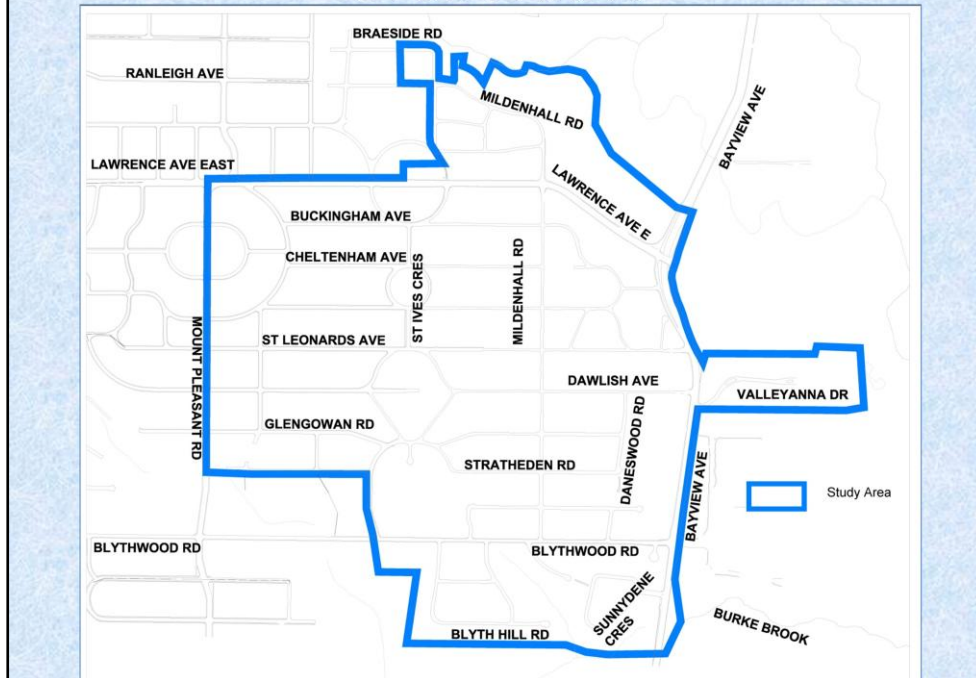


**LAWRENCE PARK NEIGHBOURHOOD
INVESTIGATION OF
BASEMENT FLOODING &
ROAD IMPROVEMENT STUDY
CLASS ENVIRONMENTAL ASSESSMENT**

**PUBLIC INFORMATION CENTRE 2
19 NOVEMBER 2013**



STUDY AREA



STUDY PURPOSE

To address issues relating to:

- deteriorating road conditions
 - traffic
 - pedestrian safety
 - drainage problems
 - basement and surface flooding
- in the Lawrence Park Neighbourhood.

Measures that improve stormwater quality and reduce storm runoff will also be incorporated.



ENVIRONMENTAL ASSESSMENT PROCESS

What it does address:

- Defines problems and existing conditions
- Identifies alternatives, including the Do Nothing option
- Defines evaluation approach
- Evaluates and selects preferred alternative(s)
- Ultimately defines construction projects which address the problems in an integrated manner



ENVIRONMENTAL ASSESSMENT PROCESS

What it does **not** address:

- Day to day operation and maintenance items
- Topics covered by other processes:
 - Speeding
 - Traffic calming
 - Flooding related to private property issues



PUBLIC CONSULTATION PROCESS

Public Information Centre 1 (22 April 2013):

- Describe the study area
- Define problems and opportunities
- Present initial findings



PUBLIC CONSULTATION PROCESS

Public Information Centre 2 (19 November 2013):

- Summarize existing conditions
- Present a long list of alternatives that address existing issues
- Present a list of criteria to evaluate each alternative



PUBLIC CONSULTATION PROCESS

Public Information Centre 3 (Winter 2014):

- Present more detailed alternatives
- Present evaluation process
- Select preferred alternative



LONG LIST OF ALTERNATIVES

General Categories

- Basement and Surface Flooding
- Stormwater Quality
- Roadway Maintenance and Rehabilitation
- Roadway Cross Sections
- Traffic



EVALUATION CRITERIA

- **Socio-Cultural**

- Pedestrian Safety
- Vehicular Safety
- Impact on Urban Greenspace / Recreational Use (Trees, Parks, Open Spaces)
- Disruption to Community During Construction
- Potential Impact to Archaeological and/or Natural Heritage Sites

- **Technical**

- Technical Effectiveness
 - Surface and Basement Flooding
 - Stormwater Quality Improvement
 - Traffic Operations
 - Roadway Conditions

- **Natural Environment**

- Potential Impact on Terrestrial Systems (Vegetation, Trees, Wildlife)
- Potential Impact on Aquatic Systems, Aquatic Life and Aquatic Vegetation
- Potential Impact on Soils, Groundwater and Surface Water

- **Economic**

- Capital Costs
- Operating/Maintenance Costs

An initial list of evaluation criteria is shown. Please provide comments as to the relative importance of each criteria as well as whether other criteria should be considered.



