

PLANS AND DOCUMENTS
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ADAM **PEKOL**

CONSULTING



**PERRY PARK REDEVELOPMENT
TRAFFIC IMPACT ASSESSMENT**

PREPARED FOR
YMCA OF BRISBANE

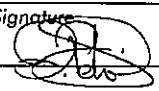
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REPORT - FEBRUARY 2010

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2.0 EXISTING CONDITIONS

Perry Park is currently the home of the Brisbane Strikers Football Club. The existing development on this site consists of a 906m² clubhouse and a football field, serviced by 87 car parks.

The site is surrounded by four major intersections as shown in Figure 1.1:

- Abbotsford Road / Edmondstone Road / Mayne Road signalised intersection;
- Abbotsford Road / Folkestone Street signalised T-intersection;
- Edmondstone Road / Folkestone Street / Ross Street roundabout; and
- Edmondstone Road / Thompson Street priority controlled T-intersection.

The precincts to the north and west of Perry Park on Abbotsford Road, Edmondstone Road and Thompson Street are dominated by industrial and commercial activities. The southern side of Folkestone Street is comprised mainly of residential dwellings.

2.1 Road Network Operations

The attributes of the road network adjacent to the site are summarised in Table 2.1.

TABLE 2.1: ROAD NETWORK ATTRIBUTES

Attribute	Abbotsford Road	Edmondstone Road	Thompson Street	Folkestone Street
Road Hierarchy ^a	Arterial	Local	Local	Local
Directionality	Two-Way	Two-Way	Two-Way	Two-Way
Number of Lanes	6	2	2	2
Speed Limit (km/h)	60	60	50	50
Jurisdiction	Council	Council	Council	Council
Predominant Land-Use	Commercial and Industrial	Commercial and Industrial	Commercial and Industrial	Residential
Kerb-and-Channel	Yes	Yes	Yes	Yes
Dedicated Parking	No	Yes	Yes (metered)	Yes
Footpaths	Both Sides	Both Sides	Both Sides	Both Sides
Bicycle Lanes	No	Yes	No	No
Bus Route	Yes	Yes	Yes	Yes

^a Road Hierarchy classifications obtained from Brisbane City Council Proposed Road Hierarchy to 2012

To assist in the quantification of existing intersection operations, a classified turning movement survey was conducted on Wednesday 18 November 2009 at the four intersections mentioned in Section 2.0.

In addition, a turning movement count was also undertaken at the two existing accesses to Perry Park. These surveys were conducted during the following periods:

- morning peak period: 7:00am – 9:00am; and
- evening peak period: 4:00pm – 6:00pm;

This traffic survey information is presented in Appendix A.

2.2 Existing Accesses

Vehicular access to the site is currently gained from two accesses located on:

- Edmondstone Road, 14m east of the Abbotsford Road / Mayne Road / Edmondstone Road intersection stop-line; and
- Folkestone Street, 16m east of the Abbotsford Road / Folkestone Street intersection stop-line.

The Edmondstone Road access is currently 8m wide, and the Folkestone Street access is 6m wide. Both accesses cater for all turning movements.

Commercial servicing and refuse collection is currently undertaken at the on-site loading dock, which is accessed via a 6m wide cross-over directly to Abbotsford Road.

2.3 Intersection Operations

A series of SIDRA analyses were performed to quantify existing peak hour traffic operations at the following intersections:

- Abbotsford Road / Edmondstone Road / Mayne Road signalised intersection;
- Abbotsford Road / Folkestone Street signalised T-intersection; and
- Edmondstone Road / Folkestone Street / Ross Street roundabout.

The Edmondstone Road / Thompson Street priority controlled intersection and the two site access intersections were analysed using the gap-acceptance method.

The analyses were based on the traffic count data presented in Appendix A and assumed the following parameters:

- morning peak hour: 730-8:30am;
- evening peak hour: 4:30-5:30pm.
- heavy vehicle percentages as observed;
- peak flow factor of 0.95;
- Gap acceptance parameters as per Table 13.12 of *Main Roads' Road Planning and Design Manual*; and
- SIDRA 4.0 default values for all other parameters.

The results of these analyses are presented in Appendix B and summarised in Table 2.2.

TABLE 2.2: EXISTING INTERSECTION OPERATIONS

Intersection and Scenario	Degree of Saturation	95th Percentile Queues (veh)	Critical Movement
Abbotsford Road / Edmondstone Road			
Morning Peak	85%	48	Abbotsford Road (North) - Through
Evening Peak	80%	37	Abbotsford Road (South) - Through
Abbotsford Road / Folkestone St			
Morning Peak	54%	11	Abbotsford Road (North) - Through
Evening Peak	52%	19	Abbotsford Road (South) - Through
Edmondstone Road / Thompson St			
Morning Peak	66%	5	Thompson Street (North) - Left
Evening Peak	36%	2	Edmondstone Road (East) - Right
Edmondstone Road / Folkestone St / Ross St			
Morning Peak	32%	2	Edmondstone Road (West) - Right, Through
Evening Peak	41%	4	Edmondstone Road (East) - Through
Edmondstone Road / Site Access			
Morning Peak	0%	1	Site Access (South) - Right
Evening Peak	1%	1	Site Access (South) - Right
Folkestone St / Site Access			
Morning Peak	1%	1	Site Access (North) - Right, Left
Evening Peak	2%	1	Site Access (North) - Right, Left

The degree of saturation for a movement is defined as the ratio of traffic demand to the capacity of the movement. Table 2.3 is an extract from the SIDRA Intersection 4.0 manual, which defines the operational rating in relation to the approach or movement with the highest degree of saturation for all intersection control types.

TABLE 2.3: INTERSECTION RATINGS (SIDRA)

Rating	Level of Service	Degree of Saturation (x)		
		Signals	Roundabouts	Priority
Excellent	LOS A	$x \leq 0.6$	$x \leq 0.6$	$x \leq 0.6$
Very good	LOS B	$0.6 < x \leq 0.7$	$0.6 < x \leq 0.7$	$0.6 < x \leq 0.7$
Good	LOS C	$0.7 < x \leq 0.9$	$0.7 < x \leq 0.85$	$0.7 < x \leq 0.8$
Acceptable	LOS D	$0.9 < x \leq 0.95$	$0.85 < x \leq 0.95$	$0.8 < x \leq 0.9$
Poor	LOS E	$0.95 < x \leq 1.0$	$0.95 < x \leq 1.0$	$0.9 < x \leq 1.0$
Very poor	LOS F	$1.0 < x$	$1.0 < x$	$1.0 < x$

Therefore, from the results of the intersection analysis provided in Table 2.2 it can be concluded that during morning and evening peak periods all of the intersections currently demonstrate very good or excellent operations, except the Abbotsford Road / Edmondstone Road intersection which demonstrates good operations.

2.3 Pedestrians, Cyclists and Public Transport

Pedestrians and Cyclists

Pedestrian footpaths are currently located on both sides of all roads proximate to the site.

On street bicycle lanes are provided along both sides of Edmondstone Street from Abbotsford Road to the Edmondstone Road / Folkestone Street / Ross Street roundabout. These bicycle

lanes connect with the pedestrian / cycle path alongside the Inner City Bypass on the western side of Abbotsford Road.

Public Transport

Perry Park is extremely well serviced by public transport. It is located approximately 200 metres walking distance from the Bowen Hills train station. Bowen Hills is serviced by all QR city train lines, providing public transport connectivity to the majority of the greater Brisbane region.

Additionally, a number of high frequency bus services stop on Abbotsford Road adjacent to Perry Park, including the 301, 310 and 320 services. These services are run on both weekdays and weekends.

3.0 PROPOSED DEVELOPMENT

3.1 Land Uses

It is understood that YMCA of Brisbane intends to construct an indoor sports and gymnasium facility on the subject site, which will comprise:

- a 2,901m² building accommodating three indoor (netball, soccer or volleyball) courts and ancillary uses;
- a 1,063m² gym / fitness area; and
- 891m² of offices.

3.2 Site Layout

The proposed site layout is shown on CDI Architects drawing numbers TP-07 and TP-09 in Appendix C.

3.3 Site Access

It is proposed to maintain the existing access on Folkestone Street. The access on Edmondstone Road is proposed to be relocated to a position 60m south of the Abbotsford Road / Edmondstone Road intersection stop-line, on Edmondstone Road. The relocated access will be able to operate more efficiently as it will be clear of the queuing from the intersection on the Edmondstone Road approach.

It is proposed to maintain the 6m wide Type B2 crossover to Folkestone Street. The proposed new access to Edmondstone Road should be constructed as a Type B2 crossover with a minimum width of 6m, consistent with the requirements detailed in Council's *Traffic, Access, Parking and Servicing (TAPS) Planning Scheme Policy* (for cars and commercial vehicles – Table 8 and 9 respectively).

The Brisbane City Council's *Traffic, Access, Parking and Servicing Code* suggests that for site accesses fronting a road with a 60km/h speed environment the desirable sight distance provision is 110m. On-site observations indicate that this sight distance is available at the accesses.

Hence, the proposed location of the two vehicle cross-overs is considered acceptable.

3.4 Car Parking

Demand

As stated in Performance Criteria P6 of Council's *Bowen Hills Local Plan*, vehicular parking within the Perry Park precinct must be sufficient to discourage on-street parking whilst reflecting the needs of users and balance parking requirements with objectives to encourage public transport use. Therefore all various applicable car parking rates, including those found in Council's *TAP Policy*, *City Frame Plan* and *Bowen Hills Local Plan* have been assessed in order to best determine a suitable parking range for this development.

Table 12 in Council's TAPS Policy nominates the preferred car parking provision rates for a range of land uses. In this instance, the relevant figures are presented in Table 3.1 below.

TABLE 3.1: TAPS POLICY PARKING REQUIREMENTS

Land Use	Scale	Car Parking Rate	Car Parks
Clubhouse	906 m ² GFA	1 space per 15m ² GFA	60
Courts	3 Courts	20 spaces per court	60
Gymnasium	1,063 m ² GFA	1 space per 10m ² GFA	106
Office	891 m ² GFA	1 space per 30m ² GFA	30
Total			256

Application of these rates to the subject development suggests a TAPS requirement for 256 on-site car parking spaces.

However, data collated by Adam Pekol Consulting (APC) at various urban locations draws into question the relevance of the 1 space / 10m² GFA rate gymnasium uses in the TAPS Policy. APC data suggest a peak car parking demand closer to 1 space per 16m² GFA. Application of this rate to the subject development suggests a peak car parking demand closer to 216 spaces, demonstrated in Table 3.2 below.

TABLE 3.2: APC ADJUSTED PARKING REQUIREMENTS

Land Use	Scale	Car Parking Rate	Car Parks
Clubhouse	906 m ² GFA	1 space per 15m ² GFA	60
Courts	3 Courts	20 spaces per court	60
Gymnasium	1,063 m ² GFA	1 space per 16m ² GFA	66
Office	891 m ² GFA	1 space per 8m ² GFA	30
Total			216

Alternatively, Council's *City Frame* document expresses a maximum car parking provision rate of 1 car park per 200m² of GFA. This rate results in the requirement for 29 car parks to service the entire site (5,761m² GFA).

Furthermore, Council's *Bowen Hill Local Plan* gives a maximum car parking rate of 1 car park per 75m² GFA, resulting in the requirement of 77 car parks to be provided on-site.

Table 3.3 summarises the various suggested car parking numbers discussed above.

TABLE 3.3: SUGGESTED CAR PARKING REQUIREMENTS

Land Use	Suggest number of Car Parks
TAPS Policy	256
APC Adjusted	216
City Frame Plan	max. 29
Bowen Hills Local Plan	max. 77

From Table 3.3, it is reasonable to suggest that the number of car parks provided on site for this development should be in the range between 77 – 216 car parks. A figure deemed to be reasonable would be the midpoint of this range, approximately 147 car parks.

Supply

As shown on drawing TP-03 dated February 2010 (see Appendix C), it is proposed to provide a total of 155 car parks on site, inclusive of five disable car parks. This is 8 car parks more than the mid-point of the acceptable range discussed above. It is considered that this many car parks will meet the parking demand adequately considering Council's objective of encouraging the use of public transport and the availability of both bus and train services located within walking distance of the site.

Layout

The layout of the on-site car parking arrangements has been reviewed and found to be generally consistent with Council's TAPS Policy and the relevant Australian Standard. It is characterised by:

- 5.4m long x 2.6m wide parking spaces;
- 6.2m wide circulation aisles; and
- no internal four-way intersections.

Queuing

According to Table 10 of Council's TAPS Policy, the 161-site parking spaces would require a clear entry queue of six vehicles. It is proposed to meet this requirement by providing 18m of queuing at both site accesses.

3.5 Commercial Vehicle Servicing

Refuse Collection

On site refuse collection is currently undertaken by Veolia Environmental Services (formerly Collex) via the Abbotsford Road service access. Due to the limited waste generated by indoor courts and gymnasiums, it is proposed that refuse collection continue as per the current arrangements.

Commercial Servicing

The YMCA anticipates that the largest design vehicle required to service this development is a small rigid vehicle (SRV). Therefore it is recommended that a loading bay and manoeuvring area be provided so that this vehicle can be accommodated on site, and enter and exit in a forward gear.

There is scope to pave/bitumen sufficient space for a SRV loading and turn around area located between the existing fence line and the field light. This area can be constructed clear of any existing obstructions. The design vehicle can enter and exit the site via the existing Folkestone Street access.

Bus Drop Off Area

On match days a large number of spectators commute to Perry Park via chartered bus services. These buses currently utilise the existing bus stops located on Abbotsford Road to drop off and pick up passenger. It is suggested that as a part of this development, on-street parking along Edmondstone Street be signed so that a temporary bus stops are made available in-lieu of on-street car parking on match days. Similar temporary bus stops are signed and in operation at other sporting venues in Brisbane such as Lang Park. This would alleviate any potential adverse effects on the through traffic flow along Abbotsford Road, and any route change is would not affect bus service operations.

3.6 Trip Generation

Indoor Sport and Recreation

To assist in estimating the likely trip generation of the proposed use, a trip generation survey was conducted at an existing indoor sports centre located in Wickham Street, Fortitude Valley. The survey was conducted from 07:00-09:00 in the morning and 16:00-18:00 in the evening of Wednesday 4 April 2007. The operator has advised that on Wednesdays they operate six netball courts and one volleyball court (ie seven courts in total). The results of this survey suggest the following peak period generation rates:

- morning (08:00-09:00): 13 vte or 1.9 vte / court
- evening (16:45-17:45): 44 vte or 6.3 vte / court

By comparison, trip generation rates published by Queensland Transport and Main Roads suggest a significantly higher rate of 21 vte / court, albeit for indoor cricket court. However, these sources indicate that the peak two-way generation occurs much later in the evening (eg 19:30-20:30). Thus, the lower rates measured during the evening road peak are not inconsistent with the other published rates.

The inner-city location of the surveyed site would likely increase the proportion of patrons arriving by non-car modes (eg walk, cycle and public transport), relative to the subject site. To account for this, it is considered prudent to factor up the observed rates by (say) 50%.

Thus, the following peak period trip generation rates have been adopted for the indoor sport and recreation component of the subject development:

- morning (08:00-09:00): 2.85 (say 3) vte / court
- evening (16:45-17:45): 9.45 (say 10) vte / court

Data from the Wickham Street survey also suggest that a 65:35 in:out split should be adopted for the indoor sport and recreation component during both the morning and evening peak periods.

Gymnasium

Data published by Main Roads, the NSW RTA and SA Department of Transportation all point to a peak hour trip generation rate for gymnasiums of 9-10 vte / 100m² GFA. These sources note that the peak rate typically occurs in the early evening (eg 18:00-19:00). A lower rate would be expected during the morning peak (08:00-09:00) and the earlier road peak (16:45-17:45).

Data was extracted from the 2003/04 QT Travel Survey to quantify this difference. The database included 450 person trips to/from gymnasiums across SEQ. A summary of this data is included in Appendix A. The peak two-way flow occurs in the early evening (17:00-18:00). By comparison, about 85% of the peak flow occurs during the morning peak (08:00-09:00) and 95% during the evening peak (16:45-17:45) periods on the local road network.

Thus, the following peak period trip generation rates were adopted for the gymnasium component of the subject development:

- morning (08:00-09:00): 8.5 vte / 100m² GFA
- evening (16:45-17:45): 9.5 vte / 100m² GFA

Similarly, the 2003/04 QT Travel Survey data suggest an 80:20 in:out split during the morning peak and a 50:50 in:out split during the evening peak.

Total

Based on the above, the additional peak hour traffic generation of the proposed development is demonstrated in Table 3.3 and 3.4 below.

TABLE 3.3: AM PEAK PERIOD TRAFFIC GENERATION AND SPLITS

Land Use	Scale	Trip Generation Rate	Trips (veh/hr)	AM Peak	
				In:Out Split	In:Out Split (veh/hr)
Courts	3 Courts	3 trips per court	9	65 : 35	6 : 3
Gymnasium	1,063 m ² GFA	8.5 trips per 100m ² GFA	101	80 : 20	81 : 20
Office	891 m ² GFA	2 trips per 100m ² GFA	18	55 : 45	10 : 8
Total			128		97 : 31

TABLE 3.4: PM PEAK PERIOD TRAFFIC GENERATION AND SPLITS

Land Use	Scale	Trip Generation Rate	Trips (veh/hr)	PM Peak	
				In:Out Split	In:Out Split (veh/hr)
Courts	3 Courts	10 trips per court	30	65 : 35	20 : 11
Gymnasium	1,063 m ² GFA	9.5 trips per 100m ² GFA	113	50 : 50	56 : 56
Office	891 m ² GFA	2 trips per 100m ² GFA	18	45 : 55	8 : 10
Total			161		84 : 77

The site is expected to generate slightly higher volumes later in the night, when the indoor and outdoor courts are typically busier. However, traffic volumes on the surrounding road network would also be significantly lower during these periods. Thus, the subsequent analysis of external road impacts has focussed on the road peaks (rather than the development peak).

3.7 Directional Distribution

The distribution of development related traffic has been estimated using demographic projections prepared by the Office of Urban Management (OUM) for the SEQ Regional Plan. The projections were separated into eight sectors as shown in Figure 3.1. The OUM 2026 population estimates were calculated for each of the eight sectors within an 8km radius to estimate the distribution of population for the indoor sports and gymnasium uses. An 8km radius was found to be the 85th percentile distance which people were willing to travel for indoor sports and gymnasium uses as per the 2003/04 South East Queensland Household Travel Survey.

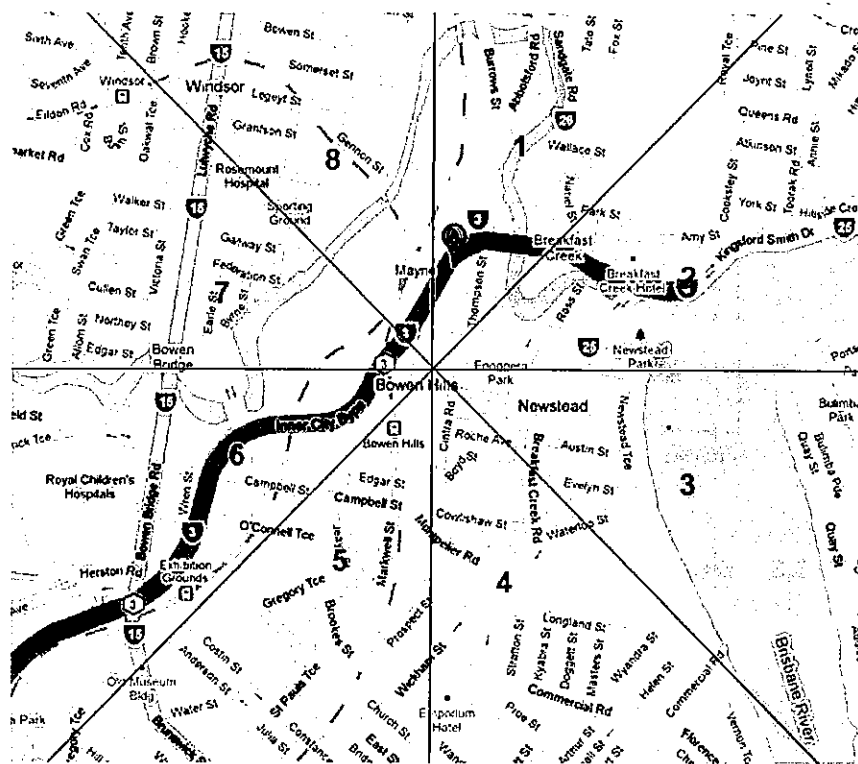


FIGURE 3.1: 8km SECTORS FROM PROPOSED SITE

Table 3.5 below presents the percentage of both future years (ie 2012 and 2022) population estimates in each sector.

TABLE 3.5: FUTURE YEAR POPULATION DISTRIBUTIONS

Sector	Population 2012	Population 2022
1	12%	12%
2	3%	3%
3	8%	8%
4	18%	18%
5	20%	22%
6	14%	13%
7	10%	10%
8	15%	14%

The distribution for the subsequent analysis was based on these results, and is shown in Figure 3.2.

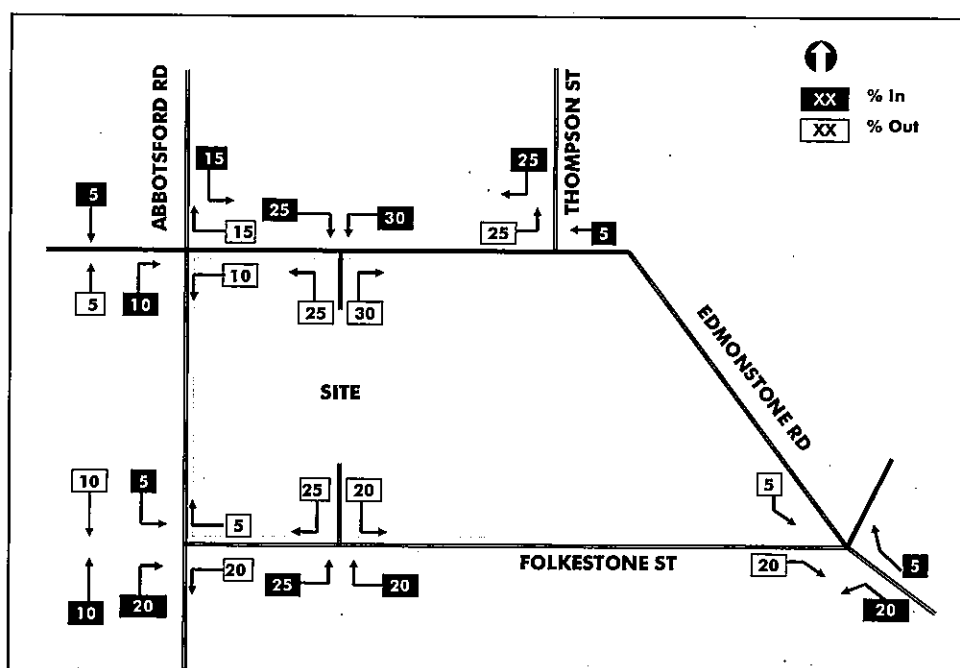


FIGURE 3.2: MORNING AND EVENING PEAK DIRECTIONAL DISTRIBUTION

3.8 Background Traffic Growth

For the analysis of future year traffic operations, the following development staging has been adopted:

- Traffic count: 2009
- Existing Scenario: 2009

-
- Full construction and occupation 2012
 - Full occupation plus ten years: 2022

For the analysis of future year traffic operations, a background traffic growth rate of 1.7% per annum has been adopted. This rate is consistent with the 2008 Department of Local Government, Planning, Sport and Recreation population growth rate for the Brisbane region. The application of this rate equates to approximately 25% increase in local traffic volumes over the next 13 years (ie 2009-2022).

