

Sheridan Park Drive Extension Municipal Class Environmental Assessment Study

Public Information Centre
June 27, 2017
6 – 8 pm
Sheridan Park Alliance Church

Welcome

to the Public Information Centre for the Sheridan Park Drive Extension Class Environmental Assessment

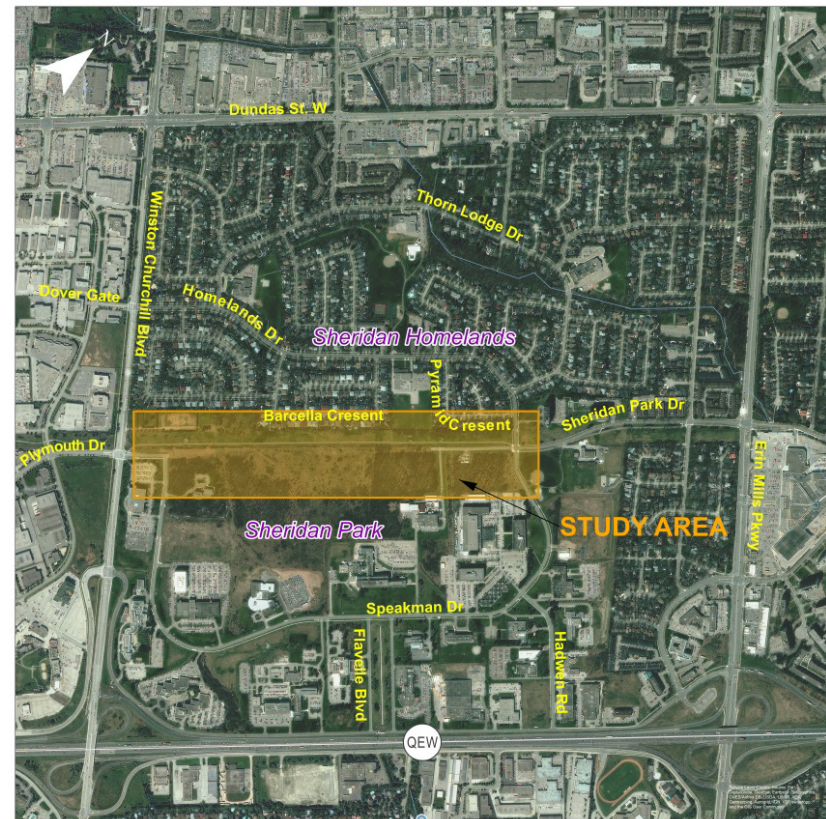
- Please Sign In
- Meet with Study Team Members
- Review the display materials and discuss your questions and ideas with the Study Team
- Please fill out a Comment Sheet and return it to the Study Team in person, by mail, email, fax or online by **July 20, 2017**

Purpose of the Public Information Centre

- Introduce the study
- Provide a summary of feedback received to date
- Present policy background and existing conditions
- Identify the opportunities of the project
- Present alternative solutions and evaluation
- Present preliminary design alternatives
- Obtain further community feedback
- Identify next steps

Study Context / Overview

- The Study Area is a unique combination of land uses including:
 - Residential
 - Businesses
 - Utility Corridor
- Key Features include:
 - Sheridan Homelands Residential Community
 - Sheridan Park Corporate Centre
 - Utility corridor with Multi-Use Trail
 - Natural areas within road right-of-way (ROW) and private lands adjacent to Study Area

