



October 31, 2023

7927959 Canada Corp. (Surjit Kang)

4 Everglade Drive  
Brampton, ON L6P 0R2

c/o GWD Professional Planners  
Mr. Anthony Sirianni  
Planning Associate

**Re: Proposed Medical Office / Residential Care Home Uses, 9610 McLaughlin Road, Brampton, ON**  
**– Traffic Brief and Parking Justification**

Dear Mr. Sirianni,

TRANS-PLAN is pleased to submit this revised traffic brief and parking justification memorandum in support of the proposed Medical Office / Residential Care Home development at 9610 McLaughlin Road in the City of Brampton. The site consists of an existing residential building which is proposed to operate as a medical office and a residential care home in the future. The two land uses are not to occur concurrently.

Our study findings indicate that the proposed land use changes will have little impact on the surrounding road network. All intersections in the study area operate well, with the exception of McLaughlin Road & Williams Parkway. This intersection is approaching capacity, with some movements expected to exceed capacity during the PM peak hours. The site has no impact on the operation of this intersection.

The proposed parking supply is expected to meet City requirements, as defined by Zoning By-laws. Transportation demand management (TDM) measures are also recommended for this site, to reduce the number of auto trips to and from the site, as well as the number of parked vehicles. Details are provided herein.

Sincerely,



Darshan Soni, P.Eng.

Intermediate Engineer

**Trans-Plan Transportation Inc.**  
Transportation Consultants



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Transmittal Letter

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## **1. INTRODUCTION**

TRANS-PLAN has been retained to complete a traffic memo and parking justification brief for a proposed minor variance application for an existing residential site located at 9610 McLaughlin Road North, in the City of Brampton, Peel Region. This study includes the following components and tasks:

### **Traffic Brief**

- A review and assessment of the existing road network
- A review of the site context and development proposal
- An assessment of the impact of site-generated traffic (auto, transit, cycling and walking trips) on the adjacent roadway network under existing traffic conditions before and after site traffic is added to the network
- Determination of roadway and intersection improvements and transit and pedestrian / cycling infrastructure improvements, if required, to accommodate the proposed development

### **Parking Study**

- A review of the site parking requirements as per the Zoning By-law compared to the proposed supply
- Recommendations to mitigate future parking demands if the proposed supply is expected to be exceeded

This report adheres to the City of Brampton Traffic Impact and Parking Study Terms of Reference for Development Applications, dated April 2019.

City of Brampton staff were provided a terms-of-reference (TOR) to confirm the study scope and methodology. A response was received from staff with traffic data and recommendations incorporated into this report. City staff also provided comments to the first submission of this report, with feedback incorporated into this submission.

## **2. STUDY AREA CONTEXT**

### **2.1 Site Location**

The site is located at 9610 McLaughlin Road North, in the City of Brampton. It is an existing single family detached home, with accessory buildings, with a proposed minor variance to permit other land uses.

The subject site measures approximately 2,500 square metres (0.62 acres), with a street frontage of approximately 32.08 metres (105.24 feet) along McLaughlin Road and 44.39 metres (145.63 feet) along Williams Parkway. The property is currently occupied by a single detached residential dwelling and accessory structure. Driveway access is provided from McLaughlin Road and Williams Parkway.

A Committee of Adjustment Minor Variance Application was submitted by the applicant to the City of Brampton seeking relief from the Zoning By-law to permit: Medical Office; and Residential Home Care uses. It is noted that these uses are not proposed to exist on the subject site at the same time. A copy of the minor variance plan pertaining to the medical office and residential home care are attached herewith in Appendix A. At the request of City of Brampton Staff, the Application was deferred until



September 12, 2023 in order to allow for the preparation of a Traffic Memo and Parking Justification Letter for the proposed two (2) uses.

## **2.2 Road Network**

The study area roadways in the immediate site vicinity are as follows:

**McLaughlin Road North** is a minor arterial under the jurisdiction of the City of Brampton. It runs in a north-south direction and has four travel lanes: two in each direction. The posted speed limit is 60 km/hr.

**Williams Parkway** is a minor arterial under the jurisdiction of the City of Brampton. It runs in a north-south direction and has four travel lanes: two in each direction, separated by a boulevard. The posted speed limit is 60 km/hr.

**Vodden Street West / Royal Orchard Drive** is a collector road under the jurisdiction of the City of Brampton. It runs in a north-south direction and has two travel lanes: one in each direction. The posted speed limit is 50 km/hr.

**Fletchers Creek Boulevard** is a collector road under the jurisdiction of the City of Brampton. It runs in a north-south direction and has two travel lanes: one in each direction. The speed limit is 50 km/hr.

**Flowertown Avenue** is a collector road under the jurisdiction of the City of Brampton. It runs in an east-west direction and has two travel lanes: one in each direction. The posted speed limit is 40 km/hr.

**Queen Street West** is a major arterial under the jurisdiction of the Region of Peel. It runs in an east-west direction and has four travel lanes: two in each direction. The posted speed limit is 50 km/hr.

## **2.3 Transit Service**

The site is served by Brampton Transit (BT). The nearby transit routes are detailed as follows:

**BT Route 3/3A, McLaughlin** is a bus route that operates north-south. It connects riders from Heart Lake Terminal to Brampton Gateway Terminal. 3A provides service to Flower City Community Campus. The nearest bus stops are at McLaughlin Road North & Williams Parkway, approximately 40m north and east of the site.

**BT Route 9, Vodden** is a bus route that operates east-west. It connects riders from Mount Pleasant GO Station to Sun Pac Boulevard, south of Williams Parkway. The nearest bus stops are at McLaughlin Road North & Williams Parkway, approximately 100m east of the site.

**BT Route 25, Edenbrook** is a bus route that operates north-south. It connects riders from Peel Memorial Hospital to Wanless Drive, west of McLaughlin Road. The nearest bus stops are at McLaughlin Road North & Williams Parkway, approximately 100m east of the site.

**BT Route 29, Williams** is a bus route that operates east-west. It connects riders from Mount Pleasant GO Station to Paget Drive, north of Kenview Boulevard. The nearest bus stops are at McLaughlin Road North & Williams Parkway, approximately 100m east of the site.

The approximate service times and peak service frequencies for each route are shown in Table 1.

Table 1 – Transit Service

Route	Nearest Transit Stop to Site	Approximate Service Times		Approximate Peak Service Frequency (min)		
		Weekdays	Saturday	AM	PM	SAT
BT Route 3/3A, McLaughlin	McLaughlin Road North & Williams Parkway	05:31 – 21:27	05:31 – 00:18 <sup>+1</sup>	12-14 <sup>1</sup> 30 <sup>2</sup>	12-14 <sup>1</sup> 30 <sup>2</sup>	30
BT Route 9, Vodden	McLaughlin Road North & Williams Parkway	05:12 – 19:32	None	45 <sup>1</sup> 60 <sup>2</sup>	45 <sup>1</sup> 60 <sup>2</sup>	None
BT Route 25, Edenbrook	McLaughlin Road North & Williams Parkway	05:34 – 20:20	None	30	30	None
BT Route 29/29A, Williams	McLaughlin Road North & Williams Parkway	05:13 – 01:00 <sup>+1</sup>	06:12 – 21:22	15	15	30

Note: (<sup>+1</sup>) Service ends on following day.

Note: (<sup>1</sup>) Service time during peak hours.

Note: (<sup>2</sup>) Service time during off-peak hours.

Additionally, in the City of Brampton Official Plan, both Williams Parkway and McLaughlin Road are designated as “Primary Transit Corridors”. According to Section 4.5.4.2 of the Official Plan, within Brampton Transit’s hierarchy of transit services along various corridors, Primary Transit Corridors are: “high frequency service with peak headways targeted at 5 to 7.5 minutes. These are major grid services linking destinations within the City, as well as to external destinations.” This designation is the second highest level in the hierarchy, behind Bus Rapid Transit (BRT) Corridors.

### 3. EXISTING CONDITIONS

#### 3.1 Study Area Intersections and Driveways

The study area intersections and driveways reviewed in our analysis are as follows:

1. McLaughlin Road North & Williams Parkway
2. Site Access & McLaughlin Road North (full movement)
3. Site Access & Williams Parkway (right-in, right-out)
4. Vodden Street West & Williams Parkway
5. Fletchers Creek Boulevard & Williams Parkway
6. McLaughlin Road North & Flowertown Avenue
7. McLaughlin Road North & Queen Street West

These intersections were confirmed with City staff during TOR correspondence.

#### 3.2 Traffic Counts

TRANS-PLAN acquired turning movement counts (TMCs) from the City of Brampton for the intersections within their jurisdiction. The intersection of McLaughlin Road & Queen Street West is within the jurisdiction of the Region of Peel. Traffic data was requested from the Region with no response. It has therefore been excluded from the study area. The count dates are summarized in Table 2.



Table 2 - Intersection Turning Movement Counts

Location	Count Date	Count Hours
McLaughlin Road & Williams Parkway	Thursday June 16, 2022	7:00am – 9:00am 3:00pm – 6:00pm
Vodden Street West & Williams Parkway	Wednesday May 3, 2023	7:00am – 9:00am 3:00pm – 6:00pm
Fletchers Creek Boulevard & Williams Parkway	Wednesday October 24, 2018	7:00am – 9:00am 3:00pm – 6:00pm
McLaughlin Road North & Flowertown Avenue	Thursday June 16, 2022	7:00am – 9:00am 3:00pm – 6:00pm

As per comments from the City on our Terms of Reference, historical counts were factored up by a growth rate of 2% per year to estimate existing volumes in 2023.

### 3.3 Peak Hour Factors

The peak hour factor (PHF) and saturation flow rate used in the traffic modelling are Synchro default values of 0.92 and 1900 vehicles/hour/lane respectively.

