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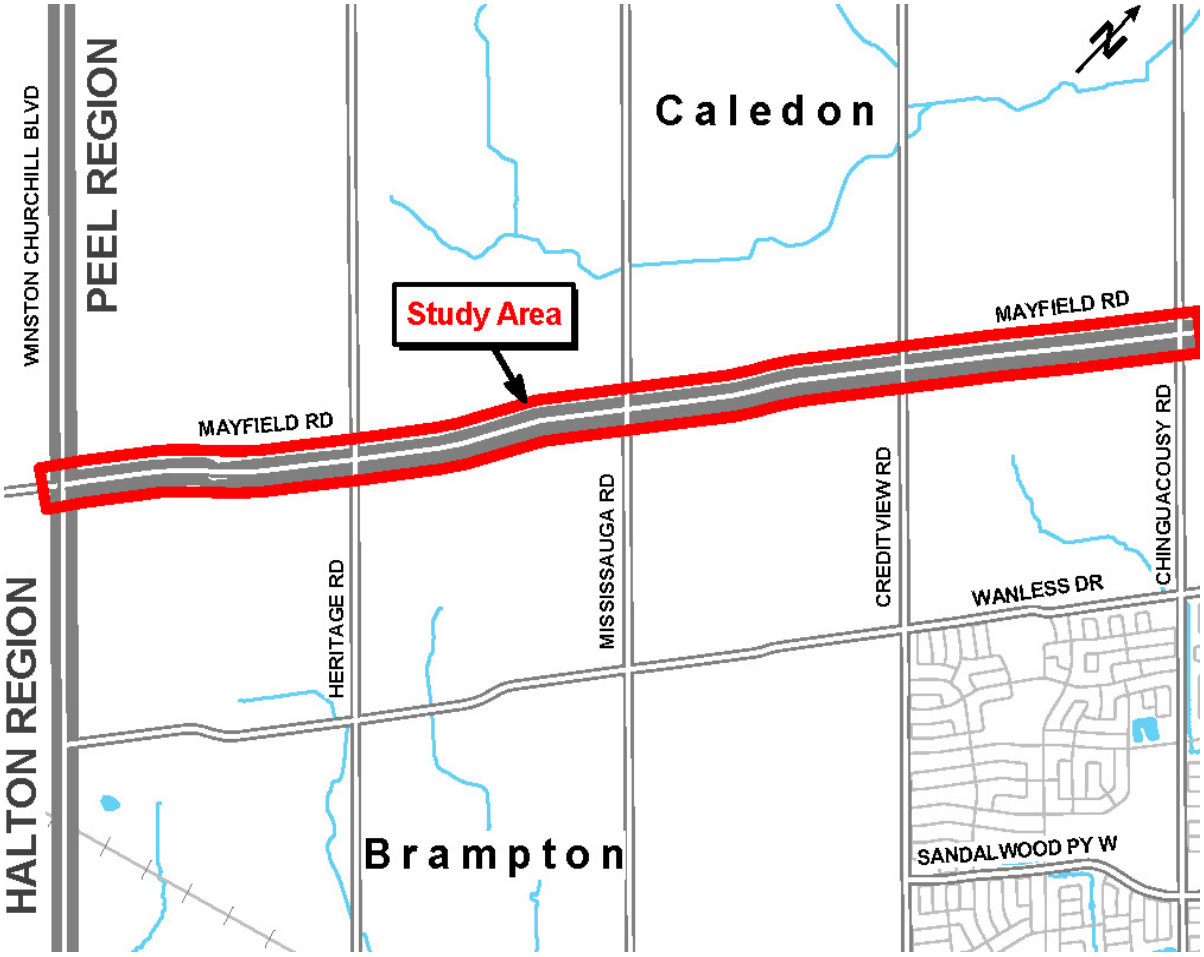
Welcome

Public Information Centre No. 2

MAYFIELD ROAD CLASS ENVIRONMENTAL ASSESSMENT

from Chinguacousy Road to Winston Churchill Boulevard
Brampton, Caledon, Halton



Held at the
Peel Regional Police Association Banquet Hall
10675 Mississauga Road, Brampton
on
Thursday October 8, 2015

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The purpose of Public Information Centre No. 1 was to introduce the study area, discuss the problems and opportunities and present a preliminary recommended planning alternative.

The purpose of Public Information Centre No. 2 is to:

1. explain how the Municipal Class EA process works
2. review what has taken place so far and confirm the recommended planning alternative from PIC No. 1
3. present a summary of technical studies completed
4. present the alternative designs and evaluation process used to select a preliminary recommended design
5. discuss the potential environmental impacts and the ways to reduce the impacts of the recommended design
6. ask for input and comments on the preliminary recommended design and show what will happen next

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How the Municipal Class EA process works

The Municipal Class EA process provides a framework for municipalities to plan, design, and construct municipal infrastructure projects. This project is following the Municipal Class EA Schedule C process which is the most comprehensive.

Phases 1 to 4

1. • Problem/Opportunity
2. • Alternative Planning Solutions

Phases 1 and 2 completed under the Region's Long Range Transportation Plan Study Update 2012

3. • Alternative Designs

We are here

4. • Environmental Study Report

30-day public review following Notice of Completion

Phase 5

Implementation – Detailed Design and Construction

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What has taken place so far?

Confirmation of the preferred planning solution for the study area as recommended in the Region's Long Range Transportation Plan 2012 Update:

- widen Mayfield Road from 2 to 6 lanes from Chinguacousy Road to Heritage Road
- widen Mayfield Road from 2 to 4 lanes from Heritage Road to Winston Churchill Boulevard
- Transportation Demand Management options for the
- corridor (i.e. transit, carpool walk/bike)

- Comments received following PIC No. 1 were addressed
- Impact analysis of alternative designs and recommended mitigation
- Development of alternative design concepts for the preferred planning solution

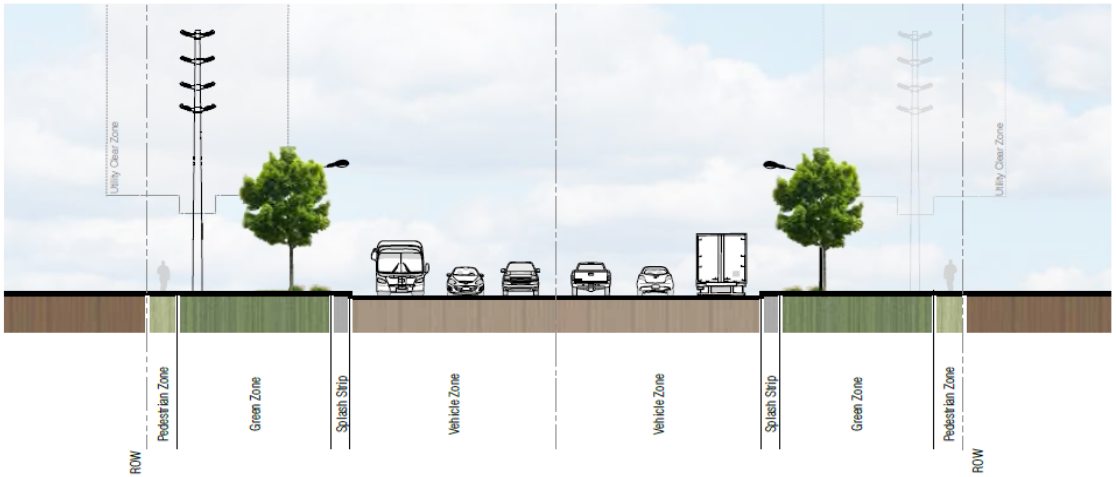
Study reports completed:

- Traffic
- Natural Environment – terrestrial and aquatic
- Archaeology and Cultural Heritage
- Structural Assessment
- Stormwater and Drainage
- Air Quality
- Contaminated Site Screening
- Geotechnical and Pavement
- Noise

Industrial Connector and Goods Movement corridor

Industrial Connector

45 metre ROW – Existing Conditions



Zone Dimensions

Vehicle Zone (Lane Width)	Pedestrian Zone	Green Zone	Splash Strip
3.7 metres	1.5 metre min	8.0 metre min	1.0 metre

The Region's Road Characterization Study has identified Mayfield Road's character as industrial connector in the study area. The study can be accessed at the following link:

http://www.peelregion.ca/pw/transportation/business/rcs-may2013.htm

Mayfield Road is a Primary Truck Route designed to handle significant truck volumes and function as a key mobility corridor. There is an anticipated future connection with the GTA West highway. The current truck percentage on this section of Mayfield Road is 15 percent.

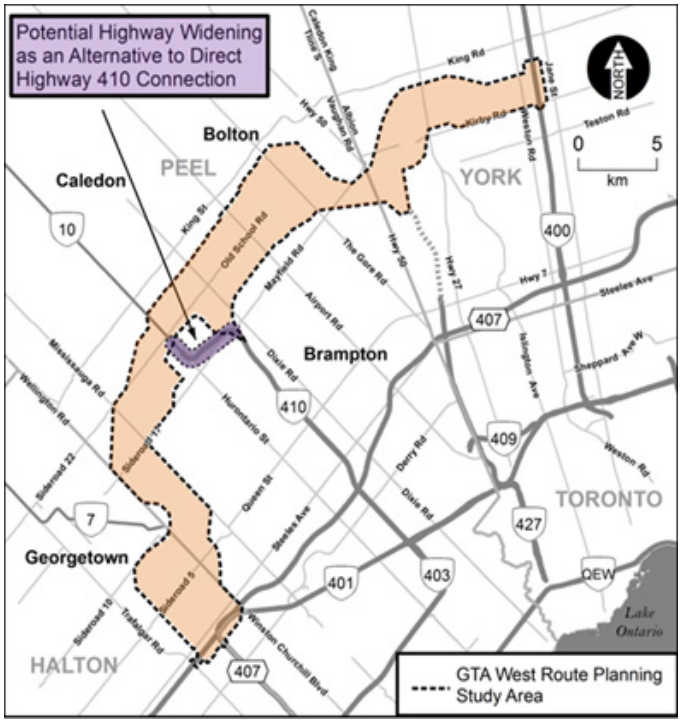
Planning & Development Context

GTA West Corridor

Once the corridor and interchange locations are finalized through the Ministry of Transportation Planning and Environmental Assessment Study for the GTA West corridor, the Mayfield Road proposed interchange location will be examined in further detail by the Ministry. Further information on the GTA West can be found at:

http://www.gta-west.com

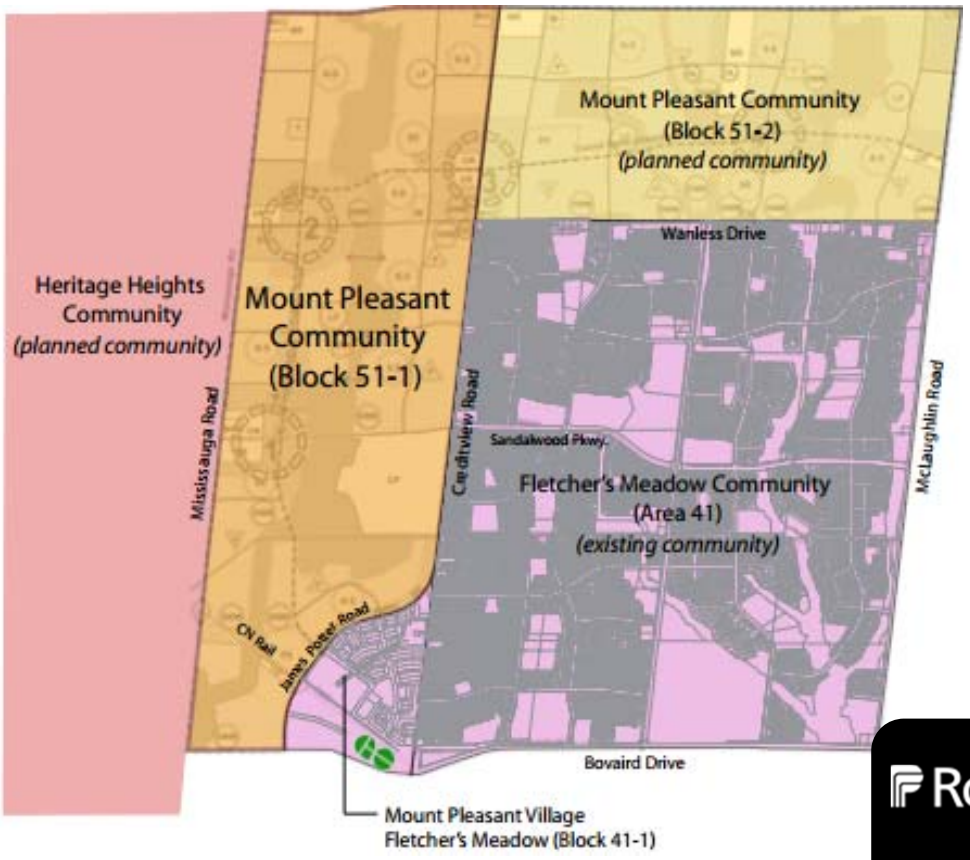
GTA West study map



Land Development Planning

Land development applications within the Mount Pleasant and Heritage Heights development areas are under review at the City of Brampton.