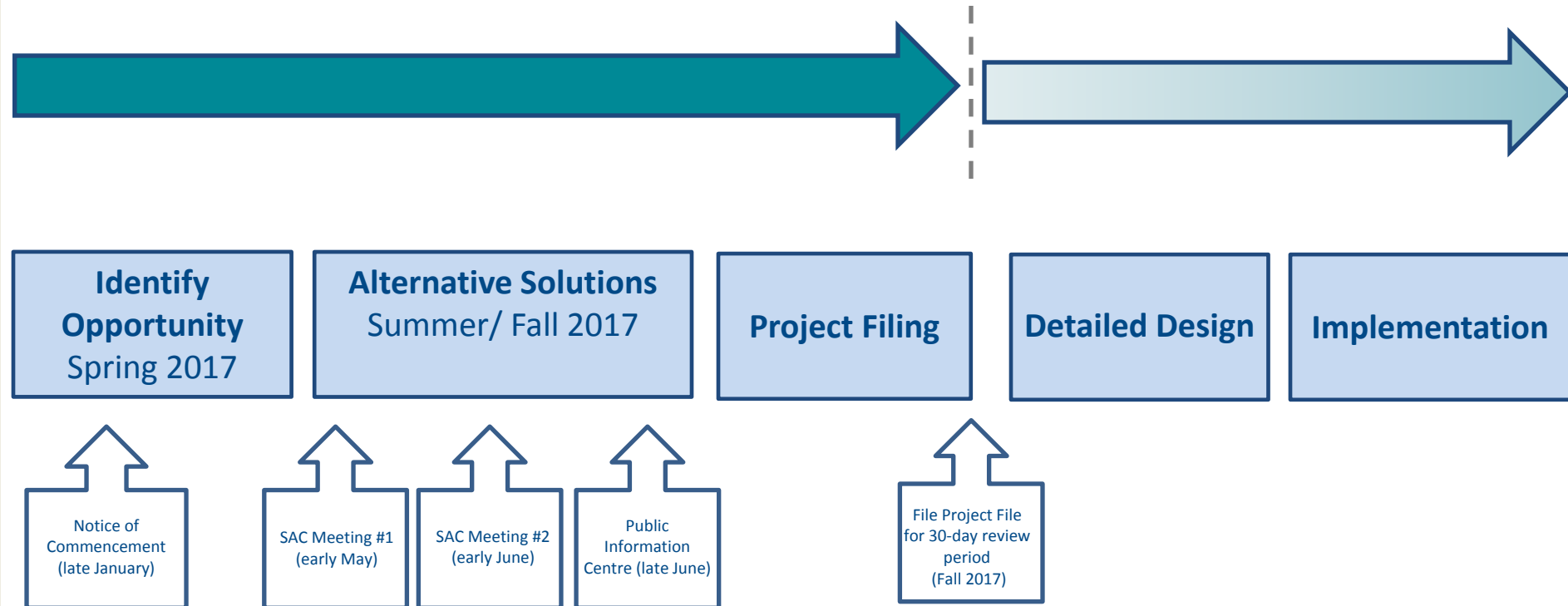


Purpose of Study

- Explore the opportunity to connect the east and west section of Sheridan Park Drive
- Improve road network in the neighborhood and business area
- Create options for alternate routes
- Improve multi-modal network connectivity
- Evaluate potential impacts to the natural, cultural, social and economic environments within the Study Area



Municipal Class EA Process (Schedule B)

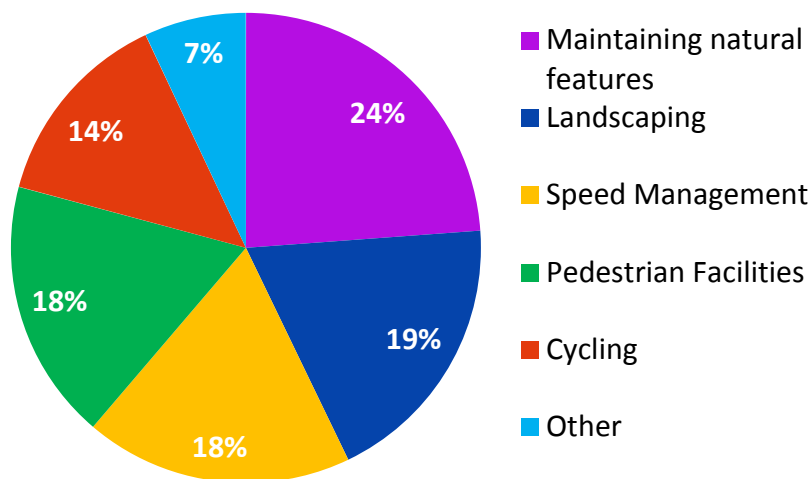


What we have heard so far...

133 survey responses received to date

We asked...

If the roadway is extended, what is important to you?



Over **65%** are comfortable using roundabouts.

We heard...

*...concerns about the impact to existing **natural spaces** and wildlife*

*...that the roadway extension would **decrease traffic** and speeding through the Homelands neighbourhood*

*...concerns about the potential increased **safety risk** for residents, cyclists and pedestrians*

Planning / Policy Background

Mississauga Strategic Plan (2009)

The Strategic Plan identifies several Strategic Pillars for Change, intended to provide guidance towards the creation of a city for the 21st century. Most relevant include:



- Increasing transportation capacity by creating additional links in street networks and active mobility choices
- Creation of complete streets with inclusive cross-sections and an urban form that supports walking and active modes of transportation
- Develop walkable, connected communities
- Maintain a safe city
- Attract innovative businesses
- Meet employment needs

