



Environmental Assessment (Schedule B) and Preliminary Design for Drainage Improvements of Highway 50 from Mayfield Road to Healey Road

Problem / Opportunity Statement

This EA study was initiated to review opportunities within the study area to address drainage improvements along Highway 50 from Mayfield Road to Healey Road, in the Town of Caledon.



The entrance culverts and drainage ditches are in poor condition and require improvement and upgrading.

To address this, the study will consider:

- Best Industry Practices
- Climate Change Requirements
- Existing and Future Regulatory Requirements
- Active Transportation Improvements (i.e. pedestrian and cycling amenities)

In developing recommendations, all reasonable alternatives will be considered to minimize impact to adjacent businesses and the surrounding environment.

Highway 50 (Regional Road) Study Area

In 2017, the Region of Peel (Region) completed a condition assessment for entrance culverts on both sides of the road. It was determined that 17 entrance culverts have reached the end of service life.

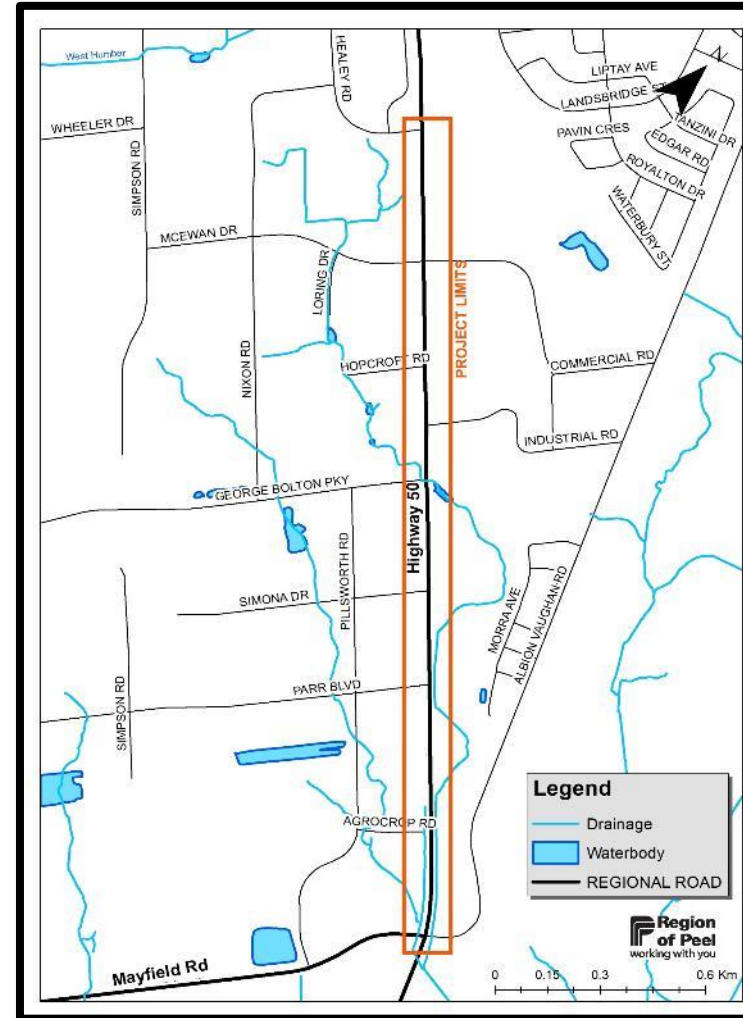
The purpose of this project is to carry out the planning process to improve existing drainage and stormwater management features in the study area to efficiently service existing and future growth along the corridor.

As part of the study, the Region is also considering options to improve pedestrian and cyclist amenities along the roadway, in consideration of the Region's *Sustainable Transportation Strategy*.



Map of Study Area

The study area consists of approximately 2.5 kilometres along Highway 50 (Regional Road) from Mayfield Road to Healey Road, in the Town of Caledon.



