



Please click the image (above) to view the main project page

# Region of Peel - Highway 50 Drainage Improvements EA

Environmental Assessment (EA) and Preliminary  
Design for Drainage Improvements of Highway 50  
From Mayfield Road To Healey Road

## Region of Peel

## Land Acknowledgement

We would like to begin by acknowledging the land on which we gather, and which the Region of Peel operates, is part of the Treaty Lands and Territory of the Mississaugas of the Credit. For thousands of years, Indigenous peoples inhabited and cared for this land, and continue to do so today. In particular we acknowledge the territory of the Anishinabek, Huron-Wendat, Haudenosaunee and Ojibway/Chippewa peoples; the land that is home to the Metis; and most recently, the territory of the Mississaugas of the Credit First Nation who are direct descendants of the Mississaugas of the Credit (**Peel Aboriginal Network**).

We are grateful to have the opportunity to work on this land, and by doing so, give our respect to its first inhabitants.

## Online Public Information Package

The purpose of providing the information in this package is to:

- Describe the Project
- Discuss the Identified Problems and Opportunities
- Provide Alternative and Preliminary Recommended Solutions
- Generate Feedback to Help Guide Project Development
- Outline the Next Steps in the Project

Please review the materials and provide your input by submitting comment forms or questions directly to the project team contacts (contact information provided at the bottom of the page).



**Culvert and drainage ditch located along Highway 50 in the study area.**

### We want your input!

Following this public consultation, the preferred **Stormwater Management (SWM) and Active Transportation (AT)** solutions will be confirmed in consideration of comments received.

### Who is involved?

The study area for the project consists of approximately 2.5 kilometres along Highway 50 from Mayfield Road to Healey Road, in the Town of Caledon. The corridor, which is controlled by the Region of Peel, is also located within the Humber River watershed, under the jurisdiction of the Toronto and Region Conservation Authority (TRCA).

Through the Class EA, various other stakeholders, including members of the public and local business community, First Nations communities, and technical agencies (e.g. Ministry of the Environment, Conservation and Parks, Ministry of Northern Development, Mines, Natural Resources and Forestry *and* Ministry of Tourism, Culture and Sport) are given the opportunity to provide input into the planning process and study recommendations.

## Map of the Highway 50 Study Area



Highway 50 Environmental Assessment (EA) Study Area Map

Please click the map (above) to view the interactive map on the PIC#2 page

### What is the problem?

### What improvements are needed?

This Environmental Assessment (EA) study was initiated to identify drainage improvements required along Highway 50 from Mayfield Road to Healey Road, in the Town of Caledon.

Inspections undertaken by the Region of Peel in 2017 identified entrance culverts and drainage infrastructure in the study area have reached end of their service life.

Additional opportunities to improve pedestrian and cyclist connectivity along the corridor were also identified in consideration of the Region's ***Sustainable Transportation Strategy (STS)***.

## What is the purpose of the project?

### The problem/opportunity statement



Sewers and culverts in the  
Highway 50 study area

Upgrades are needed to address existing and future problems caused by failing stormwater infrastructure. As growth continues, in keeping with Regional policies and priorities, such as 'Community For Life', the Region of Peel is working to create communities resilient to the impacts of climate change and striving to improve:

- **Living** by keeping communities safe from flooding risks;
- **Thriving** through adding sustainable transportation options;
- **Leading** by maintaining our assets in a state of good repair.

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This project is required to **service current needs** and **demands of future growth, improve stormwater management** (quality and quantity), minimize environmental degradation, mitigate impacts from climate change, **provide alternative transportation** options, increase connectivity through the corridor and create a vibrant streetscape for the local community.

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# Why are we undertaking a Municipal Class Environmental Assessment?

The Municipal Class Environmental Assessment (MCEA) guides the planning of municipal infrastructure (**road, water, wastewater and transit**) projects.

