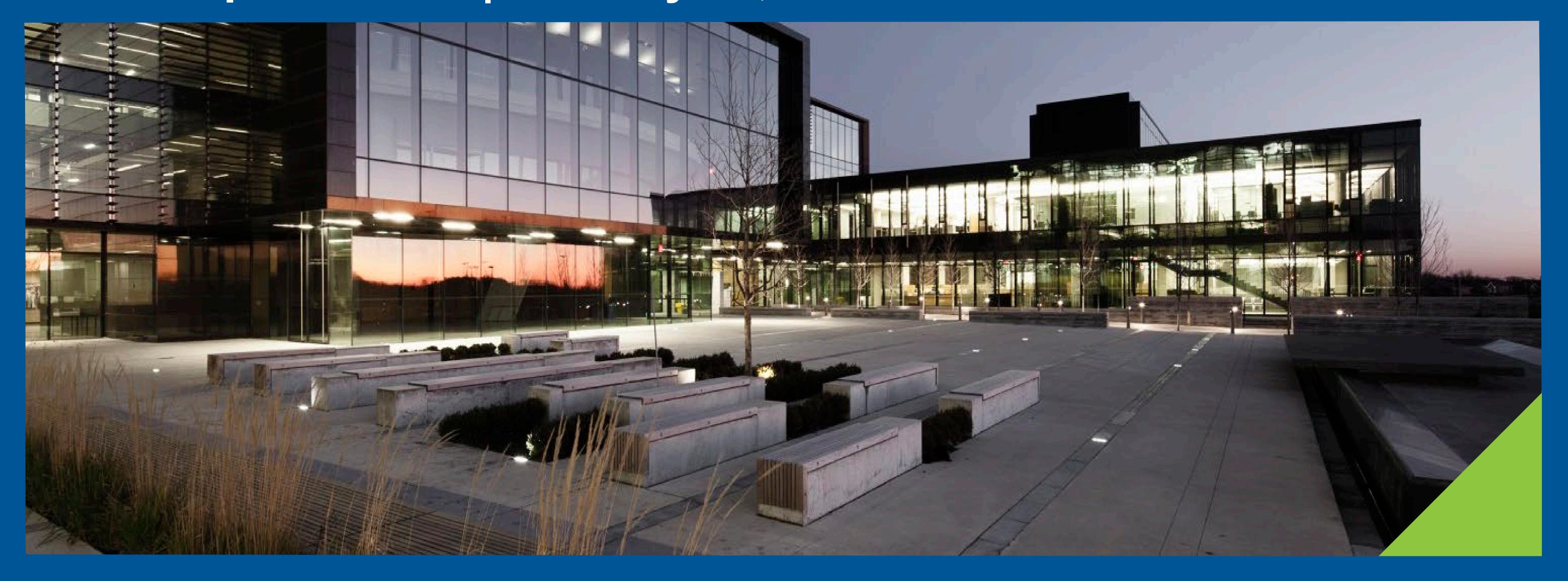
### Welcome to the

### Martin Grove Road In-Service Road Safety Review

Public Open House | January 16, 2025







## Project Purpose

- As part of the MoveSmart Mobility Management Strategy, the City of Vaughan is furthering its commitment to road safety by conducting Corridor Reviews, including along Martin Grove Road.
- These reviews examine the current and future transportation planning and mobility infrastructure needs for corridors within Vaughan.
- By assessing traffic operations in these areas, the City can continue to monitor and identify road safety measures for pedestrians, cyclists, and transit and vehicular road users to continue to serve all modes of transportation.
- These reviews will enable City staff to make recommendations on short- and long-term implementation plans to address any specific interests identified in these areas.

#### What is a Corridor?

A corridor refers to a linear road and its associated land uses.

This can include a main roadway and any sidewalks, bike lanes, greenspace and/or bus stops located along that roadway.





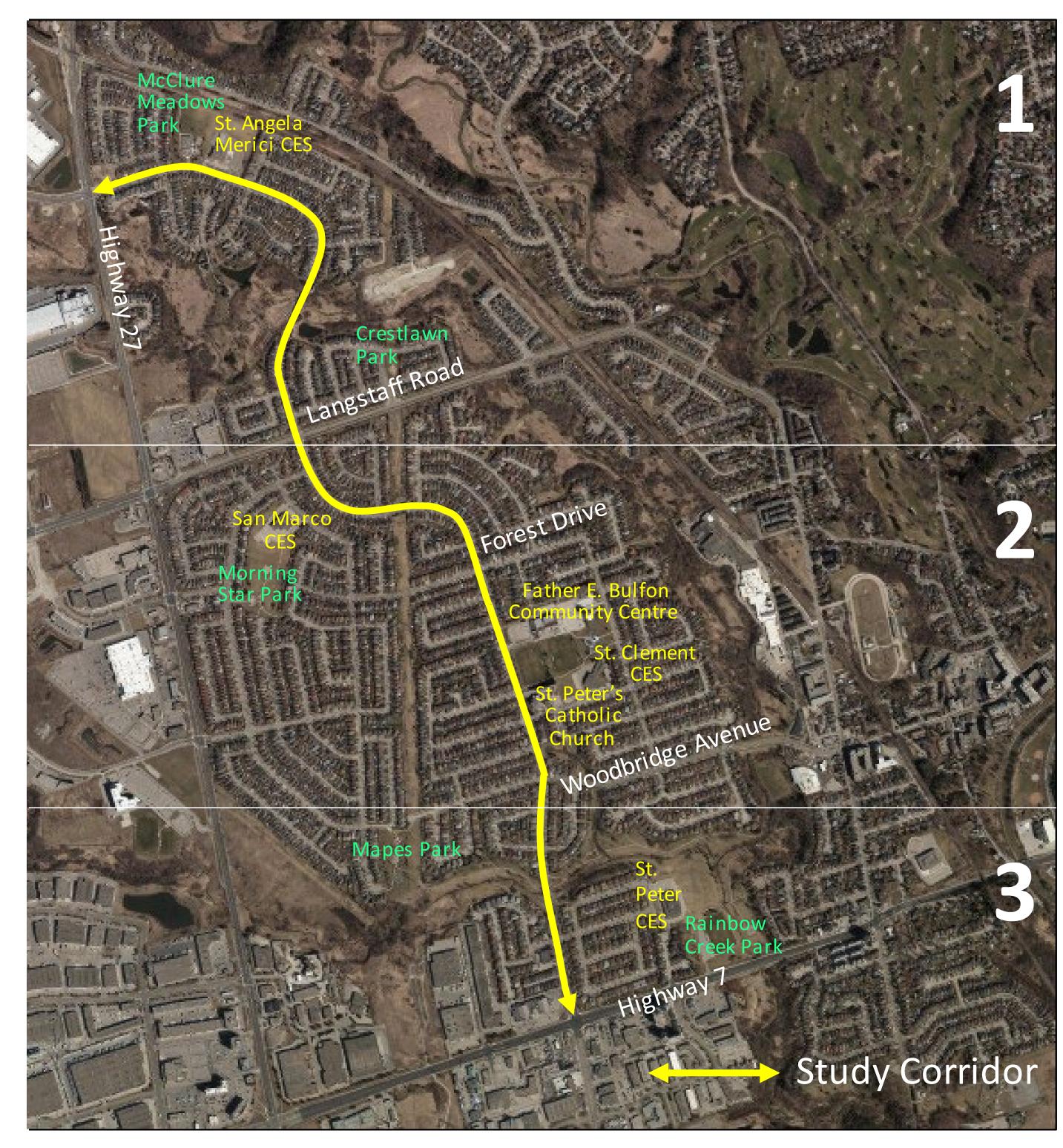
## Study Area

#### Martin Grove Road

- Between Highway 7 and Highway 27 (3.9 km)
- Classified as major collector between Highway 7 and Langstaff Road
- Classified as minor collector between Langstaff Road and Highway 27

