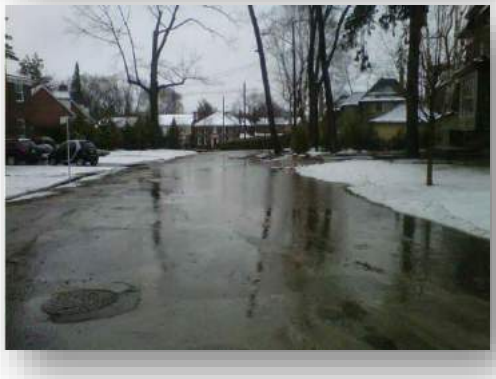

Lawrence Park Neighbourhood Investigation of Basement Flooding and Road Improvement Study Municipal Class Environmental Assessment

December 2013

Public Information Center #2
Summary Report

Prepared by Lura Consulting

for the City of Toronto

This report was prepared by Lura Consulting. Lura is providing independent facilitation services as part of the Lawrence Park Neighbourhood Investigation of Basement Flooding and Road Improvement Study. The report presents the key discussion points and outcomes from the November 19, 2013 public information centre, and is not intended to provide a verbatim transcript. If you have any questions or comments regarding the report, please contact either:

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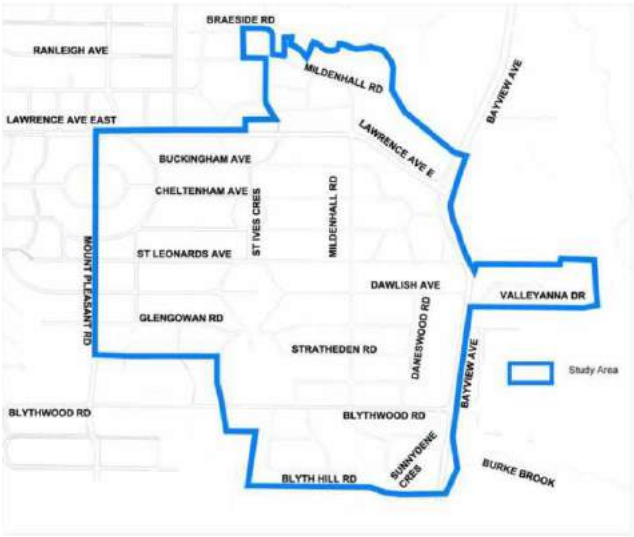
Table of Contents

1.0 BACKGROUND



The City of Toronto has initiated a Municipal Class Environmental Assessment (EA) study to address issues relating to deteriorating road conditions, traffic, pedestrian safety, drainage problems and basement flooding in the Lawrence Park neighbourhood. Measures that improve stormwater quality and reduce storm runoff will also be incorporated.

The study is following the requirements set out in the Municipal Class Environmental Assessment (MCEA) document dated October 2000, amended in 2011. The MCEA process provides members of the public and interest groups with opportunities to provide input at key stages of the study. The study will define the problem, consider and evaluate alternative solutions, assess impacts of the preferred solutions, and identify measures to lessen any adverse impacts. It will result in a series of recommended projects for the area.

City staff and a multidisciplinary team of consultants began working on the EA in November 2012. The project team is being led by Aquafor Beech, an engineering and environmental services firm. Other firms on the project team include: Morrison Hershfield, Terraprobe, and Aboud & Associates. Lura Consulting is providing independent facilitation services for the study.

2.0 Public Information Centre #2

2.1 Overview

This public information centre (PIC) was the second in a series of PICs to be hosted by the City of Toronto as part of the Lawrence Park EA study. The PIC took place on November 19th from 6:30 – 9:00 pm at the Toronto French School.

The PIC was designed to:

- Review the study purpose and process;
- Present a summary of existing conditions and long list of alternatives;
- Present and receive community input on the proposed evaluation criteria; and
- Discuss next steps for the EA process.

The PIC format consisted of an open house from 6:30-7:00 pm, followed by a presentation and question and answer period from 7:00-7:50 pm, roundtable discussions from 7:50-8:25 pm and a reporting and plenary discussion from 8:25-8:45 pm. At the conclusion of the meeting, from 8:45-9 pm, time was set aside for meeting participants to complete a questionnaire that was distributed at the outset of the meeting. Approximately 100 people participated in the PIC.

A copy of the PIC agenda and meeting notice can be found in Appendix A. The PIC questionnaire can be found in Appendix B.

2.2 Open House

During the open house, participants had an opportunity to review display boards that focused on existing conditions in the study area, a long list of alternative solutions, and conceptual illustrations of alternative road cross-sections. A copy of the boards can be found on the City of Toronto website: www.toronto.ca/lawrencepark.

Members of the EA project team and City staff were available at the Open House to answer questions informally and respond to feedback.

2.3 Welcome and Introductions

David Dilks, *Lura Consulting*, introduced himself as the independent facilitator who would be responsible for keeping the meeting on time and moderating the discussions. He stated that Lura would be preparing a report based on the meeting's proceedings and outcomes.

Mr. Dilks emphasized that the project is at the midpoint, that no decisions have been made, and there is an opportunity for participants to provide feedback that will help shape the next steps in the process. He stated that the purpose of the meeting was to provide background information on the study, summarize existing conditions within the study area, present a long list of alternatives that address existing issues, and present and obtain feedback on a list of criteria to evaluate the various alternatives.

Mr. Dilks noted all material presented is draft and subject to review and feedback. He added that participants can provide feedback by filling out a questionnaire (see Appendix B) that can be submitted any time up to Dec 9th, in addition to participating in the roundtable discussions at the PIC.

Mr. Dilks invited Councillor Jaye Robinson to make some opening remarks. She expressed that this is an important meeting as many streets in the Lawrence Park are in need of repair. She stressed that attendees should take the opportunity to ask city staff their questions and she looks forward to hearing everyone's feedback.

Mr. Dilks introduced several City staff present at the meeting, including:

- Senior Engineer, Engineering and Construction Services, and Project Manager, Jackie Kennedy;
- Senior Engineer, Infrastructure Asset Management and Programming, Transportation, Mark Berkovitz;
- Traffic Engineering Supervisor, Transportation, Jay Malone; and
- Man-Kit Koo of Toronto Water.

Mr. Dilks also recognized the efforts of the Community Advisory Group (local residents and community group representatives) that met two weeks prior to the PIC to preview and help refine the presentation materials.

2.4 Presentation

Dave Maunder, *Aquafor Beech*, and project manager of the consultant team provided an overview of the EA study area and purpose. He reviewed what the EA process does and does not address, highlighting that speeding and traffic calming are not covered in the EA Master Plan. Mr. Maunder noted that the study is at the midpoint, and that there will be an additional public meeting in the winter of 2014 to present more specific alternatives and the results of the evaluation process.

Mr. Maunder explained that the long list of alternatives address issues of basement and surface flooding, stormwater quality, roadway maintenance and rehabilitation, roadway cross sections and traffic. He stated that 40-50% of roads are in dire need of repair where the underlying base is not good enough for interim maintenance.

Mr. Maunder presented the evaluation criteria which are grouped into four basic categories: socio-cultural, technical, natural environment, and economic. He introduced several conceptual alternatives of what roadways could look like after construction, comparing them to the "do nothing" scenario. He also reviewed the rationale behind the City's preferred road width of 8.5m.

A copy of the presentation can be found on the City of Toronto website: www.toronto.ca/lawrencepark.

For a summary of the questions and answers following Mr. Maunder's presentation, please see Section 3.7.

3.0 SUMMARY OF PARTICIPANT FEEDBACK

At the PIC, participants were able to offer feedback through roundtable discussions on evaluation criteria and/or by completing a more detailed questionnaire that included questions on the evaluation criteria, existing conditions, a long list of alternatives, and conceptual roadway cross-sections. An online version of the questionnaire was also available on the project website after the PIC.

The input received from participants during the roundtable sessions on evaluation criteria was focused around two discussion questions:

1. Thinking about the proposed criteria that will be used to evaluate alternative solutions, what would you say are the top 3 most important criteria? Which are the least important?
2. Thinking about the long list of alternative solutions, have we missed any criteria? Do you have any other feedback on the proposed criteria?

What follows is a summary of feedback received through:

- A combined total of 180 questionnaires, which were either handed in at the PIC, submitted after the meeting, or completed online;
- Twelve small group table discussions on evaluation criteria; and
- Written comments received from participants through email after the PIC (compiled in Appendix C).

3.1 Evaluation Criteria

Eleven criteria were proposed to be used to evaluate the various alternatives and identify recommended solutions. In the questionnaire, participants were asked to rate each criterion as least important, important, or most important. The results from the questionnaire are shown in the table on the next page.

The most important criteria according to the questionnaire responses are:

- Pedestrian Safety;
- Impact on Urban Greenspace/Recreational Use;
- Surface and Basement Flooding.

The least important criteria according to the questionnaire responses are:

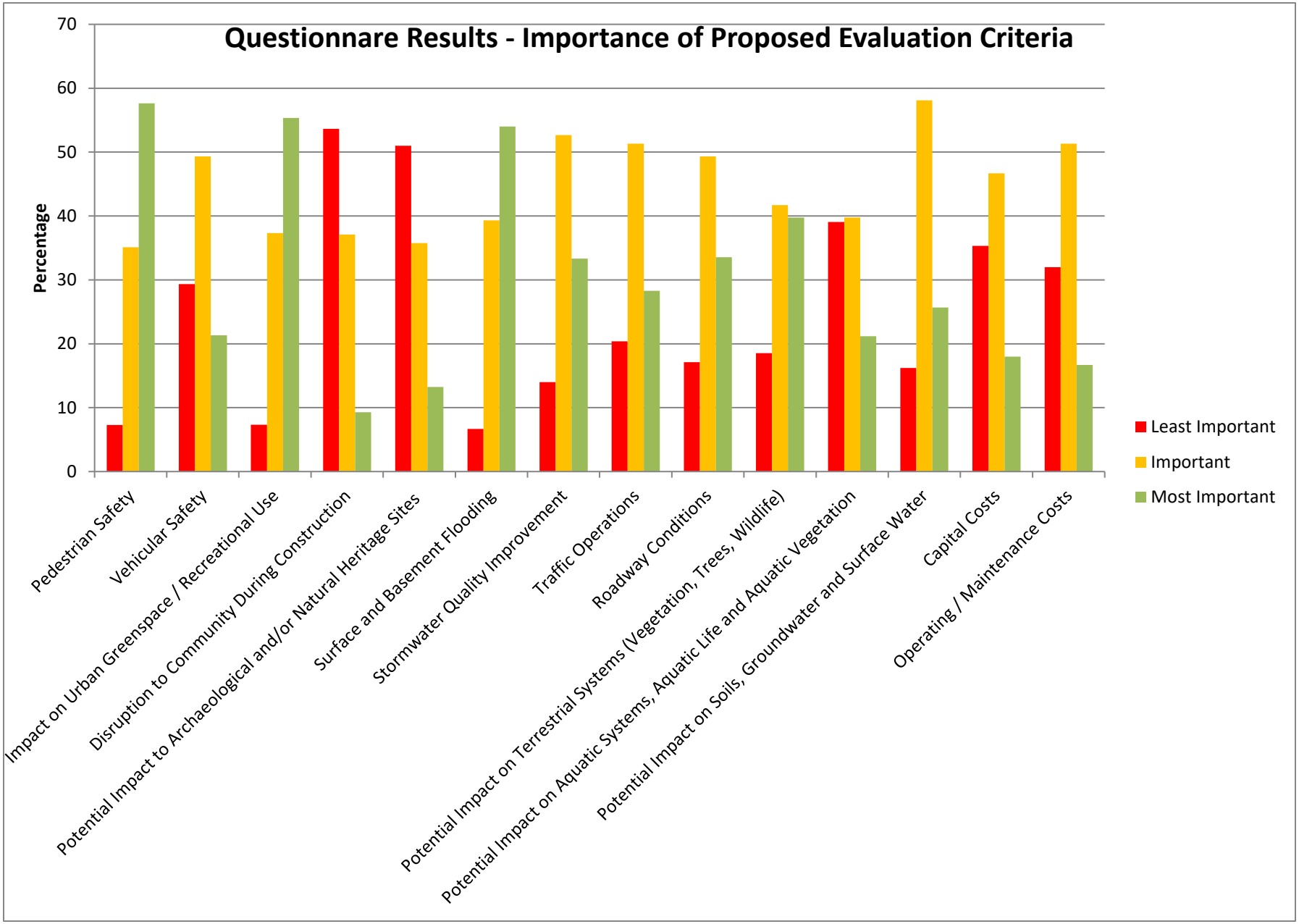
- Disruption to Community During Construction;
- Potential Impact to Archeological and/or Natural Heritage Sites;
- Potential Impact on Aquatic Systems, Aquatic Life and Aquatic Vegetation;
- Capital and Operating/Maintenance Costs.

An analysis of the results of the roundtable discussions on evaluation criteria indicates consistency with the questionnaire results. According to the roundtable reporting forms, the most important criteria are:

- Pedestrian Safety;
- Impact on Urban Greenspace/Recreational Use;
- Surface and Basement Flooding.

The least important criteria according to the roundtable discussions are:

- Disruption to Community During Construction;
- Capital Costs;
- Potential Impact to Archeological and Natural Heritage Sites.


Questionnare Results - Importance of Proposed Evaluation Criteria
Percentage
70
60
50
40
30
20
10
0
Pedestrian Safety
Vehicular Safety
Impact on Urban Greenspace / Recreational Use
Disruption to Community During Construction
Potential Impact to Archaeological and/or Natural Heritage Sites
Surface and Basement Flooding
Stormwater Quality Improvement
Traffic Operations
Roadway Conditions
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
Capital Costs
Operating / Maintenance Costs
Least Important
Important
Most Important

3.2 Additional Evaluation Criteria

In both the questionnaire and roundtable discussions, participants were asked to identify any evaluation criteria they felt are missing from the proposed criteria. Additional criteria suggested by participants are listed below:

- Consideration of future generations; roads will be here longer than current residents.
- Future impact on infrastructure due to increased density and traffic in the area.
- Impact of pre-existing and buried creeks/marshes/rivers and their location.
- Aesthetics and streetscape – integrating physical changes with the original intended philosophy of Lawrence Park as a "garden" neighbourhood.
- Potential impact to traffic flow from proposed bike lanes on Lawrence Ave.
- Feasibility from an engineering/technical perspective.
- Potential impact to individual homeowner's enjoyment or use of their property.
- Cost to the homeowner if landscaping is impacted.
- Neighbourhood interconnectedness.
- Cyclist safety.
- Universal accessibility.

3.3 Existing Conditions

A summary of existing conditions in the Lawrence Park Neighbourhood was presented at the public meeting as well as in the questionnaire. Participants were asked to provide feedback on the existing conditions which is summarized below.

Road Conditions

- The roads are extremely difficult to ride a bicycle on and that discourages local residents from riding.
- It does not make sense to improve roads considering the high level of construction in Lawrence Park. Navigating the streets is dangerous because trucks are often parked on both sides, blocking driveways and sight-lines.

Road Widths

- Many participants do not agree with widening roads to comply with City standards.

Traffic

- Traffic to the Toronto French School frequently causes backups and blockages at the Lawrence Ave. and Mildenhall Rd. intersection. This is not only inconvenient for residents but could block emergency vehicles.
- Traffic speeds (not only volumes) should be measured and taken into account.
- It is critical to maintain speed controls in the neighbourhood through traffic calming. On Dawlish Ave., with the new paving, speeds have greatly increased.

Sidewalks

- Consider neighbourhood accessibility and inter-connectedness for pedestrians. How do the current conditions in Lawrence Park comply with Accessibility for Ontarians with Disabilities Act?

Sightlines

- Lighting for pedestrians is very poor, especially on Mildenhall Rd., which is a main thoroughfare.
- Advertisements on the sides of bus shelters can create blind corners in addition to overgrown vegetation.

Tree Inventory

- On Buckingham Ave., east of Wanless Cres., there is a large tree partly in the roadway. Residents would like to see this tree preserved.

Flooding

- The sewers are not properly maintained and are usually filled with debris and sediment which impedes their use.
- Basement flooding frequently occurs because new drainage plans that direct downspouts to the neighbour's foundation and allow grading to be above the swale are being approved. This should not be occurring, but regularly does.