- Ensures all **reasonable alternatives** are considered to recommend a solution with **minimal impact** on the natural, cultural, social and economic **environments**.
- **Input** from the **public, stakeholders** and **technical agencies** is essential.

The project is being completed as a **Schedule "B"** project in accordance with the MCEA process (October 2000, amended in 2007, 2011 & 2015) and is subject to **Phase 1, Phase 2** and **Phase 5**.

## Where are we in the process?



Municipal Class Environmental Assessment (MCEA) Schedule "B" Process

We are currently in **Phase 2** of the project and the information presented on these pages is a requirement of the public consultation process.

Due to COVID-19 gathering restrictions in place during Phase 1, information about the project was presented on the Region of Peel website. Please click on the Public Information Package 1 link to view the project page.

<https://www.peelregion.ca/public-works/environmental-assessments/media/ea-hwy50-drainage.pdf>

## When are the milestones within the project schedule?

Spring 2020	Initiate study via Notice of Study Commencement. Develop draft Study Problem and Opportunity Statement. Initiate required technical studies.
Summer 2020	Online Public Information Package #1. Present information: study need and justification, planning and design process, and next steps via project website (presentation format subject to current COVID 19 restrictions).
Winter 2020	Develop and evaluate preliminary recommended alternative solutions.
Winter 2021	Online Public Information Package #2. Present and obtain input on alternatives and preliminary recommended solutions (presentation format subject to current COVID 19 restrictions).
Spring 2022	Confirm a 'Preferred Solution' in consideration of the comments received. Prepare and submit a summary of the study planning and design process for public review (Project File).
2023 - 2025	Detailed Design and Construction.

Consultation with the public, stakeholders and relevant technical agencies is on-going throughout the duration of the study.

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### Highway 50 Project Schedule, Timeline and Next Steps

## Technical Studies and Draft Reports Completed to Date

### Phase I Environmental Site Assessment (ESA)

Identifies potential sources of contamination that may impact the proposed construction works. Completed May 8, 2020.

Please click the "Phase I ESA" button above to view the draft document.

Phase I ESA

### Stage 1 Archaeological Assessment

Identifies potential of project works to impact archaeological resources. Completed July 29, 2020. Please click the "Stage 1 Archaeological Assessment" button above to view the draft document.

Stage 1 Archaeological Assessment

### **Geotechnical Investigation Report**

Describes subsurface conditions and recommends designs for soil stability. Completed September 17, 2020. Please click the "Geotechnical Investigation" button above to view the draft document.

Geotechnical Investigation

### **Hydrogeological Investigation Report**

Characterizes baseline soil and groundwater conditions. Completed October 7, 2020. Please click the "Hydrogeological Investigation" button above to view the draft document.

Hydrogeological Investigation

### **Cultural Heritage Assessment - Built Heritage Resources & Cultural Heritage Landscapes**

Identifies potential to impact areas of cultural heritage significance in the study area. Completed October 20, 2020. Please click the "Cultural Heritage Assessment" button above to view the draft document.

Cultural Heritage Assessment

### **Natural Heritage Report - Impact Assessment**

Identifies natural heritage areas and/or features of environmental sensitivity and/or significance. Completed November 2021. Please click the "Natural Heritage Report" button above to view the draft document.

Natural Heritage Report

### **Fluvial Geomorphology and Hydraulic Assessments**

Documents the existing condition and constraints within West Robinson Creek. Completed November, 2021. Please click the "Fluvial Geomorphology & Hydraulic" button above to view the draft document.

Fluvial Geomorphology & Hydraulic

### **Stormwater Management Report**

Outlines the Stormwater Management strategy that considers best management practices, supports climate change requirements and meets regulatory requirements. Completed November 15, 2021. Please click the "Stormwater Management Report" button above to view the draft document.