4.0 TRAFFIC IMPACT

The likely impact of the proposed development on traffic operations on the surrounding road network has been assessed based on morning and evening peak hour turning movements forecast for the full development in the year of opening (ie 2012) and the year of opening plus 10 years (2022). The forecast traffic volumes are detailed in Appendix D.

4.1 Road Network Operations

The future operations of the road network external to the site have been assessed based on the information presented earlier. The expected changes in the peak hour traffic volumes on the adjacent road network during the analysed peak hours are summarised in Table 4.1 and 4.2, and discussed in more detail below.

TABLE 4.1: FORECAST TRAFFIC VOLUMES (vph)

Road Segment and Scenario	Two-Way Peak Hour Traffic Volume (vph)				
	2009 Existing Conditions	2012 Pre Development	2012 Post Development	2022 Pre Development	2022 Post Development
Abbotsford Road					
South of Folkestone St					
Morning Peak	3,050	3,800	3,840	4,500	4,540
Evening Peak	2,800	3,480	3,520	4,120	4,160
Folkestone St to Edmondstone Rd					
Morning Peak	3,030	3,410	3,510	4,120	4,150
Evening Peak	2,790	3,130	3,490	4,110	4,130
North of Edmondstone Rd					
Morning Peak	3,400	3,580	3,600	4,230	4,260
Evening Peak	3,250	4,040	4,070	4,780	4,810
Folkestone Street					
Site Access to Abbotsford Rd					
Morning Peak	190	230	260	270	310
Evening Peak	190	230	270	280	310
East of Site Access					
Morning Peak	190	230	260	270	300
Evening Peak	190	240	270	280	320
Edmondstone Road					
Site Access to Abbotsford Rd					
Morning Peak	700	810	840	960	990
Evening Peak	730	900	940	1,070	1,110
Site Access to Thompson St					
Morning Peak	740	920	960	1,080	1,120
Evening Peak	720	900	940	1,060	1,100
East of Thompson St					
Morning Peak	1,450	1,810	1,810	2,140	2,150
Evening Peak	1,360	1,690	1,700	2,000	2,010
Thompson Street					
North of Edmondstone Rd					
Morning Peak	1,040	1,300	1,330	1,530	1,570
Evening Peak	870	1,080	1,110	1,280	1,310

The additional development related traffic is not expected to have an adverse effect on the surrounding road network operations. From Table 4.1 it can be seen that as a result of the development related traffic, the volumes on each of these sections increases by between 10 – 40 vehicles per hour. This represents a maximum of a 4% increase per any one section.

4.2 Intersection Operations

A series of SIDRA and gap acceptance analyses were conducted in order to quantify the full development and future year traffic operations under both pre-development and post-development traffic conditions at the relevant intersections. SIDRA analyses were performed at the following intersections:

- Abbotsford Road / Edmondstone Road / Mayne Road signalised intersection;
- Abbotsford Road / Folkestone Street signalised T-intersection; and
- Edmondstone Road / Folkestone Street / Ross Street roundabout.

The gap-acceptance method was used to analyse the Edmondstone Road / Thompson Street priority intersection and the two site access intersections.

The analyses were based on the same parameters listed earlier (see Section 2.3). The results are discussed below, with detailed results presented in Appendix B.

Abbotsford Road / Edmondstone Road / Mayne Road Intersection

The Abbotsford Road / Edmondstone Road / Mayne Road intersection analysis results are shown in Table 4.2.

TABLE: 4.2: INTERSECTION OPERATIONS

Peak Hour and Scenario	Degree of Saturation	95th Percentile Queues (veh)	Critical Movement
<i>Morning Peak Hour</i>			
2009 Existing Conditions	85%	48	Abbotsford Road (North) - Through
2012 Pre Development	89%	56	Abbotsford Road (North) - Through
2012 With Development	94%	58	Abbotsford Road (South) - Right
2022 Pre Development	104%	110	Abbotsford Road (North) - Through
2022 With Development	106%	118	Abbotsford Road (North) - Left
<i>Evening Peak Hour</i>			
2009 Existing Conditions	80%	37	Abbotsford Road (South) - Through
2012 Pre Development	101%	81	Abbotsford Road (South) - Through
2012 With Development	101%	82	Abbotsford Road (South) - Through
2022 Pre Development	119%	147	Abbotsford Road (South) - Through
2022 With Development	119%	149	Abbotsford Road (South) - Through

These results indicate that during the 2012 pre development evening peak period this intersection is expected to operate above its capacity. However, the addition of the development related traffic is not expected to increase the degree of saturation.

Similarly in 2022, this intersection is expected to exhibit very poor levels of service in the morning and evening pre development scenarios. The addition of the development related traffic is expected to increase the degree of saturation by 2% in the morning peak and by a negligible amount during the evening peak. Thus, even though the intersection is anticipated

to exhibit very poor levels of service, the effect of the proposed development is expected to be minimal.

Abbotsford Road / Folkestone Street Intersection

As can be seen from Table 4.3, the Abbotsford Road / Folkestone Street intersection is expected to operate under very good to good conditions for all stages of the development. The development related traffic is not expected to have an adverse impact on this intersection, with the largest increase in the degree of saturation expected to be approximately 4%, and queues of 13 vehicles.

TABLE: 4.3: INTERSECTION OPERATIONS

Peak Hour and Scenario	Degree of Saturation	95th Percentile Queues (veh)	Critical Movement
<i>Morning Peak Hour</i>			
2009 Existing Conditions	54%	11	Abbotsford Road (North) - Through
2012 Pre Development	67%	14	Abbotsford Road (North) - Through
2012 With Development	68%	14	Abbotsford Road (North) - Left
2022 Pre Development	80%	17	Abbotsford Road (North) - Through
2022 With Development	80%	17	Abbotsford Road (North) - Through
<i>Evening Peak Hour</i>			
2009 Existing Conditions	52%	19	Abbotsford Road (South) - Through
2012 Pre Development	68%	30	Abbotsford Road (South) - Through
2012 With Development	72%	33	Abbotsford Road (South) - Through
2022 Pre Development	86%	51	Abbotsford Road (South) - Through
2022 With Development	90%	64	Abbotsford Road (South) - Right

Edmondstone Road / Folkestone Street / Ross Street Roundabout

As can be seen from Table 4.4, the Edmondstone Road / Folkestone Street / Ross Street roundabout is expected to operate under very good conditions or better for all stages of the development. The development related traffic is not expected to have an adverse impact on this intersection during any of the analysed scenarios.

TABLE: 4.4: INTERSECTION OPERATIONS

Peak Hour and Scenario	Degree of Saturation	95th Percentile Queues (veh)	Critical Movement
<i>Morning Peak Hour</i>			
2009 Existing Conditions	32%	2	Edmondstone Road (West) - Right, Through
2012 Pre Development	41%	3	Edmondstone Road (West) - Right, Through
2012 With Development	41%	3	Edmondstone Road (West) - Right, Through
2022 Pre Development	49%	4	Edmondstone Road (West) - Right, Through
2022 With Development	49%	4	Edmondstone Road (West) - Through
<i>Evening Peak Hour</i>			
2009 Existing Conditions	41%	4	Edmondstone Road (East) - Through
2012 Pre Development	54%	5	Edmondstone Road (East) - Through
2012 With Development	56%	5	Edmondstone Road (East) - Right
2022 Pre Development	67%	8	Edmondstone Road (East) - Through
2022 With Development	68%	9	Edmondstone Road (East) - Through

Edmondstone Road / Thompson Street Intersection

Table 4.5 summarises the results for the analyses at the Edmondstone Road / Thompson Street intersection.

TABLE: 4.5: INTERSECTION OPERATIONS

Peak Hour and Scenario	Degree of Saturation	95th Percentile Queues (veh)	Critical Movement
<i>Morning Peak Hour</i>			
2009 Existing Conditions	66%	5	Thompson Street (North) - Left
2012 Pre Development	91%	10	Thompson Street (North) - Left
2012 With Development	91%	10	Thompson Street (North) - Left
2022 Pre Development	119%	57	Thompson Street (North) - Left
2022 With Development	119%	60	Thompson Street (North) - Left
<i>Evening Peak Hour</i>			
2009 Existing Conditions	36%	2	Edmondstone Road (East) - Right
2012 Pre Development	47%	3	Edmondstone Road (East) - Right
2012 With Development	47%	3	Edmondstone Road (East) - Right
2022 Pre Development	58%	4	Edmondstone Road (East) - Right
2022 With Development	58%	4	Edmondstone Road (East) - Right

From Table 4.5, it can be seen that the Edmondstone Road / Thompson Street experiences excellent operations during the evening peak period. However, during the morning peak period this intersection is expected to demonstrate poor operations in 2012 (pre and post development), and very poor operations in 2022 (pre and post development). These poor levels of service are expected to occur with or without the proposed development and the development will have a minimal effect.

Edmondstone Road / Site Access Intersection

As can be seen from Table 4.6, the access intersection on Edmondstone Road is expected to operate under excellent operation for all stages of the development, with short queues of one vehicle or less.

TABLE: 4.6: INTERSECTION OPERATIONS

Peak Hour and Scenario	Degree of Saturation	95th Percentile Queues (veh)	Critical Movement
<i>Morning Peak Hour</i>			
2009 Existing Conditions	0%	1	Site Access (South) - Right
2012 Pre Development	0%	1	Site Access (South) - Right
2012 With Development	3%	1	Site Access (South) - Right, Left
2022 Pre Development	0%	1	Site Access (South) - Right
2022 With Development	4%	1	Site Access (South) - Right, Left
<i>Evening Peak Hour</i>			
2009 Existing Conditions	1%	1	Site Access (South) - Right
2012 Pre Development	2%	1	Site Access (South) - Right, Left
2012 With Development	10%	1	Site Access (South) - Right, Left
2022 Pre Development	3%	1	Site Access (South) - Right, Left
2022 With Development	12%	1	Site Access (South) - Right, Left

Folkestone Street / Site Access Intersection

As can be seen from Table 4.7, the access intersection on Folkestone Street is expected to operate under excellent operation for all stages of the development, with queue lengths of one vehicle or less.

TABLE: 4.7: INTERSECTION OPERATIONS

Peak Hour and Scenario	Degree of Saturation	95th Percentile Queues (veh)	Critical Movement
<i>Morning Peak Hour</i>			
2009 Existing Conditions	1%	1	Site Access (North) - Right, Left
2012 Pre Development	1%	1	Site Access (North) - Right, Left
2012 With Development	3%	1	Site Access (North) - Right, Left
2022 Pre Development	1%	1	Site Access (North) - Right, Left
2022 With Development	3%	1	Site Access (North) - Right, Left
<i>Evening Peak Hour</i>			
2009 Existing Conditions	2%	1	Site Access (North) - Right, Left
2012 Pre Development	3%	1	Site Access (North) - Right, Left
2012 With Development	6%	1	Site Access (North) - Right, Left
2022 Pre Development	3%	1	Site Access (North) - Right, Left
2022 With Development	7%	1	Site Access (North) - Right, Left

4.3 Pedestrians, Cyclists and Public Transport

The proposed development is not expected to have significant adverse effects on pedestrian, cyclists or public transport operation.

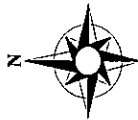
Due to its proximity to public transport services, it is anticipated that these services will be greatly utilised by persons wanting to get to and from the proposed development.

5.0 CONCLUSIONS

The impact of the proposed development by the YMCA of Brisbane at Perry Park on local traffic operations has been assessed. The main points to note from this assessment are:

- the development will comprise of three indoor courts, a gymnasium and an office area;
- the existing vehicular access on Folkestone Street will remain in its current location, and the Edmondstone Road intersection is proposed to be relocated 60m to the east of the Abbotsford Road / Edmondstone Road intersection;
- the location and design of the site accesses are consistent with the requirements detailed in Council's *Traffic, Access, Parking and Servicing (TAPS) Planning Scheme Policy* (for cars and commercial vehicles – Table 8 and 9 respectively);
- it is proposed to provide 155 on-site carpark, which is within the range prescribed by Council's *Bowen Hills Local Plan* and *TAPS Planning Scheme Policy*;
- the proposed development is expected to generate approximately 128vte and 161vte during the morning and evening peak hours respectively;
- by 2022, background traffic growth is expected to increase local traffic volumes proximate to the site by 1.7% per annum, which equates to an increase of approximately 25% over the next 13 years (2009 to 2022);
- the proposed development is not expected to have a significant adverse impact on the following intersections:
 - Abbotsford Road / Folkestone Street signalised T-intersection
 - Abbotsford Road / Edmondstone Road signalised intersection
 - Edmondstone Road / Thompson street T-intersection
 - Edmondstone Road / Folkestone Street / Ross Street roundabout
 - Edmondstone Road / Site Access
 - Folkestone Street / Site Access
- The Abbotsford Road / Edmondstone Road and Edmondstone Road / Thompson Street intersections are expected to operate poorly in future years prior to the addition of the development related traffic;
- the proposed development is not expected to have a significant adverse impact on local pedestrian and cyclists; and
- The proposed development is expected to increase public transport usage in the precinct.

APPENDIX A
TRAFFIC SURVEY DATA

[illegible]

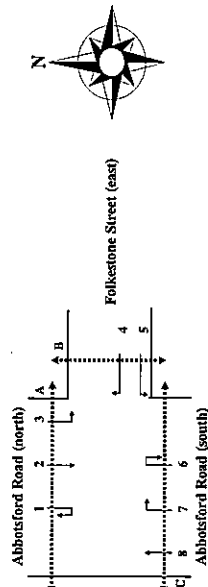


FM Peak: How ending - 5:30 PM

TIME (1/4 hr and)	Movement 9				Movement 10				Movement 11				Movement 12				Movement 13				Movement 14				Movement 15				Movement 16				Pedestrian Movements			
	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	A	B	C	D			
4:15 PM	0	0	0	0	0	395	13	0	408	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	1	0			
4:30 PM	1	0	0	1	0	20	2	0	22	0	409	6	0	415	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	1	0			
4:45 PM	0	0	0	0	0	493	0	0	493	0	2	0	0	2	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	2	7	1			
5:00 PM	0	0	0	0	0	413	5	0	418	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	4	0			
5:15 PM	0	0	0	0	0	501	11	0	512	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	22	1			
5:30 PM	0	0	0	0	0	427	5	0	432	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	15	11	0			
5:45 PM	0	0	0	0	0	419	8	0	427	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	8	10	0			
6:00 PM	2	0	0	2	0	366	6	0	372	1	0	0	0	0	0	1	0	0	1	0	3	0	0	0	3	0	0	0	0	0	1	1	0			
2 hr Total	152	12	0	164	0	3388	64	0	3452	9	5	0	0	5	0	0	0	0	0	0	8	1	0	8	3	1	0	0	0	0	48	57	44	2		
PM Peak	93	5	0	98	0	1799	27	0	1826	6	4	0	0	0	0	0	0	0	0	0	1	0	0	6	0	0	0	0	0	35	44	2				

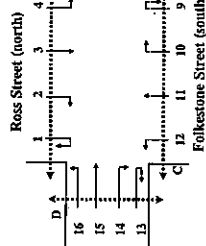
Abbotsford Road (north)

2 Weather: Fine
 Location: Abbot'sford Road/Folkestone Street
 Day/Date: Wednesday 11 November 2009
 AM Peak: Hour ending - 8:45 AM
 PM Peak: Hour ending - 5:30 PM



TIME ([14 hr end])	Movement 1					Movement 2					Movement 3					Movement 4					Movement 5					Movement 6					Movement 7					Movement 8					Pedestrian Movements		
	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	A	B	C										
7:15 AM	0	0	0	0	0	356	0	0	400	3	6	0	0	9	0	0	0	0	0	0	0	0	0	0	0	155	4	0	169	2	1	0	0										
7:30 AM	0	0	0	0	0	470	24	0	494	3	10	1	0	11	0	7	1	0	8	0	0	0	0	0	192	5	0	197	2	1	0	0											
7:45 AM	0	0	0	0	0	518	15	0	533	4	12	0	0	12	0	10	2	0	12	0	0	0	0	0	174	9	0	183	1	0	0	0											
8:00 AM	0	0	0	0	0	520	12	0	532	2	11	0	0	11	0	6	2	0	8	0	0	0	0	0	178	12	0	190	1	0	1	0											
8:15 AM	0	0	0	0	0	463	3	11	0	474	3	11	0	15	0	16	0	0	16	1	0	0	0	0	220	10	0	230	2	0	2	0											
8:30 AM	0	0	0	0	0	553	13	0	566	0	12	0	0	12	0	10	1	0	11	0	0	0	0	0	200	24	0	224	0	0	3	0											
8:45 AM	0	0	0	0	0	523	17	0	540	0	7	1	0	8	0	11	2	0	12	0	1	0	0	0	200	14	0	214	0	0	8	0											
9:00 AM	0	0	0	0	0	426	18	0	444	0	15	1	0	16	0	14	2	0	16	0	0	0	0	0	209	16	0	225	0	0	8	0											
2 hr Total	0	0	0	0	0	3988	123	0	3991	20	87	3	0	90	0	0	9	0	101	1	1	0	0	0	1528	94	0	1622	8	0	22	0											
AM Peak	0	0	0	0	0	2039	63	0	2122	5	41	1	0	42	0	0	4	0	47	1	0	0	0	0	798	60	0	858	3	0	14	0											

[illegible]

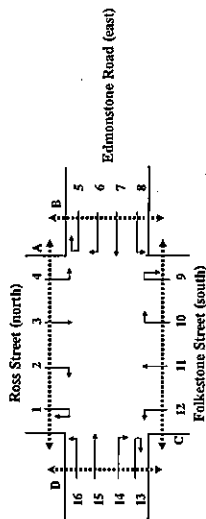
[illegible]

TIME (14 hr and)	Movement 1				Movement 2				Movement 3				Movement 4				Movement 5				Movement 6				Movement 7				Movement 8			
	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total			
PM Peak	0	0	0	0	125	1	0	0	0	33	1	0	0	0	37	7	0	0	0	5	0	0	0	0	612	14	0	0	0	21		
2 hr Total	0	0	0	0	227	5	0	0	0	66	3	0	0	0	67	14	0	0	0	10	0	0	0	0	1138	32	33	1	0	34		
6:00 PM	0	0	0	0	22	0	0	0	0	10	0	0	0	0	127	0	0	0	0	2	0	0	0	0	128	3	3	0	0	3		
5:45 PM	0	0	0	0	23	0	0	0	0	10	5	1	0	0	142	3	0	0	0	3	0	0	0	0	145	3	5	0	0	3		
5:30 PM	0	0	0	0	25	0	0	0	0	10	0	0	0	0	154	2	0	0	0	2	0	0	0	0	186	5	3	0	0	5		
5:15 PM	0	0	0	0	38	0	0	0	0	10	1	0	0	2	139	2	0	0	0	2	0	0	0	0	145	5	4	0	0	7		
5:00 PM	0	0	0	0	21	1	0	0	0	8	0	0	0	0	140	4	0	0	0	0	0	0	0	0	140	4	7	0	0	7		
4:45 PM	0	0	0	0	41	4	0	0	0	14	1	0	0	0	130	0	0	0	0	0	0	0	0	0	133	6	1	0	0	1		
4:15 PM	0	0	0	0	30	0	0	0	0	28	0	0	0	0	120	2	0	0	0	0	0	0	0	0	122	6	3	1	0	4		

Location: Folkestone Street/Edmonstone Road/Ross Street, BOWEN HILLS

Day/Date: Wednesday 11th November 2009

PM Peak: Hour ending - 5:30 PM

[illegible][illegible]

Thompson Street (north)

[illegible]

TIME (14 hr and)	Movement 1				Movement 2				Movement 3				Movement 4				Movement 5				Movement 6				Movement 7				Movement 8				Pedestrian Movements		
	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	A	B	C							
4:15 PM	8	2	0	10	0	99	2	0	0	0	0	0	0	0	0	87	3	0	0	0	0	0	0	0	0	59	1	13	2	0	15	0	0	0	
4:30 PM	8	1	0	9	0	76	1	0	0	1	0	85	3	0	88	0	85	0	0	0	0	0	0	0	0	50	0	15	0	0	0	0	0		
4:45 PM	9	0	0	9	1	74	2	0	0	0	103	2	0	105	0	98	2	0	108	0	0	53	2	0	55	2	17	0	0	0	0	0	0		
5:00 PM	11	2	0	13	0	89	2	0	0	1	104	0	0	105	0	87	1	0	88	0	0	52	5	0	57	0	18	0	0	0	0	0	0		
5:15 PM	9	1	0	10	0	69	0	0	0	0	110	1	0	111	0	94	1	0	95	1	0	48	4	0	52	0	15	0	0	0	0	0	3		
5:30 PM	7	0	0	7	0	83	0	0	0	0	119	0	0	119	2	107	2	0	109	3	0	44	0	0	44	1	16	0	0	0	0	0	0		
5:45 PM	9	0	0	9	0	66	2	0	0	0	93	0	83	0	88	3	0	0	91	2	0	39	0	0	39	1	20	0	0	0	0	0	0		
6:00 PM	7	0	0	7	0	48	0	0	0	0	103	2	0	105	4	67	0	0	67	0	0	35	1	0	36	0	14	0	0	0	0	0	0		
2 hr Total	68	6	0	74	1	573	8	0	0	0	804	9	0	813	706	15	0	0	721	5	0	374	21	0	392	5	130	2	132	3	1	0	3		
PM Peak	38	3	0	39	1	315	2	0	0	0	436	4	0	440	386	6	0	0	392	4	0	197	11	0	208	3	68	0	68	1	0	3			

