

# **Eighth Line Environmental Assessment**

Public Information Centre (PIC) 2

Monday June 8, 2020



# Public Information Centre (PIC) 2

## Overview

This public information centre (PIC) will present information on the project background, Municipal Class Environmental Assessment process, preferred solution to the problem / opportunity statement, alternative design concepts under consideration, evaluation of alternatives and next steps in the study.

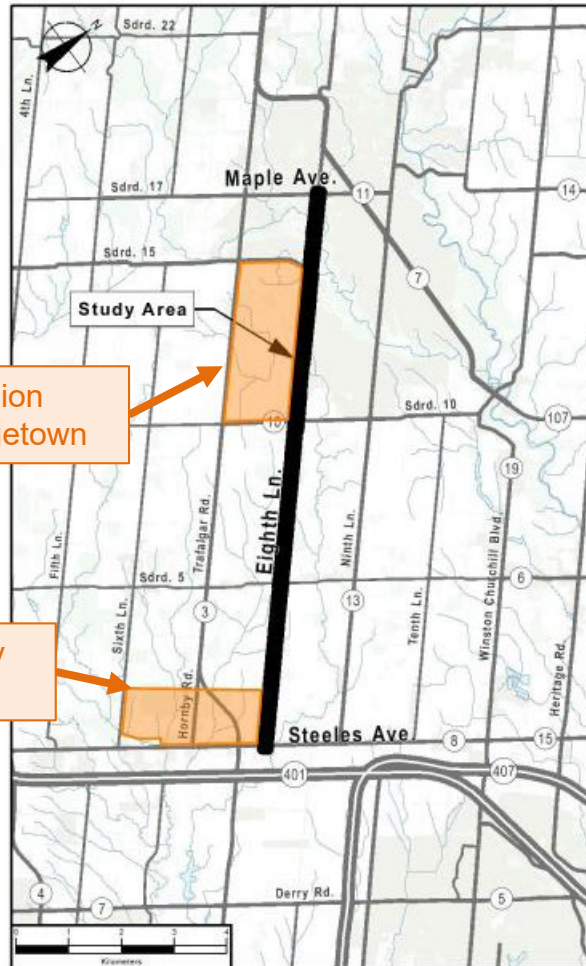
- Download a copy of the PIC material from this platform
- Following this presentation, provide feedback on this platform
- Ask questions in the Q & A section of this platform

**Your Input is Appreciated!**



# Study Description

The Town of Halton Hills is undertaking a Schedule C Municipal Class Environmental Assessment (Class EA) for improvements to Eighth Line from Steeles Avenue to Maple Avenue.



## Study Area

- 10.5 km length
- Two-lane roadway
- 7 watercourses
- Multi-Use Path (MUP)
- Sensitive Environmental Features
- Growth Areas

# Study Background

- Vision Georgetown Area will be home to 19,000 residents and will provide 1,700 new jobs starting in 2021.
- Expansion of the Premier Gateway Area (Phase 1B) in the south end of the Study Area has a planning horizon of 2021.
- This significant growth area will need to be supported by a dependable transportation network.
- Eighth Line is an important transportation corridor that will support these high-growth areas.

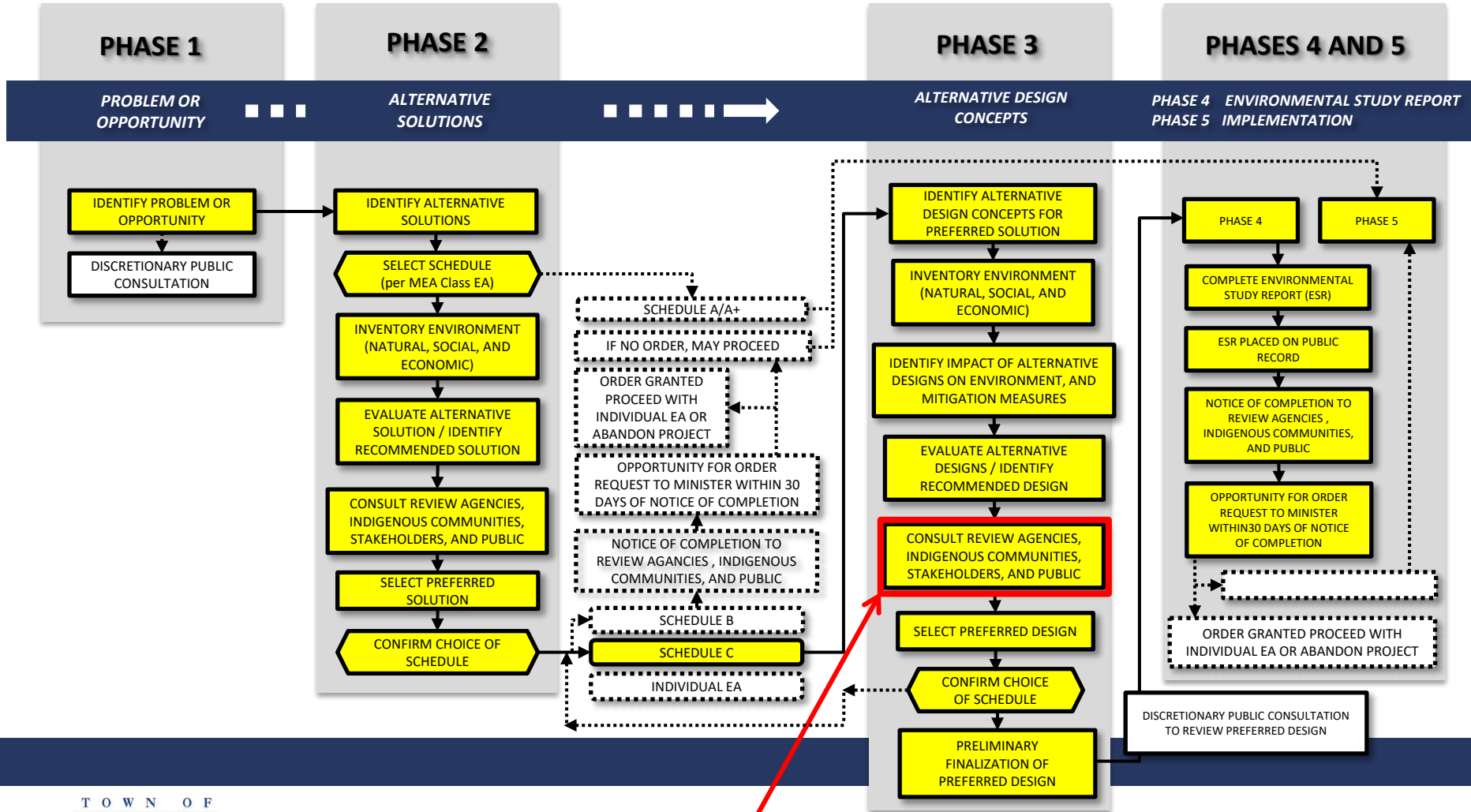


# Problem / Opportunity Statement

- Roadway improvements are required on Eighth Line to meet travel demands from growth in the Town to the year 2031.
- As presently configured, Eighth Line will not be able to accommodate the projected traffic demand in 2031.
- The Town has the opportunity to make improvements on Eighth Line that will provide:
  - sufficient lane capacity
  - adequate intersection operations
  - traffic safety
  - integration of active transportation infrastructure
  - accommodation of future transit



# The EA Process



We are Here

# Supporting Studies

## Completed

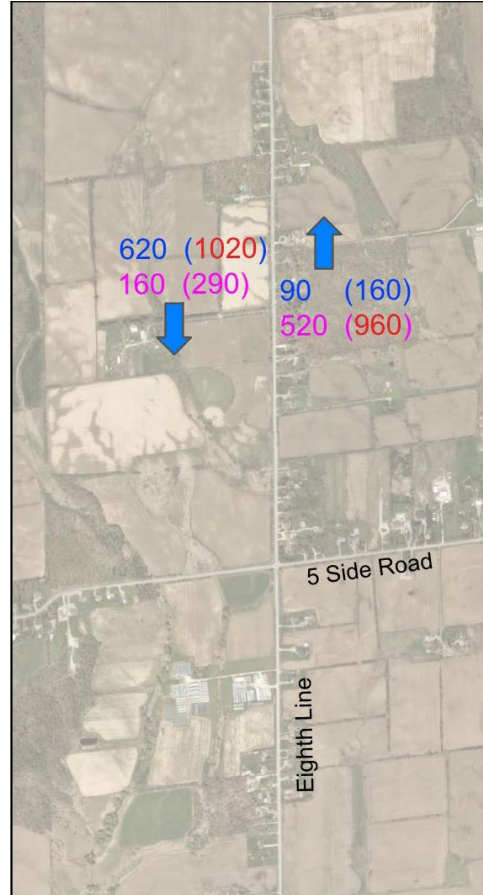
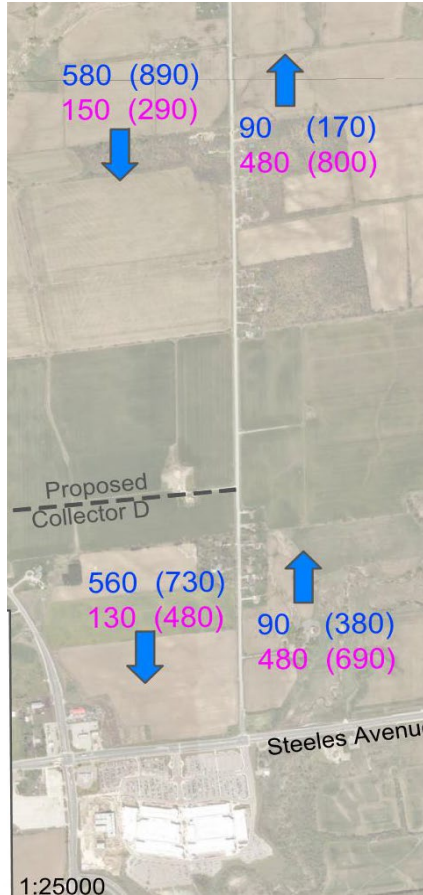
- Transportation Study
- Natural Environment Assessment
- Stage 1 Archaeological Assessment
- Cultural Heritage Resource Assessment