3.4 Long List of Alternatives

For each of the following, participants were asked to provide any feedback on the proposed long list of alternatives. Feedback is summarized below.

Basement and Surface Flooding

- Source controls and conveyance controls together would improve the amount of flooding.
- Both the City and homeowners need to work together to limit flooding.
- The City should not allow eavestroughs on the side of a building where there has been an adjustment for the side yard setback as to do so directs water to the neighbour's foundation. Similarly, City departments should not allow builders to raise the property line and to grade above the swale for new buildings - this just exacerbates the problem and is exceedingly common. *[Editor's Note – these are private property matters and are outside of the scope of the EA Master Plan.]*
- Prohibit below-grade garages.

Stormwater Quality

- Ponding is significant and run-off needs to be contained.
- Storm drains are likely clogged because of pooling along the curb.

Roadway Maintenance and Rehabilitation

- Parking regulations should be consistent with road widths to safely allow cars to pass.
- Potholes are an ongoing issue.
- Construction vehicles are damaging the neighbourhood roads. Require builders to contribute to maintenance and rehabilitation. *[Editor's Note – the above points are outside of the scope of the EA Master Plan.]*

Sightlines

- Removal of obstructions at certain intersections is required.
- Unlit signage or signage covered by trees is an issue.
- The intersection of Wanless Cres. west and Buckingham Ave. is dangerous as vehicles do not obey the stop sign and proceed through into oncoming traffic.

Traffic

- Traffic flow in the area is heaviest at school rush hour times, and those providing feedback believe this is caused mainly by the Toronto French School and Glendon College.
- Speed enforcement is required on Blythwood Rd.
- Consider bike lanes/pathways on arterial roads/roads with heavy traffic.

3.5 Alternative Roadway Cross-Sections

Alternative conceptual roadway cross sections were presented that incorporated:

- Widening of roads to meet City standards (8.5m for local roads);
- Improved drainage features to reduce flooding;
- Sidewalks to meet City standards or improve pedestrian safety (in some locations); and
- Protection of existing trees.

Feedback received from participants through the questionnaire is summarized below and is organized by "likes" and "concerns" according to each cross-section.

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

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

What I Like…	What Concerns Me…
• Trees will not be affected. • Costs are lowest. • Sidewalks on both sides for safety. • Maintains greenspace on private properties.	• Road needs significant repair. • Drainage remains an issue. • Sidewalks are not required for low volume of pedestrian traffic.

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

- 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

What I Like…	What Concerns Me…
• No sidewalks added. • Wider/improved road condition. More defined road. • Best approach to protect trees and gardens. • Minimal impact to the road footprint. • Ditches on both sides. • Rural look is maintained. • Lower cost option.	• Sidewalk is required. • Road is too wide and smooth. This will encourage vehicular speeding. • Impacts property frontage. • Ditches are a hazard to pedestrians and cars, standing water leads to mosquitos. Underground water drainage is preferred. • Swale/ditch will be covered/landscaped eventually as has happened.

Existing

Conceptual

Legend

Road Width

Approximate

Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

- Existing road width would be increased from 7.5m 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

What I Like…	What Concerns Me…
• Curb on one side and no sidewalk. • Improved road condition. • Wider road for increased safety. • Rural look is maintained. • Minimal damage to trees and landscaping. • Lower cost option.	• Sidewalks are required. • Road is too wide and smooth. This will encourage vehicular speeding. • Too many trees will be affected. • Culvert/ditch is very susceptible to blockage/crushing and is dangerous. • Curb looks too conventional.

Existing

Conceptual

Legend

Road Width

Approximate

Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

- 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

What I Like…	What Concerns Me…
• Increased pedestrian safety with addition of one sidewalk. • Resurfaced road. • Improved road width. • Better drainage system.	• Sidewalks are not required on quiet streets. • Ditch and sidewalk together makes road footprint too wide and is dangerous. • Road is too wide and will cause vehicular speeding. • Streetscape is uneven with one sidewalk. • Better drainage is required. • Trees will be affected. • Rural character is lost.

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

- 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

What I Like…	What Concerns Me…
• Increased pedestrian safety with addition of one sidewalk. • Sidewalk directly beside road is preferred. • Improved road condition and rolled curbs. • Hidden storm sewer system. • Appears to be lower maintenance.	• Sidewalk is not desirable. Streetscape is uneven. • Concept is too disruptive to existing landscape and trees. • Road is too smooth and wide, encourages vehicular speeding. • Rural character is lost. • Increase in hard surfaces with sidewalk and widened road.

Existing

Conceptual

Legend

Road Width

Approximate

Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

- Existing road width to remain at 8.5m
- Sidewalk, with boulevard to be constructed on one side of roadway

What I Like…	What Concerns Me…
• Increased pedestrian safety with addition of sidewalk. • One sidewalk is preferred. • Improved road condition and width. • Curbs.	• Boulevard is not necessary. It places the sidewalk too close to the houses and driveway space is lost. • Sidewalk is undesirable. • Road is too smooth and wide, encourages vehicular speeding. • Trees will be affected. • Rural character is lost.

Existing

Conceptual

Legend

Road Width

Approximate

Limit of Municipal Right of Way

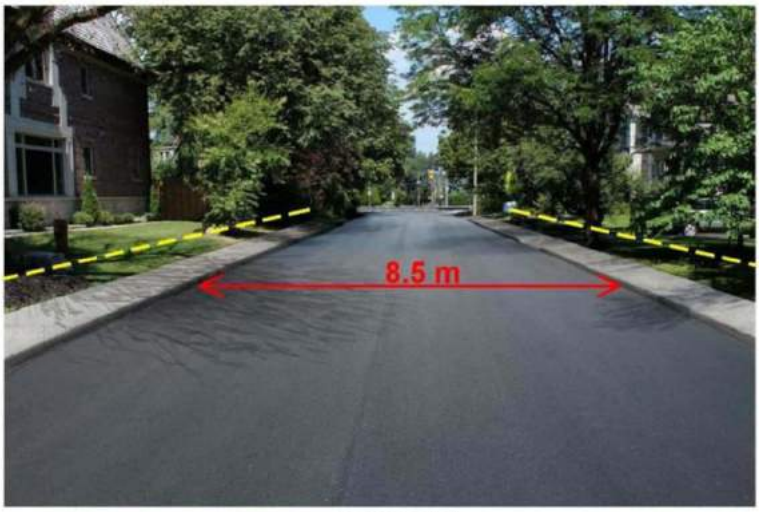
?

Existing tree may have to be removed due to road reconstruction

- Existing road width would be increased from 8.0m to 8.5m
- Existing ditches on each side of roadway would be regraded to convey required flows
- Sidewalk constructed on both sides of roadway

What I Like…	What Concerns Me…
• Increased pedestrian safety with addition of sidewalks. • Improved road condition and width. • New ditches. • Maintains rural character.	• Two sidewalks are not necessary. Preference is for only one or none depending on volume of pedestrian traffic. • Road is too smooth and wide, encourages vehicular speeding. • Trees will be affected. • Drainage is inadequate and dangerous. • Rural character is lost.

Existing



Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

- 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

What I Like…	What Concerns Me…
• Pedestrian safety increased with addition of sidewalks. • Concept uses the least amount of area where two sidewalks may be required. (Sidewalk directly beside road). • No issues deciding which side of the road has the sidewalk. • Improved road condition and width. • Improved storm sewer system.	• Two sidewalks are not necessary. • Road is too smooth and wide, encourages vehicular speeding. • Trees/hedges will be affected. • Rural character is lost. • More costly option.

3.6 Summary of Key Feedback from the Questionnaires

Road Width & Condition

- Many respondents to the questionnaire believe a widened road width of 8.5m is not necessary. They believe vehicular traffic and speeding will increase if the roads are widened and repaved, and the rural character of the neighbourhood will be lost.
- Many would like to see road repairs to eliminate damage to vehicles and increase pedestrian/cyclist accessibility.
- Respondents frequently cited the road width and conditions of Hoggs Hollow as example of conditions they would like to see in Lawrence Park.

Sidewalks & Pedestrian Safety

- Varying opinions were expressed regarding installing sidewalks in the neighbourhood. Some people feel they are not needed and too expensive, while others believe they are important for safety reasons, especially on busy streets.
- It was expressed that sidewalks are most important for safety of children. Historically, residents have been opposed to sidewalks but demographics have changed, and now there are many younger families with children.
- Many respondents would like to see sidewalks on one side of the road only, if necessary (with the exception of Mildenhall Rd. where many feel strongly that they are required on both sides).
- Several respondents expressed that if one sidewalk is to be installed, the centre line of the road should be shifted so homeowners on both sides of the road share the impact of the reconstruction.
- Several respondents would like clarification on how the City will determine what side of the road a sidewalk would go on. They also believe one sidewalk creates an unfavourable and uneven streetscape.
- Many respondents expressed that a boulevard is not necessary as it places the sidewalk closer to individual homes and changes the character of the streetscape. They also believe that it would increase impacts on the natural environment.
- Many are in favour of rounded curbs, suggesting that they provide for improved safety and protection of lawns.

Traffic

- Respondents would like to see traffic forecasts based on increased population densities in the surrounding areas.
- Respondents would like clarification on traffic survey results, including whether they measure traffic going both ways, or only southbound traffic in the morning and northbound traffic in the evening.
- Many would like traffic calming measures to be implemented in high traffic areas of the neighbourhood. *[Editor's Note – this is outside the scope of the EA Master Plan.]*

- It was expressed that there should be parking restrictions on some roads in the Lawrence Park neighbourhood. Vehicles parked by Glendon College students and Sunnybrook Hospital staff/visitors clutter the streets and make it difficult for homeowners to enter/exit their properties.
- Traffic caused by Toronto French School was frequently cited as an issue that needs to be addressed.
- The potential for traffic calming on St. Leonard's Ave., Mildenhall Rd., and Blythwood Rd. was raised as a concern. *[Editor's Note – this is outside the scope of the EA Master Plan.]*

Drainage & Flooding

- Many believe drainage is the number one priority due to the hilly nature of the area, lack of permeable surfaces, and history of basement flooding events.
- It was suggested that the City impose limits to the size of hard landscaping, driveways, pools, patios, etc. which prevent the absorption of water.
- Many respondents would like to see a long term solution for drainage. Ditches and swales are not a favourable solution. Storm sewers are preferred for flooding and pedestrian safety reasons.
- It was emphasized that greenspace should be maintained as it absorbs water. Installation of driveways paved with permeable material should be encouraged.

Natural Environment

- Many respondents are opposed to removing trees. They would like to see sensitivity to the existing natural environment as a priority when making decisions.
- Some feel maintaining the neighbourhood greenspace and trees should be prioritized over sidewalks.
- Many would like the rural character of the neighbourhood to be maintained, using soft edges rather than straight lines of concrete and asphalt.

Decision Making

- There is concern that calls for pedestrian safety/sidewalks by the homeowners of the busy streets in question may drive a decision about sidewalks. It was highlighted that the homeowners on the busy streets are not the sole users of those streets.
- A few respondents expressed that they would like the same considerations Hoggs Hollow received during road improvement planning in that neighbourhood.
- Several community members feel that not all streets should be decided the same way. Different solutions for different streets may be required.
- Some community members feel that improvements are long overdue; doing nothing is not an option.
- Some expressed concern regarding the decision making process in the case where a consensus amongst neighbours cannot be reached.

- Some requested more information on which to base their feedback, beyond photographs which may be superficial.

3.7 Questions of Clarification

The following summarizes participants' questions (identified with 'Q') or comments (identified with 'C'), and responses from the project team or City of Toronto (identified with 'A') during the Q&A session following the presentation at the PIC. Please note this is not a verbatim summary.

Q: I live on street with no sidewalks. The city prefers an 8.5 m roadway. If sidewalks are added, what becomes the total width?
A: A sidewalk would be between 1.7 - 2m in width. *[Editor's Note – the total width would be 10.2 – 10.5m.]*

Q: You showed on some slides there could be a boulevard between the road and sidewalk. Whose responsibility is it for grass cutting?
A: Typically the homeowner would maintain it.

Q: I was flooded on July 8, and live on Valleyanna Dr. The flooding was caused by a backup in wastewater sewage, how will you deal with that in this study?
A: We will be dealing with the flooding issue on that street. As to how we will deal with it that will come out of 3rd public meeting. We know about the historic flooding in the area.

Q: You've shown several cross sections and the last one was clearly Mildenhall Rd. Does the concept depict your current thinking for Mildenhall Rd. or is that representative of what could be on any street?
A: We initially included street names in the presentation. The Community Advisory Group advised us to remove them. We took 8 general areas and tried to show "do nothing" and a range of alternatives. Mildenahll Rd. is a collector road and will likely have to get sidewalks south of Lawrence.

Q: In your maps you have designated flood areas represented by red dots. Valleyanna Rd. has none at all. What information did you use to determine flooded areas? I am concerned because you excluded a dot for Valleyanna.
A: Valleyanna should have a dot. That was a mistake. *[Editor's Note – the board in question used the questionnaire results to show where flooding has occurred. The project team is aware of the flooding on Valleyanna and will take this into account.]*

Q: At the Community Advisory Group meeting, we discussed the 8.5m road width. Is that open to negotiation given that other neighbourhoods have not followed that rule? Hoggs Hollow was discussed. They have repaved and did not make roads 8.5m.
A: It is a starting point, a desired requirement, but not a done deal.

Q: You have done a great number of boreholes in the area. Is it possible to obtain a map of these boreholes?
A: We did about 90 boreholes, that information will be available through the City in a month or so, before the next meeting.

Q: I live on Fidelia Ave. The area is very hilly and slopes down from north to south and east to west, down to the ravine. The issue is that the road accumulates a lot of water from other roads. We end up with huge ponds and water on lawns of homeowners on the west side. Are you doing something in this study to address the water that accumulates?
A: We will be looking at that. A typical area has storm sewers or a ditch or swale for storm drainage. We will hopefully be coming up with a solution where water that will be retained in the public Right-of-way (ROW) and will not spill onto private ROW. There are a lot of reverse grade driveways. We will take those factors into consideration.

Q: 10 years ago, the City asked all of us to disconnect our downspouts. Have you had any results on what the impact was?
A: It is mandatory to do so. As part of this exercise, we will be evaluating the effectiveness of disconnecting downspouts. We don't have the historical information you are asking about but we will be looking at the impact of disconnection.

Q: You determined the 8.5m road width is a starting point by City requirements. Is the incorporation of sidewalks also a starting point?
A: There is a general policy that sidewalks will be put in in certain circumstances. But this has to be balanced with respect to cost, impact on vegetation, and technical feasibility. It is a starting point but there is some flexibility.

Q: I live on Mildenhall Rd. Can we get speed bumps to slow traffic?
A: Traffic calming is not part of this process. We can make a recommendation that traffic calming measures should be considered. Traffic calming is generally done through a polling process through your Councillor.

C: 40-50 years ago, the area between Blythwood Rd. and Dawlish Ave. was a marsh, now there are houses and a marsh underneath. It is a disaster.
C: (Councillor Robinson) There is a lot of development happening in Lawrence Park. Most of it wa approved by the OMB. Council has voted to get rid of the OMB. It is up to the province to decide. Let your MPP know about the development issues. It is affecting water management, there is nowhere for the water to go.

Q: As part of this process, how are you layering in future conditions as we become more dense (population, buildings etc.), relating to storm sewers, traffic, etc.?
A: We run computer models that can look at various scenarios with respect to sewers. From the traffic perspective, we have approximations. We can adjust those numbers.

Q: Relating to the sidewalks issue, I thought City policy also allowed residents of each individual street to petition not having sidewalks. That was the case a few years ago. In Hoggs Hollow residents were surveyed. 87% of residents voted against sidewalks.
A: City policy is a preference for sidewalks. There is a separate process about going through with sidewalks. There is a policy for arterial roads and collector roads. Mildenhall Rd. and Blythewood Rd. are the only collector streets. The policy would be to have sidewalks on both sides of the street. All the other streets in the area are local streets. We would like to have a sidewalk on one side of each street where possible. We also want to hear from the community, but that's the preference we have in the policy.

Q: Is future weather data being taken into account when designing drainage systems? Extreme events are happening more frequently.
A: The standard for the City is to plan for the 100 year storm. We also looked at an event that took place on August 19, 2005. The city will design for the 100 year storm for the storm drainage system.

Q: Who pays the capital cost? Will there be an impact on taxes?
A: Money comes from general City funds. It won't directly affect your taxes.

