Town of Bradford

2025 Traffic Calming Program

DRAFT FINAL

Paradigm Transportation Solutions Limited

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Project Summary

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1 Introduction

1.1 Background and Purpose

The Town of Bradford West Gwillimbury (BWG) regularly receives requests to implement traffic calming measures on neighbourhood streets. The Town's Traffic Mitigation Strategy (TMS) provides a data-oriented technical process to respond to traffic safety concerns addressable via traffic calming solutions (see **Figure 1.1**).

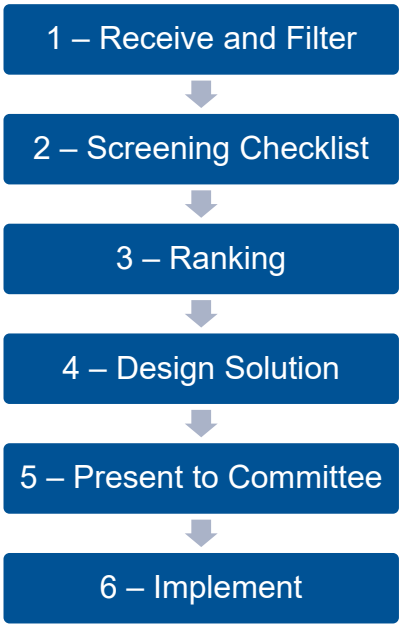
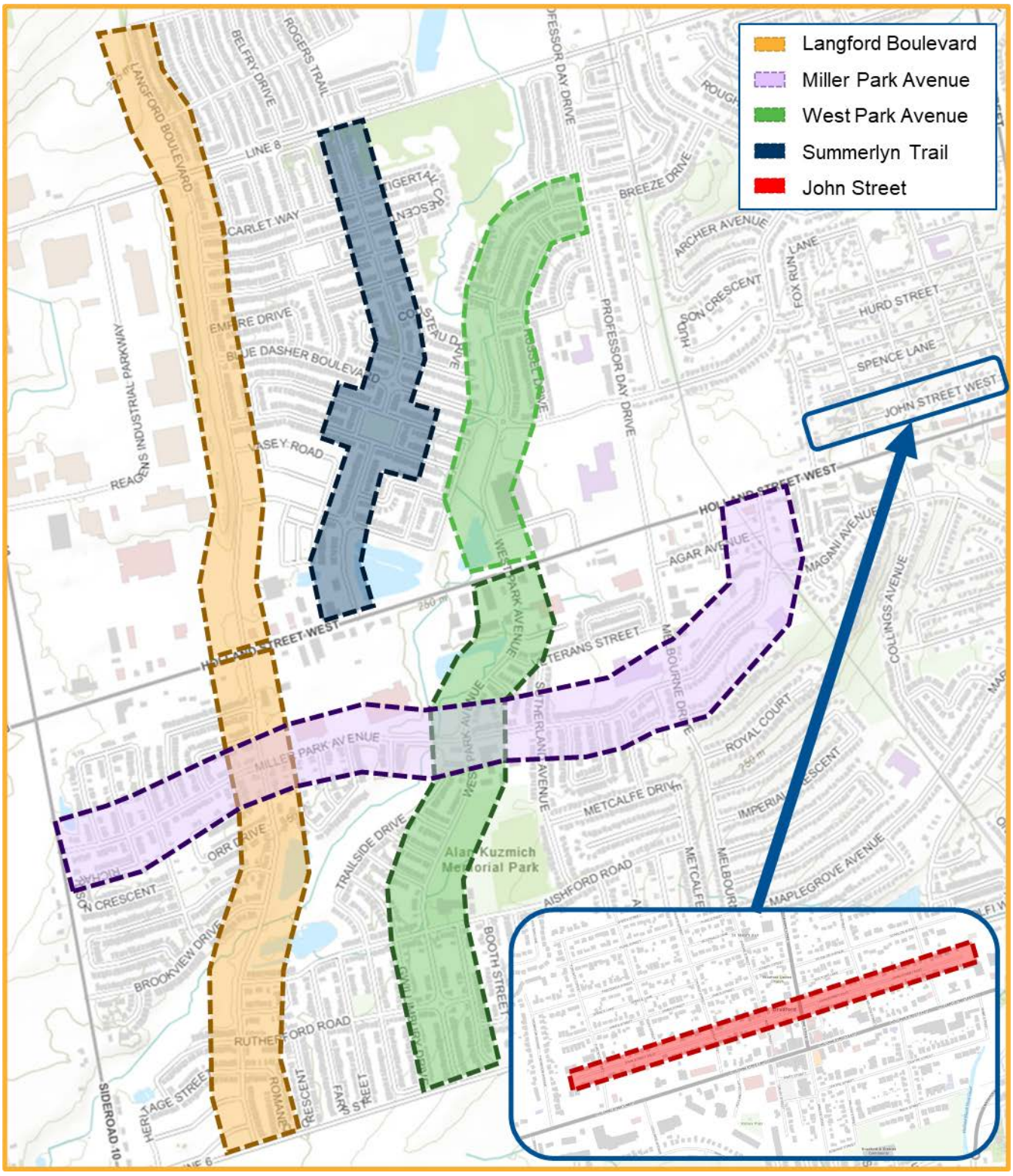


FIGURE 1.1: TOWN OF BRADFORD WEST GWILLIMBURY TRAFFIC CALMING PROCESS

The Town conducted an extensive data collection program of collector and local roads in 2024 and completed Stage 2 and 3, identifying roads that met the warrant criteria to initiate a Traffic Calming Study per Stage 4 of the policy. This study will focus on designing traffic calming plans (Stage 4), obtaining approval (Stage 5) and implementation (Stage 6) for the following locations (see **Figure 1.2**):

- Langford Boulevard between Crossland Boulevard and Line 6;
- Miller Park Avenue between Sideroad 10 and Holland Street West;
- West Park Avenue between Professor Day Drive and Line 6;
- Summerlyn Trail between Line 8 and Holland Street West; and
- John Street between west extent (west of Toronto Street) and east extent (east of Colborne Street).



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Traffic Calming Study Locations

Town of Bradford West Gwillimbury 2025 Traffic Calming Program
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Figure 1.1

The goal of the study is to develop traffic calming plans for each street that focus on reducing traffic on local neighbourhood roads, improving intersections, and reducing speeds to improve a sense of place for people to walk, roll, play, shop alongside motor vehicles.

1.2 Study Methodology

The 2025 Traffic Calming Program followed a five-stage consultation and design methodology, which can be summarized as follows:

Stage 1. Review traffic data, conduct on-site investigations, summarize existing conditions and gather resident feedback.

Stage 2. Evaluate traffic calming measures for each location considering existing conditions, Transportation Master Plan, and overall neighbourhood street network.

Stage 3. Prepare conceptual Traffic Calming Plans.

Stage 4. Present draft Traffic Calming Plans to residents and consult with stakeholders, note potential implementation challenges, and incorporate feedback received.

Stage 5. Finalize proposed Traffic Calming Plans and present to Council for approval.

1.3 Report Organization

The remainder of the **2025 Traffic Calming Program Report** comprises the following three chapters:

- **Chapter 2 – Engagement Process** details the principles, objectives, and approaches used to involve Town of BWG stakeholders and residents in the Traffic Calming Studies.
- **Chapter 3 – Traffic Calming Plan Development** describes the process followed in developing the traffic calming plans.
- **Chapter 4** to **Chapter 8 – Study Areas** provides an overview of the study area, traffic data, problems and opportunities, selection of traffic calming measures, details of the proposed plan, and highlights of the engagement feedback.
- **Chapter 9 – Recommendations** outlines the recommended actions for moving forward with the Traffic Calming Plans.

2 Engagement Process

2.1 Overview

The engagement process for the 2025 Traffic Calming Program took place between March and May 2025. The process featured primarily in-person community and online stakeholder consultation activities.

Town of Bradford West Gwillimbury social media and digital platforms, and door to door flyers were used to promote the studies and advertise engagement opportunities. Updates were shared throughout the project on the Town's website (www.townofbwg.com/TrafficCalming), which served as the digital presence for the studies and contained:

- Project background information;
- Notice of upcoming community engagement opportunities;
- Study documents (Public Information Centre materials, proposed Traffic Calming Plans, etc.);
- Names of project team members (Town and consultant) and their contact information.

The community consultation component consisted of two "rounds" of public outreach:

- The first round featured a Public Information Centre to present the study background and existing conditions. Individuals (regardless of whether they lived within a study area) were invited to provide comments on existing neighbourhood traffic issues in the study areas.
- The second round featured a Public Information Centre to present and seek feedback on the proposed Traffic Calming Plans.

A summary of existing conditions and resident feedback was presented to the Strategic Initiatives Committee on March 25, 2025 after the first round of engagement.

During the second round of community consultation, the plans were circulated to stakeholders for review and comment.

Table 2.1 summarizes the engagement activities completed for the Traffic Calming Program and participation in the events. The following sections provide further information about the individual activities.

Appendix A provides the engagement materials including notices, public information centre display boards, and stakeholder and public feedback summaries.

TABLE 2.1: ENGAGEMENT ACTIVITIES AND PARTICIPATION

Engagement Activity	Participation Count
Community Engagement	
Website	N/A
Public Information Centre #1 ▶ Attendees ▶ Comments Received	 13 3
Public Information Centre #2 ▶ Notice ▶ Attendees ▶ Comments Received	 630 32 20
Stakeholder Engagement	
Circulation	3
Feedback	3

2.2 Stakeholder Circulation

Prior to releasing the proposed Traffic Calming Plans to the public, the concepts were circulated to key stakeholders (BWG Fire, Simcoe Emergency Services, South Simcoe Police Service) via e-mail for comment. While all stakeholders providing feedback recognized the road safety benefits of the proposed traffic calming measures, representatives of emergency services expressed concern about the potential adverse consequences of vertical deflection measures (i.e., speed humps) on their operations. BWG Fire noted traffic calming measures impact overall response times and headways, impose additional wear and tear on vehicles, and reduce occupant comfort. BWG Fire would prefer no vertical traffic calming measures. Their preference is to install speed cushions instead of speed humps as they would be less intrusive, but vehicles would still need to slow down. South Simcoe Police Service noted the proposed diverters on John Street would increase response times in the downtown area.

2.3 Public Information Centre 1

Public Information Centre (PIC) #1 was held on March 20, 2025 from 4:00 PM to 8:00 PM in Community Corner at the BWG Leisure Centre to present existing conditions and gather resident feedback. The PIC was promoted through the Town's website and social media channels (Facebook, X and Instagram).

The PIC featured a series of display boards summarizing the study background, process, existing transportation conditions on the study area roadways and opportunities for attendees to provide feedback. Attendees were encouraged review the display boards and bring any comments or questions to the project team.

A total of 13 attendees signed the registrar and three comments sheets were received. The following summarizes the general comments and feedback received. Comments for each study area are summarized in their respective report sections.

- Install raised pedestrian crossings at residential intersections.
- Consider a separate mixed-use trail at the pedestrian level, i.e. not on the road, with year-round maintenance and cleaning.
- Need strategies which lower speed limits include raised intersections, road diets and narrowing.
- Implement 30 km/h zones on local roads and school areas.
- Consider red light speed mitigation strategy for collector roads.
- Implement red light cameras ensure vehicles come to a complete stop at the stop bar at a red light.
- Consider lane narrowing and chicanes to force drivers to pay attention to the road.
- Consider alternatives to stop signs as many people do not stop where stop signs are installed and leading to dangerous conditions for pedestrians and speeding vehicles.
- Restrict parking on the boulevard as parked vehicles impact sight lines, and block the road and sidewalks.

2.4 Public Information Centre 2

Public Information Centre (PIC) #2 was held on April 24, 2025 from 4:00 PM to 8:00 PM in Community Corner at the BWG Leisure Centre to present existing conditions and gather resident feedback. The PIC was promoted through the Town's website and social media channels (Facebook, X and Instagram) and hand-delivered notices to approximately 630 households in the study areas.

The PIC featured a series of display boards summarizing the study background, process, traffic calming measures and draft traffic calming plans for each of the study areas. Attendees were encouraged review the display boards and bring any comments or questions to the project team.

At total of 32 attendees signed the registrar and 20 comment sheets were received. The following summarizes the general comments and feedback received. Comments for each study area are summarized in their respective report sections.

- Stressed the need for clear visual indicators to support driver compliance.
- Praise for the Town's proactive safety efforts; cites studies showing the safety and traffic-calming benefits of protected lanes; encourages infrastructure for students.
- Support for bike infrastructure, but recommends protected bike lanes using bollards or delineators for greater safety, especially near schools.
- Concerns about speeding during traffic peaks, cut-through traffic, child/senior safety. Supports stop signs, speed cameras, and safety zone designation.
- Support for urban shoulders which keeps on-street parking, and contributes to traffic calming.

3 Traffic Calming Plan Development

3.1 Overview

Traffic Calming plans for the study areas were developed using the following process:

1. Consider the Proposed Cycling Routes in the Town of Bradford West Gwillimbury Transportation Master Plan and confirm cycling facility type.
2. Address intersection concerns and review mid-block pedestrian crossing opportunities.
3. Consider applicable traffic calming measures in:
    a. Areas with excessive speeding;
    b. Locations with existing traffic calming measures; and
    c. Neighbourhood entrances and throughout the study area to maintain lower speeds.

3.2 Traffic Calming Toolbox

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."[1] Traffic calming measures are usually applied in locations experiencing excessive vehicle speed or high volumes of shortcutting traffic with the goal of enhancing community livability and road safety, particularly for vulnerable users.

When applied properly, traffic calming can help reduce the negative effects of motor vehicle use and alter driver behaviour. It can also improve conditions for non-motorized street users by reducing motor vehicle speeds, reducing traffic volumes, lessening shortcutting (traffic infiltration), reducing pedestrian crossing distances, reducing the risk and severity of motor vehicle collisions, and reducing conflicts between roadway users.

While offering several advantages, the inappropriate use of traffic calming can also cause unintended consequences such as

- Increased emergency vehicle response and transit operating times;

[1] Transportation Association of Canada, *Canadian Guide to Traffic Calming*, 2nd ed., (Ottawa: TAC, 2018).

- Reduced or impeded access and egress from neighbourhoods by vehicle;
- Shifting or diverting of traffic volumes and/or speeding concerns onto other roadways;
- Increased maintenance costs, including snow clearing and curbside waste collection; and
- Increased vehicle emissions and/or noise pollution.

As such, careful consideration and proper planning, design, and implementation is key to the success of implementing traffic calming.

The Town's Traffic Calming Toolbox through the Traffic Mitigation Strategy (TMS) identifies the following potential measures for installation on Town roads:

- Education – Flexible bollards, pavement markings, radar message boards, Community Safety Zone, 40 km/h area speed limit
- Enforcement – Automated Speed Enforcement (ASE)
- Engineering
    - Horizontal Deflection – Chicane, curb extension, curb radius reduction, on-street parking, raised median islands, traffic circle
    - Vertical Deflection – Raised intersection, speed cushion, speed hump
    - Obstruction – Directional closure, diverter, full closure

In addition to the Town's Toolbox of measures, a raised crosswalk was added to the potential list of vertical measures. A raised crosswalk is a marked pedestrian crosswalk at an intersection or midblock location constructed at a higher elevation than the adjacent roadway. The purpose of a raised crosswalk is to reduce vehicle speeds, improve pedestrian visibility, and reduce pedestrian–vehicle conflicts.

While not explicitly listed above, other measures such as signs, pedestrian crossings, and traffic control devices can be considered within the broad category of a traffic calming plan and typically supplement other physical measures. However, the TAC *Canadian Guide to Traffic Calming* does not recommend the use of regulatory signs as the only means of discouraging excessive speeding and/or traffic infiltration on neighbourhood streets. This includes the use of all-way stop control.

All way stop control is intended to assist with assigning right-of-way control at intersections where volumes are high enough that two-way stop control is resulting in significant delays due to lack of safe gaps in the flow of traffic on the main road. Some municipalities have installed all stop control in an effort to slow traffic down. In many of these cases, follow up studies have found limited benefit in reducing overall vehicle speeds. Obviously forcing vehicles to stop at stop sign will reduce speeds at the stop sign location, however these temporary reductions are often eliminated by higher midblock operating speeds downstream of the stop sign. Installing unwarranted stop signs can also have other negative impacts, including:

- Slowing down emergency service response (police, ambulance and fire vehicles must stop at stop signs),
- Drivers ignoring stop signs because there are so many,
- Providing a false sense of security to pedestrians as drivers may roll through the intersection or fail to stop,
- Drivers speeding up to make up for lost time,
- Increasing air pollution and vehicle Greenhouse Gas Emissions, and
- Increasing driver frustration causing aggressive driving behaviours.

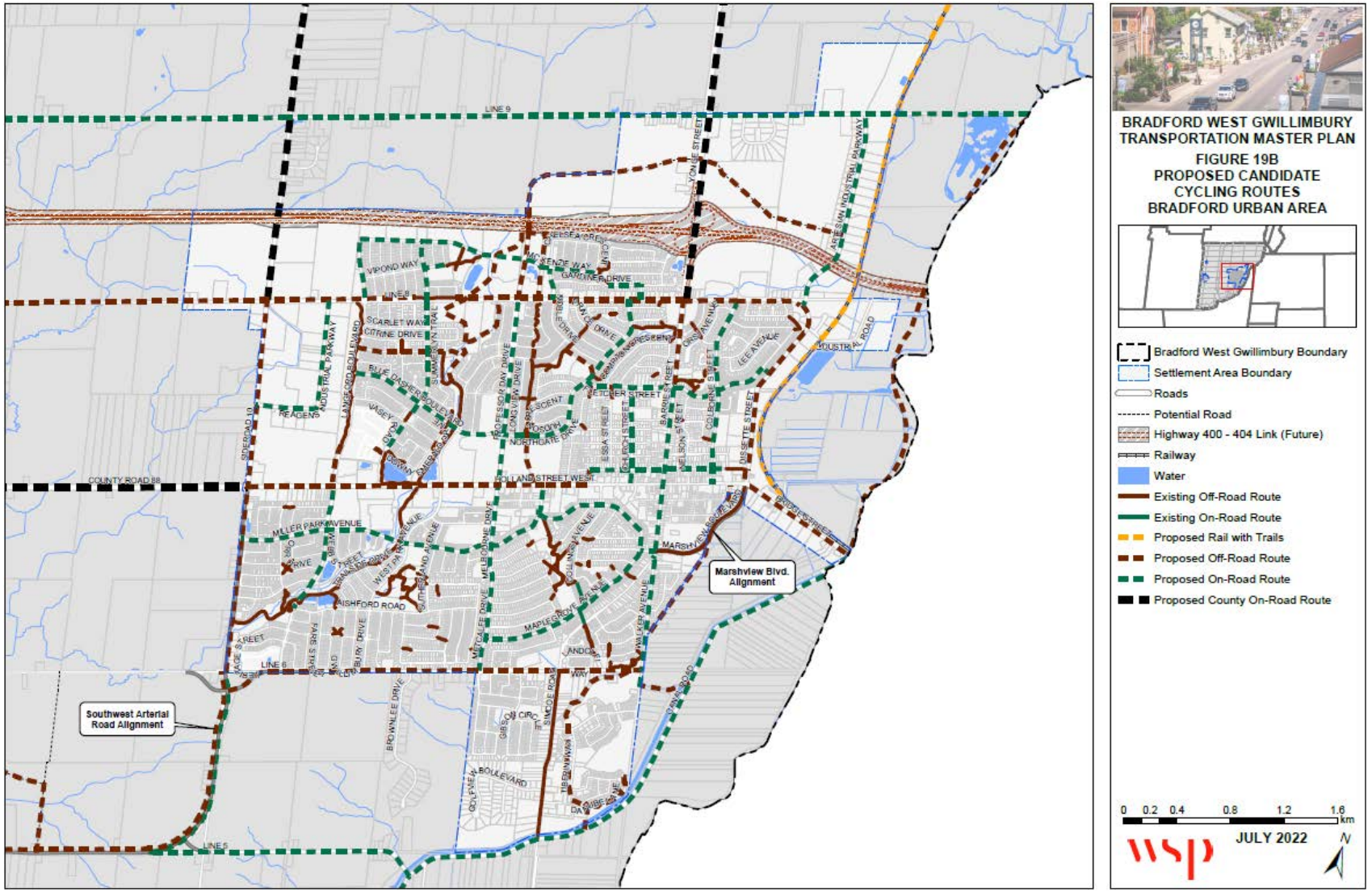
3.3 Cycling Routes

3.3.1 Transportation Master Plan

The Town of Bradford West Gwillimbury Transportation Master Plan (TMP)[2] presents multi-modal transportation investments to accommodate the forecast growth of population and employment in the Town to the year 2031. The TMP includes a series of multi-modal recommendations for road improvements, improvements to enhance active transportation, improvements to support improved transit services, and policy initiatives to support healthy communities and traffic safety.

Several of the study area roadways are proposed as cycling routes in the Town's TMP. Adding cycling infrastructure to a roadway can have a road narrowing effect and therefore provide some traffic calming and safety benefits for users. As illustrated in **Figure 3.1**, the Proposed Cycling Network in the TMP identified cycling routes on:

2



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2022 TMP Proposed Candidate Cycling Routes

- Langford Boulevard – Shared route from Crossland Boulevard to Line 8, off-road trail from Line 8 to Holland Street West (existing), and shared route from Holland Street West to Aishford Boulevard.
- Miller Park Avenue – Shared route from Sideroad 10 to Holland Street West
- Summerlyn Trail – Shared route from Line 8 to Downey Emerald Drive and off-road trail from Downey Emerald Trail to Holland Street West (existing); and
- John Street – Bike lanes from Toronto Street to Colborne Street.

3.3.2 Cycling Facility Options

Ontario Traffic Manual (OTM) *Book 18 (Cycling Facilities)* provides guidance on the selection, design, and operation of cycling facilities in Ontario. The guidebook sets out a three-step process for selecting the preferred cycling facility for a given location. The first step of the process (facility pre-selection) determines the preferred level of separation, and the second step (contextual evaluation) identifies the type of cycling facility based on roadway characteristics and other factors.

"Facility pre-selection is undertaken through the use of a nomograph, which helps practitioners identify an appropriate level of separation and a set of reasonable facility types for a given context based on the motor vehicle posted speed (or operating speed where speeds significantly differ from posted limits) and average daily traffic volume."[3] This guidance method is intended for corridors with one to three-lane cross-sections.

According to OTM Book 18, "if evidence suggests that operating speeds are higher than the posted speed limit, practitioners may consider using the 85th percentile operating speed as well as implementing traffic calming measures or increasing enforcement to decrease operating speeds."[3] The study corridors feature 40 km/h posted speed limits.

Appendix B contains the facility pre-selection assessments for each segment, which is based on the Desirable Cycling Facility Pre-Selection Nomograph – Urban/Suburban Context published as Figure 5.5 in OTM Book 18.

[3] Ministry of Transportation, Ontario. *Ontario Traffic Manual: Book 18 (Cycling Facilities)*. Queen's Printer of Ontario. 2021, 120.

The second step of the process identifies whether the facility pre-selection from Step 1 is consistent with the surrounding context. OTM Book 18 provides three categories of application heuristics (or knowledge-based rules) to aid in the contextual evaluation: roadway characteristics, feasibility, and attractiveness. These heuristics link specific site conditions to appropriate facility types and supplementary design features.

The Roadway Characteristics Application Heuristics Summary (Table 5.3) in OTM Book 18 provides the starting point for the detailed contextual evaluation. The assessment is also summarized in **Appendix B.**

3.4 Roundabout Intersection Improvements

The Transportation Association of Canada (TAC) *Manual of Uniform Traffic Control Devices for Canada, Sixth Edition (2021)*[4] provides guidance for pavement markings and signage at roundabouts. Typical pavement markings for roundabouts delineate the entries, exits and the circulatory roadway (multi-lane roundabouts), providing guidance for pedestrians and vehicle operators. **Figure 3.2** illustrates the typical pavement markings and signage for single-lane roundabouts.

Ontario Traffic Manual (OTM) *Book 15 (Pedestrian Crossing Treatments)* [5] notes *"In accordance with Ontario's HTA, controlled pedestrian crossings in the Province of Ontario are only at locations where vehicles are controlled by any of traffic signals, intersection pedestrian signals, mid-block pedestrian signals, pedestrian crossovers, stop signs, yield signs, or school crossings when a school crossing guard is supervising the crossing."* Furthermore, roundabouts are considered uncontrolled crossings; therefore pedestrians do not have the right-of-way. The yield control must not me used to provide right-of-way to pedestrians at roundabouts.

To provide right-of-way to pedestrians at roundabouts, Pedestrian Crossovers (PXOs) must be installed on all approaches. Section 5 of OTM *Book 15* sets out the decision making process for the installation of Pedestrian Crossing Treatment Systems for Controlled Pedestrian Crossings.

OTM *Book 15* provides a decision support tool (DST) for selecting the most appropriate crossing treatment. The DST comprises two components: 1) Preliminary Assessment, and 2) Pedestrian Crossover

[4] Transportation Association of Canada, *Manual of Uniform Traffic Control Devices for Canada,* 6th ed., (Ottawa: TAC, 2021), 481.

[5] Ontario Ministry of Transportation, *Ontario Traffic Manual Book 15: Pedestrian Crossing Treatments*, (Toronto: Queen's Printer for Ontario, 2016).

Selection Matrix. Application of the DST requires pedestrian crossing and traffic volume data for the subject road segment over a typical day. Pedestrian crossing facilities may be warranted based on pedestrian desire lines, which is the case for roundabout applications.

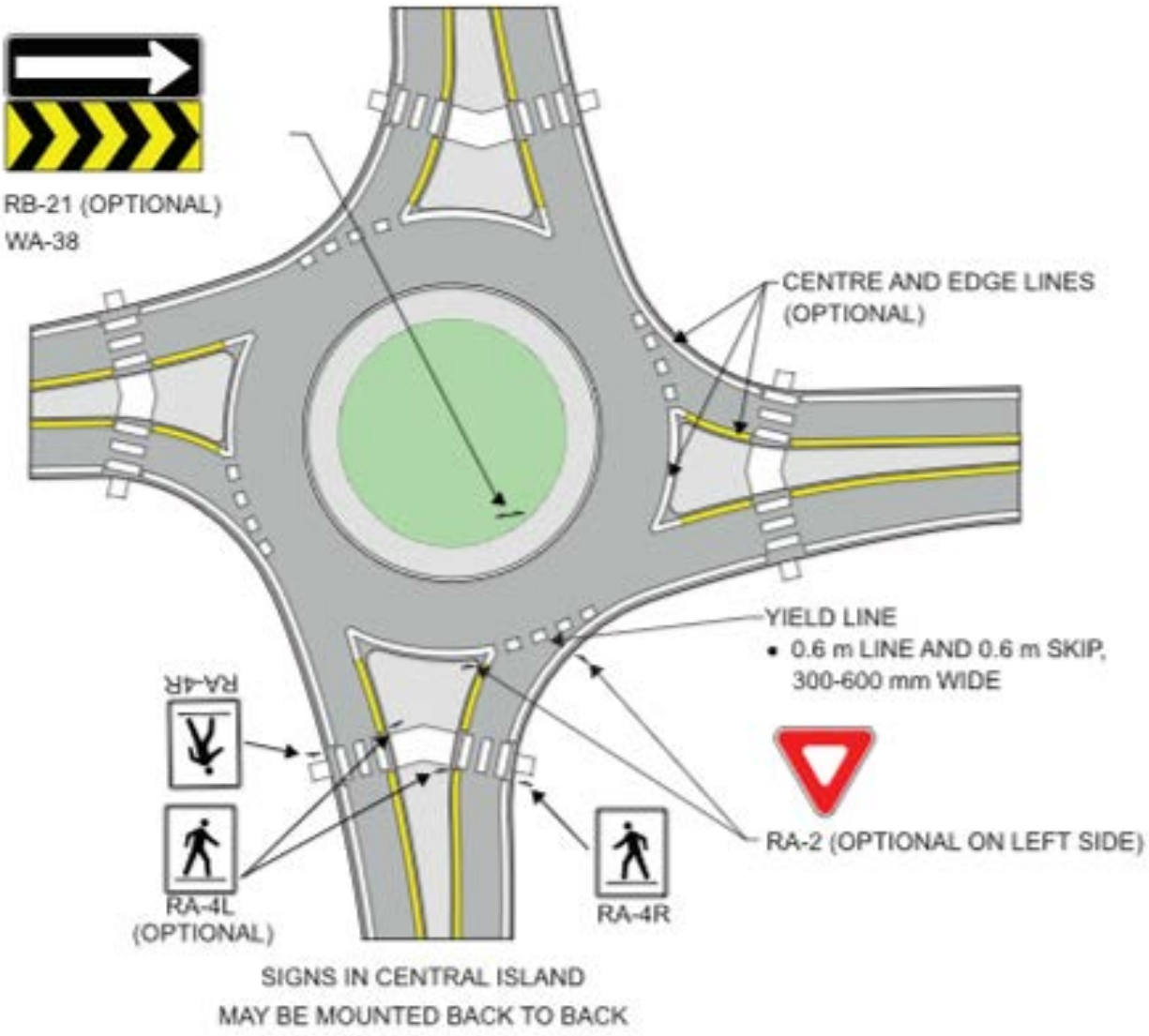
Appendix C contains Pedestrian Crossover Selection matrix for each roundabout location in the study area, which is based Table 7 OTM Book 15. A PXO Level 2 Type D is recommended for all roundabout approaches as the traffic volumes fall within the range of 2,250 to 4,500 vehicles stated in OTM Book 15.

Figure 3.3 details the components for a PXO Level 2 Type D at a single-lane roundabout.

The TAC *Canadian Roundabout Design Guide (2017)*[6] provides guidance for landscaping on roundabouts, specifically the central island. Within critical visibility areas, the landscaping should be limited to and maintained at a height of 0.6 m or lower, known as the low landscaping zone. The low landscaping zone should be a minimum width of 2.0 metres to maintain stopping sight distance when circulating the roundabout. Trees can be located in the low landscaping zone as long as, once matured, they have narrow trunks not more than 100mm in diameter and are sufficiently spaced to preserve the sight distance requirements.

The high landscaping zone is the centre of the central island and consists of vertical elements. The high landscaping zone serves to reduce speeds by limiting sight lines to adequate levels for the design speed. Fixed objects such as large rocks should only be placed in the high landscaping zone.

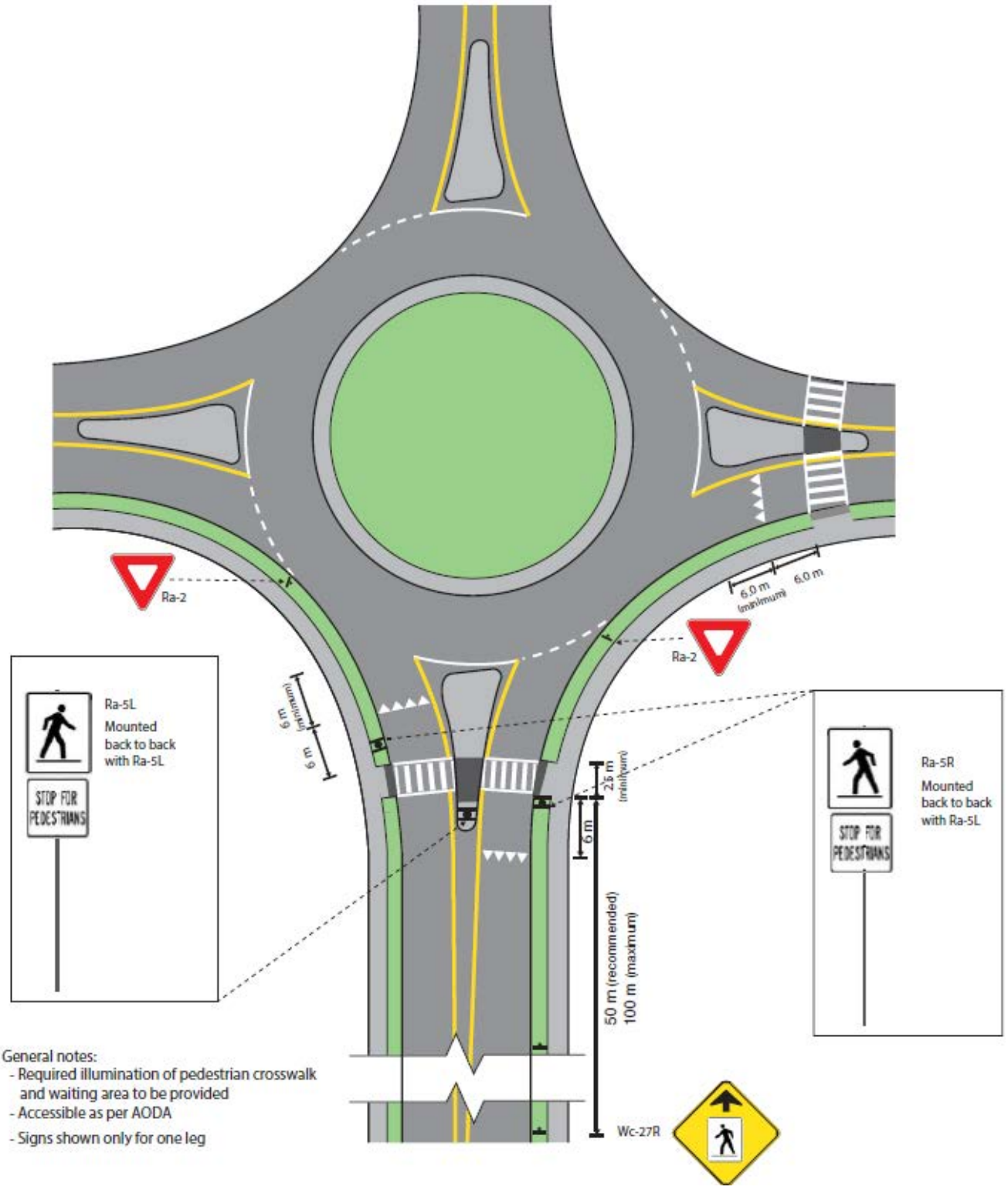
[6] Transportation Association of Canada, *Canadian Roundabout Design Guide,* (Ottawa: TAC 2017), 114-117, 158-162.



NOTE:
• REGULATORY AND WARNING SIGNAGE SHOWN FOR ONE LEG ONLY.

Source: TAC MUTCD, Figure E-1

Single-Lane Roundabout Pavement Marking and Signage



Source: OTM Book 18, Figure 45.

Pedestrian Crossover Level 2 Type D – Single Lane Roundabout

4 Langford Boulevard

4.1 Study Area Overview

The Langford Boulevard Study Area extends from Crossland Boulevard in the north to Line 6 in the south. Langford Boulevard is a north-south collector road with two travel lanes (one in each direction), an urban cross-section and a posted speed limit of 40 km/h. Between the Food Basics Plaza Entrance and Mooney Street, Langford Boulevard has a four-lane cross-section with two travel lanes in each direction.

North of Holland Street, parking is prohibited along the west side of Langford Boulevard from Crossland Boulevard to Line 8, on the east side from Line 8 to Holland Street and on both sides from 335 metres north of to Holland Street. South of Holland Street, parking is prohibited along both sides of the road to Miller Park Avenue, the west side from Miller Park Avenue to Brookview Drive, and the east side from Brookview Drive to Line 8.

Sidewalks are provided on both sides of Langford Boulevard for the entire study corridor. Between Line 8 and approximately 285 metres north of Holland Street a multi-use path is provided on the west side of, known as the Langford Berm Trail.

The study corridor includes the following key intersections.

- Signalized – Line 8 and Holland Street West
- Roundabout – Citrine Drive and Blue Dasher Boulevard
- All-way Stop Control – Food Basics Plaza Entrance, Miller Park Avenue, Brookview Drive, Aishford Road, and Rutherford Road

All other intersections all operate under two-way stop control with unrestricted flow on Langford Boulevard. At Line 6, Langford Boulevard operates under stop control.

