

31 October 2022  
Project: (220404)

Rocco Oliverio  
RKO Enterprise Inc.  
5687 Ferry Street  
Niagara Falls ON L2G 1S5

**RE: MIXED-USE DEVELOPMENT, 5687 FERRY STREET,  
CITY OF NIAGARA FALLS – TRANSPORTATION BRIEF**

---

Paradigm Transportation Solutions Limited was retained to prepare this traffic brief to support the proposed mixed-use development located at 5687 Ferry Street in the City of Niagara Falls, Ontario. **Figure 1 (attached)** illustrates the subject site's location.

Based on discussions with the City of Niagara Falls and the Region of Niagara, the scope of the Transportation Brief is limited to forecasting the weekday AM and PM peak hour vehicle traffic volumes generated by the proposed development and reviewing the impacts this traffic will have concerning Spring Street. In addition, the study will assess the need for an eastbound left-turn lane along Ferry Street at the proposed driveway.

## Roadway Characteristics

The following is noted concerning the study area roadways<sup>1</sup>:

- ▶ **Ferry Street** is an east-west regional road<sup>2</sup> with a two-lane cross-section. The statutory speed limit of 50 km/h is assumed. Sidewalks are present on both sides of the road. No dedicated on-street cycling facilities are present on the road.
- ▶ **Spring Street** is an east-west local road with a two-lane cross-section. The statutory speed limit of 50 km/h is assumed. Sidewalks are present on both sides of the road. No dedicated on-street cycling facilities are present on the road.

---

<sup>1</sup> City of Niagara Falls Official Plan. 2019

<sup>2</sup> Niagara Region – Regional Road Map 2021

## Existing Traffic Volumes

Turning movement counts are used to quantify the movement of vehicles. Existing traffic data at an intersection or road section forms the foundation for analysis. The counts are usually taken during peak periods to complete the level of service analysis.

### Ferry Street Volumes

Turning movement count data along Ferry Street was collected for a previous Transportation Impact Study completed by Paradigm for adjacent development<sup>3</sup>. **Appendix A** contains the volumes.

### Spring Street Volumes

As no historical count data is provided along Spring Street, a new count conducted in October 2022 has been completed at Spring Street and Temperance Avenue. It is acknowledged the count was completed during the Fall of 2022, outside the summer peak tourist season. As a result, a seasonal adjustment factor has been reviewed.

The Region of Niagara collects Annual Average Daily Traffic (AADT) and Summer Average Daily Traffic (SADT) for their regional road network<sup>4</sup>. **Table 1** summarizes the SADT and AADT along Ferry Street (Regional Road 20) and Stanley Street (Regional Road 102), the closest arterial roads adjacent to Spring Street. An average AADT to SADT factor of 1.761 is noted for the adjacent Regional Roads. This factor has been used to forecast the summer traffic conditions along Spring Street.

**TABLE 1: SEASONAL ADJUSTMENT FACTOR**

| Regional Road  | From                            | To                                 | Year | SADT   | AADT   | Difference (Volume) | Factor        |
|----------------|---------------------------------|------------------------------------|------|--------|--------|---------------------|---------------|
| 102            | Regional Road 20 (Ferry Street) | Regional Road 420 (Falls Avenue)   | 2018 | 25,300 | 20,500 | 4,800               | 1.2341        |
| 20             | Main Street                     | Regional Road 102 (Stanley Avenue) | 2018 | 14,200 | 12,700 | 1,500               | 1.1181        |
| <b>Average</b> |                                 |                                    |      |        |        |                     | <b>1.1761</b> |

Further, as traffic counts along Spring Street were collected in the Fall of 2022, outside of the peak summer tourist season, a seasonal adjustment has been applied to the traffic count to adjust volumes to remain consistent with summer traffic volumes.

**Figure 2 (attached)** illustrates the adjusted weekday peak-hour traffic at the study area intersection. **Appendix A** contains the traffic data.

<sup>3</sup> 220132: 5528 Ferry Street, Niagara Falls, ON Traffic Impact & Parking Study, Paradigm, May 2022.

<sup>4</sup> <https://niagaraopendata.ca/dataset/regional-road-traffic-volumes>



## Development Proposal

The property owner proposes developing the property as an 8-storey mixed-use building. The upper floors of the proposed building will be for the residential dwelling, which consists of 82 units (a mix of 2 and 3-bedroom units). The ground floor would be occupied by retail stores with a total gross floor area (GFA) of 3,519 square feet. Parking for the Site will consist of 105 parking spaces. Two entrances are being proposed for vehicle access, one on Ferry Street and the other on Spring Street. **Appendix B** contains reduced-scale architectural plans.

### Trip Generation

The Institute of Transportation Engineers (ITE) Trip Generation<sup>5</sup> methods are used to estimate the site trip generation. The following land use codes were referenced:

- ▶ LUC 221 Multifamily Housing (Mid-Rise)
- ▶ LUC 822 Retail Plaza (<40,000 sq.ft GFA)

Data for the peak hour of adjacent street traffic were used to estimate trip generation. Fitted curve equations with satisfactory R<sup>2</sup> values and independent variables were applied. The average rates have been applied if no equations were provided or satisfactory R<sup>2</sup> values and independent variables were unavailable. No reductions in alternative modes of transportation, internal trips or pass-by reduction have been applied to remain conservative. **Table 2** summarizes the projected trip generation associated with the build-out of the development. The development is estimated to generate approximately 32 trips during the AM peak hour and 55 trips during the PM peak hour.

**TABLE 2: ESTIMATED TRIP GENERATION**

| Land Use Code                               | GFA (sq. ft.) | Units | Trips        | AM Peak Hour |           |           |           | PM Peak Hour |           |           |           |
|---|---------------|-------|--------------|--------------|-----------|-----------|-----------|--------------|-----------|-----------|-----------|
|   |               |       |              | Rate         | In        | Out       | Total     | Rate         | In        | Out       | Total     |
| 221 - Multi-Family Housing Mid Rise (Units) | -             | 82    | Total        | Eqn.         | 5         | 19        | <b>24</b> | Eqn.         | 19        | 13        | <b>32</b> |
| 822 - Strip Retail (<40k) (GFA)             | 3,519         | -     | Total        | 2.36         | 5         | 3         | <b>8</b>  | 6.59         | 11        | 12        | <b>23</b> |
| <b>Total Trip Generation</b>                |               |       | <b>Total</b> |              | <b>10</b> | <b>22</b> | <b>32</b> |              | <b>30</b> | <b>25</b> | <b>55</b> |

<sup>5</sup> Trip Generation Manual 11th Edition + Supplement Institute of Transportation Engineers Washington DC 2020



## Trip Distribution

The directional distribution of traffic approaching and departing the development is a function of several variables: population densities, employment locations, existing travel patterns, and the efficiency of the Site's roadways. The estimated distribution was developed using the Transportation Tomorrow Survey<sup>6</sup> (TTS) data for the subject site and adjacent traffic zones. The TTS zone contains a mixture of residential and commercial land uses. **Table 3** summarizes the estimated trip distribution for site-generated traffic volumes. **Figure 3 (attached)** illustrates the weekday peak hour site-generated traffic volumes.

**TABLE 3: ESTIMATED TRIP DISTRIBUTION**

| Origin /Destination         | Distribution |
|-----------------------------|--------------|
| North via Stanley Avenue    | 55%          |
| North via Temperance Avenue | 2%           |
| South via Stanley Avenue    | 20%          |
| East via Ferry Street       | 3%           |
| West via Ferry Street       | 20%          |
| <b>Total</b>                | <b>100%</b>  |

## Future Traffic Growth

A horizon year of five years after the year of study (2027) has been assessed.

Traffic growth on area roadways is a function of the expected land development, economic activity, and changes in demographics. A frequently used procedure estimates an annual percentage increase and applies that increase to the study area traffic volumes. An alternative approach is to identify estimated traffic generated by specific planned significant developments that would be expected to affect the project study area roadways. For this assessment, both methods were utilized.

### General Growth

A growth rate of 2.0% was applied to the area roadways to account for population and employment growth. This growth rate is consistent with previous studies completed for adjacent development proposals.

### Site Specific Growth

In addition, traffic associated with the following developments has been included in the background traffic projections. Trip generation and distribution of traffic generated by the

---

<sup>6</sup> Transportation Tomorrow Survey 2016, University of Toronto Data Management Group.



developments were taken from the respective traffic impact studies. The background developments included are located at the following locations:

- ▶ 5566 Robinson Street – Mixed-use development containing a hotel, high-rise residential, and commercial land use.
- ▶ 5528 Ferry Street – Mixed-use development containing a high-rise residential and commercial land use.

## Future Traffic Projections

### 2027 Background Projections

The forecast background traffic volumes within the study area are estimated to consist of generalized background traffic growth and other planned developments. **Figure 4 (attached)** illustrates the forecasted background traffic volumes.

### 2027 Total Projections

The forecast total traffic volumes within the study area are estimated to consist of generalized background traffic growth, other planned developments, and Site generated traffic. **Figure 5 (attached)** illustrates the forecasted total traffic volumes.

## Spring Street Volumes

Roadway classifications are generally determined following the Transportation Association of Canada Geometric Design Guidelines. A municipal road network typically has a road hierarchy that consists of local, collector and arterial roadways.

According to the city's Official Plan, the primary function of a local roadway, Spring Street, is to provide access to abutting properties and carry traffic predominantly of a local nature. Typically, roadways have low volumes of traffic over short distances. Local roads generally are designed to accommodate on-street parking, sidewalks and limited landscaping in the boulevards.

As indicated in the Transportation Association of Canada (TAC) Geometric Design Guide<sup>7</sup>, the environmental capacity for a local roadway is approximately 1,000 – 3,000 vehicles per day. The existing daily volume along Spring Street is 700 vehicles.

As outlined above, the proposed development will result in the trip generation of 32-55 trips during the respective weekday peak hours. After considering the distribution patterns, the development is estimated to add 8 trips during the AM peak hour and 20 trips during the PM Peak hour along the local neighbourhood roadways, i.e., Spring Street. This additional volume

---

<sup>7</sup> Transportation Association of Canada, Geometric Design Guide for Canadian Road, June 2017



is noted to be low and is expected to have minimal impact on the capacity and operations along Spring Street.

### Left Turn Lane Assessment

The unsignalized intersection of Ferry Street with the proposed driveway to the Site has been assessed to determine if the future traffic volumes warrant the installation of a left turn lane along Ferry Street. The warrants for left-turn lanes follow the requirements in the Ministry of Transportation's (MTO) Geometric Design Standards<sup>8</sup>. A design speed of 20 kilometres per hour over the posted or assumed speed limit has been utilized. **Table 4** summarizes the results of the left-turn lane warrant analyses. The following is noted:

- ▶ As the percentage of eastbound left-turning traffic is well below the 5% threshold, a left-turn lane is not warranted along Ferry Street at Driveway A.

**TABLE 4: LEFT-TURN LANE WARRANT**

| Ferry Street at Driveway A         |                      |                    |
|------------------------------------|----------------------|--------------------|
| Approach Direction<br>Design Speed | Eastbound<br>70 km/h |                    |
| Peak Hour                          | AM                   | PM                 |
| Advancing Volume                   | 328                  | 644                |
| Opposing Volumes                   | 344                  | 701                |
| Left Turning Traffic               | 2                    | 6                  |
| % of Left Turning Traffic          | 0.6%                 | 0.9%               |
| Figure Used*                       | N/A (less than 5%)   | N/A (less than 5%) |
| <b>Warranted</b>                   | <b>No</b>            | <b>No</b>          |
| Storage Length Required            | N/A                  | N/A                |

Based on MTO Design Supplement for TAC Geometric Design Guide for Canadian Road - June 2017

<sup>8</sup> Based on MTO Design Supplement for TAC Geometric Design Guide for Canadian Road - June 2017



## Conclusion

The proposed development consists of an 8-storey mixed-use building. The upper floors of the proposed building will be for the residential dwelling, which consists of 82 units (a mix of 2 and 3-bedroom units). Retail stores would occupy the ground floor with a total gross floor area (GFA) of 3,519 square feet. Parking for the Site will consist of 105 parking spaces. Two entrances are being proposed for vehicle access, one on Ferry Street and the other on Spring Street. A total of 32 AM peak hour vehicle trips and 55 PM peak hour vehicle trips are forecast to be generated by the proposed development.

After considering the distribution patterns, the development is estimated to add 8 trips during the AM peak hour and 20 trips during the PM Peak hour along Spring Street. This additional volume is noted to be low and is expected to have minimal impact on the capacity and operations along Spring Street.

The unsignalized intersection of Ferry Street with the proposed driveway to the Site (Driveway A) has been assessed to determine if the future traffic volumes warrant the installation of a left-turn lane along Ferry Street. As the percentage of eastbound left-turning traffic is well below the 5% threshold, a left-turn lane is not warranted along Ferry Street at Driveway A.

Yours very truly,

### PARADIGM TRANSPORTATION SOLUTIONS LIMITED



**Adam J. Makarewicz**  
Dipl. T., C.E.T. MITE  
Senior Project Manager



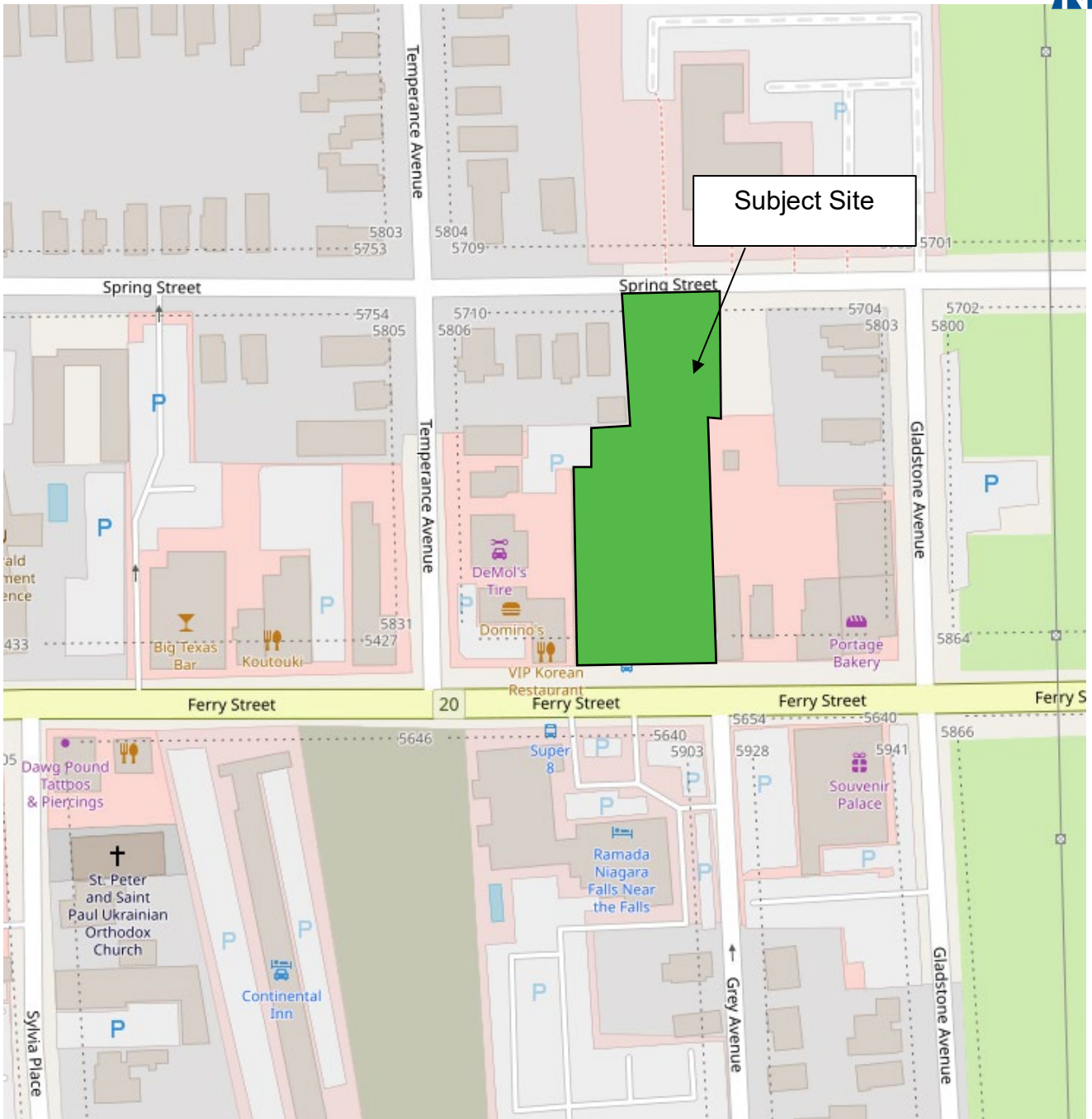
**Stew Elkins**  
BES, MITE  
Vice President and Chief Resource Officer