#### Major Traffic Generators

- St. Angela Merici CES, San Marco CES, St. Clement CES, and St. Peter CES
- Father E. Bulfon Community Centre
- St. Peter's Catholic Church
- Plaza access just north of Highway 7 on west side







## Project Schedule

Project Start Date January 2024 Background Research and Existing Conditions

January 2024

– March 2024

Resident and Stakeholder Engagement Session #1

**March 2024** 

Identification of Proposals

April 2024 – June 2024 Resident and Stakeholder Engagement Session #2

June 2024 – September 2024 Development of Recommendations

October 2024

Conceptual

Design

November

2024

Resident and Stakeholder Engagement Session #3

November 2024 – January 2025 Recommendations incorporated into MoveSmart Report

March 2025

Included virtual public meeting, online survey and Councillor meeting

Included in person public meeting, online survey and Councillor meeting





### Previous Public Feedback

"Speed cameras at Father E. Bulfon would be great..."

"[Edge line and centre line markings] have been a successful measure already implemented throughout the community..."

"Curb extensions should be implemented, if possible, at all crossings along Martin Grove for maximum safety for people outside of cars."

"[Curb radius reductions are] a great idea to lower turning speeds...."

"[Leading
Pedestrian Intervals
are an] excellent
option that benefits
pedestrians without
penalizing local
traffic."

"Left-turn traffic calming would be a good option..."

"Benches can be added along Martin Grove to reinforce to the road users that the complete street is used by a variety of transport modes (walking, biking, rolling)"

"[On-street parking at St.
Angela Merici CES] may be beneficial so that families have a space to drop off their children while minimally disrupting the straight-through traffic."





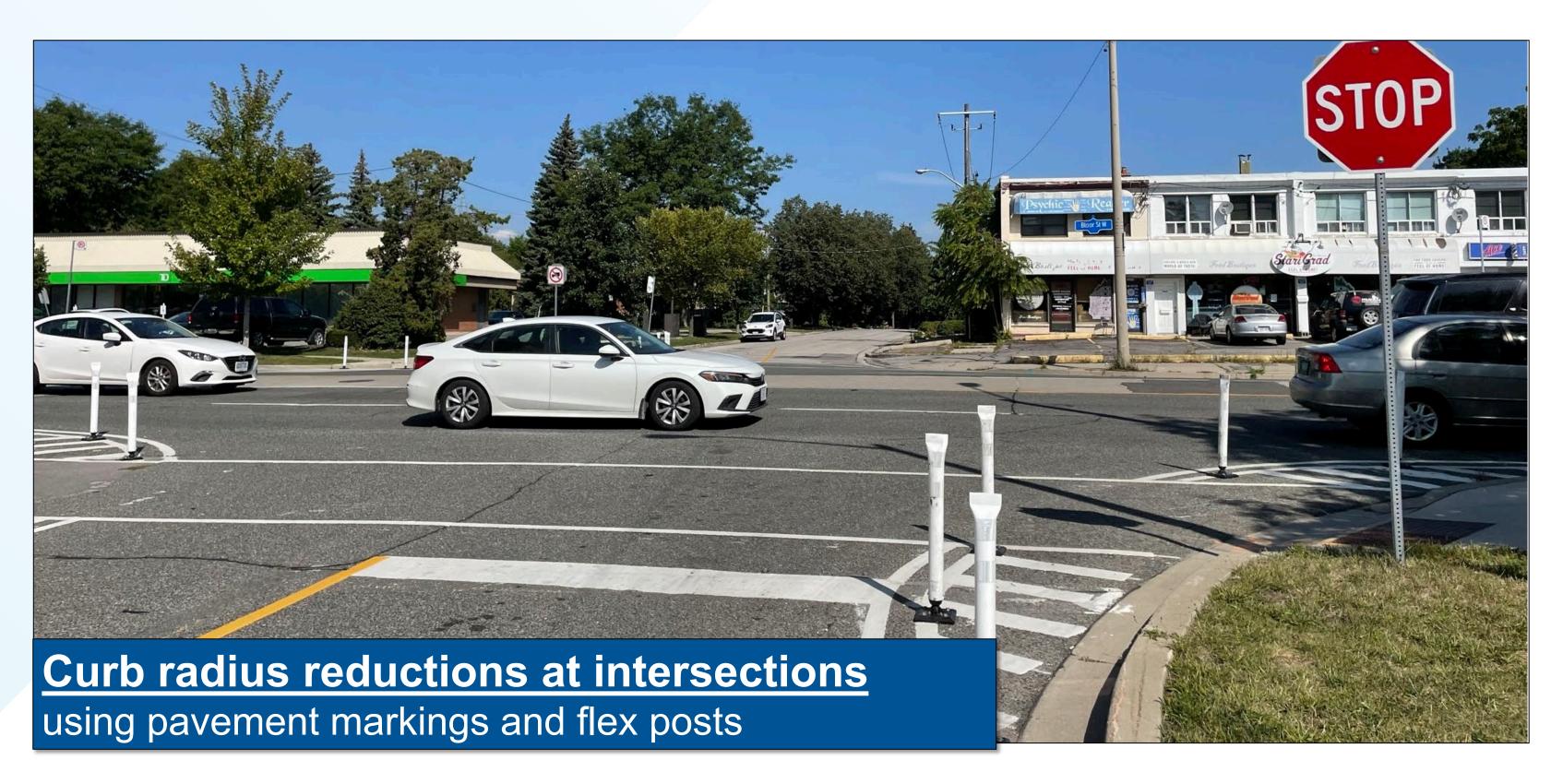
# Key Findings & Identified Opportunities