The existing traffic calming measures on Langford Boulevard include a speed hump between Mooney Street and Weir Street, with flexible bollards installed from May to November. Additionally, the Town recently installed an ASE camera between Blue Dasher Boulevard and Meadowhawk Trail as part of the ASE Pilot Program, effective for four months starting February 27, 2025.

The Holland Street plazas, and Constable Devon Northrup Memorial Park are key destinations in along the study area.

4.2 Traffic Data

The Town provided speed and volume data for Langford Boulevard, collected in April and May 2024. Automatic traffic recorders (ATRs) were used to collect 7 days of data for 13 segments along the roadway.

Table 4.1 below details the 85th percentile speed and average daily traffic (ADT) for the segments along Langford Boulevard. The table also notes the TMS priority ranking for each segment based on the road classification, which indicates the relative priority of the segment for traffic calming across the Town's roads for which traffic data was collected. Langford Boulevard has an average daily volume of 3,400 vehicles and an average 85th percentile speed of 50 km/h, 10 km/h over the posted speed limit. Six segments have 85th percentiles speed 10 km/h or greater than the posted speed limit.

TABLE 4.1: LANGFORD BOULEVARD SPEED AND VOLUME DATA

TMS Priority Ranking	North	South	85th % Speed (km/h)	Average Daily Traffic (vpd)
60	Vipond Way	Line 8	48	2,200
26	Line 8	Scarlet Way	49	2,565
19	Wandering Glider Trail	Empire Drive	53	3,074
9	Blue Dasher Boulevard	Meadowhawk Trail	54	4,235
7	Vasey Road	Montrose Boulevard	55	4,487
4	Mooney Street	Weir Street	43	5,502
23	Miller Park Avenue	Orr Drive	49	3,733
21	Orr Drive	Slack Street	53	3,492
31	Slack Street	Brookview Drive	47	3,472
5	Brookview Drive	Aishford Road	58	3,499
24	Aishford Road	Liberty Crescent	48	2,841
55	Rutherford Road	Heritage Street (north)	42	2,504
54	Mac Campbell Way	Heritage Street (south)	51	2,534
Average			**50**	**3,400**

4.3 Problems and Opportunities

Paradigm staff conducted a field visit with Town staff on February 20, 2025 to identify potential opportunities and constraints for implementing traffic calming measures in the study area.

The following observations were noted during the site visit and discussion with Town staff:

- Slight up-grade north, north of Line 8.
- Vehicles have a difficult time navigating the roundabouts at Citrine Drive and Blue Dasher Boulevard. No pavement markers are provided.
- Multi-use path on the west side of Langford Boulevard is not maintained during winter.
- On-street parking is well utilized as many households have multiple vehicles.
- Speeding concerns higher for segments without houses fronting one or both sides of the road.
- Some marked pedestrian crossings at intersections. Pavement markings require refreshing.
- Minimal spacing between driveways and offset driveways on opposite sides of the road along several sections.
- High pedestrian crossing volumes north-south at Holland Street West.
- 9.0 m roadway cross-section, except in the vicinity of Holland Street. Between Mooney Street and Miller Park Avenue, Langford Boulevard has a 12.0 m two-lane cross-section.
- Intersection with Miller Park Avenue is extremely wide with long pedestrian crossing distances; however, pedestrian volumes have reduced since the catchment area for Chris Hadfield was changed.
- Perceived sight line issues at the intersection with Slack Street.
- Previous requests for all-way stop control or pedestrian crossing at Heritage Street/Romanelli Crescent.

Residents provided the following feedback during the first round of community engagement:

- Speeding on Langford Boulevard at Rutherford Road, many vehicles don’t stop at the stop sign. A raised intersection at this location is needed.

- When crossing Langford Boulevard to go to the parks on the west side, there are lots of cars and pedestrians need to wait long for a gap.
- Need a pedestrian crossing of Langford Boulevard near Orr Drive to facilitate trips to the park. Either an all-way stop or pedestrian crossing.

4.4 Selection of Traffic Calming Measures

4.4.1 Potential Traffic Calming Measures

Based on the data collected and discussions with Town staff, vehicle speeds is the main concern to address through traffic calming. Improving the safety and convenience of access to neighbourhood parks is another objective. However, the close spacing and offset alignment of driveways will impact the feasibility of certain measures.

Using the Town's Traffic Calming Toolbox (detailed in **Section 0**), the study team shortlisted 7 candidate measures aimed at reducing vehicle speeds, deemed to be the primary traffic concern for the study corridor.

Table 4.2 summarizes the assessment of potential traffic calming measures for the study corridor, with the shortlist of **Preferred Treatments** (✓) highlighted in gray. The remaining measures in the toolkit were characterized as either:

Possible Option (▲) – May be a candidate if the Preferred Treatments deemed not appropriate after further investigation; or

Not Recommended (✖) – Not suitable or feasible under the circumstances.

TABLE 4.2: ASSESSMENT OF POTENTIAL TRAFFIC CALMING MEASURES FOR LANGFORD BOULEVARD

Measure	Considerations	Candidate
Education		
Flexible Bollards		✓
Pavement Markings		✓
Radar Message Board	Compliments other measures.	✓
Community Safety Zone	Must meet CSZ warrant.	▲
40 km/h Speed Limit Area	Current speed limit.	✖
Enforcement		
Automated Speed Enforcement	Must be in a Community Safety Zone/School Zone.	▲
Engineering – Horizontal Measures		
Chicane	Implement under special circumstances. Avoid driveways. Consider only if volume ≥ 750 vpd.	✖
Curb Extension		✓
Curb Radius Reduction		✓
On-Street Parking	Implement in accordance with Town by-laws.	▲
Raised Median Island	Implement where width permits and/or alongside reconstruction projects. Consider only on two-lane roads.	✖
Traffic Circle	Implement to address intersection conflicts (where space permits). Consider only if volume < 1,500 vpd.	✖
Engineering – Vertical Measures		
Raised Intersection	Site specific, considered as part of road reconstruction projects or new development.	▲
Raised Crosswalk	Implement to facilitate pedestrian connections. Consider only if sidewalk on at least one side of road.	▲
Speed Cushion		✓
Speed Hump		✓
Engineering – Obstruction Measure		
Directional Closure	Consider for volume reduction within the context of the network design. Consider only if volume on Local < 1,500 vpd or Collector 1,500 – 5,000 vpd.	✖
Diverter	Consider for volume reduction within the context of the network design. Consider only if volume < 5,000 vpd. Use with caution > 1,500 vpd.	✖
Full Closure	Consider for volume reduction within the context of the network design	✖

Legend: ✓ Preferred ▲ Possible Option ✖ Not Recommended

4.4.2 Intersection Improvements

There are two roundabouts located on Langford Boulevard at Citrine Drive and Blue Dasher Boulevard. As detailed in **Section 3.4**, pavement markings (yield lines) and Pedestrian Crossovers (Level 2, Type D) should be installed on all approaches.

4.4.3 Cycling Facility

The Desirable Cycling Facility Pre-Selection Nomograph – Urban/ Suburban Context (Figure 5.5) in *OTM Book 18 (Cycling Facilities)* was used to pre-select the facility category. The assessment shown in **Appendix B** indicates that a designated operating space is the preferred level of separation, with bicycle lanes or buffered bicycle lanes as the desirable facility types.

The Roadway Characteristics Application Heuristics Summary (Table 5.3) in *OTM Book 18* provided the starting point for the detailed contextual evaluation. The assessment summarized in **Appendix B** indicates that bicycle lanes or buffered bicycle lanes would generally be suitable facility types for the study corridor based on the prevailing roadway characteristics.

Desired and Suggested Minimum Widths for Bicycle Lanes (Table 4.7) in *OTM Book 18* indicates the desired width for conventional bicycle lane is 1.8 m with a suggested minimum of 1.5 m. Given the existing 9.0 m cross-section, 1.5 m bike lanes and 3.0 m general purpose lanes could be accommodated on Langford Boulevard.

4.5 Proposed Plan

With the shortlist of candidate traffic calming measures identified, the plan development process moved into the conceptual plan preparation phase. Input received through the engagement program played an integral role in informing the traffic calming concepts, helping to clarify the neighbourhood traffic issues to be addressed, prioritize the list of candidate measures, and highlight potential implementation challenges.

The proposed Langford Boulevard Traffic Calming Plan contained in **Figure 4.1** and **Figure 4.2** features the following measures. The measures were spaced to achieve an 85th percentile speed of 40 km/h based on the guidance detailed in the TAC *Canadian Guide to Traffic Calming*:

1. Install centre line pavement markings.

2. Install edge line pavement markings to create urban shoulders or bicycle lanes. With the existing pavement width of 9.0 m, the new cross-section will consist of 1.5 m urban shoulders/bicycle lanes and 3.0 m general purpose lanes.
3. Install pavement markings at the intersection with:
    a. Citrine Drive – Pedestrian crosswalks, yield lines, and edge lines
    b. Blue Dasher Boulevard – Pedestrian crosswalks, yield lines, and edge lines
    c. Rutherford Road – Pedestrian crosswalks including the south leg
4. Install Pedestrian Crossovers (Level 2, Type D) on all approaches at the intersection with:
    a. Citrine Drive
    b. Blue Dasher Boulevard
5. Install flexible bollards including centre and edge line bollards at:
    a. North of Scarlet Way
    b. Between 683 and 679 Langford Boulevard
    c. South terminus of the multi-use path
    d. North of Weir Street at existing speed hump (existing)
    e. Between 335 and 331 Langford Boulevard
    f. North of Liberty Crescent
    g. Between 29 and 25 Langford Boulevard
6. Consider installing a northbound ASE camera between Brookview Drive and Aishford Road as part of the ASE program as an interim measure before installing speed humps.
7. Retain the southbound ASE Camera location between Blue Dasher Boulevard and Aishford Road in the program rotation.
8. Construct curb radius reductions to narrow the roadway width and pedestrian crossing distance at the intersection with:
    a. Mooney Street – south leg only with curb extensions
    b. Miller Park Avenue
    c. Rutherford Road
9. Install speed humps at:
    a. Between 841 and 837 Langford Boulevard

b. Between 763 and 759 Langford Boulevard
c. South of Montrose Boulevard
d. North of Weir Street (existing)
e. North of Slack Street
f. 80 metres south of Brookview Drive
g. 90 metres north of Aishford Road
h. North of 49 Langford Boulevard

10. Review signal timing at Holland Street West, specifically the pedestrian crossing times and cycle lengths to reduce pedestrian delays. Consider implementing a leading pedestrian interval for north-south crossings. Town is currently undertaking this review as part of the Holland Street Signal Review (Sideroad 10 to Professor Day Drive).

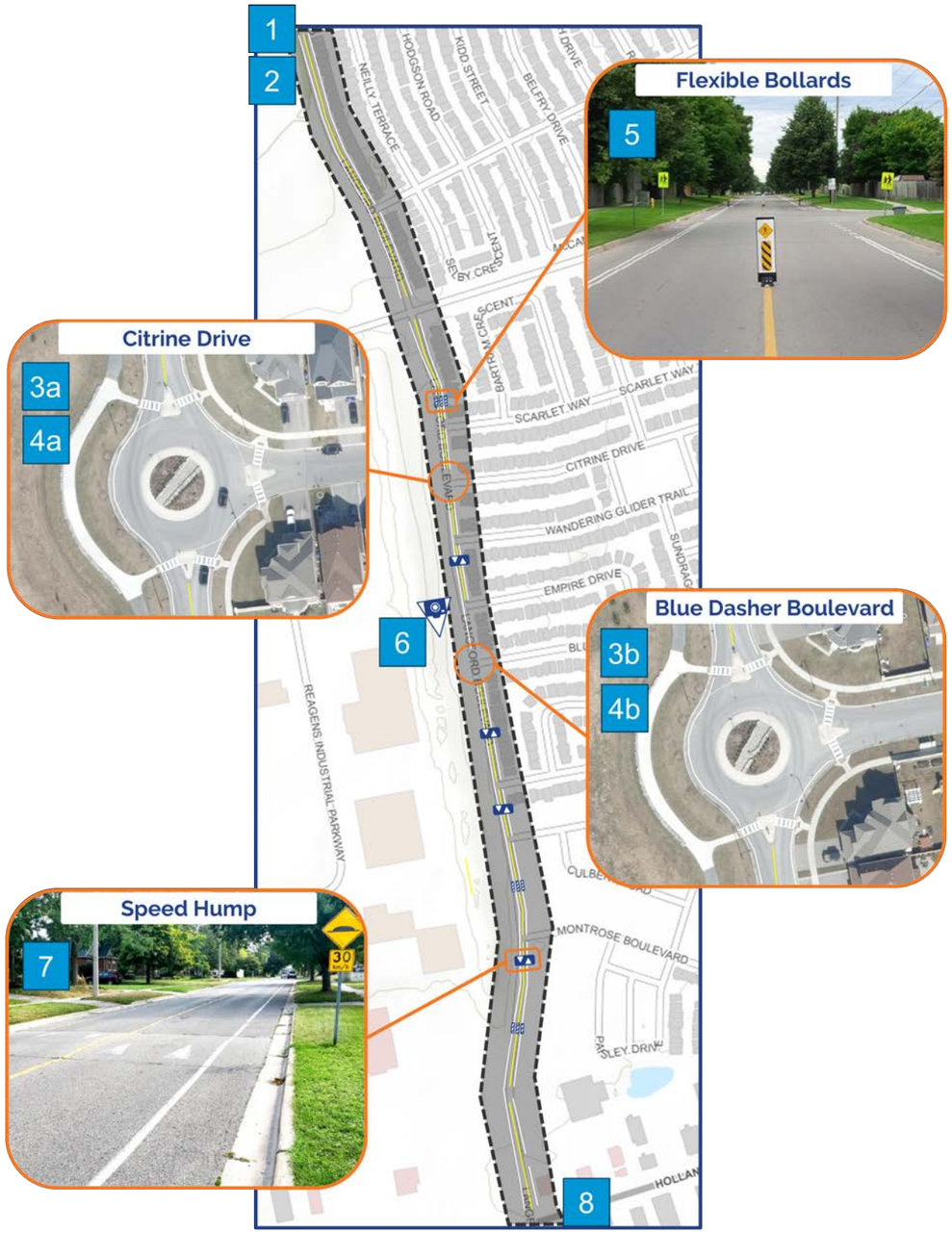
Implementing the proposed plan for Langford Boulevard will require the following changes to the roadway:

- Installing curb drops and landings on the south side of Rutherford Road to accommodate the south leg crossing.
- Restricting parking 15 metres upstream and downstream of flexible bollards.

4.6 Neighbourhood Feedback

Many respondents supported the implementation of traffic calming measures and lower speeds in the study area. Residents provided the following feedback during the second round of community engagement:

- Support for bike lanes, as street parking is rarely used and there is already significant bike traffic during the summer months.
- Support for urban shoulders.
- Request for additional speed humps installed south of Montrose Boulevard.
- Support for the raised crossing at Armstrong Crescent/Long Street, along with additional speed humps along Langford Boulevard.
- Appreciates the area is being studied, noting the high number of bus stops and school crossings along Langford Boulevard, where many vehicles travel at high speeds.



LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Automated Speed Enforcement Camera
- Speed Hump

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes.
3. Install pavement markings at the intersection with:
   a. Citrine Drive – Pedestrian crosswalks, yield lines, and edge lines
   b. Blue Dasher Boulevard – Pedestrian crosswalks, yield lines, and edge lines
4. Install Pedestrian Crossovers (Level 2, Type D) on all approaches at the intersection with:
   a. Citrine Drive
   b. Blue Dasher Boulevard
5. Install flexible bollards including centre and edge line bollards (3 new locations).
6. Retain the southbound ASE Camera location between Blue Dasher Boulevard and Aishford Road in the program rotation.
7. Install speed humps (4 new locations).
8. Review signal timing at Holland Street West. Consider implementing a leading pedestrian interval for north-south crossings (review in progress).

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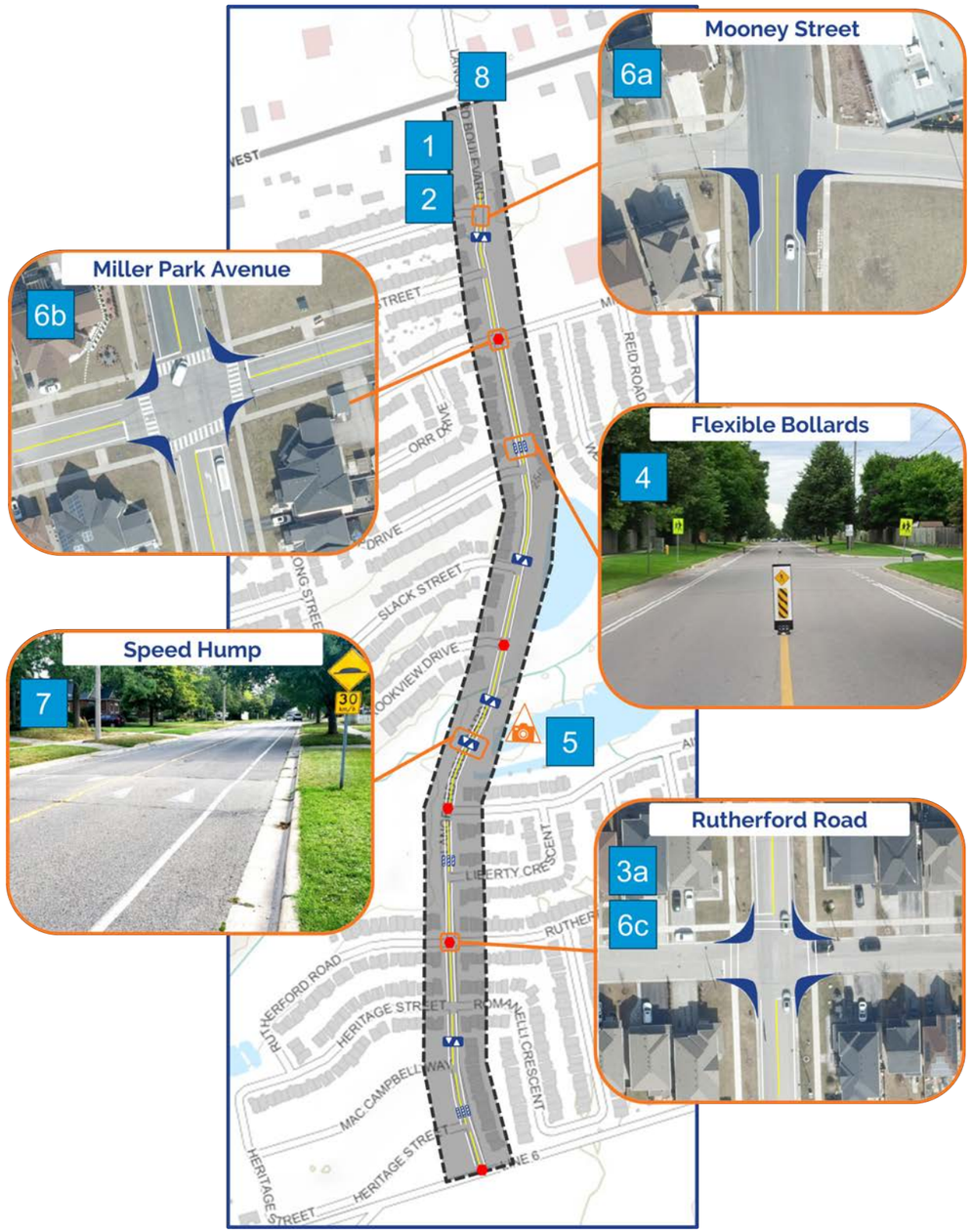
Langford Boulevard north of Holland Street West Proposed Traffic Calming Plan



LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Automated Speed Enforcement Camera
- Curb Radius Reduction
- Speed Hump

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes.
3. Install pavement markings at the intersection with:
   a. Rutherford Road – Pedestrian crosswalks including the south leg
4. Install flexible bollards including centre and edge line bollards (3 new locations).
5. Consider installing a northbound ASE camera between Brookview Drive and Aishford Road as part of the ASE program as an interim measure before installing speed humps.
6. Construct curb radius reductions at the intersections with:
   a. Mooney Street – south leg only with curb extensions
   b. Miller Park Avenue
   c. Rutherford Road
7. Install speed humps (4 new locations, 1 existing location).
8. Review signal timing at Holland Street West. Consider implementing a leading pedestrian interval for north-south crossings (review in progress).

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Langford Boulevard south of Holland Street West Proposed Traffic Calming Plan

5 Miller Park Avenue

5.1 Study Area Overview

The Miller Park Avenue Study Area extends from Sideroad 10 in the west to Holland Street in the east. Miller Park Avenue is an east-west collector road with two travel lanes (one in each direction), an urban cross-section and a posted speed limit of 40 km/h.

Parking is prohibited along both sides of the road from Sideroad 10 to Carter Street, the north side from Carter Street to Magani Avenue, and on both sides from Wilson Drive to Melbourne Drive. Between Magani Avenue and Agar Avenue, parking is prohibited on the east side from the 1st to 15th and the west side from the 16th to the end of the month.

Sidewalks are provided on both sides of Miller Park Avenue from Sideroad 10 to Melbourne Drive and on the south side from Melbourne Drive to Holland Street West.

The study corridor includes the following key intersections.

- Signalized – Melbourne Drive
- All-way Stop Control – Langford Boulevard, West Park Avenue, Sutherland Avenue and Magani Avenue.

All other intersections all operate under two-way stop control with unrestricted flow on Miller Park Avenue. At Sideroad 10 and Holland Street West, Miller Park Avenue operates under stop control.

The existing traffic calming measures on Miller Park Avenue include flexible bollards between Armstrong Street (west) and Carter Street installed from May to November, and two speed humps between West Park Avenue and Sutherland Avenue. An ASE camera was previously installed between Angela Street and West Park Avenue as part of the Town's ASE Pilot Project. The Town recently installed an ASE camera between Milby Crescent (east) and Wilson Drive effective for four months starting February 27, 2025.

The Holland Street plaza, Angela Parkette, Chris Hadfield Public School, Holy Trinity Catholic High School and St. Jean De Brebeuf Separate School are key destinations in the study area.

5.2 Traffic Data

The Town provided speed and volume data for Miller Park Avenue, collected in April 2024. Automatic traffic recorders (ATRs) were used to collect 7 days of data for ten segments along the roadway.

Table 5.1 details the 85th percentile speed and average daily traffic (ADT) for the segments along Miller Park Avenue. The table also notes the TMS priority ranking for each segment based on the road classification, which indicates the relative priority of the segment for traffic calming across the Town's roads for which traffic data was collected. Miller Park Avenue has an average daily volume of 3,550 vehicles and an average 85th percentile speed of 50 km/h, 10 km/h over the posted speed limit. Six segments have 85th percentile speeds 10 km/h or greater than the posted speed limit.

TABLE 5.1:MILLER PARK AVENUE SPEED AND VOLUME DATA

TMS Priority Ranking	West	East	85th % Speed (km/h)	Average Daily Traffic (vpd)
42	Armstrong Crescent (west)	Carter Street	53	2,458
37	Armstrong Crescent (east)	Mooney Street	51	2,980
25	Orr Drive	Langford Boulevard	47	3,188
11	Reid Road	Webb Street (east)	53	4,376
2	Angela Street	West Park Avenue	56	5,789
1	West Park Avenue	Sutherland Avenue	38	3,701
33	Milby Crescent (west)	Milby Crescent (east)	49	3,450
18	Wilson Drive	Boyd Lane	52	3,762
14	Boyd Lane	Melbourne Drive	52	3,953
20	Melbourne Drive	Magani Avenue	48	2,034
Average			**50**	**3,550**

5.3 Problems and Opportunities

Paradigm staff conducted a field visit with Town staff on February 20, 2025 to identify potential opportunities and constraints for implementing traffic calming measures in the study area.

The following observations were noted during the site visit and discussion with Town staff:

- Request for all-way stop control or pedestrian crossing at Armstrong Crescent/Long Street. Council approved a Pedestrian Crossover Level 2 Type D on the east side of the intersection during the Strategic Initiatives Committee Meeting on March 25, 2025.
- Intersection with Langford Boulevard is extremely wide with long pedestrian crossing distances; however, pedestrian volumes have reduced since the catchment area for Chris Hadfield was changed.
- Town previously had ASE Camera on Miller Park Avenue near the Angela Street Parkette that helped reduce vehicle speeds.
- New Paramedic Station on the north side of Miller Park Avenue east of Angela Street.
- Intersection with West Park Avenue has high pedestrian crossing volumes due to the nearby school.
- Town recently installed all-way stop control at Sutherland Avenue, and number of complaints received as decreased.
- Vertical grade from Melbourne Avenue towards Magani Avenue and downgrade from Magani Avenue to Holland Street.
- Speeding concerns higher for segments without houses fronting one or both sides of the road.
- Some marked pedestrian crossings at intersections. Pavement markings require refreshing.
- Minimal spacing between driveways and offset driveways on opposite sides of the road along several sections.
- 9.0 m roadway cross-section.

Residents provided the following feedback during the first round of community engagement:

- Miller Park Avenue between Langford Boulevard and West Park Avenue is a straightaway that encourages hard acceleration. The width of the road also enables this.

5.4 Selection of Traffic Calming Measures

5.4.1 Potential Traffic Calming Measures

Based on the data collected and discussions with Town staff, vehicle speeds is the main concern to address through traffic calming. Improving the safety and convenience of access to neighbourhood schools and parks is another objective. However, the close spacing and offset alignment of driveways will impact the feasibility of certain measures.

Using the Town's Traffic Calming Toolbox (detailed in **Section 0**), the study team shortlisted 8 candidate measures aimed at reducing vehicle speeds, deemed to be the primary traffic concern for the study corridor.

Table 5.2 summarizes the assessment of potential traffic calming measures for the study corridor, with the shortlist of **Preferred Treatments** (✓) highlighted in gray. The remaining measures in the toolkit were characterized as either:

Possible Option (▲) – May be a candidate if the Preferred Treatments deemed not appropriate after further investigation; or

Not Recommended (✖) – Not suitable or feasible under the circumstances.

5.4.2 Cycling Facility

The Desirable Cycling Facility Pre-Selection Nomograph – Urban/ Suburban Context (Figure 5.5) in *OTM Book 18 (Cycling Facilities)* was used to pre-select the facility category. The assessment shown in **Appendix B** indicates that a designated operating space is the preferred level of separation, with bicycle lanes or buffered bicycle lanes as the desirable facility types.

The Roadway Characteristics Application Heuristics Summary (Table 5.3) in *OTM Book 18* provided the starting point for the detailed contextual evaluation. The assessment summarized in **Appendix B** indicates that bicycle lanes or buffered bicycle lanes would generally be suitable facility types for the study corridor based on the prevailing roadway characteristics.

Desired and Suggested Minimum Widths for Bicycle Lanes (Table 4.7) in *OTM Book 18* indicates the desired width for conventional bicycle lane is 1.8 m with a suggested minimum of 1.5 m. Given the existing 9.0 m cross-section, 1.5 m bike lanes and 3.0 m general purpose lanes could be accommodated on Miller Park Avenue.

TABLE 5.2: ASSESSMENT OF POTENTIAL TRAFFIC CALMING MEASURES FOR MILLER PARK AVENUE

Measure	Considerations	Candidate
Education		
Flexible Bollards		✓
Pavement Markings		✓
Radar Message Board	Compliments other measures.	✓
Community Safety Zone	Must meet CSZ warrant.	▲
40 km/h Speed Limit Area	Current speed limit.	✖
Enforcement		
Automated Speed Enforcement	Must be in a Community Safety Zone/School Zone.	▲
Engineering – Horizontal Measures		
Chicane	Implement under special circumstances. Avoid driveways. Consider only if volume ≥ 750 vpd.	✖
Curb Extension		✓
Curb Radius Reduction		✓
On-Street Parking	Implement in accordance with Town by-laws.	▲
Raised Median Island	Implement where width permits and/or alongside reconstruction projects. Consider only on two-lane roads.	✖
Traffic Circle	Implement to address intersection conflicts (where space permits). Consider only if volume < 1,500 vpd.	✖
Engineering – Vertical Measures		
Raised Intersection	Site specific, considered as part of road reconstruction projects or new development.	▲
Raised Crosswalk	Implement to facilitate pedestrian connections. Consider only if sidewalk on at least one side of road.	✓
Speed Cushion		✓
Speed Hump		✓
Engineering – Obstruction Measure		
Directional Closure	Consider for volume reduction within the context of the network design. Consider only if volume on Local < 1,500 vpd or Collector 1,500 – 5,000 vpd.	✖
Diverter	Consider for volume reduction within the context of the network design. Consider only if volume < 5,000 vpd. Use with caution > 1,500 vpd.	✖
Full Closure	Consider for volume reduction within the context of the network design	✖

Legend: ✓ Preferred ▲ Possible Option ✖ Not Recommended

5.4.3 Intersection Improvements

No intersection improvements were identified for Miller Park Avenue.

5.5 Proposed Plan

With the shortlist of candidate traffic calming measures identified, the plan development process moved into the conceptual plan preparation phase. Input received through the engagement program played an integral role in informing the traffic calming concepts, helping to clarify the neighbourhood traffic issues to be addressed, prioritize the list of candidate measures, and highlight potential implementation challenges.

The proposed Miller Park Avenue Traffic Calming Plan contained in **Figure 5.1** and **Figure 5.2** features the following measures. The measures were spaced to achieve an 85th percentile speed of 40 km/h based on the guidance detailed in the TAC *Canadian Guide to Traffic Calming*:

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes. With the existing pavement width of 9.0 m, the new cross-section will consist of 1.5 m urban shoulders/bicycle lanes and 3.0 m general purpose lanes.
3. Construct a raised crosswalk on Miller Park Avenue across the east leg of the intersection at Armstrong Crescent/Long Street and install a Pedestrian Crossover Level 2 Type D.
4. Install pavement markings including east leg and north let pedestrian crosswalks and refresh the stop bar pavement markings at the intersection with Magani Avenue.
5. Install flexible bollards including centre and edge line bollards at:
    a. East of 769 Miller Park Avenue (existing)
    b. West of Webb Street (west)
    c. West of Reid Street
    d. Between 288 and 286 Miller Park Avenue
    e. Between 250 and 244 Miller Park Avenue (existing)
    f. Between 214 and 208 Miller Park Avenue (existing)
6. Retain the following locations in the ASE Camera rotation:
    a. Between Webb Street and Angela Street (eastbound)

   b. Between Milby Crescent and Wilson Drive (westbound)

7. Construct curb radius reductions to narrow the roadway width and pedestrian crossing distance at the intersection with:
   a. Langford Boulevard
   b. Zehrs Plaza (north side only)
8. Install speed humps at:
   a. East of 889 Miller Park Avenue
   b. Between 801 and 797 Miller Park Avenue
   c. At Angela Parkette (speed cushion)
   d. East of 480 driveway Miller Park Avenue (speed cushion)
   e. Between 396 and 392 Miller Park Avenue (existing)
   f. Between 386 and 364 Miller Park Avenue (existing)
   g. Between 304 and 302 Miller Park Avenue
   h. Between 280 and 278 Miller Park Avenue

Implementing the proposed plan for Miller Park Avenue will require the following changes to the roadway:

- Restricting parking upstream and downstream of the Pedestrian Crossover at Armstrong Crescent/Long Street as detailed in OTM *Book 15 (Pedestrian Crossings).*
- Extending the existing sidewalk on the west side of Miller Park Avenue south to Magani Avenue and installing a curb drop and landing to accommodate the north leg crossing.
- Restricting parking 15 metres upstream and downstream of flexible bollards.

5.6 Neighbourhood Feedback

Many respondents supported the implementation of traffic calming measures and lower speeds in the study area. Residents provided the following feedback during the second round of community engagement:

- Support for bike infrastructure, but recommends protected bike lanes using bollards or delineators for greater safety, especially near schools.
- Support for urban shoulders.
- Request for signal timing to be assessed at Melbourne Avenue intersection.
- Request for all-way stop at intersection with Agar Avenue.

LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Automated Speed Enforcement Camera
- Curb Radius Reduction
- Speed Hump
- Speed Cushion
- Raised Crosswalk

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes.
3. Construct a raised crosswalk on Miller Park Avenue across the east leg of the intersection at Armstrong Crescent/Long Street and install a Pedestrian Crossover Level 2 Type D (west of West Park Avenue).
4. Install flexible bollards including centre and edge line bollards (2 new locations, 1 existing location).
5. Retain the eastbound ASE Camera location between Webb Street to Angela Street in the program rotation.
6. Construct curb radius reductions to narrow the roadway width and pedestrian crossing distance at the intersection with:
    a. Langford Boulevard
    b. Zehrs Plaza (north side only)
7. Install speed humps (2 new locations).
8. Install speed cushions (2 new locations).

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Miller Park Avenue west of West Park Avenue Proposed Traffic Calming Plan

LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Automated Speed Enforcement Camera
- Speed Hump

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes.
3. Install pavement markings including east leg and north let pedestrian crosswalks and refresh the stop bar pavement markings at the intersection with Magani Avenue (east of West Park Avenue).
4. Install flexible bollards including centre and edge line bollards (1 new location, 2 existing locations).
5. Retain the westbound ASE Camera location between Milby Crescent and Wilson Drive in the program rotation.
6. Install speed humps (2 new locations, 2 existing locations).

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Miller Park Avenue east of West Park Avenue Proposed Traffic Calming Plan

6 West Park Avenue

6.1 Study Area Overview

The West Park Avenue Study Area extends from Professor Day Drive in the north to Line 6 in the south. West Park Avenue is a north-south collector road with two travel lanes (one in each direction), an urban cross-section and a posted speed limit of 40 km/h. Between Brian Collier Way and Elgin Court, West Park Avenue has a four-lane cross-section with two travel lanes in each direction.

North of Holland Street, parking is prohibited along the east side of road from Professor Day Drive to Blue Dasher Boulevard and on both sides from Blue Dasher Boulevard to Holland Street. South of Holland Street West, parking is prohibited along both sides of the road to Veterans Street, on the east side from Veterans Street to Miller Park Avenue and Rutherford Road to Line 6, and on the west side from Miller Park Avenue to Rutherford Road.

Sidewalks are provided on both sides of West Park Avenue from Professor Day Drive to Huron Lane, and from Holland Street West to Line 6. From Huron Lane to Holland Street West, a multi-use path is provided on the west side and a sidewalk is provided on the east side of the road. The multi-use path forms part of the Summerlyn Trail.

The study corridor includes the following key intersections.

- Signalized – Holland Street West and Line 6
- Roundabout – Blue Dasher Boulevard and Rutherford Road
- All-way Stop Control – Professor Day, Drive, Veterans Street, Miller Park Avenue, Outlook Avenue, and Aishford Road

All other intersections all operate under two-way stop control with unrestricted flow on West Park Avenue.

The existing traffic calming measures on West Park Avenue include two speed humps and a set of flexible bollards (May to November) between Wilke Trail and Blue Dasher Boulevard. Two sets of flexible bollards were approved to be installed between Memorial Court and Miller Park Avenue from May to November as part of the TMS approval in 2024. An ASE camera was previously installed between Blue Dasher Boulevard and Brian Collier Way as part of the Town's ASE Pilot Project.

Fieldcrest Elementary School, Bradford District High School, BWG Leisure Centre, Holland Street plazas, BWG Library, Holy Trinity

Catholic High School, Chris Hadfield Public School, Alan Kuzmich Park, and St. Angela Merici Catholic School are key destinations in the study area.

6.2 Traffic Data

The Town provided speed and volume data for West Park Avenue, collected in April and May 2024. Automatic traffic recorders (ATRs) were used to collect 7 days of data for 11 segments along the roadway.

Table 6.1 details the 85th percentile speed and average daily traffic (ADT) for segments along West Park Avenue. The table also notes the TMS priority ranking for each segment based on the road classification, which indicates the relative priority of the segment for traffic calming across the Town's roads for which traffic data was collected. West Park Avenue has an average daily volume of 3,400 vehicles and an average 85th percentile speed of 49 km/h, 9 km/h over the posted speed limit. Three segments have 85th percentile speeds 10 km/h or greater than the posted speed limit.

