City of Peterborough

To:	**Members of the General Committee**
From:	**Blair Nelson, Commissioner, Infrastructure, Planning and Growth Management**
Meeting Date:	**June 17, 2024**
Report:	**Spillsbury Drive Pedestrian Crossover, Report IPGENG24-019**

Subject

A report to recommend the implementation of a Pedestrian Crossover on Spillsbury Drive at the west leg of Clancy Crescent.

Recommendations

That Council approve the recommendations outlined in Report IPGENG24-019, dated June 17, 2024 of the Commissioner of Infrastructure, Planning and Growth Management as follows:

a) That a Pedestrian Crossover Level 2 Type B complete with rectangular rapid flashing beacons be implemented on Spillsbury Drive near the west edge of Valleymore Park;

b) That a By-law be passed to amend the appropriate Schedules and Articles of the Parking By-law 09-136 to authorize implementation of Recommendation a); and

c) That the existing contract agreement awarded to Guild Electric Limited for Traffic Signal works be amended to increase the contract amount by $40,000.00, exclusive of HST, to cover the cost of the electrical works required to construct the Pedestrian Crossover on Spillsbury Drive at Clancy Cresent.

Executive Summary

- In response to resident concerns, a traffic impact study was undertaken to review the impacts of the proposed Valleymore Park Splash Pad.
- The study concluded that a pedestrian crossover is warranted based on the criteria outlined in the Ontario Traffic Manual Book 15 – Pedestrian Crossing Treatments.
- Staff recommend the implementation of a pedestrian crossover Level 2 Type B complete with rapid flashing beacons on Spillsbury Drive at Clancy Crescent.

Background

The Parks and Outdoor Recreation Study was adopted by Council through Report CSRS23-002 dated October 10, 2023. The updated waterplay strategy includes the ongoing replacement of existing wading pools with new splash pads and the development of new waterplay facilities in under served areas of the City. In 2023, budget was approved for a new splash pad in Valleymore Park as recommended by the capital waterplay strategy. Valleymore Park is a neighbourhood park located in the City's south west end. The proposed splash pad will be a Level C waterplay facility. Staff from Facilities and Property Management Division are implementing the splash pad project.

Public Consultation

In 2023, staff initiated public consultation for the Valleymore splash pad project. The City conducted an online survey and held a public open house in the summer of 2023. 205 people provided feedback. The survey results indicate park visitors primarily walk to visit Valleymore Park and spend an hour or less at the park. 83 people chose to leave an additional comment with requests to not interfere with existing uses on site and confirming their excitement to have a splash pad built in the park along with the need for shade. There were also concerns with the availability of existing parking and comments about increased traffic on Spillsbury Drive. The concerns were noted and resulted in the completion of a traffic impact study.

Traffic Impact Study

As per the City's Procurement By-law 22-070 Section b), i), staff proceeded with an informal quote process for completion of the traffic impact study. Quotes were received from three traffic engineers and Tranplan Associates were engaged to complete a traffic impact study for Valleymore Park splash pad.

The traffic impact study (see Appendix A) examined the impacts of the proposed splash pad. The study found that Spillsbury Drive, in the vicinity of Valleymore Park, does not meet the criteria/qualify for a Traffic Calming Study. However, the projected pedestrian

volumes warrant a Level 2 Type D pedestrian crossover treatment (per OTM Book 15). In addition, the study provided the following recommendations:

- The ideal location of the pedestrian cross-walk is at the east leg of Clancy Crescent in the vicinity of the west edge of the park.
- An additional cross-walk on Parcells Crescent may be provided for the benefit of both park and transit passengers using the eastbound transit stop.
- Carry out a study to assess the auto demand and availability of parking on Spillsbury Drive post the build-out of splash pad in the summer.
- Review existing on-street parking policies by the City to allow more on-street parking on the south side of Spillsbury Drive.

Collision Data Analysis

There was a total of 4 collisions reported, 2 within the vicinity of Valleymore Park, both identified as “Property Damage Only” and one was a single motor vehicle collision and the other was a rear-ender. Based on the available collision data, there is no evidence of physical or geometric constraints that are apparent causes for these collisions.

Speed Data Analysis

Review of the speed study conducted by the City indicated that the average speed of vehicles on Spillsbury Drive do not exceed more than 2 km/h above the posted speed limit of 50km/h. The study notes current posted speed of 50km/h is appropriate. As per the speed study conducted by the City in the Fall of 2022, the average 24 hour vehicular volume on Spillsbury Drive between Clancy Crescent and Parcell’s Crescent was recorded as a total of 2089 vehicles per day (vpd). Based on latest vehicle Turning Movement Count (TMC) data for Spillsbury Drive and Sir Sanford Fleming Drive intersection, collected on February 20, 2024, the south approach volume indicates that approximately 1021 vpd travel south on Spillsbury Drive and 1023 vpd travel north on Spillsbury Drive..

Site Access

Spillsbury Drive is classified as a high-capacity collector road. The cross-section of the road comprises of a 10m paved surface, 5m grassed boulevards,1.5m sidewalks on both sides of road and has a posted speed limit of 50km/hr. Parking is permitted on the north side of the road and has a “No Parking” restriction on the south side near the park. Spillsbury Drive is also served by two transit routes.

Proposed Splash Pad

The City intends to construct a splash pad with approximately 14-18 play features and a shade structure with gathering tables. See Appendix A Traffic Impact Study for proposed Concept Plan and further details on site trip generation, peak hour volumes, site trip distribution, and park catchment area.

Traffic Calming Policy

As per the screening criteria of the City's Neighbourhood Traffic Calming Policy, Spillsbury Drive (between Airport Road and Sir Sandford Fleming Drive) does not qualify for a traffic calming study. See Section 4.1 of the traffic impact study for the screening check (Appendix A).

Pedestrian Crossover

The study shows the pedestrian volumes, vehicular volumes and the minimum distance criteria from a traffic control device as given in the Ontario Traffic Manual, Book 15 were met indicating that pedestrian crossover treatment is warranted on Spillsbury Drive. The study recommends a Level 2 Type D single pedestrian crossover on Spillsbury Drive in the immediate vicinity of the splash pad, ideally at Clancy Crescent.

After internal review, the City's traffic engineering staff agree a pedestrian crossover is warranted on Spillsbury Drive adjacent to the proposed slash pad near Clancy Crescent. To maintain consistency with existing pedestrian crossovers treatments on high-capacity collector roads, City staff recommend a Level 2 Type B pedestrian crossover (shown in appendix B) be installed with flashing beacons. Staff also recommended the location of the crossing be shifted slightly east of the intersection to avoid existing catch basins in the road and to provide space for one vehicle between the pedestrian cross-over and the intersection to accommodate a vehicle turning left from Clancy Crescent.

Staff also recommend shifting the proposed path from the splash pad to better align with the proposed pedestrian cross-over location. See exhibit 3.1 in the traffic impact study for the proposed splash pad concept plan. The updated path connection will be reflected in the final drawings for the splash pad.

Items Given Further Consideration

As per the study, items that should be given further consideration are to carry out a study of available parking on Spillsbury Drive post the splash pad build out, establish total auto demand for parking at the park and develop strategies for dealing with any parking deficiencies. The City intends to complete this parking study after the splash pad and crosswalk are built, as recommended.

The study also recommends review of the existing on-street parking policies by the City to consider parking on the south side of the street instead of the north side or on both

sides. The City's traffic engineering staff confirmed that the current 'No Parking' restriction on the south side of the road fronting the park was implemented through the curve because on-street parking restricted driver sightlines and forced eastbound vehicles to cross the centreline without having a clear view of oncoming traffic. Therefore, this change will not be given any further consideration at this time.

Strategic Plan

Strategic Pillar: Community & Well-being

Strategic Priority: Support opportunities for multi-modal transportation including walking, cycling and transit services.

Pedestrian crossovers promote community and well-being by providing the community with designated pedestrian crossing locations to access community spaces and resources. They also lower carbon footprints through the encouragement of active transportation.

Engagement and Consultation

The traffic impact study and recommendation for a Pedestrian Crossover on Spillsbury Drive near the west edge of Valleymore Park reviewed by the Manager, Traffic and Parking Services, the Senior Transportation Project Manager and the Parks and Recreation Project Manager.

Budget and Financial Implications

The implementation of a Pedestrian Crossover (PXO) Level 2 Type B on Spillsbury Drive will cost approximately $65,000.00, funds for which are available in the 2024 Capital Budget for Traffic Improvements (Project Reference 17-154).

Timeline

If the recommendations are approved, construction will start as resources allow and will utilize Public Works and the City's traffic signal maintenance contractor. The project is anticipated to be complete in 2024.

Conclusion

A traffic impact study was undertaken on Spillsbury Drive and has shown that the implementation of a Pedestrian Crossover Level 2 Type B on Spillsbury Drive near the west edge of Valleymore Park is warranted. The study also identified the need to carry

out a study to assess the auto demand and availability of parking on Spillsbury Drive post the build-out of splash pad.

Attachments

Appendix A: Valleymore Park Splash Pad Traffic Impact Study
Appendix B: Pedestrian Crossover Level 2 Type B
Appendix C: Draft By-law to amend By-law 09-136 The Parking By-law

Submitted by,

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Commissioner, Infrastructure, Planning and Growth Management

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TRANPLAN ASSOCIATES

TRAFFIC IMPACT ASSESSMENT

Proposed Splash Pad Addition

Valleymore Park
338 Spillsbury Drive
City of Peterborough

March 2024

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March 6, 2024

Attn. Mr. Sean Nailer
Parks and Recreation Project Manager
City of Peterborough

Re: Traffic Impact Assessment for the Proposed Splash Pad Addition to be located at Valleymore Park, 338 Spillsbury Drive, City of Peterborough

Enclosed, please find our Traffic Impact Assessment report for the proposed *Splash Pad Addition* to be located at Valleymore Park, 338 Spillsbury Drive, in the City of Peterborough.

The study examined the impacts of the proposed splash pad addition with emphasis on non-auto modes of travel and evaluated safe access requirements for pedestrian/bicycle users to/from the park. The study reviewed the Community Survey Report as well as the City of Peterborough's Traffic Calming Policy to address the concerns of nearby residents in terms of safe access to the park. The study found that Spillsbury Drive, in the vicinity of Valleymore Park, does not meet the criteria/qualify for a Traffic Calming Study. However, the projected pedestrian volumes meet the warrant for a Level 2 Type D pedestrian crossover treatment (per OTM Book 15). Due to the winter study timeline, the study could not collect or assess trips data from similar splash pad facilities, hence it is suggested that a follow up data collection of non-auto trips and auto based trips are carried out in the summer months at Valleymore Park when the splash pad is functional and open to the public.

In addition, the study provided the following recommendations/considerations:

- The ideal location of the pedestrian cross-walk is at Clancy Crescent in the immediate vicinity of the park.
- An additional cross-walk on Parcells Crescent may be provided for the benefit of both the park and transit passengers using the eastbound transit stop.
- Carry out a study to assess the auto demand and availability of parking on Spillsbury Drive post the build-out of splash pad in the summer.
- Review existing on-street parking policies by the City to allow more on-street parking on the south side of Spillsbury Drive.

Tranplan is pleased to have the opportunity to work with your study team on this project. If you should require further information on the study, please do not hesitate to contact us at your convenience.

Yours truly,

Sreelakshmi Changaradil, M.Sc., E.I.T

Reviewed By,

William Copeland, P.Eng.
Tranplan Associates

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1. INTRODUCTION

1.1 Study Objective

Tranplan Associates Inc. is pleased to present the results of a Traffic Impact Assessment conducted in support of the proposed *addition of a splash pad* to the existing Valleymore Park located at 338 Spillsbury Drive, City of Peterborough.

Tranplan Associates was retained by City of Peterborough (the City) to assess the pedestrian and related non-auto impacts of the proposed splash pad addition at Valleymore Park (the park). Valleymore Park is located on the south side of Spillsbury Drive, in the City of Peterborough's southwest end, in the general area, south of Sir Sandford Fleming Drive and to the east of Airport Road. (see ***Exhibit 1.1*****:** Key Map). A Study Terms of Reference was provided by the City with the RFP (see ***Appendix A1***). A further discussion with the City staff helped to narrow down the study scope of work limited to the impact assessment of the proposed splash pad on non-vehicular auto modes and evaluate safe access requirements for pedestrians/bicycle users to/from the park. It is noted that the study had to be completed during the winter months, which did not allow for more detailed collection of observed trip generation data at similar parks during summer months (ideal condition) within the City.

The report describes the analysis and presents the findings, suggestions, and recommendations of the Traffic Impact Assessment.

1.2 Study Background

The splash pad addition to Valleymore Park is proposed by the City as part of the Waterplay Facilities Provision Strategy to enhance outdoor water play facilities through the development of new facilities and the replacement of aging facilities in various parks across the City (see ***Appendix A2*** for the Proposed Candidate Locations for Upgraded and New Facilities).Valleymore Park is proposed to be developed into a Level C splash pad facility and will continue to operate as a neighborhood park serving the immediate residential neighbourhood south of Sir Sandford Fleming Drive.

1.3 Valleymore Splash Pad Community Survey

The City had conducted an online community survey in the summer of 2023 to understand and incorporate the needs and concerns of the community in regards to the development of the splashpad. It was found from the survey report that most of the people visit the park with children to use the playground, for walking dogs, to

EXHIBIT 1.1 : KEY MAP

exercise and to use the basketball court. A popular use at the park during winter is tobogganing on the hills around the park.