## Attachments



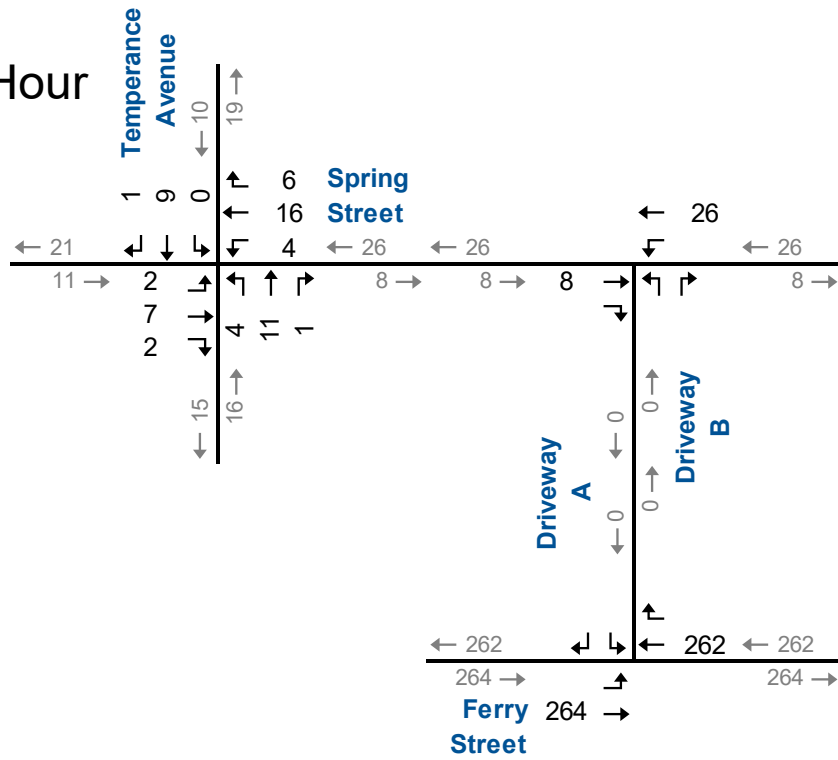




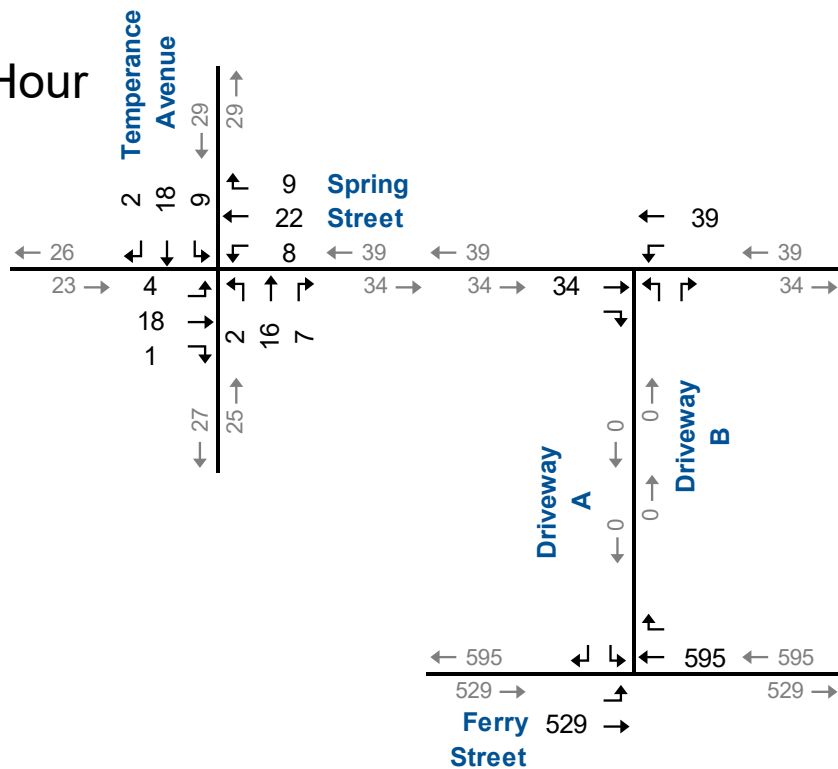
# Development Location



# Weekday AM Peak Hour



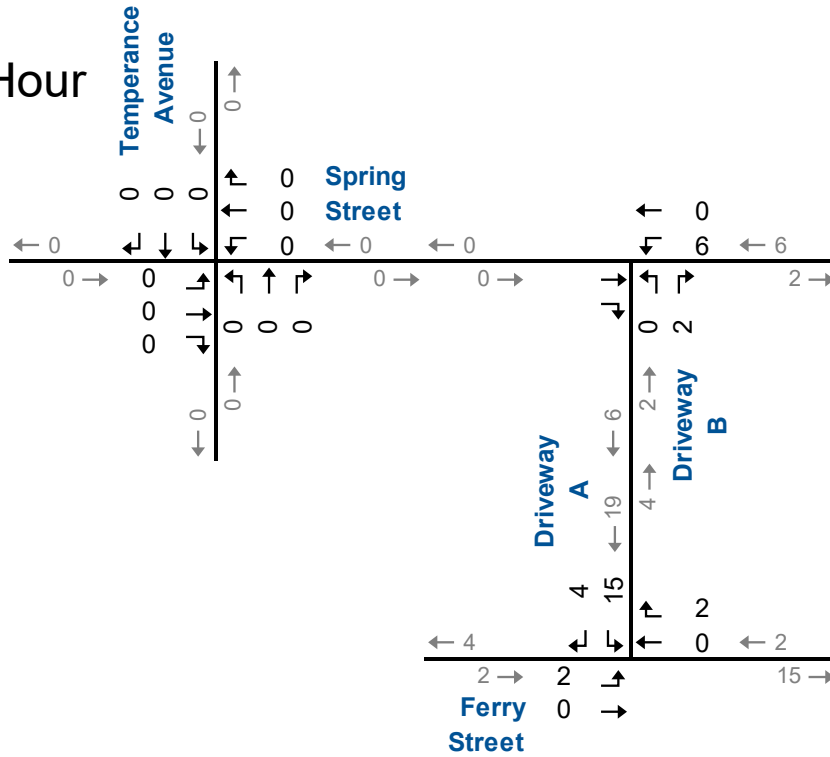
# Weekday PM Peak Hour



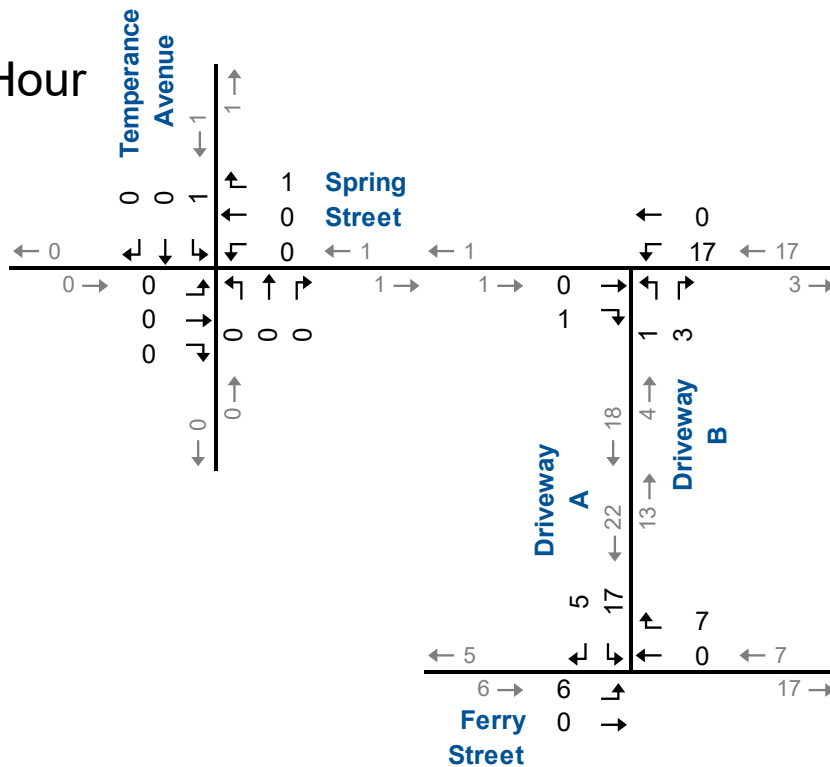
## Base Year (2022) Traffic Volumes



### Weekday AM Peak Hour



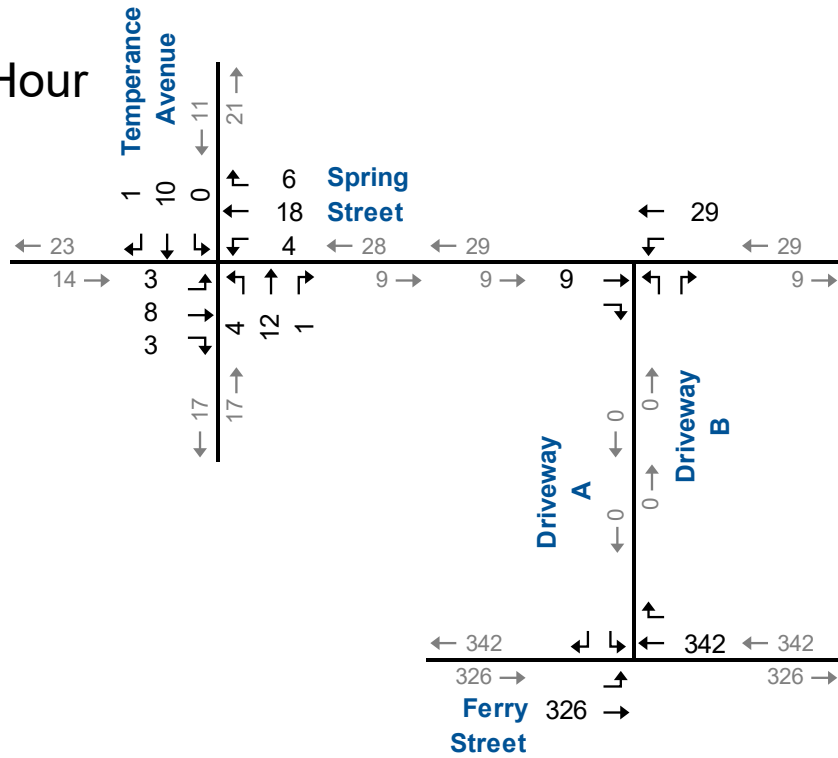
### Weekday PM Peak Hour



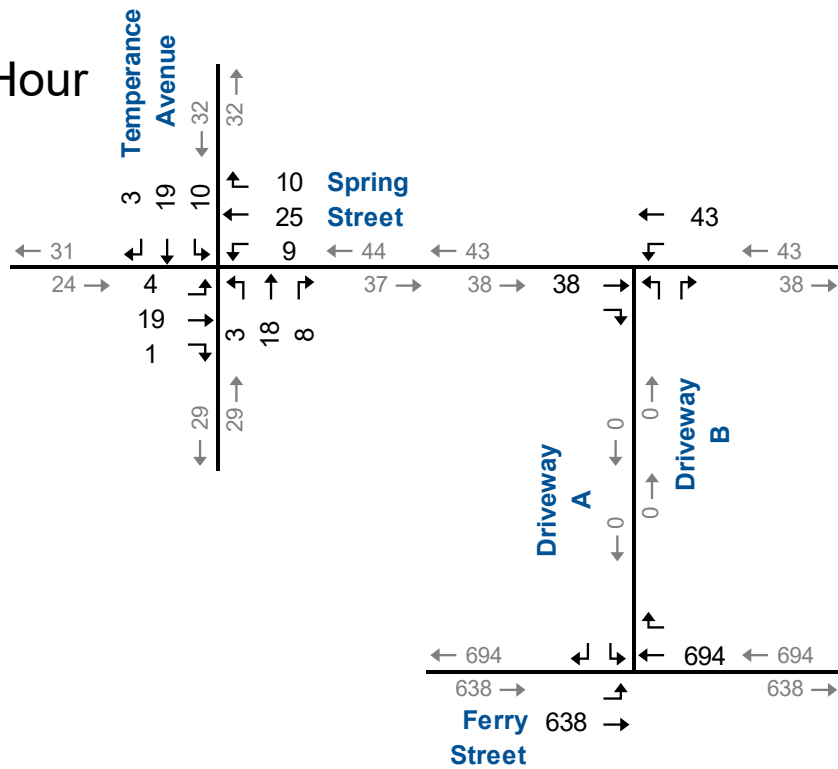
## Site Generated Traffic Volumes



### Weekday AM Peak Hour



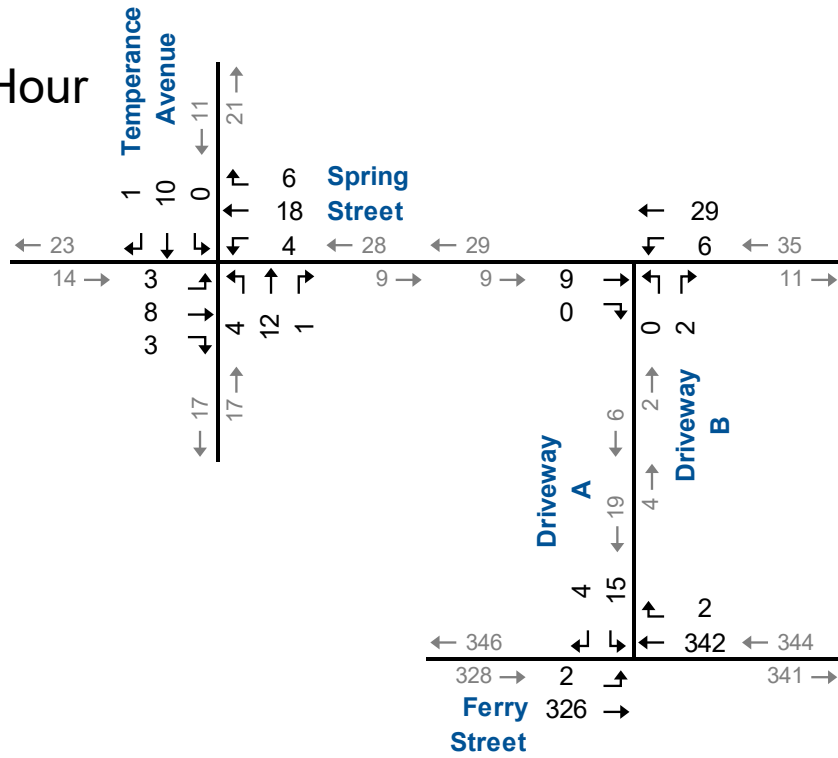
### Weekday PM Peak Hour



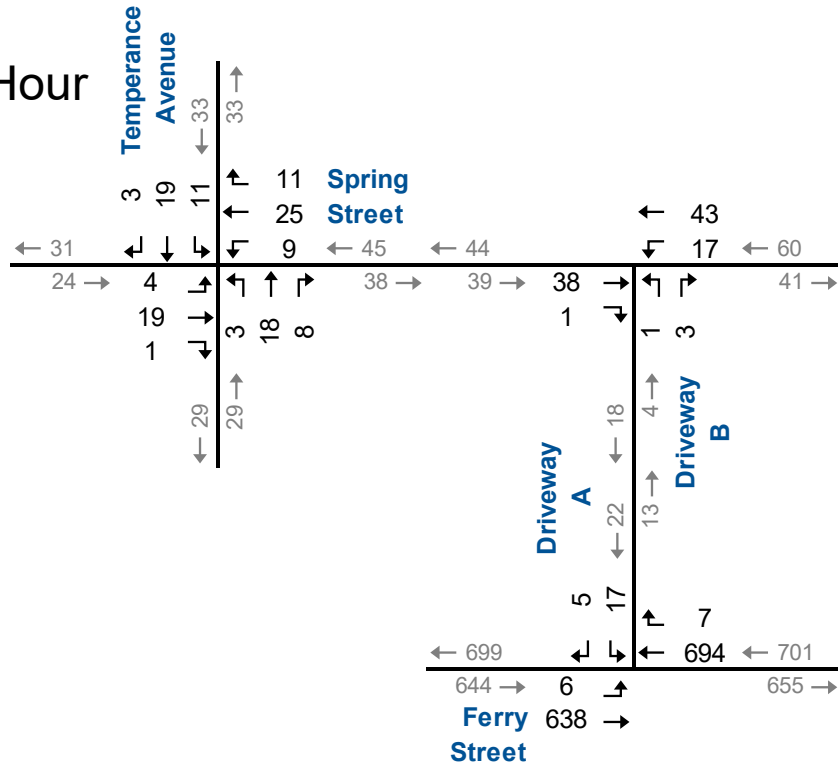
## 2027 Background Traffic Volumes



### Weekday AM Peak Hour



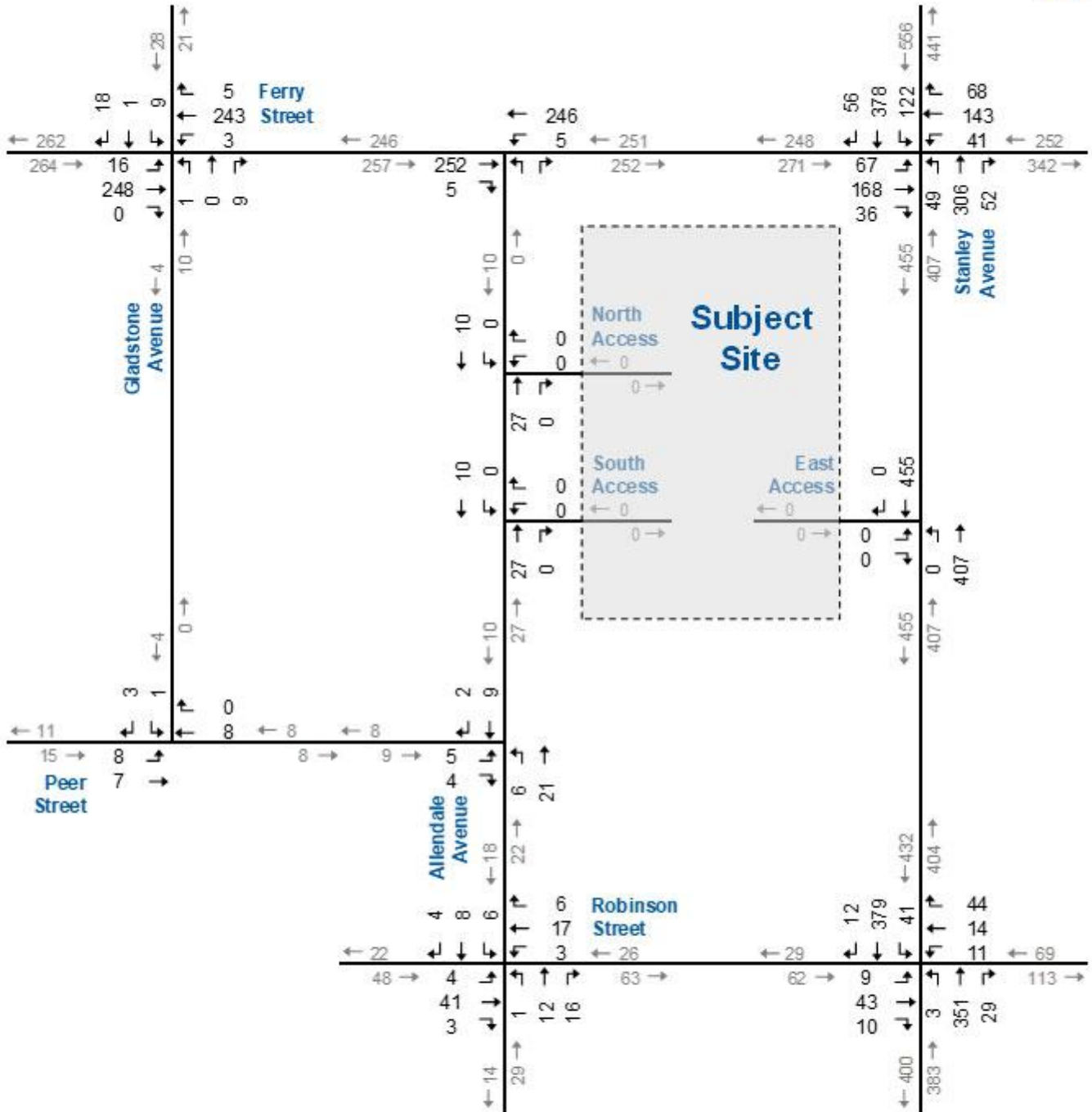
### Weekday PM Peak Hour



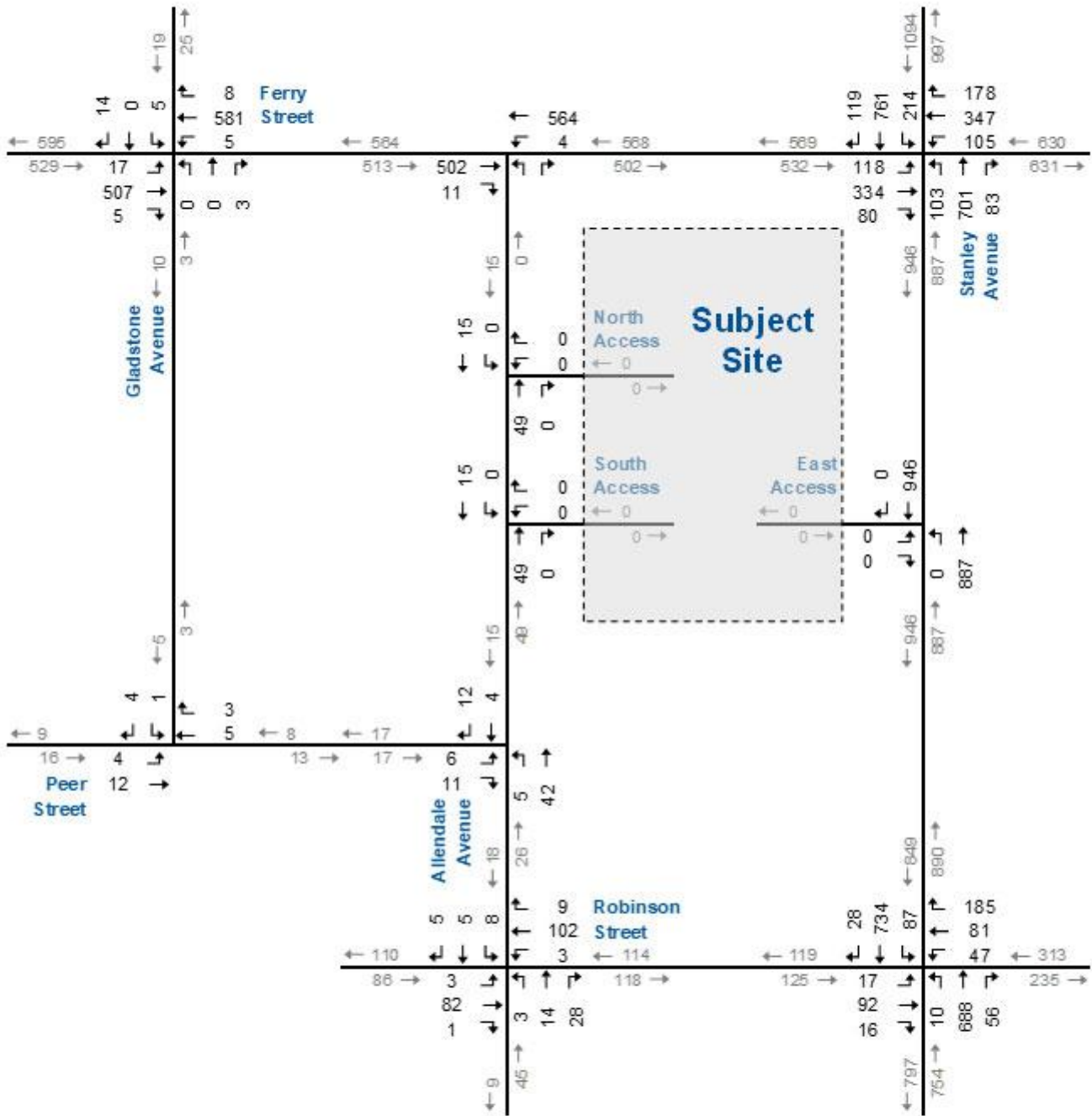
## 2027 Total Traffic Volumes

## Appendix A – Traffic Data





## Base Year Traffic Volumes Weekday AM Peak Hour



## Base Year Traffic Volumes Weekday PM Peak Hour





Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 1

### Turning Movement Data

| Start Time    | Ferry Street Eastbound |      |       |        |      |            | Ferry Street Westbound |      |       |        |      |            | Gladstone Avenue Northbound |      |       |        |      |            | Gladstone Avenue Southbound |      |       |        |      |            | Int. Total |
|---------------|------------------------|------|-------|--------|------|------------|------------------------|------|-------|--------|------|------------|-----------------------------|------|-------|--------|------|------------|-----------------------------|------|-------|--------|------|------------|------------|
|               | Left                   | Thru | Right | U-Turn | Peds | App. Total | Left                   | Thru | Right | U-Turn | Peds | App. Total | Left                        | Thru | Right | U-Turn | Peds | App. Total | Left                        | Thru | Right | U-Turn | Peds | App. Total |            |
| 7:00 AM       | 1                      | 26   | 0     | 0      | 0    | 27         | 0                      | 27   | 1     | 0      | 0    | 28         | 0                           | 0    | 0     | 0      | 3    | 0          | 1                           | 0    | 0     | 0      | 1    | 1          | 56         |
| 7:15 AM       | 2                      | 20   | 0     | 0      | 0    | 22         | 1                      | 29   | 0     | 0      | 0    | 30         | 0                           | 0    | 1     | 0      | 2    | 1          | 0                           | 0    | 1     | 0      | 1    | 1          | 54         |
| 7:30 AM       | 0                      | 33   | 0     | 0      | 0    | 33         | 1                      | 39   | 0     | 0      | 0    | 40         | 0                           | 0    | 0     | 0      | 1    | 0          | 0                           | 0    | 0     | 0      | 1    | 0          | 73         |
| 7:45 AM       | 1                      | 51   | 2     | 0      | 0    | 54         | 0                      | 43   | 1     | 0      | 0    | 44         | 1                           | 0    | 1     | 0      | 1    | 2          | 1                           | 0    | 1     | 0      | 1    | 2          | 102        |
| Hourly Total  | 4                      | 130  | 2     | 0      | 0    | 136        | 2                      | 138  | 2     | 0      | 0    | 142        | 1                           | 0    | 2     | 0      | 7    | 3          | 2                           | 0    | 2     | 0      | 4    | 4          | 285        |
| 8:00 AM       | 0                      | 42   | 0     | 0      | 0    | 42         | 0                      | 47   | 0     | 0      | 0    | 47         | 0                           | 0    | 1     | 0      | 3    | 1          | 0                           | 0    | 0     | 0      | 5    | 0          | 90         |
| 8:15 AM       | 0                      | 63   | 1     | 0      | 0    | 64         | 0                      | 36   | 0     | 0      | 0    | 36         | 1                           | 0    | 0     | 0      | 3    | 1          | 1                           | 0    | 1     | 0      | 1    | 2          | 103        |
| 8:30 AM       | 1                      | 52   | 2     | 0      | 0    | 55         | 0                      | 37   | 1     | 0      | 0    | 38         | 0                           | 0    | 1     | 0      | 5    | 1          | 0                           | 0    | 0     | 0      | 2    | 0          | 94         |
| 8:45 AM       | 0                      | 45   | 1     | 0      | 0    | 46         | 1                      | 37   | 0     | 0      | 0    | 38         | 0                           | 0    | 0     | 0      | 3    | 0          | 0                           | 0    | 4     | 0      | 2    | 4          | 88         |
| Hourly Total  | 1                      | 202  | 4     | 0      | 0    | 207        | 1                      | 157  | 1     | 0      | 0    | 159        | 1                           | 0    | 2     | 0      | 14   | 3          | 1                           | 0    | 5     | 0      | 10   | 6          | 375        |
| 9:00 AM       | 6                      | 48   | 0     | 0      | 0    | 54         | 0                      | 53   | 2     | 0      | 0    | 55         | 1                           | 0    | 2     | 0      | 2    | 3          | 1                           | 1    | 4     | 0      | 2    | 6          | 118        |
| 9:15 AM       | 4                      | 45   | 0     | 0      | 0    | 49         | 1                      | 46   | 1     | 0      | 0    | 48         | 0                           | 0    | 2     | 0      | 4    | 2          | 3                           | 0    | 1     | 0      | 3    | 4          | 103        |
| 9:30 AM       | 0                      | 50   | 0     | 0      | 1    | 50         | 1                      | 40   | 1     | 0      | 0    | 42         | 0                           | 0    | 2     | 0      | 1    | 2          | 1                           | 0    | 5     | 0      | 1    | 6          | 100        |
| 9:45 AM       | 2                      | 48   | 0     | 0      | 0    | 50         | 0                      | 48   | 0     | 0      | 0    | 48         | 0                           | 0    | 1     | 0      | 3    | 1          | 2                           | 0    | 4     | 0      | 0    | 6          | 105        |
| Hourly Total  | 12                     | 191  | 0     | 0      | 1    | 203        | 2                      | 187  | 4     | 0      | 0    | 193        | 1                           | 0    | 7     | 0      | 10   | 8          | 7                           | 1    | 14    | 0      | 6    | 22         | 426        |
| *** BREAK *** | -                      | -    | -     | -      | -    | -          | -                      | -    | -     | -      | -    | -          | -                           | -    | -     | -      | -    | -          | -                           | -    | -     | -      | -    | -          | -          |
| 11:00 AM      | 4                      | 82   | 1     | 0      | 0    | 87         | 0                      | 90   | 1     | 0      | 0    | 91         | 0                           | 0    | 0     | 0      | 3    | 0          | 0                           | 1    | 6     | 0      | 1    | 7          | 185        |
| 11:15 AM      | 9                      | 77   | 1     | 0      | 0    | 87         | 1                      | 79   | 1     | 0      | 2    | 81         | 1                           | 0    | 1     | 0      | 6    | 2          | 3                           | 0    | 5     | 0      | 4    | 8          | 178        |
| 11:30 AM      | 3                      | 75   | 0     | 0      | 0    | 78         | 0                      | 83   | 1     | 0      | 0    | 84         | 0                           | 0    | 2     | 0      | 4    | 2          | 0                           | 1    | 3     | 0      | 2    | 4          | 168        |
| 11:45 AM      | 6                      | 74   | 0     | 0      | 2    | 80         | 0                      | 87   | 6     | 0      | 0    | 93         | 1                           | 0    | 0     | 0      | 1    | 1          | 4                           | 1    | 5     | 0      | 3    | 10         | 184        |
| Hourly Total  | 22                     | 308  | 2     | 0      | 2    | 332        | 1                      | 339  | 9     | 0      | 2    | 349        | 2                           | 0    | 3     | 0      | 14   | 5          | 7                           | 3    | 19    | 0      | 10   | 29         | 715        |
| 12:00 PM      | 6                      | 86   | 1     | 0      | 0    | 93         | 0                      | 85   | 7     | 0      | 0    | 92         | 1                           | 0    | 1     | 0      | 6    | 2          | 2                           | 1    | 12    | 0      | 4    | 15         | 202        |
| 12:15 PM      | 7                      | 89   | 0     | 0      | 1    | 96         | 0                      | 100  | 8     | 0      | 0    | 108        | 1                           | 0    | 0     | 0      | 1    | 1          | 3                           | 0    | 7     | 0      | 5    | 10         | 215        |
| 12:30 PM      | 3                      | 72   | 0     | 0      | 0    | 75         | 1                      | 101  | 6     | 0      | 0    | 108        | 2                           | 0    | 1     | 0      | 6    | 3          | 6                           | 1    | 6     | 0      | 4    | 13         | 199        |