## To Be Completed for Preferred Design Concept

- Air and Noise Impact Assessments
- Stormwater Management Assessment
- Road Safety Operational Assessment

# Transportation Study:

## Link Traffic Volumes – Steeles Avenue to 10 Side Road

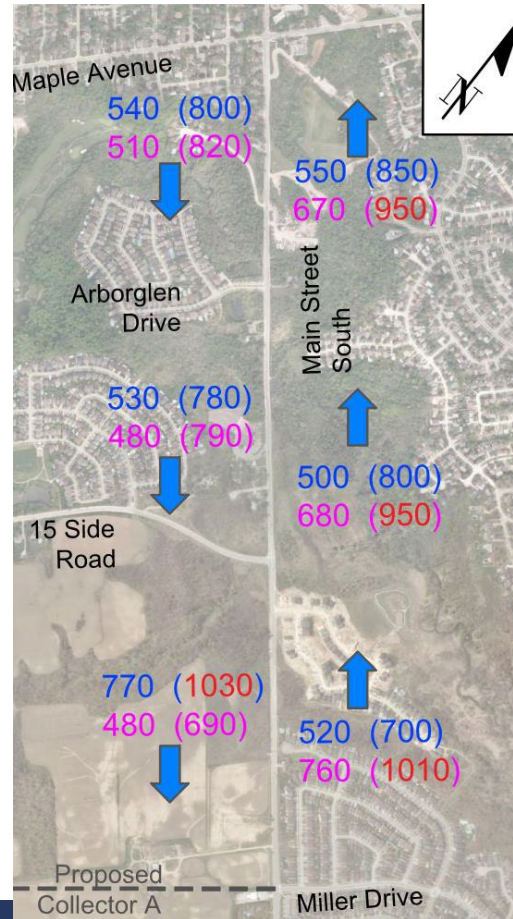
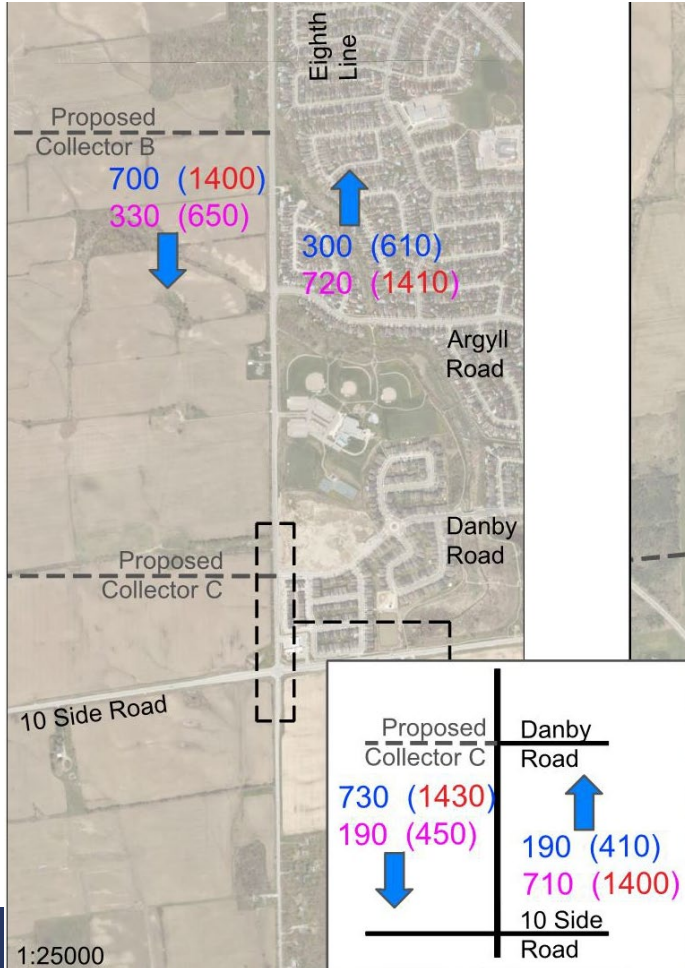


Legend		
Direction of Travel	Existing Volume	2031 Total Volume
AM	123	(456)
PM	123	(456)
123	Volume exceeds theoretical capacity	



# Transportation Study:

## Link Traffic Volumes – 10 Side Road to Maple Avenue



Legend		
Direction of Travel	Existing	2031 Total
	Volume	Volume
AM	123	(456)
PM	123	(456)
123	Volume exceeds theoretical capacity	

# Natural Environment Assessment

## Aquatic Habitat

- Four cold-water and three cool-water crossings (Black Creek, tributary of Silver Creek, three tributaries of East Sixteen Mile Creek and two tributaries of Middle Sixteen Mile Creek). Four watercourses are direct fish habitat; two are indirect and one has direct fish habitat downstream of crossing.
- Redside Dace, an aquatic Species at Risk (SAR) inhabit Silver Creek adjacent to Eighth Line in Study Area.



Downstream of the  
Black Creek Bridge Crossing

## Designated Areas

- Hungry Hollows Wetland Complex, a Provincially Significant Wetland (PSW).
- Halton Region Natural Heritage System (NHS).
- Unevaluated wetlands.

An assessment will be completed to identify how the preferred design concept may impact the natural environment within and adjacent to the Study Area.



# Natural Environment Assessment

## Terrestrial Habitat

- Forty three ecosites identified consisting of terrestrial, aquatic, wetland and constructed vegetation communities with broad diversity.
- Four species of amphibians identified; all considered common in Southern Ontario.
- Thirty five bird species exhibiting some level of breeding evidence in Study Area; two Species at Risk (SAR) birds including Eastern wood-pewee and Barn Swallow observed in their typical habitat within 50 m of road right-of-way.
- Suitable roosting habitat for SAR bats identified in Study Area.



Meadow Marsh conditions within Hungry Hallows PSW complex

An assessment will be completed to identify how the preferred design concept may impact the natural environment within and adjacent to the Study Area.

## Significant Wildlife Habitat (SWH)

- Seven candidate and one confirmed SWH in Study Area.



# Archaeology and Cultural Heritage Assessments

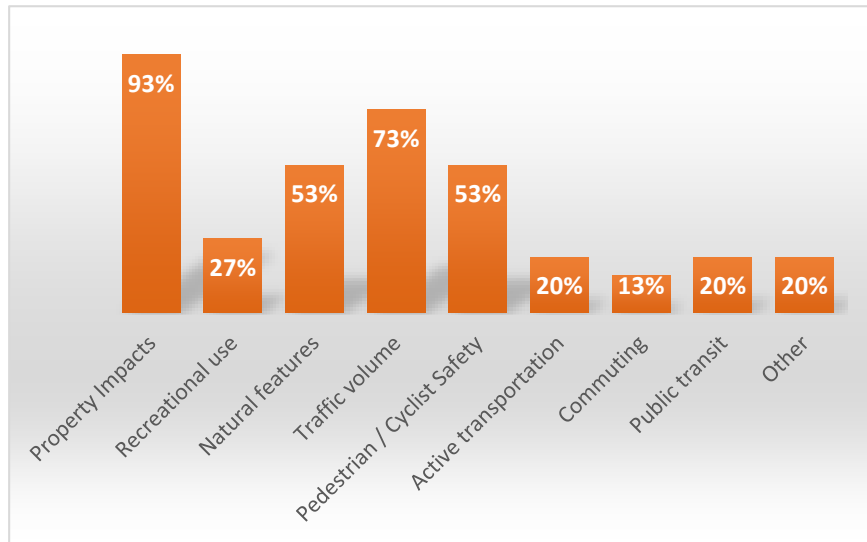
- Study Area exhibits archaeological potential.
- Several areas recommended for Stage Two Assessment.
- Three sites retain Cultural Heritage Value and are subject to Stage Three Assessment, if impacted.
  - Hornby Wesleyan Methodist Cemetery
  - Hornby Presbyterian Church Cemetery
  - Three archaeological sites on west side of Eighth Line north-west of Argyll Road
- Thirteen cultural heritage resources (CHRs) in or adjacent Study Area.
- Most sites are farmsteads or farmscapes.
- Some are rural residential properties.
- Two cemetery sites.
- Impact assessments to these CHRs will be undertaken based on the preferred design concept.