Based on the survey report, people raised some concerns including non-availability of parking spaces near the park, vehicles exceeding the posted speed limit on Spillsbury Drive, on-street parking on Spillsbury Drive causing visibility issues and increased traffic due to cut through traffic to/from Sir Sandford Fleming Drive to Airport Road.

1.3.1 Collision Data Analysis

In order to address the concerns raised in the community survey report, the collision data for Spillsbury Drive in the vicinity of Valleymore Park was reviewed. The City provided the study team with available collision data from 2020-2022 (inclusive) for Spillsbury Drive between Airport Road and Sir Sandford Fleming Drive (see ***Appendix B*** for the collision data). A review of the collision data indicates the following:

- There was a total of 4 collisions reported.
- Out of the 4 collisions, 2 collisions reported are within the vicinity of Valleymore Park.
- Both reported collisions were identified as "Property Damage Only".
- Of the two collisions, one was a single motor vehicle collision, and the other was a rear-ender.

Based on the available information provided, there is no evidence of physical or geometric constraints that are apparent causes for these collisions.

1.3.2 Speed Data Analysis

In addition to collision data review, the City provided the study team with the speed data collected in the fall of 2022, on Spillsbury Drive between Clancy Crescent and Parcell's Crescent (see ***Appendix B***). The review of the speed data indicates the following:

- The 85th percentile speed was observed as 50.58 km/hr and 51.50 km/hr for the two weekdays (not more than 10km/hr above the posted speed limit of 50km/hr).
- Mean speed for the two survey days was 42.2km/hr and 43.5km/hr.

Based on the speed data collected in the fall of 2022, it appears that the average number of vehicles travel at speeds below the posted speed and based on the 85th percentile speed, the travelling speeds are less than 2 km/h above the posted speed. It appears that the current posted speed of 50 km/h is appropriate.

2. SITE CHARACTERISTICS

2.1 Site Location, Description and Uses

Valleymore Park is located in the City of Peterborough's southwest end, to the south of Sir Sandford Fleming Drive and to the east of Airport Road. (see ***Exhibit 1.1*****:** Key Map). The park has frontage on Spillsbury Drive and is municipally known as 338 Spillsbury Drive. It is bound by residential lots on all sides except the south side which is bordered by the railway.

It consists of 1.07 hectares (2.64 acres) of land occupied by the existing park. Sidewalks are provided on both sides of Spillsbury Drive. Currently, the park does not have internal pathways. The park has an existing playground and a half basketball court which is mostly used during the summer months. There are swales located at the south end of the park. A flat open area is present around the playground.

The park is mostly used by parents/primary caregivers bringing their children to play at the playground or basketball court. People also use the park area to walk their dogs or exercise. During winter months, the sloped berms on the periphery of the park are used for tobogganing.

2.2 Site Access

The primary direct access to the park is from Spillsbury Drive, which is classified as a high capacity collector road under the jurisdiction of City of Peterborough. It has a 10 m paved cross section, 5 m grassed boulevards and 1.5 m sidewalks on both sides of Spillsbury Drive with a posted speed limit of 50km/hr. Based on Transportation Association of Canada (TAC) cross-section guidelines, Spillsbury Drive meets the cross-sectional criteria for a high capacity collector road with parking permitted on one (north)side and restricted on the south side near the park.

Spillsbury drive is also served by two transit routes: Route 8-Monaghan (between Trent University and Fleming College) and Route 5-The Parkway (between downtown terminal and Fleming College). Transit stops are located on both sides of Spillsbury Drive, the nearest one to the park is located on the south side at the park east end.

As per the speed study conducted by the City in the Fall of 2022 for two weekdays, the average 24 hour vehicular volume on Spillsbury Drive between Clancy Crescent and Parcell's crescent was recorded as a total of 2089 vehicles per day (vpd).

The City also provided the latest TMC data for Spillsbury Drive and Sir Sandford Fleming Drive intersection, collected on February 20, 2024. (see ***Appendix B***) The south approach volumes indicate that around 1021 vehicles per day (vpd) travel into Spillsbury Drive and around 1023 vehicles per day (vpd) travel out of Spillsbury Drive. Both these data are indicative of an average traffic volume passing through Spillsbury Drive on a weekday.

3. PROPOSED SPLASH PAD DEVELOPMENT

Unlike regional/community parks with wider range of sport or recreation facilities that attract visitors from the city and beyond, neighbourhood parks are intended to serve as an immediate close-to home park generally accessible within a 5–10 minute walk. It provides passive social and recreational needs for the nearest neighbourhood.

3.1 Proposed Concept Plan

Based on the Concept Site Plan (see ***Exhibit 3.1***), the City intends to construct a splashpad with approximately 14-18 play features and a nearby shaded structure with some gathering tables. A 2 m wide asphalt pathway will also be constructed to connect to the existing sidewalk on Spillsbury Drive. For safety reasons, a decorative fence will be installed at the northern side of the park that has frontage on Spillsbury Drive. The existing features of the park will be retained.

3.2 Site Trip Generation

3.2.1 ITE Trip Generation Method

A cursory review of the land uses in the current Institute of Transportation Engineers (ITE) Trips Generation Manual, 11th Edition, indicates that a land use code for a neighbourhood park with splash pad facility is not in the manual. The only land use available was for a public park (Land Use 411), but it was deemed not appropriate for the following reasons:

- The sites surveyed appear to be Regional or National in size (average size of surveyed sites range from approximately 300 acres to over 600 acres (it doesn't appear to have any small neighbourhood parks represented in the sample).

- The independent variables used for trip generation are acres, employees, and daily trail users. Valleymore Park is a small, unmanned neighbourhood park, currently without an internal pathway connecting different amenities within the park.

The ITE trip generation method was therefore considered irrelevant for this study.

3.2.2 First Principles Analysis

The proposed splash pad is a summer time activity. It would have been ideal to capture the site activities and associated trip generation by modes at a similar

EXHIBIT 3.1 : PROPOSED CONCEPT PLAN

LEGEND

- EXISTING TREES
- EXISTING MIXED SMALL TREES AND SHRUBS
- PROPOSED DECIDUOUS TREES
- ASPHALT PAVING
- CONCRETE PAVING
- SPLASH PAD SURFACING
- SOD
- BENCHES
- GATHERING TABLES
- LITTER RECEPTACLES
- 1.2m H.T. DECORATIVE METAL FENCE
- PARK SIGNAGE
- MANIFOLD CABINET
- TRANSPLANTED TREES
- MANHOLE
- PORTA-POTTY WITH POLE

KEYS

1. SPLASH PAD (150m2)
2. SHADE STRUCTURE ON THICKENED CONCRETE SLAB WITH GATHERING TABLES
3. 2m WIDE ASPHALT PATHWAY

peterborough landscape planning LANDSCAPE ARCHITECTS

1:200

VALLEYMORE PARK SPLASH PAD

CONCEPT

AUGUST 2023

neighbourhood park. Due to the study timeline as requested by the City, summer observed usage data at similar City splash pads could not be collected. Therefore, for study purposes, the future site trip generation was forecasted using the site activities/amenities and other information available through the neighbourhood survey, such as, understanding the modes of transport used by locals while visiting the park, the average time spent at the park, how often they visit the park and the purpose of visiting the park.

The peak hour forecast using the First Principles Analysis is considered the "worst case" scenario with the proposed addition of splash pad at Valleymore Park as it assumes the full capacity simultaneous usage of all park facilities during the peak hour of a summer day/weekend.

Peak Hour Volumes based on Maximum Capacity of Park Facilities

As already mentioned, Valleymore Park is a small neighbourhood park. It does not have on-site parking for visitors (the intended market/visitors are neighbourhood residents accessing the park using non-vehicular modes). As such, the peak hour trip generation carried out is for person trips based on site activities/facilities offered at the Valleymore Park.

(1) Existing playground: The different types of play structures with an approximate number of kids using them at a given time is described below.

- Two swing sets = 4 children
- Slide = 5 children
- Monkey bars = 2 children
- Still rings = 2 children
- Spring rider = 1 child

With 14 children using the play structures, we can assume that around 7-8 primary caregivers, parents or grandparents accompanying the children would be present at the park.

(2) Existing half basketball court: At a maximum, 2 teams of 4 players each could be accommodated at the half basketball court. Children using this facility are most likely to be aged 10 or older and generally will not be accompanied by a parent or caregiver.

(3) Existing open park space: People using the open park space to walk the dog or for exercising would be approximately 5 in number and not more, especially during the sunny peak hour on a weekend. They are more likely to use the park during later hours of the day.

(4) Proposed splash pad: It is anticipated that the proposed splash pad will have 14-18 play units. Assuming that each play unit will be occupied by 2 children at a time, there will be a maximum of 28-36 children playing at the splash pad during the peak hour. Splash pads are open from noon to 7 p.m. for the summer months of June- September. Since splash pads are most popular among children aged 7 or younger, they will be accompanied by a parent or primary caregiver. Assuming that 50% of the children will be accompanied by parents, there will be around 18 caregivers in the park waiting in the shaded area. It is highly unlikely that the splash pad will be at maximum capacity during a particular hour of the day but would generally be used by visitors at different times. However, to consider the worst-case scenario, we assume that the splash pad will be at maximum capacity during the peak noon hour.

Table 3.1: Site Trip Generation

Play Structure	No: of people at maximum capacity
Existing Playground	22
Existing Half basketball court	8
Existing Open Park Space	5
Proposed Splash Pad	54
Total	**89**

Based on existing and future site activities/facilities offered at the Valleymore Park, the park is assumed to generate a total of 90 users during the peak hour. Even though the farthest residential unit on Spillsbury Drive or the side streets are located from the park within a 10-minute walking distance, it is likely that not all park users would prefer to walk or bike to the park on a hot summer day. Some users may choose to drive, or some users may get dropped-off and picked-up. However, in order to test the "worst case" scenario, no allowance has been made to people accessing the site by vehicular travel modes. Hence, the peak hour pedestrian volumes would be 90 during the peak hour.

3.3 Site Trip Distribution

3.3.1 Park Catchment Area

A desktop review of the number of households in the immediate neighbourhood using Google Map was carried out and the following results were obtained. The

analysis assumed that all low-density residential dwelling units are occupied by a single family and for medium density dwelling units (apartment/condo/townhome units at the west end of Spillsbury Drive), study assumed the number of dwelling units based on number of marked/reserved parking spaces provided in the parking lot (see ***Exhibit 3.2*** for the catchment area, number of units and distribution).

Northside of Spillsbury Drive

- Laing Court = 16 units
  (farthest unit located about 400 metres east of Valleymore Park)
- Spillsbury Drive = 9 units (east of Valleymore Park), 11 units (right opposite Valleymore Park), 9 units (between Clancy Crescent)
- Parcells Crescent = 69 units
  (farthest unit located about 300 metres north of Valleymore Park)
- Clancy Crescent = 84 units
  (farthest unit located about 400 metres north of Valleymore Park)
- Whittington Drive = 24 units

Total units on the northside of Spillsbury Drive = 222 units (42%)

Southside of Spillsbury Drive

- Stonebridge Court = 21 units
  (farthest unit located about 400 metres east of Valleymore Park)
- Spillsbury Drive = 38 units (east of Valleymore Park)
- Spillsbury Drive = approximately 250 units
  (apartment/condo/townhome units west of Valleymore Park)

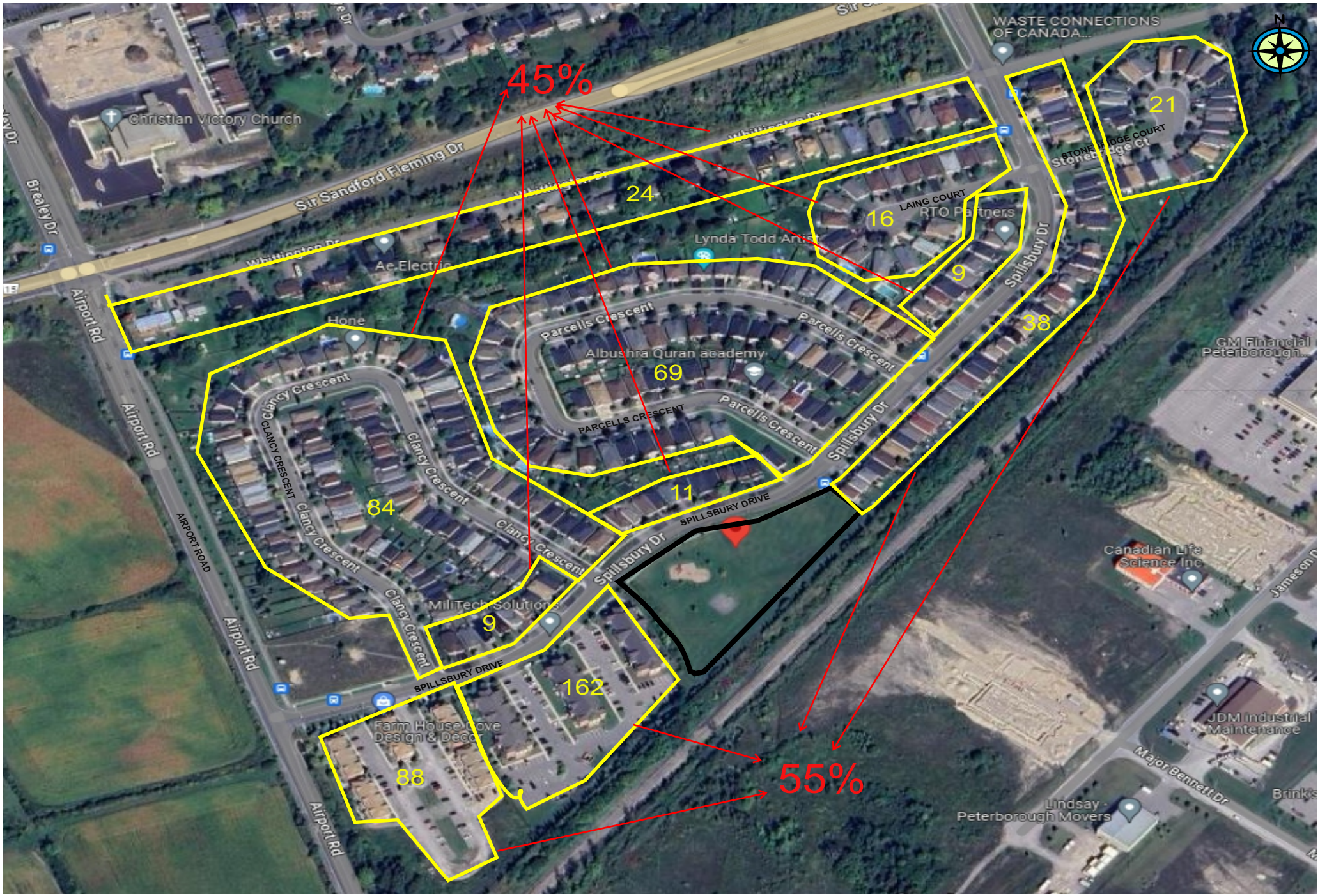
Total units on the southside of Spillsbury Drive = 310 units (58%)

Trip distribution to the park was generated by considering the percentage of dwelling units located to the north and south of Spillsbury Drive. To account for any mismatch/errors in the number of units, a rounded off percentage is assumed.
It was assumed that about 45% of units are located on the north side of and 55% of units are located on the south side of Spillsbury Drive. This split was applied to the pedestrian volumes obtained by first principles analysis (section 3.1.2).

