

***Please note:** the following are original appendices prepared for the City of St. Catharines, much of the information in the Practice Guide has been updated*

Appendix A1: Environmental Scan

Introduction

In general, the benefits of trees to humans and the environment are well documented. First, the ecosystem services provided by urban forests and greenery to residents are well-known and associated with many psychological and economic benefits. Urban forests are also key contributors to an area's ecological integrity. They contribute to improving ground water quality, reducing soil erosion and improving wildlife habitat. Urban forests can help in mitigating the effects of climate change by providing a cooling effect for nearby properties and reducing the heat island effect.

The purpose of this environmental scan is to identify and summarize research about tree protection and management in Ontario municipalities. This research will assist in understanding the current state of urban forest governance and management practices in Ontario, including popular research subjects and gaps in the literature. The next section of this report will outline the methods used for this review, followed by a discussion on key themes identified through this exercise.

Methods

Academic and grey literature were reviewed for this scan. It quickly became evident that research is primarily being conducted at the academic level. As mentioned, this environmental scan is focused on the governance and management of urban forests in Ontario, therefore, research about the benefits of urban forestry were not included. Keywords related to tree protection in Ontario were used to identify and gather relevant documents. Selected documents were further analyzed for key pieces of information and study findings. Based on the analysis, various themes were identified, which are outlined in subsequent sections of this report.

Findings

Based on our analysis, three key research themes arose: 1) tree management policies; 2) assessment of urban forestry methods; and 3) resident perspectives. This section will share findings related to each research theme.

1. Tree Management Policies

In recent years, many municipalities have shifted their approaches to urban forest management from a focus on the aesthetics and hazard reduction of public trees, towards ecosystem service provisioning and managing the entire urban forest - on both public and private lands - to support ecological integrity (Ordóñez & Duinker, 2013; Silvera Seamans, 2013 in Conway, Almas, & Coore, 2019). The first subsection deals with the literature on prevalence of urban forest policies in municipalities across

Ontario. This is followed by literature discussing how municipalities in Ontario have dealt with native species in their urban forest policies.

1.1 Distribution and nature of municipal urban forest policies in Ontario.

A research paper from the University of Toronto (Yung, 2018) exploring common urban forestry policies in Ontario municipalities found that the most common policies are pest and disease control policies, landscape guidelines, and standards for development, whereas less common common policies included tree planting and greening strategies.

Yung's research paper (2018) and another study Conway and Urbani (2007) found links between specific characteristics of municipalities and the type of tree management practices adopted by them. More specifically, they found that municipalities with a population higher than 3,000 have a higher probability of having tree by-laws. Along similar lines, more extensive and private tree by-laws were noted in more urbanized municipalities. The study highlighted the Town of Oakville as being a rapidly growing municipality with an active tree planting, replacement, and monitoring program.

In general, upper-tier municipalities are more involved in urban woodland and woodlot management, while lower-tier municipalities focus on policies and programs related to street trees and trees on private residential property (Conway & Urbani, 2007). However, these studies indicate that a higher percentage of upper-tier municipalities have tree by-laws in comparison with lower-tier municipalities. This has been ascribed to resource constraints and the population threshold for enacting conservation by-laws (i.e. only lower-tier municipalities with a population greater than 10,000 can monitor and regulate tree cutting according to the Municipal Act) (Barker & Kenny, 2012).

A comparative analysis of current tree by-laws carried out by Yung (2018) shows that urban forestry practices among municipalities vary when it comes to the establishment and management of trees. For example, while some by-laws refer to International Society of Arboriculture, others refer to American National Standards Institute when discussing best practices within the context of tree by-laws. Some of the cities recognized in these studies for carrying out notable work in tree protection include Toronto, Oakville, Peterborough, London and Vaughan.

A report from Queens University (Douglas, 2016) comparing the UFMPs of London and Mississauga used 12 indicators to measure how well the plans fare. These 12 indicators fall within four major categories: context and goal setting process, incorporation of ecological principles, stakeholder involvement cum cooperation, and implementation strategies. The study identified the implementation strategy as a strength in Mississauga's UFMP, but it did not fare well during public consultation. London's plan on the other hand fared well when it comes to public consultation undertaken for this plan.

Based on the analysis of these UFMPs, the report offers some valuable recommendations, including adopting "active adaptive management" (adapting plan to changing conditions) and taking a collaborative approach both internally and externally to ensure a consistent approach to implementation. This report also asks planners to complement UFMP with planning tools like site plan controls, urban design guidelines and development permits.

1.2 Management of native and non-native species.

According to recent research conducted by Dr. Tenley Conway and other researchers from the University of Toronto (2019), there are observed challenges in managing urban forests for ecosystem services (i.e. goods/services produced by urban forests that contribute to human well-being) and ecological integrity (the natural composition of species and/or habitat). This is especially true with regard to native tree species. In general, the ecosystem services approach has conflicting views about native versus non-native species' ability to provide these services, while the ecological integrity approach consistently views native species as positively contributing to the area's integrity.

In their study, researchers compared 17 urban forest management plans in Ontario - ranging from smaller towns (e.g. Port Hope) to large urban centres (e.g. Toronto) - and found that all municipalities include both the ideas of ecosystem services and ecological integrity in their plans, yet the importance of native species is only raised when discussing the topic of ecological integrity. Overall, this report highlights the tension between the two concepts' relationship to native species. Based on these findings, the authors suggest developing ecosystem services that are linked to specific land uses to would help guide species selection, employing a more holistic framing to ameliorate the tension between managing urban forests for ecosystem services and ecological integrity, and considering the stressors unique to urban and non-urban areas that might suit native or non-native species (Conway, Almas & Coore, 2019).

Along similar lines, another study examined how municipalities in Ontario manage native trees species (Almas & Conway, 2016). When comparing municipalities with and without UFMPs, researchers found that municipalities with UFMPs emphasized the importance of native species and wanted to increase the proportion of native species in the urban forest. However, the UFMPs were unclear about how to achieve this - no plan indicated target ratios for native to non-native planting, what the number or percent of native species should be, or situations when native or mostly native species should be used.

As part of this study, interviews with municipal foresters were conducted, which highlighted the effectiveness of UFMPs in affecting planting trends in the municipality, the benefit of tree planting authority being held by a single department, and the effective use of contracts with nurseries to specify tree provenance. In general, interviewees believed that native tree planting increases ecological integrity, however, all municipalities left at least 35 species native to Carolinian Canada (Southern Ontario) off their planting lists for unknown reasons. This research suggests that as municipalities continue to adopt UFMPs, the role of native tree species in achieving tree canopy goals needs to be identified and operationalized (Almas & Conway, 2016).

The research shows that due consideration should go into urban forestry planning for balancing the ecosystem services and ecological integrity. It further shows that identifying target ratios and percentage of native and non native species should be a priority as it hasn't been prioritized in UFMPs so far.

2. Assessment of Urban Forestry Methods

In general, research that assesses methods used to increase tree canopies in Ontario is limited, especially since long-term canopy cover data is scarce (Bonney & He, 2019). This section will highlight two studies with similar conclusions about the state of tree canopy measurement programs.

In 2016, researchers from the University of Waterloo explored urban foresters' perspectives of assisted migration - a process where non-native species are used in anticipation of future climate change - as an urban forest management strategy in Southern Ontario (Fontaine & Larson). They found that although urban foresters are aware of the concept of assisted migration, it has remained "more of a theoretical concept than a management tool" (Fontaine & Larson, 2016). Despite this, many municipalities are unknowingly employing assisted migration strategies - for example, southern tree species are being planted at the northernmost end of their range, and non-native trees are being planted in areas where native trees cannot adapt and/or where their growth is compromised.

In 2019, a study team from the University of Toronto used leaf-off aerial photographs to track tree density changes in Mississauga from 1944 to 2017 (Bonney & Hey). They found that in the case of Mississauga, tree density was able to recover, be maintained, or even increase post-development. The results of this study demonstrate that the enforcement of tree replacement by-laws and other initiatives have been successful, and shows municipalities currently experiencing high agricultural to suburban development what they can expect following their development.

In the concluding remarks of both studies, the authors allude to why this area of research is limited. For example, in the assisted migration study, Fontaine and Larson (2016) explain that limited current and historical information about municipal urban forests restricts the effective use of assisted migration - but highlights its importance, as "comprehensive and ongoing data collection allows urban foresters to detect problems early and manage proactively" - thus highlighting a significant barrier to assessing urban forestry management tools (Fontaine & Larson, 2016). Further, Bonney and Hey (2019) indicated that no comparable studies have been conducted, which is perhaps due to the difficulty of accessing and working with aerial photographs not originally intended for tree management purposes. Overall, these studies point to the necessity for municipalities to collect tree canopy data so they can more adequately evaluate the effectiveness of policies and programs put in place to preserve and maintain their urban forests.

3. Resident Perspectives

As highlighted by Almas and Conway, "residents may be the least understood but perhaps the most important" with regard to urban tree management efforts, since "the majority of trees in the urban forest are located on private property (Nowak, 2012 in Almas & Conway, 2016). Over the last decade, several Ontario-based studies have been conducted to determine residents' role in tree protection and management at the household level - most notably from Dr. Tenley Conway and associates at the University of Toronto.

3.1 Neighbourhood-scale.

Conway and associates conducted two neighbourhood-level studies in Mississauga - one to assess resident support of urban forestry policies (Conway & Bang, 2014), and another that explored resident motivations for tree planting and removal (Conway, 2016). With regard to the first study, researchers determined that most residents in Mississauga support common municipal policies that encourage the planting and/or restrict the removal of trees, but found that residents in newer neighbourhoods, who recently moved to the area, who have a university degree, and whose household does not include

seniors were more supportive of these policies. These results demonstrate the potential for residents to be willing partners in tree planting and protection efforts.

Conway's 2016 study of the same Mississauga neighbourhoods found that residents' engagement in tree planting and removal activities were primarily motivated by aesthetic reasons. However, variance in actual tree density from household to household suggests that residents have differing ideas about desired aesthetics. Findings from this study demonstrate a disconnect between residents and municipalities - as municipalities have demonstrated a shift away from beautification towards ecological service provision - and highlights the need for municipalities to "better consult with residents when establishing urban forestry goals and identify actions residents can take to help meet adopted city's goals" (Conway, 2016).

3.2 Municipal scale.

Conway has also participated in studies comparing residents' attitudes across four municipalities - two with UFMPs (London and Oakville), and two without (Hamilton and Markham). In their 2017 study of residents' knowledge of native tree species, they found that their knowledge levels were generally low whether or not their municipality had a UFMP - despite UFMPs' emphasis on resident education and program adoption (Almas & Conway, 2017). Researchers attributed these findings - in the case of municipalities with UFMPs - to the short period of time that the plans have been in place, but also to their poor communication of the plan's goals to residents.

They furthered this study in 2018 when exploring residents' attitudes and actions toward native tree species, where they found that residents believe native species are more beneficial than non-native species in urban areas, but that native status was not a primary consideration when choosing a tree to plant on their property. However, in municipalities with an UFMP, respondents were more actively engaged in planting native trees, planting and removing trees on their properties, and had more trees on their properties. Overall, the results highlight the "need for municipalities to more actively engage residents regarding the goals and targets of their management plans, and to reinforce the property-level value of planting native trees to achieve resident buy-in for these initiatives" (Almas & Conway, 2018).

Resident perspectives are a growing sector of urban forestry research in Ontario, especially as municipalities continue to adopt UFMPs and other tree management tools and since these tools typically warrant some type of resident participation. Since more than half of every municipality's urban forest is located on private residential property, it is imperative that municipalities consider means of meaningful public engagement to ensure canopy growth and sustainment.

Conclusion

As this report demonstrates, research pertaining to urban forestry is a small but growing field in the province of Ontario. As municipalities become increasingly aware of the ecosystem services provided by urban forests, they enact protection and management plans, policies, and programs. Based on these findings, several conclusions about the state of urban forestry in Ontario can be made. First, the lack of best practice guidance from the province has resulted in a wide range of municipal urban forestry plans and policies. Second, the effectiveness of these plans and policies is difficult to assess, as these plans often lack concrete measurements and targets, and due to the absence of historical tree canopy data.

Finally, residents are willing to be active participants in tree preservation and management programs, but must be engaged meaningfully. Since the era of municipal tree protection efforts is still in its infancy, it is expected that this field of research will continue to grow and inform best practices for tending to their urban forest.

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Appendix A2: Municipal Scan

Methods

Relevant policy documents from select municipalities were used for this scan. These documents were reviewed for policies relating to tree protection, management, and enhancement. The objective of this scan was to determine if and how municipal policies address trees, tree canopies, and landscaping and how policies, guidelines, and regulatory tools are used to preserve and maintain trees.

While scanning each policy document, relevant policies pertaining to tree preservation and management were recorded and grouped according to emerging themes for further analysis. Tree-related programs aimed at enhancing the tree canopy, the number of trees in the municipality, and general tree education were also noted.

A total of 17 municipalities were scanned for this policy analysis, consisting of ten identified in the City of St. Catharines' Municipal Comparators Report [CAO-061-2015], six identified through the Environmental Scan, and the City of St. Catharines. At minimum, each municipality's Official Plan, tree-related by-laws, urban design guidelines, and Urban Forest Management Plan were obtained and scanned for tree-related policies.

Below is a table listing the municipalities included in this scan.

Comparable Municipalities		Additional Municipalities	
1. Barrie	6. Niagara Falls	11. Ajax	16. Toronto
2. Cambridge	7. Oshawa	12. Mississauga	17. Vaughan
3. Guelph	8. Thunder Bay	13. Oakville	
4. Kingston	9. Waterloo	14. Peterborough	
5. Kitchener	10. Windsor	15. St. Catharines	

The municipalities reviewed for this report had varying policy frameworks to address tree protection and management. Further, the Urban Forestry Management Plans varied in approach - some were comprised of recommendations for the municipality to implement while others were applicable only to public trees (e.g. Kingston). The table below identifies the policy documents that each municipality has to monitor and regulate trees.

Municipality	Official Plan	Private Tree By-law (Municipal)	Urban Design Guidelines	Urban Forest Management Plan
Ajax	✓	✓	✓	✓
Barrie	✓	✓	✓	

Cambridge	✓		✓	✓
Guelph	✓	✓	✓	✓
Kingston	✓	✓	✓	✓ (public trees)
Kitchener	✓	✓	✓	✓
Mississauga	✓	✓	✓	✓
Niagara Falls	✓		✓	✓
Oakville	✓	✓		✓
Oshawa	✓	✓		
Peterborough	✓	✓		
St. Catharines	✓		✓	✓
Thunder Bay	✓		✓	✓
Toronto	✓	✓	✓	✓
Vaughan	✓	✓	✓	✓
Waterloo	✓		✓	
Windsor	✓			

Key Findings

After completing the document scan, four (4) distinct themes emerged. Policies pertaining to tree protection and management in municipalities explored demonstrated one or more of the following themes: 1) protection & preservation; 2) design element & amenity; 3) urban resilience; and 4) enforcement. Further, within each theme, nuances exist in the language used for each policy and the exact application of each policy. For example, some contained direct language (e.g. “shall”) whereas others were more open to interpretation (e.g. “encouraged”). The four (4) main themes will be explored in-depth below.

1. Protection & Preservation

The first theme that emerged from the policy scan pertains to the protection and preservation of existing trees. This theme is broad and encompasses a range of policies related to the preservation of trees on a site during the development process, or if being altered through a planning application. Further, most policies within this theme were premised on protecting existing trees on properties when development or alterations to a site were proposed through a formal planning application. As the majority of the municipal policies fell within this theme, sub-categories have been established to further articulate findings.

Language of Policy

Of the policies that focused on protection and preservation, some policies included general and non-binding language. For example, Guelph's Official Plan states, "*where possible*, existing trees should be retained on-site and *where appropriate* suitable new trees *should* be planted on-site, in the street right-of-way or in other City-approved locations" (8.17 Landscaping and Development). Many other municipalities use similar language that - although draws attention to the need to consider trees in the development process, can be interpreted as a suggestion to the applicant for consideration. These policies are not particularly binding in the phrasing or application. Without clear standards for the level of consideration that 'should' be dedicated to retaining existing trees or the planting of new trees, such policies may not lend strongly to tree protection objectives.

In other cases, Official Plans were more rigorous and used language prompting the protection of trees as a key factor in the development process. An example of this is demonstrated in Barrie's Official Plan, which states, "wherever possible the protection of treed areas, hedgerows and other natural areas *shall be* incorporated into the design, and the planting of new trees *shall be* encouraged" (6.5.2.2 General Design Guidelines d) Environmental Features iv)). Although similar to the previous example, this directs that tree protection be incorporated into the design of the proponent through the development process. This language clearly communicates that tree protection ought to be considered, which makes the protection of existing trees on a site a matter that is enforceable by a municipality.

Replacement & Relocation of Trees

Some policies approached tree protection and preservation through directives focused on the replacement or relocation of trees. These policies direct proponents to replace any trees demolished due to construction in order to preserve the pre-existing landscape. These policies can be used to address the challenge of preserving trees if the proposed site development or alteration does not allow for existing trees to be retained. By including policy language about replacing trees, proponents must consider the replacement of trees through the development process. This is a 'next best' approach to address the loss of trees if a proposed development fails to preserve existing trees on site. An example of this type of policies reads as follows: "Council may require proponents of development and infrastructure undertakings to submit an inventory of trees on site and prepare and implement a tree conservation and replacement plan" (Windsor Official Plan 5.3.6.7).

It is acknowledged that some proposed developments will not be able to preserve all trees located on the property due to the various site configurations - some are adjacent to woodlots, some may have existing mature trees, while others are undeveloped and have trees dispersed all over the property - which makes change impossible without destroying trees. By including policies that speak to this scenario, municipalities can address tree protection from a variety of angles. This further communicates to proponents that trees are an important feature within the municipal boundary.

Preservation of Perimeter Trees

In very few instances were perimeter trees mentioned in the policy documents scanned. The preservation of perimeter trees has been identified as a potential for municipalities to encourage more intense development and keep existing trees on sites. By outlining the protection of perimeter trees, more intense development becomes a more viable option for proponents as they cannot build larger floor plates if existing perimeter trees are on site. This can be viewed as accomplishing two major goals: preserving trees and influencing more intense development. Ajax includes a policy within the Employment Areas Urban Design Guidelines document that delineates the preservation of perimeter trees: “preserve all existing perimeter trees with minimal changes to the area beneath the drip line. Locate underground services and utilities so as not to encroach within the drip line of trees to be preserved, to minimize disruption to the root system” (4.3 Landscaping).

Heritage Protection

Lastly, a small number of policies framed tree protection as a matter of preserving heritage landscapes or the natural heritage features of neighbourhoods. Framing tree protection in this manner allows municipalities to champion the importance of protecting trees via the development process. Heritage preservation has long been a significant consideration within the development process, with public interest also vested in the matter. Thus, by framing tree protection as a heritage preservation matter, municipalities can use this approach to communicate the overall importance on preserving trees within the jurisdiction. It is an important consideration as designated heritage items are protected with additional rigorous policies through the Ontario Heritage Act (1990). An example of this type of policy can be found in the Official Plan for Guelph. The policy states: “The City shall identify, evaluate and conserve heritage trees which satisfy one of the criteria for determining cultural heritage value or interest as prescribed by regulation under the Ontario Heritage Act.

2. Where heritage trees have been identified by the City, they will be protected through appropriate measures under the Ontario Heritage Act while having regard to the health of the tree and public safety (4.8.8 Heritage Trees: 1.).

2. Design Element & Amenity

The second theme that emerged from this scan was Design Element & Amenity. Many of the policies within the documents premised the use of trees as a means to maintain existing character or enhance the character of an area. Some policies were presented from the perspective of the personal amenities that trees can provide people.

Policies that address tree protection and management through a design-focused lens championed the aesthetic benefit of trees and the material benefits that trees can provide residents. Through Kingston’s Official Plan, those making certain changes to the built environment are directed to consider that “the review of requests to establish front yard parking spaces must address the following criteria: the residual portion of the front yard shall be landscaped and consist

of grass or similar groundcover, trees, or shrubs to provide for suitable streetscape enhancement, buffering from adjacent properties and visual relief from the paved areas” (Front Yard Parking in Existing Residential Area - 4.6.60). Many design-related policies regarding trees were found within Urban Design Guidelines, with some also found in Official Plans. Such policies encourage proponents to include tree plantings on a site to achieve a desirable look for an area, which in itself can act as an incentive for proponents to contribute to the overall tree canopy.

In terms of purporting the benefits of trees, the Urban Design Guidelines for Thunder Bay include a policy for Parks and Open Space that states “playground equipment should be imaginative, easily maintained and should be located in areas shaded by trees” (2C Uses and Amenities: b)). This type of policy clearly links the personal benefits that an individual could benefit from a tree - in this case, shade is identified as the key benefit for community members. The policy - and similar ones, calls for trees to be either planted or maintained for specific reasons, making it clear to proponents the *importance of* and *reasons for* including these features.

By including policies for tree protection and management through a design-focused means, it may serve as a way to encourage tree planting or protection in a municipality through reframing as a desirable aspect for the community. These policies communicate to development proponents that trees should be added into a site plan in order to achieve a desirable aesthetic, or to provide a distinct benefits to users of a space. Although trees do play a role in improving the look of a space, trees provide a host of important benefits beyond an individual’s personal gain from the existence of a tree.

3. Urban Resilience

The policies within this theme deal with the resilience of the urban system, especially its ecological components, with an emphasis on trees and urban forests. Policies which reflect urban resilience do not necessarily refer to the concept outright. Many of the policies identified under this theme deal with protecting significant environmental features, planning green and sustainable development, greening the urban landscape, climate-appropriate planting, conservation and monitoring. Trees are not the specific focus of many of the identified policies, which deal more generally with environmental features.

Most official plans contain references to the value of the natural environment and the benefits that nature provides to residents. Where official plans discuss the resilience benefits of trees, these benefits often include shade generation, urban cooling, air purification, slope stabilisation, erosion mitigation, and aesthetic value. Generally, mature trees are considered to deliver superior benefits relative to immature trees, and as a result mature trees may be favoured by protection policies. Many official plans emphasize the importance that the municipality places on its natural features. There is a great deal of variability in the policies, regulations and actions which Municipalities adopt to pursue their natural resilience goals. Regulations which protect environmental features are often incorporated in the development approval process. This may help explain why very few official plans contain substantial policies which govern how minor environmental features such as trees should be managed on private property.

Many municipalities employ a Natural Heritage System (NHS) (Kingston, Niagara Falls, Oshawa) Natural Heritage Network (Vaughan) Green Space System (Toronto) or some similar scheme as a measure to protect and enhance the ecological network within their city. The City of Waterloo defines the NHS as follows: “The Natural System consists of Landscape Level Systems, Core Natural Features, Supporting Natural Features, fish habitat, Restoration Areas, and Linkages” (8.2.2 General Policies). More restrictive development policies generally apply on lands which are close to features identified for protection under one of these NHSs. The official plan of the City of Niagara Falls states that “When considering development or site alteration within or adjacent to a natural heritage feature, the applicant shall design such development so that there are no significant negative impacts on the feature or its function within the broader ecosystem. Actions will be undertaken to mitigate any unavoidable negative impacts.” (11.1 Natural Heritage System). Natural heritage protection areas are normally delineated through a map attached as an appendix to the official plan.

Some plans discuss the importance of creating and maintaining a robust ecological network connected through ecological linkages. The City of Vaughan references ecological linkages in Official Plan section 3.3.3 Woodlands: “an application for development or site alteration on lands adjacent to woodlands will not be considered by Council unless... b) an evaluation is carried out to determine that the required minimum vegetation protection zone between the woodland and the proposed development is sufficient to maintain or enhance existing functions, attributes and linkages of the woodland.” This language is normally tied to the natural heritage system and emphasizes how this systematic approach to protecting natural features is key for producing positive resilience outcomes. One shortcoming of this approach is that the heritage system is normally defined spatially to include provincially and locally significant woodlands and wetlands. Much of the previously developed urban landscape is outside the boundaries of these protections. The city of Guelph addresses this through policy 4.1.6 Urban Forest “To ensure that opportunities for protection of trees outside the City’s Natural Heritage System are fully considered through the planning process”. The City of Mississauga extends protection to mature trees outside the NHS through policy 16.5.3.1 “Notwithstanding the Natural Heritage System policies of this Plan concerning residential woodlands, sites with mature trees will be subject to a review of a tree preservation plan prior to consideration of proposed development”. The city of Oshawa clearly extends protection beyond the NHS through policy 5.3.4 “5.3.4 For any proposal for development or site alteration in proximity to a natural heritage and/or hydrologic feature that is not part of the Natural Heritage System, an Environmental Impact Study shall be undertaken in accordance with Section 5.5 of this Plan to determine if the feature should be protected or if appropriate mitigation, or ecological compensation as a consideration secondary in preference to mitigation, can be provided to address any loss of the feature and/or function.”

Tree canopy protection and enhancement is a key urban resilience issue for many municipalities, and this is represented in many of their official policies. Many municipalities use development regulations, urban design guidelines, public outreach and tree-planting programs to improve their tree canopy. A further issue facing canopy cover is the challenge of monitoring. The City of Toronto has identified a strategy through Table 6 of their SFMP to use “high resolution leaf-on aerial and satellite imagery” to perform a land cover classification once every ten years.

The issue of which tree species to plant is also closely tied to resilience. It is widely considered good practice to encourage the planting of native species. Climate change is leading to a northward migration of ecozones, so that trees which are native to the region may not be compatible with the regional climate in the decades to come. To this end, some municipal plans include policies which support assisted migration of tree species. Another important consideration is the carbon sequestration potential of the species selected for planting. The Town of Ajax official plan, for example, states that the municipality will “Encourage the planting of native or non-native non-invasive tree species and vegetation that are resilient to climate change and provide high levels of carbon sequestration” (2.1.4 Tree Canopy).

4. Enforcement

The final theme observed in municipal policy documents directs proponents to factor in tree protection and management practices into the proposed development. These policies are unique in that they explicitly link tree protection mechanisms into the development process itself. The Official Plan for Niagara Falls contains legislation stating: “A tree inventory and tree preservation plan, where an individual significant tree or any group of trees, including a woodland as defined by the Region’s Tree and Forest Conservation By-law, may be impacted by a proposed development” (4.2.10). This provides planners with a level of control in preserving trees or ensuring that adequate tree planting is included in development agreements. The majority of policies within this theme involve the direction to include a Tree Protection/Preservation Plan as part of any site alteration proposal.

By conducting a Tree Protection/Preservation Plan for a proposed development, the proponent is held to a higher standard for considering the protection of existing trees while development occurs. Such plans involve the documentation of existing trees on site and which ones are intended to be destroyed - allowing for a municipality to more closely monitor the treescape or question the trees planned for destruction.

A concern that municipalities have is the potential for proponents to clear-cut a property before submitting a formal planning application. This is a concern as it is only through the planning process that the policies of Official Plans, Urban Design Guidelines, and other applicable policy documents can be applied. By clear-cutting a site beforehand, municipalities worry that a proponent will not have to adhere with any tree protection, replacement, or management policies.

This scan found that some municipalities are beginning to confront this valid concern through including policies to ensure proponents are held accountable for site alterations made before a planning application is submitted to the municipality. Such policies were made stronger through reference to other municipal policies or by-laws. For example, the City of Barrie Official Plan includes a policy stating “where existing trees have been substantially removed and land stripping and/or the removal of topsoil has occurred prior to an application for development or during the process of obtaining approval for any development of a site, Council may impose conditions of such approval in accordance with the intent of the City’s tree cutting by-law” (6.5.2.2 General Design Guidelines D) Environmental Features vii)). By referencing other policies across all

documents applied when assessing a proposed development, a municipality can more strongly ensure that tree protection and management practices will be upheld.

Tree By-Laws

Municipalities that have adopted tree by-laws are able to regulate the removal of trees more strictly than municipalities without. However, a scan of tree by-laws in the selected municipalities demonstrates the range of restrictiveness across by-laws. First, it is important to note that while most municipalities reviewed have tree by-laws, not all municipalities have by-laws that includes private trees. Only by-laws pertaining to trees on developed or undeveloped lands were included in this review.

Of the municipalities that have adopted tree by-laws addressing private trees, the by-laws reviewed have varying degrees of protection allocated for private trees in the municipality. Criteria outlining which trees are subject to the tree by-law included items such as the diameter of the tree, land use designation, or the size of the land that the subject tree is located on.

An example of a land use designation-specific by-law is found in Ajax. The tree by-law in Ajax is only applicable to private trees within the outlined land use designations and zones. In this case, this includes: Environmental Protection, Open Space, Town-Wide Park, Community Park, or Neighbourhood Park land use designations; as well as areas zoned Private Open Space (Tree by-law s. 4.2). This is compared with Vaughn where all private trees of a certain diameter are subject to tree-cutting regulations (Tree by-law s. 2 & 3). The different restrictions on which trees are subject to the tree by-law impact the amount of trees that the city can regulate in order to monitor tree canopy coverage targets.

Furthermore, of the municipalities that had a tree by-law for private trees, each had different levels of requirements to be met in order to obtain a permit to remove a private tree. Some required reports from arborists and written consent from the adjacent property owner (Mississauga Tree by-law s 7). While, some simply required a notification including the contact information of the property owner, species of the tree, the diameter of the tree, the reasons (if any) for removing the tree and plans (if any) for replacing the tree (Peterborough Tree Notice By-law). The varying levels required to obtain a permit to remove a private tree impact how rigorously a municipality can monitor the tree canopy.