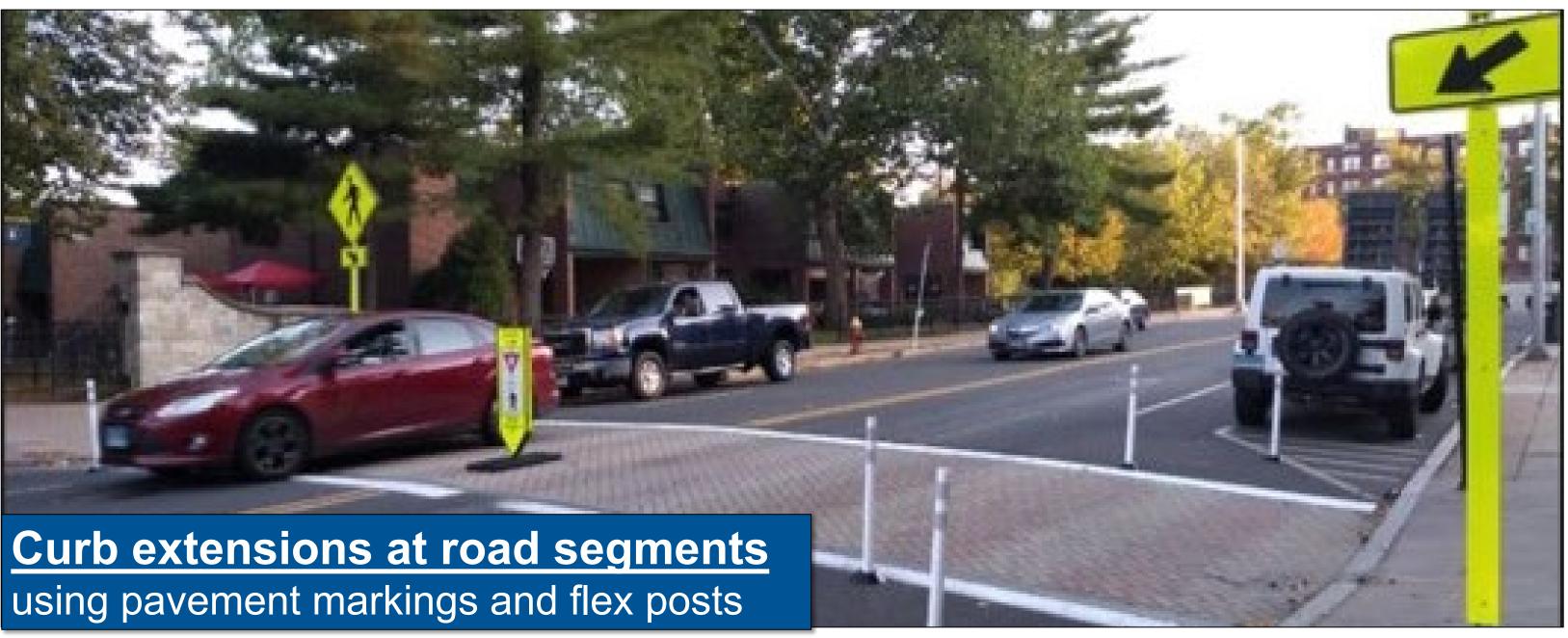
- Intersection safety
- School pick-up and drop-off activities
- Addressing speeds and the need for traffic calming
  - Operating speeds exceeding 60 km/h between Forest Drive and Claudia Avenue / Bainbridge Avenue (posted speed limit is 40 km/h)
- Lane width impacts higher operating speeds
- Compliance at all-way stop-controlled intersections, particularly:
  - Northbound right at Claudia Avenue / Bainbridge Avenue
  - Southbound right at Morning Star Drive
- Ongoing opportunities to enhance pedestrian safety, particularly for seniors
- Addressing aggressive driver behaviour, particularly with turning movements





## Phase 1 Temporary Pilot Study Measures





#### Public feedback

- Corridor speeds.
- Pedestrian safety.

#### What are the benefits?

- > Lower speeds through area.
- Reduced crossing distance for pedestrians at intersections.
- Reduced turning speeds and improved visibility for pedestrians.





### Other Phase 1 Measures



#### Study findings

Non-optimal stop sign compliance throughout the corridor.

#### Tiger tails

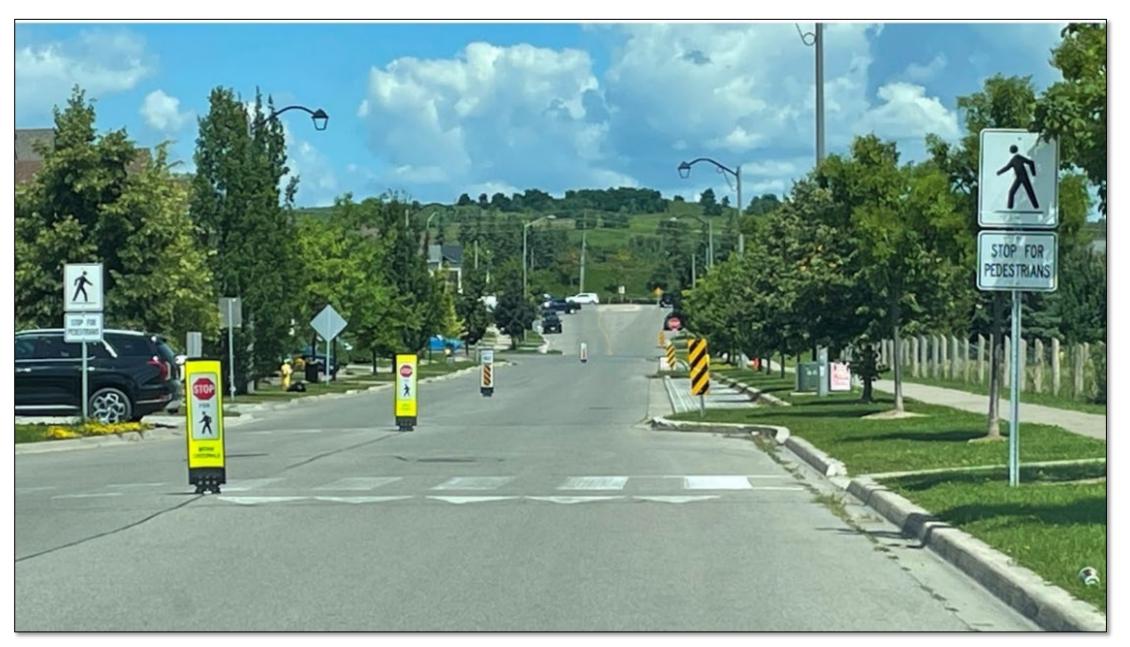
- Red and white strips below a stop sign to highlight its presence and improve stopping compliance.
- To be installed at all all-way stopcontrolled intersections along corridor.



#### **Seniors Safety Zone**

- Highlights presence of seniors along roadway.
- Area in front of Father E.

  Bulfon Community Centre chosen.
- Amenities will be added to area such as benches.



#### Centreline flex posts

To be placed at entry points into corridor (at Hwy 7 at south end and Hwy 27 at north end).



#### Signal timing adjustments

To increase walk times for pedestrians.





### Other Phase 1 Measures

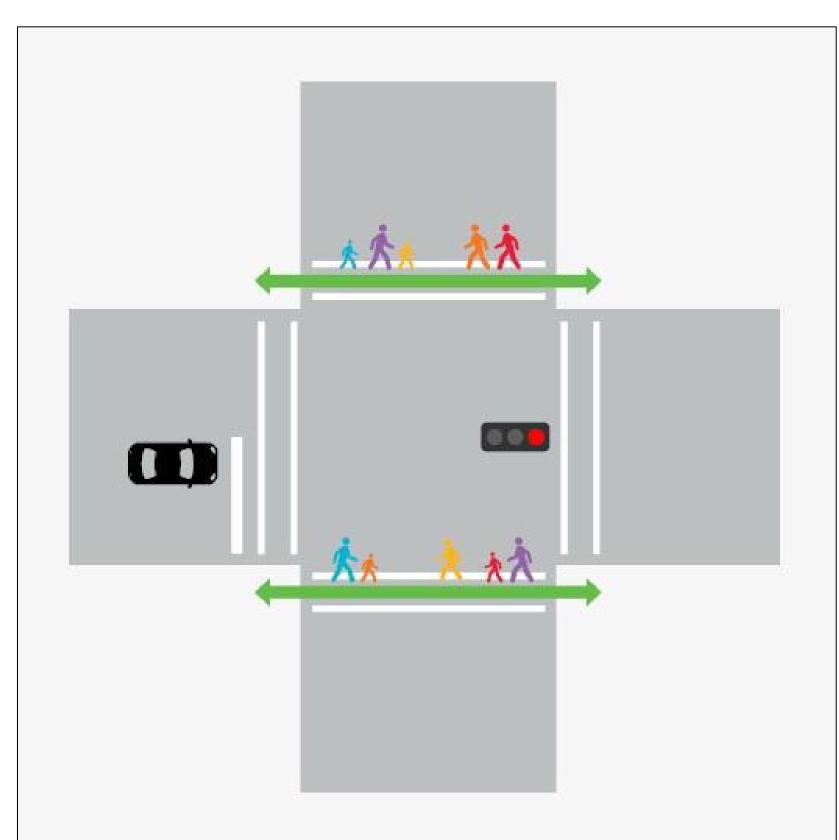


#### Study findings

Observed speeds between Sicilia Street and Castlepoint Drive exceed the posted speed limit.