AUSTRAFFIC MANUAL INTERSECTION COUNT

Site No.: 5 Weather: Overcast
 Location: Edmondstone Road/Enoggera Park access, BOWEN HILLS
 Day/Date: Friday 22 February 2002
 AM Peak: Hour ending - 8:30 AM
 PM Peak: Hour ending - 5:00 PM
 Comments: Turns only

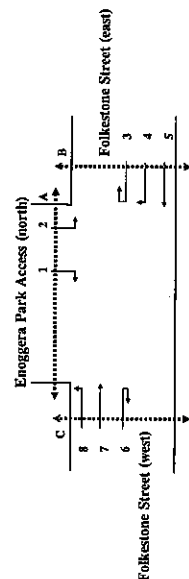
Edmondstone Road (west) Edmondstone Road (east)

Enoggera Park Access (south)

[illegible]

TIME (1/4 hr end)	Movement 1				Movement 2				Movement 3				Movement 4				Movement 5				Movement 6				Movement 7				Movement 8				Pedestrians - r/a		
	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	Cyclists	Light Vehicles	Heavy Vehicles	Not Applicable	Total	A	B	C			
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:30 PM	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4:45 PM	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:00 PM	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:30 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0			
6:00 PM	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0			
2 hr Total	0	0	0	0	0	8	0	0	8	0	6	0	0	6	0	13	0	0	13	0	0	0	0	0	0	0	0	0	2	0	0	0			
PM Peak	0	0	0	0	0	5	0	0	5	0	3	0	0	3	0	6	0	0	6	0	0	0	0	0	0	0	0	1	0	0	0	0			

Enoggera Park Access (north)

[illegible][illegible]

APPENDIX B
INTERSECTION ANALYSES

MOVEMENT SUMMARY

Site: 2009_PreDev_AM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone Predevelopment 2009 AM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbottsford Road (S)											
1	L	19	11.0	0.582	59.3	LOS E	14.1	104.7	0.96	0.85	23.8
2	T	749	7.0	0.734	53.5	LOS D	17.9	133.2	0.98	0.86	23.4
3	R	72	13.0	0.782	81.7	LOS F	6.5	50.9	1.00	0.87	18.6
Approach		840	7.6	0.782	56.0	LOS E	17.9	133.2	0.99	0.86	22.9
East Edmondstone Road											
4	L	63	8.0	0.233	57.5	LOS E	5.7	41.8	0.89	0.78	23.4
5	T	14	0.0	0.233	49.0	LOS D	5.7	41.8	0.89	0.70	23.8
6	R	193	10.0	0.602	61.5	LOS E	13.0	98.5	0.97	0.82	22.4
Approach		269	9.0	0.602	60.0	LOS E	13.0	98.5	0.95	0.81	22.7
North Abbottsford Road (N)											
7	L	386	4.0	0.846	35.0	LOS D	45.4	325.7	0.92	0.94	31.5
8	T	2203	2.0	0.845	28.9	LOS C	47.5	338.1	0.92	0.87	31.7
9	R	39	3.0	0.284	34.7	LOS C	2.3	16.3	0.66	0.71	30.7
Approach		2628	2.3	0.845	29.9	LOS C	47.5	338.1	0.92	0.88	31.6
West Mayne Road											
10	L	4	0.0	0.608	79.2	LOS E	4.8	34.4	1.00	0.77	19.0
11	T	8	0.0	0.606	71.0	LOS E	4.8	34.4	1.00	0.77	19.1
12	R	39	3.0	0.607	79.0	LOS E	4.8	34.4	1.00	0.77	19.1
Approach		52	2.3	0.607	77.7	LOS E	4.8	34.4	1.00	0.77	19.1
All Vehicles		3789	4.0	0.846	38.5	LOS D	47.5	338.1	0.94	0.87	28.2

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	42.4	LOS E	0.2	0.2	0.81	0.81
P3	Across E approach	53	51.8	LOS E	0.2	0.2	0.89	0.89
All Pedestrians		106	47.1				0.85	0.85

Level of Service (Aver. Int. Delay): LOS E. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2009_PreDev_PM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone Predevelopment 2009 PM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbottsford Road (S)											
1	L	4	0.0	0.616	44.4	LOS D	32.4	228.6	0.83	0.91	28.2
2	T	1922	1.0	0.796	33.9	LOS C	37.2	262.9	0.90	0.81	29.7
3	R	103	5.0	0.785	59.5	LOS E	7.6	55.3	0.83	0.89	22.9
Approach		2029	1.2	0.796	35.3	LOS D	37.2	262.9	0.90	0.82	29.2
East Edmondstone Road											
4	L	49	9.0	0.146	45.9	LOS D	3.4	25.7	0.78	0.74	26.6
5	T	1	0.0	0.146	37.3	LOS D	3.4	25.7	0.78	0.60	27.3
6	R	405	1.0	0.794	57.8	LOS E	25.5	179.9	0.99	0.90	23.2
Approach		456	1.9	0.794	56.5	LOS E	25.5	179.9	0.97	0.88	23.6
North Abbottsford Road (N)											
7	L	198	7.0	0.780	49.1	LOS D	21.0	155.4	0.99	0.89	26.2
8	T	868	6.0	0.779	50.3	LOS D	22.4	164.5	1.00	0.90	24.1
9	R	5	0.0	0.061	74.9	LOS E	0.5	3.7	0.98	0.65	19.6
Approach		1072	6.2	0.779	50.2	LOS D	22.4	164.5	0.99	0.90	24.4
West Mayne Road											
10	L	6	0.0	0.147	75.9	LOS E	1.3	8.8	0.99	0.68	19.5
11	T	1	0.0	0.147	67.7	LOS E	1.3	8.8	0.99	0.67	19.6
12	R	5	0.0	0.147	75.7	LOS E	1.3	8.8	0.99	0.68	19.5
Approach		13	0.0	0.147	75.1	LOS E	1.3	8.8	0.99	0.68	19.5
All Vehicles		3569	2.8	0.796	42.6	LOS D	37.2	262.9	0.93	0.85	26.8

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	33.3	LOS D	0.1	0.1	0.72	0.72
P3	Across E approach	53	46.5	LOS E	0.2	0.2	0.85	0.85
All Pedestrians		106	39.9				0.78	0.78

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2012_PreDev_AM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone Predevelopment 2012 AM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbottsford Road (S)											
1	L	20	11.0	0.615	59.7	LOS E	14.8	109.9	0.96	0.85	23.7
2	T	788	7.0	0.773	54.9	LOS D	19.2	142.3	0.99	0.88	23.0
3	R	76	13.0	0.828	83.5	LOS F	7.0	54.1	1.00	0.91	18.3
Approach		884	7.6	0.828	57.4	LOS E	19.2	142.3	0.99	0.88	22.5
East Edmondstone Road											
4	L	66	8.0	0.245	57.7	LOS E	5.9	43.8	0.90	0.78	23.4
5	T	15	0.0	0.246	49.1	LOS D	5.9	43.8	0.90	0.70	23.7
6	R	202	10.0	0.632	61.9	LOS E	13.6	103.0	0.98	0.83	22.4
Approach		283	9.0	0.632	60.2	LOS E	13.6	103.0	0.95	0.81	22.7
North Abbottsford Road (N)											
7	L	406	4.0	0.890	42.4	LOS D	54.4	390.4	0.96	0.98	28.6
8	T	2318	2.0	0.889	36.0	LOS D	56.3	401.1	0.96	0.95	28.7
9	R	41	3.0	0.299	34.8	LOS C	2.4	17.2	0.66	0.71	30.7
Approach		2765	2.3	0.889	36.9	LOS D	56.3	401.1	0.96	0.95	28.7
West Mayne Road											
10	L	4	0.0	0.634	79.4	LOS E	5.0	35.7	1.00	0.78	19.0
11	T	8	0.0	0.631	71.2	LOS E	5.0	35.7	1.00	0.78	19.0
12	R	41	3.0	0.632	79.3	LOS E	5.0	35.7	1.00	0.78	19.0
Approach		54	2.3	0.632	78.0	LOS E	5.0	35.7	1.00	0.78	19.0
All Vehicles		3986	4.0	0.890	43.7	LOS D	56.3	401.1	0.97	0.93	26.4

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	42.4	LOS E	0.2	0.2	0.81	0.81
P3	Across E approach	53	51.8	LOS E	0.2	0.2	0.89	0.89
All Pedestrians		106	47.1				0.85	0.85

Level of Service (Aver. Int. Delay): LOS E. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2012_PreDev_PM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone Predevelopment 2012 PM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Road (S)											
1	L	5	0.0	0.780	49.5	LOS D	41.2	290.9	0.93	0.92	26.6
2	T	2393	1.0	1.008	78.9	LOS E	80.6	569.2	0.98	1.16	18.4
3	R	129	5.0	0.996	57.4	LOS E	8.4	61.3	0.97	0.79	23.4
Approach		2527	1.2	1.008	77.7	LOS E	80.6	569.2	0.98	1.15	18.6
East Edmondstone Road											
4	L	62	9.0	0.182	45.4	LOS D	4.2	31.4	0.78	0.75	26.8
5	T	1	0.0	0.185	36.8	LOS D	4.2	31.4	0.78	0.60	27.5
6	R	504	1.0	0.961	88.1	LOS F	41.5	293.2	1.00	1.06	17.6
Approach		567	1.9	0.961	83.4	LOS F	41.5	293.2	0.98	1.02	18.3
North Abbotsford Road (N)											
7	L	246	7.0	0.970	86.6	LOS F	36.4	269.2	1.00	1.14	18.1
8	T	1081	6.0	0.970	85.0	LOS F	36.5	269.2	1.00	1.19	17.4
9	R	15	0.0	0.172	76.1	LOS E	1.5	10.2	0.99	0.69	19.4
Approach		1342	6.1	0.970	85.2	LOS F	36.5	269.2	1.00	1.18	17.6
West Mayne Road											
10	L	7	0.0	0.171	76.1	LOS E	1.5	10.2	0.99	0.69	19.4
11	T	1	0.0	0.171	67.9	LOS E	1.5	10.2	0.99	0.68	19.5
12	R	6	0.0	0.171	75.9	LOS E	1.5	10.2	0.99	0.69	19.5
Approach		15	0.0	0.171	75.4	LOS E	1.5	10.2	0.99	0.69	19.5
All Vehicles		4452	2.8	1.008	80.7	LOS F	80.6	569.2	0.99	1.14	18.2

Level of Service (Aver. Int. Delay): LOS F. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	32.6	LOS D	0.1	0.1	0.71	0.71
P3	Across E approach	53	46.5	LOS E	0.2	0.2	0.85	0.85
All Pedestrians		106	39.5				0.78	0.78

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2012_PostDev_AM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone PostDevelopment 2012 AM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbottsford Road (S)											
1	L	20	11.0	0.615	61.0	LOS E	14.8	110.2	0.96	0.85	23.7
2	T	791	7.0	0.775	55.0	LOS D	19.2	142.8	0.99	0.88	21.8
3	R	86	13.0	0.944	86.5	LOS F	8.0	62.0	1.00	0.91	17.7
Approach		897	7.7	0.943	58.1	LOS E	19.2	142.8	0.99	0.88	21.3
East Edmondstone Road											
4	L	71	8.0	0.258	57.0	LOS E	6.2	45.9	0.90	0.77	23.4
5	T	15	0.0	0.258	49.3	LOS D	6.2	45.9	0.90	0.71	21.7
6	R	207	10.0	0.648	60.9	LOS E	13.9	105.5	0.98	0.83	22.3
Approach		293	9.0	0.648	59.4	LOS E	13.9	105.5	0.96	0.81	22.5
North Abbottsford Road (N)											
7	L	422	4.0	0.896	44.3	LOS D	55.9	401.4	0.97	0.99	28.0
8	T	2323	2.0	0.896	37.3	LOS D	57.9	412.4	0.97	0.97	26.8
9	R	41	3.0	0.299	34.4	LOS C	2.4	17.2	0.66	0.69	30.7
Approach		2786	2.3	0.896	38.4	LOS D	57.9	412.4	0.97	0.97	27.0
West Mayne Road											
10	L	4	0.0	0.634	79.9	LOS E	5.0	35.7	1.00	0.78	19.0
11	T	8	0.0	0.631	71.2	LOS E	5.0	35.7	1.00	0.78	17.3
12	R	41	3.0	0.632	78.9	LOS E	5.0	35.7	1.00	0.78	19.0
Approach		54	2.3	0.632	77.8	LOS E	5.0	35.7	1.00	0.78	18.8
All Vehicles		4029	4.0	0.944	44.8	LOS D	57.9	412.4	0.97	0.93	25.0

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	42.4	LOS E	0.2	0.2	0.81	0.81
P3	Across E approach	53	51.8	LOS E	0.2	0.2	0.89	0.89
All Pedestrians		106	47.1				0.85	0.85

Level of Service (Aver. Int. Delay): LOS E. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

Processed: Friday, 5 February 2010 11:05:58 AM

SIDRA INTERSECTION 4.0.14.1049

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SIDRA
INTERSECTION

MOVEMENT SUMMARY

Site: 2012_PostDev_PM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone PostDevelopment 2012 PM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Road (S)											
1	L	5	0.0	0.780	53.1	LOS D	41.6	293.9	0.94	0.94	26.3
2	T	2397	1.0	1.013	81.3	LOS F	82.2	580.6	0.98	1.18	17.0
3	R	138	5.0	1.000 ³	56.6	LOS E	8.4	61.3	0.98	0.79	23.4
Approach		2540	1.2	1.013	80.0	LOS E	82.2	580.6	0.98	1.16	17.3
East Edmondstone Road											
4	L	71	9.0	0.206	44.5	LOS D	4.7	35.2	0.78	0.73	26.7
5	T	1	0.0	0.205	37.1	LOS D	4.7	35.2	0.78	0.61	25.4
6	R	516	1.0	0.983	98.2	LOS F	45.1	318.4	1.00	1.09	16.3
Approach		587	2.0	0.983	91.7	LOS F	45.1	318.4	0.97	1.05	17.1
North Abbotsford Road (N)											
7	L	259	7.0	0.977	88.9	LOS F	37.4	276.8	1.00	1.15	17.8
8	T	1081	6.0	0.977	88.1	LOS F	37.5	276.8	1.00	1.21	15.9
9	R	15	0.0	0.172	76.1	LOS E	1.5	10.2	0.99	0.69	19.4
Approach		1355	6.1	0.977	88.1	LOS F	37.5	276.8	1.00	1.19	16.3
West Mayne Road											
10	L	7	0.0	0.171	76.1	LOS E	1.5	10.2	0.99	0.69	19.4
11	T	1	0.0	0.171	67.9	LOS E	1.5	10.2	0.99	0.68	17.8
12	R	6	0.0	0.171	75.9	LOS E	1.5	10.2	0.99	0.69	19.5
Approach		15	0.0	0.171	75.4	LOS E	1.5	10.2	0.99	0.69	19.3
All Vehicles		4497	2.8	1.013	83.9	LOS F	82.2	580.6	0.99	1.15	17.0

Level of Service (Aver. Int. Delay): LOS F. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

3 x = 1.00 due to short lane

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	32.6	LOS D	0.1	0.1	0.71	0.71
P3	Across E approach	53	46.5	LOS E	0.2	0.2	0.85	0.85
All Pedestrians		106	39.5				0.78	0.78

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

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SIDRA INTERSECTION 4.0.14.1049

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SIDRA
INTERSECTION

MOVEMENT SUMMARY

Site: 2022_PreDev_AM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone PreDevelopment 2022 AM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbottsford Road (S)											
1	L	23	11.0	0.764	65.4	LOS E	18.4	137.1	1.00	0.91	22.4
2	T	933	7.0	0.961	77.9	LOS E	28.5	211.7	1.00	1.10	18.5
3	R	89	13.0	1.000 ³	103.8	LOS F	8.0	62.0	1.00	0.98	15.7
Approach		1045	7.6	1.000	79.6	LOS E	28.5	211.7	1.00	1.09	18.3
East Edmondstone Road											
4	L	79	8.0	0.290	58.2	LOS E	6.9	51.0	0.90	0.79	23.3
5	T	17	0.0	0.291	49.6	LOS D	6.9	51.0	0.90	0.72	23.6
6	R	240	10.0	0.750	65.4	LOS E	16.4	124.5	1.00	0.87	21.6
Approach		336	9.0	0.750	62.9	LOS E	16.4	124.5	0.97	0.85	22.1
North Abbottsford Road (N)											
7	L	481	4.0	1.038	107.9	LOS F	103.5	742.4	1.00	1.27	15.4
8	T	2743	2.0	1.038	105.4	LOS F	110.4	786.4	1.00	1.35	15.0
9	R	48	3.0	0.349	34.2	LOS C	2.8	19.9	0.65	0.72	31.0
Approach		3273	2.3	1.038	104.7	LOS F	110.4	786.4	0.99	1.33	15.2
West Mayne Road											
10	L	5	0.0	0.755	81.4	LOS F	5.9	42.4	1.00	0.84	18.6
11	T	11	0.0	0.755	73.2	LOS E	5.9	42.4	1.00	0.84	18.7
12	R	48	3.0	0.755	81.3	LOS F	5.9	42.4	1.00	0.84	18.7
Approach		64	2.3	0.755	80.0	LOS E	5.9	42.4	1.00	0.84	18.7
All Vehicles		4718	4.0	1.038	95.8	LOS F	110.4	786.4	0.99	1.24	16.2

Level of Service (Aver. Int. Delay): LOS F. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

3 x = 1.00 due to short lane

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	42.4	LOS E	0.2	0.2	0.81	0.81
P3	Across E approach	53	51.8	LOS E	0.2	0.2	0.89	0.89
All Pedestrians		106	47.1				0.85	0.85

Level of Service (Aver. Int. Delay): LOS E. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2022_PreDev_PM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone PreDevelopment 2022 PM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbottsford Road (S)											
1	L	6	0.0	0.926	78.1	LOS E	66.1	466.4	1.00	1.11	19.8
2	T	2833	1.0	1.185	187.4	LOS F	147.2	1040.2	1.00	1.70	9.6
3	R	154	5.0	1.000 ³	59.7	LOS E	8.4	61.3	0.97	0.79	22.8
Approach		2993	1.2	1.185	181.9	LOS F	147.2	1040.2	1.00	1.67	9.8
East Edmondstone Road											
4	L	73	9.0	0.214	46.5	LOS D	4.9	36.5	0.79	0.76	26.4
5	T	1	0.0	0.211	38.0	LOS D	4.9	36.5	0.79	0.62	27.1
6	R	597	1.0	1.169	236.4	LOS F	81.8	577.8	1.00	1.47	8.0
Approach		671	1.9	1.169	215.5	LOS F	81.8	577.8	0.98	1.39	8.7
North Abbottsford Road (N)											
7	L	292	7.0	0.966	83.5	LOS F	42.7	315.5	1.00	1.13	18.6
8	T	1280	6.0	0.966	80.9	LOS F	43.0	316.7	1.00	1.19	18.0
9	R	17	0.0	0.197	76.2	LOS E	1.7	11.6	0.99	0.69	19.4
Approach		1588	6.1	0.966	81.3	LOS F	43.0	316.7	1.00	1.17	18.1
West Mayne Road											
10	L	9	0.0	0.208	76.4	LOS E	1.8	12.4	0.99	0.70	19.4
11	T	1	0.0	0.207	68.2	LOS E	1.8	12.4	0.99	0.69	19.5
12	R	7	0.0	0.208	76.2	LOS E	1.8	12.4	0.99	0.70	19.4
Approach		18	0.0	0.208	75.8	LOS E	1.8	12.4	0.99	0.70	19.4
All Vehicles		5269	2.8	1.185	155.5	LOS F	147.2	1040.2	1.00	1.48	11.2

Level of Service (Aver. Int. Delay): LOS F. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

3 x = 1.00 due to short lane

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	33.3	LOS D	0.1	0.1	0.72	0.72
P3	Across E approach	53	41.6	LOS E	0.2	0.2	0.80	0.80
All Pedestrians		106	37.4				0.76	0.76

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2022_PostDev_AM

10-054 YMCA Redevelopment
Abbottsford/Edmondstone PostDevelopment 2022 AM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbottsford Road (S)											
1	L	23	11.0	0.732	64.5	LOS E	18.0	134.0	0.99	0.89	22.9
2	T	935	7.0	0.923	68.6	LOS E	26.4	196.4	1.00	1.04	19.0
3	R	100	13.0	1.000 ³	78.8	LOS E	8.0	62.0	1.00	0.78	18.8
Approach		1058	7.7	1.000	69.4	LOS E	26.4	196.4	1.00	1.01	19.1
East Edmondstone Road											
4	L	83	8.0	0.303	57.5	LOS E	7.2	53.0	0.91	0.78	23.2
5	T	17	0.0	0.303	49.8	LOS D	7.2	53.0	0.91	0.72	21.6
6	R	245	10.0	0.767	65.0	LOS E	16.8	128.0	1.00	0.88	21.4
Approach		345	9.0	0.766	62.4	LOS E	16.8	128.0	0.97	0.85	21.8
North Abbottsford Road (N)											
7	L	497	4.0	1.060	124.8	LOS F	110.5	792.7	1.00	1.33	14.0
8	T	2748	2.0	1.059	122.1	LOS F	117.9	839.5	1.00	1.43	12.5
9	R	48	3.0	0.353	34.5	LOS C	2.8	20.1	0.66	0.70	30.7
Approach		3294	2.3	1.059	121.2	LOS F	117.9	839.5	1.00	1.41	12.9
West Mayne Road											
10	L	5	0.0	0.755	81.9	LOS F	5.9	42.4	1.00	0.84	18.7
11	T	11	0.0	0.755	73.2	LOS E	5.9	42.4	1.00	0.84	17.0
12	R	48	3.0	0.755	80.9	LOS F	5.9	42.4	1.00	0.84	18.7
Approach		64	2.3	0.755	79.7	LOS E	5.9	42.4	1.00	0.84	18.4
All Vehicles		4761	4.0	1.060	104.9	LOS F	117.9	839.5	0.99	1.27	14.4

Level of Service (Aver. Int. Delay): LOS F. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

3 x = 1.00 due to short lane

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	42.4	LOS E	0.2	0.2	0.81	0.81
P3	Across E approach	53	51.8	LOS E	0.2	0.2	0.89	0.89
All Pedestrians		106	47.1				0.85	0.85

Level of Service (Aver. Int. Delay): LOS E. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2022_PostDev_PM

10-054 YMCA Redevelopment
Abbotsford/Edmondstone PostDevelopment 2022 PM
Signals - Fixed Time Cycle Time = 130 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Road (S)											
1	L	6	0.0	0.926	83.1	LOS F	67.1	473.9	1.00	1.12	19.7
2	T	2837	1.0	1.191	191.2	LOS F	149.2	1055.0	1.00	1.72	8.8
3	R	162	5.0	1.000 ³	59.1	LOS E	8.4	61.3	0.97	0.78	22.8
Approach		3005	1.2	1.191	185.5	LOS F	149.2	1055.0	1.00	1.68	9.1
East Edmondstone Road											
4	L	81	9.0	0.238	45.6	LOS D	5.4	40.3	0.80	0.74	26.3
5	T	1	0.0	0.238	38.2	LOS D	5.4	40.3	0.80	0.63	25.0
6	R	608	1.0	1.191	255.7	LOS F	87.1	614.6	1.00	1.51	7.5
Approach		691	1.9	1.191	230.7	LOS F	87.1	614.6	0.98	1.42	8.2
North Abbotsford Road (N)											
7	L	304	7.0	0.973	85.7	LOS F	43.8	323.5	1.00	1.14	18.3
8	T	1280	6.0	0.973	83.6	LOS F	44.1	324.2	1.00	1.20	16.5
9	R	17	0.0	0.197	76.2	LOS E	1.7	11.6	0.99	0.69	19.4
Approach		1601	6.1	0.973	84.0	LOS F	44.1	324.2	1.00	1.19	16.9
West Mayne Road											
10	L	9	0.0	0.208	76.4	LOS E	1.8	12.4	0.99	0.70	19.4
11	T	1	0.0	0.207	68.2	LOS E	1.8	12.4	0.99	0.69	17.7
12	R	7	0.0	0.208	76.2	LOS E	1.8	12.4	0.99	0.70	19.4
Approach		18	0.0	0.208	75.8	LOS E	1.8	12.4	0.99	0.70	19.3
All Vehicles		5315	2.8	1.191	160.4	LOS F	149.2	1055.0	1.00	1.49	10.4

Level of Service (Aver. Int. Delay): LOS F. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS F. LOS Method for individual vehicle movements: Delay (HCM).