Programs

A number of municipalities have public programs aimed at promoting tree planting and maintenance for residents. The programs and events are used to help inform residents about the importance of trees and provide education on tree stewardship. These programs exist outside of municipal policy frameworks - although many Urban Forest Management Plans and some Official Plans indicate the need to create such programs. Of the municipalities that had programs, there was a range in the exact type of program each municipality facilitated.

The programs ranged from straightforward to intricate, with varying levels of programming run by a municipality. One example of a straightforward program is 'Greening Guelph' which is a monetary donation program aimed at helping to increase the canopy in Guelph. Donations are solicited from interested individuals and corporate sponsors, then is used to fund existing tree planting, protection, and education programs in the municipality. Other municipalities have programs that are premised on public-private partnerships in order to expand the urban forest. In Windsor, the Parks and Recreation department is focused on planting and partnerships as a strategy to increase the tree canopy. This program relies on the expertise of the department and help with planting from local environmental groups, Scouts, and the Essex Region Conservation Authority.

Lastly, some municipalities have larger-reaching public programs aimed at increasing the tree canopy. Mississauga is well known for the One Million Trees program. This program is intended to help conserve and enhance tree canopies in open spaces and forested areas in both the public and private areas of the City. Under the program, tree planting is done by City staff, resident volunteers, and through partnerships. To track the goal of planting one million trees, Mississauga has gamified the program - groups or individuals who plant a tree are able to input the information through the online portal, which is then displayed on the website along with the tree planter's name or company name and the number of trees the individual has planted. Such a program allows residents to feel valued for their contribution and for a municipality to more accurately track the progress of a goal.

Overall, these programs are a way for municipalities to get residents involved and excited about increasing the tree canopy. Since not all individuals will go through a planning application/the development process, public programming is another way for municipalities - and all residents, to work towards better tree stewardship and the recommended canopy cover targets.

Appendix A3: Municipal Scan Charts

The following tables are compilations of all tree-related policies found during the Municipal Policy Scan phase of the project.

The first table includes relevant municipal policy documents, namely official plans and urban design guidelines. The information is organized by municipality, in alphabetical order A through Z. The policy document in question is listed and any policies found pertaining to trees and copied and organized accordingly. The columns following are used to categorize each policy into a particular theme: Protection & Preservation, Design & Amenity, Urban Resilience, and Enforcement. The following table contains over 500 policies that can be viewed as examples for policy content or policy language. There are numerous approaches to the same policy aim as well as an array of unique policies for private trees.

The second table is specific to private tree by-laws. It includes the relevant municipality, by-law document title, year enacted, and the relevant pieces of the by-law itself.

The third table includes Urban Forest Management Plans, also organized by municipality. The table notes the relevant document title, year, and recommendations.

1. Municipal Policies

Municipality	Policy Document	Year Enacted	Policy	Preservation & Protection	Design Element & Function	Ecosystem Management	Enforcement
Ajax	Official Plan	2016	2.1.1 Goals - To achieve the environmental principles in Section 1.2 of this Plan, the Town shall: l) Manage forest resources and trees in a manner that enhances their quality, quantity and sustainability over time;	Yes			
			2.1.3 Air Quality and Urban Heat Island - The Town recognizes that poor air quality and the urban heat island effect have adverse effects on both human health and the natural environment. Accordingly, the Town shall: d) Promote tree planting and innovative green spaces, such as green roofs in new and existing development, to reduce energy use through shading and sheltering;		Yes	Yes	
			2.1.4 Tree Canopy - The Town recognizes the value of tree cover in improving air quality and lowering air temperature during summer months. Expanding and providing a more robust tree cover creates bird and wildlife habitat, reduces the urban heat island effect, improves air quality, and connects open spaces and other natural areas. To maintain, protect, and enhance the existing tree canopy, the Town shall: a) Develop and implement an Urban Forest Management Plan; b) Encourage the planting of native or non-native non-invasive tree species and vegetation that are resilient to climate change and provide high levels of carbon sequestration, subject to the Town's approval, particularly through new development and on municipally-owned land; c) Consider enacting a Town-wide tree-cutting by-law to regulate the destruction or injury of trees; d) Encourage the use of water-conserving irrigation systems and the provision of adequate permeable surfaces around newly planted trees to establish a secure root system; e) Require reimbursement, in the form of new trees or financial compensation, for all healthy trees proposed to be removed in development applications, based on the findings of a Tree Inventory and Preservation Plan; f) Encourage tree planting by local residents and organizations, and educate residents about the benefits of planting trees versus the environmental impact of removing trees; and, g) Implement measures to protect, enhance, and expand the tree canopy, including but not limited to: i) requiring tree planting in areas of extensive surface parking; ii) promoting development that maximizes areas for tree planting; and, iii) preserving the existing tree canopy.			Yes	
			2.1.10.2 Policies - To achieve the goals for the Lake Ontario Waterfront, the Town shall: i) Protect the Lake Ontario Waterfront as natural, clean, green, attractive, diverse, open, accessible and connected. It is designated Environmental Protection and Open Space. Facilities and activities on the Lake Ontario Waterfront will reflect the Waterfront Management Plan, and in conformity with the principles and goals of this Official Plan: ii) Green - Waterfront landscapes shall form a green corridor, including protected natural areas, meadows, trees/shrubs, gardens and mown areas for recreation;	Yes			
			2.5 BUILT ENVIRONMENT - 2.5.2.1 Streetscapes and Landscaping - The Town intends to enhance the connectivity, sustainability and aesthetics of streetscapes and landscaping throughout the Built Environment, and strengthen connectivity to the Greenlands System by ensuring proper attention to detail is provided in the design and implementation of streetscapes and landscaping. Accordingly, the Town shall: a) Require all new public and private sector development to incorporate high-quality landscaping, including native or non-native, non-invasive trees and other vegetative plantings, subject to the Town's approval, to enhance the site, the streetscape and the surrounding area; consideration should be given to using drought-tolerant varieties of these species; b) Require new development to appropriately address arterial roads through the provision of sidewalks, and the use of tree cover, planting areas and/or other appropriate vegetation; c) Require all new development to provide amenity for the adjacent public realm to render these areas attractive, interesting, comfortable and functional for pedestrians by providing: iv) landscaped open space that is well-designed and includes permeable surfaces; and, native or non-native non-invasive species of trees and plants, subject to the Town's approval, consideration should also be given to using drought-tolerant varieties of these tree and plant species; g) Require parking lots to be attractive, well-designed and complement the character of the adjacent area. As such, surface parking lots shall be: v) designed to accommodate tree islands.		Yes		Yes
			2.5.2.2 Built Form and Architectural Design - k) Promote development that maximizes areas for tree planting and permeable surfaces;		Yes		
			2.5.2.7 Bird Friendly Design - The Town is protecting and enhancing tree cover, wildlife habitat and natural areas to continue to provide habitat and resting areas for birds, including migratory species, throughout the municipality. Such habitat is not limited to the Greenlands System, including the Lake Ontario shoreline, wetlands, valleylands, and woodlands, but also shall continue to extend into the Built Environment on rooftops and naturalizing open spaces.	Yes		Yes	

2.5.4.5 Utilities - e) Provide the Federal Government with comments regarding land use compatibility related to telecommunication towers and antenna systems, including: ii) encouraging towers and antenna systems to be designed to minimize visual impacts using fencing and tree and shrub plantings around the perimeter;		Yes		
2.6.2.1 General Policies - g) Beyond the Environmental Protection designation, consider designating landmark tree(s), tree and hedge lines, and other vegetation of a cultural significance. The preservation of landmark tree(s) and/or other vegetation of cultural significance shall be evaluated through the development review process. The applicant may be required to revise the site layout such that significant features are retained. The Town may provide approval for the removal of landmark trees and other vegetation of cultural significance if, through a Tree Inventory and Preservation Plan, it is established that there is evidence of infestation or disease damage, or to protect public health and safety;	Yes			
3.2.2.3 Village Centre - g) Natural features, including the canopy of mature trees, and connections to the Town's trail systems are appropriately protected and enhanced; and,	Yes			
3.2.3.10 Village Centre - i) Heritage, Arts and Culture – The unique character of the Village Centre as a heritage area and arts and cultural hub for the Town will be preserved and enhanced. As part of this effort, the Town shall: - promote the maintenance and enhancement of the existing tree canopy.	Yes			
3.2.3.10 Village Centre - [...] All new development shall be consistent with the following policies intended to facilitate a comfortable, safe, attractive and convenient pedestrian experience: vi) The removal of existing mature trees that are worthy of preservation is discouraged. The design of surface parking areas, driveway locations, and landscaped areas, and the siting of buildings, shall accommodate, where possible, the retention of existing mature trees. Open space areas, such as squares, patios or yards, are encouraged to be sited and designed to incorporate existing tree specimens as a means of preserving them in the context of development.	Yes	Yes		
3.2.4.3 Parking - b) Surface Parking Lots - ii) Where surface parking must be provided, the visual impact of large surface lots shall be mitigated with a combination of setbacks, significant landscaping and pavement treatments including low walls, landscape materials, trees and lighting throughout parking lots and along the edges. Parking areas should be designed with clear pedestrian routes that are defined with landscape treatment. The design of surface parking lots shall also be consistent with policy 2.5.2.1 g).		Yes		
4.2.7 Parking policies - i) Ensure that where surface parking cannot be avoided, or parking lot retrofits are proposed, designs provide tree plantings and/or pervious surfaces that seek to reduce the volume of surface runoff to the Town's stormwater management system;		Yes		
5.0 Descriptions of Studies and Reports that may be Required for Complete Applications: o) Environmental Impact Study - d) An Environmental Impact Study shall: - xiii) Provide a Tree Inventory and Preservation Plan, prepared by a qualified landscape architect, in conjunction with a certified arborist; and,				Yes
5.0 Descriptions of Studies and Reports that may be Required for Complete Applications: u) Tree Inventory and Preservation Plan - The purpose of a Tree Inventory and Preservation Plan is to provide detailed information about individual trees and associated vegetation on public and private lands. A Tree Inventory and Preservation Plan is required for any development or site alteration where private or public trees/vegetation exist within the property and/or exist within a minimum of 3 metres from the property line. The Plan shall detail, in addition to other matters, tree health and size; existing trees proposed to be removed and the canopy replacement; existing trees proposed to be transplanted and their new locations (if tree spades are needed, indicate the spade size); existing trees proposed to be retained/protected and their monetary dollar value; and, the dimensions and details of recommended tree protection and preservation measures for all trees to be retained.				Yes
6.13 Lands Fronting onto both sides of Achilles Road between Salem Road and Carruthers Creek, lands located at the northwest corner of Salem Road and Achilles Road, lands located at the southwest corner of Salem Road and Mandrake Street, and lands located north of Highway 401 and south of Chambers Drive, between Salem Road and Carruthers Creek: c) Policies - The following policies are specific to this Area Specific Policy: vii) The removal of existing mature trees that are worthy of preservation is discouraged, particularly when they are located at the edges of development. Where mature trees are removed, compensation in the form of on-site landscaping and trees shall be secured. The design of surface parking areas, driveway locations, and landscaped areas, and the siting of buildings, shall accommodate, where possible, the retention of existing mature trees.	Yes			
6.13.C.4.vi Appropriate landscape treatments, including trees and pedestrian lighting throughout parking lots and along their edges, shall be implemented to improve the appearance of parking areas and to contribute to the visual continuity of the street edge, while encouraging the safe use of these spaces.		Yes		
7.1.15 Pre-Consultation and Complete Application Requirements - i) The following studies, reports and information may be required, as determined by the Town in consultation with the applicant and any other government body, public authority and/or external agency as deemed necessary by the Town, to be submitted as part of a complete application for an Official Plan Amendment, Zoning By-law Amendment, Draft Plan of Subdivision and Draft Plan of Condominium: Urban Design 21) Tree Inventory and Preservation Plan				Yes

	Employment Areas Urban Design	2006	3.3.2 Landscape Buffers: The treatment of landscape buffers shall be consistent with the following parameters: Materials within the landscaping buffer may include hard elements such as columns, low walls and decorative fencing, and soft elements such as trees, shrubs, grasses, groundcover and sod. The buffer may not be wholly sod.		Yes		
			3.4.2 Street Trees: Provide tree planting on each side of the street as per Town standards; - Select street trees from a diversity of high crowned deciduous species, with selection of variety based on hardiness, seasonal colour and salt tolerance. Where streets abut natural areas select native deciduous species.		Yes		
	Employment Areas Urban Design Guidelines	2006	4.3 Landscaping: Plant trees in all landscaped areas in a manner that is harmonious and consistent with the surrounding tree pattern. Planting in landscape strips abutting roads should compliment the existing character of the streetscape in terms of placement and species.		Yes		
			4.3 Landscaping: Preserve all existing perimeter trees with minimal changes to the area beneath the drip line. Locate underground services and utilities so as not to encroach within the drip line of trees to be preserved, to minimize disruption to the root system.	Yes			
			4.3 Landscaping: Preserve existing trees near or along residential property lines wherever possible to act both as a buffer as well as to prevent planting on residential properties to become suddenly exposed to edge conditions.		Yes		
			5.7 Alternative Approaches to Site Planning: Provide a spacious landscaped setting for the building, parking and other elements of a public nature. Landscaping may incorporate grass areas, landforms, trees, shrub beds and decorative materials.		Yes		
	Urban Design Guidelines for Motor Vehicle Gas Bars/Service Centres	2006	2.0 Site and Building Organization - Guidelines - Provide an appropriate landscaped buffer between the gas bar/service station and the public realm, sufficiently sized to accommodate tree plantings in a mature state and a mix of hard of soft landscaping.		Yes		
			6.0 Landscaping and Tree Preservation - Gas bar/service station sites are to meet the same landscaping standards as required of all other commercial land uses and will continue and improve the existing landscaped public street edge.		Yes		
			6.0 Landscaping and Tree Preservation - Protect all existing perimeter trees worthy of preservation, with minimal grade changes to the area beneath the drip-line.	Yes			
			6.0 Landscaping and Tree Preservation - Locate all underground structures such as fuel tanks and utilities so as not to encroach within the drip-line of trees to be preserved (this minimizes disruption to the root system).	Yes			
			6.0 Landscaping and Tree Preservation - Provide tree planting in all landscaped areas, in a manner that is harmonious and consistent with the surrounding tree pattern; tree plantings along landscaped strips abutting roads are to complement the existing character of the streetscape (in terms of placement and species)		Yes		
			6.0 Landscaping and Tree Preservation - Diversification in planting schemes is desirable; accordingly, trees planted in clusters as well as in broken or unbroken lines will be considered, where appropriate.		Yes		
	Urban Design and Built Form Guidelines for Village of Pickering	2008	2.1 General Design Guidelines - Use landscaping to further define and contain public space by using street trees , for example, to delineate the pro- posed pedestrian plaza as shown in Figure 2.2.		Yes		
			2.2.4 Planting - Street Trees - Existing trees within the public right-of-way should be re- tained and protected;	Yes			
			2.2.4 Planting - Street Trees - Allow sufficient room for tree canopies to grow and de- velop without conflict with other building or sidewalk elements;		Yes	Yes	
			2.2.4 Planting - Street Trees - Street trees should be spaced 8 - 10 metres apart;		Yes		
			2.2.4 Planting - Street Trees - Street trees should be selected for durability in an urban environment, and height of the tree canopies should protect sightlines along the street for both motorists and pedestrians. Further, tree selection along boulevards containing hydro poles should ensure the height of the mature canopy will not interfere with the height of the hydro lines;		Yes		
			2.2.4 Planing - Street Trees - Street tree planting along Kingston Road would have to be located in the front yard of private properties due to the fact that it is a major arterial road with a narrow right- of-way. This should be done upon conversion or other im- provements to these properties, with an agreement for access to perform tree maintenance.		Yes		
			3.3.2 Kingston Road/Church Street - Western Site - Street trees along Kingston Road and Church Street should be planted in the front yard setback zones of private property, as shown in Figure 3.9. These trees and locations should be secured through site plan agreement, with a separate easement and maintenance agreement between the municipality and the landowners to ensure that these trees are maintained to municipal standards. Trees should be planted with sufficient soil volume and topsoil to the satis- faction of the municipality.			Yes	
Barrie	Official Plan	2018	The implementation of the master stormwater management plan and/or strategy will occur over time, via completion of development in accordance with a series of site plans. Georgian College and Royal Victoria Hospital will endeavour to maintain the lands in their natural state, for as long as feasible, with the exception of removing trees that are considered hazardous. (OPA No. 74)	Yes			
			The City may consider the reduction or re-allocation of development densities in order to preserve existing woodlots, mature trees and other natural areas and features which are not identified within the Environmental Protection Area designation.	Yes			

Where an Environmental Protection Area consists of a woodland, the City will control development adjacent to this area to prevent destruction of trees.	Yes			
...The Retail Village is intended to create an identity and continuity of the built form environment and be pedestrian friendly in terms of scale and streetscape amenities. Such amenities shall include trees and other high quality landscaping, street furniture and lighting fixtures, temporary and permanent kiosks and suitable sidewalks and patios...		Yes		
A buffer strip of trees shall be maintained where possible around the perimeter of the site.		Yes		
Site Plan Control - To ensure the appropriate use of lighting, walls, fences, hedges, trees, shrubs or other ground cover or facilities for the landscaping of areas to enhance land use compatibility and facilitate a safe and visually pleasing environment;		Yes		
Site Plan Control - To ensure development of sustainable design elements on any adjoining highway under the City's jurisdiction, including without limitation trees, shrubs, hedges, plantings or other ground cover,		Yes		
All contiguous woodlands greater than 0.2 hectares are protected by the City's Tree Preservation By-law, irrespective of ownership, maturity, composition and density. The City will control development adjacent to woodlands to prevent destruction of trees.	Yes			
Wherever possible the protection of treed areas, hedgerows and other natural areas shall be incorporated into the design, and the planting of new trees shall be encouraged.	Yes	Yes		
Where existing trees have been substantially removed and land stripping and/or the removal of topsoil has occurred prior to an application for development or during the process of obtaining approval for any development of a site, Council may impose conditions of such approval in accordance with the intent of the City's tree cutting by-law.				Yes
(8.5.4.5 Land Use) trees, berms and landscaping screen elements such as parking, service and loading areas; and,		Yes		
In order to maintain and enhance vegetation cover, the City shall support tree planting, tree preservation, conservation initiatives and land stewardship strategies.	Yes			
Prior to the creation of a lot for development on private septic systems, the necessary soil, hydrogeological, grading and tree preservation plans must meet the approval of the City and the appropriate public agencies.				Yes
The City will require the incorporation of larger lot sizes in wooded areas or the protection of woodlands (in whole or in part), and/or additional planting as determined by the City prior to approval of any development proposals in areas adjacent to or including woodlands.	Yes			
General Policy - Open Space - The City may, in the process of reviewing development applications for residential intensification, require studies related to the improvement of older residential areas, as deemed appropriate. Such studies shall consider and evaluate measures to improve the condition of housing and neighbourhood amenities including: iii) The protection, enhancement and restoration of the natural heritage system;	Yes			
General Policy - Open Space - The City shall protect and enhance open space within the municipal boundary and identify locally significant natural areas for restoration and enhancement through a Natural Heritage Strategy. The City shall also encourage protection and planting of native vegetation within City owned open space areas where appropriate.	Yes			
Where an Environmental Protection Area consists of a woodland, the City will control development adjacent to this area to prevent destruction of trees.	Yes			
General Policy - Waste Management Facility - A buffer strip of trees shall be maintained where possible around the perimeter of the site.		Yes		
General Policy - Lot Creation - The Committee of Adjustment shall require, where necessary, as a condition of severance, an application for a Tree Removal Permit for the parcel to be severed and the parcel to be retained.				Yes
General Policy - Site Plan Control - As a prerequisite or as a condition of approval of site plans, the City may require developers to provide sufficient information pertaining to any or all the items relating to the development of a site including but not limited to traffic, noise, pedestrian accessibility, functional servicing and environmental, tree preservation and shadow studies, and exterior design elements including but not limited to character, scale, appearance, massing, design features, roof pitch design, building materials, and screening of mechanical and electrical equipment.	Yes			Yes
General Design Guidelines - Urban Design Guideline - Wherever possible the protection of treed areas, hedgerows and other natural areas shall be incorporated into the design, and the planting of new trees shall be encouraged.				
Height and Density Bonusing - Without limiting the authority of the foregoing, the City will seek to secure any of the following community benefits above and beyond those that would otherwise be provided under the provisions of the Planning Act (including parkland dedication and cash-in-lieu of parking) or the Development Charges Act or any other statute. The community benefits that may be secured include, but are not limited to, the following: Enhanced on-site tree planting or landscaping;		Yes		
In order for a development application to be considered complete in accordance with Sections 22, 34, 41, 51 or 53 of the Planning Act, the City of Barrie may require the following reports or studies be prepared to the City's satisfaction: Tree preservation plan/inventory	Yes			Yes

		General Policy - Energy Conservation - The retention of forests and tree planting will be encouraged to enhance and improve the "urban forest" and tree cover as a means of improving air quality and reducing energy use through shading, sheltering, and screening.			Yes	
	Urban Design Manual	2014	3.1. Pedestrian Circulation: D. Identify and emphasize major pedestrian routes through the use of signage, pavement markings, bollards, trees, appropriately scaled lighting and continuous hard surfaces.		Yes	
		3.2 Vehicle Circulation and Parking: M. Provide raised traffic islands to break up large parking areas and at a suitable scale and size to accommodate shrub and tree planting. Provide barrier free traffic islands where they are part of the pedestrian circulation system.		Yes		
		9.0 Landscape Design: Promote the preservation of existing natural features such as watercourses, specimen trees, hedgerow and woodlot vegetation wherever reasonably possible in an effort to minimize the environmental impact on the site and surrounding areas.	Yes			
		9.0 Landscape Design: K. Tree preservation is promoted through the City of Barrie Tree Cutting By-law 2002-12 and the issuance of tree cutting permits. In situations where the by-law does not apply, it is the intent of these Guidelines that healthy trees be preserved whenever possible, and that no tree removal occur until the site plan is approved.	Yes		Yes	
Cambridge	Official Plan	2018	2.12.4 Doon Valley Golf Course - c) the registration of a conservation easement in favour of the Region, to the satisfaction of the Regional Commissioner of Planning Housing and Community Services, prepared in consultation with the City of Cambridge, the City of Kitchener, the Grand River Conservation Authority (GRCA) and the Province which contains or provides for implementation of: i) a site plan(s) which identifies: tees; greens; fairways; cart paths; bridges; public recreational trail; ponds; wetlands; drainage courses; critical habitat of endangered species; environmental constraint areas; environmental buffers (flora/fauna/wetland); riparian buffer; trees to be retained; vegetation/landscape enhancements; fencing and other structures;	Yes		
			3.A.6 Restoration Areas and Vegetation Management: 1. The protection, preservation and restoration of indigenous vegetative cover is a priority for the City. This priority ranges from the protection of significant natural features described in the Natural Heritage System to general vegetative cover across the municipality. Private development and public works projects are seen as opportunities to increase the vegetative cover quantity and quality in the municipality, as well as biodiversity. 2. The City shall require as necessary the preparation and submission of a tree management plan prior to draft approval of a plan of subdivision or site plan approval. Tree management plans submitted to the City shall be prepared in a manner consistent with the "Tree Management Policies and Guidelines for New Developments". 3. The "Tree Management Policies and Guidelines for New Developments" shall also guide the City in the preservation, protection, management, replacement and possible acquisition of significant tree stands, hedgerows, woodlots and forested areas. They will be applied to tree management practices carried out by the City on City-owned lands. 4. In addition to the "Tree Management Policies and Guidelines for New Developments", the City will consider other measures, such as the Region's Woodland Conservation By-law, a local tree protection/preservation by-law under the Municipal Act, designation of heritage trees	Yes		
			3.B.4 Urban Forest and Biodiversity - 1. The urban forest in Cambridge is the treed environment, consisting of remnant wooded areas, trees in city parks and open space, street trees and trees on private property. The City recognizes the urban forest as providing significant environmental, social, cultural heritage and economic benefits and encourages its protection, restoration, wise management and expansion. 2. The City recognizes the environmental, aesthetic and heritage values associated with trees lining both urban and rural boulevards and streets. As such, the City shall promote and encourage the protection and management of such trees and encourage public authorities and agencies to give due consideration for their protection when undertaking utility projects and regular maintenance. 3. The City shall protect and preserve street trees located within road rights-of-way wherever feasible. Trees removed from an existing road right-of-way due to development or public utilities projects shall be required to be replaced in the same location or in the vicinity wherever possible by the individual or agency responsible for the removal. 4. The City will encourage private landowners to protect and preserve street trees located outside road rights-of-way through investigation of approaches such as tree preservation by-laws, private stewardship, advice from the City's Forestry Division and Heritage Conservation District Plans. 5. The City encourages individuals and agencies to use indigenous species as appropriate to the locality when planting within or contiguous to the Natural Heritage System because some non-indigenous species are considered unsuitable and invasive. Guidance in maintaining the biodiversity of the Natural Heritage System will be provided through: the Regional list of trees and shrubs suitable for such use; the list of invasive alien herbaceous species; and any relevant City documents such as the "Tree Management Policies and Guidelines for New Developments" and the "Stormwater Management Policies and Guidelines". 7. All development or site alteration requiring the removal of trees shall meet the requirements of the Region's Woodland Conservation By-law.	Yes	Yes	
			5.14 Urban Design Guidelines: 1. The City will promote and foster the creation of a quality built environment through urban design. In order to provide guidance to the development process in terms of achieving a high standard of design and meeting the urban design objectives and policies of this Plan, the City will prepare and approve urban design guidelines, which do not form part of this plan, to address items such as the following: 1) flexible standards for redevelopment and infilling, such as parking requirements, road allowance widths, tree planting in boulevards, and street lighting;		Yes	

		5.15 Urban Design Studies: 1. Development proponents may be required to submit an urban design study to the satisfaction of the City that addresses: f) landscaping plan including the integration of existing trees and vegetation into the site design and integration with natural features and trails;				Yes
		7.8 Parkland Dedication: 3. Where parkland dedication is required by this Plan, the City will ensure that the land is suitable for development as a park. Generally, the parkland dedication should satisfy the following criteria: d) the site is oriented to take advantage of favourable topography, vistas and mature stands of trees where possible and desirable;		Yes		
		North Cambridge Business Park - A, B, C, D, E & F Studies: Prior to site plan approval, the completion and implementation of various studies may be required as conditions of a site plan or subdivision agreement depending on the location and nature of the development proposal. Studies may include, but are not limited to: Scoped Environmental Impact Statements; Tree Management Plans; Hydrogeological Studies; Chloride Impact Studies and Salt Management Plans; Spill Prevention, Response and Contingency Plans; Stormwater Management Reports; Traffic Impact Studies; Functional Servicing; and/or Stationary Noise Studies.				Yes
Design Guidelines - Downtown	2013	3.6 Pedestrian Areas, Parking and Streetscape Elements - 3.6.1 Pedestrian Circulation and the Public Realm - It is vital that the Downtown be an active and vibrant pedestrian friendly environment. This means that there must be a clearly defined pedestrian realm that is visually and physically separate from the vehicular traffic areas. These areas must also be easy to navigate, barrier-free, and include open spaces, walkways and well-marked crosswalks. The pedestrian areas should also be buffered from the street traffic through the use of on-street parking, street trees and the consistent use of street furniture/amenities.		Yes		
		3.6 Pedestrian Areas, Parking and Streetscape Elements - 3.6.5 Parking - On-Street Parking - Where possible the Study Area should provide parallel onstreet parking along all of its streets with periodic "bumpouts" where the sidewalk protrudes into the parking lane in order to provide extra space for trees and pedestrian amenities. These areas should be surfaced with permeable paving if possible.	Yes	Yes		
Design Guidelines - Main Street	2013	4.5 Pedestrian Areas, Parking and Streetscape Elements - 4.5.1 Introduction - It is vital that Main Street be an active and vibrant pedestrian friendly environment. This means that there must be a clearly defined pedestrian realm that is visually and physically separate from the vehicular traffic areas. These areas must also be easy to navigate, barrier-free, and include open spaces, walkways and well-marked crosswalks. The pedestrian areas should also be buffered from the street traffic through the use of on-street parking, street trees and the consistent use of street furniture/amenities.		Yes		
		4.5 Pedestrian Areas, Parking and Streetscape Elements - 4.5.5 Parking - On-Street Parking - Where possible Main Street should provide parallel on-street parking along its entire length with periodic "bump-outs" where the sidewalk protrudes into the parking lane in order to provide extra space for trees and pedestrian amenities. These areas should be surfaced with permeable paving if possible.	Yes	Yes		
Design Guidelines - Hespeler Streetscape	2013	4.2 Pedestrian Circulation - Connection of Queen Street to Forbes Park (Via Tannery Street) (3) Line the Pedestrian Amenity Area with numerous street trees and pedestrian scale lighting and benches.		Yes		
		4.2 Pedestrian Circulation - Tannery Street (Eastbound - From Adam Street to the Fire Hall) - To create the additional public pedestrian realm in front of the Library and Fire Hall, the detailed design should include: (4) Shade Trees in the public amenity area.		Yes		
		4.2 Pedestrian Circulation - Adam Street - The details of the design of Adam Street should include: (3) Provide street trees adjacent to the public parking lot to minimize views from residential neighbours and pedestrians.		Yes		
		4.3 Redevelopment Opportunities - Design Guidelines for Privately Owned Milling Road Revitalization: 4. Provide shade trees, seat walls, benches, bike racks, pedestrian scale lighting, waste and recycling receptacles and way-finding signage throughout the development.		Yes		
		4.4 Streetscape Design - Landscaping and Trees - (1) Street trees are planted consistently throughout the study area. They are placed in curb extension areas and are generally spaced 6.0 to 10.0 metres on-centre (dependant on species). They are repeated rhythmically and consistently throughout the area in a well-planned scheme.	Yes	Yes		
		4.4 Streetscape Design - Landscaping and Trees - (2) Salt tolerant, urban tolerant and native species are encouraged throughout the area. For locations under hydro wires, smaller plant species should be specified as to not interfere with the functioning of the wires. Street tree species should be as per City of Cambridge and Cambridge North Dumfries Hydro Standards.				Yes
		4.4 Streetscape Design - Landscaping and Trees - (3) The use of strata cells (structured soil cell) is proposed throughout the study area. Urban trees require a large volume of soil in order to survive and establish into healthy specimens, however, often urban environments do not allow for adequate space. Soil structure systems allow for adequate soil volumes and also allow the structural support required to engineer roadways.				Yes
		4.4 Streetscape Design - Landscaping and Trees - (4) Planters are incorporated into the ROW and will be landscaped using native plant material, including grasses, wildflowers, trees and shrubs. The planting scheme should reflect a four-season approach for year-round interest.				Yes