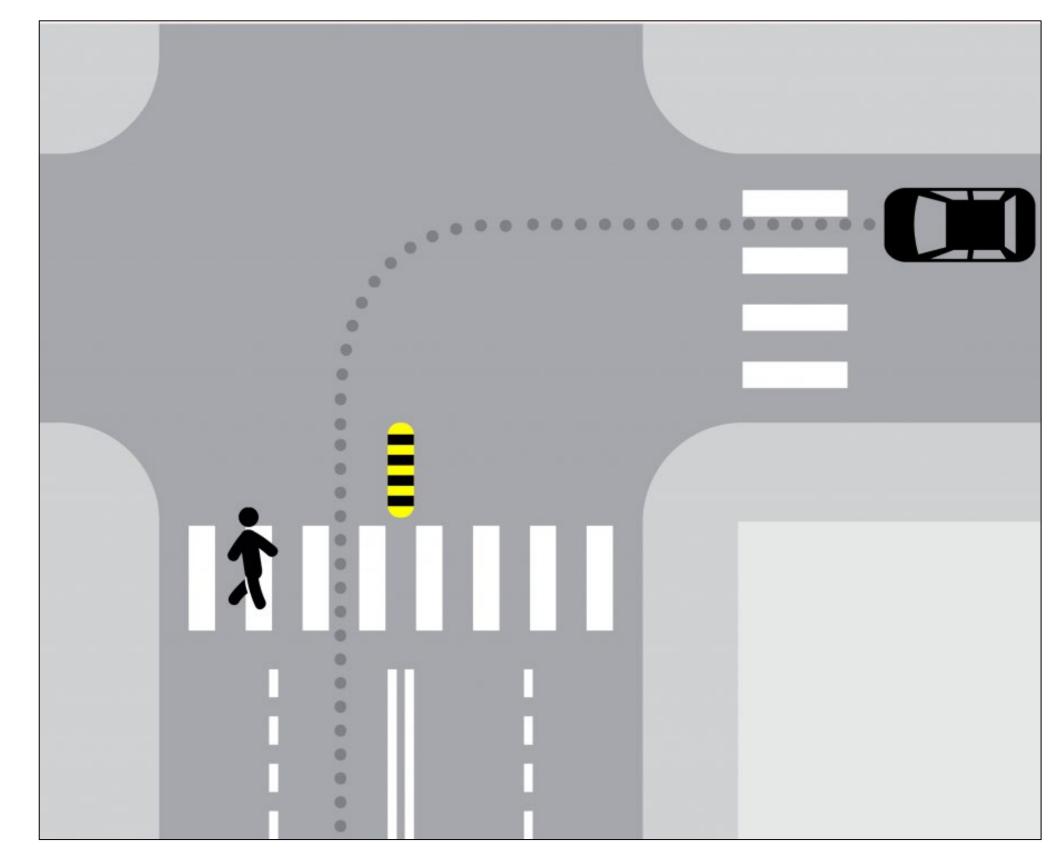
#### Edge line and centre line markings

- > Pavement markings that delineate the edges and centre of the road.
- Visually narrows the wide cross-section between Sicilia Street and Castlepoint Drive, which encourages slower vehicular speeds.



### Leading Pedestrian Intervals (LPIs)

- Pedestrian signal turns green before the vehicle signal, giving pedestrians a head start when crossing.
- Improves visibility of pedestrians and reduces the amount of time that pedestrians are in conflict with vehicles.
- ➤ To be implemented at Langstaff Road and Woodbridge Avenue.



#### Left-turn traffic calming

- Encourages drivers to approach the crosswalk at sharper angles.
- Reduces turning speeds.
- > Increases visibility of pedestrians.
- > To be installed at Woodbridge Avenue.

#### Public feedback

Overall feedback regarding pedestrian safety and driver behaviour at Woodbridge Avenue.





## Speed Cushions

- Minimal opportunity for the use of speed cushions along Martin Grove due to ineffectiveness on wide multi-lane roads.
- City is reviewing segment between Jackman Crescent and Bellona Street for potential future implementation.
- Frequency and spacing of driveways and intersections along the corridor minimize opportunities due to impacts on property owners.
- Speed cushions are temporary and seasonal. City will undertake data collection and evaluation before potential conversion to permanent installment.







### Police Enforcement

- Feedback was received to increase police enforcement along the corridor.
- Speeding and interest in additional police enforcement shared with York Regional Police.
- City's automated speed enforcement program enable cameras in Community Safety Zones to reinforce road safety.











### Implementation Schedule

#### Phase 1 Implementation

Pilot the designs with temporary measures (flex posts)

Preliminary Design – Spring 2025
Pilot Project Installations – Summer 2025

#### Phase 1 Evaluation

Gather public feedback following implementation and undertake data evaluation

**Late 2025/Early 2026** 

#### Phase 2 Implementation

Adjust the design based on evaluation findings Implement permanent measures (raised curbs) through capital projects