## 4. SITE TRAFFIC

### 4.1 Auto Trip Generation

Vehicle site trips for the proposed medical office and residential care home developments were generated using the Institute of Transportation Engineers (ITE) Trip Generation manuals, 11<sup>th</sup> Edition. These standards are widely accepted and used to generate site trips for new developments throughout Canada. The following Land Use Code (LUC) were utilized:

- LUC 720 for Medical-Dental Office Building
- LUC 620 for Nursing Home

The ITE Trip Generation Manual describes these LUCs as follows:

*“A medical-dental office building is a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care. One or more private physicians or dentists generally operate this type of facility.”*

*“A nursing home is a facility whose primary function is to provide care for persons who are unable to care for themselves. Examples include rest homes, chronic care, and convalescent homes. Skilled nurses and nursing aides are present 24 hours a day at these sites. Residents often require treatment from a registered healthcare professional for ongoing medical issues. A nursing home resident is not capable of operating a vehicle. Traffic is entirely generated by employees, visitors, and deliveries.”*

Table 3 shows site trip generation for each proposed land use. Because the land uses are not intended to operate concurrently, values are taken from the highest trip generator for the site – the standalone medical office building. With this land use, the subject site is expected to generate approximately 17 new



two-way trips during the weekday AM peak period and 19 new two-way trips during the weekday PM peak period.

Table 3 - Site Trip Generation for Each Proposed Use

Land Use	Size		Weekday AM Peak Hour			Weekday PM Peak Hour		
			In	Out	Total	In	Out	Total
LUC 720 - Standalone Medical Office Building	15 Employees	Distribution	58%	42%	100%	44%	56%	100%
		Equation	$T=1.10(X)$			$T=1.26(X)$		
		Rate	0.66	0.47	1.13	0.56	0.71	1.27
		<b>Trips</b>	<b>11</b>	<b>6</b>	<b>17</b>	<b>8</b>	<b>11</b>	<b>19</b>
LUC 620 - Nursing Home	7 Employees	Distribution	65%	35%	100%	40%	60%	100%
		Equation	$T=0.33(X)$			$T=0.45(X)$		
		Rate	0.08	0.05	0.13	0.08	0.12	0.20
		<b>Trips</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>

It is noted that the operation of the proposed Residential Home Care facility is slightly different to that of a nursing home. The proposed residential home care facility is intended to provide family support services for persons with developmental disabilities, who may be dropped off when caregiving family members are unavailable to provide full-time care. As such, ITE does not provide an exact trip generation rate for this land use.

However, the anticipated trip generation rate is approximated to be somewhere between the range of a nursing home (low estimate of trips generated due to long-term stays by residents with short-term visits) and a daycare facility (high estimate of trips generated due to half-day visits with occasional after-school care being provided). As noted in the Letter of Use for Residential Home Care, the anticipated number of students / patrons would be a maximum of 10, who are not expected to be on-site at the same time. Using the average trip generation rate per student for daycare use (LUC 565) from the ITE Trip Generation Manual, it is anticipated that no more than 12 trips will be generated during peak hours.

As a result, both the low and high estimate of trips generated for the residential home care use are lower than that of the medical office use. Since the two uses will not be operating concurrently on site, trip generation for the medical office use is taken to be the maximum anticipated traffic added to the network. Capacity analysis hereon assumes this rate.

## 4.2 Auto Trip Distribution and Assignment

The auto site trips for the proposed development were distributed to / from the subject site and the boundary roadways based on existing traffic patterns. Trip distribution is shown in Table 4.

Table 4 - Trip Distribution

Direction	AM	PM	Direction	AM	PM
To East	2	3	From East	2	2
To West	1	2	From W	3	2
To North	1	2	From N	3	3
To South	2	4	From S	2	1

The distributed trips were assigned to each of the accesses depending on the direction they are expected to originate from / travel towards.

## 5. CAPACITY ANALYSIS

### 5.1 Auto Capacity Analysis Methodology

A capacity analysis was performed for the study area intersections and driveways using Synchro 11 analysis software. The following traffic conditions, during the weekday AM and weekday PM peak hours were analyzed:

- Existing Traffic Conditions
- Existing Traffic Conditions with Site Traffic

The critical movements, if any, have been identified in the analysis as per the criteria in the City of Brampton's Terms of Reference for Traffic Impact Studies and Parking Studies:

- *Volume/capacity (V/C) ratios for overall intersection operations, through movements or shared through/turning movements increased to 0.90 or above.*
- *V/C ratios for exclusive movements that will exceed 1.00.*

### 5.2 Auto Capacity Analysis Results

The capacity analysis results are provided in Table 5 and the critical movements (if any) are discussed below. The detailed Synchro output sheets and level of service (LOS) definitions are provided in Appendix B and Appendix C, respectively. The results for the study area intersections and driveway(s) are summarized as follows:

- All intersections, with the exception of McLaughlin Road North & Williams Parkway, operate well during existing conditions with overall LOS of C or better.
- The intersection of McLaughlin Road North & Williams Parkway operates at LOS C during the AM peak period and LOS D during the PM peak period. The westbound left movement is approaching capacity with v/c of 0.93 during the PM peak period. The northbound through/right movement is approaching capacity with a v/c of 0.99 during the PM peak period. The southbound left movement exceeds capacity with a v/c of 1.11 during the PM peak period.

- The addition of site traffic makes no significant impact to the existing road network. All intersections maintain the same LOS and v/c ratios for individual movements.



Table 5 - Capacity Analysis Results

Intersection Movement	Existing Traffic Conditions						Existing + Site Traffic Conditions					
	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday AM Peak Hour			Weekday PM Peak Hour		
	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS
<b>McLaughlin Road N &amp; Williams Parkway</b>	<b>0.59</b>	<b>36</b>	<b>C</b>	<b>1.11</b>	<b>142</b>	<b>D</b>	<b>0.6</b>	<b>37</b>	<b>C</b>	<b>1.11</b>	<b>142</b>	<b>D</b>
Eastbound Left	0.12	20	C	0.59	42	D	0.12	20	C	0.59	42	D
Eastbound Through	0.59	36	F	0.63	40	F	0.6	36	F	0.63	40	F
Eastbound Right	0.17	5	A	0.18	5	A	0.17	5	A	0.18	5	A
Westbound Left	0.59	26	C	0.84	49	D	0.6	26	C	0.85	51	D
Westbound Through / Right	0.47	29	C	0.93	46	D	0.47	29	C	0.93	46	D
Northbound Left	0.19	21	C	0.62	39	D	0.19	22	C	0.63	40	D
Northbound Through / Right	0.38	28	F	0.99	74	F	0.38	29	F	0.99	74	F
Southbound Left	0.52	28	C	1.11	142	F	0.52	28	C	1.11	142	F
Southbound Through	0.59	36	D	0.53	43	D	0.6	37	D	0.54	43	D
Southbound Right	0.07	3	A	0.15	7	A	0.07	3	A	0.15	7	A
<b>Site Access &amp; Williams Parkway</b>	<b>0.39</b>	<b>0</b>	<b>A</b>	<b>0.45</b>	<b>0</b>	<b>A</b>	<b>0.39</b>	<b>12</b>	<b>A</b>	<b>0.45</b>	<b>12.8</b>	<b>A</b>
Eastbound Through / Right	0.39	0	N/A	0.45	0	N/A	0.39	0	N/A	0.45	0	N/A
Northbound Right	N/A	N/A	N/A	N/A	N/A	N/A	0.2	12	A	0.01	12.8	A
Westbound Through	0.17	0	B	0.4	0	E	0.17	0	B	0.4	0	E
<b>Site Access &amp; McLaughlin Road</b>	<b>0.44</b>	<b>0</b>	<b>A</b>	<b>0.41</b>	<b>0</b>	<b>A</b>	<b>0.44</b>	<b>12</b>	<b>A</b>	<b>0.41</b>	<b>12.8</b>	<b>A</b>
Eastbound Left	N/A	N/A	N/A	N/A	N/A	N/A	0.01	12	N/A	0.03	12.8	N/A
Northbound Through	0.13	0	N/A	0.33	0	N/A	0.13	0	N/A	0.33	0	N/A
Southbound Through	0.44	0	N/A	0.41	0	N/A	0.44	0	N/A	0.41	0	N/A
<b>Williams Parkway &amp; Fletchers Creek Boulevard</b>	<b>0.81</b>	<b>63</b>	<b>B</b>	<b>0.61</b>	<b>92</b>	<b>B</b>	<b>0.81</b>	<b>63</b>	<b>B</b>	<b>0.61</b>	<b>92</b>	<b>B</b>
Eastbound Left	0.23	14	B	0.61	30	C	0.23	14	B	0.61	30	C
Eastbound Through / Right	0.55	16	B	0.55	13	B	0.55	16	B	0.55	13	B
Westbound Left	0.34	13	B	0.58	13	B	0.34	13	B	0.58	13	B
Westbound Through / Right	0.15	2	A	0.36	2	A	0.15	2	A	0.36	2	A
Northbound Left	N/A	N/A	N/A	0.01	32	C	N/A	N/A	N/A	0.01	32	C
Northbound Through / Right	0	0	A	0.02	19	B	0	0	A	0.02	19	B
Southbound Left	0.81	63	E	0.49	42	D	0.81	63	E	0.49	42	D
Southbound Through / Right	0.23	3	A	0.19	14	B	0.23	3	A	0.19	14	B
<b>Williams Parkway &amp; Vodden Street West</b>	<b>0.58</b>	<b>59</b>	<b>B</b>	<b>0.95</b>	<b>92</b>	<b>C</b>	<b>0.58</b>	<b>59</b>	<b>B</b>	<b>0.58</b>	<b>92</b>	<b>C</b>
Eastbound Left	0.29	10	A	0.26	12	B	0.29	10	A	0.29	12	B
Eastbound Through / Right	0.55	9	A	0.58	10	B	0.56	9	A	0.56	10	B
Westbound Left	0.14	11	B	0.27	21	B	0.14	11	B	0.14	21	C
Westbound Through / Right	0.38	11	B	0.57	19	C	0.38	11	B	0.38	19	B
Northbound Left	0.58	59	E	0.95	92	F	0.58	59	E	0.58	92	F
Northbound Through / Right	0.14	28	C	0.2	36	D	0.14	28	C	0.14	36	D
Southbound Left	0.37	47	D	0.3	44	D	0.37	47	D	0.37	44	D
Southbound Through / Right	0.5	43	D	0.31	41	D	0.5	43	D	0.5	41	D
<b>McLaughlin Road N &amp; Flowertown Avenue</b>	<b>0.43</b>	<b>58</b>	<b>A</b>	<b>0.62</b>	<b>64</b>	<b>B</b>	<b>0.43</b>	<b>58</b>	<b>A</b>	<b>0.43</b>	<b>64</b>	<b>B</b>
Eastbound Left	0.36	58	E	0.62	64	E	0.36	58	E	0.36	64	E
Eastbound Through / Right	0.26	6	A	0.24	12	B	0.26	6	A	0.26	12	B
Westbound Left/Through/Right	0.01	50	D	0.01	0	A	0.01	50	D	0.01	0	A
Northbound Left	0.08	5	A	0.32	9	A	0.08	5	A	0.08	10	A
Northbound Through / Right	0.19	5	A	0.52	8	A	0.09	5	A	0.19	8	A
Southbound Left	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Southbound Through / Right	0.43	7	A	0.42	7	A	0.43	7	A	0.43	7	A