4.0 NEXT STEPS

At the conclusion of the meeting, Councillor Robinson thanked participants for taking the time to attend the meeting and provide feedback. She stressed the importance of ongoing community involvement in the study, and encouraged residents to keep the purpose of the project in mind - which is to identify measures to improve roads and address flooding issues in Lawrence Park. She urged residents to think long-term and broadly about steps that can be taken to improve roads and address flooding concerns, and not be divided by debates around certain types of infrastructure, such as sidewalks. She noted that the Hoggs Hollow study was done over ten years ago and that since then, some policies have changed.

The study team will consider verbal and written comments in order to refine the evaluation criteria and alternative solutions. The next PIC will be held in the winter of 2014. At that time, two or three refined alternative solutions will be presented based on the application of the evaluation criteria. All residents in the neighbourhood will be notified by mail about this public meeting.

Appendix A – PIC Agenda and Notice

TORONTO Building a great city – *together*

Call 311

The City of Toronto holds public consultations as one way to engage residents in the life of their city. Toronto thrives on your great ideas and actions. We invite you to get involved.

Lawrence Park Neighbourhood Investigation of Basement Flooding & Road Improvement Study

Municipal Class Environmental Assessment–Notice of Public Information Centre #2

The Study

The City of Toronto is studying different ways to address deteriorating road conditions, traffic problems, pedestrian safety, drainage problems and basement flooding in the Lawrence Park neighbourhood. Measures that improve storm water quality and reduce storm runoff will also be incorporated. The map in this Notice shows the Lawrence Park Neighbourhood Study Area.

The Process

The study is being conducted according to the Municipal Class Environmental Assessment process, and will result in a series of recommended projects for the area, known as a Master Plan. The study will define the problem, consider and evaluate alternative solutions, assess impacts of the preferred solutions, and identify measures to lessen any adverse impacts.

Public Information Centre #2

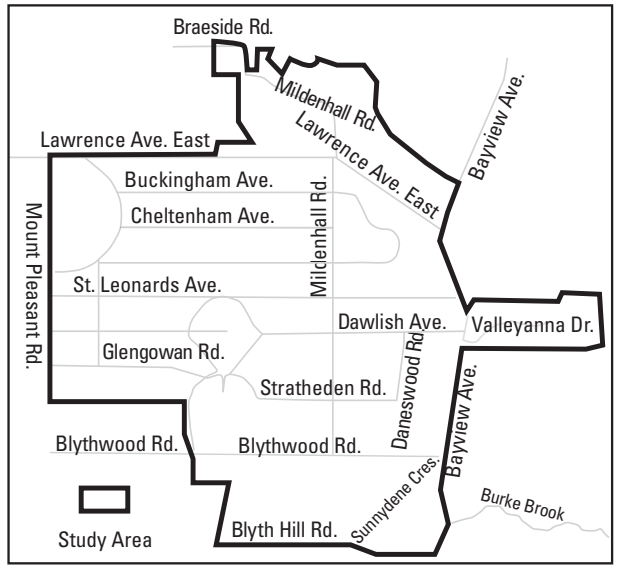
The following information will be presented at the second Public Information Centre (PIC) for this study:

- details of the relevant existing conditions
- a list of all possible solutions
- proposed criteria that will be used to evaluate alternative solutions
- some conceptual alternative road cross sections (including potential sidewalks)

An open house will begin at 6:30 p.m. followed by a presentation at 7:00 p.m. and a discussion forum on the proposed evaluation criteria. City staff and the consulting team will be available to answer questions and discuss the next steps in the process throughout the event.

The PIC details are noted below:

Date: Tuesday, November 19, 2013
Time: 6:30 p.m. to 9:00 p.m.
7:00 p.m. – Presentation
Location: Toronto French School, La Terrasse, 318 Lawrence Ave. E.



We would like to hear from you

Public consultation is an important part of this study. If you have any questions or comments, please contact:

Kate Kusiak
Senior Public Consultation Coordinator
City of Toronto Metro Hall, 19th Fl.
55 John Street, Toronto, ON M5V 3C6
Tel: 416-392-2962 **TTY: 416-338-0889**
Fax: 416-392-2974
E-mail: kkusiak@toronto.ca
Visit: toronto.ca/involved/projects

Issue Date: November 7 and 14, 2013.

TORONTO

Lawrence Park Neighbourhood Investigation of Basement Flooding (Area 20) & Road Improvement Study
Municipal Class Environmental Assessment

Public Information Centre #2
November 19, 6:30 – 9:00 pm
Toronto French School

AGENDA

6:30 p.m. Open House and Displays

7:00 p.m. Agenda Review and Welcome from Councillor Robinson

7:10 p.m. Presentation – Dave Maunder, Project Manager, Aquafor Beech

7:30 p.m. Questions and Answers

7:50 p.m. Roundtable Discussions on Evaluation Criteria

Discussion Questions

1. Thinking about the proposed criteria that will be used to evaluate alternative solutions, what would you say are the top 3 most important criteria? Which are the least important?
2. Thinking about the long list of alternative solutions, have we missed any criteria? Do you have any other feedback on the proposed criteria?

8:25 p.m. Table Reports and Plenary Discussion

8:45 p.m. Completion of Questionnaires

9:00 p.m. Adjourn

Appendix B – Questionnaire

Lawrence Park Neighbourhood Road and Stormwater Management Study – Class Environmental Assessment

Public Information Centre #2 – November 19, 2013

Questionnaire

Please complete & hand in your questionnaire before you leave tonight's meeting.

If you would like more time, please return your completed questionnaire by December 09, 2013 to:

Kate Kusiak – Fax 416-392-2974; Email kkusiak@toronto.ca.

What street do you live or work on? _____

1. Evaluation Criteria

A set of eleven criteria are proposed to be used to evaluate the various alternatives and identify recommended solutions. After the criteria have been applied, two or three refined alternatives will be presented at the third Public Information Centre, to be held in Early 2014.

a) Please review the list of criteria below and respond to specific criteria with least important, important, or most important.

Proposed Evaluation Criteria	Least Important	Important	Most Important
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			

b) Have any criteria been missed? Do you have any other feedback on the proposed criteria?

2. Existing Conditions

Through the investigations undertaken in the Lawrence Park Neighbourhood as part of this study, we have determined the following:

- **Road Conditions** – An evaluation of roads in the area suggests that certain roads have sub-standard pavement conditions and should either be reconstructed, repaved or receive preventative maintenance.

- **Road Widths** – Existing road widths in the area are less than City standards and may have to be widened in order to meet City standards related to emergency access, operation and maintenance, motorist and pedestrian safety requirements.

- **Traffic** – Traffic surveys were undertaken to define traffic movements as well as the percentage of through traffic. The results summarize the morning and evening traffic volume and percentage of through traffic.

- **Sidewalks** – Some streets in the area have sidewalks on both sides of the road, while others have sidewalks on one side or none at all. Additional sidewalks on some roads in the area may be required to improve pedestrian safety.

- **Sightlines** – The ability of drivers who are stopped at intersections to see approaching traffic has been examined. Several locations with a lack of sight distance have been identified.

- **Tree Inventory** – An inventory of trees in the area was undertaken. There are over 2700 trees located within the municipal right of way, a percentage of which may have to be removed due to reconstruction of the roadways or installation of sewers.

- **Flooding** – Surface or basement flooding in the area has occurred during recent significant rainfall events. Flooding may have occurred as a result of public property issues (lack of sewer system or roadway capacity) or private property (poor lot grading on private property). This study has identified general areas where flooding has occurred.

Do you have any feedback on any of the above findings?

3. Long List of Alternatives

The information presented at Public Information Centre #2 includes an initial long list of alternatives that are being considered to address certain issues in the study area. For each of the following issues, please provide any feedback on the proposed long list of alternatives and suggest any other alternatives that you think should be considered.

- **Basement and Surface Flooding (Board No. 19)**

- **Stormwater Quality (Boards No. 20 to 21)**

- **Roadway Maintenance and Rehabilitation (Board No. 22)**

- **Sightlines (Board No. 33)**

- **Traffic (Board No. 34)**

4. Alternative roadway cross sections have been developed for existing roads in the Lawrence Park Neighbourhood. The proposed alternatives are *preliminary and conceptual* and are intended to illustrate what certain roads *could look like after reconstruction*. The concepts incorporate:

- Widening of roads to meet City standards (8.5m for local roads);
- Improved drainage features to reduce flooding;
- Sidewalks to meet City standards or improve pedestrian safety (in some locations); and
- Protection of existing trees.

The following cross sections illustrate conceptual alternatives for various roads in the area. In some cases the conceptual illustration is the same as the existing road – which suggests no changes may be proposed.

For each cross section illustrated below, please include feedback on what you like and any concerns you have.

Existing

Legend

Road Width

Approximate Limit of Municipal Right of Way

Conceptual

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

What I Like…	What Concerns Me…

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

- **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**

What I Like…	What Concerns Me…

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

? Existing tree may have to be removed due to road reconstruction

- **Existing road width would be increased from 7.5m 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**

What I Like…	What Concerns Me…

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

? Existing tree may have to be removed due to road reconstruction

- **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**

What I Like…	What Concerns Me…

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

- **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

What I Like…	What Concerns Me…

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

? Existing tree may have to be removed due to road reconstruction

- **Existing road width to remain at 8.5m**
- **Sidewalk, with boulevard to be constructed on one side of roadway**

What I Like…	What Concerns Me…

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

? Existing tree may have to be removed due to road reconstruction

- **Existing road width would be increased from 8.0m to 8.5m**
- **Existing ditches on each side of roadway would be regraded to convey required flows**
- **Sidewalk constructed on both sides of roadway**

What I Like…	What Concerns Me…

Existing

Legend

Road Width

Approximate Limit of Municipal Right of Way

Conceptual

- **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**

What I Like…	What Concerns Me…

Additional Comments

5. Do you have any other feedback or comments on any aspect of the study?

THANK YOU FOR YOUR INPUT!

The personal information on this form is collected under the authority of the City of Toronto Act, 2006, S. 136 (c) ; City of Toronto Municipal Code, Chapter 681 (Sewers), and City of Toronto Confirmatory By-law No. 1172-2011. The information is used to contact you about future meetings and to provide updates regarding the Lawrence Park Neighbourhood EA Study. Questions about the collection of this information may be directed to Supervisor, Public Consultation Unit, Metro Hall, 55 John Street 19th Floor, Toronto, Ontario M5V 3C6; 416-392-4360.

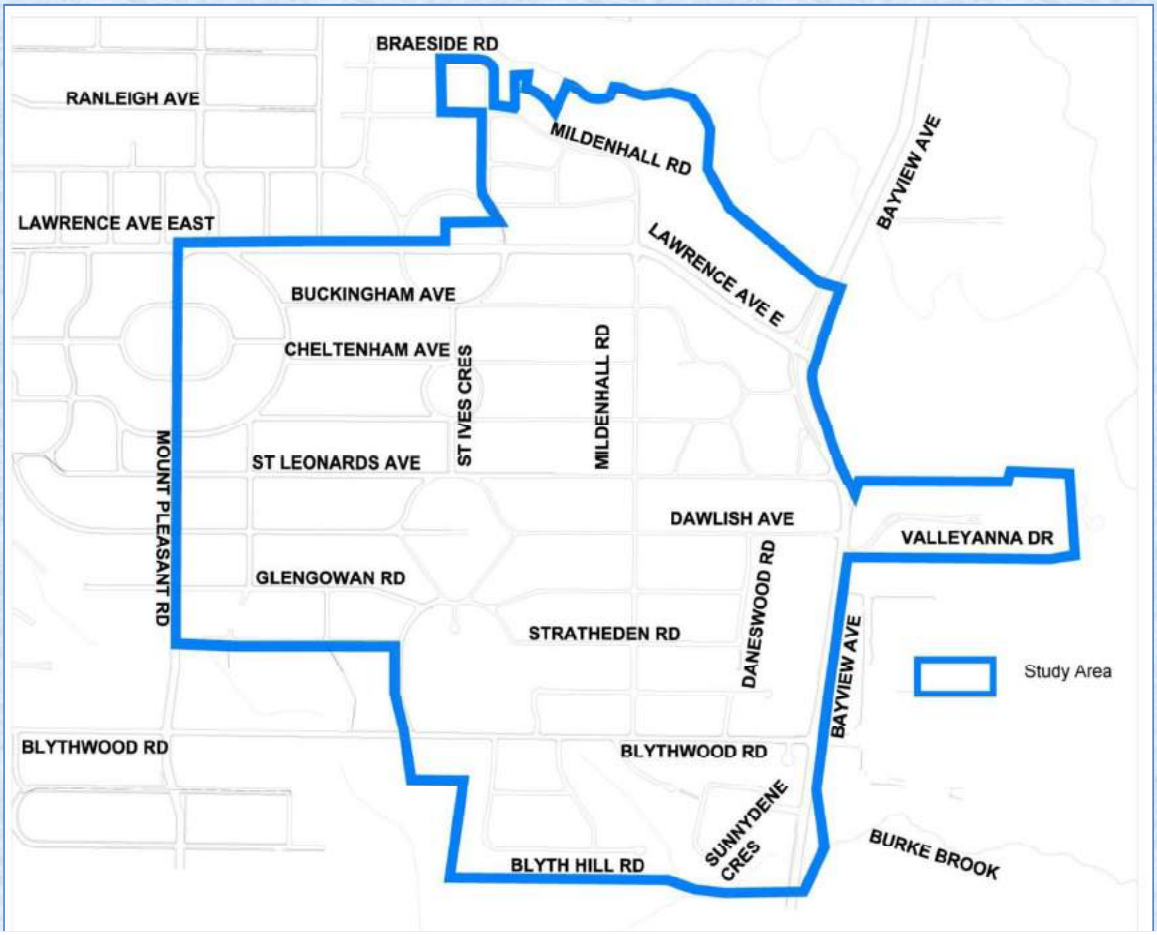
LAWRENCE PARK NEIGHBOURHOOD INVESTIGATION OF

BASEMENT FLOODING & ROAD IMPROVEMENT STUDY CLASS ENVIRONMENTAL ASSESSMENT

PUBLIC INFORMATION CENTRE 2
19 NOVEMBER 2013

TORONTO

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.

TORONTO

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

TORONTO

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

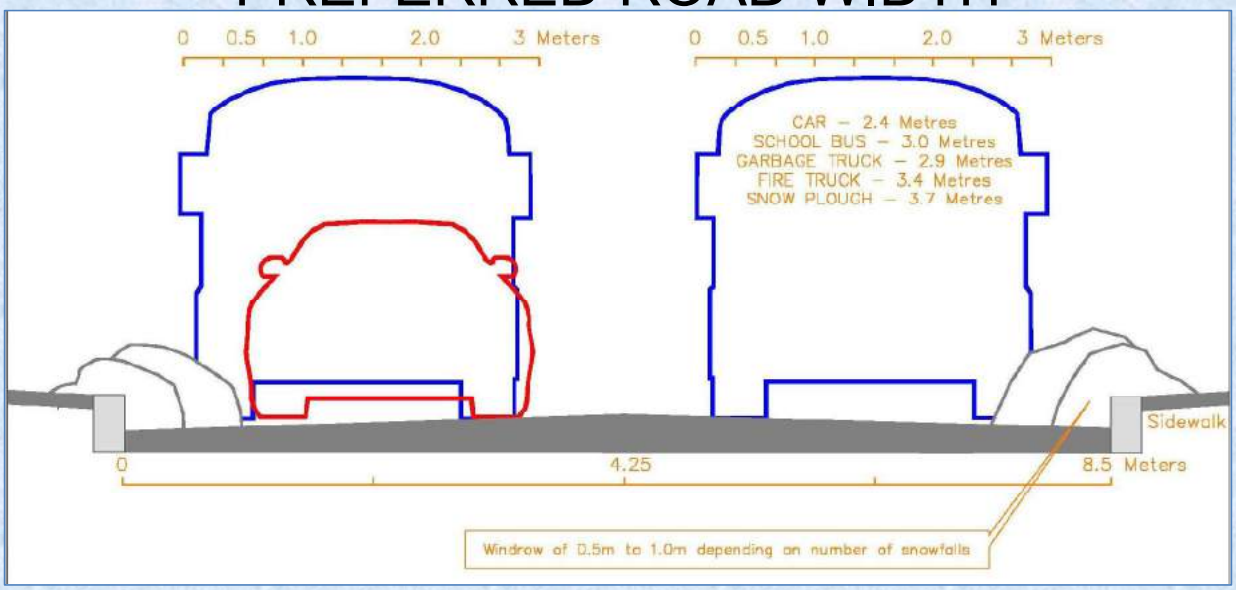
Several conceptual alternatives of what the roadways could look like after reconstruction have been presented.

