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## 536 Rochester Street

### Transportation Impact Assessment

Engineering excellence. Planning precision. Inspired landscapes.

**536 Rochester Street**  
**Transportation Impact Assessment**

Prepared By:

**NOVATECH**  
Suite 200, 240 Michael Cowpland Drive  
Ottawa, Ontario  
K2M 1P6

January 7, 2018

Novatech File: 118175  
Ref: R-2018-162

January 7, 2018

City of Ottawa  
Planning and Growth Management Department  
110 Laurier Ave. W., 4<sup>th</sup> Floor,  
Ottawa, Ontario K1P 1J1

**Attention: Mr. Wally Dubyk**  
**Project Manager, Infrastructure Approvals**

Dear Mr. Dubyk:

**Reference: 536 Rochester Street**  
**Transportation Impact Assessment Report**  
**Novatech File No. 118175**

---

We are pleased to submit the following Transportation Impact Assessment report in support of a Zoning By-law Amendment Application for the above addresses. The structure and format of this report is in accordance with the City of Ottawa Transportation Impact Assessment Guidelines (June 2017).

If you have any questions or comments regarding this report, please feel free to contact Brad Byvelds, or the undersigned.

Yours truly,

**NOVATECH**



Rochelle Fortier, B.Eng.  
E.I.T. | Transportation/Traffic



## **TIA Plan Reports**

On 14 June 2017, the Council of the City of Ottawa adopted new Transportation Impact Assessment (TIA) Guidelines. In adopting the guidelines, Council established a requirement for those preparing and delivering transportation impact assessments and reports to sign a letter of certification.

Individuals submitting TIA reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that s/he meets the four criteria listed below.

### **CERTIFICATION**

1. I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines;
2. I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;
3. I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and
4. I am either a licensed<sup>1</sup> or registered<sup>2</sup> professional in good standing, whose field of expertise [check ☒ appropriate field(s)] is either transportation engineering ☒ or transportation planning ☐.

**1,2 License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.**

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Dated at Ottawa this 7 day of January, 2019.  
(City)

Name: Brad Byvelds, P.Eng.  
(Please Print)

Professional Title: Project Coordinator, Transportation/Traffic

B. Byvelds

Signature of Individual certifier that s/he meets the above four criteria

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# TABLE OF CONTENTS

|            |   |           |
|------------|---|-----------|
| <b>1.0</b> | <b>INTRODUCTION</b>                       | <b>1</b>  |
| <b>2.0</b> | <b>PROPOSED DEVELOPMENT</b>               | <b>1</b>  |
| <b>3.0</b> | <b>SCREENING</b>                          | <b>2</b>  |
| 3.1        | Screening Form                            | 2         |
| <b>4.0</b> | <b>SCOPING</b>                            | <b>3</b>  |
| 4.1        | Existing Conditions                       | 3         |
| 4.1.1      | Roadways                                  | 3         |
| 4.1.2      | Intersections                             | 4         |
| 4.1.3      | Driveways                                 | 5         |
| 4.1.4      | Pedestrian and Cycling Facilities         | 6         |
| 4.1.5      | Transit                                   | 6         |
| 4.1.6      | Existing Area Traffic Management Measures | 8         |
| 4.1.7      | Existing Traffic Volumes                  | 8         |
| 4.2        | Collision Records                         | 9         |
| 4.3        | Planned Conditions                        | 11        |
| 4.4        | Study Area and Time Periods               | 12        |
| 4.5        | Exemptions Review                         | 12        |
| <b>5.0</b> | <b>FORECASTING</b>                        | <b>13</b> |
| 5.1        | Development-Generated Traffic             | 13        |
| 5.1.1      | Trip Generation                           | 13        |
| 5.1.2      | Trip Distribution                         | 14        |
| 5.2        | Background Traffic                        | 15        |
| 5.2.1      | Other Area Development                    | 16        |
| <b>6.0</b> | <b>ANALYSIS</b>                           | <b>22</b> |
| 6.1        | Development Design                        | 22        |
| 6.1.1      | Design for Sustainable Modes              | 22        |
| 6.1.2      | Circulation and Access                    | 22        |
| 6.2        | Parking                                   | 22        |
| 6.3        | Boundary Streets                          | 24        |
| 6.3.1      | Pedestrian Level of Service (PLOS)        | 24        |
| 6.3.2      | Bicycle Level of Service (BLOS)           | 24        |
| 6.3.3      | Truck Level of Service (TkLOS)            | 25        |
| 6.3.4      | Vehicular Level of Service (Auto LOS)     | 25        |
| 6.3.5      | Segment MMLOS Summary                     | 25        |
| 6.4        | Access Intersections Design               | 26        |
| <b>7.0</b> | <b>CONCLUSIONS AND RECOMMENDATIONS</b>    | <b>26</b> |

**Figures**

|   |    |
|---|----|
| Figure 1: View of the Subject Site .....                              | 2  |
| Figure 2: OC Transpo Bus Stop Locations .....                         | 7  |
| Figure 3: Existing Traffic Volumes.....                               | 9  |
| Figure 4: Carling Avenue Transit Priority Functional Design Plan..... | 11 |
| Figure 5: Site Generated Traffic Volumes .....                        | 15 |
| Figure 6: Total Traffic Volumes .....                                 | 21 |
| Figure 7: Little Italy Local Parking Study Area .....                 | 23 |

**Tables**

|  |    |
|--|----|
| Table 1: Reported Collisions .....         | 10 |
| Table 2: TIA Exemptions .....              | 13 |
| Table 3: Person Trips.....                 | 13 |
| Table 4: Person Trips by Modal Share ..... | 14 |
| Table 5: PLOS Segment Analysis .....       | 24 |
| Table 6: BLOS Segment Analysis .....       | 25 |
| Table 7: TkLOS Segment Analysis.....       | 25 |
| Table 8: Auto LOS Segment Analysis .....   | 25 |

**Appendices**

|   |  |
|---|--|
| Appendix A: Preliminary Site Plan                               |  |
| Appendix B: TIA Screening Form                                  |  |
| Appendix C: OC Transpo System Information                       |  |
| Appendix D: Traffic Count Data                                  |  |
| Appendix E: Collision Records                                   |  |
| Appendix F: Relevant Excerpts from Other Transportation Studies |  |
| Appendix G: TDM – Supportive Development Design Checklist       |  |

## EXECUTIVE SUMMARY

This Transportation Impact Assessment (TIA) Report has been prepared in support of a Zoning By-law Amendment Application for the property located at 536 Rochester Street. The proposed development will be located midblock, approximately 15m south of Pamilla Street.

The subject site is approximately 251 square metres in area and is occupied by a residential building with a footprint of approximately 56 square metres per floor, with a residential driveway to the north of the existing dwelling. A laneway providing access to a rear parking lot for a coffee shop at 538 Rochester Street abuts the house on the south side.

The Subject Site is currently zoned Residential Fourth Density, Subzone T (R4T) in the City of Ottawa Zoning By-law 2008-250, which does not provide for commercial uses. The proposed development will convert the residential building into a take-out restaurant, with seating for approximately 20 customers. A Zoning By-law Amendment is required to permit the proposed restaurant.

No new accesses or parking spaces are proposed. The selected time period for the TIA is the weekday PM peak hour as it represents the 'worst case' combination of site generated traffic and adjacent street traffic. The proposed development is expected to be completed with full occupancy by the year 2019.

Based on the foregoing, the conclusions and recommendations of this TIA can be summarized as follows:

### Development Design

- No changes are proposed to the existing pedestrian facilities along Rochester Street. The existing pedestrian connection between the main building entrance and the sidewalk along Rochester Street will be maintained.
- OC Transpo stops #8012, #8011, #8013, #6657, #2397, #8002, and #6654 are all located within a 400m actual walking distance to the entrance of the proposed development.
- All required TDM-supportive design and infrastructure measures in the TDM checklist are met.
- The proposed fire and garbage route is located curbside along Rochester Street.

### Parking

- As per the Zoning By-law, no off-street motor vehicle parking or bicycle parking is required to be provided for this development.
- There is an existing access from Rochester Street leading to one surface space along the north side of the building which will be retained.
- A review of the Little Italy Local Area Parking Study suggests that there are ample underutilized on-street parking spaces in the area to the east of Rochester Street which restaurant patrons may use.



Boundary Street MMLoS

- Rochester Street achieves a PLOS C, which does not meet the target PLOS A. In order to achieve the target, a 1.8m wide sidewalk with a 2m wide boulevard, or a 2m wide sidewalk with a 0.5m wide boulevard would be required. A reduction in the operating speed to 30km/h would also achieve the target PLOS A.
- Rochester Street achieves a BLOS F which does not meet the target BLOS D. In order to achieve the target, a reduction in the operating speed to 50km/h could be considered. Bike lanes along Rochester Street would also meet the target BLOS D.
- Rochester Street exceeds the target TkLOS D, achieving a TkLOS B.
- Rochester Street exceeds the target Auto LOS E, achieving an Auto LOS C.

Access Design

- There is an existing access from Rochester Street which leads to a surface parking space along the north side of the building. No changes are proposed to the existing access and no new site accesses are proposed.

In conclusion, no modifications to the transportation network are recommended as a result of the proposed development as none are required.

## 1.0 INTRODUCTION

This Transportation Impact Assessment (TIA) Report has been prepared in support of a Zoning By-law Amendment Application for the property located at 536 Rochester Street. The proposed development will be located midblock, approximately 15m south of Pamilla Street.

The subject site is approximately 251 square metres in area and is occupied by a residential building with a footprint of approximately 56 square metres per floor, with a residential driveway to the north of the existing dwelling. A laneway providing access to a rear parking lot for a coffee shop at 538 Rochester Street abuts the house on the south side. The proposal entails converting the existing building into a take-out restaurant, with seating for approximately 20 customers.

The subject site is surrounded by the following:

- Residential properties to the north and west;
- A coffee shop to the south; and
- Rochester Street and a federal government building to the east.

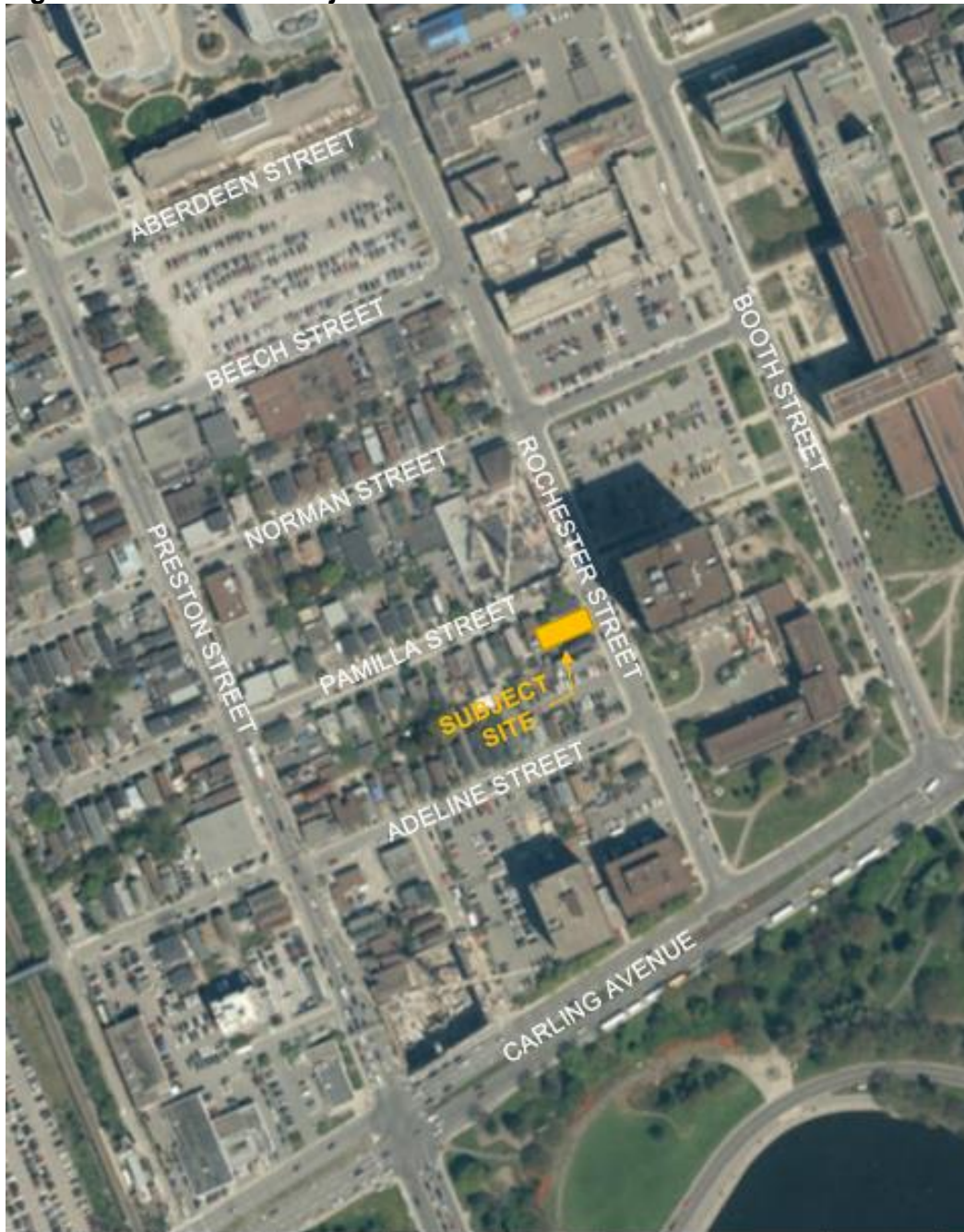
A view of the subject site is provided in **Figure 1**.

## 2.0 PROPOSED DEVELOPMENT

The Subject Site is currently zoned Residential Fourth Density, Subzone T (R4T) in the City of Ottawa Zoning By-law 2008-250, which does not provide for commercial uses. The proposed development will convert the residential building into a take-out restaurant, with seating for approximately 20 customers. A Zoning By-law Amendment is required to permit the proposed restaurant.

No new accesses or parking spaces are proposed. The estimated date of full occupancy is 2019.

A copy of the preliminary site plan is included in **Appendix A**.

**Figure 1: View of the Subject Site**

### **3.0 SCREENING**

#### **3.1 Screening Form**

The City's 2017 TIA Guidelines identify three triggers for completing a TIA report, including trip generation, location, and safety. The criteria for each trigger are outlined in the City's TIA Screening Form.

The trigger results are as follows:

- Trip Generation Trigger – The proposed development is not anticipated to generate over 60 person trips/peak hour; further assessment is not required based on this trigger.
- Location Triggers – The proposed development is located in a Design Priority Area (DPA); further assessment is required based on this trigger.
- Safety Triggers – The proposed development does not meet any of the safety triggers; further assessment is not required based on this trigger.

The proposed development satisfies the location trigger for completing a TIA, as the development is located within a Design Priority Area. As the Trip Generation Trigger is not met, the TIA is only required to review the Design Review component of the guidelines. A copy of the TIA screening form is included in **Appendix B**.

## **4.0 SCOPING**

### **4.1 Existing Conditions**

#### **4.1.1 Roadways**

All roadways within the study area fall under the jurisdiction of the City of Ottawa.

Rochester Street is a north-south major collector roadway and an official truck route. Rochester Street has a four-lane undivided cross section north of Beech Street which narrows to a two-lane cross section south of Beech Street. The regulatory speed limit along Rochester Street is 50 km/h. On-street parking is provided along the east side of Rochester Street, as well as along portions of the west side.

Pamilla Street is an east-west local roadway with a regulatory speed limit of 50km/h. It operates as a one-way in the eastbound direction, with a single travel lane and on-street parking along the south side of the road.

Adeline Street is an east-west local roadway with a regulatory speed limit of 50km/h. It has a two-lane, undivided cross section with on-street parking permitted along the south side.

Carling Avenue is an arterial roadway that runs from Bronson Avenue in the east to March Road in the west. Carling Avenue is an official truck route. In the vicinity of the subject site, it has a divided six-lane cross section, with a posted speed limit of 60km/h. No parking is permitted along Carling Avenue. There are transit priority lanes along Carling Avenue between Bronson Avenue and Booth Street.

Booth Street is a two-lane major collector roadway with a regulatory speed limit of 60km/h. Booth Street runs north-south and is an official truck route. On-street parking is permitted along both sides of Booth Street within the study area.

Preston Street is a two-lane arterial roadway with a regulatory speed limit of 50km/h. It runs north-south and is an official truck route. Parking is permitted along both sides of the roadway.

Norman Street is an east-west local roadway with a regulatory speed limit of 50km/h. Between Rochester Street and Preston Street, Norman Street is a one-way in the westbound direction. East of Rochester Street, Norman Street is a two-way roadway. On-street parking is permitted along the north side of the street.

Aberdeen Street is an east-west local roadway with a regulatory speed limit of 50km/h. To the east of Preston Street, on-street parking is permitted along the south side of Aberdeen Street.

Beech Street is an east-west local roadway with a regulatory speed limit of 50km/h. On-street parking is permitted along both sides of Beech Street east of Preston Street.

#### 4.1.2 Intersections

##### Carling Avenue/Preston Street

- Signalized intersection
- Northbound: one left turn lane, one through lane, one shared through/right turn lane
- Southbound: one left turn lane, one shared through/right turn lane
- Eastbound/Westbound: one left turn lane, three through lanes, one dedicated right turn lane
- Standard crosswalks are provided on all legs



##### Rochester Street/Aberdeen Street:

- Signalized T intersection
- Northbound: one shared left/through lane, one through lane/parking lane
- Southbound: one through lane, one shared through/right lane
- Eastbound: one left turn lane, one right turn lane
- Standard crosswalks are provided on all legs





Booth Street/Norman Street

- Signalized T intersection
- Northbound: one shared left/through lane
- Southbound: one shared through/right lane
- Eastbound: one shared left/right turn lane
- Standard crosswalks are provided on all legs



#### 4.1.3 Driveways

In accordance with the City's 2017 TIA guidelines, a review of adjacent driveways along the boundary roads within 200m of the site are provided as follows:

*Rochester Street, east side (south of Norman Street):*

- One driveway to a small parking lot with loading docks for the government building at 580 Booth Street
- One driveway to the main parking lot for the government building at 580 Booth Street

*Rochester Street, west side (south of Pamilla Street):*

- One driveway to a salon at 548 Rochester Street
- One driveway to a parking lot servicing the government building at 785 Carling Avenue
- One driveway to a public paid parking lot at 544 Rochester Street
- One driveway to the restaurant at 540 Rochester Street
- One driveway serving the rear parking spaces for the café at 538 Rochester Street
- One driveway to the residential dwelling at 534 Rochester Street

*Rochester Street, east side (north of Norman Street):*

- One driveway to a parking lot serving the government building at 552 Booth Street
- Two driveways with gated access to the government buildings at 552 Booth Street

*Rochester Street, west side (north of Pamilla Street):*

- One proposed driveway to the underground garage being constructed as part of the residential development at 514 Rochester Street
- One driveway to the residential dwelling at 506 Rochester Street
- One driveway to the restaurant at 502 Rochester Street
- One driveway simultaneously serving the sporting good store at 492 Rochester and the residential dwelling at 490 Rochester

#### **4.1.4 Pedestrian and Cycling Facilities**

The City of Ottawa's Ultimate Cycling Network identifies Booth Street and Carling Avenue as Spine Routes and Preston Street is classified as a local cycling route.

Concrete sidewalks are provided along both sides of Rochester Street, Adeline Street, Aberdeen Street, Pamilla Street, Carling Avenue, Norman Street, Preston Street, Beech Street, and Booth Street. Along the south side of Carling Avenue, a series of Multi-Use Pathways (MUP) are provided, connecting to Dow's Lake and to the pathways along the Rideau Canal. A MUP is also provided to the east of the O-Train Trillium Line.

#### **4.1.5 Transit**

Transit service within the vicinity of the site is currently provided by OC Transpo Routes 56, 85, 101 and 103.

OC Transpo Route 56 travels from Hurdman Transit Station to Tunney's Pasture Transit Station. It operates Monday to Friday during peak periods only. The nearest bus stops serving this route are #8012 and #8013.

OC Transpo Route 85 travels from Lees Transit Station to Bayshore Transit Station. It operates seven days a week, with all day service. The nearest bus stops serving this route are #6657, #2397, #8012, #8013, #8002, and #6654.

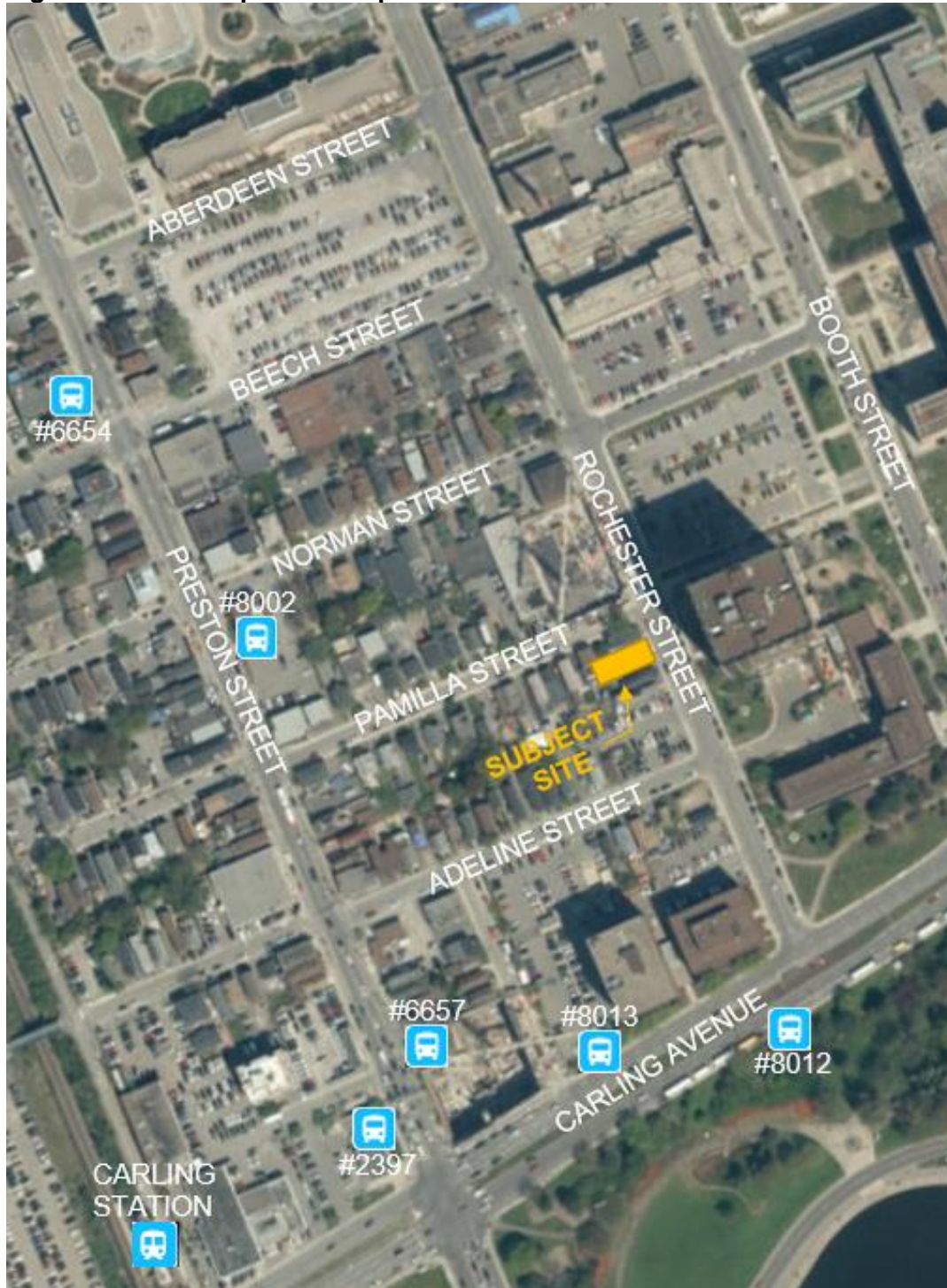
OC Transpo Route 101 travels from St-Laurent Transit Station to Bayshore Transit Station. It operates Monday to Saturday, with all day service. The nearest bus stops serving this route are #8012 and #8013.