## 6. QUEUEING ANALYSIS

Due to the proximity of the existing full-movement access to the intersection of McLaughlin Road & Williams Parkway, a review of the northbound queues at the signalized intersection was completed to determine whether queues may extend past the access. A SimTraffic analysis was conducted for the weekday AM and weekday PM peak periods at this intersection using the following parameters:

- A seeding interval of 5 minutes;
- A recording interval of 60 minutes; and
- A total of 3 simulation runs, with the average results of all runs taken to diminish the impact of statistical outliers.

The results of the queueing analysis are summarized in Table 6.

Table 6 - Queueing Analysis Summary

Time Period	Queue Storage Length (m)	Distance between northbound left stop bar and site access (m)	95 <sup>th</sup> Percentile Queue (m)
Weekday AM Peak Hour	92.0	37.0	21.8
Weekday PM Peak Hour	92.0	37.0	35.4

With existing traffic and the proposed site generated traffic, northbound left volumes on McLaughlin Road North are not expected to exceed the storage bay capacity. During the Weekday PM peak period, northbound left queues on McLaughlin Road are expected to reach just short of the full movement site access. This is not expected to be an operational concern due to the relatively low volume of trips (4 trips per hour) making a left turn out of the site.

During future conditions, it is possible that the northbound left turn queues extend beyond the site access during peak periods. At this venture, it is recommended that turn restrictions be considered to the site access and allow it to operate as a left-in, right-in, right-out (LIRIRO) or right-in, right-out (RIRO) access. The reassignment of site trips as a result of these turn restrictions is not expected to adversely impact the operation of the intersection.

## 7. PARKING STUDY

### 7.1 Parking Requirements, City of Brampton Zoning Bylaw

The parking requirements for the site, as per the City's Zoning By-law section 20.0 (General Provisions for Commercial Zones), is calculated below in Table 7.

Table 7 - Parking Requirements

Land Use	Area (sq. m.)	1 space per (X) sq.m.	Required Spaces
Medical Office	353.29	16	22
Other Medical	353.29	30	12
All other commercial	353.29	23	15

As per the description of the intended land use described in Appendix A, the Zoning By-law does not have a land use similar to the residential care facility for people with developmental disabilities. In this case, people being cared for are not likely to drive to the facility and park on premises, but rather be dropped and picked by a caregiver. Thus, the catch-all land use case for "other" is determined to be appropriate for this site, with employees being the primary driver for parking demand.

Based on the by-law, the parking requirement for the medical office is 22 spaces, while the parking requirement for the residential care home (all other commercial uses) is 12 spaces. As the proposed land uses are not to be operational concurrently, the required number of spaces is not additive – the maximum required number of spaces is taken to be 22.

### 7.2 Proposed Parking Supply

The developer is proposing the supply of 17 parking spaces, with at least 1 space designated as an accessible parking space. Based on this, the developer is expected to have a deficiency of 5 parking spaces.

### 7.3 Justification for Parking Variance

Using the Zoning By-law's calculated requirement of 22 spaces, there would be a deficit of 5 parking spaces or 23%. The deficit of 5 parking spaces is considered to be supported by the site's location within Brampton, with good multimodal connections available.

The site is well served by Brampton Transit, with stops at the adjacent intersection of McLaughlin Road North & Williams Parkway, as described in the transit section. According to the Peel Region Sustainable Transportation Strategy (2018), mode share for transit within the Region is somewhere between 10.8% (as measured in 2011) and the Region's target of 17% in 2041. It is noted that this number includes less dense areas of the Region such as Caledon, which are likely to have lower transit mode share. A number of customers to the medical office are expected to take transit to and from the facility.

The site also has good pedestrian connectivity, with sidewalks or trails abutting all property lines and residential areas in close proximity to the northwest, northeast and southeast of the site. Fletchers Creek Trail to the west of the site provides good connectivity for cyclists coming from residential areas to the north and south of the site.



Aside from existing transportation infrastructure, it is noted that policies and norms enacted by tenants on the site can further contribute to a reduction in auto use to and from the site. TRANS-PLAN recommends that the developer provide secure bicycle storage areas on-site, to promote the use of bicycles. Carpooling should be encouraged among staff where possible, and this can be implemented by restricting the number of stalls available for employees. The provision of transit passes to employees would further encourage the use of transit. With Presto card readers across the GTA now capable of reading alternative contactless payment options such as pre-paid credit cards and debit cards, it is anticipated that the increased payment flexibility will make transit more accessible for employees wanting to expense their travel. Finally, the distribution of medical test results electronically where possible will result in discouraging of trips to and from the clinic for collection of results, which in turn would reduce the number of vehicle trips and short term parking demand.

## **8. SUMMARY AND CONCLUSIONS**

This Traffic and Parking Brief, prepared in support of the proposed minor variance application to permit a medical office and residential care land use at the existing site, currently occupied by a single-family detached home at 9610 McLaughlin Road North, Brampton, ON is summarized as follows:

- All intersections, with the exception of McLaughlin Road North & Williams Parkway, operate well during existing conditions with overall LOS of C or better.
- The intersection of McLaughlin Road North & Williams Parkway is approaching capacity, with individual movements expected to exceed capacity during the PM peak periods. Improvements to this intersection are to be made regardless of the operation of the proposed site, and in concert with the rest of the arterial road network in the surrounding area.
- The addition of site traffic makes no significant impact to the existing road network. With the addition of site traffic, all intersections maintain the same LOS and v/c ratios for individual movements.
- With existing traffic patterns, northbound left turn queues on McLaughlin Road North are not expected to extend past the full-movement site access. During future conditions, these queues may extend past the site access, whereupon the application of turning restrictions is recommended to the site access.
- If the site access on McLaughlin Road North were to operate as a left-in, right-in, right-out (LIRIRO) or right-in, right-out (RIRO) access, the reassigned trips are not expected to have an adverse impact on the intersection of McLaughlin Road North & Williams Parkway.

### **Parking Study**

- Based on the City of Brampton Zoning By-law, the highest site parking requirement for either land use proposed is 22 parking spaces. The developer is proposing a provision of 17 parking spaces which would be 5 parking spaces short of this requirement.
- The Medical Office was determined to generate the higher parking demand of the two proposed, non-concurrent land uses. The residential care home in this case caters to persons with developmental disabilities, often requiring care when family is away. They are not expected to drive to the site independently and park.
- The shortfall of one parking spaces is expected to be managed by a combination of the existing supply of multimodal transportation infrastructure in the area, as well as targeted transportation demand

management measures to encourage active and transit modal use, as well as discouraging personal auto trips among employees and customers.

- The site is well served by Brampton Transit, as well as being accessible for pedestrians with sidewalks on all sides, connecting to nearby residential areas.
- TRANS-PLAN recommends that the developer encourage the use of other modes through the provision of:
  - Secure bicycle parking facilities
  - Transit passes provided by tenants to employees
  - Parking restrictions for employees to encourage carpooling
  - Electronic distribution of lab results by the medical clinic where possible, to reduce vehicle trips and short-term parking for test result collection.

It is anticipated that a combination of the measures and existing infrastructure above will allow the site to function well, with either of the proposed land uses.

Respectfully submitted,



Darshan Soni, P.Eng.