# Feedback from PIC 1

## We asked...

If Eighth Line is improved what is of importance or concern to you?



60% respondents are very comfortable with roundabouts.

## We heard...

Concerned about increased traffic in rural community

Would like a safe route for walking to Premier Gateway

Concerns about property taking

Concerned about road closures that would impact local farm businesses

Concerned about increased speed limits and speed enforcement

Please prohibit truck traffic



# Preferred Solution to Problem Statement

Based on the feedback from PIC 1, the Study Team confirmed the widening of Eighth Line as the preferred solution with the inclusion of road improvements and active transportation.

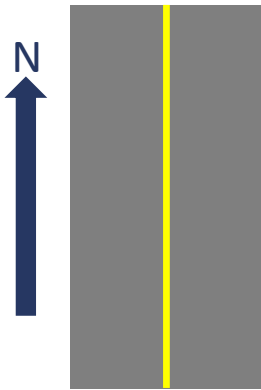
Alternative Solutions	1: Do Nothing	2: Road Improvements	3: Road Widening	4: Transportation Demand Management	5: Active Transportation
	Not Carried Forward		Carried Forward		



# Alternative Design Concepts

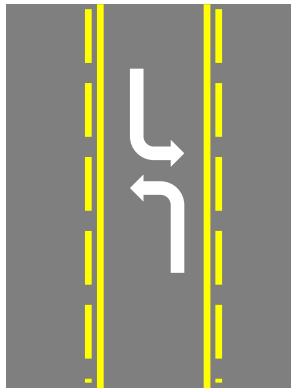
## Steeles Avenue to 5 Side Road

Existing



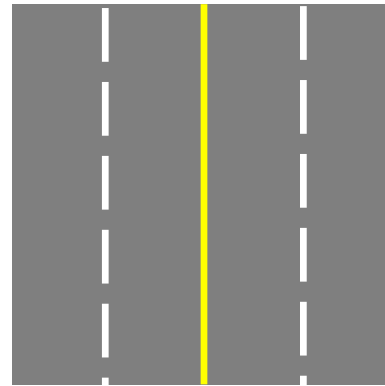
- Two travel lanes

Alternative 1



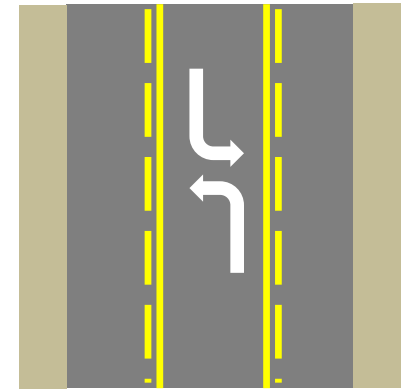
- Two travel lanes
- One centre turn lane

Alternative 2



- Four travel lanes

Alternative 3



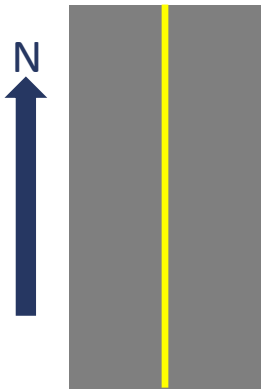
- Two travel lanes
- One centre turn lane
- Multi-Use Path (MUP) both sides

All alternatives include paved shoulders or better, roadside ditches and traffic signals at 5 Side Road.

# Alternative Design Concepts

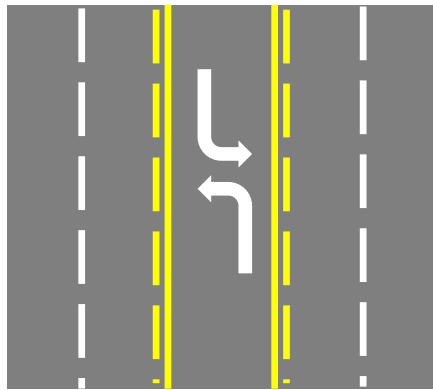
## 5 Side Road to 10 Side Road

Existing



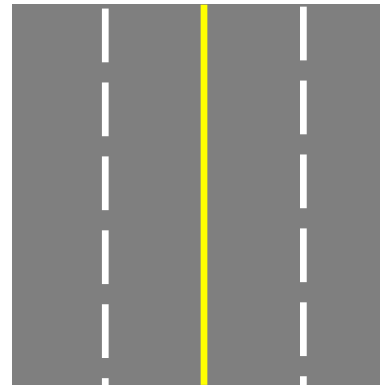
- Two travel lanes

Alternative 1



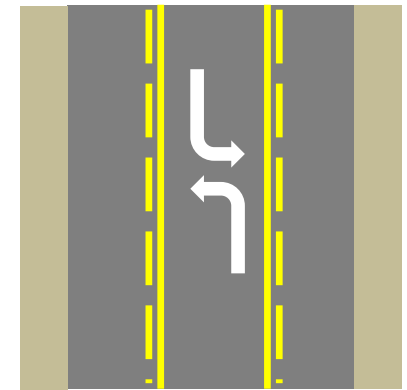
- Four travel lanes
- One centre turn lane

Alternative 2



- Four travel lanes

Alternative 3



- Two travel lanes
- One centre turn lane
- Multi-Use Path (MUP) both sides

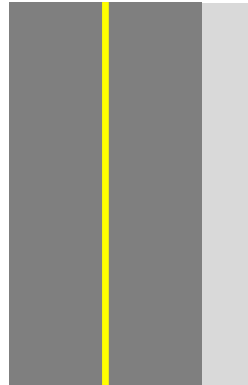
All alternatives include paved shoulders or better, roadside ditches and traffic signals at 5 Side Road.



# Alternative Design Concepts

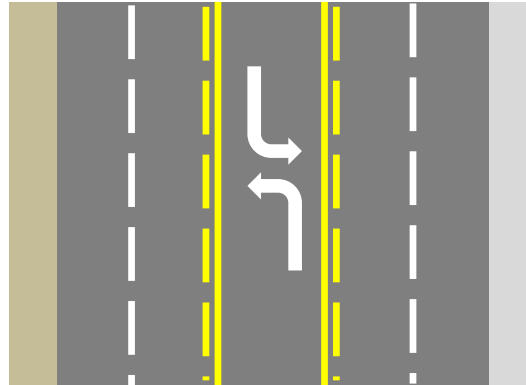
## 10 Side Road to 15 Side Road

Existing



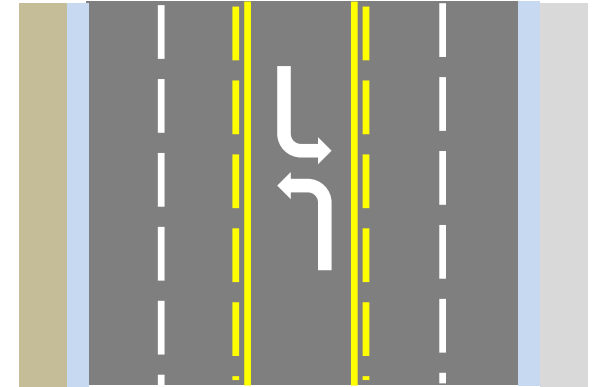
- Two travel lanes
- MUP on east side

Alternative 1



- Four travel lanes
- One centre turn lane

Alternative 2



- Four travel lanes
- One centre turn lane
- Bike lanes on both sides

Both alternatives include:

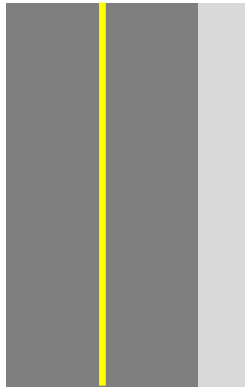
- Maintaining existing MUP on east side
- New MUP or sidewalk on west side
- Signals at Miller Drive and Argyll Road
- Controlled Stop at Proposed Collector B
- Roundabout at Danby Road