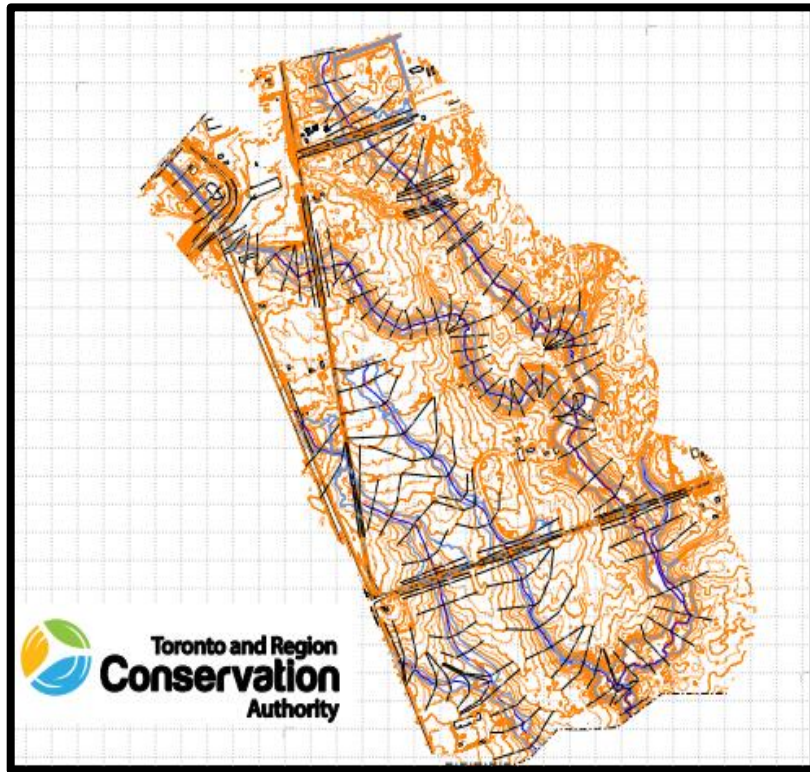
Study Area Catchment (Watershed)

A watershed describes all the upstream areas that contribute water to a specified point along a watercourse.

The area is highly altered and degraded. Drainage improvement alternatives that can mitigate erosion risks and enhance natural geomorphic processes will be considered.



Study Area Catchment (Watershed)



The study area is within the Rainbow Creek subwatershed of the larger Humber River watershed under the jurisdiction of the Toronto and Region Conservation Authority (TRCA).

The subwatershed is drained by Rainbow Creek and Robinson Creek, which merge north of Highway 7 to form Plunkett Creek.

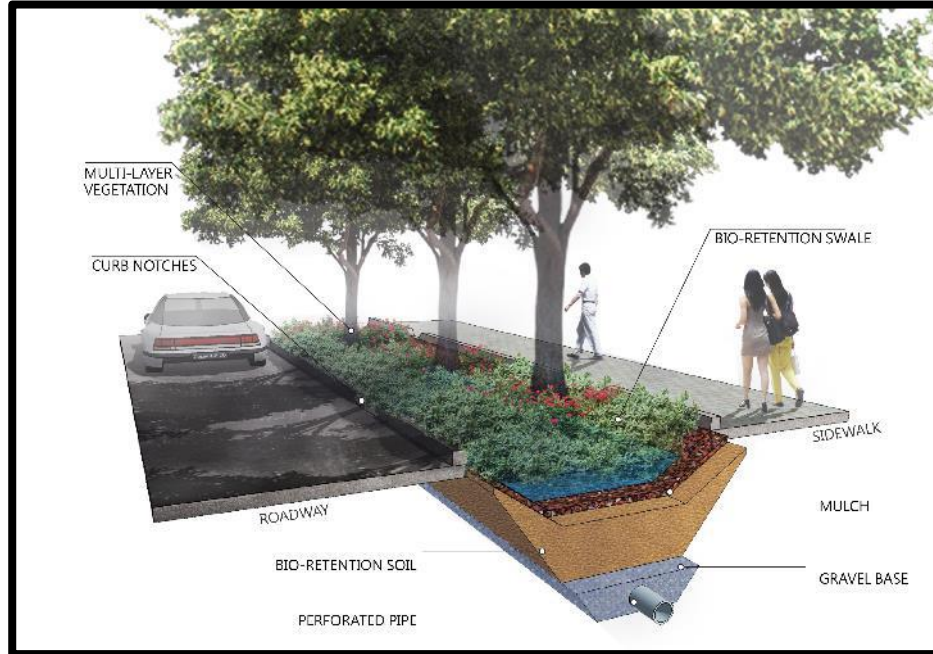
Stormwater Management (SWM)

Best Management Practices (BMPs) are methods applied to stop or decrease the harmful impacts of land use development and activities on the environment.

Low Impact Development (LID) is a SWM strategy that seeks to mitigate the impacts of increased water runoff and stormwater pollution. Three areas are addressed: production; removal; and delivery.

LID techniques can effectively remove nutrients, pathogens, and metals from stormwater, and they reduce the volume and intensity of stormwater flows.