Pedestrians travelling from north side of Spillsbury Drive = 45% x 90 = 40
Pedestrians travelling from south side of Spillsbury Drive = 55% x 90 = 50

From the above pedestrian numbers, we can conclude that 40 pedestrians will have to cross Spillsbury Drive to reach the park. They would cross at Clancy Crescent

EXHIBIT 3.2 : PARK CATCHMENT AREA, NUMBER OF UNITS AND DISTRIBUTION



where the existing south sidewalk connects to the proposed park pathway or at Parcells Crescent. About 45% of the north units are located to the north-west of Valleymore Park and the remaining 55% are located to the north-east of Valleymore Park.

Pedestrians likely to cross at Clancy Crescent = 45% x 40 = 18
Pedestrians likely to cross at Parcells Crescent = 55% x 40 = 22

Whereas 50 pedestrians from the south side can access the park without crossing Spillsbury Drive by utilizing the existing sidewalk on the south side.

4. REVIEW OF PEDESTRIAN ACCESS TO THE PARK

Pedestrians can access the park through the sidewalks provided on both sides of Spillsbury Drive. As described in the previous section, out of the total pedestrian volume visiting the park during a peak hour, 45% will have to cross Spillsbury Drive to reach the park and 55% can use the existing south sidewalk to reach the park. Currently, there is no cross-over on Spillsbury Drive for pedestrian access to the park (see ***Exhibit 4.1*** for the Pedestrian Access Routes). From the community survey report, it is evident that some residents have concerns regarding the safety of pedestrians on Spillbury Drive due to vehicles exceeding the posted speed limit and visibility issues if cars were to park on the roadside.

In this section, requirements to provide safe pedestrian access have been analyzed. We have reviewed the City of Peterborough Traffic Calming Policy to assess if this section of road qualifies for a Traffic Calming Study or requires implementation of traffic calming measures. The requirement of a pedestrian crossover is also assessed based on Ontario Traffic Manual (OTM), Book 15.

4.1 City of Peterborough Traffic Calming Policy

The *TAC Canadian Guide to Traffic Calming* describes traffic calming as;

"The process and measures applied by road authorities to address concerns about the behaviour of motor vehicle drivers travelling on streets within their jurisdictions."

The City of Peterborough Neighbourhood Traffic Calming Policy classifies traffic calming measures in two categories:

- Physical measures; consisting primarily of vertical and horizontal deflections in the roadway. It also includes treatments that narrow the roadway, alter the road surface, or restrict access.

- Non-Physical measures; including tools and strategies intended to influence or modify driver behavior with education and enforcement.

The City of Peterborough has developed a set of criteria to determine whether traffic calming measures are to be implemented on a street or not. The primary step is to perform a screening for initiating a Traffic Calming Study. The screening criteria is provided in Table 3.1 of City's Traffic Calming Policy 0051 (see ***Appendix C***). The screening check for Spillsbury Drive (between Airport Road and Sir Sandford Fleming Drive) is given below:

EXHIBIT 4.1 : PEDESTRIAN ACCESS ROUTES

(1) A prior request for Traffic calming has not been denied within the last 3 years- *True*

(2) Traffic calming measures have not been removed within the last 5 years- *True*

(3) The subject street is designated as a High Capacity Collector road- *True*

(4) The subject street does not serve as a transit route, signed hospital route or primary fire route in the city – *False* (Spillsbury Drive serves as a transit route)

(5) The posted speed limit of the subject street is 50km/hr or less – *True*

(6) The average grade of the study area is less than 8% - *True*

(7) The distance between stop-controlled intersections along the subject street is 150 metres or more – *True*

All the above listed criteria need to be met for a traffic calming study to be initiated. Since the location criteria is not met, Spillsbury Drive is not an eligible candidate for the study.

(8) Moreover, for high-capacity collector roads, the 85th Percentile speed should be greater than 10km/hr or more above the posted speed limit to initiate the study.

Upon review of the data provided to us by the City, where a two-day speed study was conducted on Spillsbury Drive between Parcells Crescent and Clancy Crescent in September 2022; it was observed that:

- The 85th percentile speed was observed as 50.58 km/hr and 51.50 km/hr for the two weekdays (not more than 10km/hr above the posted speed limit of 50km/hr)

- Mean speed noted was 42.2km/hr and 43.5km/hr

See ***Appendix B*** for the relevant Traffic Data.

(9) The percentage of non-local traffic (shortcutting traffic) is more than 60% - *False – based on limited data in Tranplan files and City's recent counts for Spillsbury Drive/Sir Sandford Fleming Drive*

The initial screening check for Spillsbury Drive indicates that the street is not eligible for a Traffic Calming Study with the current conditions. However, it is noted that Spillsbury Drive to the north of Sir Sandford Fleming Drive till Lansdowne St W has been subject to an ongoing traffic calming study. A review of available collision data provided by the City indicated that there was no history of pedestrian related collisions on this stretch of Spillbury Drive in the last 3 years. As per the latest available data, the stretch of Spillsbury Drive between Airport Road and Sir Sandford Fleming Drive does not have a traffic calming study requests in place or meet the criteria for a traffic calming study to be initiated.

4.2 Pedestrian Crossover

4.2.1 Pedestrian Crossover Assessment

Based on *Section 5.1.2* of *Ontario Traffic Manual Book 15, Pedestrian Crossing Treatments, June 2016*, the preliminary assessment for a pedestrian crossover is based on (see ***Appendix D*** for relevant excerpts from OTM Book 15)*:*

- **Traffic Volume:** The 8-hour pedestrian volume should be greater than or equal to 100 and 8-hour vehicle volume should be greater than or equal to 750. Otherwise, the 4-hour pedestrian volume should be greater than or equal to 65 and the 4-hour vehicle volume should be greater than or equal to 395.

  Since we do not have an observed data of pedestrian volume crossing Spillsbury Drive to reach the park, we have applied the derived forecasted volume as described in Section 3.3.1.

  It was determined through the study forecasting that 40 pedestrians (from the north side) would cross Spillsbury Drive at Clancy Crescent or Parcells Crescent during the peak hour. Further percentage division based on resident unit's density indicates that 18 pedestrians would cross near Clancy Crescent and 22 pedestrians would cross near Parcells Crescent. If the same number or more are expected in the 3 hours following the peak hour, the pedestrian volume will exceed 65 in the 4-hour period at Clancy Crescent and at Parcells Crescent. To account for the "worst case scenario", the pedestrian volumes are considered to cross at one of the streets, most likely to be at Clancy Crescent due to the proposed internal park pathway connecting the existing south sidewalk.

  The 4-hour vehicular volume was derived from the traffic data collected by the City in the fall of 2022 on Spillsbury Drive between Parcells Crescent and

Clancy Crescent (attached in ***Appendix B***). The data collected on two consecutive days indicate that the 4 hour-traffic vehicular volume exceeds 395.

The 4-hour pedestrian and vehicular traffic volume criteria are therefore met.

- **Distance from the nearest traffic control device:** If the minimum distance from the site to the nearest traffic control device is more than 200m, then the location is a candidate for Pedestrian Crossover Treatment. Here the nearest traffic control device on Spillsbury Drive from the proposed park access is at Airport Road which is more than 200 m away.

Based on the assumptions and analyses completed for this study, there is a warrant for a pedestrian crossover treatment on Spillsbury Drive at Clancy Crescent. The location meets the minimum criteria requirements as per OTM Book 15.

4.2.2 Pedestrian Crossover Selection

The selection matrix for pedestrian crossover (see ***Appendix D*** for Table 7, PXO selection matrix, OTM Book 15) is based on 4 variables,

- 8-hour or 4-hour two-way vehicular volume of the roadway at the location of the crosswalk
- Posted speed limit of the roadway (50km/hr for Spillbury Drive)
- Total number of lanes for the entire driveway cross section (2 lanes on Spillsbury Drive)
- Presence of raised pedestrian refuge (none on Spillsbury Drive)

According to OTM Book 15, the type of crossover most appropriate on Spillsbury Drive would be a Level 2 Type D pedestrian crossover in the immediate vicinity of Clancy Crescent connecting the sidewalk to the proposed park access. A typical installation layout of Level 2 Type D PXO with associated signs and pavement markings is attached in ***Appendix E***.

4.3 Traffic Calming Measures

As per the initial screening criteria, Spillsbury Drive between Sir Sandford Fleming Drive and Airport Drive does not qualify for a Traffic Calming Study. If a Traffic Calming Study request is denied, then non-physical traffic calming measures can be considered. Non-physical traffic calming measures to be considered include Education and Enforcement which can influence/modify the driver's behaviour.

5. STUDY CONCLUSIONS AND RECOMMENDATIONS

This Traffic Study has assessed the impact of proposed *Splash Pad Addition* to Valleymore Park with emphasis on non-vehicular modes of travel and evaluated safe access requirements to/from the park based on the current City, TAC and OTM guidelines and standards.

The following are the study conclusions:

- Valleymore Park will continue to remain as a small/local neighbourhood park with the Splash Pad addition to existing facilities and will continue to serve mostly residents from the immediate neighbourhood located within walking distance.

- Review of Speed Study conducted by the City indicated that the average speed of vehicles on Spillsbury Drive do not exceed more than 2km/hr above the posted speed limit of 50km/hr.

- Review of Collision Data (2020-2022) provided by the City indicated that in the last 3 years, there has not been any pedestrian related collisions on Spillsbury Drive between Sir Sandford Fleming Drive and Airport Road. It can therefore be concluded that this stretch of Spillsbury Drive does not have pedestrian safety issues requiring immediate attention as expressed by residents in the community survey feedback.

- Site Trip Generation by First Principles Analysis for the "worst case" scenario generated a total of 90 pedestrian trips to the park with the existing facilities and future splash pad addition on a summer day peak hour.

- Site Trip Distribution based on residential unit densities indicated that out of the total pedestrians, about 45% (about 40 pedestrians) would travel from the north of Spillsbury Drive and will have to cross the street to access the park. Whereas the remaining 55% will travel from the south side of Spillsbury Drive (about 50 pedestrians) and can access the park without the need to cross.

- The 45% (40 pedestrians) coming from the north side is further split to assume that about 45% (18 pedestrians) are likely to cross at Clancy Crescent and 55% (22 pedestrians) are likely to cross at Parcell's Crescent.

- As per the screening criteria of City of Peterborough's Neighbourhood Traffic Calming Policy, Spillsbury Drive does not qualify to be included in a Traffic Calming Study with the existing conditions.

- The pedestrian volumes, vehicular volumes and the minimum distance criteria from a traffic control device as given in the Ontario Traffic Manual, Book 15 were met indicating that pedestrian crossover treatment is warranted at Spillsbury Drive.

The following are the study recommendations:

- A Level 2 Type D single pedestrian crossover is recommended on Spillsbury Drive in the immediate vicinity of the splash pad. Installing the cross-walk at the west end of the park by the splash pad will have two main benefits; it will provide a safer more direct crossing for Splash Pad and park users. It will signal to drivers on Spillsbury Drive that there are park facilities and related pedestrian crossings that in turn will hopefully encourage drivers to reduce speeds in the vicinity of the park. Therefore, an ideal cross-walk location on Spillsbury Drive would be at Clancy Crescent.

- An additional cross-walk at Parcells Crescent could also be considered to support both the park and transit passengers using the eastbound transit stop on the south side of Spillsbury Drive.

- No additional immediate mitigation measures or improvements will be required to support the splash pad addition to Valleymore Park.