OC Transpo Route 103 travels from the Carling Campus and Moodie Transit Station to Place D'Orléans Transit Station. It operates Monday to Friday during peak periods only. The nearest bus stops serving this route are #8012 and #8013.

The Carling Station is located just north of Carling Avenue and west of Preston Street, providing access to the O-Train/future Trillium LRT. The O-Train currently provides service seven days a week on 15-minute intervals, from Bayview Station to Greenboro Station.

The location of the bus stops described above are shown in **Figure 2**.

**Figure 2: OC Transpo Bus Stop Locations**





OC Transpo Route information is included in **Appendix C**.

The City of Ottawa's Transportation Master Plan identifies an at-grade LRT corridor between Lincoln Fields Station and Carling O-Train Station. This project is not included in the 2031 Affordable Network. The Affordable Network concept for Carling Avenue includes exclusive bus lanes and transit signal priority between Lincoln Fields Station and Carling O-Train Station, and transit signal priority and queue jump lanes between Carling O-Train Station and Bronson Avenue. More on the future Carling Avenue Transit Priority Measures can be found in Section 4.2.

#### **4.1.6 Existing Area Traffic Management Measures**

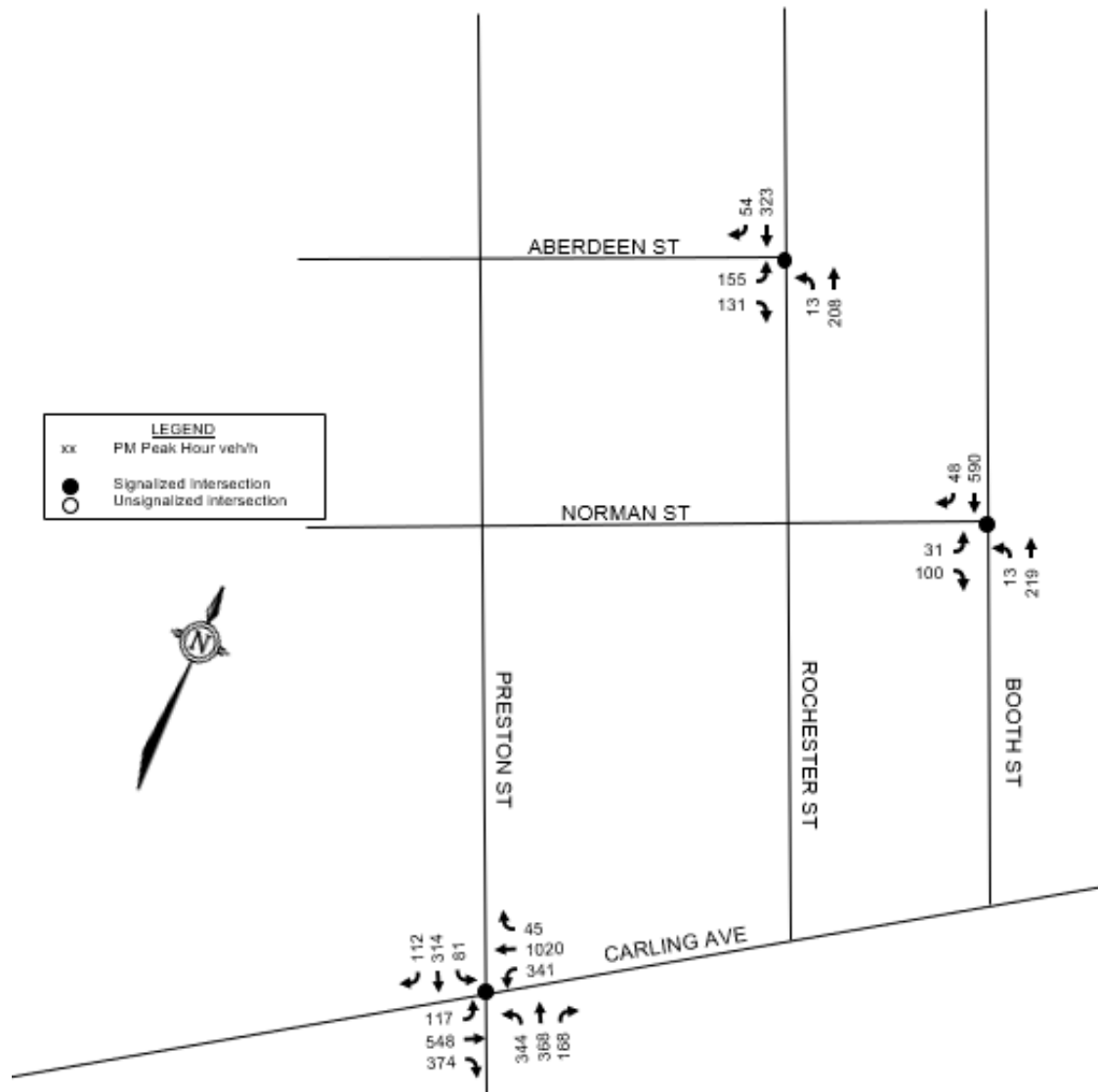
Currently, there are no existing Area Traffic Management (ATM) measures within the study area.

#### **4.1.7 Existing Traffic Volumes**

Weekday turning movement counts were conducted by the City of Ottawa for the Preston Street/Carling Avenue, Booth Street/Norman Street, and Rochester Street/Aberdeen Street intersections. The traffic counts were completed on the following dates:

- |                                    |                               |
|------------------------------------|-------------------------------|
| • Preston Street/Carling Avenue    | June 20, 2017 (Tuesday)       |
| • Booth Street/Norman Street       | September 1, 2016 (Thursday)  |
| • Rochester Street/Aberdeen Street | November 16, 2016 (Wednesday) |

Existing traffic volumes at the study area intersections are shown in **Figure 3**. Peak hour summary sheets of the above traffic counts are included in **Appendix D**.

**Figure 3: Existing Traffic Volumes**

## 4.2 Collision Records

Historical collision data from the last five years was obtained from the City's Public Works and Service Department for the Preston Street/Carling Avenue, Booth Street/Norman Street, and Rochester Street/Aberdeen Street intersections. Copies of the collision summary report are included in **Appendix E**.

The collision data has been evaluated to determine if there are any identifiable collision patterns. The following summarizes the number of collisions at the Preston Street/Carling Avenue, Booth Street/Norman Street, and Rochester Street/Aberdeen Street intersections from January 1, 2013 to December 31, 2017.

**Table 1: Reported Collisions**

| Intersection                     | Number of Reported Collisions |
|----------------------------------|-------------------------------|
| Aberdeen Street/Rochester Street | 1                             |
| Booth Street/Norman Street       | 3                             |
| Carling Avenue/Preston Street    | 43                            |

**Aberdeen Street/Rochester Street**

One collision was reported at this intersection over the course of the last five years. The collision occurred between a southbound right turning vehicle and a southbound through vehicle. No injuries were reported.

**Booth Street/Norman Street**

A total of three collisions were reported at this intersection over the course of the last five years. All three were rear end collisions, of which one occurred on the northbound approach, one on the southbound approach, and one on the eastbound approach. No injuries were reported.

**Carling Avenue/Preston Street**

A total of 43 collisions occurred at this intersection over the last five years. Of these, there were seventeen rear end impacts, nine turning movement impacts, seven angle impacts, six sideswipe impacts, and four single vehicle/other impacts. Sixteen collisions caused injuries, but none cause fatalities. One collision involved a pedestrian. Of the total 43 collisions, five occurred under snowy/icy conditions, three occurred under rainy/wet conditions, and 35 occurred in clear conditions.

Of the seventeen rear end impacts, seven involved vehicles travelling westbound (five going straight, one turning left, one turning right), six involved vehicles travelling eastbound (all going straight), two involved vehicles travelling northbound, and two involved vehicles travelling southbound.

Of the nine turning movement impacts, two involved southbound left turning vehicles colliding with northbound through vehicles, and seven involved cyclists. Of the seven collisions involving cyclists, five of the cyclists were travelling northbound, and two were travelling southbound. Of the cyclists travelling northbound, four collided with southbound left turning vehicles, and one collided with a northbound right turning vehicle. The northbound cyclists may be coming from the MUP which intersects the southeast corner of the Preston Street/Carling Avenue intersection at an angle. As such, vehicles may not be expecting a cyclist, as they are not on or parallel to the road until they are in the intersection. As described in Section 4.3, several changes are coming to this intersection as part of the Carling Avenue Transit Priority Measures. This involves a slight realignment of the MUP as it exits at the southeast corner. Cyclists will be positioned north-south when entering/exiting the MUP instead of entering/exiting at an angle. Also of note is that the recommended functional design plan does not include cross-rides for cyclists crossing Carling Avenue. As such, cyclists are required to dismount to cross north-south.

Of the seven angle impacts, two involved westbound vehicles colliding with northbound vehicles, two involved eastbound vehicles colliding with southbound vehicles, one involved a westbound vehicle colliding with a southbound vehicle, one involved an eastbound vehicle colliding with a northbound vehicle, and one involved northbound vehicle colliding with an eastbound cyclist.

Of the six sideswipe impacts, two occurred between vehicles travelling southbound, two occurred between vehicles travelling westbound, one occurred between vehicles travelling northbound, and one occurred between vehicles travelling eastbound.

### 4.3 Planned Conditions

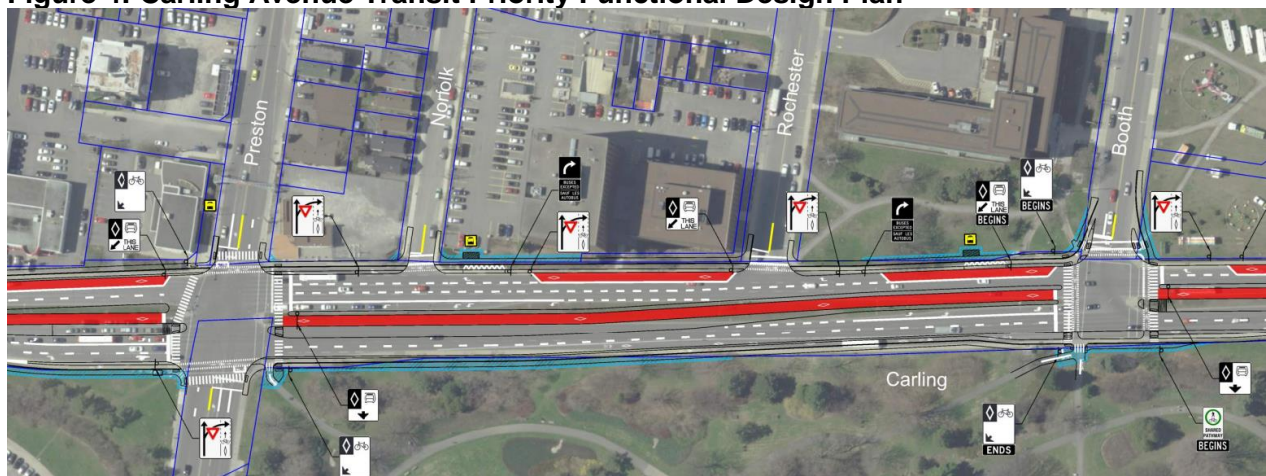
A shared use bike lane is identified in the 2031 Affordable Cycling Plan for Booth Street as part of the Phase 3 project for the Centretown Neighbourhood Bikeway. The 2013 Ottawa Cycling Plan does not identify any other planned cycling projects along the study area roadways. However, the Preston-Carling Secondary Plan, developed in 2016, identifies bicycle lanes or tracks, with on-street parking for both sides of Rochester Street. The Preston-Carling Secondary Plan also identifies cycle tracks for Carling Avenue. This is consistent with the Carling Avenue Transit Priority Functional Design Plan, as discussed below.

Carling Avenue is identified as a Transit Priority Corridor with Continuous Lanes, between the Carling O-Train/Trillium Line Station and the Lincoln Field Transit Station, in the 2031 Affordable Network Plan. Between the Carling O-Train/Trillium Line Station and Bronson Avenue, Carling Avenue is identified as a Transit Priority Corridor with Isolated Measures.

The City has developed a Recommended Functional Design Plan (shown in **Figure 4**) for the Carling Avenue Transit Priority Measures Study. Currently, the design for Carling Avenue (from Sherwood Drive to Bronson Avenue) includes:

- Eastbound centre median transit priority lane with platforms on the centre median
- Westbound curb bus lanes
- Traffic lane arrangement modifications at the Preston Street intersection
- Improved pedestrian comfort with provision for pedestrian refuge areas where possible at Preston Street and Booth Street
- Cycle tracks in both directions from Sherwood Drive to Booth Street and a bi-directional MUP on the south side of the road from Booth Street to Bronson Avenue

**Figure 4: Carling Avenue Transit Priority Functional Design Plan**



Other study area developments include:

- A mixed-use development at 552 Booth Street which consists of approximately 1,000 dwelling units in five buildings and 142,200 square feet of retail/office uses.
- A residential development at 514 Rochester Street which includes 117 residential units and 5,000 square feet of ground floor retail.
- An expansion of the existing residential building at 17 Aberdeen Street, which will include an increase of 197 residential units.
- A residential development at 500 Preston Street which includes 280 residential units and 10,000 square feet of ground floor retail.
- A mixed-use development at 505 Preston Street which includes 262 residential units, 5,000 square feet of ground floor retail and 17,550 square feet of office use.
- A residential development at 845 Carling Avenue which includes 1123 residential units and 16,000 square feet of ground floor retail.

#### **4.4 Study Area and Time Periods**

A boundary street review will be conducted for Rochester Street. The study area intersections include Preston Street/Carling Avenue, Booth Street/Norman Street, and Rochester Street/Aberdeen Street.

The selected time period for the TIA is the weekday PM peak hour as it represents the 'worst case' combination of site generated traffic and adjacent street traffic. The proposed development is expected to be completed with full occupancy by the year 2019.

#### **4.5 Exemptions Review**

This module reviews possible exemptions from the final TIA, as outlined in the TIA Guidelines. The applicable exemptions for this site are shown in **Table 2**.

**Table 2: TIA Exemptions**

| Module                           | Element                         | Exemption Criteria  | Exemption Applies |
|----------------------------------|---------------------------------|---|-------------------|
| <b>Design Review Component</b>   |                                 |   |                   |
| <b>4.1</b><br>Development Design | 4.1.2<br>Circulation and Access | <ul style="list-style-type: none"> <li>Only required for site plans</li> </ul>  | No                |
|                                  | 4.1.3<br>New Street Networks    | <ul style="list-style-type: none"> <li>Only required for plans of subdivision</li> </ul>  | Yes               |
| <b>4.2</b><br>Parking            | 4.2.1<br>Parking Supply         | <ul style="list-style-type: none"> <li>Only required for site plans</li> </ul>  | No                |
|                                  | 4.2.2<br>Spillover Parking      | <ul style="list-style-type: none"> <li>Only required for site plans where parking supply is 15% below unconstrained demand</li> </ul> | Yes               |

As the trip generation trigger was not met, the Network Impact Component (Modules 4.5 to 4.9) of the TIA analysis is exempt from further review.

Based on the foregoing, the following modules will be included in the TIA report:

- Module 4.1: Development Design
- Module 4.2: Parking
- Module 4.3: Boundary Streets
- Module 4.4: Access Design

## 5.0 FORECASTING

### 5.1 Development-Generated Traffic

#### 5.1.1 Trip Generation

The proposed development, consisting of a take-out restaurant with limited seating, will provide 111 square metres (1,195 square feet) of Gross Floor Area (GFA). Trips generated by the restaurant have been estimated using the recommended rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10<sup>th</sup> Edition. Land use code 930 for a Fast Casual Restaurant was used. Person Trips were calculated using an ITE Trip to Person Trip factor of 1.28, consistent with the TIA Guidelines. The Person Trips generated by the proposed development are summarized in **Table 3**.

**Table 3: Person Trips**

| Land Use               | ITE Code | GFA       | PM Peak (PPH) |     |     |
|------------------------|----------|-----------|---------------|-----|-----|
|                        |          |           | IN            | OUT | TOT |
| Proposed Development   |          |           |               |     |     |
| Fast Casual Restaurant | 930      | 1,195 ft² | 12            | 10  | 22  |

The modal shares for the proposed development are anticipated to be consistent with the modal shares outline in the 2011 TRANS *O-D Survey Report*, specific to the Ottawa Inner Area District and the Ottawa West District. The modal share values applied to the trips generated by the proposed development are based on all observed trips within these districts during the PM peak hour. A full breakdown of the projected person trips by modal share are shown in **Table 4**.

**Table 4: Person Trips by Modal Share**

| Travel Mode                         | Modal Share | PM Peak |     |     |
|-------------------------------------|-------------|---------|-----|-----|
|                                     |             | IN      | OUT | TOT |
| Proposed Development                |             |         |     |     |
| Fast Casual Restaurant Person Trips |             | 12      | 10  | 22  |
| Auto Driver                         | 25%         | 3       | 3   | 6   |
| Auto Passenger                      | 10%         | 1       | 1   | 2   |
| Transit                             | 10%         | 1       | 1   | 2   |
| Non-Auto                            | 55%         | 7       | 5   | 12  |

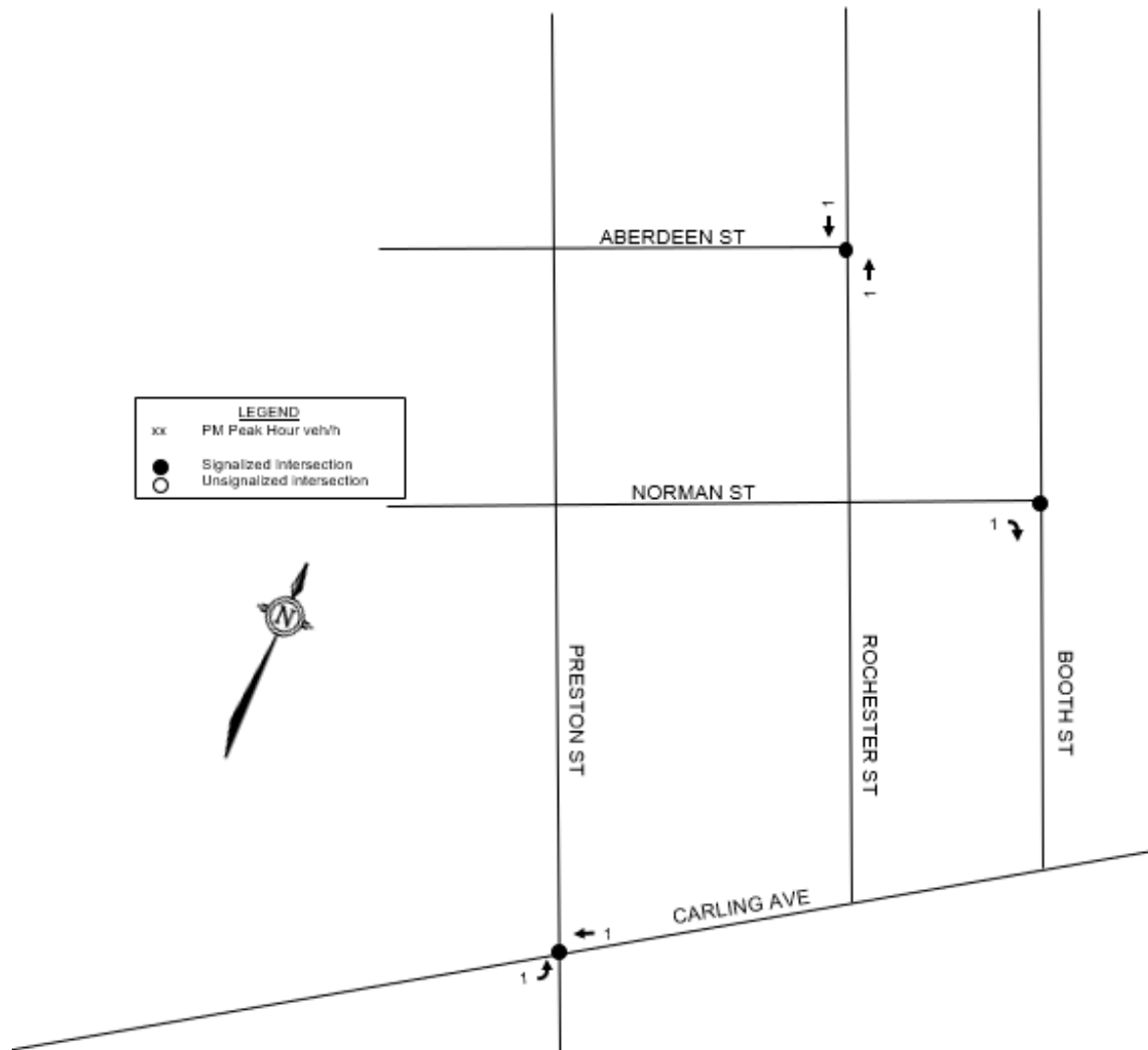
From the previous table, the development is projected to generate 6 vehicle trips during the PM peak hour.

### 5.1.2 Trip Distribution

The assumed distribution of trips generated by the proposed development has been derived from existing traffic patterns on the roadways within the study area. The distribution can be described as follows:

- 30% to/from the east via Carling Avenue
- 35% to/from the west via Carling Avenue
- 15% to/from the north via Rochester Street
- 15% to/from the north via Booth Street
- 5% to/from the south via Preston Street

Site generated trips can be found in **Figure 5**.

**Figure 5: Site Generated Traffic Volumes**

## 5.2 Background Traffic

### 5.2.1 General Background Growth Rate

A review of recent transportation studies in the area was conducted in order to establish a general background growth rate. In general, it was found that the study area historically is experiencing a 0% growth rate and in some cases the traffic has decreased.

For the purpose of this analysis, no background growth rate has been applied to the study area roadways, and traffic generated by new development in the study area will be accounted for separately.