Stormwater Management (SWM)



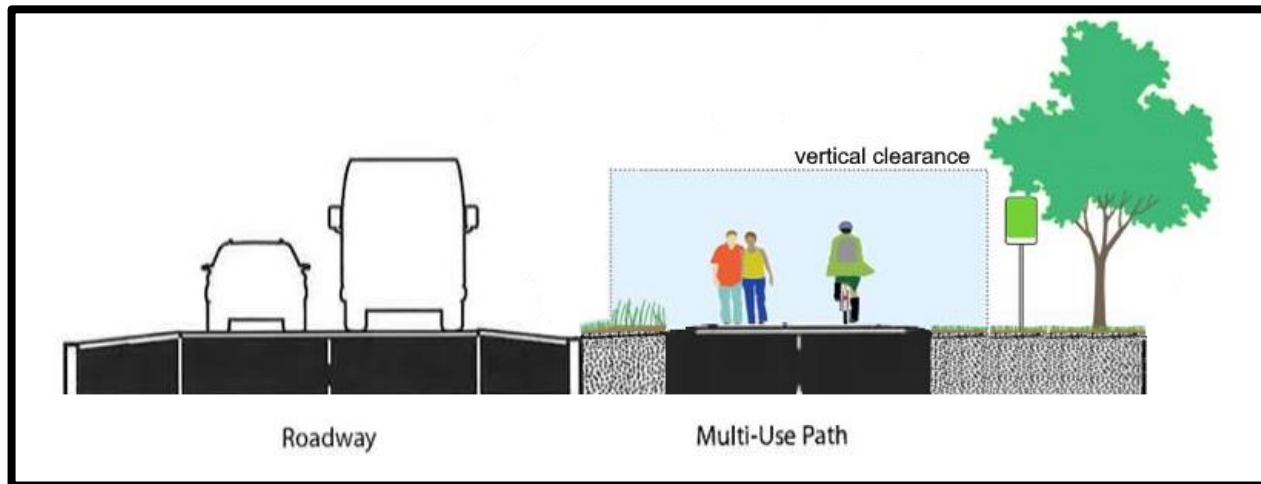
Conceptual illustration only, subject to change

LID options under consideration:

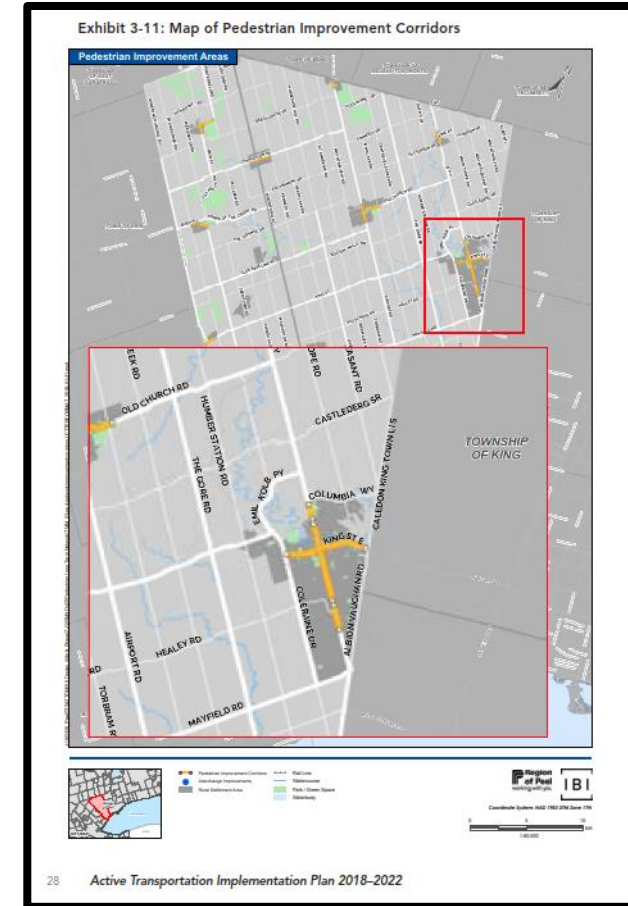
- Infiltration chambers to achieve water balance;
- Oil-grit separators to provide quality controls;
- Swale enhancements to promote infiltration; and
- Storage pipes with orifice control to achieve post- to pre-development release rates.

Active Transportation Environment

This area has been designated by the Region as a pedestrian improvement corridor. The study will explore the addition of multi-use path or a cycle track per the Region's *Sustainable Transportation Strategy (STS)* to address long term active transportation requirements.



Conceptual illustration only, subject to change



Municipal Class Environmental Assessment (EA)

The study follows the Municipal Class EA formal framework undertaken for planning of municipal infrastructure projects to meet the requirements of the *EA Act*.