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

TORONTO

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

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Legend

Road Width

Approximate Limit of Municipal Right of Way

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

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Legend

Road Width

Approximate Limit of Municipal Right of Way

Conceptual

Key Features

- 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

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- 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

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- 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

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Key Features

- 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

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- Existing road width to remain at 8.5m
- Sidewalk, with boulevard to be constructed on one side of roadway

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- Existing road width would be increased from 8.0m to 8.5m
- Existing ditches on each side of roadway would be regraded to convey required flows
- Sidewalk constructed on both sides of roadway

TORONTO

ALTERNATIVE ROADWAY CROSS SECTIONS

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Key Features

- 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

TORONTO

NEXT STEPS

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

TORONTO

THANK YOU AND QUESTIONS

TORONTO

Welcome

Lawrence Park Neighbourhood Investigation of Basement Flooding & Road Improvement Study Class Environmental Assessment

Public Information Centre 2

View displays and discuss the study with project staff

Feel free to ask questions and fill out a comment sheet

Purpose of this Study

Study Purpose

The City of Toronto has initiated a Master Plan (Approach 3) Municipal Class Environmental Assessment (EA) study to address issues relating to

- deteriorating road conditions,
- traffic,
- pedestrian safety,
- drainage problems, and
- basement flooding

in the Lawrence Park Neighbourhood. Measures that improve stormwater quality and reduce storm runoff will also be incorporated.

The study is being planned under the requirements set out in the Municipal Class Environmental Assessment (MCEA) document dated October 2000, amended in 2011. The MCEA process provides members of the public and interest groups with opportunities to provide input at key stages of the study.

The key stages of the study will:

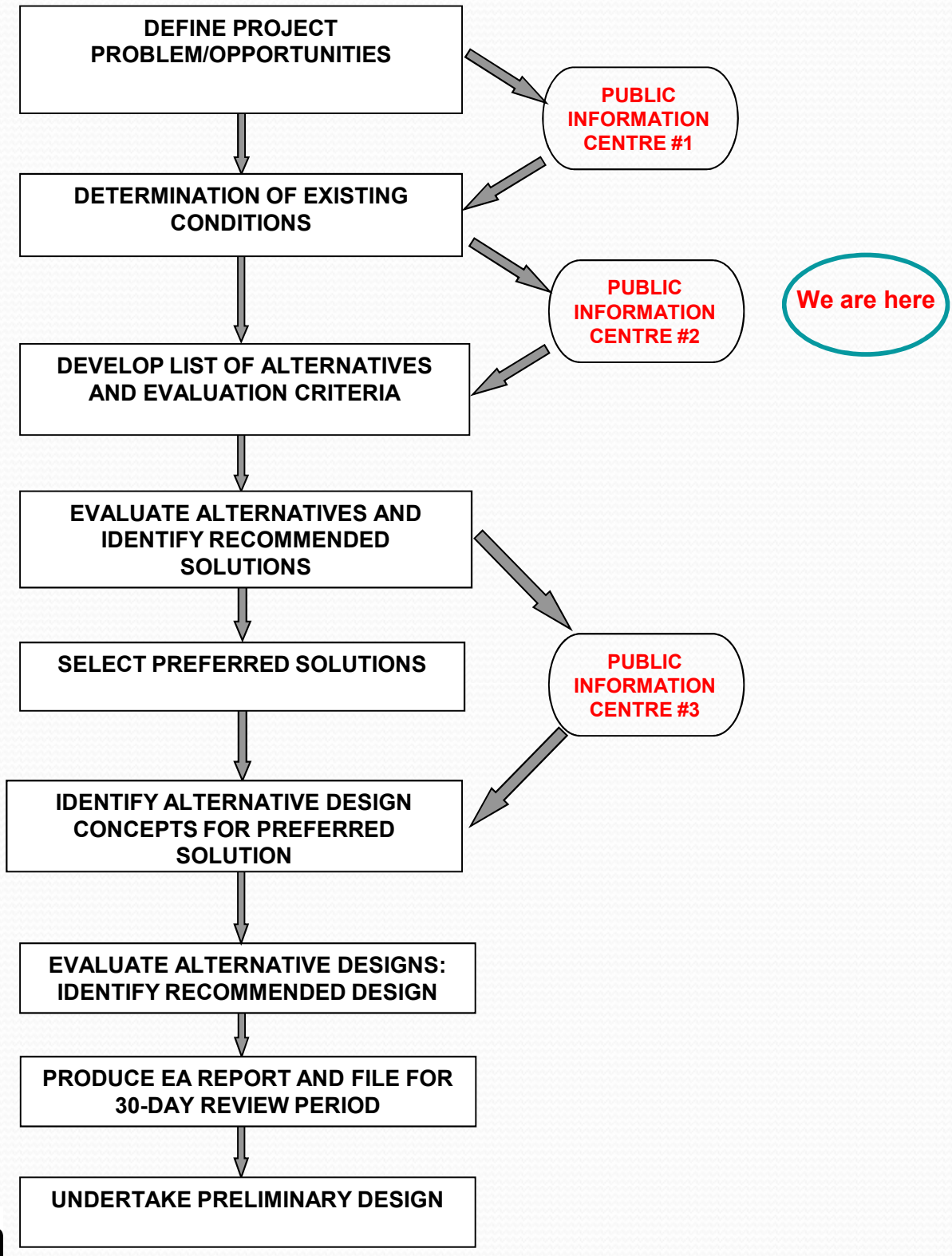
1. Define the problem,
2. Evaluate alternative solutions,
3. Assess impacts of the preferred solutions, and
4. Identify measures to lessen any adverse impacts.

Objectives of Tonight's Meeting

- Provide background on the study,
- Summarize existing conditions within the study area,
- Present a long list of alternatives that address existing issues,
- Present a list of criteria to evaluate each alternative,
- Outline the next steps in the study process, and
- Receive your feedback and answer your questions.

Municipal Class Environmental Assessment Process

This study is being undertaken as a Master Plan (Approach 3) project under the Municipal Class Environmental Assessment (EA) process. The flow chart illustrates the key steps to be undertaken as part of the EA process.



Existing Conditions

The existing conditions within the study area are listed below:

- Geotechnical Findings
- Sewer and Drainage System
- General Areas where Surface or Basement Flooding has Occurred
- Tree Inventory
- Widths of the Paved Road Surface
- Sight Lines
- Traffic
- Sidewalks & Key Destinations

Geotechnical Findings

A geotechnical investigation was undertaken in the Spring of 2013. In total approximately 90 boreholes were installed at representative locations within the study area.

The purpose of this investigation was to evaluate the roadways, investigate pavement thickness and composition and; explore the underlying subsurface conditions. Groundwater elevations were also recorded at representative sites. This information, in turn, will be used to assist in defining the type of road and sewer reconstruction measures that may need to be undertaken.

Provided below are typical roadway maintenance and rehabilitation activities.

Activities

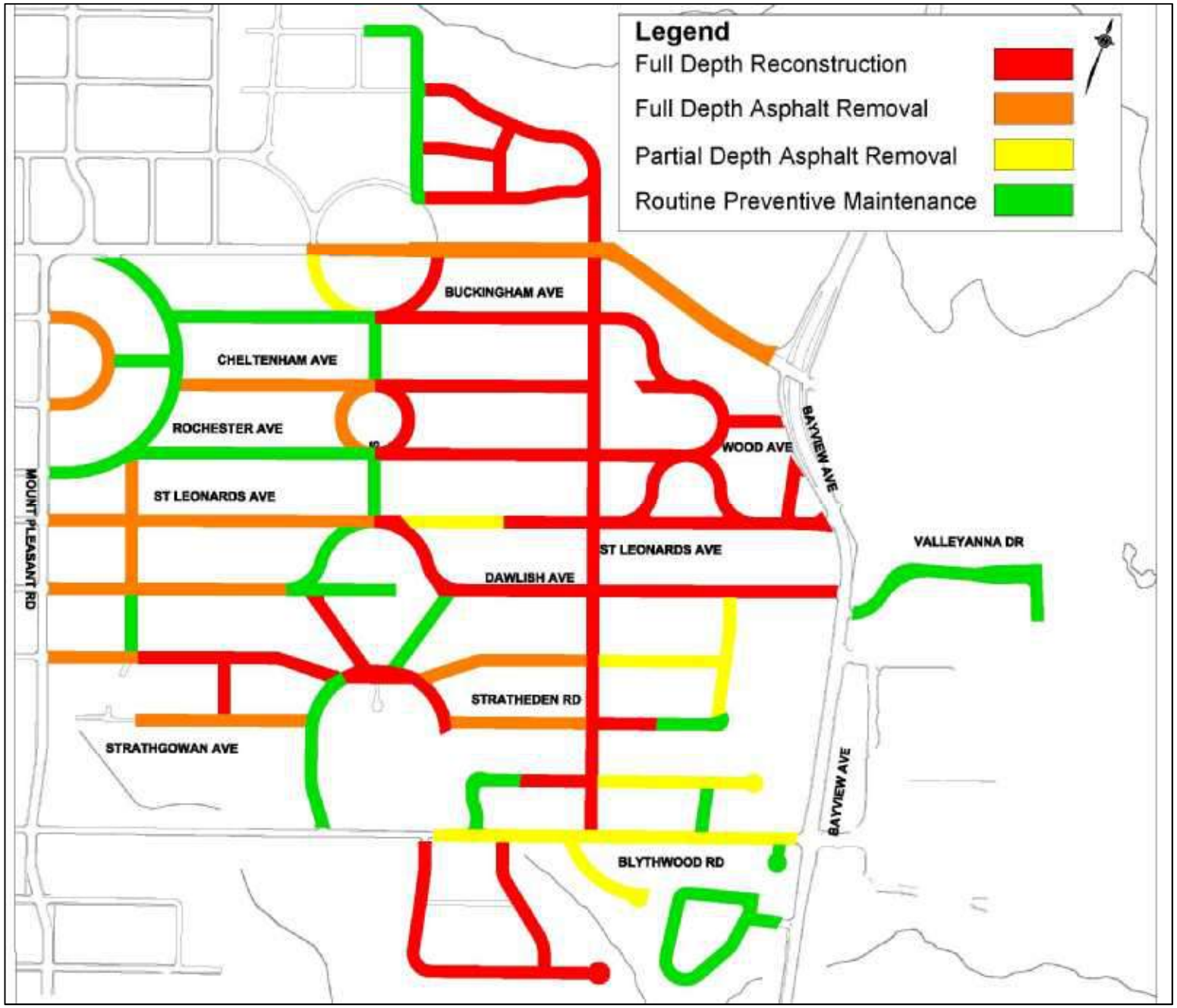
Routine Preventive Maintenance
Undertake maintenance treatments such as routing and sealing existing cracks in the asphalt pavement, patching potholes, patching road surface defects around maintenance chambers etc.; Preventive measures are meant to preserve the pavement, mitigate future deterioration and maintain or improve driving comfort.

Partial Depth Asphalt Removal (Mill and Overlay)
Mill (i.e. remove the existing asphalt concrete to a specified thickness) and Overlay (i.e. repave with a specified layer of hot mix asphalt.) Existing deficient curb and sidewalk will be repaired.

Full Depth Asphalt Removal
For flexible pavement, remove the existing asphalt, regrade, level and compact the existing granular material and repave the roadway with hot mix asphalt. For composite pavement, remove the existing asphalt to expose the underlying concrete slab, repair the concrete slab and joints and repave the roadway with hot mix asphalt. Existing deficient curb and sidewalk will be repaired.

Full Depth Reconstruction
Remove existing asphalt, concrete and underlying granular materials and excavate to the road design subgrade elevation. Reconstruct the roadway by placing and compacting the granular sub-base followed by the granular base and then repave roadway with hot mix asphalt. Existing deficient curb and sidewalk will be repaired.

Existing Roadway Conditions and Representative Rehabilitation Measures



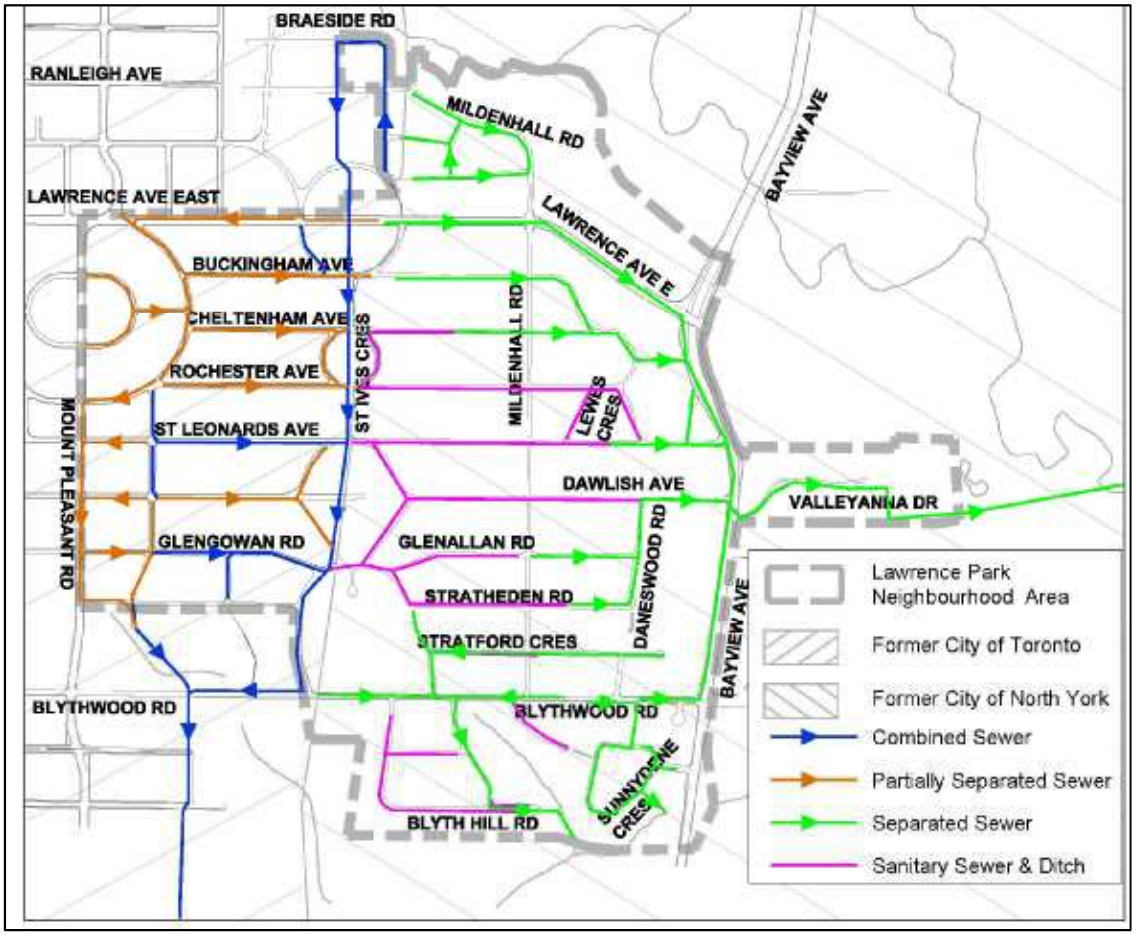
TORONTO

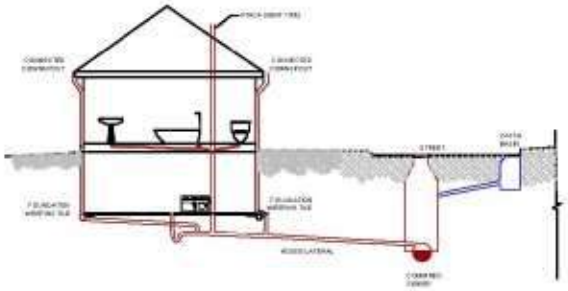
Existing Sewer and Drainage System

The accompanying figure illustrates the types of sewer systems that exist within the study area.

– The former City of Toronto area was initially serviced by a combined sewer system. Over time, a sewer separation program has been undertaken along several streets.