| 12:45 PM      | 4                      | 86   | 2     | 1      | 0    | 93         | 0                      | 93   | 2     | 0      | 0    | 95         | 0                           | 0    | 1     | 0      | 1    | 1          | 2                           | 0    | 8     | 0      | 4    | 10         | 199        |
| Hourly Total  | 20                     | 333  | 3     | 1      | 1    | 357        | 1                      | 379  | 23    | 0      | 0    | 403        | 4                           | 0    | 3     | 0      | 14   | 7          | 13                          | 2    | 33    | 0      | 17   | 48         | 815        |
| *** BREAK *** | -                      | -    | -     | -      | -    | -          | -                      | -    | -     | -      | -    | -          | -                           | -    | -     | -      | -    | -          | -                           | -    | -     | -      | -    | -          | -          |
| 3:30 PM       | 4                      | 97   | 0     | 0      | 2    | 101        | 0                      | 119  | 2     | 0      | 1    | 121        | 0                           | 0    | 0     | 0      | 0    | 0          | 1                           | 0    | 3     | 0      | 2    | 4          | 226        |
| 3:45 PM       | 3                      | 107  | 2     | 0      | 0    | 112        | 0                      | 102  | 2     | 0      | 0    | 104        | 0                           | 0    | 1     | 0      | 2    | 1          | 2                           | 0    | 2     | 0      | 0    | 4          | 221        |
| Hourly Total  | 7                      | 204  | 2     | 0      | 2    | 213        | 0                      | 221  | 4     | 0      | 1    | 225        | 0                           | 0    | 1     | 0      | 2    | 1          | 3                           | 0    | 5     | 0      | 2    | 8          | 447        |
| 4:00 PM       | 3                      | 90   | 1     | 0      | 0    | 94         | 2                      | 111  | 2     | 0      | 0    | 115        | 0                           | 0    | 1     | 0      | 0    | 1          | 1                           | 0    | 2     | 0      | 7    | 3          | 213        |
| 4:15 PM       | 3                      | 96   | 1     | 0      | 1    | 100        | 2                      | 115  | 0     | 1      | 1    | 118        | 0                           | 0    | 0     | 0      | 5    | 0          | 0                           | 0    | 4     | 0      | 4    | 4          | 222        |
| 4:30 PM       | 1                      | 103  | 0     | 0      | 0    | 104        | 1                      | 103  | 1     | 0      | 2    | 105        | 2                           | 0    | 2     | 0      | 4    | 4          | 2                           | 1    | 1     | 0      | 1    | 4          | 217        |
| 4:45 PM       | 1                      | 109  | 2     | 0      | 0    | 112        | 2                      | 105  | 1     | 0      | 0    | 108        | 2                           | 0    | 3     | 0      | 1    | 5          | 1                           | 0    | 1     | 0      | 4    | 2          | 227        |
| Hourly Total  | 8                      | 398  | 4     | 0      | 1    | 410        | 7                      | 434  | 4     | 1      | 3    | 446        | 4                           | 0    | 6     | 0      | 10   | 10         | 4                           | 1    | 8     | 0      | 16   | 13         | 879        |

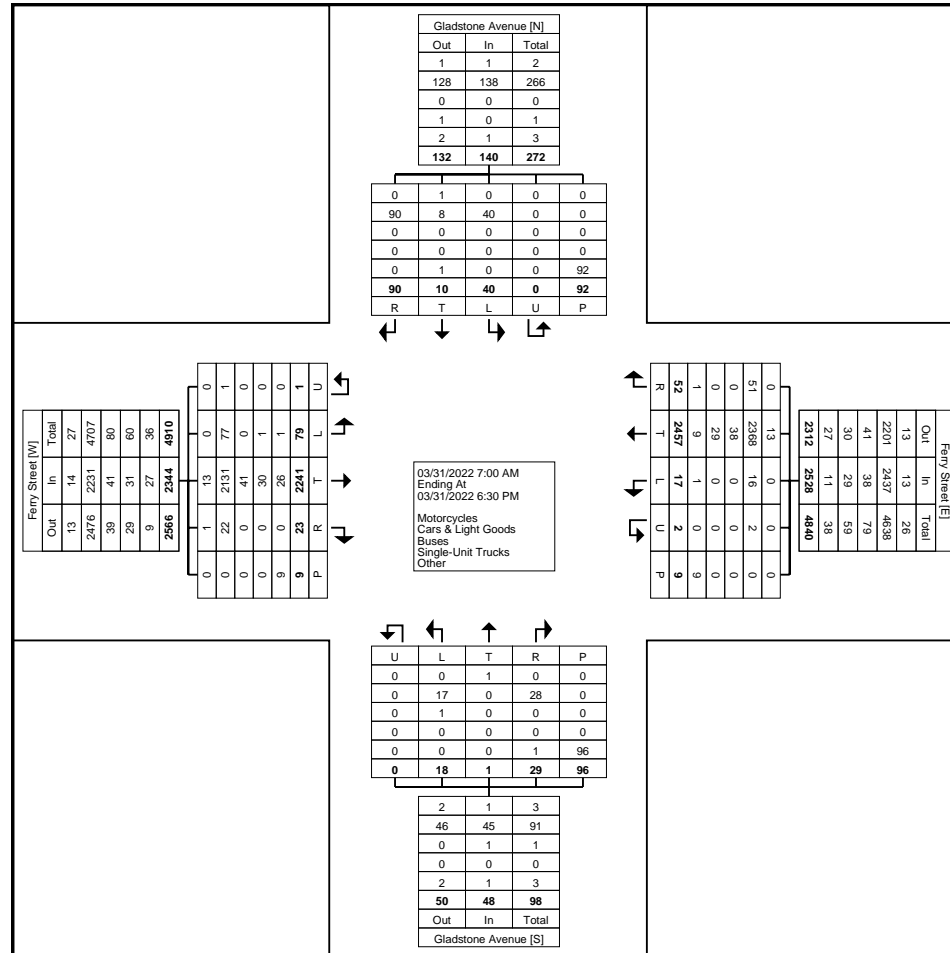
|                         |      |      |      |       |      |      |      |      |      |       |      |      |      |       |      |     |      |      |       |      |       |     |      |      |      |
|-------------------------|------|------|------|-------|------|------|------|------|------|-------|------|------|------|-------|------|-----|------|------|-------|------|-------|-----|------|------|------|
| 5:00 PM                 | 1    | 73   | 3    | 0     | 0    | 77   | 0    | 115  | 0    | 0     | 1    | 115  | 0    | 0     | 1    | 0   | 6    | 1    | 0     | 1    | 1     | 0   | 2    | 2    | 195  |
| 5:15 PM                 | 2    | 62   | 1    | 0     | 1    | 65   | 0    | 106  | 1    | 0     | 2    | 107  | 0    | 0     | 0    | 0   | 3    | 0    | 1     | 0    | 2     | 0   | 5    | 3    | 175  |
| 5:30 PM                 | 1    | 74   | 0    | 0     | 0    | 75   | 2    | 98   | 2    | 0     | 0    | 102  | 2    | 1     | 2    | 0   | 8    | 5    | 1     | 1    | 1     | 0   | 3    | 3    | 185  |
| 5:45 PM                 | 0    | 93   | 0    | 0     | 1    | 93   | 0    | 83   | 0    | 0     | 0    | 83   | 0    | 0     | 1    | 0   | 3    | 1    | 0     | 1    | 0     | 0   | 9    | 1    | 178  |
| Hourly Total            | 4    | 302  | 4    | 0     | 2    | 310  | 2    | 402  | 3    | 0     | 3    | 407  | 2    | 1     | 4    | 0   | 20   | 7    | 2     | 3    | 4     | 0   | 19   | 9    | 733  |
| 6:00 PM                 | 1    | 85   | 2    | 0     | 0    | 88   | 1    | 107  | 1    | 0     | 0    | 109  | 3    | 0     | 0    | 0   | 1    | 3    | 1     | 0    | 0     | 0   | 7    | 1    | 201  |
| 6:15 PM                 | 0    | 88   | 0    | 0     | 0    | 88   | 0    | 93   | 1    | 1     | 0    | 95   | 0    | 0     | 1    | 0   | 4    | 1    | 0     | 0    | 0     | 0   | 1    | 0    | 184  |
| Grand Total             | 79   | 2241 | 23   | 1     | 9    | 2344 | 17   | 2457 | 52   | 2     | 9    | 2528 | 18   | 1     | 29   | 0   | 96   | 48   | 40    | 10   | 90    | 0   | 92   | 140  | 5060 |
| Approach %              | 3.4  | 95.6 | 1.0  | 0.0   | -    | -    | 0.7  | 97.2 | 2.1  | 0.1   | -    | -    | 37.5 | 2.1   | 60.4 | 0.0 | -    | -    | 28.6  | 7.1  | 64.3  | 0.0 | -    | -    | -    |
| Total %                 | 1.6  | 44.3 | 0.5  | 0.0   | -    | 46.3 | 0.3  | 48.6 | 1.0  | 0.0   | -    | 50.0 | 0.4  | 0.0   | 0.6  | 0.0 | -    | 0.9  | 0.8   | 0.2  | 1.8   | 0.0 | -    | 2.8  | -    |
| Motorcycles             | 0    | 13   | 1    | 0     | -    | 14   | 0    | 13   | 0    | 0     | -    | 13   | 0    | 1     | 0    | 0   | -    | 1    | 0     | 1    | 0     | 0   | -    | 1    | 29   |
| % Motorcycles           | 0.0  | 0.6  | 4.3  | 0.0   | -    | 0.6  | 0.0  | 0.5  | 0.0  | 0.0   | -    | 0.5  | 0.0  | 100.0 | 0.0  | -   | -    | 2.1  | 0.0   | 10.0 | 0.0   | -   | -    | 0.7  | 0.6  |
| Cars & Light Goods      | 77   | 2131 | 22   | 1     | -    | 2231 | 16   | 2368 | 51   | 2     | -    | 2437 | 17   | 0     | 28   | 0   | -    | 45   | 40    | 8    | 90    | 0   | -    | 138  | 4851 |
| % Cars & Light Goods    | 97.5 | 95.1 | 95.7 | 100.0 | -    | 95.2 | 94.1 | 96.4 | 98.1 | 100.0 | -    | 96.4 | 94.4 | 0.0   | 96.6 | -   | -    | 93.8 | 100.0 | 80.0 | 100.0 | -   | -    | 98.6 | 95.9 |
| Buses                   | 0    | 41   | 0    | 0     | -    | 41   | 0    | 38   | 0    | 0     | -    | 38   | 1    | 0     | 0    | 0   | -    | 1    | 0     | 0    | 0     | 0   | -    | 0    | 80   |
| % Buses                 | 0.0  | 1.8  | 0.0  | 0.0   | -    | 1.7  | 0.0  | 1.5  | 0.0  | 0.0   | -    | 1.5  | 5.6  | 0.0   | 0.0  | -   | -    | 2.1  | 0.0   | 0.0  | 0.0   | -   | -    | 0.0  | 1.6  |
| Single-Unit Trucks      | 1    | 30   | 0    | 0     | -    | 31   | 0    | 29   | 0    | 0     | -    | 29   | 0    | 0     | 0    | 0   | -    | 0    | 0     | 0    | 0     | 0   | -    | 0    | 60   |
| % Single-Unit Trucks    | 1.3  | 1.3  | 0.0  | 0.0   | -    | 1.3  | 0.0  | 1.2  | 0.0  | 0.0   | -    | 1.1  | 0.0  | 0.0   | 0.0  | -   | -    | 0.0  | 0.0   | 0.0  | 0.0   | -   | -    | 0.0  | 1.2  |
| Articulated Trucks      | 0    | 10   | 0    | 0     | -    | 10   | 0    | 7    | 1    | 0     | -    | 8    | 0    | 0     | 0    | 0   | -    | 0    | 0     | 0    | 0     | 0   | -    | 0    | 18   |
| % Articulated Trucks    | 0.0  | 0.4  | 0.0  | 0.0   | -    | 0.4  | 0.0  | 0.3  | 1.9  | 0.0   | -    | 0.3  | 0.0  | 0.0   | 0.0  | -   | -    | 0.0  | 0.0   | 0.0  | 0.0   | -   | -    | 0.0  | 0.4  |
| Bicycles on Road        | 1    | 16   | 0    | 0     | -    | 17   | 1    | 2    | 0    | 0     | -    | 3    | 0    | 0     | 1    | 0   | -    | 1    | 0     | 1    | 0     | 0   | -    | 1    | 22   |
| % Bicycles on Road      | 1.3  | 0.7  | 0.0  | 0.0   | -    | 0.7  | 5.9  | 0.1  | 0.0  | 0.0   | -    | 0.1  | 0.0  | 0.0   | 3.4  | -   | -    | 2.1  | 0.0   | 10.0 | 0.0   | -   | -    | 0.7  | 0.4  |
| Bicycles on Crosswalk   | -    | -    | -    | -     | 2    | -    | -    | -    | -    | -     | 1    | -    | -    | -     | -    | -   | 4    | -    | -     | -    | -     | -   | 4    | -    | -    |
| % Bicycles on Crosswalk | -    | -    | -    | -     | 22.2 | -    | -    | -    | -    | -     | 11.1 | -    | -    | -     | -    | -   | 4.2  | -    | -     | -    | -     | -   | 4.3  | -    | -    |
| Pedestrians             | -    | -    | -    | -     | 7    | -    | -    | -    | -    | -     | 8    | -    | -    | -     | -    | -   | 92   | -    | -     | -    | -     | -   | 88   | -    | -    |
| % Pedestrians           | -    | -    | -    | -     | 77.8 | -    | -    | -    | -    | -     | 88.9 | -    | -    | -     | -    | -   | 95.8 | -    | -     | -    | -     | -   | 95.7 | -    | -    |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.l.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 4