Stormwater Management Report

# How will improvements happen?

## Stormwater Management (SWM)

Below is a video which explains what stormwater is, the Region's role in managing water on regional roads (including the Highway 50 study area), why management is necessary and how the natural environment is protected as a result of using a Low Impact Development (LID) design approach.

Best Management Practices (BMPs) are methods applied to decrease the harmful impacts of land use development and activities on the environment. This project evaluates **LID** approaches, **BMPs** for reducing flow volume, decreasing runoff intensity, as well as removing nutrients, pathogens, and metals from stormwater. Opportunities to improve result from mitigating local effects of urbanization on the Rainbow Creek subwatershed and achieving recommended **water quality and quantity objectives** set out in the Region of Peel's **Public Works Stormwater Design Criteria and Procedural Manual (2019)**.

Please click either of the Region of Peel Stormwater Servicing Master Plan Video images to view the video



Region of Peel Stormwater Servicing Master Plan Video



Region of Peel Stormwater Servicing Master Plan Video



Multi-Use Path



Cycle Track

## Active Transportation (AT)

For the study area, designated as a pedestrian improvement corridor, **the addition of multi-use paths, cycle tracks and sidewalks** were explored to address long term active transportation requirements **per the Sustainable Transportation Strategy (STS)**.

**Sidewalk** - A facility separated from the roadway for pedestrians and cyclists.







**Cycle Track (CT)** - A facility separated from roads and sidewalks exclusively for bicycles and cyclists.

**Multi-Use Path (MUP)** - A facility for varying modes of travel together: bicycles, pedestrians, and other non-motorized means of transportation.



## How will the alternatives for Stormwater Management and Active Transportation be evaluated?

Alternative Solutions for Stormwater Management (SWM) and Active Transportation (AT) were comparatively evaluated using criteria that represent the broad definition of the environment (from the Environmental Assessment Act).



















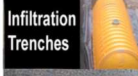











Criteria	Description
 <b>Technical</b>	Are the technical requirements of the project addressed (Water Quantity, Water Quality, Erosion Control Measures, etc.)?
 <b>Traffic Operations &amp; Safety</b>	Are the existing and future pedestrian and cycling traffic needs served (Sustainability, Active Transportation, Connectivity, etc.)?
 <b>Social Environment</b>	What are the impacts on the local community (Land Use Compatibility, Flow for Local Businesses, Property Requirements, Accessibility Restrictions, etc.)?
 <b>Natural Environment</b>	Are existing terrestrial and aquatic habitats affected (Wildlife, Fisheries, Vegetation Communities)? Are climate change impacts considered and addressed?
 <b>Archaeological &amp; Cultural Heritage</b>	Are First Nations communities, cultural heritage resources, or archeological resources affected?
 <b>Cost</b>	What are the costs (Capital Cost, Utility Relocations, Property Acquisitions, etc.)? What are the operation and maintenance costs related to the alternative?

### The "Environment" Definitions - Evaluation Criteria Summary Table

## Evaluation of Alternative Solutions and Preliminary Recommendations































### Stormwater Management (SWM) Alternative Solutions

Following a comparative evaluation of the alternative solutions, the combination of alternatives below; Sewer Upgrades and Replacements, Bioretention Facilities, Oil and Grit Separator Units (OGS), Infiltration Trenches and Catchbasin Shields are the **preliminary recommended solutions** to be carried forward. Sewers Upgrades include culverts and sewer pipe infrastructure.

Alternatives - Recommended					
Alternatives	Evaluation Criteria				
	Technical	Social	Natural	Cultural	Cost
 Sewer Upgrades					
 Bioretention Facilities					
 Oil / Grit Separator Units (OGS)					
 Infiltration Trenches					
 Catchbasin Shields					

Evaluation Summary Table of SWM Alternative Solutions - Recommended

Following a comparative evaluation of the alternative solutions, the alternatives below; Do Nothing, Stormwater Management (SWM) Pond, Permeable Pavement, Superpipe Storage and Enhanced Ditches **are NOT recommended**.