Intermediate Engineer

**Trans-Plan Transportation Inc.**  
Transportation Consultants



Figure 1 - Site Location



Source: Google Earth



## **APPENDICES**

**Appendix A – Minor Variance Plan**

**Appendix B – Capacity and Vehicle Queuing Analysis Sheets**

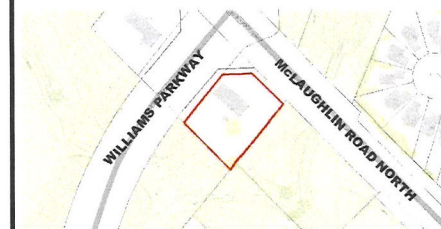
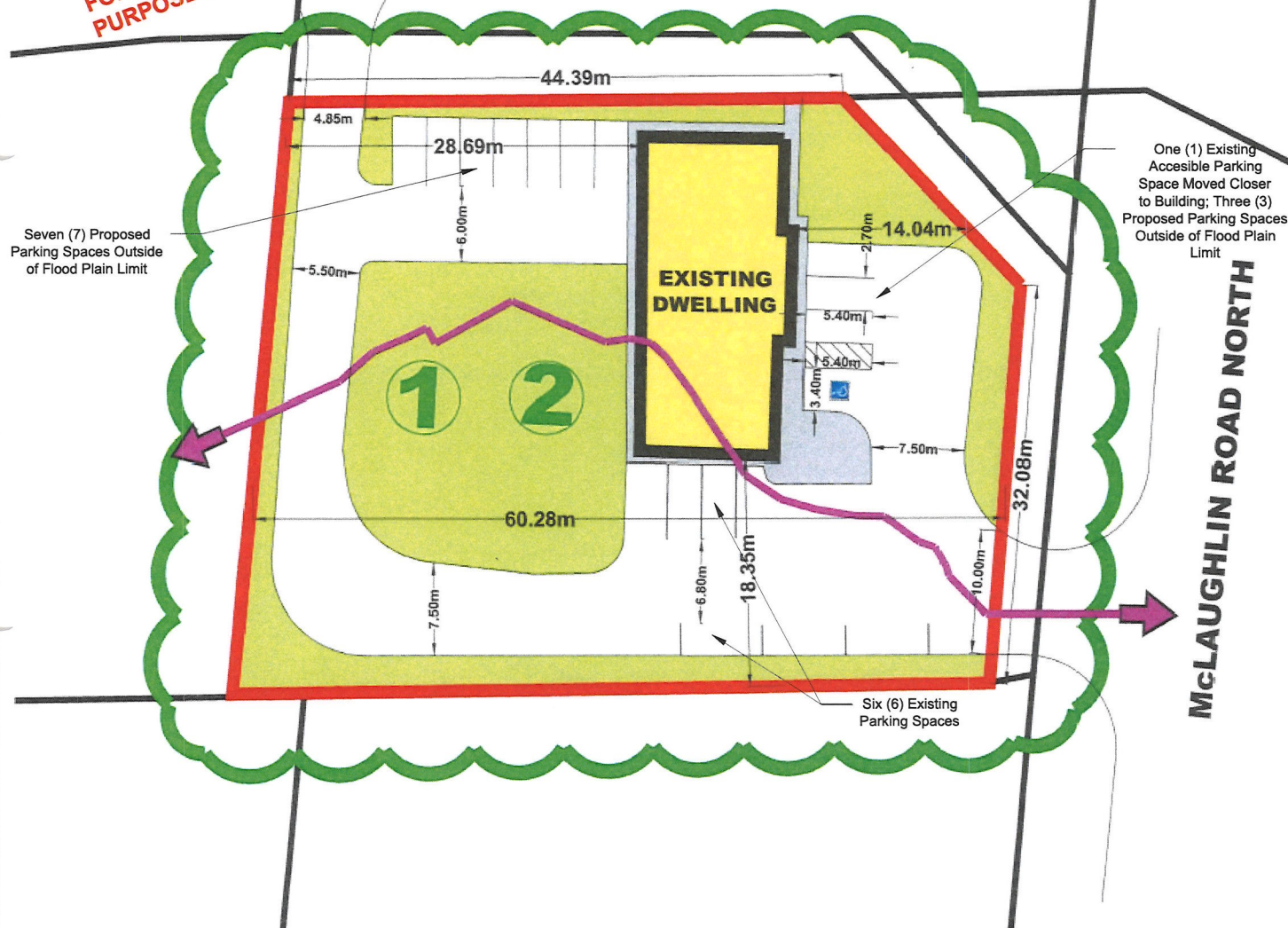
**Appendix C – Level of Service Definitions**

**Appendix D – Turning Movement Counts**

**Appendix E – Signal Timing Plans**

**"PRELIMINARY"  
FOR DISCUSSION  
PURPOSES ONLY**

**WILLIAMS PARKWAY**



### MINOR VARIANCE

1. To permit a Medical Office use on the subject site whereas the Zoning By-law does not allow a Medical Office use.
2. To permit a Residential Care Home use on the subject site whereas the Zoning By-law does not allow a Residential Care Home use.

### STATISTICS OVERVIEW

TOTAL LOT AREA:	0.25 ha (0.62 ac)
EXISTING PARKING:	7 SPACES
PROPOSED PARKING:	10 SPACES

### LEGEND

- PROPERTY BOUNDARY
- 1 MINOR VARIANCE
- 2 MINOR VARIANCE
- FLOODPLAIN LIMIT

### MINOR VARIANCE PLAN 9610 McLAUGHLIN ROAD CITY OF BRAMPTON

P.N.: 23.2962.00	Date: September 19, 2023
Scale: N.T.S	Revised:
Drawn By: H.S.	File No.: PN 2962 Minor Variance Plan



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Principals

Michael Gagnon  
Lena Gagnon  
Andrew Walker  
Richard Domes

July 20, 2023

Corporation of the City of Brampton  
2 Wellington Street West  
Brampton, Ontario  
L6Y 4R2

**Attn:** François Hémon-Morneau, Planner III, Development Services  
Jeanie Myers, Secretary Treasurer, Committee of Adjustment

**Re:** Letter of Use – Medical Office  
Committee of Adjustment - Minor Variance Application  
9610 McLaughlin Road North, City of Brampton, Ontario  
(City File: A-2023-0217) (GWD File: 2962.00)

**Dear François:**

Gagnon Walker Domes Ltd. (GWD) acts as Planning Consultant to 7927959 Canada Corp. the Registered Owner of 9610 McLaughlin Road North, in the City of Brampton (hereinafter referred to as the "subject site").

In response to comments received by City Staff regarding the Committee of Adjustment Minor Variance Application (City File: A-2023-0217) for the subject site, this Letter of Use has been prepared on behalf of our Client and *Queen West X-ray and Ultrasound Services* in order to provide City Staff with a description of the proposed Medical Office use for the subject site.

The operations of *Queen West X-ray and Ultrasound Services* is described as follows:

- A total of twenty (20) staff members are proposed to be working with rotational shifts for *Queen West X-ray and Ultrasound Services* on the subject site.
- Hours of operation are from 8:00a.m. to 8:00p.m. 7-days a week.
- *Queen West X-ray and Ultrasound Services* provides X-ray, Ultrasound and Walk-in Clinic services.

*Queen West X-ray and Ultrasound Services* has been operating successfully from their location at 400 Queen Street West in the City of Brampton since 2005.

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**GAGNON WALKER DOMES LTD.**

7685 Hurontario Street, Suite 501 • Brampton ON Canada L6W 0B4 • P: 905-796-5790  
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Further information regarding the services provided by *Queen West X-ray and Ultrasound Services* can be found on their website: [www.queenwestimaging.com](http://www.queenwestimaging.com)

Should you have any further questions regarding the operations of *Queen West X-ray and Ultrasound Services*, please feel free to contact the undersigned.

Yours truly,

Anthony Sirianni,  
Planning Associate  
[asirianni@gwdplanners.com](mailto:asirianni@gwdplanners.com)

C.c.: 7927959 Canada Corp.  
Dr. Anil Sharma  
Charles Ng – City of Brampton  
A. Walker, Gagnon Walker Domes Ltd.  
M. Gagnon, Gagnon Walker Domes Ltd.



Principals

Michael Gagnon  
Lena Gagnon  
Andrew Walker  
Richard Domes

July 20, 2023

Corporation of the City of Brampton  
2 Wellington Street West  
Brampton, Ontario  
L6Y 4R2

**Attn:** François Hémon-Morneau, Planner III, Development Services

**Re:** Letter of Use – Residential Home Care  
Committee of Adjustment - Minor Variance Application  
9610 McLaughlin Road North, City of Brampton, Ontario  
(City File: A-2023-0217) (GWD File: 2962.00)

**Dear François:**

Gagnon Walker Domes Ltd. (GWD) acts as Planning Consultant to 7927959 Canada Corp., the Registered Owner of 9610 McLaughlin Road North, in the City of Brampton (hereinafter referred to as the "subject site").

In response to comments received by City Staff regarding the Committee of Adjustment Minor Variance Application (City File: A-2023-0217) for the subject site, this Letter of Use has been prepared on behalf of our Client and *Rise Respite Resource Solutions* in order to provide City Staff with a description of the proposed Residential Home Care use for the subject site.

The operations of *Rise Respite Resource Solutions* is described as follows:

- A total of seven (7) staff members are proposed to be working for *Rise Respite Resource Solutions* on the subject site.
- A total of ten (10) students/patrons/patients would be attending *Rise Respite Resource Solutions*; however, each individual has a specific schedule based on the service they are accessing and all will not be on the premises at the same time.
- *Rise Respite Resource Solutions* provides Family Support Services for persons with a developmental disability, inclusive of after school/Day respite care, life skills training, group activities, social activities, and behavioral therapy.
- *Rise Respite Resource Solutions* would also like the opportunity to provide our clients with short term over night Respite Support. Over night respite Support is a

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short term stay that provides supervised care to persons with developmental disabilities whose family members might have personal emergencies which requires them to need someone to care for their loved ones in their absences.

*Rise Respite Resource Solutions* has been operating successfully from their existing location in the City of Mississauga for five (5) years and has proven to be a well needed service in the Region of Peel. As a result of the increasing demand, *Rise Respite Resource Solutions* hopes to expand their services into the City of Brampton.

Currently *Rise Respite Resource Solutions* is operating from 6535 Millcreek Drive, Unit #65, in the City of Mississauga. Further information regarding the services provided by *Rise Respite Resource Solutions* can be found on their website: <https://www.3rsolutions4u.ca>

Should you have any further questions regarding the operations of *Rise Respite Resource Solutions* please feel free to contact the undersigned.