Planning / Policy Background

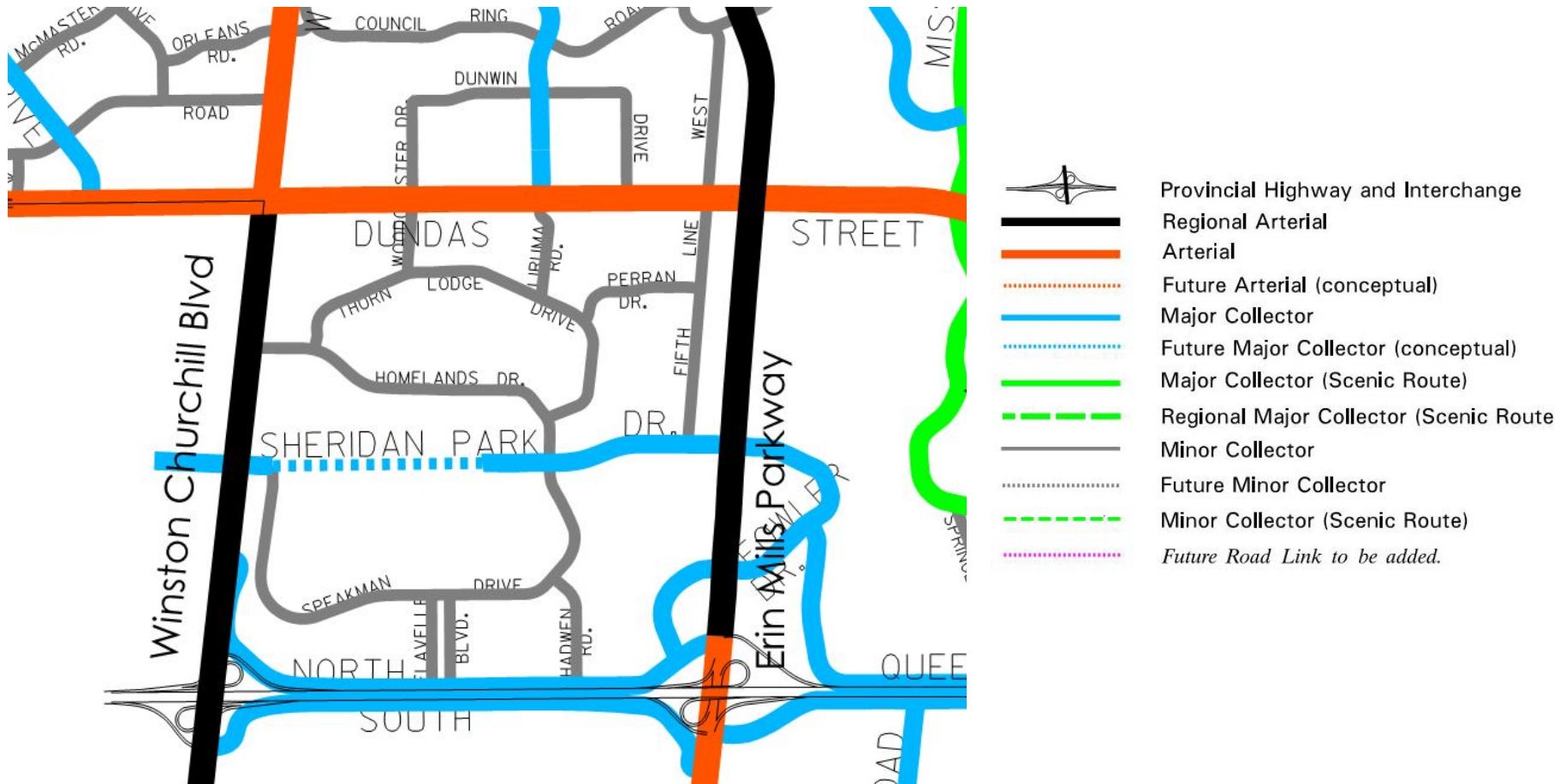
Mississauga Official Plan (MOP)

- Develop a multi-modal transportation system that connects important destinations and safely accommodates all roadway users
- Encourage development of healthy, vibrant communities that accommodate a range of mobility choices
- Develop a fine-grained roadway network, with short streets and small block sizes
- Encourages Corporate Centres (e.g., Sheridan Park) to provide for employment uses and densities similar to major nodes (less than downtown, but more than elsewhere)