### 5.2.2 Other Area Development

Other study area developments, as identified in Section 4.3, include:

- A mixed-use development at 552 Booth Street which consists of approximately 1,000 dwelling units in five buildings and 142,200 square feet of retail/office uses. A draft TIA Strategy Report, dated December 2018, was prepared by Parsons in support of Zoning By-law and Official Plan Amendment applications for this development. This report suggests the development is anticipated to be completed with full occupancy by 2025. Trip generation was presented using both existing and future modal shares. The existing modal shares were assumed to reflect the 2025 build-out conditions, while the future modal shares were assumed to reflect the City's initiative to increase the number of transit user and were assumed for the 2030 horizon year. For the purposes of this report, the trip generation based on the existing modal shares have been added to the 2024 background traffic. Relevant excerpts from the 2018 Draft TIA are included in **Appendix F**.
- A residential development at 514 Rochester Street which includes 117 residential units and 5,000 square feet of ground floor retail. A Transportation Brief, dated April 2013, and subsequent Addendum, dated December 2018, were prepared by Delcan in support of a Site Plan Control application for this development. The estimated date of full occupancy was not identified; however, this development was under construction at the time of the traffic counts. As such, site generated traffic has been added to the 2019 background traffic volumes. Site generated traffic figures from the 2013 Transportation Brief can be found in **Appendix F**.
- An expansion of the existing residential building at 17 Aberdeen Street, which will include an increase of 197 residential units. A Transportation Overview was prepared by IBI Group in August 2016 in support of a Site Plan Control application for this development. The estimated date of full occupancy was not identified. The expansion is projected to increase vehicle trips to the site by approximately 49 veh/h during the PM peak, with vehicles assumed to be utilizing all four existing parking garage ramps. The effect on the adjacent road network was expected to be insignificant, and no trip distribution or site generated traffic figures were developed. As this development is north of the Rochester Street/Aberdeen Street intersection, and traffic is likely to be drawn to/from the north because of the proximity of the highway, traffic generated by this development has not been added to background traffic.
- A residential development at 500 Preston Street which includes 280 residential units and 10,000 square feet of ground floor retail. A Community Transportation Study, dated June 2011, and subsequent Addendums, dated December 2012 and September 2013, were prepared in support of a Site Plan Control application for this development. These reports projected an increase in vehicle traffic of approximately 100 veh/h during the PM peak hour. Traffic generated by this development has been added to 2024 background traffic. Relevant excerpts from the 2011 Community Transportation Study and subsequent Addendums can be found in **Appendix F**.
- A mixed-use development at 505 Preston Street which includes 262 residential units, 5,000 square feet of ground floor retail and 17,550 square feet of office use. A Community Transportation Study, dated December 2012, was prepared by IBI Group in support of

Site Plan Control and Zoning By-law Amendment applications for this development. This report projected an increase in vehicle traffic of approximately 70 veh/h during the PM peak hour. The estimated date of full occupancy was 2016; however, this site was under construction and traffic generated by this development would not have been included in the traffic counts. Traffic generated by this development has been added to 2019 background traffic. Site generated traffic figures from the 2012 Community Transportation Study are included in **Appendix F**.

- A residential development at 845 Carling Avenue which includes 1,123 residential units and 16,000 square feet of ground floor retail. A Community Transportation Study/Transportation Impact Study, dated April 2013, was prepared by Delcan in support of a Zoning By-law Amendment application for this development. The report identified the project would result in an increase of approximately 175 veh/h during the PM peak hour. This development is anticipated to be phased over 15 to 20 years. However, traffic generated by the ultimate development has been added to 2024 background traffic. Site generated traffic figures from the 2013 CTS are included in **Appendix F**.

Background traffic figures for the 2019 build out and 2024 horizon year can be found in **Figures 6 and 7**. Total traffic volumes for the 2019 build out and 2024 horizon year can be found in **Figures 8 and 9**.

Figure 6: 2019 Background Traffic Volumes

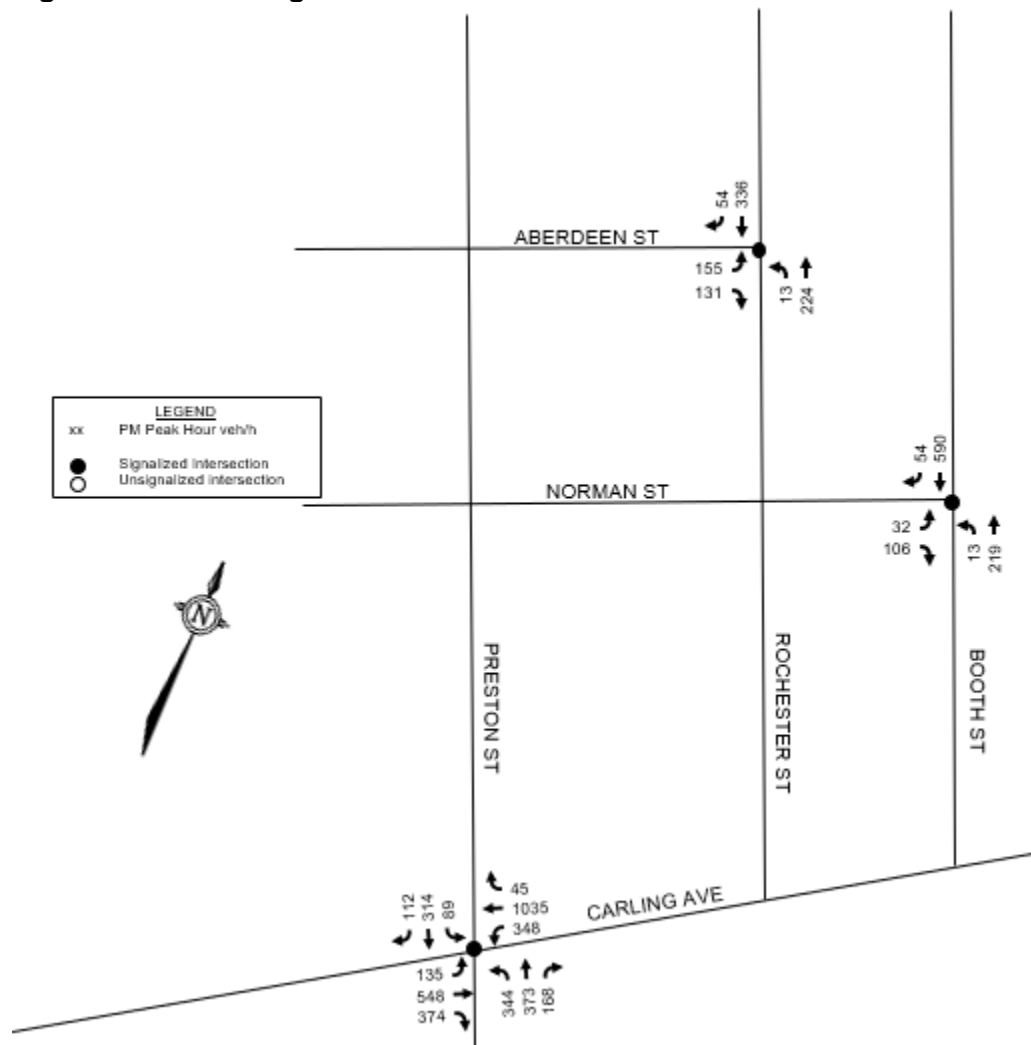
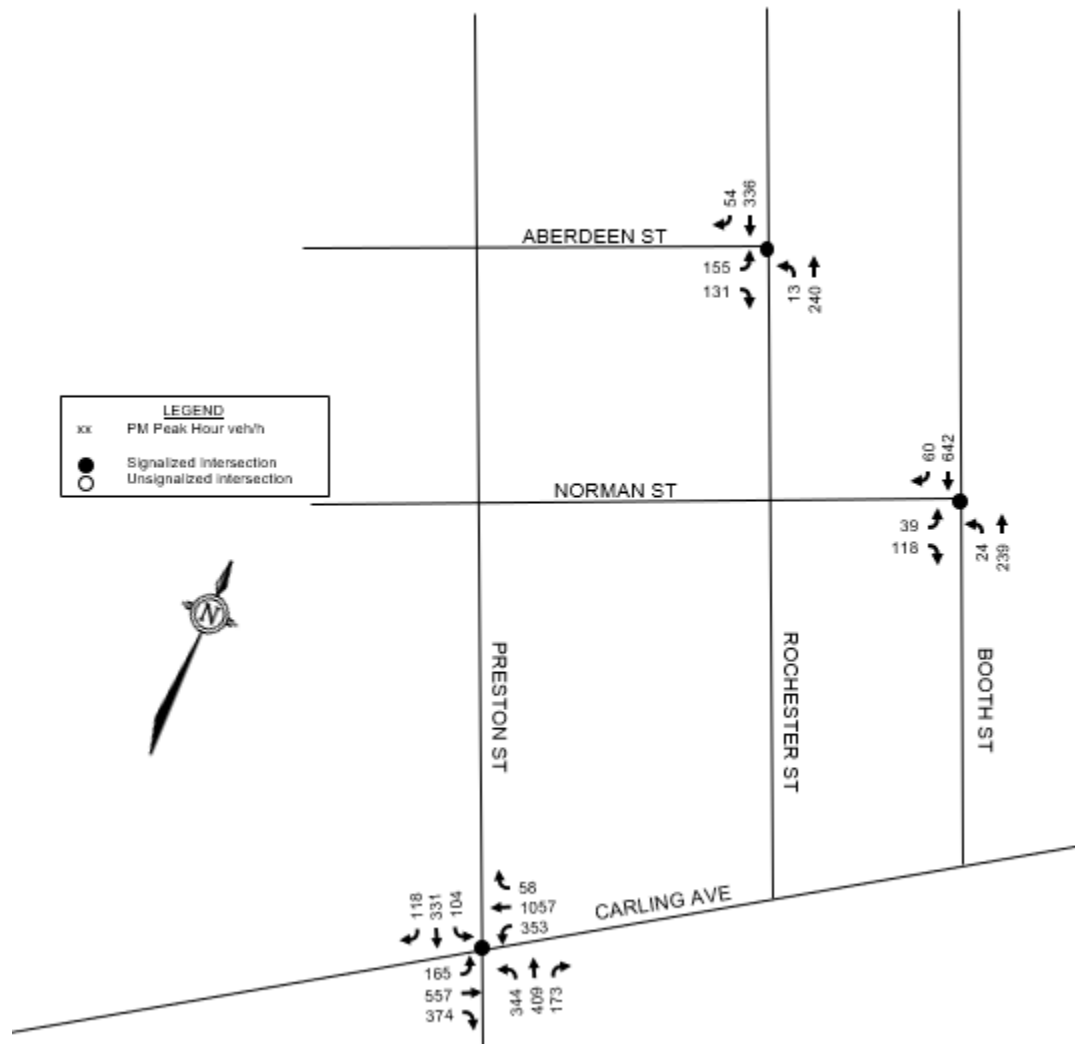


Figure 7: 2024 Background Traffic Volumes



**Figure 8: 2019 Total Traffic Volumes**

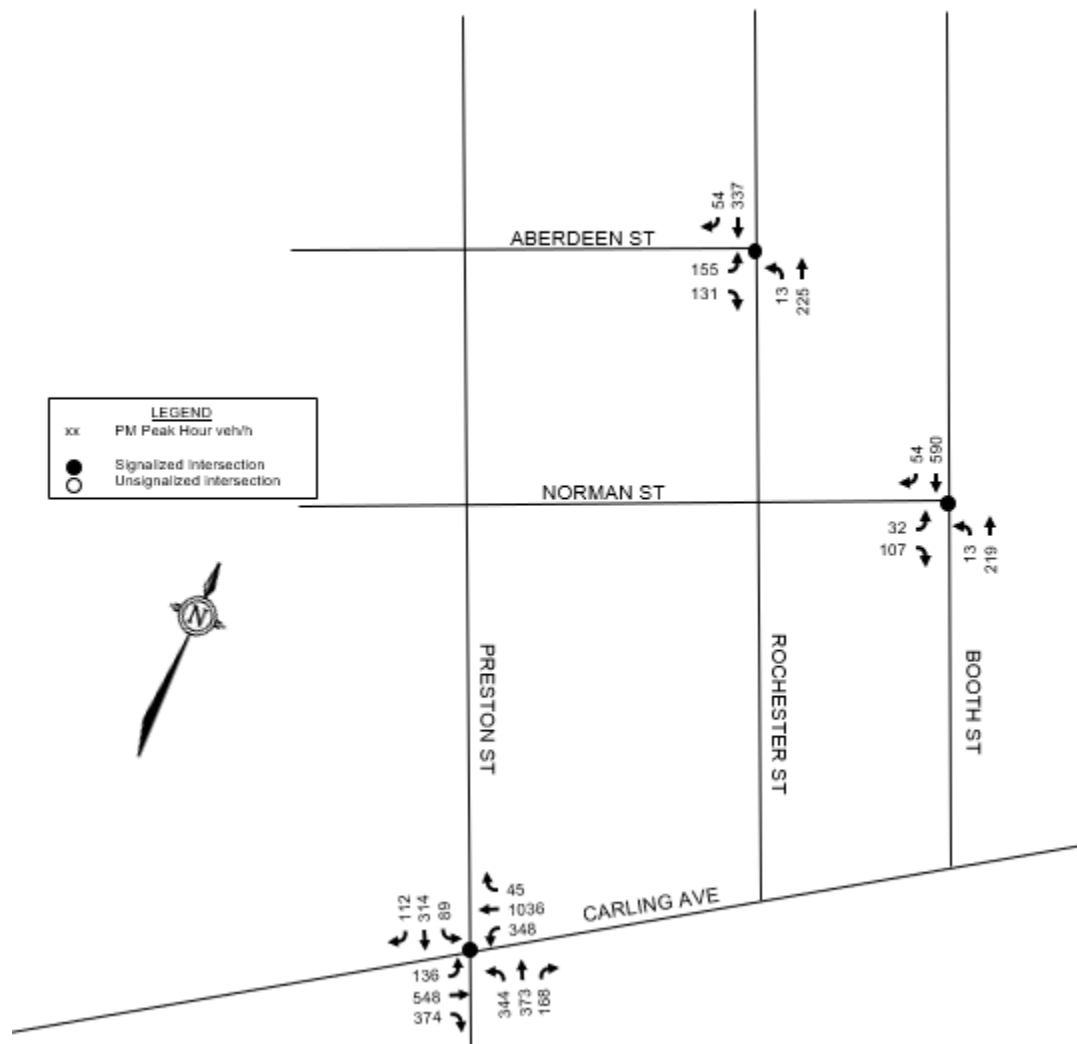
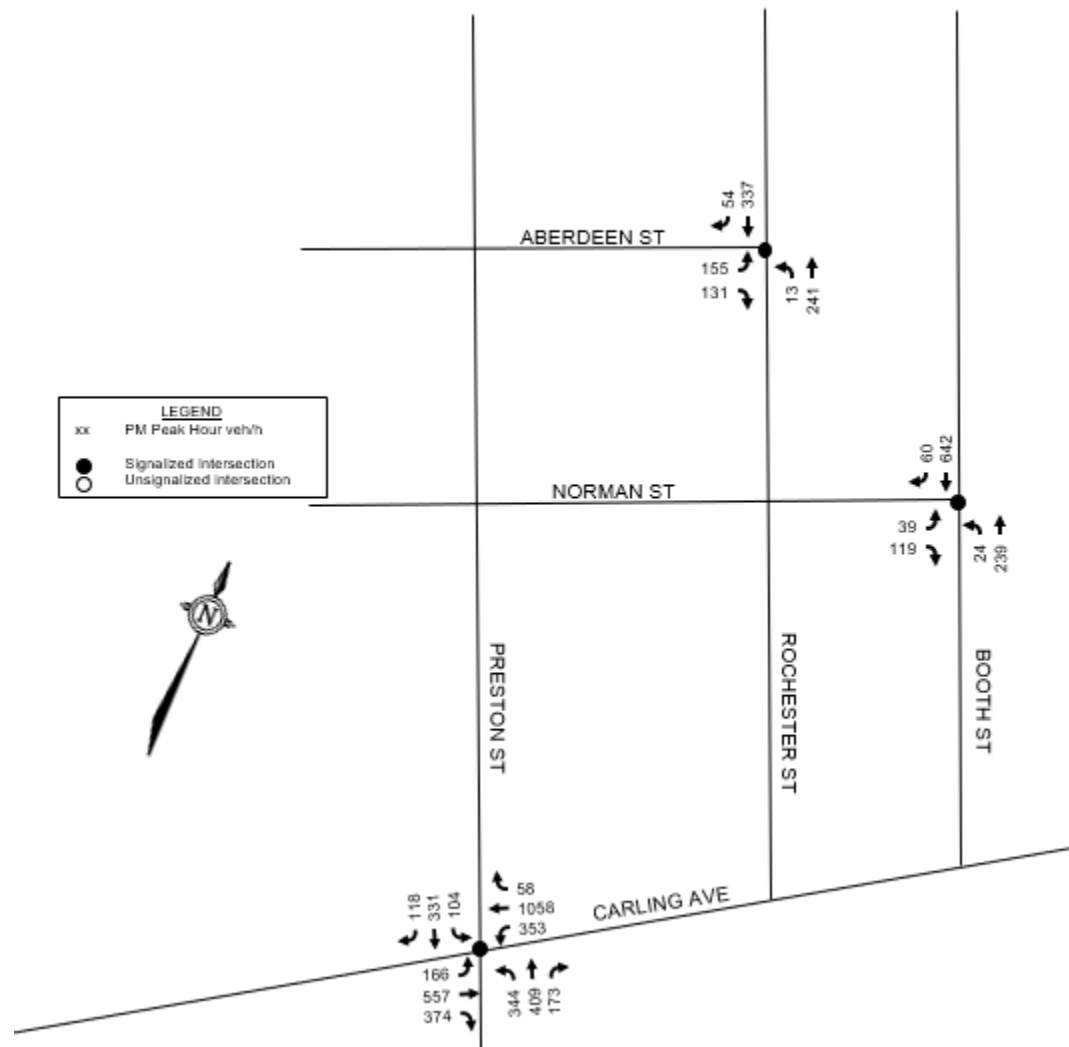


Figure 9: 2024 Total Traffic Volumes



## 6.0 ANALYSIS

### 6.1 Development Design

#### 6.1.1 Design for Sustainable Modes

No changes to the existing pedestrian facilities along Rochester Street are proposed. The existing pedestrian connection between the main building entrance and the sidewalk along Rochester Street will be maintained.

The nearest bus stops to the subject site are described in section 4.1.5.

OC Transpo's service design guideline for peak period service is to provide service within a five minute (400m) walk of the home, school and work location of 95% of urban residents. The actual walking distance from the proposed restaurant main entrance to the nearest bus stops was measured. Stop #8012 and #8011 are a 300m walk, stop #8013 is a 240m walk, stop #6657 is a 290m walk, stop #2397 is a 370m walk, stop #8002 is a 255m walk, and stop #6654 is a 385m walk. Based on the foregoing, there are several transit stops within the required 400m walk radius.

A review of the Transportation Demand Management (TDM) – *Supportive Development Design and Infrastructure Checklist* has been conducted. A copy of the TDM checklist is included in **Appendix G**. All required TDM-supportive development design measures in the TDM checklist are met.

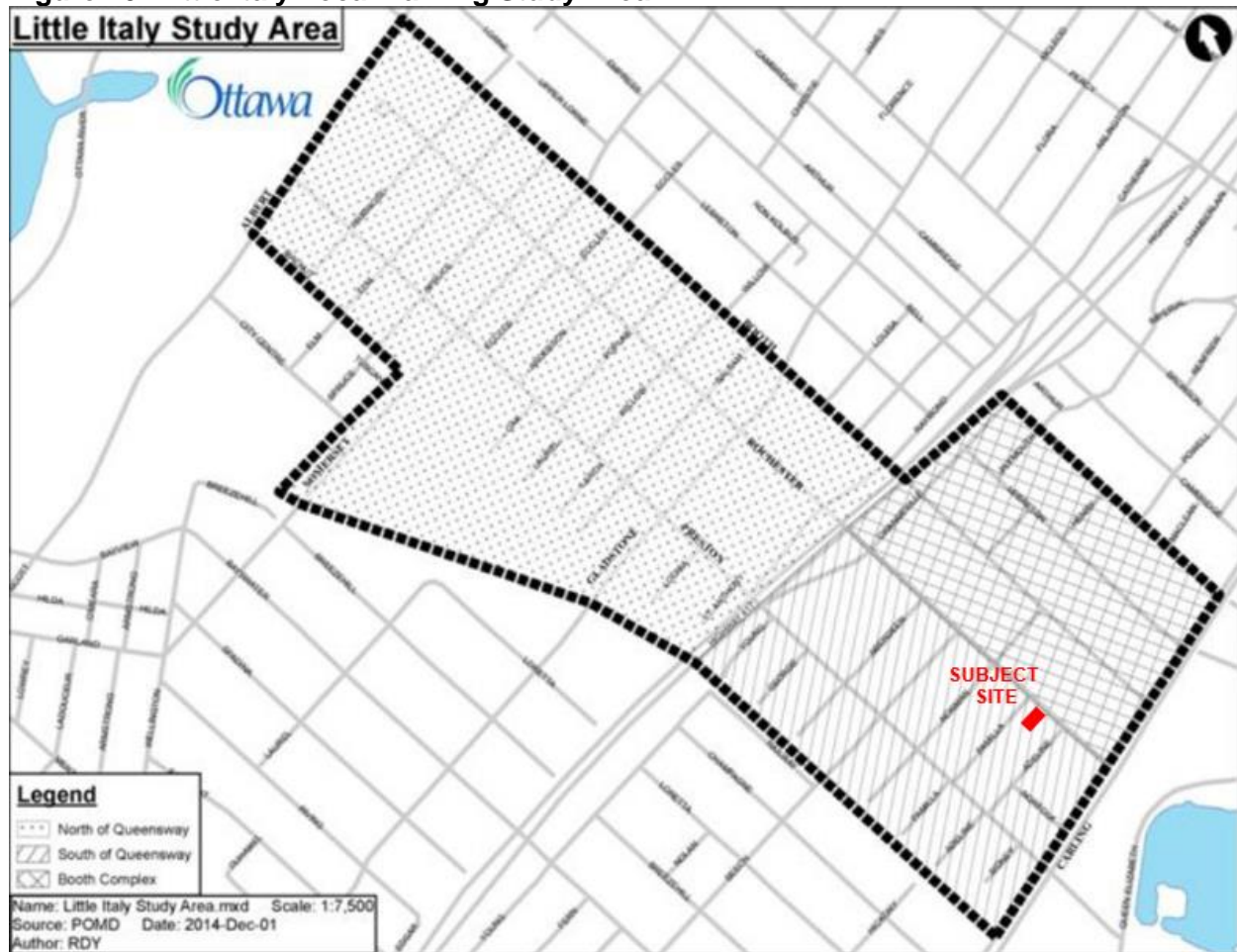
#### 6.1.2 Circulation and Access

The proposed fire and garbage route is located curbside along Rochester Street. No new site accesses are proposed.

### 6.2 Parking

The subject site is located in Area Z on Schedule 1A of the City of Ottawa's Official Plan. As per the Zoning By-law, no off-street motor vehicle parking or bicycle parking is required to be provided for this development. There is an existing access from Rochester Street leading to one surface space along the north side of the building. Although there are no minimum parking requirements in this area of the City, it is proposed to retain this existing access and parking space to provide convenient off-street parking.

The Little Italy Local Area Parking Study was prepared by the City of Ottawa in February 2015. This parking study provided an inventory of the total amount of parking spaces (both on-street and off-street) available in the area bounded by Albert Street in the north, Carling Avenue in the south, Booth Street and Bell Street South in the east, and the O-Train Corridor in the west. The study area for the parking study is shown in **Figure 10**.