– The former City of North York area was originally serviced by a sanitary sewer system and ditches to convey stormwater runoff. Over time, storm sewers have been constructed along several streets.





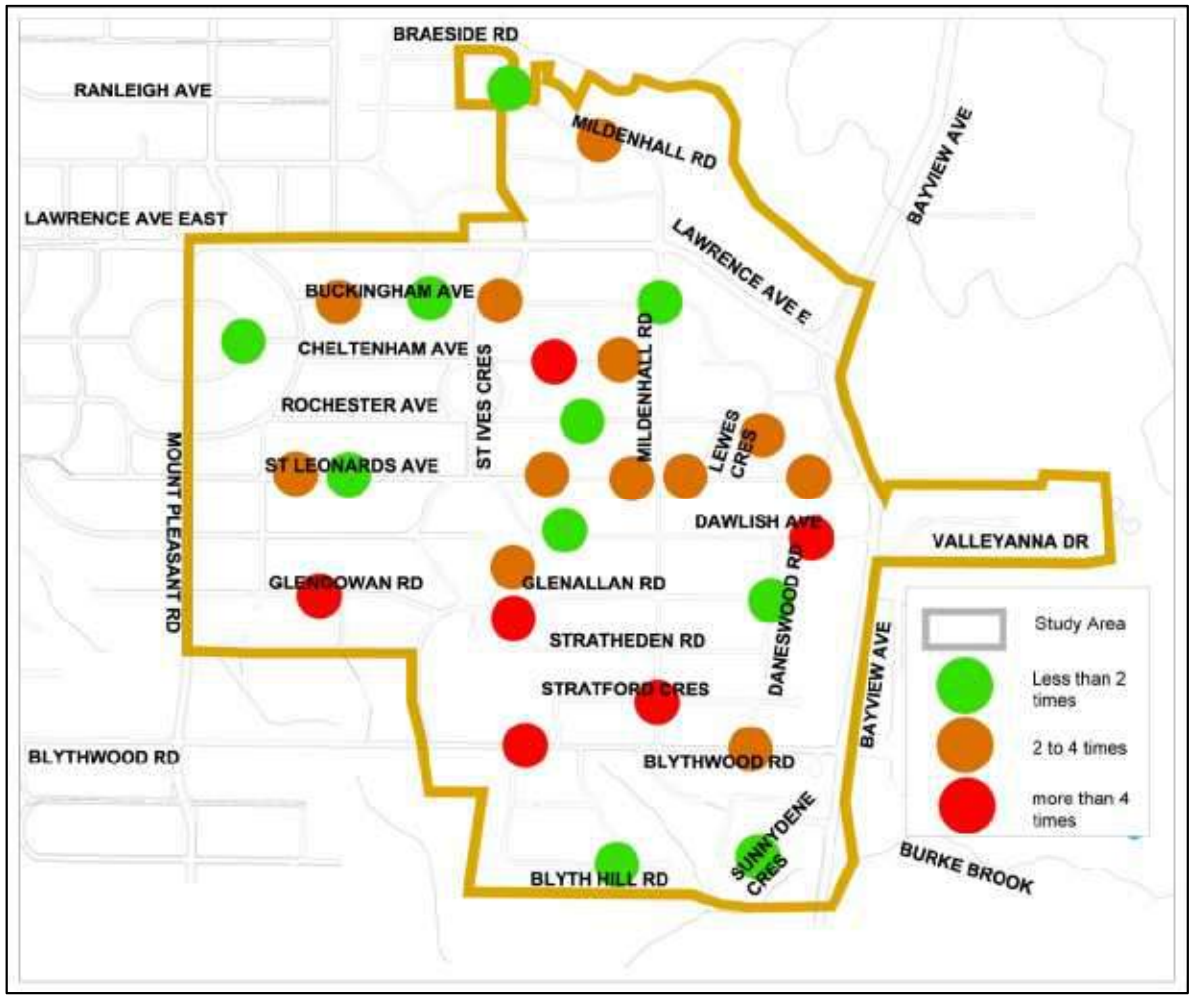
Combined Sewer

Partially Separated Sewer

Separated Sewer

General Areas where Surface or Basement Flooding Has Occurred

The accompanying figure illustrates the general locations of surface or basement flooding recorded in questionnaires that were submitted in February 2013. Recently significant rainfall events which have resulted in flooding occurred in May 2000, August 2005, May 2013 and July 2013.



Tree Inventory

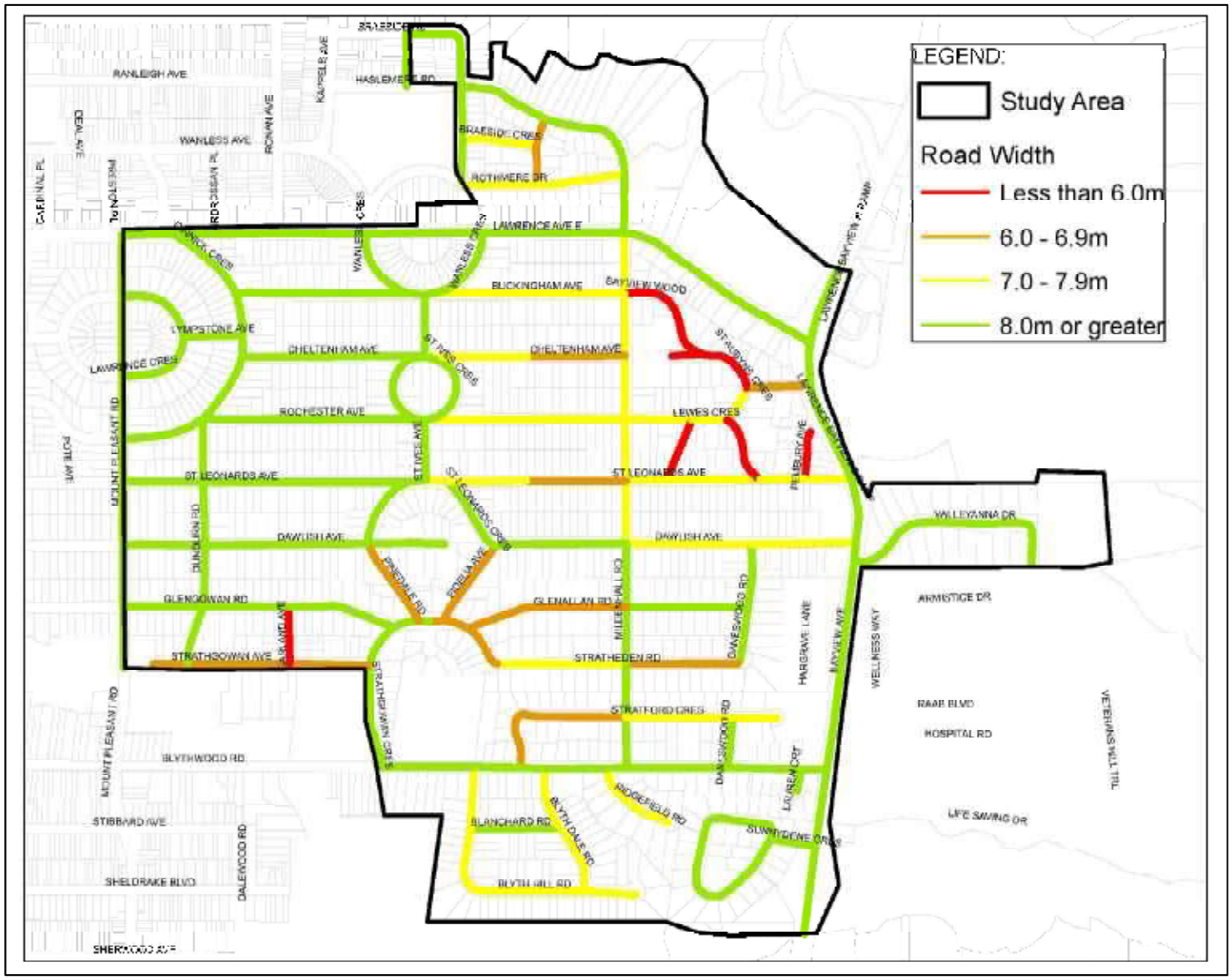
A tree inventory of the study area was undertaken. All trees that may be impacted by construction work within the right of way were inventoried and assessed for preservation priority. A preservation priority level of either “High”, “ModHigh”, “Moderate” or “Low” was assigned by a certified arborist to each tree based on its diameter at breast height, biological health, and general condition.

TORONTO

Width of the Paved Road Surface

The City property set aside to provide amenities to private properties such as paved road, curbs, sidewalks, above and underground utilities (i.e., water supply, sewage, hydro, gas, telecommunications), boulevards, street trees and signage. The typical Right-of-way is 20m (66') on local roads in the City.

Provided below is a summary of the average paved road widths for streets in the study area.



Sight Lines

- The ability of a stopped vehicle to see the approaching traffic is called the sightline

- The Project Team has conducted a sightline review of the intersections within the Lawrence Park Neighbourhood

- Six locations with a lack of sight distance are identified:
  - Lawrence Crescent / Mount Pleasant Road (south intersection)
  - St. Leonards Avenue / Mount Pleasant Road
  - Dawlish Avenue / Mount Pleasant Road
  - Strathgowan Crescent / Blythwood Road
  - Rochester Avenue / Mildenhall Road
  - Wanless Crescent / Lawrence Park Avenue (east intersection)

Traffic

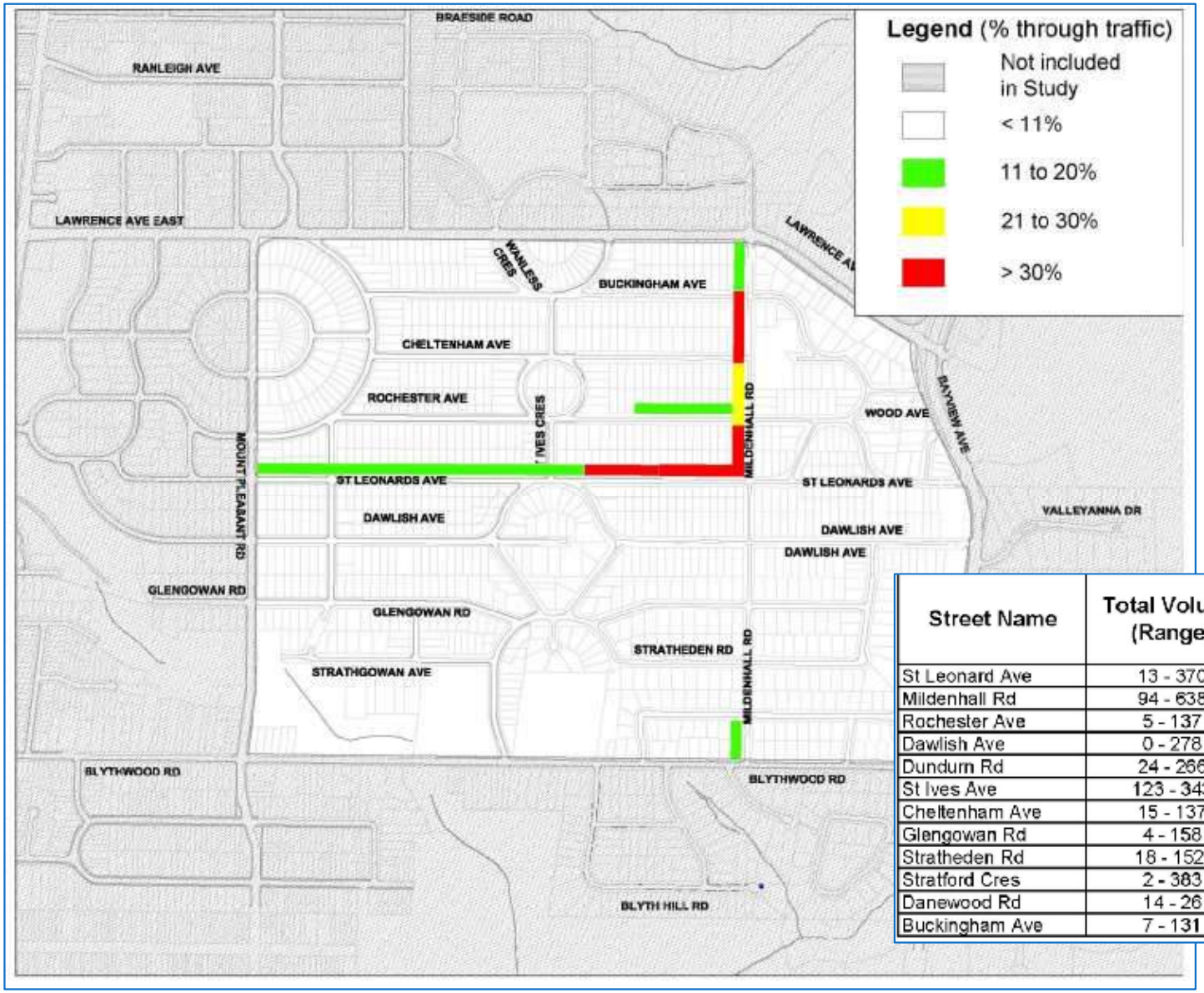
- To understand travel patterns in the study area traffic surveys and counts were conducted. Modelling was then undertaken to determine traffic movements, particularly the percentage of through traffic (infiltration) of vehicles

- To understand travel operations in the area turning movements at intersections were studied and the Level of Service (LOS) was estimated at several intersections

- To understand the state of safety in the study area measurements and safety indicators were studied and a collision analysis for the last 5 years was carried out

Traffic Volume & Percent Through Traffic - AM

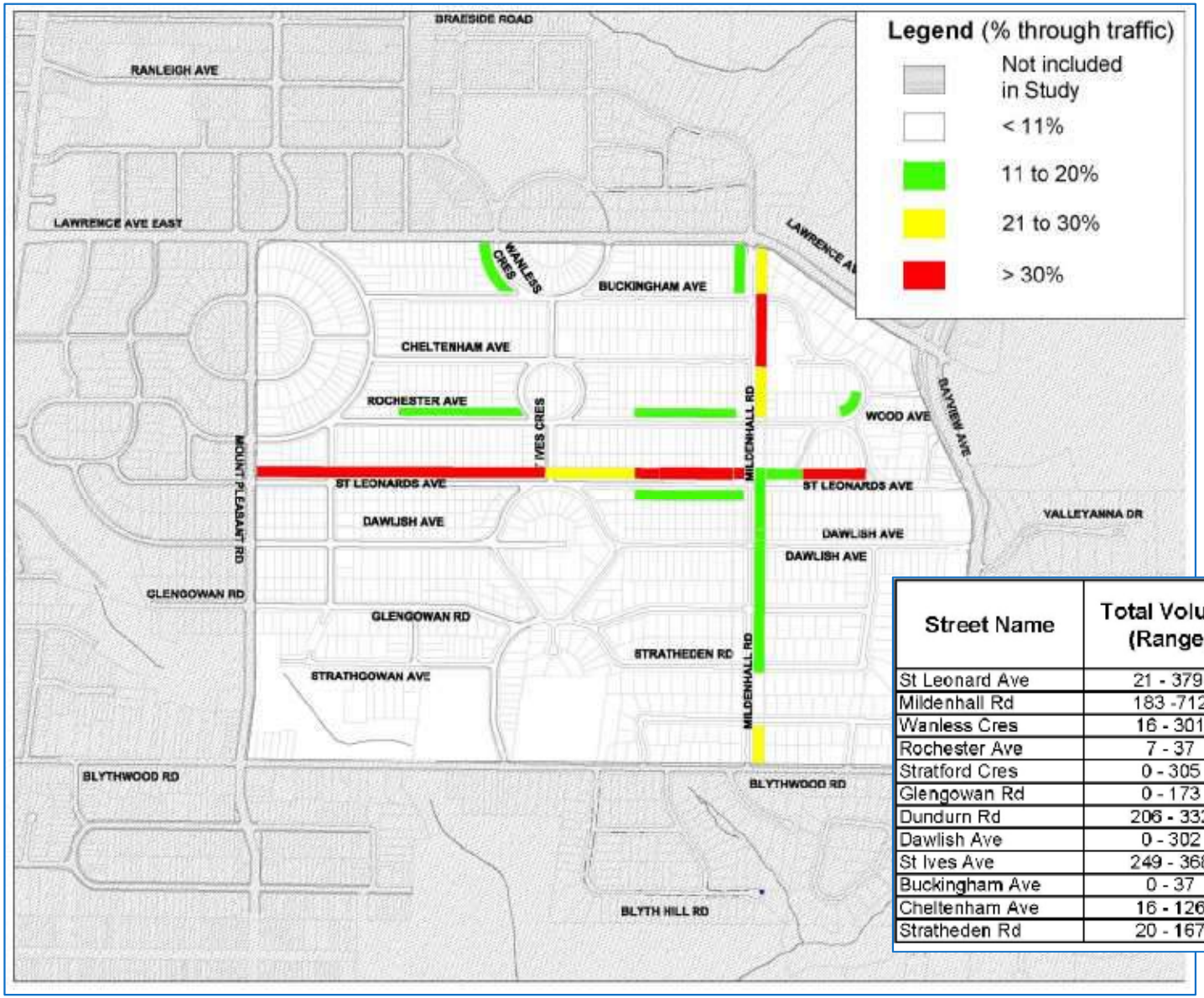
Provided on the accompanying figure is the percentage of through traffic for each street in the area. The table summarizes morning peak hour total volume and morning percentage peak hour through volume for representative streets in the area.