2027+

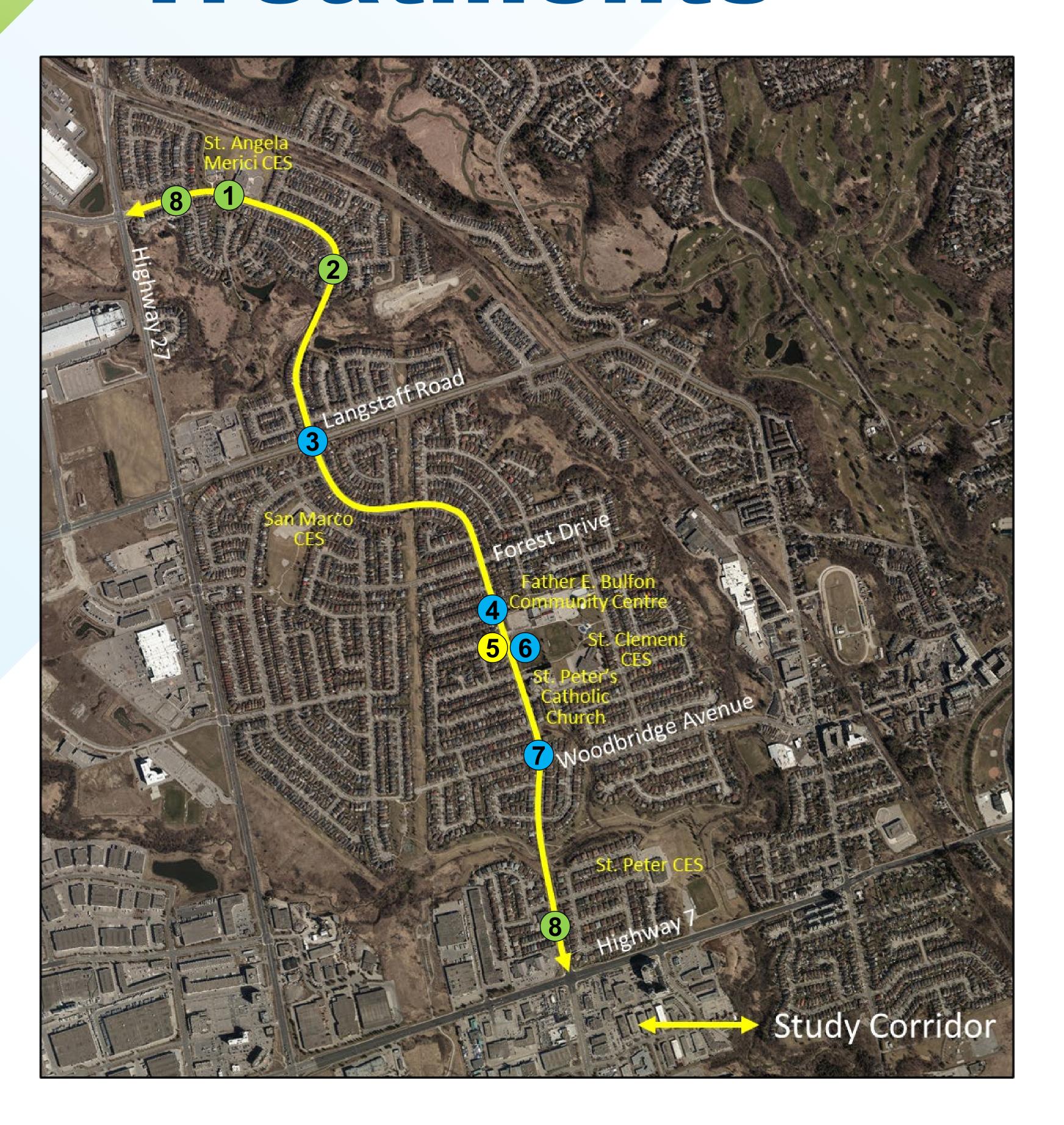








## Summary of Proposed Treatments



#### Legend

- Cross-Section Treatment
- Pedestrian-Friendly Treatment
- Speed Management Treatment
- 1. Designated parking spaces and PXO in front of St. Angela Merici CES
- 2. Edge line treatment with provision for on-street parking
- 3. Signal timing adjustments, including Leading Pedestrian Intervals (LPIs)
- 4. Curb extensions\* and signal timing adjustments
- 5. Automated speed enforcement camera
- 6. Senior Safety Zone
- 7. Left-turn traffic calming and LPIs
- 8. Centreline flex posts

#### Treatments to be implemented throughout corridor

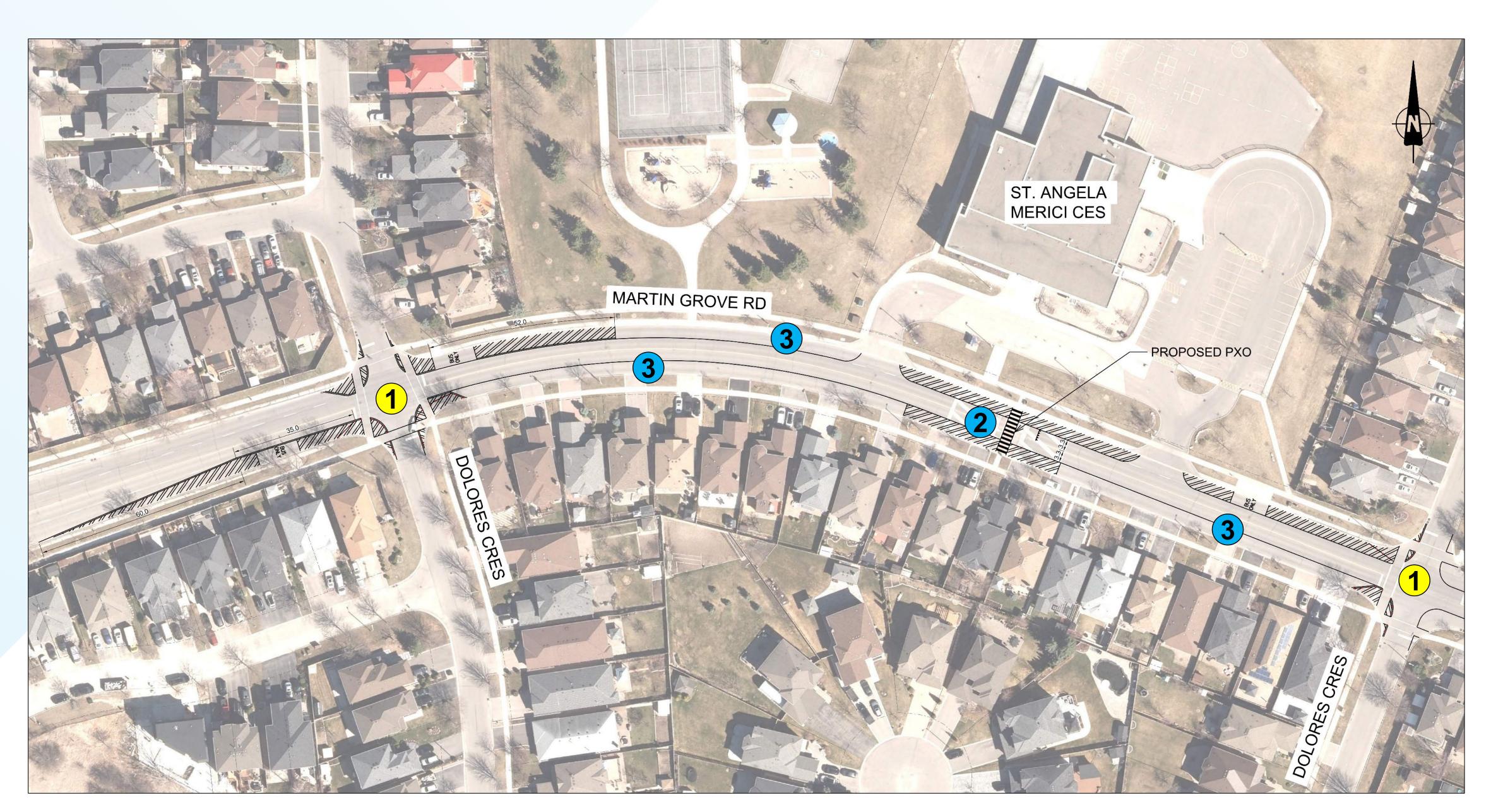
- Stop sign visibility improvements
- Curb radius reductions\* and curb extensions\*

<sup>\*</sup>Depending on pilot study, raised curbs may be implemented in Phase 2





## On-Street Parking: St. Angela Merici CES



#### Legend

- Phase 1 Measure
- Phase 1 and 2 Measure\*

\*If proceeding with Phase 2 measure, raised curbs will be installed.

- Install curb radius reductions at Andy Crescent and at Castlepoint Drive.
- Convert existing raised crosswalk in front of school to a pedestrian crossover.
- Install edge lines to indicate permitted parking.

#### What are the benefits?

- Dedicated parking for parents at locations that do not negatively impact school operations.
- > Lower speeds through area.

#### Public feedback

Overall public support for providing parking stalls in front of school based on survey findings.