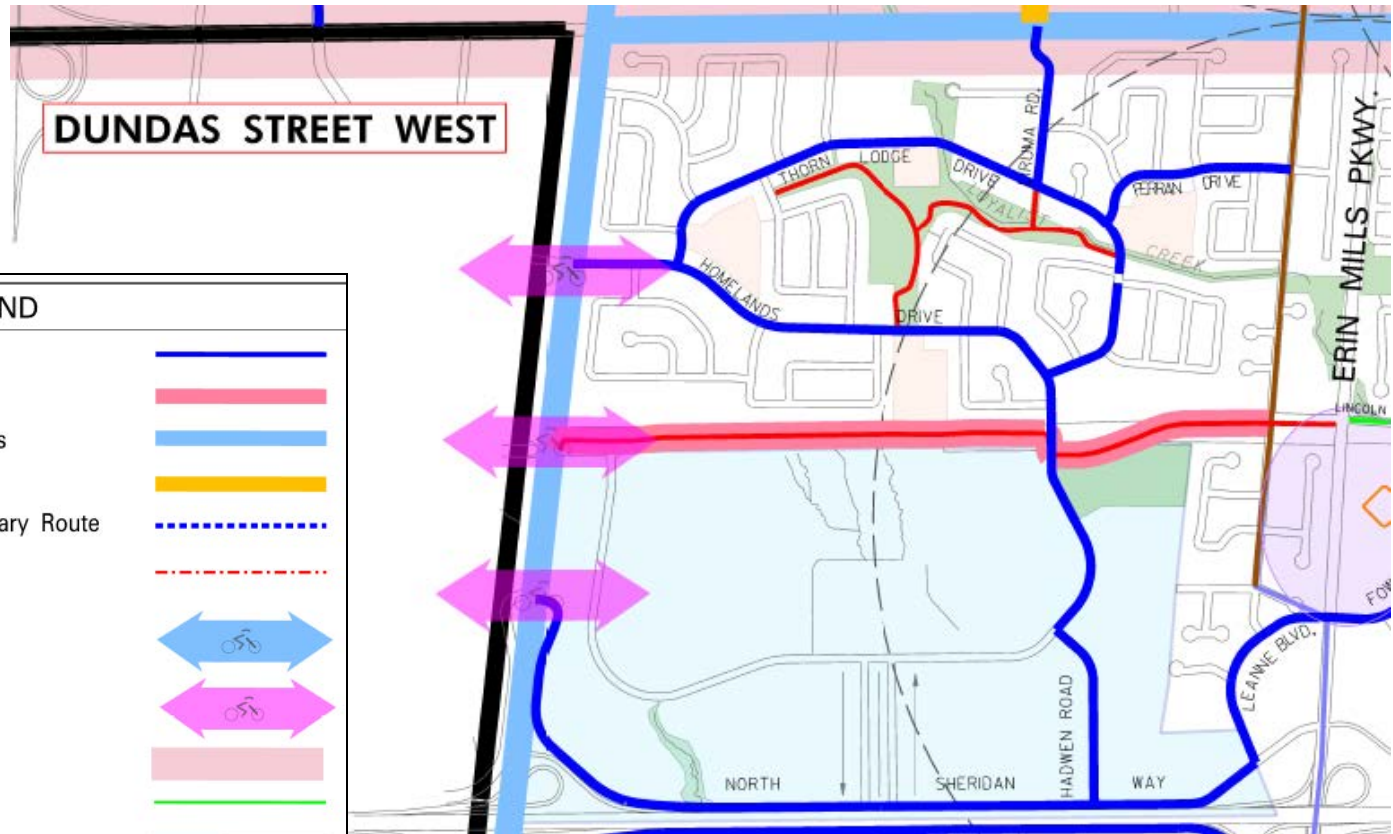


Mississauga Official Plan














Schedule 5 – Long Term Road Network



Mississauga Cycling Master Plan (2010)



LEGEND

Proposed Secondary Routes	
Proposed Primary Off-Road Routes	
Proposed Primary Boulevard Routes	
Proposed Primary On-Road Routes	
Proposed DT21 Master Plan-Secondary Route	
Proposed DT21 Master Plan Off-Road Multi-use Trails	
Proposed Crossings	
Proposed Municipal Connections	
Special Study Area	
Ex. On-Road Shared Use Lanes	
Ex. On-Road Bike Lanes Routes	
Ex. Boulevard Trails	
Ex. Off-Road Multi-use Trails	