TABLE 6.1: WEST PARK AVENUE SPEED AND VOLUME DATA

TMS Priority Ranking	North	South	85th % Speed (km/h)	Average Daily Traffic (vpd)
28	Professor Day Drive	Collis Drive	47	1,887
59	Wilke Trail	Waterton Way	42	1,772
22	Huron Lane	Blue Dasher Boulevard	47	2,342
1	Blue Dasher Boulevard	Holland Street	55	4,596
3	Holland Street	Veterans Street	49	5,682
6	Memorial Court	Miller Park Avenue	56	4,654
8	Miller Park Avenue	Trailside Drive	46	4,094
10	Trailside Drive	Outlook Avenue	49	3,966
12	Fairside Drive	Bradford Street	49	3,794
56	Aishford Road	Rutherford Road	49	2,222
32	Rutherford Road	Line 6	53	2,503
Average			**49**	**3,400**

6.3 Problems and Opportunities

Paradigm staff conducted a field visit with Town staff on February 20, 2025 to identify potential opportunities and constraints for implementing traffic calming measures in the study area.

The following observations were noted during the site visit and discussion with Town staff:

- Request for all-way stop control at Huron Lane.
- West Park Avenue near Huron Lane is busy during school drop-off and pick-up times.
- No pedestrian crossing markings are provided at the intersections with Blue Dasher Boulevard and Rutherford Road.
- Town previously had ASE Camera on West Park Avenue near Brian Collier Way that helped reduce vehicle speeds.

- High pedestrian crossing volumes north-south at Holland Street West.
- 9.0 m roadway cross-section, except in the vicinity of Holland Street.
- High school students cross West Park Avenue at Veterans Street to access the plazas on Holland Street. Town recently installed all-way stop control.
- Intersection with Miller Park Avenue has high pedestrian crossing volumes due to the nearby schools.
- Speeding concerns higher for segments without houses fronting one or both sides of the road.
- Some marked pedestrian crossings at intersections. Pavement markings require refreshing.
- Minimal spacing between driveways and offset driveways on opposite sides of the road along several sections.
- Right-turn and left-turn lane markings are not provided at Line 6.

Residents did not provide any feedback during the first round of community engagement for West Park Avenue.

6.4 Selection of Traffic Calming Measures

6.4.1 Potential Traffic Calming Measures

Based on the data collected and discussions with Town staff, vehicle speeds is the main concern to address through traffic calming. Improving the safety and convenience of access to neighbourhood schools and parks is another objective. However, the close spacing and offset alignment of driveways will impact the feasibility of certain measures.

Using the Town's Traffic Calming Toolbox (detailed in **Section 0**), the study team shortlisted 8 candidate measures aimed at reducing vehicle speeds, deemed to be the primary traffic concern for the study corridor.

Table 6.2 summarizes the assessment of potential traffic calming measures for the study corridor, with the shortlist of **Preferred Treatments** (✓) highlighted in gray. The remaining measures in the toolkit were characterized as either:

Possible Option (▲) – May be a candidate if the Preferred Treatments deemed not appropriate after further investigation; or

Not Recommended (✖) – Not suitable or feasible under the circumstances.

6.4.2 Intersection Improvements

There are two roundabouts located on West Park Avenue at Blue Dasher Boulevard and Rutherford Road. As detailed in **Section 3.4**, pavement markings (yield lines) and Pedestrian Crossovers (Level 2, Type D) should be installed on all approaches.

Additionally, left-turn and right-turn pavement lane markings and directional arrows should be installed on West Park Avenue at the intersection with Line 6.

TABLE 6.2: ASSESSMENT OF POTENTIAL TRAFFIC CALMING MEASURES FOR WEST PARK AVENUE

Measure	Considerations	Candidate
Education		
Flexible Bollards		✓
Pavement Markings		✓
Radar Message Board	Compliments other measures.	✓
Community Safety Zone	Must meet CSZ warrant.	▲
40 km/h Speed Limit Area	Current speed limit.	✖
Enforcement		
Automated Speed Enforcement	Must be in a Community Safety Zone/School Zone.	▲
Engineering – Horizontal Measures		
Chicane	Implement under special circumstances. Avoid driveways. Consider only if volume ≥ 750 vpd.	✖
Curb Extension		✓
Curb Radius Reduction		✓
On-Street Parking	Implement in accordance with Town by-laws.	▲
Raised Median Island	Implement where width permits and/or alongside reconstruction projects. Consider only on two-lane roads.	✖
Traffic Circle	Implement to address intersection conflicts (where space permits). Consider only if volume < 1,500 vpd.	✖
Engineering – Vertical Measures		
Raised Intersection	Site specific, considered as part of road reconstruction projects or new development.	▲
Raised Crosswalk	Implement to facilitate pedestrian connections. Consider only if sidewalk on at least one side of road.	✓
Speed Cushion		✓
Speed Hump		✓
Engineering – Obstruction Measure		
Directional Closure	Consider for volume reduction within the context of the network design. Consider only if volume on Local < 1,500 vpd or Collector 1,500 – 5,000 vpd.	✖
Diverter	Consider for volume reduction within the context of the network design. Consider only if volume < 5,000 vpd. Use with caution > 1,500 vpd.	✖
Full Closure	Consider for volume reduction within the context of the network design	✖

Legend: ✓ Preferred ▲ Possible Option ✖ Not Recommended

6.5 Proposed Plan

With the shortlist of candidate traffic calming measures identified, the plan development process moved into the conceptual plan preparation phase. Input received through the engagement program played an integral role in informing the traffic calming concepts, helping to clarify the neighbourhood traffic issues to be addressed, prioritize the list of candidate measures, and highlight potential implementation challenges.

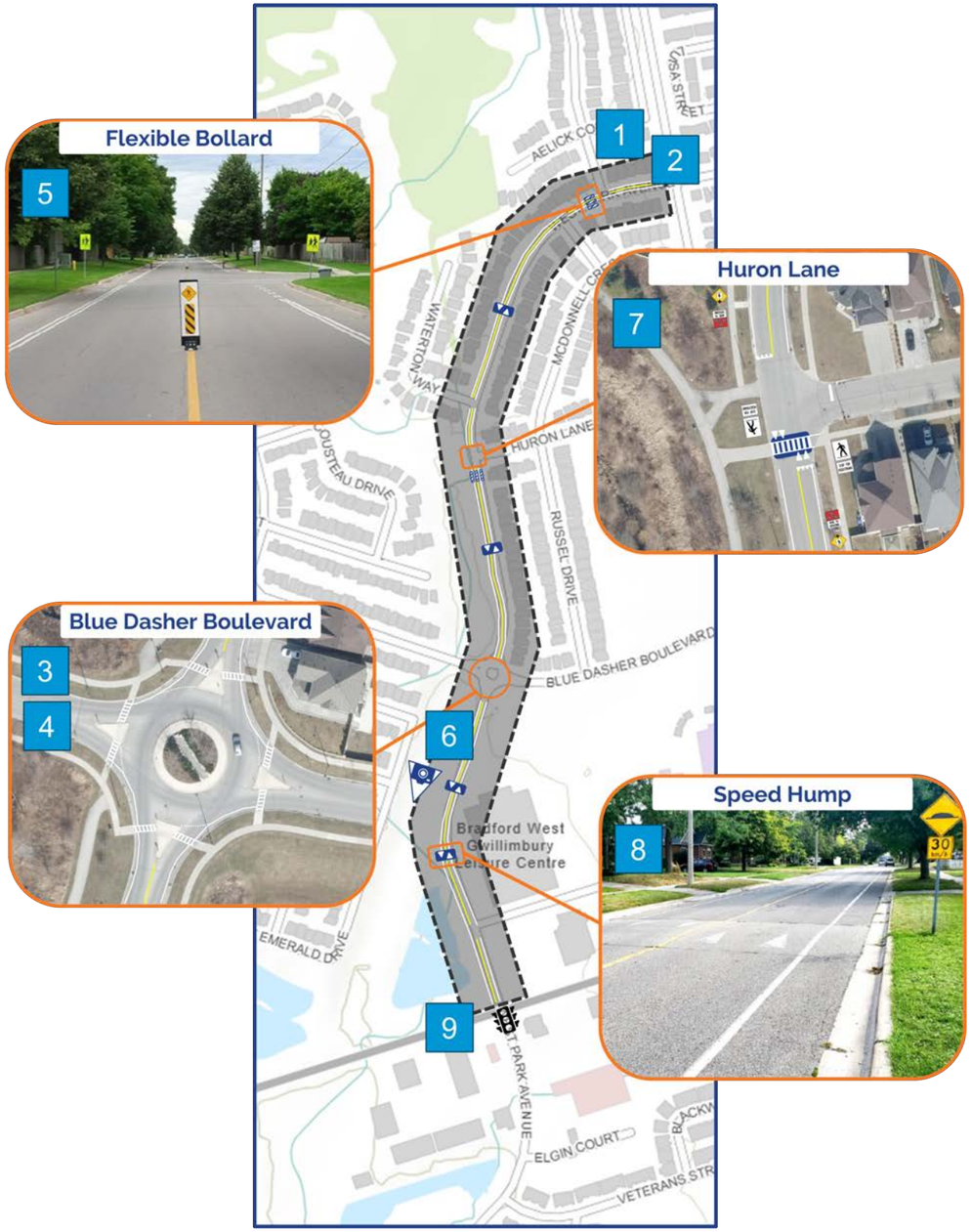
The proposed West Park Avenue Traffic Calming Plan contained in **Figure 6.1** and **Figure 6.2** features the following measures. The measures were spaced to achieve an 85th percentile speed of 40 km/h based on the guidance detailed in the TAC *Canadian Guide to Traffic Calming*:

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders. With the existing pavement width of 9.0 m, the new cross-section will consist of 1.5 m urban shoulders and 3.0 m general purpose lanes.
3. Install pavement markings at the intersection with:
    a. Blue Dasher Boulevard – Pedestrian crosswalks, yield lines, and edge lines
    b. Outlook Avenue – Pedestrian crosswalks, stop bars
    c. Rutherford Road – Pedestrian crosswalks, yield lines, and edge lines
    d. Line 6 – Left-turn and right-turn lane markings and arrows (installed by Town of BWG May 1, 2025)
4. Install Pedestrian Crossovers (Level 2, Type D) on all approaches at the intersection with:
    a. Blue Dasher Boulevard
    b. Rutherford Road
5. Install flexible bollards including centre and edge line bollards at:
    a. South of Collis Drive
    b. North of 575 West Park Avenue (existing)
6. Retain the southbound ASE Camera location between Blue Dasher Boulevard and Holland Street West in the program rotation.

7. Construct a raised crosswalk on West Park Avenue across the south leg of the intersection at Huron Lane and reinstate the Level 2 Type D Pedestrian Crossover (existing).
8. Install speed humps at:
    a. Between 668 and 662 West Park Avenue (existing)
    b. Between 551 and 547 West Park Avenue (existing)
    c. 140 metres south of Blue Dasher Boulevard
    d. 80 metres north of Brian Collier Way
    e. North of 283 West Park Avenue
    f. Between 271 and 267 West Park Avenue
    g. North of 192 West Park Avenue
    h. North of Fairside Drive
    i. North of Bradford Street
    j. Between 67 and 65 West Park Avenue (space permitting)
    k. Between 20 and 18 West Park Avenue
9. Review signal timing at Holland Street West, specifically the pedestrian crossing times and cycle lengths to reduce pedestrian delays. Consider implementing a leading pedestrian interval for north-south crossings. Town is currently undertaking this review as part of the Holland Street Signal Review (Sideroad 10 to Professor Day Drive).

Implementing the proposed plan for West Park Avenue will require the following changes to the roadway:

- Restricting parking upstream and downstream of the Pedestrian Crossover at Huron Lane as detailed in OTM *Book 15 (Pedestrian Crossings).*
- Restricting parking 15 metres upstream and downstream of flexible bollards.



LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Automated Speed Enforcement Camera
- Speed Hump
- Raised Crosswalk

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders.
3. Install pavement markings at the intersection Blue Dasher Boulevard – Pedestrian crosswalks, yield lines, and edge lines.
4. Install Pedestrian Crossovers (Level 2, Type D) on all approaches at the intersection with Blue Dasher Boulevard
5. Install flexible bollards including centre and edge line bollards (1 new location, 1 existing location.
6. Retain the southbound ASE Camera location between Blue Dasher Boulevard and Holland Street West in the program rotation.
7. Construct a raised crosswalk on West Park Avenue across the south leg of the intersection at Huron Lane and install a Pedestrian Crossover Level 2 Type D (north of Holland Street West).
8. Install speed humps (2 new locations, 2 existing locations).
9. Review signal timing at Holland Street West. Consider implementing a leading pedestrian interval for north-south crossings (review in progress).

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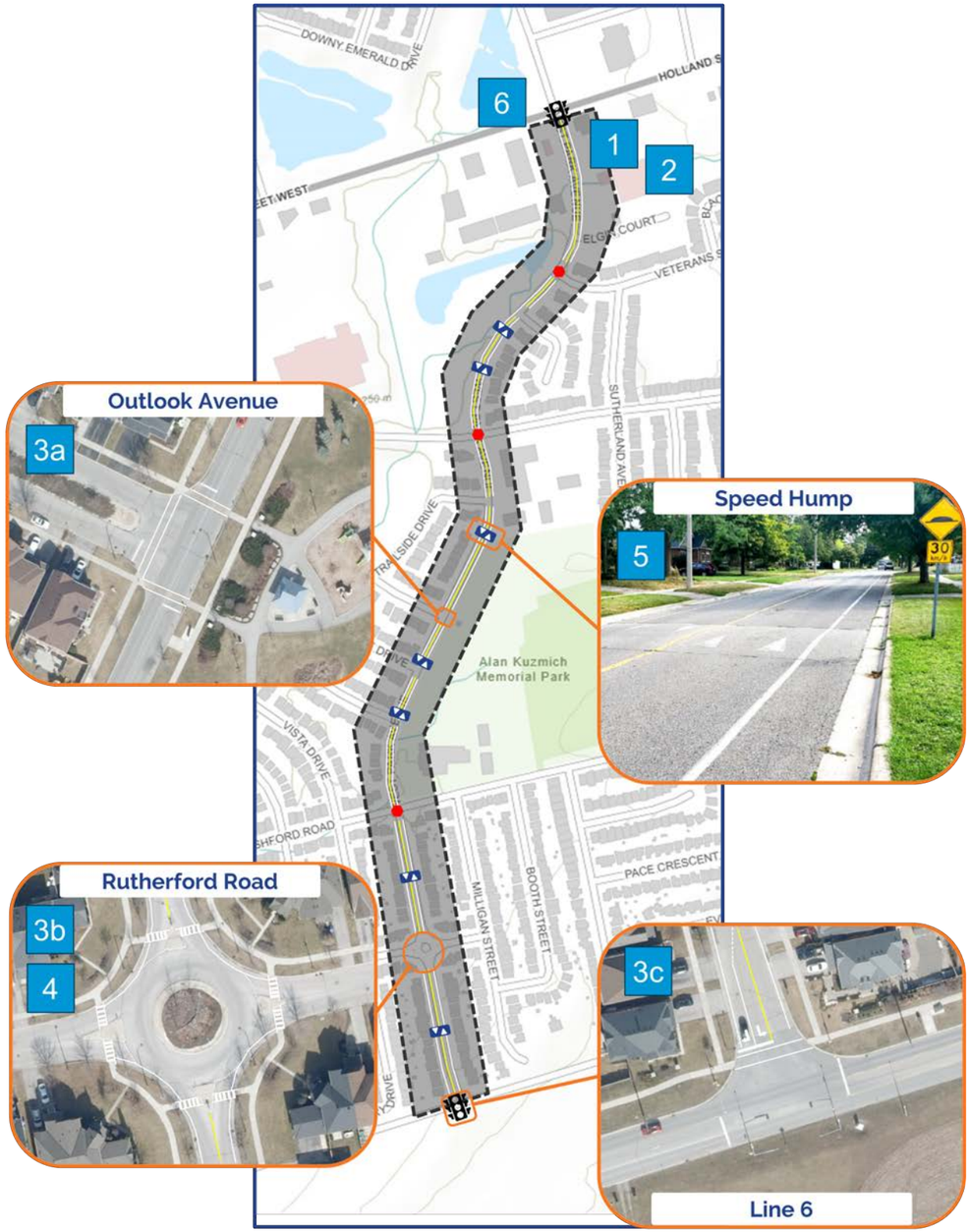
West Park Avenue north of Holland Street West Proposed Traffic Calming Plan



LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Speed Hump

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders.
3. Install pavement markings at the intersection with:
   a. Outlook Avenue – Pedestrian crosswalks, stop bars
   b. Rutherford Road – Pedestrian crosswalks, yield lines, and edge lines
   c. Line 6 – Left-turn and right-turn lane markings and arrows (completed May 2025)
4. Install Pedestrian Crossovers (Level 2, Type D) on all approaches at the intersection with Rutherford Road.
5. Install speed humps (7 new locations).
6. Review signal timing at Holland Street West. Consider implementing a leading pedestrian interval for north-south crossings (review in progress).

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West Park Avenue south of Holland Street West Proposed Traffic Calming Plan

6.6 Neighbourhood Feedback

Many respondents supported the implementation of traffic calming measures and lower speeds in the study area. Residents provided the following feedback during the second round of community engagement:

- Support for urban shoulders.
- Concern traffic calming measures may lead to increased congestion.
- Support for the installation of speed bumps along West Park Avenue, between Veterans Street and Miller Park Avenue.

7 Summerlyn Trail

7.1 Study Area Overview

The Summerlyn Trail Study Area extends from Line 8 in the north to Holland Street in the south. Summerlyn Trail is a north-south local road with two travel lanes (one in each direction), an urban cross-section and a posted speed limit of 40 km/h.

Parking is prohibited along the west side of road, and permitted on the east side along select blocks.

Sidewalks are provided on both sides of Summerlyn Trail from Line 8 to Downy Emerald Drive (south). From Downy Emerald Drive (south) to Holland Street West, a sidewalk is provided on the west side and a multi-use path is provided on the east side of the road. The multi-use path forms part of the Summerlyn Trail.

The study corridor includes the following key intersections.

- Signalized – Line 8, Holland Street West
- Roundabout – Wandering Glider Trail/Green Darner Trail, Blue Dasher Boulevard and Montrose Boulevard/Downy Emerald Drive
- All-way Stop Control – Meadowhawk Trail and Downy Emerald Drive (north)

All other intersections all operate under two-way stop control with unrestricted flow on Summerlyn Trail.

The existing traffic calming measures on Summerlyn Trail include two speed humps located between Line 8 and Citrine Drive/Tigertail Crescent.

Summerlyn Parkette and the Holland Street plazas are key destinations in the study area.

7.2 Traffic Data

The Town provided speed and volume data for Summerlyn Trail, collected in April and May 2024. Automatic traffic recorders (ATRs) were used to collect 7 days of data for six segments along the roadway.

Table 7.1 details the 85th percentile speed and average daily traffic (ADT) for segments along Summerlyn Trail. The table also notes the

TMS priority ranking for each segment based on the road classification, which indicates the relative priority of the segment for traffic calming across the Town's roads for which traffic data was collected. Summerlyn Trail has an average daily volume of 2,450 vehicles and an average 85th percentile speed of 46 km/h, 6 km/h over the posted speed limit. Three segments have 85th percentile speeds 5 km/h or greater than the posted speed limit.

TABLE 7.1: SUMMERLYN TRAIL SPEED AND VOLUME DATA

TMS Priority Ranking	North	South	85th % Speed (km/h)	Average Daily Traffic (vpd)
14	Line 8	Tigertail Crescent	41	2,100
17	Tigertail Crescent	Green Darner Trail	44	2,000
9	Acorn Lane	Cousteau Drive	49	2,250
6	Amberwing Landing	Blue Dasher Boulevard	45	2,900
8	Meadowhawk Trail	Corwin Drive	48	1,950
4	Downy Emerald Drive	Commercial Driveway	47	2,850
Average			**46**	**2,450**

7.3 Problems and Opportunities

Paradigm staff conducted a field visit with Town staff on February 20, 2025 to identify potential opportunities and constraints for implementing traffic calming measures in the study area.

The following observations were noted during the site visit and discussion with Town staff:

- Concerns with vegetation in the centre of roundabouts and visibility of pedestrians.
- No pedestrian crossing markings or pavement markings are provided at the intersections with Wandering Glider Trail/Green Darner Trail, Blue Dasher Boulevard and Montrose Boulevard/Downy Emerald Drive.
- 9.0 m roadway cross-section, except in the vicinity of Holland Street.

- On-street parking is well utilized as many households have multiple vehicles.
- Speeding concerns higher for segments without houses fronting one or both sides of the road.
- Some marked pedestrian crossings at intersections. Pavement markings require refreshing.
- Minimal spacing between driveways and offset driveways on opposite sides of the road along several sections.

Residents provided the following feedback during the first round of community engagement:

- The existing speed humps on Summerlyn Trail do a good job of slowing vehicles down.

7.4 Selection of Traffic Calming Measures

7.4.1 Potential Traffic Calming Measures

Based on the data collected and discussions with Town staff, vehicle speeds is the main concern to address through traffic calming. Improving the safety and convenience of access to neighbourhood parks is another objective. However, the close spacing and offset alignment of driveways will impact the feasibility of certain measures.

Using the Town's Traffic Calming Toolbox (detailed in **Section 0**), the study team shortlisted 7 candidate measures aimed at reducing vehicle speeds, deemed to be the primary traffic concern for the study corridor.

Table 7.2 summarizes the assessment of potential traffic calming measures for the study corridor, with the shortlist of **Preferred Treatments** (✓) highlighted in gray. The remaining measures in the toolkit were characterized as either:

Possible Option (▲) – May be a candidate if the Preferred Treatments deemed not appropriate after further investigation; or

Not Recommended (✖) – Not suitable or feasible under the circumstances.

TABLE 7.2: ASSESSMENT OF POTENTIAL TRAFFIC CALMING MEASURES FOR SUMMERLYN TRAIL

Measure	Considerations	Candidate
Education		
Flexible Bollards		✓
Pavement Markings		✓
Radar Message Board	Compliments other measures.	✓
Community Safety Zone	Must meet CSZ warrant.	▲
40 km/h Speed Limit Area	Current speed limit.	✖
Enforcement		
Automated Speed Enforcement	Must be in a Community Safety Zone/School Zone.	▲
Engineering – Horizontal Measures		
Chicane	Implement under special circumstances. Avoid driveways. Consider only if volume ≥ 750 vpd.	✖
Curb Extension		✓
Curb Radius Reduction		✓
On-Street Parking	Implement in accordance with Town by-laws.	▲
Raised Median Island	Implement where width permits and/or alongside reconstruction projects. Consider only on two-lane roads.	✖
Traffic Circle	Implement to address intersection conflicts (where space permits). Consider only if volume < 1,500 vpd.	✖
Engineering – Vertical Measures		
Raised Intersection	Site specific, considered as part of road reconstruction projects or new development.	▲
Raised Crosswalk	Implement to facilitate pedestrian connections. Consider only if sidewalk on at least one side of road.	▲
Speed Cushion		✓
Speed Hump		✓
Engineering – Obstruction Measure		
Directional Closure	Consider for volume reduction within the context of the network design. Consider only if volume on Local < 1,500 vpd or Collector 1,500 – 5,000 vpd.	✖
Diverter	Consider for volume reduction within the context of the network design. Consider only if volume < 5,000 vpd. Use with caution > 1,500 vpd.	✖
Full Closure	Consider for volume reduction within the context of the network design	✖

Legend: ✓ Preferred ▲ Possible Option ✖ Not Recommended

7.4.2 Intersection Improvements

There are three roundabouts located on Summerlyn Trail at Wandering Glider Trail/Green Darner Trail, Blue Dasher Boulevard and Montrose Boulevard/Downy Emerald Drive. As detailed in **Section 3.4**, pavement markings (yield lines) and Pedestrian Crossovers (Level 2, Type D) should be installed on all approaches.

7.4.3 Cycling Facility

The Desirable Cycling Facility Pre-Selection Nomograph – Urban/ Suburban Context (Figure 5.5) in *OTM Book 18 (Cycling Facilities)* was used to pre-select the facility category. The assessment shown in **Appendix B** indicates that a designated operating space is the preferred level of separation, with bicycle lanes or buffered bicycle lanes as the desirable facility types.

The Roadway Characteristics Application Heuristics Summary (Table 5.3) in *OTM Book 18* provided the starting point for the detailed contextual evaluation. The assessment summarized in **Appendix B** indicates that bicycle lanes or buffered bicycle lanes would generally be suitable facility types for the study corridor based on the prevailing roadway characteristics.

Desired and Suggested Minimum Widths for Bicycle Lanes (Table 4.7) in *OTM Book 18* indicates the desired width for conventional bicycle lane is 1.8 m with a suggested minimum of 1.5 m. Given the existing 9.0 m cross-section, 1.5 m bike lanes and 3.0 m general purpose lanes could be accommodated on Summerlyn Trail.

7.5 Proposed Plan

With the shortlist of candidate traffic calming measures identified, the plan development process moved into the conceptual plan preparation phase. Input received through the engagement program played an integral role in informing the traffic calming concepts, helping to clarify the neighbourhood traffic issues to be addressed, prioritize the list of candidate measures, and highlight potential implementation challenges.

The proposed Summerlyn Trail Traffic Calming Plan contained in **Figure 7.1** features the following measures. The measures were spaced to achieve an 85th percentile speed of 40 km/h based on the guidance detailed in the TAC *Canadian Guide to Traffic Calming*:

1. Install centre line pavement markings.

2. Install edge line pavement markings to create urban shoulders or bicycle lanes. With the existing pavement width of 9.0 m, the new cross-section will consist of 1.5 m urban shoulders/bicycle lanes and 3.0 m general purpose lanes.
3. Install pavement markings at the intersection with:
    a. Wandering Glider Trail/Green Darner Trail – Pedestrian crosswalks, yield lines and edge lines
    b. Blue Dasher Boulevard – Pedestrian crosswalks, yield lines, and edge lines
    c. Montrose Boulevard/Downy Emerald Drive – Pedestrian crosswalks, yield lines, and edge lines
4. Install Pedestrian Crossovers (Level 2, Type D) on all approaches at the intersection with:
    a. Wandering Glider Trail/Green Darner Trail
    b. Blue Dasher Boulevard
    c. Montrose Boulevard/Downy Emerald Drive
5. Install flexible bollards including centre and edge line bollards at:
    a. Between 243 and 239 Summerlyn Trail
    b. Between 64 and 60 Summerlyn Trail
6. Install speed humps at:
    a. Between 434 and 428 Summerlyn Trail (existing)
    b. 40 metres south of Scarlet Way (existing)
    c. Between 279 and 273 Summerlyn Trail
    d. Between 148 and 144 Summerlyn Trail

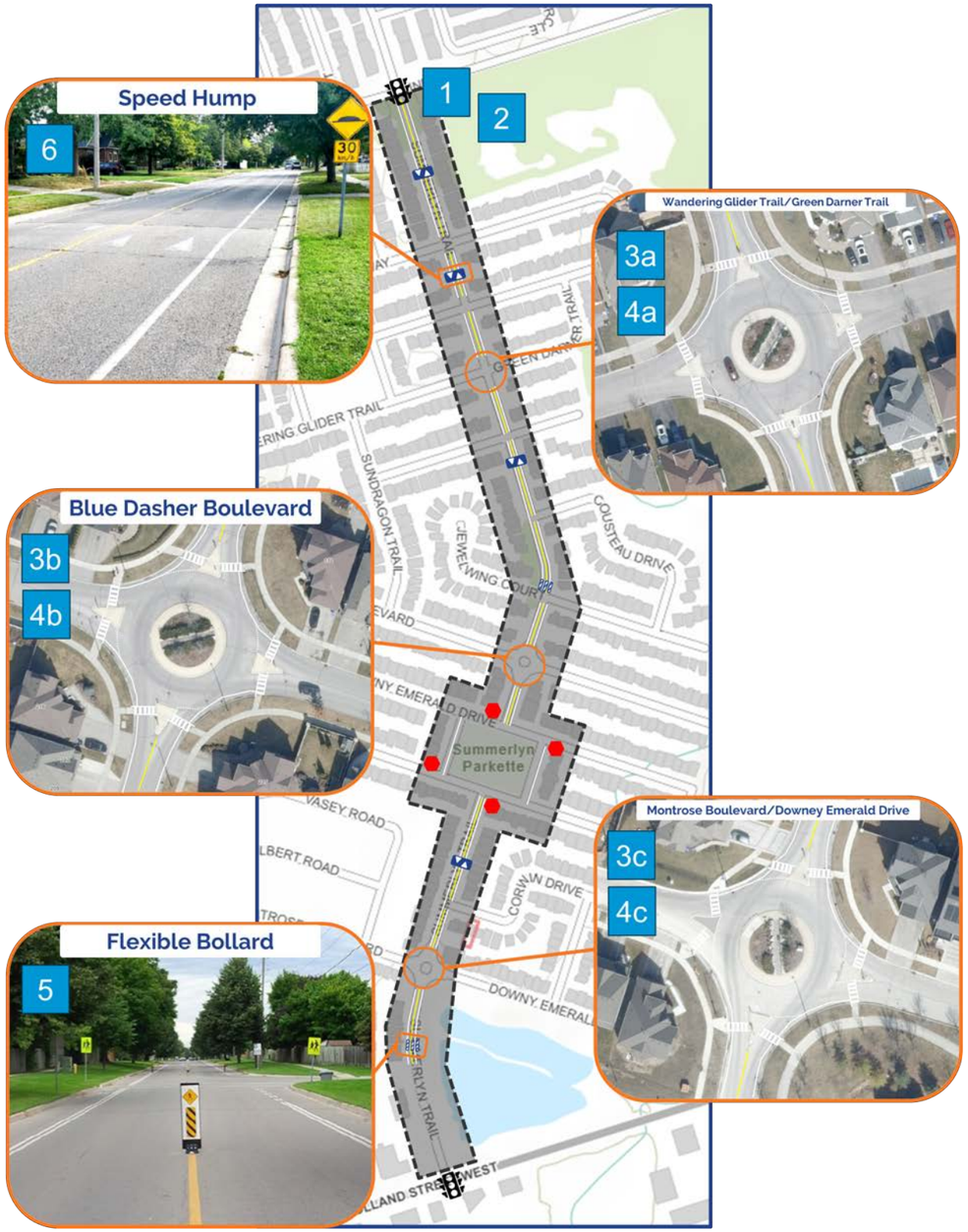
Implementing the proposed plan for Summerlyn Trail will require restricting parking 15 metres upstream and downstream of flexible bollards.

7.6 Neighbourhood Feedback

Many respondents supported the implementation of traffic calming measures and lower speeds in the study area. Residents provided the following feedback during the second round of community engagement:

- Support for bike infrastructure, but recommends protected bike lanes using bollards or delineators for greater safety, especially near schools.

- Support for urban shoulders.
- Support for speed humps.
- Request for stop signs at all park-adjacent intersections.



LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Speed Hump

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes.
3. Install pavement markings at the intersection with:
   a. Wandering Glider Trail/Green Darner Trail – Pedestrian crosswalks, yield lines and edge lines
   b. Blue Dasher Boulevard – Pedestrian crosswalks, yield lines, and edge lines
   c. Montrose Boulevard/Downy Emerald Drive – Pedestrian crosswalks, yield lines, and edge lines
4. Install Pedestrian Crossovers (Level 2, Type D) on all approaches at the intersection with:
   a. Wandering Glider Trail/Green Darner Trail
   b. Blue Dasher Boulevard
   c. Montrose Boulevard/Downy Emerald Drive
5. Install flexible bollards including centre and edge line bollards (2 new locations).
6. Install speed humps (2 new locations, 2 existing locations).

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Summerlyn Trail Proposed Traffic Calming Plan

8 John Street

8.1 Study Area Overview

The John Street Study Area extends from Toronto Street in the west to Colborne Street in the east. John Street is an east-west local road with two travel lanes (one in each direction), an urban cross-section and a posted speed limit of 40 km/h.

Parking is prohibited along the south side of the road between Church Street and Barrie Street. From Barrie Street to Nelson Street, parking on the south side is restricted to 60 minutes, 9:00 AM to 6:00 PM Monday to Friday.

Sidewalks are provided on both sides of John Street from Essa Street to Nelson Street and on the north side from Toronto Street to Essa Street and Nelson Street to the eastern terminus. A multi-use path connects the eastern terminus of John Street to Dissette Street.

John Street is within the Holland Street Reconstruction project area. The section from Church Street to Allan Lane is within the Downtown Bradford Designation Area, with several businesses fronting the road. Additional parking for downtown patrons is accessed via John Street.

The study corridor includes all-way stop control intersections at Church Street, Nelson Street and Colborne Street. At Toronto Street and Barrie Street, John Street operates under stop control. All other intersections all operate under two-way stop control with unrestricted flow on John Street.

8.2 Traffic Data

The Town provided speed and volume data for John Street, collected in May and June 2024. Automatic traffic recorders (ATRs) were used to collect 7 days of data for five segments along the roadway.

Table 8.1 details the 85th percentile speed and average daily traffic (ADT) for segments along John Street. The table also notes the TMS priority ranking for each segment based on the road classification, which indicates the relative priority of the segment for traffic calming across the Town's roads for which traffic data was collected. John Street has an average daily volume of 2,500 vehicles and an average 85th percentile speed of 47 km/h, 7 km/h over the posted speed limit. All five segments have 85th percentile speeds 5 km/h or greater than the posted speed limit.

TABLE 8.1: JOHN STREET SPEED AND VOLUME DATA

TMS Priority Ranking	West	East	85th % Speed (km/h)	Average Daily Traffic (vpd)
30	Toronto Street	Essa Street	48	1,250
5	Church Street	Moore Street	47	2,550
2	Moore Street	Barrie Street	46	2,600
1	Barrie Street	Nelson Street	48	3,150
3	Nelson Street	Colborne Street	48	2,800
Average			**47**	**2,500**

8.3 Problems and Opportunities

Paradigm staff conducted a field visit with Town staff on February 20, 2025 to identify potential opportunities and constraints for implementing traffic calming measures in the study area.

The following observations were noted during the site visit and discussion with Town staff:

- Motorists use John Street as a by-pass for the downtown area and an alternative to Holland Street. Cut-through traffic is higher east of Barrie Street; motorists use Colborne Street and Nelson Street to access John Street and turn right and head north on Barrie Street.
- Any traffic calming measures proposed for John Street east of Barrie should also be considered on Scanlon Street to avoid traffic re-routing to Scanlon Street.
- Vertical grade to the east between Toronto Street and Essa Street causing sightline issues.
- On-street parking, particularly between Church Street and Nelson Street supports business on John Street as well as Holland Street.
- Intersection with Barrie Street is offset.
- Left-turn, through and right-turn lane markings are not provided on John Street at Barrie Street.
- Some marked pedestrian crossings at intersections. Pavement markings require refreshing.

- Minimal spacing between driveways and offset driveways on opposite sides of the road between Nelson Street and Colborne Street.
- Roadway is within the Holland Street Reconstruction area and subject to the findings of the Environmental Assessment.

Residents provided the following feedback during the first round of community engagement:

- Barrie Street and John Street intersection is skewed, causing visibility concerns.
- Need to realign Barrie Street and John Street intersection and install proper traffic controls.
- Barrie Street and John Street intersection has a high level of foot and bike traffic. There has been many pedestrian and vehicle accidents in the past and no changes have ever been made.
- Refer to the Holland Street EA project on recommendations for Barrie Street and John Street intersection. Implementation of these measures should be installed as soon as possible.
- Several accidents at the Barrie Street and John Street intersection – vehicles exiting John Street and trying to make the gap in traffic. Problem is especially bad in the summertime.
- Cars park too close to the Barrie Street and John Street intersection, blocking visibility for the SBL and NBR movements.
- Concerns about traffic on Scanlon Avenue if traffic calming is installed on John Street. Need to consider the impact of cut-through traffic.