Mayfield Road



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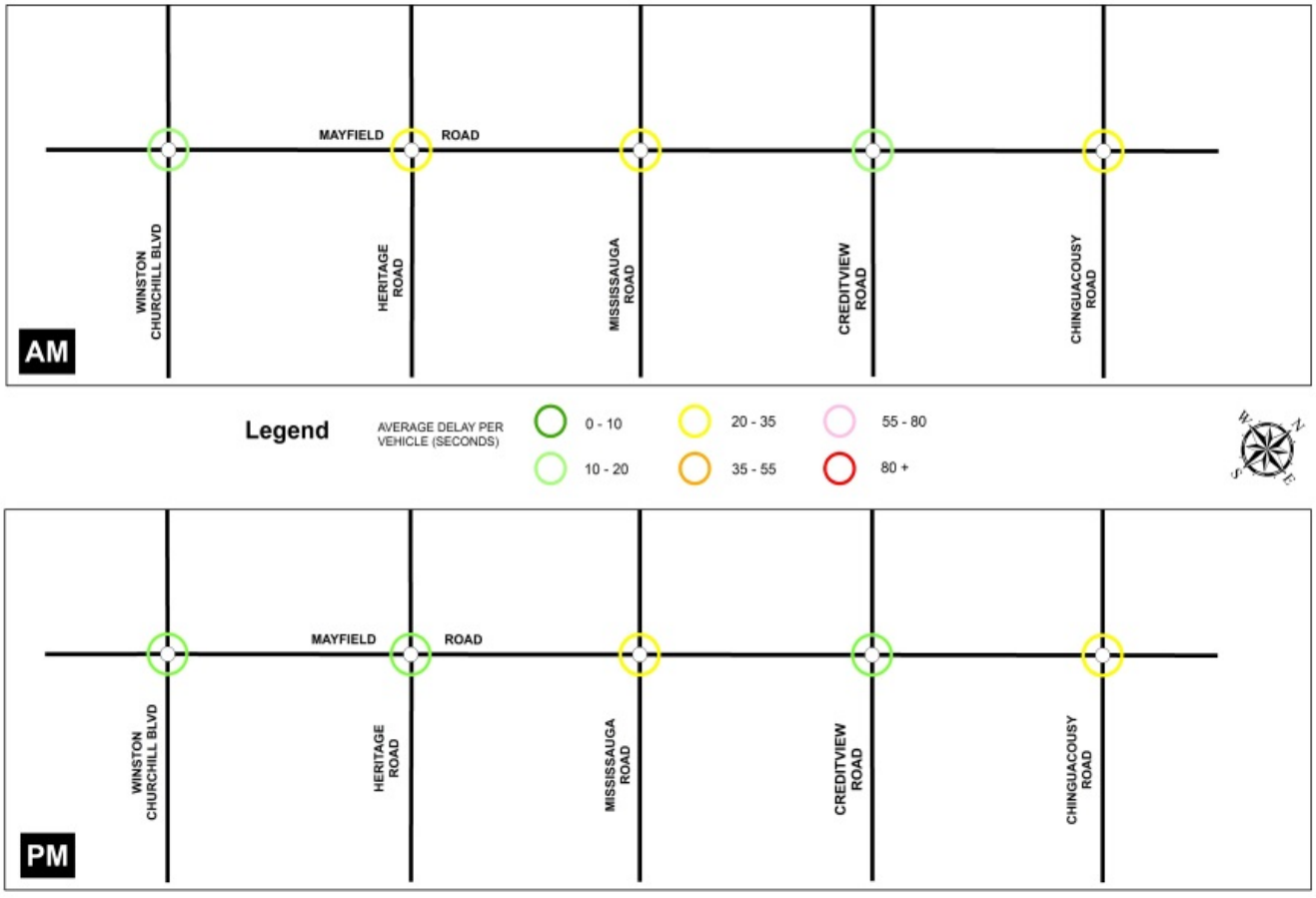
1 update on Technical Reports

Traffic

The traffic report looked at traffic delay at both the current signalized and unsignalized intersections for 2021 and 2031. The report shows that without improvements, Mayfield Road will experience increasing levels of delay. With improvements, traffic delays will be minimal as illustrated below for the ultimate 2031 scenario:

The 2031 a.m. and p.m. traffic modelling shows there will be **improved traffic flow.**



Roundabout Feasibility

Roundabout feasibility was screened for all intersections along Mayfield and 3 intersections were identified as possible roundabout locations: Heritage Road

Proposed Sandalwood Parkway Extension (City of Brampton Road)

Winston Churchill Boulevard

Capacity and operational analysis will be further reviewed during detailed design as more planning information becomes available (i.e. location of the GTA West and status of development applications).

The environmental assessment will protect for both signals and roundabouts. The final selection of the preferred option will be made during the detailed design process.

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2 Update on Technical Reports

Natural Environment

Aquatic Features

- The study area is located entirely within the jurisdiction of Credit Valley Conservation, within the subwatersheds of Fletcher's Creek in the east and Huttonville Creek in the west. The headwaters of both of these subwatersheds area located along the study area at Mayfield Road.

Terrestrial Features

- No woodlands have been identified.
- Several small wetlands may be required to be removed.
- 243 trees were documented within 20m of either side of Mayfield Road and rated from poor to good.

Evaluation of Species at Risk

- There are no endangered tree species within the study area.
- Two grassland bird species, Bobolink and Meadowlark are listed as Endangered, and the Barn Swallow is listed as Threatened under the Endangered Species Act. Though they have the potential to live within the study area, no suitable habitat has been identified.

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3 Update on Technical Reports

Archaeological and Built Heritage Resources

- The Stage 1 Archaeological Assessment has been completed.
- Sections of Mayfield Road including the frontage of the Alloa Home United Church retain archaeological potential and will be assessed in the Stage 2 Archaeological Assessment to be conducted in the fall.

- The Built and Cultural Heritage Report recommends a Heritage Impact Statement for both the Alloa Home Church and the Farmscape at the south east corner of Heritage Road and Mayfield Road (419 Mayfield Rd)
- Tree protection zones are recommended for all cultural heritage resources where tree removals are planned due to the recommended widening.

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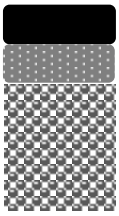
4 Update on Technical Reports

Geotechnical & Pavement Design

- The proposed pavement structure for new pavement is:

Corridor Pavement Profile



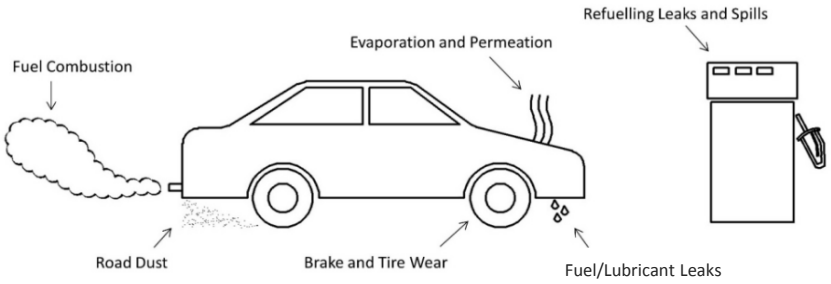
Hot Mix Asphalt 160mm (170mm for roundabout)

Granular A Base 150mm

Granular B Sub-base 500mm

Air Quality

Motor Vehicle Emission Sources



All contaminants were assessed and found to be below Ministry of the Environment and Climate Change guidelines except for the following:

- Coarse Particulate Matter (PM10) and Total Suspended Particulate Matter (TSP) are above Ministry guidelines; however they will exceed the guidelines less than 1% of the time over the 5 years following widening.
- Mitigation measures are not warranted due to the small number of additional days which are expected to exceed the guideline.

Noise

The noise study reviewed noise levels for the future widening conditions at 6 receptor locations along the corridor:

- Noise walls are not warranted for any existing sites except for one receptor location which is expected to exceed the threshold limit in 2031. However since the threshold will be exceeded whether or not widening takes place, mitigation is not recommended.