# Alternative Design Concepts

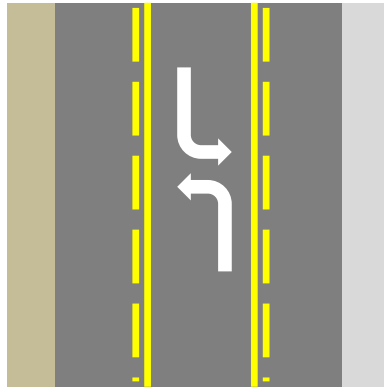
## 15 Side Road to Maple Avenue

Existing



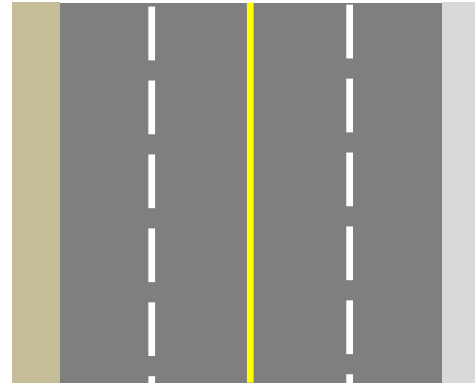
- Two travel lanes
- MUP on east side

Alternative 1



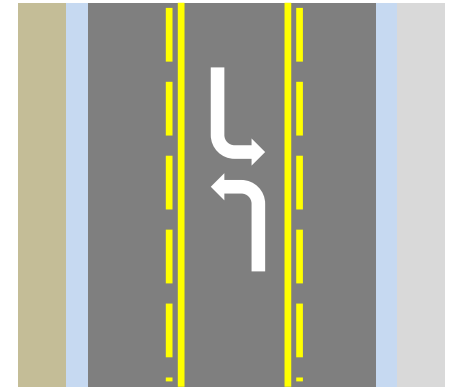
- Two travel lanes
- One centre turn lane

Alternative 2



- Four travel lanes

Alternative 3



- Two travel lanes
- One centre turn lane
- Bike lanes on both sides

All alternatives maintain existing MUP on east side, include a new MUP / sidewalk on the west side and traffic signals at Arbor Glen Drive.



# Alternative Design Concepts

## Plan and Profiles Drawings

Drawings illustrating the alternative design concepts for the four road segments can be downloaded from the Let's Talk Halton Hills platform.



# Evaluation Criteria

## Natural Environment

- Impacts to vegetation communities
- Impacts to fisheries and aquatic habitat
- Impacts to terrestrial habitat
- Impacts to designated features
- Natural hazard impacts

## Socio-Cultural and Economic Environment

- Provision of active transportation facilities
- Provision of safe access to private properties and businesses
- Property requirements
- Nuisance impacts to local residents

## Technical Environment

- Transportation safety
- Impacts to corridor capacity and level of service
- Roadside geometry and sightlines
- Impact to utilities
- Stormwater management

## Implementation

- Construction complexity
- Temporary construction impacts
- Permitting and approval requirements



















## Financial Environment

- Capital costs
- Operation and maintenance costs





















# Alternatives Evaluation

## Steeles Avenue to 5 Side Road

Evaluation Criteria	Alternative 1: Three Lanes	Alternative 2: Four Lanes	Alternative 3: Three Lanes & MUP
<b>Natural Environment</b>	 Similar impacts to natural features for all alternatives. Opportunities to improve watercourses and crossings. Slightly lower estimated disturbance to Significant Wildlife Habitat (SWH) and Natural Heritage System (NHS).	 Similar impacts to natural features for all alternatives. Opportunities to improve watercourses and crossings. Slightly greater estimated disturbance to SWH and NHS.	 Similar impacts to natural features for all alternatives. Opportunities to improve watercourses and crossings. Slightly greater estimated disturbance to SWH and NHS.
<b>Socio-Cultural &amp; Economic Environment</b>	 Paved shoulder provides partial active transportation. Centre turn lane provides safer private property entry/exit. Property requirements similar for all alternatives.	 Paved shoulder provides partial active transportation. Left turning movements less safe than Alt 1 and 3. Property requirements similar for all alternatives.	 MUP provides best active transportation options. Centre turn lane provides safer private property entry/exit. Property requirements similar for all alternatives.
<b>Technical Environment</b>	 Safer for vehicles with centre turn lane; paved shoulder less safe for pedestrians and cyclists. Meets 2031 capacity needs. Least SWM controls.	 Less safe for vehicles; paved shoulder less safe for pedestrians and cyclists. Provides highest corridor capacity. Somewhat lower SWM controls.	 Safer for vehicles with centre turn lane; MUP provides greater protection for pedestrian and cyclists. Meets 2031 capacity needs. Highest SWM controls.
<b>Implementation</b>	 Somewhat more complex to construct as least area for staging traffic. May require limiting traffic to one lane during construction. Permitting requirements.	 Somewhat less complex to construct as two way traffic can be maintained. Permitting requirements.	 Somewhat more complex to construct as least area for staging traffic. May require limiting traffic to one lane during construction. Permitting requirements.
<b>Financial Environment</b>	 Capital and Operation and Maintenance costs similar for both Alt 1 and 3; lower than Alt 2.	 Highest capital costs to construct and maintain additional lane.	 Capital and Operation and Maintenance costs similar for both Alt 1 and 3; lower than Alt 2.
<b>Recommendation</b>	 <b>Not Carried Forward</b>	 <b>Not Carried Forward</b>	 <b>Carried Forward</b>

# Alternatives Evaluation

## 5 Side Road to 10 Side Road

Evaluation Criteria	Alternative 1: Five Lanes	Alternative 2: Four Lanes	Alternative 3: Three Lanes & MUP
<b>Natural Environment</b>	 Wider road platform results in more impacts to vegetation. Highest impact to Middle Sixteen Mile Creek crossing. Slightly higher estimated disturbance to Significant Wildlife Habitat (SWH) and Natural Heritage System (NHS).	 Slightly lower estimated disturbance to SWH and NHS.	 Slightly lower estimated disturbance to SWH and NHS.
<b>Socio-Cultural &amp; Economic Environment</b>	 Paved shoulder provides partial active transportation. Centre turn lane provides safer private property entry/exit. Property requirements similar for all alternatives.	 Paved shoulder provides partial active transportation. Left turning movements less safe than Alt 1 and 3. Property requirements similar for all alternatives.	 MUP provides best active transportation options. Centre turn lane provides safer private property entry/exit. Property requirements similar for all alternatives.
<b>Technical Environment</b>	 Safer for vehicles with centre turn lane; paved shoulder less safe for pedestrians and cyclists. Provides highest corridor capacity. Highest SWM controls.	 Less safe for vehicles; paved shoulder less safe for pedestrians and cyclists. Corridor capacity at level between Alt 1 and 3. Somewhat lower SWM controls.	 Safer for vehicles with centre turn lane; MUP provides greater protection for pedestrian and cyclists. Meets 2031 capacity needs. Lowest SWM controls.
<b>Implementation</b>	 Somewhat less complex to construct as two way traffic can be maintained. Permitting requirements.	 Incrementally more complex to construct than Alt 1; two way traffic can be maintained. Permitting requirements.	 Somewhat more complex to construct as least area for staging traffic. May require limiting traffic to one lane during construction. Permitting requirements.
<b>Financial Environment</b>	 Highest capital costs to construct and maintain additional lane.	 Incrementally higher capital costs to construct and maintain additional lane compared to Alt 3.	 Lowest Capital and Operation and Maintenance costs.
<b>Recommendation</b>	 <b>Not Carried Forward</b>	 <b>Not Carried Forward</b>	 <b>Carried Forward</b>



















# Alternatives Evaluation

## 10 Side Road to 15 Side Road

Evaluation Criteria	Alternative 1: Five Lanes	Alternative 2: Five Lanes with On Road Bike Lanes
<b>Natural Environment</b>	 Some impacts to vegetation communities and terrestrial habitat. Some impacts to Significant Wildlife Habitat (SWH) and Natural Heritage System (NHS).	 Incrementally higher impacts to vegetation communities and terrestrial habitat to accommodate bike lanes. Somewhat higher impacts to SWH and NHS compared to Alt 1.
<b>Socio-Cultural &amp; Economic Environment</b>	 MUP/sidewalk on west side provides additional active transportation options. Centre turn lane provides safe private property entry/exit. Somewhat less property impacts than Alt 2.	 Bike lanes provides enhanced active transportation over Alt 1. Centre turn lane provides safe private property entry/exit. Requires incrementally higher impacts to adjacent properties.
<b>Technical Environment</b>	 Both alternatives provide safety along corridor and meet capacity needs. Lower SWM controls.	 Both alternatives provide safety along corridor and meet capacity needs. Provides enhanced safety for cyclists. Higher SWM controls.
<b>Implementation</b>	 Construction complexity and impacts similar for both alternatives. Permitting requirements.	 Construction complexity and impacts similar for both alternatives. Permitting requirements.
<b>Financial Environment</b>	 Similar Capital and Operation and Maintenance costs for both alternatives.	 Lowest Capital and Operation and Maintenance costs.
<b>Recommendation</b>	 <b>Carried Forward</b>	 <b>Not Carried Forward</b>