ALTERNATIVE ROADWAY CROSS SECTIONS

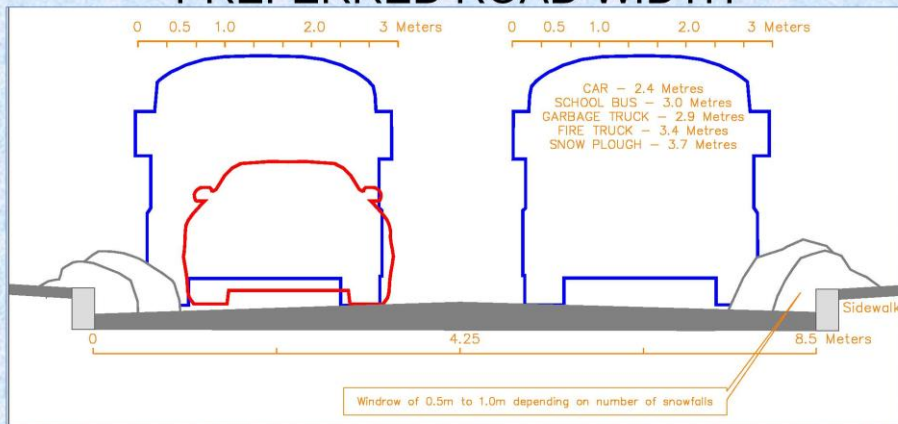
Several conceptual alternatives of what the roadways could look like after reconstruction have been presented.

The proposed illustrations are conceptual in nature and are intended to illustrate alternatives which incorporate:

- Widening of roadway width to meet the City's desired requirements (8.5m for local roads)
- Incorporation of improved drainage features to reduce flooding and improve stormwater quality
- Incorporation of sidewalks according to City's policies
- Protection of existing trees where possible



PREFERRED ROAD WIDTH



Requirements for:

- emergency vehicle access
- service vehicle access
- winter road maintenance
- parking

Considerations for:

- cyclist and pedestrian / vehicle conflicts
- safe two way traffic flow

Provisions for:

- adequate widths for underground structures



ALTERNATIVE ROADWAY CROSS SECTIONS



Existing



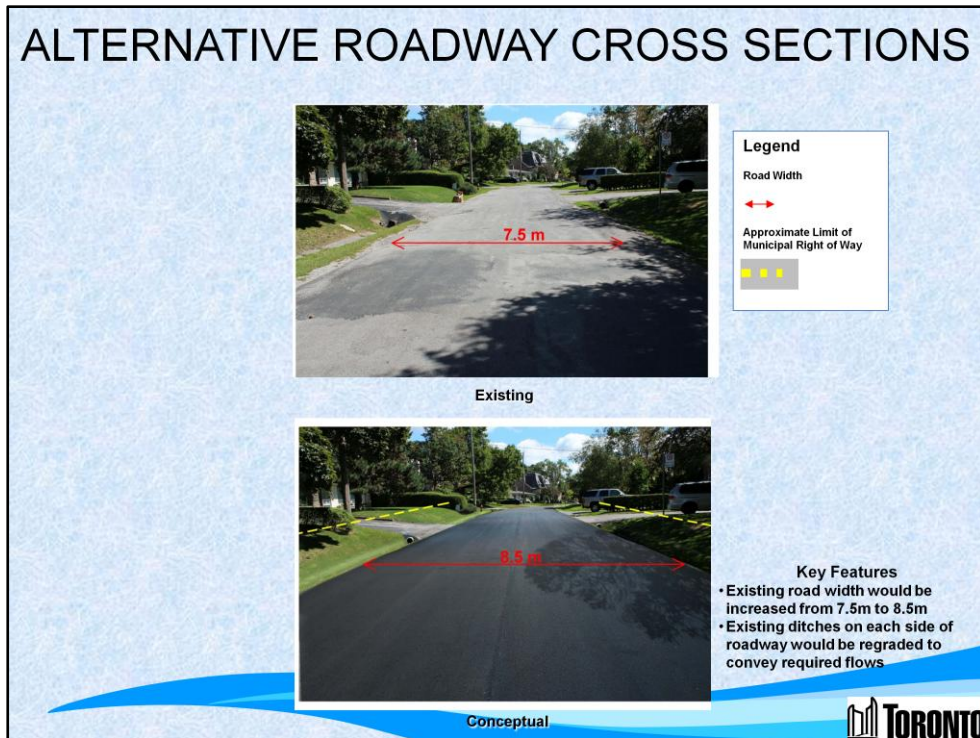
Conceptual

Key Features

- The roadway cross section would remain as is
- This is referred to as the Do Nothing option in the Environmental Assessment Process