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

3 x = 1.00 due to short lane

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	33.3	LOS D	0.1	0.1	0.72	0.72
P3	Across E approach	53	41.6	LOS E	0.2	0.2	0.80	0.80
All Pedestrians		106	37.4				0.76	0.76

Level of Service (Aver. Int. Delay): LOS D. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2009_Ex_Am

10-054 YMCA Redevelopment
Abbotsford/Folkestone Existing 2009 AM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	903	7.0	0.330	5.9	LOS A	10.8	79.9	0.38	0.34	50.0
3	R	34	9.0	0.391	17.4	LOS B	1.4	10.6	0.44	0.74	40.8
Approach		937	7.1	0.392	6.3	LOS A	10.8	79.9	0.38	0.35	49.6
East Folkestone St											
4	L	49	9.0	0.170	55.3	LOS E	3.6	27.2	0.89	0.75	23.9
6	R	58	4.0	0.192	55.2	LOS E	4.2	30.2	0.90	0.76	23.8
Approach		107	6.3	0.192	55.3	LOS E	4.2	30.2	0.90	0.75	23.8
North Abbotsford Rd (N)											
7	L	44	2.0	0.538	9.9	LOS A	5.9	42.6	0.11	1.04	47.7
8	T	2223	3.0	0.539	1.6	LOS A	6.0	42.7	0.11	0.10	56.9
Approach		2267	3.0	0.539	1.8	LOS A	6.0	42.7	0.11	0.12	56.7
All Vehicles		3312	4.2	0.539	4.8	LOS A	10.8	79.9	0.21	0.21	52.2

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2009_Ex_Pm

10-054 YMCA Redevelopment
Abbotsford/Folkestone Existing 2009 PM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	1921	1.0	0.518	7.3	LOS A	19.2	135.4	0.47	0.43	48.1
3	R	56	0.0	0.520	15.4	LOS B	14.0	98.9	0.47	0.95	43.6
Approach		1977	1.0	0.518	7.5	LOS A	19.2	135.4	0.47	0.44	48.0
East Folkestone St											
4	L	53	4.0	0.175	55.1	LOS E	3.8	27.6	0.90	0.75	23.9
6	R	62	2.0	0.204	55.2	LOS E	4.4	31.6	0.90	0.76	23.8
Approach		115	2.9	0.204	55.2	LOS E	4.4	31.6	0.90	0.76	23.8
North Abbotsford Rd (N)											
7	L	22	0.0	0.227	9.3	LOS A	1.7	12.7	0.07	1.03	48.0
8	T	908	7.0	0.227	1.2	LOS A	1.7	12.8	0.07	0.06	57.8
Approach		931	6.8	0.227	1.4	LOS A	1.7	12.8	0.07	0.08	57.5
All Vehicles		3022	2.9	0.520	7.4	LOS A	19.2	135.4	0.36	0.34	48.6

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2012_Predev_Am

10-054 YMCA Redevelopment
Abbotsford/Folkestone Predevelopment 2012 AM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	1124	7.0	0.411	6.4	LOS A	13.8	102.3	0.41	0.37	49.3
3	R	43	9.0	0.473	20.2	LOS C	2.1	15.6	0.52	0.76	38.8
Approach		1167	7.1	0.474	6.9	LOS A	13.8	102.3	0.42	0.39	48.8
East Folkestone St											
4	L	62	9.0	0.214	55.8	LOS E	4.5	33.6	0.90	0.76	23.7
6	R	72	4.0	0.238	55.7	LOS E	5.1	36.7	0.91	0.77	23.7
Approach		134	6.3	0.238	55.7	LOS E	5.1	36.7	0.91	0.76	23.7
North Abbotsford Rd (N)											
7	L	55	2.0	0.672	10.2	LOS B	9.1	65.6	0.15	1.04	47.6
8	T	2767	3.0	0.671	1.9	LOS A	9.2	65.8	0.15	0.14	56.2
Approach		2822	3.0	0.671	2.1	LOS A	9.2	65.8	0.15	0.16	56.0
All Vehicles		4123	4.2	0.672	5.2	LOS A	13.8	102.3	0.25	0.24	51.6

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2012_PreDev_Pm

10-054 YMCA Redevelopment
Abbotsford/Folkestone Predevelopment 2012 PM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	2392	1.0	0.684	9.1	LOS A	30.2	213.0	0.58	0.54	45.9
3	R	69	0.0	0.684	17.3	LOS B	17.4	122.6	0.58	0.94	42.3
Approach		2461	1.0	0.684	9.3	LOS A	30.2	213.0	0.58	0.55	45.8
East Folkestone St											
4	L	65	4.0	0.217	55.5	LOS E	4.7	33.7	0.90	0.76	23.8
6	R	77	2.0	0.252	55.7	LOS E	5.4	38.4	0.91	0.77	23.7
Approach		142	2.9	0.252	55.6	LOS E	5.4	38.4	0.91	0.77	23.7
North Abbotsford Rd (N)											
7	L	27	0.0	0.283	9.4	LOS A	2.3	16.7	0.07	1.03	48.0
8	T	1131	7.0	0.282	1.2	LOS A	2.3	16.7	0.07	0.06	57.6
Approach		1158	6.8	0.282	1.4	LOS A	2.3	16.7	0.07	0.09	57.4
All Vehicles		3761	2.9	0.684	8.6	LOS A	30.2	213.0	0.44	0.42	47.1

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2012_PostDev_Am

10-054 YMCA Redevelopment
Abbotsford/Folkestone Postdevelopment 2012 AM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	1135	7.0	0.415	6.5	LOS A	13.9	103.4	0.41	0.37	48.5
3	R	64	9.0	0.613	26.0	LOS C	3.8	28.5	0.60	0.78	34.6
Approach		1199	7.1	0.614	7.5	LOS A	13.9	103.4	0.42	0.40	47.4
East Folkestone St											
4	L	69	9.0	0.239	54.9	LOS D	4.9	37.3	0.91	0.75	23.7
6	R	74	4.0	0.245	55.3	LOS E	5.2	37.7	0.91	0.76	23.7
Approach		143	6.4	0.245	55.1	LOS E	5.2	37.7	0.91	0.76	23.7
North Abbotsford Rd (N)											
7	L	60	2.0	0.676	14.5	LOS B	9.2	66.1	0.15	1.26	43.9
8	T	2772	3.0	0.674	1.9	LOS A	9.2	66.3	0.15	0.14	55.9
Approach		2832	3.0	0.674	2.2	LOS A	9.2	66.3	0.15	0.16	55.5
All Vehicles		4174	4.3	0.676	5.5	LOS A	13.9	103.4	0.26	0.25	50.5

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

Processed: Friday, 5 February 2010 11:17:17 AM
SIDRA INTERSECTION 4.0.14.1049

Project: P:\2009-10\10-054 YMCA Redevelopment - Perry Park\Calcs\SIDRA\Abb-Folk-intsn.sip
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SIDRA 
INTERSECTION

MOVEMENT SUMMARY

Site: 2012_PostDev_Pm

10-054 YMCA Redevelopment
Abbotsford/Folkestone Postdevelopment 2012 PM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	2392	1.0	0.715	9.5	LOS A	32.9	232.4	0.61	0.57	44.4
3	R	86	0.0	0.713	21.0	LOS C	16.1	113.1	0.61	1.01	40.1
Approach		2478	1.0	0.715	9.9	LOS A	32.9	232.4	0.61	0.58	44.2
East Folkestone St											
4	L	81	4.0	0.269	55.5	LOS E	5.7	41.1	0.91	0.77	23.6
6	R	81	2.0	0.266	55.6	LOS E	5.7	40.4	0.91	0.77	23.7
Approach		162	3.0	0.269	55.6	LOS E	5.7	41.1	0.91	0.77	23.6
North Abbotsford Rd (N)											
7	L	32	0.0	0.285	14.0	LOS B	2.3	16.9	0.07	1.34	44.3
8	T	1139	7.0	0.285	1.2	LOS A	2.3	17.0	0.07	0.07	57.4
Approach		1171	6.8	0.285	1.6	LOS A	2.3	17.0	0.07	0.10	56.9
All Vehicles		3811	2.8	0.715	9.3	LOS A	32.9	232.4	0.46	0.44	45.5

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

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SIDRA INTERSECTION 4.0.14.1049

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**SIDRA
INTERSECTION**

MOVEMENT SUMMARY

Site: 2022_PreDev_Am

10-054 YMCA Redevelopment
Abbotsford/Folkestone Predevelopment 2022 AM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	1331	7.0	0.486	7.0	LOS A	17.0	126.3	0.45	0.41	48.5
3	R	52	9.0	0.550	26.3	LOS C	3.0	22.6	0.62	0.80	35.1
Approach		1382	7.1	0.550	7.7	LOS A	17.0	126.3	0.46	0.42	47.9
East Folkestone St											
4	L	73	9.0	0.250	56.1	LOS E	5.1	38.8	0.91	0.77	23.7
6	R	85	4.0	0.283	56.1	LOS E	5.9	43.0	0.92	0.77	23.6
Approach		158	6.3	0.283	56.1	LOS E	5.9	43.0	0.91	0.77	23.6
North Abbotsford Rd (N)											
7	L	65	2.0	0.795	10.6	LOS B	14.5	103.8	0.22	1.03	47.4
8	T	3276	3.0	0.795	2.3	LOS A	14.5	104.1	0.22	0.21	55.2
Approach		3341	3.0	0.795	2.5	LOS A	14.5	104.1	0.22	0.23	55.1
All Vehicles		4881	4.2	0.795	5.7	LOS A	17.0	126.3	0.31	0.30	50.7

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2022_PreDev_Pm

10-054 YMCA Redevelopment
Abbotsford/Folkestone Predevelopment 2022 PM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	2831	1.0	0.863	14.9	LOS B	51.2	361.2	0.79	0.77	40.3
3	R	82	0.0	0.861	40.2	LOS D	27.2	191.5	0.79	1.07	29.5
Approach		2913	1.0	0.863	15.6	LOS B	51.2	361.2	0.79	0.78	39.9
East Folkestone St											
4	L	78	4.0	0.259	55.9	LOS E	5.5	39.6	0.91	0.77	23.6
6	R	92	2.0	0.300	56.2	LOS E	6.3	45.0	0.92	0.78	23.6
Approach		169	2.9	0.300	56.1	LOS E	6.3	45.0	0.92	0.77	23.6
North Abbotsford Rd (N)											
7	L	33	0.0	0.335	9.5	LOS A	2.8	20.8	0.08	1.03	47.9
8	T	1339	7.0	0.334	1.3	LOS A	2.8	20.9	0.08	0.07	57.5
Approach		1372	6.8	0.334	1.5	LOS A	2.8	20.9	0.08	0.09	57.2
All Vehicles		4454	2.9	0.863	12.8	LOS B	51.2	361.2	0.58	0.57	42.7

Level of Service (Aver. Int. Delay): LOS B. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

MOVEMENT SUMMARY

Site: 2022_PostDev_Am

10-054 YMCA Redevelopment
Abbotsford/Folkestone Postdevelopment 2022 AM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	1341	7.0	0.490	7.0	LOS A	17.2	127.6	0.45	0.41	47.7
3	R	73	9.0	0.685	36.1	LOS D	5.1	38.7	0.71	0.86	29.8
Approach		1414	7.1	0.684	8.5	LOS A	17.2	127.6	0.46	0.44	46.2
East Folkestone St											
4	L	80	9.0	0.275	55.2	LOS E	5.6	42.4	0.91	0.76	23.6
6	R	87	4.0	0.290	55.7	LOS E	6.1	44.0	0.92	0.77	23.6
Approach		167	6.4	0.290	55.5	LOS E	6.1	44.0	0.92	0.77	23.6
North Abbotsford Rd (N)											
7	L	71	2.0	0.795	15.0	LOS B	14.6	104.8	0.22	1.24	43.8
8	T	3280	3.0	0.797	2.3	LOS A	14.6	105.1	0.22	0.21	54.8
Approach		3351	3.0	0.797	2.6	LOS A	14.6	105.1	0.22	0.23	54.5
All Vehicles		4932	4.3	0.797	6.1	LOS A	17.2	127.6	0.32	0.31	49.6

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

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**SIDRA
INTERSECTION**

MOVEMENT SUMMARY

Site: 2022_PostDev_Pm

10-054 YMCA Redevelopment
Abbotsford/Folkestone Predevelopment 2022 PM
Signals - Fixed Time Cycle Time = 120 seconds

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Abbotsford Rd (S)											
2	T	2831	1.0	0.901	22.0	LOS C	64.1	452.9	0.86	0.87	34.2
3	R	99	0.0	0.902	61.6	LOS E	27.1	190.8	0.85	1.19	23.4
Approach		2929	1.0	0.901	23.4	LOS C	64.1	452.9	0.86	0.88	33.7
East Folkestone St											
4	L	94	4.0	0.311	55.9	LOS E	6.5	46.8	0.92	0.77	23.5
6	R	96	2.0	0.314	56.1	LOS E	6.6	46.9	0.92	0.78	23.5
Approach		189	3.0	0.314	56.0	LOS E	6.6	46.9	0.92	0.78	23.5
North Abbotsford Rd (N)											
7	L	37	0.0	0.337	14.0	LOS B	2.9	21.1	0.08	1.34	44.3
8	T	1347	7.0	0.337	1.3	LOS A	2.9	21.2	0.08	0.07	57.3
Approach		1384	6.8	0.337	1.6	LOS A	2.9	21.2	0.08	0.10	56.8
All Vehicles		4503	2.8	0.902	18.1	LOS B	64.1	452.9	0.62	0.64	37.6

Level of Service (Aver. Int. Delay): LOS B. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual vehicle movements: Delay (HCM).

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

Movement Performance - Pedestrians								
Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P1	Across S approach	53	40.8	LOS E	0.1	0.1	0.83	0.83
P3	Across E approach	53	4.0	LOS A	0.0	0.0	0.26	0.26
All Pedestrians		106	22.4				0.54	0.54

Level of Service (Aver. Int. Delay): LOS C. Based on average delay for all pedestrian movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS E. LOS Method for individual pedestrian movements: Delay (HCM).

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SIDRA
INTERSECTION

MOVEMENT SUMMARY

Site: 2009_PreDev_AM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Predevelopment 2009 AM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	27	4.0	0.035	9.4	LOS A	0.2	1.3	0.49	0.67	47.7
2	T	38	3.0	0.059	7.7	LOS A	0.3	2.3	0.48	0.60	48.2
3	R	21	10.0	0.059	13.0	LOS B	0.3	2.3	0.48	0.80	45.4
Approach		86	5.0	0.060	9.5	LOS B	0.3	2.3	0.48	0.67	47.3
East Edmonstone Road East											
4	L	20	0.0	0.105	8.5	LOS A	0.7	4.7	0.36	0.64	48.5
5	T	442	4.0	0.295	6.9	LOS A	2.3	16.5	0.36	0.52	49.2
6	R	47	0.0	0.294	11.7	LOS B	2.3	16.5	0.36	0.78	46.1
Approach		509	3.5	0.295	7.4	LOS B	2.3	16.5	0.36	0.55	48.8
North Ross Street											
7	L	28	15.0	0.055	12.0	LOS B	0.2	1.9	0.59	0.80	45.6
8	T	39	0.0	0.089	8.3	LOS A	0.4	3.2	0.55	0.70	47.6
9	R	41	3.0	0.089	13.4	LOS B	0.4	3.2	0.55	0.85	44.8
Approach		108	5.1	0.089	11.2	LOS B	0.4	3.2	0.56	0.79	45.9
West Edmonstone Road West											
10	L	118	3.0	0.076	6.8	LOS A	0.4	2.9	0.18	0.53	49.9
11	T	822	3.0	0.322	6.4	LOS A	2.2	15.7	0.25	0.50	49.9
12	R	71	4.0	0.322	11.6	LOS B	1.8	12.7	0.26	0.79	46.2
Approach		1011	3.1	0.322	6.8	LOS B	2.2	15.7	0.24	0.52	49.6
All Vehicles		1715	3.4	0.322	7.4	LOS A	2.3	16.5	0.31	0.56	49.0

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

MOVEMENT SUMMARY

Site: 2009_PreDev_PM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Predevelopment 2009 PM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	39	0.0	0.061	10.6	LOS B	0.3	2.3	0.61	0.76	46.4
2	T	67	2.0	0.103	8.7	LOS A	0.6	4.4	0.60	0.70	47.5
3	R	22	0.0	0.103	13.7	LOS B	0.6	4.4	0.60	0.86	44.7
Approach		128	1.0	0.103	10.1	LOS B	0.6	4.4	0.60	0.75	46.6
East Edmonstone Road East											
4	L	22	0.0	0.146	9.0	LOS A	0.9	6.7	0.45	0.68	48.2
5	T	644	1.0	0.411	7.2	LOS A	3.6	25.4	0.48	0.58	48.5
6	R	5	0.0	0.405	12.2	LOS B	3.6	25.4	0.49	0.79	46.1
Approach		672	1.0	0.411	7.3	LOS B	3.6	25.4	0.48	0.58	48.5
North Ross Street											
7	L	39	0.0	0.066	10.3	LOS B	0.3	2.1	0.52	0.74	46.7
8	T	35	0.0	0.163	7.6	LOS A	0.8	5.9	0.48	0.64	47.8
9	R	133	1.0	0.163	12.7	LOS B	0.8	5.9	0.48	0.80	45.0
Approach		206	0.6	0.163	11.4	LOS B	0.8	5.9	0.49	0.77	45.7
West Edmonstone Road West											
10	L	67	0.0	0.043	6.6	LOS A	0.2	1.7	0.17	0.52	49.9
11	T	513	4.0	0.206	6.4	LOS A	1.4	9.9	0.23	0.49	50.0
12	R	47	2.0	0.206	11.4	LOS B	1.1	7.8	0.24	0.79	46.2
Approach		627	3.4	0.206	6.8	LOS B	1.4	9.9	0.23	0.52	49.7
All Vehicles		1634	1.9	0.411	7.8	LOS A	3.6	25.4	0.39	0.59	48.4

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

MOVEMENT SUMMARY

Site: 2012_PreDev_AM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Predevelopment 2012 AM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	34	4.0	0.048	10.0	LOS A	0.2	1.8	0.55	0.71	47.2
2	T	47	3.0	0.081	8.2	LOS A	0.5	3.3	0.55	0.65	47.7
3	R	26	10.0	0.081	13.5	LOS B	0.5	3.3	0.55	0.83	45.0
Approach		107	5.0	0.081	10.1	LOS B	0.5	3.3	0.55	0.72	46.9
East Edmonstone Road East											
4	L	25	0.0	0.135	8.8	LOS A	0.9	6.2	0.41	0.66	48.3
5	T	551	4.0	0.379	7.1	LOS A	3.2	23.1	0.43	0.55	48.7
6	R	59	0.0	0.378	12.0	LOS B	3.2	23.1	0.44	0.77	46.0
Approach		635	3.5	0.379	7.7	LOS B	3.2	23.1	0.43	0.58	48.4
North Ross Street											
7	L	36	15.0	0.077	13.0	LOS B	0.4	2.8	0.64	0.85	44.8
8	T	48	0.0	0.124	8.9	LOS A	0.7	4.7	0.63	0.76	47.1
9	R	52	3.0	0.124	14.1	LOS B	0.7	4.7	0.63	0.90	44.3
Approach		136	5.1	0.124	11.9	LOS B	0.7	4.7	0.63	0.84	45.3
West Edmonstone Road West											
10	L	146	3.0	0.095	6.8	LOS A	0.5	3.7	0.20	0.53	49.7
11	T	1023	3.0	0.405	6.6	LOS A	3.0	21.8	0.31	0.52	49.5
12	R	87	4.0	0.404	11.8	LOS B	2.5	17.8	0.32	0.79	46.1
Approach		1257	3.1	0.405	7.0	LOS B	3.0	21.8	0.30	0.54	49.3
All Vehicles		2135	3.4	0.405	7.6	LOS A	3.2	23.1	0.37	0.58	48.6