# Alternatives Evaluation

## 15 Side Road to Maple Avenue

Evaluation Criteria	Alternative 1: Three Lanes	Alternative 2: Four Lanes	Alternative 3: Three Lanes with On Road Bike Lanes
<b>Natural Environment</b>	 <p>Least impact to natural features of all alternatives. Potential for indirect impacts to Black Creek and Silver creek during construction; with mitigation impacts can be minimized.</p>	 <p>Significant encroachment into Hungry Hollow Provincially Significant Wetland (PSW). Requires realignment of Black Creek to accommodate bridge widening and sidewalk on west side.</p>	 <p>Significant encroachment into Hungry Hollow PSW. Requires realignment of Black Creek to accommodate bridge widening and sidewalk on west side.</p>
<b>Socio-Cultural &amp; Economic Environment</b>	 <p>Provision of new MUP on west side increases active transportation. Centre turn lane provides safer private property entry/exit. Some properties impacted but can be mitigated with retaining walls. Property requirements similar for all alternatives.</p>	 <p>Left turning movements less safe than Alt 1 and 3. Highest level of property impacts, some property acquisition may be required.</p>	 <p>MUP provides best active transportation options. Centre turn lane provides safer private property entry/exit. Some properties impacted but can be mitigated with retaining walls.</p>
<b>Technical Environment</b>	 <p>Safer for vehicles with centre turn lane. Meets 2031 capacity needs. Some impacts to utilities. Least SWM controls.</p>	 <p>Less safe for vehicles. Provides highest corridor capacity. Highest impact to utilities. Highest SWM controls.</p>	 <p>Safer for vehicles with centre turn lane; Meets 2031 capacity needs. Some impacts to utilities. Somewhat lower SWM controls.</p>
<b>Implementation</b>	 <p>Least complex to construct of all alternatives. Several permitting requirements.</p>	 <p>Widening Black Creek bridge adds more construction complexity. Several permitting requirements.</p>	 <p>Widening Black Creek bridge adds more construction complexity. Several permitting requirements.</p>
<b>Financial Environment</b>	 <p>Capital costs for Alt 1 and 3 similar. Lowest Operation and Maintenance costs of all alternatives.</p>	 <p>Highest capital costs to construct and maintain additional lane.</p>	 <p>Capital costs for Alt 1 and 3 similar. Incrementally higher Operation and Maintenance cost compared to Alt 1 due to bike lanes.</p>
<b>Recommendation</b>	 <p><b>Carried Forward</b></p>	 <p><b>Not Carried Forward</b></p>	 <p><b>Not Carried Forward</b></p>





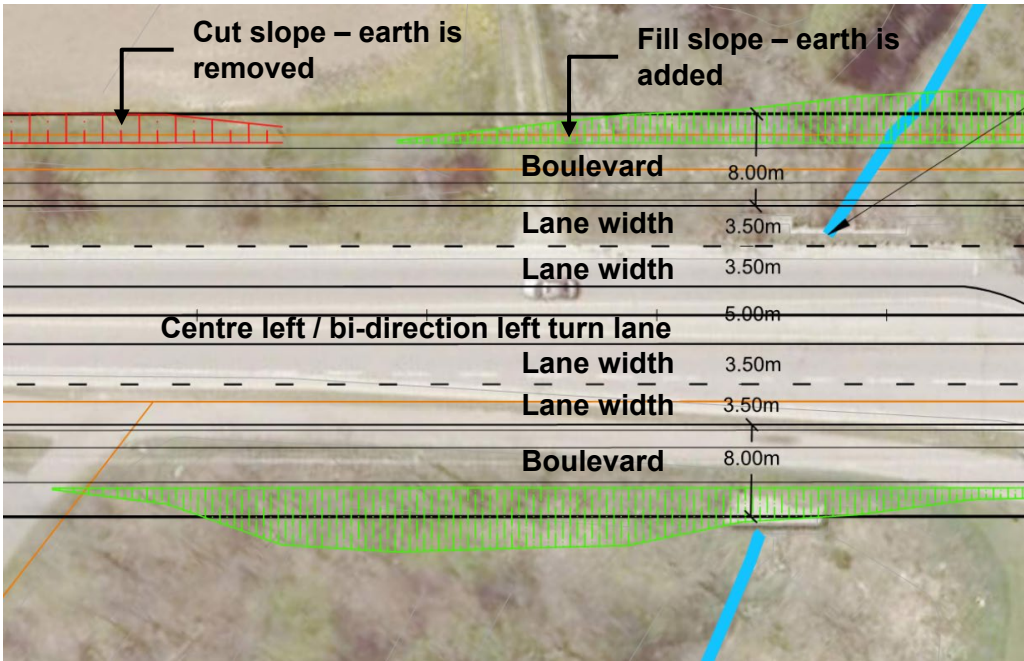
# Preliminary Preferred Design Concept

Drawings illustrating the Preliminary Preferred Design Concepts for the four road segments can be downloaded from the Let's Talk Halton Hills platform.



# Interpreting the Drawings

Drawings are arranged from south to north starting at Steeles Avenue and moving to Maple Avenue.



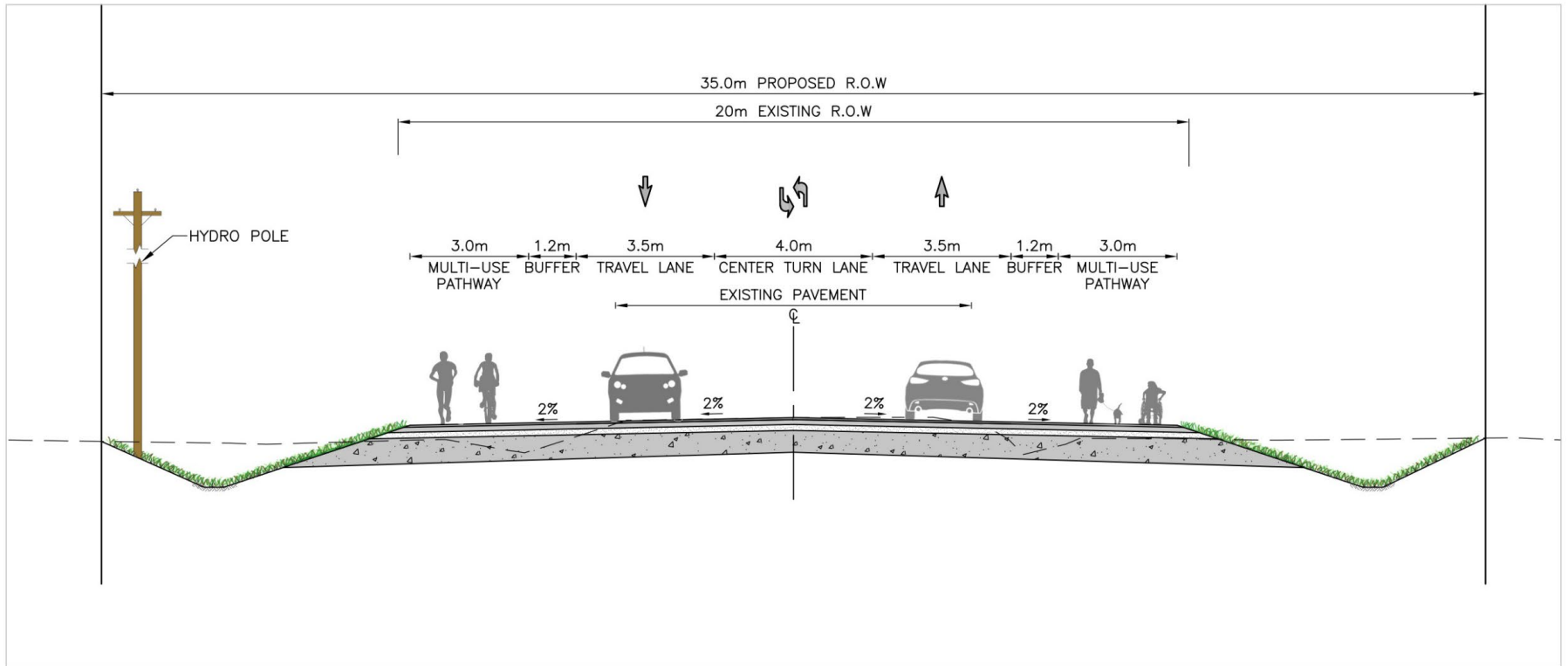
- Existing property line
- Proposed signaled intersection
- Potential roundabout location

Shaded symbols represent existing features.