Alternatives - Not Recommended					
Alternatives	Evaluation Criteria				
	Technical	Social	Natural	Cultural	Cost
 Do Nothing					
 SWM Pond					
 Permeable Pavement					
 Superpipe Storage					
 Enhanced Ditches					

Evaluation Summary Table of SWM Alternative Solutions - Not Recommended

# Active Transportation (AT) Alternative Solutions

The alternative solutions below; Do Nothing, Cycle Track East Side, Cycle Track West Side, Multi-Use Path East Side, Multi-Use Path West Side, Cycle Tracks East / West Sides, and Multi-Use Path West Side / Sidewalk East Side were comparatively evaluated.

**Multi-Use Path (MUP) West Side and Sidewalk East Side**, from 12599 RR50 to George Bolton Parkway, is the **preliminary recommended solution** to be carried forward.

Alternatives		Evaluation Criteria				
		Traffic/Safety	Social	Natural	Cultural	Cost
<b>Not Recommended</b>						
<b>Do Nothing</b>	No Changes					
<b>Cycle Track East Side</b>						
<b>Cycle Track West Side</b>						
<b>Multi-Use Path East Side</b>						
<b>Multi-Use Path West Side</b>						
<b>Cycle Tracks East &amp; West Sides</b>						
<b>Recommended</b>						
<b>Multi-Use Path West Side Sidewalk East Side</b>						

Evaluation Summary Table of AT Alternative Solutions

# Stormwater Management (SWM)

## Preliminary Recommended Solutions



The map shows the location of the preliminary recommended solutions for different sections of the corridor. They are; Sewer Upgrades and Replacements, Bioretention Facilities, Oil and Grit Separator Units, Infiltration Trenches, and Catchbasin Shields.

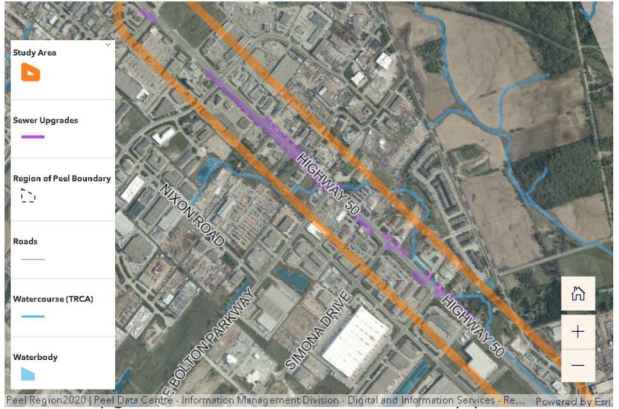
The preliminary recommended solutions will improve the future water quality and will help enhance the Rainbow Creek watershed and the watercourse. With limited space available, we have respected the watercourse and implemented quality and quantity stormwater management LID techniques where possible.

Please click the map above  
to view the interactive map  
on the PIC#2 page



# Sewer Upgrades

Sewer Upgrades and Replacements



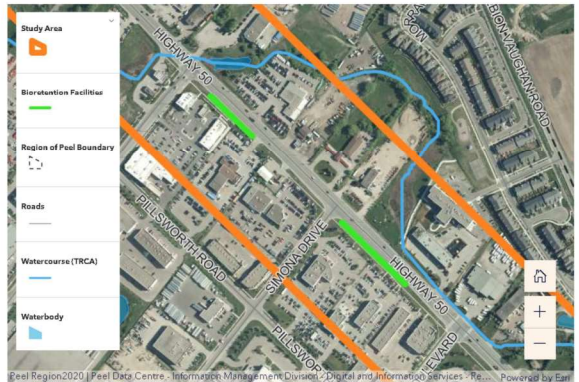
Sewers Upgrades include culverts and sewer pipe infrastructure.