8.4 Selection of Traffic Calming Measures

8.4.1 Potential Traffic Calming Measures

Based on the data collected and discussions with Town staff, vehicle speeds and cut-through traffic are the main concerns to address through traffic calming. However, the close spacing and offset alignment of driveways, and maintaining convenient access for neighbourhood residents will impact the feasibility of certain measures.

Using the Town's Traffic Calming Toolbox (detailed in **Section 0**), the study team shortlisted 8 candidate measures aimed at reducing vehicle speeds and cut-through traffic, deemed to be the primary traffic concerns for the study corridor.

Table 8.2 summarizes the assessment of potential traffic calming measures for the study corridor, with the shortlist of **Preferred Treatments** (✓) highlighted in gray. The remaining measures in the toolkit were characterized as either:

Possible Option (▲) – May be a candidate if the Preferred Treatments deemed not appropriate after further investigation; or

Not Recommended (✖) – Not suitable or feasible under the circumstances.

8.4.2 Intersection Improvements

At the intersection with Barrie Street, John Street is slightly offset, with the westbound left-through-right lane on approximately 3 metres north of the receiving lane on the west side of the intersection. The westbound approach is approximately 12 metres wide, providing the opportunity for auxiliary turning lanes.

To align the westbound approach and receiving lane, it is recommended to reconfigure the approach to have a left-through and right-turn auxiliary lane. Pavement lane markings and directional arrows should be installed on John Street (west side) at Barrie Street. On the south side of John Street parking should be restricted from Barrie Street to Allan Lane.

8.4.3 Cycling Facility

The Desirable Cycling Facility Pre-Selection Nomograph – Urban/ Suburban Context (Figure 5.5) in *OTM Book 18 (Cycling Facilities)* was used to pre-select the facility category. The assessment shown in **Appendix B** indicates that a designated operating space is the preferred level of separation, with bicycle lanes or buffered bicycle lanes as the desirable facility types.

The Roadway Characteristics Application Heuristics Summary (Table 5.3) in *OTM Book 18* provided the starting point for the detailed contextual evaluation. The assessment summarized in **Appendix B** indicates that bicycle lanes or buffered bicycle lanes would generally be suitable facility types for the study corridor based on the prevailing roadway characteristics.

Desired and Suggested Minimum Widths for Bicycle Lanes (Table 4.7) in *OTM Book 18* indicates the desired width for conventional bicycle lane is 1.8 m with a suggested minimum of 1.5 m. Given the existing 9.0 m cross-section, 1.5 m bike lanes and 3.0 m general purpose lanes could be accommodated on John Street.

TABLE 8.2: ASSESSMENT OF POTENTIAL TRAFFIC CALMING MEASURES FOR JOHN STREET

Measure	Considerations	Candidate
Education		
Flexible Bollards		✓
Pavement Markings		✓
Radar Message Board	Compliments other measures.	✓
Community Safety Zone	Must meet CSZ warrant.	▲
40 km/h Speed Limit Area	Current speed limit.	✖
Enforcement		
Automated Speed Enforcement	Must be in a Community Safety Zone/School Zone.	✖
Engineering – Horizontal Measures		
Chicane	Implement under special circumstances. Avoid driveways. Consider only if volume ≥ 750 vpd.	✖
Curb Extension		✓
Curb Radius Reduction		✓
On-Street Parking	Implement in accordance with Town by-laws.	▲
Raised Median Island	Implement where width permits and/or alongside reconstruction projects. Consider only on two-lane roads.	✖
Traffic Circle	Implement to address intersection conflicts (where space permits). Consider only if volume < 1,500 vpd.	✖
Engineering – Vertical Measures		
Raised Intersection	Site specific, considered as part of road reconstruction projects or new development.	▲
Raised Crosswalk	Implement to facilitate pedestrian connections. Consider only if sidewalk on at least one side of road.	▲
Speed Cushion		✓
Speed Hump		✓
Engineering – Obstruction Measure		
Directional Closure	Consider for volume reduction within the context of the network design. Consider only if volume on Local < 1,500 vpd or Collector 1,500 – 5,000 vpd.	✖
Diverter	Consider for volume reduction within the context of the network design. Consider only if volume < 5,000 vpd. Use with caution > 1,500 vpd.	✓
Full Closure	Consider for volume reduction within the context of the network design	✖

Legend: ✓ Preferred ▲ Possible Option ✖ Not Recommended

8.5 Proposed Plan

With the shortlist of candidate traffic calming measures identified, the plan development process moved into the conceptual plan preparation phase. Input received through the engagement program played an integral role in informing the traffic calming concepts, helping to clarify the neighbourhood traffic issues to be addressed, prioritize the list of candidate measures, and highlight potential implementation challenges.

8.5.1 Option 1

The proposed Option 1 John Street Traffic Calming Plan contained in **Appendix C** features the following measures. The measures were spaced to achieve an 85th percentile speed of 40 km/h based on the guidance detailed in the TAC *Canadian Guide to Traffic Calming*:

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes. With the existing pavement width of 9.0 m, the new cross-section will consist of 1.5 m urban shoulders/bicycle lanes and 3.0 m general purpose lanes.
3. Install pavement markings at the intersection with Barrie Street including left-through and right-turn lane markings and arrows on the east leg (John Street) and refresh stop bars and pedestrian crossings.
4. Install speed humps at:
    a. Between 169 and 165 John Street
    b. West of Essa Street
    c. Between 111 and 105 John Street
5. Construct Diverters diagonally from the southwest corner to the northeast corner to force drivers to make a 90 degree right-turn at:
    a. John Street and Nelson Street
    b. Scanlon Avenue and Nelson Street

Implementing the proposed plan for John Street will require the following changes to the roadway:

- Restricting parking from Barrie Street to Allan Lane.
- Installing signage at the entrances to the neighbourhood on Barrie Street (Scanlon Street and John Street), and Holland Street (Nelson Street and Colborne Street) informing motorists

of the diverters (i.e. not a through street, local traffic only, traffic calmed neighbourhood).

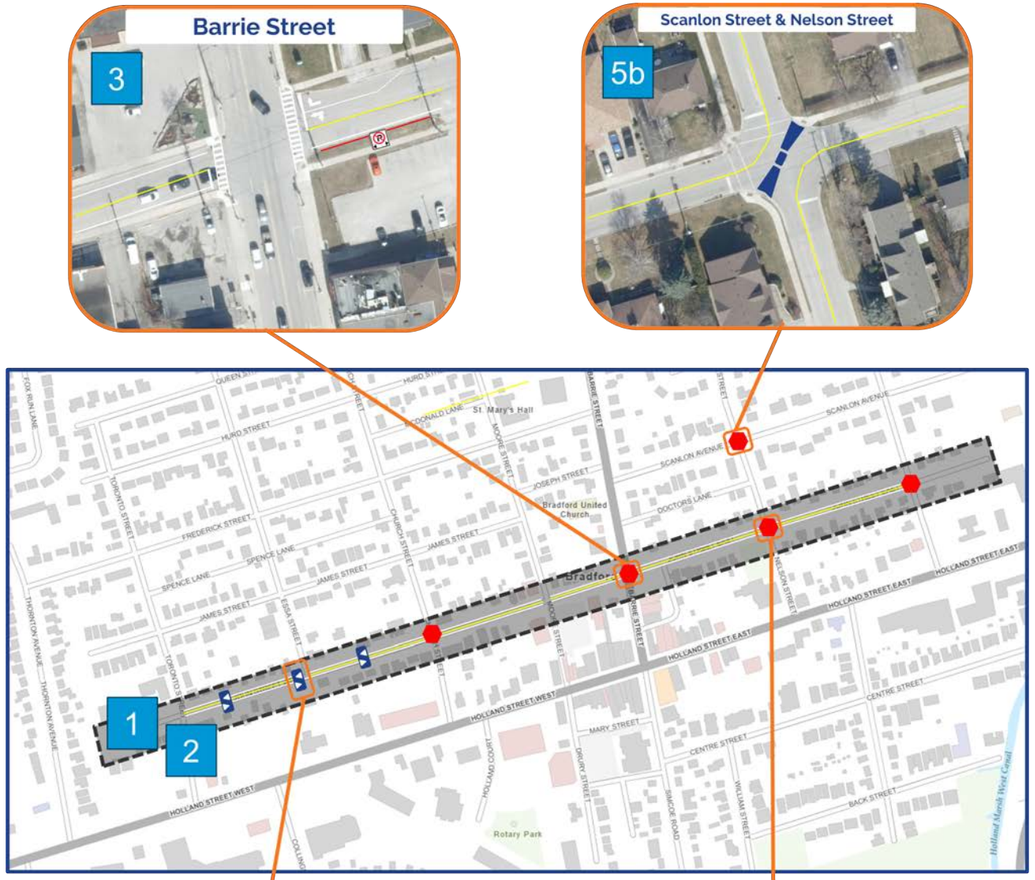
8.5.2 Option 2

Option 2 was not presented at Public Information Centre #2 and was developed in response to the mixed feedback received regarding the diverters proposed as part of Option 1.

The proposed Option 2 John Street Traffic Calming Plan contained in **Appendix C** features the following measures. The measures were spaced to achieve an 85th percentile speed of 40 km/h based on the guidance detailed in the TAC *Canadian Guide to Traffic Calming*:

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes. With the existing pavement width of 9.0 m, the new cross-section will consist of 1.5 m urban shoulders/bicycle lanes and 3.0 m general purpose lanes.
3. Install pavement markings at the intersection with Barrie Street including left-through and right-turn lane markings and arrows on the east leg (John Street) and refresh stop bars and pedestrian crossings.
4. Install speed humps at:
    a. Between 169 and 165 John Street
    b. West of Essa Street
    c. Between 111 and 105 John Street
    d. Between 33 and 43 John Street
    e. Between 79 and 85 John Street
    f. Between 67 Barrie Street and 22 Scanlon Avenue
    g. Between 86 and 88 Scanlon Avenue

Implementing the proposed plan for John Street will require restricting parking from Barrie Street to Allan Lane.



LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Diverter
- Speed Hump

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes.
3. Install pavement markings at the intersection with Barrie Street including left-through and right-turn lane markings and arrows on the east leg (John Street) and refresh stop bars and pedestrian crossings.
4. Install speed humps (3 locations).
5. Construct Diverters diagonally from the southwest corner to the northeast corner to force drivers to make a 90 degree right-turn at:
   a. John Street and Nelson Street
   b. Scanlon Avenue and Nelson Street

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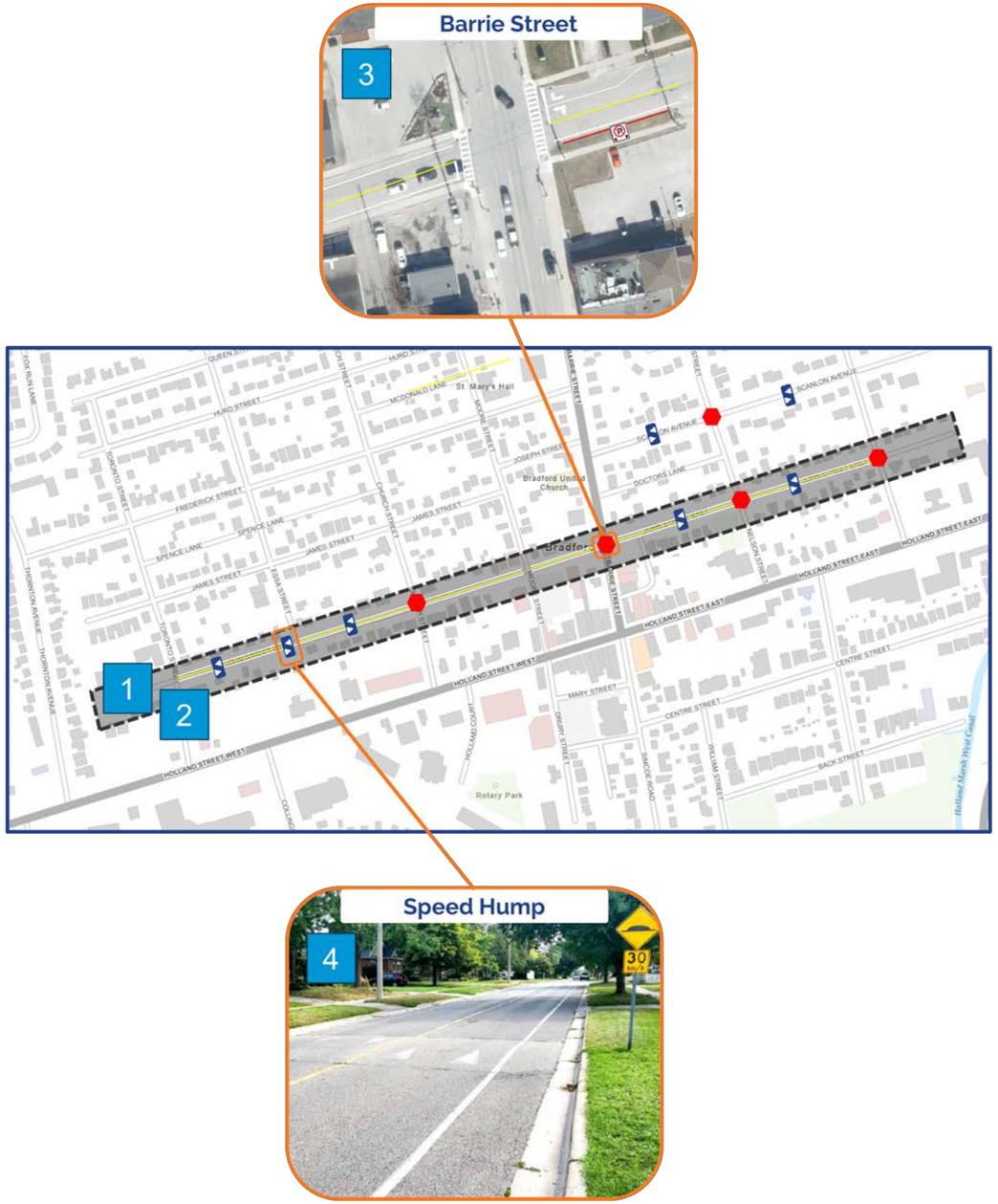
Option 1 John Street Proposed Traffic Calming Plan



LEGEND

- Study Area
- Centreline and Edgeline Pavement Markings
- Flexible Bollards
- Crosswalk Pavement Markings
- Speed Hump

NOTES

1. Install centre line pavement markings.
2. Install edge line pavement markings to create urban shoulders or bicycle lanes.
3. Install pavement markings at the intersection with Barrie Street including left-through and right-turn lane markings and arrows on the east leg (John Street) and refresh stop bars and pedestrian crossings.
4. Install speed humps (7 locations).

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Option 2 John Street Proposed Traffic Calming Plan

8.6 Neighbourhood Feedback

Many respondents supported the implementation of traffic calming measures and lower speeds in the study area. Residents provided the following feedback during the second round of community engagement:

- Strongly feels that speeding and acceleration should be addressed, particularly at Colborne Street and John Street.
- Supports Urban Shoulders, keeps on-street parking, contributes to traffic calming.
- Supports stop signs, speed cameras, and safety zone designation.
- Believes bike lanes are necessary and welcomes their addition.
- Requests stop signs and PXO at John St West and Essa Street due to blind crest.
- Opposes speed humps, prefers stop signs for better speed control.
- Reuqested all-way stop at John West and Essa Street. Town will conduct review following the TMS.

Several residents provided comments regarding the proposed diverters on John Street and Scanlon Street east of Barrie Street, noting congestion on Holland Street is causing the cut-through issue. However, without upgrades to the arterial network, congestion on Holland Street will only increase with the diverters. There is a need to maintain access on John Street and another alternative to slow traffic in the neighbourhood may be better received by residents.

- Concern that traffic diverters could interfere with emergency service response times, particularly because of the high number of elderly residents and the methadone clinic in the area.
- Curious about how this would affect navigation out of the area.
- Belief that motorists will find ways around diverters due to the heavy volume of traffic on Holland Street.
- Notes John Street is essential for emergency access and an alternative to Holland Street congestion.
- Implies diverters are unnecessary; proposes resolving congestion by removing street parking from Holland to keep traffic flowing.

- Suggests reconfiguring parking policies (off-street lots) as a better alternative to traffic diversion; identifies Holland Street congestion as the core issue.
- Accepts diverters on John Street if there is no better alternative; suggests similar treatment (or dead-ending) John West at Essa Street.

9 Recommendations

9.1 Traffic Calming Plans

Despite some of the apparent adverse responses, the majority of feedback received indicated most residents supported implementation of the proposed Traffic Calming Plans.

After reviewing the feedback received and discussions with Town staff, the urban shoulders were selected as the preferred treatment instead of bicycle lanes on Langford Boulevard, Miller Park Avenue, Summerlyn Trail and John Street. Urban shoulders provide a traffic calming effect while maintaining the existing on-street parking provisions. A cyclist may choose to ride in the urban shoulder instead of riding in the vehicular shared lane. However, urban shoulders are not an alternative to bicycle lanes. The urban shoulders will be designed based on the minimum bicycle lane requirements, if such time in the future the Town decides to designate the urban shoulders as bicycle lanes.

Two traffic calming plan options were developed for John Street – with and without access restrictions. Selection of the preferred traffic calming plan should be done in conjunction with the proposed Holland Street reconstruction project.

It recommended that the Traffic Calming Plans contained in **Appendix D** be presented to Town Council for approval and implementation.

9.2 Implementation

If Town Council endorses the recommended Traffic Calming Plans, it is recommended that the Town monitor the effectiveness of the installations and make minor refinements if needed. The modifications should not alter the intent or key features of the approved Traffic Calming Plan unless a significant operational and/or safety concern arises following implementation. Pre- and post-implementation monitoring activities should include speed surveys, traffic counts, origin-destination studies (to assess shortcutting traffic), and collision data.

9.3 Cost Estimates

The cost to install and maintain the traffic calming plans is subject to timing of implementation and current market rates. The Town will

prepare detailed costing at such time. The Town's TMS provides cost estimates for measures contained in the Traffic Calming Plans.

Due to budget constraints, the Town may decide to implement the traffic calming plans for each study area, or specific traffic calming measures at different times. Implementation of the plans should be based on available funding as well as the relative priority ranking of each roadway segment (detailed in the Speed and Volume Data table for each study area).

While it is possible to implement traffic calming measures at different times, the measures were selected and located to work in conjunction with each other. The plans may not be as effective if not all elements or only sections of the plan are in place.

Appendix A

Engagement Summary

Welcome

Town of Bradford West Gwillimbury Traffic Calming Program

Public Information Centre 1
Community Corner
BWG Leisure Centre
471 West Park Avenue
March 20, 2025
4:00 PM to 8:00 PM

Please pick up a Comment Sheet!

We encourage you to use the sheet provided to record any comments on the material presented today.

Questions? **Feel free to ask any member of our project team in attendance. We are happy to assist!**

Bradford West Gwillimbury

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Study Overview

Background

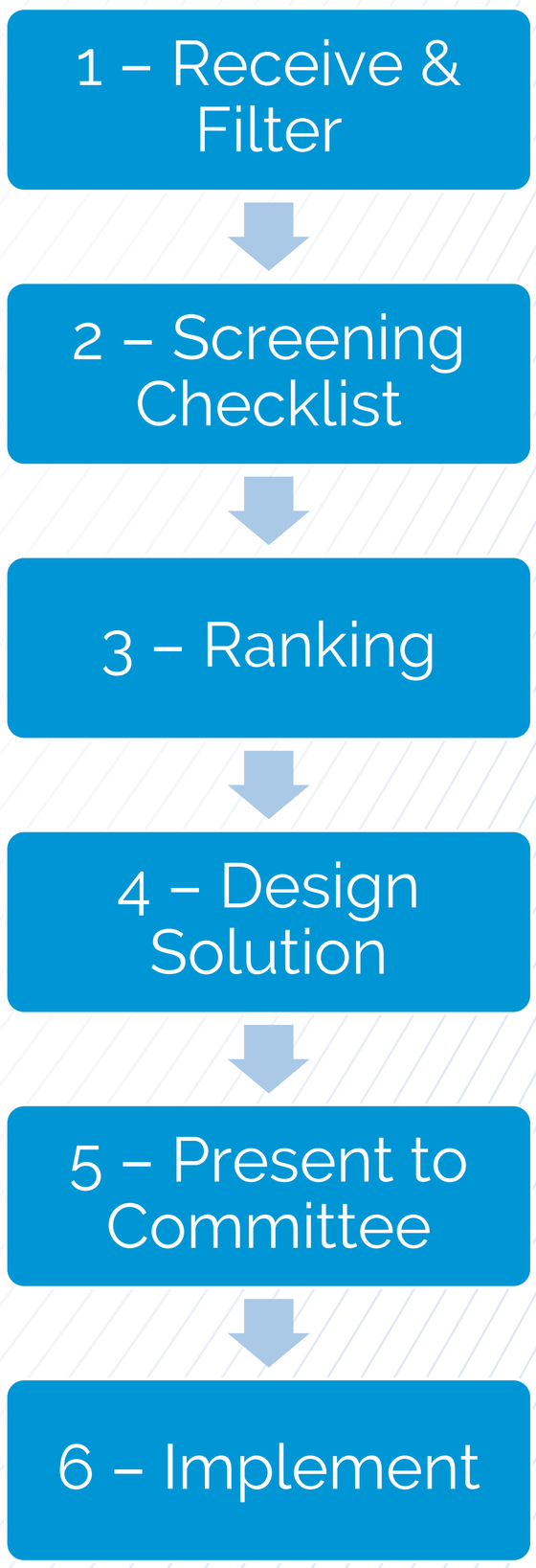
The Town of Bradford West Gwillimbury undertaking a holistic review of Langford Boulevard, Miller Park Avenue, West Park Avenue, Summerlyn Trail, and John Street, in response to identified speeding concerns.

The goal of the study is to develop traffic calming plans for each street that focus on reducing traffic on local neighbourhood roads, improving intersections, and reducing speeds to improve a sense of place for people to walk, roll, play, shop alongside motor vehicles.

Traffic Mitigation Strategy

The Town's Traffic Mitigation Strategy (TMS) provides a data-oriented technical process to respond to traffic safety concerns addressable via traffic calming solutions. The process involves six stages, detailed in the figure to the right.

The Town conducted an extensive data collection program in 2024 and completed Stage 2 and 3, identifying the study area roads for traffic calming. This study will focus on designing traffic calming plans (Stage 4) and obtaining approval for implementation (Stage 5).



Traffic Calming Overview

What is Traffic Calming?

Traffic calming is a set of measures used to "calm" traffic. These actions can ease traffic concerns through physical changes to the street and/or behaviour change. The goal of traffic calming is to create safer streets for all users. This includes pedestrians, people who use mobility devices, cyclists, and motorists.

The Town's Traffic Calming Toolbox identifies the following potential measures for installation on Town roads:

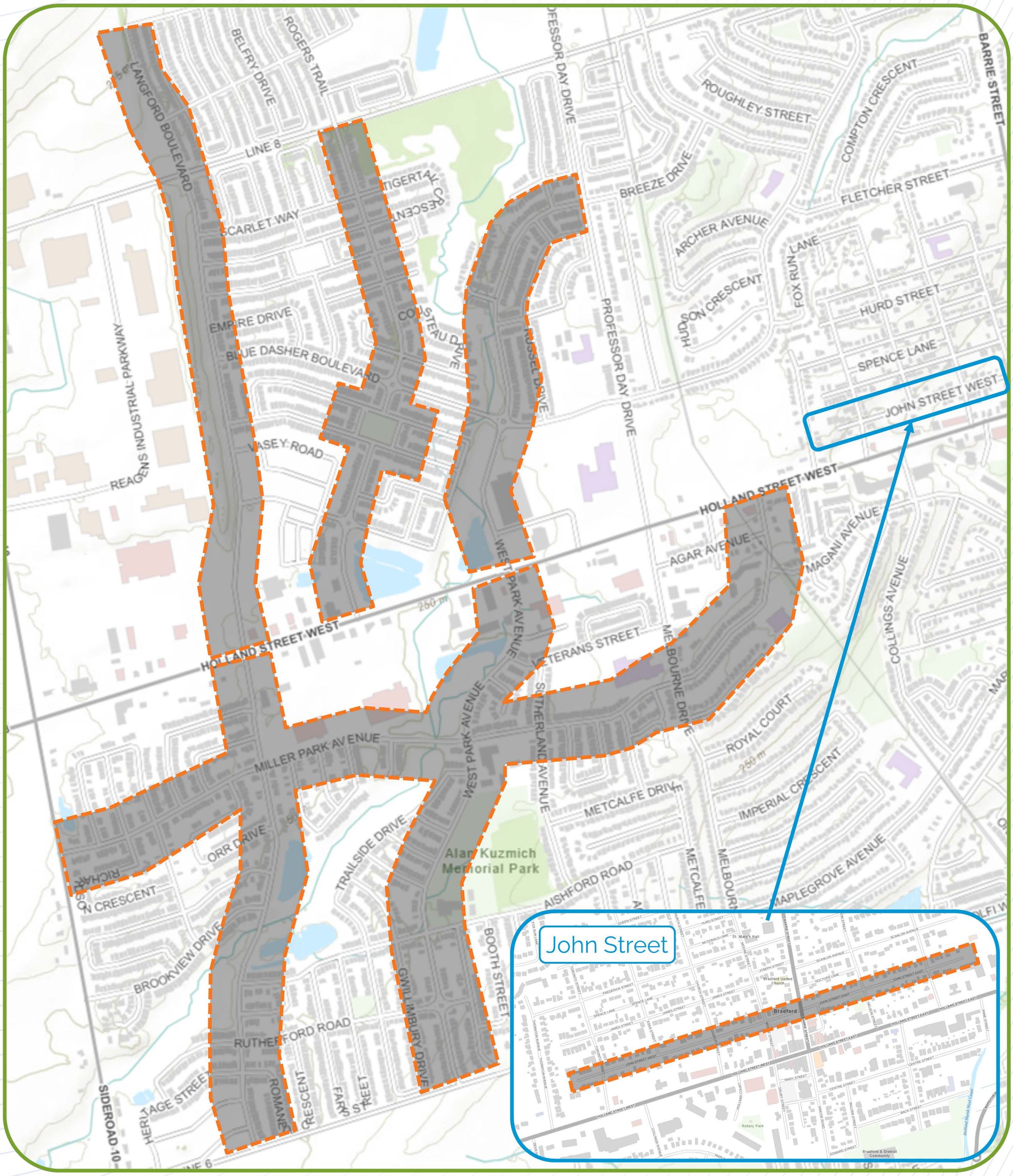
- **Education – Flexible bollards, pavement markings, radar message boards, Community Safety Zone, 40 km/h area speed limit**
- **Enforcement – Automated Speed Enforcement (ASE)**
- **Engineering**
  - **Horizontal Deflection – Chicane, curb extension, curb radius reduction, on-street parking, raised median islands, traffic circle**
  - **Vertical Deflection –Raised intersection, speed cushion, speed hump**
  - **Obstruction – Directional closure, diverter, full closure**

What is not a Traffic Calming Measure?

Traffic control devices (stop signs, pedestrian crossings and traffic signals) are primarily installed to assign right-of-way and are not recommended for traffic calming purposes.

Have your say

Place a dot within the highlighted areas on the map to identify locations where you have a traffic concern.



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Langford Boulevard
North of Holland Street

Study Area Highlights

The Langford Boulevard Study Area extends from Crossland Boulevard in the north to Line 6 in the south. Langford Boulevard is classified as a Collector road, with a posted speed limit of 40 km/h.

North of Holland Street

Parking is prohibited along the west side of road from Crossland Boulevard to Line 8, on the east side from Line 8 to Holland Street and on both sides 335 metres north to Holland Street.

The Town recently installed an ASE camera between Blue Dasher Boulevard and Meadowhawk Trail.

The coloured lines refer to the traffic data for the segment detailed on Board 7.

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Langford Boulevard
South of Holland Street

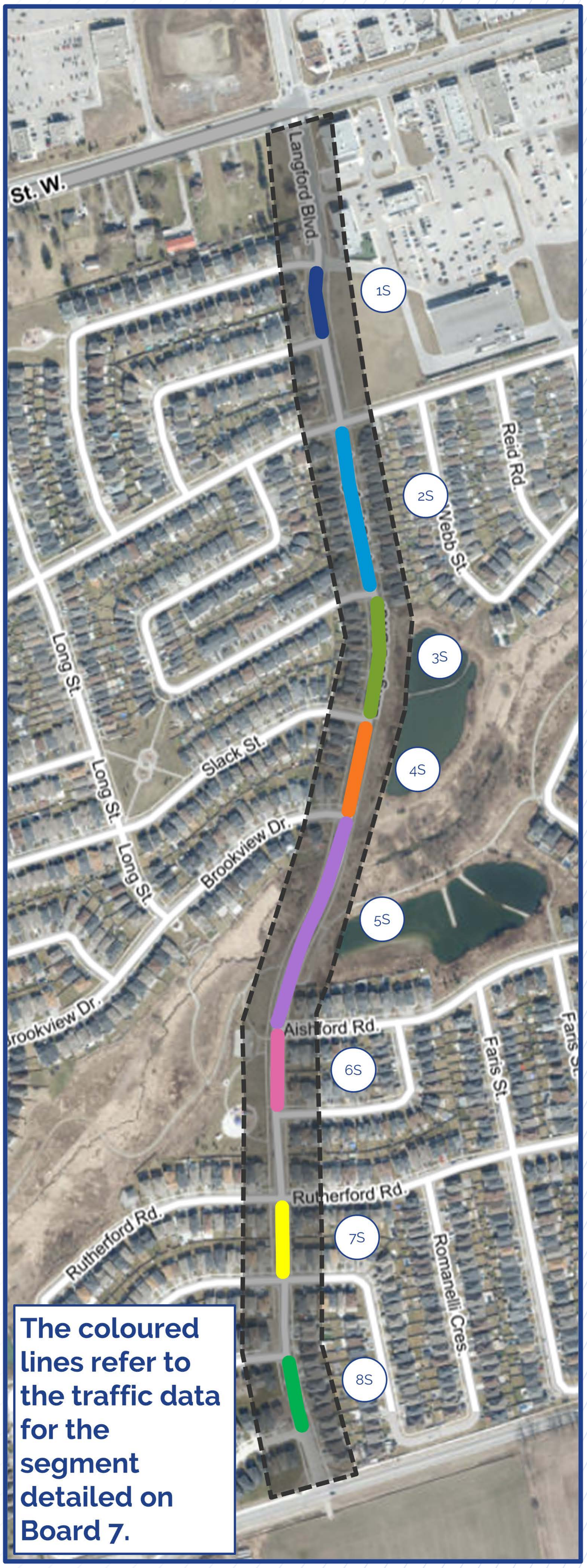
Study Area Highlights

South of Holland Street

Parking is prohibited along both sides of the road from Holland Street to Miller Park Avenue, the west side from Miller Park Avenue to Brookview Drive, and the east side from Brookview Drive to Line 8. BWG Transit Route 2 Around Town operates between Mooney Street and Miller Park Avenue.

A speed hump is installed between Mooney Street and Weir Street, with flexible bollards from May to November. South Simcoe Police installed a speed warning camera between Brookview Drive and Aishford Road.

The Holland Street plazas, and Constable Devon Northrup Memorial Park are key destinations in the study area.



Bradford West Gwillimbury

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Langford Boulevard

Traffic Data

Langford Boulevard has an average daily volume of 3,400 vehicles and an average 85th percentile speed of 50 km/h, 10 km/h over the posted speed limit. The 85th percentile speed is the speed at which 85% of drivers are traveling at or below. It is perceived as the speed that drivers are comfortable with on a given road.

The table below details the 85th percentile speed and average daily volume for segments along Langford Boulevard.

#	North	South	85th % Speed (km/h)	Average Daily Volume
1N	Vipond Way	Line 8	48	2,200
2N	Line 8	Scarlet Way	49	2,565
3N	Wandering Glider Trail	Empire Drive	53	3,074
4N	Blue Dasher Boulevard	Meadowhawk Trail	54	4,235
5N	Vasey Road	Montrose Boulevard	55	4,487
1S	Mooney Street	Weir Street	43	5,502
2S	Miller Park Avenue	Orr Drive	49	3,733
3S	Orr Drive	Slack Street	53	3,492
4S	Slack Street	Brookview Drive	47	3,472
5S	Brookview Drive	Aishford Road	58	3,499
6S	Aishford Road	Liberty Crescent	48	2,841
7S	Rutherford Road	Heritage Street (north)	42	2,504
8S	Mac Campbell Way	Heritage Street (south)	51	2,534

Have your say

What are your traffic concerns and what types of traffic calming measures would you like to see implemented?

Langford Boulevard

Miller Park Avenue

Miller Park Avenue
West of West Park Avenue

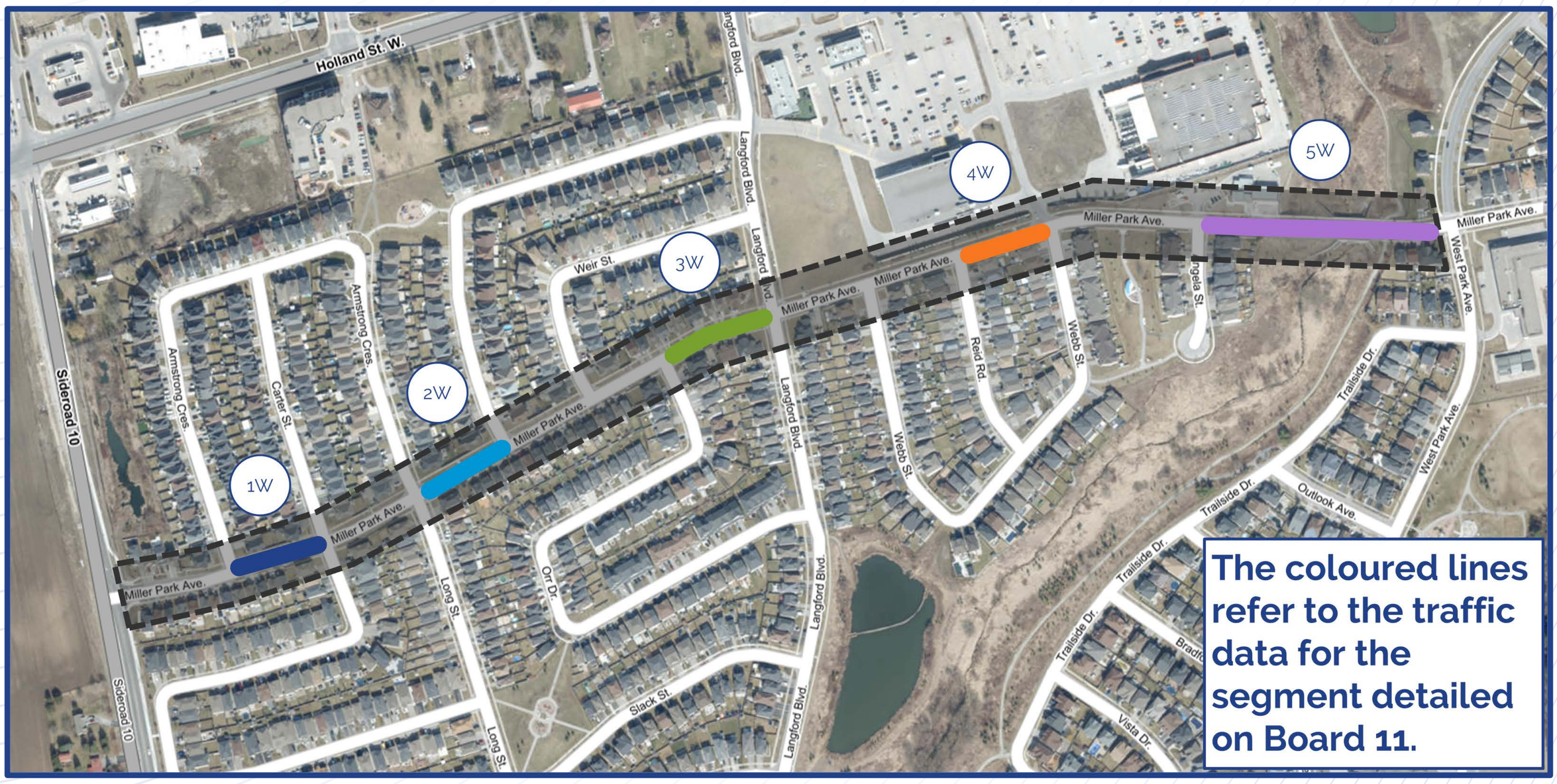
Study Area Highlights

The Miller Park Avenue Study Area extends from Sideroad 10 in the west to Holland Street in the east. Miller Park Avenue is classified as a Collector road, with a posted speed limit of 40 km/h. BWG Transit operates Route 2 between Sideroad 10 and West Park Avenue, and Route 1 between Melbourne Drive and Holland Street.