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

MOVEMENT SUMMARY

Site: 2012_PreDev_PM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Predevelopment 2012 PM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	48	0.0	0.092	12.0	LOS B	0.5	3.7	0.69	0.83	45.0
2	T	84	2.0	0.158	9.8	LOS A	1.0	7.4	0.71	0.79	46.8
3	R	32	0.0	0.158	14.9	LOS B	1.0	7.4	0.71	0.90	43.8
Approach		164	1.0	0.158	11.5	LOS B	1.0	7.4	0.71	0.83	45.6
East Edmonstone Road East											
4	L	27	0.0	0.193	9.6	LOS A	1.3	8.9	0.50	0.71	48.0
5	T	802	1.0	0.541	7.8	LOS A	5.2	36.9	0.59	0.64	47.8
6	R	20	0.0	0.541	12.8	LOS B	5.2	36.9	0.60	0.80	45.7
Approach		849	0.9	0.541	8.0	LOS B	5.2	36.9	0.59	0.64	47.8
North Ross Street											
7	L	48	0.0	0.069	8.8	LOS A	0.3	2.2	0.40	0.65	48.1
8	T	43	0.0	0.178	6.9	LOS A	0.9	6.7	0.37	0.55	48.6
9	R	165	1.0	0.178	12.0	LOS B	0.9	6.7	0.37	0.74	45.3
Approach		257	0.6	0.178	10.5	LOS B	0.9	6.7	0.37	0.69	46.3
West Edmonstone Road West											
10	L	1	0.0	0.001	6.7	LOS A	0.0	0.0	0.21	0.49	49.7
11	T	182	4.0	0.095	6.4	LOS A	0.6	4.2	0.26	0.49	49.8
12	R	66	2.0	0.095	11.5	LOS B	0.5	3.4	0.27	0.72	45.8
Approach		249	3.5	0.095	7.8	LOS B	0.6	4.2	0.26	0.55	48.6
All Vehicles		1520	1.3	0.541	8.8	LOS A	5.2	36.9	0.51	0.65	47.4

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

MOVEMENT SUMMARY

Site: 2012_PostDev_AM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Postdevelopment 2012 AM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	34	4.0	0.050	9.8	LOS A	0.3	1.9	0.56	0.70	47.0
2	T	47	3.0	0.090	8.0	LOS A	0.5	3.8	0.56	0.64	47.5
3	R	34	10.0	0.090	12.2	LOS B	0.5	3.8	0.56	0.75	44.9
Approach		115	5.3	0.090	9.7	LOS B	0.5	3.8	0.56	0.69	46.5
East Edmonstone Road East											
4	L	46	0.0	0.140	9.5	LOS A	0.9	6.4	0.41	0.67	47.7
5	T	556	4.0	0.394	6.8	LOS A	3.4	24.4	0.44	0.53	48.6
6	R	59	0.0	0.393	12.0	LOS B	3.4	24.4	0.44	0.77	46.0
Approach		661	3.4	0.394	7.4	LOS B	3.4	24.4	0.44	0.56	48.3
North Ross Street											
7	L	36	15.0	0.078	11.3	LOS B	0.4	2.9	0.64	0.79	44.7
8	T	48	0.0	0.125	8.9	LOS A	0.7	4.8	0.63	0.75	46.9
9	R	52	3.0	0.125	13.7	LOS B	0.7	4.8	0.63	0.88	44.2
Approach		136	5.1	0.125	11.4	LOS B	0.7	4.8	0.63	0.81	45.2
West Edmonstone Road West											
10	L	146	3.0	0.095	6.5	LOS A	0.5	3.7	0.20	0.50	49.7
11	T	1025	3.0	0.408	6.3	LOS A	3.1	22.2	0.33	0.50	49.4
12	R	87	4.0	0.408	11.2	LOS B	2.5	18.1	0.33	0.73	46.1
Approach		1259	3.1	0.408	6.7	LOS B	3.1	22.2	0.31	0.51	49.2
All Vehicles		2171	3.4	0.408	7.4	LOS A	3.4	24.4	0.38	0.55	48.5

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

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INTERSECTION

MOVEMENT SUMMARY

Site: 2012_PostDev_PM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Postdevelopment 2012 PM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	48	0.0	0.097	12.4	LOS B	0.6	3.9	0.70	0.84	44.7
2	T	84	2.0	0.181	9.8	LOS A	1.2	8.7	0.73	0.80	46.4
3	R	47	0.0	0.181	15.1	LOS B	1.2	8.7	0.73	0.91	43.6
Approach		180	0.9	0.181	11.9	LOS B	1.2	8.7	0.72	0.84	45.2
East Edmonstone Road East											
4	L	44	0.0	0.197	10.4	LOS B	1.3	9.2	0.51	0.73	47.2
5	T	806	1.0	0.554	7.8	LOS A	5.4	38.5	0.60	0.63	47.7
6	R	20	0.0	0.556	12.8	LOS B	5.4	38.5	0.61	0.80	45.7
Approach		871	0.9	0.554	8.0	LOS B	5.4	38.5	0.59	0.64	47.7
North Ross Street											
7	L	48	0.0	0.070	8.9	LOS A	0.3	2.3	0.41	0.66	48.1
8	T	43	0.0	0.180	6.9	LOS A	1.0	6.8	0.38	0.54	48.3
9	R	165	1.0	0.179	11.9	LOS B	1.0	6.8	0.38	0.73	45.3
Approach		257	0.6	0.179	10.5	LOS B	1.0	6.8	0.39	0.69	46.3
West Edmonstone Road West											
10	L	1	0.0	0.001	6.7	LOS A	0.0	0.0	0.21	0.49	49.7
11	T	186	4.0	0.097	6.1	LOS A	0.6	4.4	0.28	0.46	49.6
12	R	66	2.0	0.097	11.3	LOS B	0.5	3.6	0.29	0.70	45.8
Approach		254	3.5	0.097	7.5	LOS B	0.6	4.4	0.28	0.52	48.5
All Vehicles		1561	1.3	0.556	8.8	LOS A	5.4	38.5	0.52	0.65	47.3

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

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SIDRA
INTERSECTION

MOVEMENT SUMMARY

Site: 2022_PreDev_AM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Predevelopment 2022 AM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South - Folkestone St											
1	L	40	4.0	0.062	10.6	LOS B	0.3	2.4	0.61	0.76	46.6
2	T	56	3.0	0.103	8.7	LOS A	0.6	4.5	0.61	0.70	47.3
3	R	31	10.0	0.103	14.0	LOS B	0.6	4.5	0.61	0.85	44.7
Approach		126	5.0	0.103	10.6	LOS B	0.6	4.5	0.61	0.76	46.4
East Edmonstone Road East											
4	L	29	0.0	0.165	9.1	LOS A	1.1	7.7	0.46	0.68	48.2
5	T	652	4.0	0.461	7.5	LOS A	4.2	30.5	0.51	0.59	48.2
6	R	69	0.0	0.460	12.3	LOS B	4.2	30.5	0.52	0.78	45.9
Approach		751	3.5	0.461	8.0	LOS B	4.2	30.5	0.51	0.61	48.0
North Ross Street											
7	L	42	15.0	0.102	14.0	LOS B	0.5	3.9	0.69	0.87	43.9
8	T	58	0.0	0.163	9.6	LOS A	0.9	6.6	0.69	0.82	46.6
9	R	60	3.0	0.163	14.8	LOS B	0.9	6.6	0.69	0.94	43.7
Approach		160	5.1	0.163	12.7	LOS B	0.9	6.6	0.69	0.88	44.8
West Edmonstone Road West											
10	L	174	3.0	0.114	6.9	LOS A	0.6	4.6	0.23	0.53	49.5
11	T	1212	3.0	0.484	6.7	LOS A	4.0	28.9	0.38	0.54	49.1
12	R	104	4.0	0.485	11.9	LOS B	3.3	23.6	0.38	0.79	46.0
Approach		1489	3.1	0.484	7.1	LOS B	4.0	28.9	0.36	0.55	48.9
All Vehicles		2526	3.4	0.485	7.9	LOS A	4.2	30.5	0.44	0.60	48.2

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

MOVEMENT SUMMARY

Site: 2022_PreDev_PM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Predevelopment 2022 PM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	58	0.0	0.132	13.7	LOS B	0.8	5.8	0.77	0.90	43.6
2	T	99	2.0	0.223	11.3	LOS B	1.6	11.5	0.81	0.88	45.6
3	R	37	0.0	0.223	16.3	LOS B	1.6	11.5	0.81	0.96	42.7
Approach		194	1.0	0.223	13.0	LOS B	1.6	11.5	0.80	0.90	44.4
East Edmonstone Road East											
4	L	33	0.0	0.238	10.1	LOS B	1.6	11.3	0.56	0.75	47.5
5	T	949	1.0	0.667	9.2	LOS A	8.4	59.5	0.71	0.73	47.1
6	R	23	0.0	0.662	14.3	LOS B	8.4	59.5	0.74	0.85	44.5
Approach		1005	0.9	0.667	9.4	LOS B	8.4	59.5	0.71	0.73	47.0
North Ross Street											
7	L	58	0.0	0.085	9.2	LOS A	0.4	2.8	0.44	0.68	47.9
8	T	52	0.0	0.217	7.1	LOS A	1.2	8.4	0.41	0.58	48.3
9	R	196	1.0	0.217	12.2	LOS B	1.2	8.4	0.41	0.76	45.2
Approach		305	0.6	0.217	10.7	LOS B	1.2	8.4	0.42	0.71	46.2
West Edmonstone Road West											
10	L	1	0.0	0.001	6.7	LOS A	0.0	0.0	0.23	0.49	49.5
11	T	216	4.0	0.114	6.5	LOS A	0.7	5.3	0.30	0.50	49.6
12	R	79	2.0	0.114	11.6	LOS B	0.6	4.3	0.30	0.72	45.7
Approach		296	3.5	0.114	7.9	LOS B	0.7	5.3	0.30	0.56	48.4
All Vehicles		1800	1.3	0.667	9.7	LOS A	8.4	59.5	0.60	0.72	46.8

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

MOVEMENT SUMMARY

Site: 2022_PostDev_AM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Postdevelopment 2022 AM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	40	4.0	0.064	10.4	LOS B	0.4	2.5	0.62	0.74	46.4
2	T	56	3.0	0.113	8.5	LOS A	0.7	5.1	0.62	0.70	47.1
3	R	38	10.0	0.113	12.7	LOS B	0.7	5.1	0.62	0.79	44.5
Approach		134	5.3	0.113	10.3	LOS B	0.7	5.1	0.62	0.74	46.1
East Edmonstone Road East											
4	L	51	0.0	0.170	9.8	LOS A	1.1	8.0	0.46	0.70	47.6
5	T	657	4.0	0.477	7.1	LOS A	4.4	32.1	0.52	0.56	48.1
6	R	69	0.0	0.476	12.3	LOS B	4.4	32.1	0.53	0.78	45.9
Approach		777	3.4	0.477	7.7	LOS B	4.4	32.1	0.51	0.59	47.9
North Ross Street											
7	L	42	15.0	0.103	12.3	LOS B	0.5	3.9	0.69	0.82	43.8
8	T	58	0.0	0.164	9.6	LOS A	0.9	6.7	0.70	0.81	46.4
9	R	60	3.0	0.164	14.4	LOS B	0.9	6.7	0.70	0.93	43.7
Approach		160	5.1	0.165	12.1	LOS B	0.9	6.7	0.70	0.86	44.7
West Edmonstone Road West											
10	L	174	3.0	0.114	6.6	LOS A	0.6	4.6	0.23	0.50	49.5
11	T	1214	3.0	0.488	6.5	LOS A	4.1	29.3	0.39	0.52	49.0
12	R	104	4.0	0.487	11.4	LOS B	3.4	24.1	0.39	0.74	46.0
Approach		1492	3.1	0.488	6.8	LOS B	4.1	29.3	0.37	0.53	48.8
All Vehicles		2562	3.4	0.488	7.6	LOS A	4.4	32.1	0.45	0.58	48.1

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

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INTERSECTION

MOVEMENT SUMMARY

Site: 2022_PostDev_PM

10-054 YMCA Redevelopment
Edmonstone Road / Folkestone Street Postdevelopment 2022 PM
Roundabout

Movement Performance - Vehicles											
Mov ID	Turn	Demand Flow veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
South Folkestone St											
1	L	58	4.0	0.139	13.8	LOS B	0.9	6.3	0.78	0.90	43.2
2	T	99	3.0	0.260	11.4	LOS B	1.9	14.0	0.83	0.90	45.1
3	R	53	10.0	0.261	15.6	LOS B	1.9	14.0	0.83	0.94	42.4
Approach		209	5.0	0.260	13.1	LOS B	1.9	14.0	0.82	0.91	43.8
East Edmonstone Road East											
4	L	49	0.0	0.243	10.9	LOS B	1.7	11.9	0.56	0.76	46.7
5	T	954	4.0	0.682	9.1	LOS A	8.9	64.7	0.73	0.73	47.0
6	R	23	0.0	0.681	14.5	LOS B	8.9	64.7	0.76	0.85	44.4
Approach		1026	3.7	0.682	9.4	LOS B	8.9	64.7	0.72	0.73	46.9
North Ross Street											
7	L	58	15.0	0.099	8.8	LOS A	0.5	3.7	0.47	0.61	47.2
8	T	52	0.0	0.219	7.1	LOS A	1.2	8.7	0.42	0.57	48.0
9	R	196	3.0	0.220	11.9	LOS B	1.2	8.7	0.42	0.73	45.2
Approach		305	4.8	0.220	10.5	LOS B	1.2	8.7	0.43	0.68	46.0
West Edmonstone Road West											
10	L	1	0.0	0.001	6.7	LOS A	0.0	0.0	0.23	0.49	49.5
11	T	220	3.0	0.117	6.3	LOS A	0.8	5.4	0.32	0.48	49.4
12	R	79	4.0	0.117	11.2	LOS B	0.6	4.6	0.32	0.67	45.7
Approach		300	3.3	0.117	7.5	LOS B	0.8	5.4	0.32	0.53	48.3
All Vehicles		1841	4.0	0.682	9.7	LOS A	8.9	64.7	0.62	0.71	46.6

Level of Service (Aver. Int. Delay): LOS A. Based on average delay for all vehicle movements. LOS Method: Delay (HCM).

Level of Service (Worst Movement): LOS B. LOS Method for individual vehicle movements: Delay (HCM).

Approach LOS values are based on the worst delay for any vehicle movement.

Roundabout LOS Method: Same as Signalised Intersections.

Roundabout Capacity Model: SIDRA Standard.

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SIDRA INTERSECTION 4.0.14.1049

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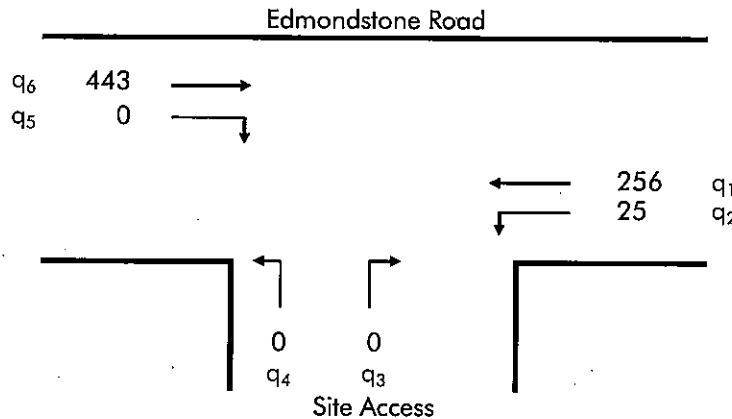
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SIDRA
INTERSECTION

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2009 AM Peak Hour Existing

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1353	1083	0%	1	#NUM!
→	5	3	600	480	0%	3	#NUM!
↘	4	2	1453	1162	0%	1	#NUM!

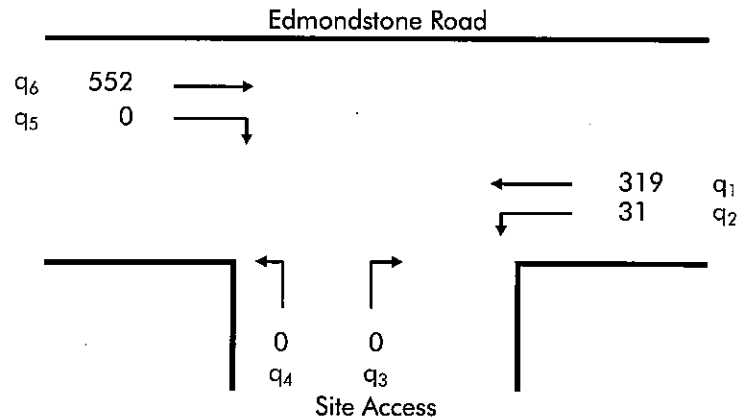
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↔	####	####	####	####	####	#DIV/0!	#DIV/0!
↘	4	2	1453	1162	0%	1	#NUM!

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2012 AM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1262	1009	0%	1	#NUM!
→	5	3	504	403	0%	5	#NUM!
↓	4	2	1378	1103	0%	1	#NUM!

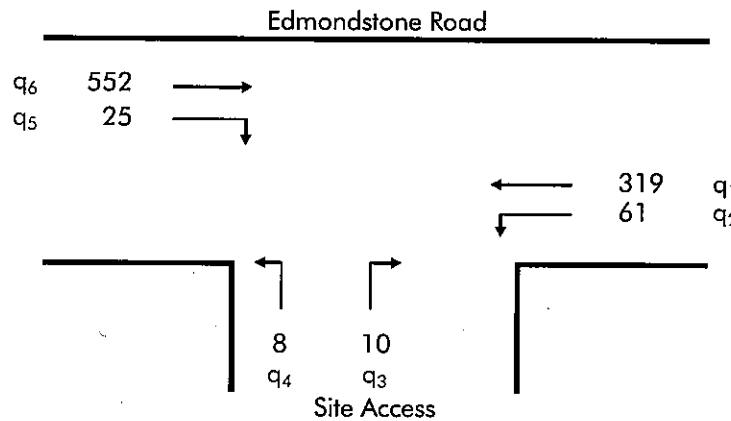
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	####	####	####	####	####	#DIV/0!	#DIV/0!
↓	4	2	1378	1103	0%	1	#NUM!

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2012 AM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1262	1009	1%	1	0.6
→	5	3	488	391	3%	5	0.8
↘	4	2	1378	1103	2%	1	0.7

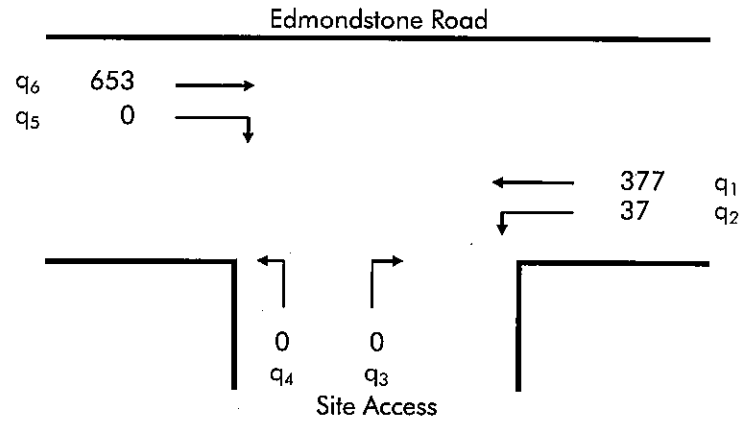
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.45	671	537	3%	2	0.8
↘	4	2	1378	1103	2%	1	0.7

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2022 AM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1182	945	0%	2	#NUM!
→	5	3	428	342	0%	6	#NUM!
↘	4	2	1312	1050	0%	1	#NUM!

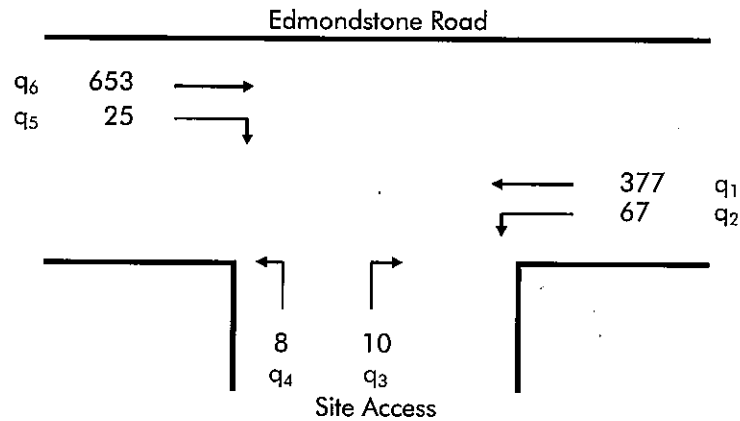
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↕	####	####	####	####	####	#DIV/0!	#DIV/0!
↘	4	2	1312	1050	0%	1	#NUM!

