

LONG-TERM SOLUTION

LEGENDS

- EXISTING RIGHT OF WAY
- EXISTING PROPERTY LINE
- PROPOSED RIGHT OF WAY
- GRADING
- EXISTING NOISE BARRIER
- 2015 PROPOSED NOISE BARRIER
- NEW NOISE BARRIER
- PROPOSED SIDEWALK
- PROPOSED MULTI-USE TRAIL
- PROPOSED MEDIAN

NOTE:
THE UTILITIES SHOWN IN THE TYPICAL SECTIONS ARE ILLUSTRATION PURPOSE ONLY;
THE ACCURACY WILL BE VERIFIED DURING DETAIL DESIGN.

MISSISSAUGA

CREDITVIEW ROAD CLASS EA
PLAN / CROSS SECTIONS
LONG-TERM SOLUTION
PLAN - STA. 8+403.7 TO STA. 10+487

DESIGN	DRAWN	CHECKED	CONTRACT No.
SCALE: 1" = 30'	15' 0' 30'	DRAWING NUMBER	SHEET
DATE:			

AECOM

CONSULTANTS

HORIZONTAL / VERTICAL CONTROL MONUMENTS

DIGITAL INFORMATION

No.

DATE

REVISIONS

INITIAL

SIGNED

Impacts and Mitigation

Long-term Solution

Trees

- An additional +/- 50 trees will be impacted, many of which are in poor to fair condition.
- A Tree Protection Zone will be established prior to construction to protect the remaining trees.
- Trees that are removed will be replaced at a 2:1 ratio along the corridor as much as possible and additional trees may be planted in nearby parks and natural areas.

Air Quality

- The improvements to Creditview Road will reduce traffic congestion (e.g. delays, idling).

Speed and Safety

- Incorporate roundabout design to manage speeds and facilitate safe pedestrian crossing.

Noise

- No additional noise mitigation is required as new noise walls will be installed as part of the preferred alternative.

Property and Construction

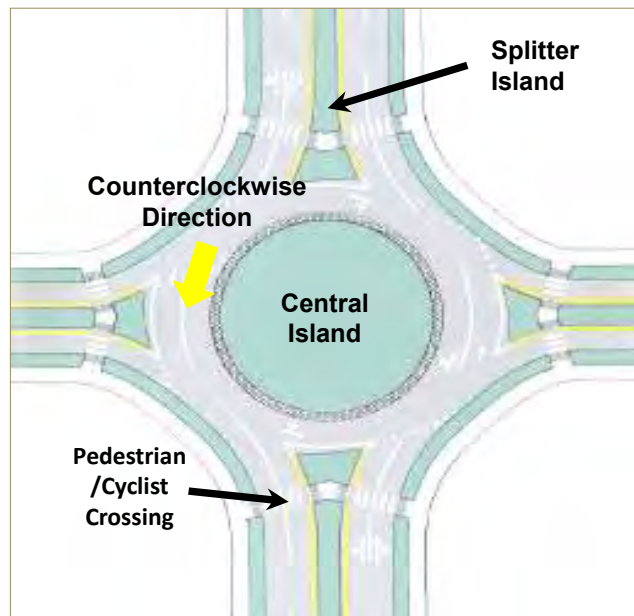
- Approximately 875 m² of additional right-of-way will be required for the recommended long-term solution, 61 m² of which is private property.
- The City will negotiate the property requirements with private owners.
- A Construction Management Plan will be developed.

* Further community consultation will take place prior to the implementation of the long-term solution.

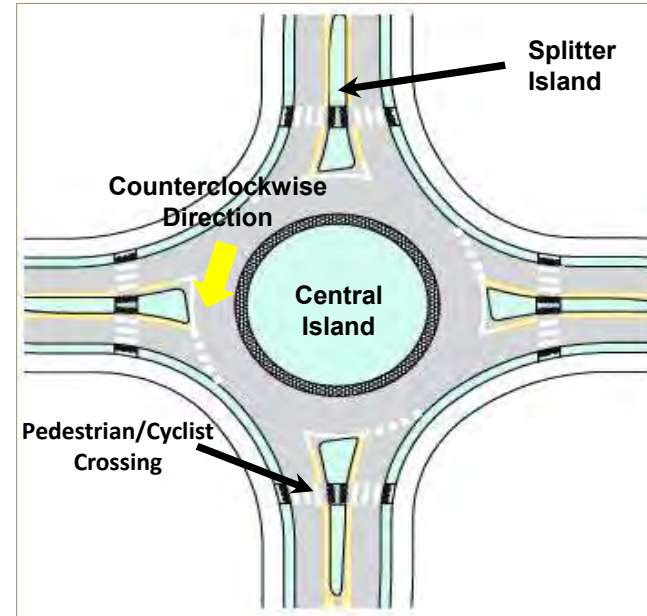
Roundabouts

A circular intersection design that has specific traffic control features and is designed to control speeds.

Two-Lane Roundabout With One- and Two-Lane Approaches



Single-Lane Roundabout With One- Lane Approaches



Source: Manual on Uniform Traffic Control Devices for Streets and Highways

Pedestrian and Cyclist Use

- Pedestrians use splitter islands to cross one direction of traffic at a time.
- Experienced cyclists may ride through a roundabout as per other vehicles.
- Other cyclists dismount and walk their bicycles as per pedestrians.