West of West Park Avenue

Parking is prohibited along both sides of the road from Sideroad 10 to Carter Street, and the north side from Carter Street to West Park Avenue.

Flexible bollards are installed between Armstrong Street (west) and Carter Street. An ASE camera was previously installed between Angela Street and West Park Avenue as part of the Town's ASE Pilot Project.



Miller Park Avenue
East of West Park Avenue

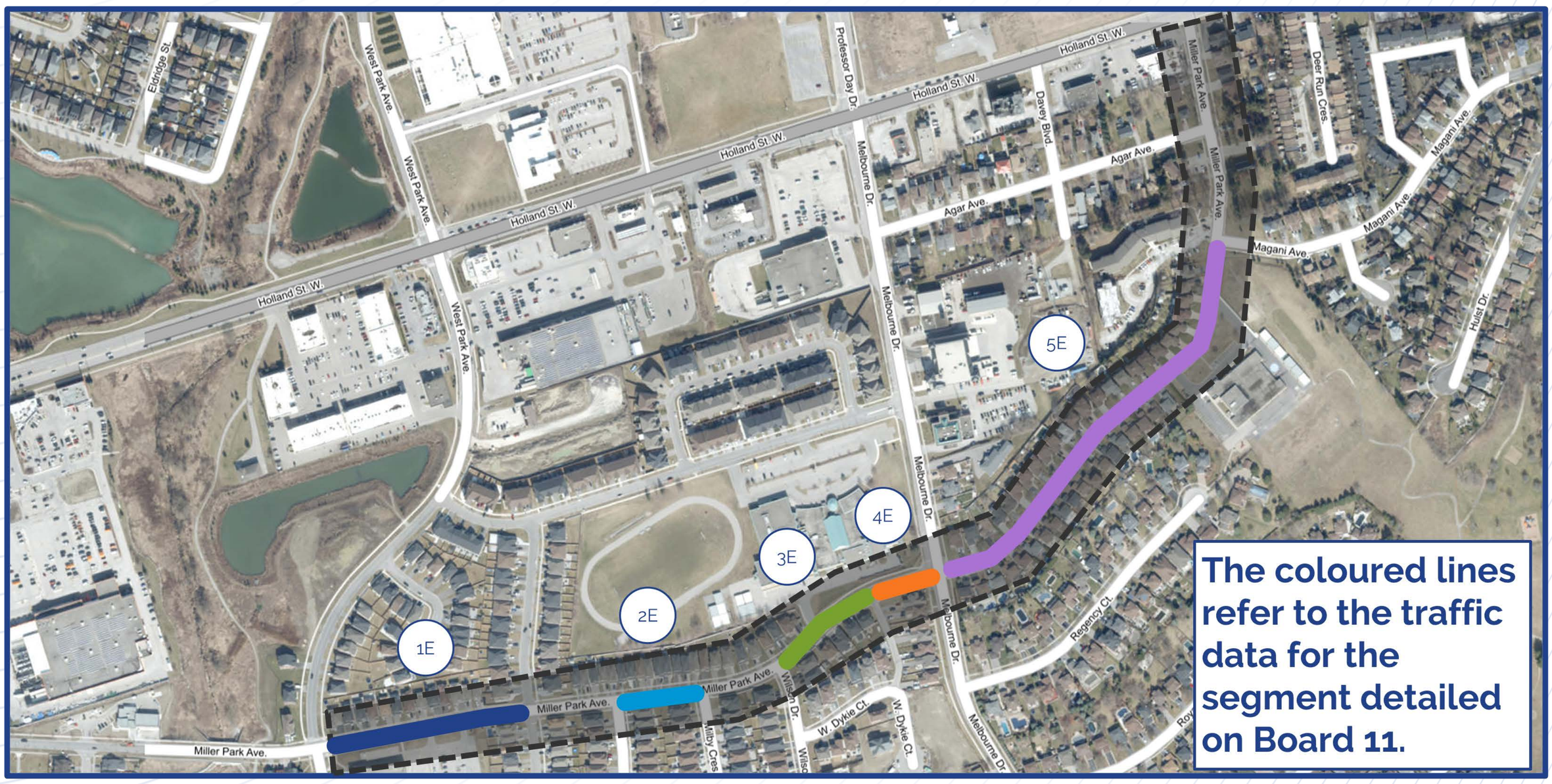
Study Area Highlights

East of West Park Avenue

Parking is prohibited along the north side of the road from West Park Avenue to Magani Avenue and on both sides from Wilson Drive to Melbourne Drive. Between Magani Avenue and Agar Avenue, parking is prohibited on the east side from the 1st to 15th and the west side from the 16th to the end of the month.

Two speed humps are installed between West Park Avenue and Sutherland Avenue. The Town recently installed an ASE camera between Milby Crescent (east) and Wilson Drive.

The Holland Street plaza, Angela Parkette, Chris Hadfield Public School, Holy Trinity Catholic High School and St. Jean De Brebeuf Separate School are key destinations in the study area.



Miller Park Avenue

Traffic Data

Miller Park Avenue has an average daily volume of 3,550 vehicles and an average 85th percentile speed of 50 km/h, 10 km/h over the posted speed limit. The 85th percentile speed is the speed at which 85% of drivers are traveling at or below. It is perceived as the speed that drivers are comfortable with on a given road.

The table below details the 85th percentile speed and average daily volume for segments along Miller Park Avenue.

#	West	East	85th % Speed (km/h)	Average Daily Volume
1W	Armstrong Crescent (west)	Carter Street	53	2,458
2W	Armstrong Crescent (east)	Mooney Street	51	2,980
3W	Orr Drive	Langford Boulevard	47	3,188
4W	Reid Road	Webb Street (east)	53	4,376
5W	Angela Street	West Park Avenue	56	5,789
1E	West Park Avenue	Sutherland Avenue	38	3,701
2E	Milby Crescent (west)	Milby Crescent (east)	49	3,450
3E	Wilson Drive	Boyd Lane	52	3,762
4E	Boyd Lane	Melbourne Drive	52	3,953
5E	Melbourne Drive	Magani Avenue	48	2,034

West Park Avenue
North of Holland Street

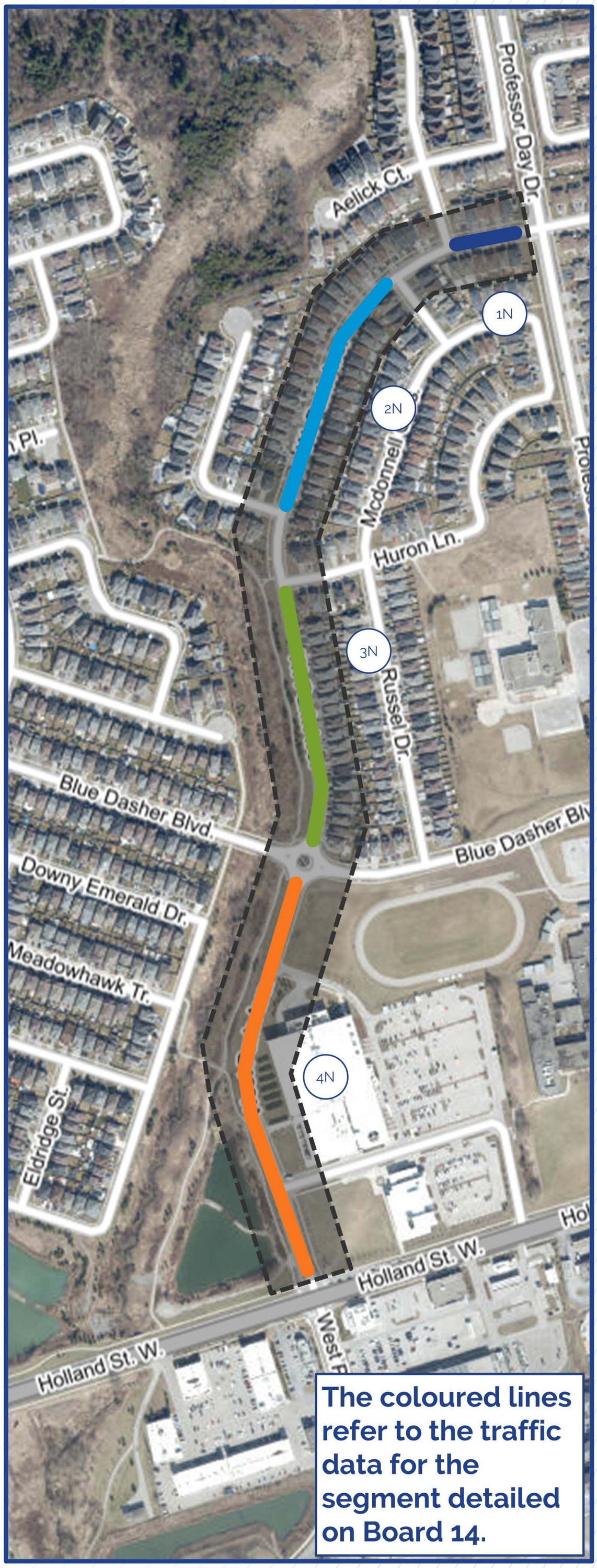
Study Area Highlights

The West Park Avenue Study Area extends from Professor Day Drive in the north to Line 6 in the south. West Park Avenue is classified as a Collector road, with a posted speed limit of 40 km/h.

North of Holland Street

Parking is prohibited along the east side of road from Professor Day Drive to Blue Dasher Boulevard and on both sides from Blue Dasher Boulevard to Holland Street.

Two speed humps and a set of flexible bollards are installed between Wilke Trail and Blue Dasher Boulevard. An ASE camera was previously installed between Blue Dasher Boulevard and Brian Collier Way as part of the Town's ASE Pilot Project.



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West Park Avenue
South of Holland Avenue

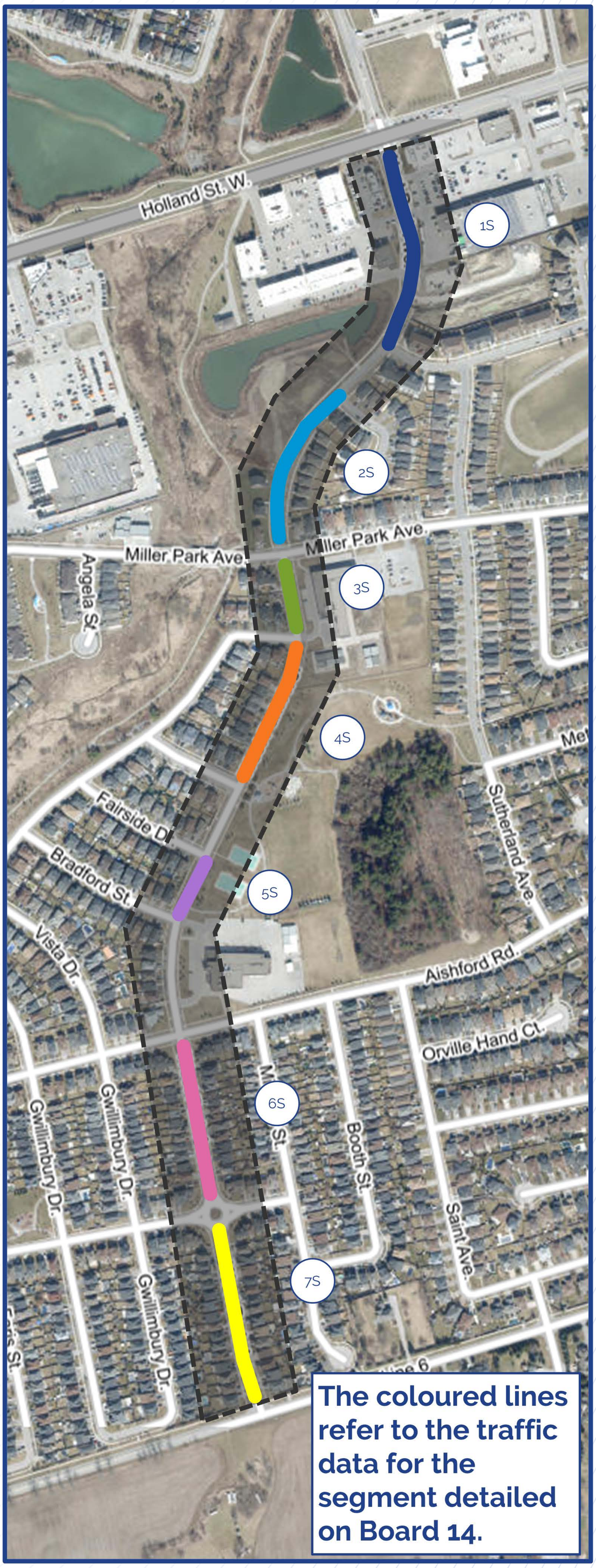
Study Area Highlights

South of Holland Street

Parking is prohibited along both sides of the road from Holland Street to Veterans Street, on the east side from Veterans Street to Miller Park Avenue and Rutherford Road to Line 6, and on the west side from Miller Park Avenue to Rutherford Road.

Two sets of flexible bollards will be installed between Memorial Court and Miller Park Avenue (spring 2025).

Fieldcrest Elementary School, Bradford District High School, BWG Leisure Centre, Holland Street plazas, BWG Library, Holy Trinity Catholic High School, Chris Hadfield Public School, Alan Kuzmich Park, and St. Angela Merici Catholic School are key destinations in the study area.



West Park Avenue

Traffic Data

West Park Avenue has an average daily volume of 3,400 vehicles and an average 85th percentile speed of 49 km/h, 9 km/h over the posted speed limit. The 85th percentile speed is the speed at which 85% of drivers are traveling at or below. It is perceived as the speed that drivers are comfortable with on a given road.

The table below details the 85th percentile speed and average daily volume for segments along West Park Avenue.

#	North	South	85th % Speed (km/h)	Average Daily Volume
1N	Professor Day Drive	Collis Drive	47	1,887
2N	Wilke Trail	Waterton Way	42	1,772
3N	Huron Lane	Blue Dasher Boulevard	47	2,342
4N	Blue Dasher Boulevard	Holland Street	55	4,596
1S	Holland Street	Veterans Street	49	5,682
2S	Memorial Court	Miller Park Avenue	56	4,654
3S	Miller Park Avenue	Trailside Drive	46	4,094
4S	Trailside Drive	Outlook Avenue	49	3,966
5S	Fairside Drive	Bradford Street	49	3,794
6S	Aishford Road	Rutherford Road	49	2,222
7S	Rutherford Road	Line 6	53	2,503

Have your say

What are your traffic concerns and what types of traffic calming measures would you like to see implemented?

West Park Avenue

Summerlyn Trail

Summerlyn Trail

Study Area Highlights

The Summerlyn Trail Study Area extends from Line 8 in the north to Holland Street in the south. Summerlyn Trail is classified as a Local road, with a posted speed limit of 40 km/h.

Parking is prohibited along the west side of road, and permitted on the east side along select blocks. BWG Transit Route 2 Around Town operates on Summerlyn Trail.

The Town installed two speed humps on Summerlyn Trail between Line 8 and Citrine Drive/Tigertail Crescent.

Summerlyn Parkette and the Holland Street plazas are key destinations in the study area.

Summerlyn Trail

Traffic Data

Summerlyn Trail has an average daily volume of 2,450 vehicles and an average 85th percentile speed of 46 km/h, 6 km/h over the posted speed limit. The 85th percentile speed is the speed at which 85% of drivers are traveling at or below. It is perceived as the speed that drivers are comfortable with on a given road.

The table below details the 85th percentile speed and average daily volume for segments along Summerlyn Trail.

#	North	South	85th % Speed (km/h)	Average Daily Volume
1	Line 8	Tigertail Crescent	41	2,100
2	Tigertail Crescent	Green Darner Trail	44	2,000
3	Acorn Lane	Cousteau Drive	49	2,250
4	Amberwing Landing	Blue Dasher Boulevard	45	2,900
5	Meadowhawk Trail	Corwin Drive	48	1,950
6	Downy Emerald Drive	Commercial Driveway	47	2,850

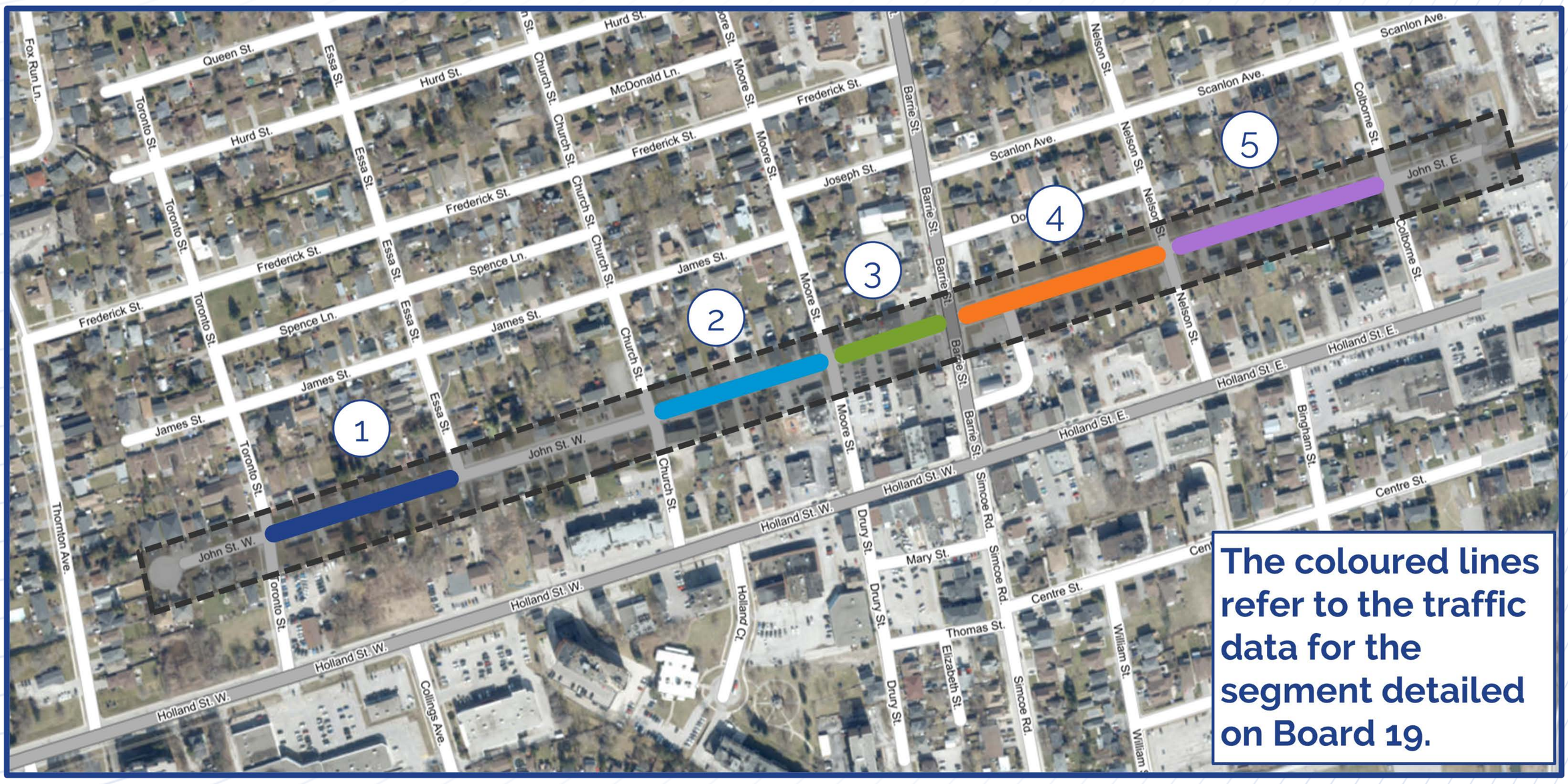
John Street

Study Area Highlights

The John Street Study Area extends from Toronto Street in the west to Colborne Street in the east. John Street is classified as a Local road, with a posted speed limit of 40 km/h.

Parking is prohibited along the south side of the road between Church Street and Barrie Street . From Barrie Street to Nelson Street, parking on the south side is restricted to 60 minutes, 9:00 AM to 6:00 PM Monday to Friday.

John Street is within the Holland Street Reconstruction project area. The section from Church Street to Allan Lane is within the Downtown Bradford Designation Area, with several businesses fronting the road. Additional parking for downtown patrons is accessed via John Street.



John Street

Traffic Data

John Street has an average daily volume of 2,500 vehicles and an average 85th percentile speed of 47 km/h, 7 km/h over the posted speed limit. The 85th percentile speed is the speed at which 85% of drivers are traveling at or below. It is perceived as the speed that drivers are comfortable with on a given road.

The table below details the 85th percentile speed and average daily volume for segments along John Street.

#	West	East	85th % Speed (km/h)	Average Daily Volume
1	Toronto Street	Essa Street	48	1,250
2	Church Street	Moore Street	47	2,550
3	Moore Street	Barrie Street	46	2,600
4	Barrie Street	Nelson Street	48	3,150
5	Nelson Street	Colborne Street	48	2,800

What are your traffic concerns and what types of traffic calming measures would you like to see implemented?

Next Steps

After this meeting, we will:

- Accept further feedback until April 6, 2025
- Present existing conditions and preliminary feedback to the Strategic Initiatives Committee on March 25, 2025
- Review and analyze resident input
- Draft traffic calming plans for each study area
- Present draft plans at Public Information Centre #2 on April 24, 2025 at the BWG Leisure Centre
- Finalize and present traffic calming plans to Strategic Initiatives Committee for approval

Please provide us your feedback!

If you have any questions or comments, visit the project webpage www.townofbwg.com/TrafficCalming or contact:

Paul Dubniak
Traffic Technologist
Community Services
Town of Bradford West Gwillimbury
(905) 775-5369 ext. 5206
pdubniak@townofbwg.com

Heather Hector, P.Eng., PTP
Consultant Project Manager
Paradigm Transportation Solutions Limited
(416) 479-9684 ext. 502
hhector@ptsl.com

Thank you for attending! Please return your comment sheets.

With the exception of personal information, all comments received will become part of the public record, in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*.

Welcome

Town of Bradford West Gwillimbury Traffic Calming Program

Public Information Centre 2
Community Corner
BWG Leisure Centre
471 West Park Avenue
April 24, 2025
4:00 PM to 8:00 PM

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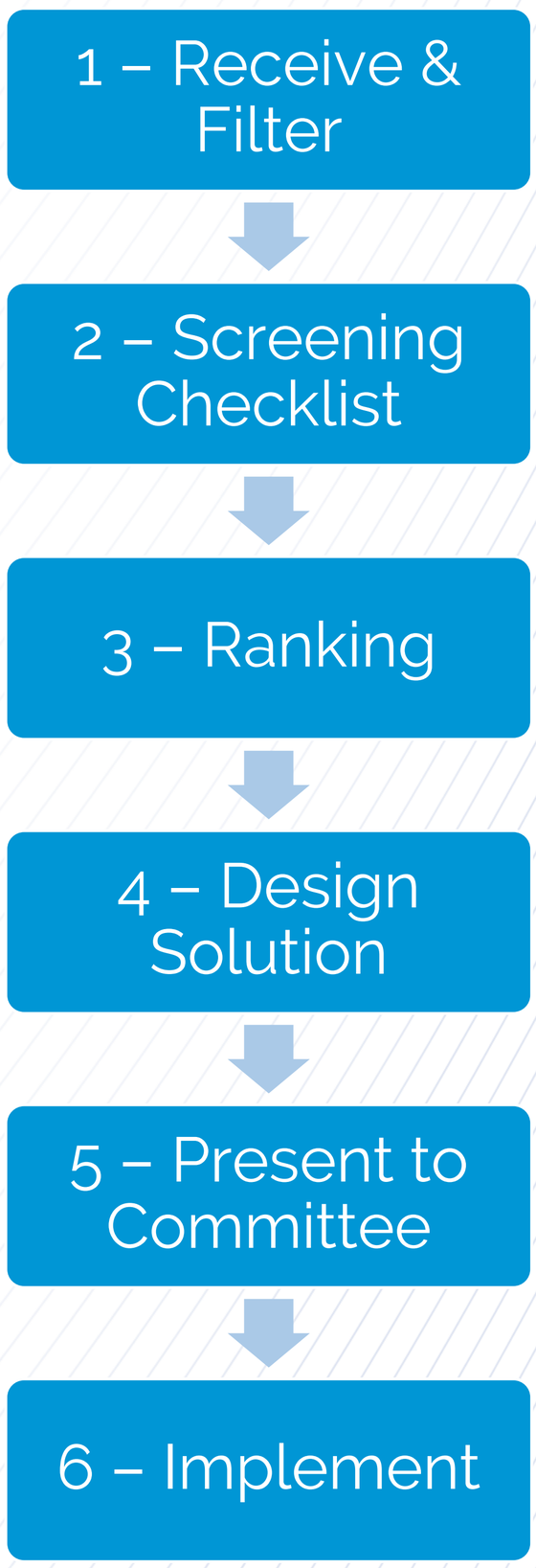


Study Process

What We Heard

Public Information Centre (PIC) #1 was held on March 20, 2025 to present existing conditions and gather resident feedback. Attendees raised their concerns about speeding vehicles, need for additional pedestrian crossings, and intersection improvements.

Developing Traffic Calming Plan

Traffic Calming plans for the study areas were developed using the following process:

1. **Consider the Proposed Cycling Routes in the Town of Bradford West Gwillimbury Transportation Master Plan and confirm cycling facility type.**

2. **Address intersection concerns and review mid-block pedestrian crossing opportunities (see Board 4).**

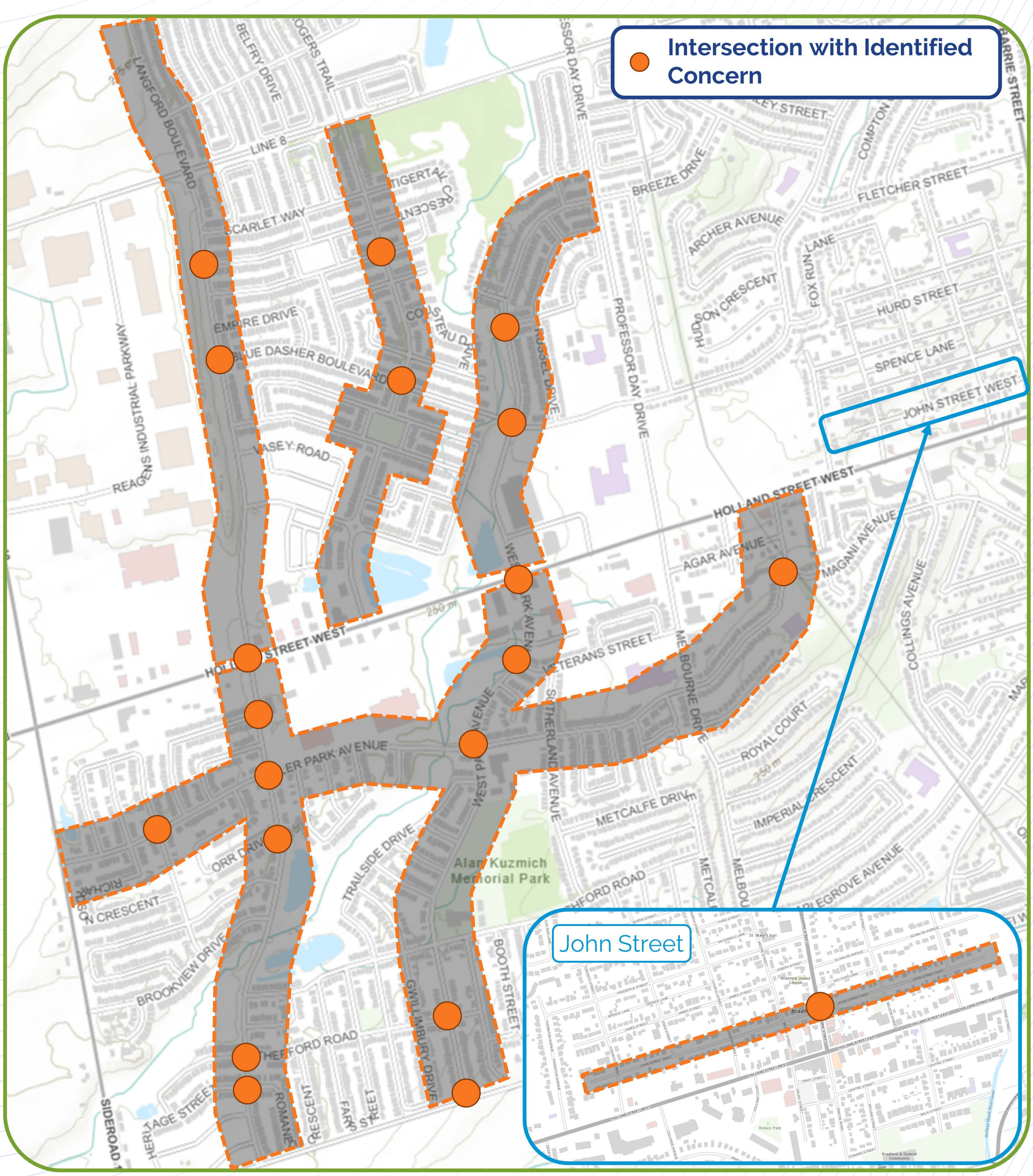
3. **Assess areas with excessive speeding (see Board 5) and consider applicable traffic calming measures.**

4. **Reassess existing traffic calming measures (including Automated Speed Enforcement) already installed.**

5. **Consider additional traffic calming measures at neighbourhood entrances and throughout the study area to maintain lower speeds.**

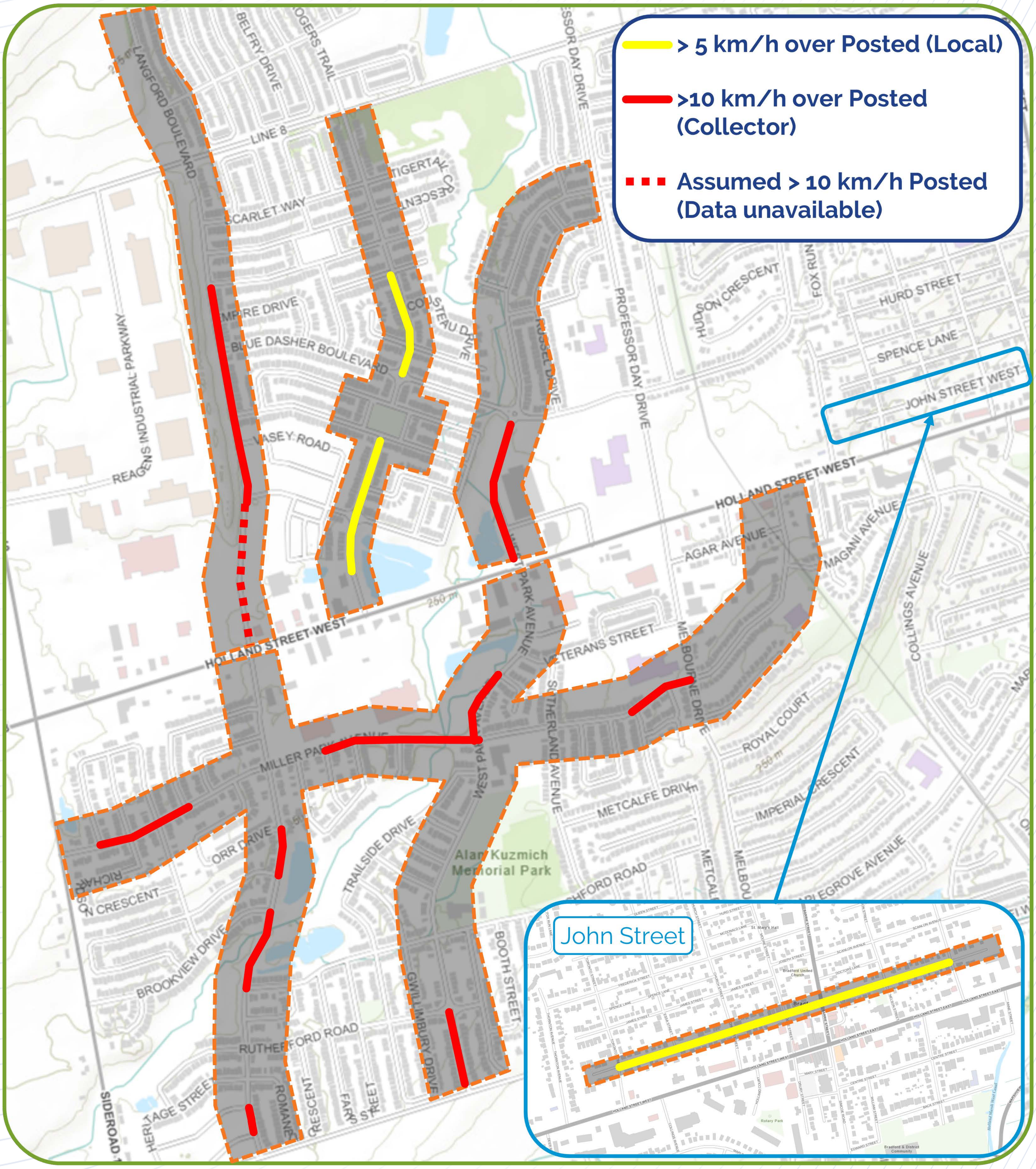
Intersection Concerns

The map below depicts intersections where residents, Councillors and Town staff identified concerns.



Excessive Speeding

The map below depicts road segments where excessive speeding was observed, defined as greater than 5 km/h (Local) or 10 km/h (Collector) over the posted speed limit.



Traffic Calming Overview

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The Town's Traffic Calming Toolbox identifies the following potential measures for installation on Town roads:

- **Education – Flexible bollards, pavement markings, radar message boards, Community Safety Zone, 40 km/h area speed limit**
- **Enforcement – Automated Speed Enforcement (ASE)**
- **Engineering**
  - **Horizontal Deflection – Chicane, curb extension, curb radius reduction, on-street parking, raised median islands, traffic circle**
  - **Vertical Deflection –Raised intersection, speed cushion, speed hump**
  - **Obstruction – Directional closure, diverter, full closure**

What is not a Traffic Calming Measure?

Traffic control devices (stop signs, pedestrian crossings and traffic signals) are primarily installed to assign right-of-way and are not recommended for traffic calming purposes.

Traffic Calming Measures

Flexible Bollards are a rubber post placed in the centre of a road to make drivers uncomfortable travelling at high speeds due to less space on the road. Installed seasonally (May to October)

Flexible Bollards

Pavement Markings are used to draw attention to a specific area or information. Centrelines and pedestrian crosswalks are all types of pavement markings.

Ladder Crosswalk Markings

Automated Speed Enforcement (ASE) uses a camera and speed measurement device to detect vehicles travelling above the posted speed limit. Tickets are mailed to the address corresponding to the vehicle's license plate.

Centreline and Edgeline Markings

Speed Watch cameras capture vehicles travelling above the posted speed limit. The vehicle owner is sent a warning letter.

Pedestrian Crossover (PXO) is a portion of roadway distinctly indicated for pedestrian crossings by signage and pavement markings.