## Edge Line and Centre Line Markings: Sicilia Street to Castlepoint Drive



#### Legend

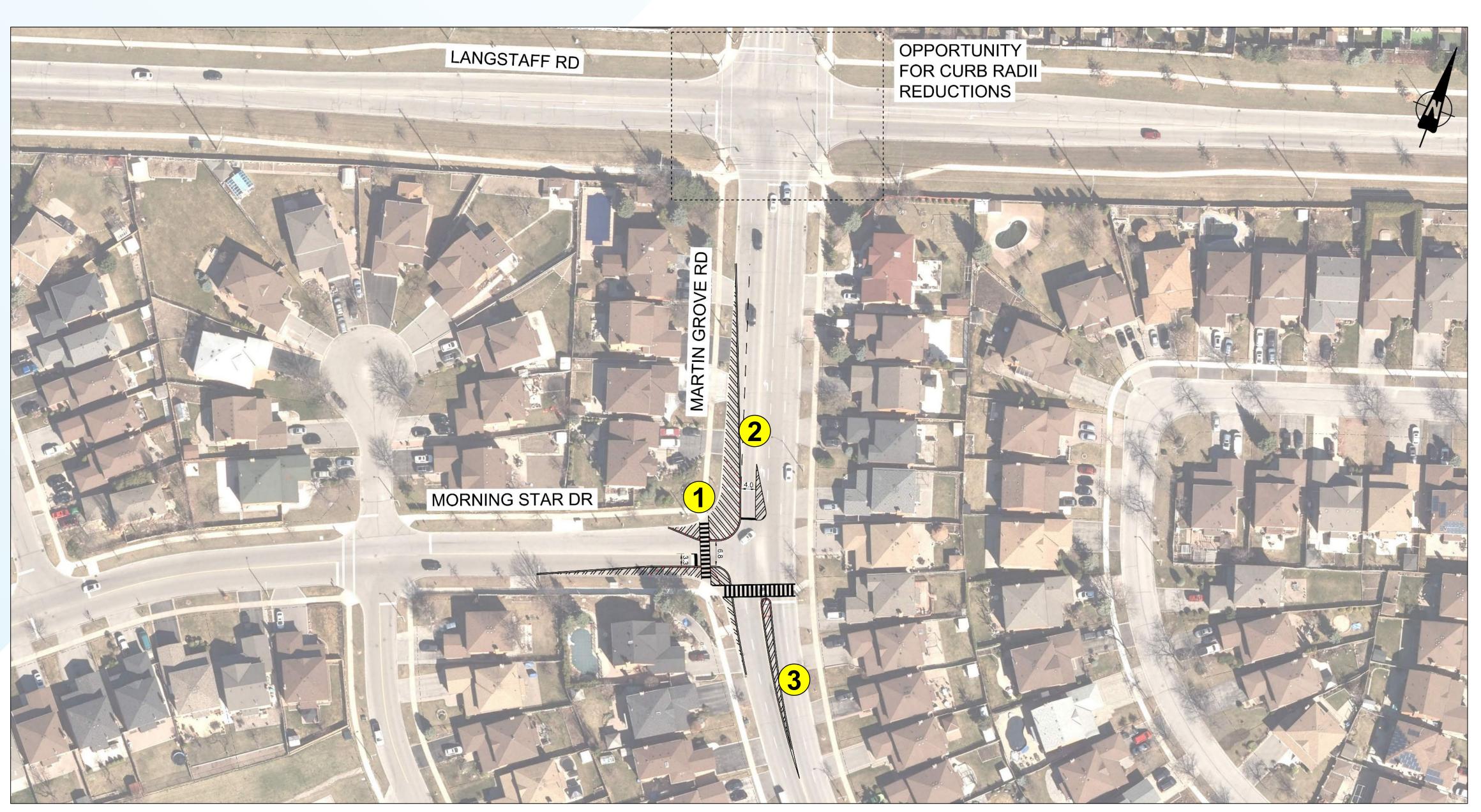
Phase 1 Measure

1. Install edge line and centre line pavement markings to highlight existing cross-section.





## **Curb Radius Reduction: Morning Star Drive (Pilot Study)**



#### Legend

- Phase 1 Measure
- Phase 1 and 2 Measure\*

\*If proceeding with Phase 2 measure, raised curbs will be installed.

- 1. Install curb radius reductions.
- 2. Install curb extension.
- 3. Remove northbound left-turn lane that is too narrow to be effective. Replace with centre median using pavement markings and flex posts.

#### What are the benefits?

- Lower turning speeds for the southbound right turn.
- Minimal impacts to traffic operations.

#### Public feedback

Pedestrian safety, particularly in the west crosswalk.

#### **Study findings**

Motorists not stopping at this location, particularly for the southbound right turn.





## **Curb Radius Reduction: Amaretto Court (Pilot Study)**



#### Legend

- Phase 1 Measure
- Phase 1 and 2 Measure\*

\*If proceeding with Phase 2 measure, raised curbs will be installed.

- 1. Install curb extension
- 2. Install curb radius reductions

#### What are the benefits?

- Improved sightlines for vehicles exiting Amaretto Court.
- Easier access to driveways for residents living on the west side of Martin Grove Road.

#### Public feedback

Visibility exiting Amaretto Court.