### Turning Movement Peak Hour Data (9:00 AM)

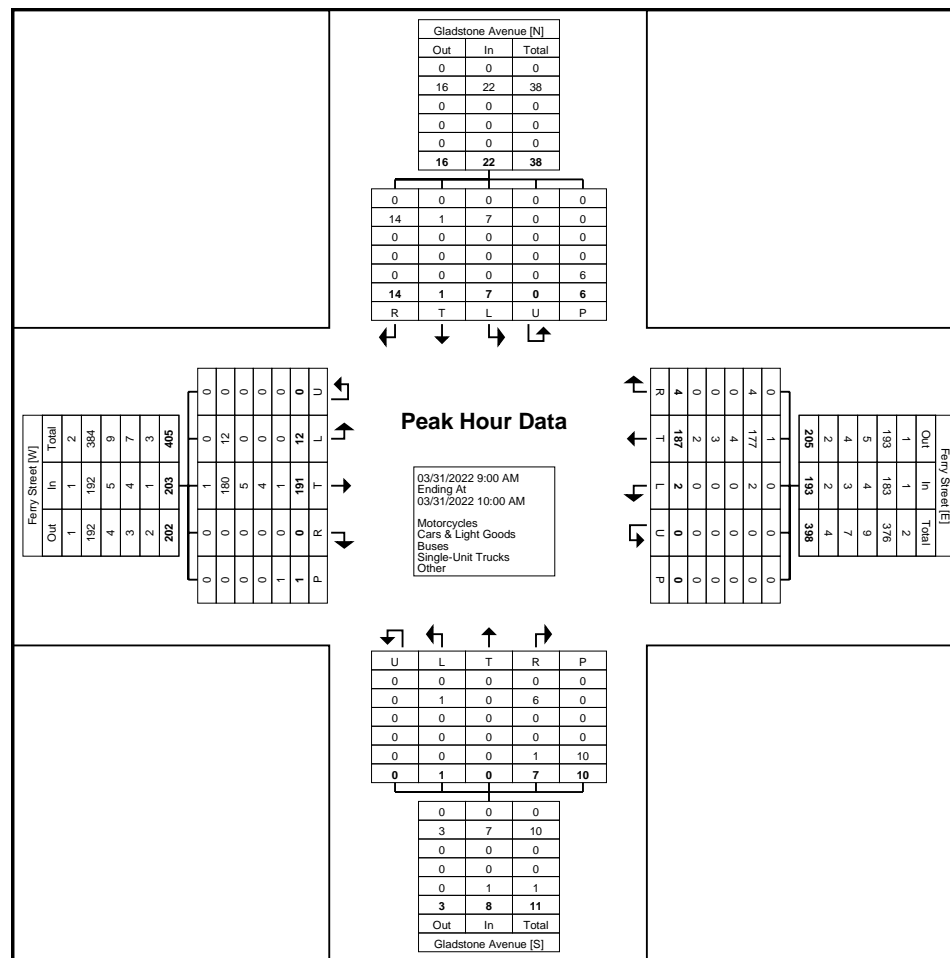
| Start Time              | Ferry Street Eastbound |       |       |        |       |            | Ferry Street Westbound |       |       |        |      |            | Gladstone Avenue Northbound |       |       |        |      |            | Gladstone Avenue Southbound |       |       |        |       |            | Int. Total |
|-------------------------|------------------------|-------|-------|--------|-------|------------|------------------------|-------|-------|--------|------|------------|-----------------------------|-------|-------|--------|------|------------|-----------------------------|-------|-------|--------|-------|------------|------------|
|                         | Left                   | Thru  | Right | U-Turn | Peds  | App. Total | Left                   | Thru  | Right | U-Turn | Peds | App. Total | Left                        | Thru  | Right | U-Turn | Peds | App. Total | Left                        | Thru  | Right | U-Turn | Peds  | App. Total |            |
| 9:00 AM                 | 6                      | 48    | 0     | 0      | 0     | 54         | 0                      | 53    | 2     | 0      | 0    | 55         | 1                           | 0     | 2     | 0      | 2    | 3          | 1                           | 1     | 4     | 0      | 2     | 6          | 118        |
| 9:15 AM                 | 4                      | 45    | 0     | 0      | 0     | 49         | 1                      | 46    | 1     | 0      | 0    | 48         | 0                           | 0     | 2     | 0      | 4    | 2          | 3                           | 0     | 1     | 0      | 3     | 4          | 103        |
| 9:30 AM                 | 0                      | 50    | 0     | 0      | 1     | 50         | 1                      | 40    | 1     | 0      | 0    | 42         | 0                           | 0     | 2     | 0      | 1    | 2          | 1                           | 0     | 5     | 0      | 1     | 6          | 100        |
| 9:45 AM                 | 2                      | 48    | 0     | 0      | 0     | 50         | 0                      | 48    | 0     | 0      | 0    | 48         | 0                           | 0     | 1     | 0      | 3    | 1          | 2                           | 0     | 4     | 0      | 0     | 6          | 105        |
| Total                   | 12                     | 191   | 0     | 0      | 1     | 203        | 2                      | 187   | 4     | 0      | 0    | 193        | 1                           | 0     | 7     | 0      | 10   | 8          | 7                           | 1     | 14    | 0      | 6     | 22         | 426        |
| Approach %              | 5.9                    | 94.1  | 0.0   | 0.0    | -     | -          | 1.0                    | 96.9  | 2.1   | 0.0    | -    | -          | 12.5                        | 0.0   | 87.5  | 0.0    | -    | -          | 31.8                        | 4.5   | 63.6  | 0.0    | -     | -          | -          |
| Total %                 | 2.8                    | 44.8  | 0.0   | 0.0    | -     | 47.7       | 0.5                    | 43.9  | 0.9   | 0.0    | -    | 45.3       | 0.2                         | 0.0   | 1.6   | 0.0    | -    | 1.9        | 1.6                         | 0.2   | 3.3   | 0.0    | -     | 5.2        | -          |
| PHF                     | 0.500                  | 0.955 | 0.000 | 0.000  | -     | 0.940      | 0.500                  | 0.882 | 0.500 | 0.000  | -    | 0.877      | 0.250                       | 0.000 | 0.875 | 0.000  | -    | 0.667      | 0.583                       | 0.250 | 0.700 | 0.000  | -     | 0.917      | 0.903      |
| Motorcycles             | 0                      | 1     | 0     | 0      | -     | 1          | 0                      | 1     | 0     | 0      | -    | 1          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 2          |
| % Motorcycles           | 0.0                    | 0.5   | -     | -      | -     | 0.5        | 0.0                    | 0.5   | 0.0   | -      | -    | 0.5        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 0.5        |
| Cars & Light Goods      | 12                     | 180   | 0     | 0      | -     | 192        | 2                      | 177   | 4     | 0      | -    | 183        | 1                           | 0     | 6     | 0      | -    | 7          | 7                           | 1     | 14    | 0      | -     | 22         | 404        |
| % Cars & Light Goods    | 100.0                  | 94.2  | -     | -      | -     | 94.6       | 100.0                  | 94.7  | 100.0 | -      | -    | 94.8       | 100.0                       | -     | 85.7  | -      | -    | 87.5       | 100.0                       | 100.0 | 100.0 | -      | -     | 100.0      | 94.8       |
| Buses                   | 0                      | 5     | 0     | 0      | -     | 5          | 0                      | 4     | 0     | 0      | -    | 4          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 9          |
| % Buses                 | 0.0                    | 2.6   | -     | -      | -     | 2.5        | 0.0                    | 2.1   | 0.0   | -      | -    | 2.1        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 2.1        |
| Single-Unit Trucks      | 0                      | 4     | 0     | 0      | -     | 4          | 0                      | 3     | 0     | 0      | -    | 3          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 7          |
| % Single-Unit Trucks    | 0.0                    | 2.1   | -     | -      | -     | 2.0        | 0.0                    | 1.6   | 0.0   | -      | -    | 1.6        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 1.6        |
| Articulated Trucks      | 0                      | 0     | 0     | 0      | -     | 0          | 0                      | 2     | 0     | 0      | -    | 2          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 2          |
| % Articulated Trucks    | 0.0                    | 0.0   | -     | -      | -     | 0.0        | 0.0                    | 1.1   | 0.0   | -      | -    | 1.0        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 0.5        |
| Bicycles on Road        | 0                      | 1     | 0     | 0      | -     | 1          | 0                      | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 1     | 0      | -    | 1          | 0                           | 0     | 0     | 0      | -     | 0          | 2          |
| % Bicycles on Road      | 0.0                    | 0.5   | -     | -      | -     | 0.5        | 0.0                    | 0.0   | 0.0   | -      | -    | 0.0        | 0.0                         | -     | 14.3  | -      | -    | 12.5       | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 0.5        |
| Bicycles on Crosswalk   | -                      | -     | -     | -      | 0     | -          | -                      | -     | -     | -      | 0    | -          | -                           | -     | -     | -      | 1    | -          | -                           | -     | -     | -      | 0     | -          | -          |
| % Bicycles on Crosswalk | -                      | -     | -     | -      | 0.0   | -          | -                      | -     | -     | -      | -    | -          | -                           | -     | -     | -      | 10.0 | -          | -                           | -     | -     | -      | 0.0   | -          | -          |
| Pedestrians             | -                      | -     | -     | -      | 1     | -          | -                      | -     | -     | -      | 0    | -          | -                           | -     | -     | -      | 9    | -          | -                           | -     | -     | -      | 6     | -          | -          |
| % Pedestrians           | -                      | -     | -     | -      | 100.0 | -          | -                      | -     | -     | -      | -    | -          | -                           | -     | -     | -      | 90.0 | -          | -                           | -     | -     | -      | 100.0 | -          | -          |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts1.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 5



Turning Movement Peak Hour Data Plot (9:00 AM)



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 6

### Turning Movement Peak Hour Data (11:00 AM)

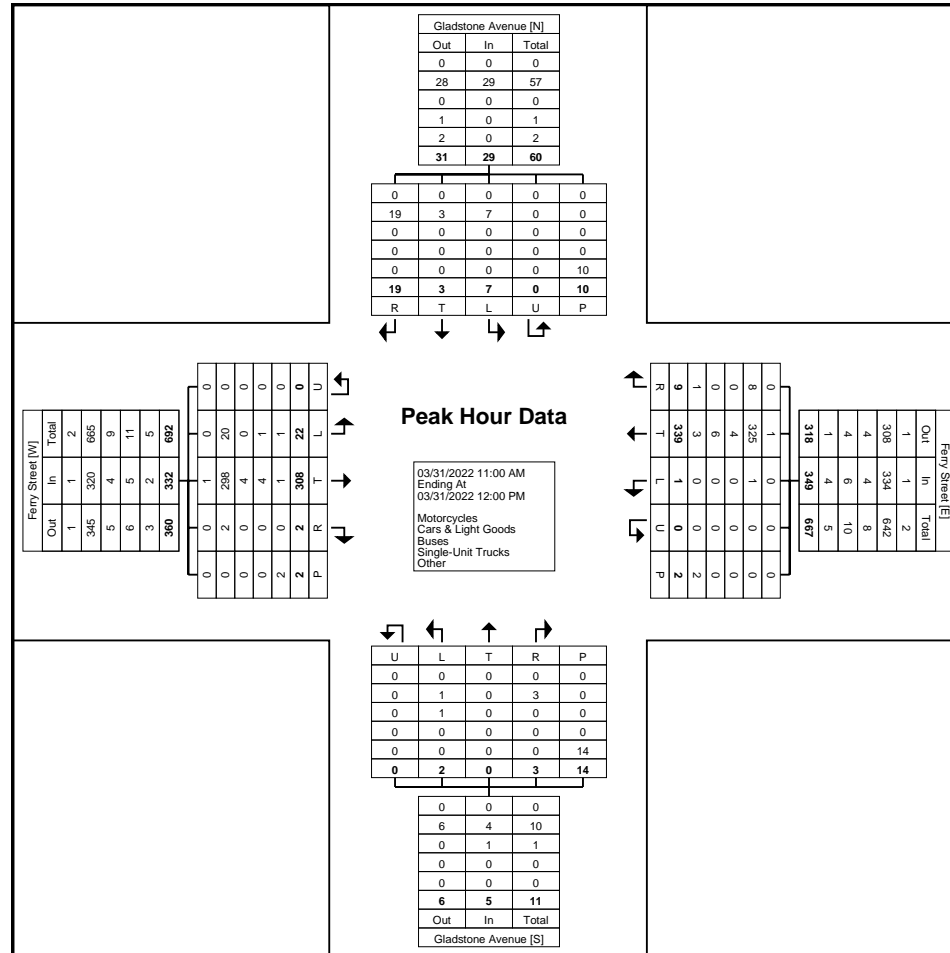
| Start Time              | Ferry Street Eastbound |       |       |        |       |            | Ferry Street Westbound |       |       |        |       |            | Gladstone Avenue Northbound |       |       |        |      |            | Gladstone Avenue Southbound |       |       |        |       |            | Int. Total |
|-------------------------|------------------------|-------|-------|--------|-------|------------|------------------------|-------|-------|--------|-------|------------|-----------------------------|-------|-------|--------|------|------------|-----------------------------|-------|-------|--------|-------|------------|------------|
|                         | Left                   | Thru  | Right | U-Turn | Peds  | App. Total | Left                   | Thru  | Right | U-Turn | Peds  | App. Total | Left                        | Thru  | Right | U-Turn | Peds | App. Total | Left                        | Thru  | Right | U-Turn | Peds  | App. Total |            |
| 11:00 AM                | 4                      | 82    | 1     | 0      | 0     | 87         | 0                      | 90    | 1     | 0      | 0     | 91         | 0                           | 0     | 0     | 0      | 3    | 0          | 0                           | 1     | 6     | 0      | 1     | 7          | 185        |
| 11:15 AM                | 9                      | 77    | 1     | 0      | 0     | 87         | 1                      | 79    | 1     | 0      | 2     | 81         | 1                           | 0     | 1     | 0      | 6    | 2          | 3                           | 0     | 5     | 0      | 4     | 8          | 178        |
| 11:30 AM                | 3                      | 75    | 0     | 0      | 0     | 78         | 0                      | 83    | 1     | 0      | 0     | 84         | 0                           | 0     | 2     | 0      | 4    | 2          | 0                           | 1     | 3     | 0      | 2     | 4          | 168        |
| 11:45 AM                | 6                      | 74    | 0     | 0      | 2     | 80         | 0                      | 87    | 6     | 0      | 0     | 93         | 1                           | 0     | 0     | 0      | 1    | 1          | 4                           | 1     | 5     | 0      | 3     | 10         | 184        |
| Total                   | 22                     | 308   | 2     | 0      | 2     | 332        | 1                      | 339   | 9     | 0      | 2     | 349        | 2                           | 0     | 3     | 0      | 14   | 5          | 7                           | 3     | 19    | 0      | 10    | 29         | 715        |
| Approach %              | 6.6                    | 92.8  | 0.6   | 0.0    | -     | -          | 0.3                    | 97.1  | 2.6   | 0.0    | -     | -          | 40.0                        | 0.0   | 60.0  | 0.0    | -    | -          | 24.1                        | 10.3  | 65.5  | 0.0    | -     | -          | -          |
| Total %                 | 3.1                    | 43.1  | 0.3   | 0.0    | -     | 46.4       | 0.1                    | 47.4  | 1.3   | 0.0    | -     | 48.8       | 0.3                         | 0.0   | 0.4   | 0.0    | -    | 0.7        | 1.0                         | 0.4   | 2.7   | 0.0    | -     | 4.1        | -          |
| PHF                     | 0.611                  | 0.939 | 0.500 | 0.000  | -     | 0.954      | 0.250                  | 0.942 | 0.375 | 0.000  | -     | 0.938      | 0.500                       | 0.000 | 0.375 | 0.000  | -    | 0.625      | 0.438                       | 0.750 | 0.792 | 0.000  | -     | 0.725      | 0.966      |
| Motorcycles             | 0                      | 1     | 0     | 0      | -     | 1          | 0                      | 1     | 0     | 0      | -     | 1          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 2          |
| % Motorcycles           | 0.0                    | 0.3   | 0.0   | -      | -     | 0.3        | 0.0                    | 0.3   | 0.0   | -      | -     | 0.3        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 0.3        |
| Cars & Light Goods      | 20                     | 298   | 2     | 0      | -     | 320        | 1                      | 325   | 8     | 0      | -     | 334        | 1                           | 0     | 3     | 0      | -    | 4          | 7                           | 3     | 19    | 0      | -     | 29         | 687        |
| % Cars & Light Goods    | 90.9                   | 96.8  | 100.0 | -      | -     | 96.4       | 100.0                  | 95.9  | 88.9  | -      | -     | 95.7       | 50.0                        | -     | 100.0 | -      | -    | 80.0       | 100.0                       | 100.0 | 100.0 | -      | -     | 100.0      | 96.1       |
| Buses                   | 0                      | 4     | 0     | 0      | -     | 4          | 0                      | 4     | 0     | 0      | -     | 4          | 1                           | 0     | 0     | 0      | -    | 1          | 0                           | 0     | 0     | 0      | -     | 0          | 9          |
| % Buses                 | 0.0                    | 1.3   | 0.0   | -      | -     | 1.2        | 0.0                    | 1.2   | 0.0   | -      | -     | 1.1        | 50.0                        | -     | 0.0   | -      | -    | 20.0       | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 1.3        |
| Single-Unit Trucks      | 1                      | 4     | 0     | 0      | -     | 5          | 0                      | 6     | 0     | 0      | -     | 6          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 11         |
| % Single-Unit Trucks    | 4.5                    | 1.3   | 0.0   | -      | -     | 1.5        | 0.0                    | 1.8   | 0.0   | -      | -     | 1.7        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 1.5        |
| Articulated Trucks      | 0                      | 1     | 0     | 0      | -     | 1          | 0                      | 3     | 1     | 0      | -     | 4          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 5          |
| % Articulated Trucks    | 0.0                    | 0.3   | 0.0   | -      | -     | 0.3        | 0.0                    | 0.9   | 11.1  | -      | -     | 1.1        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 0.7        |
| Bicycles on Road        | 1                      | 0     | 0     | 0      | -     | 1          | 0                      | 0     | 0     | 0      | -     | 0          | 0                           | 0     | 0     | 0      | -    | 0          | 0                           | 0     | 0     | 0      | -     | 0          | 1          |
| % Bicycles on Road      | 4.5                    | 0.0   | 0.0   | -      | -     | 0.3        | 0.0                    | 0.0   | 0.0   | -      | -     | 0.0        | 0.0                         | -     | 0.0   | -      | -    | 0.0        | 0.0                         | 0.0   | 0.0   | -      | -     | 0.0        | 0.1        |
| Bicycles on Crosswalk   | -                      | -     | -     | -      | 2     | -          | -                      | -     | -     | -      | 0     | -          | -                           | -     | -     | -      | 1    | -          | -                           | -     | -     | -      | 0     | -          | -          |
| % Bicycles on Crosswalk | -                      | -     | -     | -      | 100.0 | -          | -                      | -     | -     | -      | 0.0   | -          | -                           | -     | -     | -      | 7.1  | -          | -                           | -     | -     | -      | 0.0   | -          | -          |
| Pedestrians             | -                      | -     | -     | -      | 0     | -          | -                      | -     | -     | -      | 2     | -          | -                           | -     | -     | -      | 13   | -          | -                           | -     | -     | -      | 10    | -          | -          |
| % Pedestrians           | -                      | -     | -     | -      | 0.0   | -          | -                      | -     | -     | -      | 100.0 | -          | -                           | -     | -     | -      | 92.9 | -          | -                           | -     | -     | -      | 100.0 | -          | -          |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 7



Turning Movement Peak Hour Data Plot (11:00 AM)