		4.4 Streetscape Design - Drainage: To encourage the Guiding Principle of Environmental Sustainability proper drainage of the sidewalks is encouraged by sloping toward the curb and gutter along the street - but must maintain an appropriate cross slope. Streets should include surfaces or areas that absorb run-off and encourage natural percolation where possible. An infiltration system should be incorporated to increase soil moisture for street trees and reduce stress on stormwater management systems.		Yes		
	Design Guidelines - Preston Streetscape	4.1 Traffic Calming and Street Design - Street Design: Proper drainage of the sidewalks is encouraged by sloping toward the curb and gutter along the street. Streets should include surfaces or areas that absorb run-off and encourage natural percolation where possible. An infiltration system should be incorporated to increase soil moisture for street trees and reduce stress on stormwater management systems.		Yes		
		4.2 Street Trees and Planters: Street trees are planted consistently throughout the study area. They are placed in curb extension areas and are generally spaced 6.0 to 10.0m on-centre (dependant on species). They are repeated rhythmically and consistently throughout the area in a well-planned scheme (refer to Appendix 1 for a list of suitable trees).	Yes	Yes		
		4.2 Street Trees and Planters: Salt tolerant, urban tolerant and native species are encouraged throughout the area. For locations under hydro wires, smaller plant species should be specified as to not interfere with the functioning of the wires. Street tree species should be as per City of Cambridge Standards.	Yes			
		4.2 Street Trees and Planters: The use of strata cells (structured soil cell) is proposed throughout the study area. Urban trees require a large volume of soil in order to survive and establish into healthy specimens, however, often urban environments do not allow for adequate space. Soil structure systems allow for adequate soil volumes and also allow the structural support required to engineer roadways.			Yes	
		4.2 Street Trees and Planters: Planters are incorporated into the ROW and will be landscaped using native plant material, including grasses, wildflowers, trees and shrubs. The planting scheme should reflect a four-season approach for yearround interest.		Yes		
		4.2 Street Trees and Planters: Landscape should incorporate a wide range of strategies to minimize water consumption, including the use of native and adapted species, use of mulches and compost, alternatives to lawn and rainwater collection systems.	Yes		Yes	
Guelph	Official Plan	2018	4.1 Natural Heritage System - Objectives - g) To protect and enhance tree canopy cover while providing for meadow habitat at appropriate locations to support biodiversity.	Yes		Yes
			4.1.3.10 Restoration Areas - Objectives - c) To provide opportunities to increase the City's tree canopy cover, including areas where tree compensation can be directed.			Yes
			4.1.4.3 Cultural Woodlands - Objectives - c) To protect healthy non-invasive trees within Cultural Woodlands.	Yes		
			4.1.4.3 Cultural Woodlands - Objectives - e) To compensate for loss of trees from Cultural Woodlands, where development and site alteration is permitted.			Yes
			4.1.4.3 Cultural Woodlands - Policies - 3. Development and site alteration within or adjacent to a Cultural Woodland shall also require a Tree Inventory and Tree Preservation Plan in accordance with Section 4.2.4.			Yes
			4.1.4.3 Cultural Woodlands - Policies - 4. Where development is permitted in all or part of a Cultural Woodland that does not meet the criteria in 4.1.4.3.1 healthy non-invasive trees should be protected to the fullest extent possible.	Yes		
			4.1.4.3 Cultural Woodlands - Policies - 8. A Vegetation Compensation Plan, in accordance with the policies of 4.1.6.4, shall be required for the replacement of all healthy, non-invasive trees measuring over 10 cm dbh that are proposed to be removed as part of development or site alteration.	Yes		Yes
			4.1.6 Urban Forest - 4.1.6.1 Policies - 1. Healthy non-invasive trees within the urban forest shall be encouraged to be retained and integrated into proposed development. Where these trees cannot be retained, they will be subject to the Vegetation Compensation Plan addressed in Policy 4.1.6.4.	Yes		
			4.1.6 Urban Forest - 4.1.6.1 Policies - 2. Where the City is undertaking infrastructure work, healthy non-invasive trees within the urban forest will be retained to the fullest extent possible. Where trees are required to be removed, relocation or replacement plantings will be provided by the City.	Yes		
			4.1.6 Urban Forest - 4.1.6.1 Policies - 4. Tree destruction or removal of trees on private property will be regulated by the City's tree by-law.			Yes
			4.1.6.2 Plantations - 2. Development and site alteration within a plantation shall also require a Tree Inventory and a Tree Protection Plan in accordance with Section 4.2.4.	Yes		
4.1.6.2 Plantations - 3. A Vegetation Compensation Plan shall be required for the replacement of all healthy non-invasive trees measuring over 10 cm dbh, proposed to be removed.	Yes		Yes			

			4.1.6.3 Hedgerows and Trees - 1. Development and site alteration may be permitted to impact hedgerows and individual trees provided it has been demonstrated, to the satisfaction of the City, that the hedgerows and trees cannot be protected or integrated into the urban landscape.	Yes			Yes
			4.1.6.3 Hedgerows and Trees - 2. Tree Inventory and Vegetation Compensation Plans shall be required for all new development and site alterations.				Yes
			4.1.6.3 Hedgerows and Trees - 3. Heritage Trees may be identified by the City in accordance with the Cultural Heritage Policies of this Plan.	Yes			Yes
			4.1.6.4 Vegetation Compensation Plan - 1. The detailed requirements for a Vegetation Compensation Plan will be developed by the City through the Urban Forest Management Plan. The requirements, once developed, will be applied to determine appropriate vegetation compensation for the loss of trees through development and site alteration.				Yes
			4.1.7 Natural Heritage Stewardship and Monitoring - Policies - 4.1.7.1 Invasive Species - 4. Plans prepared in conjunction with development and site alteration applications will require indigenous plants, trees and shrubs except where harsh environmental conditions would limit their survival.				Yes
			4.2.4 Tree Inventory and Tree Preservation Plan - 1. Tree Inventory and Tree Preservation Plans shall as a minimum include: i) a Tree Inventory measuring all trees over 10 cm diameter at breast height (dbh), including the size, species composition and health, and indigenous shrubs in accordance with the City's tree inventory guidelines; ii) a Tree Preservation Plan identifying healthy indigenous and non-invasive trees to be protected, including those that may be transplanted (e.g. smaller specimens); iii) the protective measures required for tree protection during construction; and iv) measures for avoiding disturbance to any breeding birds during construction.				Yes
			4.8.8 Heritage Trees - 1. The City shall identify, evaluate and conserve heritage trees which satisfy one of the criteria for determining cultural heritage value or interest as prescribed by regulation under the Ontario Heritage Act. 2. Where heritage trees have been identified by the City, they will be protected through appropriate measures under the Ontario Heritage Act while having regard to the health of the tree and public safety.	Yes			Yes
			8.2 Public Realm - 8. The City will maintain a program of tree replacement within its right-of- ways in all areas of the city. 9. The planting of trees, shrubs and groundcover in street medians and shoulders shall be designed to allow for their long term health through the implementation of best practices for planting and maintenance. Planting in street medians and shoulders will generally be undertaken with low maintenance, drought resistant and salt tolerant plant species.	Yes			
			8.17 Landscaping and Development - 3. Where possible existing trees should be retained on-site and where appropriate suitable new trees should be planted on-site, in the street right-of-way or in other City-approved locations. 4. Where appropriate, trees should be used to help define the image of neighbourhoods, streets and parks.	Yes	Yes		
			11.1.6 Energy, Water and The Natural Environment - In addition to supporting the Principles, Objectives and Targets in Section 11.1.2, the intent of the policies below is to: Increase the amount of urban forest tree canopy cover Downtown.				
			11.2.2.4 Urban Forest - 1. The GID includes hedgerows, smaller wooded areas and individual trees that are part of the City's urban forest. Development and site alteration will identify opportunities for: a) Protection, enhancement, compensation and/or restoration of the urban forest; and b) Contributing to maintaining and increasing canopy cover in a manner that respects the cultural heritage landscape and associated public views and public vistas.	Yes		Yes	Yes
			11.2.5.2 Streets - 4. Opportunities for landscaping within the public right-of-way will be explored and implemented as a means to increase the area's tree canopy and contribute to stormwater management.			Yes	
	Urban Design Manual (Volume 2)	2017	Neighbourhood Infill and Residential Development: Objectives: 4. Integrate existing natural features into the design of new developments and preserve existing trees as much as possible to help retain the character and value of the neighbourhood.	Yes	Yes		
Natural Heritage and the Urban Forest: Objectives: 3. Maintain and increase tree canopy cover within the city, in accordance with the Urban Forest Master Plan.			Yes				
Major Roadways: Objectives: Develop a Hanlon Beautification Program in conjunction with the Province and adjacent landowners, that coordinates landscaping projects with capital improvements, identifies annual City initiatives, and encourages landowners to plant native trees along the edge of the highway.				Yes			
Kingston Official Plan		2010	Urban Areas - Focus of Growth - 2.1.1: where possible, the preservation of mature trees for shade and their other beneficial ecological and community effects	Yes	Yes		

Functional Needs 2.7.6: Only development proposals that meet the long-term needs of the intended users or occupants will be supported. Proponents, whether developing individual buildings on a single site, or multiple buildings being built at one time or phased over time, will be required to demonstrate to the satisfaction of the City that the functional needs of the occupants or users will be met by providing: appropriate landscaping that meets or improves the characteristic green space amenity of the site and surroundings and enhances the City's tree planting program;		Yes		
Minimum Forest Cover 2.8.2: Forests and trees are recognized as a critical part of the City's health and character. Kingston will take steps to achieve the Environment Canada guideline of 30 percent minimum forest coverage in the urban area and maintain the existing forest coverage outside the Urban Boundary, as well as achieve a doubling of the urban forest cover by 2025.			Yes	
Urban Agricultural and Community Food Centres: 3.8.3 Community-based initiatives such as community gardens, other forms of urban agriculture, and tree planting projects are permitted in all land use designations, subject to site by site evaluation. Not-for-profit community food centres are considered a community facility and are permitted in all land use designations except for an Environmental Protection Area.		Yes		
Forest Resources - 3.11.20: Part of the natural heritage system includes significant woodlands, and contributory woodlands, which are shown on Schedule 8 as an overlay on the land use designations shown in Schedule 3. All land owners are encouraged to recognize these forest resources as an integral part of their total agricultural use, both as a source of income from various forest products, and as an important component of soil and water conservation. Landowners are encouraged to: b. retain existing tree cover as much as possible, and particularly in areas of low capability soils, slopes, major drainage swales and flood prone areas to reduce runoff rates and minimize soil erosion; (note: policy 3.12.20 contains the same wording)a	Yes			
Proposal for New Estate Residential Development - 3.12.17 - Approval of new areas of Estate Residential development is strongly discouraged by Council and, upon review of the following criteria, may be prohibited. Any proposal to expand or designate new Estate Residential areas requires an amendment to this Plan, rezoning, and a plan of subdivision. All applications are required to demonstrate conformity to the following policies through submission of supporting plans and studies as may be required in accordance with Section 9.12 of this Plan, and prepared by qualified persons to the satisfaction of the City: b. the site has tree cover, varied topography or other interesting landscape characteristics suitable for residential development and these qualities are preserved in the proposed development;				
Alcan District, Schedule 3-D, SSP Number 9 - 3.17.9 - c. WildlifeHabitatPolicies New development within the Alcan District is subject to the following policy with respect to wildlife habitat: the preservation of tree and shrub species and corridors is considered in the context of project design to provide amenity for future development, and long- term maintenance of local habitat.	Yes			
1150-1202 Division Street (86 Dalton Avenue), Schedule 3-D, SSP Number 18 - 3.17.18 - a. urban setting and site attributes - landscaping and tree planting for any new development, and the use of these to 'break up' any large parking areas. (note: policy 3.17.21 contains the same wording)		Yes		
Pedestrian Friendly Streetscapes - 4.6.6 - The City supports the development of convenient, accessible and appealing streetscapes through such measures as providing wide sidewalks, street furniture, trees and amenities, including convenient transit stops.		Yes		
Street Trees - 4.6.27 - Development proponents may also be required to provide trees in the street boulevard, or in other locations as approved by the City, as a condition of development approval.				Yes
Street Landscaping - 4.6.28 - The City will augment its program of landscaping and street tree planting and replacement in many parts of the City to enhance the streetscape, particularly within the Urban Boundary.		Yes		
Buffering for Future Road Design - 4.6.36 - Adequate buffering in the form of berming, landscaping, fencing, and tree planting will be required as part of any future road design to minimize the potential impacts of any new road extension or road improvement. Native species of trees are also encouraged as a means to increase tree coverage.		Yes	Yes	
Front Yard Parking in Existing Residential Area - 4.6.60 - The review of requests to establish front yard parking spaces must address the following criteria: the residual portion of the front yard shall be landscaped and consist of grass or similar groundcover, trees, or shrubs to provide for suitable streetscape enhancement, buffering from adjacent properties and visual relief from the paved areas;		Yes		
Tree Conservation - 6.1.19 - Trees are recognized as a resource that improves community resilience since they contribute to air quality improvement, and have aesthetic benefits, quality of life benefits, financial benefits, and stormwater management benefits. The City will manage the urban forest as per Section 2.8.2 and with reference to the long term management plan established through Kingston's Urban Forest Management Plan.			Yes	
6.1.20 - Trees will be protected in accordance with the City's Tree By-law. The City will monitor and review the Tree By-law to ensure its provisions are up-to date and provide adequate protection.				Yes

Policies (General) 6.2.2 - The City promotes landscaping and tree planting programs that help to moderate summer and winter micro-climatic conditions.			Yes	
Old Sydenham Heritage Conservation District - 7.3.C.9 - a. The District is a stable, pedestrian-focused historic neighbourhood of human scale which is a significant cultural heritage resource to be conserved and protected from proposed changes that could undermine its heritage attributes. Its heritage attributes include the following: tree-lined streets and dominating rear yards;	Yes			
King Street West Heritage Character Area - 7.3D.2 - "..." Planning for the roadway and first tier of lots abutting the roadway requires: f) preserving and supplementing mature tree cover wherever possible through a program of tree replacement.	Yes			
Gateways to the City - 8.11.2 - Along individual corridors, the City will develop an appropriate streetscape for the corridor through the implementation of public works, site plan control review, and through the effort of individual owners by providing such features as tree plantings, gardens, boulevards, public and private signage, and where feasible, underground utilities.		Yes		
Tree By-law - 9.5.41 - The City will continue to enforce and monitor its by-law to prohibit or regulate the destruction or injury of trees within the municipality, in accordance with the provisions of the Municipal Act.				Yes
9.12.13 - Development Applications: Additional Information – Studies and Assessments - d) The additional information or material that may be required includes, but is not limited to, the following: Tree Inventory; Tree Preservation & Protection Plan;	Yes			Yes
Design Guidelines - 10B.2.11 - When considering new residential development, the following design guidelines apply: g) the preservation of existing trees, woodlots, and new tree plantings along streets.	Yes			
10B.6 Open Space Policies - e) in reviewing proposed developments, the intent of this Plan is to ensure that: existing woodlots and trees are assessed and preserved where appropriate; and, additional tree planting, especially along streets, is provided;	Yes	Yes		
Baxter Farm Subdivision, SSP Number RC-1-2 - 10B.13.2.2 - In conjunction with Section 10B.6, Open Space Policies, for the lands shown as Open Space on Schedule RC-1 and located between the Environmental Protection Area designation and the Low Density Residential designation the following policies will also apply: a. the permitted uses will include open space, parklands, a stormwater management facility, and a tree preservation area; b. within the tree preservation area native trees will be promoted and left largely undisturbed; d. buildings, structures, pathways or other facilities will not be permitted within the defined tree preservation area.	Yes			
10C. Catarqui North Secondary Plan - 10C.1.7 To encourage the preservation of significant features of the natural environment, such as watercourses and stands of mature trees, and integrate such resources into proposed developments, wherever possible.	Yes			
10C.1.13 - To implement a tree planting program that is consistent with municipal policy.				Yes
10C.8 Transportation Policies - 10C.8.1 Though Schedule CN-1 does not show local roads, it is intended that local roads will accommodate automobiles, public transit, all modes of active transportation, service vehicles and other supporting features such as parking, laneways, loading areas, street furniture and tree planting.		Yes		
10C.9 Development Policies - 10C.9.2 The location of roads and land uses will reflect the natural environment, specifically: c) appropriate species of deciduous trees are planted along the boulevards of key streets throughout the neighbourhood to provide, ultimately, a continuous tree canopy that will enhance natural habitats and serve as connecting links to open space and other natural areas;				
10D.1 Catarqui West Goal and Objectives - 10D.1.2. Secondary Plan Objectives - j) encourage tree preservation practices so as to enhance the existing natural environment and the aesthetics of the built environment;	Yes			
10D.10.1. Natural Environment - Every reasonable effort will be made to ensure that development proposals contribute to an environmentally-sensitive, healthy, urban setting. Specifically: b) appropriate species of deciduous trees will be planted in the street boulevards throughout the neighbourhood to provide, ultimately, a continuous tree canopy to enhance wildlife habitat and serve as connecting links with open space and other natural areas. All tree planting, removal and replacement works must be undertaken in accordance with the City's Tree By-Law;			Yes	
Boulevards - 10E.1.14 The following policies apply to the Williamsville Main Street boulevard: c) Wherever possible, the boulevard should contain linear planting of street trees in clustered tree trenches to encourage longevity and viability. Street tree locations should be coordinated with utilities to minimize root pruning during utility maintenance and to ensure optimum tree growth.		Yes		
Green Streets - 10E.1.21 Green streets are defined as tree-lined corridors that create important visual links and enhance pedestrian and cyclist connections between areas within and surrounding the Williamsville Main Street. Green streets should incorporate healthy tree planting practices in order to ensure the longevity of trees and the creation of street canopies. Planting should include double rows of trees on both sides of the street wherever possible, with enhanced landscape treatments where appropriate.		Yes		

		Low Density Residential Policies - 10F.3.9 When considering new development within the Low Density Residential designation, the following design guidelines apply: a. SiteDesignandBuildingOrientation - Every effort should be made to retain existing mature trees in this area.	Yes			
		Medium Density Residential - 10F.3.13 Medium Density Residential areas shall be compatible with the character of the Heritage Landscape designation and enhanced through the preservation and/or planting of mature trees and shrubs along roadsides, pathways and on residential properties. (note: this policy is the same for Low Density Residential and High Density Residential)				
		10F.4 Mixed Use Policies - 10F.4.8 Mixed Use areas shall be compatible with the character of the Heritage Landscape designation and enhanced through the preservation and/or planting of mature trees and shrubs along roadsides, pathways and on residential properties.	Yes	Yes		
		10F.6 Heritage Landscape Policies - 10F.6.11 - 19th century plantings of specimen trees that are now in a mature state should be maintained to conserve these important cultural heritage resources	Yes			
Guidelines for Tree Preservation and Protection	2007	NOTE: A document for developers to provide info on protecting trees on a site under construction				
Design Guidelines - Communities	2015	5.6 Boulevards and Sidewalks: h. Plant street trees within the Street Furniture and Landscape Zone (refer to Figure 5-13). Use double rows of trees in key areas where space allows, such as next to open spaces and wider boulevards. See the Street Trees section for further details.		Yes		
		5.6 Boulevards and Sidewalks: k. Expand sidewalk widths where pedestrian activity is concentrated. At neighbourhood hubs, design sidewalks as high quality spaces that include street furniture, street trees, special paving, signage, public art and seasonal banners.		Yes		
		5.7 Traffic Calming: d. Incorporate treed bump-outs in combination with on-street parking. Strategically placed along the side of the roadway, these elements force drivers to slow down by narrowing the traffic lane.		Yes		
		5.9 Street Trees - a) Plant street trees at regular intervals to create a street canopy that will integrate them as a major component of all streets. Mature street trees provide shade for pedestrians, slow traffic, reduce the urban heat island effect, enhance the visual and environmental qualities of the street, increase land value, and provide a buffer between the pavement, sidewalk and buildings. b) Locate street trees within the street furniture and landscape zone and offset them from the curb to accommodate snow storage, large vehicle movements, and to minimize salt damage, and to allow for enough room for when the trees reach physical maturity. c) Provide adequate soil volume for trees in hard boulevard surface environments and ensure that utility trenches are placed away from the growing space needed for proper street tree establishment. d) Preserve existing street trees wherever possible, as mature street trees create a greater sense of enclosure along streets.e) Use trees to create canopy and shade especially in parking areas and passive open space areas. Trees should be spaced to allow 'filtered' views for security purposes. f) Consider the type and location of trees to avoid interference between higher branching trees and truck traffic, sight lines, utilities, rooftop solar panels, etc. g) Incorporate a variety of native tree species. Using only one type of tree increases the risk of tree loss to disease or infestation (e.g. emerald ash borer, Dutch elm disease).	Yes	Yes	Yes	
		6.1 On-Street Parking - d. Landscape curb extensions with street trees or low level ground cover and design them to accommodate snow storage.		Yes		
		6.3 Surface Parking - e. Preserve sightlines to surface parking areas and primary building façade, but screen parking with softened views at sidewalk level by using landscaping such as trees and shrubs, or other interesting visual features. Incorporate CPTED principles including an easily observed location, natural view corridors, and coordinated landscaping and lighting.		Yes		
		6.3 Surface Parking - h. Provide landscaping that is proportionate to the overall parking lot size, using approximately 1 tree for every 8 parking spaces. Use plant materials with appropriate year- round appearance, hardiness, and maintenance requirements. Landscaping improves edge conditions and minimizes visual impact, surface water runoff and heat island effects. Define areas for accommodating snow storage.		Yes		Yes
Design Guid	2015	4.1 Building Orientation and Configuration: f. Preserve mature on-site trees, wherever possible, by locating structures in areas where existing mature vegetation is not affected.	Yes			

		6.10 Heritage Considerations: j. Protect site elements and features, such as large mature trees, wrought-iron fencing, stone walls, and stone paving.	Yes			
		7.3 Surface Parking lots - b. Preserve sightlines to surface parking areas, but screen parking with softened views at sidewalk level by using landscaping such as trees and shrubs, or other interesting visual features.		Yes		
		7.3 Surface Parking lots - h. Provide tree landscaping that is proportionate to the overall parking lot size, with generally 1 tree for every 8 parking spaces.		Yes		Yes
		9.1 Landscaping: d. Assess and retain existing landscape features of environmental and ecological value. Protect and incorporate existing trees, tree stands, and vegetation. Where trees are to be removed, it should be shown that alternative measures such as pruning are impractical, and suitable replacement trees should be planted and maintained elsewhere on the site, wherever possible. e. Plant new trees to contribute to the City's existing tree canopy. Plant new trees where the rhythm of existing trees is interrupted to infill and maintain a continuous canopy. Incorporate a variety of tree types to protect against major deforestation in the event of a species-specific affliction. f. Use trees to create canopy and shade especially in parking areas and passive open space areas. Trees should be spaced to allow 'filtered' views for security purposes. g. Locate deciduous trees to shade windows of dwellings to reduce cooling costs in the summer. Locate coniferous trees to create barriers protecting structures from prevailing winter winds. k. Create an attractive sidewalk edge by planting trees, shrubs, hedges, ornamental plantings and groundcover adjacent to the street and sidewalk, but not within the municipal right-of-way. Select hardy, salt-tolerant, native plant material that can thrive in stringent urban conditions. Position and maintain landscaping such that pedestrian passageways, sight-triangles and entrances are clear of obstacles.	Yes		Yes	
Kitchener Official Plan 2014		4.C.1.24 The City, in accordance with Planning Act and other applicable legislation, will permit stand-alone secondary dwelling units, such as a coach house dwelling or a garden suite as an ancillary use to all single detached dwellings, subject to a Zoning By-law Amendment and appropriate zoning regulations being in place. The following criteria will be considered as the basis for all Zoning By-law Amendments to permit a coach house dwelling or a garden suite. d) other requirements such as servicing, parking, access, stormwater management, tree preservation, landscaping and the provision of amenity areas.	Yes			
		7.C.2.1. The Natural Heritage System includes all the natural heritage features which have been identified by the Kitchener Natural Heritage System Technical Background Report for protection, conservation, restoration and/or enhancement. The features of the Natural Heritage System include but are not limited to the following: g) Significant Woodlands; h) Locally Significant Woodlands	Yes			
		7.C.2.3. Illegal acts resulting, or having resulted, in a reduction in the form or function of a natural heritage feature, including but not limited to such acts as tree removal, wetland filling or draining, or the diverting of watercourses, will not be recognized as existing conditions within the development review process. Restoration of the damaged area may be required prior to, or as a condition of, approval of any development applications.	Yes			Yes
		7.C.2.4 The removal, destruction or injuring of woodlands and/or trees will be regulated through the City's Tree Conservation By-law.				Yes
		7.C.2.23. Development, redevelopment or site alteration will only be permitted on lands adjacent to the Natural Heritage Conservation features where an Environmental Impact Study or other appropriate study has determined to the satisfaction of the City, Region, Grand River Conservation Authority and/or Province, as appropriate, that approval of the proposed development, redevelopment or site alteration would not result in adverse environmental impacts on the natural heritage feature or the ecological functions of the feature.	Yes			
		8.C.2.1. The City will preserve, protect, manage, replace and where appropriate acquire significant tree stands, hedgerows, woodlands and forested areas within the city boundaries	Yes	Yes		
		8.C.2.2. The City, in accordance with the Parks Strategic Plan, will develop an Urban Forest Management Strategy including a tree inventory and an update of the Woodland Management Program.	Yes			
		8.C.2.4. The City, in accordance with the Parks Strategic Plan, will implement a tree planting and replacement program and support natural area and urban woodland retention and maintenance.	Yes			
		8.C.2.5 The City will encourage landscaping on public and private lands to preserve and complement the existing natural landscape. The City will direct the use of a mix of indigenous plant species and trees having historic or cultural significance in these landscape areas.			Yes	
		8.C.2.6. The City will incorporate existing and/or new trees into the streetscape or road rights-of-way and encourage new development or redevelopment to incorporate, protect and conserve existing healthy trees and woodlands in accordance with the Urban Design Policies in Section 11, the Urban Design Manual and the Development Manual.	Yes			
		8.C.2.9 The City will promote and encourage the protection and wise management of trees located within and outside a road right-of-way and encourage public authorities to give due consideration to their preservation when undertaking infrastructure projects and regular maintenance.	Yes			
	8.C.2.10 The City will require the replacement of any trees damaged or removed from an existing road right-of-way due to a development or infrastructure project.				Yes	