ALTERNATIVE ROADWAY CROSS SECTIONS



Existing road width would be increased from 7.5m to 8.5m

Existing ditches on each side of roadway would be regraded to convey required flows

ALTERNATIVE ROADWAY CROSS SECTIONS

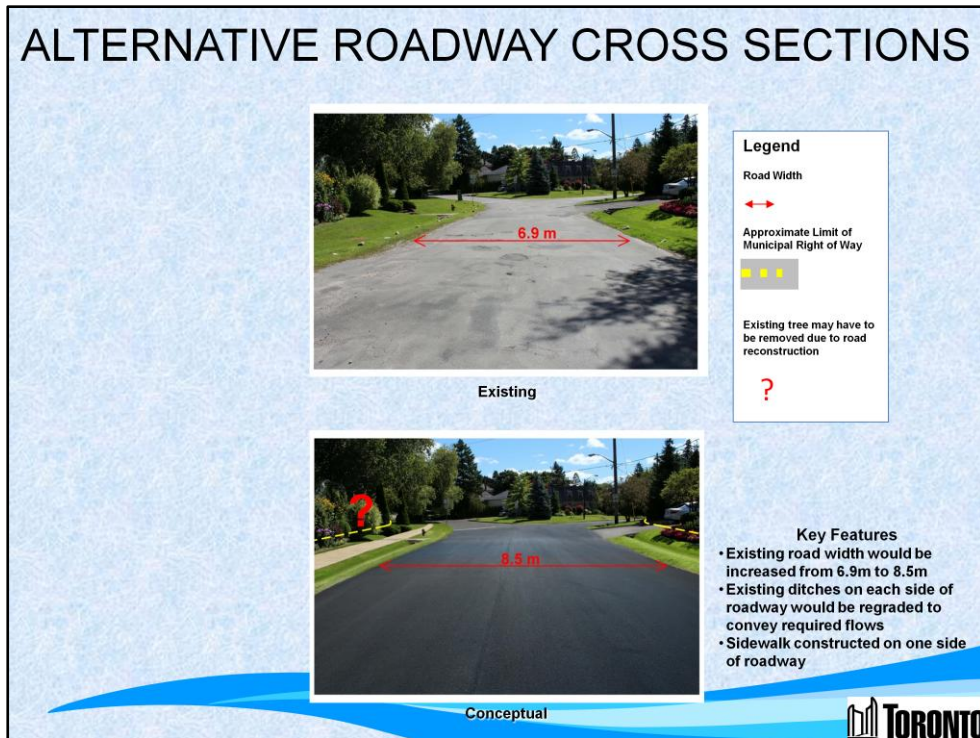


Existing road width would be increased from 7.0m to 8.5m

Existing swale on left side of roadway would be replaced with ditch to convey required flows

Curb would be installed on right side of roadway

ALTERNATIVE ROADWAY CROSS SECTIONS



Existing road width would be increased from 6.9m to 8.5m

Existing ditches on each side of roadway would be regraded to convey required flows