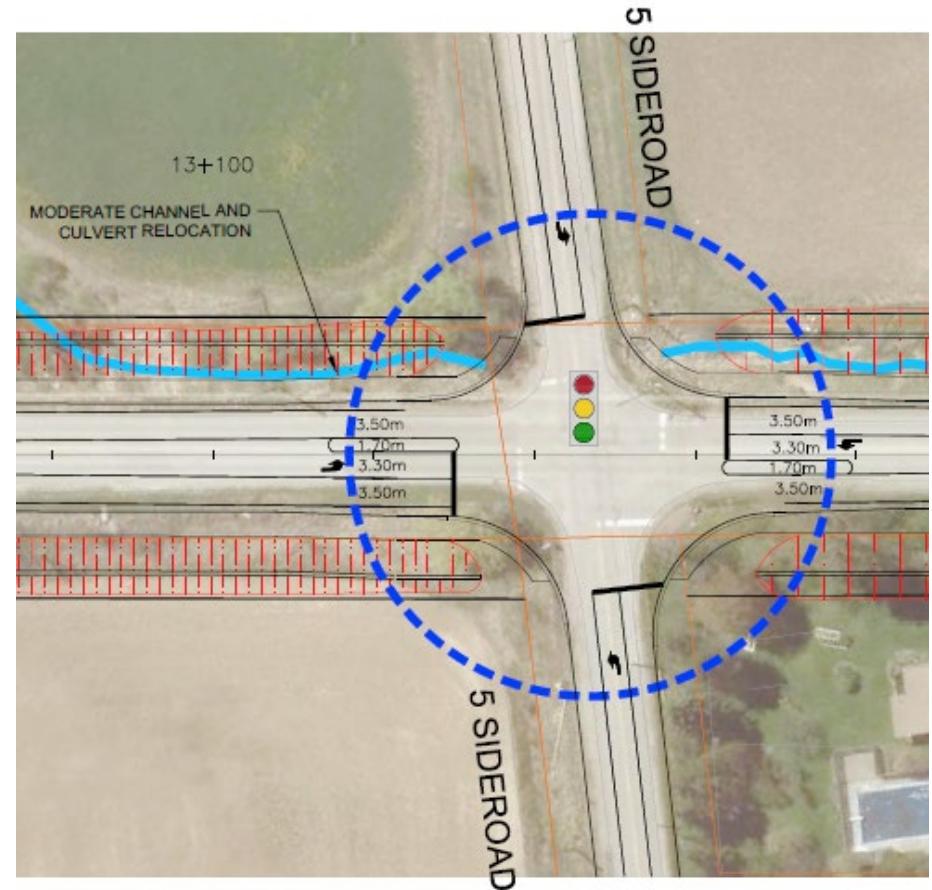
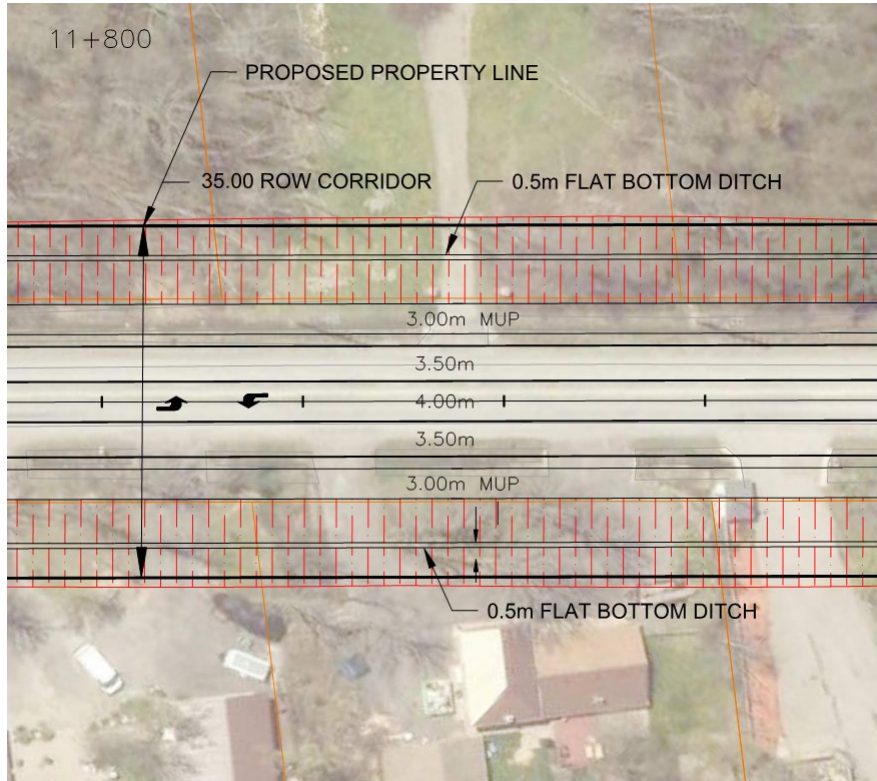
# Steeles Avenue to 5 Side Road