**Figure 10: Little Italy Local Parking Study Area**

The subject site is located at the eastern edge of the section labelled “South of Queensway” and just west of the section labelled “Booth Street Complex”. As such, it was assumed that patrons visiting the restaurant would park in either of these two sections. There are a total of 178 on-street parking spaces and 634 public off-street parking spaces available South of the Queensway (west of Rochester Street), and 211 on-street parking spaces available in the Booth Street Complex (east of Rochester Street).

The findings of the Little Italy Local Area Parking Study can be summarized as follows:

- For the area labelled “South of Queensway” (west of Rochester Street), there is a significant capacity problem for on-street parking in the evenings; the occupancy exceeds maximum capacity on both weekday and Saturday evenings. The off-street public parking is approaching capacity during the daytime on weekdays, but the off-street public parking is not being utilized to nearly the same extent on weekday evenings or weekends.
- For the area labelled “Booth Street Complex” (east of Rochester Street), on-street parking is underutilized at all times. Demand for on-street parking is relatively static between weekdays, Saturdays, and Sundays (varies between 17% and 35%).



The recommendations of the Little Italy Local Area Parking Study included reducing the price of on-street parking in the Booth Street Complex area from \$3.00 an hour to \$1.50 an hour to encourage parking east of Rochester Street.

Based on the foregoing, there are ample underutilized on-street parking spaces in the area to the east of Rochester Street which restaurant patrons may use.

### 6.3 Boundary Streets

This section provides a review of the boundary streets using complete streets principles. The Multi-Modal Level of Service (MMLOS) guidelines produced by IBI Group in 2015 were used to evaluate the LOS of the boundary roadways for each mode of transportation. Schedule 'B' of the City of Ottawa's Official Plan indicates Rochester Street is located in a Mixed-Use Centre. The subject site is also located within 600m of the Carling O-Train Station.

As transit does not provide service on Rochester Street, the transit level of service (TLOS) has not been evaluated.

Targets for pedestrian level of service (PLOS), bicycle level of service (BLOS), truck level of service (TkLOS), and vehicular level of service (Auto LOS) for Rochester Street adhere to those outlined for a collector road located within 600m of a rapid transit station as identified in Exhibit 22 of the MMLOS guidelines.

#### 6.3.1 Pedestrian Level of Service (PLOS)

Exhibit 4 of the MMLOS guidelines has been used to evaluate the segment PLOS of the boundary roadways. Exhibit 22 of the MMLOS guidelines suggest a target PLOS A for all road classes within 600m of a rapid transit station. The results of the segment PLOS analysis are summarized in the following table.

**Table 5: PLOS Segment Analysis**

| Sidewalk Width                     | Boulevard Width | Avg. Daily Curb Lane Traffic Volume | Presence of On-Street Parking | Operating Speed | Segment PLOS |
|------------------------------------|-----------------|-------------------------------------|-------------------------------|-----------------|--------------|
| <b>Rochester Street, East Side</b> |                 |                                     |                               |                 |              |
| 1.8m                               | 0m              | < 3,000                             | Yes                           | 60km/h          | C            |
| <b>Rochester Street, West Side</b> |                 |                                     |                               |                 |              |
| 1.8m                               | 0m              | < 3,000                             | No                            | 60km/h          | C            |

#### 6.3.2 Bicycle Level of Service (BLOS)

Exhibit 11 of the MMLOS guidelines has been used to evaluate the segment BLOS of the boundary roadways. Exhibit 22 of the MMLOS guidelines suggest a target BLOS D for collector roads within 600m of a rapid transit station that are not classified as cycling routes. The results of the segment BLOS analysis are in the following table.

**Table 6: BLOS Segment Analysis**

| Road Class              | Bike Route | Type of Bikeway | Travel Lanes | Centerline Markings | Operating Speed | Segment BLOS |
|-------------------------|------------|-----------------|--------------|---------------------|-----------------|--------------|
| <b>Rochester Street</b> |            |                 |              |                     |                 |              |
| Collector               | N/A        | Mixed Traffic   | 2            | Yes                 | 60km/h          | F            |

### 6.3.3 Truck Level of Service (TkLOS)

Exhibit 20 of the MMLOS guidelines has been used to evaluate the segment TkLOS of the boundary roadways. Exhibit 22 of the MMLOS guidelines suggest a target TkLOS D for a collector roadway that is classified as a truck route within 600m of a rapid transit station. The results of the segment TkLOS analysis are in the following table.

**Table 7: TkLOS Segment Analysis**

| Road Class              | Curb Lane Width | Number of Travel Lanes      | Segment TkLOS |
|-------------------------|-----------------|-----------------------------|---------------|
| <b>Rochester Street</b> |                 |                             |               |
| Collector               | >3.7m           | Two (One in Each Direction) | B             |

### 6.3.4 Vehicular Level of Service (Auto LOS)

Exhibit 22 of the MMLOS guidelines suggest a target Auto LOS E for all roadways within 600m of a rapid transit station. The typical lane capacity along the study area roadways are based on the City's guidelines for the TRANS Long-Range Transportation Model. The lane capacity along the boundary streets has been estimated based on roadway classification and general characteristics (i.e. suburban with limited access, urban with on-street parking, etc.). The results of the Auto LOS analysis are summarized in the following table.

**Table 8: Auto LOS Segment Analysis**

| Direction               | Directional Capacity | Traffic Volumes | V/C Ratio and LOS |     |
|-------------------------|----------------------|-----------------|-------------------|-----|
|                         |                      | PM Peak         | PM Peak           |     |
|                         |                      |                 | V/C               | LOS |
| <b>Rochester Street</b> |                      |                 |                   |     |
| NB                      | 600                  | 221 veh/h       | 0.37              | A   |
| SB                      | 600                  | 454 veh/h       | 0.76              | C   |

The above noted table represents existing traffic conditions. Under 2024 total traffic volumes, the NB v/c ratio will increase to 0.42 (LOS A) and the SB v/c will increase to 0.78 (LOS C).

### 6.3.5 Segment MMLOS Summary

The results of the existing segment MMLOS analysis can be summarized as follows:

- Rochester Street achieves a PLOS C, which does not meet the target PLOS A. In order to achieve the target, a 1.8m wide sidewalk with a 2m wide boulevard, or a 2m wide

sidewalk with a 0.5m wide boulevard would be required on both sides of the road. A reduction in the operating speed to 30km/h would also achieve the target PLOS A.

- Rochester Street achieves a BLOS F which does not meet the target BLOS D. In order to achieve the target, a reduction in the operating speed to 50km/h could be considered. Bike lanes along Rochester Street would also meet the target BLOS D.
- Rochester Street exceeds the target TkLOS D, achieving a TkLOS B.
- Rochester Street exceeds the target Auto LOS E, achieving an Auto LOS C.

#### **6.4 Access Intersections Design**

There is an existing access from Rochester Street which leads to a surface parking space along the north side of the building. No changes are proposed to the existing access and no new site accesses are proposed.

### **7.0 CONCLUSIONS AND RECOMMENDATIONS**

Based on the foregoing, the conclusions and recommendations of this TIA can be summarized as follows:

#### Development Design

- No changes are proposed to the existing pedestrian facilities along Rochester Street. The existing pedestrian connection between the main building entrance and the sidewalk along Rochester Street will be maintained.
- OC Transpo stops #8012, #8011, #8013, #6657, #2397, #8002, and #6654 are all located within a 400m actual walking distance to the entrance of the proposed development.
- All required TDM-supportive design and infrastructure measures in the TDM checklist are met.
- The proposed fire and garbage route is located curbside along Rochester Street.

#### Parking

- As per the Zoning By-law, no off-street motor vehicle parking or bicycle parking is required to be provided for this development.
- There is an existing access from Rochester Street leading to one surface space along the north side of the building which will be retained.
- A review of the Little Italy Local Area Parking Study suggests that there are ample underutilized on-street parking spaces in the area to the east of Rochester Street which restaurant patrons may use.

Boundary Street MMLOS

- Rochester Street achieves a PLOS C, which does not meet the target PLOS A. In order to achieve the target, a 1.8m wide sidewalk with a 2m wide boulevard, or a 2m wide sidewalk with a 0.5m wide boulevard would be required. A reduction in the operating speed to 30km/h would also achieve the target PLOS A.
- Rochester Street achieves a BLOS F which does not meet the target BLOS D. In order to achieve the target, a reduction in the operating speed to 50km/h could be considered. Bike lanes along Rochester Street would also meet the target BLOS D.
- Rochester Street exceeds the target TkLOS D, achieving a TkLOS B.
- Rochester Street exceeds the target Auto LOS E, achieving an Auto LOS C.

Access Design

- There is an existing access from Rochester Street which leads to a surface parking space along the north side of the building. No changes are proposed to the existing access and no new site accesses are proposed.

In conclusion, no modifications to the transportation network are recommended as a result of the proposed development as none are required.

**NOVATECH**

Prepared by:



Rochelle Fortier, B.Eng.  
E.I.T. | Transportation/Traffic

Reviewed by:



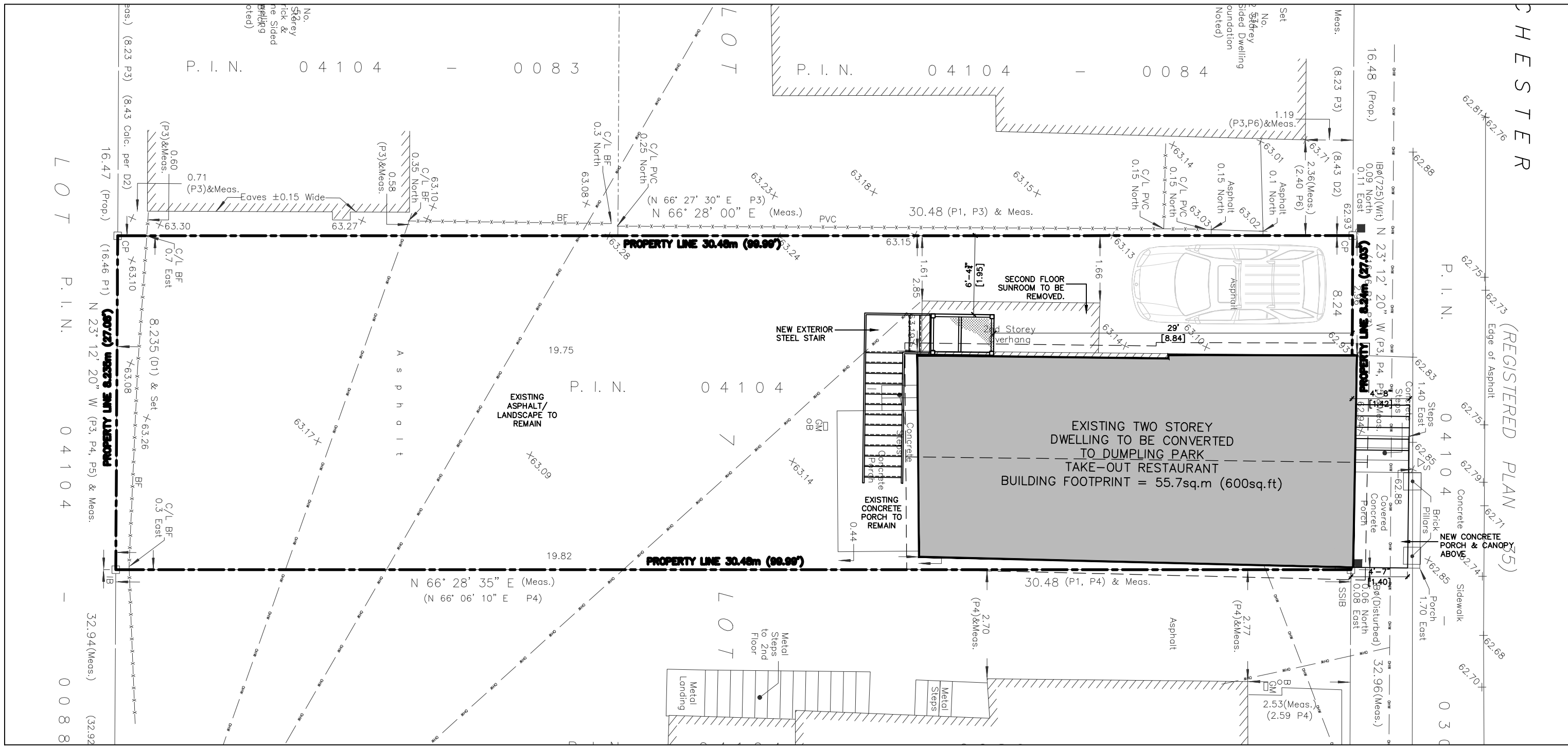
Brad Byvelds, P.Eng.  
Project Coordinator | Transportation/Traffic

## **APPENDIX A**

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Preliminary Site Plan





**LEGAL DESCRIPTION**

PART 1 PLAN OF PART OF LOT 7  
REGISTERED PLAN 35  
CITY OF OTTAWA  
FARLEY SMITH & DENIS SURVEYING LTD.  
COMPLETED ON THE 29TH DAY OF OCTOBER, 2018  
JOB No. 524-18



1 SITE PLAN  
A100 SCALE: 1/8" = 1'-0"

02 KEY PLAN  
A100 SCALE: N.T.S.

| Item | Dumpling park take-out -Ontario Building Data Matrix Part #9 &11   | OBC Reference   |
|------|--|---|
| 1    | <div>Project Description:<div><div><div><div><div><input type="checkbox"/> New</div><div><input type="checkbox"/> Addition</div><div><input type="checkbox"/> Change of Use</div></div><div><div><input checked="" type="checkbox"/> Part 11</div><div><input type="checkbox"/> Part 3</div><div><input type="checkbox"/> Part 9</div></div></div><div><div><div><div><input type="checkbox"/> Alteration</div><div><input type="checkbox"/> 11.1 to 11.4</div></div><div><div><div><div><input type="checkbox"/> 1.1.2. [A]</div><div><input type="checkbox"/> 1.1.2. [A]&amp;9.10.1.3.</div></div></div></div></div></div></div></div></div>                             |   |
| 2    | Major Occupancy (s) Group "E"  | 3.1.2.1. (1) 9.10.2.  |
| 3    | Building Area (m²) Existing 55.7m² New n/a Total 55.7m²  | 1.4.1.2. [A] 1.1.1.2. [A]   |
| 4    | Gross Area (m²) Existing 111.4m² New n/a Total 11.4m²  | 1.4.1.2. [A] 1.1.1.2. [A]   |
| 5    | Number of Storeys Above Grade Crawl space Below Grade 2  | 1.4.1.2. [A] & 3.2.1.1. 1.1.1.2. [A] & 9.10.4.                                    |
| 6    | Height of Building (m) 7.69m [Existing to Remain]  |   |
| 7    | Number of Streets/ Fire Fighter Access 1   | 3.2.2.10. & 3.2.5. 9.10.20.   |
| 8    | Building Classification EXISTING TO REMAIN   | 3.2.2.20. - .83 9.10.2.   |
| 9    | Sprinkler System Proposed <div><input type="checkbox"/> Entire Building<div><input type="checkbox"/> Selected Compartments<div><input type="checkbox"/> Selected Floor Areas<div><input type="checkbox"/> Basement <input type="checkbox"/> in lieu of roof rating<div><input checked="" type="checkbox"/> Not Required</div></div></div></div></div>  | 3.2.2.20. - .83 9.10.8.2. 3.2.1.5. 3.2.2.17. INDEX INDEX                          |
| 10   | Standpipe Required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | 3.2.9. N/A  |
| 11   | Fire Alarm Required <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | 3.2.4. 9.10.18.   |
| 12   | Water Service/ Supply is adequate <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  | 3.2.5.7. N/A  |
| 13   | High Building <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  | 3.2.6. N/A  |
| 14   | Permitted Construction <input checked="" type="checkbox"/> Combustible <input checked="" type="checkbox"/> Non-Combustible<br>Actual Construction <input checked="" type="checkbox"/> Combustible <input checked="" type="checkbox"/> Non-Combustible  | 3.2.2.20. - .83 9.10.6.   |
| 15   | Mezzanine(s) Area (m²) n/a   | 3.2.1.1. (3)-(8) 9.10.4.1.  |
| 16   | Occupant load based on <input type="checkbox"/> m²/person <input type="checkbox"/> Design of building<br>1st Floor: Occupancy Group "E" Load 9 Persons<br>2nd Floor: Occupancy Group "E" Load 9 Persons  | 3.1.1.7. 9.9.1.3.   |
| 17   | Barrier-free Design <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Ground floor Only)  | 3.8. 9.5.2.   |
| 18   | Hazardous Substances <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | 3.3.1.2. & 3.3.1.19 9.10.1.3. (4)   |
| 19   | Required Fire Resistance Rating (FRR) <div><div><div>Horizontal Assemblies</div><div>FRR (Hours)</div><div>Listed Design No. or Description (SG-2)</div></div><div><div>Floors</div><div>3/4 Hours</div><div>Fire Separation</div></div><div><div>Roof</div><div>0 Hours</div><div></div></div><div><div>Mezzanine</div><div>0 Hours</div><div></div></div><div><div>FRR of Supporting Members</div><div></div><div>Listed Design No. or Description (SG-2)</div></div><div><div>Floors</div><div>3/4 Hours</div><div>Fire Separation</div></div><div><div>Roof</div><div>0 Hours</div><div></div></div><div><div>Mezzanine</div><div>0 Hours</div><div></div></div></div> | 3.2.2.20. .83 & 3.2.1.4. 9.10.8. 9.10.9.  |
| 20   | Spatial Separation - Construction of Exterior Walls - Existing to remain   | 9.10.14.  |
| 21   | Plumbing Fixture Requirements  |   |
|      | Male/Female Count @ 50 % / 50 % except as noted otherwise  | Building Code Reference   |
|      |  | <input type="checkbox"/> Part 3 <input checked="" type="checkbox"/> Part 9        |
|      | 1st Floor Occupancy "D"  | Occupant Load 9 BC Table Number 3.7.4.3.D Fixtures Required 1 Fixtures Provided 1 |
|      | 2nd Floor Occupancy "D"  | Occupant Load 9 BC Table Number 3.7.4.3.D Fixtures Required 1 Fixtures Provided 1 |

| CITY OF OTTAWA ZONING BY-LAW 2008-250<br>R4T [RESIDENTIAL FOURTH DENSITY ZONE, SUBZONE T]<br>PROPOSED RESTAURANT CONVERSION |  |  |
|---|--|--|
| ZONE PROVISIONS   | REQUIRED<br>[EXISTING DETACHED DWELLING]     | PROVIDED<br>[PROPOSED RESTAURANT USE]  |
| RESIDENTIAL FOURTH DENSITY ZONE & MATURE NEIGHBOURHOODS OVERLAY PROVISIONS  |  |  |
| MIN. LOT WIDTH  | 7.5m   | 8.24m  |
| MIN. LOT AREA   | 195sq.m                                      | 251sq.m  |
| MAX. BUILDING HEIGHT  | 11m  | 7.69m  |
| MIN. FRONT YARD SETBACK   | 1.83m  | 0*   |
| MIN. REAR YARD SETBACK  | 1.2m   | 19.75m   |
| MIN. INTERIOR YARD SETBACK  | 0.6m/1.2m                                    | 0.07m*/2.85m   |
| PARKING SPACE PROVISIONS  |  |  |
| MIN. PARKING SPACE RATE (AREA Z)  | 0  | 1  |
| MIN. BICYCLE PARKING SPACE RATE   | 0  | 0  |
| PERMITTED PROJECTIONS INTO REQUIRED YARDS PROVISIONS  |  |  |
| COVERED PORCH PROJECTION  | 2m, BUT NOT CLOSER THAN 1m FROM ANY LOT LINE | EXISTING PORCH 1.72m BEYOND THE FRONT LOT LINE*<br>NEW PORCH TO BE 1.45m BEYOND FRONT LOT LINE*    |
| STEPS PROJECTION  | NO CLOSER THAN 0.6m FROM A FRONT LOT LINE    | EXISTING STEP 1.42m BEYOND THE FRONT LOT LINE*<br>NEW STEPS TO REMAIN 1.42m BEYOND FRONT LOT LINE* |
| *EXISTING NON-COMPLYING CONDITION   |  |  |
| SHEET INDEX:  |  |  |
| A100  | -  | SITE PLAN, NOTES, KEY PLAN, ZONING TABLE   |
| A200  | -  | DEMOLITION & PROPOSED FLOOR PLANS  |
| A400  | -  | DEMOLITION & PROPOSED ELEVATIONS   |

| DRAWING SYMBOLS  | LIST OF ABBREVIATIONS                  |
|--|--|
| REFERENCE BUBBLE   | ACT ACOUSTIC CEILING TILE              |
| <div><div>A</div><div>DRAWING NUMBER</div><div>SHEET NUMBER</div></div>  | AFF ABOVE FINISHED FLOOR               |
| INTERIOR ELEVATION BUBBLE  | ALUM ALUMINUM                          |
| <div><div>1</div><div>DRAWING NUMBER</div><div>SHEET NUMBER</div></div>  | ARCH ARCHITECTURAL                     |
| ROOM LABEL   | ASSY ASSEMBLY                          |
| MECH. ROOM NAME  | BD BOARD                               |
| 100 ROOM NUMBER  | BG BUILDING GRADE                      |
| DOOR LABEL   | BLDG BUILDING                          |
| 116.1 DOOR NUMBER  | CC CENTRE TO CENTRE                    |
| WINDOW LABEL   | CJ CONTROL JOINT                       |
| <div><div>G2</div><div>(B) =BASEMENT</div><div>(G) =GROUND FLOOR</div><div>(S) =SECOND FLOOR</div><div># = WINDOW NUMBER</div></div>                         | CL CENTRE LINE                         |
| CONSTRUCTION ASSEMBLY LABEL  | CLG CEILING                            |
| <div><div>W2</div><div>(W) = EXTERIOR WALL</div><div>(P) = INTERIOR WALL</div><div>(F) = ROOF</div><div>(R) = ROOF</div><div># = ASSEMBLY NUMBER</div></div> | CLR CLEAR                              |
| CEILING ELEVATIONS   | COL COLUMN                             |
| <div><div>114</div><div>CEILING FINISH HEIGHT</div></div>  | CONC CONCRETE                          |
| GRID REFERENCE   | CPT CARPET                             |
| <div><div>4</div><div>GRID DESTINATION</div></div>   | CT CERAMIC TILE                        |
| ELEVATION HEIGHT   | CW CURTAIN WALL                        |
| <div><div>174.25</div><div>ELEVATION HEIGHT</div></div>  | DIM DIMENSIONS                         |
|  | DO HANDICAP DOOR OPERATOR              |
|  | EL ELEVATION                           |
|  | ELECT ELECTRICAL                       |
|  | ELEC ELEVATOR                          |
|  | EIFS EXTERIOR INSULATION FINISH SYSTEM |
|  | EP ELECTRICAL PANEL                    |
|  | EQ EQUAL                               |
|  | ES EMERGENCY SCUPPER                   |
|  | EX EXISTING                            |
|  | EXP EXPOSED                            |
|  | EXT EXTERIOR                           |
|  | FA FIRE ALARM                          |
|  | FD FLOOR DRAIN                         |
|  | FEC FIRE EXTINGUISHER CABINET          |
|  | FHC FIRE HOSE CABINET                  |
|  | FIN FINISH                             |
|  | FL FLOOR                               |
|  | FR FIRE RESISTANCE RATED               |
|  | GL GLASS OR GLAZING                    |
|  | GB GRAB BAR                            |
|  | GYP GYPSUM WALLBOARD                   |
|  | HM HOLLOW METAL                        |
|  | HWT HOT WATER TANK                     |
|  | INT INTERIOR                           |
|  | JOINT JOINT                            |
|  | LTC LIGHTING                           |
|  | LTG LIGHTING                           |
|  | MAX MAXIMUM                            |
|  | MECH MECHANICAL                        |
|  | MC MEDICINE CABINET                    |
|  | MIN MINIMUM                            |
|  | NBC NATIONAL BUILDING CODE             |
|  | NO NOT TO SCALE                        |
|  | NTS NOT TO SCALE                       |
|  | OC ON CENTRE                           |
|  | OH OVERHEAD                            |
|  | PT PAINT                               |
|  | PLAM PLASTIC LAMINATE                  |
|  | PSF PRESSED STEEL FRAME                |
|  | PVC POLY VINYL CHLORIDE                |
|  | RCP REFLECTIVE CEILING PLAN            |
|  | RD ROOF DRAIN                          |
|  | REINF REINFORCED                       |
|  | REQD REQUIRED                          |
|  | SH SHOWER                              |
|  | SIM SIMILAR                            |
|  | SS STAINLESS STEEL                     |
|  | T/O TOP OF                             |
|  | TYP TYPICAL                            |
|  | U/S UNDERSIDE                          |
|  | VCT VINYL COMPOSITION TILE             |
|  | VEST VESTIBULE                         |
|  | WC WATER CLOSET                        |