- Water quality and quantity objectives set out by the Region met when combined with other measures
- Compatible with adjacent land use
- Required to prevent flooding
- No impacts to terrestrial environment or archaeological resources
- Moderate construction and property costs

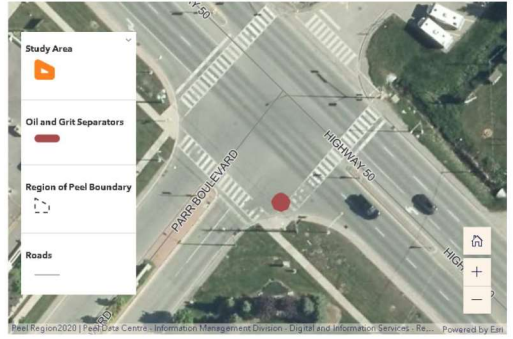
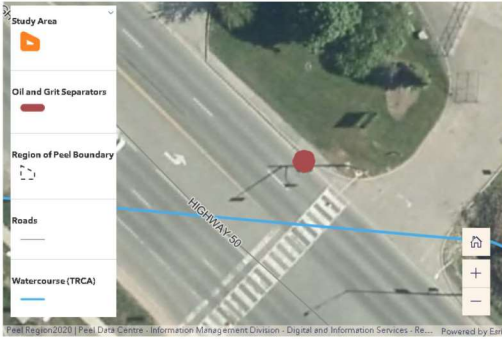


# Bioretention Facilities

Bioretention Facilities



- Water quality and quantity objectives set out by the Region met when combined with other measures (pretreatment)
- No impact to adjacent properties
- No impact to archaeological resources
- Provides additional terrestrial habitat
- Minimal aquatic impact
- Moderate construction costs



Oil and Grit Separator Units

- Water quality and quantity objectives set out by the Region met when combined with other measures
- Flexible locations
- Limited impacts to terrestrial habitats
- Improved aquatic habitat
- No impact to archaeological resources or adjacent properties
- Low construction cost with standard costs to maintain



Infiltration Trenches



- Water quality and quantity objectives set out by the Region met when combined with other measures
- Compatible with land use
- No impacts to archaeological resources
- Moderate construction and lower maintenance costs



Catchbasin Shields

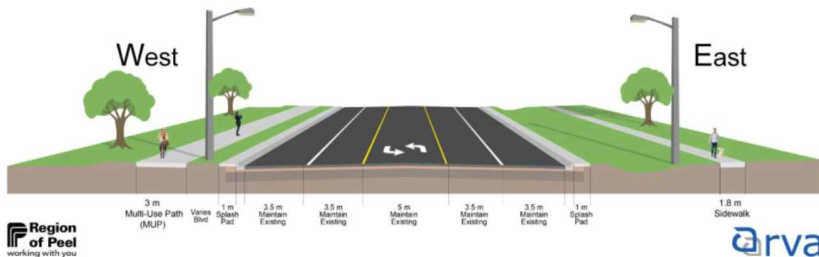


- Water quality and quantity objectives set out by the Region met when combined with other measures
- Located in existing infrastructure
- No impacts to terrestrial environment
- No impacts to cultural heritage or archaeological resources
- Low construction and maintenance costs

## Active Transportation (AT)

### Preliminary Recommended Solution

#### Multi-Use Path West Side and Sidewalk East Side



# Active Transportation (AT)

## Preliminary Recommended Solution

- Satisfies Active Transportation objectives.
- Minimal property impacts.
- Negligible impacts on adjacent terrestrial and aquatic habitats.
- Could require removal of 18 trees (to be mitigated by the Region's 3/1 planting policy).
- No impacts to archaeological or cultural heritage resources.
- Reduced construction, property and maintenance costs.
- Contractor to maintain property access for businesses.