Yours truly,










Anthony Sirrianni,  
Planning Associate  
[asirianni@gwdplanners.com](mailto:asirianni@gwdplanners.com)

C.c.: 7927959 Canada Corp.  
Rise Respite Resource Solutions  
Charles Ng – City of Brampton  
A. Walker, Gagnon Walker Domes Ltd.  
M. Gagnon, Gagnon Walker Domes Ltd.












Lanes, Volumes, Timings  
3: McLaughlin Rd

<2023Existing> AM Peak  
09-06-2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	525	1026	0
Future Volume (vph)	0	0	0	525	1026	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	0.95	0.95
Fr t						
Flt Protected						
Satd. Flow (prot)	1863	0	0	5085	3539	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	5085	3539	0
Link Speed (k/h)	50			60	50	
Link Distance (m)	38.6			883.1	59.3	
Travel Time (s)	2.8			53.0	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	571	1115	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	571	1115	0
Sign Control	Stop			Free	Free	
<b>Intersection Summary</b>						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 31.7%	ICU Level of Service A					
Analysis Period (min) 15						

Lanes, Volumes, Timings  
3: McLaughlin Rd


<2023Existing> PM Peak  
09-06-2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	1297	956	0
Future Volume (vph)	0	0	0	1297	956	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	0.95	0.95
Frt						
Flt Protected						
Satd. Flow (prot)	1863	0	0	5085	3539	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	5085	3539	0
Link Speed (k/h)	50			60	50	
Link Distance (m)	38.6			883.1	59.3	
Travel Time (s)	2.8			53.0	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1410	1039	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	1410	1039	0
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	29.8%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings  
3: McLaughlin Rd

<2023Total> AM Peak

09-06-2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	WT			TTT	TTT	
Traffic Volume (vph)	2	2	2	525	1026	5
Future Volume (vph)	2	2	2	525	1026	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	0.95	0.95
Frt	0.932				0.999	
Flt Protected	0.976					
Satd. Flow (prot)	1694	0	0	5085	3536	0
Flt Permitted	0.976					
Satd. Flow (perm)	1694	0	0	5085	3536	0
Link Speed (k/h)	50			60	50	
Link Distance (m)	38.6			883.1	59.3	
Travel Time (s)	2.8			53.0	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	2	2	571	1115	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	0	573	1120	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 38.5%










ICU Level of Service A

Analysis Period (min) 15



Lanes, Volumes, Timings  
3: McLaughlin Rd

<2023Total> PM Peak  
09-06-2023

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	0	1	1297	956	5
Future Volume (vph)	4	0	1	1297	956	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.91	0.91	0.95	0.95
Frt					0.999	
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	0	5085	3536	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	5085	3536	0
Link Speed (k/h)	50			60	50	
Link Distance (m)	38.6			883.1	59.3	
Travel Time (s)	2.8			53.0	4.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	0	1	1410	1039	5
Shared Lane Traffic (%)						
Lane Group Flow (vph)	4	0	0	1411	1044	0
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other  
Control Type: Unsignalized  
Intersection Capacity Utilization 36.6% ICU Level of Service A  
Analysis Period (min) 15

Queuing and Blocking Report  
<2023Total> AM Peak

10-13-2023

Intersection: 1: Williams Pkwy & McLaughlin Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	TR	L	T
Maximum Queue (m)	49.8	59.8	64.0	50.0	93.5	58.6	67.1	29.1	36.0	43.9	75.4	99.0
Average Queue (m)	10.3	52.1	53.7	22.4	46.0	28.7	38.7	8.6	25.3	32.1	36.8	64.9
95th Queue (m)	33.0	58.2	60.3	54.4	86.8	48.6	59.9	21.8	38.8	43.9	70.2	93.6
Link Distance (m)		50.0	50.0			296.3	296.3		31.6	31.6		488.2
Upstream Blk Time (%)	0	21	26	0				0	8	23		
Queuing Penalty (veh)	0	97	120	0				0	21	60		
Storage Bay Dist (m)	103.0			103.0	130.0			92.0			68.0	
Storage Blk Time (%)	0	21	26	0				0	8		0	6
Queuing Penalty (veh)	0	7	29	1				0	3		0	11

Intersection: 1: Williams Pkwy & McLaughlin Rd

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	91.8	82.4
Average Queue (m)	62.0	8.8
95th Queue (m)	88.5	39.0
Link Distance (m)	488.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		75.0
Storage Blk Time (%)	3	0
Queuing Penalty (veh)	1	0

Queuing and Blocking Report  
<2023Total> PM Peak

10-13-2023

Intersection: 1: Williams Pkwy & McLaughlin Rd

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	TR	L	T	TR	L	T
Maximum Queue (m)	49.9	58.7	65.9	50.0	131.6	171.8	179.7	31.5	50.2	50.5	75.4	282.5
Average Queue (m)	24.7	49.2	51.5	16.7	74.4	102.9	115.1	23.3	37.3	34.5	69.6	170.7
95th Queue (m)	50.7	61.8	61.9	46.5	143.5	177.9	180.7	35.4	47.1	41.3	93.8	310.6
Link Distance (m)		50.0	50.0			296.3	296.3		31.6	31.6		488.2
Upstream Blk Time (%)	0	21	24	0				8	61	59		
Queuing Penalty (veh)	0	112	129	0				0	397	383		
Storage Bay Dist (m)	103.0			103.0	130.0			92.0			68.0	
Storage Blk Time (%)	0	21	24	0	14	1		8	61		76	2
Queuing Penalty (veh)	1	18	29	1	71	2		41	100		234	4

Intersection: 1: Williams Pkwy & McLaughlin Rd

Movement	SB	SB
Directions Served	T	R
Maximum Queue (m)	269.7	82.4
Average Queue (m)	160.8	16.3
95th Queue (m)	294.3	54.0
Link Distance (m)	488.2	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		75.0
Storage Blk Time (%)	4	0
Queuing Penalty (veh)	4	0



## **LEVEL OF SERVICE ANALYSIS AT SIGNALIZED INTERSECTIONS**

To assist in clarifying the arithmetic analysis associated with traffic engineering, it is often useful to refer to "Level of Service". The term Level of Service implies a qualitative measure of traffic flow at an intersection. It is dependent upon vehicle delay and vehicle queue lengths at the approaches. Specifically, Level of Service criteria are stated in terms of the average stopped delay per vehicle for a 15-minute analysis period. The following table describes the characteristics of each level:

<u>Level of Service</u>	<u>Features</u>	<u>Stopped Delay per Vehicle (sec)</u>
A	At this level of service, almost no signal phase is fully utilized by traffic. Very seldom does a vehicle wait longer than one red indication. The approach appears open, turning movements are easily made and drivers have freedom of operation.	$\leq 5.0$
B	At this level, an occasional signal phase is fully utilized and many phases approach full use. Many drivers begin to feel somewhat restricted within platoons of vehicles approaching the intersection.	$> 5.0$ and $\leq 15.0$
C	At this level, the operation is stable though with more frequent fully utilized signal phases. Drivers feel more restricted and occasionally may have to wait more than one red signal indication, and queues may develop behind turning vehicles. This level is normally employed in urban intersection design.	$> 15.0$ and $\leq 25.0$
D	At this level, the motorist experiences increasing restriction and instability of flow. There are substantial delays to approaching vehicles during short peaks within the peak period, but there are enough cycles with lower demand to permit occasional clearance of developing queues and prevent excessive backups.	$> 25.0$ and $\leq 40.0$
E	At this level, capacity is reached. There are long queues of vehicles waiting upstream of the intersection and delays to vehicles may extend to several signal cycles.	$> 40.0$ and $\leq 60.0$
F	At this level, saturation occurs, with vehicle demand exceeding the available capacity.	$> 60.0$

## LEVEL OF SERVICE ANALYSIS AT UNSIGNALIZED INTERSECTIONS<sup>(1)</sup>

The term "level of service" implies a qualitative measure of traffic flow at an intersection. It is dependent upon the vehicle delay and vehicle queue lengths at approaches. The level of service at unsignalized intersections is often related to the delay accumulated by flows on the minor streets, caused by all other conflicting movements. The following table describes the characteristics of each level.

Level of Service	Features
A	Little or no traffic delay occurs. Approaches appear open, turning movements are easily made, and drivers have freedom of operation.
B	Short traffic delays occur. Many drivers begin to feel somewhat restricted in terms of freedom of operation.
C	Average traffic delays occur. Operations are generally stable, but drivers emerging from the minor street may experience difficulty in completing their movement. This may occasionally impact on the stability of flow on the major street.
D	Long traffic delays occur. Motorists emerging from the minor street experience significant restriction and frustration. Drivers on the major street will experience congestion and delay as drivers emerging from the minor street interfere with the major through movements.
E	Very long traffic delays occur. Operations approach the capacity of the intersection.
F	Saturation occurs, with vehicle demand exceeding the available capacity. Very long traffic delays occur.

---

<sup>(1)</sup> Highway Capacity Manual - Special Report No. 209, Transportation Research Board, 1985.