Contaminated Site Screening

Soil contamination within the study area can occur in 3 ways:

- from property acquired for the road widening that is already contaminated
- spills along the existing right-of-way
- movement of contaminants into the existing right-of-way from adjacent properties

If areas of contamination are identified, all Provincial practices will be followed .

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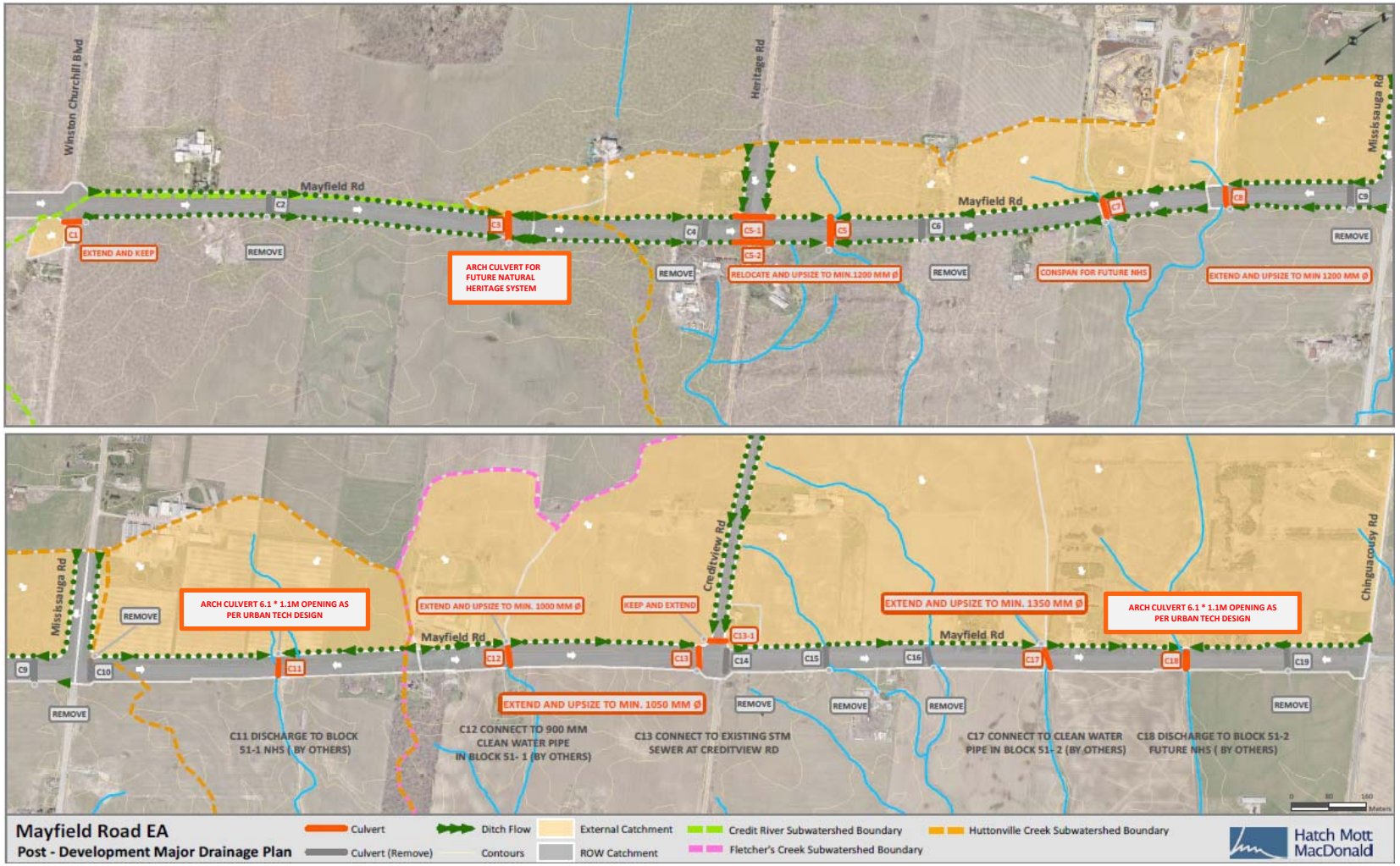
5a

Update on Technical Reports

Structural Assessment



Illustrated are the drainage areas and culvert/structure replacements for the major drainage area. Some existing culverts will be removed with their flows re-directed to the larger culverts, and the remaining will be upgraded in size and capacity.

Drainage for the minor system will be infiltrated using green infrastructure techniques (Low Impact Development known as LID) that are contained within the road right-of-way.