Traffic Flow

- All traffic circulates in a counterclockwise direction, to the right of a central island.
- Traffic must yield at entry to traffic already within the roundabout.
- Vehicles entering or leaving the traffic circle must stop to allow pedestrians to fully cross at the crosswalk.

The following are benefits of roundabouts over traditional intersections:

Improved safety - Reducing the number of vehicular conflict points and reducing vehicular speeds, in turn, reduces the potential for severe crashes and serious injury.

Speed management - A reduction in speed is necessary to negotiate the roundabout, whereas vehicles may not slow down during the green phase of a traffic signal or speed through a yellow/red phase.

Increased capacity - A high volume of left turning vehicles is better handled by a roundabout than a multi-phased traffic signal.

Fewer stops and reduced delays - Delay is significantly reduced by yielding at the entry of a roundabout, rather than stopping and waiting for a green light at a signalized intersection; or waiting for a gap in the traffic at a stop sign.

Less idling and air pollution - Reduced delays mean reduced fuel consumption and improved air quality by reducing emissions.

Reduced maintenance costs - The roundabout eliminates maintenance and electricity costs associated with traffic signals.

Aesthetics - There is an opportunity for landscaping within the central island.

Reference: mto.gov.on.ca

Streetscape Vision

- Improve active transportation opportunities and connections to adjacent neighbourhoods and open spaces;
- Balance the functional and aesthetic requirements of pedestrians, cyclists, transit, vehicles and the natural environment;
- Enhance the natural and scenic route qualities along Creditview Road with new tree species and vegetative planting;
- Opportunities to enhance the City parkland;
- Consideration of the transition of land uses in the study area from businesses and Highway 401 crossing to low/medium density residential and parklands;
- Incorporate plantings into the central island of roundabouts as a means of enhancing the natural and scenic route qualities; and,
- Restoration of the natural environment using appropriate tree, shrub and herbaceous species throughout the corridor.

PREFERRED ALTERNATIVE

LEGENDS

- EXISTING TREE TO REMAIN
- PROPOSED TALL DECIDUOUS TREES
- PROPOSED SMALL TREES
- PROPOSED CONIFEROUS TREES
- PROPOSED SHRUBS
- EXISTING RIGHT OF WAY
- EXISTING PROPERTY LINE
- PROPOSED RIGHT OF WAY
- PROPOSED SIDEWALK
- PROPOSED MULTI-USE TRAIL
- PROPOSED MEDIAN
- PROPOSED COLOURED STAMPED CONCRETE

- EXISTING NOISE BARRIER
- 2015 PROPOSED NOISE BARRIER
- NEW NOISE BARRIER

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2. SUBJECT TO FURTHER CITY AND PUBLIC CONSULTATION.

AECOM

CONSULTANTS

HORIZONTAL / VERTICAL CONTROL MONUMENTS		DIGITAL INFORMATION		No.		DATE		REVISIONS		INITIAL		SIGNED	

MISSISSAUGA

CREDITVIEW ROAD CLASS EA PROPOSED LANDSCAPE PLAN / CROSS SECTIONS PLAN - STA. 8+037 TO STA. 10+487			
DESIGN	DRAWN	CHECKED	CONTRACT No.
SCALE: 15 0 30		DRAWING NUMBER	SHEET
DATE:			

PREFERRED ALTERNATIVE

LEGENDS

- EXISTING TREE TO BE PRESERVED
- EXISTING TREE TO BE IMPACTED
- EXISTING TREES TO BE REMOVED
- EXISTING TREES TO BE REMOVED DUE TO NOISE BARRIER WALL CONSTRUCTION 2015
- EXISTING RIGHT OF WAY
- EXISTING PROPERTY LINE
- PROPOSED RIGHT OF WAY
- GRADING LIMITS
- PROPOSED SIDEWALK
- PROPOSED MULTILANE TRAIL
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MISSISSAUGA													

CREDITVIEW ROAD CLASS EA TREE PRESERVATION PLAN / CROSS SECTIONS		PLAN - STA. 8+037 TO STA. 10+487		DESIGN	DRAWN	CHECKED	CONTRACT No.
SCALE: 15 0 30							
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Preliminary Tree Protection and Planting Plan

Tree Protection

- A Tree Protection Zone will be established prior to construction. Root damage will be minimized to the extent possible;
- Root pruning will occur prior to the start of construction and under the supervision of a certified arborist;
- Any roots severed during construction will be cut cleanly to minimize decay and entry points for disease;
- Limbs and/or branches will be pruned prior to construction, where it is expected that they could be damaged or interfere with construction, under the supervision of the contract administrator;
- Construction restrictions and maintenance practices; and,
- Special consideration will be given to the preservation of identified significant/mature trees.

Tree Planting

- Trees that will be removed or damaged during construction will be replaced in appropriate locations;
- Replacement planting will include native tree species where appropriate; and,
- Significant tree species (e.g. Sugar Maple, Red Oak, Bur Oak, Shagbark Hickory and Black Walnut) will be planted, where appropriate.

Enhanced street tree planting helps to improve air quality and enhances the aesthetics of the roadway. Opportunities to plant additional trees and improve the diversity of age and species will be explored as part of this project.