## Turning Movement Count - Details Report

**Location.....** MCLAUGHLIN RD N @ FLOWERTOWN AVE  
**Municipality.....** Brampton  
**Count Date.....** Thursday, June 16, 2022

MCLAUGHLIN RD N											FLOWERTOWN AVE									
North Approach						South Approach					East Approach					West Approach				
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
07:00 07:15	0	179	14	0	193	2	94	0	0	96	0	0	0	0	0	11	0	21	0	32
07:15 07:30	0	164	8	0	172	6	104	0	0	110	1	0	0	0	1	12	0	21	0	33
07:30 07:45	0	240	13	0	253	6	105	0	0	111	0	0	0	0	0	18	0	22	0	40
07:45 08:00	0	223	8	0	231	5	155	0	0	160	1	1	0	0	2	27	0	15	0	42
Hourly Total	0	806	43	0	849	19	458	0	0	477	2	1	0	0	3	68	0	79	0	147
08:00 08:15	0	237	12	0	249	10	96	0	0	106	0	0	0	0	0	12	0	23	0	35
08:15 08:30	0	221	15	0	236	2	112	0	0	114	1	0	0	0	1	16	0	14	0	30
08:30 08:45	0	268	15	0	283	3	117	0	0	120	0	0	0	0	0	22	0	24	0	46
08:45 09:00	0	236	19	0	255	6	136	1	0	143	0	0	0	0	0	21	0	22	0	43
Hourly Total	0	962	61	0	1023	21	461	1	0	483	1	0	0	0	1	71	0	83	0	154
11:00 11:15	0	155	21	0	176	12	153	0	0	165	1	0	0	0	1	18	0	15	0	33
11:15 11:30	0	178	18	0	196	11	142	0	0	153	0	0	0	0	0	26	0	16	0	42
11:30 11:45	0	181	20	0	201	8	143	0	0	151	0	0	0	0	0	16	1	13	0	30
11:45 12:00	0	183	20	0	203	7	153	1	0	161	0	1	0	0	1	19	0	19	0	38
Hourly Total	0	697	79	0	776	38	591	1	0	630	1	1	0	0	2	79	1	63	0	143
12:00 12:15	2	184	25	0	211	8	160	0	0	168	0	0	1	0	1	20	0	16	0	36
12:15 12:30	0	182	21	0	203	14	153	1	0	168	0	0	0	0	0	21	0	13	0	34
12:30 12:45	1	160	34	0	195	11	176	0	0	187	0	0	0	0	0	18	1	25	0	44
12:45 13:00	0	182	31	0	213	12	172	1	0	185	1	0	0	0	1	19	2	15	0	36
Hourly Total	3	708	111	0	822	45	661	2	0	708	1	0	1	0	2	78	3	69	0	150
13:00 13:15	0	184	34	0	218	15	157	1	0	173	1	0	0	0	1	23	0	12	0	35
13:15 13:30	0	180	22	0	202	7	178	0	0	185	0	0	0	0	0	26	0	13	0	39
13:30 13:45	0	177	29	0	206	10	171	0	0	181	0	0	0	0	0	22	0	13	0	35
13:45 14:00	1	181	27	0	209	12	200	0	0	212	1	0	0	0	1	22	0	13	0	35
Hourly Total	1	722	112	0	835	44	706	1	0	751	2	0	0	0	2	93	0	51	0	144
15:00 15:15	1	148	27	0	176	11	244	0	0	255	0	0	0	0	0	26	0	12	0	38
15:15 15:30	0	184	28	0	212	14	240	2	0	256	1	0	0	0	1	13	0	15	0	28
15:30 15:45	0	204	38	0	242	16	219	0	0	235	0	0	0	0	0	39	0	14	0	53
15:45 16:00	0	194	36	0	230	19	281	0	0	300	1	0	0	0	1	24	0	16	0	40
Hourly Total	1	730	129	0	860	60	984	2	0	1046	2	0	0	0	2	102	0	57	0	159
16:00 16:15	0	193	36	0	229	16	291	2	0	309	1	0	0	0	1	43	0	14	0	57



## MCLAUGHLIN RD N

## FLOWERTOWN AVE

North Approach						South Approach					East Approach					West Approach				
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
16:15 16:30	0	187	34	0	221	21	280	0	0	301	0	0	0	0	0	25	0	10	0	35
16:30 16:45	0	176	37	0	213	14	306	1	0	321	0	1	1	0	2	32	2	12	0	46
16:45 17:00	0	195	39	0	234	18	336	1	0	355	1	0	0	0	1	26	1	11	0	38
Hourly Total	0	751	146	0	897	69	1213	4	0	1286	2	1	1	0	4	126	3	47	0	176
17:00 17:15	0	227	40	0	267	23	323	0	0	346	0	0	0	0	0	32	0	9	0	41
17:15 17:30	0	196	28	0	224	28	290	0	0	318	0	0	1	0	1	37	1	16	0	54
17:30 17:45	0	212	32	0	244	19	288	0	0	307	1	0	0	0	1	35	1	24	0	60
17:45 18:00	0	204	41	0	245	22	315	0	0	337	0	0	0	0	0	32	1	22	0	55
Hourly Total	0	839	141	0	980	92	1216	0	0	1308	1	0	1	0	2	136	3	71	0	210
Grand Total	5	6215	822	0	7042	388	6290	11	0	6689	12	3	3	0	18	753	10	520	0	1283
Truck %	0%	2%	2%	0%	2%	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	1%	0%	8%	0%	4%



## Turning Movement Count - Details Report

**Location.....** WILLIAMS PKY @ FLETCHERS CREEK BLVD  
**Municipality.....** Brampton  
**Count Date.....** Wednesday, October 24, 2018

FLETCHERS CREEK BLVD											WILLIAMS PKY									
North Approach						South Approach					East Approach					West Approach				
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
07:00 07:15	70	0	16	0	86	0	0	0	0	0	0	114	23	0	137	4	164	0	0	168
07:15 07:30	72	0	22	0	94	0	0	0	0	0	0	137	21	0	158	2	227	0	0	229
07:30 07:45	85	1	26	0	112	0	0	0	0	0	0	179	20	0	199	10	247	0	0	257
07:45 08:00	55	0	42	0	97	0	0	0	0	0	0	209	34	0	243	17	298	0	0	315
Hourly Total	282	1	106	0	389	0	0	0	0	0	0	639	98	0	737	33	936	0	0	969
08:00 08:15	68	0	25	0	93	0	0	0	0	0	0	163	34	0	197	20	273	0	0	293
08:15 08:30	80	0	28	0	108	0	0	0	0	0	0	182	35	0	217	20	263	0	0	283
08:30 08:45	60	0	23	0	83	0	0	1	0	1	0	154	32	0	186	14	242	0	0	256
08:45 09:00	54	0	29	0	83	0	0	0	0	0	0	140	29	0	169	18	249	0	0	267
Hourly Total	262	0	105	0	367	0	0	1	0	1	0	639	130	0	769	72	1027	0	0	1099
11:00 11:15	17	0	20	0	37	0	0	0	0	0	0	107	17	0	124	7	136	0	0	143
11:15 11:30	30	0	12	0	42	0	0	0	0	0	0	96	27	0	123	1	117	0	0	118
11:30 11:45	26	0	9	0	35	0	0	1	0	1	0	120	28	0	148	13	145	0	0	158
11:45 12:00	29	0	11	0	40	0	0	1	0	1	0	119	19	0	138	8	136	0	0	144
Hourly Total	102	0	52	0	154	0	0	2	0	2	0	442	91	0	533	29	534	0	0	563
12:00 12:15	22	0	10	0	32	0	1	1	0	2	0	114	19	0	133	7	126	0	0	133
12:15 12:30	26	0	9	0	35	0	1	1	0	2	0	98	25	0	123	7	137	0	0	144
12:30 12:45	31	0	15	0	46	1	1	2	0	4	0	126	30	0	156	11	144	0	0	155
12:45 13:00	38	0	11	0	49	1	1	1	0	3	0	113	29	0	142	9	133	0	0	142
Hourly Total	117	0	45	0	162	2	4	5	0	11	0	451	103	0	554	34	540	0	0	574
13:00 13:15	34	1	13	0	48	0	0	0	0	0	0	117	28	0	145	9	130	0	0	139
13:15 13:30	23	0	9	0	32	0	0	0	0	0	0	128	21	0	149	9	144	0	0	153
13:30 13:45	23	0	9	0	32	0	0	0	0	0	0	119	35	0	154	7	142	0	0	149
13:45 14:00	29	0	12	0	41	0	0	0	0	0	0	140	33	0	173	9	137	0	0	146
Hourly Total	109	1	43	0	153	0	0	0	0	0	0	504	117	0	621	34	553	0	0	587
15:00 15:15	29	0	22	0	51	1	0	1	0	2	0	222	60	0	282	14	179	0	0	193
15:15 15:30	29	0	14	0	43	0	0	1	0	1	0	254	50	0	304	23	211	0	0	234
15:30 15:45	43	0	24	0	67	1	0	1	0	2	0	222	61	0	283	14	222	0	0	236
15:45 16:00	38	0	20	0	58	0	1	1	0	2	0	260	75	0	335	16	225	0	0	241
Hourly Total	139	0	80	0	219	2	1	4	0	7	0	958	246	0	1204	67	837	0	0	904
16:00 16:15	32	0	15	0	47	18	6	52	0	76	0	253	62	0	315	13	220	0	0	233

## FLETCHERS CREEK BLVD

## WILLIAMS PKY

North Approach						South Approach					East Approach					West Approach				
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
16:15 16:30	22	0	12	0	34	3	1	5	0	9	0	239	79	0	318	17	197	0	0	214
16:30 16:45	32	0	15	0	47	1	2	1	0	4	0	245	72	0	317	15	197	0	0	212
16:45 17:00	39	0	26	0	65	2	0	2	0	4	0	294	69	0	363	13	235	0	0	248
Hourly Total	125	0	68	0	193	24	9	60	0	93	0	1031	282	0	1313	58	849	0	0	907
17:00 17:15	39	0	19	0	58	0	0	3	0	3	0	277	66	0	343	23	235	0	0	258
17:15 17:30	39	0	23	0	62	1	0	1	0	2	0	288	100	0	388	26	254	0	0	280
17:30 17:45	42	0	11	0	53	1	1	2	0	4	0	272	89	0	361	18	316	0	0	334
17:45 18:00	38	0	21	0	59	1	0	1	0	2	0	266	101	0	367	24	242	0	0	266
Hourly Total	158	0	74	0	232	3	1	7	0	11	0	1103	356	0	1459	91	1047	0	0	1138
Grand Total	1294	2	573	0	1869	31	15	79	0	125	0	5767	1423	0	7190	418	6323	0	0	6741
Truck %	3%	0%	2%	0%	3%	0%	0%	0%	0%	0%	0%	2%	3%	0%	2%	1%	2%	0%	0%	2%