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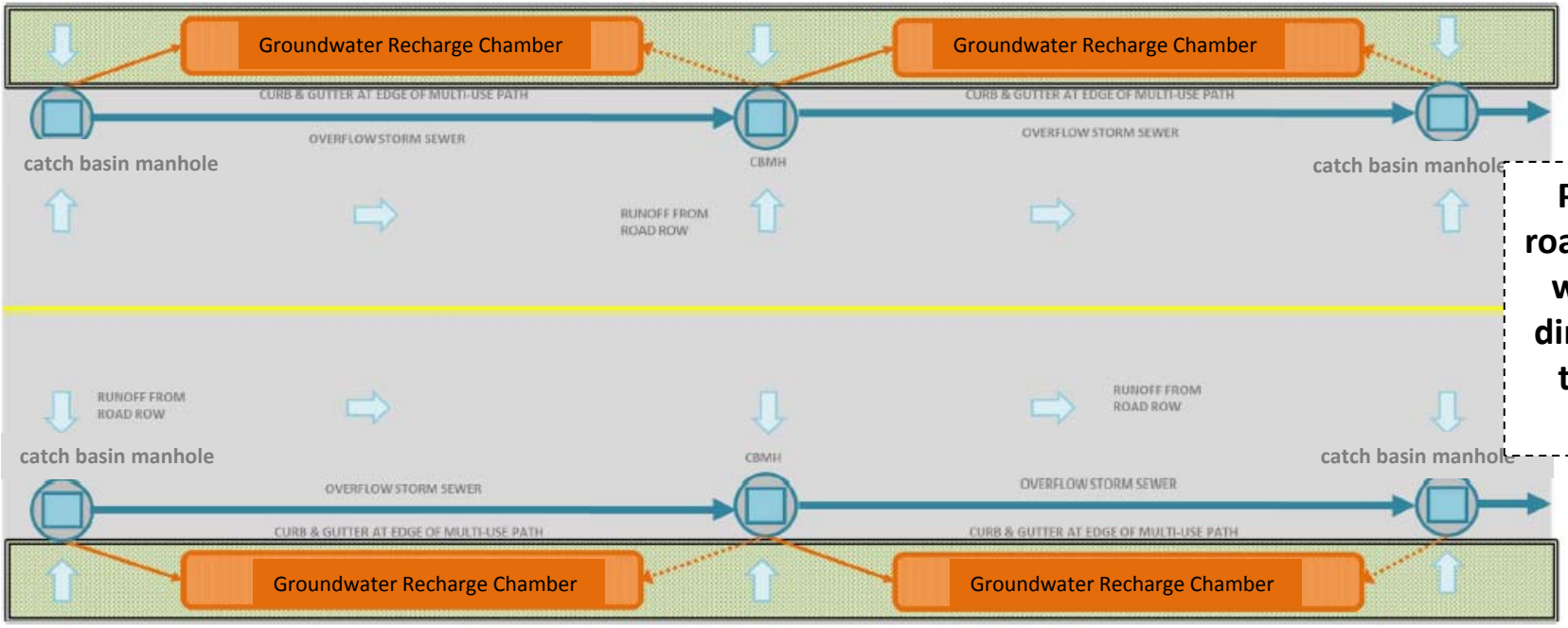
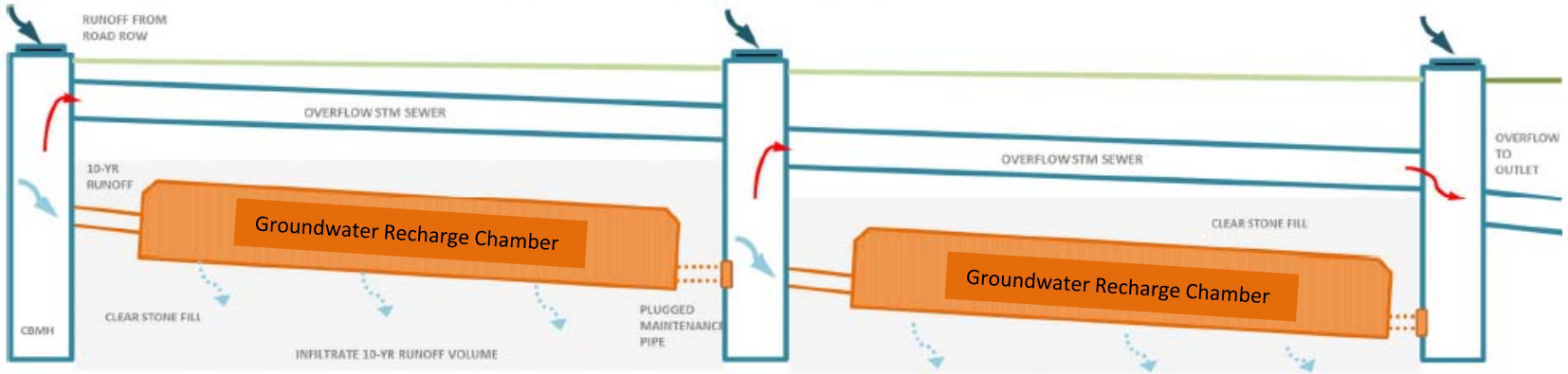
5b

Update on Technical Reports

Stormwater & Drainage for the Ultimate Road Design



PLAN VIEW – ROAD ROW LID IMPLEMENTATION USING MULTI-USE TRAIL



PROFILE VIEW – SUB-SURFACE INFRASTRUCTURE

Plan view of road shows how water will be directed within the right-of-way.

Conceptual Low Impact Development (LID) Strategy design to capture minor storm events will be further explored in detailed design.

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6a Update on Technical Reports

Managing Stormwater

Water on the road from rain events or melting snow is managed through quantity controls and quality controls.

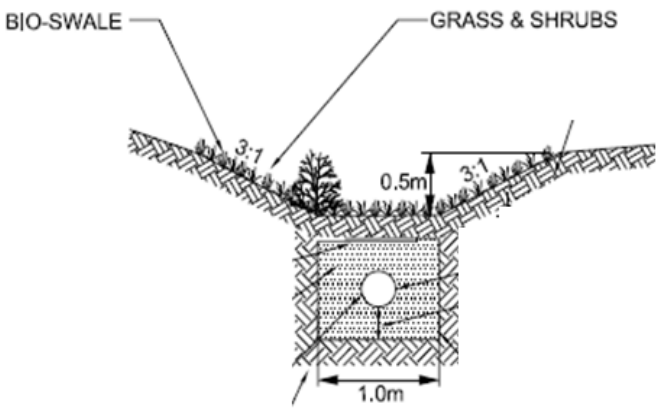
Quantity Control

Water volume is either conveyed through ditches or through stormwater systems.

- ditches are currently found on the north and south sides of Mayfield Road. If the road is widened, areas where ditches remain following widening will be improved to flat bottom infiltration ditches for better water quantity and quality .
- New storm sewer infrastructure for urban areas will convey water using curb and gutters and storm sewer pipes. Water is conveyed to culverts/receiving drainage systems.

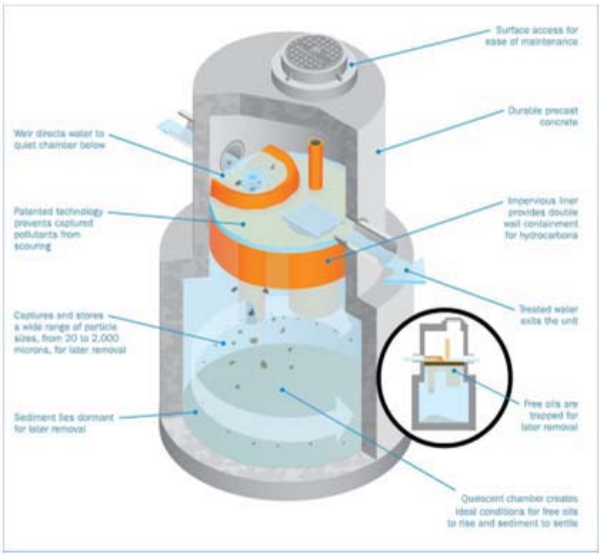
Quality Control

- use of enhanced flat bottom ditches
- oil/grit separators to treat storm water
- sediment and erosion control measures to protect water quality during construction



Enhanced flat bottom ditch

For use on the north side interim condition



Oil and grit separator

For use on the side ultimate condition

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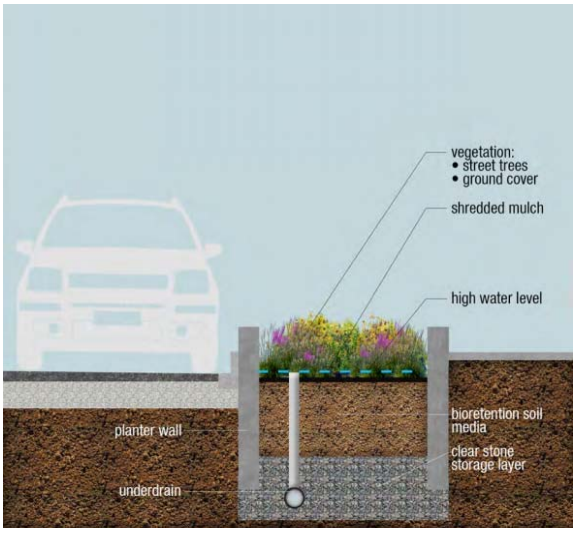
6b Update on Technical Reports

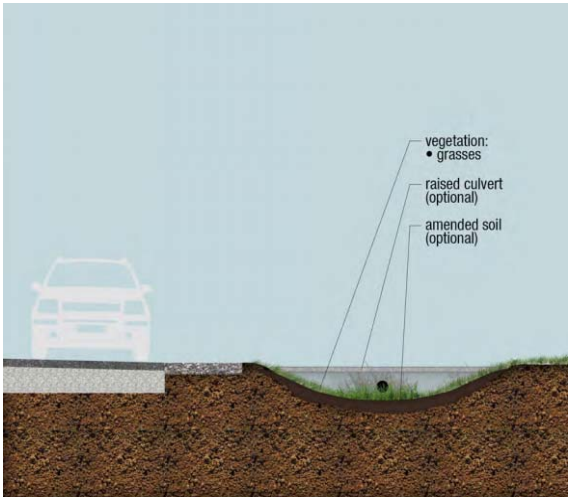
Improving Stormwater management through green infrastructure

The Region recommends using Low Impact Development (LID) practices to infiltrate minor rain events. LID options will be reviewed in the Detailed Design stage.