Street Name	Total Volume (Range)	% Through Traffic (Range)
St Leonard Ave	13 - 370	0 - 62
Mildenhall Rd	94 - 638	0 - 35
Rochester Ave	5 - 137	0 - 11
Dawlish Ave	0 - 278	0 - 6
Dundurn Rd	24 - 266	0 - 6
St Ives Ave	123 - 343	0 - 1
Cheltenham Ave	15 - 137	0
Glengowan Rd	4 - 158	0
Stratheden Rd	18 - 152	0
Stratford Cres	2 - 383	0
Danewood Rd	14 - 26	0
Buckingham Ave	7 - 131	0

Traffic Volume & Percent Through Traffic - PM

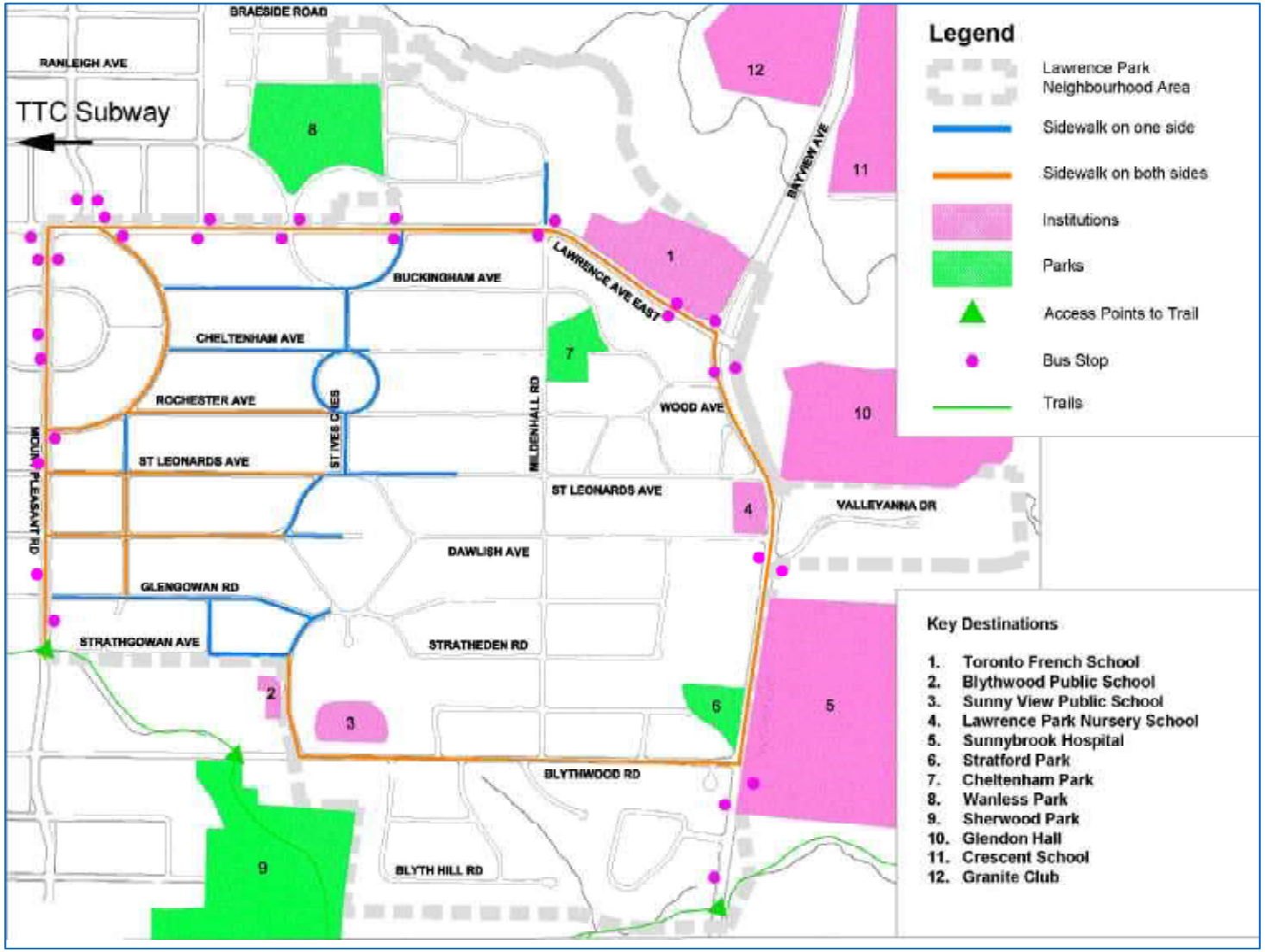
Provided on the accompanying figure is the percentage of through traffic for each street in the area. The table summarizes evening peak hour total volume and evening percentage peak hour through volume for representative streets in the area.



Street Name	Total Volume (Range)	% Through Traffic (Range)
St Leonard Ave	21 - 379	11 - 92
Mildenhall Rd	183 -712	7 - 37
Wanless Cres	16 - 301	0 - 13
Rochester Ave	7 - 37	0 - 11
Stratford Cres	0 - 305	0 - 10
Glengowan Rd	0 - 173	0 - 8
Dundurn Rd	206 - 332	0 - 7
Dawlish Ave	0 - 302	0 - 6
St Ives Ave	249 - 368	0 - 1
Buckingham Ave	0 - 37	0
Cheltenham Ave	16 - 126	0
Stratheden Rd	20 - 167	0

Existing Sidewalks & Key Destinations

Provided on the accompanying figure is the location of streets where sidewalks do, or do not exist. Also shown are several of the key destination points within, or close to, the study area.



Presenting a Long List of Alternatives

To address the existing conditions and issues, a long list of alternatives or options can be considered for each of the following items listed below. After reviewing your comments and reviewing the details for each option, the next public information meeting will present a short list of alternatives in order to arrive at a final preferred recommendation:

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

Evaluation Criteria

The following criteria will be used to evaluate each alternatives. It will help determine which alternatives should continue to be considered in selecting a preferred alternative or final recommendation.

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

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

Technical

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

Economic

- Capital Costs
- Operating/Maintenance Costs

Methods for Reducing Basement and Surface Flooding

Source Controls

Source control measures involve managing stormwater where it originates (roofs, roads, driveways), before it enters the City's sewer pipes.

Measures include:

- Downspout disconnection
- Rain barrels
- Catchbasin inlet controls
- Pervious pavements
- Soakaway pits
- Rain gardens
- Tree planting
- Low impact/Green development

Conveyance Controls

Conveyance control measures help to control stormwater as it travels along the drainage system (in pipes or along the road).

Measures include:

- Sewer pipe diversions, replacement or twinning
- Underground storage pipes
- Overland relief sewers and diversion
- Sealing Sanitary Manholes

End-of-Pipe Controls

End-of-Pipe control measures manage stormwater just before it is discharged to a watercourse (stream, river, or lake).

Measures include:

- Surface dry ponds
- Surface wet ponds or constructed wetlands
- Underground storage tanks

Stormwater Quality

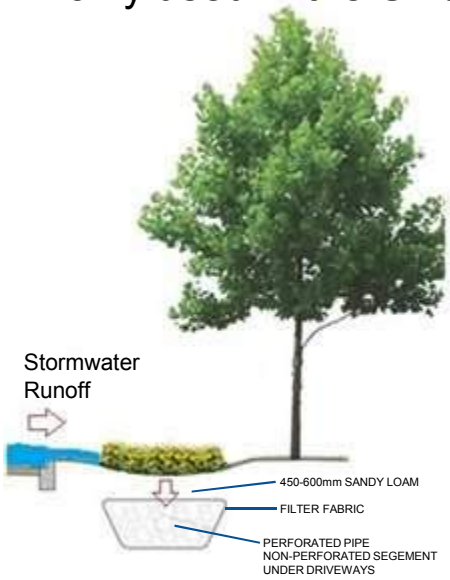
In 2003, the City of Toronto completed the Wet Weather Flow (WWFMP) Master Plan.

The overall objective was to develop a long-term plan to protect our environment and sustain healthy rivers, streams and other water bodies. One of the significant contributors to water pollution is stormwater runoff.

For this study area a number of different alternatives to treat stormwater runoff have been identified. The following board illustrates several types of measures that can be integrated into road or sewer reconstruction projects. The proposed measures include bioretention units and perforated pipe systems. These units, as shown in the accompanying schematic, allow treatment and infiltration of stormwater prior to discharging it to our streams or rivers.

Provided on the next slide are four general types of bioretention units which are being considered for this study area. The first two have been constructed within Toronto, the third is in an adjacent municipality. The fourth is commonly used in the United States.

Bioretention Unit

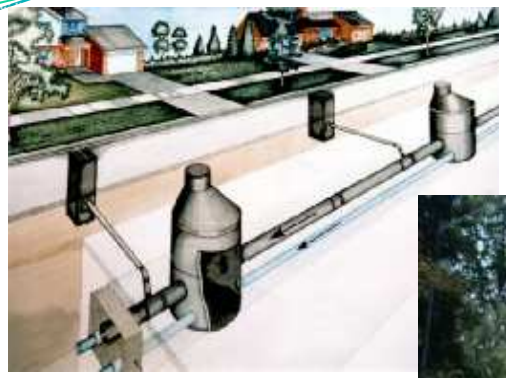


Perforated Pipe
Illustration

Perforated Pipe
Photo

Perforated Pipe System

Stormwater Quality Alternatives



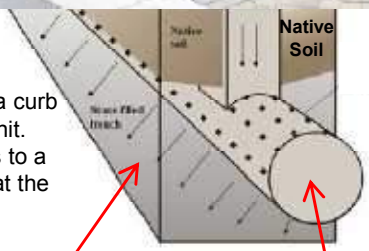
Stormwater is initially directed to a perforated pipe system located under the road. Excess flows are then directed to a conventional storm sewer.

Perforated Pipe System

Alternative No.1

Stormwater is directed to catch basins and a perforated pipe system located in the boulevard.

Alternative No.2



Stormwater is directed via a curb cut to the bioretention unit. Stormwater then infiltrates to a perforated sewer located at the bottom of the unit.

Alternative No.3

Alternative No.4

Stormwater is directed via a curb cut to the bioretention unit. Stormwater then infiltrates through the unit and is directed to a storm sewer located within the roadway.

TORONTO

Roadway Maintenance and Rehabilitation

- The pavement maintenance and rehabilitation alternatives for each road in the neighbourhood will depend on the findings and recommendations of the geotechnical investigations.

- The maintenance and rehabilitation alternatives will consist of: Full Depth Reconstruction, Full Depth Asphalt Removal, Partial Depth Removal, and Routine Maintenance.

- The Project Team will coordinate the pavement maintenance and rehabilitation recommendations with road improvement strategies, including timing of implementation, sewer reconstruction measures, and road types.

- The City will undertake necessary maintenance in accordance with Provincially mandated Minimum Maintenance Standards for Roads. Maintenance work may include filling potholes, localized and extensive patch work.

Alternative Roadway Cross Sections

The following boards illustrate existing roadways within the study area together with conceptual alternatives of what the roadways could look like after reconstruction.

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, that is:
  - Sidewalks are mandatory on both sides of collector and arterial roads, and on at least one side of local roads, where possible
  - Consideration is given to balance cost, existing conditions, community and local Councillor input (for local roads), and priority is given to creating pedestrian links
- Protection of existing trees where possible

Road cross sections illustrating urban (curb & gutter) and rural (swales) are shown. In several cases the conceptual illustration is the same as the existing roadways which suggests no changes may occur (or be proposed).

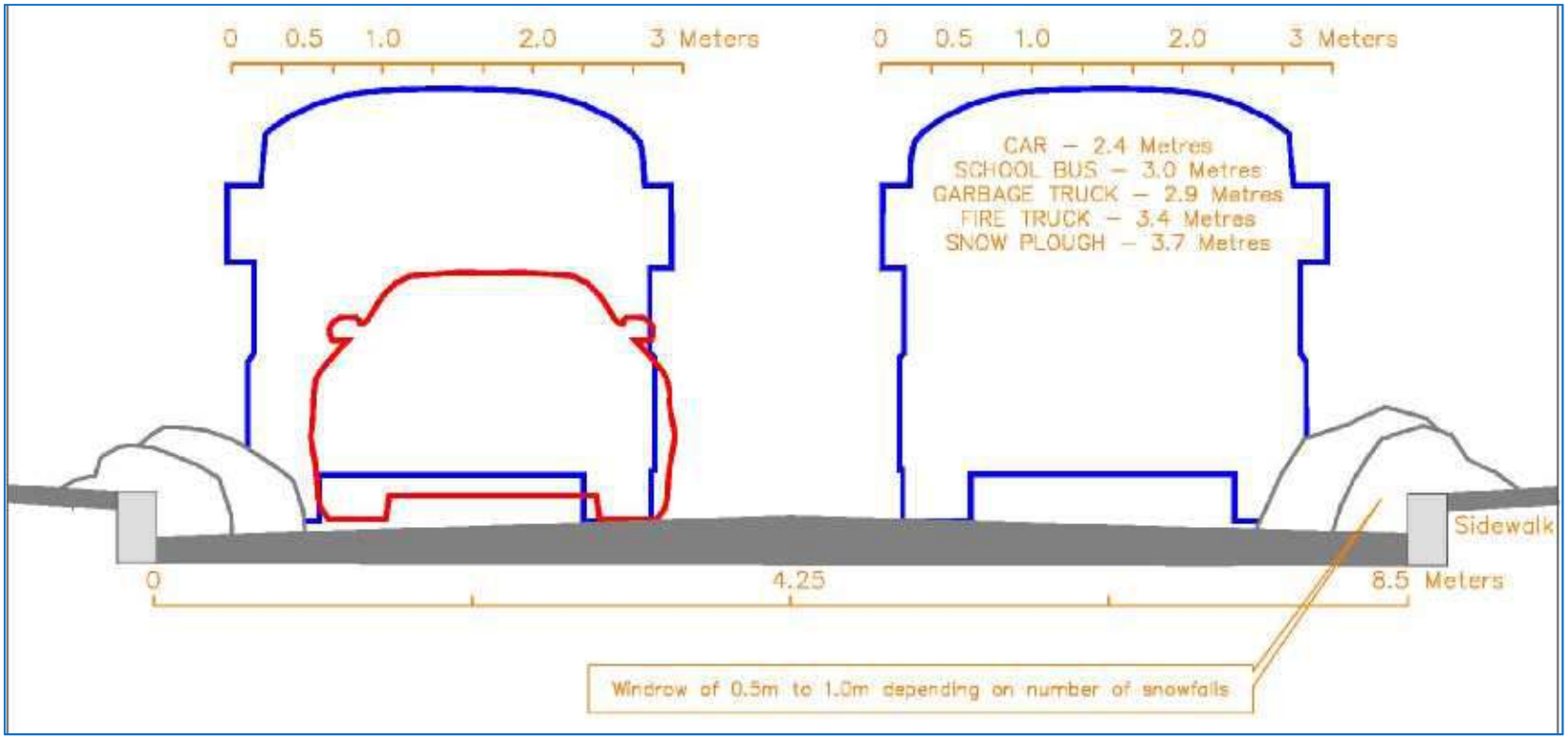
Preferred Road Width

The recognized transportation infrastructure policy for a local residential roadway within the City consists of a 20.1m Right-of-Way (ROW), an 8.5 metre paved road surface, concrete curb and a 1.7 – 2.0 metre sidewalk on one or both sides of road.