		8.C.2.11 By-laws enacted under the Municipal Act will contain details and regulations pertaining to protection, planting, care and maintenance of City trees within a public right-of-way and regulate and ensure the appropriate use of the City's natural areas including parks.				Yes
		8.C.2.12. The City will encourage the reforestation, wise management and improvement of privately owned trees and woodlands within the City.	Yes			
		8.C.2.13. Tree removal on private property will be subject to the City Tree Conservation By-law where applicable.	Yes			
		8.C.2.14 The City will, whenever possible, provide guidance and advice for the reforestation, wise management and improvement of privately owned trees and woodlands within the city.	Yes			
		8.C.2.15. The City may require existing trees and vegetation to be retained through the Site Plan Approval process to act as buffers to minimize potential adverse effects to sensitive natural areas.				Yes
		8.C.2.16. The City will require the preparation and submission of a tree management plan in accordance with the City's Tree Management Policy, where applicable, as a condition of a development application. Any tree management plan must identify the trees proposed to be removed, justify the need for removal, identify the methods of removal and specify an ecologically sound tree replacement scheme and any mitigative measures to be taken to prevent detrimental impacts on remaining trees.	Yes			
		8.C.2.17. The City will consider the importance of woodlands, not classified as significant, during the development review process by considering the following: a) the potential impact of the proposed development, redevelopment or site alteration on the ecological functions of the woodland; b) the impact of the proposed development, redevelopment or site alteration on the extent and distribution of woodland cover in the watershed, the city and the local planning community; and, c) opportunities to restore or re-establish productive forest habitats consisting of native species following the completion of the proposed development.	Yes		Yes	
		8.C.2.18. The City will minimize the impact of development, redevelopment or site alteration on woodlands, not classified as significant through the implementation of appropriate mitigation measures, which may include compensation.			Yes	
		8.C.2.19. When considering development, redevelopment or site alteration proposals, the City may require the protection and enhancement of hedgerows, especially where: a) they link other elements of the Natural Heritage System; b) wildlife regularly use them as habitat or movement corridors; c) they are composed of mature, healthy trees; d) they contain trees that are rare, unique, culturally important or over 100 years in age; or, e) they contribute to the aesthetics of the landscape.	Yes		Yes	
		13.C.4.17. The following additional policies will apply to the specified Heritage Corridors listed below: b) Tilt Drive from Doon Mills Drive to Stauffer Drive. This section of Tilt Drive is closed to vehicular traffic. Local road crossings provide access to the abutting lands on the west side of Tilt Drive. Every effort will be made to maintain and conserve existing trees and hedgerows within its existing right-of-way.; c) Tilt Drive from Doon Mills Drive to Doon Village Road. It is intended that this section of Tilt Drive will be closed to vehicular traffic. Every effort will be made to maintain and conserve existing trees and hedgerows within its existing right-of-way.	Yes			
		15.D.2.33. The City may identify and establish a plan and hierarchy for green areas within the Urban Growth Centre (Downtown) to contribute to a liveable Downtown and develop a strategy for implementing new tree plantings.			Yes	
		17.E.9.2. Community Improvement Project Areas may be established by Council and designated by by-law, in accordance with the provisions of the Planning Act, as long as the area satisfies one or more of the following criteria: f) there are deficient streetscapes in terms of poor roads, curbs, sidewalk, boulevards, tree planting, street furniture and street lighting;			Yes	
		17.E.22.3. Proposed development or redevelopment within the Site Plan Control Area may not be permitted until such time as the City has approved drawings showing plan, elevation and cross-section views for all buildings to be erected (including all buildings to be used for residential purposes regardless of the number of units) and for other site development works sufficient to display the following: b) Design elements within and/or adjacent to City and/or Regional right-of-way, including without limitation: i) trees, shrubs and/or hedges				Yes
Urban Design Manual - City-wide Design	2019	Age and Family Friendly Design - Design the public realm with frequent rest areas, including barrier-free seating, weather protection and shade trees. Ensure comfortable wind conditions for users.			Yes	
		Design for Sustainability - Provide street trees along all streets with sufficient soil volume to ensure a healthy, mature canopy. Maximize tree planting wherever possible. Ensure natural and built shade features are available at outdoor public spaces.			Yes	Yes
		Four Design & Winter Season Design - Give preference to deciduous trees to the south and southwest of buildings or shared space where shade is desired. Deciduous trees will provide shade in the summer while allowing sunlight to filter through in the winter.	Yes		Yes	
		Complete Streets - Maintainable: Plan and design for the ongoing maintenance of streetscapes, including trees/landscaping, sidewalks and bike lanes within the public realm.	Yes			

		Complete Streets - Coordinated: Design streets to accommodate the full range of utilities in a coordinated, comprehensive manner to ensure an attractive, uncluttered streetscape that is designed for people. This includes trees, stormwater management, natural gas, hydro, telecoms, and any other utilities.		Yes		
		Street Design - Provide street trees with the goal of creating a continuous mature tree canopy wherever possible.		Yes	Yes	
		Street Design - Provide additional trees, planters and other soft landscaping elements, featuring a sensitive, diverse and attractive mix of plant species that are durable, easy to maintain and designed to meet the needs of all users (including wildlife) throughout all four seasons.		Yes		
		Street Design -Protect existing natural features and provide sufficient soil depth, volume and growing medium for new trees.			Yes	
		Street Design - Protect existing natural features and provide sufficient soil depth, volume and growing medium for new trees.			Yes	
		Scale & Transition - Use thoughtful and creative landscape design to create compatibility. This includes the size, placement and style of public and private open spaces, using landscaping to provide screening and help established a human-scaled streetscape, and using planting beds, trees, shrubs and other landscaping to enhance setbacks and reinforce boundaries and thresholds.		Yes		
		Landscaping - Plant trees, shrubs, and ground cover on any unbuilt portions of the site that are not required for other site functions. This includes any areas reserved for future phases of development.		Yes		
		Landscaping - Protect and feature heritage, specimen and mature trees on site by minimizing grade changes, protecting against construction impacts and preserving permeable surfaces.	Yes			
		Landscaping - Provide landscape areas between the building and the sidewalk with plant beds, planters, trees, street furniture and walkways to the public sidewalk.		Yes		
		Landscaping - Where trees are proposed within landscaped areas, adequate soil volumes are to be planned in order that trees may achieve a mature canopy size.			Yes	
		Urban Forestry - Provide enhanced boulevard treatment by planting large canopy street trees where adequate soil volumes are available or can be provided, consistent with the City's urban forestry objectives.			Yes	
		Urban Forestry - Where boulevard locations and lot frontages are restricted, consider a range of alternative suitable locations for public and private trees.		Yes		
		Urban Forestry - Retain and incorporate existing trees and other natural features into new development planning where possible, using tree protection and conservation techniques to protect the integrity of the root soil zone as well as the existing growing and drainage characteristics of the site.	Yes			
Urban Design Manual - Major Transit Station Areas	2019	Design for Sustainability - Health & Well Being - Provide sustainable landscaping within streetscapes, including a range of vegetation focusing on street trees and stormwater retention and infiltration techniques. Use storm water for landscape irrigation where possible.			Yes	
		Shared Spaces - Landscaping - Ensure effective use of landscape screening along property lines and to provide separation between automotive and pedestrian areas. Pursue all opportunities to provide tree plantings on-site, particularly large canopy trees that will contribute significantly to Kitchener's urban tree canopy. Pursue landscaping opportunities that align with sustainability objectives including Low Impact Development (LID) stormwater techniques, using local, hardy and drought-resistant plant species, providing for the needs of bird and wildlife habitats, and integrating into existing natural systems and surrounding contexts to leverage and reinforce sustainable goals.		Yes	Yes	
		PARTS Midtown - Design for Midtown - Setback new development along King St. W to accommodate street trees and a minimum sidewalk width of 2m. Street trees should be consistent in their spacing, stature and soil volumes and be coordinated between sites/properties.		Yes	Yes	
		PARTS Midtown - Design for Midtown - Buildings along Park St. and Glasgow St. should have generous setbacks to create more walkable sidewalks and provide ample room for landscaped areas including street trees.		Yes		
		PARTS Midtown - Design for Midtown - Design Glasgow St., Mt. Hope St., Green St., and Strange St. as complete streets with a focus on cycling infrastructure. This includes coordinating street trees, landscaping, traffic calming, bicycle parking, lighting and seating.		Yes		
		PARTS Central - Design for Central - Setback new development along King St., Charles St. and Courtland Ave. to accommodate street trees and a minimum sidewalk width of 2m.		Yes		
		PARTS Central - Design for Central - Street trees along King St., Charles St. and Courtland Ave. should be consistent in their spacing, stature, soil volumes and coordinated between developments.		Yes	Yes	
		PARTS Rockway - Design for Rockway - Transform King St. E. into a gateway to the city core with active frontages, a human-scaled public realm, setbacks to accommodate street trees and wide pedestrian pathways.		Yes		
Urban Design Manual	2019	Design for sustainability - Health & Well Being - Provide a mixture of coniferous and deciduous trees. Concentrate deciduous trees to shade south and south-west windows from the summer sun. Concentrate coniferous trees on the north and northwest to screen prevailing winter winds.		Yes		

		Street design - Streets in Central Neighbourhoods - Provide public-level amenities along private streets, including sidewalks and street trees.		Yes		
		Street design - Streets in Central Neighbourhoods - Provide adequate soil volumes for all trees to ensure a healthy mature canopy.			Yes	
		Compatibility - Scale & Transition - Provide public-level amenities for private streets, including sidewalks, street trees and seating		Yes		
		Shared Spaces - Landscaping - Design infill around existing trees and topography to retain established landscaping patterns and characteristics. Retain and protect existing healthy, mature trees wherever possible.	Yes			
Urban Design Manual - New Neighbourhoods	2019	Establishing Neighbourhood Structure - Existing Site Features - Conserve and integrate natural features such as mature trees, woodlands, valleylands and wetlands (and required buffers) through appropriate supporting environmental studies and land conveyance, creative parks and open space design, street alignments and alternative lotting or floor plan configurations.	Yes			
		Establishing Neighbourhood Structure - Existing Site Features - Provide buffer areas around existing natural features, such as woodlands and significant wetlands, as appropriate, to help ensure conservation. Buffers should be established through Environmental Impact Assessments and/or Tree Management Policy		Yes		
		Creating Walkable Neighbourhoods - Design for Active Transportation - Create pedestrian friendly streets through means including attractive building facades, street trees, landscaping and interesting streetscape elements.		Yes		
		Design for Outdoor Comfort - Microclimates - Provide a mixture of coniferous and deciduous trees. Concentrate deciduous trees to shade south and south-west windows from the summer sun. Concentrate coniferous trees on the north and northwest to screen prevailing winter winds.		Yes	Yes	
		Street Design - Street Trees - Provide a continuous street tree canopy with large, medium and small stature trees distributed appropriately throughout the streetscape. Ensure adequate soil volumes and satisfy the specifications outlines in the City's Development Manual.		Yes	Yes	
		Street Design - Street Trees - Provide double-loaded (paired) street trees along park space frontages, open space frontages, non-residential development frontages or reverse lotted frontages.		Yes		
		Street Design - Street Trees - Provide additional street trees along landscaped medians, trailheads and pedestrian connections.		Yes		
		Street Design - Street Trees - Provide additional street trees along landscaped medians, trailheads and pedestrian connections.		Yes		
		Street Design - Focal Points & Gateways - Preferred Landscaped Median (>2m). Provide large canopy trees with low height plant materials.		Yes		
		Street Design - Focal Points & Gateways - Narrow Landscaped Median Nar (1.5-2.0m). Provide low growing non-woody vegetation. Provide structural soils and adequate soil volumes for small trees.		Yes	Yes	
		Street Design - Focal Points & Gateways - Provide enhanced boulevard treatment by planting large canopy street trees where adequate soil volumes exist, consistent with the City's Urban Forestry objectives.		Yes	Yes	
Parks & Open Spaces - Park & Open Space Design - Consider a variety of functions, facilities and features in each park space such as playground equipment, seating areas, information kiosks, street trees, plant materials, neighbourhood mailboxes, interpretative signage, landmarks, linkages and passive naturalized areas.		Yes				
Parks & Open Spaces - Park & Open Space Design - Incorporate seating areas into play areas with waste and recycling receptacles and trees for shade.		Yes				
Urban Design Manual - Downtown	2019	Community Design - Design for Climate Change - Pursue all opportunities to increase the urban tree canopy by designing sites to conserve existing trees while providing for new, large canopy tree planting wherever possible.	Yes	Yes		
		Street Design - Streets in the Downtown - Streetscape design is to form an integral part of all development, seamlessly connecting the public and private rights of way to the building interior(s) in thoughtful, creative, dynamic ways. This includes street trees, landscaped areas, cycling infrastructure, seating areas, pedestrian refuge, walkways, public art and other features.		Yes		
Urban Design Manual - Nodes & Corridors	2019	Street Design - Blocks & Streets - During streetscape reconstruction or as part of redevelopment, coordinate utilities in the right-of-way to ensure ample opportunity exists for street trees and other urban design elements.		Yes		
		Street Design - Blocks & Streets - Provide a coordinated streetscape (both within the public and private realm) that seamlessly incorporates the following interwoven elements: Trees, planters and hard and so landscaping features using resilient species.		Yes	Yes	
		Built Form - Massing - Buildings are to be setback an appropriate distance from the front and exterior side property lines to define the street edge and to provide space for pedestrian activity and landscaping, including street trees.		Yes		
		Built Form - Massing - Avoid blank walls. Where unavoidable, screen from public view with landscaping, including a mix of deciduous and coniferous trees along the full extent of the blank facade. Use art, projections, recesses, canopies, colour and texture to reduce the impact of unglazed walls.		Yes		

		Shared Spaces - Landscaping - Plant street trees along public streets and along the full length of internal pedestrian walkways. Plant trees in permeable surface areas, with an adequate amount of structural soil that allows for trees to reach their full mature canopies.		Yes	Yes	
		Shared Spaces - Landscaping - Select trees, shrubs and other vegetation considering their tolerance to urban conditions, such as road salt and heat. Give preference to native species of the region that are of equal suitability.			Yes	
		Shared Spaces - Landscaping - Plant trees in landscaped islands in parking areas, with at least two trees together, and provide adequate soil volumes for the trees to thrive.		Yes	Yes	
		Shared Spaces - Landscaping - Plant trees, shrubs, ground cover etc. on any unbuilt portions of the site. Where future phases are contemplated, temporary landscaping may be permissible, provided it is compatible with the permanent landscape site design.		Yes		
Urban Design Manual - 2019		Shared Spaces - Landscaping - Landscaped areas are to contain trees, mid-height plants such as shrubs or tall grasses and groundcovers. Design these areas to be visually appealing and easily maintainable.		Yes		
		Shared Spaces - Landscaping - Larger species of trees should be mainly deciduous, in order to maintain views from the street to the building façade.		Yes		
Urban Design Manual - Green Areas		Shared Spaces - Landscaping - Employ tree protection and conservation techniques that protect the integrity of the root soil zone as well as the existing growing and drainage characteristics of the site.			Yes	
		Shared Spaces - Landscaping - Use a mixture of tree species and other plant materials to promote comfortable microclimatic conditions including deciduous trees for shading and coniferous trees to protect from winter winds.		Yes		
		Shared Spaces - Landscaping - Place trees and other plant materials such that they do not obstruct natural surveillance, create unsafe entrapment areas or otherwise negatively impact the space.		Yes		
		Shared Spaces - Landscaping - Place trees and other plant materials to take advantage of maintenance efficiencies, reduce the need for watering, and facilitate stormwater, heritage and sustainability objectives.		Yes	Yes	
		Shared Spaces - Landscaping - Select trees and other plant materials that are low maintenance, drought tolerant, disease resistant, and varied in colour, texture, and scale. Encourage growth with generous soil volumes.			Yes	
		Shared Spaces - Landscaping - Provide trees and other plant materials that complement adjacent streetscape design.		Yes		
Urban Design Manual - Mid-rise Buildings	2019	Shared Spaces - Landscaping - All sites are to be comprehensively landscaped including substantial tree planting, generous landscape buffers, and planting beds which provide screening between pedestrian pathways and drive aisles, parking areas and site function and servicing elements. Use landscaping to accentuate, unify and complement different areas of the site.		Yes		
Urban Design Manual - Low Rise Multiple Residential Buildings	2019	Compatibility - Massing & Placement - All available space between the street and the building is to be landscaped, including street trees and entry features.		Yes		
		Inclusive Design - Safety - A Crime Prevention Through Environmental Design (CPTED) Report will be required of any proposals featuring 'cantilevered' building elements over drive aisles, parking areas, areas of pedestrian circulation and underground parking structures. Use human-scaled lighting and landscaping to maximize safety and comfort. Limit the height of trees and shrubs where they may impact pedestrian or motorist sight lines.		Yes		
		Site Design - Landscaping - Respect and enhance the existing landscape design of streets and neighbouring properties. Preserve and integrate existing trees, vegetation and natural landscape features into the landscape design of new development. Minimize impervious surfaces by reducing driveway and surface parking areas and providing permeable or semi-permeable surface materials as alternatives to concrete or asphalt. Preserve natural drainage flow and incorporate vegetated swales where appropriate. Employ native, non-invasive vegetation and drought-tolerant species. Consider green roofs on buildings or structured parking. Provide so landscape distributed throughout the site, including tree cover over parking areas, sidewalks, laneways, driveways and other hard surfaces.		Yes	Yes	
Urban Design Manual - Structured	2019	Shared Space - Landscaping - Plant trees wherever possible within on-site landscaped areas, including landscape boulevards.		Yes		
		Shared Space - Landscaping - Create tree-lined streets with a full, continuous canopy, where possible.		Yes		
Urban Design Manual - Structured	2019	Shared Spaces - Landscaping - Focus parking-related landscaping on sustainable design, particularly strategies which offset the impacts of vehicle usage and emissions associated with parking structures, such as CO2 sinks, living walls, trees and low-impact stormwater planters/permeable surfaces.		Yes	Yes	
		Public Realm - Streetscape & Landscape Design - Protecting existing natural features and providing sufficient soil depth, volume and growing medium for new trees	Yes		Yes	

Mississauga	Official Plan	2019	4.5 Acheiving the Guiding Principles - Value The Environment - Mississauga has natural areas of exceptional beauty and quality. Mississauga will serve as a steward of the environment by protecting, enhancing, restoring and expanding its Natural Heritage System, making use of sustainable green infrastructure, and preserving and protecting trees.	Yes			
			5.3.1 Downtown - [...] Opportunities to enjoy nature in a variety of urban open spaces that include trees and other natural elements will be provided. [...]		Yes		
			6.2 Living Green - Individual sites and portions of the public realm can contribute to the health of the environment by incorporating measures such as: planting trees;			Yes	
			6.2.12 Mississauga will encourage tree planting on public and private lands and will strive to increase the Urban Forest canopy.			Yes	
			6.3.7 Buffers which are vegetated protection areas that provide a physical separation of development from the limits of natural heritage features and Natural Hazard Lands, will be provided to perform the following: - protection of tree root zones to ensure survival of vegetation; - provision of a safety zone for tree fall next to woodlands;			Yes	
			6.3.19 Development proposals and site alteration for lands within a Residential Woodland will have regard for how existing tree canopy and understorey are protected, enhanced, restored and expanded. A site development plan may be required to demonstrate how the following, among other matters, have been addressed:	Yes			Yes
			6.3.24 The Natural Heritage System will be protected, enhanced, restored and expanded through the following measures: a. ensuring that development in or adjacent to the Natural Heritage System protects and maintains natural heritage features and their ecological functions through such means as tree preservation, appropriate location of building envelopes, grading, landscaping, and parking and amenity area locations;	Yes			
			6.3.42 Mississauga will protect, enhance, restore and expand the Urban Forest. This will be achieved by the following: a. developing and implementing a strategic planting program, specific to distinct geographic areas within the city; b. developing and implementing a strategic pro- active maintenance program pertaining to trees on public land; c. providing sustainable growing environments for trees by allocating adequate soil volumes and landscaped areas during the design of new development and infrastructure projects; d. developing and implementing consistent standards for tree protection and planting across the city; f. increasing tree canopy coverage and diversity, by planting trees appropriate to the location and avoiding the use of non-native tree and shrub species that are invasive; g. regulating the injury and destruction of trees on public and private property; k. compliance with by-laws pertaining to tree preservation and protection.	Yes		Yes	Yes
			6.3.43 The preservation of trees and woodlots on public and private property that serve to connect and enhance the overall vegetative system and improve wildlife habitat will be encouraged.	Yes		Yes	
			6.3.44 Development and site alteration will demonstrate that there will be no negative impacts to the Urban Forest. An arborist report and tree inventory that demonstrates tree preservation and protection both pre and post construction, and where preservation of some trees is not feasible, identifies opportunities for replacement, will be prepared to the satisfaction of the City in compliance with the City's tree permit by-law.	Yes			Yes
			6.3.45 Where tree replacement cannot be accommodated on-site, the City may require cash-in- lieu for replacement trees elsewhere or replacement plantings at a location approved by the City.				Yes
			6.3.81 Wherever possible, significant treed areas throughout Mississauga will be incorporated into the Public Open Space network. Where appropriate, these areas will be retained in a natural condition or be permitted to regenerate to assume a natural state. Active recreation will be restricted to lands that have been specifically acquired and developed for such purposes.	Yes			
			7.6.1.2 Built form within Intensification Areas should provide for the creation of a sense of place through, among other matters, distinctive architecture, high quality public art, streetscaping (including street trees), and cultural heritage recognition.		Yes		
			7.4.1. Cultural Heritage Resources - Mississauga's cultural heritage resources reflect the social, cultural and ethnic heritage of the city and, as such, are imperative to conserve and protect. Cultural heritage resources are structures, sites, environments, artifacts and traditions that are of cultural, historical, architectural, or archaeological value, significance or interest. These include, but are not limited to: environments such as landscapes, streetscapes, flora and fauna within a defined area, parks, heritage trails and historic corridors;	Yes			
			8.3.1.1 The City will design its roads in a manner that: c. minimizes the disruption to the Natural Heritage System and preserves, where appropriate, existing tree canopies;	Yes			
			9.2.1.36 Streetscape improvements including trees, pedestrian scale lighting, special paving and street furniture in sidewalks, boulevards, open spaces and walkways, will be coordinated and well designed.		Yes		
9.2.2.3 While new development need not mirror existing development, new development in Neighbourhoods will: f. preserve mature high quality trees and ensure replacement of the tree canopy; and	Yes						

9.3.3.11 Lands fronting, flanking and/or abutting Mississauga Road, between the Canadian Pacific Railway, located south of Reid Drive, and Lakeshore Road West, are part of a designated scenic route. These lands will be subject to the following: i. tree preservation and enhancement will be required on public and private lands in order to maintain existing trees;	Yes			
9.5.2.2 Developments will be sited and massed to contribute to a safe and comfortable environment for pedestrians by: d. providing opportunities for weather protection, including awnings and trees.		Yes		
9.5.2.5 Development proponents may be required to upgrade the public boulevard and contribute to the quality and character of streets and open spaces by providing: a. street trees and landscaping, and relocating utilities, if required;		Yes		
9.5.2.11 Site development will be required to: f. preserve significant trees on public and private lands;	Yes			Yes
9.5.5.3 Where surface parking is permitted, the following will apply. Parking should: b. incorporate stormwater best management practices, such as, permeable paving, bioretention areas and tree clusters; f. have appropriate landscape treatment including trees and lighting, throughout parking lots;		Yes		
10.6 Infrastructure and Utilities - 10.6.7 The preservation of existing trees and the planting of new trees will be given priority and coordinated with utility placement within the public boulevard.	Yes	Yes		
10.7 Energy and Power Generation - 10.7.6 Mississauga encourages the creation of innovative strategies such as green site design and green buildings, which utilize technology such as green roofs, white roofs and the use of the urban tree canopy to achieve energy efficiencies.			Yes	
12.4.1.9 Public Realm: The Design of the Public Boulevard - The following features should be encouraged to reduce the perceived visual width of the street and improve the level of pedestrian comfort, safety and convenience within the public boulevard: f. provision of street trees, feature lighting and related pedestrian amenities.		Yes		
13.3.5.1 Living Green - 13.3.5.1.1 To achieve a sustainable community, development will be designed to include sustainable measures such as: planting trees;		Yes		
13.3.7.1.5 Streets will be designed to incorporate active transportation and provide views to the waterfront. Lakefront Promenade, Street 'I', Hydro Road/Street 'J' and Street 'K' will be designed with enhanced streetscapes that may include among other things, wide sidewalks, street trees, planting, furniture.		Yes		
13.3.8.2.1 Development master plans will provide direction and contain built form guidelines to be prepared to the City's satisfaction, addressing issues including, but not limited to: d. use of public and private open spaces to accommodate innovative stormwater best management practices, including low impact development techniques, reinforce view corridors, enhance the aesthetic quality of the area, increase the tree canopy, and enhanced connections (i.e. connections to the adjoining street network);		Yes		
13.3.8.2.1 - g. streetscape and upgraded boulevard treatments that provide appropriate setbacks to reflect planned function, minimize vehicular access points, create an attractive public and private realm and provide opportunities for tree planting;		Yes		
14.7.2.2.2 Notwithstanding the provisions of the Residential High Density and Convenience Commercial designations, the following additional policies will apply: a. a concept plan for all or part of this site may be required and will address, among other matters, the following: preservation of all mature trees and other significant natural features; and	Yes			
14.10.1.8 The established residential character of the areas generally located along Queen Street South, south of Barry Avenue, will be maintained through appropriate building masses, setbacks, intensive landscaping, streetscapes with many mature trees, and a regular street grid pattern.	Yes			
14.10.6.1.5 Sufficient on-site parking, which will consist of only surface parking, as required by the Zoning By-law, should be provided in the rear yard only at grade without removal of existing trees, except at the discretion of the City arborist.	Yes			
15.5.2.2 To achieve and enhance the campus like setting, the following design guidelines will be used to evaluate development proposals: d. landscape design should incorporate the following: a consistent pattern of trees lining the streets to unite the elements of the open space system and refresh the green identity within Sheridan Park Corporate Centre;		Yes		
15.5.2.2 To achieve and enhance the campus like setting, the following design guidelines will be used to evaluate development proposals: e. large expanses of surface parking will be softened by landscaped islands with canopy trees;		Yes		
15.2.2.1.1 The lands identified as Special Site 1 are located north of Eglinton Avenue West, south of Matheson Boulevard East, east of the Etobicoke Creek, to Explorer Drive and all lands east of Explorer Drive: c. Pedestrian Connections: Development will promote pedestrian movements to and from transit stations through the local streets and publicly accessible private pedestrian connections or private open space areas (plazas). The location, size and character of the publicly accessible connections will be determined during the site plan review process having regard for the following: streetscape improvements will be coordinated and well designed, including trees, pedestrian scale lighting, special paving and street furniture on sidewalks, boulevards and important pedestrian and publicly accessible open space areas and walkways;		Yes		

15.2.2.1.1 [...] - c. Pedestrian Connections: [...] the site plan review process having regard for the following: parking areas will have appropriate landscape treatments, including trees and lighting, throughout parking lots and along their edges, in order to improve the appearance of the parking areas, to contribute to the visual continuity of the street edge. Parking areas should also incorporate defined pedestrian routes for safe and convenient pedestrian movement to building entrances and other destinations to encourage the safe use of these spaces;		Yes		
15.3.1.2 The purpose of the following urban design policies is to define principles for the physical form and character of Hurontario Street: b. encourage a high standard of public and private realm streetscape design that is coordinated and comprehensive, particularly at Major Transit Station Areas, which includes street furniture, public art, building forecourts, open space, transit shelters, bicycle parking, tree planting, and the sensitive placement of utilities with consideration for the public and private realm;		Yes		
15.5.2.1 A business park within a natural setting creates the identity of Sheridan Park Corporate Centre that distinguishes it from other office parks. The campus like setting is achieved by a combination of public and private open spaces of various sizes, forms and functions. To achieve the City's urban design objectives for Sheridan Park Corporate Centre, development proposals should address the following: g. a Streetscape Master Plan will be prepared to coordinate street tree planting and right-of-way design.				Yes
15.5.2.2 To achieve and enhance the campus like setting, the following design guidelines will be used to evaluate development proposals: d. landscape design should incorporate the following: a consistent pattern of trees lining the streets to unite the elements of the open space system and refresh the green identity within Sheridan Park Corporate Centre;		Yes		
16.22.3.1.2 Notwithstanding the provisions of the Residential Low Density I designation of this Plan, the following additional policies will apply: a. a concept plan for all or part of this site may be required and will address, among other matters, the following: preservation of mature trees and other significant natural features; and	Yes			
16.22.3.2.2 Notwithstanding the provisions of the Residential Medium Density designation, the following additional policies will apply: a. a concept plan for all or part of this site may be required and will address, among other matters, the following: preservation of all mature trees and other significant natural features; and	Yes			
16.24.1.3 The established residential character of the areas generally located along Main Street east of Church Street and along Queen Street South, south of Barry Avenue, will be maintained through appropriate building masses, setbacks, intensive landscaping, streetscapes with many mature trees, and a regular street grid pattern.		Yes		
16.24.5.1.5 Sufficient on-site parking, which will consist of only surface parking, as required by the Zoning By-law, should be provided in the rear yard only at grade, without removal of existing trees, except at the discretion of the City arborist.				Yes
16.2.4.3.2 Notwithstanding the provisions of the Office designation, apartment dwellings in accordance with the Residential High Density designation, will also be permitted and the following additional policies will apply: b. approval for development will be subject to approval of a tree survey submission which demonstrates appropriate tree preservation measures.				Yes
16.2.4.4.3 Approval for development will be subject to approval of a tree survey submission which demonstrates appropriate tree preservation measures.				Yes
16.4.2.2.1 The lands surrounding the intersection of Thomas Street and Tenth Line West will form a community focus for the city through the development of a retail commercial facility and Residential High Density development. The form of development is to allow for transition of conventional dwellings to mixed uses with store fronts addressing mainstreets to achieve an urban character with a pedestrian friendly environment: [...] incorporation of measures such as landscape space, planters or tree grates; or other elements which reinforce the urban street wall; (NOTE: The same wording is also found in policies 16.4.2.5.1 and 16.4.7.4.2)		Yes		
16.5.1.4 For development of all detached dwellings on lands identified in the Site Plan Control By-law, the following will apply: h. preserve existing mature high quality trees to maintain the existing mature nature of these areas;	Yes			
16.5.3.1 Notwithstanding the Natural Heritage System policies of this Plan concerning residential woodlands, sites with mature trees will be subject to a review of a tree preservation plan prior to consideration of proposed development.				Yes
16.6.5.4.2 Notwithstanding the policies of this Plan, the following additional policies will apply: i. existing high quality trees will be preserved to maintain the existing mature nature of these areas;	Yes			
16.6.5.7.2 Notwithstanding the policies of this Plan, the following additional policies will apply: j. existing high quality trees will be preserved to maintain the existing mature nature of the area.	Yes			
16.7.3.1.2 Notwithstanding the provisions of the Residential Low Density II designation, the following additional policies will apply: b. new development will be subject to site plan approval to ensure compatibility with the heritage structure and the preservation of mature trees and other significant natural features.				Yes