The following are some items that should be given further consideration:

- It is expected that the new Splash Pad will generate/attract new pedestrian and other non-auto traffic to the existing park. The forecasted future non-auto/pedestrian traffic to/from the park has been based on a worst-case scenario of simultaneous full usage of all park facilities. Because the study timeline did not allow for the collection of observed trip generation data, such data should be assembled to confirm and/or adjust the study analyses as may be required.

- Carry out a study of available parking on Spillsbury Drive post the Splash Pad build out, establish total auto demand for parking at the park and develop strategies for dealing with any parking deficiencies.

- It is recommended that the existing on-street parking policies be reviewed by the City to consider parking allowance on the south side of the street instead of the north side or on both sides. People accessing the park, particularly with small children, will not have to cross Spillsbury Drive if parking can be made available on the south side.

- The City can consider carrying out a follow up collection of pedestrian, other non-auto trips and auto-based travel at similar splash pads in the City. This trip generation data should then be assembled into a mode-based trip generation database to aid in detailed planning for future city splash pads.

- As required, install additional park-related signage along Spillsbury Drive to create a corridor environment in the vicinity of the park that will encourage drivers to reduce speeds.

TECHNICAL APPENDIX

APPENDIX A1
STUDY TERMS OF REFERENCE

City of Peterborough
Facilities and Property Management Division
500 George Street North, Peterborough, ON, K9H 3R9
705-742-7777 | 1-855-738-3755
peterborough.ca

Informal Quote Request

October 25, 2023

Tranplan Associates

Re: Informal Quote Request

The City of Peterborough (the "City") is seeking a quote to perform engineering services to complete a traffic impact study for the proposed Valleymore Park Splash Pad. The park is situated on 1.07 ha parcel of existing City park lands. The subject lands are located at 338 Spillsbury Drive. The scope of work is further described in the attached Terms of Reference.

1. Submission of Quotation

Please email a fully completed and signed Quote Form to:

Sean Nailer, Parks and Recreation Project Manager **snailer@peterborough.ca**

The submission deadline is **Wednesday, November 8th at 11:59am.** The completed and signed Quote Form should be received by the submission deadline, or it may not be considered.

2. Informal Quote Process

This is an informal non-binding quote process. No legal obligations regarding the procurement of any good or service will be created through this process. This request does not obligate the City to contract with any supplier and the submission of a quote does not obligate any supplier to contract with the City.

Following Contract award, the selected supplier, if any, will be sent an electronic notice. Suppliers not selected will also be informed. The City may choose not to select any supplier and may amend or cancel this request at any time.

The terms and conditions of the contract for the Deliverables will be based on the Traffic Impact Study – Valleymore Splash Pad – Informal Quote Request and Terms of Reference.

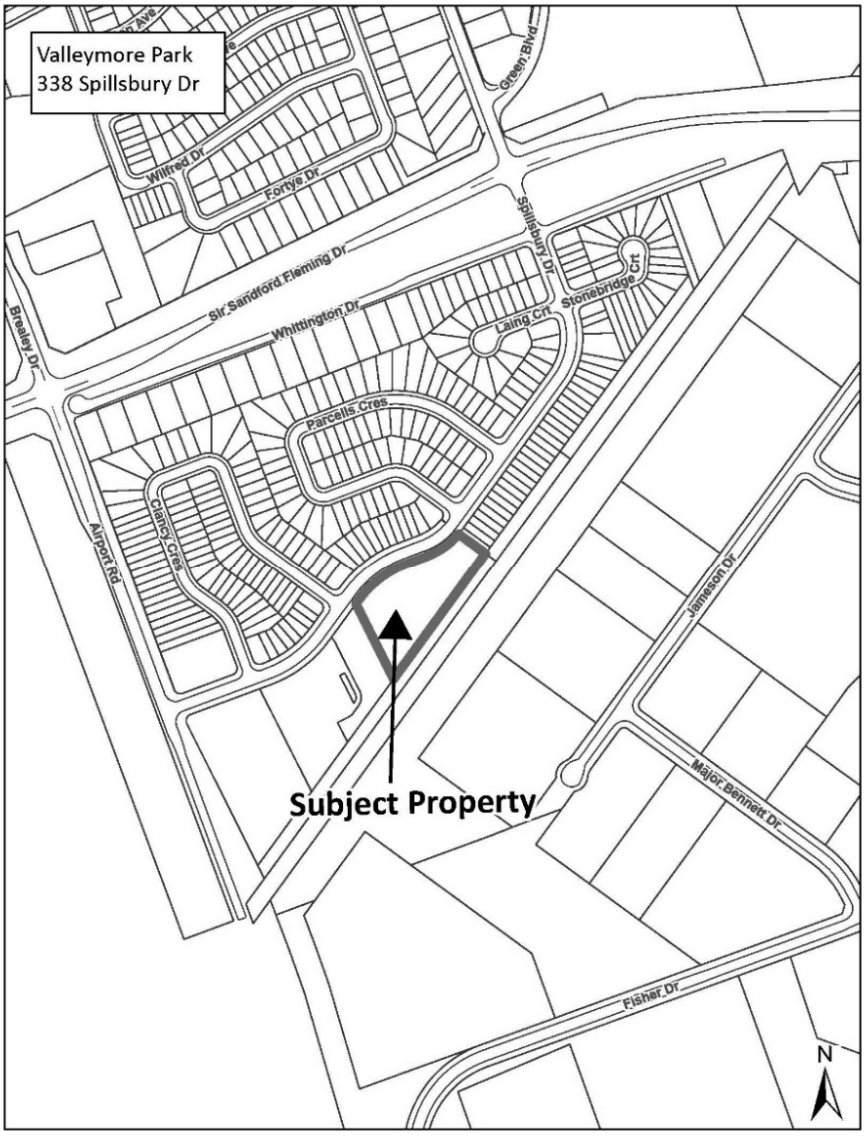
We look forward to receipt of your response. Please contact the under-signed with any questions relating to this request.

Terms of Reference

1. Introduction

The City of Peterborough (City) is seeking proposals to perform engineering services to complete a traffic impact study for the proposed Valleymore Park Splash Pad. The scope of work shall include all required engineering services for due diligence, site assessment, traffic capacity assessment, production of report documents, determine the impact of the proposed splash pad with respect to the existing roadway infrastructure, on-street parking, pedestrian safety and associate a cost to potential roadway improvements.

Consulting work to include items such as the collection of traffic data, and a report summarizing all of the findings, suggestions and recommendations. Further detail regarding deliverables and key project milestones is available below.



2. Context and Background

Valleymore Park consists of 1.07 hectare (2.64 acres) of land that is an existing neighbourhood park. The park is located in Ward 1 in the City's southwest end. The park block has a large frontage on Spillsbury Drive and is municipally known as 338 Spillsbury Drive. The park block is bounded by residential lots on all sides, except the south side which is bounded by the Railway. There is an existing sidewalk that runs along Spillsbury Drive along the north side of the park. There are no existing pathways within Valleymore Park.

The park block is zoned as OS.2 'Open Space District 2' under the Zoning By-law where a park is identified as a permitted use.

Valleymore Park currently has an existing playground and a half basketball court. There is an open flat area around the existing playground. There is street lighting along Spillsbury Drive but no existing lighting within the park. The large frontage along Spillsbury Drive makes for a high visibility park and there is some existing park signage and benches. There are existing swales within the park that will be maintained or diverted, so as to not alter the drainage patterns for the surrounding residential lots.

Through consultation with the public, the neighbourhood has expressed concerns with the existing traffic along Spillsbury Drive. It is the City's intent to construct a splashpad with approximately 14-18 play features and a shade structure with accessible seating in Valleymore Park. It is anticipated that this park will include the installation of asphalt pathways, connecting the splashpad with the Spillsbury Drive sidewalk.

3. Objectives

To implement this project successfully, the following objectives must be addressed:

- The consultant shall prepare a draft report summarizing all of the findings, suggestions and recommendations. The draft report will be reviewed by the City for comments. Subsequently a final report will be prepared and submitted to the City.

- The project manager will liaise regularly with the City to ensure the successful completion of the traffic impact study. The successful bidder will have to attend a start-up meeting with the City to review the scope of work, project schedule and other items.

- The successful bidder shall provide any additional services not listed above as required to achieve the intended purpose of this request. The above list is not meant to be all inclusive and should be expanded upon by the consultant in their submission. All costs associated with completing the aforementioned engineering work shall be included in the quote.

4. Project Schedule

The overall project schedule has been established as follows:

Selection of Consultant	October 2023
Review of proposed Splash Pad	November 2023
Data Collection	November 2023
Traffic Impact Study Report	December 2023

*If you are unable to meet the intended deadlines based on your current availability please provide justification and propose deadlines that are achievable.

5. Scope of Consulting Services

The engineering consultant shall provide consulting services as one coordinated and integrated service. Coordination with the City shall be through the Project Manager, Sean Nailer, Parks and Recreation Project Manager, **snailer@peterborough.ca** Engineering services shall include but not be limited to the following tasks:

TASK 1 - TRAFFIC IMPACT STUDY

The Traffic Impact Study ensures that all transportation and traffic impacts have been properly assessed, and the recommended improvements to the transportation system will allow the development to proceed without adverse impacts.

The Consulting Team shall:

a. Meet on site with the City's Representative to discuss report requirements for the project. Review with the City alternative approaches to the report, design and scope of the project;

b. Contact all potentially affected government agencies to confirm road jurisdiction and determine their individual requirements with respect to addressing impacts on various aspects of the transportation system;

c. Include the study area for the traffic impact study, that will typically vary according to the size of the proposed development, but should include the road sections and intersections, transit routes, and cycling and pedestrian facilities that will experience higher traffic demands and/or impacts due to the proposed development. Therefore, **pre-consultation with the City** shall be required to establish the limits of the study area including the specific intersections and other significant transportation facilities to be included in the analysis. The traffic impact study report shall include a key map to illustrate the study area in the context of the City.

d. Data collection of directional traffic counts as required to properly assess the existing vehicular movements. The collected data shall include vehicular

directional volumes, turning movements, roadway geometry, operating / posted speeds and existing traffic control and signage infrastructure, also the vehicle classification as well as pedestrians and cyclists volumes may be collected if deemed necessary to complete the study;

e. Review existing City drawings and any other documents, as applicable;

f. Assess the site-generated parking demand and if required, determine an appropriate parking strategy to mitigate the potential negative parking impacts on the neighbourhood;

g. Review the existing road network and the characteristics of the site;

h. Review existing traffic and provide recommendation regarding additional crosswalks, or parking that may be required;

i. Identify and suggest other traffic calming measures that may be required;

j. Review all applicable statutes, regulations, codes and by-laws and, where necessary, review the same with the authorities having jurisdiction;

k. Ensure that the recommendations meet or exceed all accessibility requirements and regulations;

l. Review the City's Neighbourhood Traffic Calming Policy and advise what is permitted and provide the appropriate recommendations;

m. Provide preliminary cost estimates for proposed transportation improvements;

n. Prepare a draft report summarizing all of the findings, suggestions and recommendations. The draft report will be reviewed by the City for comments. Subsequently a final report will be prepared and submitted to the City.

6. Required Qualifications

The Consulting Team should be prepared to demonstrate the experience and expertise that both the firm and the individual acting as project manager have in the field of traffic engineering and the preparation of traffic impact studies.

The submitted traffic impact study will include a transmittal or signature page with the signatures of the project manager and a second person responsible for quality assurance (i.e., "checked by"). The City requires that traffic impact studies shall be prepared under the supervision of an individual or individuals with the following qualifications:

- Licensed by Professional Engineers Ontario;
- Specific training in traffic and transportation engineering; and
- Several years of experience related to preparing traffic studies for existing or proposed developments.

The individual taking responsibility for the traffic impact study shall apply their PEO stamp to the final report.

7. Background / Reference Information

The existing physical conditions in the study area shall be clearly documented though a site visit, and shall include detailed descriptions of the roadways, intersections, traffic control devices, transit, cycling and pedestrian facilities, traffic regulations (e.g., turn prohibitions, speed limits, parking restrictions, etc.), and adjacent land uses. The classification of study area roads shall also be provided, Valleymore Park is on Spillsbury Drive which is a high-capacity collector road. The designations may be found in the Official Plans of the City, or in the current Transportation Master Plan. To augment the descriptive text where it would be beneficial, it is recommended that photos taken at the site should be included in the traffic impact study to assist in illustrating existing conditions.

The most recent traffic counts available in the City's database are provided below. These counts shall be supplemented by new traffic counts at the consultant's cost in the event that the available traffic counts are more than one year old. This will ensure that the basis for both assessing existing traffic conditions and forecasting future traffic conditions will properly reflect current traffic data for the peak periods of interest. A summary of key traffic data and other relevant data required is as follows:

- Existing and historical traffic volumes, including vehicle classification;
- Bicycle traffic volumes;
- Pedestrian crossing volumes;
- Transit routes and schedules; and
- List of committed road improvements.

Existing traffic operations shall also be observed and documented during the peak periods. Preferably, the observations should be carried out at the same time as the data collection. This will assist in determining if there are any unusual traffic conditions or issues within the study area, and will serve to validate the results of subsequent analyses.

The data collection activities shall be described in the traffic impact study with existing peak period traffic volumes presented clearly and legibly in figures (preferable), charts, and/or tables. The raw traffic data summaries obtained from field counts shall be provided for reference as part of the report appendix materials.