NOTES:

1/ ALL WORK TO BE IN COMPLIANCE WITH LOCAL BUILDING CODES, REGULATIONS AND BY-LAWS

2/ ADDITIONAL DRAWINGS MAY BE ISSUED FOR CLARIFICATION TO ASSIST PROPER EXECUTION OF WORK. SUCH DRAWINGS WILL HAVE THE SAME MEANING AND INTENT AS IF THEY WERE INCLUDED WITH PLANS IN CONTRACT DOCUMENTS

3/ DO NOT SCALE DRAWINGS

4/ ALL SUB-CONTRACTORS TO TAKE THEIR OWN ON-SITE MEASUREMENTS AND BE RESPONSIBLE FOR THEIR ACCURACY

5/ NOTIFY SHAWN J. LAWRENCE ARCHITECT FOR ANY ERRORS AND/OR OMISSIONS PRIOR TO START OF WORK

STAMP

ONTARIO ASSOCIATION OF ARCHITECTS

SHAWN J. LAWRENCE

LICENCE 442

NORTH ARROW

NORTH

|     |            |                    |
|-----|------------|--------------------|
| 10  |            |                    |
| 09  |            |                    |
| 08  |            |                    |
| 07  |            |                    |
| 06  |            |                    |
| 05  | 2018-12-19 | ISSUED FOR ZONING  |
| 04  | 2018-12-17 | REVISED STAIR      |
| 03  | 2018-11-16 | PRELIMINARY REVIEW |
| 02  | 2018-11-09 | PRELIMINARY REVIEW |
| 01  | 2018-10-25 | PRELIMINARY REVIEW |
| No. | DATE:      | REVISION:          |

THIS DRAWING IS THE SOLE PROPERTY OF SL LAWRENCE ARCHITECT INCORPORATED. REPRODUCTION IS NOT PERMITTED

|              |            |              |            |
|--------------|------------|--------------|------------|
| DESIGNED BY: | AL         | DESIGNED BY: | S.J.L.     |
| DATE:        | 2018-10-12 | CHECKED BY:  | S.J.L.     |
| SCALE:       | AS NOTED   | PLOT DATE:   | 2018-12-19 |

PROJECT:

DUMPLING PARK TAKE-OUT

536 ROCHESTER, OTTAWA, ON

JOB NUMBER:

SL - 931 - 18

DRAWING TITLE:

SITE PLAN

SHEET:

A 100

## **APPENDIX B**

---

TIA Screening Form

## City of Ottawa 2017 TIA Guidelines Screening Form

### 1. Description of Proposed Development

|                                    |  |
|------------------------------------|--|
| Municipal Address                  | <b>536 Rochester Street</b>                          |
| Description of Location            | <b>Midblock, Approx. 15m south of Pamilla Street</b> |
| Land Use Classification            | <b>Take-out Restaurant</b>                           |
| Development Size (units)           | <b>N/A</b>   |
| Development Size (m <sup>2</sup> ) | <b>111m<sup>2</sup> GFA</b>                          |
| Number of Accesses and Locations   | <b>No new access proposed</b>                        |
| Phase of Development               | <b>One</b>   |
| Buildout Year                      | <b>2019</b>  |

**If available, please attach a sketch of the development or site plan to this form.**

### 2. Trip Generation Trigger

Considering the Development's Land Use type and Size (as filled out in the previous section), please refer to the Trip Generation Trigger checks below.

| Land Use Type                       | Minimum Development Size |
|-------------------------------------|--------------------------|
| Single-family homes                 | 40 units                 |
| Townhomes or apartments             | 90 units                 |
| Office                              | 3,500 m <sup>2</sup>     |
| Industrial                          | 5,000 m <sup>2</sup>     |
| Fast-food restaurant or coffee shop | 100 m <sup>2</sup>       |
| Destination retail                  | 1,000 m <sup>2</sup>     |
| Gas station or convenience market   | 75 m <sup>2</sup>        |

*\* If the development has a land use type other than what is presented in the table above, estimates of person-trip generation may be made based on average trip generation characteristics represented in the current edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual.*

**If the proposed development size is greater than the sizes identified above, the Trip Generation Trigger is satisfied.**



### 3. Location Triggers

|  | Yes                                 | No |
|--|-------------------------------------|----|
| Does the development propose a new driveway to a boundary street that is designated as part of the City's Transit Priority, Rapid Transit or Spine Bicycle Networks? |                                     | X  |
| Is the development in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone?*  | <input checked="" type="checkbox"/> |    |

\*DPA and TOD are identified in the City of Ottawa Official Plan (DPA in Section 2.5.1 and Schedules A and B; TOD in Annex 6). See Chapter 4 for a list of City of Ottawa Planning and Engineering documents that support the completion of TIA).

**If any of the above questions were answered with 'Yes,' the Location Trigger is satisfied.**

### 4. Safety Triggers

|   | Yes | No |
|---|-----|----|
| Are posted speed limits on a boundary street are 80 km/hr or greater?   |     | X  |
| Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?  |     | X  |
| Is the proposed driveway within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions)? |     | X  |
| Is the proposed driveway within auxiliary lanes of an intersection?   |     | X  |
| Does the proposed driveway make use of an existing median break that serves an existing site?   |     | X  |
| Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?  |     | X  |
| Does the development include a drive-thru facility?   |     | X  |

**If any of the above questions were answered with 'Yes,' the Safety Trigger is satisfied.**

### 5. Summary

|   | Yes                                 | No |
|---|-------------------------------------|----|
| Does the development satisfy the Trip Generation Trigger? |                                     | X  |
| Does the development satisfy the Location Trigger?        | <input checked="" type="checkbox"/> |    |
| Does the development satisfy the Safety Trigger?          |                                     | X  |

## **APPENDIX C**

---

### OC Transpo System Information

FORMER / ANCIEN 6

56

Local

HURDMAN

TUNNEY'S  
PASTURE

Monday to Friday / Lundi au vendredi

Peak periods only

Périodes de pointe seulement



Legend • Légende



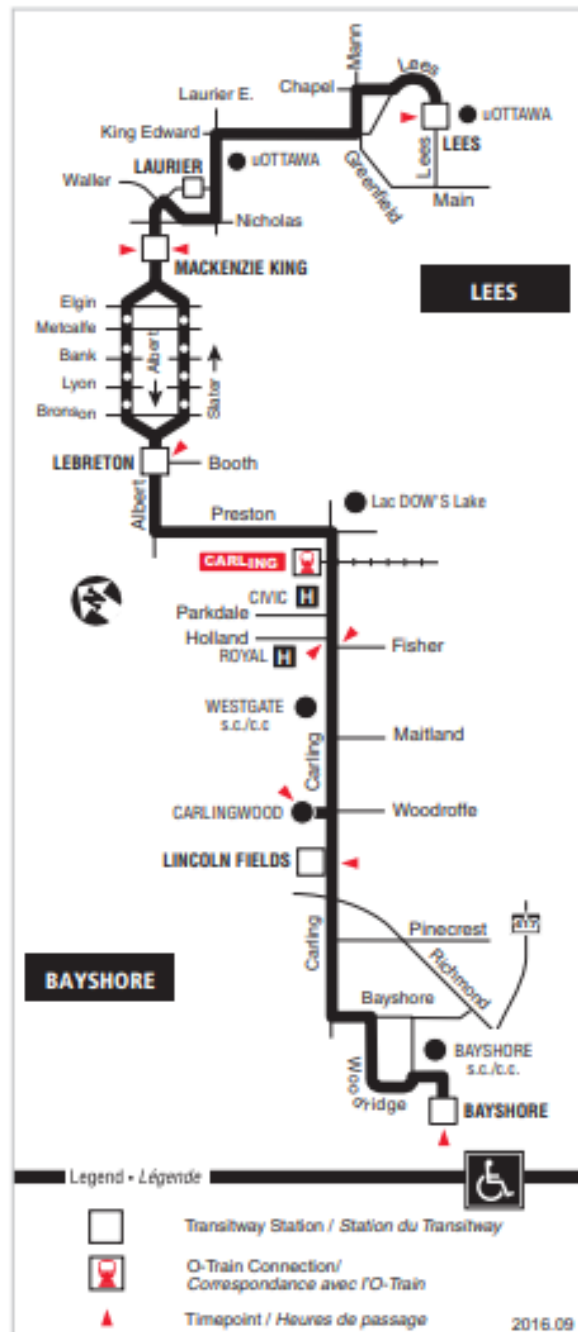
Transitway Station / Station du Transitway



O-Train Connection  
Correspondance avec l'O-Train

# 85 LEES BAYSHORE

**7 days a week / 7 jours par semaine**  
All day service  
Service toute la journée



# 101

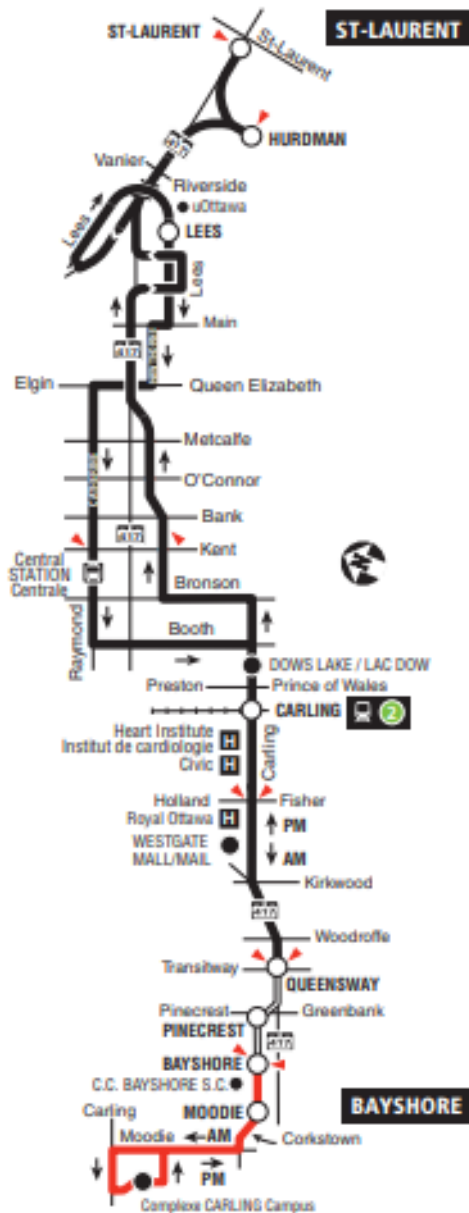
## ST-LAURENT BAYSHORE

*Local*

**Monday to Saturday / Lundi ay samedi**

No Sunday service

Aucun service le dimanche

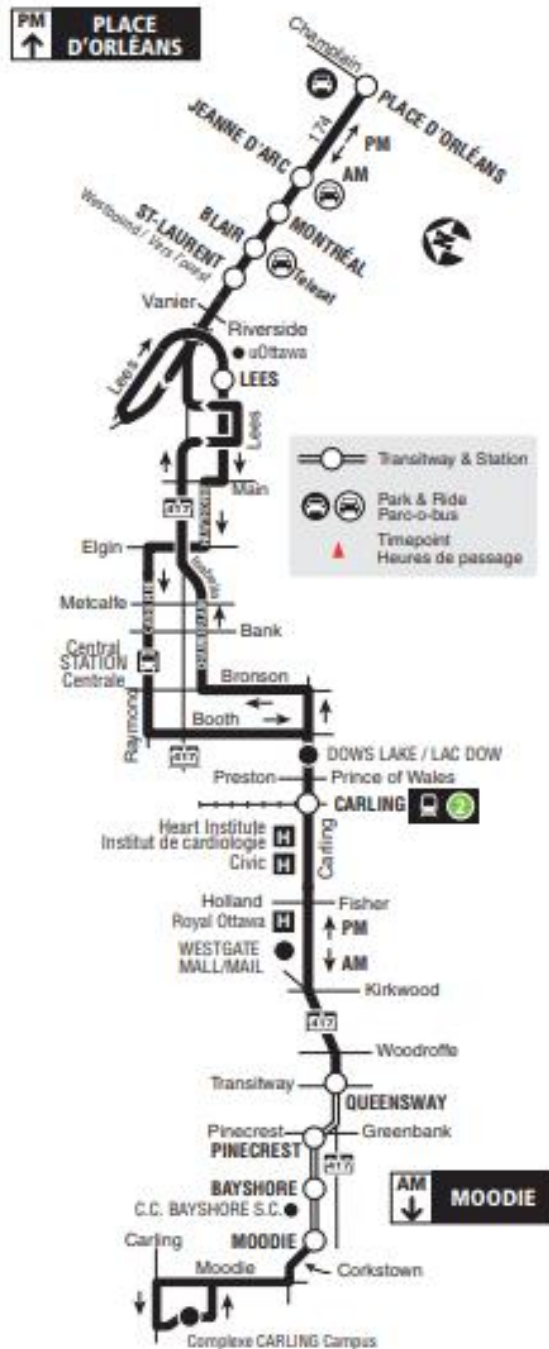


# 103

## MOODIE PLACE D'ORLÉANS

### Local

Monday to FRIDAY / Lundi au vendredi  
Peak Periods Only  
Périodes de pointe seulement



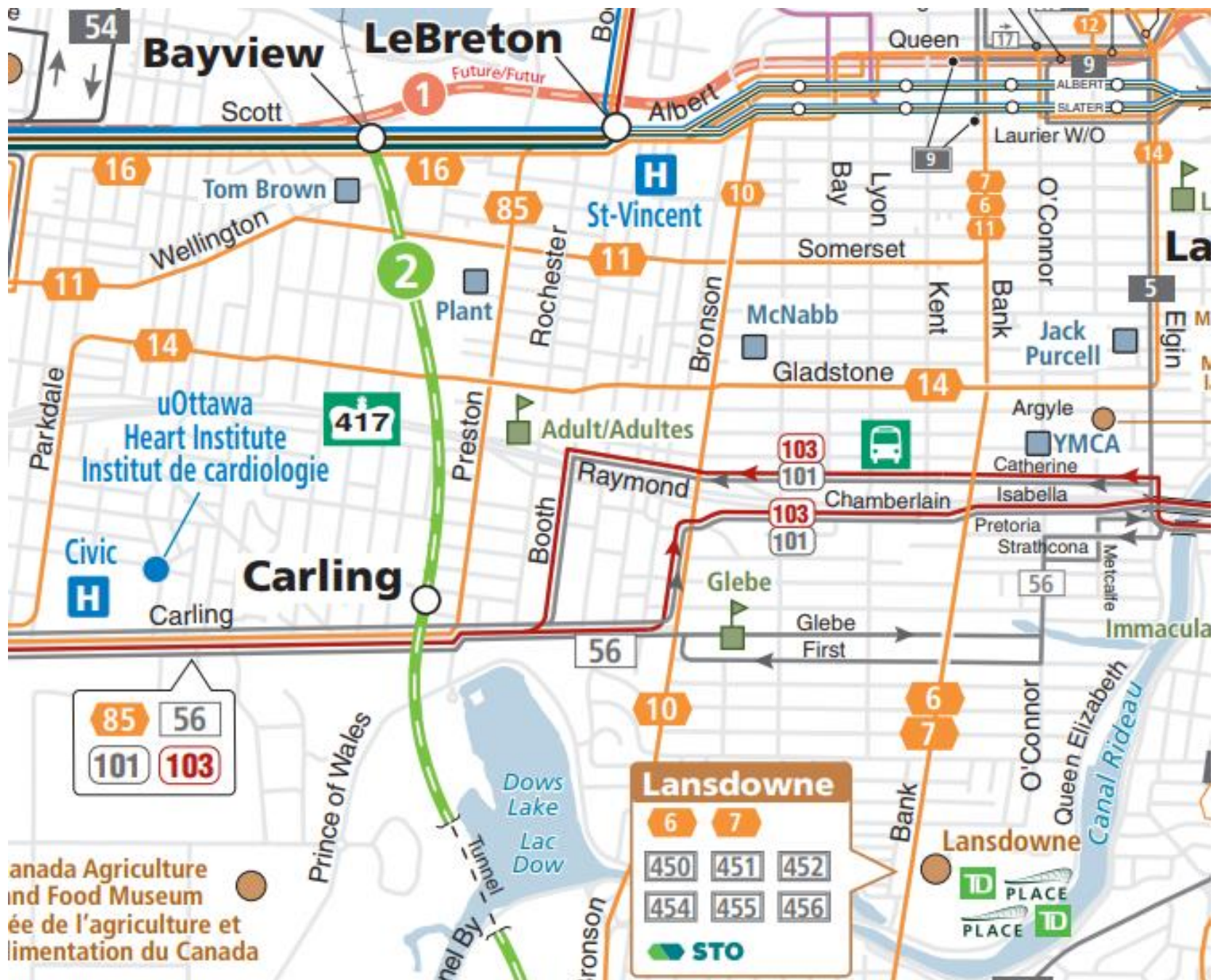




### Boarding locations at Carling Station / Zones d'embarquement à la station Carling

|                     |     |
|---------------------|-----|
| 2 Bayview           |     |
| 2 Greenboro         |     |
| 85 Bayshore         | A C |
| 85 Lees             | B D |
| 56 Tunney's Pasture | A   |
| 56 Hurdman          | B   |
| 101 Moodie Bayshore | A   |
| 101 St-Laurent      | B   |
| 103 Moodie          | A   |
| 103 Orléans         | B   |
| 2 Bayview           | D   |
| 2 South Keys        | C   |





## **APPENDIX D**

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### Traffic Count Data

# 5245355 - Aberdeen and Rochester - Nov - 16th - TMC

Wed Nov 16, 2016

PM Peak (4:30PM - 5:30PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road)

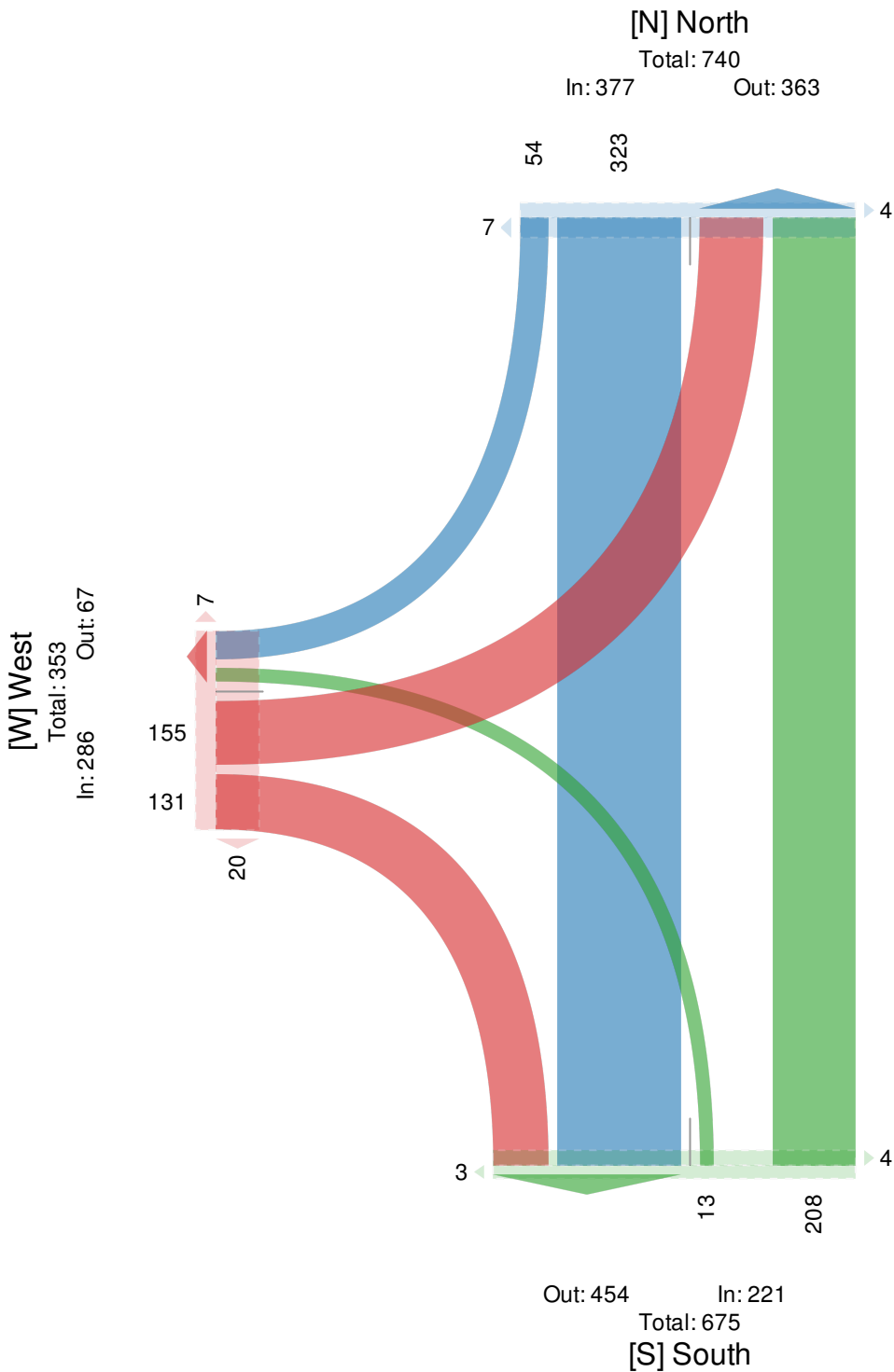
All Movements

ID: 366477, Location: 45.401927, -75.707706, Site Code: 36481103



Provided by: City of Ottawa

100 Constellation Dr, Nepean, ON, K2G 5J9, CA



# 5268129 - Booth and Norman - Sept - 1st - TMC

Thu Sep 1, 2016

PM Peak (4:15PM - 5:15PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road)