What is LID?

LID is a green infrastructure approach to stormwater management that uses simple cost-effective landscaped features and other techniques to filter, store, infiltrate and use rainfall where it falls.





LID options to be reviewed in the **detailed design stage** of the project may include:

- bioretention planters and boulevard units
- bioswales
- enhanced grass swale
- perforated pipe systems
- permeable pavement sidewalks and multi-use trails (MUT)
- prefabricated modules (i.e. soil support systems / silva cells, modular bioretention systems, etc.)
- infiltration facilities (i.e. trenches, galleries and soak-a-way pits)

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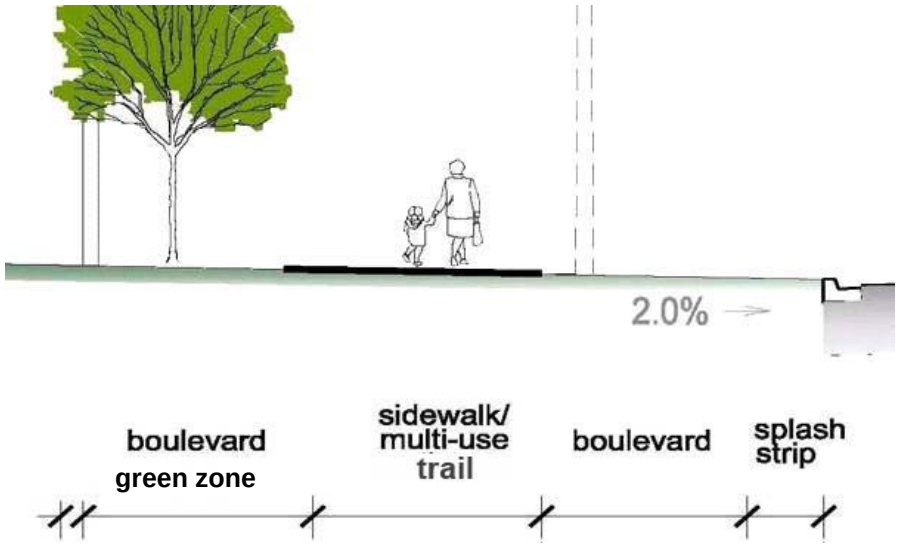
Active Transportation (AT)/Transportation Demand Management (TDM) initiatives

The Ontario Traffic Manual is the design guideline for active transportation facilities and the Ontario Cycling Strategy's vision is to make cycling a viable transportation mode. The Region's Active Transportation Plan recommends a multi-use trail on Mayfield Rd. For more information on the Region's AT program visit: http://www.peelregion.ca/planning/residents/transportation/active/



Bicycle detection systems and cross ride treatments will be evaluated in the detailed design stage.

Transportation Demand Management (TDM)

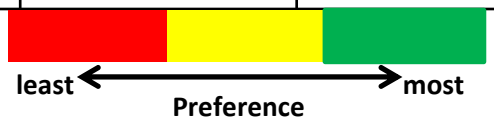
TDM is the application of strategies and measures to provide travel options and choices to reduce single occupant vehicle travel.

TDM will be part of the recommended solution for Mayfield Road through the construction of multi-use trails for walking and cycling, transit infrastructure along Mayfield Road and the use of **Smart Commute** tools to participate in carpooling

All alternatives were evaluated on their potential technical, natural environment, social/land use and cultural environment impacts as well as constructability and cost.

Design Alternatives Evaluation Matrix

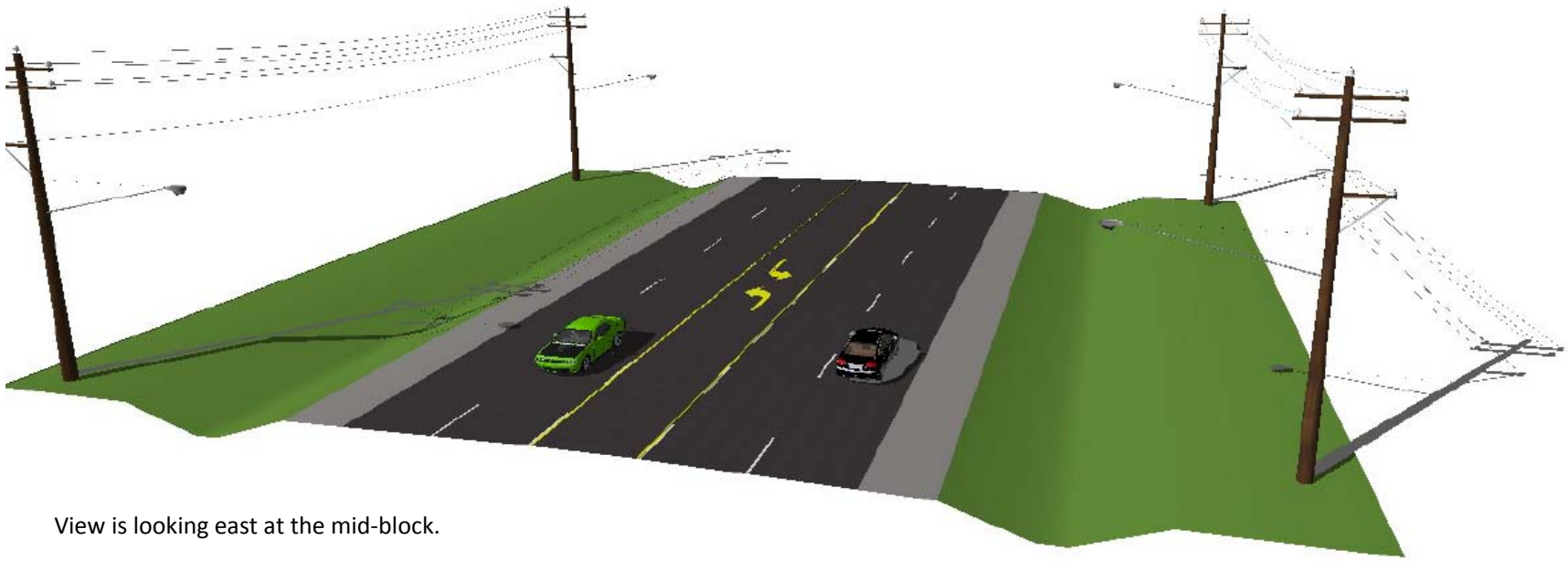
Category	Factors	Criteria	Alternative 1 Widen to the North	Alternative 2 Widen to the South	Alternative 3 Widen equally around the centerline	Alternative 4 A hybrid approach
Technical	Utility Impacts	Hydro/Bell poles impacted				
	Stormwater & Drainage	Impact to existing stormwater management and drainage facilities				
	Constructability	Ease of construction				
	Geometrics	Roadway geometrics are within acceptable design standards				
	Alternative Modes of Transportation (TDM)	Easily able to incorporate alternative modes of transportation into the design				
Natural Environment	Terrestrial	Impact to existing vegetation, wildlife, wildlife crossings, including proximity to Areas of Natural and Scientific Interest, Wetlands and habitats of Endangered or Threatened species				
	Aquatic	Impacts to valley lands, floodplains, watercourses, water bodies, crossings and fisheries (including impacts to hydrogeological features).				
Social, Land Use and Cultural Environment	Social Environment	Low potential for short-term construction related effects (e.g. noise, dust, etc.) on area residents				
	Land Use	Impacts to existing land uses Low potential for property taking				
	Proximity to Built-Up Areas	Impacts to existing built-up areas				
	Archaeology and Built Heritage	Impacts to existing archaeological or built heritage features				
Construction	Capital Costs	Low potential for capital costs				
	Property Costs	Low potential property acquisition costs				