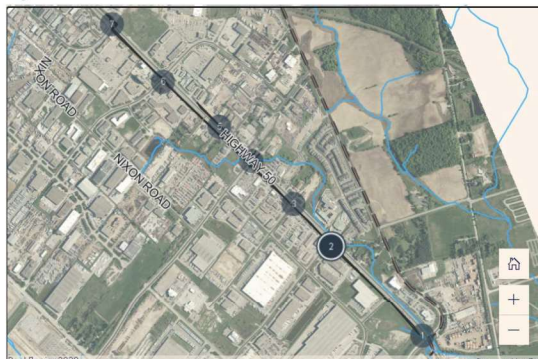
Business accesses on both sides will be maintained during construction to ensure the least amount of disruption. The Region of Peel is committed to continue to work together to keep the local community informed.

The Multi-Use Path (MUP) located on the west side and sidewalk on the east side, will improve the pedestrian and cyclist connectivity along the corridor without impacting the watercourse or sensitive natural areas located along the east side of Highway 50.



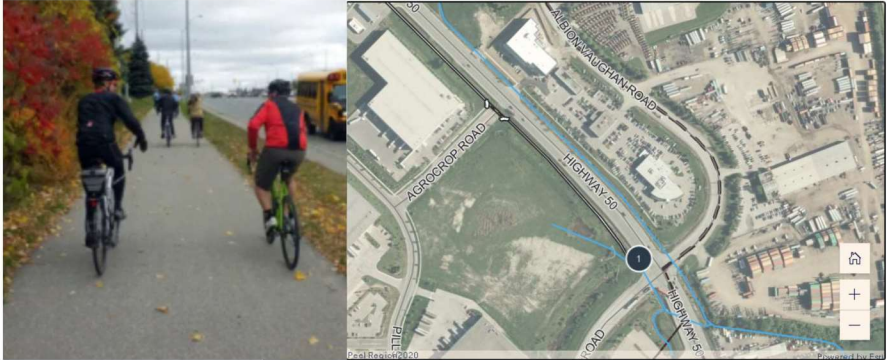
A sensitive natural area located along the corridor.