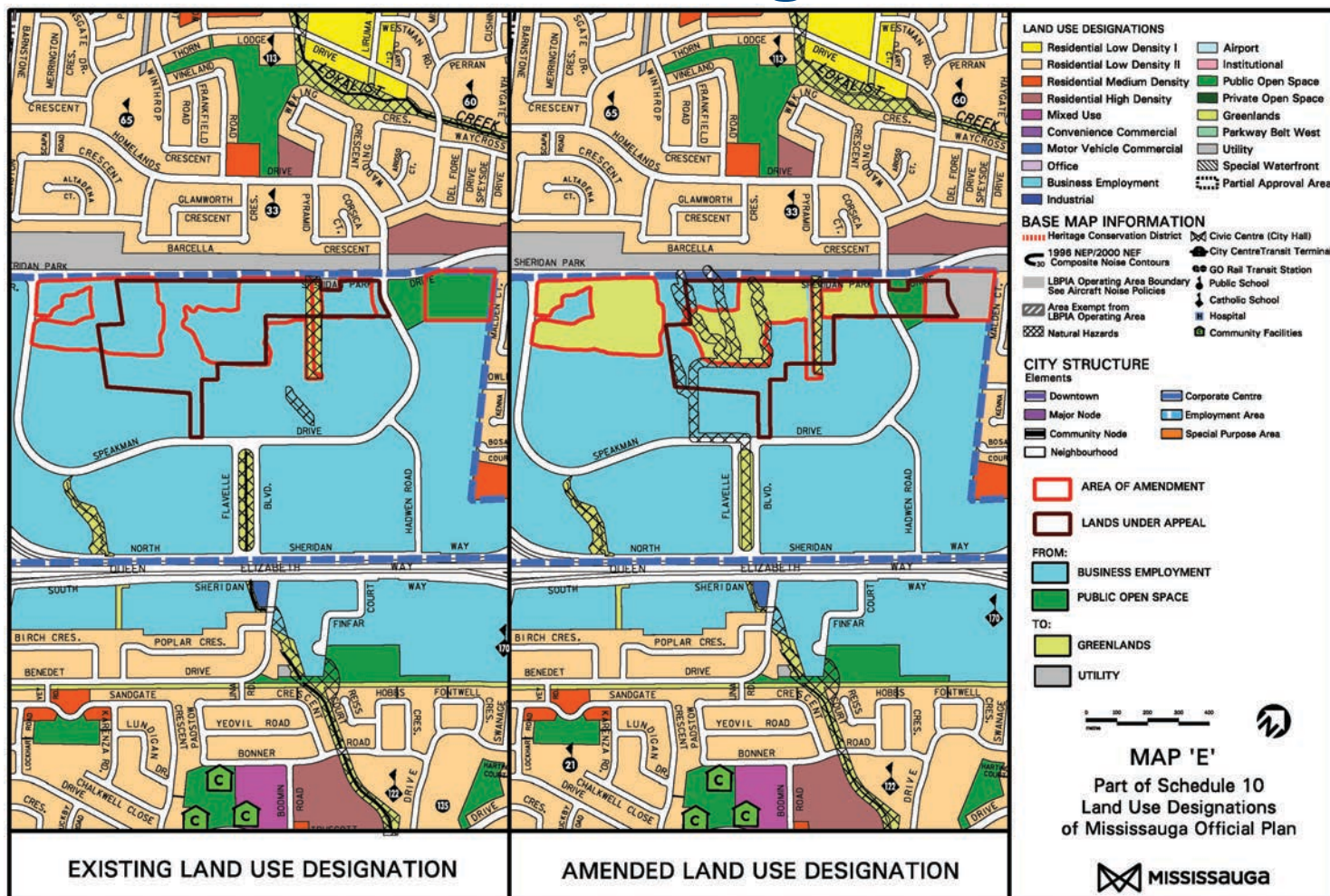
Planning / Policy Background

Sheridan Park Land Use Master Plan (December 2014)

- The City completed a study to review existing conditions of the area and recommend amendments to land use designations within the Corporate Centre.
- The area is transitioning to more diverse employment uses.
- Future development applications may bring new businesses to Sheridan Park, but the policies support increasing the protected green spaces and maintaining the unique campus feel of the area.



Land Use Designations



Existing Natural Environment



Vegetation Community Classification

- CUM - Cultural Meadow
- CUT - Cultural Thicket
- FOD9-1 / FOD9-4 - Fresh Moist Oak-Sugar Maple Deciduous Forest / Fresh-Moist Shagbark Hickory Deciduous Forest

- Intermittent Watercourse
- Headwater Drainage Features
- Sheridan Park Drive Right-of-Way

0 25 50 100 Meters

Imagery Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

- There are no Provincially Significant Wetlands, Areas of Natural and Scientific Interest or Environmental Significant Areas in the Study Area.
- There are three wooded areas southeast of the Sheridan Park Drive right-of-way that are designated as Significant Natural Areas in the City's Natural Areas Survey (2016).
- The existing vegetation communities were classified based on the Ecological Land Classification system (as shown on above map).
- There is potential for bat habitat within the wooded area. Impacts to bat habitat can be readily mitigated through the installation of bat habitat boxes within the Study Area where appropriate.
- Three frog call surveys were completed in the Study Area. No frog calls were observed.
- Two breeding bird surveys were completed in the Study Area. Two Special Concern Species At Risk (SAR) species (Eastern Wood Pewee and Wood Thrush) were observed. The proposed road extension will not directly affect breeding habitat for these two species. No Threatened or Endangered SAR species observed.

Tree Inventory and Impact Assessment

152 trees 10 cm diameter (DBH) or greater were identified within the Sheridan Park Drive right-of-way. 15 species were observed (approximately 67% native to Ontario). No tree Species at Risk (SAR) were present. Based on the preliminary preferred design plan, some trees would need to be removed, while others can be protected and/or preserved (as illustrated in the maps below).