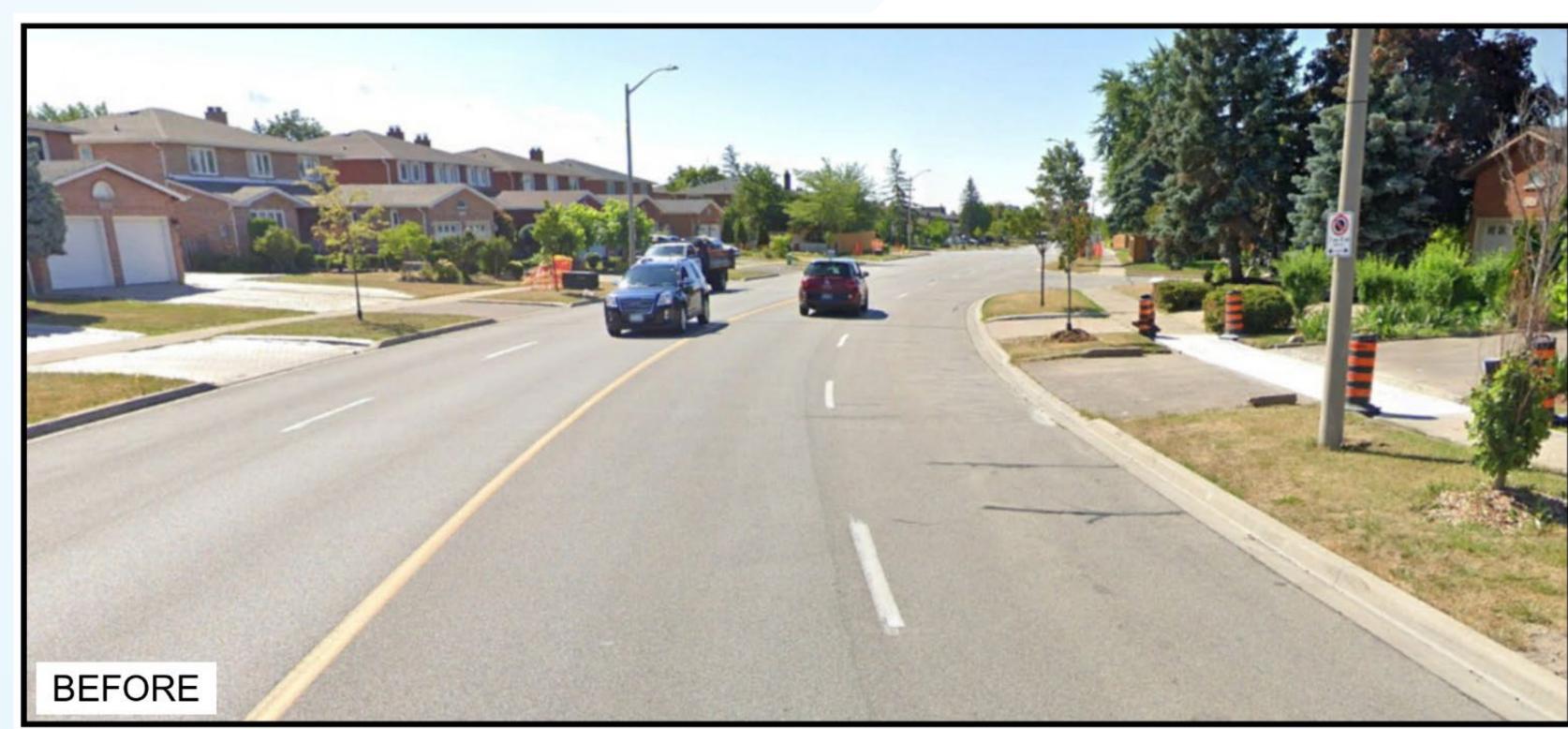
#### **Study findings**

Observed speeds along this section exceed the posted speed limit.





# **Curb Radius Reduction: Amaretto Court (Pilot Study)**





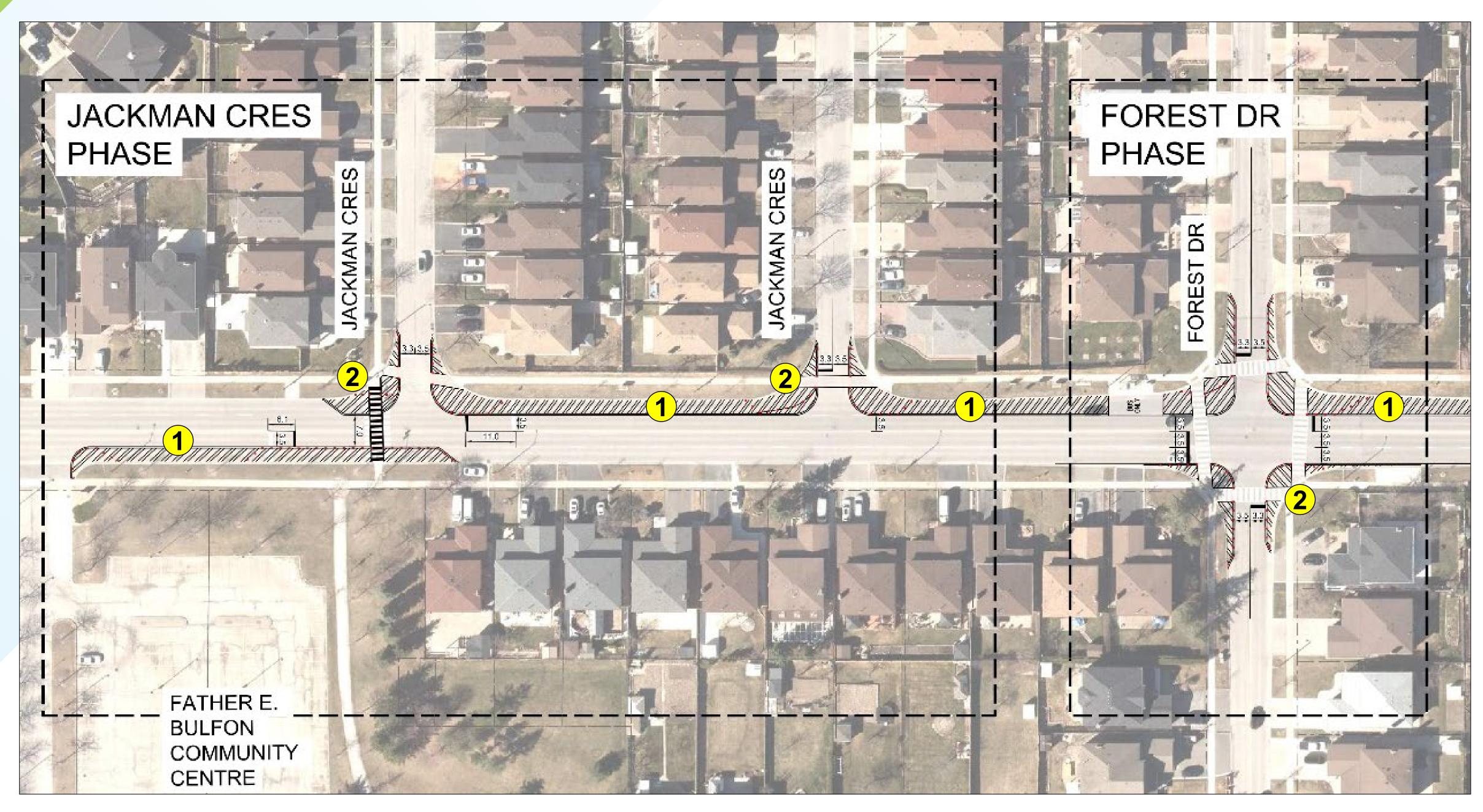








## Horizontal Physical Measures: Forest Drive to Jackman Crescent (Pilot Study)



#### Legend

- Phase 1 Measure
- Phase 1 and 2 Measure\*

\*If proceeding with Phase 2 measure, raised curbs will be installed.

- 1. Install curb extensions.
- 2. Install curb radius reductions.

#### Public feedback

- > Speeds along this section.
- > Stop sign compliance and pedestrian safety at Forest Drive.
- > Overall feedback regarding pedestrian safety at Jackman Crescent.

#### **Study findings**

Observed speeds along this section exceed the posted speed limit.





# Horizontal Physical Measures: Jackman Crescent to Claudia Avenue / Bainbridge Avenue (Pilot Study)



#### Legend

- Phase 1 Measure
- Phase 1 and 2 Measure\*

\*If proceeding with Phase 2 measure, raised curbs will be installed.

- 1. Install curb extensions.
- 2. Install curb radius reductions.

#### Public feedback

- > Speeds along this section.
- Overall feedback regarding pedestrian safety and driver behaviour at Claudia Avenue / Bainbridge Avenue.