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 8

### Turning Movement Peak Hour Data (12:00 PM)

| Start Time              | Ferry Street Eastbound |            |          |          |          |            | Ferry Street Westbound |            |           |          |          |            | Gladstone Avenue Northbound |          |          |          |           |            | Gladstone Avenue Southbound |          |           |          |           |            | Int. Total |
|-------------------------|------------------------|------------|----------|----------|----------|------------|------------------------|------------|-----------|----------|----------|------------|-----------------------------|----------|----------|----------|-----------|------------|-----------------------------|----------|-----------|----------|-----------|------------|------------|
|                         | Left                   | Thru       | Right    | U-Turn   | Peds     | App. Total | Left                   | Thru       | Right     | U-Turn   | Peds     | App. Total | Left                        | Thru     | Right    | U-Turn   | Peds      | App. Total | Left                        | Thru     | Right     | U-Turn   | Peds      | App. Total |            |
| 12:00 PM                | 6                      | 86         | 1        | 0        | 0        | 93         | 0                      | 85         | 7         | 0        | 0        | 92         | 1                           | 0        | 1        | 0        | 6         | 2          | 2                           | 1        | 12        | 0        | 4         | 15         | 202        |
| 12:15 PM                | 7                      | 89         | 0        | 0        | 1        | 96         | 0                      | 100        | 8         | 0        | 0        | 108        | 1                           | 0        | 0        | 0        | 1         | 1          | 3                           | 0        | 7         | 0        | 5         | 10         | 215        |
| 12:30 PM                | 3                      | 72         | 0        | 0        | 0        | 75         | 1                      | 101        | 6         | 0        | 0        | 108        | 2                           | 0        | 1        | 0        | 6         | 3          | 6                           | 1        | 6         | 0        | 4         | 13         | 199        |
| 12:45 PM                | 4                      | 86         | 2        | 1        | 0        | 93         | 0                      | 93         | 2         | 0        | 0        | 95         | 0                           | 0        | 1        | 0        | 1         | 1          | 2                           | 0        | 8         | 0        | 4         | 10         | 199        |
| <b>Total</b>            | <b>20</b>              | <b>333</b> | <b>3</b> | <b>1</b> | <b>1</b> | <b>357</b> | <b>1</b>               | <b>379</b> | <b>23</b> | <b>0</b> | <b>0</b> | <b>403</b> | <b>4</b>                    | <b>0</b> | <b>3</b> | <b>0</b> | <b>14</b> | <b>7</b>   | <b>13</b>                   | <b>2</b> | <b>33</b> | <b>0</b> | <b>17</b> | <b>48</b>  | <b>815</b> |
| Approach %              | 5.6                    | 93.3       | 0.8      | 0.3      | -        | -          | 0.2                    | 94.0       | 5.7       | 0.0      | -        | -          | 57.1                        | 0.0      | 42.9     | 0.0      | -         | -          | 27.1                        | 4.2      | 68.8      | 0.0      | -         | -          | -          |
| Total %                 | 2.5                    | 40.9       | 0.4      | 0.1      | -        | 43.8       | 0.1                    | 46.5       | 2.8       | 0.0      | -        | 49.4       | 0.5                         | 0.0      | 0.4      | 0.0      | -         | 0.9        | 1.6                         | 0.2      | 4.0       | 0.0      | -         | 5.9        | -          |
| PHF                     | 0.714                  | 0.935      | 0.375    | 0.250    | -        | 0.930      | 0.250                  | 0.938      | 0.719     | 0.000    | -        | 0.933      | 0.500                       | 0.000    | 0.750    | 0.000    | -         | 0.583      | 0.542                       | 0.500    | 0.688     | 0.000    | -         | 0.800      | 0.948      |
| Motorcycles             | 0                      | 0          | 1        | 0        | -        | 1          | 0                      | 2          | 0         | 0        | -        | 2          | 0                           | 0        | 0        | 0        | -         | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 3          |
| % Motorcycles           | 0.0                    | 0.0        | 33.3     | 0.0      | -        | 0.3        | 0.0                    | 0.5        | 0.0       | -        | -        | 0.5        | 0.0                         | -        | 0.0      | -        | -         | 0.0        | 0.0                         | 0.0      | 0.0       | -        | -         | 0.0        | 0.4        |
| Cars & Light Goods      | 20                     | 316        | 2        | 1        | -        | 339        | 1                      | 365        | 23        | 0        | -        | 389        | 4                           | 0        | 3        | 0        | -         | 7          | 13                          | 2        | 33        | 0        | -         | 48         | 783        |
| % Cars & Light Goods    | 100.0                  | 94.9       | 66.7     | 100.0    | -        | 95.0       | 100.0                  | 96.3       | 100.0     | -        | -        | 96.5       | 100.0                       | -        | 100.0    | -        | -         | 100.0      | 100.0                       | 100.0    | 100.0     | -        | -         | 100.0      | 96.1       |
| Buses                   | 0                      | 4          | 0        | 0        | -        | 4          | 0                      | 4          | 0         | 0        | -        | 4          | 0                           | 0        | 0        | 0        | -         | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 8          |
| % Buses                 | 0.0                    | 1.2        | 0.0      | 0.0      | -        | 1.1        | 0.0                    | 1.1        | 0.0       | -        | -        | 1.0        | 0.0                         | -        | 0.0      | -        | -         | 0.0        | 0.0                         | 0.0      | 0.0       | -        | -         | 0.0        | 1.0        |
| Single-Unit Trucks      | 0                      | 4          | 0        | 0        | -        | 4          | 0                      | 7          | 0         | 0        | -        | 7          | 0                           | 0        | 0        | 0        | -         | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 11         |
| % Single-Unit Trucks    | 0.0                    | 1.2        | 0.0      | 0.0      | -        | 1.1        | 0.0                    | 1.8        | 0.0       | -        | -        | 1.7        | 0.0                         | -        | 0.0      | -        | -         | 0.0        | 0.0                         | 0.0      | 0.0       | -        | -         | 0.0        | 1.3        |
| Articulated Trucks      | 0                      | 3          | 0        | 0        | -        | 3          | 0                      | 0          | 0         | 0        | -        | 0          | 0                           | 0        | 0        | 0        | -         | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 3          |
| % Articulated Trucks    | 0.0                    | 0.9        | 0.0      | 0.0      | -        | 0.8        | 0.0                    | 0.0        | 0.0       | -        | -        | 0.0        | 0.0                         | -        | 0.0      | -        | -         | 0.0        | 0.0                         | 0.0      | 0.0       | -        | -         | 0.0        | 0.4        |
| Bicycles on Road        | 0                      | 6          | 0        | 0        | -        | 6          | 0                      | 1          | 0         | 0        | -        | 1          | 0                           | 0        | 0        | 0        | -         | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 7          |
| % Bicycles on Road      | 0.0                    | 1.8        | 0.0      | 0.0      | -        | 1.7        | 0.0                    | 0.3        | 0.0       | -        | -        | 0.2        | 0.0                         | -        | 0.0      | -        | -         | 0.0        | 0.0                         | 0.0      | 0.0       | -        | -         | 0.0        | 0.9        |
| Bicycles on Crosswalk   | -                      | -          | -        | -        | 0        | -          | -                      | -          | -         | -        | 0        | -          | -                           | -        | -        | -        | 2         | -          | -                           | -        | -         | -        | 0         | -          | -          |
| % Bicycles on Crosswalk | -                      | -          | -        | -        | 0.0      | -          | -                      | -          | -         | -        | -        | -          | -                           | -        | -        | -        | 14.3      | -          | -                           | -        | -         | -        | 0.0       | -          | -          |
| Pedestrians             | -                      | -          | -        | -        | 1        | -          | -                      | -          | -         | -        | 0        | -          | -                           | -        | -        | -        | 12        | -          | -                           | -        | -         | -        | 17        | -          | -          |
| % Pedestrians           | -                      | -          | -        | -        | 100.0    | -          | -                      | -          | -         | -        | -        | -          | -                           | -        | -        | -        | 85.7      | -          | -                           | -        | -         | -        | 100.0     | -          | -          |







Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 10

### Turning Movement Peak Hour Data (3:30 PM)

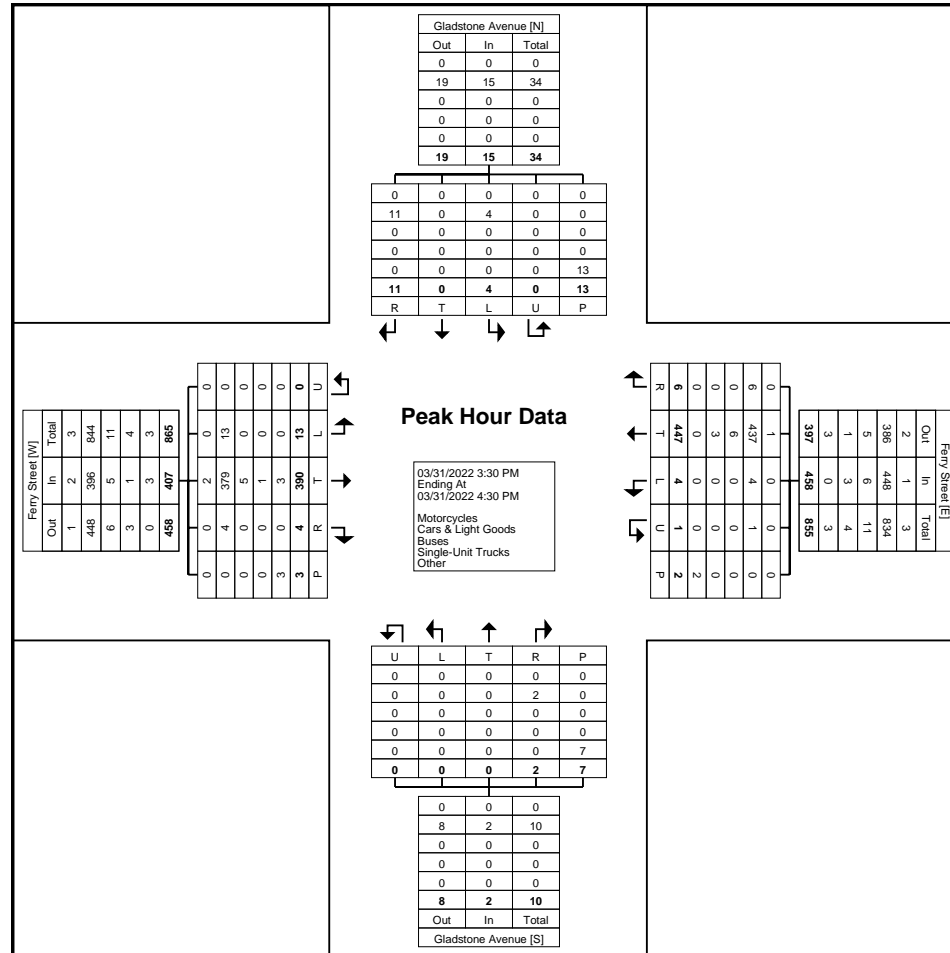
| Start Time              | Ferry Street Eastbound |            |          |          |          |            | Ferry Street Westbound |            |          |          |          |            | Gladstone Avenue Northbound |          |          |          |          |            | Gladstone Avenue Southbound |          |           |          |           |            | Int. Total |
|-------------------------|------------------------|------------|----------|----------|----------|------------|------------------------|------------|----------|----------|----------|------------|-----------------------------|----------|----------|----------|----------|------------|-----------------------------|----------|-----------|----------|-----------|------------|------------|
|                         | Left                   | Thru       | Right    | U-Turn   | Peds     | App. Total | Left                   | Thru       | Right    | U-Turn   | Peds     | App. Total | Left                        | Thru     | Right    | U-Turn   | Peds     | App. Total | Left                        | Thru     | Right     | U-Turn   | Peds      | App. Total |            |
| 3:30 PM                 | 4                      | 97         | 0        | 0        | 2        | 101        | 0                      | 119        | 2        | 0        | 1        | 121        | 0                           | 0        | 0        | 0        | 0        | 0          | 1                           | 0        | 3         | 0        | 2         | 4          | 226        |
| 3:45 PM                 | 3                      | 107        | 2        | 0        | 0        | 112        | 0                      | 102        | 2        | 0        | 0        | 104        | 0                           | 0        | 1        | 0        | 2        | 1          | 2                           | 0        | 2         | 0        | 0         | 4          | 221        |
| 4:00 PM                 | 3                      | 90         | 1        | 0        | 0        | 94         | 2                      | 111        | 2        | 0        | 0        | 115        | 0                           | 0        | 1        | 0        | 0        | 1          | 1                           | 0        | 2         | 0        | 7         | 3          | 213        |
| 4:15 PM                 | 3                      | 96         | 1        | 0        | 1        | 100        | 2                      | 115        | 0        | 1        | 1        | 118        | 0                           | 0        | 0        | 0        | 5        | 0          | 0                           | 0        | 4         | 0        | 4         | 4          | 222        |
| <b>Total</b>            | <b>13</b>              | <b>390</b> | <b>4</b> | <b>0</b> | <b>3</b> | <b>407</b> | <b>4</b>               | <b>447</b> | <b>6</b> | <b>1</b> | <b>2</b> | <b>458</b> | <b>0</b>                    | <b>0</b> | <b>2</b> | <b>0</b> | <b>7</b> | <b>2</b>   | <b>4</b>                    | <b>0</b> | <b>11</b> | <b>0</b> | <b>13</b> | <b>15</b>  | <b>882</b> |
| Approach %              | 3.2                    | 95.8       | 1.0      | 0.0      | -        | -          | 0.9                    | 97.6       | 1.3      | 0.2      | -        | -          | 0.0                         | 0.0      | 100.0    | 0.0      | -        | -          | 26.7                        | 0.0      | 73.3      | 0.0      | -         | -          | -          |
| Total %                 | 1.5                    | 44.2       | 0.5      | 0.0      | -        | 46.1       | 0.5                    | 50.7       | 0.7      | 0.1      | -        | 51.9       | 0.0                         | 0.0      | 0.2      | 0.0      | -        | 0.2        | 0.5                         | 0.0      | 1.2       | 0.0      | -         | 1.7        | -          |
| PHF                     | 0.813                  | 0.911      | 0.500    | 0.000    | -        | 0.908      | 0.500                  | 0.939      | 0.750    | 0.250    | -        | 0.946      | 0.000                       | 0.000    | 0.500    | 0.000    | -        | 0.500      | 0.500                       | 0.000    | 0.688     | 0.000    | -         | 0.938      | 0.976      |
| Motorcycles             | 0                      | 2          | 0        | 0        | -        | 2          | 0                      | 1          | 0        | 0        | -        | 1          | 0                           | 0        | 0        | 0        | -        | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 3          |
| % Motorcycles           | 0.0                    | 0.5        | 0.0      | -        | -        | 0.5        | 0.0                    | 0.2        | 0.0      | 0.0      | -        | 0.2        | -                           | -        | 0.0      | -        | -        | 0.0        | 0.0                         | -        | 0.0       | -        | -         | 0.0        | 0.3        |
| Cars & Light Goods      | 13                     | 379        | 4        | 0        | -        | 396        | 4                      | 437        | 6        | 1        | -        | 448        | 0                           | 0        | 2        | 0        | -        | 2          | 4                           | 0        | 11        | 0        | -         | 15         | 861        |
| % Cars & Light Goods    | 100.0                  | 97.2       | 100.0    | -        | -        | 97.3       | 100.0                  | 97.8       | 100.0    | 100.0    | -        | 97.8       | -                           | -        | 100.0    | -        | -        | 100.0      | 100.0                       | -        | 100.0     | -        | -         | 100.0      | 97.6       |
| Buses                   | 0                      | 5          | 0        | 0        | -        | 5          | 0                      | 6          | 0        | 0        | -        | 6          | 0                           | 0        | 0        | 0        | -        | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 11         |
| % Buses                 | 0.0                    | 1.3        | 0.0      | -        | -        | 1.2        | 0.0                    | 1.3        | 0.0      | 0.0      | -        | 1.3        | -                           | -        | 0.0      | -        | -        | 0.0        | 0.0                         | -        | 0.0       | -        | -         | 0.0        | 1.2        |
| Single-Unit Trucks      | 0                      | 1          | 0        | 0        | -        | 1          | 0                      | 3          | 0        | 0        | -        | 3          | 0                           | 0        | 0        | 0        | -        | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 4          |
| % Single-Unit Trucks    | 0.0                    | 0.3        | 0.0      | -        | -        | 0.2        | 0.0                    | 0.7        | 0.0      | 0.0      | -        | 0.7        | -                           | -        | 0.0      | -        | -        | 0.0        | 0.0                         | -        | 0.0       | -        | -         | 0.0        | 0.5        |
| Articulated Trucks      | 0                      | 0          | 0        | 0        | -        | 0          | 0                      | 0          | 0        | 0        | -        | 0          | 0                           | 0        | 0        | 0        | -        | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 0          |
| % Articulated Trucks    | 0.0                    | 0.0        | 0.0      | -        | -        | 0.0        | 0.0                    | 0.0        | 0.0      | 0.0      | -        | 0.0        | -                           | -        | 0.0      | -        | -        | 0.0        | 0.0                         | -        | 0.0       | -        | -         | 0.0        | 0.0        |
| Bicycles on Road        | 0                      | 3          | 0        | 0        | -        | 3          | 0                      | 0          | 0        | 0        | -        | 0          | 0                           | 0        | 0        | 0        | -        | 0          | 0                           | 0        | 0         | 0        | -         | 0          | 3          |
| % Bicycles on Road      | 0.0                    | 0.8        | 0.0      | -        | -        | 0.7        | 0.0                    | 0.0        | 0.0      | 0.0      | -        | 0.0        | -                           | -        | 0.0      | -        | -        | 0.0        | 0.0                         | -        | 0.0       | -        | -         | 0.0        | 0.3        |
| Bicycles on Crosswalk   | -                      | -          | -        | -        | 0        | -          | -                      | -          | -        | -        | 0        | -          | -                           | -        | -        | -        | 0        | -          | -                           | -        | -         | -        | 3         | -          | -          |
| % Bicycles on Crosswalk | -                      | -          | -        | -        | 0.0      | -          | -                      | -          | -        | -        | 0.0      | -          | -                           | -        | -        | -        | 0.0      | -          | -                           | -        | -         | -        | 23.1      | -          | -          |
| Pedestrians             | -                      | -          | -        | -        | 3        | -          | -                      | -          | -        | -        | 2        | -          | -                           | -        | -        | -        | 7        | -          | -                           | -        | -         | -        | 10        | -          | -          |
| % Pedestrians           | -                      | -          | -        | -        | 100.0    | -          | -                      | -          | -        | -        | 100.0    | -          | -                           | -        | -        | -        | 100.0    | -          | -                           | -        | -         | -        | 76.9      | -          | -          |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 amakarewicz@pts.com

Count Name: Ferry Street & Gladstone Avenue  
Site Code: 220132  
Start Date: 03/31/2022  
Page No: 11



Turning Movement Peak Hour Data Plot (3:30 PM)



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@ptsI.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 1

### Turning Movement Data

| Start Time    | Spring Street Eastbound |      |       |        |      |            | Spring Street Westbound |      |       |        |      |            | Temperance Avenue Northbound |      |       |        |      |            | Temperance Avenue Southbound |      |       |        |      |            | Int. Total |
|---------------|-------------------------|------|-------|--------|------|------------|-------------------------|------|-------|--------|------|------------|------------------------------|------|-------|--------|------|------------|------------------------------|------|-------|--------|------|------------|------------|
|               | Left                    | Thru | Right | U-Turn | Peds | App. Total | Left                    | Thru | Right | U-Turn | Peds | App. Total | Left                         | Thru | Right | U-Turn | Peds | App. Total | Left                         | Thru | Right | U-Turn | Peds | App. Total |            |
| 7:00 AM       | 1                       | 0    | 0     | 0      | 0    | 1          | 0                       | 4    | 0     | 0      | 0    | 4          | 0                            | 2    | 0     | 0      | 0    | 2          | 0                            | 1    | 1     | 0      | 0    | 2          | 9          |
| 7:15 AM       | 0                       | 2    | 0     | 0      | 0    | 2          | 2                       | 0    | 0     | 0      | 0    | 2          | 1                            | 0    | 0     | 0      | 0    | 1          | 0                            | 0    | 1     | 0      | 0    | 1          | 6          |
| 7:30 AM       | 1                       | 3    | 1     | 0      | 1    | 5          | 0                       | 0    | 0     | 0      | 0    | 0          | 0                            | 1    | 1     | 0      | 1    | 2          | 0                            | 0    | 0     | 0      | 0    | 0          | 7          |
| 7:45 AM       | 0                       | 0    | 0     | 0      | 0    | 0          | 1                       | 1    | 2     | 0      | 0    | 4          | 0                            | 3    | 0     | 0      | 0    | 3          | 1                            | 3    | 0     | 0      | 0    | 4          | 11         |
| Hourly Total  | 2                       | 5    | 1     | 0      | 1    | 8          | 3                       | 5    | 2     | 0      | 0    | 10         | 1                            | 6    | 1     | 0      | 1    | 8          | 1                            | 4    | 2     | 0      | 0    | 7          | 33         |
| 8:00 AM       | 1                       | 2    | 0     | 0      | 0    | 3          | 0                       | 4    | 1     | 0      | 0    | 5          | 1                            | 1    | 0     | 0      | 0    | 2          | 0                            | 2    | 1     | 0      | 0    | 3          | 13         |
| 8:15 AM       | 1                       | 1    | 1     | 0      | 0    | 3          | 1                       | 3    | 1     | 0      | 0    | 5          | 0                            | 2    | 0     | 0      | 0    | 2          | 0                            | 1    | 0     | 0      | 0    | 1          | 11         |
| 8:30 AM       | 0                       | 0    | 1     | 0      | 2    | 1          | 1                       | 2    | 1     | 0      | 0    | 4          | 1                            | 2    | 1     | 0      | 0    | 4          | 0                            | 1    | 0     | 0      | 1    | 1          | 10         |
| 8:45 AM       | 0                       | 3    | 0     | 0      | 2    | 3          | 1                       | 5    | 2     | 0      | 0    | 8          | 1                            | 4    | 0     | 0      | 0    | 5          | 0                            | 4    | 0     | 0      | 0    | 4          | 20         |
| Hourly Total  | 2                       | 6    | 2     | 0      | 4    | 10         | 3                       | 14   | 5     | 0      | 0    | 22         | 3                            | 9    | 1     | 0      | 0    | 13         | 0                            | 8    | 1     | 0      | 1    | 9          | 54         |
| *** BREAK *** | -                       | -    | -     | -      | -    | -          | -                       | -    | -     | -      | -    | -          | -                            | -    | -     | -      | -    | -          | -                            | -    | -     | -      | -    | -          | -          |
| 11:00 AM      | 0                       | 4    | 1     | 0      | 0    | 5          | 1                       | 4    | 3     | 0      | 0    | 8          | 2                            | 2    | 2     | 0      | 0    | 6          | 1                            | 1    | 0     | 0      | 0    | 2          | 21         |
| 11:15 AM      | 0                       | 6    | 3     | 0      | 1    | 9          | 2                       | 9    | 1     | 0      | 0    | 12         | 0                            | 2    | 2     | 0      | 0    | 4          | 0                            | 3    | 1     | 0      | 1    | 4          | 29         |
| 11:30 AM      | 0                       | 3    | 1     | 0      | 1    | 4          | 2                       | 9    | 0     | 0      | 0    | 11         | 0                            | 1    | 0     | 1      | 0    | 2          | 2                            | 3    | 0     | 0      | 0    | 5          | 22         |
| 11:45 AM      | 0                       | 2    | 1     | 0      | 1    | 3          | 3                       | 10   | 2     | 0      | 0    | 15         | 0                            | 4    | 1     | 0      | 0    | 5          | 4                            | 2    | 1     | 0      | 0    | 7          | 30         |
| Hourly Total  | 0                       | 15   | 6     | 0      | 3    | 21         | 8                       | 32   | 6     | 0      | 0    | 46         | 2                            | 9    | 5     | 1      | 0    | 17         | 7                            | 9    | 2     | 0      | 1    | 18         | 102        |
| 12:00 PM      | 1                       | 7    | 0     | 0      | 0    | 8          | 2                       | 12   | 1     | 0      | 1    | 15         | 4                            | 1    | 5     | 0      | 0    | 10         | 0                            | 0    | 0     | 0      | 0    | 0          | 33         |
| 12:15 PM      | 0                       | 6    | 1     | 0      | 0    | 7          | 1                       | 4    | 1     | 0      | 1    | 6          | 1                            | 2    | 0     | 0      | 1    | 3          | 0                            | 2    | 0     | 0      | 0    | 2          | 18         |
| 12:30 PM      | 0                       | 5    | 0     | 0      | 0    | 5          | 0                       | 4    | 1     | 0      | 0    | 5          | 0                            | 4    | 1     | 0      | 1    | 5          | 2                            | 2    | 0     | 0      | 0    | 4          | 19         |
| 12:45 PM      | 0                       | 1    | 2     | 0      | 0    | 3          | 0                       | 7    | 2     | 0      | 0    | 9          | 0                            | 0    | 2     | 0      | 0    | 2          | 1                            | 2    | 2     | 0      | 0    | 5          | 19         |
| Hourly Total  | 1                       | 19   | 3     | 0      | 0    | 23         | 3                       | 27   | 5     | 0      | 2    | 35         | 5                            | 7    | 8     | 0      | 2    | 20         | 3                            | 6    | 2     | 0      | 0    | 11         | 89         |
| 1:00 PM       | 1                       | 2    | 0     | 0      | 0    | 3          | 2                       | 5    | 2     | 0      | 3    | 9          | 1                            | 1    | 0     | 0      | 0    | 2          | 0                            | 2    | 0     | 0      | 0    | 2          | 16         |
| 1:15 PM       | 1                       | 4    | 0     | 0      | 0    | 5          | 2                       | 6    | 1     | 0      | 0    | 9          | 1                            | 0    | 1     | 0      | 0    | 2          | 1                            | 2    | 1     | 0      | 0    | 4          | 20         |
| 1:30 PM       | 0                       | 4    | 0     | 0      | 0    | 4          | 1                       | 0    | 0     | 0      | 0    | 1          | 0                            | 3    | 1     | 0      | 0    | 4          | 1                            | 2    | 0     | 0      | 2    | 3          | 12         |
| 1:45 PM       | 0                       | 2    | 0     | 0      | 1    | 2          | 3                       | 3    | 3     | 0      | 1    | 9          | 1                            | 1    | 1     | 0      | 0    | 3          | 1                            | 2    | 0     | 0      | 2    | 3          | 17         |
| Hourly Total  | 2                       | 12   | 0     | 0      | 1    | 14         | 8                       | 14   | 6     | 0      | 4    | 28         | 3                            | 5    | 3     | 0      | 0    | 11         | 3                            | 8    | 1     | 0      | 4    | 12         | 65         |
| *** BREAK *** | -                       | -    | -     | -      | -    | -          | -                       | -    | -     | -      | -    | -          | -                            | -    | -     | -      | -    | -          | -                            | -    | -     | -      | -    | -          | -          |
| 3:00 PM       | 0                       | 2    | 1     | 0      | 0    | 3          | 2                       | 3    | 1     | 0      | 0    | 6          | 0                            | 1    | 2     | 0      | 1    | 3          | 1                            | 3    | 1     | 0      | 0    | 5          | 17         |
| 3:15 PM       | 1                       | 1    | 1     | 0      | 1    | 3          | 2                       | 6    | 2     | 0      | 3    | 10         | 1                            | 1    | 4     | 0      | 0    | 6          | 4                            | 3    | 0     | 0      | 1    | 7          | 26         |
| 3:30 PM       | 1                       | 4    | 0     | 0      | 2    | 5          | 4                       | 6    | 2     | 0      | 0    | 12         | 0                            | 4    | 1     | 0      | 0    | 5          | 2                            | 5    | 0     | 0      | 0    | 7          | 29         |
| 3:45 PM       | 0                       | 5    | 0     | 0      | 0    | 5          | 1                       | 4    | 3     | 0      | 0    | 8          | 0                            | 7    | 0     | 0      | 0    | 7          | 1                            | 3    | 1     | 0      | 2    | 5          | 25         |
| Hourly Total  | 2                       | 12   | 2     | 0      | 3    | 16         | 9                       | 19   | 8     | 0      | 3    | 36         | 1                            | 13   | 7     | 0      | 1    | 21         | 8                            | 14   | 2     | 0      | 3    | 24         | 97         |
| 4:00 PM       | 1                       | 5    | 0     | 0      | 0    | 6          | 0                       | 3    | 1     | 0      | 3    | 4          | 1                            | 2    | 1     | 0      | 1    | 4          | 1                            | 4    | 1     | 0      | 0    | 6          | 20         |
| 4:15 PM       | 0                       | 2    | 1     | 0      | 1    | 3          | 4                       | 4    | 3     | 0      | 0    | 11         | 2                            | 2    | 0     | 0      | 3    | 4          | 3                            | 1    | 0     | 0      | 1    | 4          | 22         |
| 4:30 PM       | 0                       | 4    | 1     | 0      | 0    | 5          | 1                       | 4    | 0     | 0      | 0    | 5          | 0                            | 2    | 2     | 0      | 0    | 4          | 1                            | 5    | 0     | 0      | 0    | 6          | 20         |