Note: Tree Impacts at Sheridan Park Drive / Speakman Drive intersections at east and west limits of the Study Area are to be determined based on preferred intersection configuration.

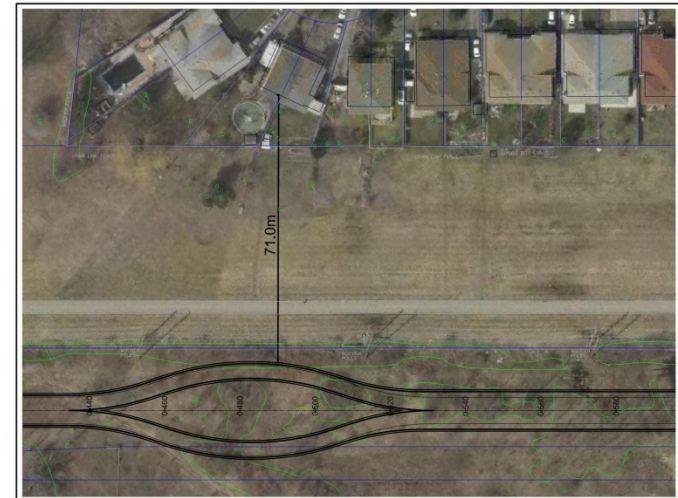
Existing Social / Cultural Environment

- Over 2,700 employed in Sheridan Park Corporate Centre (Sheridan Park).
- A Stage 1 Archaeological Assessment has been completed and identified some areas of archaeological potential within the Study Area. A Stage 2 Archaeological Assessment will be conducted to determine if there are any archaeological resources within the Study Area.
- A Cultural Heritage Resource Assessment has been completed for the Study Area. Sheridan Park is identified as a significant Cultural Landscape by the City with properties listed on the City's Heritage Register. No significant cultural heritage impacts to these resources will result from the proposed extension of Sheridan Park Drive.



Noise and Air Quality Impact Assessment

- A Noise Impact Assessment has been completed within the Study Area. The existing noise levels were measured at a Point of Reception (POR) in the Study Area (at fence line of residential backyard). The existing noise levels at this POR were found to be 47 dBA during daytime hours (7am-11pm) and 40 dBA during nighttime hours (11pm-7am).
- Based on the forecasted 2031 traffic volumes, the future predicted noise levels at the closest POR were found to be no more than 0.5 dBA greater than the existing noise levels. In general, sound level increases of less than 3 dBA are not noticeable to the human ear.
- These predicted future noise levels are below Ministry of Transportation and City of Mississauga standards, therefore no noise mitigation (sound barriers) are required.
- The map below illustrates the location of the POR and the distance of this POR to the proposed road extension corridor.



- An Air Quality Impact Assessment has been completed within the Study Area. Based on the forecasted 2031 traffic volumes, future predicted air quality levels with a road extension in place were compared to existing air quality levels to understand the impact of a potential road extension on local air quality.
- Typical contaminants from automobile exhaust were evaluated including Carbon Monoxide (CO), Nitrogen Oxides (NOx), Particulate Matter (PM2.5 and PM10), Total Suspended Particulates (TSP), 1-3 Butadiene, Benzene, Acrolein, Acetaldehyde, and Formaldehyde.
- The future predicted air quality levels at sensitive receptor locations in the Study Area (including seven residential properties and the Homelands Senior Public School) were all below the Ministry of the Environment and Climate Change criteria with the exception of Benzene, which already exceeds the criteria based on background air quality.

Transportation Conditions and Opportunities



Field observations made on Thursday January 26, 2017.

Imagery Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Project Opportunity Statement

The City of Mississauga fully recognizes that this Study Area offers diverse and complimentary land uses that all need to be carefully considered. The implementation of this link would be an important piece of the City's overall road network. The science and technology facilities in Sheridan Park will continue to develop to support the growth of a contemporary science and business park. At the same time, it is important to recognize the need to protect the existing residential community and recreational facilities.

Through this EA, the City has an opportunity to:

- Improve network redundancy in the broader road network to improve traffic flow for all modes of transportation;
- Increase access to a growing / developing Sheridan Park;
- Support multi-modal transportation and encourage walking, cycling and transit;
- Potentially divert traffic from the Sheridan Homelands neighbourhood; and
- Preserve the natural feel and recreational benefits of the Study Area.

Alternative Solutions

- Alternative 1: Do Nothing
 - Do not make any changes/ improvements to road network. Do not extend Sheridan Park Drive.
- Alternative 2: Limit / Manage Growth
 - Limit development growth in surrounding areas.
- Alternative 3: Extend Roadway (Sheridan Park Drive)
 - Extend Sheridan Park Drive from Speakman Drive to Homelands Drive.
- Alternative 4: Provide Alternative Routes for Existing and Future Traffic
 - Make improvements to adjacent roads to enable existing and future traffic to use alternate route options.