Pedestrian Crossover (PXO)

Bradford West Gwillimbury

paradigm TRANSPORTATION SOLUTIONS LIMITED

Traffic Calming Measures

Curb Extension is a horizontal intrusion into the road resulting in a narrow section. The narrowed road causes a driver to feel confined, resulting in lower speeds.

Curb Extension

Curb Radius Reduction is an intersection corner with a reduced radius, which slows down right-turning vehicles. This reduces crossing distances for pedestrians and improves visibility of pedestrians.

Curb Radius Reduction

Raised crossing is a marked pedestrian crosswalk constructed at a higher elevation than the adjacent roadway. This reduces vehicle speeds, improves pedestrian visibility and reduces pedestrian-vehicle conflicts.

Raised Crossing

Speed humps are road features designed to slow down vehicles by creating a raised section of pavement across the roadway.

Speed Hump

Traffic Calming Measures

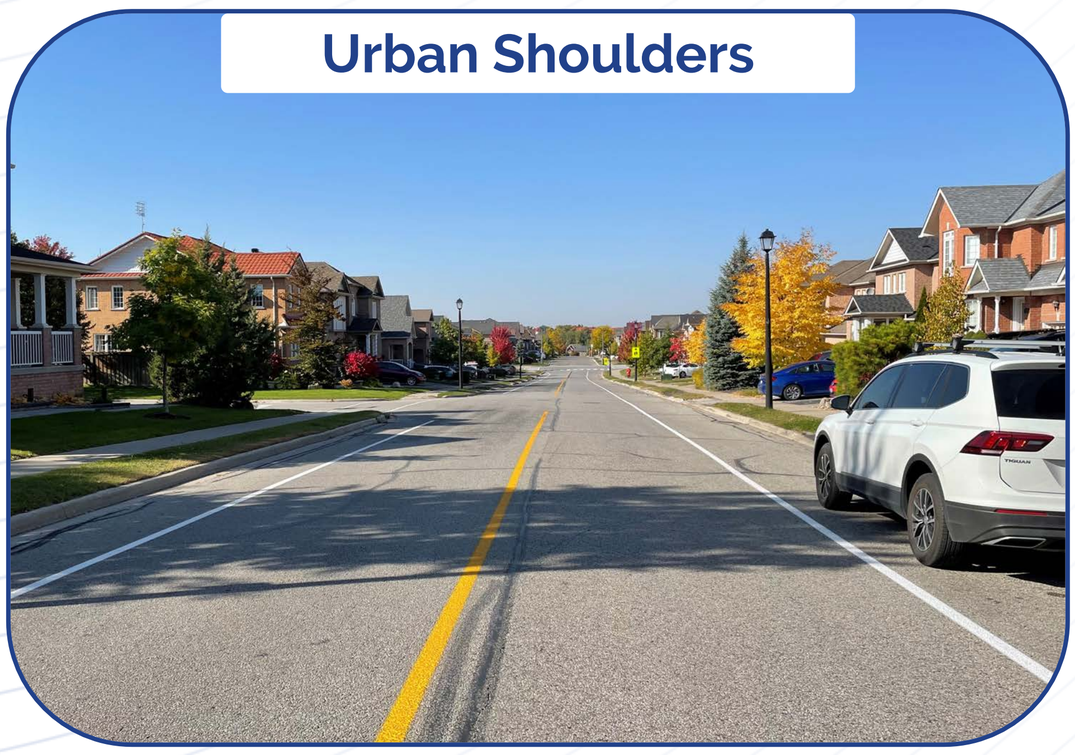
Lane Narrowing is the process of reducing lane widths using pavement markings or other features. The intention is for drivers to perceive the roadway to be less comfortable at higher speeds due to the narrowing of the lanes and ultimately reduce operating speeds.

Urban Shoulder is a space that consists of a white line painted anywhere from 1.0 to 2.5 metres away from a curb to create a visual "road diet". All parking restrictions remain as they were, and any on-street parking continues to be permitted after the lines are painted.

A cyclist may choose to ride in the urban shoulder instead of riding in the vehicular shared lane. An urban shoulder is not an alternative to a dedicated cycling facility, but a traffic calming measure to slow down vehicular traffic.

Bike Lanes are a portion of the road designated by pavement markings and signage for the exclusive use by people riding bikes. On-street parking is removed to permit bike lanes.

Urban Shoulders



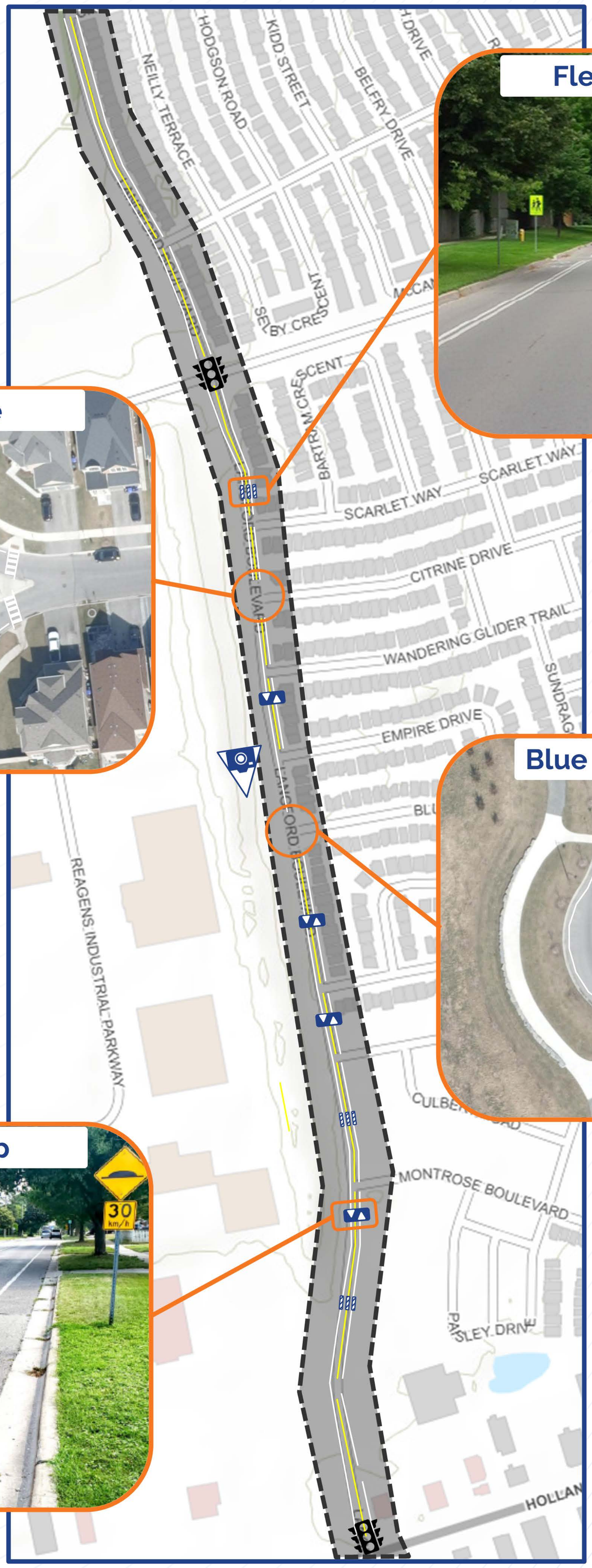
Bike Lanes

Langford Boulevard
Traffic Calming Measures

The table below details the proposed traffic calming measures and locations for the Langford Boulevard Corridor. The legend symbols correspond with the diagrams shown on Boards 11 and 12.

Legend	Measure	Location
	Urban Shoulders or Bike Lanes	• Entire corridor
	Flexible Bollards	• North of Scarlet Way • North of Montrose Boulevard • Start of Multi-use Path • North of Weir Street at speed hump (existing) • North of Liberty Crescent • North of Heritage Street (south)
	Pavement Markings	• Citrine Drive • Blue Dasher Boulevard
	Speed Watch Camera	• Northbound between Brookview Drive and Aishford Road
	Automated Speed Enforcement (ASE)	• Southbound between Blue Dasher Boulevard and Meadowhawk Trail
	Curb Radius Reduction	• Mooney Street (only south leg with curb extensions) • Miller Park Avenue • Rutherford Road
	Speed Hump	• North of Empire Drive • North of Meadowhawk Trail • South of Montrose Boulevard • North of Weir Street (existing) • North of Slack Street • 80 metres south of Brookview Drive • 90 metres north of Aishford Road • North of Mac Campbell Way

Langford Boulevard
North of Holland Street

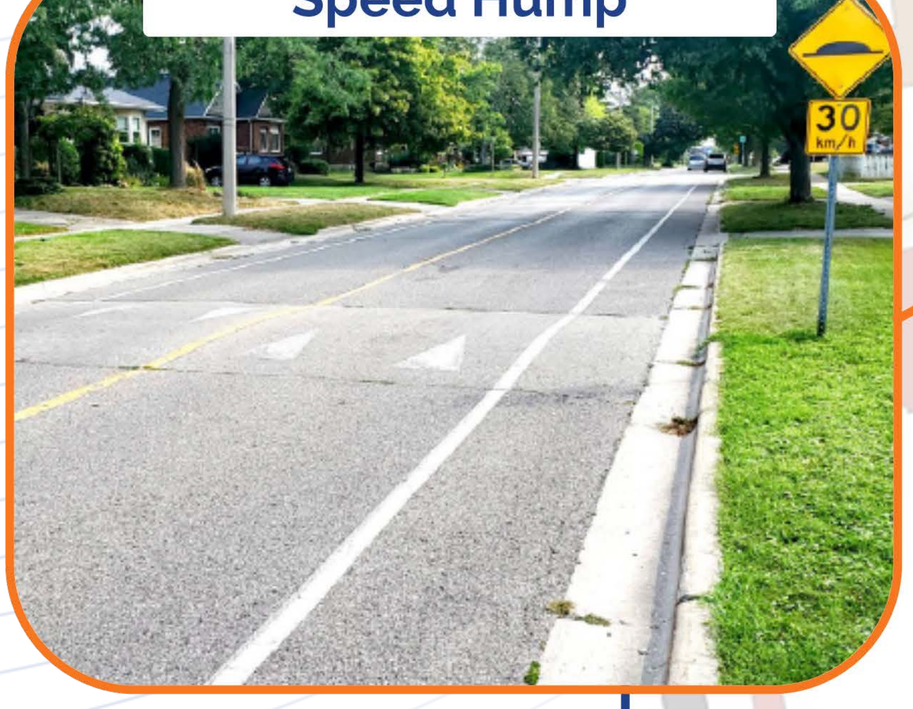


Flexible Bollards

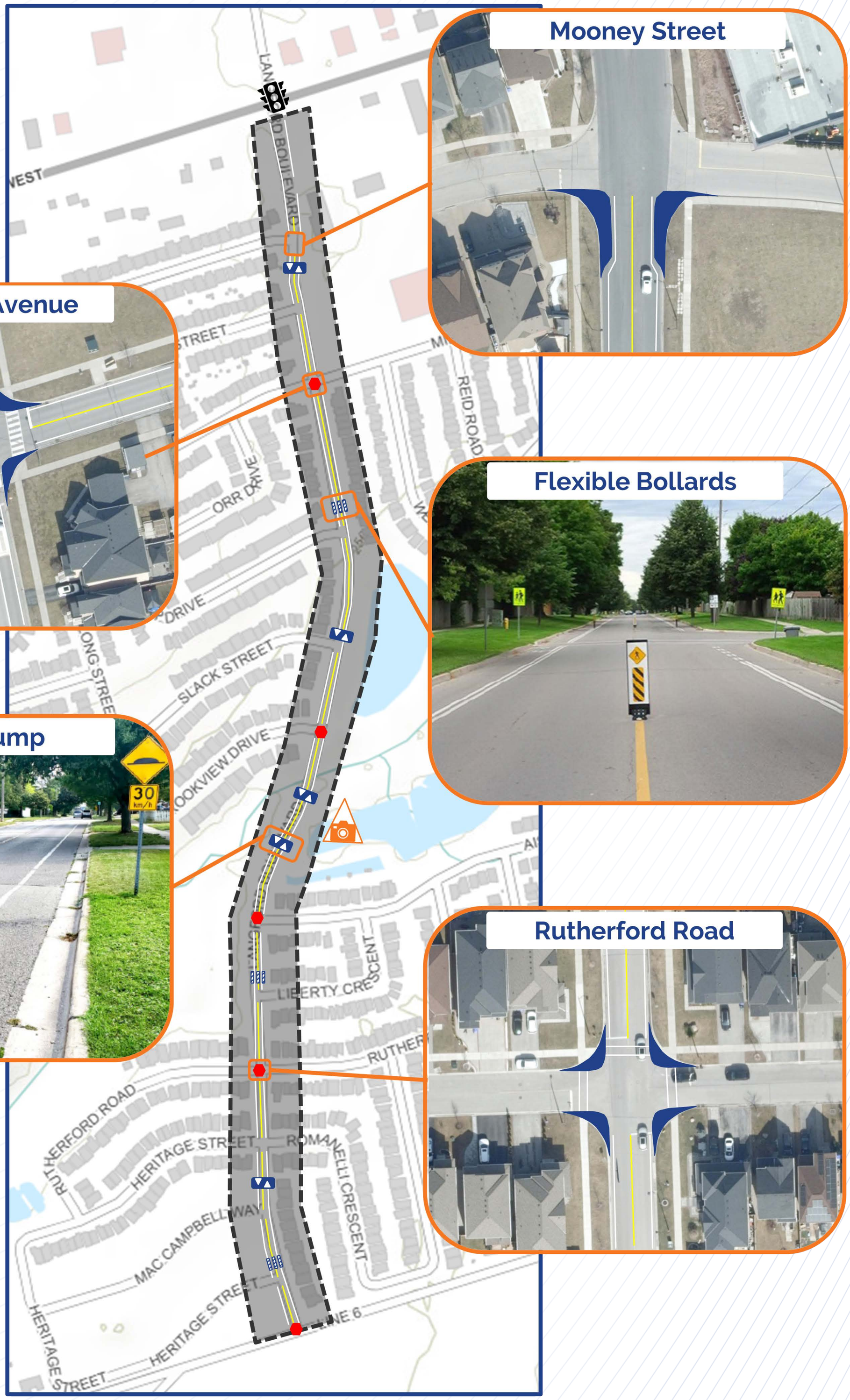
Citrine Drive

Blue Dasher Boulevard

Speed Hump

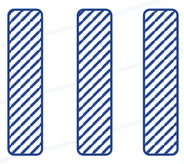
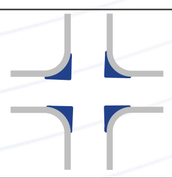
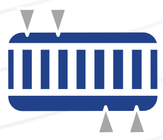


Langford Boulevard
South of Holland Street



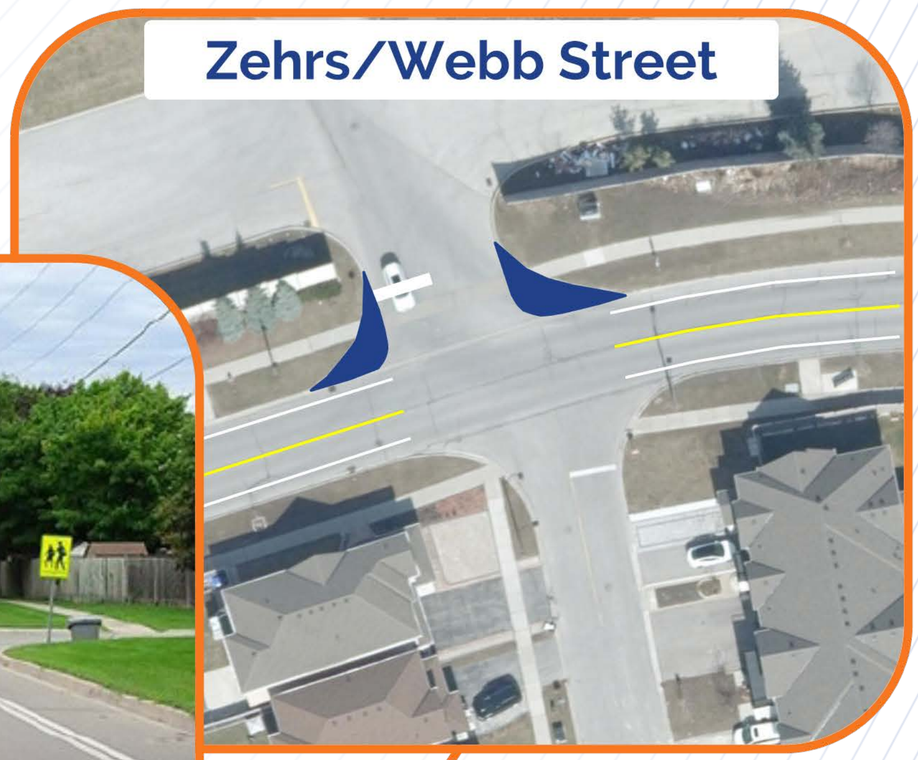
Miller Park Avenue
Traffic Calming Measures

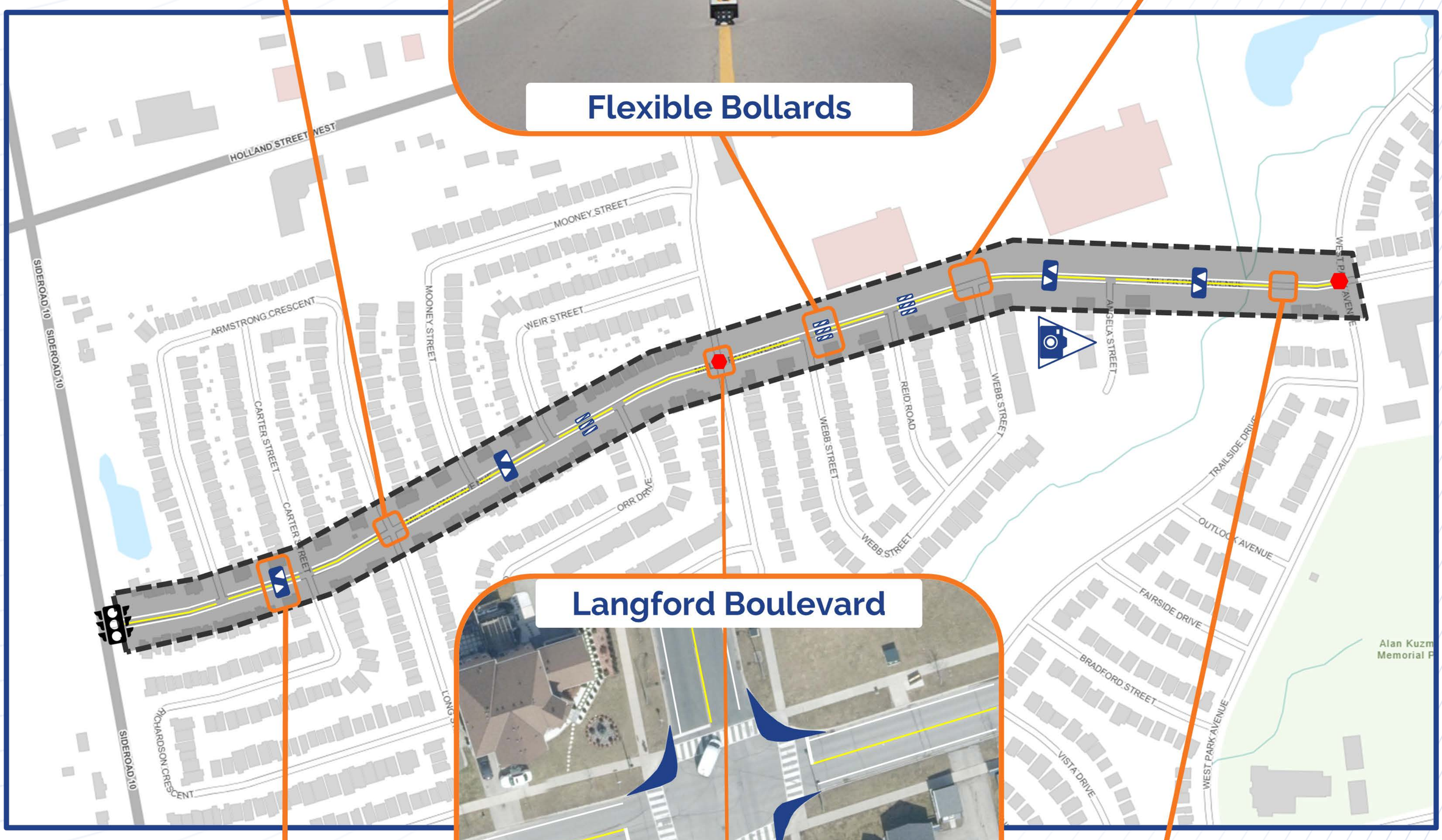
The table below details the proposed traffic calming measures and locations for the Miller Park Avenue Corridor. The legend symbols correspond with the diagrams shown on Boards 14 and 15.

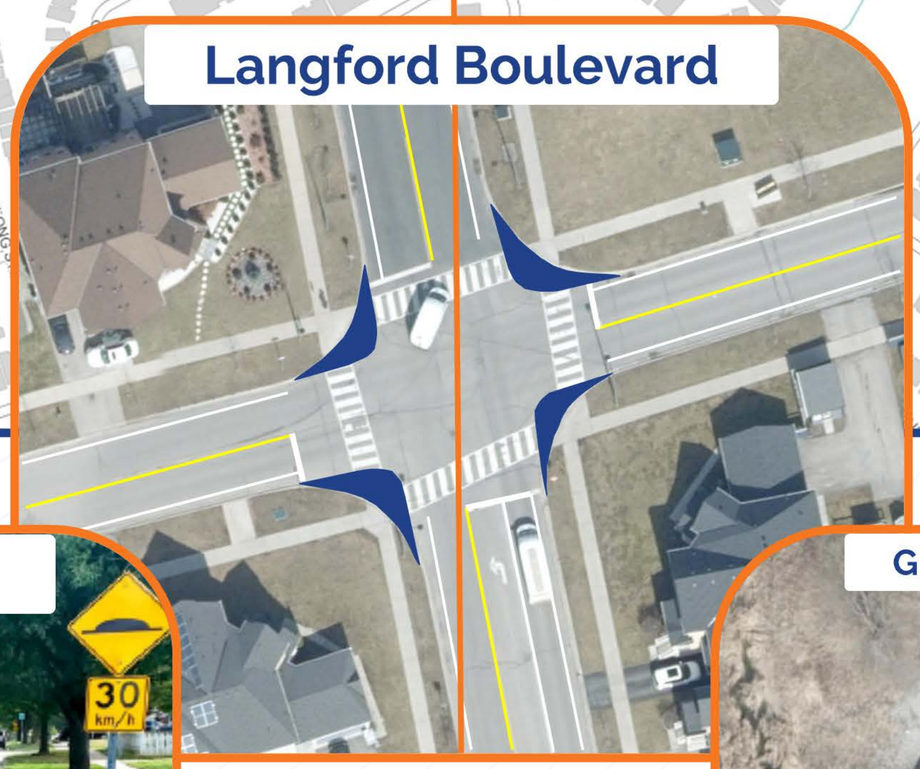
Legend	Measure	Location
	Urban Shoulders or Bike Lanes	• Entire corridor
	Flexible Bollards	• East Weir Street • West of Webb Street (west) • West of Reid Street • East of Milby Crescent (east) • Between Melbornue Avenue and Magani Avenue (2 sets)
	Pavement Markings	• Magani Avenue
	Pedestrian Crossover (PXO)	• Grand Central Valley Land Trail (PXO Level 2 Type D)
	Automated Speed Enforcement (ASE)	• Eastbound between Webb Street and Angela Street • Westbound between Milby Crescent and Wilson Drive
	Curb Radius Reduction	• Langford Boulevard
	Raised Crosswalk	• East leg at Armstrong Crescent/Long Street
	Speed Hump	• West of Carter Street • East of Mooney Street • At Angela Parkette • East of 480 driveway • Between West Park Avenue and Sutherland Avenue (2 sets, existing) • Between Milby Crescent west and east • East of Wilson Drive

Miller Park Avenue

West of West Park Avenue







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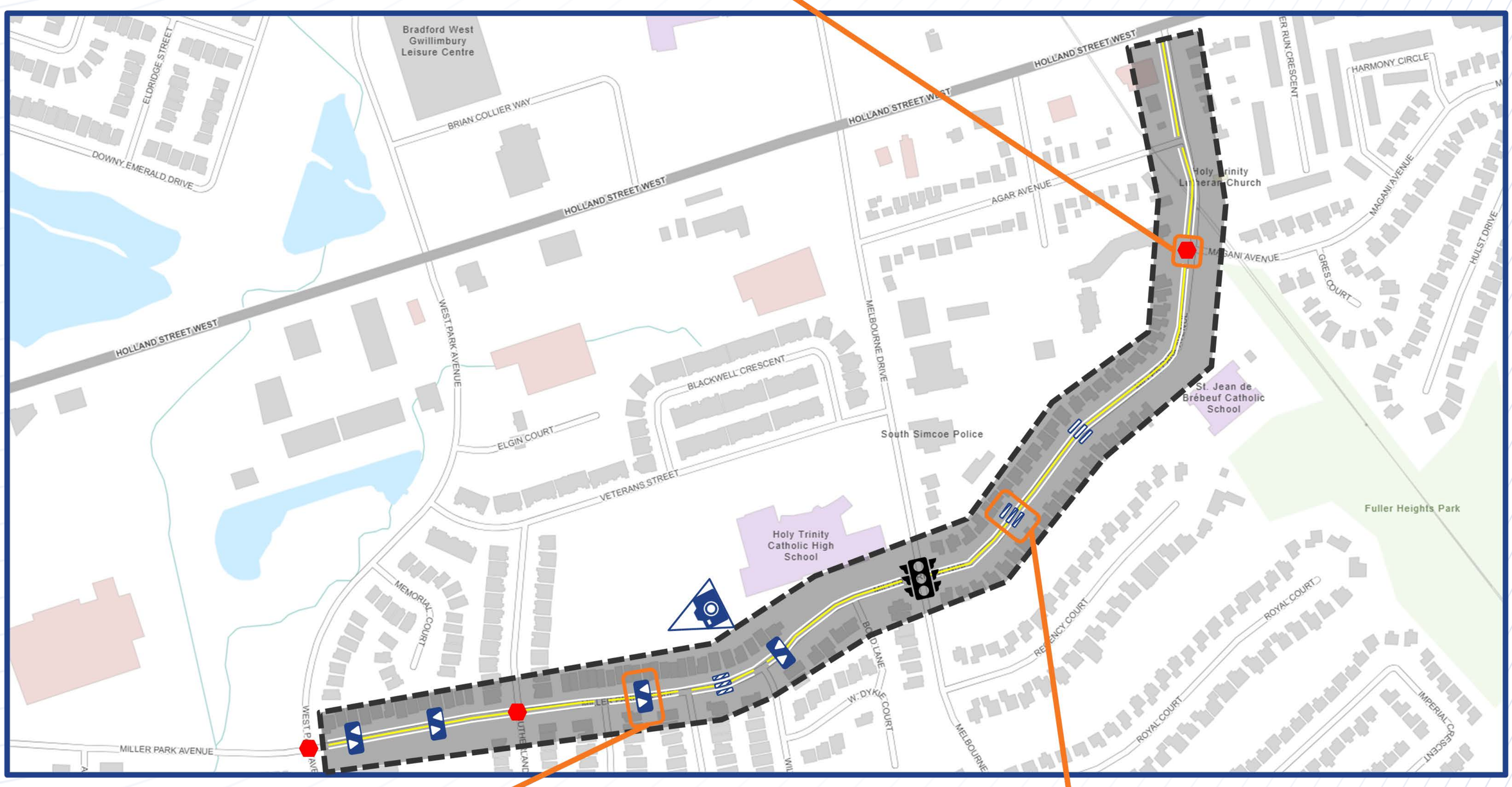
Miller Park Avenue

East of West Park Avenue



Speed Hump

Flexible Bollard

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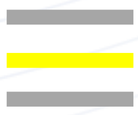
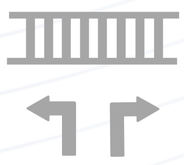
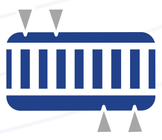
West Park Avenue
Traffic Calming Measures

The table below details the proposed traffic calming measures and locations for the West Park Avenue Corridor. The legend symbols correspond with the diagrams shown on Boards 17 and 18.

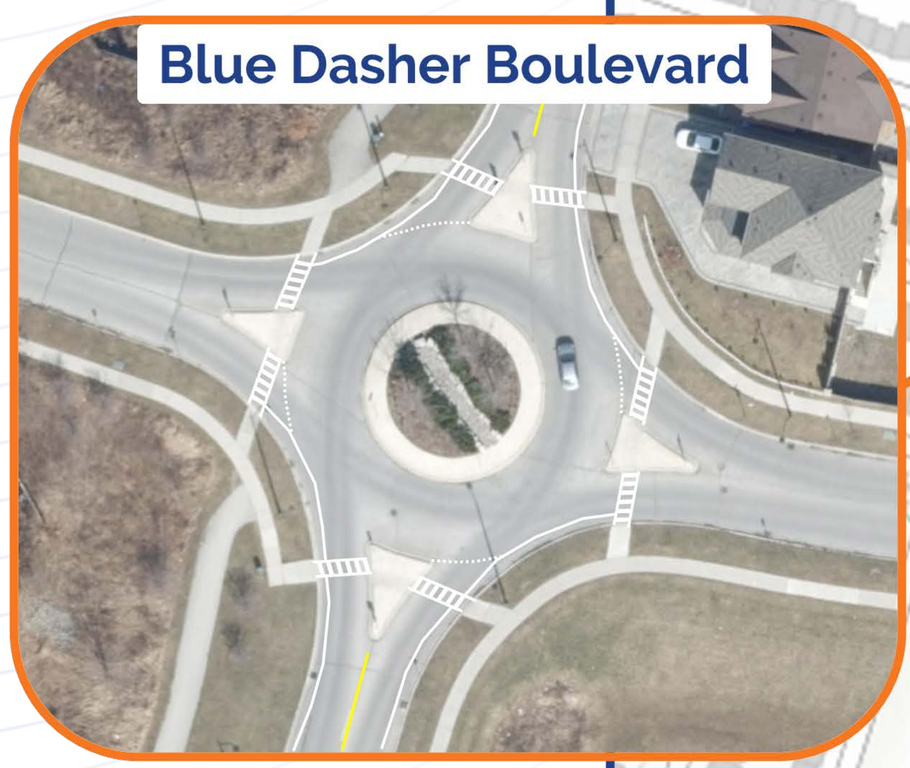
Legend	Measure	Location
	Urban Shoulders	• Entire corridor
	Flexible Bollards	• South of Collis Drive • South of Huron Lane (existing)
	Pavement Markings	• Blue Dasher Boulevard • Outlook Avenue • Rutherford Road • Line 6
	Pedestrian Crossover (PXO)	• North leg at Huron Lane
	Automated Speed Enforcement (ASE)	• Southbound between Blue Dasher Boulevard and Holland Street West
	Raised Crosswalk	• North leg at Huron Lane
	Speed Hump	• Between 668 & 662 (existing) • Between 551 & 547 (existing) • 140 metres south of Blue Dasher Boulevard • 80 metres north of Brian Collier Way • Between Memorial Court and Miller Park Avenue (2 sets) • South of Trailside Drive • North of Fairside Drive • North of Bradford Street • North of Rutherford Road • North of Line 6

West Park Avenue
North of Holland Street

Flexible Bollard

Huron Lane

Blue Dasher Boulevard



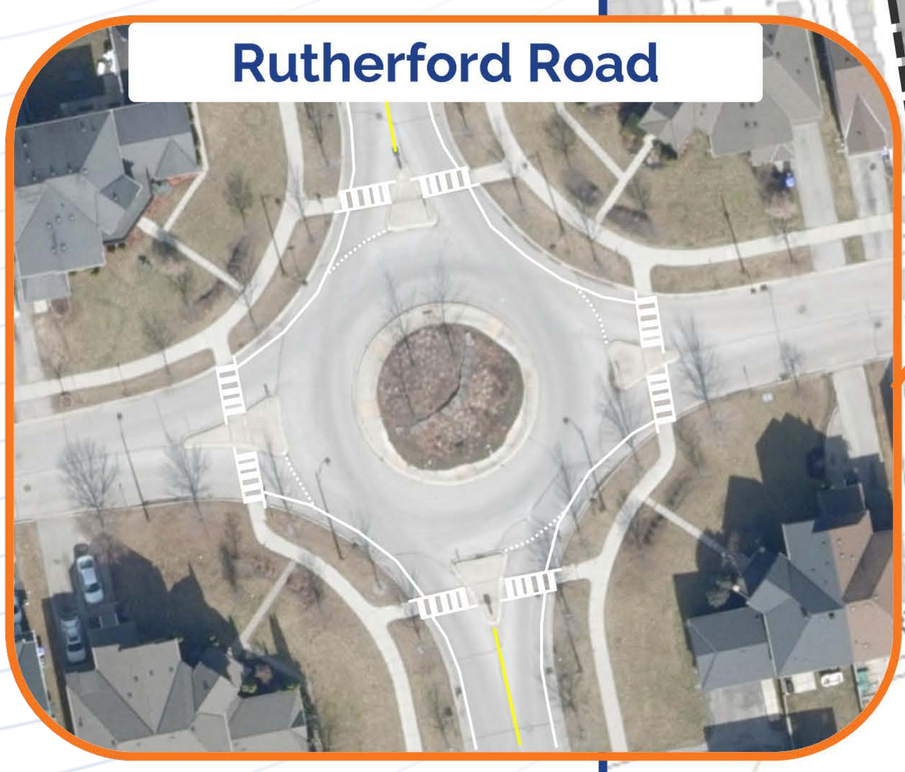
Speed Hump

West Park Avenue
South of Holland Avenue

Outlook Avenue

Speed Hump

Rutherford Road



Line 6

Bradford West Gwillimbury

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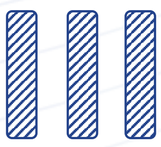
Summerlyn Trail
Traffic Calming Measures

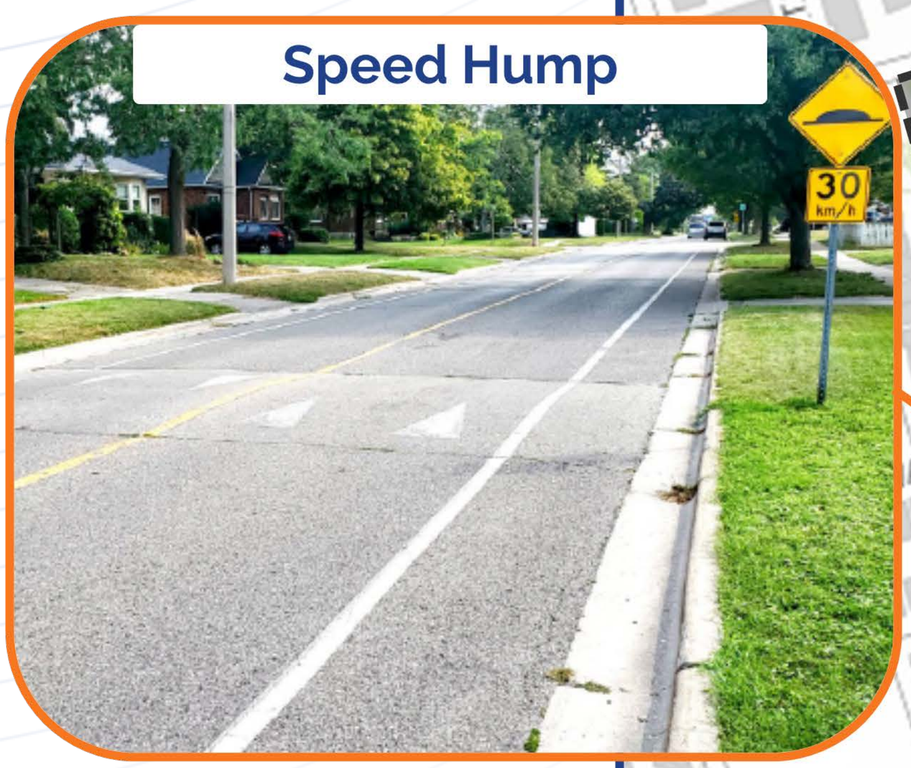
The table below details the proposed traffic calming measures and locations for the Summerlyn Trail Corridor. The legend symbols correspond with the diagrams shown on Board 20.