The recommended alternative throughout the corridor is Alternative 4 – a hybrid approach which offers the most design flexibility and least property impacts.

4-lane Interim Cross Section

Mayfield Road west of Mississauga Road to Winston Churchill Boulevard to 2021 - preliminary recommended design

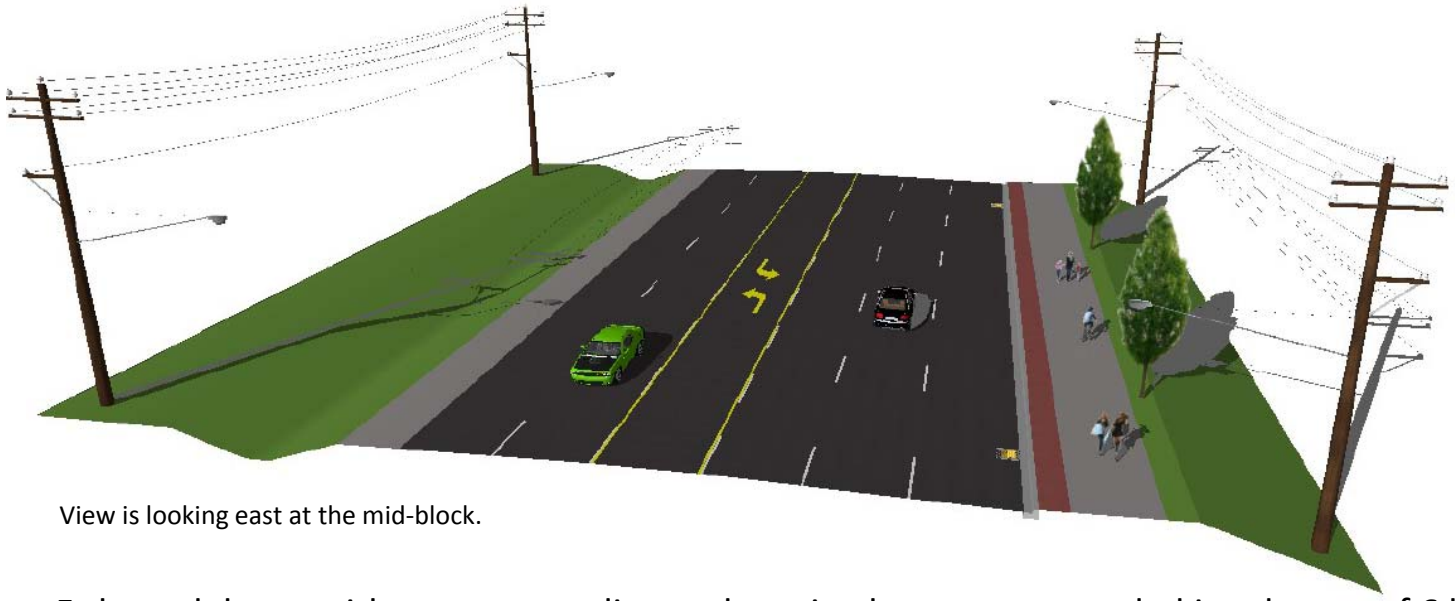


View is looking east at the mid-block.

-
- ditches on both sides of the road; rural cross section is maintained
- a paved shoulder for safe stopping of motor vehicles and for bicycle use on both sides of the road

5-lane Interim Cross section

Mayfield Road from Chinguacousy Road to just west of Mississauga Road to 2021 - preliminary recommended design

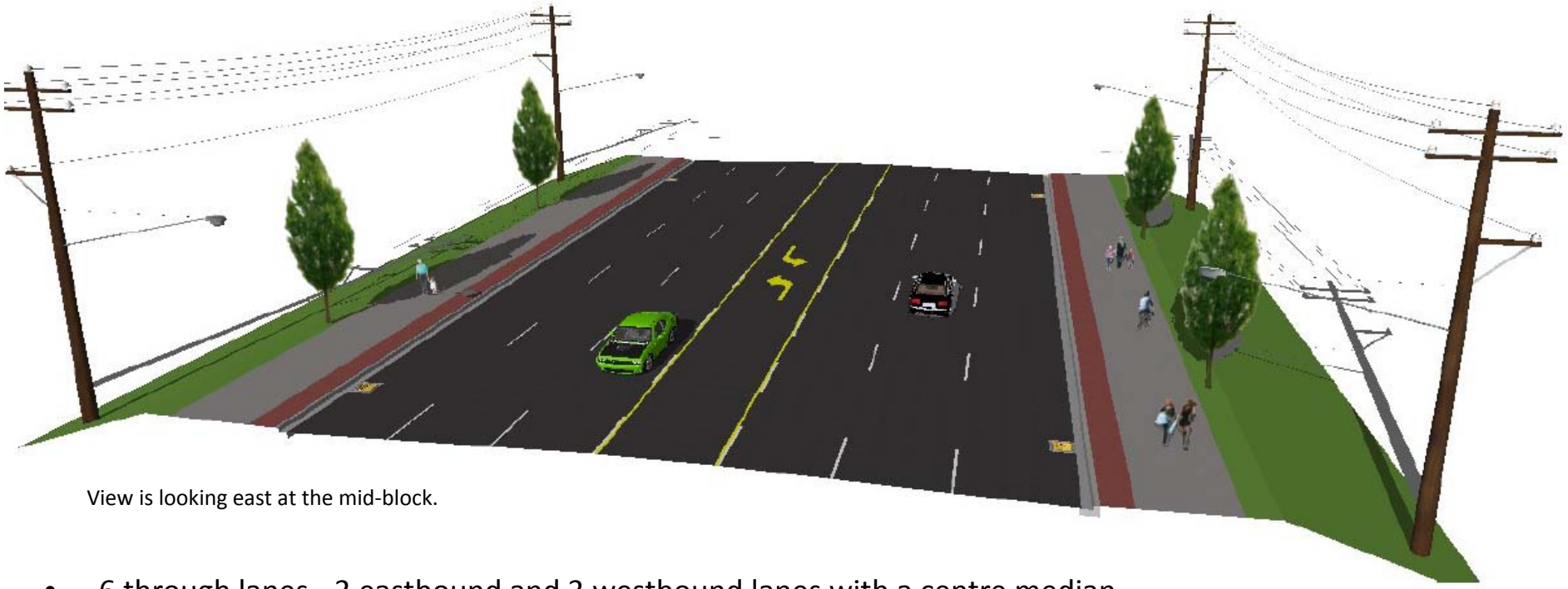


View is looking east at the mid-block.