There are a number of factors which are considered in determining the road width. These include:

- Requirements for emergency vehicle access
- Requirements for service vehicle access
- Considerations for cyclist and pedestrian / vehicle conflicts
- Considerations for safe two way traffic flow
- Requirements for winter road maintenance
- Requirements for parking
- Provision of adequate widths for underground structures

Provided below is an illustration of several of the factors which are taken into consideration when defining the preferred road width.



Alternative Roadway Cross Sections

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

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

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Key Features

- 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

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- 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

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- 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

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Key Features

- 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

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

Alternative Roadway Cross Sections

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- Existing road width to remain at 8.5m
- Sidewalk, with boulevard to be constructed on one side of roadway

Alternative Roadway Cross Sections

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Existing tree may have to be removed due to road reconstruction

?

Key Features

- Existing road width would be increased from 8.0m to 8.5m
- Existing ditches on each side of roadway would be regraded to convey required flows
- Sidewalk constructed on both sides of roadway

Alternative Roadway Cross Sections

Existing

Conceptual

Legend

Road Width

Approximate Limit of Municipal Right of Way

Key Features

- 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

Sight Lines

Several alternatives can be considered to address the sight line problems at the identified locations:

- Removal of Obstructions
- Provide Signage for approaching traffic, e.g. Hidden Driveway
- Temporary reduction of posted speed
- Provide STOP sign at local roads
- Provide signals for intersections at Major Arterials

Traffic Considerations

Several alternatives will be considered to improve Traffic Operations & Safety in the Area:

- Road widenings & intersection improvements, e.g. cross walks
- Addition of turning lanes
- Installation of traffic control devices (e.g. signing, signalization)
- Drainage improvements which will also improve traffic, including pedestrian & cyclists safety.
- Geometric design options, e.g. sidewalks, improving sight distance if needed.

Next Steps

Following this Public Information Centre, the study team will review and consider your comments related to the long list of alternatives and evaluation criteria.

The next Public Information Centre (PIC #3) is expected to be held in Early 2014 to present the recommended solutions.

For more information on this study, or to provide your comments, please contact:

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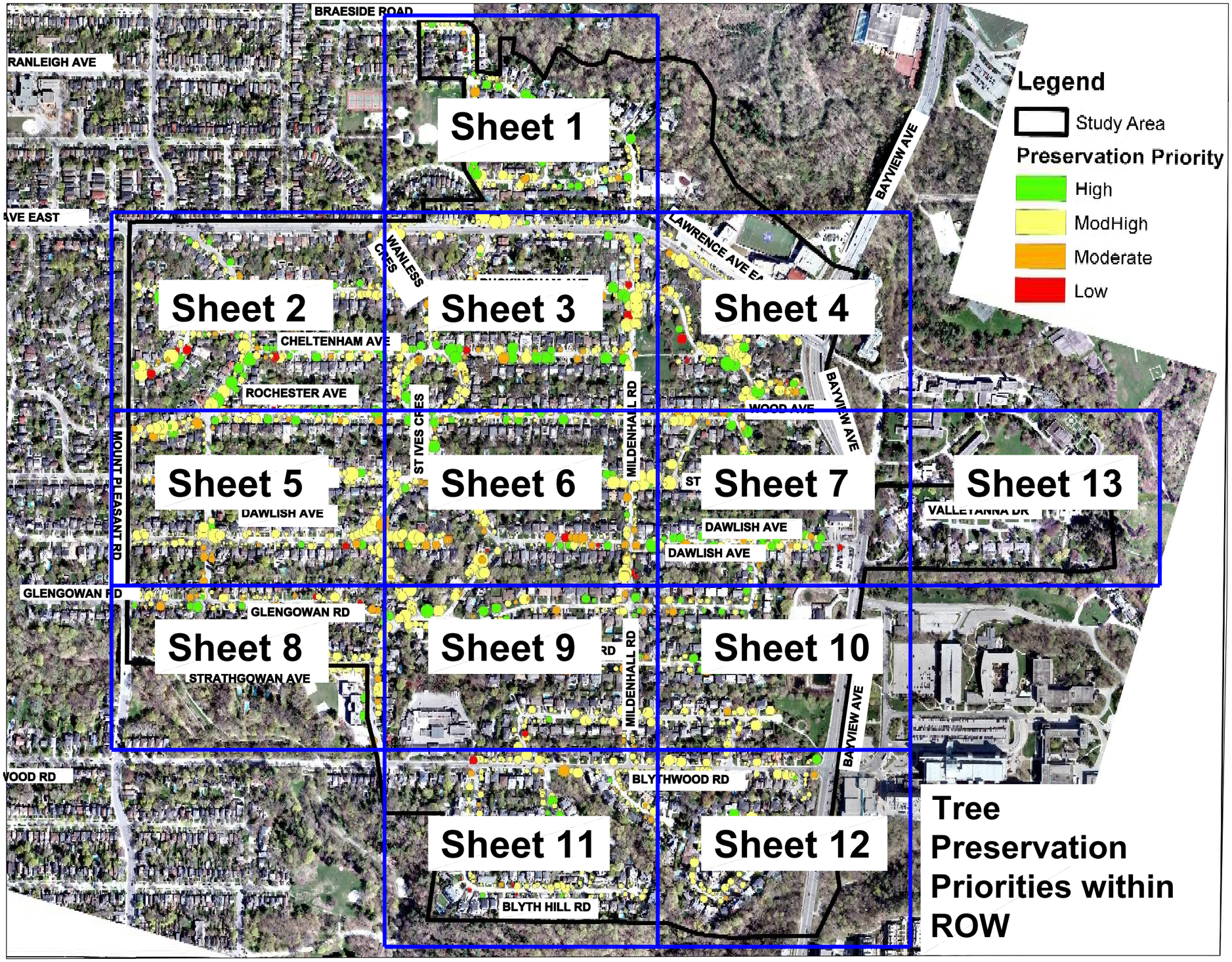
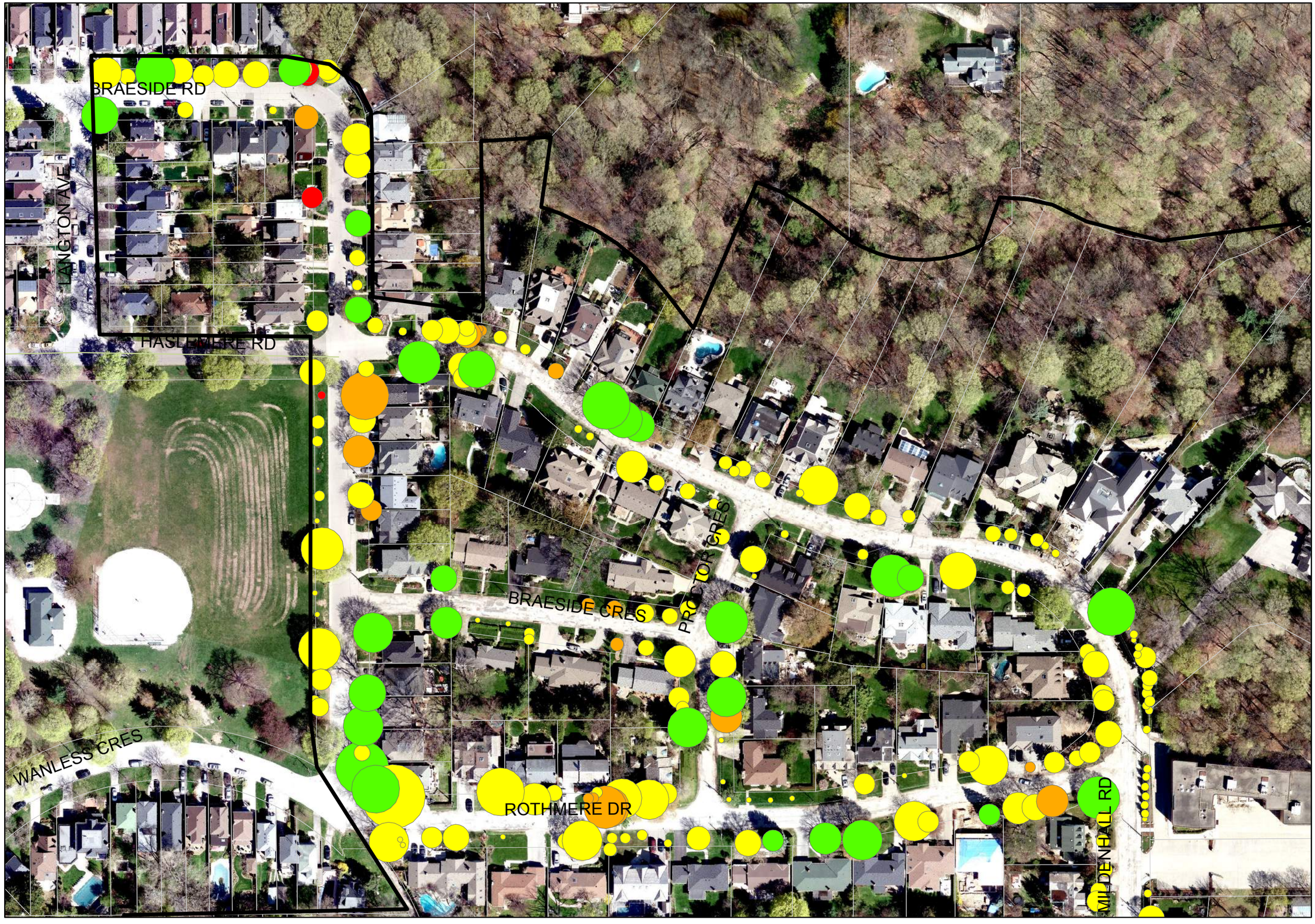
Toronto, ON M5V 3C6
Tel: 416-392-2962
TTY: 416-338-0889
Fax: 416-392-2974
Email: kkusiak@toronto.ca

Thank You and Questions



Tree Preservation Priorities within ROW



Legend

Study Area

Preservation Priority

- High
- ModHigh
- Moderate
- Low

Sheet 1


LAWRENCE AVE E
WANLESS CRES
LAWRENCE CRES
BUCKINGHAM AVE
MOUNT PLEASANT RD
LYMPSTONE AVE
CHELTENHAM AVE
DINNICK CRES
Legend
Study Area
Preservation Priority
High
ModHigh
Moderate
Low

Sheet 2

LAWRENCE AVE E

WANLESS CRES

WANLESS CRES

BUCKINGHAM AVE

MILDENHALL RD

BAYVIEW WOOD

ST IVES AVE

CHELTENHAM AVE

CHELTENHAM AVE

CHELTENHAM AVE

ST IVES CRES

ROCHESTER AVE

ROCHESTER AVE

Legend

Study Area

Preservation Priority

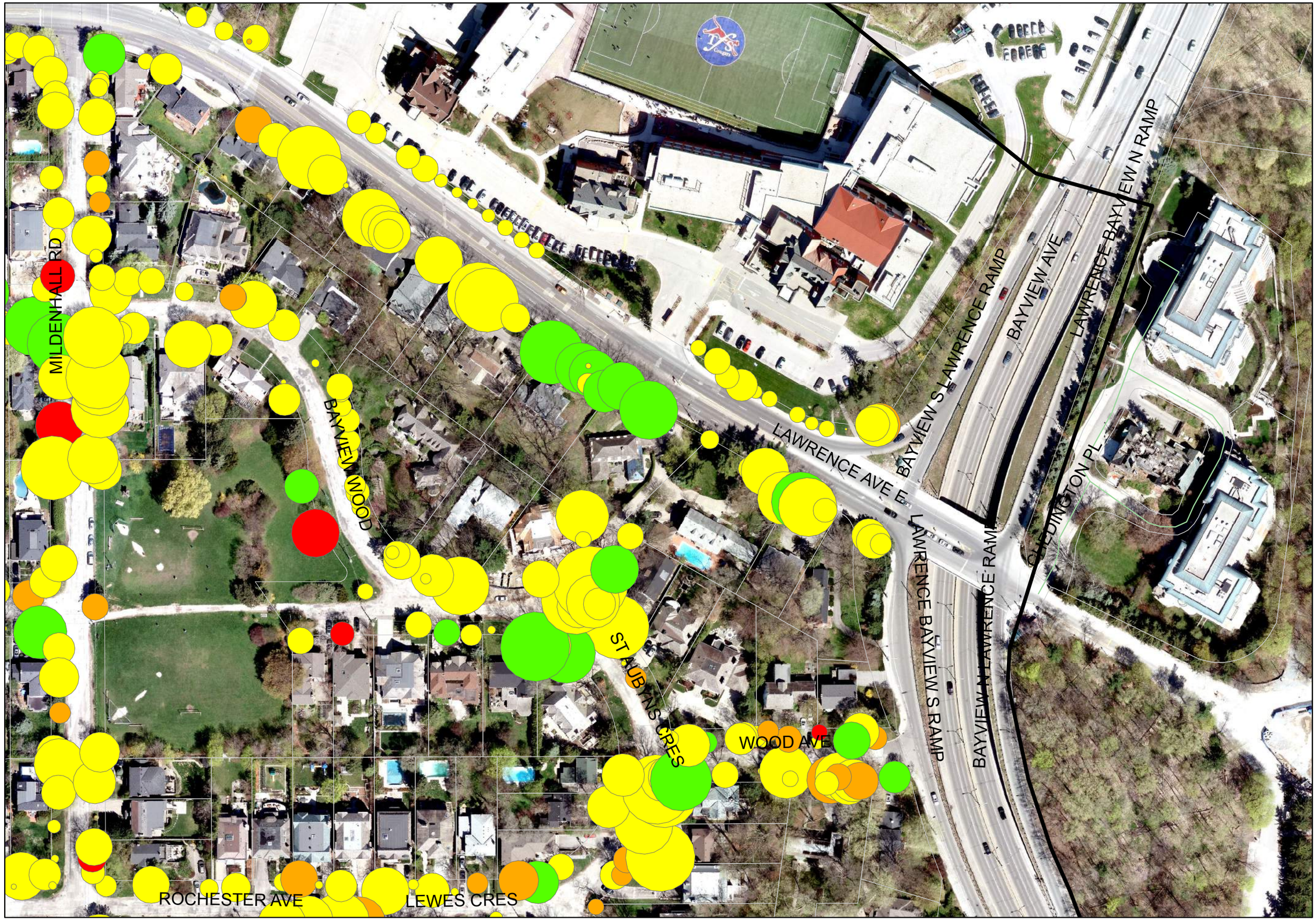
High

ModHigh

Moderate

Low

Sheet 3



Legend

- Study Area

Preservation Priority

- High
- ModHigh
- Moderate
- Low

Sheet 4


ROCHESTER AVE
DINNICK CRES
ST LEONARDS AVE
DUNDURN RD
MOUNT PLEASANT RD
DAWLISH AVE
PINEDALE RD
Legend
Study Area
Preservation Priority
High
ModHigh
Moderate
Low

Sheet 5

ST IVES CRES
ROCHESTER AVE
ST IVES AVE
ST LEONARDS AVE
ST LEONARDS AVE
ST LEONARDS AVE
ST LEONARDS CRES
DAWLISH AVE
DAWLISH AVE
MILDENHALL RD
FIDELIA AVE
PINEDALE RD