16.9.2.2.2 Notwithstanding the provisions of the Residential Low Density I designation, the following additional policies apply: h. preserve existing mature high quality trees to maintain the existing mature nature of these areas; and	Yes			
16.15.1.1 The following principles should be encouraged during the evaluation of any development proposal: [...] There is a strong character of modest one to one and a half storey residential structures, mature trees and consistent setbacks.		Yes		
16.17.2.4 A concept plan may be required as part of the processing of any development application to illustrate the location of existing trees, the road and lotting pattern and connections to adjacent developments. Appropriate land assembly may be encouraged to achieve the objectives of this Plan.				Yes
16.17.2.12 The rural village character of the Heritage Conservation District must be maintained; for example, the small houses with complex massing, the generous front, rear and side setbacks, the many mature trees and the irregular topography. These provisions should also guide new development in close proximity to the Heritage Conservation District.		Yes		
16.17.2.13 The horizontal and vertical road alignments of existing roads within the Heritage Conservation District should be preserved with no widenings or significant changes to existing grades to ensure the preservation of existing hedgerow trees and Village character.		Yes		
16.17.2.14 The ditched cross-sections of existing roads within the Heritage Conservation District should be maintained to retain character and to avoid disrupting the existing drainage pattern and thus affecting the health of existing trees; reconstruction of these roads to a curb and gutter cross-section will require an amendment to this Plan.		Yes		
16.17.2.19 A concept plan will be required as part of the processing of any development application to illustrate the location of existing trees, the road and lotting pattern, connections to adjacent developments, existing and proposed grading, building envelopes, and garage locations.				Yes
16.17.2.20 The Precinct includes a progression of spaces and landscape features to define the edge of the Village; development near these gateways should enhance them and be in harmony with the character of the Village. The progression of spaces leading to the Village starts with a streetscape which is loosely enclosed by buildings or tree planting, followed by a streetscape which is enclosed by a canopy of trees which marks the entrance to the Village.		Yes		
Infil House - 16.18.1.1 For development of all detached dwellings on lands identified in the Site Plan Control By-law, the following will apply: h. existing trees, large groupings or areas of vegetation and landscape features such as retaining walls, fences, hedgerows, etc. should be preserved and enhanced, along with the maintenance of topographic features and drainage systems;	Yes			
16.18.1.2 On lands adjacent to Hurontario Street, the existing mature vegetation, well landscaped appearance and generous setbacks will be maintained to reflect area character. As Hurontario Street is a gateway to the Character Area, as well as Port Credit, consideration should be given to: additional tree planting, a sodded boulevard, a bicycle route and a right-of-way design that is sympathetic to the character of the area.		Yes		
16.18.1.3 On Mineola Road East and West, consideration should be given to additional tree planting.		Yes		
16.22.3.1.2 Notwithstanding the provisions of the Residential Low Density I designation of this Plan, the following additional policies will apply: preservation of mature trees and other significant natural features; and	Yes			
16.22.3.2.2 Notwithstanding the provisions of the Residential Medium Density designation, the following additional policies will apply: a. a concept plan for all or part of this site may be required and will address, among other matters, the following: preservation of all mature trees and other significant natural features; and	Yes			Yes
16.24.1.3 The established residential character of the areas generally located along Main Street east of Church Street and along Queen Street South, south of Barry Avenue, will be maintained through appropriate building masses, setbacks, intensive landscaping, streetscapes with many mature trees, and a regular street grid pattern.	Yes			
16.24.5.1.5 Sufficient on-site parking, which will consist of only surface parking, as required by the Zoning By-law, should be provided in the rear yard only at grade, without removal of existing trees, except at the discretion of the City arborist.				Yes
17.4.4.1.2 The lands identified as Area A are located north and south of Dundas Street East, from Southcreek Road to the municipal boundary, Etobicoke Creek. Notwithstanding the provisions of the Mixed Use designation of the lands, the following additional policies will apply: e. special formal street tree planting at regular intervals is encouraged along the frontage of the gateway properties.		Yes		
19.4.5 Some or all of the following studies, reports and/or documents may be required as part of a complete application submission for an official plan amendment, rezoning, draft plan of subdivision or condominium or consent application, dependent on the type of application, the property location and adequacy of services. Includes: Arborist's Report (including Tree Survey/Tree Preservation Plan)				Yes
19.4.7 To provide consistent, efficient, and predictable application of environmental planning principles, all applications will have regard for: i. tree preservation;	Yes			

			19.14.5 Site plan applications will address the sustainable design elements on the development site and adjoining highways under Mississauga's jurisdiction including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curbs, ramps, waste and recycling containers, and bicycle parking facilities.					Yes	
			19.21.3 An approved development plan, archaeological assessment and tree permit may be required prior to the release of a demolition permit.					Yes	
	Urban Design Guidelines - New Dwellings, Replacement Housing and Additions	2014	2.6 Grades - 2.6.2 Guideline: Existing grades within the site and adjacent to tree preservation areas should be maintained.	Yes					
			2.8 Driveway/Hard Surfaces - 2.8.2 Guideline: Circular driveways will only be considered on lots with a frontage of 22.5 m or greater where no existing trees are impacted and where there is ample room for landscaping.	Yes					
			2.9 Natural Environment Preservation and Protection - Trees should be preserved and protected. It is recommended that home owners engage the services of a certified arborist to assess the health and condition of the existing trees and to make recommendations with regard to the preservation measures, including the siting of the house.	Yes					
			3.2 Who Gets Circulated - Community Services Department - Forestry responsible for the assessment of trees within the City boulevard. Also responsible for the issuance of tree permits and tree removal permissions. For more information (contact (905) 615-4108); Parks Planning: responsible for the assessment of fencing, tree protection and grading in regards to properties adjacent to parkland and public open space. (Contact (905) 896-5382);						Yes
			3.3 Site Plan Application Requirements - 3.3.1 Site Plan Drawings Required - Show the location of all trees on site, neighbouring trees around the perimeter of the site and trees within the municipal boulevard. Include details such as the species, diameter, canopy size, and calliper. Additional information and Frequently Asked Questions regarding tree information can be found on the City's web site at www.mississauga.ca/urbanforestry						Yes
			3.4 Securities - As a condition of Site Plan approval, the Development and Design Division may request securities to ensure that tree protection and site works comply with the approved plans. As indicated below, the amount of securities will vary depending on the extent of the proposed development and site works: Minor Additions: (includes tree protection/hoarding with no changes to the driveway) \$5,000 - \$10,000; Major Additions: (includes tree protection, replanting and driveway reconfigurations) \$10,000 - \$15,000 New/Replacement Dwellings under 400 m ² (4,305 ft. ²) (includes tree protection and replanting and driveway reconfigurations) \$15,000 - \$25,000 New/Replacement Dwellings 400 m ² (4,305 sq. ft.) or greater (includes tree protection and replanting and driveway reconfigurations) \$25,000 - and up It is anticipated that some Site Plan applications may vary from the above criteria. In these cases, it will be at staff's discretion to determine the appropriate amount of securities for the site. Once the exterior cladding is complete and all site works have been installed, the homeowner should contact the Development and Design Division to arrange for an inspection to initiate the release of the securities.						Yes
			3.6 Tree Removal Permission - The City of Mississauga passed By-law 0254-2012 regulating the removal of trees on private property. The By-law states that property owners require a permit to remove three or more trees that are greater than 15 cm (6 in.) in diameter from their private property in a calendar year. Trees should not be removed prior to submitting an application.					Yes	
	Urban Design Guidelines - Green	2012	4.1 New Trees - For groups of two or more trees planted primarily in hardscaped areas, provide a minimum volume of 15 m ³ (530 ft ³) of high quality soil per tree. A single tree planted in hardscape requires a minimum volume of 30 m ³ (1060 ft ³) of soil. - Provide trees planted in softscape with a minimum volume of 30 m ³ (1,060 ft ³) high quality soil. - Plant "shade trees" approximately 6-8 m (20- 27 ft) apart along all street frontages, open space frontages and public walkways.				Yes		
			5.2 Pedestrian Comfort - Provide shade trees along pedestrian pathways and in amenity spaces to take advantage of summer shade.		Yes				
Niagara Falls	Official Plan	1993	2.9 Proposed development shall be designed, as much as possible, to retain desirable natural features, vegetation and mature trees and to make provision for the enhancement of the site.	Yes					
			2.9.1.16 All development is to be designed in a sensitive manner having regard to the environmental, social and aesthetic benefits of trees, hedgerows and woodlands through the following: (i) The retention and protection, to the greatest extent possible, of the existing tree cover, recognizing its environmental and aesthetic importance. (ii) Ensuring efficient harvesting and use of trees that must be removed to accommodate the placement of buildings, structures and roads (iii) The incorporation of land with existing tree cover into the urban area park system, if appropriate. (iv) The maintenance and possible enhancement of tree cover along watercourses and on steep slopes, in order to reduce soil erosion and improve water quality. (v) Permitting the continued management and selective harvesting of forest resources, where appropriate. (vi) The use of native trees in development design.	Yes	Yes	Yes			
			2.9.1.17 The City supports the protection of woodlands greater than 0.2 hectares in size and individual trees or small stands of trees on private lands that are deemed by Council to be of significance to the City because of species, quality, age or cultural association from injury and destruction through such means as the Region's Tree and Forest Conservation By law or any similar municipal by law.	Yes					

2.9.1.18 The City shall encourage the retention of individual trees or stands of trees wherever possible through development applications including site plan control, plan of subdivision or vacant land condominiums. A Tree Savings Plan may be requested as a condition of development.				Yes
2.9.1.4 When considering development or site alteration within or adjacent to a natural heritage feature, the applicant shall design such development so that there are no significant negative impacts on the feature or its function within the broader ecosystem. Actions will be undertaken to mitigate any unavoidable negative impacts.	Yes			
2.9.1.6 The policies of the Natural Heritage System shall apply to protect any previously unmapped natural heritage feature identified by an Environmental Impact Study regardless of the land use designation applying to such feature in this Plan.	Yes			
2.9.1.9 An Environmental Impact Study (EIS) shall be required as part of a complete application under the Planning Act for site alteration or development on lands: (a) within or adjacent to an Environment Protection Area or Environmental Conservation Area as shown on Schedule A 3; or (b) that contain or are adjacent to a natural heritage feature.				Yes
3.14.2 The built form of these nodes supports pedestrian activity and the use of public transit. This Plan supports the maintenance of an active and safe pedestrian environment through the following policies and Urban Design Guidelines: b) Improvements to streets and streetscapes to create attractive streetscapes through measures such as consistent street furniture and directional signage, a range of pavement materials, planting of street trees, and increased sidewalk widths.		Yes		
4.1.7 Within the Tourist Commercial Districts, City streets need to be planted with trees, thus extending the "green" of Queen Victoria Park into the urban setting. The greening of streets shall be accompanied by other streetscape improvements designed to create a vibrant and animated public realm, consistent with the expectations of the international traveller.		Yes		
4.1.16 Detailed engineering and design studies for the Grand Boulevard follows the railway right-of-way. b) identify detailed streetscape improvements such as road and sidewalk widths, sidewalk paving, street lighting, the location and type of street trees, street furniture details, the treatment of public utilities in street allowance and signage.		Yes		
4.2.7.1 The site bounded by Lyon's Creek Road, Montrose Road, Reixinger Road and the Q.E.W. will be subject to the following additional policies: b) In order to ensure that the lands are adequately serviced and develop in an orderly fashion, the amending zoning by-law shall include a holding "H" symbol to address the following: (iii) The preparation of an acceptable tree savings plan for the whole of the areas identified on the completed Environmental Impact Study previously submitted or on any follow-up detailed studies such that the connectivity and ecological function of the wooded area is maintained.				Yes
4.2.10 A tree inventory and tree preservation plan, where an individual significant tree or any group of trees, including a woodland as defined by the Region's Tree and Forest Conservation By-law, may be impacted by a proposed development.				Yes
4.2.20 A comprehensive Streetscape Master Plan for the Clifton Hill Subdistrict shall be undertaken, in cooperation with area BIA's, to provide detailed urban design guidelines and identify detailed streetscape improvements, road and sidewalk widths, sidewalk paving, street lighting, the location and type of street trees, street furniture details, the treatment of public utilities in the street allowance and signage, in order to implement the policies of this Plan.		Yes		
4.2.24 A comprehensive Streetscape Master Plan for the Fallsview Subdistrict shall be undertaken, in cooperation with the area BIA, to provide detailed urban design guidelines and identify detailed streetscape improvements, road and sidewalk widths, sidewalk paving, street lighting, the location and type of street trees, street furniture details, the treatment of public utilities in the street allowance and signage, in order to implement the policies of this Plan.		Yes		
4.2.33 A comprehensive Streetscape Master Plan for the Lundy's Lane Satellite District shall be undertaken, in cooperation with area BIA'S, to provide detailed urban design guidelines and identify detailed streetscape improvements, road and sidewalk widths, sidewalk paving, street lighting, the location and type of street trees, street furniture details, the treatment of public utilities in the street allowance and signage, in order to implement the policies of this Plan.		Yes		
4.3.10 Council shall ensure that public improvements and new developments abutting all streets in the Tourist Area not otherwise designated on Fig. 2, help improve the physical setting of the Tourist Area through streetscape improvements such as reconstructed sidewalks, the planting of street trees, and landscaping treatment. The details of these improvements shall be outlined in Streetscape Master Plans.		Yes		
4.4.4 In approving zoning by-law amendments permitting increases in building heights, Council shall authorize the use of Section 37 of the Planning Act and enter into legal agreements under that Section to ensure that all street frontages are improved including sidewalks, the planting of street trees, the provision of street furniture and the provision of landscaped open space		Yes		Yes

5.3.5 The City shall encourage the preservation and the incorporation of existing trees, vegetation, green areas and topography into the design and landscaping plans of proposed developments. Tree Preservation Plans may be required prior to any site alteration in compliance with PART 2, Section 11.	Yes	Yes		
11.1.5 When considering development or site alteration within or adjacent to a natural heritage feature, the applicant shall design such development so that there are no significant negative impacts on the feature or its function within the broader ecosystem. Actions will be undertaken to mitigate any unavoidable negative impacts.			Yes	
11.1.39 The City recognizes the values and benefits of trees, hedgerows and woodlands to the overall environmental health of the community as well as its visual appeal. The City shall place a high priority on the protection of these features.	Yes			
11.1.41 All development is to be designed in a sensitive manner having regard to the environmental, social and aesthetic benefits of trees, hedgerows and woodlands through the following: (i) The retention and protection, to the greatest extent possible, of the existing tree cover, recognizing its environmental and aesthetic importance. (ii) Ensuring efficient harvesting and use of trees that must be removed to accommodate the placement of buildings, structures and roads (iii) The incorporation of land with existing tree cover into the urban area park system, if appropriate. (iv) The maintenance and possible enhancement of tree cover along watercourses and on steep slopes, in order to reduce soil erosion and improve water quality. (v) Permitting the continued management and selective harvesting of forest resources, where appropriate. (vi) The use of native trees in development design.	Yes	Yes	Yes	
11.1.42 The City supports the protection of woodlands greater than 0.2 hectares in size and individual trees or small stands of trees on private lands that are deemed by Council to be of significance to the City because of species, quality, age or cultural association from injury and destruction through such means as the Region's Tree and Forest Conservation By-law or any similar municipal by-law.	Yes			
11.1.43 Good stewardship of urban woodlots and forested areas shall be promoted. The location of treed and wooded areas, including those located outside of significant woodlands, are illustrated on Appendix III to this Plan. Where such lands are under private ownership and are contemplated for development, the preservation and maintenance of natural environment conditions will be encouraged to the fullest extent possible. Where deemed appropriate, the City will consider such measures as bonusing, land purchase, transfer of development rights or land exchanges to safeguard important natural areas.	Yes			
11.1.44 The City shall encourage the retention of individual trees or stands of trees wherever possible through development applications including site plan control, plan of subdivision or vacant land condominiums. A Tree Savings Plan may be requested as a condition of development.				Yes
11.1.45 City Council may consider the preparation of Policy and Procedural Guidelines for a formal compensation program that would outline the level of compensation required for the removal of a tree either in terms of the replanting of trees on site or elsewhere in the community, or the monetary equivalent of the tree(s) lost to be applied towards the planting of trees on public lands elsewhere in the community or City.				Yes
11.1.46 Land owners in Good General Agricultural and Rural/Agricultural areas as well as the Niagara Escarpment Area shall be encouraged to recognize the forest resource as both a source of income from various forest products and as an important element in providing essential soil and water conservation benefits. In this respect, land owners shall be encouraged to carry out the following: (ii) Retain existing tree cover wherever possible.; (vi) Maintain or establish tree and shrub cover on soils of low agricultural capability and in hazardous areas such as steep slopes and flood prone areas, in order to reduce water runoff and minimize soil erosion.	Yes	Yes		
11.2.12 A natural area known as the 'Treed Moraine' forms a backdrop to the Horseshoe Falls and Queen Victoria Park between Clifton Hill and Burning Springs Hill. It is a complex landscape which needs to be protected, properly maintained and stabilized and is recognized as an important local, regional and international landscape. This forested slope separates the urban, commercial development at the top of the moraine and the natural area of the Niagara Parks. Development in close proximity to the moraine should have regard to the Moraine Management Plan (January 21, 2000) prepared by the Niagara Parks Commission.	Yes			Yes
13.35.2 Portions of the land contain designated Environmental Protection areas. The large significant woodlot/wetland on the site is to be retained and protected. It will be integrated into the resort commercial development by providing for passive recreational/education use. In order to ensure that Environmental Protection Areas are adequately protected, the following criteria shall apply: b) The EIS shall identify the boundaries of provincially significant wetland habitats, use and woodlot areas, significant stands of trees, and fish habitats, together with appropriate means of mitigation for development including, but not limited to, distance separations, buffer requirements, drainage and stormwater management, and any other protection measures and monitoring procedures required to be implemented by the applicant.				Yes

<p>13.39.2 Portions of the land contain Locally Significant Wetlands and Woodlands. These natural features will be integrated into the golf course through the design and development process. In order to ensure that the Significant Wetlands and Woodlands are adequately protected, Site Plan Control shall apply to the golf course, driving range and accessory facilities. Particularly: a) the Site Plan shall provide appropriate buffers and buffer management techniques to protect and enhance the Locally Significant Wetlands, Woodlands and other isolated environmental features as recommended in an approved environmental impact study and a tree preservation plan. The environmental impact study and tree preservation plan shall be completed by a qualified professional(s) to the satisfaction of the Regional Planning and Development Department and the City of Niagara Falls. The Site Plan shall also address grading, stormwater management and herbicide/pesticide impacts.</p>				Yes
<p>13.40.3 A large woodlot in the northeast section of the subject land, as well as hedgerows providing wildlife corridors and connecting with the woodlot and the creek, are designated Environmental Protection Area. These lands are in private ownership and shall be protected. There is no tree cutting permitted within the woodlot except in accordance with an approved Tree Saving/Preservation Plan and the Regional Tree Conservation By-law.</p>				Yes
<p>13.44.2 A 5 hectare woodlot containing rare Carolinian tree species is located along the northerly periphery of the residential area. This area, which is bounded by the woodlot dripline, will be protected in accordance with the policies of Part 2, Section 11, Environmental Protection Areas. In reference to</p>	Yes			
<p>13.53.1 The Residential policies of the Plan will apply to the area designated Residential with a Special Policy Area designation that permits the development of the land subject to the following policies: b) Development will be subject to Plan(s) of Condominium which shall implement site controls including grading and storm water management. Also through Plan(s) of Condominium and/Site Plan agreements, a tree preservation plan shall be completed to determine the extent of treed areas outside of Environmental Protection Areas that are to be protected and the measures to implement protection to the satisfaction of the City and the Regional Municipality of Niagara.</p>				Yes
<p>13.53.2 No development or site alteration shall be permitted within the areas designated Environmental Protection Area. An area of natural regeneration along the southerly limit of the hydro corridor shall be delineated through the Plan(s) of Condominium. Conservation easements within the back yards of the lots abutting the natural regeneration area and along Drummond Road will protect those trees and shall be required through Plan(s) of Condominium.</p>	Yes			
<p>13.64.3 The lands designated Environmental Protection Area, together with any buffers determined through the EIS, shall be maintained in a natural state. Lots may extend into the lands designated Environmental Protection Area, however no buildings, structures or drainage works shall be permitted within this area. No tree cutting shall be permitted within this area except in accordance with an approved Tree Saving/Preservation Plan and the Regional Tree Conservation By-law to the satisfaction of the Niagara Region Conservation Authority. Conservation easements between the City and landowners shall be used to protect the portion of the lands designated Environmental Protection Area and associated buffers which are located on the site and fall under private ownership.</p>				Yes
<p>1.5 TRANSPORTATION - 1.5.3 The streetscape of corridors within the City's jurisdiction should be designed to increase the comfort level of pedestrians through the use of street trees, benches and bus shelters.</p>		Yes		
<p>1.5 TRANSPORTATION - 1.5.11 Where residential or institutional development is proposed in close proximity to operational railway lines, Council shall require the preparation of a noise and vibration impact assessment. If necessary, the assessment shall include measures necessary to achieve acceptable attenuation levels in accordance with Ministry of the Environment, and Railway criteria. The measures may take the form of fencing, increased setbacks, earthberms, tree planting, acoustical insulation, site plans or combinations thereof in order to minimize potential safety hazards and visual, noise and vibration impacts to the satisfaction of the City and the Ministry of the Environment, and in consultation with the appropriate Railway.</p>		Yes		
<p>PART 3 ENVIRONMENTAL MANAGEMENT SECTION 2 PARKLAND STRATEGY - 2.1.2 Community Parks shall be established to service residents within larger planning districts or "communities". To accommodate the needs of this broader population base, community parks shall be relatively large in size and contain a wide variety of recreational facilities. While emphasis will be placed on facilities for active recreation and organized sports, with smaller areas set aside for landscaping, beautification and passive recreation, significant tree stands, woodlots and ravine lands will be conserved and protected as much as possible. Community parks shall be provided on the basis of 1 hectare per 1000 population and shall be accessible to the entire community by means of public transit and private automobile.</p>		Yes		
<p>PART 3 ENVIRONMENTAL MANAGEMENT SECTION 5 URBAN DESIGN STRATEGY - 5.2.3 The City shall cooperate with other levels of government in protecting existing trees and planting new trees along roadways and highways in accordance with municipal, Regional and Provincial guidelines for aesthetics, maintenance and safety.</p>	Yes			

PART 3 ENVIRONMENTAL MANAGEMENT SECTION 5 URBAN DESIGN STRATEGY - 5.2.4 In all public works, no trees within the road allowance or on public property shall be removed unnecessarily. However, if they must be removed, suitable, native trees shall be replaced as soon as possible where it is desirable and practical.				Yes
PART 3 ENVIRONMENTAL MANAGEMENT SECTION 5 URBAN DESIGN STRATEGY - 5.2.5 The City shall participate in a tree planting program to enhance the environment and shall encourage private landowners to protect existing trees, hedgerows, windbreaks and other natural areas and plant additional trees on their own property using native species wherever possible.	Yes			
PART 3 ENVIRONMENTAL MANAGEMENT SECTION 5 URBAN DESIGN STRATEGY - 5.3.3 The size and extent of new plantings shall be appropriate for the mass and size of the building and surrounding area. Suitable tree types and plant species shall be selected having regard for their purpose, appearance and resilience to conditions of the urban environment.		Yes		
PART 3 ENVIRONMENTAL MANAGEMENT SECTION 5 URBAN DESIGN STRATEGY - 5.3.5 The City shall encourage the preservation and the incorporation of existing trees, vegetation, green areas and topography into the design and landscaping plans of proposed developments. Tree Preservation Plans may be required prior to any site alteration in compliance with PART 2, Section 11.				Yes
PART 3 ENVIRONMENTAL MANAGEMENT SECTION 5 URBAN DESIGN STRATEGY - 5.6.2 Aspects such as the arrangement of uses and densities, road layout and orientation, lotting schemes, parks, pedestrian and cycling routes, tree planting, landscaping and services shall all be addressed as design elements within secondary plans and plans of subdivision.				Yes
PART 3 ENVIRONMENTAL MANAGEMENT SECTION 6 ENVIRONMENTAL QUALITY - 6.13 The City supports all efforts to reduce sources of air pollution and activities that contribute to greenhouse gas emissions. To this end the City shall: c) promote the retention and enlargement of green spaces in site design through such measures as tree planting, tree preservation, roof top gardens, and the use of native species in landscaping.		Yes		
PART 4 ADMINISTRATION AND IMPLEMENTATION SECTION 10 SITE PLAN CONTROL - 10.2 A building permit shall be issued in respect of any development in the site plan control area only where the plans required have been approved by the municipality and the required agreements ensuring the provision of certain items and ensuring that development proceeds in accordance with the approved plans are executed and registered on title. Agreements may include, but not be limited to, the following items. 10.2.11 Sustainable design elements on adjoining municipal roads such as, but not limited to, trees, shrubs, hedges, plantings, pavement, furniture, curb ramps, and bicycle parking facilities.		Yes		
PART 4 ADMINISTRATION AND IMPLEMENTATION SECTION 14 GENERAL IMPLEMENTATION POLICIES - 14.2.10 A tree inventory and tree preservation plan, where an individual significant tree or any group of trees, including a woodland as defined by the Region's Tree and Forest Conservation By-law, may be impacted by a proposed development.				Yes
2.9 Environmental Protection (EPA) and Environmental Conservation (ECA) Areas 2.9.1 General Natural Heritage System Policies - 2.9.1.16 All development is to be designed in a sensitive manner having regard to the environmental, social and aesthetic benefits of trees, hedgerows and woodlands through the following: (i) The retention and protection, to the greatest extent possible, of the existing tree cover, recognizing its environmental and aesthetic importance.; (ii) Ensuring efficient harvesting and use of trees that must be removed to accommodate the placement of buildings, structures and roads.; (iii) The incorporation of land with existing tree cover into the urban area park system, if appropriate.; (iv) The maintenance and possible enhancement of tree cover along watercourses and on steep slopes, in order to reduce soil erosion and improve water quality.; (v) Permitting the continued management and selective harvesting of forest resources, where appropriate.; (vi) The use of native trees in development design.	Yes	Yes	Yes	
2.9.1.17 The City supports the protection of woodlands greater than 0.2 hectares in size and individual trees or small stands of trees on private lands that are deemed by Council to be of significance to the City because of species, quality, age or cultural association from injury and destruction through such means as the Region's Tree and Forest Conservation By law or any similar municipal by law.	Yes			Yes
2.9.1.18 The City shall encourage the retention of individual trees or stands of trees wherever possible through development applications including site plan control, plan of subdivision or vacant land condominiums. A Tree Savings Plan may be requested as a condition of development.	Yes			Yes
3.11.2 Gateways - 3.11.2.1- Gateway improvements should include prominent signage, enhanced lighting, intensive landscaping (such as seasonal floral displays, tree planting), cycling-supportive infrastructure, public art and other types of public realm enhancements. Adjacent redevelopment should be designed to support the function of the gateway. [...]		Yes		
3.11.2 Gateways - 3.11.2.2. Enhanced landscaping and tree plantings, pedestrian- scaled lighting, cycling facilities, street furniture and new public spaces should be considered in these gateway improvement areas.		Yes		