All Movements

ID: 341177, Location: 45.401035, -75.705473, Site Code: 36264103



Provided by: City of Ottawa

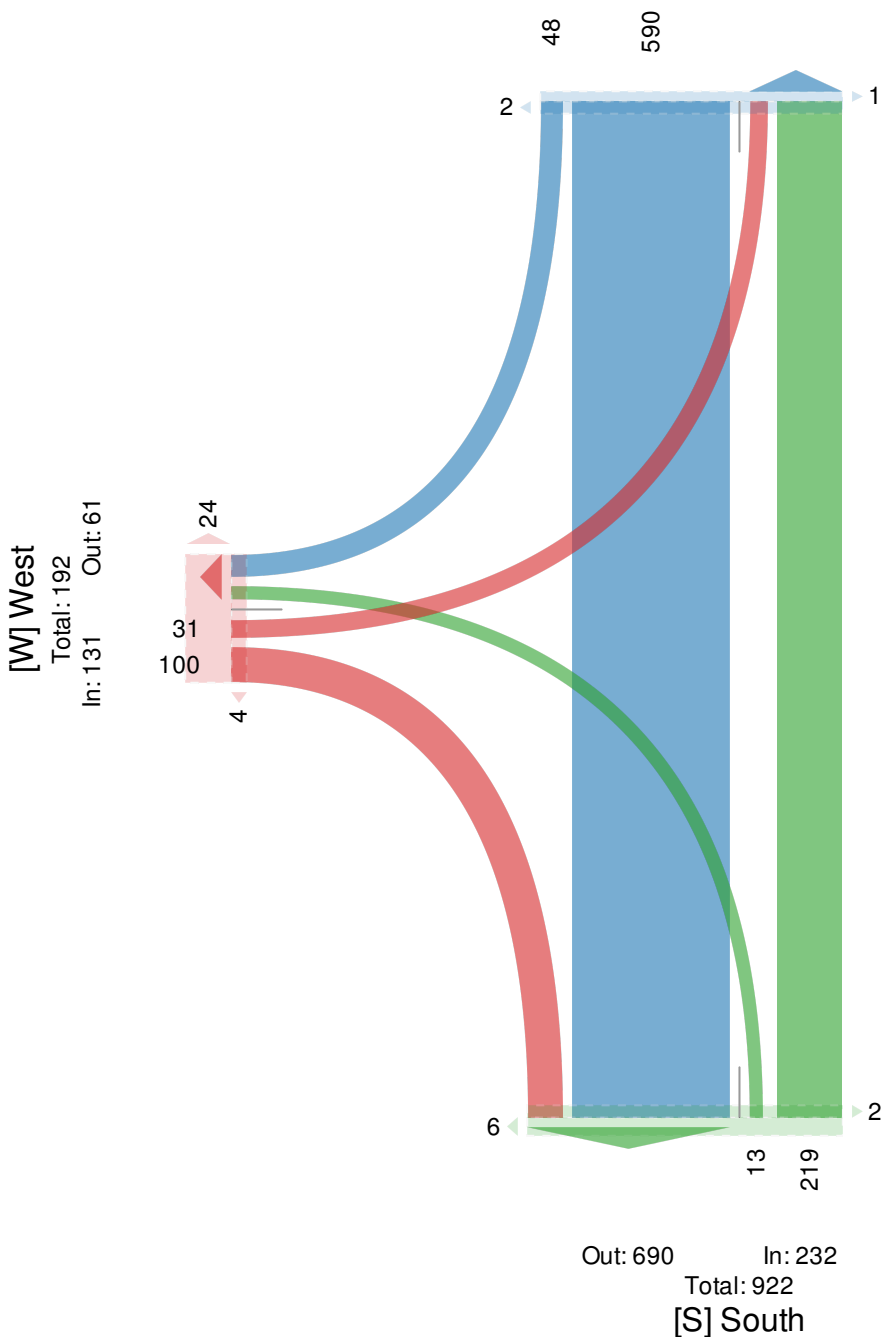
100 Constellation Dr, Nepean, ON, K2G 5J9, CA

[N] North

Total: 888

In: 638

Out: 250



# 5318194 - Carling and Preston - June - 20th - TMC

Tue Jun 20, 2017

PM Peak (4:15PM - 5:15PM) - Overall Peak Hour

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road)

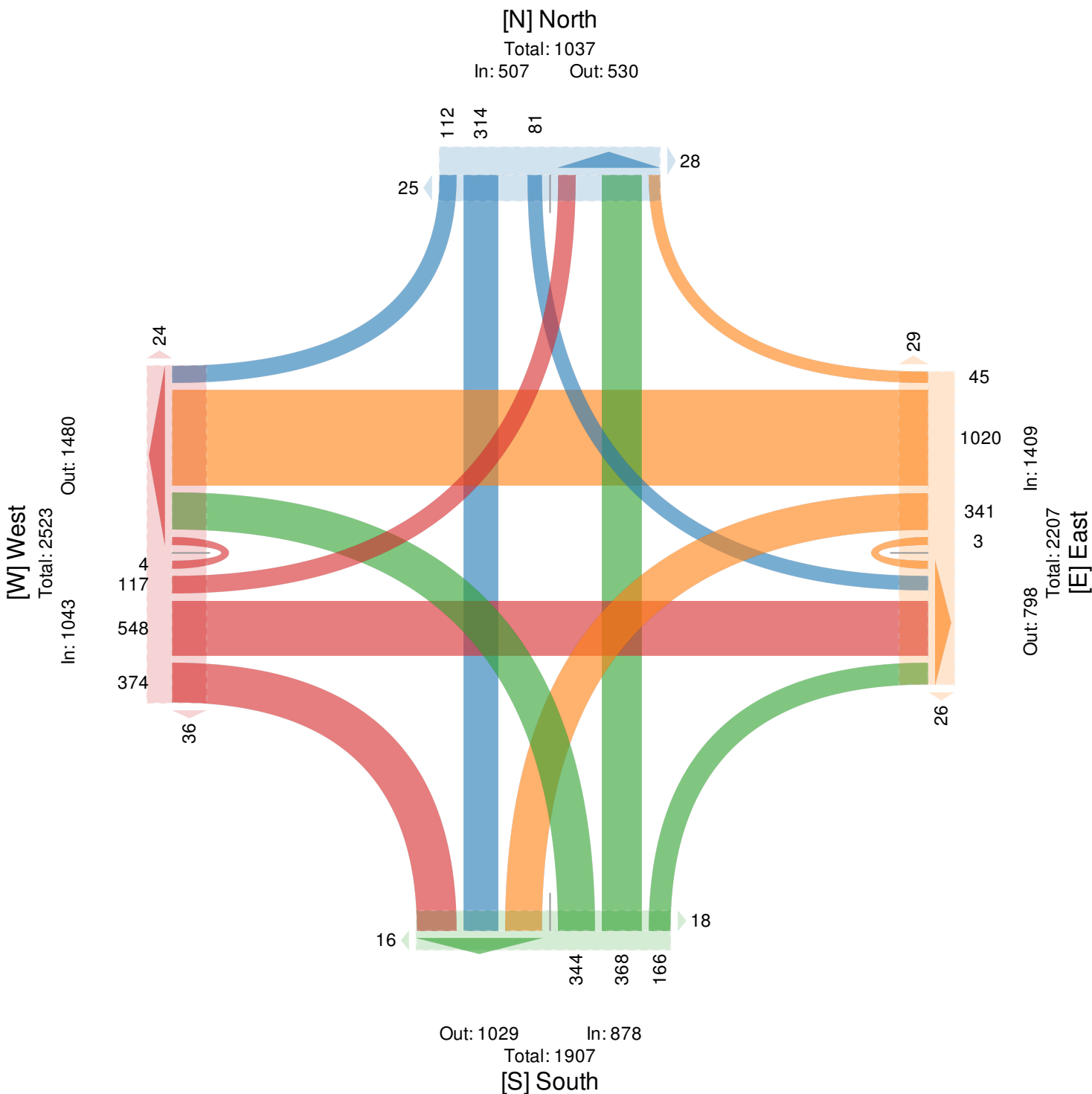
All Movements

ID: 425813, Location: 45.39755, -75.707704, Site Code: 37131103



Provided by: City of Ottawa

100 Constellation Dr, Nepean, ON, K2G 5J9, CA



## **APPENDIX E**

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### Collision Records



# City Operations - Transportation Services

## Collision Details Report - Public Version

**From:** January 1, 2013 **To:** December 31, 2017

**Location:** ABERDEEN ST @ ROCHESTER ST

**Traffic Control:** Traffic signal

**Total Collisions:** 1

| Date/Day/Time          | Environment | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre | Vehicle type              | First Event         | No. Ped |
|------------------------|-------------|------------------|----------------|----------------|----------|-------------------|---------------------------|---------------------|---------|
| 2014-Nov-14, Fri,09:03 | Clear       | Turning movement | P.D. only      | Dry            | South    | Turning right     | Unknown                   | Other motor vehicle |         |
|                        |             |                  |                |                | South    | Going ahead       | Automobile, station wagon | Other motor vehicle |         |

**Location:** BOOTH ST @ CARLING AVE

**Traffic Control:** Traffic signal

**Total Collisions:** 12

| Date/Day/Time          | Environment   | Impact Type      | Classification   | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre   | Vehicle type              | First Event         | No. Ped |
|------------------------|---------------|------------------|------------------|----------------|----------|---------------------|---------------------------|---------------------|---------|
| 2014-Mar-26, Wed,10:44 | Clear         | Turning movement | P.D. only        | Dry            | East     | Turning left        | Pick-up truck             | Other motor vehicle |         |
|                        |               |                  |                  |                | West     | Going ahead         | Passenger van             | Other motor vehicle |         |
| 2014-Aug-03, Sun,07:05 | Clear         | Sideswipe        | P.D. only        | Dry            | South    | Changing lanes      | Automobile, station wagon | Other motor vehicle |         |
|                        |               |                  |                  |                | South    | Turning right       | Automobile, station wagon | Other motor vehicle |         |
| 2014-Nov-04, Tue,18:15 | Rain          | Rear end         | P.D. only        | Wet            | South    | Going ahead         | Automobile, station wagon | Other motor vehicle |         |
|                        |               |                  |                  |                | South    | Stopped             | Pick-up truck             | Other motor vehicle |         |
| 2014-Jan-11, Sat,08:30 | Freezing Rain | Rear end         | Non-fatal injury | Ice            | South    | Slowing or stopping | Pick-up truck             | Other motor vehicle |         |

|                        |       |                  |                  |            |       |              |                              |                        |
|------------------------|-------|------------------|------------------|------------|-------|--------------|------------------------------|------------------------|
|                        |       |                  |                  |            | South | Stopped      | Automobile,<br>station wagon | Other motor<br>vehicle |
| 2015-May-06, Wed,10:23 | Clear | Rear end         | Non-fatal injury | Dry        | East  | Turning left | Automobile,<br>station wagon | Other motor<br>vehicle |
|                        |       |                  |                  |            | East  | Turning left | Automobile,<br>station wagon | Other motor<br>vehicle |
| 2015-Jul-23, Thu,10:34 | Clear | Rear end         | Non-fatal injury | Dry        | West  | Going ahead  | Truck and trailer            | Other motor<br>vehicle |
|                        |       |                  |                  |            | West  | Stopped      | Automobile,<br>station wagon | Other motor<br>vehicle |
| 2015-Apr-02, Thu,16:29 | Clear | Rear end         | P.D. only        | Dry        | South | Going ahead  | Automobile,<br>station wagon | Other motor<br>vehicle |
|                        |       |                  |                  |            | South | Stopped      | Pick-up truck                | Other motor<br>vehicle |
| 2015-Jun-30, Tue,16:26 | Clear | Turning movement | Non-fatal injury | Dry        | East  | Turning left | Automobile,<br>station wagon | Other motor<br>vehicle |
|                        |       |                  |                  |            | West  | Going ahead  | Automobile,<br>station wagon | Other motor<br>vehicle |
| 2016-Oct-27, Thu,16:41 | Snow  | Turning movement | P.D. only        | Wet        | East  | Turning left | Pick-up truck                | Other motor<br>vehicle |
|                        |       |                  |                  |            | West  | Going ahead  | Automobile,<br>station wagon | Other motor<br>vehicle |
| 2017-Jan-10, Tue,17:30 | Snow  | Turning movement | P.D. only        | Loose snow | East  | Turning left | Automobile,<br>station wagon | Other motor<br>vehicle |
|                        |       |                  |                  |            | West  | Going ahead  | Automobile,<br>station wagon | Other motor<br>vehicle |
| 2013-Jul-06, Sat,13:01 | Clear | Turning movement | P.D. only        | Dry        | East  | Turning left | Automobile,<br>station wagon | Other motor<br>vehicle |



|                        |       |           |                  |     |      |                |                              |                        |   |
|------------------------|-------|-----------|------------------|-----|------|----------------|------------------------------|------------------------|---|
|                        |       |           |                  |     | West | Turning right  | Automobile,<br>station wagon | Other motor<br>vehicle |   |
| 2013-Oct-12, Sat,17:35 | Clear | SMV other | Non-fatal injury | Dry | East | Changing lanes | Automobile,<br>station wagon | Pedestrian             | 1 |

**Location:** BOOTH ST @ NORMAN ST

**Traffic Control:** Traffic signal

**Total Collisions:** 3

| Date/Day/Time          | Environment | Impact Type | Classification | Surface<br>Cond'n | Veh. Dir | Vehicle Manoeuver   | Vehicle type                 | First Event            | No. Ped |
|------------------------|-------------|-------------|----------------|-------------------|----------|---------------------|------------------------------|------------------------|---------|
| 2015-Jan-23, Fri,09:15 | Clear       | Rear end    | P.D. only      | Wet               | North    | Unknown             | Automobile,<br>station wagon | Other motor<br>vehicle |         |
|                        |             |             |                |                   | North    | Stopped             | Pick-up truck                | Other motor<br>vehicle |         |
| 2017-Aug-30, Wed,07:25 | Clear       | Rear end    | P.D. only      | Dry               | East     | Going ahead         | Unknown                      | Other motor<br>vehicle |         |
|                        |             |             |                |                   | East     | Stopped             | Automobile,<br>station wagon | Other motor<br>vehicle |         |
| 2017-Jan-15, Sun,12:13 | Clear       | Rear end    | P.D. only      | Dry               | South    | Slowing or stopping | Automobile,<br>station wagon | Other motor<br>vehicle |         |
|                        |             |             |                |                   | South    | Stopped             | Pick-up truck                | Other motor<br>vehicle |         |

**Location:** CARLING AVE @ PRESTON ST

**Traffic Control:** Traffic signal

**Total Collisions:** 43

| Date/Day/Time          | Environment | Impact Type | Classification | Surface<br>Cond'n | Veh. Dir | Vehicle Manoeuver | Vehicle type                 | First Event            | No. Ped |
|------------------------|-------------|-------------|----------------|-------------------|----------|-------------------|------------------------------|------------------------|---------|
| 2014-Jan-26, Sun,19:47 | Clear       | Angle       | P.D. only      | Loose snow        | West     | Going ahead       | Automobile,<br>station wagon | Other motor<br>vehicle |         |
|                        |             |             |                |                   | North    | Going ahead       | Automobile,<br>station wagon | Other motor<br>vehicle |         |
| 2014-Jan-30, Thu,18:00 | Snow        | Sideswipe   | Non-reportable | Slush             | North    | Changing lanes    | Pick-up truck                | Other motor<br>vehicle |         |

|                        |       |                  |                  |            |       |                     |                           |                     |
|------------------------|-------|------------------|------------------|------------|-------|---------------------|---------------------------|---------------------|
|                        |       |                  |                  |            | North | Going ahead         | Pick-up truck             | Other motor vehicle |
| 2014-Feb-14, Fri,08:00 | Snow  | Rear end         | P.D. only        | Loose snow | North | Going ahead         | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |            | North | Stopped             | Automobile, station wagon | Other motor vehicle |
| 2014-Mar-28, Fri,16:30 | Clear | Rear end         | P.D. only        | Dry        | West  | Going ahead         | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |            | West  | Stopped             | Pick-up truck             | Other motor vehicle |
| 2014-May-29, Thu,15:30 | Clear | Rear end         | Non-fatal injury | Dry        | East  | Slowing or stopping | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |            | East  | Stopped             | Automobile, station wagon | Other motor vehicle |
| 2014-Jun-18, Wed,07:34 | Clear | Turning movement | Non-fatal injury | Dry        | South | Turning left        | Pick-up truck             | Cyclist             |
|                        |       |                  |                  |            | North | Going ahead         | Bicycle                   | Other motor vehicle |
| 2014-Oct-13, Mon,09:42 | Clear | Angle            | Non-fatal injury | Dry        | South | Going ahead         | Pick-up truck             | Other motor vehicle |
|                        |       |                  |                  |            | West  | Going ahead         | Automobile, station wagon | Other motor vehicle |
| 2014-Oct-09, Thu,12:00 | Rain  | Turning movement | Non-fatal injury | Wet        | North | Going ahead         | Bicycle                   | Other motor vehicle |
|                        |       |                  |                  |            | South | Turning left        | Pick-up truck             | Cyclist             |
| 2015-Jan-16, Fri,15:45 | Clear | Rear end         | Non-fatal injury | Loose snow | West  | Turning right       | Passenger van             | Other motor vehicle |
|                        |       |                  |                  |            | West  | Turning right       | Automobile, station wagon | Other motor vehicle |

|                        |       |                  |                  |       |       |                |                           |                     |
|------------------------|-------|------------------|------------------|-------|-------|----------------|---------------------------|---------------------|
| 2015-Jun-23, Tue,23:02 | Clear | Sideswipe        | P.D. only        | Dry   | West  | Changing lanes | Intercity bus             | Other motor vehicle |
|                        |       |                  |                  |       | West  | Stopped        | Automobile, station wagon | Other motor vehicle |
| 2015-Oct-05, Mon,06:19 | Clear | Turning movement | Non-fatal injury | Dry   | South | Turning left   | Pick-up truck             | Cyclist             |
|                        |       |                  |                  |       | North | Going ahead    | Bicycle                   | Other motor vehicle |
| 2015-Jul-30, Thu,19:39 | Clear | Angle            | P.D. only        | Dry   | North | Turning right  | Automobile, station wagon | Cyclist             |
|                        |       |                  |                  |       | East  | Going ahead    | Bicycle                   | Other motor vehicle |
| 2015-May-26, Tue,23:49 | Clear | SMV other        | P.D. only        | Dry   | East  | Reversing      | Municipal transit bus     | Concrete guide rail |
| 2015-Jun-06, Sat,21:44 | Clear | Turning movement | Non-fatal injury | Dry   | South | Turning left   | Bicycle                   | Other motor vehicle |
|                        |       |                  |                  |       | South | Going ahead    | Automobile, station wagon | Cyclist             |
| 2015-Mar-19, Thu,19:32 | Clear | Sideswipe        | P.D. only        | Slush | South | Changing lanes | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |       | South | Going ahead    | Automobile, station wagon | Other motor vehicle |
| 2015-May-12, Tue,18:50 | Clear | Rear end         | P.D. only        | Dry   | West  | Turning left   | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |       | West  | Turning left   | Automobile, station wagon | Other motor vehicle |
| 2015-Jun-24, Wed,15:39 | Clear | Rear end         | Non-fatal injury | Dry   | West  | Going ahead    | Municipal transit bus     | Other motor vehicle |

|                        |       |                  |                  |     |       |                     |                           |                     |
|------------------------|-------|------------------|------------------|-----|-------|---------------------|---------------------------|---------------------|
|                        |       |                  |                  |     | West  | Stopped             | Pick-up truck             | Other motor vehicle |
|                        |       |                  |                  |     | West  | Slowing or stopping | Passenger van             | Other motor vehicle |
| 2015-Apr-15, Wed,09:04 | Clear | Rear end         | P.D. only        | Dry | East  | Unknown             | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |     | East  | Stopped             | Passenger van             | Other motor vehicle |
| 2015-Apr-29, Wed,20:00 | Clear | Turning movement | P.D. only        | Dry | South | Turning left        | Automobile, station wagon | Cyclist             |
|                        |       |                  |                  |     | North | Going ahead         | Bicycle                   | Other motor vehicle |
| 2015-Aug-17, Mon,14:00 | Clear | Sideswipe        | P.D. only        | Dry | South | Changing lanes      | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |     | South | Changing lanes      | Automobile, station wagon | Other motor vehicle |
| 2015-Oct-17, Sat,13:21 | Clear | Rear end         | P.D. only        | Dry | South | Changing lanes      | Automobile, station wagon | Other motor vehicle |
|                        |       |                  |                  |     | South | Slowing or stopping | Pick-up truck             | Other motor vehicle |
| 2015-Sep-22, Tue,16:56 | Clear | Rear end         | P.D. only        | Dry | East  | Unknown             | Unknown                   | Other motor vehicle |
|                        |       |                  |                  |     | East  | Stopped             | Automobile, station wagon | Other motor vehicle |
| 2016-Jul-06, Wed,08:39 | Clear | Turning movement | Non-fatal injury | Dry | North | Turning right       | Automobile, station wagon | Cyclist             |
|                        |       |                  |                  |     | North | Going ahead         | Bicycle                   | Other motor vehicle |

|                        |       |                  |                  |     |       |              |                           |                       |
|------------------------|-------|------------------|------------------|-----|-------|--------------|---------------------------|-----------------------|
| 2016-May-18, Wed,23:39 | Clear | Turning movement | Non-fatal injury | Dry | South | Turning left | Automobile, station wagon | Other motor vehicle   |
|                        |       |                  |                  |     | North | Going ahead  | Automobile, station wagon | Other motor vehicle   |
| 2016-Nov-09, Wed,18:00 | Clear | Rear end         | Non-fatal injury | Dry | West  | Going ahead  | Automobile, station wagon | Other motor vehicle   |
|                        |       |                  |                  |     | West  | Stopped      | Automobile, station wagon | Other motor vehicle   |
| 2016-Jul-23, Sat,23:13 | Clear | Rear end         | P.D. only        | Dry | West  | Unknown      | Automobile, station wagon | Other motor vehicle   |
|                        |       |                  |                  |     | West  | Stopped      | Automobile, station wagon | Other motor vehicle   |
| 2017-Oct-14, Sat,15:47 | Clear | SMV other        | P.D. only        | Dry | South | Turning left | Automobile, station wagon | Pole (utility, power) |
| 2017-Mar-06, Mon,16:53 | Snow  | Angle            | P.D. only        | Ice | South | Overtaking   | Automobile, station wagon | Other motor vehicle   |
|                        |       |                  |                  |     | East  | Turning left | Automobile, station wagon | Other motor vehicle   |
| 2017-Feb-10, Fri,13:45 | Clear | Rear end         | P.D. only        | Dry | East  | Going ahead  | Automobile, station wagon | Other motor vehicle   |
|                        |       |                  |                  |     | East  | Stopped      | Automobile, station wagon | Other motor vehicle   |
| 2017-Apr-27, Thu,16:07 | Clear | Rear end         | P.D. only        | Dry | North | Turning left | Automobile, station wagon | Other motor vehicle   |
|                        |       |                  |                  |     | North | Turning left | Pick-up truck             | Other motor vehicle   |
| 2017-Apr-26, Wed,16:44 | Clear | Rear end         | P.D. only        | Dry | West  | Going ahead  | Pick-up truck             | Other motor vehicle   |