Please click the map (right) to view the interactive map on the PIC#2 page



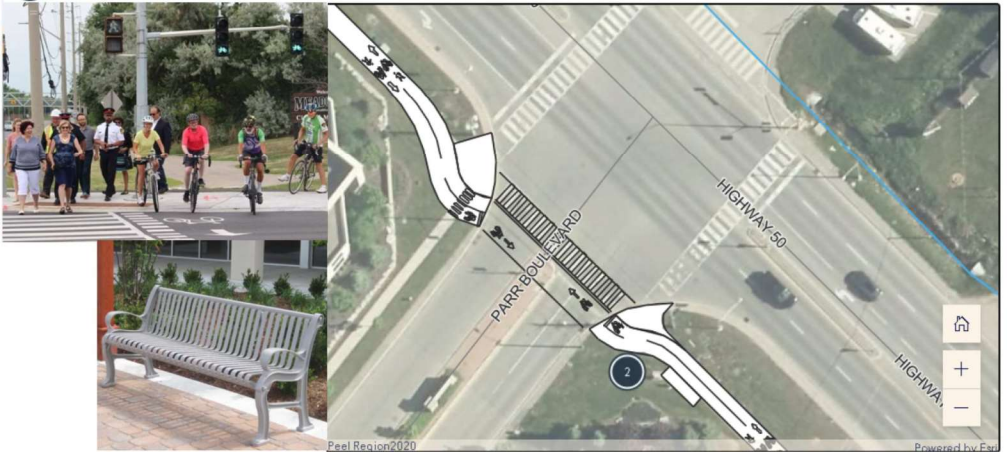


**1 Multi-Use Path - South Connection**



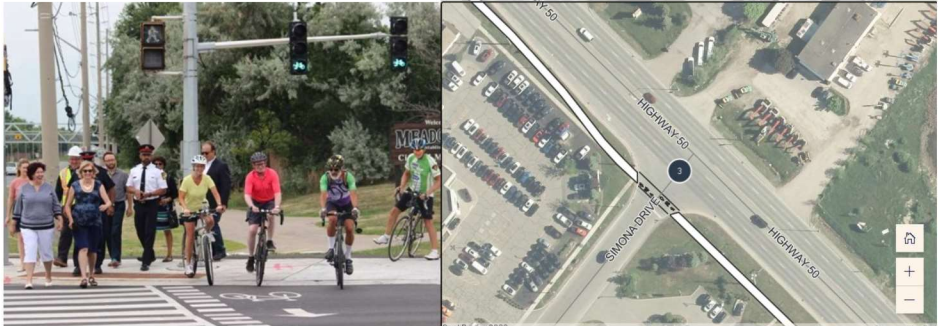
Connection south to future MUP as part of Regional Road 50 Improvements Project at Mayfield Road and Albion Vaughan Road intersection.

**2 Rest Area & Crossside**



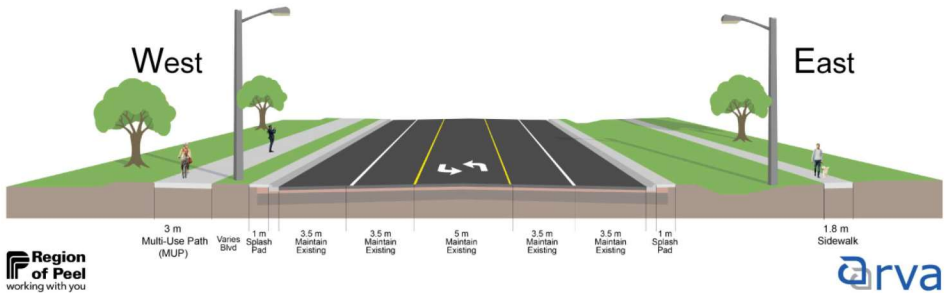
Parr Boulevard intersection. A safer crossing for cyclists and pedestrians.

**3 Crossride**



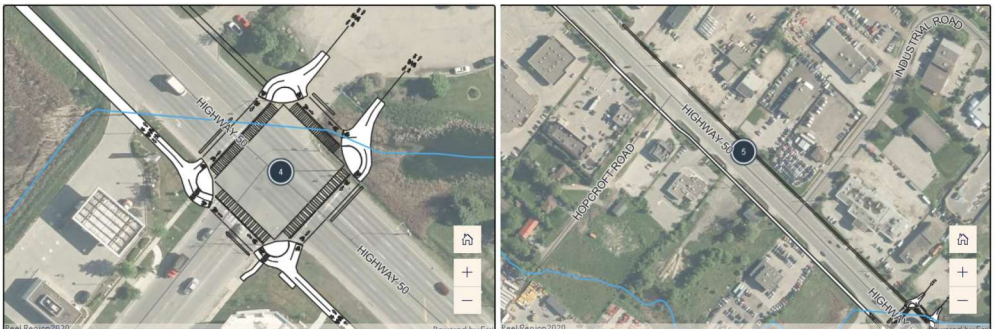
Simona Drive intersection. A safer crossing for cyclists and pedestrians.

**Multi-Use Path West Side and Sidewalk East Side**



**4 Multi- Use Path - East Connections**

**5 Sidewalk East Side**



Rest Area, Crossrides, MUP connections and Sidewalk connection at George Bolton Parkway intersection. Safer crossings for cyclists and pedestrians. Connection to existing sidewalks and upgrade to AODA compliant width of 1.8 metres.