3.11.3 Streetscape Improvements - 3.11.3.1 The City, in consultation with the Niagara Parks Commission, is encouraged to undertake major streetscape improvements to River Road within the Transit Station Secondary Plan Area. Key improvements may include, but not limited to, tree plantings on the west side of the street to provide shade and comfort for pedestrians, improved lighting and occasional street furniture.		Yes		
3.11.3 Streetscape Improvements - Streetscape improvements have been identified for Buttrey Street (between Victoria Avenue and River Road), Bridge Street (east of Victoria Avenue), and Victoria Avenue (between Buttrey Street and Morrison Street). Key improvements should include (but not limited to) curbs, sidewalks, and tree plantings on both sides of the street to provide shade and comfort for pedestrians and bike lanes, as well as completion of the sidewalk network along Buttrey Street.		Yes		
3.11.4 Potential New Public Spaces and Public Space Improvements - 3.11.4.1 Where new major mixed use development or redevelopment is planned, new public spaces should be provided to enhance the pedestrian environment and provide amenities for residents, employees and visitors. Where public spaces exist, improvements should be made to better serve the existing and planned community. Public spaces should be universally designed and include a mix of design elements including (but not limited to) enhanced landscaping, shade trees, ample locations for seating and public art.		Yes		
3.12 URBAN DESIGN FOR THE PUBLIC REALM - 3.12.2 Boulevard Design - Boulevards are the component of the public right-of-way from building face to street edge. The design of the boulevard must accommodate pedestrian circulation, and an attractive public realm. It should support its multi- purpose function, accommodating pedestrian circulation, adequate space for healthy tree growth, plants and other landscaping, bicycle parking, public art, transit shelters, street lighting, signage, street furniture, utilities and adequate space for commercial and social activity.		Yes		
3.12.7 Landscaping - 3.12.7.1 Providing improved landscaping, along Bridge Street and within public and semi-public open spaces, will help create visual continuity throughout the Transit Station Secondary Plan Area. Trees shall be incorporated into public street design and will frame all streets and pathways. Trees provide shade and comfort and enhance the visual and environmental qualities of the street.		Yes		
3.12.7 Landscaping - 3.12.7.2 To sustain trees, planting should occur in sufficiently deep and wide planting areas backfilled with appropriate soil. Native and disease-resistant species for street trees should be used, wherever possible, to promote long-term growth. The following are general landscaping guidelines that should be adhered to as the Transit Station Secondary Plan Area develops: a) To allow for full growth and to ensure their long-term viability, street trees should be planted with appropriate soil volume in continuous tree trenches. b) Where compaction of planting soil is anticipated, the use of soil cells should be considered. c) Only species that are tolerant of urban conditions should be used. Mono-culture planting may, in the case of disease, be entirely lost and is, therefore, strongly discouraged. Refer to Niagara Peninsula Conservation Authority's Native Plant Guide for information on appropriate native plants. e) Shrub and ground cover planting should be utilized in open tree pits, provided the minimum pedestrian clearway dimension is available. f) Careful consideration should be given to the type and location of trees. Higher branching trees should be positioned to ensure there is no interference with cyclists or truck traffic. Sight lines shall not be obstructed by trees planted near intersections. h) The planting of trees, as infill along existing streets where the rhythm of existing trees is interrupted, should be implemented.		Yes	Yes	
3.13.3 Gateway Features - 3.13.3.1 Buildings adjacent to the gateways along Bridge Street should have an appropriate built form to provide orientation and to assist in defining a neighbourhood's distinct character. The design should: a) Create a sense of entrance and arrival, contributing to community image and identity, at a scale appropriate for the given context. Elements contributing to gateway features and design include: signage and wayfinding, trees and other landscaping, feature lighting, paving, seat walls and public art.		Yes		
3.13.5.2 Landscaping for Parking - c) Landscaped parking islands, of at least 1.5 metres wide, at the end of parking rows and pedestrian connections that contain salt tolerant shade trees are encouraged. Selection of plant materials should consider the following:		Yes		
3.13.11.1 Passive Solar Design - New development within the Transit Station Secondary Plan Area should be massed to maximize opportunities for access to natural light and heating, cooling, security and views. Building design should analyze site characteristics and address existing conditions. For example: e) Trees and vegetation, operable windows, treated glass, roof coverings and other building elements should be selected to take advantage of natural means of regulating interior temperature, lighting and other environmental variables.			Yes	
Sustainable Design - 1.10 Green building technologies, renewable and alternative energy sources, and other sustainable design options for development are promoted through the following policies: 1.10.3 The use of green infrastructure is encouraged to utilize the absorbing and filtering abilities of plants, trees, and soil to protect water quality, reduce runoff volumes, and recharge groundwater supplies. An interconnected network of open spaces, natural areas, greenways, wetlands, parks, and forest areas shall be provided.		Yes	Yes	

		Sustainable Design - 1.10 Green building technologies, renewable and alternative energy sources, and other sustainable design options for development are promoted through the following policies: 1.10.4 Drought tolerant and native tree and shrub species in parks and along streetscapes shall be used to reduce water use			Yes	
		Public Parks and Open Space - 1.12 An integrated system of municipally owned Neighbourhood Parks and Parkettes, and other publicly accessible open space areas, trails, and pathways shall be provided within the community in accordance with the following: 1.12.7 Park and open space design shall reflect the requirements of the Urban Design Guidelines and shall consider the following: New trees and landscaping within parks that are of a diverse, native, robust species selection, drought tolerant, that contribute to the tree canopy objectives of the City and Region, and where possible, are salvaged from the site or the local area.		Yes		
		Parkettes - 1.12.9 Parkettes are smaller scale parks that are intended to provide passive open space areas, serve as focal points within sub-areas of each neighbourhood. Parkettes shall be: a reflection of the needs of surrounding residents including places to sit and socialize, junior play area for children, and a significant tree canopy for shade; and,		Yes		
		General - 2.5.21 Tree saving plans shall be required as part of subdivision and site plan applications to identify existing mature trees located outside of the Environmental Protection Areas and associated buffers to preserve and integrate them into the built environment where possible.				Yes
Model Urban Design Guidelines	2005	3b Roads - 3b.1.4 - Living Streets: Street trees should be a major component of the design of all streets. Tree-lined streets provide an evolving and lasting impression of the street, and provide physical buffering between the pavement, the sidewalk and private dwellings. The shading effects of mature street trees have a significant mediating effect on summer sunlight, reducing glare and the urban 'heat island' effect.		Yes		
		3b Roads - 3b.3 Arterial Road Guidelines: c) Boulevard: Boulevards are required for Arterial Roads in urban areas and should be at least 2.0m wide but preferably 3.75m and planted with street trees situated every 6.0 to 9.0m where adequate safety standards are met.		Yes		
		3b Roads - 3b.5 Local Street Guidelines: d) A landscaped boulevard of 2.0m wide should be located on both sides of the road, planted with lawn and street trees located every 6.0 to 9.0m on centre.		Yes		
		3c. Sidewalks & Streetscaping - 3c.1. Public spaces: Sidewalks should be designed as high quality public spaces, promoting active use by residents and visitors and enhancing pedestrian experiences. Amenities such as street furniture, banners, art, street trees and special paving, wayfinding signage, along with historical elements and cultural references, should promote a 'sense of place'.		Yes		
		3c. Sidewalks & Streetscaping - 3c.3 Commercial Area Sidewalks: d) Street trees should be located within the paved boulevard and planted in an adequate pit under a metal grille.		Yes		
		3c. Sidewalks & Streetscaping - 3c.7 Street Trees: a) Street trees should generally be located within the boulevard and should be offset a minimum of 1.5m from the curb to accommodate snow storage, large vehicle movements and minimize salt damage		Yes		
		3c. Sidewalks & Streetscaping - 3c.7 Street Trees: b) Trees should be spaced consistently at 6.0 to 9.0m intervals. Appropriate clearances from utility boxes, street lights, and sight triangles should be considered.		Yes		
		3c. Sidewalks & Streetscaping - 3c.7 Street Trees: c) Careful consideration should be given to the type and location of trees to ensure that higher branching trees are positioned to ensure there is no interference with truck traffic. Sight lines should also be considered in the location of trees planted at intersections.		Yes		
		3c. Sidewalks & Streetscaping - 3c.7 Street Trees: d) Existing street trees should be preserved wherever possible, as mature street trees create a greater sense of enclosure along roads.	Yes			
		3c. Sidewalks & Streetscaping - 3c.7 Street Trees: e) The planting of trees as infill along existing streets where the rhythm of existing trees is interrupted should be implemented and such trees should be of a similar or compatible species.			Yes	
		3e. Natural Heritage - 3e.5 Heritage Greenways: b) New neighbourhoods should incorporate a network of off-road Heritage Greenways and linear recreation trails planted with double rows of columnar trees to connect with the open space system and between new neighbourhoods and existing areas. Heritage Greenways should be encouraged to be a minimum of 12 metres wide to allow for a 3.0m path centred between double rows of trees.		Yes		
		3e. Natural Heritage - 3e.6 Significant Tree Preservation: a) Existing trees and significant vegetation should be preserved whenever possible and incorporated into site landscaping to preserve the context of surrounding land uses and the Natural Heritage System. Existing trees and vegetation will act as buffers between adjoining developments and act as site amenities.	Yes	Yes		
		3e. Natural Heritage - 3e.6 Significant Tree Preservation: b) For purposes of this section, "significant" trees include the following: - Trees with 30cm minimum diameter or trees of 3.5m or more in height; and - Groups or stands of ten (10) or more trees with a minimum diameter of 15cm measured 1.4m from the diameter breast height.	Yes			

		3e. Natural Heritage - 3e.6 Significant Tree Preservation: c) Any existing vegetation or significant trees that are in appropriate locations, in sufficient quantities, and of acceptable quality to be used to fulfil transition, landscaping, or buffering requirements should be preserved to the maximum extent practicable.	Yes			
		3e. Natural Heritage - 3e.6 Significant Tree Preservation: d) All preserved trees and vegetation should be healthy and free of mechanical injury.	Yes			
		3e. Natural Heritage - 3e.6 Significant Tree Preservation: e) Significant trees (as per above definition) should be protected during construction with the erection of hoarding, which is maintained throughout construction at the dripline of the trees. Grading should be avoided within the root area or drip line of any existing preserved trees.	Yes			
		3e. Natural Heritage - 3e.6 Significant Tree Preservation: f) Maintenance of tree cover, plantings, or other stabilizing vegetation should be used to minimize erosion of sloped areas.	Yes			
		3e. Natural Heritage - 3e.6 Significant Tree Preservation: g) If any significant trees designated for preservation are removed or substantially damaged during clearing, grading, or construction, they should be replaced. Replacement trees should be the same diameter, and of similar species to the trees removed or damaged, or alternately a species native to the Region.	Yes			
		3g. Stormwater Management Facilities - 3g.2 Water Quality & Runoff Management: a) Landscape Systems: Swales, planters or other vegetated areas can be used to filter, detain or infiltrate stormwater. Vegetated swales are integrated into site landscaping to slow stormwater flow and to allow sedimentation and infiltration. Trees, shrubs, grasses and ground covers are also used in landscape systems. In poorly drained soils, it is necessary to consider the cost benefits and the maintenance aspects of the installation.		Yes		
		3h Environmental Sustainability - 3h.3 Right-of-Way & Street Infrastructure: b) A central landscaped median should be included within the Arterial and Collector road ROWs wherever possible to enable 'greening' of the road and to assist in reducing water runoff. Medians should be planted and street trees located every 6.0 ~ 9.0m on centre.		Yes		
		3h Environmental Sustainability - 3h.3 Right-of-Way & Street Infrastructure: e) Street trees and street landscaping should be locally adapted native species. Plants that grow naturally in the Region of Niagara are adapted to the local climate and soil conditions and have a better than average chance of surviving with minimum upkeep, use of fertilizer, pesticide or irrigation.			Yes	
		4f. Off-Street Surface Parking - 4f.2 Layout & Orientation: c) Internal vehicular routes should be clearly defined by raised and curbed landscape islands planted with trees and low level vegetation. Internal drive aisles should be a minimum 6.0m wide. Parking bay dimensions should comply with municipal standards.		Yes		
		4f. Off-Street Surface Parking - 4f.3 Landscape Buffers: c) Trees at the perimeter of parking areas should be planted every 6 to 9.0m on centre.		Yes		
		4g. Environmental Sustainability - 4g.2 Site Landscaping: c) Existing significant trees, tree stands, and vegetation should be protected and incorporated into site design and landscaping.	Yes			
		4g. Environmental Sustainability - 4g.6 Solar Orientation: g) Landscape plans should use deciduous street trees and on-site trees where these trees will grow to shade windows of residential structures. Such trees provide shade and help reduce temperatures inside adjacent units during the warmer months and shed their leaves to allow sunlight and better heat penetration during cooler months.		Yes		
Oakville	Official Plan	2009	5.3 Heritage Conservation - 5.3.12 The Town shall develop a set of criteria for determining trees of cultural heritage value.	Yes		
			6.2 Public Realm - 6.2.1 The design of the public realm shall promote creativity and innovation and include: e) furnishings, trees and landscaping, wayfinding, and public art that provide orientation and a sense of identity.		Yes	
			6.4 Streetscapes - 6.4.1 Streetscapes shall: c) provide well designed and coordinated tree planting, landscaping, lighting and furnishings;		Yes	
			6.4 Streetscapes - 6.4.2 New development should contribute to the creation of a cohesive streetscape by: e) incorporating sustainable design elements, such as trees, plantings, furnishings, lighting, etc.;		Yes	
			6.10 Landscaping - 6.10.2 Development should preserve and enhance the urban forest by: a) maintaining existing healthy trees, where possible; b) providing suitable growing environments; c) increasing tree canopy coverage; d) incorporating trees with historic or cultural significance; and, e) integrating a diverse mix of native plant species.			Yes
			6.13 Parking - 6.13.4 Surface parking areas should incorporate planted landscaped areas that: d) are sufficiently sized to support the growth of trees and other vegetation.		Yes	
			6.16 Service, Loading and Storage Areas - 6.16.2 The visual and noise effects of activities associated with service and loading areas on the surrounding environment should be minimized by locating such areas behind buildings, erecting noise walls and fences, and screening with tree and shrub plantings.		Yes	

8.4 Rights-of-Way - 8.4.6 From a streetscape perspective, the Town may require additional road rights-of-way to provide for improvements such as, but not limited to, median, double row planted street trees, on-street or lay-by parking, and urban design considerations.		Yes		
8.16 Noise and Vibration - 8.16.2 Sensitive land uses shall be buffered through mechanisms such as restrictions on the type of use, building design, location of outdoor living area and the provision of landscaping including street trees and fencing.		Yes		
10.12 Urban Forests - 10.12.1 For every square metre of leaf area that is removed from Town property or from Town road rights-of-way, sufficient trees will be replanted to replace the lost square metres of leaf area.	Yes			
10.12 Urban Forests - 10.12.2 The Town shall ensure that appropriate space for tree protection and tree planting within road rights-of-way are included in the design of new roads or road improvements.	Yes			
10.12 Urban Forests - 10.12.3 The Town shall develop standards for the protection of trees to assist with the review of planning applications and municipal consents by utilities.				Yes
10.12 Urban Forests - 10.12.4 The Town shall develop standards for the planting of new trees to assist with the review of planning applications.				Yes
10.12 Urban Forests - 10.12.5 Tree removal on private property shall be subject to the Town's private tree protection by-law.				Yes
23.4 Functional Policies - 23.4.1 Transportation c) Parking i) Surface parking lots shall be limited. Where surface parking is provided, the visual impact of large surface lots shall be mitigated by a combination of setbacks and significant landscaping including: trees and lighting throughout parking lots and along the edges.		Yes		
23.5 Urban Design - 23.5.2 Public Realm - Enhanced streetscape areas, as identified on Schedule O2, should be incorporated in the design of new developments, streetscapes and open space areas, and utilized as a unifying public realm element through the use of compatible, consistent and complementary design treatments while contributing to a distinctive and unique streetscape. Enhanced streetscape areas may include the preservation of existing large stature trees and open space areas, as well as larger setbacks in built form and the creation of additional pedestrian-oriented spaces.		Yes		
24.5 Urban Design - 24.5.3 Public Realm - c) Enhanced streetscape areas, as indicated on Schedule P2, should be incorporated in the design of new developments, streetscapes and open space areas, and utilized as a unifying public realm element through the use of compatible, consistent and complementary design treatments while contributing to a distinctive and unique streetscape. Enhanced streetscape areas may include the preservation of existing large stature trees and open space areas, as well as larger setbacks in built form and the creation of additional pedestrian-oriented spaces.		Yes		
27.1 South West Exceptions – Schedule F - 27.1.2 On the lands designated High Density Residential on the south side of Lakeshore Road West, west of Great Lakes Boulevard: c) A tree preservation area shall be established along the Lakeshore Road West frontage to minimize impacts on the significant trees and the natural habitat on the site. e) Only one vehicular access shall be permitted to Lakeshore Road West to minimize the impact on the tree preservation area. f) No buildings, structures or parking facilities shall be permitted within the tree preservation area, erosion setback and top-of-bank public walkway areas other than one temporary sales pavilion/trailer and one driveway and associated landscape or entrance features.	Yes			Yes
27.3 West Exceptions – Schedule H - 27.3.3 On the lands designated Low Density Residential on the west side of Montrose Abbey Drive, south of the lands fronting onto Friars Court and north of the Glen Abbey Trail: a) Development shall be designed to preserve intact both the wooded character of the area and preserve individually identified specimen trees to the maximum extent possible. A tree inventory and arborist's report shall be required to indicate the location, species and health of all significant trees. Higher standards of tree protection may be imposed, where warranted, to provide for the long-term preservation of the wooded area. b) To provide flexibility in development, while ensuring the preservation of trees, a range of housing is permitted. Detached, semi-detached and multiple attached dwellings may be permitted. Building clusters and other innovative forms of low- density housing, which maximize the preservation of trees, may also be considered.	Yes			
27.3.9 Bronte Green Lands - 27.3.9.2 Functional Policies - e) Sustainability ii) Development shall provide tree canopy cover in accordance with the North Oakville Urban Forest Strategic Management Plan.				Yes
27.3.10 Bronte Road West Lands - 27.3.10.2 Functional Policies - e) Sustainability ii) Development shall provide tree canopy cover in accordance with the North Oakville Urban Forest Strategic Management Plan.				Yes

		28.17 Pre-consultation and Complete Application Submission Requirements - 28.17.3 Unless an exemption is granted under section 28.17.5, the following information and materials shall be required to be submitted as part of any application for Official Plan amendment, Zoning By-law amendment, draft plan of subdivision or draft plan of condominium, and shall be requested as applicable for other applications: d) Environmental Considerations: iii) tree vegetation study and tree protection plan				Yes
		28.17 Pre-consultation and Complete Application Submission Requirements - 28.17.6 The following information and materials shall be required to be submitted as part of any application for consent: a) Environmental Considerations: i) environmental site screening checklist; ii) tree inventory and preservation study				Yes
Site Design and Development Standards for Oakville	2017	2.0 Soft Landscape Standards - 2.1 Canopy Cover: New development north of Dundas Street shall demonstrate adherence with the canopy cover targets established for the following zones. South of Dundas Street, development should implement the target canopy to help achieve Oakville's town-wide 40% canopy coverage objective			Yes	
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 1. Species variation will depend on the amount of trees to be planted: a. if more than 10 trees are proposed, a mix of tree types should be selected; b. if 20 to 40 trees are proposed, no more than 25% of the trees should be of the same genus; c. if more than 40 trees are proposed, no more than 10% of the trees should be of the same genus			Yes	
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 2. A minimum of 30% of the trees planted on a site should be native tree species. Refer to Conservation Halton Landscaping and Tree Preservation guidelines for a list of permitted native species. Locally rare native species may be accepted on a case by case basis. Cultivars of native trees will not be credited towards the minimum 30% requirement.			Yes	
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 3. Invasive species shall not be planted. Refer to Conservation Halton Landscaping and Tree Preservation guidelines for a list of prohibited invasive species.			Yes	
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 5. Species selection and arrangement should provide visual interest through diversity and seasonal variety.		Yes		
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 7. The minimum acceptable size for plant material should be: a. for deciduous trees, 60 mm caliper and 3.0 to 3.5 m in height; b. for coniferous trees, 1.75 m in height; c. for shrubs, 600 mm in height and spread; d. for perennials, 1 gallon pot			Yes	
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 8. Tree spacing should reflect the projected canopy size based on the species selected and its growing environment: a. ;small stature trees (3.0 m to 9.0 m spread), should be spaced 3.0 m to 9.0 m on centre; b. medium stature trees (10.0 m – 13.0 m spread), should be spaced 10.0 m to 13.0 m on centre; c. large stature trees (14.0 m or greater spread), should be spaced 14.0 m on centre			Yes	
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 10. For naturalization plantings a variety of sizes and successional species should be included to accelerate establishment. Refer to Conservation Halton Landscaping and Tree Preservation guidelines when planning these types of environments for further design direction.			Yes	
		2.0 Soft Landscape Standards - 2.2 Proposed Planting: 13. Typical tree plantings within a soft landscape environment are recommended to incorporate the following: a. a tree pit diameter three times (3x) the root ball diameter; b. a root habitat preservation zone encircling the edge of the tree pit with a minimum width of 2.0 m to a depth of 400 mm to 500 mm; c. non-compacted soils within the expanded tree pit and root habitat preservation zone.			Yes	

2.0 Soft Landscape Standards - 2.2 Proposed Planting: 14. Trees are recommended to be planted at or slightly above ground level, not mounded or depressed. Shrubs planted slightly above ground level, by no more than 25 mm, is recommended.			Yes	
2.0 Soft Landscape Standards - 2.2 Proposed Planting: 16. Services and utilities should not encroach into the soil volume required for new tree plantings.			Yes	
2.0 Soft Landscape Standards - 2.2 Proposed Planting: 19. For the purpose of ensuring installation performance, all tree planting should have a two-year warranty period from substantial completion of the development. A longer warranty period, to a maximum of 4 years, may be required in limited instances where challenging growing environments bring the long term survivability of the tree into question.				Yes
2.0 Soft Landscape Standards - 2.2 Proposed Planting: 21. To accommodate the base of the tree, space should be provided for tree openings that are at least: a. 3.0 m wide for a large stature tree; b. 2.5 m wide for a medium stature tree; c. 2.0 m wide for a small stature tree. These minimums could be reduced if enhanced rooting techniques are employed that mitigate possible damage to the surrounding landscape while providing for the long term growth of the tree.			Yes	
2.0 Soft Landscape Standards - 2.2 Proposed Planting: 22. Where underground services or utilities are present/proposed, consider the potential negative impacts to the base of the tree should future maintenance require soil excavation in close proximity to the tree. To mitigate this and other risks, trees should not be planted within: a. 1.0 m of the edge of a utility or service easement that is 3.0 m in width or greater; b. 2.5 m of any underground utility or service, where space permits. However, at a main and lateral intersection a 2.0 m setback shall be maintained; c. 3.0 m of a transformer or hydrant. Local utility companies shall be contacted for further information when planting, or proposing other works, near utilities.			Yes	
2.0 Soft Landscape Standards - 2.2 Proposed Planting: 23. To respect the crown of the tree, trees should not be planted: a. within 7.0 m of a stop sign or other traffic control signage; b. in locations where the growing canopy may come into contact with buildings, structures, or fencing; c. in locations where growing canopy may come within 3.0 m of a primary powerline or within 1.0 m of a secondary powerline or communication asset.; d. overhanging pedestrian areas if it is a species that drop fruit or seed pods			Yes	
2.0 Soft Landscape Standards - 2.3 Existing Vegetation: 1. The retention of all existing healthy trees on the subject site is recommended.	Yes			
2.0 Soft Landscape Standards - 2.3 Existing Vegetation: 2. Buildings and site development should be designed, both above and below grade, to prevent negative impacts or injury to existing boundary trees or neighbouring trees within 6.0 m of the subject site.	Yes			
2.0 Soft Landscape Standards - 2.3 Existing Vegetation: 3. Existing healthy trees with a diameter at breast height (DBH) less than 150 mm that cannot be accommodated in their current location due to development constraints are recommended as candidates for transplantation on-site or to other lands within the town.	Yes			
2.0 Soft Landscape Standards - 2.3 Existing Vegetation: 4. Retained trees should have a Tree Protection Zone (TPZ) delineated and installed, based on the following tree diameters: Diameter at Breast Height (DBH) <10 cm / 11 – 40 cm / 41 – 50 cm / 51 – 60 cm / 61 – 70 cm / 71 – 80 cm / 81 – 90 cm / 91 – 100 cm + Tree Protection Zone (TPZ) 1.8 m / 2.4 m / 3.0 m / 3.6 m / 4.2 m / 4.8 m / 5.4 m / 6.0 m	Yes			
2.0 Soft Landscape Standards - 2.3 Existing Vegetation: 5. The perimeter of the Tree Protection Zone (TPZ) shall be measured from the outside edge of the tree base outwards to the drip line. The TPZ may be minimally encroached upon by an existing paved surface provided that surface remains intact and undisturbed throughout the site alteration activities.	Yes			
2.0 Soft Landscape Standards - 2.3 Existing Vegetation: 6. Within the Tree Protection Zone (TPZ), no site alteration or disturbance to the existing grade through deposit of fill, trenching, excavating, scraping, or paving should be permitted. Storage or stockpiling of materials within the TPZ is prohibited.	Yes			
2.0 Soft Landscape Standards - 2.4 Soft Landscape Grading: 2. Existing grades should match at property lines and at edges of tree protection zones.	Yes			
2.0 Soft Landscape Standards - 2.5 Soil: 1. For new tree plantings, 30.0 m3 of good quality topsoil, with a minimum depth of 750 mm to a maximum depth of 900 mm, should be provided. Trees in common planting areas may share soil volume to a maximum of 15.0 m3 each.			Yes	
2.0 Soft Landscape Standards - 2.5 Soil: 2. In tree planting areas with less than 30.0 m3 of good quality topsoil, break-out zones should be provided to allow the roots to access additional soil. Break-out zones should be incorporated that are a minimum of 3.0 m wide by 625 mm deep and constructed with engineered soil or soil cell(s).			Yes	
2.0 Soft Landscape Standards - 2.5 Soil: 4. A minimum topsoil depth of 200 mm should be provided in all landscape areas. In landscape areas with tree plantings, the soil depth should be increased to meet the volume requirement, as per standard 2.5.1.			Yes	

2.0 Soft Landscape Standards - 2.5 Soil: 5. Landscape areas located on an underground structure roof slab should maintain the following minimum topsoil depth of cover: a. 900 mm for tree plantings; b. 600 mm for shrub plantings; c. 400 mm for sodded areas			Yes	
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: 1. A landscape area required for buffering/screening/separation should have a minimum dimension of 3.0 m in any direction and a minimum area of 33.4 m2 to accommodate planting and potential fencing, grading and drainage features. These areas should contain, at a minimum, large stature tree and shrub plantings, which in quantity, height and spacing are proportional to the abutting use being buffered or screened.			Yes	
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: 2. Any required 3.0 m continuous landscape width along or abutting any road should contain, at a minimum, one (1) deciduous tree for every 12.0 m of frontage. For layout and design purposes, trees may be grouped in clusters, but spaced no greater than 15.0 m apart. Trees should be setback from the property line to avoid overlap with existing or proposed street trees.		Yes		
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: 3. Any required 3.0 m continuous landscape width, other than those abutting a road, should contain, at a minimum: a. one (1) deciduous or coniferous tree planting for every 12.0 m of abutting land; and; b. a hedge, fence, or combination thereof, to form a continuous screening element with a minimum height of 1.5 m		Yes		
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: 4. Any required 7.5 m continuous landscape width should contain, at a minimum: a. one (1) deciduous or coniferous tree planting for every 4.5 m of abutting land, with a minimum of 80% of the trees within the buffer strip as coniferous species; and b. a hedge, fence, berm or combination thereof, to form a continuous screening element with a minimum height of 1.8 m		Yes		
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: 5. Any required 3.0 m continuous landscape width along or abutting any road should contain, at a minimum: a. one (1) deciduous tree for every 12.0 m of frontage. For layout and design purposes, trees may be grouped in clusters, but spaced no greater than 15.0 m apart. Trees should be setback from the property line to avoid overlap with existing or proposed street trees; and b. a hedge, berm, wall, low decorative fence, or combination thereof, to form a continuous screening element with a height of 750 mm to 1000 mm above the parking area grade. Walls and fences should be set back 1.2 m from the property line to accommodate shrub plantings on the street side of the wall or fence.		Yes		
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: 6. Any required 3.0 m continuous landscape width, other than those abutting a road, should contain, at a minimum, deciduous tree planting that meets the canopy cover target and minimum tree planting requirements.		Yes		
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: 7. Any required 4.5 m continuous landscape width, should contain, at a minimum: a. one (1) deciduous or coniferous tree for every 6.75 m of abutting land, with 60% of the trees within the buffer strip as coniferous species; and b. a hedge, fence, or combination thereof, to form a continuous screening element with a minimum height of 1.5 m		Yes		
2.0 Soft Landscape Standards - 2.6 Treatment for Required Landscaping: In order to minimize and alleviate the conflicts of the railway network with adjacent land uses aesthetic measures should be implemented to recognize the increasing importance of the railway rights-of-way as a commuter corridor through the Town. 8. Any required 7.5 m continuous landscape width, should contain, at a minimum: a. one (1) deciduous or coniferous tree planting for every 4.5 m of abutting land, with a minimum of 80% of the trees within the buffer strip as coniferous species; and b. a hedge, fence, berm or combination thereof, to form a continuous screening element with a minimum height of 1.8 m		Yes		
2.0 Soft Landscape Standards - 2.7 Play spaces and amenity areas: 9. Shade trees should be strategically placed near play structures, play areas, and seating areas to provide shade for users.		Yes		
2.0 Soft Landscape Standards - 2.7 Play spaces and amenity areas: 10. Providing a balance of coniferous and deciduous trees is encouraged. However, coniferous trees should not interfere with views onto playgrounds for monitoring reasons and should be positioned outside of fenced play areas, as low branches and needles may not be appropriate near small children.		Yes		
2.0 Soft Landscape Standards - 2.8 Greening Surface Parking and Other Site Areas: 4. Landscape areas are recommended to be consolidated to enhance tree and plant material growing conditions.			Yes	
2.0 Soft Landscape Standards - 2.8 Greening Surface Parking and Other Site Areas: 6. Landscape areas should include tree and understory planting, such as shrub, perennials, ornamental grasses and groundcover.		Yes	Yes	
2.0 Soft Landscape Standards - 2.8 Greening Surface Parking and Other Site Areas: 7. For new tree plantings, 30.0 m3 of good quality topsoil, with a minimum depth of 750 mm to a maximum depth of 900 mm, should be provided. Trees in common planting areas may share soil volume to a maximum of 15.0 m3 each.			Yes	