|                        |       |                  |                  |     |       |               |                           |                     |   |
|------------------------|-------|------------------|------------------|-----|-------|---------------|---------------------------|---------------------|---|
|                        |       |                  |                  |     | West  | Stopped       | Pick-up truck             | Other motor vehicle |   |
|                        |       |                  |                  |     | West  | Stopped       | Pick-up truck             | Other motor vehicle |   |
|                        |       |                  |                  |     | West  | Stopped       | Passenger van             | Other motor vehicle |   |
| 2017-Mar-21, Tue,18:10 | Clear | Turning movement | P.D. only        | Dry | South | Turning left  | Automobile, station wagon | Other motor vehicle |   |
|                        |       |                  |                  |     | North | Going ahead   | Automobile, station wagon | Other motor vehicle |   |
| 2017-Jun-26, Mon,08:54 | Clear | Turning movement | Non-fatal injury | Dry | South | Turning right | Automobile, station wagon | Cyclist             |   |
|                        |       |                  |                  |     | South | Going ahead   | Bicycle                   | Other motor vehicle |   |
| 2017-Dec-01, Fri,14:10 | Rain  | SMV other        | Non-fatal injury | Wet | South | Turning left  | Automobile, station wagon | Pedestrian          | 1 |
| 2017-Jul-29, Sat,00:57 | Clear | Angle            | Non-fatal injury | Dry | North | Going ahead   | Automobile, station wagon | Other motor vehicle |   |
|                        |       |                  |                  |     | West  | Going ahead   | Automobile, station wagon | Other motor vehicle |   |
| 2013-Feb-06, Wed,16:00 | Clear | Rear end         | Non-fatal injury | Dry | East  | Going ahead   | Automobile, station wagon | Other motor vehicle |   |
|                        |       |                  |                  |     | East  | Stopped       | Delivery van              | Other motor vehicle |   |
| 2013-Mar-21, Thu,07:31 | Clear | Sideswipe        | P.D. only        | Dry | West  | Turning right | Pick-up truck             | Other motor vehicle |   |
|                        |       |                  |                  |     | West  | Going ahead   | Municipal transit bus     | Other motor vehicle |   |

|                        |       |           |                  |     |       |                     |                           |                       |
|------------------------|-------|-----------|------------------|-----|-------|---------------------|---------------------------|-----------------------|
| 2013-Apr-23, Tue,21:06 | Clear | Angle     | P.D. only        | Dry | North | Going ahead         | Automobile, station wagon | Other motor vehicle   |
|                        |       |           |                  |     | East  | Going ahead         | Automobile, station wagon | Other motor vehicle   |
| 2017-Nov-29, Wed,07:36 | Clear | Sideswipe | P.D. only        | Wet | East  | Changing lanes      | Automobile, station wagon | Other motor vehicle   |
|                        |       |           |                  |     | East  | Going ahead         | Automobile, station wagon | Other motor vehicle   |
| 2013-Aug-06, Tue,12:51 | Clear | Rear end  | P.D. only        | Dry | East  | Going ahead         | Delivery van              | Other motor vehicle   |
|                        |       |           |                  |     | East  | Slowing or stopping | Automobile, station wagon | Other motor vehicle   |
| 2013-Jul-26, Fri,15:50 | Clear | Angle     | P.D. only        | Dry | East  | Going ahead         | Delivery van              | Other motor vehicle   |
|                        |       |           |                  |     | South | Turning left        | Automobile, station wagon | Other motor vehicle   |
| 2013-Nov-21, Thu,14:21 | Clear | SMV other | P.D. only        | Dry | South | Turning left        | Truck - tractor           | Pole (utility, power) |
| 2013-Nov-21, Thu,22:56 | Clear | Rear end  | Non-fatal injury | Dry | South | Slowing or stopping | Automobile, station wagon | Other motor vehicle   |
|                        |       |           |                  |     | South | Stopped             | Automobile, station wagon | Other motor vehicle   |

**Location:** PAMILLA ST @ PRESTON ST

**Traffic Control:** Traffic signal

**Total Collisions:** 5

| Date/Day/Time          | Environment | Impact Type      | Classification | Surface Cond'n | Veh. Dir | Vehicle Manoeuvre                  | Vehicle type  | First Event         | No. Ped |
|------------------------|-------------|------------------|----------------|----------------|----------|------------------------------------|---------------|---------------------|---------|
| 2015-May-13, Wed,15:06 | Clear       | Turning movement | P.D. only      | Dry            | North    | Pulling away from shoulder or curb | Pick-up truck | Other motor vehicle |         |
|                        |             |                  |                |                | North    | Turning right                      | Pick-up truck | Other motor vehicle |         |

|                        |       |             |                  |            |       |                     |                           |                     |   |
|------------------------|-------|-------------|------------------|------------|-------|---------------------|---------------------------|---------------------|---|
| 2017-Nov-22, Wed,10:17 | Clear | Rear end    | P.D. only        | Dry        | North | Slowing or stopping | Automobile, station wagon | Other motor vehicle |   |
|                        |       |             |                  |            | North | Stopped             | Automobile, station wagon | Other motor vehicle |   |
|                        |       |             |                  |            |       |                     |                           |                     |   |
| 2017-Feb-25, Sat,15:11 | Rain  | Angle       | P.D. only        | Wet        | South | Going ahead         | Pick-up truck             | Other motor vehicle |   |
|                        |       |             |                  |            | East  | Going ahead         | Automobile, station wagon | Other motor vehicle |   |
|                        |       |             |                  |            |       |                     |                           |                     |   |
| 2016-Dec-31, Sat,22:11 | Snow  | Approaching | P.D. only        | Loose snow | North | Going ahead         | Automobile, station wagon | Other motor vehicle |   |
|                        |       |             |                  |            | South | Going ahead         | Automobile, station wagon | Other motor vehicle |   |
|                        |       |             |                  |            |       |                     |                           |                     |   |
| 2017-Nov-20, Mon,14:15 | Clear | SMV other   | Non-fatal injury | Dry        | North | Going ahead         | Unknown                   | Pedestrian          | 1 |
|                        |       |             |                  |            |       |                     |                           |                     |   |



## **APPENDIX F**

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Relevant Excerpts from Other Transportation Studies

transit trips is estimated to be 65 to 80 additional persons/h and the increase in active trips is also 45 to 135 persons/h. These developments represent the redevelopment of the existing heritage buildings, which are currently vacant.

## Residential Trip Generation

Using the TRANS Trip Generation rates outlined in Table 1 and the TRANS Trip Generation mode splits for the residential component of the site, the total amount of person trips generated by the proposed 1,000 residential units is summarized in Table 5.

Table 5: Projected Person Trip Generation - Residential

| Land Use               | Area        | AM Peak (Person Trips/h) |     |       | PM Peak (Person Trips/h) |     |       |
|------------------------|-------------|--------------------------|-----|-------|--------------------------|-----|-------|
|                        |             | In                       | Out | Total | In                       | Out | Total |
| High-Rise Condominiums | 1,000 units | 267                      | 696 | 963   | 504                      | 366 | 870   |

As shown in Table 5, a total of 963 and 870 person-trips per hour are projected to travel to/from the proposed residential development during the weekday morning and afternoon commuter peak hours. Using the model splits from the TRANS Trip Generation report, these person trips were broken down into people trips as outlined in Table 6.

Table 6: TRANS Model Site Trip Generation - Residential

| Travel Mode               | Mode Share  |     | AM Peak (Person Trips/h) |            |            | PM Peak (Person Trips/h) |            |            |
|---------------------------|-------------|-----|--------------------------|------------|------------|--------------------------|------------|------------|
|                           | AM          | PM  | In                       | Out        | Total      | In                       | Out        | Total      |
| Auto Driver               | 27%         | 23% | 72                       | 188        | 260        | 116                      | 84         | 200        |
| Auto Passenger            | 3%          | 6%  | 7                        | 21         | 28         | 31                       | 21         | 52         |
| Transit                   | 27%         | 29% | 73                       | 188        | 261        | 146                      | 107        | 253        |
| Non-motorized             | 43%         | 42% | 115                      | 299        | 414        | 211                      | 154        | 365        |
| <b>Total Person Trips</b> | <b>100%</b> |     | <b>267</b>               | <b>696</b> | <b>963</b> | <b>504</b>               | <b>366</b> | <b>870</b> |

As shown in Table 6, based on the TRANS Trip Generation rates and TRANS modal shares, the proposed residential developments are projected to generate approximately 260 and 200 'new' veh/h during the weekday morning and afternoon peak hours, respectively. The increase in two-way transit trips is estimated to be approximately 260 to 250 persons per hour, and the increase in bike/walk trips is approximately 415 and 365 persons per hour.

The total development trip generation, including the proposed office, retail and residential developments is summarized in Table 7.

Table 7: Total Site Person-Trip Generation

| Travel Mode                      | AM Peak (Person Trips/h) |            |              | PM Peak (Person Trips/h) |            |              |
|----------------------------------|--------------------------|------------|--------------|--------------------------|------------|--------------|
|                                  | In                       | Out        | Total        | In                       | Out        | Total        |
| Auto Driver                      | 132                      | 201        | 333          | 146                      | 156        | 302          |
| Auto Passenger                   | 24                       | 26         | 50           | 43                       | 44         | 87           |
| Transit                          | 128                      | 198        | 326          | 165                      | 167        | 332          |
| Non-motorized                    | 146                      | 313        | 459          | 271                      | 230        | 501          |
| <i>Less Retail Pass-By (30%)</i> | -2                       | -2         | -4           | -6                       | -6         | -12          |
| <b>Total Person Trips</b>        | <b>430</b>               | <b>738</b> | <b>1,168</b> | <b>625</b>               | <b>597</b> | <b>1,222</b> |
| <b>Total 'New' Auto Trips</b>    | <b>130</b>               | <b>199</b> | <b>329</b>   | <b>140</b>               | <b>150</b> | <b>290</b>   |

Table 11: Future Projected 2030/2035 Office Trip Generation

| Travel Mode                   | Mode Share  | AM Peak (Person Trips/h) |           |            | PM Peak (Person Trips/h) |            |            |
|-------------------------------|-------------|--------------------------|-----------|------------|--------------------------|------------|------------|
|                               |             | In                       | Out       | Total      | In                       | Out        | Total      |
| Auto Driver                   | 15%         | 20                       | 4         | 24         | 4                        | 19         | 23         |
| Auto Passenger                | 5%          | 7                        | 1         | 8          | 2                        | 7          | 9          |
| Transit                       | 50%         | 66                       | 11        | 77         | 11                       | 61         | 72         |
| Non-motorized                 | 30%         | 39                       | 6         | 45         | 6                        | 36         | 42         |
| <b>Total Person Trips</b>     | <b>100%</b> | <b>132</b>               | <b>22</b> | <b>154</b> | <b>23</b>                | <b>123</b> | <b>146</b> |
| <b>Total 'New' Auto Trips</b> |             | <b>20</b>                | <b>4</b>  | <b>24</b>  | <b>4</b>                 | <b>19</b>  | <b>23</b>  |

Table 12: Future Projected 2030/2035 Retail Trip Generation

| Travel Mode                   | Mode Share  | AM Peak (Person Trips/h) |           |           | PM Peak (Person Trips/h) |            |            |
|-------------------------------|-------------|--------------------------|-----------|-----------|--------------------------|------------|------------|
|                               |             | In                       | Out       | Total     | In                       | Out        | Total      |
| Auto Driver                   | 15%         | 5                        | 3         | 8         | 15                       | 17         | 32         |
| Auto Passenger                | 5%          | 2                        | 1         | 3         | 5                        | 6          | 11         |
| Transit                       | 20%         | 6                        | 4         | 10        | 20                       | 21         | 41         |
| Non-motorized                 | 60%         | 18                       | 12        | 30        | 58                       | 64         | 122        |
| Less Retail Pass-By (30%)     |             | -1                       | -1        | -2        | -5                       | -5         | -10        |
| <b>Total Person Trips</b>     | <b>100%</b> | <b>31</b>                | <b>20</b> | <b>51</b> | <b>98</b>                | <b>108</b> | <b>206</b> |
| <b>Total 'New' Auto Trips</b> |             | <b>5</b>                 | <b>3</b>  | <b>8</b>  | <b>15</b>                | <b>17</b>  | <b>32</b>  |

Table 13: Future Projected 2030/2035 Residential Trip Generation

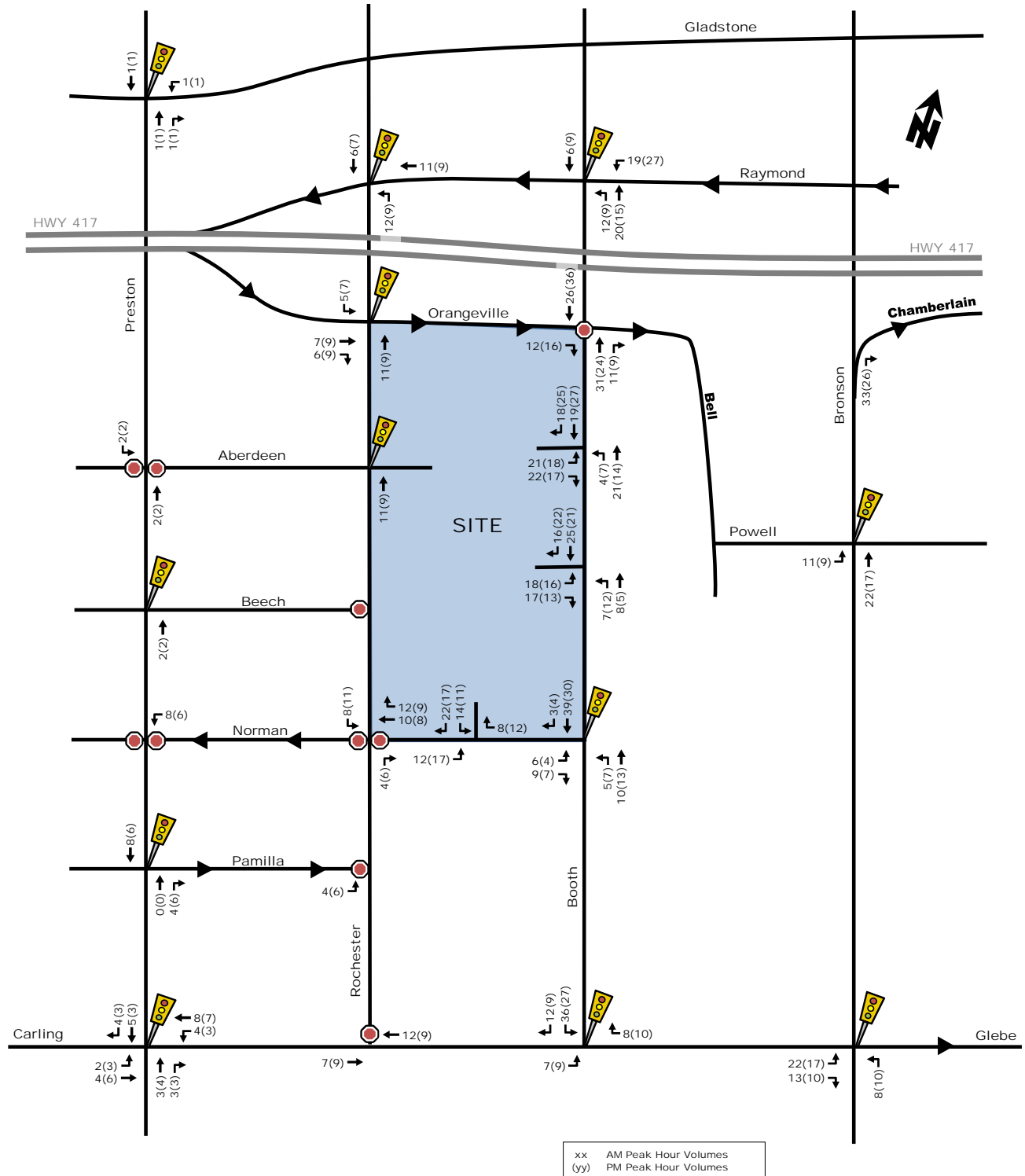
| Travel Mode                   | Mode Share  | AM Peak (Person Trips/h) |            |            | PM Peak (Person Trips/h) |            |            |
|-------------------------------|-------------|--------------------------|------------|------------|--------------------------|------------|------------|
|                               |             | In                       | Out        | Total      | In                       | Out        | Total      |
| Auto Driver                   | 15%         | 40                       | 105        | 145        | 75                       | 55         | 130        |
| Auto Passenger                | 5%          | 13                       | 35         | 48         | 25                       | 19         | 44         |
| Transit                       | 50%         | 134                      | 348        | 482        | 252                      | 183        | 435        |
| Non-motorized                 | 30%         | 81                       | 207        | 288        | 151                      | 110        | 261        |
| <b>Total Person Trips</b>     | <b>100%</b> | <b>268</b>               | <b>695</b> | <b>963</b> | <b>503</b>               | <b>367</b> | <b>870</b> |
| <b>Total 'New' Auto Trips</b> |             | <b>40</b>                | <b>105</b> | <b>145</b> | <b>75</b>                | <b>55</b>  | <b>130</b> |

Table 14: Future Projected 2030/2035 Total Site-Generated Person Trips

| Travel Mode                   | Mode Share  | AM Peak (Person Trips/h) |            |              | PM Peak (Person Trips/h) |            |              |
|-------------------------------|-------------|--------------------------|------------|--------------|--------------------------|------------|--------------|
|                               |             | In                       | Out        | Total        | In                       | Out        | Total        |
| Auto Driver                   | 15%         | 65                       | 112        | 177          | 94                       | 91         | 185          |
| Auto Passenger                | 5%          | 22                       | 37         | 59           | 32                       | 32         | 64           |
| Transit                       | 50%         | 206                      | 363        | 569          | 283                      | 265        | 548          |
| Non-motorized                 | 30%         | 138                      | 225        | 363          | 215                      | 210        | 425          |
| Less Retail Pass-By (30%)     |             | -1                       | -1         | -2           | -5                       | -5         | -10          |
| <b>Total Person Trips</b>     | <b>100%</b> | <b>431</b>               | <b>737</b> | <b>1,168</b> | <b>624</b>               | <b>598</b> | <b>1,222</b> |
| <b>Total 'New' Auto Trips</b> |             | <b>64</b>                | <b>111</b> | <b>175</b>   | <b>89</b>                | <b>86</b>  | <b>175</b>   |

As shown in Table 14, the resulting number of potential 'new' two-way vehicle trips for the proposed developments by 2030 is approximately 175 and 175 veh/h during the weekday morning and afternoon peak hours, respectively. Transit trips in

Figure 13: 'New' and 'Pass-by' 2030 Site-Generated Vehicle Traffic



## 3.2. BACKGROUND NETWORK TRAVEL DEMANDS

### 3.2.1. TRANSPORTATION NETWORK PLANS

Refer to Section 2.1.2 Planned Conditions.

Figure 5: 'New' Site-Generated Traffic Volumes

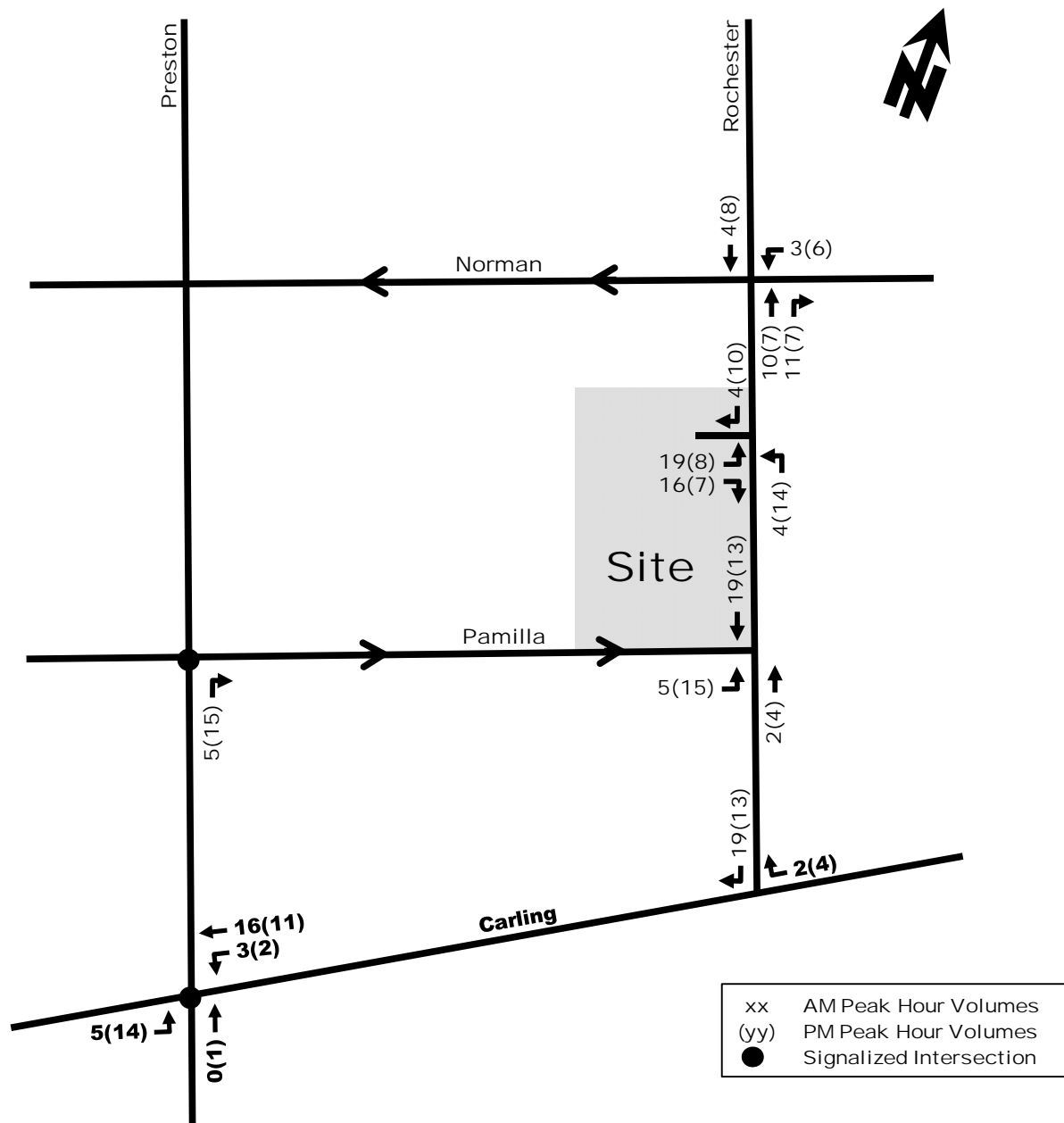
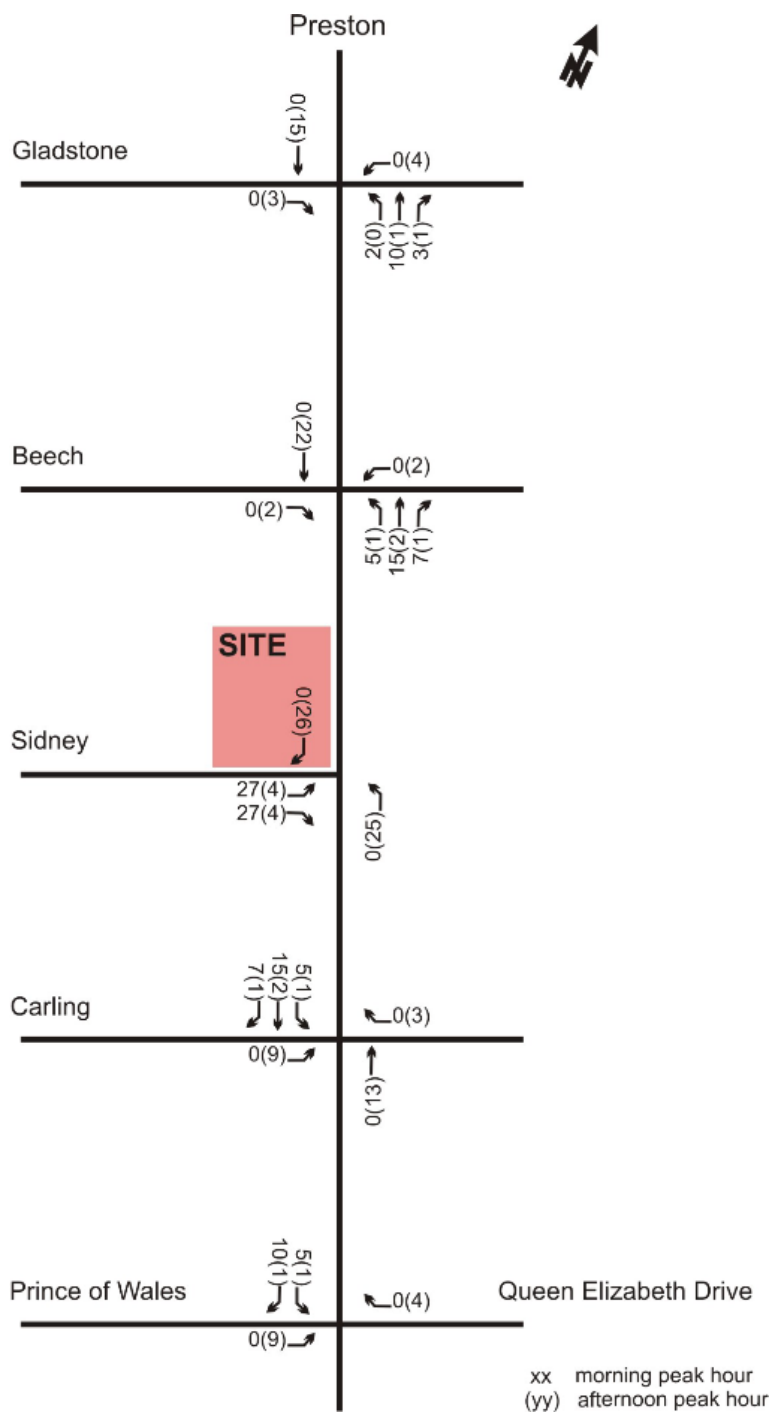


Figure 5 illustrates the proposed development's site-generated traffic volumes, however, the 'net' increase in site traffic generation will be less than this, as the site is currently occupied by an approximate 60 space pay/display parking lot. Peak hour traffic counts were conducted at the existing site connection to Rochester Street and were found to be 21 veh/h inbound during the morning peak hour and 24 veh/h outbound during the afternoon peak hour. No trips were observed in the outbound direction during the morning peak hour or inbound during the afternoon peak hour.