Legend	Measure	Location
	Urban Shoulders or Bike Lanes	• Entire corridor
	Flexible Bollards	• North of Jewelwing Court • South of Downey Emerald Drive
	Pavement Markings	• Wandering Glider Trail/Green Darner Trail • Blue Dasher Boulevard • Montrose Boulevard/Downey Emerald Drive
	Speed Hump	• Between Line 8 and Scarlet Way (existing) • 40 metres south of Scarlet Way (existing) • South of Acorn Lane/Irwin Place • North of Corwin Drive

Existing Speed Hump on Summerlyn Trail

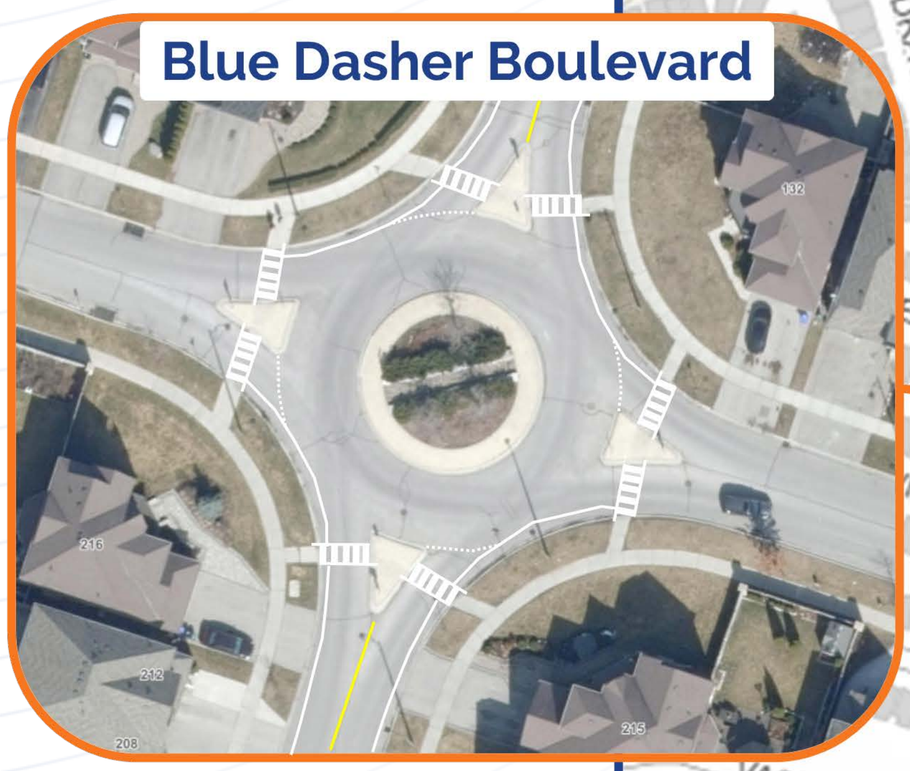
Summerlyn Trail

Speed Hump

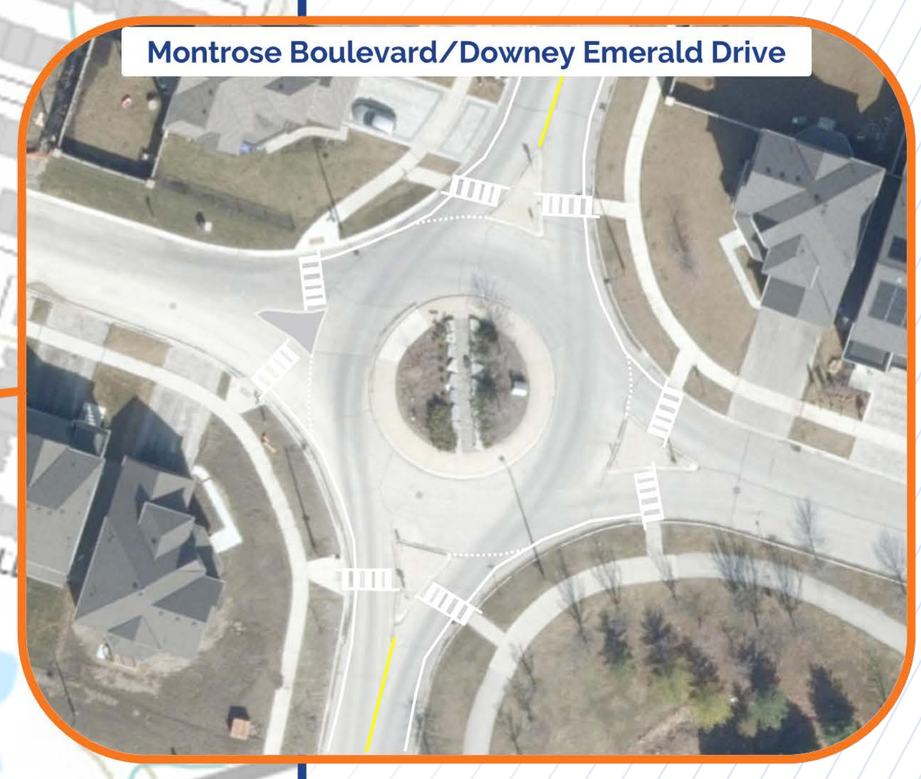


Wandering Glider Trail/Green Darner Trail

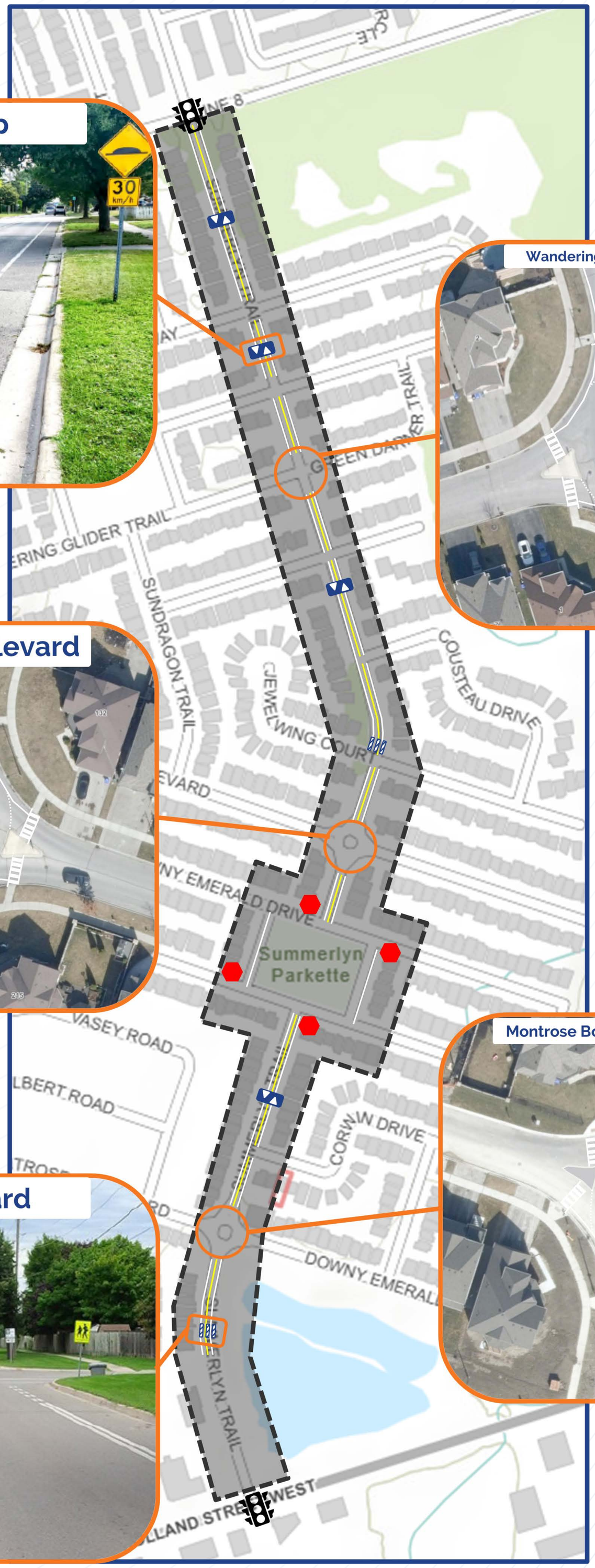
Blue Dasher Boulevard



Montrose Boulevard/Downey Emerald Drive



Flexible Bollard



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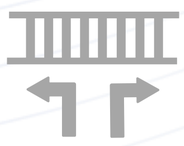
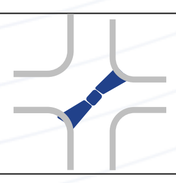
John Street
Traffic Calming Measures

The table below details the proposed traffic calming measures and locations for the John Street Corridor. The legend symbols correspond with the diagrams shown on Board 22.

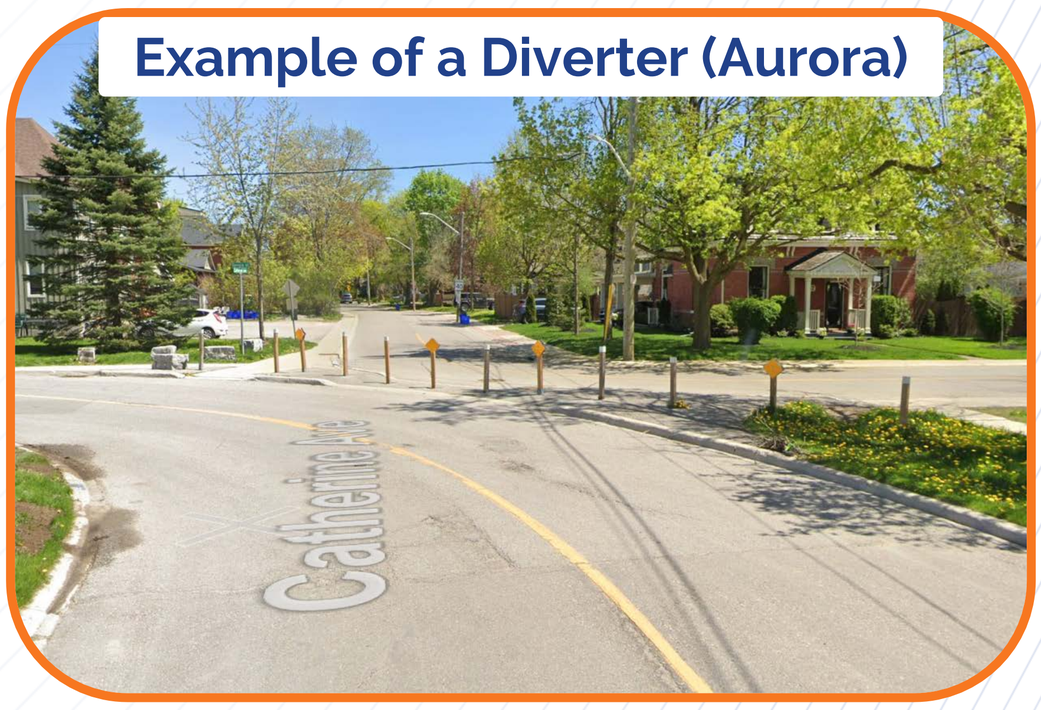
Legend	Measure	Location
	Urban Shoulders or Bike Lanes	• Entire corridor
	Pavement Markings	• Barrie Street
	Speed Hump	• Between Toronto Street and Essa Street (2 sets) • Between Essa Street and Church Street
	Diverter	• John Street & Nelson Street • Scanlon Avenue & Nelson Street

Diverter

A diverter is a barrier which covers the entire width of an intersection and limits the turning movements that can be made by vehicles traveling on the road. The diverter can include openings for cyclist access.

To limit cut-through traffic on John Street, diverters could be placed at the intersection of John Street and Nelson Street. A second diverter would be placed at Scanlon Avenue and Nelson Street to stop traffic from diverting to Scanlon Avenue.

Example of a Diverter (Aurora)



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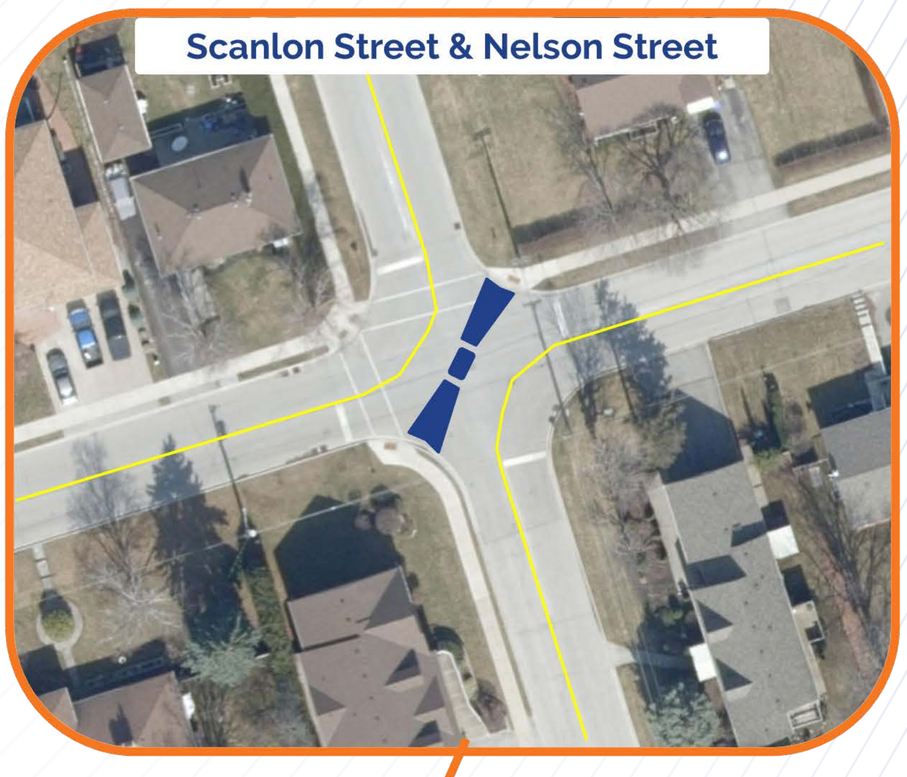
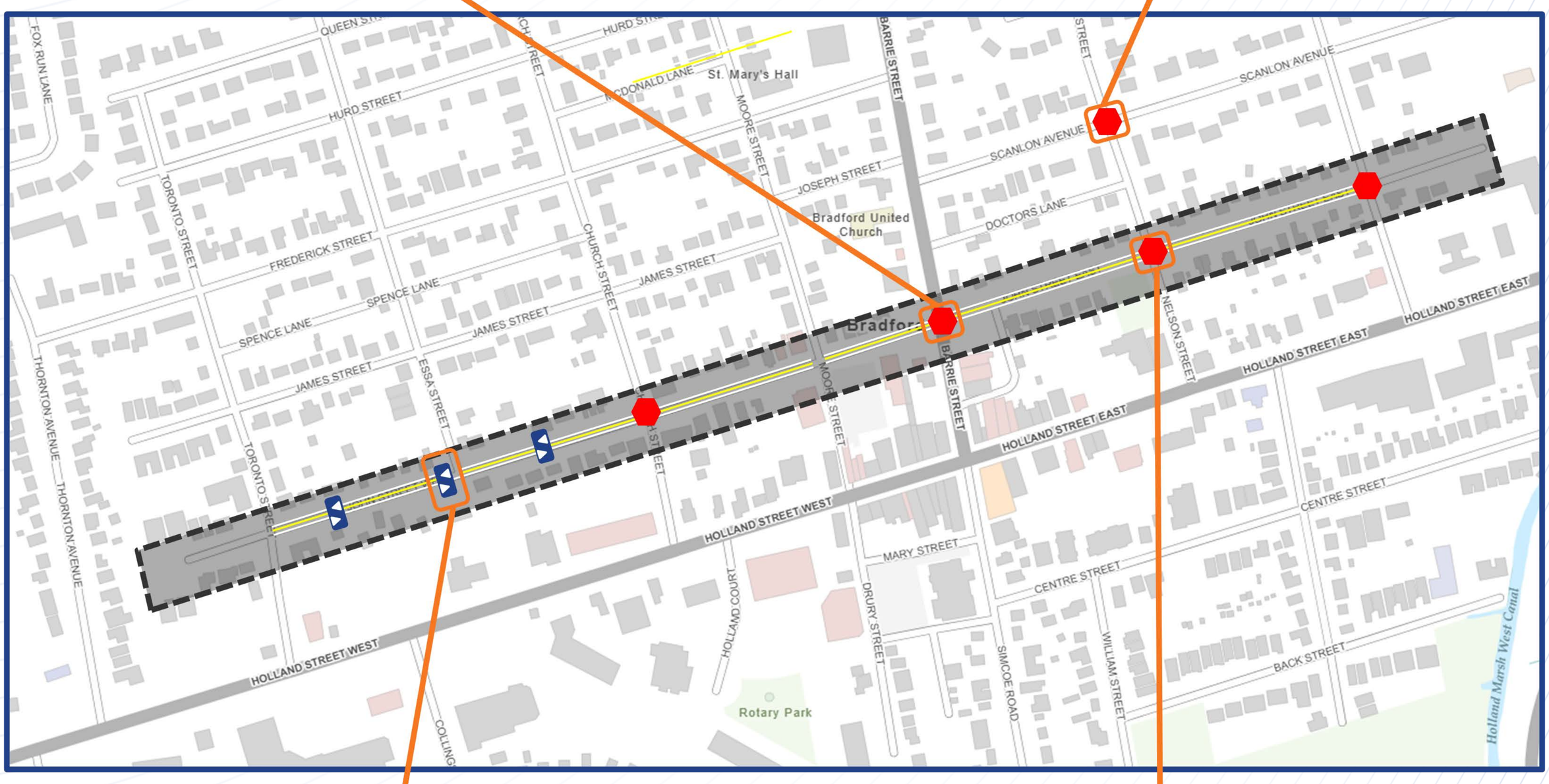
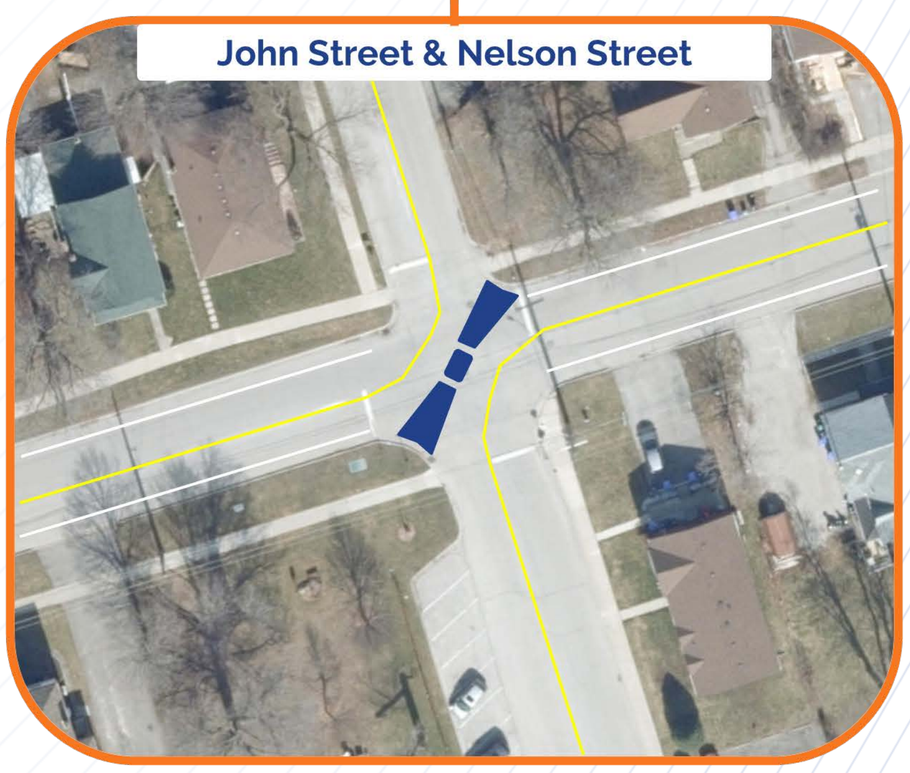
John Street







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Next Steps

After this meeting, we will:

- Accept further feedback until May 9, 2025
- Review and analyze resident input
- Finalize traffic calming plans for each study area
- Present traffic calming plans to Strategic Initiatives Committee for approval on May 27, 2025

Please provide us your feedback!

If you have any questions or comments, visit the project webpage www.townofbwg.com/TrafficCalming or contact:

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Traffic Technologist
Community Services
Town of Bradford West Gwillimbury
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pdubniak@townofbwg.com

Heather Hector, P.Eng., PTP
Consultant Project Manager
Paradigm Transportation Solutions Limited
(416) 479-9684 ext. 502
hhector@ptsl.com

Thank you for attending! Please return your comment sheets.

With the exception of personal information, all comments received will become part of the public record, in accordance with the *Municipal Freedom of Information and Protection of Privacy Act*.

Town of Bradford West Gwillimbury Traffic Calming Program

STRATEGIC INITIATIVES COMMITTEE MEETING
MARCH 25, 2025

Bradford West Gwillimbury
A Growing Tradition

Presentation Outline

- About this Study
- Study Area Highlights
- Public Information Centre 1
- Next Steps

Bradford West Gwillimbury

A Growing Tradition

Study Overview

The Town of Bradford West Gwillimbury has retained Paradigm Transportation Solutions Limited to undertake a holistic review of Langford Boulevard, Miller Park Avenue, West Park Avenue, Summerlyn Trail, and John Street, in response to speeding concerns.

The goal of the study is to develop **traffic calming plans** for each street that focus on reducing traffic on local neighbourhood roads, improving intersections, and reducing speeds to improve a sense of place for people to walk, roll, play, shop alongside motor vehicles.

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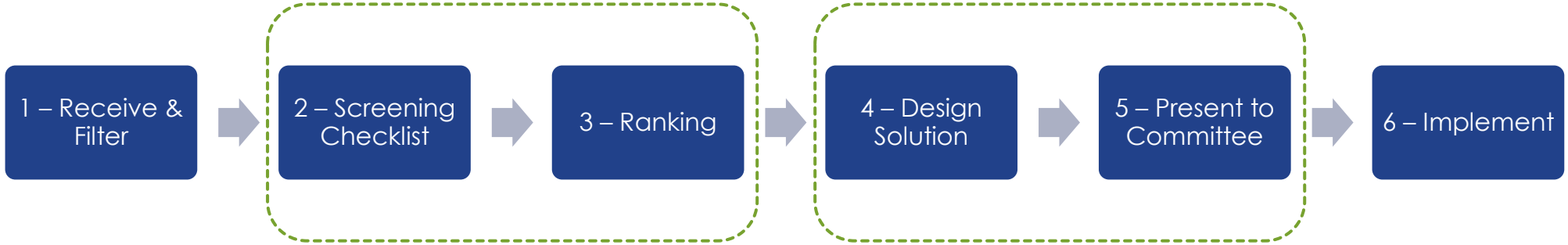
Traffic Mitigation Strategy

The Town's Traffic Mitigation Strategy (TMS) provides a data-oriented technical process to respond to traffic safety concerns addressable via traffic calming solutions.



Completed by Town staff in 2024

This Study
(Traffic Calming Program 2025)

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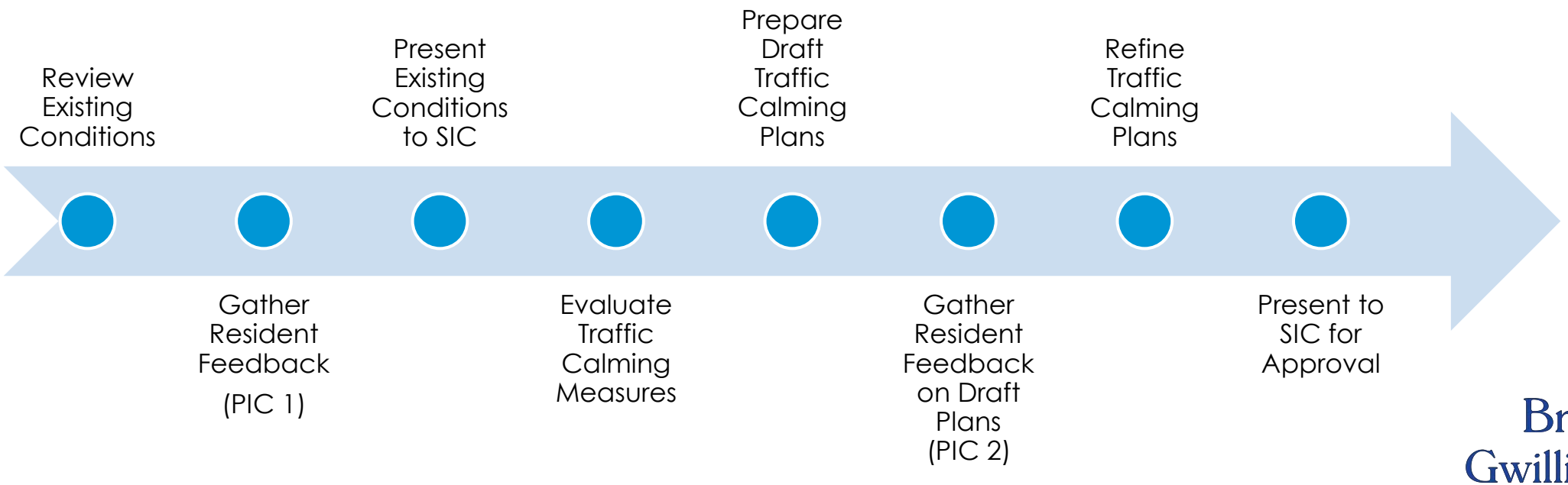
Study Process



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What is Traffic Calming?

Traffic calming is a set of measures used to "calm" traffic. These actions can ease traffic concerns through physical changes to the street and/or behaviour change.

The goal of traffic calming is to create safer streets for all users. This includes pedestrians, people who use mobility devices, cyclists, and motorists.

Town's Traffic Calming Toolbox identifies three categories of measures:

- Education
- Enforcement
- Engineering

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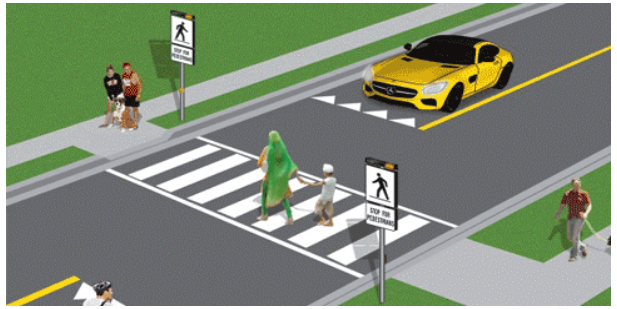
What is NOT a Traffic Calming Measure?

Primarily installed to assign right-of-way, **traffic control devices** are not recommended for traffic calming purposes.

Stop Signs



Pedestrian Crossing

Traffic Signals

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Langford Boulevard

The Langford Boulevard Study Area extends from Crossland Boulevard in the north to Line 6 in the south. Langford Boulevard is classified as a Collector road, with a posted speed limit of 40 km/h.

Criteria	Langford Boulevard
Traffic Calming Measures	• ASE Camera • Speed warning camera • 1 Speed hump with flexible bollards (May-Nov)
Volume	• Ranges from 2,200 to 5,500 vpd • Average – 3,400 vpd
Speed	• 85th percentile ranges from 42 to 58 km/h • Average 85th percentile – 50 km/h

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Miller Park Avenue

The Miller Park Avenue Study Area extends from Sideroad 10 in the west to Holland Street in the east. Miller Park Avenue is classified as a Collector road, with a posted speed limit of 40 km/h. BWG Transit operates Route 2 and Route 1 on sections of Miller Park Avenue.

Criteria	Miller Park Avenue
Traffic Calming Measures	• ASE Camera • Flexible bollards • 2 Speed humps
Volume	• Ranges from 2,000 to 5,800 vpd • Average – 3,550 vpd
Speed	• 85th percentile ranges from 38 to 56 km/h • Average 85th percentile – 50 km/h

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West Park Avenue

The West Park Avenue Study Area extends from Professor Day Drive in the north to Line 6 in the south. West Park Avenue is classified as a Collector road, with a posted speed limit of 40 km/h.

Criteria	West Park Avenue
Traffic Calming Measures	• ASE Camera (part of the ASE Pilot Program) • Flexible bollards • 2 Speed humps
Volume	• Ranges from 1,800 to 5,700 vpd • Average – 3,400 vpd
Speed	• 85th percentile ranges from 42 to 56 km/h • Average 85th percentile – 49 km/h

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Summerlyn Trail

The Summerlyn Trail Study Area extends from Line 8 in the north to Holland Street in the south. Summerlyn Trail is classified as a Local road, with a posted speed limit of 40 km/h. BWG Transit Route 2 Around Town operates on Summerlyn Trail.

Criteria	Summerlyn Trail
Traffic Calming Measures	• 2 Speed humps
Volume	• Ranges from 1,950 to 2,900 vpd • Average – 2,350 vpd
Speed	• 85th percentile ranges from 41 to 49 km/h • Average 85th percentile – 46 km/h

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John Street

The John Street Study Area extends from Toronto Street in the west to Colborne Street in the east. John Street is classified as a Local road, with a posted speed limit of 40 km/h. John Street is within the Holland Street Reconstruction project area.

Criteria	John Street
Volume	• Ranges from 1,250 to 3,150 vpd • Average – 2,500 vpd
Speed	• 85th percentile ranges from 46 to 48 km/h • Average 85th percentile – 47 km/h

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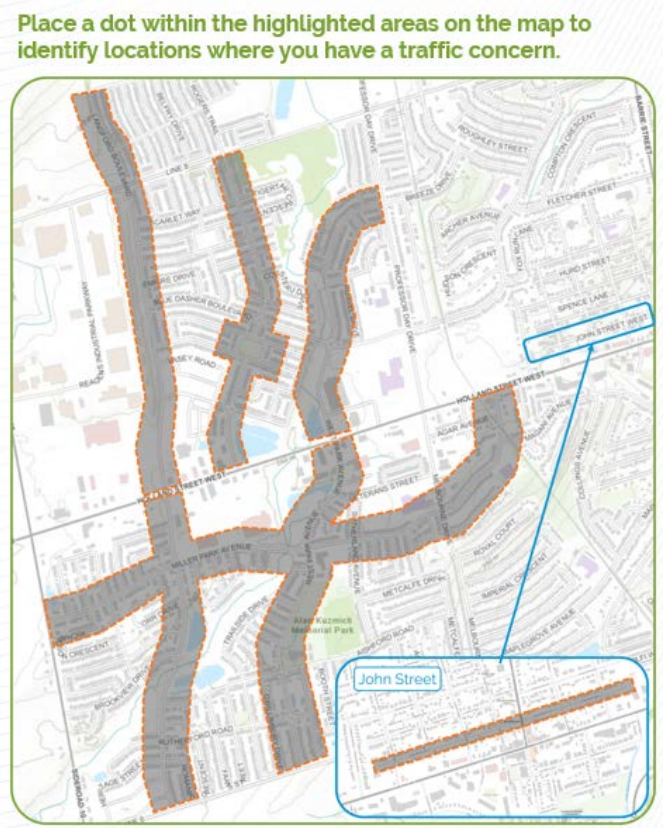
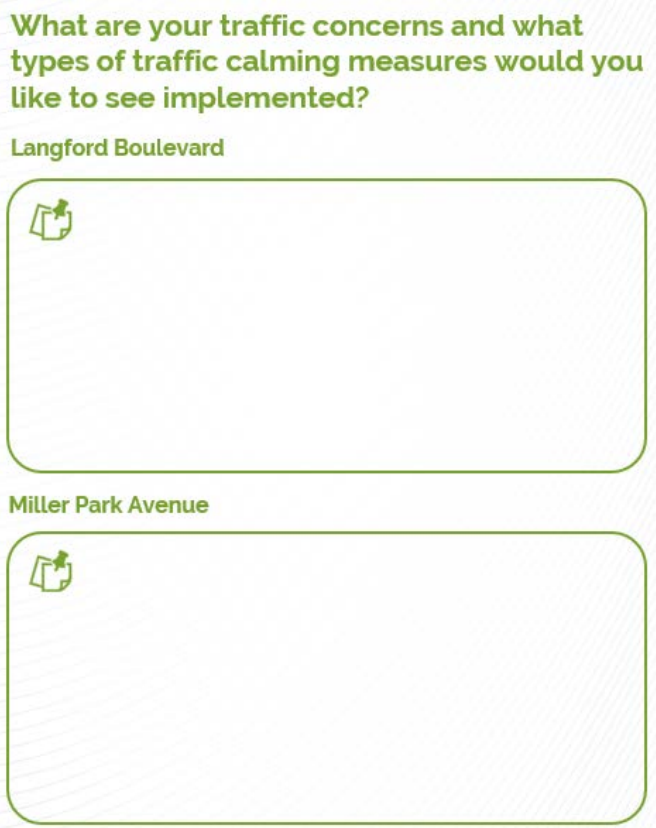
Public Information Centre 1

- Held on Thursday, March 20, 2025 at the BWG Leisure Centre from 4:00 to 8:00 PM
- Presented study overview, study area highlights and traffic data
- Opportunity for residents to provide feedback (concerns, locations and preferred measures)





Next Steps

- Accept further public feedback until April 6, 2025
- Review and analyze resident input
- Draft traffic calming plans for each study area
- Present draft plans at Public Information Centre #2 on April 24, 2025 at the BWG Leisure Centre
- Finalize and present traffic calming plans to Strategic Initiatives Committee for approval

Bradford West Gwillimbury

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Thank you!
Any questions or comments?

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Town of Bradford West Gwillimbury
2025 Traffic Calming Program
Public Information Centre 1 - March 20, 2025
Summary of Resident Feedback

Study Area	What are your traffic concerns?	What types of traffic calming measures would you like to see implemented?	General Comments
Langford Blvd & John St	Doesn't think more stop signs will help; prefers the idea of a road diet, raised intersections, or simply narrowing the roadway.	Supports 30 km/h zones, a raised intersection at Langford and Rutherford, and a red light speed mitigation strategy.	John Street and Berrie Street need to be realigned, with proper traffic controls installed at the intersection due to high pedestrian and bicycle traffic, in an effort to reduce future accidents.
Langford Blvd & Miller Park Ave	Hard acceleration on Miller Park Ave between Langford Blvd and West Park Ave.	Supports raised pedestrian crossings at residential intersections, purpose-built, separated mixed-use trails that can be used year-round and are at curb level. Also supports hard lane narrowing with intentional bends.	If full stops are not enforced at the line on a red light, they will end up being used as yield signs for right-hand turns.
Rogers Trail & Vipond Rogers Trail & Crossland	Speeding concerns are present within the selected area, as well as issues with failing to stop at stop signs at Rogers Trail & Crosslands, and Rogers Trail & Vipond.	Supports speed bumps, traffic enforcement, and additional speed cameras.	