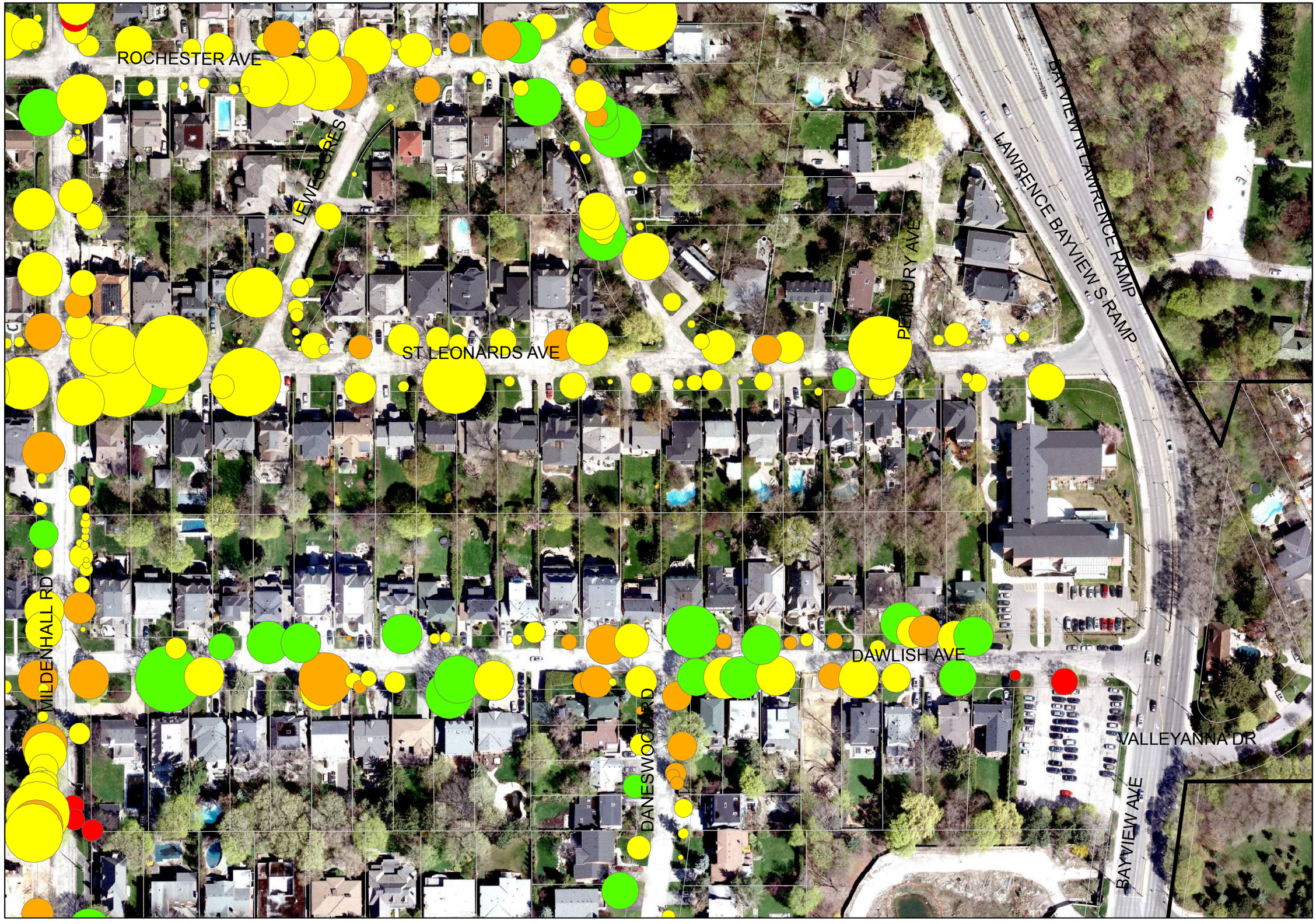
Legend

- Study Area

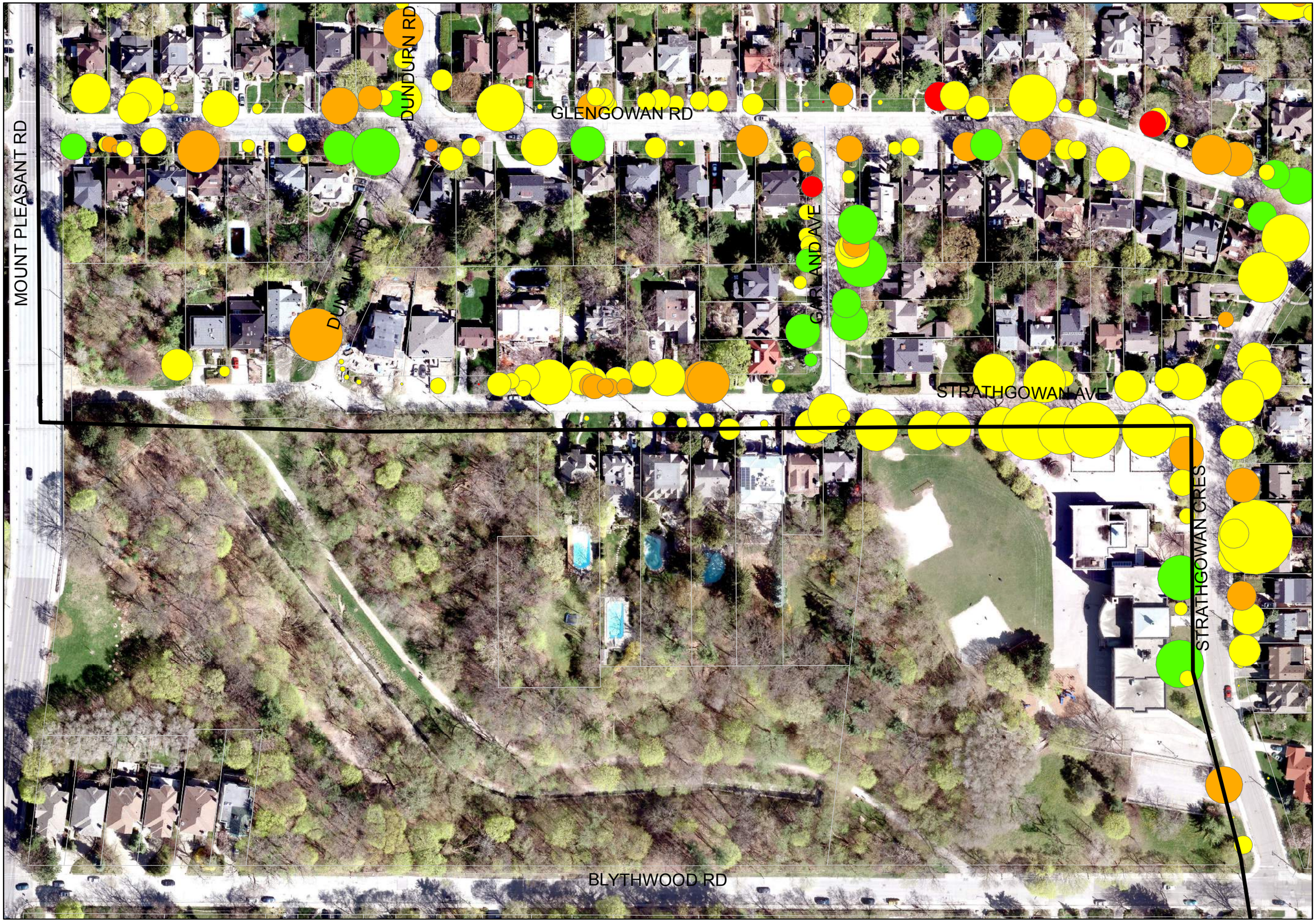
Preservation Priority

- High
- ModHigh
- Moderate
- Low

Sheet 6


ROCHESTER AVE
LEWIS CRES
ST LEONARDS AVE
PEMBURY AVE
LAWRENCE BAYVIEW S RAMP
BAYVIEW N LAWRENCE RAMP
MILDENHALL RD
DANESWOOD RD
DAWLISH AVE
VALLEYANNA DR
BAYVIEW AVE
Legend
Study Area
Preservation Priority
High
ModHigh
Moderate
Low

Sheet 7


MOUNT PLEASANT RD
DUNDURN RD
GLENGOWAN RD
DUNDURN RD
GARLAND AVE
STRATHGOWAN AVE
STRATHGOWAN CRES
BLYTHWOOD RD
Legend
Study Area
Preservation Priority
High
ModHigh
Moderate
Low

Sheet 8

PINEDALE RD
FIDELIA AVE
STRATHGOWAN CRES
PINE FOREST RD
GLENALLAN RD
MILDENHALL RD
STRATHEDEN RD
STRATFORD CRES
BLYTHWOOD RD

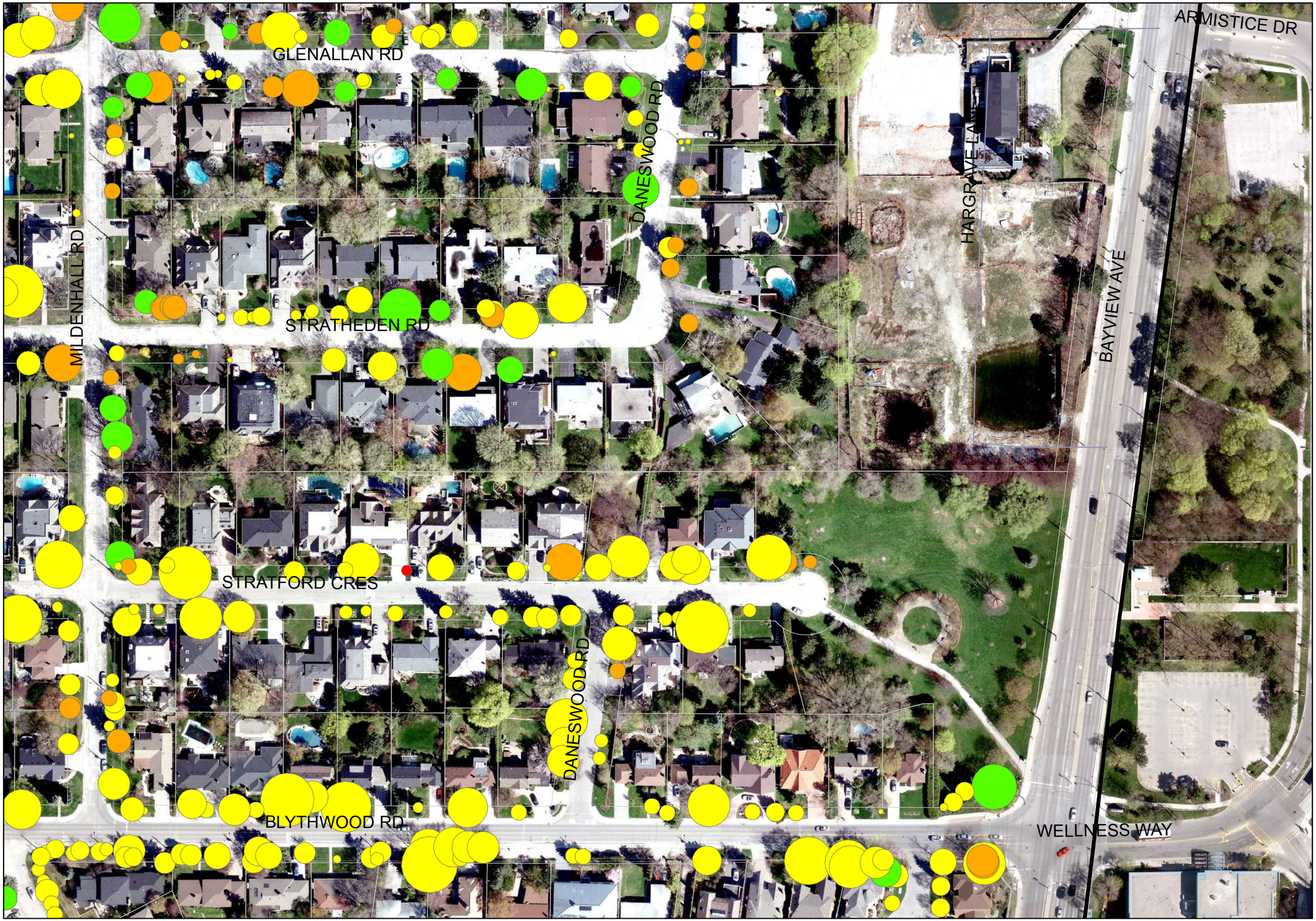
Legend

Study Area

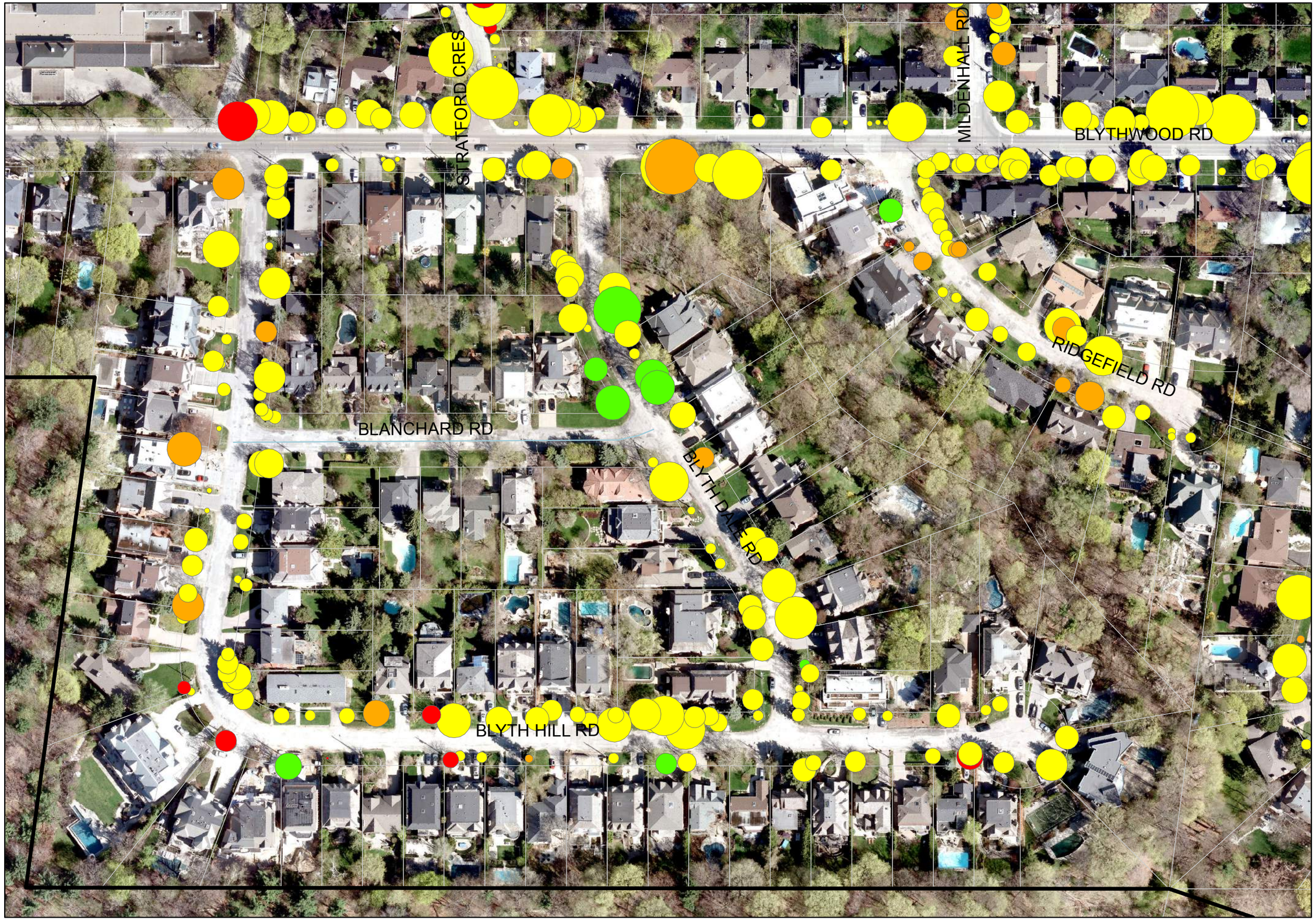
Preservation Priority

- High
- ModHigh
- Moderate
- Low

Sheet 9


GLENALLAN RD
MILDENHALL RD
STRATHEDEN RD
DANESWOOD RD
HARGRAVE AVE
ARMISTICE DR
BAYVIEW AVE
STRATFORD CRES
DANESWOOD RD
BLYTHWOOD RD
WELLNESS WAY
Legend
Study Area
Preservation Priority
High
ModHigh
Moderate
Low

Sheet 10



Legend

Study Area

Preservation Priority

- High
- ModHigh
- Moderate
- Low

Sheet 11


BLYTHWOOD RD
RIDGEFIELD RD
LAUREN CRT
BAYVIEW AVE
WELLNESS WAY
LIFE SAVING DR
SUNNYDENE CRES
Legend
Study Area
Preservation Priority
High
ModHigh
Moderate
Low

Sheet 12

Legend

- Study Area

Preservation Priority

- High
- Moderate
- Medium
- Low

Sheet 13