## Turning Movement Count - Details Report

**Location.....** MCLAUGHLIN RD N @ WILLIAMS PKY  
**Municipality.....** Brampton  
**Count Date.....** Thursday, June 16, 2022

MCLAUGHLIN RD N											WILLIAMS PKY										
North Approach						South Approach					East Approach					West Approach					
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	
07:00	07:15	43	136	5	0	184	11	73	24	0	108	25	55	11	0	91	6	143	27	0	176
07:15	07:30	22	103	7	0	132	10	81	17	0	108	29	106	16	0	151	3	170	26	0	199
07:30	07:45	42	176	9	0	227	11	67	28	0	106	29	100	18	0	147	3	180	33	0	216
07:45	08:00	56	149	4	0	209	12	115	49	0	176	38	120	22	0	180	8	172	37	0	217
Hourly Total		163	564	25	0	752	44	336	118	0	498	121	381	67	0	569	20	665	123	0	808
08:00	08:15	43	174	10	0	227	8	71	43	0	122	39	108	19	0	166	8	164	27	0	199
08:15	08:30	39	189	9	0	237	7	75	23	0	105	34	90	16	0	140	9	169	7	0	185
08:30	08:45	45	179	10	0	234	9	93	29	0	131	41	128	24	0	193	4	248	42	0	294
08:45	09:00	52	189	12	0	253	16	108	32	0	156	53	111	18	0	182	11	173	30	0	214
Hourly Total		179	731	41	0	951	40	347	127	0	514	167	437	77	0	681	32	754	106	0	892
11:00	11:15	32	111	9	0	152	22	121	32	0	175	35	104	25	0	164	10	124	20	0	154
11:15	11:30	40	126	11	0	177	23	99	33	0	155	34	109	26	0	169	7	141	23	0	171
11:30	11:45	27	117	7	0	151	26	100	31	0	157	57	112	20	0	189	13	158	22	0	193
11:45	12:00	25	125	9	0	159	17	116	35	0	168	57	141	35	0	233	17	148	27	0	192
Hourly Total		124	479	36	0	639	88	436	131	0	655	183	466	106	0	755	47	571	92	0	710
12:00	12:15	28	143	16	0	187	18	118	36	0	172	37	101	21	0	159	15	159	22	0	196
12:15	12:30	40	127	13	0	180	22	123	33	0	178	48	135	29	0	212	15	146	28	0	189
12:30	12:45	40	110	8	0	158	26	118	39	0	183	48	139	39	0	226	10	138	22	0	170
12:45	13:00	34	126	12	0	172	24	105	44	0	173	46	132	25	0	203	8	154	22	0	184
Hourly Total		142	506	49	0	697	90	464	152	0	706	179	507	114	0	800	48	597	94	0	739
13:00	13:15	43	117	18	0	178	25	125	32	0	182	55	143	13	0	211	12	135	30	0	177
13:15	13:30	30	119	17	0	166	18	135	51	0	204	39	163	39	0	241	6	166	27	0	199
13:30	13:45	28	127	13	0	168	24	109	40	0	173	56	152	25	0	233	16	164	18	0	198
13:45	14:00	43	149	12	0	204	26	137	54	0	217	41	171	24	0	236	22	185	29	0	236
Hourly Total		144	512	60	0	716	93	506	177	0	776	191	629	101	0	921	56	650	104	0	810
15:00	15:15	39	106	15	0	160	27	176	59	0	262	35	172	34	0	241	19	168	23	0	210
15:15	15:30	27	137	12	0	176	34	161	39	0	234	54	216	49	0	319	11	162	21	0	194
15:30	15:45	38	138	16	0	192	21	163	61	0	245	51	215	39	0	305	13	194	25	0	232
15:45	16:00	31	135	9	0	175	39	189	57	0	285	54	223	32	0	309	18	183	32	0	233
Hourly Total		135	516	52	0	703	121	689	216	0	1026	194	826	154	0	1174	61	707	101	0	869
16:00	16:15	26	151	21	0	198	55	195	68	0	318	59	216	33	0	308	18	185	33	0	236

## MCLAUGHLIN RD N

## WILLIAMS PKY

North Approach						South Approach					East Approach					West Approach				
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
16:15 16:30	39	130	14	0	183	48	177	62	0	287	38	194	27	0	259	16	218	28	0	262
16:30 16:45	37	130	19	0	186	50	231	53	0	334	50	255	45	0	350	16	209	21	0	246
16:45 17:00	30	117	21	0	168	61	207	67	0	335	56	251	51	0	358	26	221	33	0	280
Hourly Total	132	528	75	0	735	214	810	250	0	1274	203	916	156	0	1275	76	833	115	0	1024
17:00 17:15	36	167	25	0	228	47	204	64	0	315	57	252	32	0	341	19	191	30	0	240
17:15 17:30	33	129	16	0	178	32	272	17	0	321	53	266	42	0	361	29	190	20	0	239
17:30 17:45	36	144	19	0	199	36	261	19	0	316	49	232	39	0	320	11	198	34	0	243
17:45 18:00	44	165	22	0	231	43	253	22	0	318	55	241	43	0	339	26	251	32	0	309
Hourly Total	149	605	82	0	836	158	990	122	0	1270	214	991	156	0	1361	85	830	116	0	1031
Grand Total	1168	4441	420	0	6029	848	4578	1293	0	6719	1452	5153	931	0	7536	425	5607	851	0	6883
Truck %	1%	3%	1%	0%	2%	2%	3%	2%	0%	3%	2%	2%	2%	0%	2%	2%	2%	1%	0%	2%





## Turning Movement Count - Details Report

**Location.....** WILLIAMS PKY @ ROYAL ORCHARD DR  
**Municipality.....** Brampton  
**Count Date.....** Wednesday, May 03, 2023

ROYAL ORCHARD DR											WILLIAMS PKY									
North Approach						South Approach					East Approach					West Approach				
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
07:00 07:15	19	13	9	0	41	15	9	10	0	34	2	112	7	0	121	3	180	26	0	209
07:15 07:30	19	11	7	0	37	12	9	18	0	39	5	141	15	0	161	4	233	41	0	278
07:30 07:45	28	32	12	0	72	18	13	18	0	49	4	152	12	0	168	5	223	53	0	281
07:45 08:00	11	25	13	0	49	25	6	7	0	38	11	156	13	0	180	5	192	88	0	285
Hourly Total	77	81	41	0	199	70	37	53	0	160	22	561	47	0	630	17	828	208	0	1053
08:00 08:15	25	25	16	0	66	33	27	11	0	71	3	162	24	0	189	9	189	63	0	261
08:15 08:30	25	32	24	0	81	16	24	5	0	45	11	174	52	0	237	40	261	54	0	355
08:30 08:45	47	34	39	0	120	31	15	8	0	54	7	159	48	0	214	31	247	68	0	346
08:45 09:00	9	21	20	0	50	32	11	15	0	58	7	172	12	0	191	15	214	71	0	300
Hourly Total	106	112	99	0	317	112	77	39	0	228	28	667	136	0	831	95	911	256	0	1262
11:00 11:15	14	10	8	0	32	31	13	8	0	52	5	109	20	0	134	3	155	37	0	195
11:15 11:30	9	18	7	0	34	24	13	5	0	42	12	135	11	0	158	5	180	29	0	214
11:30 11:45	22	16	8	0	46	23	14	10	0	47	7	134	15	0	156	2	174	36	0	212
11:45 12:00	17	15	7	0	39	24	14	12	0	50	8	137	21	0	166	6	151	33	0	190
Hourly Total	62	59	30	0	151	102	54	35	0	191	32	515	67	0	614	16	660	135	0	811
12:00 12:15	23	13	4	0	40	24	16	7	0	47	10	141	21	0	172	8	190	26	0	224
12:15 12:30	18	19	6	0	43	41	13	7	0	61	4	130	16	0	150	4	171	25	0	200
12:30 12:45	13	14	13	0	40	27	14	9	0	50	4	127	16	0	147	5	138	31	0	174
12:45 13:00	14	14	5	0	33	31	14	5	0	50	2	152	23	0	177	2	153	22	0	177
Hourly Total	68	60	28	0	156	123	57	28	0	208	20	550	76	0	646	19	652	104	0	775
13:00 13:15	20	17	11	0	48	20	10	8	0	38	8	152	18	0	178	6	194	29	0	229
13:15 13:30	12	13	6	0	31	30	18	8	0	56	7	155	20	0	182	9	199	25	0	233
13:30 13:45	18	14	4	0	36	30	15	8	0	53	9	164	21	0	194	4	164	28	0	196
13:45 14:00	22	18	3	0	43	28	22	11	0	61	5	179	8	0	192	2	208	33	0	243
Hourly Total	72	62	24	0	158	108	65	35	0	208	29	650	67	0	746	21	765	115	0	901
15:00 15:15	23	22	12	0	57	45	23	10	0	78	9	207	22	0	238	14	230	33	0	277
15:15 15:30	16	25	14	0	55	59	37	10	0	106	7	210	26	0	243	15	235	44	0	294
15:30 15:45	18	21	7	0	46	65	36	12	0	113	14	232	27	0	273	6	253	51	0	310
15:45 16:00	16	26	8	0	50	66	28	8	0	102	11	236	28	0	275	8	249	39	0	296
Hourly Total	73	94	41	0	208	235	124	40	0	399	41	885	103	0	1029	43	967	167	0	1177
16:00 16:15	24	23	7	0	54	56	34	11	0	101	14	249	28	0	291	10	212	36	0	258