		2.0 Soft Landscape Standards - 2.8 Greening Surface Parking and Other Site Areas: 8. Within surface parking areas, each of the following tree planting conditions should be provided: a. a minimum of one (1) 60 mm caliper deciduous tree planted for every five (5) parking spaces; b. for parking lots with more than 75 parking stalls, locate all required trees in or within 5.0 m of the vehicle use area; c. all parking spaces are positioned no farther than 30.0 m from a tree			Yes	
		2.0 Soft Landscape Standards - 4.4 Snow Storage Areas: 1. Snow should not be placed or stored in a manner that may damage private or public property, including, but not limited to, trees, hedges, shrubs and other groundcover, walls and other structures, and fencing.	Yes			
		2.0 Soft Landscape Standards - 4.4 Snow Storage Areas: 5. Snow storage should not occur upon/within: h. a 1.5 m radius of any existing or proposed tree	Yes			
		2.0 Soft Landscape Standards - 4.4 Snow Storage Areas: 57. Trees and soft landscape areas should be protected from damage caused by typical snow plowing operations by: a. providing continuous 150 mm high barrier curb where soft landscape area abuts vehicular hard surfaces; b. providing a minimum setback of 1.5 m between trees and vehicular hard surfaces c. providing additional protection measures for trees that, due to site constraints, are located in close proximity to snow storage areas. It is recommended the additional protection consists of a solid bollard, at least 1.2 m in height, appropriately positioned between the tree and the vehicular hard surface area.	Yes			
Oshawa	Official Plan	1987	2.1.8 Transportation Hubs and Commuter Stations – Planning Criteria - 2.1.8.4 Master Land Use and Urban Design Plans and implementing urban design guidelines prepared for the Transportation Hubs and areas adjacent to future Commuter Stations identified in Policy 2.1.8.2 of this Plan shall address the following: (h) Opportunities for high-quality parks and publicly accessible open spaces (e.g., outdoor gathering/sitting spaces), with these spaces designed with tree protection and preservation as a primary consideration, as well as opportunities to integrate new natural and artificial shade structures, where appropriate;	Yes		
			2.3.4 Design Criteria - 2.3.4.3 Safe and accessible connections such as walkways for pedestrians and bike paths for cyclists shall be required as part of residential developments where such connections are warranted to provide opportunities for active transportation to access facilities such as schools, public facilities, parks, on- and off-road walking and cycling facilities, transit stops and commercial areas. Where deemed appropriate by the City, walkway and bike path connections should be designed and situated to extend view corridors, have sufficient width to support healthy tree growth on both sides of the pathway, and be lit, landscaped and maintained for year-round public use to increase safety and amenity.		Yes	
			2.4.4 Design Criteria - 2.4.4.4 Provisions shall be made for convenient, safe, accessible and attractive walking, cycling and transit facilities/amenities in the design of industrial areas and in the design of individual sites. Where the nature of uses permits, development in industrial areas shall reflect compact, transit-supportive built form with buildings sited and massed to reinforce the public realm. Buildings and primary building entrances for visitors should be oriented toward the street, with direct walkway access to sidewalks and with sheltered, safe and secure bicycle parking in proximity to primary visitor and employee entrances.		Yes	
			2.4.4 Design Criteria - 2.4.4.6 Off-street parking, loading and service areas for industrial uses shall be provided to ensure accessibility at all times and shall be designed to ensure that all vehicular movements are accommodated on the site and off the public roads. Wherever possible, the amount of surface parking should be minimized, including the use of landscaped islands (of sufficient size to promote long-term, healthy tree growth) to divide large parking areas and separate parking areas from loading and service areas.		Yes	
			2.9.2 Land Use Relationships - 2.9.2.2 In considering applications to amend this Plan and/or the Durham Regional Official Plan to designate a new or expanded area for Mineral Aggregate Extraction purposes or to permit aggregate-related industrial uses outside of an Industrial area, or in considering proposals for a new or expanded pit or quarry operation in areas designated as Prime Agricultural as an interim use or for aggregate-related industrial uses in appropriate areas designated as Industrial, City and/or the Region shall require the following: (m) To the extent possible, plans showing the ultimate area of aggregate extraction, progressive and ultimate road plan, any water diversion or storage facilities, location of stockpiles for stripping and products, tree screening and berming;		Yes	
			2.15 Special Waterfront Area - 2.15.2 Site Specific Policies - 2.15.2.3 An urban design plan and related design guidelines have been prepared for the lands designated as Special Waterfront Area. The urban design plan and design guidelines address the matters outlined in Policy 2.15.2.1 and the following: (k) Maintenance of existing trees wherever feasible.		Yes	
			5.0 Environmental Management - 5.1.10 Development shall have regard to its effect on the natural environment. Measures shall be taken to protect, enhance and/or restore natural heritage and hydrologic features, including key natural heritage and key hydrologic features, specimen trees and scenic vistas.	Yes		
			5.0 Environmental Management - 5.1.13 To protect and enhance natural resources including the Natural Heritage System, promote a healthy, resilient ecosystem and sustainable natural environment and support the development of a livable and resilient City for the benefit of present and future residents, the City shall: (a) Promote tree planting and tree preservation for the purposes of improving air quality, health and reducing energy use through shading and sheltering;			Yes

5.3.2 Development and site alteration shall be prohibited within key natural heritage and key hydrologic features and their related minimum Vegetation Protection Zone as identified in accordance with Policy 5.3.5. Notwithstanding the foregoing, development and site alteration may be permitted in these features and zones for certain uses in accordance with Policy 5.4.4.	Yes			
5.3.3 The extent and the exact location of natural heritage and/or hydrologic features, including key natural heritage and/or key hydrologic features, shall be determined at the time of development application(s) in accordance with Section 5.5 of this Plan.				
5.3.4 For any proposal for development or site alteration in proximity to a natural heritage and/or hydrologic feature that is not part of the Natural Heritage System, an Environmental Impact Study shall be undertaken in accordance with Section 5.5 of this Plan to determine if the feature should be protected or if appropriate mitigation, or ecological compensation as a consideration secondary in preference to mitigation, can be provided to address any loss of the feature and/or function	Yes			
5.3.10 In the event that portions of key natural heritage or key hydrologic features are damaged or destroyed by unauthorized development or site alteration, these areas and the ecological features, functions and/or landform will continue to be subject to all relevant key natural heritage or key hydrologic features policies of this Plan, and the lands will be restored as part of any development approval process.	Yes			Yes
5.4.1 The City's Natural Heritage System is shown on Schedules "D-1", "D-2", "F-1A" and "F-1B". The Natural Heritage System includes lands with the highest concentration of the most sensitive and/or significant natural heritage and hydrologic features and functions. Achieving a healthy, self-sustaining, connected Natural Heritage System is integral to ensuring a healthy and resilient watershed. Protection of this system is necessary to support ecological integrity including healthy terrestrial, wildlife, wetland and aquatic ecosystems.	Yes		Yes	
5.4.4 Development and site alteration shall be prohibited within the following components of the Natural Heritage System: [...] (c2) Forestry; [...]				
5.4.10 Development or site alteration in proximity to components of the Natural Heritage System may be permitted subject to submission of an Environmental Impact Study, prepared in accordance with the policies of Section 5.5 of this Plan, that demonstrates: [...]	Yes			
5.4.11 Development and site alteration shall be prohibited within buffers, including minimum Vegetation Protection Zones, established to protect the components of the Natural Heritage System identified in Policy 5.4.4 of this Plan. Notwithstanding the foregoing, development and site alteration may be permitted in these buffers for the projects/uses identified in Policy 5.4.4 in accordance with the provisions therein.				
5.4.14 Excepting buildings and structures permitted under the umbrella of agricultural, agricultural-related and secondary agricultural uses (e.g., bed and breakfast establishments), where non-agricultural uses are contemplated in areas within the Greenbelt Natural Heritage System, the Natural Heritage System, or both, as permitted by the policies of this Plan, applicants shall demonstrate that: (a) At least 30 percent (30%) of the total developable area of the site will remain or be returned to natural self-sustaining vegetation. This does not apply to new or expanding areas for Mineral Aggregate Extraction; [...]	Yes	Yes		
5.12.1 The City, in consultation with the Conservation Authority and other agencies having jurisdiction, shall require an Environmental Impact Study to be undertaken in accordance with Policy 5.3.5 and Section 5.5 of this Plan to assess and, where appropriate, identify measures to mitigate the impact of development or site alteration on significant woodlands.	Yes			
5.12.2 For any proposal for development or site alteration in proximity to a wooded area, an appropriate buffer for the wooded area shall be determined pursuant to an Environmental Impact Study in accordance with Section 5.5, provided that: (a) Within the Major Urban Area or within areas designated either as Estate Residential or Hamlet ORM – Rural Settlement Area: (i) The minimum buffer width shall be 10 metres (32 ft.) past the dripline of the wooded area, if the wooded area relates to part of the Natural Heritage System as shown on Schedules "D-1" and "F-1A" other than a riparian corridor, a wetland, or a provincially significant feature; (ii) The minimum buffer width shall be 10 metres (32 ft.) past the dripline of the wooded area, if the wooded area comprises a known natural heritage feature outside of the Natural Heritage System; (iii) The minimum buffer width shall be 30 metres (98 ft.) from the base of the outermost tree trunks if the wooded area relates to a provincially significant feature; (iv) The minimum buffer width shall be 15 metres (49 ft.) from the dripline of any part of a wooded area associated with a wetland that is not a provincially significant wetland; or (v) The minimum buffer width shall match the minimum buffer requirements for a riparian corridor in accordance with Policies 5.4.8 and 5.4.9, if the wooded area is within a riparian corridor;			Yes	

<p>5.12.2 For any proposal for development or site alteration in proximity to a wooded area, an appropriate buffer for the wooded area shall be determined pursuant to an Environmental Impact Study in accordance with Section 5.5, provided that: (b) Outside of the Major Urban Area or areas designated either as Estate Residential or Hamlet ORM – Rural Settlement Area: (i) The minimum buffer width shall be 10 metres (32 ft.) past the dripline of the wooded area, if the wooded area relates to a component of the Natural Heritage System as shown on Schedules “D-1” and “F-1A” other than a key natural heritage feature, a key hydrologic feature or a riparian corridor; (ii) The minimum buffer width shall be 10 metres (32 ft.) past the dripline of the wooded area, if the wooded area comprises a known natural heritage feature outside of the Natural Heritage System; (iii) The minimum buffer width shall be 30 metres (98 ft.) from the base of the outermost tree trunks if the wooded area relates to a key natural heritage or key hydrologic feature identified in Table 6 of this Plan; or (iv) The minimum buffer width shall match the minimum buffer requirements for a riparian corridor in accordance with Policies 5.4.8 and 5.4.9, if the wooded area is within a riparian corridor.</p>			Yes	
<p>5.12.3 The City may pass by-laws restricting and regulating the cutting of trees. Notwithstanding the foregoing, a tree cutting by-law in accordance with Policy 5.13.9.4.1 shall be adopted for the Oak Ridges Moraine. (OPA 179)</p>				Yes
<p>5.12.4 For any development or site alteration where private or public trees are located within the property and/or a minimum of 5 metres (16 ft.) beyond the limit of the development site, the City may require the proponent to submit a Tree Inventory and Preservation Plan for trees 100 millimetres or greater in caliper indicating the following: (a) Location including the grade/elevation at the base of the trunk; (b) General location of smaller trees and shrub groupings; (c) Species identification both botanical and common names; (d) Size of tree: caliper, canopy spread and height; (e) State of health/condition of tree; (f) Existing trees proposed to be removed and the reason for removal; (g) Existing trees proposed to be transplanted and their new locations; (h) Existing trees proposed to be protected/retained; (i) Dimensions and details of recommended tree protection and preservation measures for all trees to be retained; and (j) Any other matters to tree protection and preservation identified by the City. For existing trees proposed to be removed and/or damaged as a result of development, compensation planting may be required at a ratio of 1 tree for every 100 millimetres of the impacted tree caliper up to a maximum of 5 trees and/or at the discretion of the City. For existing trees proposed to be removed and/or damaged as a result of development, compensation planting may be required at a ratio of 1 tree for every 100 millimetres of the impacted tree caliper up to a maximum of 5 trees and/or at the discretion of the City.</p>				Yes
<p>5.13.9.4 Site Alteration and Tree Cutting By-laws - 5.13.9.4.1 The City shall adopt site alteration and tree cutting by-laws for the Oak Ridges Moraine in accordance with Sections 135 and 142 of the Municipal Act and the Oak Ridges Moraine Conservation Act, 2001.</p>				Yes
<p>6.4 Residential Intensification - 6.4.4 To ensure compatibility with the character of the surrounding neighbourhood and achieve an appropriate transition to adjacent uses, the design of new residential development in existing residential neighbourhoods shall: (d) Preserve mature high quality trees and ensure replacement of the tree canopy wherever possible</p>	Yes			
<p>8.3.7 Environmental Management - 8.3.7.6 Development shall have regard to its effect on the natural environment. Measures shall be taken to retain and enhance natural features having ecological, recreational or aesthetic value such as significant woodlots, specimen trees, scenic vistas and natural watercourses.</p>	Yes			
<p>8.3.7 Environmental Management - 8.3.7.7 Development proposals within the Eastdale Planning Area shall be designed and reviewed having regard for the preservation and integration of existing significant trees and other vegetation where possible and practicable, and may be required to address the requirements of Policy 5.12.4. (OPA 179)</p>	Yes			
<p>8.4.12 Environmental Management - 8.4.12.5 Development shall have regard to its effect on the natural environment. Measures shall be taken to retain and enhance natural features having ecological, recreational or aesthetic value such as significant woodlots, specimen trees, scenic vistas and natural watercourses.</p>	Yes			
<p>8.4.12 Environmental Management - Development proposals within the Pinecrest Planning Area shall be designed and reviewed having regard for established engineering principles and constraints and for the preservation and integration of existing significant trees and other vegetation where possible and practicable.</p>	Yes			
<p>8.4.12 Environmental Management - 8.4.12.10 No significant removal of trees or topsoil or significant grading shall be undertaken within the Pinecrest Planning Area without prior approval from the City. In this regard, the City may require the submission of an environmental analysis report including a Tree Inventory and Preservation Plan in accordance with Policy 5.12.4 by a qualified arborist prior to granting such approval.</p>				Yes
<p>8.5.13 Environmental Management - 8.5.13.7 The City shall encourage the retention of other existing vegetative features not shown on Schedule “B” – Taunton Environmental Management Plan such as specimen trees, tree stands and hedgerows. In this regard, the City may require the submission of a Tree Inventory and Preservation Plan in accordance with Policy 5.12.4 by a qualified arborist prior to granting development approval. These features may be retained and incorporated, where appropriate, into the design of roads, parks, site plans, and plans of subdivision.</p>				Yes

8.6.12 Environmental Management - 8.6.12.7 The City shall encourage, where appropriate, the retention of other existing vegetation not shown on Schedule "B" – Windfields Environmental Management Plan such as specimen trees, tree stands and hedgerows. In this regard, the City may require the submission of a Tree Inventory and Preservation Plan in accordance with Policy 5.12.4 by a qualified arborist prior to granting development approval. These features shall be considered during the development review process and may be retained and incorporated, where appropriate.				Yes
8.7.2 Community Structure - 8.7.2.1 The community structure for the Kedron Part II Plan is based on several principles that are intended to guide all development in the Kedron Part II Plan area. These principles are: (c) Provide attractive streets with an emphasis on well designed and pedestrian-oriented streetscapes and a significant tree canopy;		Yes		
8.7.7 Municipal Services and Utilities - 8.7.7.1.7 The City encourages the installation of private and public utilities as early as possible in the development approvals process, and in a coordinated fashion taking into consideration the siting of street trees, in order to maximize urban tree canopy coverage and minimize disruption to the community.	Yes			
8.7.8 Transportation - 8.7.8.1.1 The City's intention is to achieve a balanced, multi-modal transportation environment in the Kedron Part II Plan. The transportation corridors shall be designed to safely accommodate a range of viable travel options, including automobile, transit, bicycle and pedestrian modes, together with street trees, other landscaping and street furniture. Such facilities shall conform to the classification, functions and design requirements outlined in Schedule "B" – Kedron Transportation Plan, Table 5 of the Part I Plan and the Durham Regional Official Plan and shall be subject to the approval of the relevant agencies.		Yes		
8.7.9 Environmental Management - 8.7.9.9 Retention of other existing natural heritage and hydrologic features not shown on Schedule "C" – Kedron Environmental Management Plan such as specimen trees, tree stands and hedgerows is encouraged. These features shall be identified and considered during the development review process and may be retained and incorporated where appropriate into the design of roads, parks, site plans and plans of subdivision in consultation with the City and Central Lake Ontario Conservation Authority. In this regard, the City may require that a Tree Preservation Plan be submitted in conjunction with a development application. Features found to be suitable and feasible for retention shall be detailed and implemented in the development agreement. Mitigation measures such as tree protection fencing, silt fence/sedimentation control, dust control and protection of soil moisture regime shall be utilized before, during and after construction.				Yes
8.7.9 Environmental Management - 8.7.9.16 As a condition of development, development proponents may be required to enhance the natural state of an adjacent watercourse, wetland or wooded area. This may include re-vegetation including the planting of trees and shrubs, where appropriate, in consideration of enhancing fisheries and wildlife habitat potential.	Yes			
8.7.12.4 Design Principles for Development Applications - 8.7.12.4.1 Road and Block Pattern - [...] Street medians in rights-of-way and roundabouts shall be provided in accordance with Policies 8.7.8.1.5 and 8.7.8.2.4 of this Part II Plan to reduce traffic speed and provide opportunities for street trees and mature tree canopies that ultimately frame the streets. (OPA 179) [...]		Yes		
8.7.12.4 Design Principles for Development Applications - 8.7.12.4.4 Streetscape - Development in all areas of the Kedron Part II Plan is intended to be characterized by high quality, pedestrian oriented streetscape design with the highest form of design treatment on Type "A" and "B" arterial roads, including appropriate sidewalks and cycling facilities, special tree and feature planting, paving, lighting, public art and signage design. [...] A defining characteristic of the Kedron Part II Plan shall be its attractive streets featuring a robust tree canopy. Street trees and boulevard landscaping will be located to maximize the urban tree canopy, provide shade, contribute to neighbourhood character and help control water runoff. Every effort shall be made to minimize utility conflict to maximize the number of street trees to be located within the public right-of-way. [...]		Yes		
8.7.12.4 Design Principles for Development Applications - 8.7.12.4.5 Landscaping - [...] For multi-residential development, planted and constructed elements between the building wall and road right-of-way are encouraged and may include low hedges, trees, raised planters, masonry and decorative metal fences and gates. [...] The planting of deciduous trees is encouraged to enhance the urban tree canopy and achieve cooler environments.		Yes	Yes	
9.4 Site Plan Control - 9.4.5 No development shall be undertaken within a site plan control area designated in accordance with Policy 9.4.3, unless exempt from site plan control under Policy 9.4.4, until the City has approved plans and/or drawings sufficient to display the matters set out in Subsections 41(4) and 41(5) of the Planning Act, including, but not limited to: (b1) Sustainable design elements within an adjoining City right-of-way, including, without limitation, trees, landscaping, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities.		Yes		
Appendix B - Windfields Planning Area Urban Design Guidelines - 1.0 Urban Design Principles - 1.1.2 Sense of Place through Streetscape Design: The urban design guidelines to foster a sense of place through streetscape design include: (d) Provide street trees in boulevards;		Yes		

Landscaping Design Policies	1988	1.0 GENERAL REQUIREMENTS - 1.3 The proponent of subdivision development shall provide a Subdivision Landscape Plan for the entire proposed subdivision. The Subdivision Landscape Plan shall include a planting concept for street tree planting and any other boulevard features fencing, a recreational facilities layout for park lands, any proposed open space linkages and any reverse lot landscape strips. The Subdivision Landscape Plan shall be submitted to the City for approval prior to the registration of any portion of a subdivision plan but shall not form part of the subdivision agreement. In addition, it should be noted that a Landscape Plan showing detailed landscaping features and Park Concept Plan(s) may be required pursuant to other provisions of this document.				Yes	
		1.0 GENERAL REQUIREMENTS - 1.9 Existing features such as trees, topographical features, watercourses, beaches, historical sites and other site assets shall be preserved in the design of a site, wherever feasible. The proponent may be required to undertake protective measures and maintain such protective facilities to the satisfaction of the City to ensure that these features are protected during the course of site development. No tree cutting or regrading shall be permitted on a site while the City's decision on a development application is pending.	Yes				
		1.0 GENERAL REQUIREMENTS - 1.12 The proponent shall provide appropriate landscape features along private roads including the provision of street trees.		Yes			
		1.0 GENERAL REQUIREMENTS - 1.13 Notwithstanding the exemption of certain single family and semi-detached housing in Section 1.1, street trees shall be provided at the rate of one tree per dwelling unit, unless otherwise specified in the appropriate agreement.					
		1.0 GENERAL REQUIREMENTS - 1.15 Lot grading and site grading shall be performed in such a manner as to preserve existing trees and/or other vegetation, wherever reasonable, and to maintain the integrity of any storm drainage schemes.	Yes				
		1.0 GENERAL REQUIREMENTS - 1.16 Low Medium, Medium High and High Density Residential developments, as defined in the Oshawa Official Plan, shall include outdoor playground and/or recreation facilities. Facilities provided should be compatible with the scale of the development and should be capable of accommodating the number of expected users. Such areas shall be suitably landscaped with trees, shrubs and berms from view of any public right-of-way or adjoining property. Enclosures and barriers shall be used, as necessary, to contain activities, buffer noise and reduce conflicts between users and adjacent land uses. Specific details for play areas and/or recreation areas shall be included on the Landscape Plan.		Yes			
		1.0 GENERAL REQUIREMENTS - 1.18 Wherever feasible, the following energy conserving landscape design elements should be considered: (a) deciduous trees should be planted on the south side of buildings in order to provide summer shade and admit winter sun; (b) windbreaks (coniferous trees, berms, walls, fences) should be located on the north and northwest sides of a lot in order to reduce the impact of winter winds; (d) barriers (coniferous trees, berms, walls, fences) should be used to reduce snow accumulation in high use areas.		Yes			
		1.0 GENERAL REQUIREMENTS - 1.24 Where lands to be developed through plan of subdivision abut significant woodlots, hazard lands or environmentally sensitive areas, whether in public ownership or not, the City may require that building lots and/or fencing be set back to the "drip-line" of such woodlots, or other appropriate setback in relation to the degree of hazard or environmental sensitivity as determined by a landscape architect, forester, engineer or other professional as appropriate. The City may require this "setback" strip to be conveyed to the City and, by retaining this "setback" strip in public ownership, ensure that the sensitive features are protected. Where such woodlots, hazard lands or environmentally sensitive areas are located within a site, specific measures may be included in the applicable development agreement to protect features such as trees, topographical features, watercourses, beaches, historical sites and other site assets.					Yes
		3.0 PARKING LOTS AND SERVICE AREAS - 3.2 Notwithstanding the fencing and screening requirements of Table 1, where a parking lot or service area abuts land of different ownership or incompatible land use or a right- of-way, a 3.0 metre minimum width landscape strip shall be required wherever feasible. The following minimum screening measures shall be required: (a) high branching deciduous trees and coniferous trees spaced to form a visual barrier at maturity; and		Yes			
		3.0 PARKING LOTS AND SERVICE AREAS - 3.3 Parking and service areas should be separated from any amenity or recreation activity area located either within the site or adjacent to the site boundaries. A landscape strip having a minimum width of 4.5 metres with appropriate tree plantings and shrub plantings and/or fencing may be required. The use of landscaped berms is encouraged.		Yes			
		3.0 PARKING LOTS AND SERVICE AREAS - 3.5 All parking and service areas shall be well lighted to promote safety and security. Measures such as lighting redirection and additional screening measures (especially the use of coniferous trees and shrubs) may be required to ameliorate any adverse effects of lighting glare on adjacent lands or the roadway.		Yes			
		3.0 PARKING LOTS AND SERVICE AREAS - 3.9 All parking lots shall have plantings incorporated within their interior as well as perimeter planting. These internal parking planted areas shall be provided at the minimum rate of one tree per twenty parking spaces. Perimeter plantings shall be provided in accordance with Section 3.2.		Yes			
3.0 PARKING LOTS AND SERVICE AREAS - 3.11 Landscaping measures, such as trees, shrubs, fences or site furnishings, shall not be located or constructed in a manner which would interfere with traffic visibility or safety. Visibility should be maintained at all intersections.		Yes					

3.0 PARKING LOTS AND SERVICE AREAS - 3.13 All permanent emergency access routes shall be property graded, and kept clear of trees, shrubs, fences or other landscape elements which could interfere with through traffic. The proponent shall be responsible for providing a paved or other type of hard surface drive.		Yes		
6.0 PLANT MATERIAL - 6.1 (6.1) The minimum acceptable size for trees used to satisfy the requirements of these policies shall be as follows: (a) Deciduous tree 60 mm caliper (b) Coniferous tree 2.0 metre height				Yes
6.0 PLANT MATERIAL - 6.4 The use of indigenous plant material is encouraged. It is suggested that at least 50 percent of all proposed tree and shrub plantings on a site be of indigenous material.				Yes
6.0 PLANT MATERIAL - 6.7 Adequate staking and protection of newly planted trees shall be required. Minimum requirements are contained in the planting details shown in Appendix A. Maintenance of these protective features shall be the responsibility of the owner.				Yes
6.0 PLANT MATERIAL - 6.8 The proponent shall be required to take measures to protect existing high quality vegetation from damage during site development. To meet this objective, the proponent shall prepare a tree preservation program as per Section 6.9, which shall be shown on the Landscape Plan and will be included in the appropriate agreement between the proponent and the City.				Yes
6.0 PLANT MATERIAL - 6.9 The tree preservation program shall be prepared with regard for the following: (a) Trees to be preserved shall be fully protected with snow fencing erected beyond their "drip line" to the satisfaction of the City. Groups of trees and other existing plantings to be protected shall be done in a like manner with snow fencing around the entire clump(s). Areas within the protective fencing shall remain undisturbed and shall not be used for the storage of building materials or equipment. This work shall be completed prior to the commencement of site clearance, demolition or any type of construction. (b) No cables of any types shall be wrapped around or otherwise attached to trees. Surplus soil, equipment, debris or materials shall not be placed over root systems of the trees within the protective fencing. No contaminants will be dumped or flushed where feeder roots or trees exist (c) Every necessary precaution shall be taken to prevent damage to trees or shrubs which are to be retained on the site. Where limbs, roots or portions of trees must be removed to accommodate construction work, they should be removed carefully and measures shall be taken to prevent any further damage.				Yes
6.0 PLANT MATERIAL - 6.10 Trees which are to be preserved as per the Landscape Plan, and which have died or have been damaged beyond repair during site construction activities, shall be replaced with a tree(s) of species and size which shall reflect the size and species of the damaged plant material as determined by the Director of the Department of Planning and Development. The location of such trees shall be approved by the Director. Failure to replace damaged trees shall result in the City exercising its right to draw upon the landscape portion of the letter of credit as per Section 7.4 of this document.				Yes
7.0 SUBMISSION, APPROVAL AND INSPECTION - 7.2 Prior to the approval of any plans for proposed development, the proponent may be required to carry out a tree inventory as per Section 8.5, in order to assess the potential for the preservation of existing tree stock, as well as the compatibility of a proposed use for the site. Tree inventories may be required on sites of historical, ecological or cultural interest containing significant tree specimens or significant masses of vegetation. All tree inventories shall be undertaken by qualified professionals.				Yes
8.0 LANDSCAPE PLANS - 8.1 A Landscape Plan should describe all proposed landscape development and all existing landscape features to be retained, and shall include, but not necessarily be limited to, the following: (d) all existing trees which are to be preserved are to be accurately located on the plan and clearly defined (species, caliper, condition); (e) existing trees which are to be removed must be indicated with a broken line; (f) a tree preservation program, where applicable as described in Section 6.9 of this document;				Yes
8.0 LANDSCAPE PLANS - 8.2 Details and/or specifications for the following items shall be included on Landscape Plans: (a) planting details of trees, shrubs, groundcover, etc.;				Yes
8.0 LANDSCAPE PLANS - 8.5 A tree inventory plan, when required, shall contain the following information: (a) location of trees (100 mm+ caliper); (b) general location of smaller tree and shrub groupings; (c) species identification (botanical and/or common names); (d) size: caliper, canopy spread, height; (e) state of health; (f) description of understory vegetation; and (g) impact statement regarding effects of proposed development on vegetation.				Yes

Urban Design Guidelines For Sites With Vehicle Drive-through Facilities	2017	Theme E : Landscaping and Streetscape - E1 - Landscape design - • Street trees must be planted in public boulevards abutting the site, where applicable, in coordination with on-site landscaping.		Yes		
		Theme E : Landscaping and Streetscape - E1 - Landscape design - • A balanced mix of deciduous and coniferous, trees and shrub planting should be included to offer year round vegetation, variety and color for overall site landscaping and landscape open space strips.		Yes		
Peterborough Official Plan	2019	3.3.5 Methods of Protection: The City of Peterborough may assist in the protection of identified Natural Areas through the following actions: 2) entering into agreements with land owners as a condition of development approvals involving rezoning, subdivision, variances or site plan approval. Such agreements may require the placement of siltation barriers, and fencing around the drip line of treed areas or other natural features during construction, and specific planting required to buffer or enhance natural features within a development plan. Adequate performance security to guarantee compliance with measures specified in the agreement will be required. 5) regulating the destruction or removal of trees from properties through the requirement of a permit.	Yes			
		4.5.1.2 Sense of Community: To contribute to the beauty of the urban setting by providing parkland and preserving treed areas in high profile locations in order to maintain the natural image of Peterborough as a “city in the country”.	Yes			
		4.5.1.3 Preservation/Conservation: To maintain and improve a healthy natural environment within an urban setting by protecting and preserving those features considered to be a part of the natural heritage of the community. To reduce the risk of loss of life or damage to property by restricting development of lands or areas sensitive to development or that may be hazardous to development.	Yes			
		Development Policies: 10.5.3.8: Prior to any grading, construction or tree removal, the City may require the submission of detailed natural features/vegetation studies, tree assessment and preservation plans, which will include an inventory of existing mature trees on site and identify measures for respecting these trees, hydrogeological studies and archaeological assessment studies when reviewing development proposals. Development approvals will be conditional upon the completion of required studies and implementation of necessary works.				Yes
		Natural Area, Open Space and Parkland: 10.9.3.2.5 Prior to any development, site alteration, construction or tree removal, the City will require the submission of detailed natural features/vegetation studies, tree assessment and preservation plans (including an inventory of existing mature trees on site and measures for respecting or replacing these trees), hydrogeological and geotechnical studies, and archaeological assessment studies when reviewing development proposals.				Yes
		10.9.3.2.7 The Jackson Creek Valley is a significant valleyland and woodland area that serves to connect Jackson Park to significant natural areas beyond the City. Generally, the treeline along the top of and within the valley shall be protected. Limited tree removal may be permitted to facilitate the provision of infrastructure and trail facilities subject to the completion of studies and plans in accordance with Sections 10.9.3.2.1, 10.9.3.2.5, and 10.9.3.2.6.	Yes			
		10.9.3.2.9 To promote public accessibility to and to protect public views to and from the Jackson Creek Valley, the City will encourage the provision of open space and tree planting along the top of the valley and may consider alternative design standards for streets that abut such open space.		Yes		
		10.9.3.2.10 Connecting Links are conceptually depicted on Schedule “C” – Natural Areas and Flood Plains. The final number, width and location of the connecting links shall be determined through the plan of sub- division process, and shall be subject to the recommendations of studies and plans prepared pursuant to Sections 10.9.3.2.1, 10.9.3.2.5, and 10.9.3.2.6 in order to protect the existing treelines around which they are planned and/or to accommodate significant re- vegetation and an off-road trail, in accordance with Section 3.3 of the Plan.	Yes			