Evaluation Criteria

Natural Environment

- Impacts to existing trees and vegetation communities
- Impacts to wildlife
- Impacts to aquatic habitat
- Impacts to hazard lands
- Impacts to surface water quality and drainage (stormwater management)
- Impacts to groundwater quality

Socio-Economic Environment

- Routing and connectivity within Study Area for all travel modes
- Impacts to noise and air quality
- Lifestyle and culture of local residents
- Provision for emergency services
- Support for future potential development





















Cultural Environment

- Impacts to archaeological resources
- Impacts to heritage features

Transportation Engineering Environment

- Balancing of all travel modes
- Facilitating active transportation
- Traffic management
- Construction and staging
- Speed of traffic
- Impacts to vehicular level of service
- Impacts to utilities
- Capital and operation costs

Evaluation of Alternative Solutions

Evaluation Criteria	Alternative 1: Do Nothing		Alternative 2: Limit / Manage Growth		Alternative 3: Extend Roadway (Sheridan Park Drive)		Alternative 4: Improve Alternatives Routes for Existing or Anticipated Traffic	
Natural Environment		No impacts to existing conditions.		No impacts to existing conditions.		Requires tree / vegetation removals; however, impacts can be mitigated by tree plantings at a 2:1 replacement ratio. No tree Species at Risk (SAR) observed in Study Area. The proposed road extension will not directly affect wildlife habitat, any potential impacts will be mitigated. Road extension not anticipated to impact the form and function of vegetation and headwater drainage features.		Avoids potential impact to natural environment in the Study Area, but potential for impacts to natural features along other roadways.
Socio-Economic Environment		Future vehicle connectivity in area is limited without extension. No changes to pedestrian and cycling use of corridor.		Future vehicle connectivity in area is limited without extension. No changes to pedestrian and cycling use of corridor.		Connectivity will be improved for all modes of transportation. Provides increased access routes for emergency services. No changes to pedestrian and cycling use of corridor.		Providing alternate route options does not increase connectivity within the Study Area. No changes to pedestrian and cycling use of corridor.
Cultural Environment		No impacts to existing conditions.		No impacts to existing conditions.		Some areas of archaeological potential to be investigated. No impacts anticipated to cultural heritage features.		No impacts to existing conditions within the Study Area. Some potential for impacts to archaeological resources and cultural heritage resources in other corridors.
Transportation Engineering Environment		Not consistent with City planning policies (e.g., Official Plan). Does not address anticipated transportation needs. Does not improve network connectivity or provide alternate route options for all travel modes.		Not consistent with City planning policies (e.g., Official Plan). Does not address anticipated transportation needs. Does not improve network connectivity or provide alternate route options for all travel modes.		Consistent with City planning policies (e.g., Official Plan). Addresses anticipated transportation needs. Improves network connectivity and provides alternate route options for all travel modes.		Would potentially provide capacity in other corridors; however, does not improve network connectivity or provide alternate route options for all travel modes within the Study Area.
Addresses Project Opportunity Statement								
Overall Summary	Not Carried Forward		No Carried Forward		Carried Forward		Not Carried Forward	

Ranking Order of Preference: Most Preferred ● Somewhat Preferred ◐ Least Preferred ○

Preliminary Preferred Alternative Solution

	Alternative 1: Do Nothing	Alternative 2: Limit / Manage Growth	Alternative 3: Extend Roadway (Sheridan Park Drive)	Alternative 4: Improve Alternatives Routes for Existing and Future Traffic
Addresses Project Opportunity Statement	x	x	✓	x

Alternative 1 (Do Nothing) and **Alternative 2** (Limit/Manage Growth) are unable to address the Project Opportunity Statement with the exception of preserving the natural feel and recreational benefits of the Study Area.

Alternative 3 (Extend Sheridan Park Drive) can fully address the Project Opportunity Statement, because it:

- Supports multi-modal transportation for all users;
- Has the potential to divert traffic from the residential neighbourhood;
- Improves network redundancy;
- Improves access to the Study Area; and
- Will preserve the natural feel and recreational benefits of the Study Area by implementing appropriate mitigation.

Alternative 4 (Improve Alternative Routes) partially addresses the Project Opportunity Statement as it supports multi-modal transportation; however, it does not improve network redundancy or improve access to the Study Area.

Therefore, **Alternative 3** is the **Preliminary Preferred Alternative**.