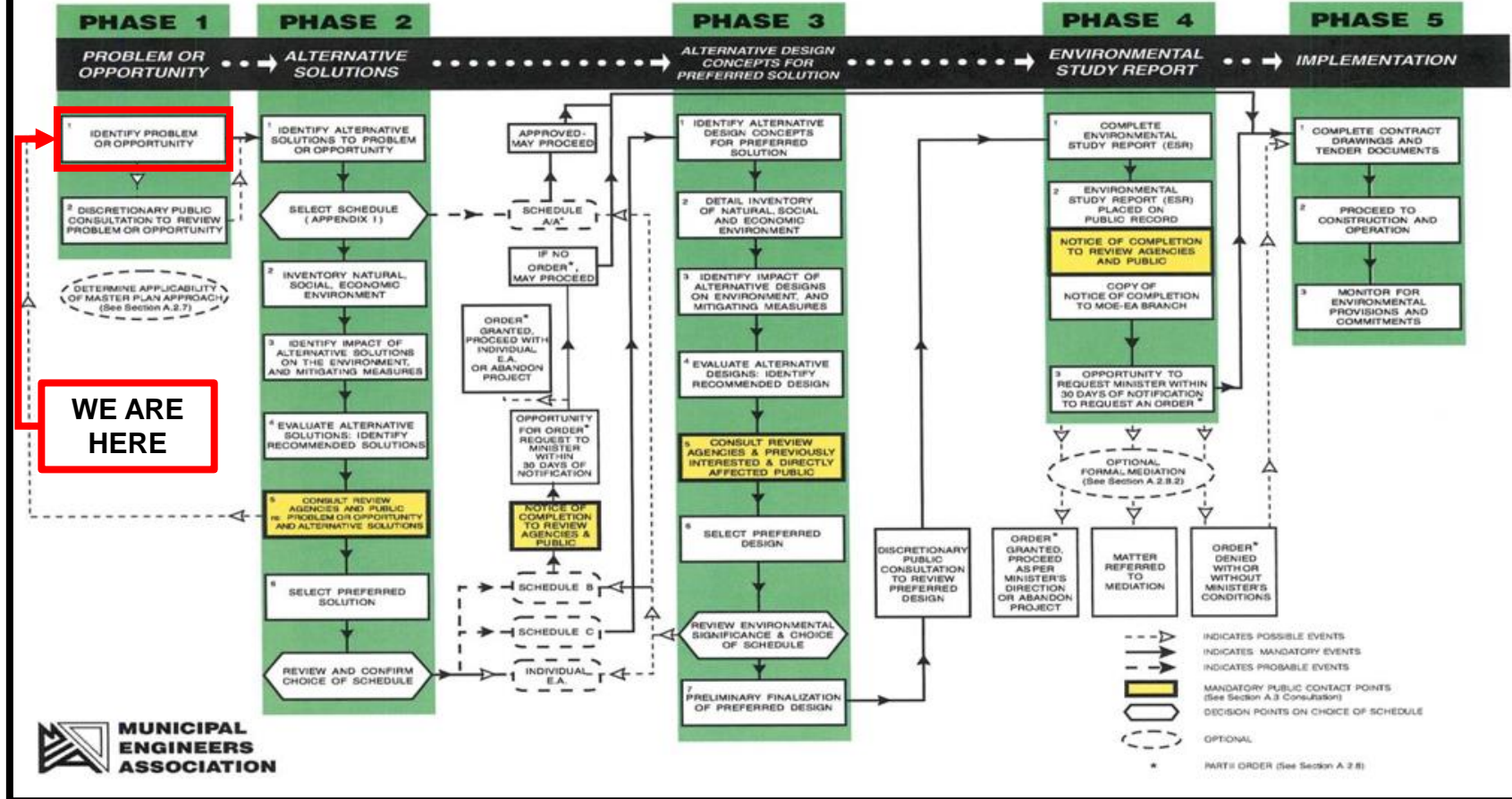
The project is being completed as a Schedule “B” project in accordance with the *Municipal Class Environmental Assessment (October 2000, amended in 2007, 2011 & 2015)* and is subject to Phase 1, Phase 2 and Phase 5.



EXHIBIT A.2

MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



Other Studies Underway

Review of existing and future conditions, developing and evaluating alternatives to determine the preferred solution takes into consideration various environmental factors. Studies in these areas are underway and will be made available to the public upon completion.

- Natural Heritage Assessment
- Archaeological Assessment and Cultural Heritage Assessment
- Geotechnical, Hydrological and Stage 1 Environmental Investigations
- Fluvial Geomorphic and Hydraulic Assessment
- Topographic Survey and Base Plan
- Transportation & Traffic Impact Assessment



What Are The Next Steps?