**Figure 5: "Net" Increase in Site-Generated Traffic**



**TABLE 5: High Rise Condo Trip Generation (Net Increase)**

| Travel Mode                   | Mode Share | AM Peak<br>(Persons/hr) |           |           | PM Peak<br>(Persons/hr) |          |           |
|-------------------------------|------------|-------------------------|-----------|-----------|-------------------------|----------|-----------|
|                               |            | In                      | Out       | Total     | In                      | Out      | Total     |
| Auto Driver                   | 30%        | 3                       | 12        | 15        | 6                       | 4        | 10        |
| Auto Passenger                | 10%        | 1                       | 4         | 5         | 2                       | 2        | 4         |
| Transit                       | 40%        | 3                       | 16        | 19        | 8                       | 5        | 13        |
| Non-motorized                 | 20%        | 1                       | 7         | 8         | 3                       | 2        | 5         |
| Total Person Trips            | 100%       | 8                       | 39        | 47        | 19                      | 13       | 32        |
| <b>Total 'New' Auto Trips</b> |            | <b>3</b>                | <b>12</b> | <b>15</b> | <b>6</b>                | <b>4</b> | <b>10</b> |

**TABLE 6: Commercial Trip Generation (Net Increase)**

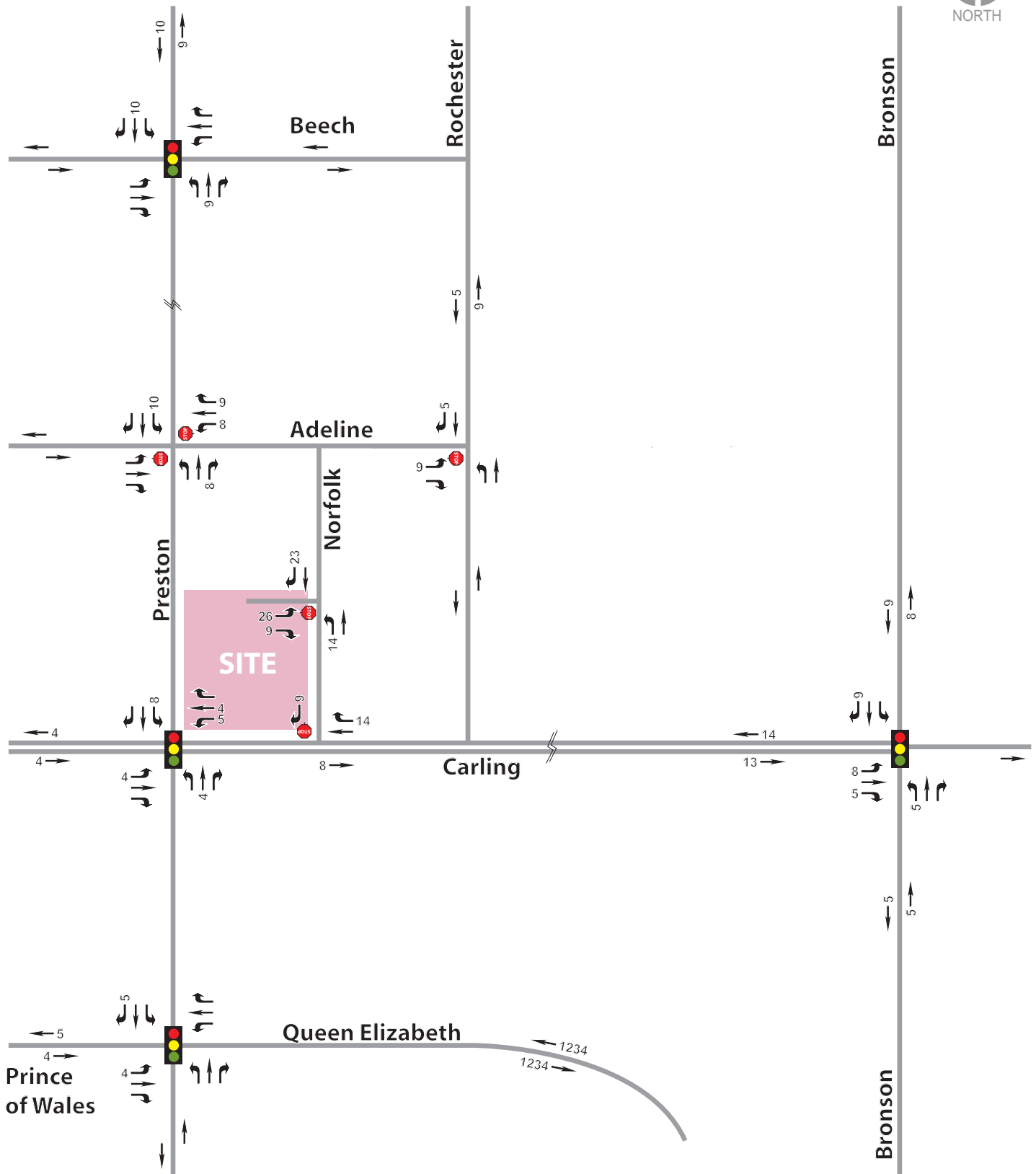
| Travel Mode                   | Mode Share | AM Peak<br>(Persons/hr) |          |           | PM Peak<br>(Persons/hr) |           |           |
|-------------------------------|------------|-------------------------|----------|-----------|-------------------------|-----------|-----------|
|                               |            | In                      | Out      | Total     | In                      | Out       | Total     |
| Auto Driver                   | 30%        | 8                       | 3        | 11        | 5                       | 11        | 16        |
| Auto Passenger                | 10%        | 2                       | 1        | 3         | 2                       | 4         | 6         |
| Transit                       | 40%        | 10                      | 2        | 12        | 5                       | 14        | 19        |
| Non-motorized                 | 20%        | 5                       | 1        | 6         | 2                       | 7         | 9         |
| Total Person Trips            | 100%       | 25                      | 7        | 32        | 14                      | 36        | 50        |
| <b>Total 'New' Auto Trips</b> |            | <b>8</b>                | <b>3</b> | <b>11</b> | <b>5</b>                | <b>11</b> | <b>16</b> |

**TABLE 7: Total Additional Site Vehicle Trip Generation (condo + commercial/office)**

| Travel Mode                       | AM Peak (veh/h) |           |           | PM Peak (veh/h) |           |           |
|-----------------------------------|-----------------|-----------|-----------|-----------------|-----------|-----------|
|                                   | In              | Out       | Total     | In              | Out       | Total     |
| High Rise Condo Trip Generation   | 3               | 12        | 15        | 6               | 4         | 10        |
| Commercial/Office Trip Generation | 8               | 3         | 11        | 5               | 11        | 16        |
| <b>Total 'New' Auto Trips</b>     | <b>11</b>       | <b>15</b> | <b>26</b> | <b>11</b>       | <b>15</b> | <b>26</b> |

As summarized in Table 7, the net traffic increase associated with the proposed Site Plan changes is estimated at 26 vph during both peak periods, or less than one new vehicle every two minutes during peak hours.

As the initial proposal addressed in the June 2011 CTS had a "net" new traffic generation of 50 vph to 65 vph two-way total, as the changes per the December 2012 Addendum #1 added 8 vph and as the current Site Plan changes add 26 vph, the resultant total peak hour generation of the current proposal is in the range of 85 vph to 100 vph, with approximately



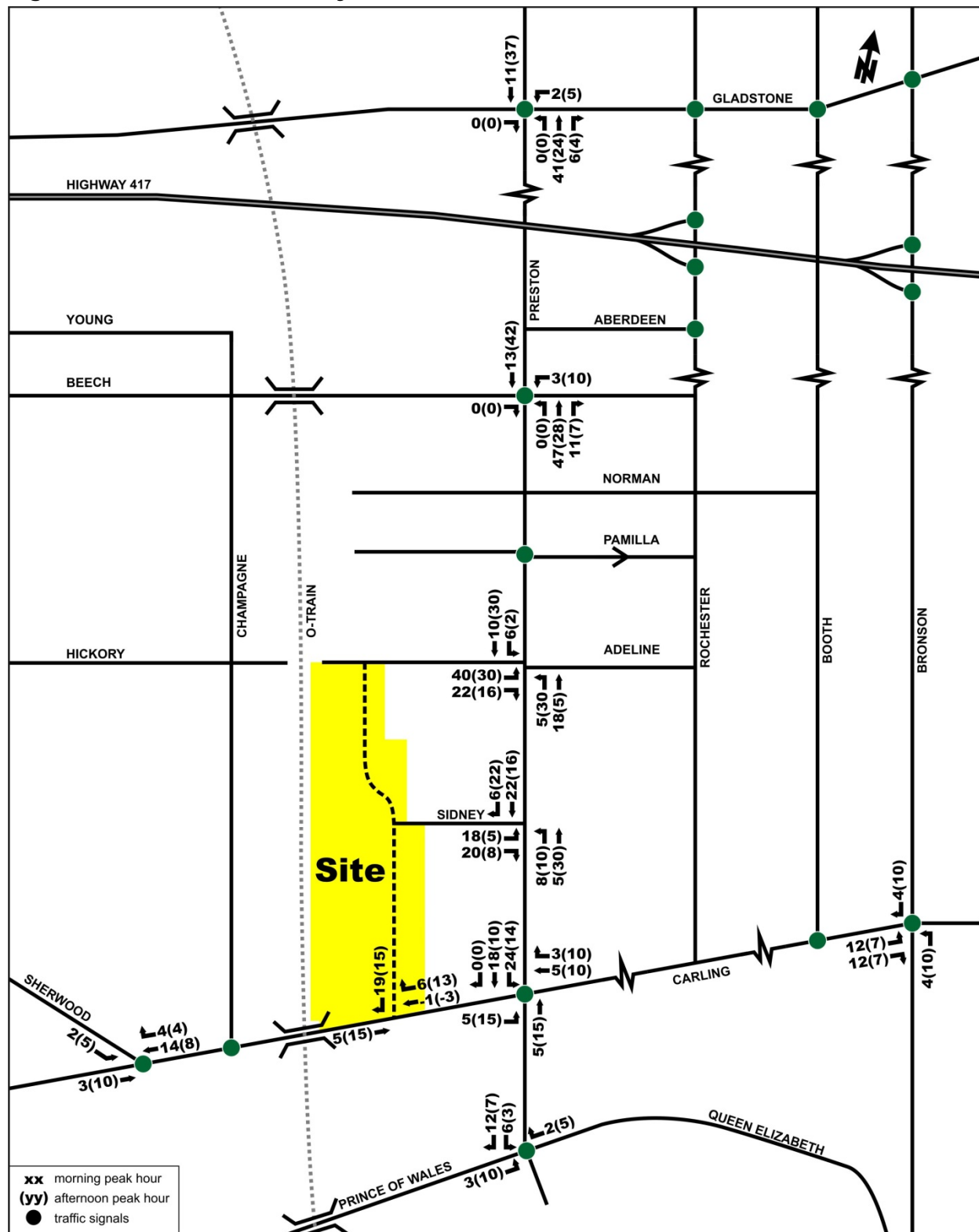
Mixed-Use Development - 505 Preston Street  
Community Transportation Study

**EXHIBIT 6B**  
Site-Generated Traffic  
PM Peak Hour

PROJECT No. 31637  
DATE: Dec. 2012  
SCALE: N.T.S.  
0m 0m 0m



Figure 6: 'New' and 'Pass-by' Site-Generated Traffic Volumes



## **APPENDIX G**

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### **TDM – Supportive Development Design Checklist**

## **TDM-Supportive Development Design and Infrastructure Checklist:** *Non-Residential Developments (office, institutional, retail or industrial)*

| <b>Legend</b>   |  |
|-----------------|--|
| <b>REQUIRED</b> | The Official Plan or Zoning By-law provides related guidance that must be followed                             |
| <b>BASIC</b>    | The measure is generally feasible and effective, and in most cases would benefit the development and its users |
| <b>BETTER</b>   | The measure could maximize support for users of sustainable modes, and optimize development performance        |

| <b>TDM-supportive design &amp; infrastructure measures:</b><br><i>Non-residential developments</i> |   | <b>Check if completed &amp; add descriptions, explanations or plan/drawing references</b>     |
|--|---|---|
| <b>1. WALKING &amp; CYCLING: ROUTES</b>  |   |   |
| <b>1.1 Building location &amp; access points</b>   |   |   |
| <b>BASIC</b>   | 1.1.1 Locate building close to the street, and do not locate parking areas between the street and building entrances  | <input checked="" type="checkbox"/>   |
| <b>BASIC</b>   | 1.1.2 Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations  | <input checked="" type="checkbox"/>   |
| <b>BASIC</b>   | 1.1.3 Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort   | <input checked="" type="checkbox"/>   |
| <b>1.2 Facilities for walking &amp; cycling</b>  |   |   |
| <b>REQUIRED</b>  | 1.2.1 Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations ( <i>see Official Plan policy 4.3.3</i> )  | <input checked="" type="checkbox"/> No changes are proposed to existing pedestrian facilities |
| <b>REQUIRED</b>  | 1.2.2 Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible ( <i>see Official Plan policy 4.3.12</i> ) | <input checked="" type="checkbox"/> No changes are proposed to existing pedestrian facilities |

| TDM-supportive design & infrastructure measures:<br><i>Non-residential developments</i> |  | Check if completed &<br>add descriptions, explanations<br>or plan/drawing references          |
|---|--|---|
| REQUIRED  | 1.2.3 Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks ( <i>see Official Plan policy 4.3.10</i> )  | <input checked="" type="checkbox"/> No changes are proposed to existing pedestrian facilities |
| REQUIRED  | 1.2.4 Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps ( <i>see Official Plan policy 4.3.10</i> )   | <input checked="" type="checkbox"/> No changes are proposed to existing pedestrian facilities |
| REQUIRED  | 1.2.5 Include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on-road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians ( <i>see Official Plan policy 4.3.11</i> ) | <input checked="" type="checkbox"/> No changes are proposed to existing pedestrian facilities |
| BASIC   | 1.2.6 Provide safe, direct and attractive walking routes from building entrances to nearby transit stops   | <input checked="" type="checkbox"/>   |
| BASIC   | 1.2.7 Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible  | <input type="checkbox"/>  |
| BASIC   | 1.2.8 Design roads used for access or circulation by cyclists using a target operating speed of no more than 30 km/h, or provide a separated cycling facility  | <input type="checkbox"/>  |
| <b>1.3 Amenities for walking &amp; cycling</b>  |  |   |
| BASIC   | 1.3.1 Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails  | <input type="checkbox"/>  |
| BASIC   | 1.3.2 Provide wayfinding signage for site access (where required, e.g. when multiple buildings or entrances exist) and egress (where warranted, such as when directions to reach transit stops/stations, trails or other common destinations are not obvious)  | <input type="checkbox"/>  |

| TDM-supportive design & infrastructure measures:<br><i>Non-residential developments</i> |  | Check if completed &<br>add descriptions, explanations<br>or plan/drawing references |
|---|--|--|
| <b>2. WALKING &amp; CYCLING: END-OF-TRIP FACILITIES</b>                                 |  |  |
| <b>2.1 Bicycle parking</b>  |  |  |
| REQUIRED  | 2.1.1 Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible ( <i>see Official Plan policy 4.3.6</i> )  | <input type="checkbox"/> N/A – no bicycle parking required                           |
| REQUIRED  | 2.1.2 Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well-used areas ( <i>see Zoning By-law Section 111</i> )   | <input type="checkbox"/> N/A – no bicycle parking required                           |
| REQUIRED  | 2.1.3 Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored ( <i>see Zoning By-law Section 111</i> )   | <input type="checkbox"/> N/A – no bicycle parking required                           |
| BASIC   | 2.1.4 Provide bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met), plus the expected peak number of customer/visitor cyclists  | <input type="checkbox"/>   |
| BETTER  | 2.1.5 Provide bicycle parking spaces equivalent to the expected number of commuter and customer/visitor cyclists, plus an additional buffer (e.g. 25 percent extra) to encourage other cyclists and ensure adequate capacity in peak cycling season                        | <input type="checkbox"/>   |
| <b>2.2 Secure bicycle parking</b>   |  |  |
| REQUIRED  | 2.2.1 Where more than 50 bicycle parking spaces are provided for a single office building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers ( <i>see Zoning By-law Section 111</i> ) | <input type="checkbox"/> N/A   |
| BETTER  | 2.2.2 Provide secure bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met)   | <input type="checkbox"/>   |
| <b>2.3 Shower &amp; change facilities</b>   |  |  |
| BASIC   | 2.3.1 Provide shower and change facilities for the use of active commuters   | <input type="checkbox"/>   |
| BETTER  | 2.3.2 In addition to shower and change facilities, provide dedicated lockers, grooming stations, drying racks and laundry facilities for the use of active commuters   | <input type="checkbox"/>   |
| <b>2.4 Bicycle repair station</b>   |  |  |
| BETTER  | 2.4.1 Provide a permanent bike repair station, with commonly used tools and an air pump, adjacent to the main bicycle parking area (or secure bicycle parking area, if provided)   | <input type="checkbox"/>   |

| TDM-supportive design & infrastructure measures:<br><i>Non-residential developments</i> |   | Check if completed &<br>add descriptions, explanations<br>or plan/drawing references |
|---|---|--|
| <b>3. TRANSIT</b>   |   |  |
| <b>3.1 Customer amenities</b>   |   |  |
| BASIC   | 3.1.1 Provide shelters, lighting and benches at any on-site transit stops   | <input type="checkbox"/>   |
| BASIC   | 3.1.2 Where the site abuts an off-site transit stop and insufficient space exists for a transit shelter in the public right-of-way, protect land for a shelter and/or install a shelter | <input type="checkbox"/>   |
| BETTER  | 3.1.3 Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building   | <input type="checkbox"/>   |
| <b>4. RIDESHARING</b>   |   |  |
| <b>4.1 Pick-up &amp; drop-off facilities</b>  |   |  |
| BASIC   | 4.1.1 Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones        | <input type="checkbox"/>   |
| <b>4.2 Carpool parking</b>  |   |  |
| BASIC   | 4.2.1 Provide signed parking spaces for carpools in a priority location close to a major building entrance, sufficient in number to accommodate the mode share target for carpools      | <input type="checkbox"/>   |
| BETTER  | 4.2.2 At large developments, provide spaces for carpools in a separate, access-controlled parking area to simplify enforcement  | <input type="checkbox"/>   |
| <b>5. CARSHARING &amp; BIKESHARING</b>  |   |  |
| <b>5.1 Carshare parking spaces</b>  |   |  |
| BETTER  | 5.1.1 Provide carshare parking spaces in permitted non-residential zones, occupying either required or provided parking spaces ( <i>see Zoning By-law Section 94</i> )                  | <input type="checkbox"/>   |
| <b>5.2 Bikeshare station location</b>   |   |  |
| BETTER  | 5.2.1 Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection                                     | <input type="checkbox"/>   |

| TDM-supportive design & infrastructure measures:<br><i>Non-residential developments</i> |   | Check if completed &<br>add descriptions, explanations<br>or plan/drawing references |
|---|---|--|
| <b>6. PARKING</b>   |   |  |
| <b>6.1 Number of parking spaces</b>   |   |  |
| <b>REQUIRED</b>   | 6.1.1 Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for  | <input checked="" type="checkbox"/>  |
| <b>BASIC</b>  | 6.1.2 Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking  | <input type="checkbox"/>   |
| <b>BASIC</b>  | 6.1.3 Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly ( <i>see Zoning By-law Section 104</i> )   | <input type="checkbox"/>   |
| <b>BETTER</b>   | 6.1.4 Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking ( <i>see Zoning By-law Section 111</i> ) | <input type="checkbox"/>   |
| <b>6.2 Separate long-term &amp; short-term parking areas</b>                            |   |  |
| <b>BETTER</b>   | 6.2.1 Separate short-term and long-term parking areas using signage or physical barriers, to permit access controls and simplify enforcement (i.e. to discourage employees from parking in visitor spaces, and vice versa)  | <input type="checkbox"/>   |
| <b>7. OTHER</b>   |   |  |
| <b>7.1 On-site amenities to minimize off-site trips</b>                                 |   |  |
| <b>BETTER</b>   | 7.1.1 Provide on-site amenities to minimize mid-day or mid-commute errands  | <input type="checkbox"/>   |