A traffic count was conducted in the Fall of 2022 on Spillsbury Drive between Clancy Crescent and Parcells Crescent. The averaged 24hr vehicular volume recorded is as follows:

- Eastbound: 742
- Westbound: 1,347
- Total: 2,089

APPENDIX A2
CITY'S PROPOSED PARK LOCATIONS FOR UPGRADED AND NEW FACILITIES

Proposed Candidate Locations for Upgraded and New Facilities

- A — PSWC (Level A/Destination)
- B — Knights of Columbus Park (Upgrade to Level B)
- C — Lily Lake Community (Level B)
- D — Kawartha Hts, or Dainard Park (Level B or C)
- E — Chelsea Gardens Park (Upgrade to Level C)
- F — Northland Park (move Stillman Park Facility to Northland Park, Level C)
- G — John Taylor Park (Upgrade to Level C)
- H — Roper Park (Level C)
- I — Valleymore Park (Level C)
- J — Chemong Planning Area (Level C)
- K — Waverley Hts Park
- L — Liftlock Planning Area (Level C)
- M — Coldpsring Planning Area East (Level C)
- N — Coldpsring Planning Area West (Level C)

Existing Facilities

Level A/Destination Waterplay Facilities

- 1 — Riverview Park and Zoo
- 2 — Rogers Cove Park

Level B Waterplay Facilities

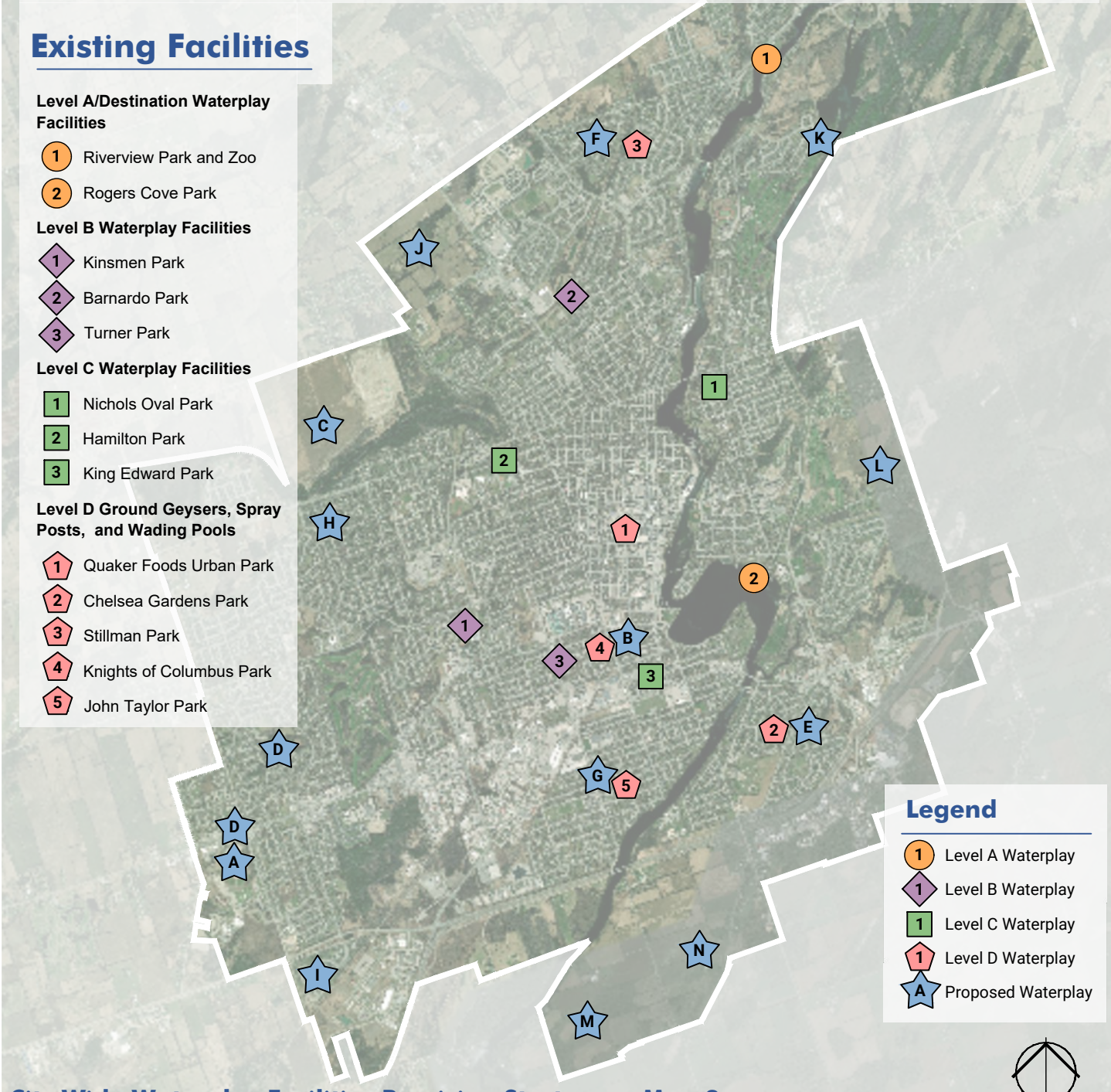
- 1 — Kinsmen Park
- 2 — Barnardo Park
- 3 — Turner Park

Level C Waterplay Facilities

- 1 — Nichols Oval Park
- 2 — Hamilton Park
- 3 — King Edward Park

Level D Ground Geysers, Spray Posts, and Wading Pools

- 1 — Quaker Foods Urban Park
- 2 — Chelsea Gardens Park
- 3 — Stillman Park
- 4 — Knights of Columbus Park
- 5 — John Taylor Park



Legend

- 1 — Level A Waterplay
- 1 — Level B Waterplay
- 1 — Level C Waterplay
- 1 — Level D Waterplay
- A — Proposed Waterplay

City Wide Waterplay Facilities Provision Strategy – Map 2

APPENDIX B

TRAFFIC DATA FROM CITY

COLLISION DATA

SPEED STUDY DATA

SPILLSBURY/SSF DRIVE TMC'S

Accident Date	Accident Time	Location	Accident Location	Environment Condition 1	Light	Collision Type	Initial Impact Type	Traffic Control	Vehicle 1 Type	Initial Direction Of Travel One	Driver One At Fault	Vehicle 2 Type	Initial Direction Of Travel Two	Driver Two At Fault
2020-02-09	21:50	Spillsbury Dr @ Sir Sandford Fleming Dr (106)	03 - At intersection	03 - Snow	07 - Dark	PDO	03 - Rear end	01 - Traffic signal	01 - Automobile, station wagon	South	TRUE		South	FALSE
2020-08-16	17:00	Spillsbury Dr @ Parcells Cr (1108)	03 - At intersection	02 - Rain	01 - Daylight	PDO	02 - Angle	02 - Stop sign	01 - Automobile, station wagon	North	FALSE	01 - Automobile, station wagon	East	FALSE
2021-10-13	19:07	Spillsbury Dr btwn Clancy Cr & Parcells Cr (12405)	01 - Non intersection	01 - Clear	08 - Dark, artificial	PDO	07 - SMV other	10 - No control	01 - Automobile, station wagon	South	FALSE		None	FALSE
2021-10-31	15:41	Spillsbury Dr btwn Clancy Cr & Clancy Cr (12461)	01 - Non intersection	01 - Clear	01 - Daylight	PDO	03 - Rear end	10 - No control	01 - Automobile, station wagon	West	TRUE	05 - Pick-up truck	West	TRUE
2021-11-28	16:30	Spillsbury Dr btwn Stonebridge Cr & Whittington Dr (12330)	01 - Non intersection	03 - Snow	05 - Dusk	PDO	07 - SMV other	10 - No control	01 - Automobile, station wagon	West	FALSE		None	FALSE
2022-02-15	13:03	Spillsbury Dr @ Sir Sandford Fleming Dr (106)	03 - At intersection	01 - Clear	01 - Daylight	Injury	02 - Angle	01 - Traffic signal	01 - Automobile, station wagon	West	TRUE	01 - Automobile, station wagon	South	FALSE
2022-02-17	18:30	Spillsbury Dr @ Sir Sandford Fleming Dr (106)	03 - At intersection	03 - Snow	07 - Dark	PDO	03 - Rear end	01 - Traffic signal	01 - Automobile, station wagon	South	FALSE	01 - Automobile, station wagon	South	FALSE
2022-03-03	11:51	Spillsbury Dr @ Sir Sandford Fleming Dr (106)	02 - Intersection related	01 - Clear	01 - Daylight	PDO	03 - Rear end	01 - Traffic signal	01 - Automobile, station wagon	East	TRUE	13 - Truck - tractor	East	FALSE
2022-05-09	21:00	Spillsbury Dr @ Sir Sandford Fleming Dr (106)	02 - Intersection related	01 - Clear	07 - Dark	PDO	03 - Rear end	01 - Traffic signal	01 - Automobile, station wagon	North	FALSE	01 - Automobile, station wagon	North	FALSE
2022-12-13	14:35	Spillsbury Dr @ Sir Sandford Fleming Dr (106)	02 - Intersection related	01 - Clear	01 - Daylight	PDO	03 - Rear end	01 - Traffic signal		East	TRUE	16 - Bus (other)	East	FALSE

MetroCount Traffic Executive

CustomList-690 -- English (ENU)

Datasets:

Site:	**[P22-198] !Spillsbury Dr(Parcells Cres & Clancy Cres)**
Attribute:	PETERBOROUGH
Direction:	8 - East bound A>B, West bound B>A. **Lane:** 1
Survey Duration:	00:00 Monday, September 19, 2022 => 23:48 Friday, September 23, 2022,
Zone:	
File:	Spillsbury-Parcells to Clancy.EC1 (Plus)
Identifier:	DJ37NKTX MC56-L5 [MC55] (c)Microcom 19Oct04
Algorithm:	Factory default axle (v5.02)
Data type:	Axle sensors - Paired (Class/Speed/Count)

Profile:

Filter time:	**00:00 Wednesday, September 21, 2022 => 00:00 Friday, September 23, 2022 (2)**
Included classes:	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range:	10 - 160 km/h.
Direction:	North, East, South, West (bound), P = East, Lane = 0-16
Separation:	Headway > 0 sec, Span 0 - 100 metre
Name:	Default Profile
Scheme:	Vehicle classification (Scheme F3)
Units:	Metric (metre, kilometre, m/s, km/h, kg, tonne)

Column Legend:

0 [Time]	24-hour time (0000 - 2359)
1 [Total]	Number in time step (AB)
2 [Total]	Number in time step (BA)
3 [Total]	Number in time step
4 [Mean]	Average speed
5 [Vpp]	Percentile speed

*** Wednesday, September 21, 2022**

Time	Total AB	Total BA	Total	Mean	Vpp 85
0000	6	16	22	49.4	55.4
0100	2	3	5	49.9	-
0200	3	3	6	51.1	-
0300	2	4	6	47.3	-
0400	4	7	11	48.2	56.6
0500	7	18	25	46.9	55.4
0600	16	29	45	43.5	50.6
0700	41	83	124	44.2	48.2
0800	53	93	146	44.8	49.1
0900	43	45	88	41.8	48.7
1000	29	57	86	42.8	50.6
1100	25	54	79	40.9	50.2
1200	51	81	132	40.9	49.5
1300	42	66	108	37.6	46.3
1400	42	90	132	40.5	49.7
1500	55	96	151	40.1	51.2
1600	64	122	186	47.2	56.3
1700	75	123	198	40.1	47.6
1800	53	104	157	37.9	47.0
1900	29	75	104	38.8	45.4
2000	33	66	99	43.6	48.2
2100	26	44	70	47.2	54.6
2200	14	24	38	42.9	49.1
2300	11	17	28	47.2	57.9
07-19	**573**	**1014**	**1587**	**41.7**	**50.1**
06-22	**677**	**1228**	**1905**	**41.9**	**50.1**
06-00	**702**	**1269**	**1971**	**42.0**	**50.1**
00-00	**726**	**1320**	**2046**	**42.2**	**50.6**

Vehicles = 2046
Posted speed limit = 50 km/h, Exceeding = 348 (17.01%), Mean Exceeding = 54.03 km/h
Maximum = 83.2 km/h, **Minimum** = 12.4 km/h, **Mean** = 42.2 km/h
85% Speed = 50.58 km/h, **95% Speed** = 55.44 km/h, **Median** = 43.29 km/h
20 km/h Pace = 32 - 52, **Number in Pace** = 1558 (76.15%)
Variance = 72.86, **Standard Deviation** = 8.54 km/h

*** Thursday, September 22, 2022**

Time	Total AB	Total BA	Total	Mean	Vpp 85
0000	10	13	23	52.9	57.9
0100	3	6	9	51.6	-
0200	1	2	3	43.8	-
0300	1	2	3	38.8	-
0400	6	10	16	45.7	52.5
0500	8	21	29	50.2	60.4
0600	19	31	50	50.0	58.8
0700	46	74	120	41.1	48.0
0800	59	78	137	43.3	48.8
0900	38	60	98	46.1	53.7
1000	27	59	86	43.3	51.3
1100	40	77	117	40.7	50.7
1200	35	63	98	42.8	54.0
1300	32	67	99	46.6	53.5
1400	49	91	140	47.9	59.4
1500	52	99	151	40.7	48.3
1600	49	99	148	43.4	49.2
1700	69	127	196	41.1	45.1
1800	62	109	171	40.7	46.6
1900	51	97	148	43.4	49.7
2000	34	65	99	45.5	53.3
2100	24	60	84	47.1	56.8
2200	23	33	56	40.0	52.0
2300	20	30	50	40.9	48.4
07-19	**558**	**1003**	**1561**	**42.9**	**50.5**
06-22	**686**	**1256**	**1942**	**43.4**	**51.0**
06-00	**729**	**1319**	**2048**	**43.3**	**51.0**
00-00	**758**	**1373**	**2131**	**43.5**	**51.5**