6

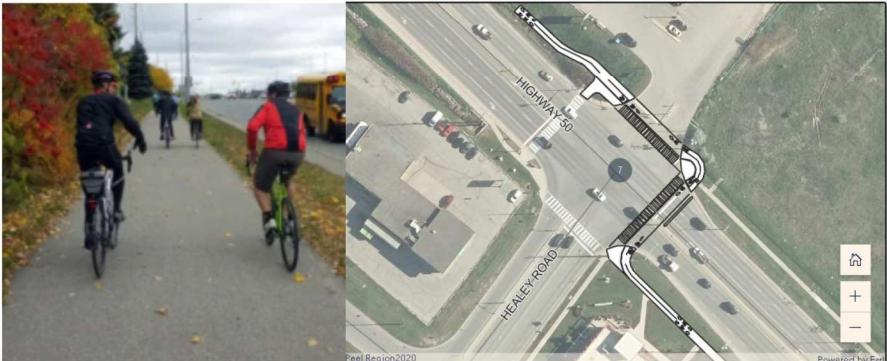
## Rest Area & Crossride



McEwan Drive West Intersection. A safer crossing for cyclists and pedestrians.

7

## Multi-Use Path - North Connection



Crossrides at Healey Road intersection connecting MUP to future bridge rehabilitation project to the north. Safer crossings for cyclists and pedestrians.

## Summary

The preliminary recommended solutions were determined to best address the Problem/Opportunity Statement and provide key benefits to the study area.

- ***SWM Best Management Practices***

Improved roadway drainage and surface water runoff conveyance.

- ***Climate Change Requirements***

Designed to reduce water quantity, increase overflow capacity, slow infiltration and increase retention of surface runoff.

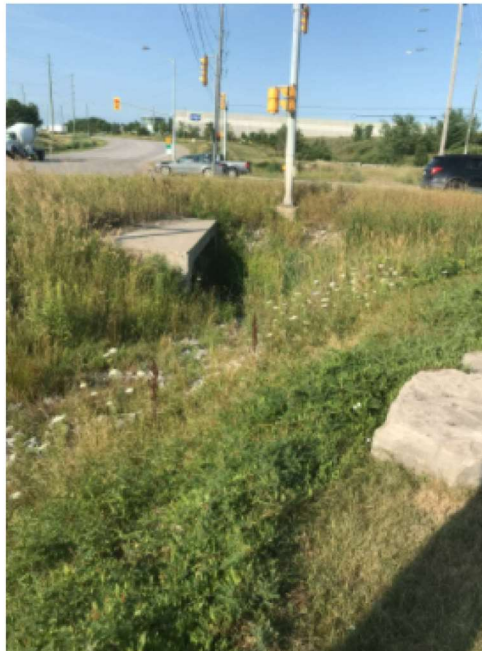
- ***Regulatory Requirements***

Improved water quality and quantity, closer to targets set out by the Region.

- ***Active Transportation***

Improved accessibility for pedestrians and cyclists through the corridor.

Increased connectivity to existing and future walking and cycling (active transportation) networks.



## Questions and Comments

### Thank You For Your Interest In This Study. Your Input Is Important To Us!

Following this public consultation, the preliminary recommended solutions for the study area will be confirmed and/or revised in consideration of the comments received.

[Comment Form](#)

Please note that this is the final Public Information Centre (PIC) for the study.

We will be accepting feedback for PIC 2 until April 8, 2022.

A formal response to all questions, comments and feedback will be available on April 22, 2022.

Please contact us or email your comments to the project team.  
Project team contacts:

 <p><b>Region of Peel</b> working with you</p>	<p><b>Syeda Banuri, M.Eng., P. Eng.</b> Project Manager, Infrastructure Programming and Studies</p> <p>Telephone: (416) - 407 - 7860 E-mail: syeda.banuri@peelregion.ca</p>
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[Email Syeda Banuri](#)

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[Email Andrew McGregor](#)

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[Alternative Format](#)

Tell us how we are doing on accessibility at the Region of Peel by providing your feedback on accessible customer service. Please click the "Provide Accessibility Feedback" button below.

[Provide Accessibility Feedback](#)

Please note that information related to this study will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. All comments related will become part of the public record and may be included in the study documentation prepared for public review

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