## Typical Cross Section



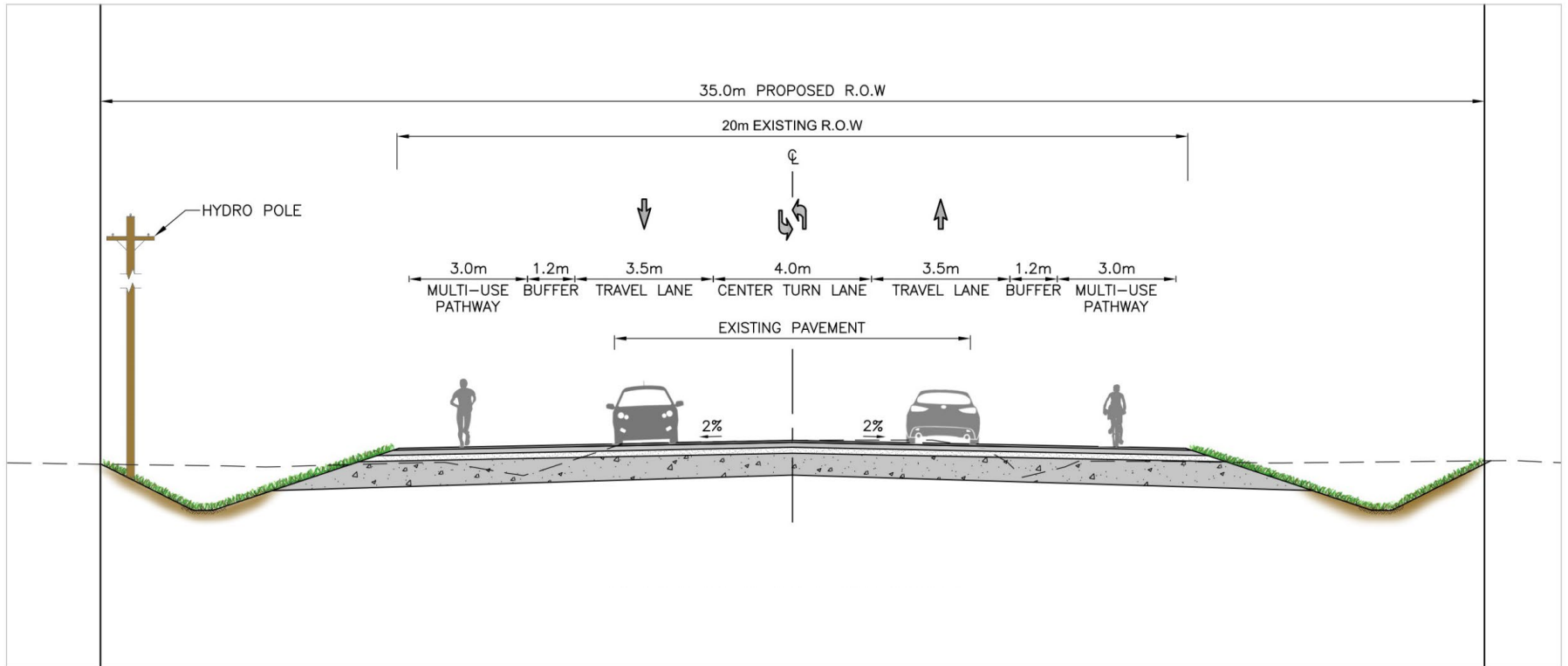
# Steeles Avenue to 5 Side Road

## Key Design Concept Elements



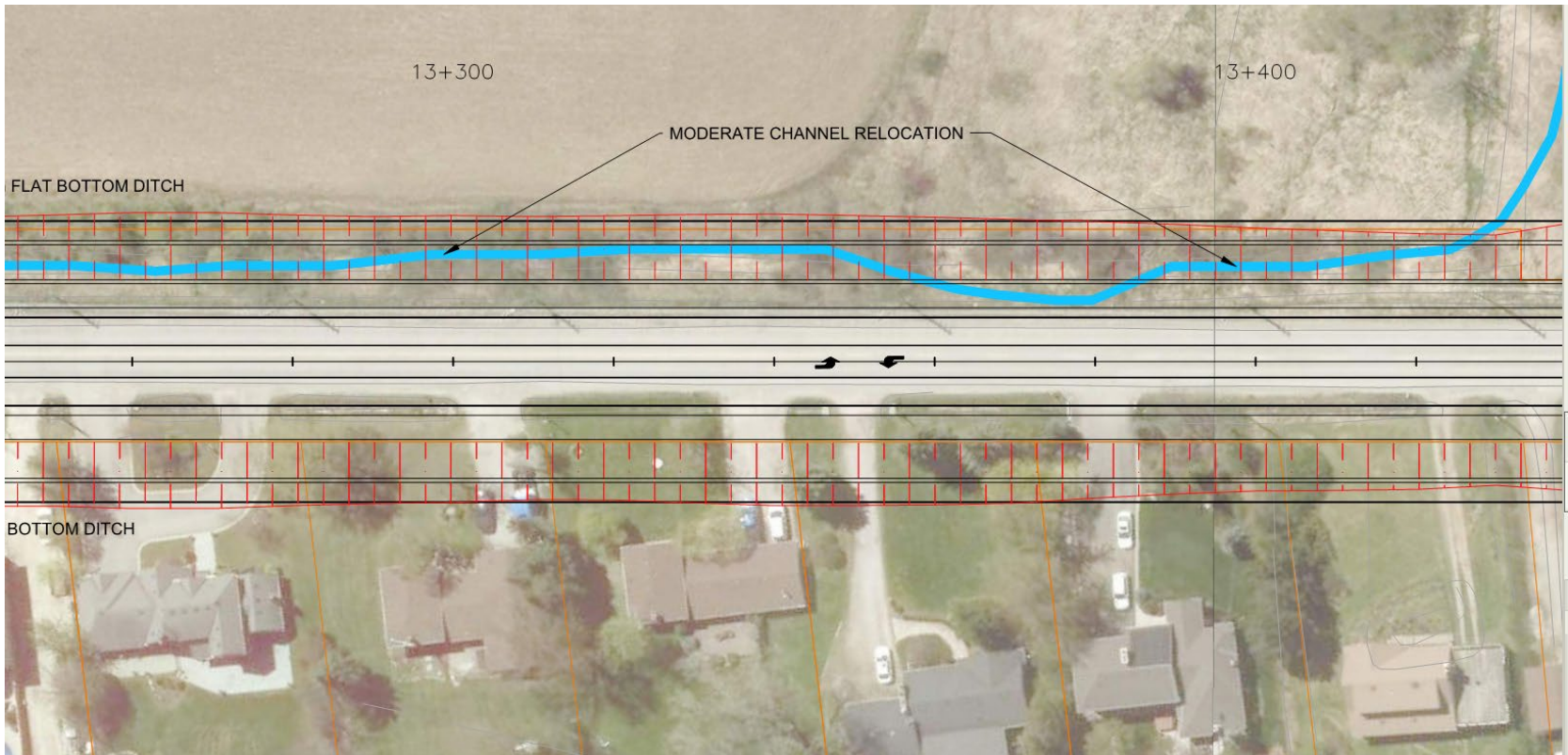
# 5 Side Road to 10 Side Road

## Typical Cross Section



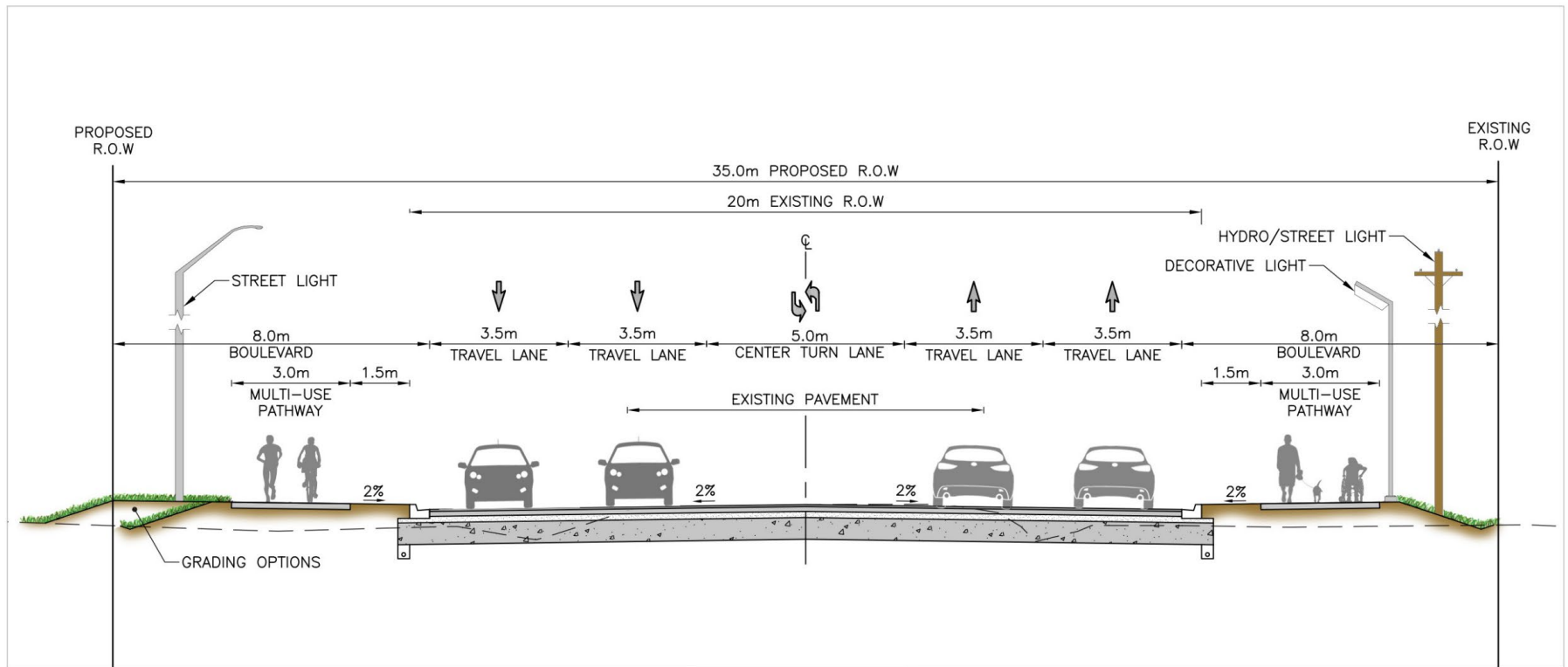
# 5 Side Road to 10 Side Road

## Key Design Concept Elements



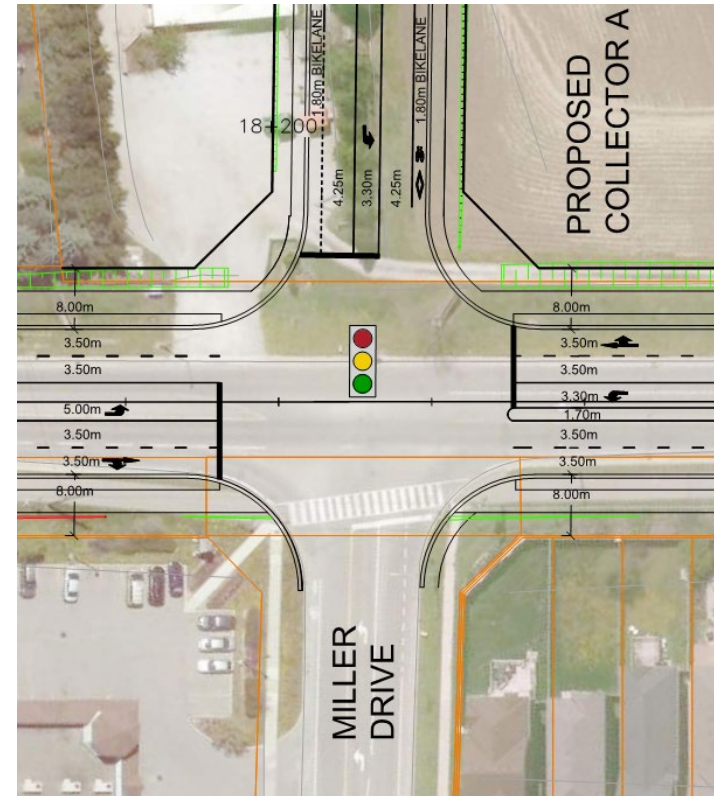
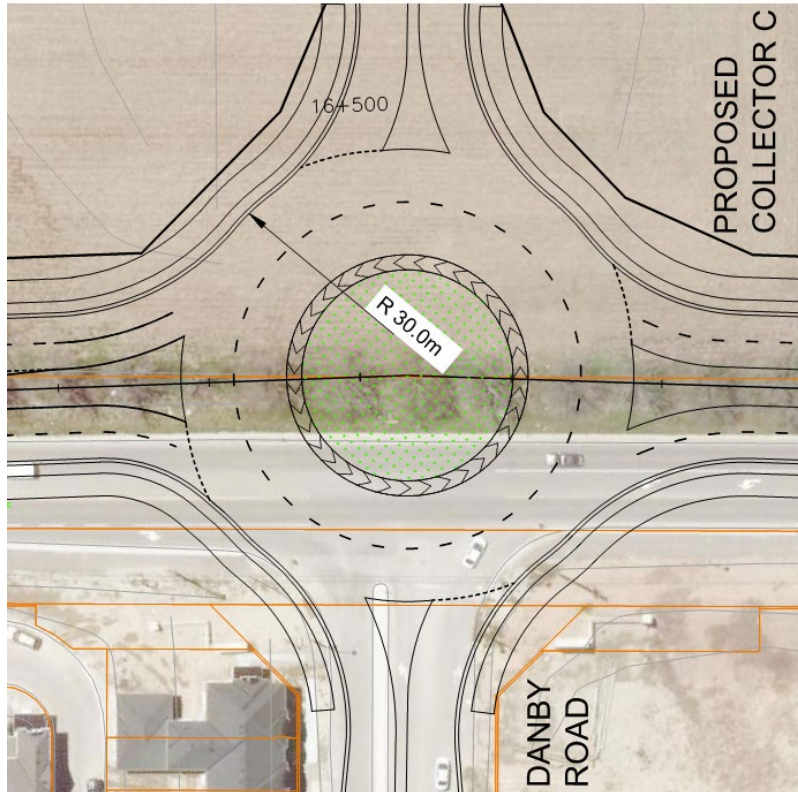
# 10 Side Road to 15 Side Road