- 5 through lanes with a centre median and turning lane recommended in advance of 6 lanes. The south side of Mayfield Rd will be developed first and placing the south-side lanes in the ultimate location will reduce future construction costs and disturbance
- 3 eastbound and 2 westbound lanes with a centre turning lane
- a ditch on the north side (rural cross section)
- a paved shoulder on the north side for safe stopping of motor vehicles and use of bicycles; and a multi-use trail on the south side for active transportation
- curb and gutter and storm sewers on the south side

6-lane Ultimate Cross Section

Mayfield Road from Chinguacousy to Heritage Road after 2031 - preliminary recommended design



View is looking east at the mid-block.

- 6 through lanes - 3 eastbound and 3 westbound lanes with a centre median
- curbs and gutters and storm sewers (urban cross section)
- multi-use trails on both sides of the road

Anticipated Construction Staging

Construction will be completed in stages and for ease of explanation, the corridor has been divided into 2 sections:

Section 1 – *Mayfield Road from Chinguacousy Road to just west of Mississauga Road*

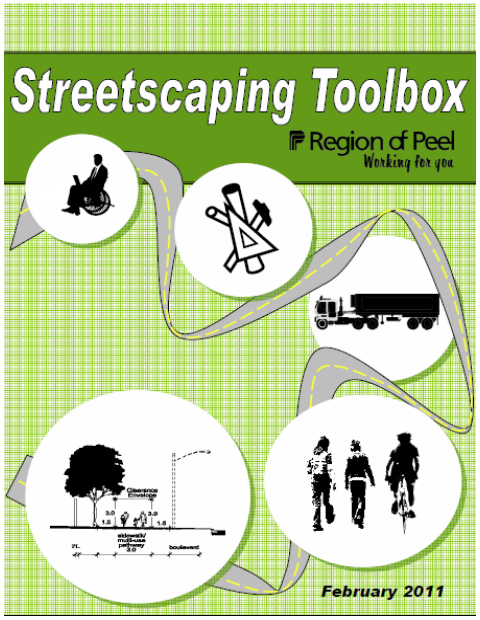
Section 2 – *Mayfield Road from just west of Mississauga Road to Winston Churchill Boulevard*

Project construction dates are tentative based on Council approval and project schedule.

	Section 1	Section 2
2017	Detailed design and utility relocates for both sections.	
2020	Construction starts for the 5–lane cross section – 3 lanes to the south and 2 lanes to the north with a centre turning lane for safe turning	
2021		Construction starts for the 4-lane cross section – 2 lanes on the south side and 2 lanes on the north side with a centre turning lane for safe turning
2031	Construction starts for the 6–lane cross section with a centre median	

COMMITMENTS

- **engineering**
- **access and safety**
- **environment**
- **active transportation (AT)/TDM**
- **social/economic/cultural heritage**
- **landscaping**
- **storm water management**



We will:

- improve sight lines for property accesses identified with deficiencies
- ensure access to existing properties/entrances is maintained during and after construction
- implement safety improvements which may include channelized right turn lanes (smart channels) and review roundabouts for 3 possible locations along the corridor
- provide an overall benefit to the environment through the use of wider culverts
- facilitate active transportation through implementation of a multi-use trail on the south side of Mayfield Road and paved shoulder on north side rural areas for cyclists (interim stage) and both sides for the ultimate 6 lane scenario; implement TDM policies and strategies
- ensure there are no property impacts to Alloa Home United Church
- provide a landscaping plan which will follow the guidelines for the Region's Streetscaping Toolbox
- prepare a formal tree preservation/planting plan in the detailed design phase with tree removals replaced on a basis agreed between the Region and the Credit Valley Conservation Authority
- improve stormwater management for the entire corridor and add new storm sewers on the south side of Mayfield Road
- implement storm water management practices within the Region's right-of-way using Low Impact Development practices

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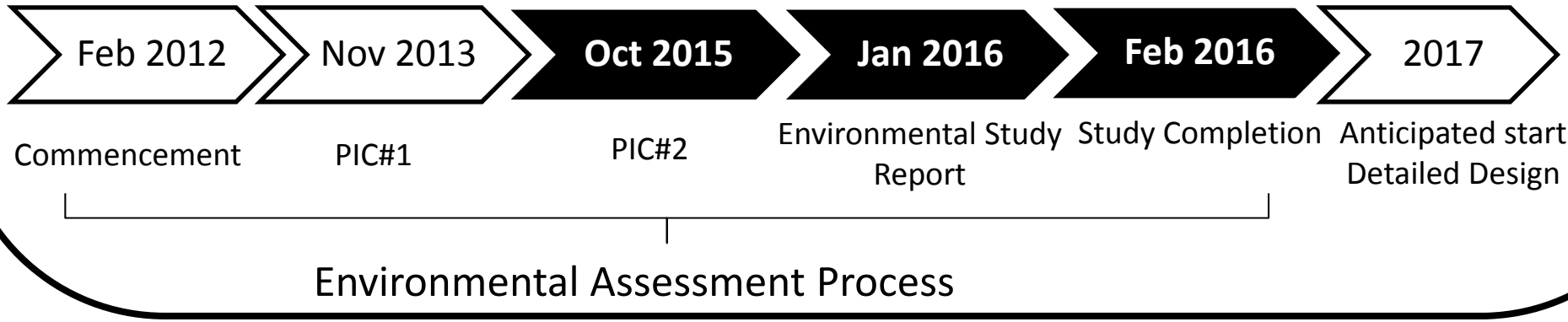
What happens next?

- receive public comments by October 23, 2015
- consider public input
- confirm the recommended design concept
- document the study findings and results and incorporate them along with the recommended design concept into an Environmental Study Report (ESR)
- issue a notice of completion to adjacent property owners within the corridor and members of the public who registered at the PICs
- advertise the study completion in local newspapers
- place the ESR on public review for 30 days

Timeline



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Please tell us what you think before

October 23, 2015

You can review the boards on our website and provide comment at:

http://www.peelregion.ca/pw/transportation/environ-assess/mayfield-road-ea-2.htm

or fill out the comment sheet today and submit, or send comments by email/fax/letter to:

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