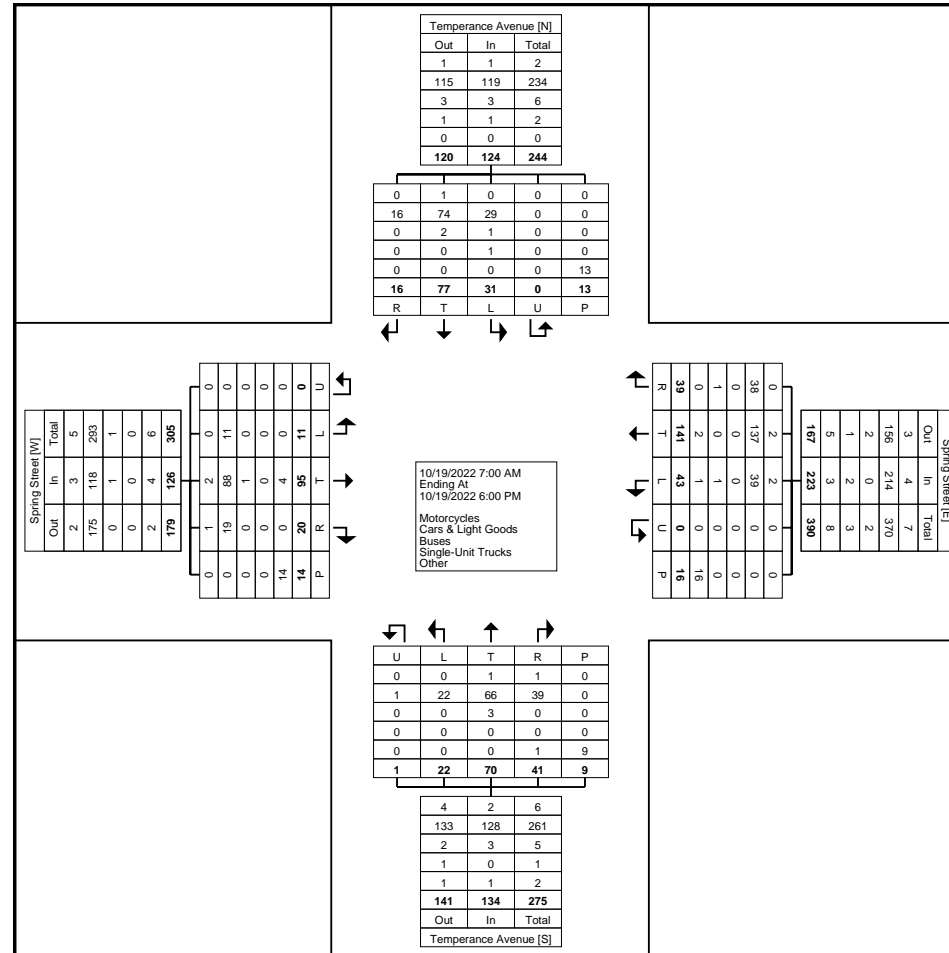
|                         |       |      |      |     |       |      |      |      |      |     |       |      |       |      |      |       |       |      |      |      |       |     |       |      |      |
|-------------------------|-------|------|------|-----|-------|------|------|------|------|-----|-------|------|-------|------|------|-------|-------|------|------|------|-------|-----|-------|------|------|
| 4:45 PM                 | 1     | 3    | 1    | 0   | 0     | 5    | 1    | 5    | 0    | 0   | 0     | 6    | 0     | 1    | 4    | 0     | 0     | 5    | 1    | 3    | 1     | 0   | 1     | 5    | 21   |
| Hourly Total            | 2     | 14   | 3    | 0   | 1     | 19   | 6    | 16   | 4    | 0   | 3     | 26   | 3     | 7    | 7    | 0     | 4     | 17   | 6    | 13   | 2     | 0   | 2     | 21   | 83   |
| 5:00 PM                 | 0     | 3    | 0    | 0   | 1     | 3    | 1    | 5    | 1    | 0   | 0     | 7    | 1     | 4    | 5    | 0     | 0     | 10   | 0    | 5    | 2     | 0   | 2     | 7    | 27   |
| 5:15 PM                 | 0     | 2    | 1    | 0   | 0     | 3    | 0    | 3    | 0    | 0   | 0     | 3    | 1     | 1    | 1    | 0     | 0     | 3    | 2    | 3    | 1     | 0   | 0     | 6    | 15   |
| 5:30 PM                 | 0     | 2    | 0    | 0   | 0     | 2    | 0    | 4    | 1    | 0   | 1     | 5    | 1     | 8    | 2    | 0     | 1     | 11   | 1    | 4    | 0     | 0   | 0     | 5    | 23   |
| 5:45 PM                 | 0     | 5    | 2    | 0   | 0     | 7    | 2    | 2    | 1    | 0   | 3     | 5    | 1     | 1    | 1    | 0     | 0     | 3    | 0    | 3    | 1     | 0   | 0     | 4    | 19   |
| Hourly Total            | 0     | 12   | 3    | 0   | 1     | 15   | 3    | 14   | 3    | 0   | 4     | 20   | 4     | 14   | 9    | 0     | 1     | 27   | 3    | 15   | 4     | 0   | 2     | 22   | 84   |
| Grand Total             | 11    | 95   | 20   | 0   | 14    | 126  | 43   | 141  | 39   | 0   | 16    | 223  | 22    | 70   | 41   | 1     | 9     | 134  | 31   | 77   | 16    | 0   | 13    | 124  | 607  |
| Approach %              | 8.7   | 75.4 | 15.9 | 0.0 | -     | -    | 19.3 | 63.2 | 17.5 | 0.0 | -     | -    | 16.4  | 52.2 | 30.6 | 0.7   | -     | -    | 25.0 | 62.1 | 12.9  | 0.0 | -     | -    | -    |
| Total %                 | 1.8   | 15.7 | 3.3  | 0.0 | -     | 20.8 | 7.1  | 23.2 | 6.4  | 0.0 | -     | 36.7 | 3.6   | 11.5 | 6.8  | 0.2   | -     | 22.1 | 5.1  | 12.7 | 2.6   | 0.0 | -     | 20.4 | -    |
| Motorcycles             | 0     | 2    | 1    | 0   | -     | 3    | 2    | 2    | 0    | 0   | -     | 4    | 0     | 1    | 1    | 0     | -     | 2    | 0    | 1    | 0     | 0   | -     | 1    | 10   |
| % Motorcycles           | 0.0   | 2.1  | 5.0  | -   | -     | 2.4  | 4.7  | 1.4  | 0.0  | -   | -     | 1.8  | 0.0   | 1.4  | 2.4  | 0.0   | -     | 1.5  | 0.0  | 1.3  | 0.0   | -   | -     | 0.8  | 1.6  |
| Cars & Light Goods      | 11    | 88   | 19   | 0   | -     | 118  | 39   | 137  | 38   | 0   | -     | 214  | 22    | 66   | 39   | 1     | -     | 128  | 29   | 74   | 16    | 0   | -     | 119  | 579  |
| % Cars & Light Goods    | 100.0 | 92.6 | 95.0 | -   | -     | 93.7 | 90.7 | 97.2 | 97.4 | -   | -     | 96.0 | 100.0 | 94.3 | 95.1 | 100.0 | -     | 95.5 | 93.5 | 96.1 | 100.0 | -   | -     | 96.0 | 95.4 |
| Buses                   | 0     | 1    | 0    | 0   | -     | 1    | 0    | 0    | 0    | 0   | -     | 0    | 0     | 3    | 0    | 0     | -     | 3    | 1    | 2    | 0     | 0   | -     | 3    | 7    |
| % Buses                 | 0.0   | 1.1  | 0.0  | -   | -     | 0.8  | 0.0  | 0.0  | 0.0  | -   | -     | 0.0  | 0.0   | 4.3  | 0.0  | 0.0   | -     | 2.2  | 3.2  | 2.6  | 0.0   | -   | -     | 2.4  | 1.2  |
| Single-Unit Trucks      | 0     | 0    | 0    | 0   | -     | 0    | 1    | 0    | 1    | 0   | -     | 2    | 0     | 0    | 0    | 0     | -     | 0    | 1    | 0    | 0     | 0   | -     | 1    | 3    |
| % Single-Unit Trucks    | 0.0   | 0.0  | 0.0  | -   | -     | 0.0  | 2.3  | 0.0  | 2.6  | -   | -     | 0.9  | 0.0   | 0.0  | 0.0  | 0.0   | -     | 0.0  | 3.2  | 0.0  | 0.0   | -   | -     | 0.8  | 0.5  |
| Articulated Trucks      | 0     | 0    | 0    | 0   | -     | 0    | 0    | 1    | 0    | 0   | -     | 1    | 0     | 0    | 0    | 0     | -     | 0    | 0    | 0    | 0     | 0   | -     | 0    | 1    |
| % Articulated Trucks    | 0.0   | 0.0  | 0.0  | -   | -     | 0.0  | 0.0  | 0.7  | 0.0  | -   | -     | 0.4  | 0.0   | 0.0  | 0.0  | 0.0   | -     | 0.0  | 0.0  | 0.0  | 0.0   | 0.0 | -     | 0.0  | 0.2  |
| Bicycles on Road        | 0     | 4    | 0    | 0   | -     | 4    | 1    | 1    | 0    | 0   | -     | 2    | 0     | 0    | 1    | 0     | -     | 1    | 0    | 0    | 0     | 0   | -     | 0    | 7    |
| % Bicycles on Road      | 0.0   | 4.2  | 0.0  | -   | -     | 3.2  | 2.3  | 0.7  | 0.0  | -   | -     | 0.9  | 0.0   | 0.0  | 2.4  | 0.0   | -     | 0.7  | 0.0  | 0.0  | 0.0   | -   | -     | 0.0  | 1.2  |
| Bicycles on Crosswalk   | -     | -    | -    | -   | 0     | -    | -    | -    | -    | -   | 0     | -    | -     | -    | -    | -     | 0     | -    | -    | -    | -     | -   | 0     | -    | -    |
| % Bicycles on Crosswalk | -     | -    | -    | -   | 0.0   | -    | -    | -    | -    | -   | 0.0   | -    | -     | -    | -    | -     | 0.0   | -    | -    | -    | -     | -   | 0.0   | -    | -    |
| Pedestrians             | -     | -    | -    | -   | 14    | -    | -    | -    | -    | -   | 16    | -    | -     | -    | -    | -     | 9     | -    | -    | -    | -     | -   | 13    | -    | -    |
| % Pedestrians           | -     | -    | -    | -   | 100.0 | -    | -    | -    | -    | -   | 100.0 | -    | -     | -    | -    | -     | 100.0 | -    | -    | -    | -     | -   | 100.0 | -    | -    |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@ptsI.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 3



Turning Movement Data Plot



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@ptsll.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 4

### Turning Movement Peak Hour Data (8:00 AM)

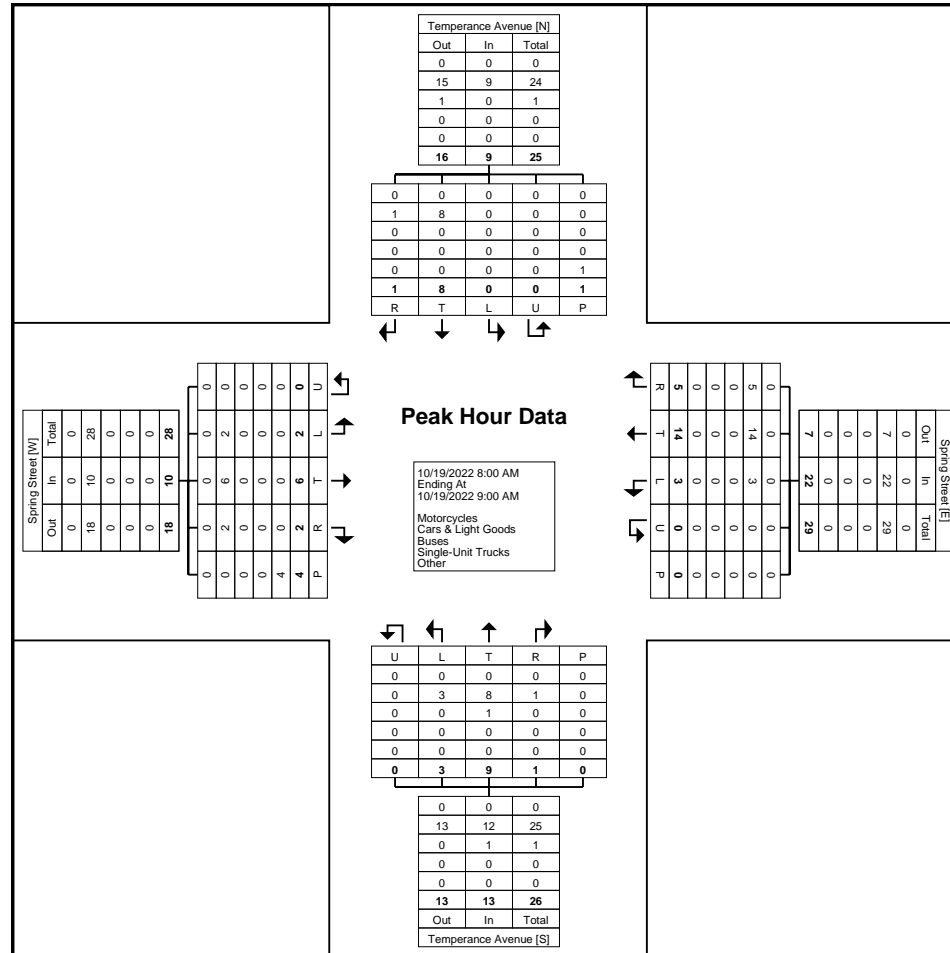
| Start Time              | Spring Street Eastbound |          |          |          |          |            | Spring Street Westbound |           |          |          |          |            | Temperance Avenue Northbound |          |          |          |          |            | Temperance Avenue Southbound |          |          |          |          |            | Int. Total |
|-------------------------|-------------------------|----------|----------|----------|----------|------------|-------------------------|-----------|----------|----------|----------|------------|------------------------------|----------|----------|----------|----------|------------|------------------------------|----------|----------|----------|----------|------------|------------|
|                         | Left                    | Thru     | Right    | U-Turn   | Peds     | App. Total | Left                    | Thru      | Right    | U-Turn   | Peds     | App. Total | Left                         | Thru     | Right    | U-Turn   | Peds     | App. Total | Left                         | Thru     | Right    | U-Turn   | Peds     | App. Total |            |
| 8:00 AM                 | 1                       | 2        | 0        | 0        | 0        | 3          | 0                       | 4         | 1        | 0        | 0        | 5          | 1                            | 1        | 0        | 0        | 0        | 2          | 0                            | 2        | 1        | 0        | 0        | 3          | 13         |
| 8:15 AM                 | 1                       | 1        | 1        | 0        | 0        | 3          | 1                       | 3         | 1        | 0        | 0        | 5          | 0                            | 2        | 0        | 0        | 0        | 2          | 0                            | 1        | 0        | 0        | 0        | 1          | 11         |
| 8:30 AM                 | 0                       | 0        | 1        | 0        | 2        | 1          | 1                       | 2         | 1        | 0        | 0        | 4          | 1                            | 2        | 1        | 0        | 0        | 4          | 0                            | 1        | 0        | 0        | 1        | 1          | 10         |
| 8:45 AM                 | 0                       | 3        | 0        | 0        | 2        | 3          | 1                       | 5         | 2        | 0        | 0        | 8          | 1                            | 4        | 0        | 0        | 0        | 5          | 0                            | 4        | 0        | 0        | 0        | 4          | 20         |
| <b>Total</b>            | <b>2</b>                | <b>6</b> | <b>2</b> | <b>0</b> | <b>4</b> | <b>10</b>  | <b>3</b>                | <b>14</b> | <b>5</b> | <b>0</b> | <b>0</b> | <b>22</b>  | <b>3</b>                     | <b>9</b> | <b>1</b> | <b>0</b> | <b>0</b> | <b>13</b>  | <b>0</b>                     | <b>8</b> | <b>1</b> | <b>0</b> | <b>1</b> | <b>9</b>   | <b>54</b>  |
| Approach %              | 20.0                    | 60.0     | 20.0     | 0.0      | -        | -          | 13.6                    | 63.6      | 22.7     | 0.0      | -        | -          | 23.1                         | 69.2     | 7.7      | 0.0      | -        | -          | 0.0                          | 88.9     | 11.1     | 0.0      | -        | -          | -          |
| Total %                 | 3.7                     | 11.1     | 3.7      | 0.0      | -        | 18.5       | 5.6                     | 25.9      | 9.3      | 0.0      | -        | 40.7       | 5.6                          | 16.7     | 1.9      | 0.0      | -        | 24.1       | 0.0                          | 14.8     | 1.9      | 0.0      | -        | 16.7       | -          |
| PHF                     | 0.500                   | 0.500    | 0.500    | 0.000    | -        | 0.833      | 0.750                   | 0.700     | 0.625    | 0.000    | -        | 0.688      | 0.750                        | 0.563    | 0.250    | 0.000    | -        | 0.650      | 0.000                        | 0.500    | 0.250    | 0.000    | -        | 0.563      | 0.675      |
| Motorcycles             | 0                       | 0        | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0          |
| % Motorcycles           | 0.0                     | 0.0      | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | -                            | 0.0      | 0.0      | -        | -        | 0.0        | 0.0        |
| Cars & Light Goods      | 2                       | 6        | 2        | 0        | -        | 10         | 3                       | 14        | 5        | 0        | -        | 22         | 3                            | 8        | 1        | 0        | -        | 12         | 0                            | 8        | 1        | 0        | -        | 9          | 53         |
| % Cars & Light Goods    | 100.0                   | 100.0    | 100.0    | -        | -        | 100.0      | 100.0                   | 100.0     | 100.0    | -        | -        | 100.0      | 100.0                        | 88.9     | 100.0    | -        | -        | 92.3       | -                            | 100.0    | 100.0    | -        | -        | 100.0      | 98.1       |
| Buses                   | 0                       | 0        | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 1        | 0        | 0        | -        | 1          | 0                            | 0        | 0        | 0        | -        | 0          | 1          |
| % Buses                 | 0.0                     | 0.0      | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 11.1     | 0.0      | -        | -        | 7.7        | -                            | 0.0      | 0.0      | -        | -        | 0.0        | 1.9        |
| Single-Unit Trucks      | 0                       | 0        | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0          |
| % Single-Unit Trucks    | 0.0                     | 0.0      | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | -                            | 0.0      | 0.0      | -        | -        | 0.0        | 0.0        |
| Articulated Trucks      | 0                       | 0        | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0          |
| % Articulated Trucks    | 0.0                     | 0.0      | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | -                            | 0.0      | 0.0      | -        | -        | 0.0        | 0.0        |
| Bicycles on Road        | 0                       | 0        | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0          |
| % Bicycles on Road      | 0.0                     | 0.0      | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | -                            | 0.0      | 0.0      | -        | -        | 0.0        | 0.0        |
| Bicycles on Crosswalk   | -                       | -        | -        | -        | 0        | -          | -                       | -         | -        | -        | 0        | -          | -                            | -        | -        | -        | 0        | -          | -                            | -        | -        | -        | 0        | -          | -          |
| % Bicycles on Crosswalk | -                       | -        | -        | -        | 0.0      | -          | -                       | -         | -        | -        | -        | -          | -                            | -        | -        | -        | -        | -          | -                            | -        | -        | -        | 0.0      | -          | -          |
| Pedestrians             | -                       | -        | -        | -        | 4        | -          | -                       | -         | -        | -        | 0        | -          | -                            | -        | -        | -        | 0        | -          | -                            | -        | -        | -        | 1        | -          | -          |
| % Pedestrians           | -                       | -        | -        | -        | 100.0    | -          | -                       | -         | -        | -        | -        | -          | -                            | -        | -        | -        | -        | -          | -                            | -        | -        | -        | 100.0    | -          | -          |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@ptsli.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 5