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2022 AM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1182	945	1%	2	0.6
→	5	3	414	331	3%	7	0.8
↘	4	2	1312	1050	2%	1	0.8

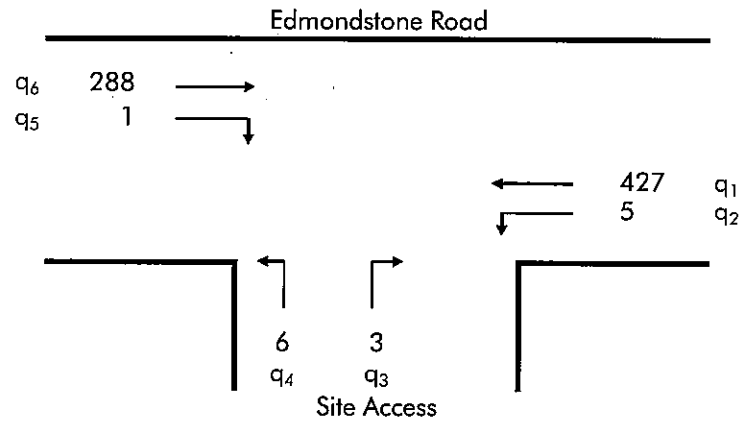
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↕	5.00	2.45	582	466	4%	2	0.9
↘	4	2	1312	1050	2%	1	0.8

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2009 PM Peak Hour Existing

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1117	894	1%	2	0.6
→	5	3	589	471	1%	4	0.6
↘	4	2	1258	1006	0%	1	0.4

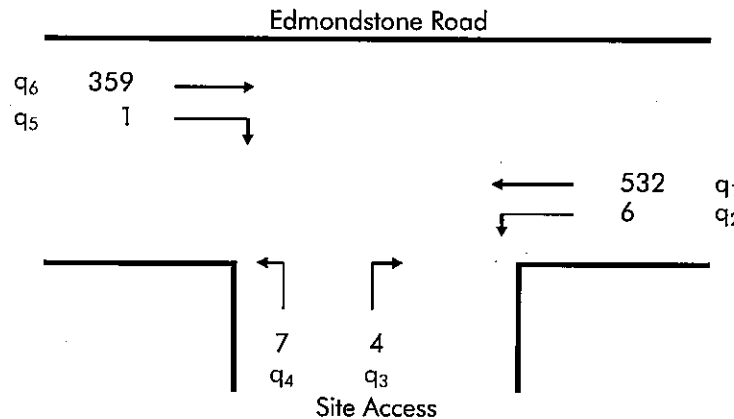
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.25	860	688	1%	3	0.7
↘	4	2	1258	1006	0%	1	0.4

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2012 PM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	993	795	1%	2	0.6
→	5	3	493	394	1%	5	0.6
↘	4	2	1152	921	0%	1	0.4

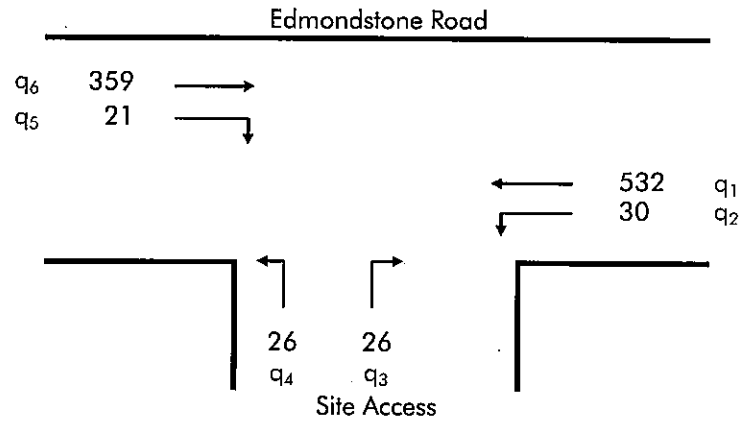
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.25	742	594	2%	4	0.7
↘	4	2	1152	921	0%	1	0.4

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2012 PM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
↙	5	2	993	795	3%	3	0.8
↘	5	3	480	384	7%	5	1.0
↘	4	2	1152	921	2%	2	0.7

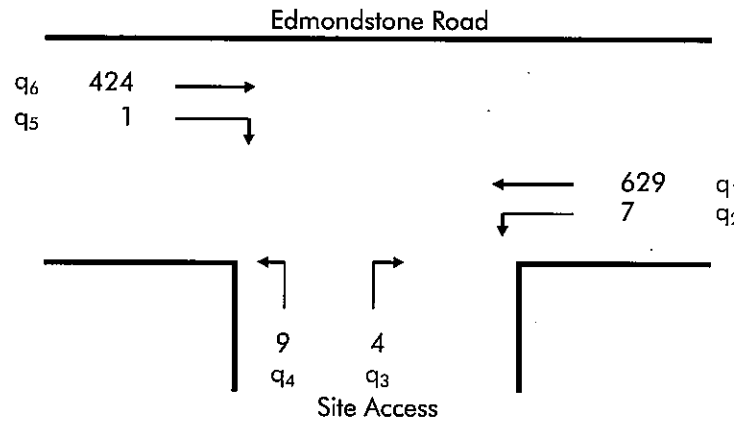
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↕	5.00	2.40	648	518	10%	4	1.2
↘	4	2	1152	921	2%	2	0.7

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2022 PM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	890	712	1%	3	0.6
→	5	3	416	333	1%	6	0.7
↘	4	2	1060	848	0%	2	0.5

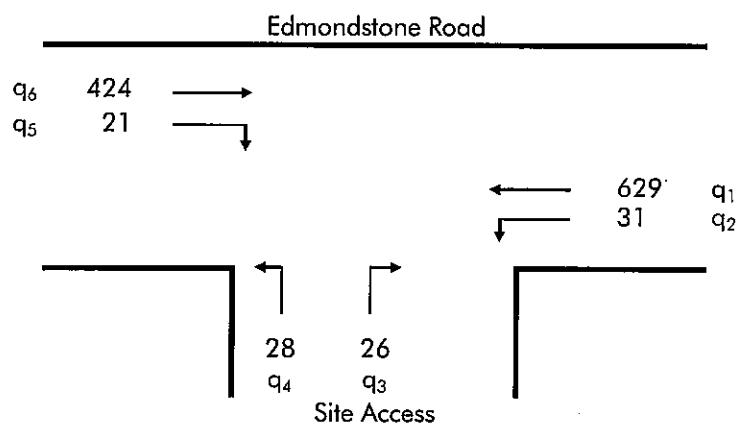
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.25	645	516	3%	5	0.8
↘	4	2	1060	848	0%	2	0.5

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Edmondstone Road / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2022 PM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	890	712	4%	3	0.9
→	5	3	406	325	8%	7	1.1
↘	4	2	1060	848	2%	2	0.8

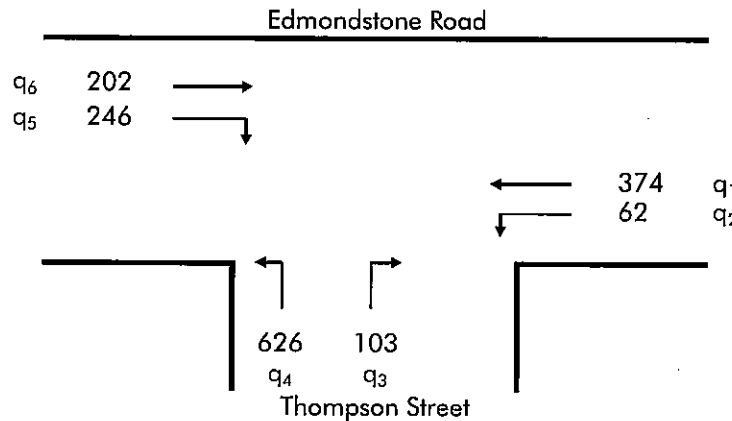
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↕	5.00	2.38	565	452	12%	5	1.3
↘	4	2	1060	848	2%	2	0.8

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2009 AM Peak Hour Existing

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1186	949	66%	-59	4.7
→	5	3	495	396	26%	6	1.9
↘	4	2	1316	1053	23%	2	1.8

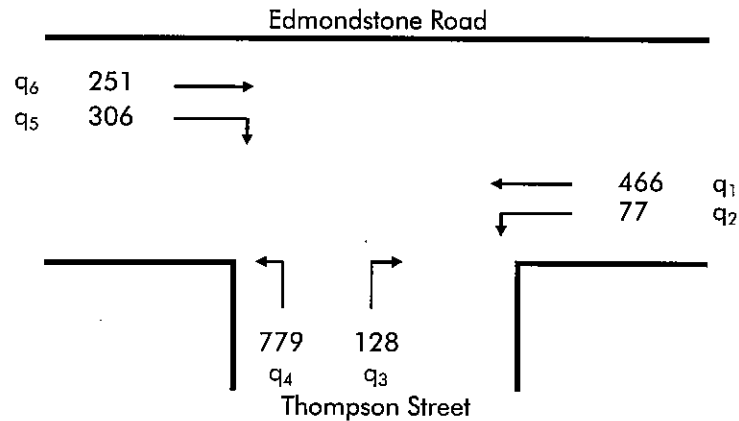
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
←	5.00	2.10	991	793	92%	-361	9.8
↘	4	2	1316	1053	23%	2	1.8

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2012 AM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1070	856	91%	-16	9.5
↗	5	3	392	314	41%	9	2.7
↘	4	2	1218	974	31%	2	2.2

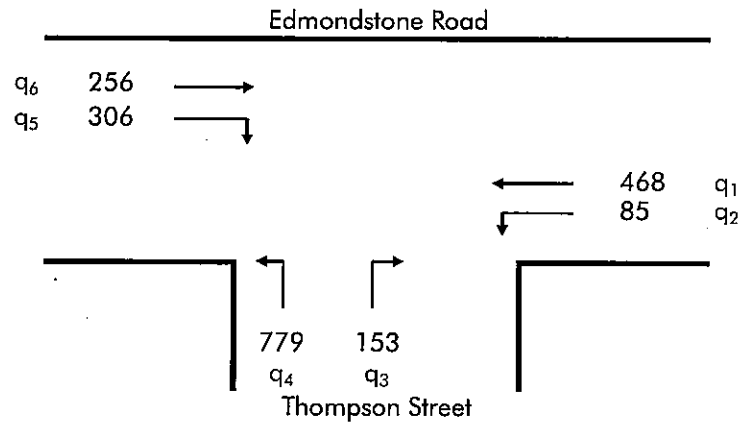
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.10	860	688	132%	-22	0.0
↘	4	2	1218	974	31%	2	2.2

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2012 AM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1068	854	91%	-16	9.5
→	5	3	389	311	49%	10	3.2
↘	4	2	1216	973	31%	2	2.2

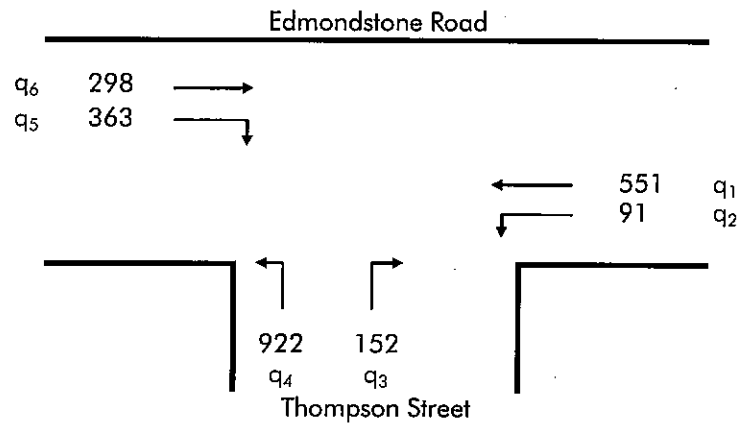
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.12	830	664	140%	-19	0.0
↘	4	2	1216	973	31%	2	2.2

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2022 AM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
↙	5	2	972	778	119%	-11	57.4
↘	5	3	312	250	61%	14	4.1
↓	4	2	1133	906	40%	3	2.6

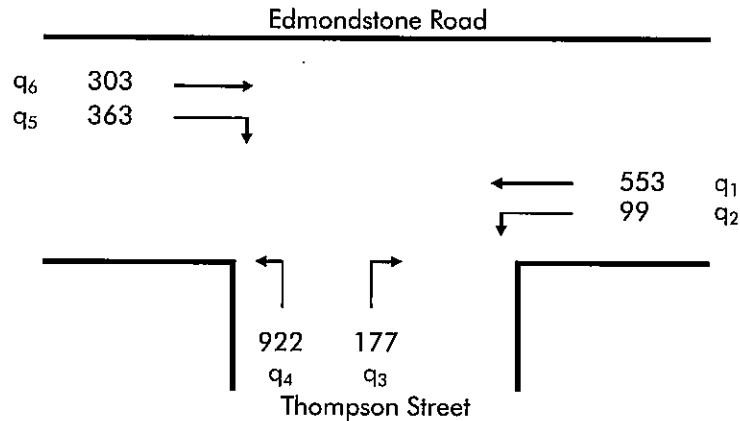
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↕	5.00	2.10	749	599	179%	-13	0.0
↓	4	2	1133	906	40%	3	2.6

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2022 AM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	970	776	119%	-11	60.0
→	5	3	310	248	71%	15	5.3
↘	4	2	1131	905	40%	3	2.6

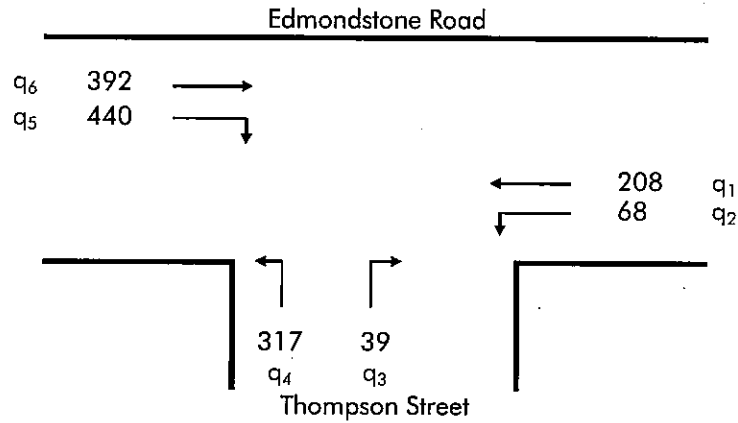
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.11	722	578	190%	-13	0.0
↘	4	2	1131	905	40%	3	2.6

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2009 PM Peak Hour Existing

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1428	1142	28%	4	2.0
→	5	3	379	303	13%	8	1.3
↘	4	2	1513	1210	36%	40	2.4

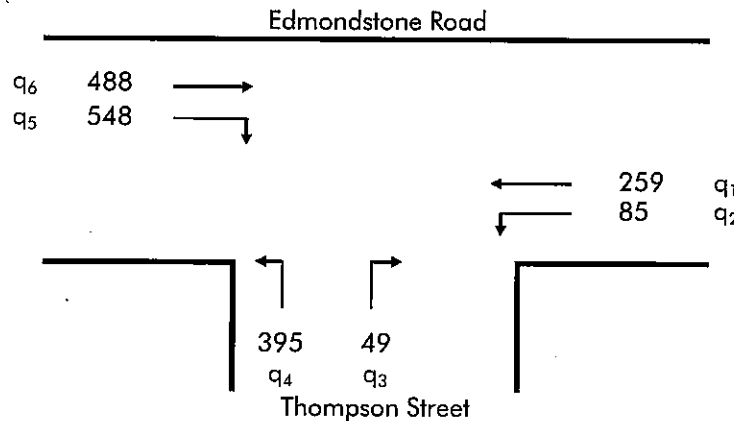
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑	5.00	2.08	1095	876	41%	9	2.7
↘	4	2	1513	1210	36%	40	2.4

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2012 PM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1349	1079	37%	7	2.4
→	5	3	278	222	22%	12	1.7
↘	4	2	1449	1159	47%	-27	3.1

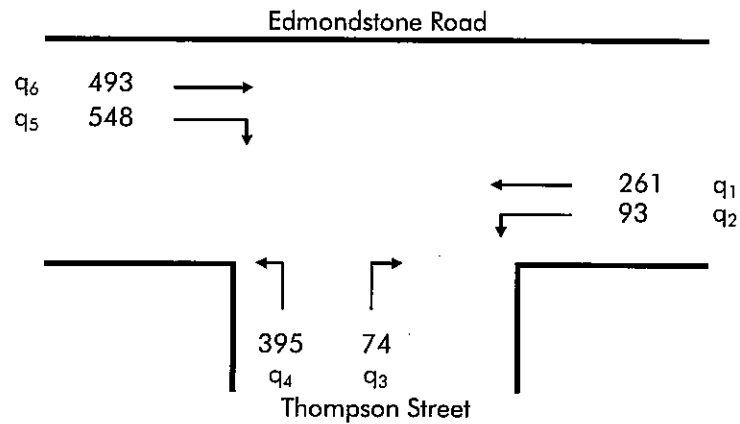
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↕	5.00	2.08	948	759	58%	17	3.9
↘	4	2	1449	1159	47%	-27	3.1

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2012 PM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1346	1077	37%	7	2.4
→	5	3	276	221	34%	13	2.3
↘	4	2	1447	1158	47%	-32	3.1

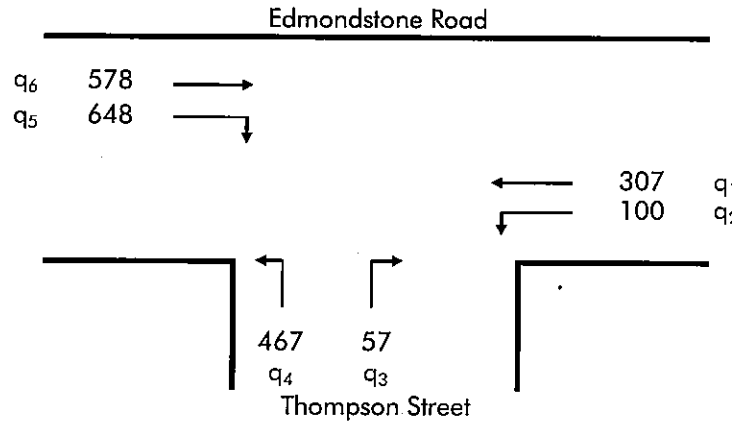
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑	5.00	2.11	835	668	70%	15	5.2
↘	4	2	1447	1158	47%	-32	3.1

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2022 PM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1279	1023	46%	11	3.0
→	5	3	205	164	35%	19	2.4
↘	4	2	1393	1114	58%	-13	3.9

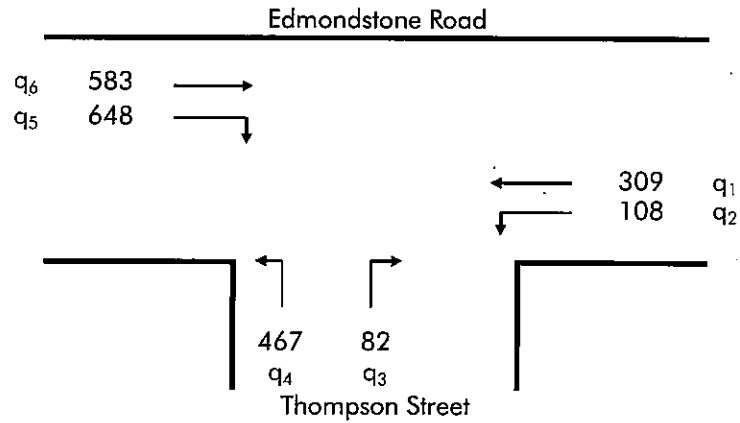
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.08	813	651	81%	48	6.8
↘	4	2	1393	1114	58%	-13	3.9

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Edmondstone Road / Thompson Street, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2022 PM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1276	1021	46%	11	3.0
→	5	3	204	163	50%	20	3.3
↘	4	2	1390	1112	58%	-14	3.9

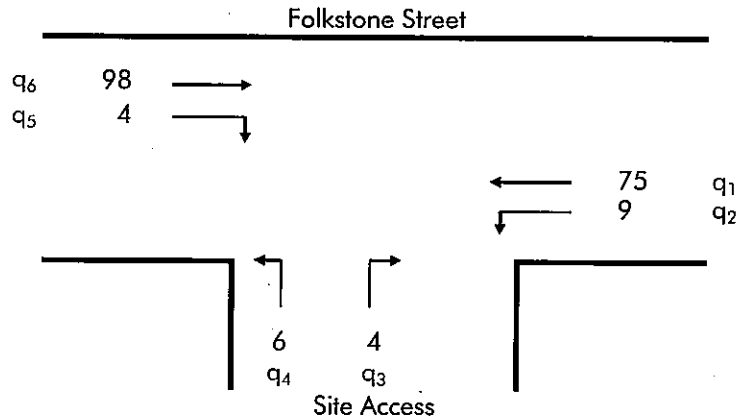
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.10	714	572	96%	39	11.4
↘	4	2	1390	1112	58%	-14	3.9

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2009 AM Peak Hour Existing

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1656	1325	0%	0	0.5
→	5	3	1009	807	0%	1	0.5
↘	4	2	1691	1353	0%	0	0.5

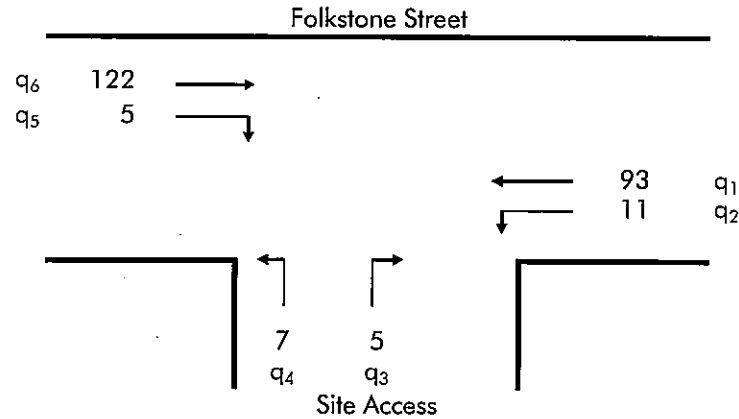
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
←	5.00	2.31	1318	1054	1%	0	0.6
↘	4	2	1691	1353	0%	0	0.5

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2012 AM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1622	1298	1%	0	0.6
→	5	3	966	773	1%	1	0.6
↓	4	2	1665	1332	0%	0	0.5

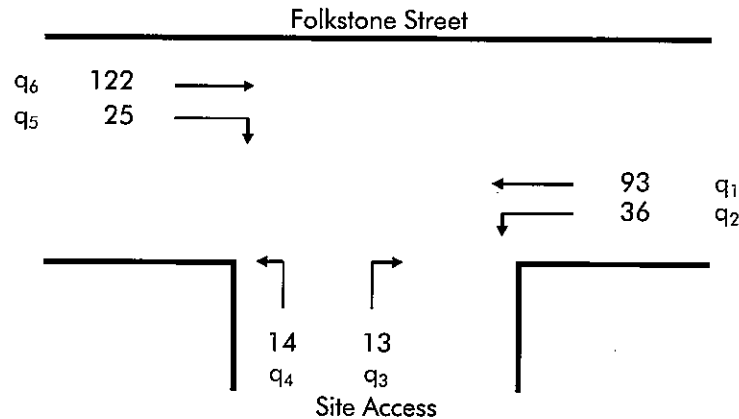
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.31	1276	1021	1%	1	0.6
↓	4	2	1665	1332	0%	0	0.5

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2012 AM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1622	1298	1%	0	0.6
→	5	3	944	755	2%	1	0.7
↘	4	2	1665	1332	2%	0	0.7

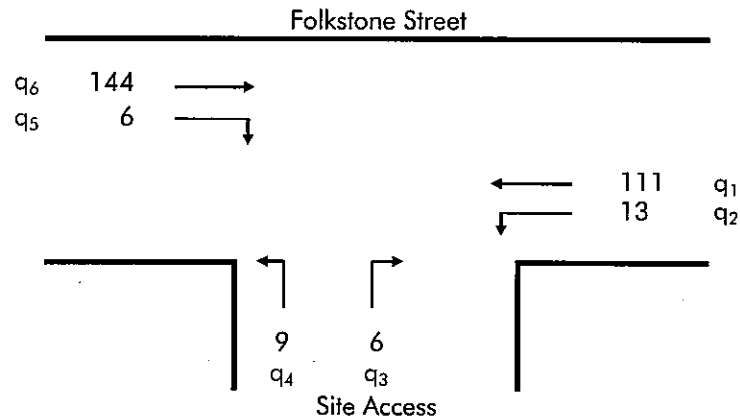
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.38	1205	964	3%	1	0.8
↘	4	2	1665	1332	2%	0	0.7

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2022 AM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1592	1273	1%	0	0.6
→	5	3	928	743	1%	1	0.6
↘	4	2	1641	1313	0%	0	0.5

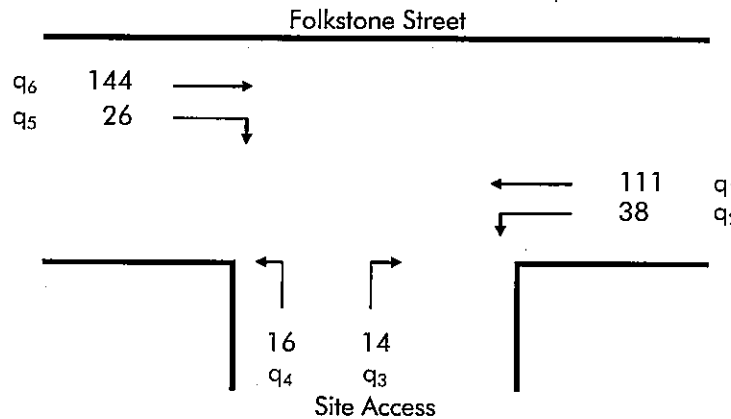
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.31	1238	990	1%	1	0.7
↘	4	2	1641	1313	0%	0	0.5

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 7:30AM - 8:30AM**TITLE:** 2022 AM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1592	1273	1%	0	0.7
→	5	3	907	725	2%	1	0.7
↘	4	2	1641	1313	2%	0	0.7

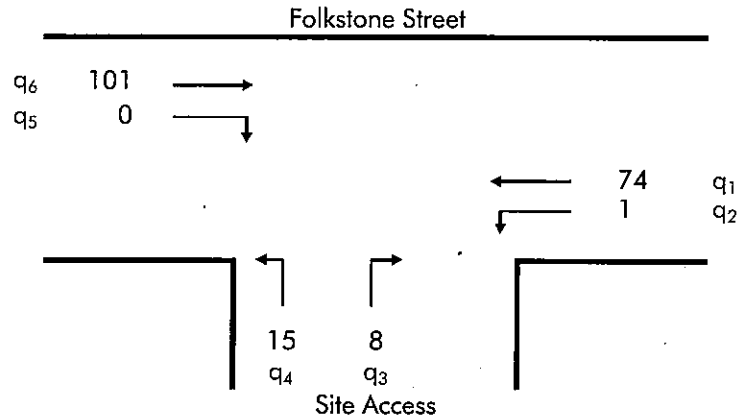
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.37	1177	941	3%	1	0.8
↘	4	2	1641	1313	2%	0	0.7

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2009 PM Peak Hour Existing

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
↙	5	2	1658	1326	1%	0	0.6
↘	5	3	1011	809	1%	1	0.6
↘	4	2	1692	1354	0%	0	#NUM!