Guiding Principles for Road Design Concept

In developing the design concepts, a number of key constraints and design elements are considered:

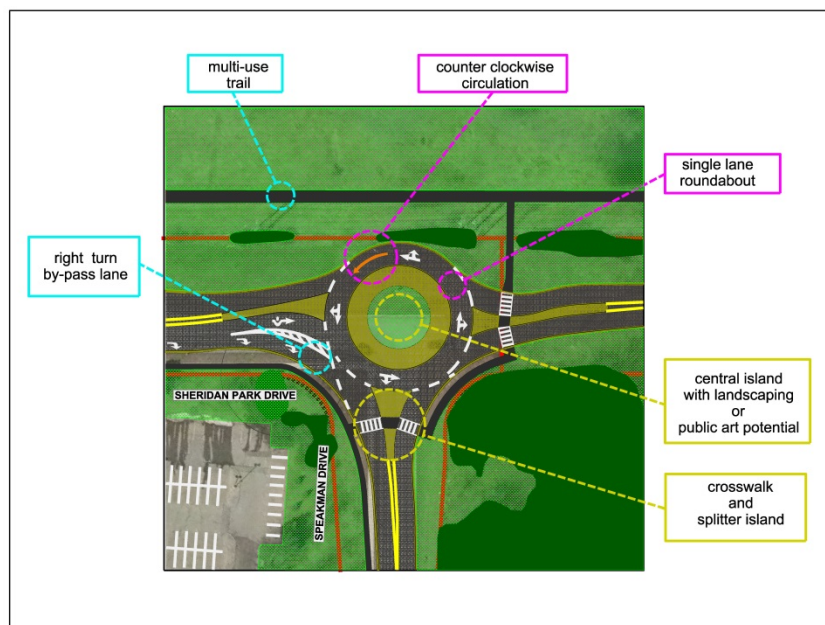
- Compatibility with adjacent communities and natural areas
- Access to Sheridan Park Corporate Centre
- Speed Management features
- Opportunity for streetscaping
- Provisions for pedestrians and cyclists
- Major utilities within the study area
- Geometric design requirements
- Existing and future intersection and turning lane requirements




Preliminary Design Concepts – Roll Out Plan

See Separate Roll Plan

Roundabouts







A **roundabout** could be constructed at Sheridan Park Drive - Speakman Drive and Sheridan Park Drive - Homelands Drive intersections



	<p>Pedestrians...</p> <ul style="list-style-type: none"> ➤ cross at a marked crosswalk, using splitter islands to cross one direction of traffic at a time
	<p>Cyclists...</p> <ul style="list-style-type: none"> ➤ dismount before the roundabout and cross either at the crosswalks (like pedestrian) ➤ or, ride through the roundabout (like a vehicle)
	<p>Vehicles...</p> <ul style="list-style-type: none"> ➤ enter by yielding to traffic that is already in the roundabout ➤ circulate in a counterclockwise direction (i.e. to the right of the central island) ➤ exit by signaling right ➤ stop at crosswalk for pedestrians

Roundabouts

Roundabouts can offer a number of improvements **over signalized intersections**

	Improved Safety	<p>Roundabouts reduce the severity of potential collisions by:</p> <ul style="list-style-type: none"> ➤ Lower travel speeds ➤ Fewer conflict points ➤ Reducing conflict angles
	Lower Speeds	Vehicles slow down to navigate a roundabout
	Fewer Delays	Vehicles yield rather than stop, when entering a roundabout, which reduces delay when compared to waiting for either a green light at a traffic signal or waiting for a gap in traffic at a stop sign
	Reduced Environmental Impacts	<p>Fewer delays</p> <ul style="list-style-type: none"> ➤ Reduces fuel consumption ➤ Improves air quality by reducing emissions
	Less Maintenance	Roundabouts eliminate traffic signal costs for maintenance and electricity .
	Improved Aesthetics	The central island of a roundabout provides an opportunity to accommodate public art and landscaping .

Rendering of Potential Roundabout



View Looking East along Sheridan Park Drive from near Winston Churchill Boulevard (low vegetation in roundabout)

Rendering of Potential Roundabout



View Looking East along Sheridan Park Drive from near Winston Churchill Boulevard (with tree plantings in roundabout)

Rendering of Potential Median



View Looking East along Sheridan Park Drive extension corridor showing potential median (horizontal deflection)

Thank you for attending

**Please complete a comment sheet or
send comments to:**

NEXT STEPS

Following this PIC the Project Team will:

- Review all public and agency comments
- Confirm preferred solution based on input
- Prepare the Final Project File and issue for 30-day Public Review Period

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Your comments are welcome at any time during the study. However, with respect to the PIC we ask you provide your comments by **July 20, 2017.**

Thank You!

THORN LODGE / HOMELANDS NEIGHBOURHOOD TRAFFIC CALMING REVIEW

What has been done so far?

- Traffic volume and speed data collected in June 2016
- Edge lines and centerline pavement markings implemented in August 2016



What's Next?

- Follow-up studies conducted in June 2017
- Neighbourhood under consideration for physical traffic calming devices
- Further community consultation in Fall 2017

Examples of physical traffic calming measures