## Typical Cross Section



# 10 Side Road to 15 Side Road

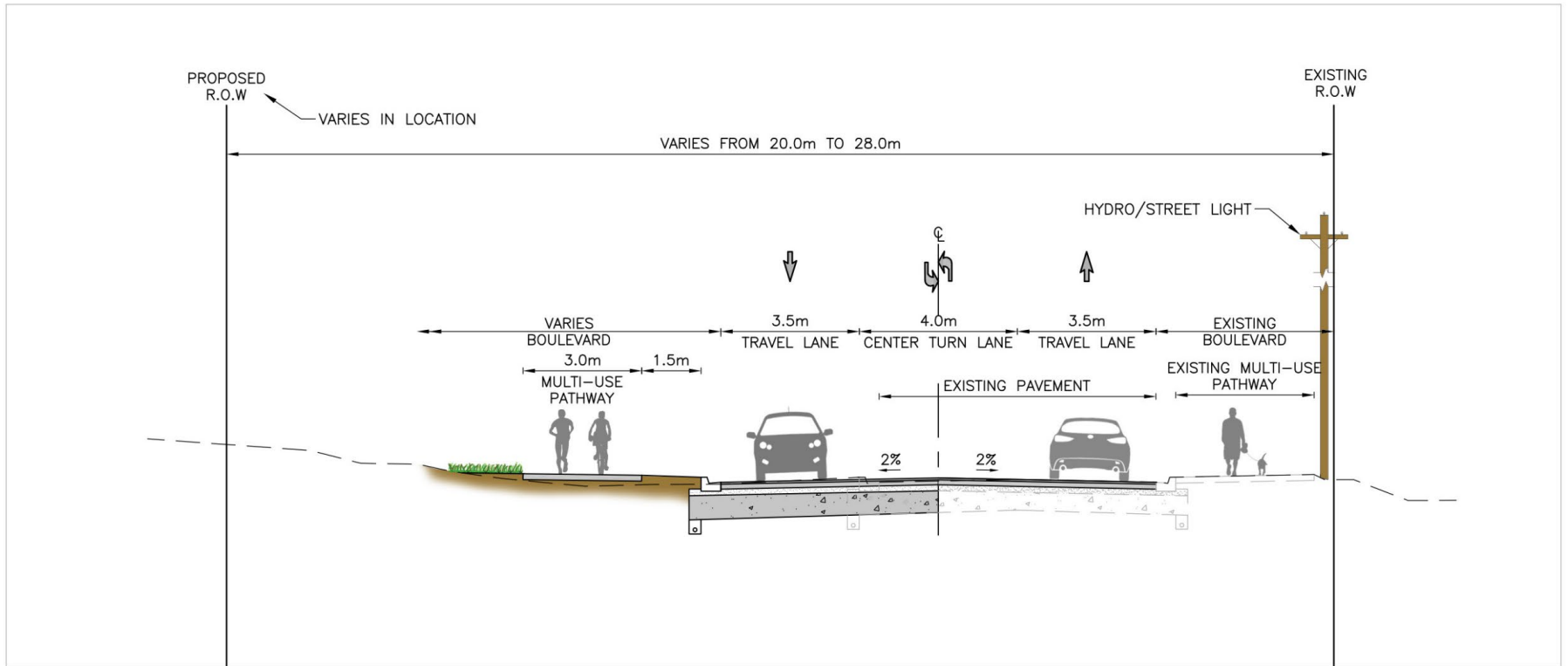
## Key Design Concept Elements





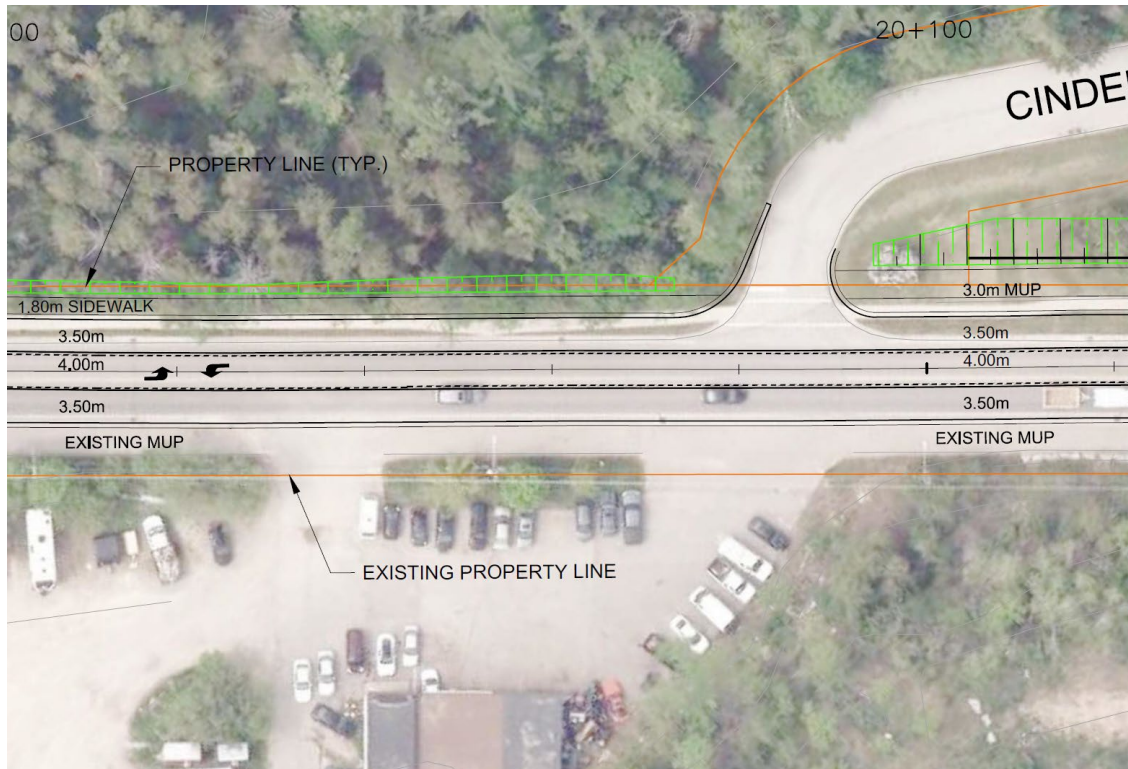
# 15 Side Road to Maple Avenue

## Typical Cross Section



# 15 Side Road to Maple Avenue

## Key Design Concept Elements



- Three lane cross-section
- Bi-directional left (dedicated at intersections)
- Maintains existing MUP
- Adds a MUP on the west side
- Areas with profile adjustments are identified



# Example Road Improvement Features / Intersection Options



Roundabout



Traffic Signals



Turning Lanes / Additional Through Lanes

# Examples of Active Transportation

**Urban Setting**  
Sidewalk / multi-use trail



**Rural Setting**  
Partially paved shoulder



**Rural Setting**  
Multi-use trail separated from vehicles lanes



**Rural Setting**  
Multi-use trail adjacent travel lanes



# Next Steps

- Digital Public Information Centre # 2 (June 2020)
- Confirm Preferred Design Concept (Summer 2020)
- Public Information Centre # 3 (estimated Fall 2020)
- Environmental Study Report (estimated Winter 2020 / 2021)
- File EA (estimated Spring 2021)



# Invitation for Participation

- Public input is an important component of the decision-making process.
- Please submit your comments on [letstalkhaltonhills.ca](https://letstalkhaltonhills.ca) by **June 30, 2020**.
- Please leave your questions in the Q&A section of this platform.



Thank you for participating in this PIC