Vehicles = 2131
Posted speed limit = 50 km/h, Exceeding = 428 (20.08%), Mean Exceeding = 54.43 km/h
Maximum = 71.6 km/h, **Minimum** = 14.1 km/h, **Mean** = 43.5 km/h
85% Speed = 51.50 km/h, **95% Speed** = 56.79 km/h, **Median** = 43.65 km/h
20 km/h Pace = 34 - 54, **Number in Pace** = 1704 (79.96%)
Variance = 63.32, **Standard Deviation** = 7.96 km/h

In profile: Vehicles = 4177 / 4366 (95.67%)

Turning Movement Count - Details Report

Location Spillsbury Dr @ Sir Sandford Fleming Dr

Municipality Peterborough

Count Date Tuesday, February 20, 2024

		North Approach					South Approach					East Approach					West Approach				
Time Period		LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
00:00	00:15	0	0	0	0	0	0	0	1	0	1	1	4	1	0	6	1	1	0	0	2
00:15	00:30	0	1	0	0	1	0	1	1	0	2	1	4	3	0	8	0	1	0	0	1
00:30	00:45	1	1	1	0	3	0	0	0	0	0	0	1	1	0	2	0	3	0	0	3
00:45	01:00	1	2	0	0	3	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1
Hourly Total		2	4	1	0	7	0	1	2	0	3	2	10	6	0	18	2	5	0	0	7
01:00	01:15	0	2	0	0	2	0	0	1	0	1	0	1	1	0	2	1	1	0	0	2
01:15	01:30	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0
01:30	01:45	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1
01:45	02:00	1	0	0	0	1	0	0	0	0	0	0	2	1	0	3	0	2	0	0	2
Hourly Total		2	4	0	0	6	0	1	2	0	3	0	4	2	0	6	1	4	0	0	5
02:00	02:15	1	0	1	0	2	0	0	0	0	0	1	0	1	0	2	1	3	0	0	4
02:15	02:30	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	1	0	0	1
02:30	02:45	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	1	2	0	0	3
02:45	03:00	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Hourly Total		4	1	1	0	6	0	1	0	0	1	1	2	2	0	5	2	9	0	0	11
03:00	03:15	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	1	4	0	0	5
03:15	03:30	1	0	0	0	1	0	0	1	0	1	0	1	0	0	1	0	2	0	0	2
03:30	03:45	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	0	3	0	0	3
03:45	04:00	1	0	0	0	1	0	0	0	0	0	0	3	0	0	3	0	2	0	0	2
Hourly Total		3	2	0	0	5	1	0	1	0	2	0	8	0	0	8	1	11	0	0	12
04:00	04:15	1	0	1	0	2	0	0	1	0	1	1	1	0	0	2	0	2	0	0	2
04:15	04:30	1	1	0	0	2	0	0	0	0	0	1	5	0	0	6	0	2	0	0	2
04:30	04:45	1	0	4	0	5	0	0	0	0	0	0	8	0	0	8	1	4	0	0	5
04:45	05:00	3	0	3	0	6	0	0	3	0	3	0	9	0	0	9	0	5	0	0	5
Hourly Total		6	1	8	0	15	0	0	4	0	4	2	23	0	0	25	1	13	0	0	14
05:00	05:15	2	0	3	0	5	0	0	2	0	2	0	10	1	0	11	0	3	0	0	3
05:15	05:30	3	1	3	0	7	1	3	2	0	6	0	19	2	0	21	0	13	0	0	13
05:30	05:45	5	2	3	0	10	0	2	2	0	4	0	21	2	0	23	0	12	0	0	12
05:45	06:00	9	1	2	0	12	0	2	2	0	4	0	28	2	0	30	0	23	0	0	23
Hourly Total		19	4	11	0	34	1	7	8	0	16	0	78	7	0	85	0	51	0	0	51

Time Period		North Approach					South Approach					East Approach					West Approach				
		LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
06:00	06:15	10	1	5	0	16	1	2	3	0	6	1	23	5	0	29	0	25	0	0	25
06:15	06:30	11	1	1	0	13	0	4	7	0	11	2	26	4	0	32	0	40	0	0	40
06:30	06:45	18	1	3	0	22	2	1	5	0	8	0	31	8	0	39	3	59	0	0	62
06:45	07:00	14	3	4	0	21	1	5	7	0	13	2	43	8	0	53	4	59	0	0	63
Hourly Total		53	6	13	0	72	4	12	22	0	38	5	123	25	0	153	7	183	0	0	190
07:00	07:15	15	3	6	0	24	0	3	6	0	9	2	56	8	0	66	4	50	1	0	55
07:15	07:30	31	2	5	0	38	1	4	8	0	13	2	64	14	0	80	4	60	1	0	65
07:30	07:45	29	3	6	0	38	1	6	10	0	17	1	85	24	0	110	8	72	1	0	81
07:45	08:00	46	6	13	0	65	3	21	16	0	40	3	73	42	0	118	12	103	0	0	115
Hourly Total		121	14	30	0	165	5	34	40	0	79	8	278	88	0	374	28	285	3	0	316
08:00	08:15	38	6	6	0	50	1	12	7	0	20	3	59	37	0	99	5	82	0	0	87
08:15	08:30	32	9	7	0	48	1	13	9	0	23	2	73	45	0	120	8	88	0	0	96
08:30	08:45	32	7	11	0	50	1	10	10	0	21	3	65	35	0	103	7	74	1	0	82
08:45	09:00	31	9	7	0	47	1	8	15	0	24	3	71	28	0	102	10	83	2	0	95
Hourly Total		133	31	31	0	195	4	43	41	0	88	11	268	145	0	424	30	327	3	0	360
09:00	09:15	28	8	5	0	41	2	5	6	0	13	5	63	15	0	83	4	75	0	0	79
09:15	09:30	24	1	5	0	30	1	8	12	0	21	4	62	18	0	84	4	80	1	0	85
09:30	09:45	22	3	4	0	29	0	5	11	0	16	3	69	22	0	94	6	59	0	0	65
09:45	10:00	25	4	5	0	34	0	7	7	0	14	5	65	22	0	92	6	57	1	0	64
Hourly Total		99	16	19	0	134	3	25	36	0	64	17	259	77	0	353	20	271	2	0	293
10:00	10:15	19	3	3	0	25	2	5	7	0	14	3	58	16	0	77	5	51	0	0	56
10:15	10:30	21	4	2	0	27	2	5	7	0	14	7	53	14	0	74	3	59	1	0	63
10:30	10:45	17	5	5	0	27	3	6	7	0	16	2	59	23	0	84	5	61	1	0	67
10:45	11:00	18	3	3	0	24	1	5	10	0	16	5	71	20	0	96	7	73	1	0	81
Hourly Total		75	15	13	0	103	8	21	31	0	60	17	241	73	0	331	20	244	3	0	267
11:00	11:15	12	3	4	0	19	0	2	6	0	8	7	57	24	0	88	5	68	2	0	75
11:15	11:30	20	8	5	0	33	2	3	9	0	14	5	63	27	0	95	7	67	3	0	77
11:30	11:45	21	5	4	0	30	2	9	7	0	18	4	72	29	0	105	2	67	1	0	70
11:45	12:00	21	7	5	0	33	2	4	4	0	10	7	76	24	0	107	8	71	0	0	79
Hourly Total		74	23	18	0	115	6	18	26	0	50	23	268	104	0	395	22	273	6	0	301
12:00	12:15	24	6	4	0	34	1	5	4	0	10	6	72	42	0	120	4	80	1	0	85
12:15	12:30	25	8	4	0	37	2	7	8	0	17	7	72	30	0	109	6	65	1	0	72
12:30	12:45	20	5	7	0	32	1	7	8	0	16	4	73	28	0	105	11	85	2	0	98
12:45	13:00	33	4	5	0	42	3	6	7	0	16	7	73	32	0	112	8	69	2	0	79
Hourly Total		102	23	20	0	145	7	25	27	0	59	24	290	132	0	446	29	299	6	0	334
13:00	13:15	24	6	6	0	36	1	7	6	0	14	6	71	25	0	102	8	61	3	0	72
13:15	13:30	21	14	3	0	38	0	3	9	0	12	3	71	24	0	98	6	68	2	0	76
13:30	13:45	26	6	3	0	35	1	5	8	0	14	6	73	32	0	111	6	72	3	0	81

		North Approach					South Approach					East Approach					West Approach				
Time Period		LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
13:45	14:00	25	8	2	0	35	1	9	8	0	18	6	66	35	0	107	3	65	1	0	69
Hourly Total		96	34	14	0	144	3	24	31	0	58	21	281	116	0	418	23	266	9	0	298
14:00	14:15	25	5	6	0	36	2	8	5	0	15	11	73	29	0	113	8	79	1	0	88
14:15	14:30	27	9	8	0	44	2	9	9	0	20	6	72	33	0	111	7	67	1	0	75
14:30	14:45	32	10	11	0	53	0	10	7	0	17	7	63	29	0	99	6	77	3	0	86
14:45	15:00	34	11	6	0	51	1	7	7	0	15	8	78	32	0	118	7	83	3	0	93
Hourly Total		118	35	31	0	184	5	34	28	0	67	32	286	123	0	441	28	306	8	0	342
15:00	15:15	26	6	5	0	37	2	11	8	0	21	10	86	40	0	136	9	88	2	0	99
15:15	15:30	17	13	5	0	35	0	9	7	0	16	9	96	34	0	139	9	89	3	0	101
15:30	15:45	27	13	6	0	46	1	7	9	0	17	15	117	40	0	172	5	88	3	0	96
15:45	16:00	23	9	7	0	39	1	7	8	0	16	9	100	39	0	148	11	88	2	0	101
Hourly Total		93	41	23	0	157	4	34	32	0	70	43	399	153	0	595	34	353	10	0	397
16:00	16:15	36	13	7	0	56	2	6	10	0	18	13	104	45	0	162	8	110	2	0	120
16:15	16:30	33	11	8	0	52	0	12	9	0	21	8	97	53	0	158	11	94	3	0	108
16:30	16:45	37	12	6	0	55	1	10	7	0	18	14	104	59	0	177	13	92	2	0	107
16:45	17:00	27	13	9	0	49	3	10	7	0	20	16	117	45	0	178	8	92	1	0	101
Hourly Total		133	49	30	0	212	6	38	33	0	77	51	422	202	0	675	40	388	8	0	436
17:00	17:15	23	10	5	0	38	2	15	6	0	23	16	119	67	0	202	11	93	2	0	106
17:15	17:30	20	15	6	0	41	3	7	9	0	19	18	101	59	0	178	10	82	2	0	94
17:30	17:45	25	12	7	0	44	3	11	8	0	22	11	76	31	0	118	7	72	1	0	80
17:45	18:00	15	8	5	0	28	0	7	8	0	15	14	77	28	0	119	9	74	1	0	84
Hourly Total		83	45	23	0	151	8	40	31	0	79	59	373	185	0	617	37	321	6	0	364
18:00	18:15	15	8	3	0	26	2	10	6	0	18	12	59	27	0	98	4	51	1	0	56
18:15	18:30	17	12	4	0	33	1	10	8	0	19	11	48	25	0	84	6	48	1	0	55
18:30	18:45	18	8	2	0	28	1	10	6	0	17	12	51	19	0	82	2	35	1	0	38
18:45	19:00	10	6	4	0	20	2	8	11	0	21	11	33	14	0	58	2	37	1	0	40
Hourly Total		60	34	13	0	107	6	38	31	0	75	46	191	85	0	322	14	171	4	0	189
19:00	19:15	11	12	3	0	26	1	5	3	0	9	12	37	18	0	67	2	36	2	0	40
19:15	19:30	11	7	2	0	20	0	5	5	0	10	4	25	13	0	42	2	30	2	0	34
19:30	19:45	11	8	2	0	21	0	3	4	0	7	8	29	14	0	51	2	26	1	0	29
19:45	20:00	11	5	2	0	18	1	8	3	0	12	8	25	13	0	46	3	26	1	0	30
Hourly Total		44	32	9	0	85	2	21	15	0	38	32	116	58	0	206	9	118	6	0	133
20:00	20:15	12	8	3	0	23	1	6	5	0	12	9	25	15	0	49	1	31	1	0	33
20:15	20:30	6	6	3	0	15	0	5	8	0	13	5	29	15	0	49	4	19	2	0	25
20:30	20:45	10	5	2	0	17	0	2	2	0	4	5	18	6	0	29	3	22	1	0	26
20:45	21:00	3	4	2	0	9	0	4	2	0	6	5	14	6	0	25	2	13	2	0	17
Hourly Total		31	23	10	0	64	1	17	17	0	35	24	86	42	0	152	10	85	6	0	101
21:00	21:15	7	8	2	0	17	1	5	5	0	11	4	11	10	0	25	2	17	0	0	19