Turning Movement Peak Hour Data Plot (8:00 AM)





Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@pts1.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 6

### Turning Movement Peak Hour Data (11:15 AM)

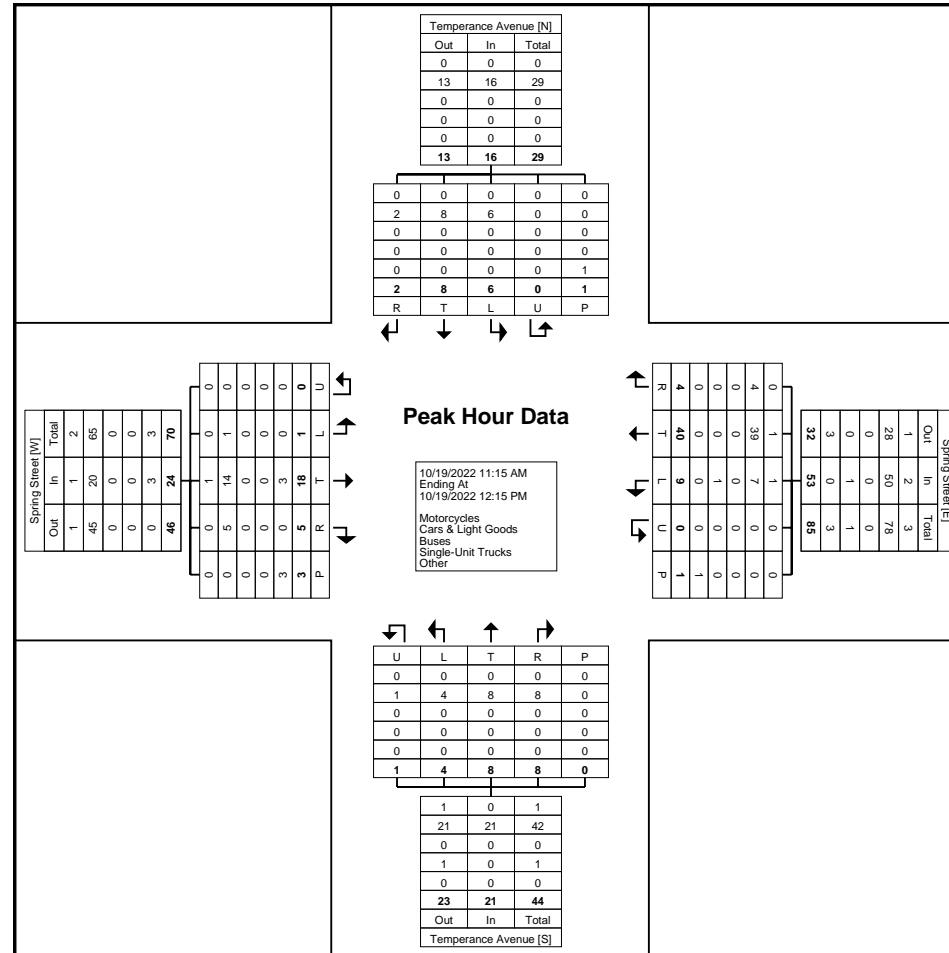
| Start Time              | Spring Street Eastbound |           |          |          |          |            | Spring Street Westbound |           |          |          |          |            | Temperance Avenue Northbound |          |          |          |          |            | Temperance Avenue Southbound |          |          |          |          |            | Int. Total |
|-------------------------|-------------------------|-----------|----------|----------|----------|------------|-------------------------|-----------|----------|----------|----------|------------|------------------------------|----------|----------|----------|----------|------------|------------------------------|----------|----------|----------|----------|------------|------------|
|                         | Left                    | Thru      | Right    | U-Turn   | Peds     | App. Total | Left                    | Thru      | Right    | U-Turn   | Peds     | App. Total | Left                         | Thru     | Right    | U-Turn   | Peds     | App. Total | Left                         | Thru     | Right    | U-Turn   | Peds     | App. Total |            |
| 11:15 AM                | 0                       | 6         | 3        | 0        | 1        | 9          | 2                       | 9         | 1        | 0        | 0        | 12         | 0                            | 2        | 2        | 0        | 0        | 4          | 0                            | 3        | 1        | 0        | 1        | 4          | 29         |
| 11:30 AM                | 0                       | 3         | 1        | 0        | 1        | 4          | 2                       | 9         | 0        | 0        | 0        | 11         | 0                            | 1        | 0        | 1        | 0        | 2          | 2                            | 3        | 0        | 0        | 0        | 5          | 22         |
| 11:45 AM                | 0                       | 2         | 1        | 0        | 1        | 3          | 3                       | 10        | 2        | 0        | 0        | 15         | 0                            | 4        | 1        | 0        | 0        | 5          | 4                            | 2        | 1        | 0        | 0        | 7          | 30         |
| 12:00 PM                | 1                       | 7         | 0        | 0        | 0        | 8          | 2                       | 12        | 1        | 0        | 1        | 15         | 4                            | 1        | 5        | 0        | 0        | 10         | 0                            | 0        | 0        | 0        | 0        | 0          | 33         |
| <b>Total</b>            | <b>1</b>                | <b>18</b> | <b>5</b> | <b>0</b> | <b>3</b> | <b>24</b>  | <b>9</b>                | <b>40</b> | <b>4</b> | <b>0</b> | <b>1</b> | <b>53</b>  | <b>4</b>                     | <b>8</b> | <b>8</b> | <b>1</b> | <b>0</b> | <b>21</b>  | <b>6</b>                     | <b>8</b> | <b>2</b> | <b>0</b> | <b>1</b> | <b>16</b>  | <b>114</b> |
| Approach %              | 4.2                     | 75.0      | 20.8     | 0.0      | -        | -          | 17.0                    | 75.5      | 7.5      | 0.0      | -        | -          | 19.0                         | 38.1     | 38.1     | 4.8      | -        | -          | 37.5                         | 50.0     | 12.5     | 0.0      | -        | -          | -          |
| Total %                 | 0.9                     | 15.8      | 4.4      | 0.0      | -        | 21.1       | 7.9                     | 35.1      | 3.5      | 0.0      | -        | 46.5       | 3.5                          | 7.0      | 7.0      | 0.9      | -        | 18.4       | 5.3                          | 7.0      | 1.8      | 0.0      | -        | 14.0       | -          |
| PHF                     | 0.250                   | 0.643     | 0.417    | 0.000    | -        | 0.667      | 0.750                   | 0.833     | 0.500    | 0.000    | -        | 0.883      | 0.250                        | 0.500    | 0.400    | 0.250    | -        | 0.525      | 0.375                        | 0.667    | 0.500    | 0.000    | -        | 0.571      | 0.864      |
| Motorcycles             | 0                       | 1         | 0        | 0        | -        | 1          | 1                       | 1         | 0        | 0        | -        | 2          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 3          |
| % Motorcycles           | 0.0                     | 5.6       | 0.0      | -        | -        | 4.2        | 11.1                    | 2.5       | 0.0      | -        | -        | 3.8        | 0.0                          | 0.0      | 0.0      | 0.0      | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | 2.6        |
| Cars & Light Goods      | 1                       | 14        | 5        | 0        | -        | 20         | 7                       | 39        | 4        | 0        | -        | 50         | 4                            | 8        | 8        | 1        | -        | 21         | 6                            | 8        | 2        | 0        | -        | 16         | 107        |
| % Cars & Light Goods    | 100.0                   | 77.8      | 100.0    | -        | -        | 83.3       | 77.8                    | 97.5      | 100.0    | -        | -        | 94.3       | 100.0                        | 100.0    | 100.0    | 100.0    | -        | 100.0      | 100.0                        | 100.0    | 100.0    | -        | -        | 100.0      | 93.9       |
| Buses                   | 0                       | 0         | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0          |
| % Buses                 | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0      | 0.0      | 0.0      | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | 0.0        |
| Single-Unit Trucks      | 0                       | 0         | 0        | 0        | -        | 0          | 1                       | 0         | 0        | 0        | -        | 1          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 1          |
| % Single-Unit Trucks    | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 11.1                    | 0.0       | 0.0      | -        | -        | 1.9        | 0.0                          | 0.0      | 0.0      | 0.0      | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | 0.9        |
| Articulated Trucks      | 0                       | 0         | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0          |
| % Articulated Trucks    | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0      | 0.0      | 0.0      | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | 0.0        |
| Bicycles on Road        | 0                       | 3         | 0        | 0        | -        | 3          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 0                            | 0        | 0        | 0        | -        | 0          | 3          |
| % Bicycles on Road      | 0.0                     | 16.7      | 0.0      | -        | -        | 12.5       | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0      | 0.0      | 0.0      | -        | 0.0        | 0.0                          | 0.0      | 0.0      | -        | -        | 0.0        | 2.6        |
| Bicycles on Crosswalk   | -                       | -         | -        | -        | 0        | -          | -                       | -         | -        | -        | 0        | -          | -                            | -        | -        | -        | 0        | -          | -                            | -        | -        | -        | 0        | -          | -          |
| % Bicycles on Crosswalk | -                       | -         | -        | -        | 0.0      | -          | -                       | -         | -        | -        | 0.0      | -          | -                            | -        | -        | -        | -        | -          | -                            | -        | -        | -        | 0.0      | -          | -          |
| Pedestrians             | -                       | -         | -        | -        | 3        | -          | -                       | -         | -        | -        | 1        | -          | -                            | -        | -        | -        | 0        | -          | -                            | -        | -        | -        | 1        | -          | -          |
| % Pedestrians           | -                       | -         | -        | -        | 100.0    | -          | -                       | -         | -        | -        | 100.0    | -          | -                            | -        | -        | -        | -        | -          | -                            | -        | -        | -        | 100.0    | -          | -          |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@ptsI.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 7



Turning Movement Peak Hour Data Plot (11:15 AM)



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@ptsl.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 8

### Turning Movement Peak Hour Data (3:15 PM)

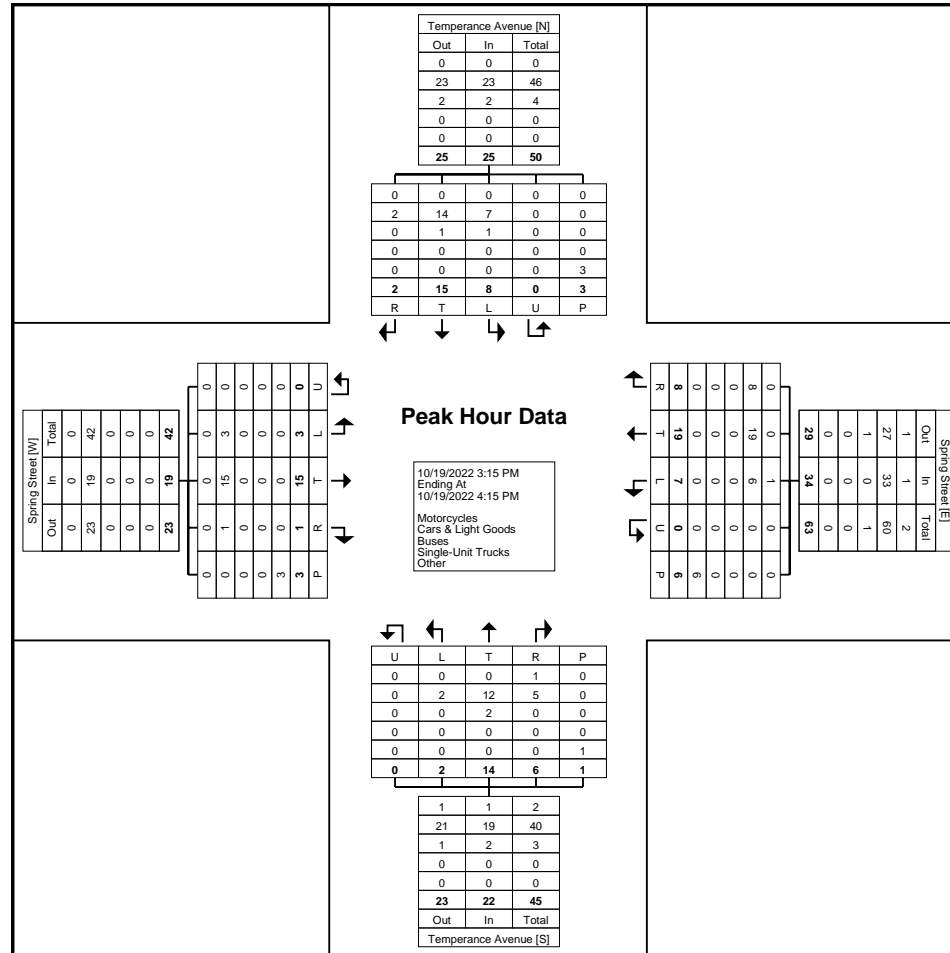
| Start Time              | Spring Street Eastbound |           |          |          |          |            | Spring Street Westbound |           |          |          |          |            | Temperance Avenue Northbound |           |          |          |          |            | Temperance Avenue Southbound |           |          |          |          |            | Int. Total |
|-------------------------|-------------------------|-----------|----------|----------|----------|------------|-------------------------|-----------|----------|----------|----------|------------|------------------------------|-----------|----------|----------|----------|------------|------------------------------|-----------|----------|----------|----------|------------|------------|
|                         | Left                    | Thru      | Right    | U-Turn   | Peds     | App. Total | Left                    | Thru      | Right    | U-Turn   | Peds     | App. Total | Left                         | Thru      | Right    | U-Turn   | Peds     | App. Total | Left                         | Thru      | Right    | U-Turn   | Peds     | App. Total |            |
| 3:15 PM                 | 1                       | 1         | 1        | 0        | 1        | 3          | 2                       | 6         | 2        | 0        | 3        | 10         | 1                            | 1         | 4        | 0        | 0        | 6          | 4                            | 3         | 0        | 0        | 1        | 7          | 26         |
| 3:30 PM                 | 1                       | 4         | 0        | 0        | 2        | 5          | 4                       | 6         | 2        | 0        | 0        | 12         | 0                            | 4         | 1        | 0        | 0        | 5          | 2                            | 5         | 0        | 0        | 0        | 7          | 29         |
| 3:45 PM                 | 0                       | 5         | 0        | 0        | 0        | 5          | 1                       | 4         | 3        | 0        | 0        | 8          | 0                            | 7         | 0        | 0        | 0        | 7          | 1                            | 3         | 1        | 0        | 2        | 5          | 25         |
| 4:00 PM                 | 1                       | 5         | 0        | 0        | 0        | 6          | 0                       | 3         | 1        | 0        | 3        | 4          | 1                            | 2         | 1        | 0        | 1        | 4          | 1                            | 4         | 1        | 0        | 0        | 6          | 20         |
| <b>Total</b>            | <b>3</b>                | <b>15</b> | <b>1</b> | <b>0</b> | <b>3</b> | <b>19</b>  | <b>7</b>                | <b>19</b> | <b>8</b> | <b>0</b> | <b>6</b> | <b>34</b>  | <b>2</b>                     | <b>14</b> | <b>6</b> | <b>0</b> | <b>1</b> | <b>22</b>  | <b>8</b>                     | <b>15</b> | <b>2</b> | <b>0</b> | <b>3</b> | <b>25</b>  | <b>100</b> |
| Approach %              | 15.8                    | 78.9      | 5.3      | 0.0      | -        | -          | 20.6                    | 55.9      | 23.5     | 0.0      | -        | -          | 9.1                          | 63.6      | 27.3     | 0.0      | -        | -          | 32.0                         | 60.0      | 8.0      | 0.0      | -        | -          | -          |
| Total %                 | 3.0                     | 15.0      | 1.0      | 0.0      | -        | 19.0       | 7.0                     | 19.0      | 8.0      | 0.0      | -        | 34.0       | 2.0                          | 14.0      | 6.0      | 0.0      | -        | 22.0       | 8.0                          | 15.0      | 2.0      | 0.0      | -        | 25.0       | -          |
| PHF                     | 0.750                   | 0.750     | 0.250    | 0.000    | -        | 0.792      | 0.438                   | 0.792     | 0.667    | 0.000    | -        | 0.708      | 0.500                        | 0.500     | 0.375    | 0.000    | -        | 0.786      | 0.500                        | 0.750     | 0.500    | 0.000    | -        | 0.893      | 0.862      |
| Motorcycles             | 0                       | 0         | 0        | 0        | -        | 0          | 1                       | 0         | 0        | 0        | -        | 1          | 0                            | 0         | 1        | 0        | -        | 1          | 0                            | 0         | 0        | 0        | -        | 0          | 2          |
| % Motorcycles           | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 14.3                    | 0.0       | 0.0      | -        | -        | 2.9        | 0.0                          | 0.0       | 16.7     | -        | -        | 4.5        | 0.0                          | 0.0       | 0.0      | -        | -        | 0.0        | 2.0        |
| Cars & Light Goods      | 3                       | 15        | 1        | 0        | -        | 19         | 6                       | 19        | 8        | 0        | -        | 33         | 2                            | 12        | 5        | 0        | -        | 19         | 7                            | 14        | 2        | 0        | -        | 23         | 94         |
| % Cars & Light Goods    | 100.0                   | 100.0     | 100.0    | -        | -        | 100.0      | 85.7                    | 100.0     | 100.0    | -        | -        | 97.1       | 100.0                        | 85.7      | 83.3     | -        | -        | 86.4       | 87.5                         | 93.3      | 100.0    | -        | -        | 92.0       | 94.0       |
| Buses                   | 0                       | 0         | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 2         | 0        | 0        | -        | 2          | 1                            | 1         | 0        | 0        | -        | 2          | 4          |
| % Buses                 | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 14.3      | 0.0      | -        | -        | 9.1        | 12.5                         | 6.7       | 0.0      | -        | -        | 8.0        | 4.0        |
| Single-Unit Trucks      | 0                       | 0         | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0         | 0        | 0        | -        | 0          | 0                            | 0         | 0        | 0        | -        | 0          | 0          |
| % Single-Unit Trucks    | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0       | 0.0      | -        | -        | 0.0        | 0.0        |
| Articulated Trucks      | 0                       | 0         | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0         | 0        | 0        | -        | 0          | 0                            | 0         | 0        | 0        | -        | 0          | 0          |
| % Articulated Trucks    | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0       | 0.0      | -        | -        | 0.0        | 0.0        |
| Bicycles on Road        | 0                       | 0         | 0        | 0        | -        | 0          | 0                       | 0         | 0        | 0        | -        | 0          | 0                            | 0         | 0        | 0        | -        | 0          | 0                            | 0         | 0        | 0        | -        | 0          | 0          |
| % Bicycles on Road      | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                     | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0       | 0.0      | -        | -        | 0.0        | 0.0                          | 0.0       | 0.0      | -        | -        | 0.0        | 0.0        |
| Bicycles on Crosswalk   | -                       | -         | -        | -        | 0        | -          | -                       | -         | -        | -        | 0        | -          | -                            | -         | -        | -        | 0        | -          | -                            | -         | -        | -        | 0        | -          | -          |
| % Bicycles on Crosswalk | -                       | -         | -        | -        | 0.0      | -          | -                       | -         | -        | -        | 0.0      | -          | -                            | -         | -        | -        | 0.0      | -          | -                            | -         | -        | -        | 0.0      | -          | -          |
| Pedestrians             | -                       | -         | -        | -        | 3        | -          | -                       | -         | -        | -        | 6        | -          | -                            | -         | -        | -        | 1        | -          | -                            | -         | -        | -        | 3        | -          | -          |
| % Pedestrians           | -                       | -         | -        | -        | 100.0    | -          | -                       | -         | -        | -        | 100.0    | -          | -                            | -         | -        | -        | 100.0    | -          | -                            | -         | -        | -        | 100.0    | -          | -          |