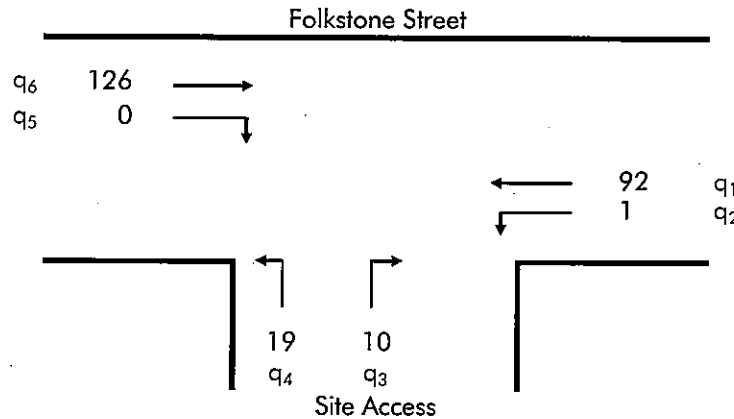
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.26	1356	1085	2%	0	0.7
↘	4	2	1692	1354	0%	0	#NUM!

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2012 PM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1625	1300	1%	0	0.7
→	5	3	970	776	1%	1	0.7
↘	4	2	1667	1333	0%	0	#NUM!

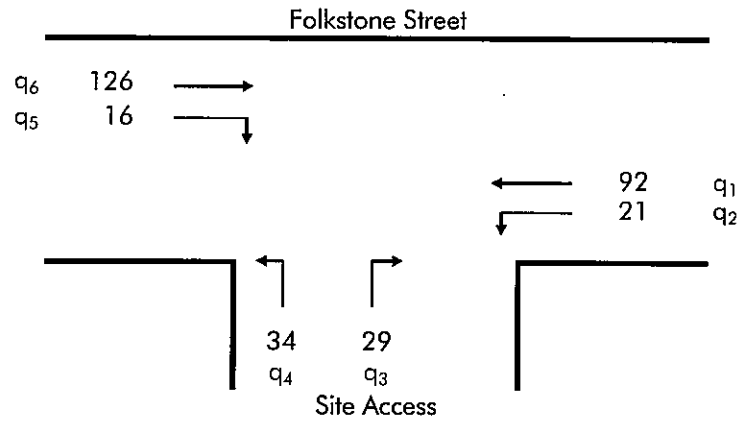
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑	5.00	2.26	1316	1052	3%	1	0.8
↘	4	2	1667	1333	0%	0	#NUM!

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2012 PM Peak Hour Post Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1625	1300	3%	0	0.8
→	5	3	952	761	4%	1	0.9
↘	4	2	1667	1333	1%	0	0.6

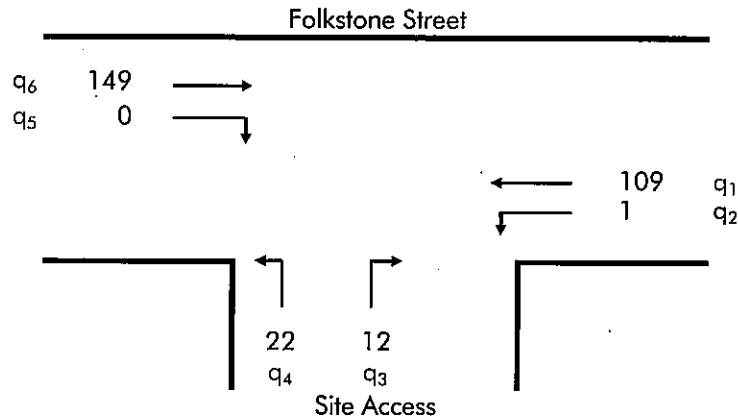
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.36	1226	981	6%	1	1.0
↘	4	2	1667	1333	1%	0	0.6

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

* NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2022 PM Peak Hour Pre Development

Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1594	1275	2%	0	0.7
→	5	3	932	746	2%	1	0.7
↘	4	2	1643	1315	0%	0	#NUM!

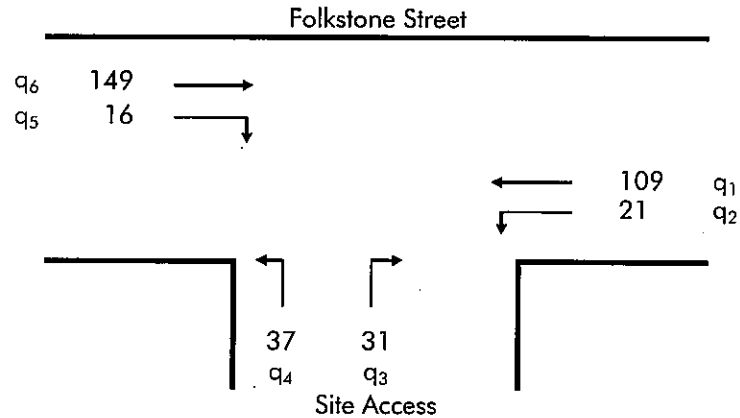
Single Exist Lane - Mixed Composition Flow

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑	5.00	2.26	1278	1023	3%	1	0.8
↘	4	2	1643	1315	0%	0	#NUM!

GAP ACCEPTANCE SPREADSHEET

*SINGLE-LANE MAJOR STREAM

*NO PLATOONING

JUNCTION: Folkstone Street / Site Access, Bowen Hills**PERIOD:** Weekday 4:30PM - 5:30PM**TITLE:** 2022 PM Peak Hour Pre Development

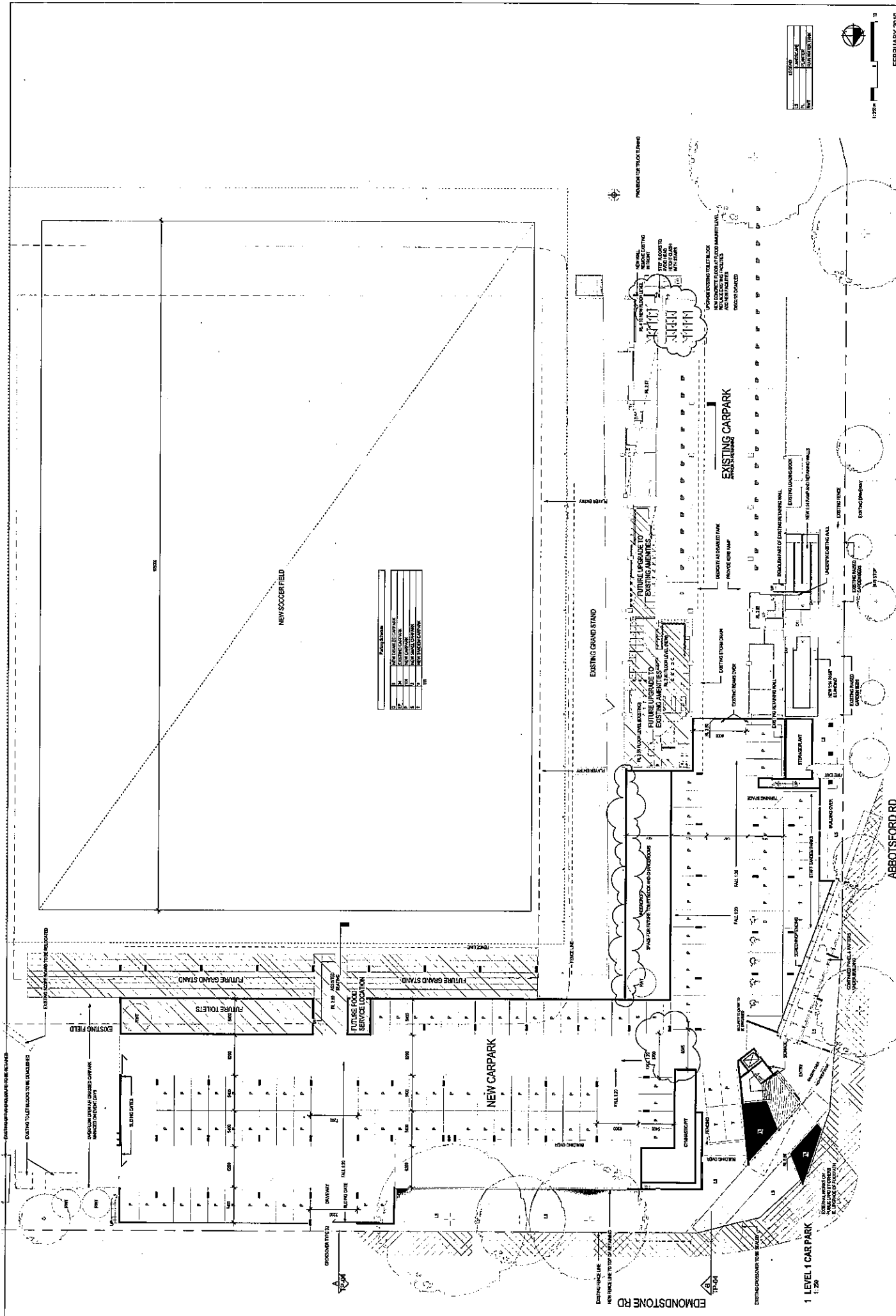
Two Exit Lanes

Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp	Avg Delay (sec)	Max Queue (veh)
←	5	2	1594	1275	3%	0	0.8
→	5	3	915	732	4%	1	0.9
↘	4	2	1643	1315	1%	0	0.6

Single Exist Lane - Mixed Composition Flow

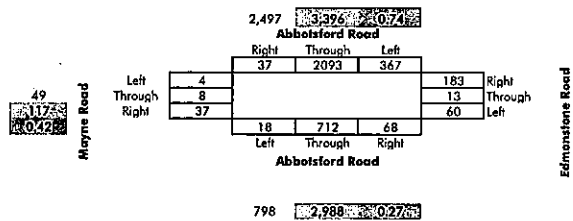
Turn	T (sec)	To (sec)	C (vph)	Cp (vph)	Xp (%)	Avg Delay (sec)	Max Queue (veh)
↑↑	5.00	2.36	1191	953	7%	1	1.0
↘	4	2	1643	1315	1%	0	0.6

APPENDIX C
SITE LAYOUT PLAN

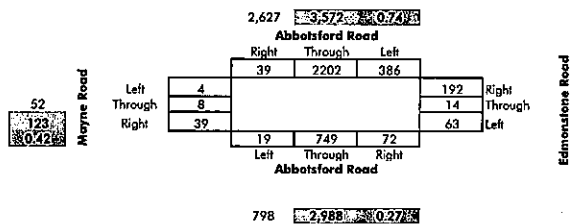


APPENDIX D
FORECAST TRAFFIC VOLUMES

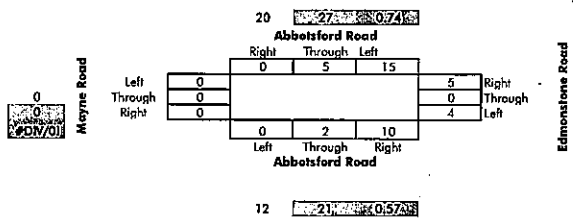
2009 AM Peak Hour Existing Conditions



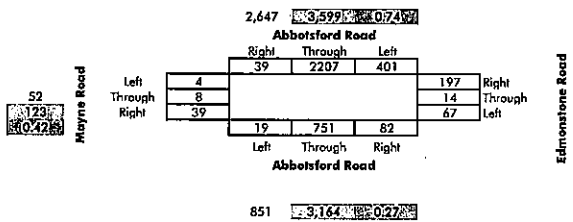
2012 AM Peak Hour Pre_Development



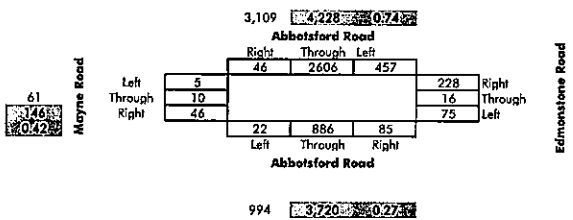
Development



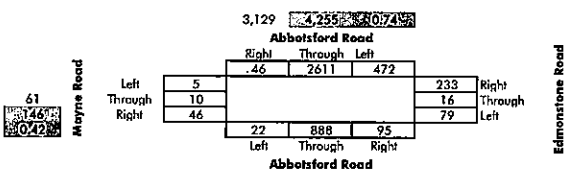
2012 AM Peak Hour Post_Development



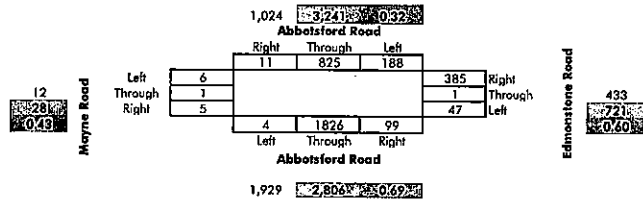
2022 AM Peak Hour Pre_Development



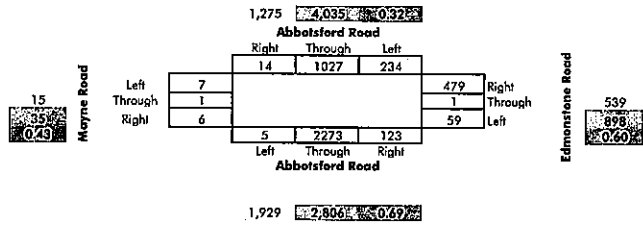
2022 AM Peak Hour Post_Development



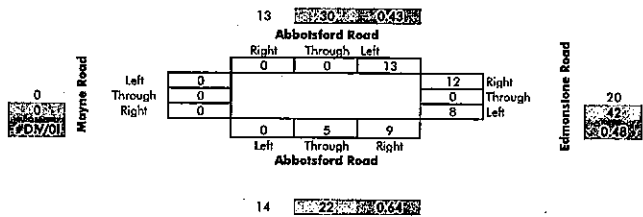
2009 PM Peak Hour Existing Conditions



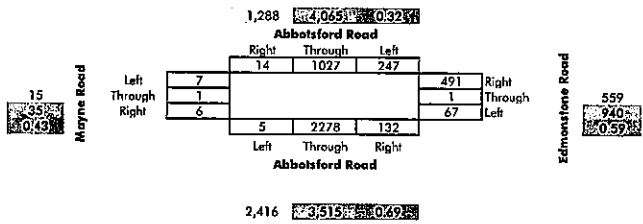
2012 PM Peak Hour Pre_Development



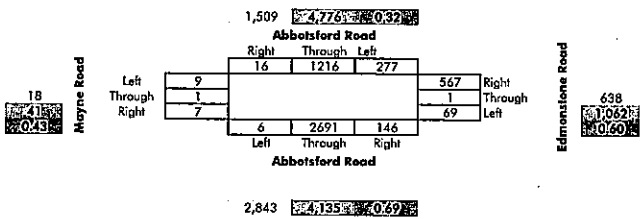
Development



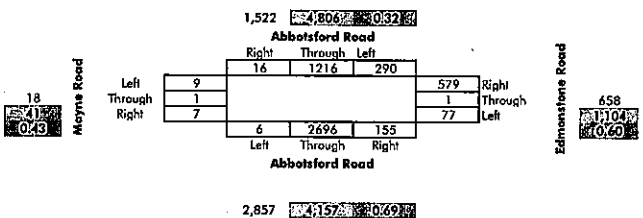
2012 PM Peak Hour Post_Development



2022 PM Peak Hour Pre_Development



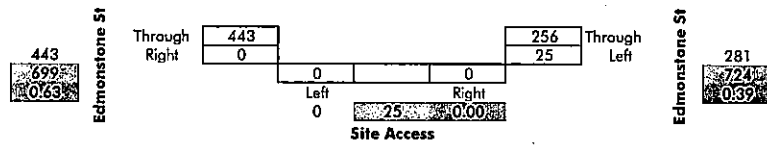
2022 PM Peak Hour Post_Development



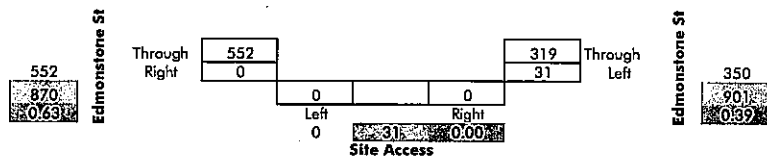
10-054 YMCA Redevelopment - Perry Park
Traffic Volumes

Sheet Date
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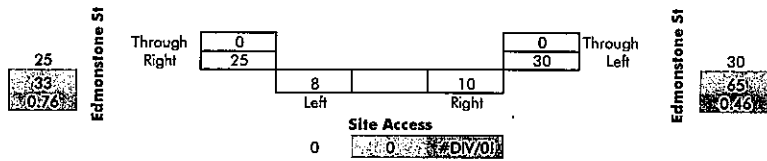
2009 AM Peak Hour Existing Conditions



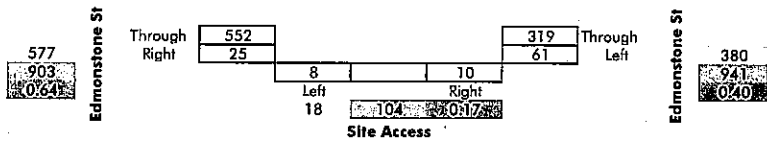
2012 AM Peak Hour Pre Development



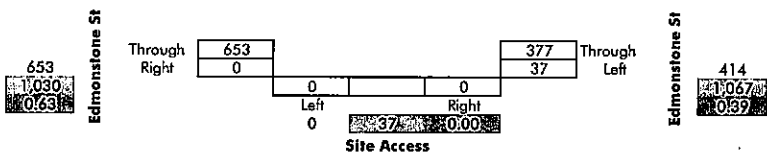
Development



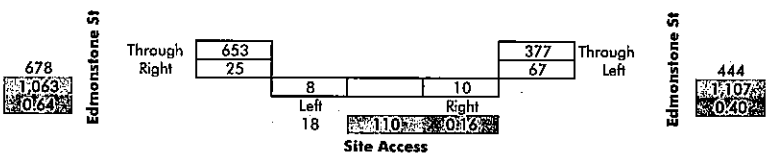
2012 AM Peak Hour Post Development



2022 AM Peak Hour Pre Development



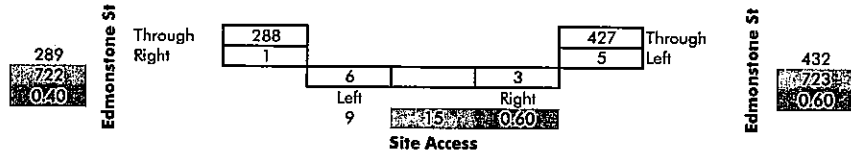
2022 AM Peak Hour With Development



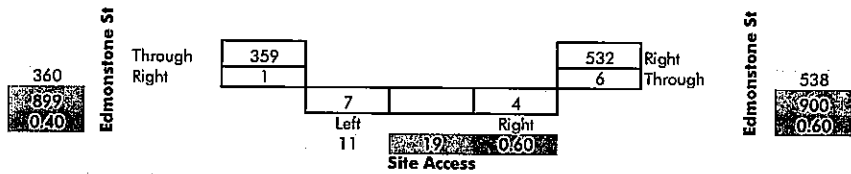
**10-054 YMCA Redevelopment - Perry Park
Traffic Volumes**

Sheet Date
15/2/10

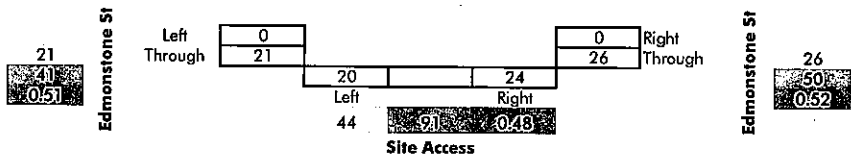
2009 PM Peak Hour Existing Conditions



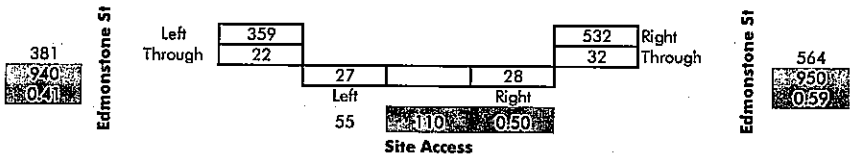
2012 PM Peak Hour Pre Development



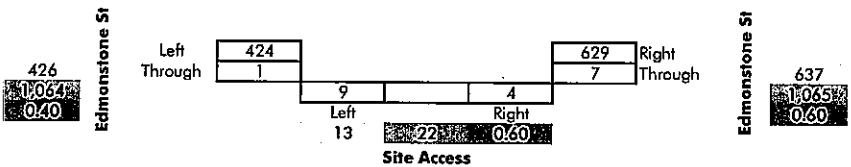
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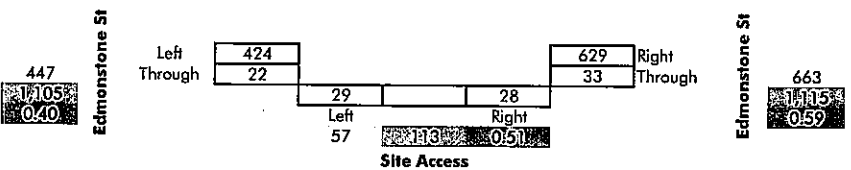
2012 PM Peak Hour Post Development