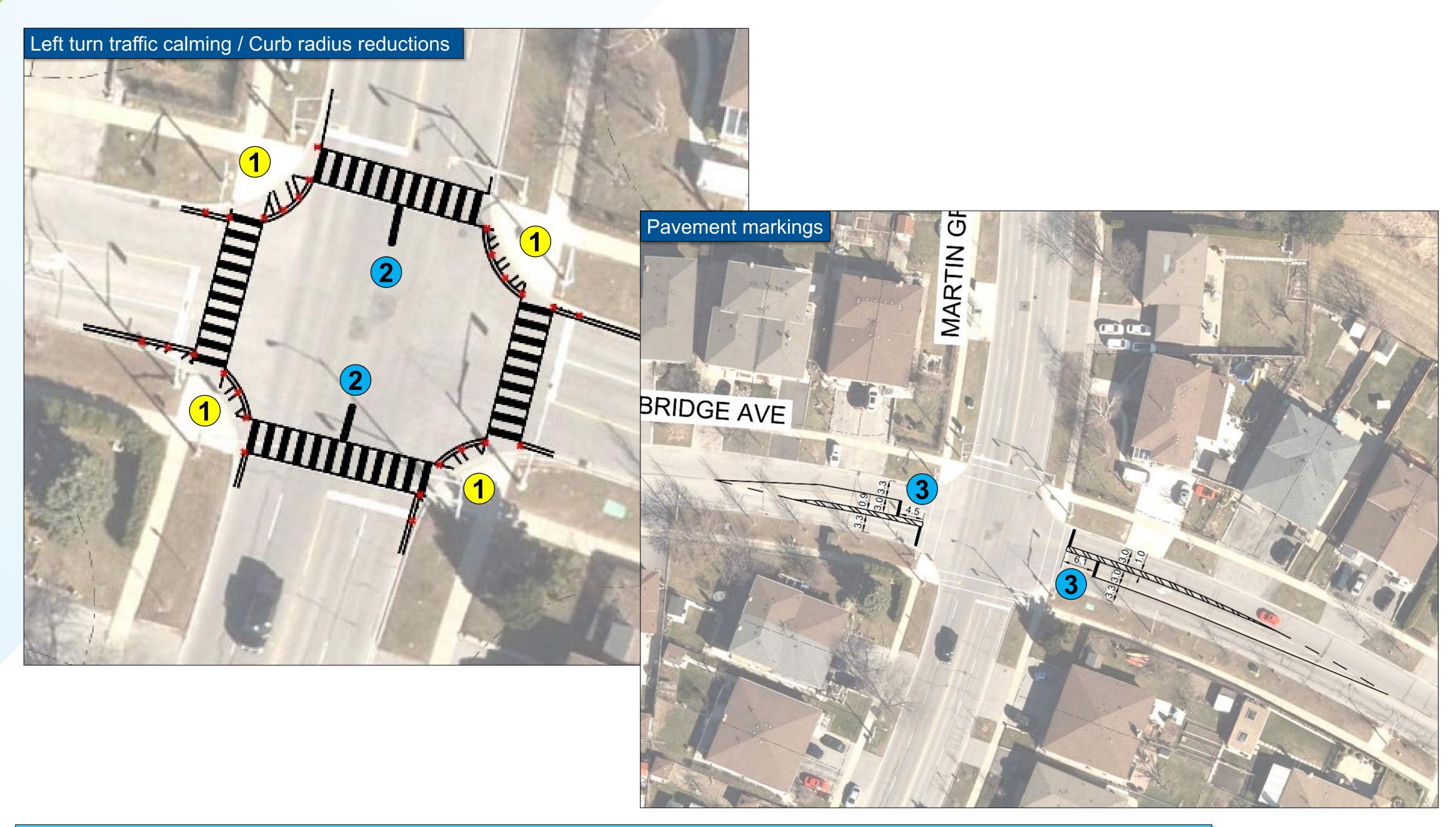
#### Study findings

- > Observed speeds along this section exceed the posted speed limit.
- Stop sign compliance at Claudia Avenue / Bainbridge Avenue, particularly for the northbound right turn.





## Woodbridge Avenue Improvements



#### Legend

- Phase 1 Measure
- Phase 1 and 2 Measure\*

\*If proceeding with Phase 2 measure, raised curbs will be installed.

- 1. Install curb radius reductions.
- 2. Install left-turn calming using temporary speed bumps on the north and south legs.
- Move stop bar for the eastbound and westbound left-turn lanes further back from the crosswalk.

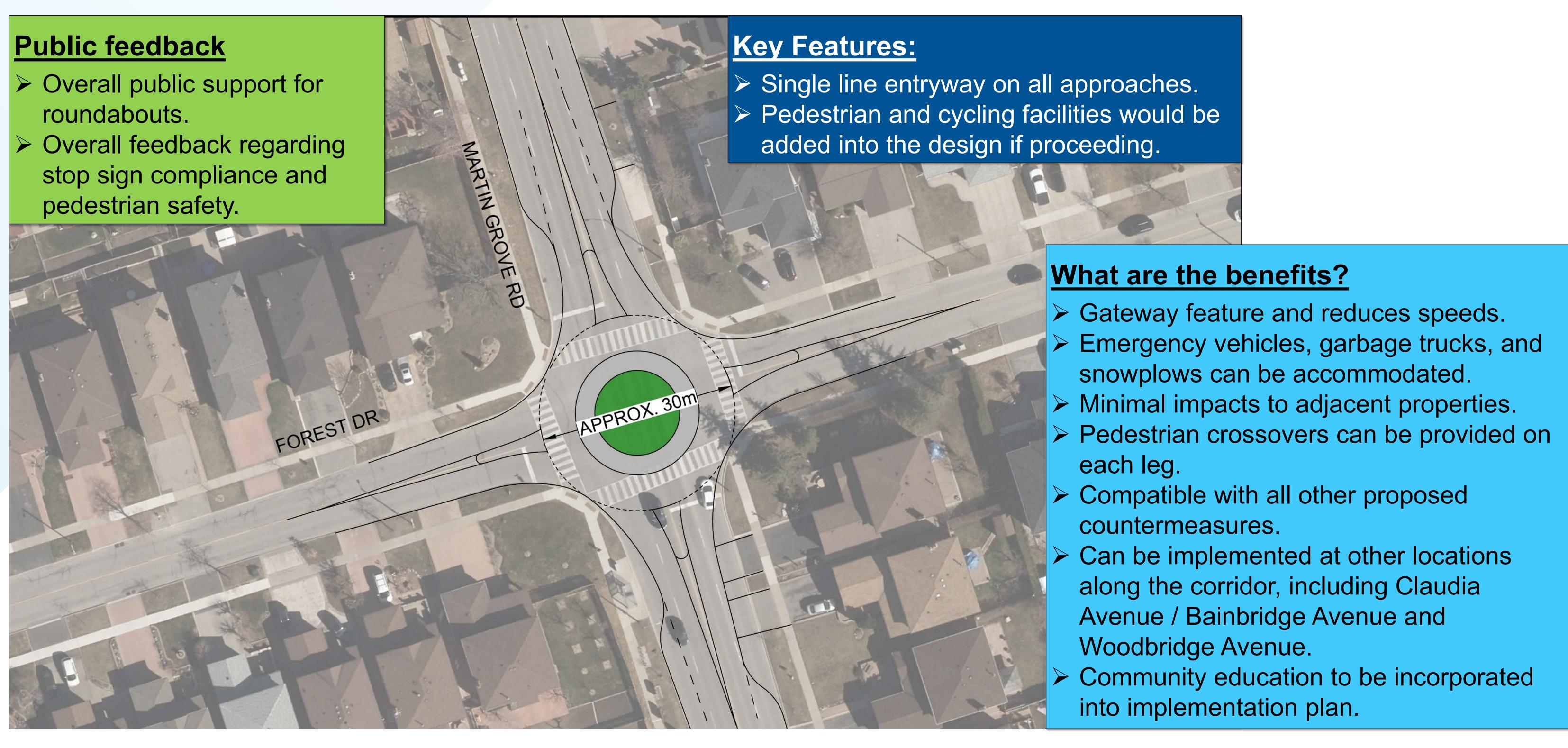
#### What are the benefits?

- School buses will continue to be able to make the southbound left-turn movement.
- > Pavement marking / lane alignments improve sightlines.





## For Phase 2 Consideration: Traffic Circles









## Next Steps

- Target project completion March 2025, including incorporation of recommendations in MoveSmart report
- Installations for pilot project to begin in Summer 2025

#### QUESTIONS

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