ROYAL ORCHARD DR

WILLIAMS PKY

North Approach						South Approach					East Approach					West Approach					
Time Period	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	
16:15	16:30	16	18	10	0	44	53	44	15	0	112	14	218	23	0	255	14	252	44	0	310
16:30	16:45	16	22	6	0	44	66	25	9	0	100	8	238	23	0	269	11	245	40	0	296
16:45	17:00	15	29	5	0	49	69	26	8	0	103	12	283	31	0	326	8	267	60	0	335
Hourly Total		71	92	28	0	191	244	129	43	0	416	48	988	105	0	1141	43	976	180	0	1199
17:00	17:15	30	36	10	0	76	66	42	15	0	123	11	243	30	0	284	10	204	43	0	257
17:15	17:30	27	29	7	0	63	79	36	11	0	126	9	273	38	0	320	17	285	42	0	344
17:30	17:45	14	27	9	0	50	70	37	7	0	114	14	263	32	0	309	9	263	42	0	314
17:45	18:00	20	27	9	0	56	65	35	11	0	111	11	247	29	0	287	8	239	49	0	296
Hourly Total		91	119	35	0	245	280	150	44	0	474	45	1026	129	0	1200	44	991	176	0	1211
Grand Total		620	679	326	0	1625	1274	693	317	0	2284	265	5842	730	0	6837	298	6750	1341	0	8389
Truck %		3%	3%	2%	0%	3%	3%	5%	4%	0%	4%	5%	3%	4%	0%	3%	4%	2%	4%	0%	3%

September 5, 2023

Trans-Plan  
 67 Mowat Ave, Suite 331,  
 Toronto, ON, M6K 3E3

**Attention:** Darshan Soni  
**Subject:** Request for Signal Timings

As per your request, the traffic signal timing for the requested intersection is as follows:

### McLaughlin Road at Williams Parkway

Day Plan	Hour	Minute	Pattern	PHASE DIRECTION								Cycle Lengt	Offset
				1 SBLT -	2 McLaug	3 EBLT -	4 Williams	5 NBLT -	6 McLaug	7 WBLT -	8 Williams		
1 -	0	0	Free	9	38	9	31	9	38	10	31	105.5	0
1 -	8	0	2 - OFF	10	45	15	40	10	45	15	40	110	86
1 -	19	0	Free	9	38	9	31	9	38	10	31	105.5	0
2 -	0	0	Free	9	38	9	31	9	38	10	31	105.5	0
2 -	6	0	1 - AM	10	60	16	54	10	60	16	54	140	106
2 -	9	0	2 - OFF	10	45	15	40	10	45	15	40	110	86
2 -	15	0	3 - PM	12	63	16	69	12	63	16	69	160	91
2 -	21	0	Free	9	38	9	31	9	38	10	31	105.5	0
3 -	0	0	Free	9	38	9	31	9	38	10	31	105.5	0
3 -	8	0	2 - OFF	10	45	15	40	10	45	15	40	110	86
3 -	19	0	Free	9	38	9	31	9	38	10	31	105.5	0

	PHASE							
	1	2	3	4	5	6	7	8
Walk	0	12	0	12	0	12	0	12
Clearance	0	26	0	20	0	26	0	20
Yellow Change	3	4	3	4	3	4	3	4
Red Clearance	0	2	0	2	0	2	0	2

Yours truly,



Basma Alsarraf  
 Traffic Signals Technologist  
 Traffic services – Public works  
 Tel: (905) 874-2570 Fax: (905) 874-3583  
 Email: [basma.alsarraf@brampton.ca](mailto:basma.alsarraf@brampton.ca)

August 31, 2023

Trans-Plan  
 67 Mowat Ave, Suite 331,  
 Toronto, ON, M6K 3E3

**Attention:** Darshan Soni  
**Subject:** Request for Signal Timings

As per your request, the traffic signal timing for the requested intersection is as follows:

### Williams Parkway at Royal Orchard Drive / Vodden Street

Day Plan	Hour	Minute	Pattern	PHASE DIRECTION								Cycle Lengt	Offset
				1 N/A	2 Williams	3 N/A	4 Royal	5 N/A	6 N/A	7 N/A	8 N/A		
1 - Sunday	0	0	Free	0	35	0	19	0	0	0	0	51	0
1 - Sunday	8	0	2 - OFF	0	68	0	42	0	0	0	0	110	19
1 - Sunday	19	0	Free	0	35	0	19	0	0	0	0	51	0
2 - Weekday	0	0	Free	0	35	0	19	0	0	0	0	51	0
2 - Weekday	6	0	1 - AM	0	90	0	50	0	0	0	0	140	28
2 - Weekday	9	0	2 - OFF	0	68	0	42	0	0	0	0	110	19
2 - Weekday	15	0	3 - PM	0	100	0	60	0	0	0	0	160	156
2 - Weekday	21	0	Free	0	35	0	19	0	0	0	0	51	0
3 - Saturday	0	0	Free	0	35	0	19	0	0	0	0	51	0
3 - Saturday	8	0	2 - OFF	0	68	0	42	0	0	0	0	110	19
3 - Saturday	19	0	Free	0	35	0	19	0	0	0	0	51	0

	PHASE							
	1	2	3	4	5	6	7	8
Walk	0	12	0	12	0	0	0	0
Clearance	0	12	0	23	0	0	0	0
Yellow Change	4	4	4	4	4	4	4	4
Red Clearance	2	2	2	2	2	2	2	2

Yours truly,



Basma Alsarraf  
 Traffic Signals Technologist  
 Traffic services – Public works  
 Tel: (905) 874-2570 Fax: (905) 874-3583  
 Email: [basma.alsarraf@brampton.ca](mailto:basma.alsarraf@brampton.ca)





August 31, 2023

Trans-Plan  
67 Mowat Ave, Suite 331,  
Toronto, ON, M6K 3E3

**Attention:** Darshan Soni  
**Subject:** Request for Signal Timings

As per your request, the traffic signal timing for the requested intersection is as follows:

**Williams Parkway at Fletchers Creek Boulevard**

Day Plan	Hour	Minute	Pattern	PHASE DIRECTION								Cycle Lengt	Offset
				1 N/A	2 Williams	3 N/A	4 Gap	5 N/A	6 Williams	7 N/A	8 Fletcher		
1 -	0	0	Free	0	34	0	19	0	34	0	19	77	0
1 -	8	0	2 - OFF	0	70	0	40	0	70	0	40	110	25
1 -	19	0	Free	0	34	0	19	0	34	0	19	77	0
2 -	0	0	Free	0	34	0	19	0	34	0	19	77	0
2 -	6	0	1 - AM	0	95	0	45	0	95	0	45	140	77
2 -	7	0	5 - AM2	0	80	0	60	0	80	0	60	140	85
2 -	9	0	2 - OFF	0	70	0	40	0	70	0	40	110	25
2 -	15	0	3 - PM	0	78	0	42	0	78	0	42	120	82
2 -	21	0	Free	0	34	0	19	0	34	0	19	77	0
3 -	0	0	Free	0	34	0	19	0	34	0	19	77	0
3 -	8	0	2 - OFF	0	70	0	40	0	70	0	40	110	25
3 -	19	0	Free	0	34	0	19	0	34	0	19	77	0

	PHASE							
	1	2	3	4	5	6	7	8
Walk	0	12	0	12	0	12	0	12
Clearance	0	13	0	21	0	13	0	21
Yellow Change	4	4	4	4	4	4	4	4
Red Clearance	2	2	2	2	2	2	2	2

Yours truly,

Basma Alsarraf  
Traffic Signals Technologist  
Traffic services – Public works  
Tel: (905) 874-2570 Fax: (905) 874-3583  
Email: [basma.alsarraf@brampton.ca](mailto:basma.alsarraf@brampton.ca)

August 31, 2023

Trans-Plan  
 67 Mowat Ave, Suite 331,  
 Toronto, ON, M6K 3E3

**Attention:** Darshan Soni

**Subject:** Request for Signal Timings

**Our File:** T04 SIG (23)

As per your request, the signal timings for the requested intersection of McLaughlin Rd at Flowertown Ave is as follows: (All timing values are in seconds)

**McLaughlin Rd at Flowertown Ave**

DAY	Plan	Time Period	PHASE DIRECTION				Cycle Length	Offset
			Phase 2	Phase 4	Phase 6	Phase 8		
			McLaughlin Rd NB	Flowertown Ave WB	McLaughlin Rd SB	Flowertown Ave EB		
Sunday	FREE	0000 - 0800	41	26	41	26	67	0
Sunday	OFF PEAK	0800 - 1900	75	35	75	35	110	37
Sunday	FREE	1900 - 2400	41	26	41	26	67	0
Weekday	FREE	0000 - 0600	41	26	41	26	67	0
Weekday	AM PEAK	0600 - 0900	95	45	95	45	140	137
Weekday	OFF PEAK	0900 - 1500	75	35	75	35	110	37
Weekday	PM PEAK	1500 - 2100	95	40	95	40	135	118
Weekday	FREE	2100 - 2400	41	26	41	26	67	0
Saturday	FREE	0000 - 0800	41	26	41	26	67	0
Saturday	OFF PEAK	0800 - 1900	75	35	75	35	110	37
Saturday	FREE	1900 - 2400	41	26	41	26	67	0

Note 1: 4 seconds amber and 2 seconds all red for phases 2, 4, 6 and 8

Note 2: 8 seconds walk and 10 seconds clearance for phases 2 and 6

Note 3: 8 seconds walk and 14 seconds clearance for phases 4 and 8, if demanded

Note 4: This intersection is semi-actuated

If you have any questions, please do not hesitate to contact the undersigned.

Yours truly,

A handwritten signature in black ink, appearing to read 'Basma', with a long, sweeping horizontal line extending to the right.

Basma Alsarraf  
Traffic Signals Technologist  
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