		North Approach					South Approach					East Approach					West Approach				
Time Period		LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT	LT	TH	RT	U-Turn	TOT
21:15	21:30	4	3	2	0	9	1	4	1	0	6	4	11	7	0	22	2	12	0	0	14
21:30	21:45	6	6	0	0	12	1	2	3	0	6	3	9	4	0	16	2	10	1	0	13
21:45	22:00	3	4	2	0	9	0	2	3	0	5	6	10	6	0	22	2	11	0	0	13
Hourly Total		20	21	6	0	47	3	13	12	0	28	17	41	27	0	85	8	50	1	0	59
22:00	22:15	3	4	1	0	8	0	1	2	0	3	3	9	6	0	18	0	15	1	0	16
22:15	22:30	4	3	2	0	9	0	2	4	0	6	3	6	4	0	13	1	7	0	0	8
22:30	22:45	7	5	1	0	13	0	3	2	0	5	4	9	5	0	18	1	12	0	0	13
22:45	23:00	2	3	0	0	5	0	2	0	0	2	2	5	6	0	13	2	10	0	0	12
Hourly Total		16	15	4	0	35	0	8	8	0	16	12	29	21	0	62	4	44	1	0	49
23:00	23:15	3	2	0	0	5	1	2	1	0	4	3	10	5	0	18	1	6	0	0	7
23:15	23:30	1	2	0	0	3	0	1	1	0	2	3	6	5	0	14	0	7	1	0	8
23:30	23:45	1	2	0	0	3	1	1	1	0	3	2	5	4	0	11	0	4	0	0	4
23:45	00:00	1	1	1	0	3	1	1	2	0	4	3	5	2	0	10	1	4	0	0	5
Hourly Total		6	7	1	0	14	3	5	5	0	13	11	26	16	0	53	2	21	1	0	24
Grand Total		1393	480	329	0	2202	80	460	483	0	1023	458	4102	1689	0	6249	372	4098	83	0	4553
Truck %		3%	1%	1%	0%	2%	1%	2%	3%	0%	2%	6%	2%	2%	0%	2%	1%	2%	0%	0%	2%

APPENDIX C
TABLE 3.1, CITY'S TRAFFIC CALMING POLICY 0051

Table 3.1: Screening Criteria for Initiating A Traffic Calming Study

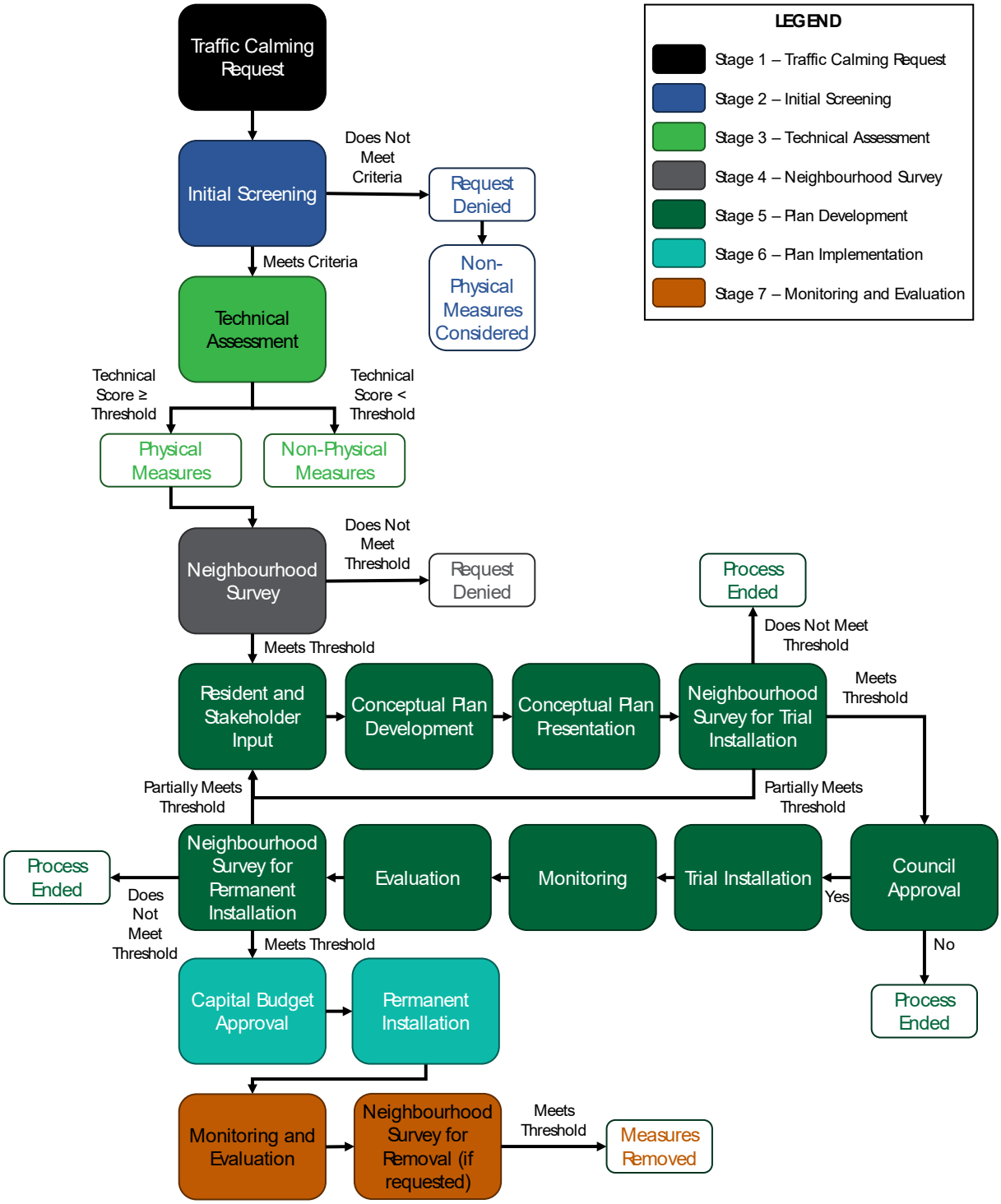
Criteria	Threshold	A Traffic Calming Study may be considered if:
All Criteria Must be Met		
Previously Requested	Within Last Three Years	A prior request for Traffic Calming has not been denied within the last three years.
Measures Removed	Within Last Five Years	Traffic Calming measures have not been removed within the last five years.
Roadway Classification	Local Street, Low Capacity Collector, or High Capacity Collector	The subject street is designated a Local Street, Low Capacity Collector or High Capacity Collector in the City of Peterborough Official Plan (Schedule B – Roadway Network).
Location	Transit Routes, Signed Hospital Routes, or Primary Fire Route	The subject street does not serve as a transit route, signed hospital route, and/or Primary Fire Route in the City.
Speed Limit	≤ 50 km/h	The posted speed limit on the subject street is 50 km/h or less.
Road Grade	< 8%	That the average grade over the study area is less than 8%.
Segment Length	≥ 150 metres	The distance between stop-controlled intersections along the subject street is 150 metres or more.
At Least One Criteria Must be Met for <u>Local Streets and Low Capacity Collectors</u>		
Operating Speed	≥ 5 km/h above posted speed limit	The 85th Percentile Speed is 5 km/h or more above the posted speed limit.
Shortcutting Traffic	> 30%	The percentage of non-local traffic is more than 30%.
At Least One Criteria Must be Met for <u>High Capacity Collectors</u>		
Operating Speed	≥ 10 km/h above posted speed limit	The 85th Percentile Speed is 10 km/h or more above the posted speed limit.
Shortcutting Traffic	> 60%	The percentage of non-local traffic is more than 60%.

Notes:

1. The 85th Percentile Speed is calculated from data collected using automated traffic recorders (or similar units) over a 7-day period.
2. The percentage of non-local traffic is estimated by comparing the expected trip generation for an area to the actual volume counts. Alternatively, data will be collected through a license plate trace survey or data collection units with Bluetooth readers.

4.13 Figure 3.1 Illustrates the Neighbourhood Traffic Calming Study Process

Figure 3.1: Neighbourhood Traffic Calming Study Process



APPENDIX D
RELEVANT EXCERPTS FROM OTM BOOK 15

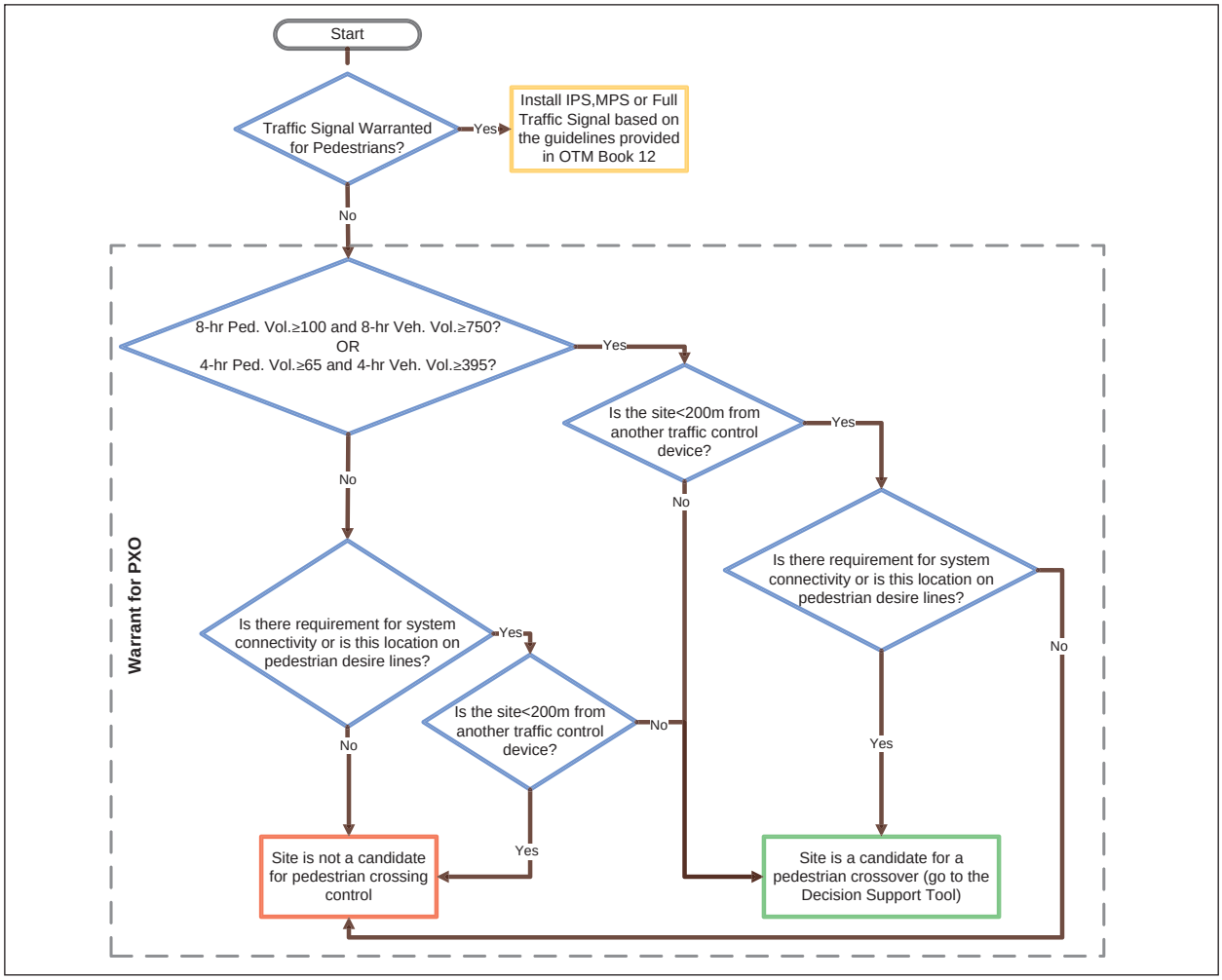


Figure 2: Decision Support Tool – Preliminary Assessment

to reflect a factored volume based on "equivalent adults" and the following definitions as described in OTM Book 12:

- Unassisted – Adults and adolescents at or above the age of 12 are considered "unassisted" pedestrians.
- Assisted – Children under the age of 12, senior citizens, disabled pedestrians and other pedestrians requiring special consideration or assistance are considered "assisted" pedestrians. In cases where an adult is accompanying a pedestrian included in the "assisted" category, both individuals should be counted as "assisted" pedestrians to reflect their higher vulnerability. It should be recognized that the exact age of the pedestrian is not critical, but the observers will need to use their judgment to place each pedestrian into one of the two categories.

The factored pedestrian volume is calculated as follows:

Adjusted volume = Unassisted Pedestrian Volume + 2 x Assisted Pedestrian Volume

Figure 3 and Figure 4 show the graphs used to determine whether a pedestrian control

Table 7: Pedestrian Crossover Selection Matrix

Two-way Vehicular Volume			Posted Speed Limit (km/h	Total Number of Lanes for the Roadway Cross Section[1]			
Time Period	Lower Bound	Upper Bound		1 or 2 Lanes	3 lanes	4 lanes w/raised refuge	4 lanes w/o raised refuge
8 Hour	750	2,250	≤50	Level 2 Type D	Level 2 Type C[3]	Level 2 Type D[2]	Level 2 Type B
4 Hour	395	1,185					
8 Hour	750	2,250	60	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	395	1,185					
8 Hour	2,250	4,500	≤50	Level 2 Type D	Level 2 Type B	Level 2 Type D[2]	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	2,250	4,500	60	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	4,500	6,000	≤50	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	4,500	6,000	60	Level 2 Type B	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	6,000	7,500	≤50	Level 2 Type B	Level 2 Type B	Level 2 Type C[2]	Level 1 Type A
4 Hour	3,155	3,950					
8 Hour	6,000	7,500	60	Level 2 Type B	Level 2 Type B		
4 Hour	3,155	3,950					
8 Hour	7,500	17,500	≤50	Level 2 Type B	Level 2 Type B		
4 Hour	3,950	9,215					
8 Hour	7,500	17,500	60	Level 2 Type B			
4 Hour	3,950	9,215					

Type A Type B Type C Type D

Approaches to roundabouts should be considered a separate roadways.