Sidewalk constructed on one side of roadway

ALTERNATIVE ROADWAY CROSS SECTIONS



Existing road width would be increased from 7.5m to 8.5m

Existing swales to be replaced with curbs and storm sewer system

Sidewalk constructed on one side of roadway

Notes: Existing retaining wall on left side of roadway to be removed

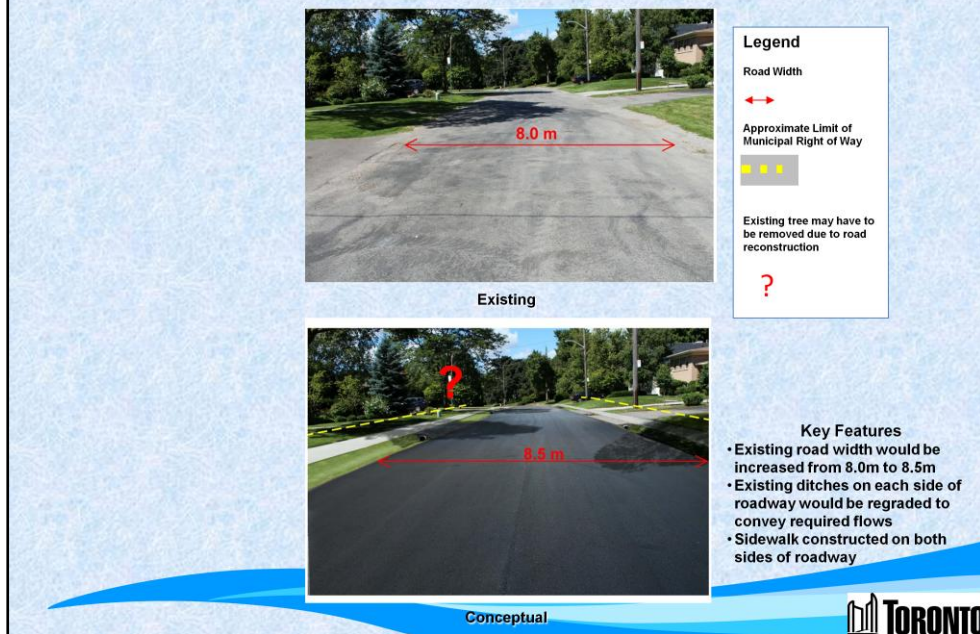
ALTERNATIVE ROADWAY CROSS SECTIONS



Existing road width to remain at 8.5m

Sidewalk, with boulevard to be constructed on one side of roadway

ALTERNATIVE ROADWAY CROSS SECTIONS

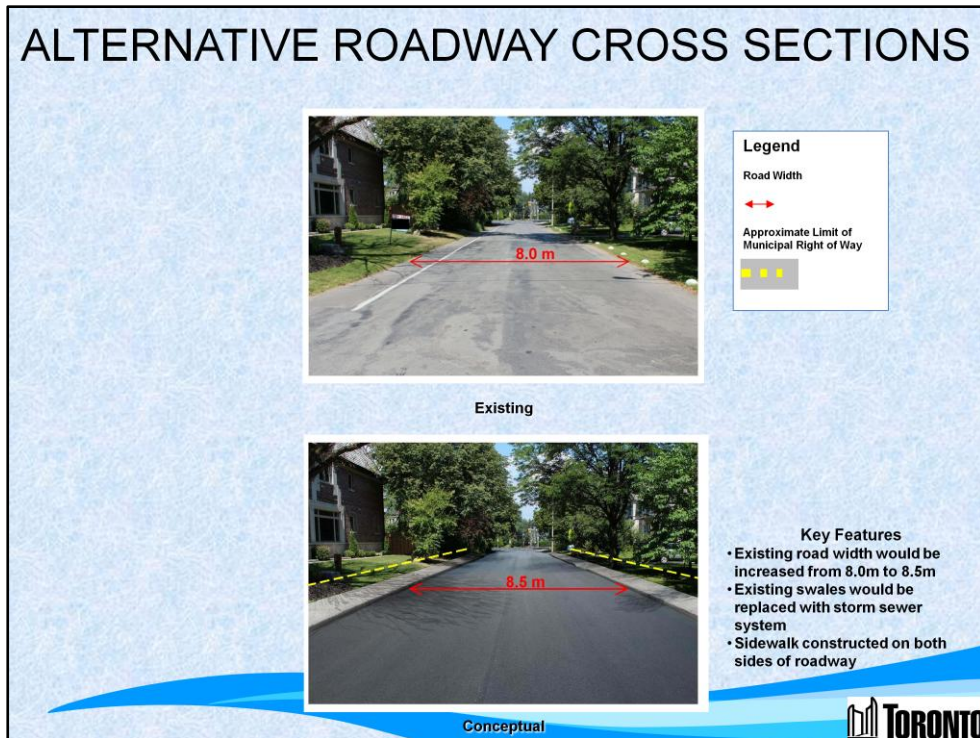


Existing road width would be increased from 8.0m to 8.5m

Existing ditches on each side of roadway would be reggraded to convey required flows

Sidewalk constructed on both sides of roadway

ALTERNATIVE ROADWAY CROSS SECTIONS



Existing road width would be increased from 8.0m to 8.5m

Existing swales would be replaced with storm sewer system

Sidewalk constructed on both sides of roadway

NEXT STEPS

- Present more detailed alternatives
- Present evaluation process
- Select preferred alternative



THANK YOU AND QUESTIONS