Town of Bradford West Gwillimbury
2025 Traffic Calming Program
Public Information Centre 2 - April 24, 2025
Summary of Resident Feedback

Study Area	What are your thoughts on Urban Shoulders instead of Bike Lanes?	What are your thoughts about the use of diverters on John Street?	General Comments
Langford Boulevard	Supports bike lanes along Langford from Line 6 North, as street parking is rarely used and there is already significant bike traffic during the summer months.	Open to implementing new measures to help reduce cut-through traffic.	Appreciates that the area is being studied, noting the high number of bus stops and school crossings along Langford, where many vehicles travel at high speeds.
Langford Boulevard	Thinks urban shoulders are a great idea.		Thinks speed bumps should be installed after Montrose on Langford Blvd.
Langford Boulevard	In favor of urban shoulders to narrow roads instead of bike lanes.	Believes this will not be effective unless traffic at the corners of Simcoe, Barrie, and Holland is addressed.	Supports an elevated sidewalk at Armstrong Crescent, along with additional speed bumps along Langford Blvd.
Miller Park Avenue	Agrees that mixed use is better.		Believes traffic is fast on Miller Park Ave, that stoplight timing may need to be assessed, and that Miller Park Ave should be cut in half, leaving two dead-end streets.
Miller Park Avenue			Implicit concern with speeding or uncontrolled vehicle movements requiring calming or intersection control. Suggests a speed bump or bollards; also recommends an all-way stop at Miller Park & Agar.
West Park Avenue		Has no opposition to the idea but is concerned it may lead to increased congestion.	Would like no left turn on simco heading during rush hours.
West Park Avenue			Supports the installation of speed bumps along West Park Ave,

Study Area	What are your thoughts on Urban Shoulders instead of Bike Lanes?	What are your thoughts about the use of diverters on John Street?	General Comments
			between Veterans St and Miller Park Ave.
Summerlyn Trail			Lack of stop signs near park creates pedestrian danger; severe speeding on Summerlyn Trail with vehicles reaching 70–80 km/h. Wants stop signs at all park-adjacent intersections and speed bumps on Summerlyn Trail to enhance child and pedestrian safety.
John Street		Curious about how this would affect navigation out of the area.	Strongly feels that speeding and acceleration should be addressed, particularly at Colborne and John St.
John Street	Believes bike lanes are necessary and welcomes their addition.	Prefers alternatives to diverters, such as speed bumps, speed cameras, flexible bollards, etc.	Concerns about traffic diverters could interfere with emergency service response times, particularly because of the high number of elderly residents and the methadone clinic in the area.
John Street		Believes this won't work and people will find ways around it. There's too much traffic on Holland Landing, and the problem will just shift to that roadway.	
John Street		Opposes diverters implicitly, stating John St is essential for emergency access and an alternative to Holland congestion.	Parking enforcement issues, safety concerns on John St W (speeding, poor visibility), construction impacts, and accessibility concerns with public input.
John Street		Implies diverters are unnecessary; proposes resolving congestion by removing street parking from Holland to keep traffic flowing.	Suggests reconfiguring parking policies (off-street lots) as a better alternative to traffic diversion;

Study Area	What are your thoughts on Urban Shoulders instead of Bike Lanes?	What are your thoughts about the use of diverters on John Street?	General Comments
			identifies Holland congestion as the core issue.
John Street	Supports Urban Shoulders, keeps on-street parking, contributes to traffic calming	Accepts diverters at John E/Nelson if no better alternative; suggests similar treatment (or dead-ending) John W at Essa.	Requests stop signs and PXO at John St W and Essa due to blind crest. Opposes speed bumps, prefers stop signs for better speed control. Frustrated with poor communication (late, hand-delivered notice). Feels area is overlooked in planning. Questions why John/Essa isn't marked as Intersection of Concern, and why no PXO or diverter is proposed. Calls for equal treatment of all intersections.
John Street			Poor visibility due to blind crest; unsafe for driveway access because of westbound traffic.
John Street	Not in favour of Urban Shoulders.	Not in favour of Diverters.	Supports stop signs as practical/cost-effective.
John Street	Supports the idea of the Urban Shoulders.	Opposes having diverters.	Has concerns about Speeding during traffic peaks, cut-through traffic, child/senior safety. Supports stop signs, speed cameras, and safety zone designation.

Study Area	What are your thoughts on Urban Shoulders instead of Bike Lanes?	What are your thoughts about the use of diverters on John Street?	General Comments
School Areas	Strong support for bike infrastructure, but recommends protected bike lanes using bollards or delineators for greater safety, especially near schools.		Commends the Town's proactive safety efforts; cites studies showing the safety and traffic-calming benefits of protected lanes; encourages infrastructure for students.
General Town Road Network	Lane narrowing via painted medians or bike lanes ("lane dieting")		Drivers diverting onto smaller streets due to inefficient signals and low speed limits on main roads; reckless driving where enforcement is lacking. Suggests increasing main road speeds and improving light timing to reduce traffic on residential streets; offers comparisons to Colorado and Waterloo. Grudging support for speed cameras; recommends traffic design over signage.
Blue Dasher Boulevard (Outside Study Area)			Concerned about speeding on Blue Dasher Blvd, from Langford to the first Circle, as there are currently no speed bumps or stop signs.

Response from BWG Fire:

Thanks for including us in this proposal. I am going to share with you quick calculations on each area that has a traffic calming proposal.

The ones that impact us the most unfavorably are:

1. *Traffic Speed Humps*
2. *Traffic Circles*
3. *Diverters*

It is well known that we operate very heavy apparatus and of course as you know, our goal is always to reduce response times.

Traffic calming measures which cause fire apparatus to have to slow down and then build speed again can create up to 10 seconds of additional response time per measure.

1. *Landford Blvd North of Holland will increase up to 60 seconds.*
2. *Langford Blvd South of Holland will increase up to 40 seconds.*
3. *Miller Park Ave West of West Park Avenue will increase up to 40 seconds*
4. *Miller Park Ave East of West Park Avenue will increase up to 40 seconds.*
5. *West Park Ave North of Holland Street will increase up to 50 seconds.*
6. *West Park Ave South of Holland Avenue will increase up to 70 seconds*
7. *Summerlyn Trail measures could increase times by 70 seconds.*
8. *John Street measures will increase times by 30 seconds not including the diverters which mean there could be time increase and change of routes for fire apparatus.*

We strive to respond as quickly as possible and we cannot accept any measures which increase response times for emergencies.

This also will not include possible wear and tear on cab and chassis components on the apparatus.

Follow-up questions were asked about speed cushions and if they have any designated emergency routes:

1. *Speed cushions probably less intrusive to us, however all of our heavy trucks have tandem axles which mean the speed cushions would likely still impact the*

rear wheels meaning we would still need to slow down. Albeit, would be better then any type of other vertical traffic measure.

2. *We do not have preferred routes, however in talking with crews just this am, they have indicated they avoid certain roads that already feature speed humps and other measures.*

Response from South Simcoe Police

I have taken a look at the sites.

For items 1-4, I don't see an issue.

For item 5, John St, I foresee this being an issue and I have a few concerns. While I am not opposed to speed reducing measures, I strongly oppose the use of diverters in the John St E area.

I know that members of SSP routinely use John St to respond to calls and will go this way to avoid the 4-corners. This may be the case for urgent (but not necessarily "emergency") calls for service. I would also personally avoid the 4 corners with lights/sirens as this route can be traffic-jammed with stopped and parked cars. If travelling east to west we will be forced to go into opposing traffic, and there is poor visibility for turning vehicles (north/south, for instance) that would not be able to see emergency vehicles until last second. With traffic being diverted from John back to Holland, I believe this will inevitably increase traffic volume in the core, causing further issue for emergency vehicles.

My other concern it this will just displace traffic flow to other areas, either through the subdivision or in front of St Marie of the Incarnation on Colborne St, where there are already traffic concerns (and calming measures) that exist.

If item 5 goes ahead, I feel like there may be a need to restrict on-street parking along Holland completely (possibly permitting it in the evenings).

To present a few statistics, when I run a search of John St (includes East and West), there have been only been 27 collisions over the last two years. Only one of those was classified as a collision with injury (PI). This PI collision was one of 14 collisions that occurred at the intersection of Barrie St and John St. Over the same period, there were 1652 collisions in Bradford. The 27 collisions along this roadway account for approximately 1.6 % of all collisions. (I should note that 'injury' is classified when someone is transported to hospital and can even be precautionary).

Given that only one collision resulted in an injury, I believe that item 5 (diverter) unnecessarily diverts traffic to an already bogged-down area or sends motorists further into the subdivision.

From the proposed plan, it looks as though drivers can still 'get around' the downtown core, but it will take longer. In creating the diversion, drivers will increase the time within the subdivision streets and will increase their travel distance from 180m to 401m.

If traffic safety is the main concern here, I feel like we are increasing the likelihood that motorists will come in contact with vehicles/cyclists/pedestrians by doubling their route and travel time. My feeling is this will increase motorist frustration, leading to more speeding and a reduction on compliance with stop signs, etc. You may also find GPS routing westbound motorists through Doctor's Lane in order to get to Barrie St.

Given these considerations, I feel like a 4-way stop or light at Barrie St/John St is most likely to address traffic safety concerns; to assist with intersection right-of-way, reduce collisions and mitigate driver's risk-taking maneuvers to get through the intersection.

I apologize for the long-winded email. Give me a call if you want to discuss this further.

Matthew Kernen
Sgt
Traffic and Marine Unit
South Simcoe Police Service
705-436-2141 Ext. 2028

Response from Simcoe EMS

No comments really on our end, our staff will be familiar with other traffic calming measures throughout the County, and would be expected to follow traffic signs and speed limits.

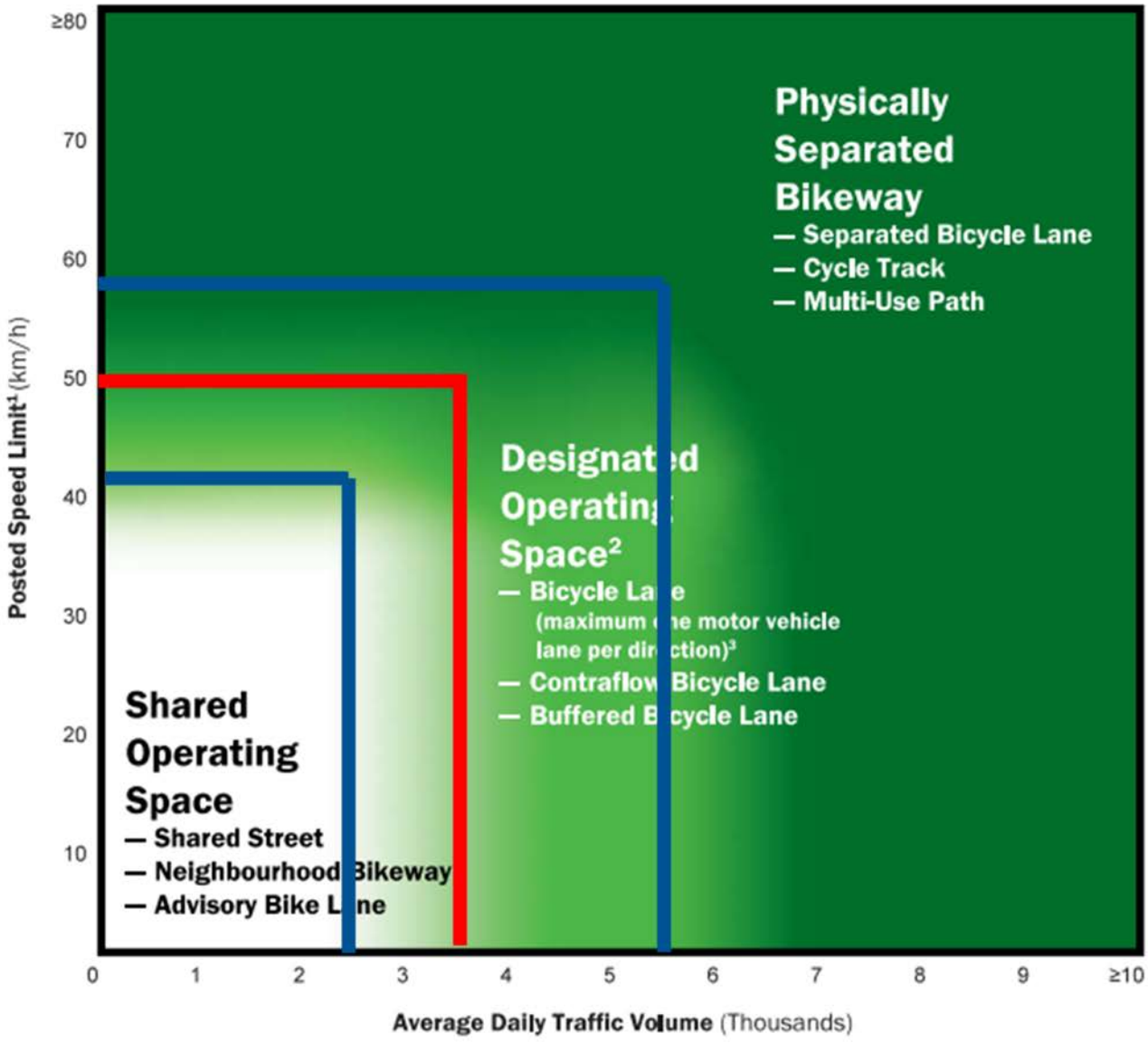
As long as there is a visual indication of the calming measures, which I imagine there is, then that would be sufficient for us.

Derryk Aelick
Commander, Paramedic Operations
County of Simcoe, Paramedic Services
1110 Highway 26, Midhurst, Ontario L9X 1N6
Phone 705-726-9300 ext. 1931 Mobile 705-818-0733
Fax 705-722-6601
Email email@simcoe.ca
simcoe.ca

Appendix B

Cycling Facility Pre-Selection and Contextual Evaluation

Desirable Cycling Facility Pre-Selection Nomograph
Urban/Suburban Context (Step 1)



1 Operating speeds are assumed to be similar to posted speeds. If evidence suggests this is not the case, practitioners may consider using 85th percentile speeds or implementing measures to reduce operating speeds.

2 Physically separated bikeways may always be considered in the designated operating space area of the nomograph.

3 On roadways with two or more lanes per direction (including multi-lane one-way roadways), a buffered bicycle lane should be considered the minimum with a typical facility being a physically separated bikeway.

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Langford Boulevard Pre-Selection

	Shared Roadway	Neighbourhood Bikeway	Rural Paved Shoulder	Advisory Bicycle Lane	Bicycle Lane	Buffered Bicycle Lane	Separated Bicycle Lane	Cycle Track	Multi-Use Path
Motor vehicle speed									
30 km/h or less	✓	✓	?	?					
40 km/h	?	?	?	✓	✓	✓	✓	✓	✓
50 km/h			?	✓	✓	✓	✓	✓	✓
60 km/h			?			?	✓	✓	✓
70 to 90 km/h			?					✓	✓
Over 90 km/h								✓	✓
Motor vehicle volumes									
<1,500 vehicles/day	✓	✓	?	?	?	?			
1,500 to 3,000 vpd	?	?	?	✓	✓	✓	✓	✓	✓
3,000 to 6,000 vpd			?	?	?	?	✓	✓	✓
6,000 to 10,000 vpd			?				✓	✓	✓
>10,000 vpd							?	✓	✓
Function of street/road/highway									
Access roads (local streets)	✓	✓	✓	?	?	?			
Both mobility and access roads (minor collectors)			?	?	✓	✓	✓	✓	✓
Mobility roads (major collectors and arterials)			?		?	?	✓	✓	✓
Vehicle mix									
More than 30 trucks/buses per hour in curb lane			?			?	✓	✓	✓
Bus stops located along route			?		?	?	✓	✓	✓
Pedestrian activity									
Low pedestrian volumes	✓	✓	✓	✓	✓	✓	✓	✓	✓
High pedestrian volumes	✓	✓		✓	✓	✓	✓	✓	?
On-street parking									
Parallel parking; low turnover	?	?		?	?	?	✓	✓	✓
Parallel parking; high turnover							✓	✓	✓
Perpendicular or angle parking							✓	✓	✓
Frequency of intersections and crossings									
Limited intersections and driveway crossings	?	?	✓	✓	✓	✓	✓	✓	✓
Low-volume driveways or unsignalized intersections	✓	✓	✓	✓	✓	✓	✓	✓	✓
Frequent high-volume driveways or unsignalized intersections					?	?	✓	✓	?
Signalized intersections with high-volume turning conflicts						?	✓	✓	?

✓	Typically appropriate for the context
?	Requires further context specific evaluation

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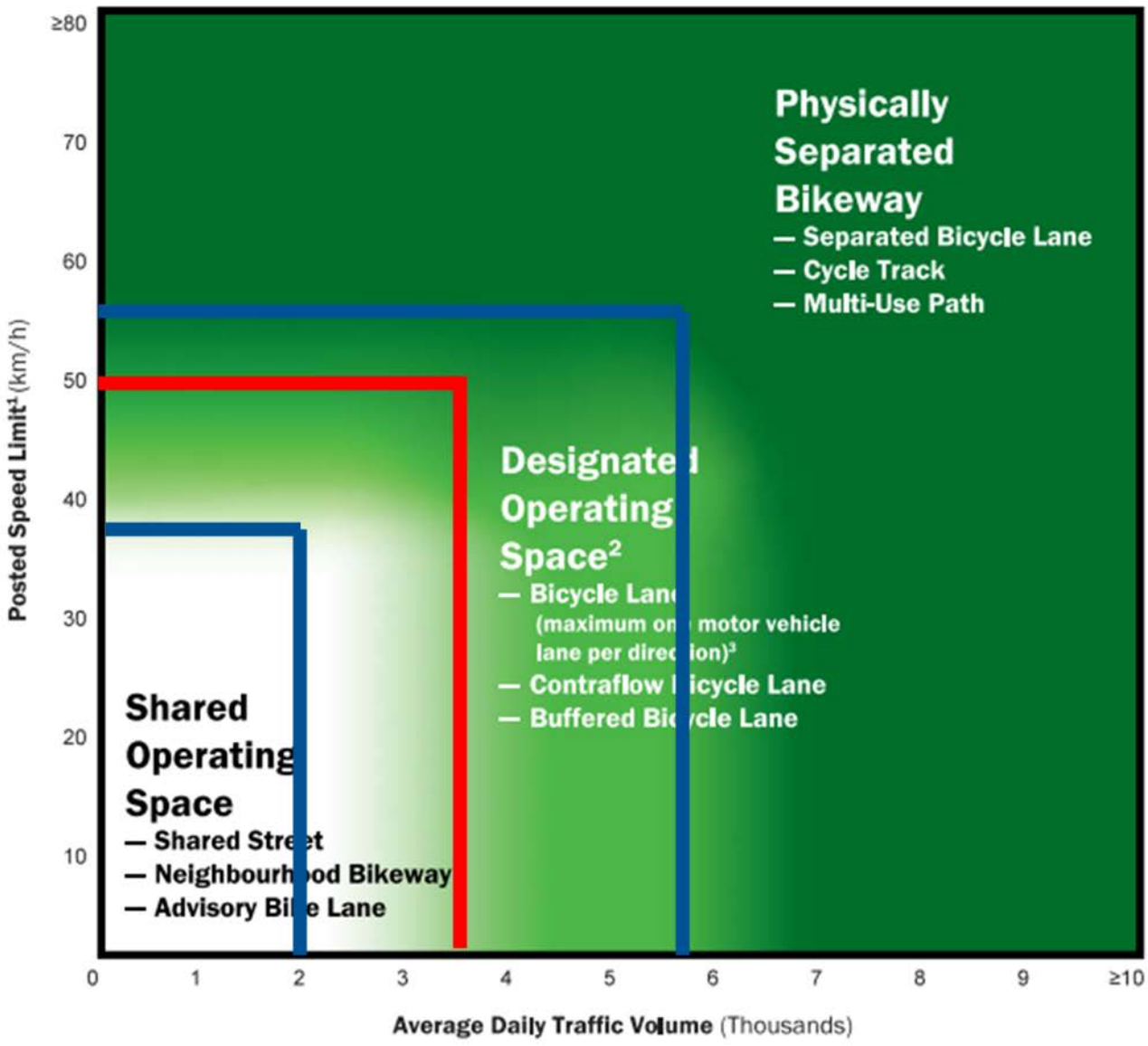
Langford Boulevard Application Heuristics

Figure B2

Desirable Cycling Facility Pre-Selection Nomograph
Urban/Suburban Context (Step 1)



1 Operating speeds are assumed to be similar to posted speeds. If evidence suggests this is not the case, practitioners may consider using 85th percentile speeds or implementing measures to reduce operating speeds.

2 Physically separated bikeways may always be considered in the designated operating space area of the nomograph.

3 On roadways with two or more lanes per direction (including multi-lane one-way roadways), a buffered bicycle lane should be considered the minimum with a typical facility being a physically separated bikeway.

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Miller Park Avenue Pre-Selection

	Shared Roadway	Neighbourhood Bikeway	Rural Paved Shoulder	Advisory Bicycle Lane	Bicycle Lane	Buffered Bicycle Lane	Separated Bicycle Lane	Cycle Track	Multi-Use Path
Motor vehicle speed									
30 km/h or less	✓	✓	?	?					
40 km/h	?	?	?	✓	✓	✓	✓	✓	✓
50 km/h			?	✓	✓	✓	✓	✓	✓
60 km/h			?			?	✓	✓	✓
70 to 90 km/h			?					✓	✓
Over 90 km/h								✓	✓
Motor vehicle volumes									
<1,500 vehicles/day	✓	✓	?	?	?	?			
1,500 to 3,000 vpd	?	?	?	✓	✓	✓	✓	✓	✓
3,000 to 6,000 vpd			?	?	?	?	✓	✓	✓
6,000 to 10,000 vpd			?				✓	✓	✓
>10,000 vpd							?	✓	✓
Function of street/road/highway									
Access roads (local streets)	✓	✓	✓	?	?	?			
Both mobility and access roads (minor collectors)			?	?	✓	✓	✓	✓	✓
Mobility roads (major collectors and arterials)			?		?	?	✓	✓	✓
Vehicle mix									
More than 30 trucks/buses per hour in curb lane			?			?	✓	✓	✓
Bus stops located along route			?		?	?	✓	✓	✓
Pedestrian activity									
Low pedestrian volumes	✓	✓	✓	✓	✓	✓	✓	✓	✓
High pedestrian volumes	✓	✓		✓	✓	✓	✓	✓	?
On-street parking									
Parallel parking; low turnover	?	?		?	?	?	✓	✓	✓
Parallel parking; high turnover							✓	✓	✓
Perpendicular or angle parking							✓	✓	✓
Frequency of intersections and crossings									
Limited intersections and driveway crossings	?	?	✓	✓	✓	✓	✓	✓	✓
Low-volume driveways or unsignalized intersections	✓	✓	✓	✓	✓	✓	✓	✓	✓
Frequent high-volume driveways or unsignalized intersections					?	?	✓	✓	?
Signalized intersections with high-volume turning conflicts						?	✓	✓	?

✓ Typically appropriate for the context

? Requires further context specific evaluation

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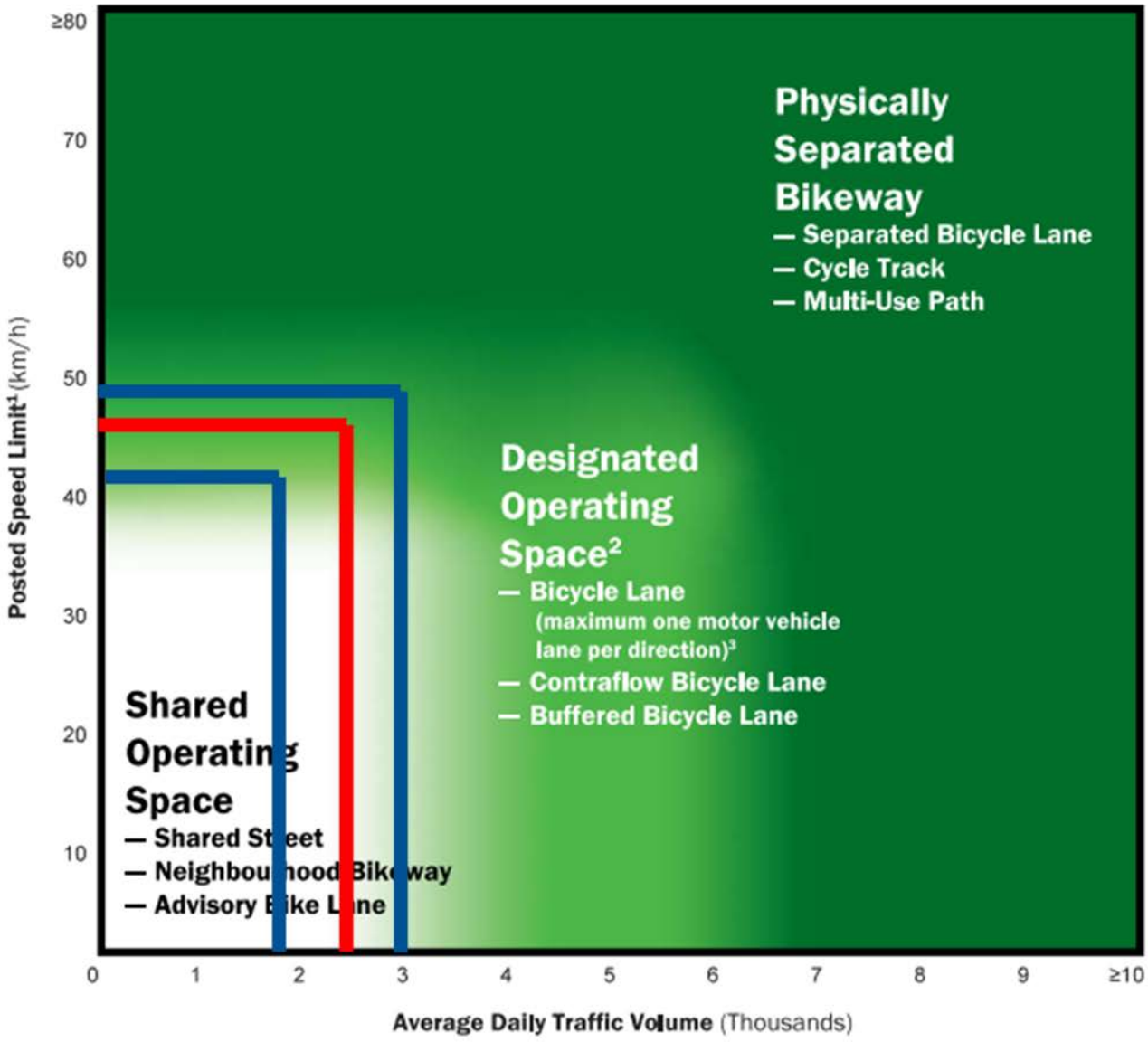
Miller Park Avenue Application Heuristics

Figure B4

Desirable Cycling Facility Pre-Selection Nomograph
Urban/Suburban Context (Step 1)



1 Operating speeds are assumed to be similar to posted speeds. If evidence suggests this is not the case, practitioners may consider using 85th percentile speeds or implementing measures to reduce operating speeds.

2 Physically separated bikeways may always be considered in the designated operating space area of the nomograph.

3 On roadways with two or more lanes per direction (including multi-lane one-way roadways), a buffered bicycle lane should be considered the minimum with a typical facility being a physically separated bikeway.

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Summerlyn Trail Pre-Selection

	Shared Roadway	Neighbourhood Bikeway	Rural Paved Shoulder	Advisory Bicycle Lane	Bicycle Lane	Buffered Bicycle Lane	Separated Bicycle Lane	Cycle Track	Multi-Use Path
Motor vehicle speed									
30 km/h or less	✓	✓	?	?					
40 km/h	?	?	?	✓	✓	✓	✓	✓	✓
50 km/h			?	✓	✓	✓	✓	✓	✓
60 km/h			?			?	✓	✓	✓
70 to 90 km/h			?					✓	✓
Over 90 km/h								✓	✓
Motor vehicle volumes									
<1,500 vehicles/day	✓	✓	?	?	?	?			
1,500 to 3,000 vpd	?	?	?	✓	✓	✓	✓	✓	✓
3,000 to 6,000 vpd			?	?	?	?	✓	✓	✓
6,000 to 10,000 vpd			?				✓	✓	✓
>10,000 vpd							?	✓	✓
Function of street/road/highway									
Access roads (local streets)	✓	✓	✓	?	?	?			
Both mobility and access roads (minor collectors)			?	?	✓	✓	✓	✓	✓
Mobility roads (major collectors and arterials)			?		?	?	✓	✓	✓
Vehicle mix									
More than 30 trucks/buses per hour in curb lane			?			?	✓	✓	✓
Bus stops located along route			?		?	?	✓	✓	✓
Pedestrian activity									
Low pedestrian volumes	✓	✓	✓	✓	✓	✓	✓	✓	✓
High pedestrian volumes	✓	✓		✓	✓	✓	✓	✓	?
On-street parking									
Parallel parking; low turnover	?	?		?	?	?	✓	✓	✓
Parallel parking; high turnover							✓	✓	✓
Perpendicular or angle parking							✓	✓	✓
Frequency of intersections and crossings									
Limited intersections and driveway crossings	?	?	✓	✓	✓	✓	✓	✓	✓
Low-volume driveways or unsignalized intersections	✓	✓	✓	✓	✓	✓	✓	✓	✓
Frequent high-volume driveways or unsignalized intersections					?	?	✓	✓	?
Signalized intersections with high-volume turning conflicts						?	✓	✓	?

✓ Typically appropriate for the context

? Requires further context specific evaluation

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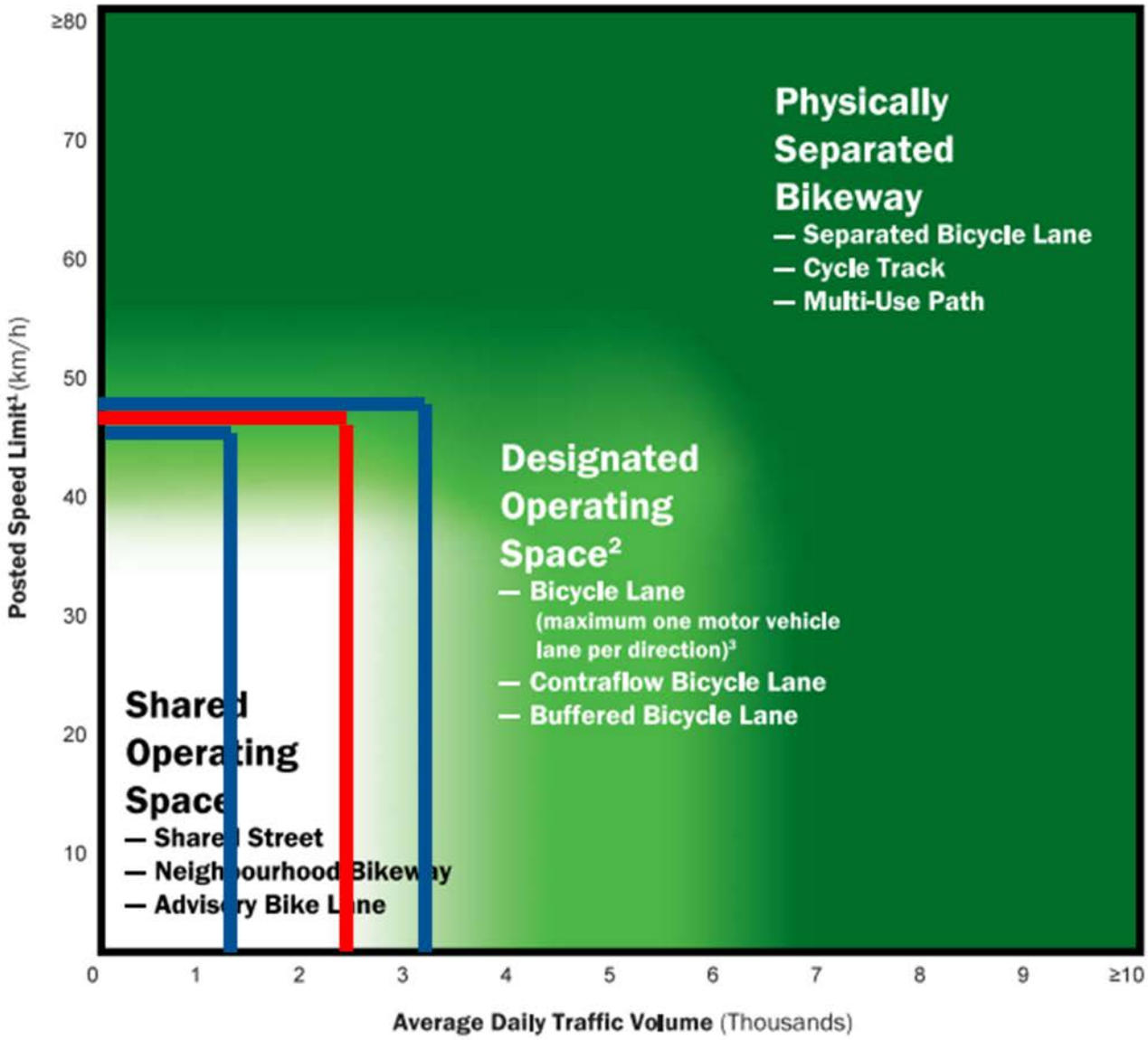
Summerlyn Trail Application Heuristics

Desirable Cycling Facility Pre-Selection Nomograph
Urban/Suburban Context (Step 1)



1 Operating speeds are assumed to be similar to posted speeds. If evidence suggests this is not the case, practitioners may consider using 85th percentile speeds or implementing measures to reduce operating speeds.

2 Physically separated bikeways may always be considered in the designated operating space area of the nomograph.

3 On roadways with two or more lanes per direction (including multi-lane one-way roadways), a buffered bicycle lane should be considered the minimum with a typical facility being a physically separated bikeway.

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John Street Pre-Selection

	Shared Roadway	Neighbourhood Bikeway	Rural Paved Shoulder	Advisory Bicycle Lane	Bicycle Lane	Buffered Bicycle Lane	Separated Bicycle Lane	Cycle Track	Multi-Use Path
Motor vehicle speed									
30 km/h or less	✓	✓	?	?					
40 km/h	?	?	?	✓	✓	✓	✓	✓	✓
50 km/h			?	✓	✓	✓	✓	✓	✓
60 km/h			?			?	✓	✓	✓
70 to 90 km/h			?					✓	✓
Over 90 km/h								✓	✓
Motor vehicle volumes									
<1,500 vehicles/day	✓	✓	?	?	?	?			
1,500 to 3,000 vpd	?	?	?	✓	✓	✓	✓	✓	✓
3,000 to 6,000 vpd			?	?	?	?	✓	✓	✓
6,000 to 10,000 vpd			?				✓	✓	✓
>10,000 vpd							?	✓	✓
Function of street/road/highway									
Access roads (local streets)	✓	✓	✓	?	?	?			
Both mobility and access roads (minor collectors)			?	?	✓	✓	✓	✓	✓
Mobility roads (major collectors and arterials)			?		?	?	✓	✓	✓
Vehicle mix									
More than 30 trucks/buses per hour in curb lane			?			?	✓	✓	✓
Bus stops located along route			?		?	?	✓	✓	✓
Pedestrian activity									
Low pedestrian volumes	✓	✓	✓	✓	✓	✓	✓	✓	✓
High pedestrian volumes	✓	✓		✓	✓	✓	✓	✓	?
On-street parking									
Parallel parking; low turnover	?	?		?	?	?	✓	✓	✓
Parallel parking; high turnover							✓	✓	✓
Perpendicular or angle parking							✓	✓	✓
Frequency of intersections and crossings									
Limited intersections and driveway crossings	?	?	✓	✓	✓	✓	✓	✓	✓
Low-volume driveways or unsignalized intersections	✓	✓	✓	✓	✓	✓	✓	✓	✓
Frequent high-volume driveways or unsignalized intersections					?	?	✓	✓	?
Signalized intersections with high-volume turning conflicts						?	✓	✓	?

✓ Typically appropriate for the context

? Requires further context specific evaluation

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John Street Application Heuristics

Appendix C

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.

Source: OTM Book 15, Table 7.

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Pedestrian Crossover Selection Matrix Langford Boulevard

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.

Source: OTM Book 15, Table 7.

Pedestrian Crossover Selection Matrix West Park Avenue

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.

Source: OTM Book 15, Table 7.

Pedestrian Crossover Selection Matrix Summerlyn Trail

Appendix D

Traffic Calming Plans (TO BE PROVIDED)