[1]The total number of lanes is representative of crossing distance. The width of these lanes is assumed to be between 3.0 m and 3.75 m according to MTO Geometric Design Standards for Ontario Highways (Chapter D.2). A cross sectional feature (e.g. bike lane or on-street parking) may extend the average crossing distance beyond this range of lane widths.

[2]Use of two sets of side mounted signs for each direction (one on the right side and one on the median)

[3] Use Level 2 Type B PXO up to 3 lanes total, cross section one-way.

The hatched cells in this table show that a PXO is not recommended for sites with these traffic and geometric conditions. Generally a traffic signal is warranted for such conditions.

APPENDIX E
RECOMMENDED PEDESTRIAN CROSSOVER TREATMENTS

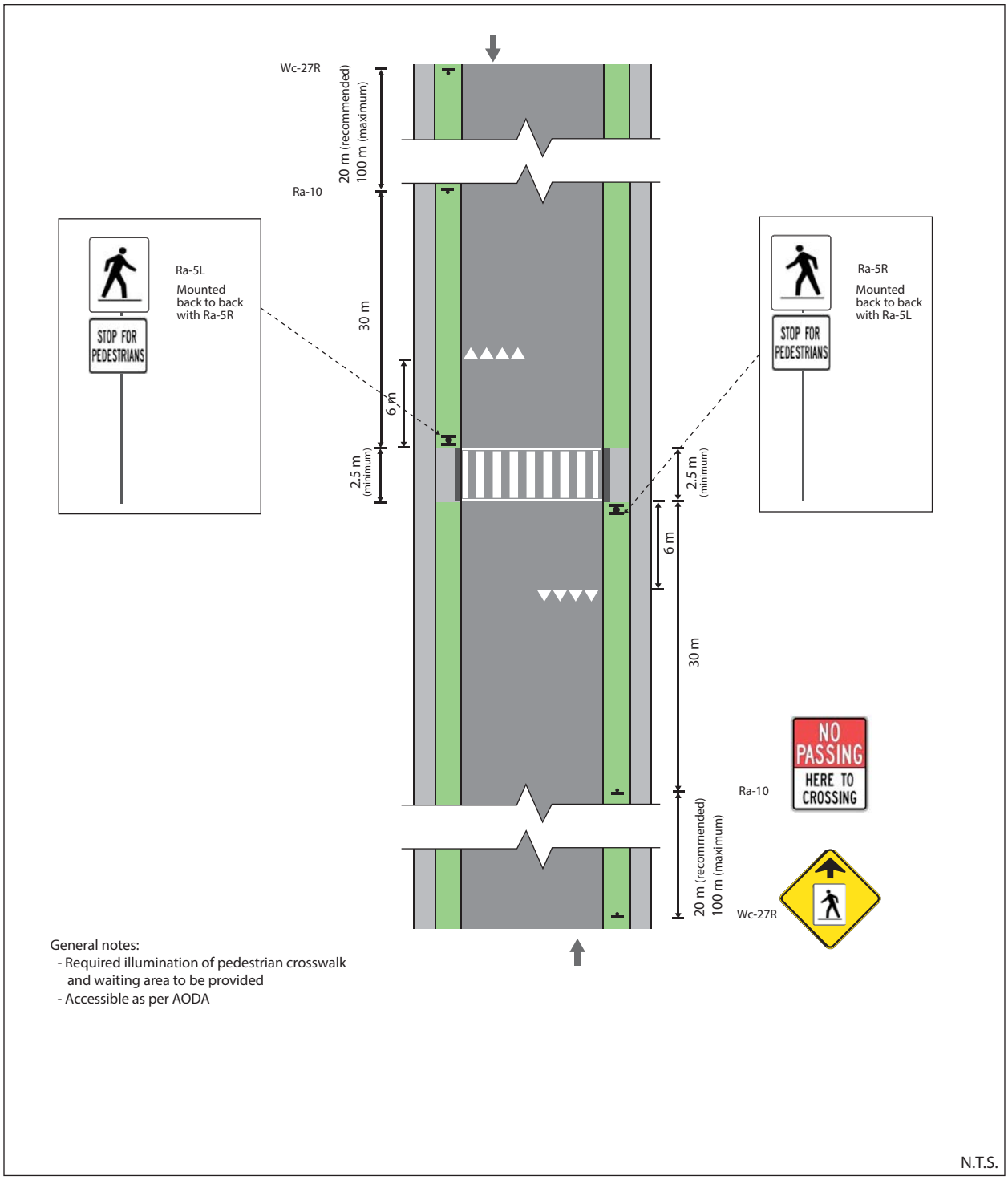


Figure 39: Pedestrian Crossover Level 2 Type D – Mid-block (2-lane, 2-way)

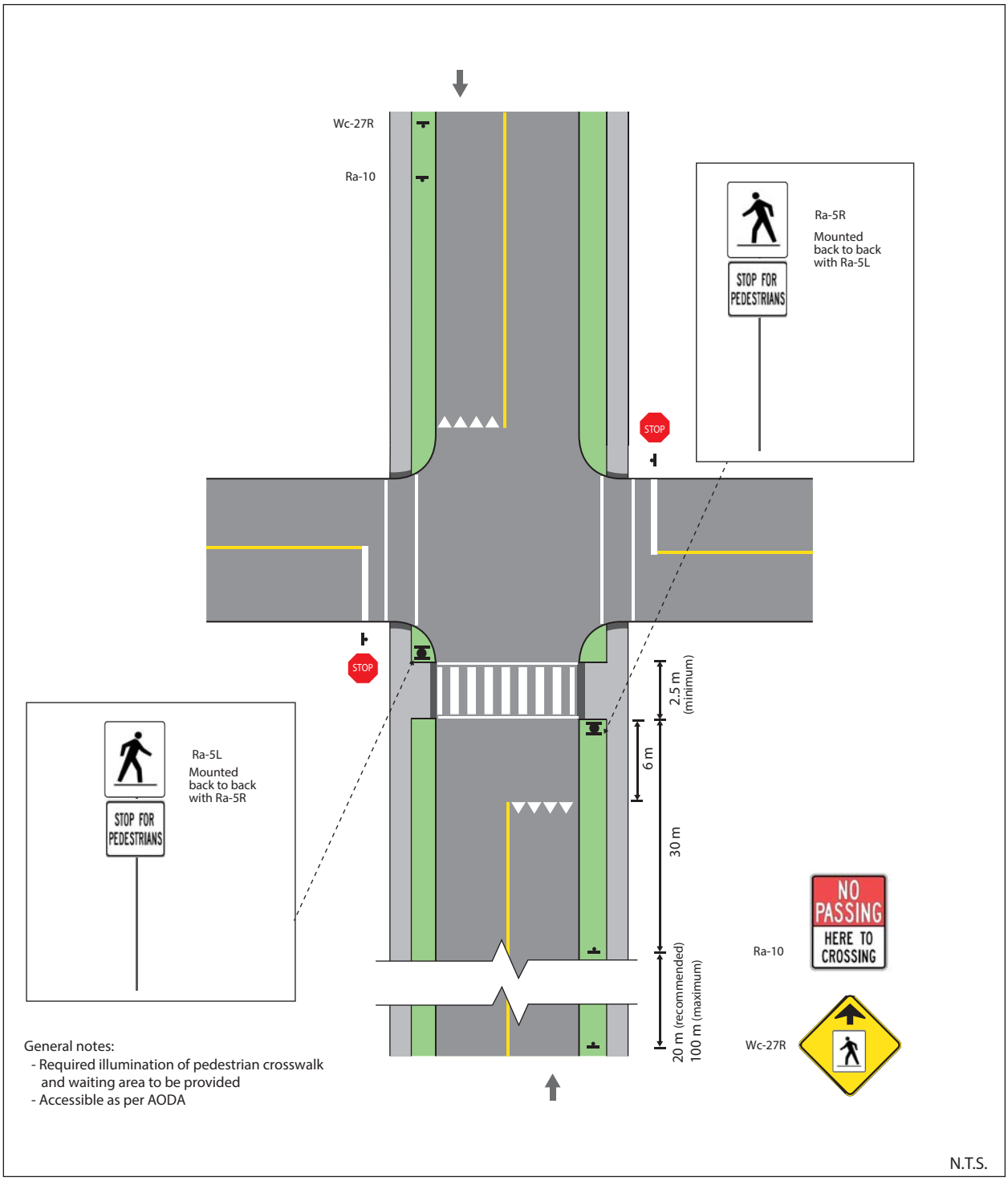
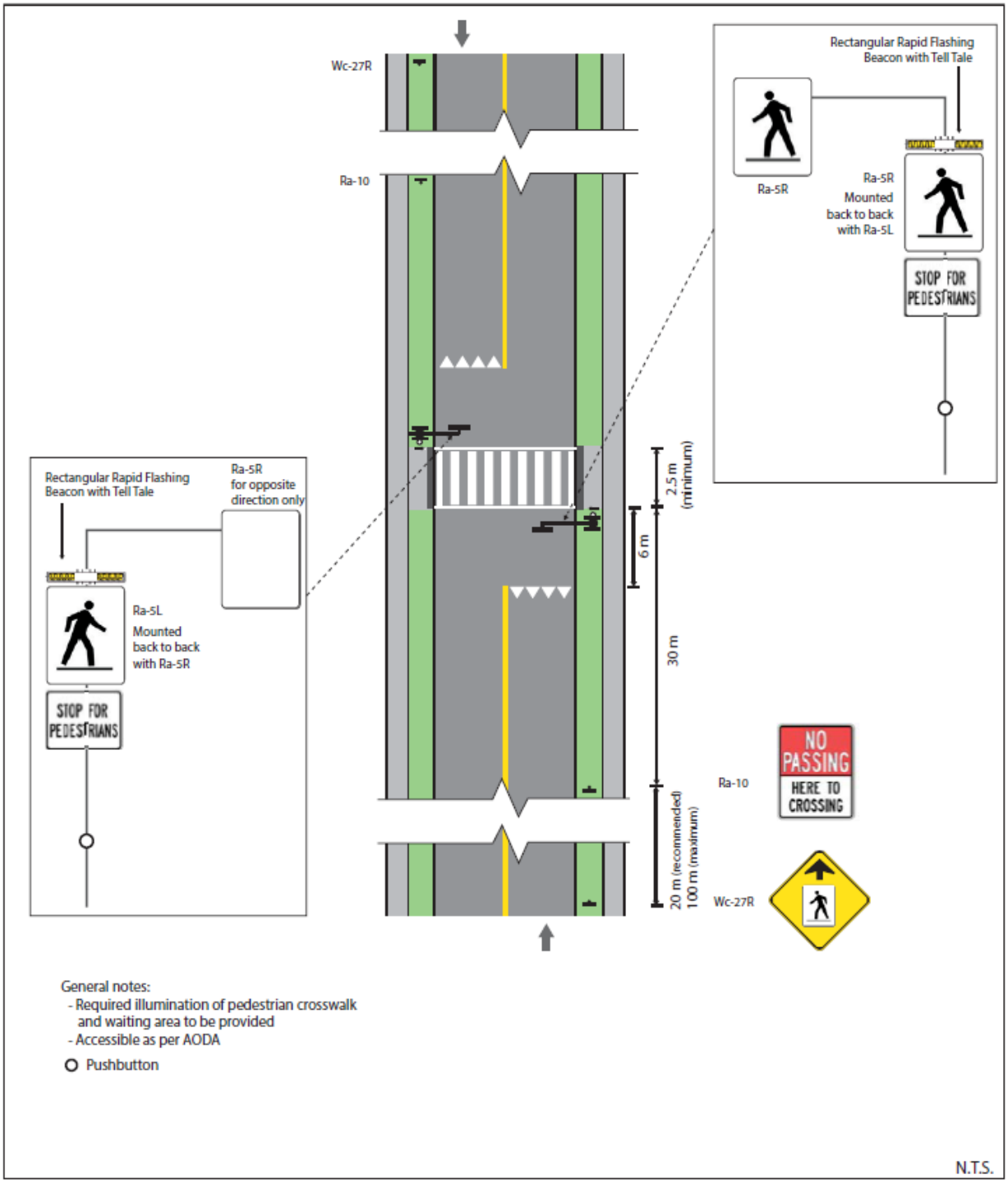


Figure 44: Pedestrian Crossover Level 2 Type D – Intersection (2-way)

Appendix B: Pedestrian Crossover Level 2 Type B – Mid-Block (2-lane, 2-way)



Appendix C: Draft By-law to amend By-law 09-130 The Parking By-law

City of Peterborough

The Corporation of the City of Peterborough

By-Law Number 24-**[Clerk's Office will assign the number]**

Being a By-law to Amend By-Law 09-136 being a By-law to for the Regulation of Parking in the City of Peterborough.

Now Therefore, The Corporation of the City of Peterborough by the Council thereof hereby enacts as follows:

1. That Schedule I of By-Law 09-136 be amended by adding the following:

Highway	Side	Between	Prohibited Times or Days	Amending By-Law Number and Date
Spillsbury Drive	North	The east curbline of the west leg of Clancy Crescent to a point 50 m east.	Anytime	
Spillsbury Drive	South	A point 5 m west of the west curbline of the west leg of Clancy Crescent to a point 50 m east.	Anytime	

By-law read a first, second and third time this day of June, 2024.

Jeff Leal, Mayor

John Kennedy, City Clerk