2022 PM Peak Hour Pre Development



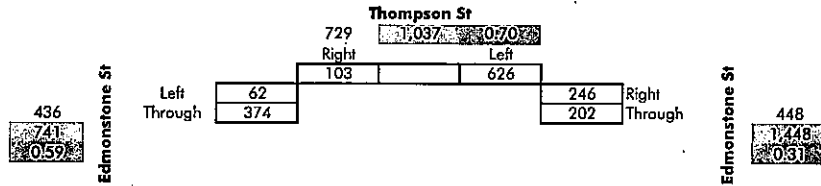
2022 PM Peak Hour With Development



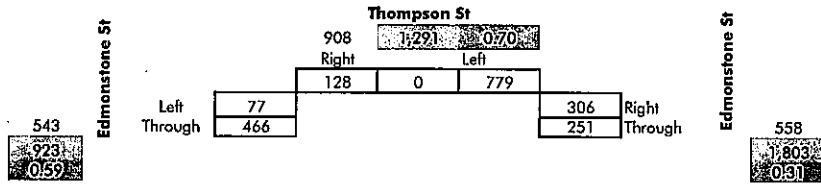
10-054 YMCA Redevelopment - Perry Park
Traffic Volumes

Sheet Date
15/2/10

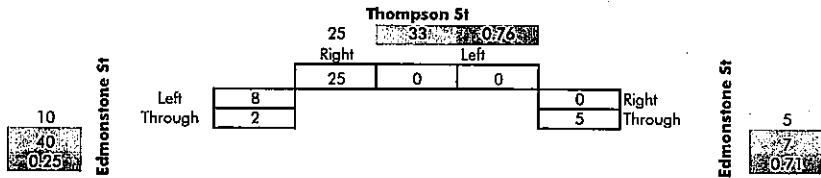
2009 AM Peak Hour Existing Conditions



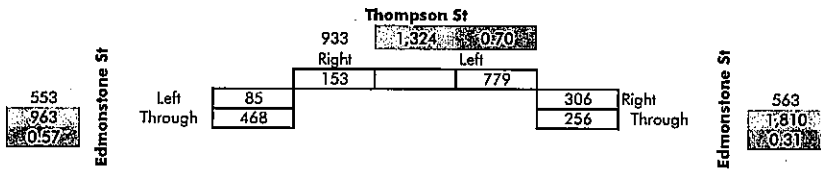
2012 AM Peak Hour Pre Development



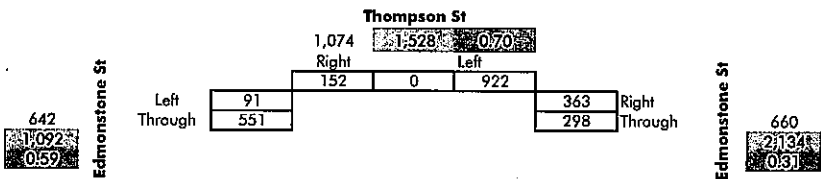
Development



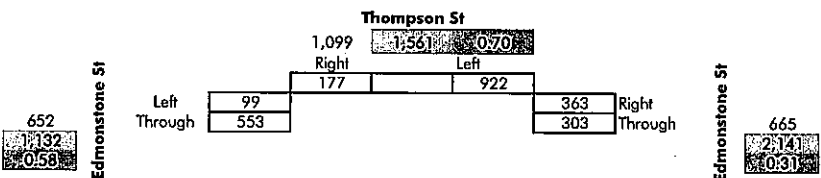
2012 AM Peak Hour With Development



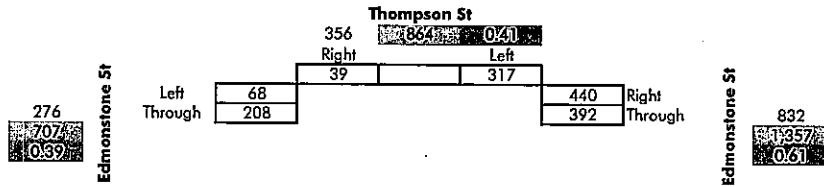
2022 AM Peak Hour Pre Development



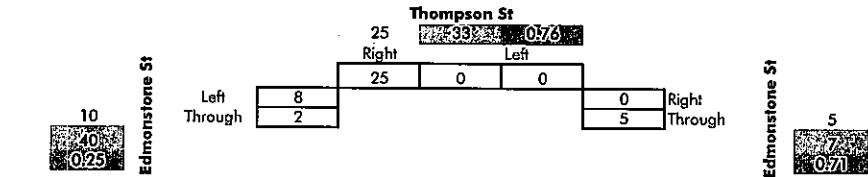
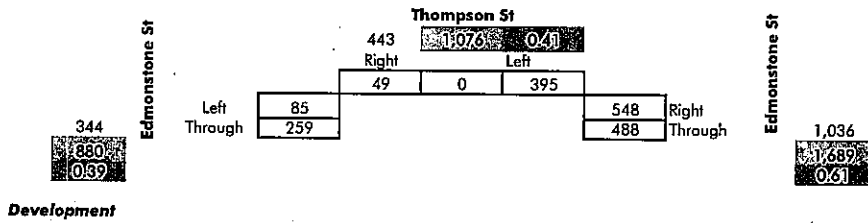
2022 AM Peak Hour With Development



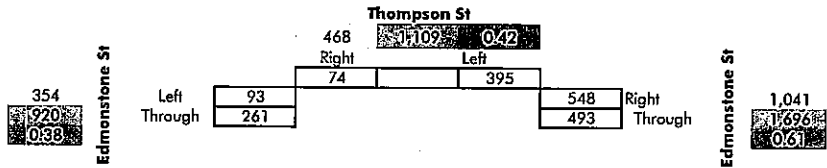
2009 PM Peak Hour Existing Conditions



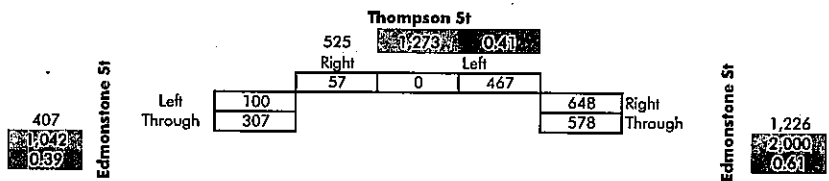
2012 PM Peak Hour Pre Development



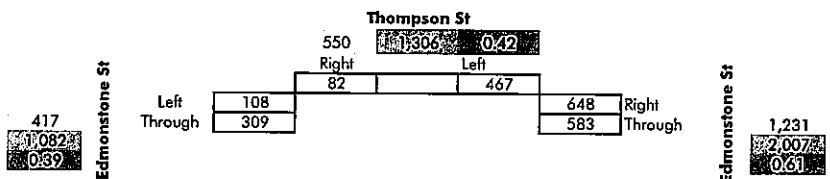
2012 PM Peak Hour With Development



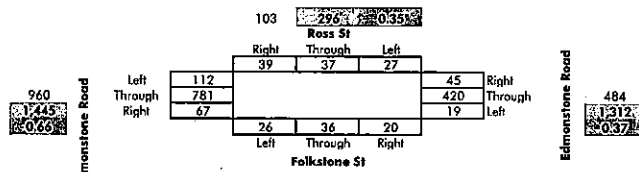
2022 PM Peak Hour Pre Development



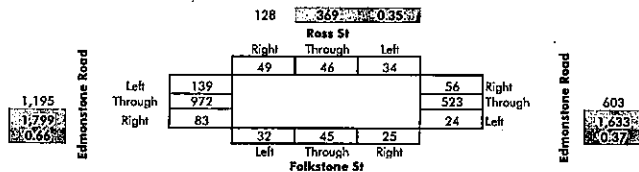
2022 PM Peak Hour With Development



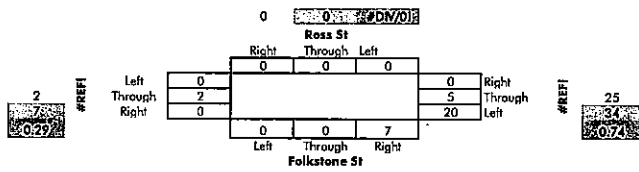
2009 AM Peak Hour Existing Conditions



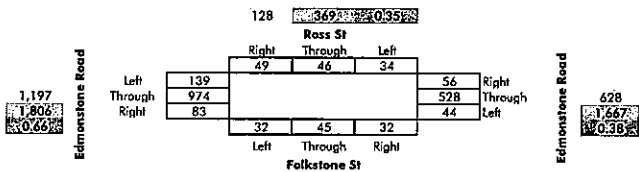
2012 AM Peak Hour Pre_Development



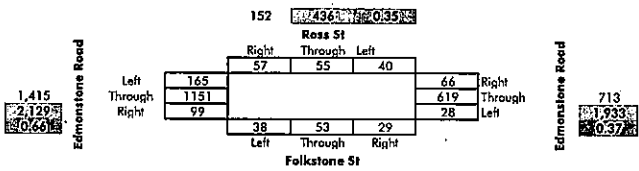
Development



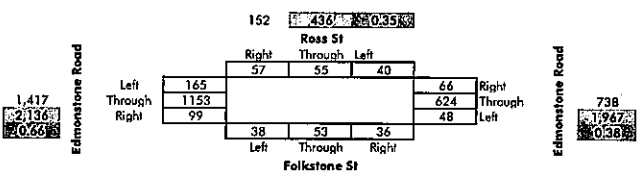
2012 AM Peak Hour Post_Development



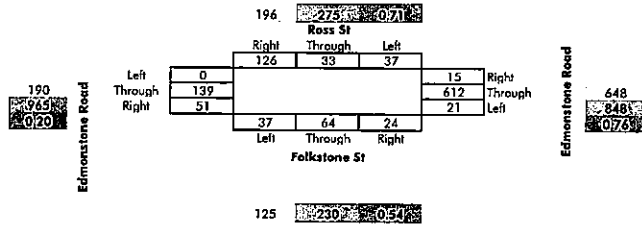
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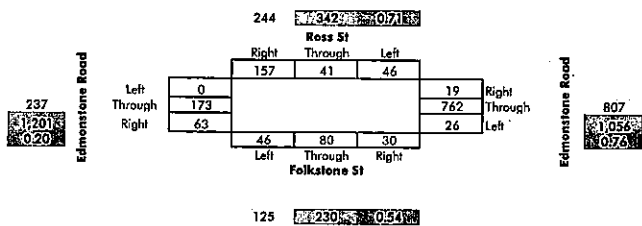
2022 AM Peak Hour Post Development



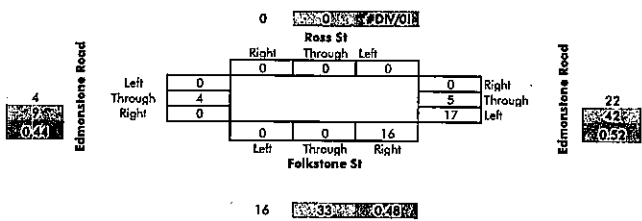
128 **329** **0.39**



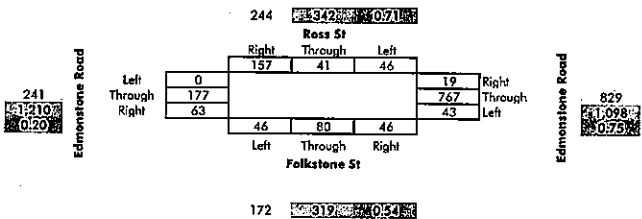
2012 PM Peak Hour Pre_Development



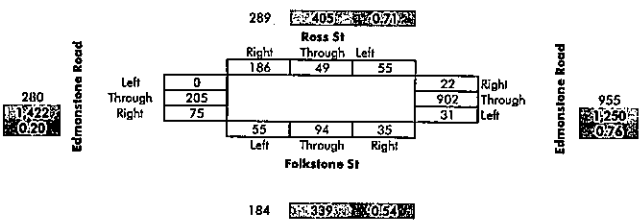
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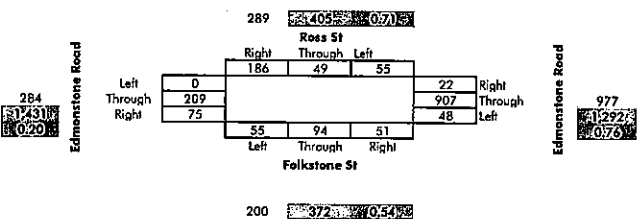
2012 PM Peak Hour Post_Development



2022 PM Peak Hour Pre Development



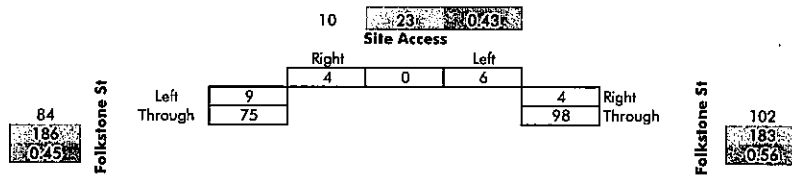
2022 PM Peak Hour Post Development



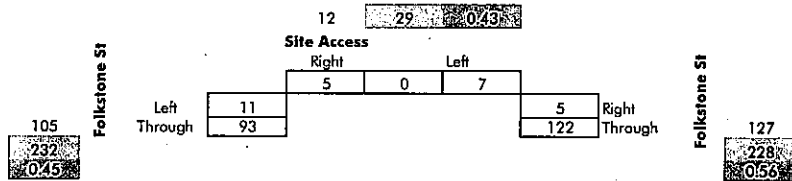
10-054 YMCA Redevelopment - Perry Park
Traffic Volumes

Sheet Date
15/2/10

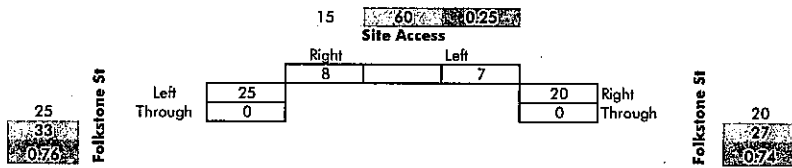
2009 AM Peak Hour Existing Conditions



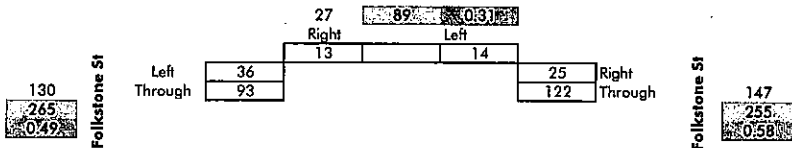
2012 AM Peak Hour Pre Development



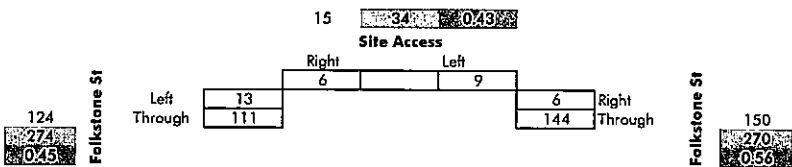
Development



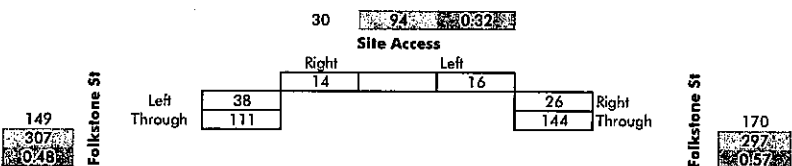
2012 AM Peak Hour Post Development



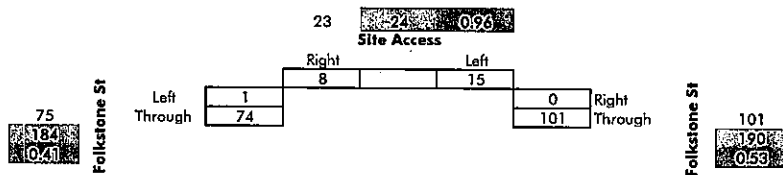
2022 AM Peak Hour Pre Development



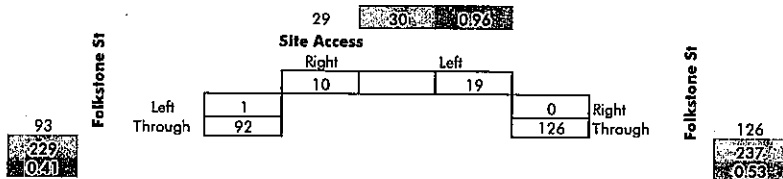
2022 AM Peak Hour With Development



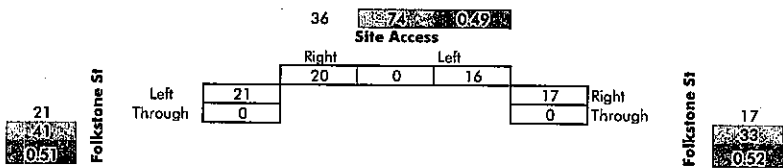
2009 PM Peak Hour Existing Conditions



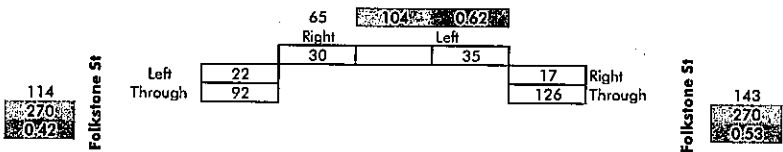
2012 PM Peak Hour Pre Development



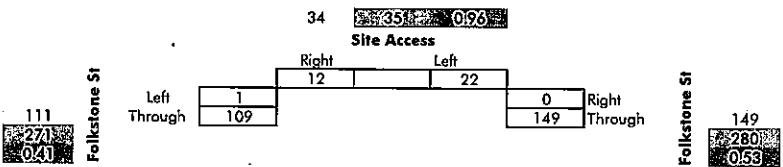
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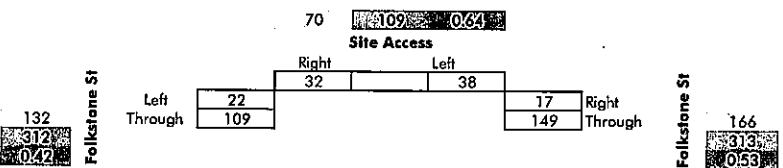
2012 PM Peak Hour Post Development



2022 PM Peak Hour Pre Development



2022 PM Peak Hour With Development



2009 AM Peak Hour Existing Conditions

2,154		3,067	0.70
Abbotsford Road			
Through	Left		
2112	42		
		55	
		47	
858	33		
Through	Right		
Abbotsford Road			
891	3,050	0.29	

Right
Left

Falkstone Street

102
177
0.58

2012 AM Peak Hour Pre_Development

2,682		3,818	0.70
Abbotsford Road			
Through	Left		
2629	52		
		68	
		59	
1068	41		
Through	Right		
Abbotsford Road			
1,109	3,797	0.29	

Right
Left

Falkstone Street

127
220
0.58

Development

9		21	0.43
Abbotsford Road			
Through	Left		
4	5		
		2	
		7	
10	20		
Through	Right		
Abbotsford Road			
30	41	0.73	

Right
Left

Falkstone Street

9
34
0.26

2012 AM Peak Hour Post_Development

2,691		3,839	0.70
Abbotsford Road			
Through	Left		
2633	57		
		70	
		66	
1078	61		
Through	Right		
Abbotsford Road			
1,139	3,838	0.30	

Right
Left

Falkstone Street

136
254
0.53

2022 AM Peak Hour Pre Development

3,174		4,520	0.70
Abbotsford Road			
Through	Left		
3112	62		
		81	
		69	
1264	49		
Through	Right		
Abbotsford Road			
1,313	4,495	0.29	

Right
Left

Falkstone Street

150
261
0.56

2022 AM Peak Hour Post Development

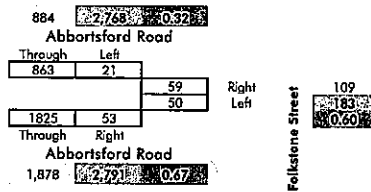
3,183		4,541	0.70
Abbotsford Road			
Through	Left		
3116	67		
		83	
		76	
1274	69		
Through	Right		
Abbotsford Road			
1,343	4,536	0.30	

Right
Left

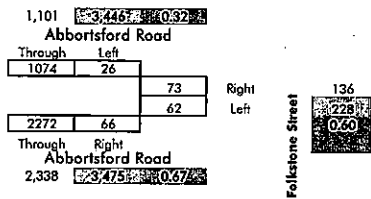
Falkstone Street

159
295
0.54

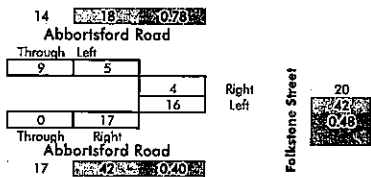
2009 PM Peak Hour Existing Conditions



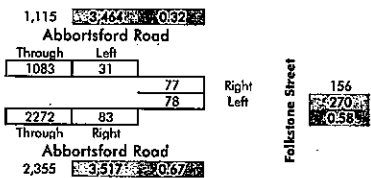
2012 PM Peak Hour Pre_Development



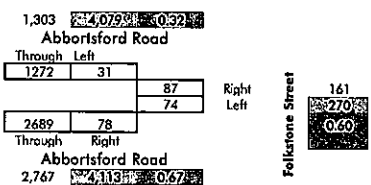
Development



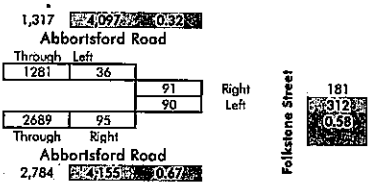
2012 PM Peak Hour Post_Development



2022 PM Peak Hour Pre_Development



2022 PM Peak Hour Post_Development



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