Paradigm Transportation Solutions Limited  
5A-150 Pinebush Rd

Cambridge, Ontario, Canada N1R 8J8  
519-896-3163 cbowness@ptsI.com

Count Name: Temperance Avenue & Spring Street  
Site Code: 220567  
Start Date: 10/19/2022  
Page No: 9



Turning Movement Peak Hour Data Plot (3:15 PM)

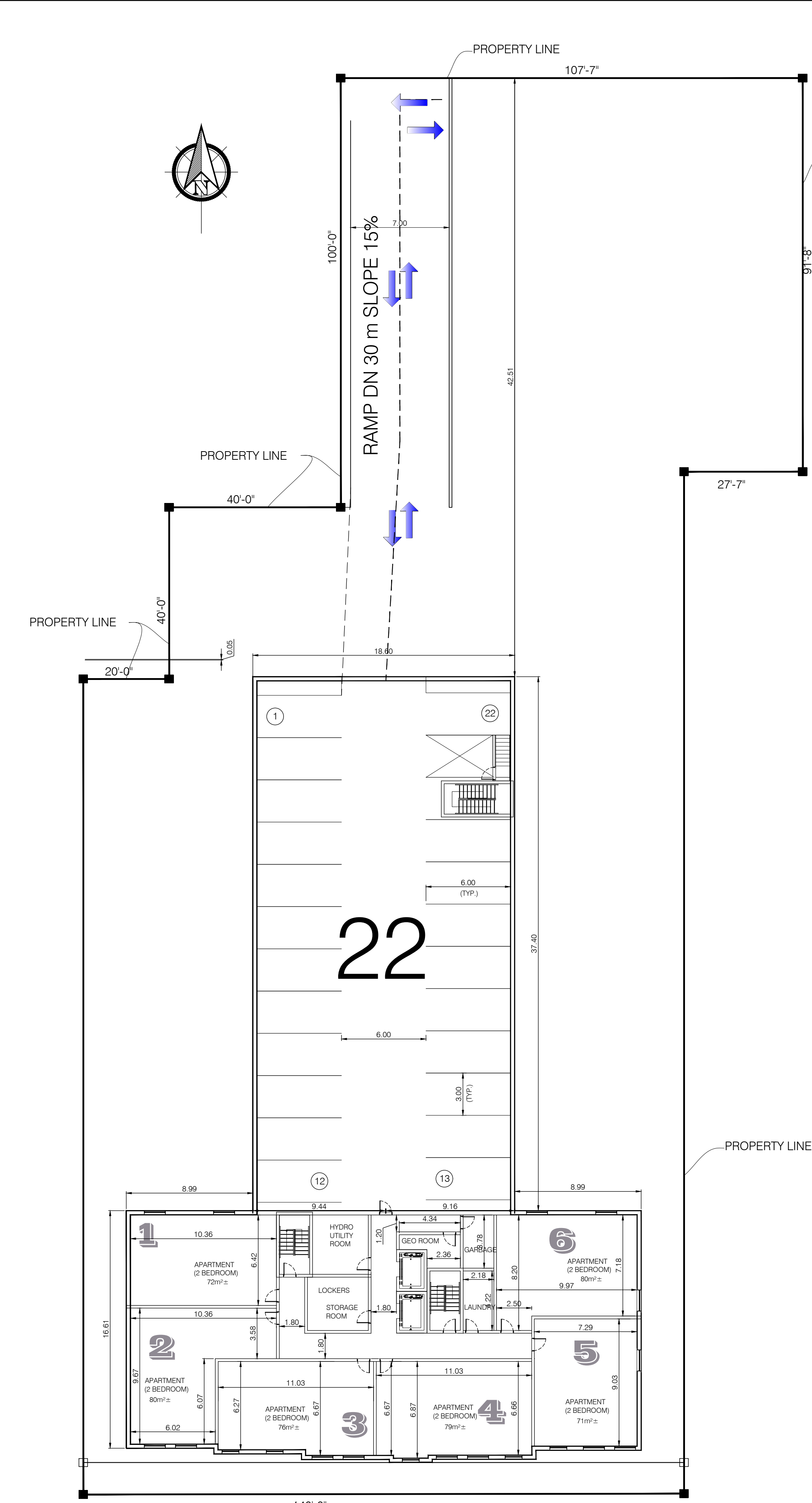
## Appendix B – Reduced Scale Architectural Plans



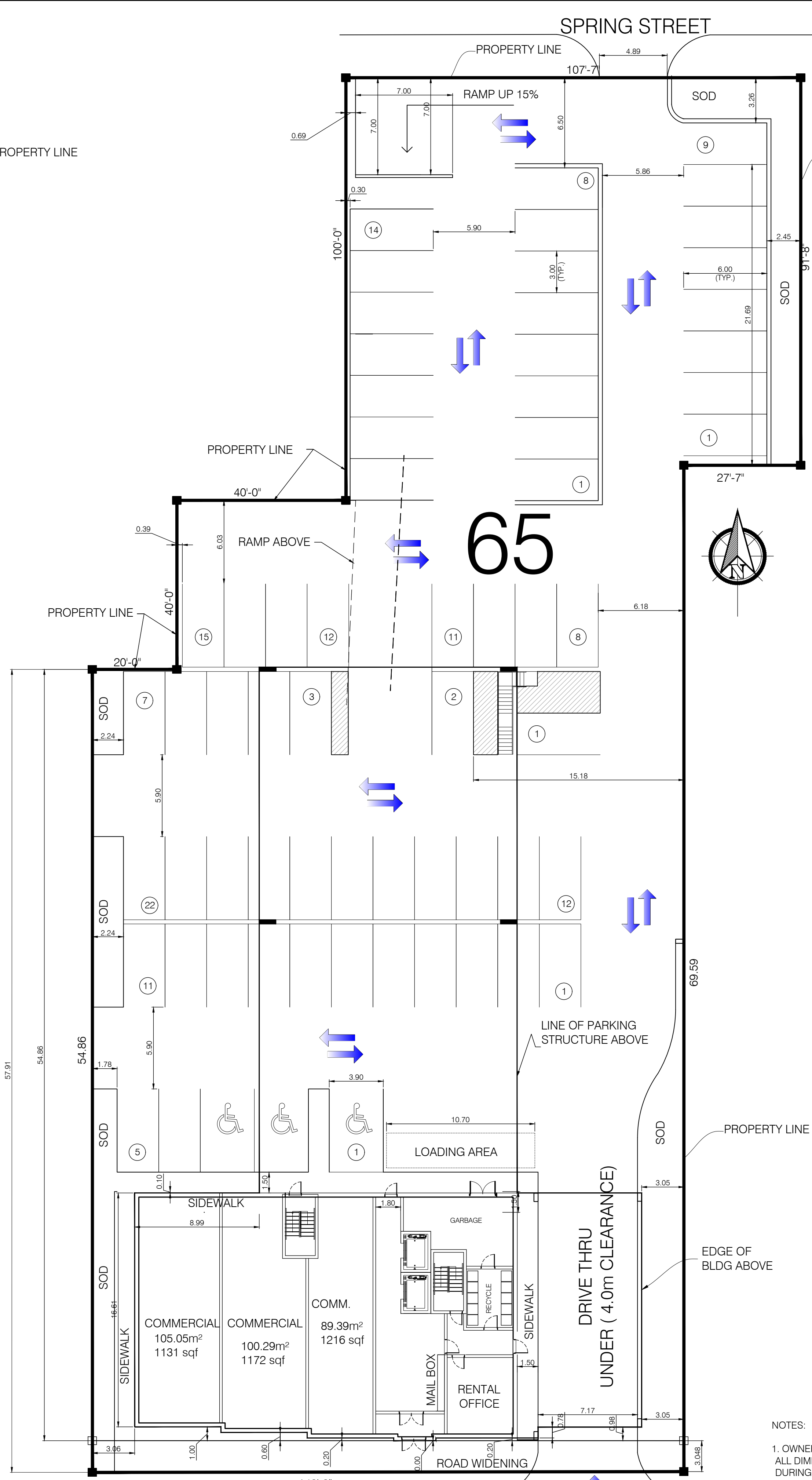
**BUILDING PARKING**

SECOND FLOOR 22 SPOTS  
 GROUND FLOOR 65 SPOTS  
 BASEMENT FLOOR 18 SPOTS

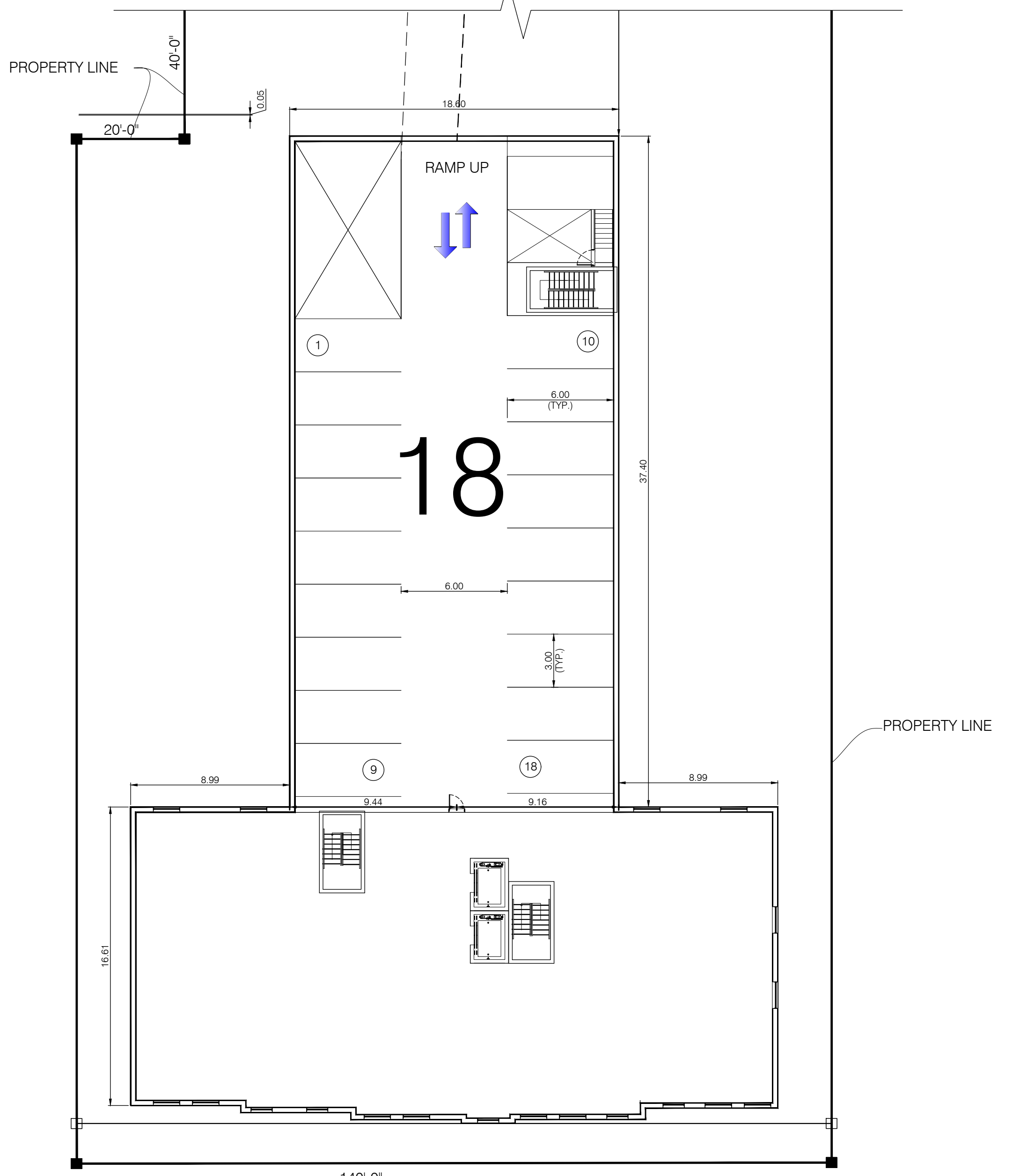
TOTAL No OF PARKING SPOTS 105



SECOND FLOOR  
 (6 UNITS)  
 SCALE 1:200



GROUND FLOOR  
 SCALE 1:200



BASEMENT FLOOR  
 SCALE 1:200

- NOTES:
1. OWNER/CONTRACTOR TO VERIFY AND CHECK ALL DIMENSIONS AND SPECS PRIOR TO AND DURING CONSTRUCTION.
  2. ANY DEVIATIONS, DEFICIENCIES OR DISCREPANCIES FROM THESE DRAWINGS AND SPECS REQUIRES WRITTEN CLARIFICATION AND/OR APPROVAL FROM THE DESIGNER PRIOR TO CONSTRUCTION.

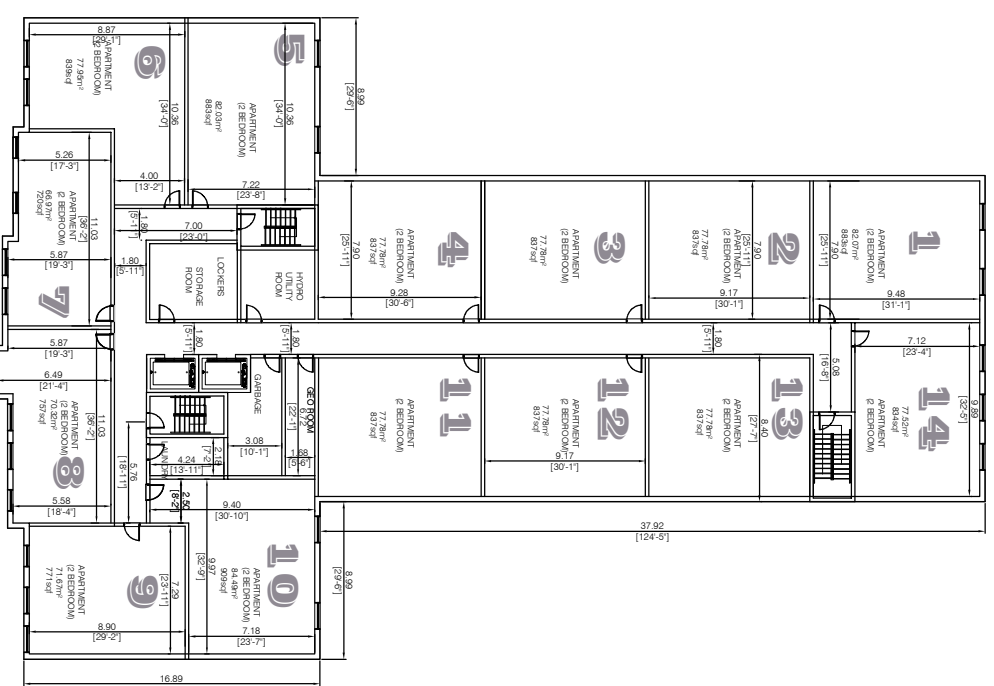
|          |                |
|----------|----------------|
| 3        |                |
| 2        | MAY, 2022      |
| 1        | FEBRUARY, 2022 |
| REV.     |                |
| JOB NO.  |                |
| CHKD. BY |                |
| DRN. BY  |                |
| DATE:    | APRIL, 2019    |
| SCALE:   | 1:200          |
| DWG NO.  | SP-2           |

**DeFILIPPIS DESIGN**  
 687 BARTON ST., SUITE 201  
 STONEY CREEK, ONTARIO L8E 5L6  
 (905) 643-2250 FAX (905) 643-1095  
 email: defilippisdesign@bellnet.ca

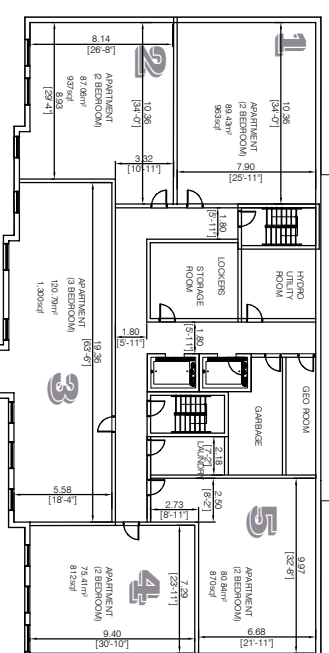
PROPOSED COMMERCIAL/RESIDENTIAL BLDG:

5687 FERRY STREET  
 5660 SPRING STREET  
 NIAGARA FALLS, ONTARIO

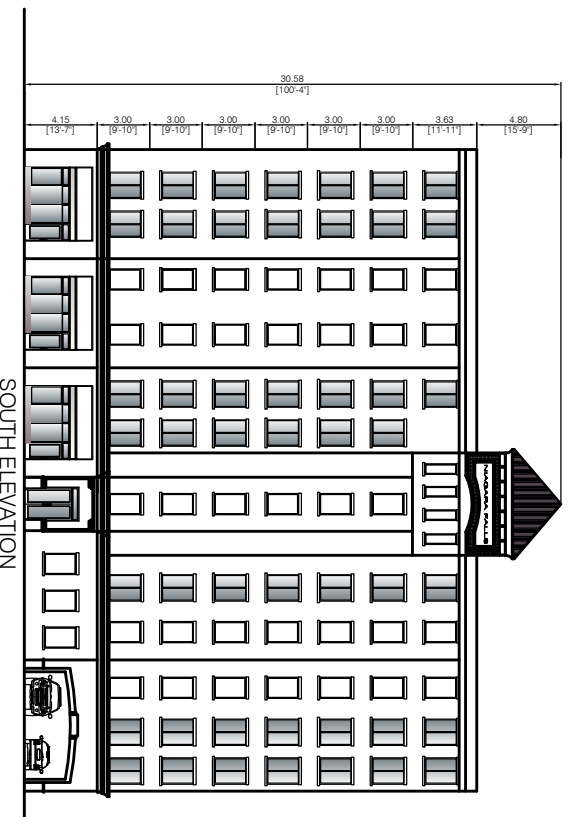
**PARKING PLAN**



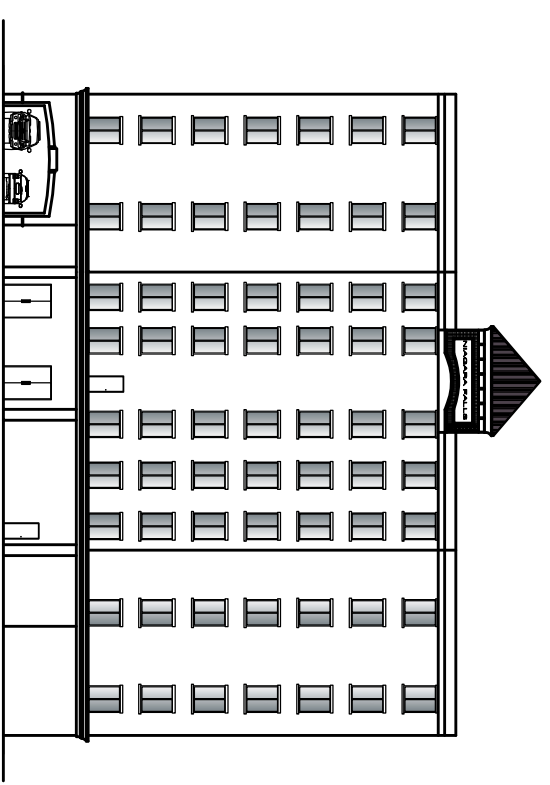
TYPICAL 3-7 FLOOR  
SCALE 1 : 200



8th FLOOR  
SCALE 1:200




SOUTH ELEVATION




NORTH ELEVATION

- NOTES
1. OWNER/CONTRACTOR TO VERIFY AND CHECK ALL DIMENSIONS AND SPECS PRIOR TO AND DURING CONSTRUCTION.
  2. ANY DEVIANIONS, DEFICIENCIES OR DISCREPANCIES FROM THESE DRAWINGS AND SPECS REQUIRES WRITTEN CLARIFICATION AND/OR APPROVAL FROM THE DESIGNER PRIOR TO CONSTRUCTION.

|                     |                |  |
|---------------------|----------------|--|
| REV.                |                |  |
| 1                   | FEBRUARY, 2022 |  |
| 2                   |                |  |
| 3                   |                |  |
| JOB NO.             |                |  |
| CHKD. BY            |                |  |
| DRN. BY             |                |  |
| DATE: APRIL, 2019   |                |  |
| SCALE: 1 : 200      |                |  |
| DWG. NO. <b>A-2</b> |                |  |



**DEFILIPPIS DESIGN**  
570 BARTON ST., SUITE 201, AE 51.6  
NAGUARA FALLS, ONTARIO  
(905) 643-2250 FAX (905) 643-1095  
email: defilippisdesign@defilippis.ca



PROPOSED COMMERCIAL/RESIDENTIAL BLDG.