			Cultural Heritage: 10.9.3.7.1 In addition to the requirements of Section 2.4.9, prior to any development, site alteration, demolition, construction or tree removal, the City shall require the submission of a Heritage Impact Assessment to assess the cultural heritage significance of existing built structures on the lands as well as the significance of the Jackson Creek Valley/Trans-Canada Trail as a Cultural Heritage Landscape and to identify measures for conserving features of cultural heritage significance.				Yes
St. Catharines	Official Plan	2012	4.3. Built Form - 3. Development/Redevelopment may be required to provide amenities for adjacent streets and open spaces such as street furniture, bicycle parking facilities, trees, signage, and lighting to ensure they are fully integrated into the surrounding neighbourhood.		Yes		
			4.5. The Natural Environment - 5. Where they remain, the pleasant tree-lined streets of the older areas will be protected and where trees have to be removed, they will be replaced as soon as possible.	Yes			
			4.5. The Natural Environment - 6. A program of tree planting, preservation, and landscaping will be undertaken so that all areas are provided with trees and other vegetation to maintain a high standard of amenity and appearance, with specific emphasis given to the Urban Growth Centre and Intensification Areas, as set out on Schedule D 'Municipal Structure', at the time of infrastructure renewal and reinvestment.	Yes	Yes		
			4.5. The Natural Environment - 7. In all public works, trees should be retained and when trees must be lost to accommodate the works, they will be replaced as soon as possible by other trees of sufficient maturity and in sufficient numbers to enhance the appearance of the public works.	Yes			
			4.5. The Natural Environment - 8. Where development or redevelopment may necessitate the loss of existing trees or vegetative planting on a public right-of-way, they will be replaced and relocated on the public right-of-way in the immediate vicinity of the affected lands, to the satisfaction of the City or the Region of Niagara, and at the cost of the proponent.	Yes			
			4.6. The Public Realm - 1. Urban design opportunities to enhance the quality of the public realm shall be encouraged as part of the design of all municipal undertakings, including public parks and buildings, public streets, natural areas, and all municipal engineering projects related to public spaces. The design of such projects will consider: c) naturalization opportunities including the use of native species of trees in development of open spaces;		Yes		
			4.6. The Public Realm - 4. Wherever feasible, utilities will be placed underground and/or designed to minimize negative impacts, maintain existing area character, and enable further aesthetic improvements such as boulevard trees planting.		Yes		
			6.4. Air Quality - 5. The City shall promote green space, tree planting, and natural heritage conservation.			Yes	
			6.6. The Urban Forest - 2. The City shall endeavor to reduce heat island effect by establishing a minimum landscaping and/or tree canopy coverage for parking lots and other major hard surface areas.			Yes	
			6.6. The Urban Forest - 3. The City shall establish a 2 for 1 public tree replacement program.	Yes			
			6.6. The Urban Forest - 5. The City shall ensure that appropriate space for tree protection and tree planting within road rights-of-way are included in the design of new roads and road improvements.	Yes			
			6.6. The Urban Forest - 6. The City may develop programs and incentives to encourage property owners to plant more trees, and should consider developing a by-law to protect trees on private property.				
			11.3. General Policies - h) The pedestrian realm is a key to providing shoppers, employers, employees, residents and visitors an active, visible and safe sense of place. The City shall create an attractive, high quality pedestrian environment by considering 'pedestrian first' and public realm principles, opportunities and connections in evaluating traffic operations, development applications and public works projects. iii) the City shall plan, fund, and maintain pedestrian level lighting, street trees, landscaping and street furniture as a standard component in completing roadway improvements.		Yes		
			13.2.2. General Policies - 7. Where development, redevelopment or site alteration is approved within Natural Hazard Lands, Natural Heritage or the associated adjacent land buffer zone, the applicant will submit a Tree Saving Plan maintaining or enhancing the ecological functions to be retained. The Plan shall be prepared in accordance with the Tree and Forest Conservation By-law and its implementation monitored by a member of the Ontario Professional Forestry Association.				
			13.2.2. General Policies - 8. Where lands are not subject to Section 13.2.2.7 above, the City should enact and maintain a by-law regulating the destruction or injuring of trees in identified woodlots less than 0.5 hectares of land in size. Where a woodland greater than 0.5 hectares of land in size is located on or adjacent to lands subject to an application for plan of subdivision, consent, site plan approval or other development approval, the applicant shall be required to prepare a Tree Saving Plan as a condition of approval. A grading or building permit shall not be issued until the Tree Saving Plan, with appropriate implementation and monitoring measures, has been approved by the City in consultation with the NPCA.				

		15.3. WEST DISTRICT - 3. Schedule E6/7 - GO Transit Station Secondary Plan (GTSSP) - 4. IMPLEMENTATION FRAMEWORK 2. Public Realm i) Gateways i) Major gateway improvements should include prominent signage, enhanced lighting, intensive landscaping (such as seasonal floral displays, tree planting), public art, cycling infrastructure and other types of public realm enhancements. Adjacent redevelopment should be designed to support the function of the gateway.		Yes		
		15.3. WEST DISTRICT - 3. Schedule E6/7 - GO Transit Station Secondary Plan (GTSSP) - 4. IMPLEMENTATION FRAMEWORK 2. Public Realm iii) Potential New Public Spaces and Public Space Improvements ii) Public spaces should be inclusive and barrier-free to all users while including a mix of design elements such as enhanced landscaping, shade trees, ample seating, and public art.		Yes		
		16.7. Site Plan Control - 4. No development shall be undertaken within a site plan control area designated in accordance with Section 16.7.3, until the City has approved drawings and/or agreements sufficient to ensure the matters set out Subsections 41(4) and 41(5) of the Planning Act as amended, including but not limited to: b) Sustainable design elements within and adjoining a City right-of-way, including, without limitation, trees, landscaping, permeable paving materials, street furniture, curb ramps, waste and recycling containers, and bicycle facilities.		Yes		
		16.16. Pre-Consultation and Complete Application Submission Requirements - 8. The additional information or material that may be required includes, but is not limited to the following: b) Environmental Assessment - tree inventory and preservation study				
		17. INTERPRETATION - 17.10 Density - 2. Within a low density designation, consideration to relax the established minimum density standard may be given for: b) private road development, where: i) enhanced design details and features are provided to support optimum compatible and context sensitive development with adjacent properties, including but not limited to gateway and building design features, greening, landscaping, fencing and additional provision of trees.		Yes		
Downtown Urban Design Guidelines	2012	Part 3 Streetscape Design - 3.11 Landscape Design - Landscape design for any individual property or portion of street should not be considered in isolation from its surroundings. Landscape design should be undertaken in a comprehensive manner to ensure the coordination of character-defining elements such as street trees, sidewalks, street furniture and boulevard treatments.		Yes		
		Part 3 Streetscape Design - 3.13 Street Trees - a) CANOPY & SHADE: Provide street trees with close regular spacing to create a continuous tree canopy. Large gaps in the street tree canopy should be avoided where possible.		Yes		
		Part 3 Streetscape Design - 3.13 Street Trees - b) PLANTING TECHNIQUES: Use planting techniques that mitigate the effects of soil compaction and road salt. Provide adequate soil space for root growth to maximize long-term tree health.			Yes	
		Part 3 Streetscape Design - 3.13 Street Trees - c) TREE PLACEMENT: Street trees should be placed between the sidewalk and the travelled road to serve as both a visual and physical buffer for pedestrians and to provide a greater sense of street enclosure. The use of "bump-outs" for tree plantings and landscaping is also encouraged. Tree locations and planting techniques should be selected which will not obstruct barrier-free pedestrian travel on the sidewalk.		Yes		
		Part 3 Streetscape Design - 3.13 Street Trees - d) TREE RETENTION: Where possible, healthy existing trees should be retained and be integrated as part of any reconstructed streetscape.		Yes		
		Part 3 Streetscape Design - 3.13 Street Trees - e) TREE SPECIES: Utilize native, high-branching deciduous tree species where feasible. Utilize a variety of species that create visual harmony, while avoiding monocultures.			Yes	
		Part 3 Streetscape Design - 3.17 Overhead Wires & Utility Boxes - a) CABLES & WIRES: Cable and wire utilities should be buried wherever feasible. Overhead wires crowd the streetscape and can limit opportunities for street tree canopy.	Yes			
		Part 3 Streetscape Design - URBAN PARKS & OPEN SPACE DESIGN - 3.20 Coverings and Shelter: Open spaces should strategically integrate coverings such as shade trees, awnings, umbrellas, trellis, or other elements, which provide shelter from inclement weather and maximize pedestrian comfort		Yes		
		Part 3 Streetscape Design - URBAN PARKS & OPEN SPACE DESIGN - 3.21 Landscaping: Open spaces of all scales will be primarily hard- surfaced though the use of concrete or pavers, but should also integrate "soft" landscaping elements including shade trees, planters, ornamental gardens, hanging plants or other methods of greening. The selection and maintenance of lush and colourful seasonal landscaping programs is encouraged. This will help to support the Garden City image. The use of movable planters or similar flexible streetscape elements is specifically encouraged. These elements can provide substantial greening, support place character, buffer traffic, and can be used to temporarily block street or demarcate special areas.		Yes		

		Part 3 Streetscape Design - URBAN PARKS & OPEN SPACE DESIGN - 3.23 Walkway Connections: [...] These off-street walkways should be hard-surfaced and have a minimum width of 2.0 metres. The walkways should be lined with shade trees and/or other landscaping elements, as well as pedestrian- scaled lighting. The inclusion of pedestrian amenities such as benches, water fountains, and works of public art is also encouraged.		Yes		
		Part 3 Streetscape Design - ENCROACHMENTS & STREET USES - 3.26 Awnings/Canopies The installation of awnings or canopies is encouraged to provide shelter and create more vibrant streetscapes. These elements may project over the sidewalk subject to approval from the City. c) ENCROACHMENT: Agreements may be required where an awning extends over a right-of-way. Awnings should provide adequate clearance light posts and street tree.		Yes		
		Part 4 Area-Specific Guidelines - SECTION 4.3 THE CIVIC CLUSTER - Design guidelines for development in the Civic Cluster: 4.3.6 Landscaping: Landscaped boulevards with consistent shade tree plantings should be provided along both James and Church Streets. Strategic gaps in street tree plantings may be appropriate to frame views of significant landmarks. Front yards should feature ornamental landscaping, as well as pedestrian amenities such as benches or fountains.		Yes		
		Part 4 Area-Specific Guidelines - SECTION 4.4 THE LOWER LEVEL VALLEY - Design guidelines for development in the Lower Level: 4.4.5 Views Buildings and trees should be arranged to strategically frame views of landmarks including the performing arts centre and the former Canada Haircloth building, as well as views from St Paul Street out across the valley.		Yes		
Guidelines for Single Dwellings on Small Infill Lots in Traditional Neighbourhoods	2009	Site and Landscaping: 6. Landscaped open space should consist of considerable amount of planting and permeable materials, such as turf, shrubs, trees, crushed stones, no-joint pavers, etc.		Yes		
		Site and Landscaping: 6. Landscaped open space should consist of considerable amount of planting and permeable materials, such as turf, shrubs, trees, crushed stones, no-joint or pervious pavers, etc.		Yes		
Guidelines for Townhouse Dwellings on Private Roads in Suburban Neighbourhoods	2009	Site and Landscaping: 2. Zoning Provision - Driveways and front yards of abutting units shall be twinned in order to provide larger front yard areas suitable for planting. One shade tree shall be planted for at least every two abutting units.		Yes		
		Site and Landscaping: 5. Front yard landscape design should be coordinated within a cluster of units and make every attempt to include deciduous trees for shade.		Yes		

		Site and Landscaping: 9. The visitor parking area should be made permeable and should be screened by landscaping strips with a minimum width of 1.5m, planted with trees, shrubs, hedges or decorative garden walls.		Yes		
		Site and Landscaping: 10. Where the lot line abuts commercial / industrial uses, denser tree/shrub planting, low berming and privacy fencing should be provided. Where the lot line abuts an arterial road, a railroad or industrial uses, noise mitigation measures should be considered.		Yes		
Design Guidelines for General Commercial Uses in Commercial Corridors	2009	Building: 11. The placement of buildings should facilitate the preservation of noteworthy existing trees on the site.	Yes			
		Landscaping, Site and Lighting: 1. Zoning Provision: For buildings near the street edge, a landscape strip (3-6m wide) with tree planting and other landscape treatments (e.g. foundation planting) shall be provided along the building front yard and flanking yard areas, to create a comfortable environment for the abutting public sidewalk and to enhance the architecture and its relation to the street frontage.		Yes		
		Landscaping, Site and Lighting: 2. Zoning Provision: Where the commercial development abuts residential uses, a minimum 3m wide landscape strip along the lot line and with tree and shrub planting and privacy fencing shall be required. For larger development sites wider landscape strips (min. 6m) shall be provided.		Yes		
		Landscaping, Site and Lighting: 3. Zoning Provision: Parking lots should be located away from the public street edge. In an area where a parking lot abuts the street, a minimum 3m wide landscape strip along the lot line with tree and shrub planting shall be required. Additionally, low berming, decorative fencing or garden walls within the landscape strip should be considered. For larger development sites wider landscape strips (min. 6m) shall be provided.		Yes		
		Landscaping, Site and Lighting: 8. A parking lot should have significant and substantial tree canopy coverage at maturity. Integrate tree planting and other landscape treatments within landscape islands and landscape strips between parking rows.		Yes		
		Landscaping, Site and Lighting: 18. Healthy existing mature trees in the site should be preserved.	Yes			
		GO Transit Station Secondary Plan	2018	Chapter 2 Urban Design Improvements - 2.2 Potential New Public Spaces and Public Space Improvements: Where new major mixed use development or redevelopment is planned, new public spaces should be provided to enhance the pedestrian environment and provide amenities for residents, employees and visitors. Where public spaces exist, improvements should be made to better serve the existing and planned community. Public spaces shall be inclusive and barrier-free to all users while including a mix of design elements such as enhanced landscaping, shade trees, ample seating, and public art. New public spaces should be located close to the street and be connected to the pedestrian network, including existing or planned transit stops.		Yes
Chapter 2 Urban Design Improvements - 2.3 Gateways - 2.3.1 Major Gateway Improvement Areas: Major gateway improvements should include prominent signage, enhanced lighting, intensive landscaping (such as seasonal floral displays, tree planting), public art, cycling infrastructure and other types of public realm enhancements. Adjacent redevelopment should be designed to support the function of the gateway. Two major gateway improvement areas have been identified:				Yes		
2.3.2 Minor Gateway Improvement Areas: Minor gateway improvements should include a smaller scale of public realm enhancements, such as landscaping, public art, lighting and appropriately scaled wayfinding cues. The expectation is that Minor Gateway Improvements are for locations that require enhancements to address the public realm at prominent intersections, but would not necessarily imply prominent redevelopment opportunities on adjacent lands. Two minor gateway improvement areas have been identified: Louth Street at Crestcombe Road: [...] In addition, enhanced landscaping and tree plantings, pedestrian-scaled lighting, street furniture and new public spaces should be considered in these minor gateway improvement areas.				Yes		

Chapter 3 Urban Design Guidelines for the Public Realm - 3.1 Boulevard Design: [...] The design of the boulevard must accommodate pedestrian circulation and an attractive public realm. It should support its multi-purpose function; accommodating pedestrian circulation, adequate space for healthy tree growth, plants and other landscaping, bicycle parking, public art, transit shelters, street lighting, signage, street furniture, utilities and adequate space for commercial and social activity. [...]		Yes		
Chapter 3 Urban Design Guidelines for the Public Realm - 3.1 Boulevard Design: [...] Development of these zones should adhere to the following guidelines: - The planting and furnishing zone will contain street furniture, street trees, street lighting and other fixed objects. - In hardscaped areas, trees should be planted in continuous tree trenches utilizing soil cells to encourage longevity and viability. Soil cells can be extended under on street parking, multi-use paths and bike facilities where soil volume is critical. Tree planting and landscaping should be optimized to provide sun protection and reduce heat island effect.		Yes	Yes	
Chapter 3 Urban Design Guidelines for the Public Realm - 3.2 Cross Sections - 3.2.1 Ridley Road and Ridley Road West: [...] The following includes supportive design recommendations: Protect existing mature trees during construction.	Yes			
Chapter 3 Urban Design Guidelines for the Public Realm - 3.2 Cross Sections - 3.2.2 Louth Street: [...] The following provide specific design recommendations for Louth Street: Provide planting, furnishing, and edge zones of 2.75 metres that include street trees and other vegetation		Yes		
Chapter 3 Urban Design Guidelines for the Public Realm - 3.6 Landscaping: Providing improved landscaping along Ridley Road and within public spaces and semi-public open spaces will help create visual continuity throughout the Plan Area. Trees shall be incorporated into public street design and will frame all streets and pathways, within consideration given to specific contexts. Trees provide shade and comfort and enhance the visual and environmental qualities of the street. To sustain trees, planting should occur in sufficiently deep and wide planting areas backfilled with appropriate soil. Native and disease- resistant species for street trees should be used, wherever possible, to promote long-term growth. Enhanced landscaping will be a priority within areas identified for major and minor streetscape improvements, including St. Paul Street West, Ridley Road, Louth Street, and Ambrose Street, as per Schedule E6/7.		Yes	Yes	
Chapter 3 Urban Design Guidelines for the Public Realm - 3.6 Landscaping: [...] The following are general landscaping guidelines that should be adhered to as the Plan Area develops: To allow for full growth and to ensure their long-term viability street trees should be planted with appropriate soil volume in continuous tree trenches.			Yes	
Chapter 3 Urban Design Guidelines for the Public Realm - 3.6 Landscaping: [...] The following are general landscaping guidelines that should be adhered to as the Plan Area develops: Only species that are tolerant of urban conditions should be used. Mono-culture planting may, in the case of disease, be entirely lost and is therefore strongly discouraged. Refer to Niagara Peninsula Conservation Authority's Native Plant Guide for information on appropriate native plants, as well as the City's Street Tree Planting List.			Yes	
Chapter 3 Urban Design Guidelines for the Public Realm - 3.6 Landscaping: [...] The following are general landscaping guidelines that should be adhered to as the Plan Area develops: Shrub and ground cover planting should be utilized in open tree pits, provided the minimum pedestrian clearway dimension is available.		Yes		
Chapter 3 Urban Design Guidelines for the Public Realm - 3.6 Landscaping: [...] The following are general landscaping guidelines that should be adhered to as the Plan Area develops: Careful consideration should be given to the type and location of trees. Higher branching trees should be positioned to ensure there is no interference with truck traffic. Sight lines should also be considered in the location of trees planted at intersections.		Yes		
Chapter 3 Urban Design Guidelines for the Public Realm - 3.6 Landscaping: [...] The following are general landscaping guidelines that should be adhered to as the Plan Area develops: The planting of trees as infill along existing streets where the rhythm of existing trees is interrupted should be implemented.		Yes		
Chapter 3 Urban Design Guidelines for the Public Realm - 3.7 Low-Impact Development (LID): Low-Impact Development is an approach to managing stormwater run-off at the source by replicating natural watershed functions. It uses simple, cost-effective methods to capture, detain and treat stormwater. General guidelines include: Incorporate LID practices where possible and as appropriate. LID options include: Pre-cast tree planters or soil cells.		Yes		
Chapter 4 Urban Design Guidelines for the Private Realm - 4.1 Site Design - 4.1.1 Gateway Features: The design should: Create a sense of entrance and arrival, contributing to community image and identity, at a scale appropriate for the given context. Elements contributing to gateway features and design include: signage and wayfinding, trees and other landscaping, feature lighting, paving, seat walls and public art.		Yes		
Chapter 4 Urban Design Guidelines for the Private Realm - 4.1 Site Design - 4.1.3 Parking - Landscaping for Parking - Landscaped parking islands, of at least 3 metres wide, at the end of parking rows and pedestrian connections that contain salt tolerant shade trees are encouraged. Selection of plant materials should consider the following: Year-round maintenance; Seasonal variety; Hardiness and resistance to disease; Maintenance requirements; and Tolerance of plant materials to salt and urban conditions.			Yes	

		Chapter 4 Urban Design Guidelines for the Private Realm - 4.3 Sustainability - 4.3.1 Passive Solar Design: The locations of buildings to each other and to open spaces influences the amount of energy they consume as well as comfort and quality of interior and exterior spaces. New development within the Plan Area should be massed to maximize opportunities for access to natural light and heating, cooling, security and views. Building design should analyze site characteristics and address existing conditions. For example: Trees and vegetation, operable windows, treated glass, roof coverings and other building elements should be selected to take advantage of natural means of regulating interior temperature, lighting and other environmental variables.			Yes	
Thunder Bay	Official Plan	2018	Forests - Urban Forest - The City shall enhance its urban forest by: - encouraging tree planting within the City's urban areas on both private and public lands; and - implementing measures to protect, enhance and expand tree cover including but not limited to: - preserving existing tree cover where appropriate; - encouraging tree planting in areas of surface parking; - promoting development that maximizes areas for tree planting; and enhancing the streetscape.	Yes		
			Forests - Urban Forest - The City has developed the Urban Forest Management Plan and, as a result, development proponents may be required to assess, and whenever possible, protect, woodlands and/or existing trees, including those on adjacent lands.	Yes		
			Street Lighting and Trees - Street lighting and trees shall be provided within the Urban Settlement Area and within Rural Settlement Areas, where appropriate. Where feasible and appropriate, pedestrian-scale lighting shall be provided on sidewalks and multi-use trails.		Yes	
			Roads - Design of Roads - Where feasible, roads within the Urban Settlement Area shall be designed to include provisions for: • adjacent residences by appropriate tree planting, landscaping, berms, or other forms of aesthetic and noise reducing applications; and,		Yes	
			Pre-Consultation and Complete Applications - The following studies, reports and information may be required, as determined by the City in consultation with the development proponent, and any other government body, public authority and/or external agency as deemed necessary by the City, to be submitted as part of a complete application for an Official Plan Amendment, Zoning By-law Amendment, Consent, Draft Plan of Subdivision, and Draft Plan of Condominium. Includes: Tree Inventory and Tree Preservation Plan			Yes
			Lot Creation - Evaluation Criteria -Consent applications will be evaluated in accordance with the following: • proposed building envelopes shall be located to protect the existing natural vegetation and trees on the lot as much as possible;			Yes
			Development Tools - Site Plan Control - The following, among other matters, shall be considered in the review of site plans: • the protection of existing natural features, including individual trees.			Yes
			Site Alteration - The City shall update the Site Alteration By-law to regulate alterations to lands within certain designations or locations, and to require the obtainment of a site alteration permit from the City, which shall address the following, among other matters: • the protection of natural heritage features or areas, including any requirements of the Lakehead Region Conservation Authority; • tree removal;			Yes
	Urban Design Guidelines	2012	Urban Forestry: The Official Plan acknowledges the significance of street trees and forested areas. In order to improve the aesthetic quality of the urban environment, the Official Plan advocates increasing the stock of trees through planting programmes, adhering to high standards regarding maintenance and replacement, and encouraging developers to retain existing trees wherever practical. In addition, the City places a high priority on the protection and wise management of natural heritage features.	Yes	Yes	
			1.3.9 Urban Forestry Management Plan: Thunder Bay's urban forest provides significant benefits to the community, at a benefit-cost ratio of 2:1, including stormwater runoff reductions, energy consumption savings, air quality improvement, carbon dioxide reduction, and aesthetic value increases for properties. The Urban Forestry Management Plan is a comprehensive, efficient, and effective urban forestry program prepared by City forestry staff and community members to protect and enhance the City's tree canopy.	Yes		
			2.1. Downtown and Image Route Vision: To protect the surrounding wilderness from further outward expansion, the majority of intensification in Thunder Bay will occur along the City's Image Routes, and within the North and South Cores. Higher density built form that continues to support the integrity of stable neighbourhoods is encouraged. New development will be of the highest quality, and will promote a mix of uses to support active, pedestrian-supportive streets characterized by wide boulevards, public art, and active at-grade uses. Abundant landscaping and large, mature street trees will be provided in all new developments to enhance the urban forest, and bring nature back into the City.		Yes	Yes
			3.1. Celebrating the Natural Foundation: All of the above features reinforce Thunder Bay's great Canadian wilderness context, and accommodate passive/ active recreation. Their preservation and enhancement should be of the highest priority. The protection of the tree canopy and reforestation of the City should influence the layout of all new development, and be linked by a well-connected network of parks, open spaces and trails to encourage alternative modes of transportation (i.e. walking and cycling).	Yes	Yes	Yes
			Parks and Open Space: 2C Uses and Ammenities: b) Playground equipment should be imaginative, easily maintained and should be located in areas shaded by trees		Yes	

		Transit Supportive Design: i) Areas adjacent to transit shelters should be well-lit, and should incorporate seating and tree planting for shade.		Yes				
		Boulevard Design: a) Boulevard widths should be optimized to support their multi-purpose function and provide adequate space to promote healthy tree growth. g) Boulevards should be planted with street trees. Linear tree trenches, soil cell technology, or structural soils are recommended to ensure mature growth. h) Pedestrian-scaled boulevard lighting should be provided in areas of high use, particularly where the future tree canopy may impact light levels.			Yes			
		Dedicated Cycling Lanes: f) New off-road dedicated cycling lanes should be placed in a wide boulevard and, where possible, separated from vehicular traffic by a 2.0 metre landscaped strip with street trees. Similarly, where possible, there should be a 1.8 metre planting strip between the cycling lanes and the adjacent sidewalk.		Yes				
		Green Streets: a) A City-wide campaign of expanding the street tree canopy should be a priority in all road works projects. c) Wherever possible, existing healthy street trees should be preserved. d) 15 cubic meters of good quality soil should be provided per tree (can be shared). e) To support sustainable tree growth, street trees should be planted in the boulevard – between the sidewalk and inside vehicular lane, and where possible use a continuous linear trench. f) Utilize continuous tree pits to maximize soil volume. A soil cell system is the preferred option when trees are planted in hard surface paving. A suspended slab system or structural soil infill are alternate options. h) Street trees should be planted at a minimum width of 2.5 metres. i) Where sufficient boulevard width is available, a double row of trees should be planted on either side of the Sidewalk Zone. j) For optimal tree health, street trees in the boulevard should be set back 1.5-2 metres (minimum) from the curb. k) Large deciduous trees should be planted at 8-10 metre intervals (on centre) or clustered in groups of 2-4 trees on bump-outs. l) Medium and small trees should be planted at 8-10 metre intervals (on centre). r) Utilities design and location should be coordinated so that it does not interfere with sustainable tree growth.	Yes		Yes			
		Green Medians: a) Medians planted with street trees should have a minimum width of 3.0 metres. c) Preferred species for trees and shrubs in medians are non-invasive species suitable for Zone 3 climatic conditions.		Yes	Yes			
		Utilities: c) Utilities should be placed within the street Right-of-Way (or in a front yard easement) in a joint utility trench that can be accessed for repairs without disturbing street trees.	Yes					
		Arterial Roads: a) Arterial road boulevards should aim to be a minimum 4.8 metres in width and should accommodate street trees offset 1.5-2.0 metres from the curb.		Yes				
		Collector Roads: a) Collector road boulevards should aim to be a minimum 4.8 metres in width and accommodate street trees offset 1.5 metres from the curb.		Yes				
		Sustainability: Site-Design: d) Tree planting should be optimized for any site and within parking areas.				Yes		
		Surface Parking: g) 1 tree for every 8 parking spaces is recommended. These can be clustered to facilitate snow clearing.		Yes				
		Private Trees: b) Utility right of ways should be adhered to for all tree planting on private sites. c) Wherever possible, plant trees on private property in a continuous row, parallel with public street trees. e) City of Thunder Bay should distribute maintenance pamphlets for all new private trees.	Yes	Yes	Yes			
		Large Format Retail: h) Continuous boulevards of 4.8 metres should be provided on the principle sides of the building, incorporating street trees (spaced 8-10 meters on centre), landscaping, benches and pedestrian-scaled lighting.		Yes				
		Office Buildings: a) Buildings should address the principle public street but may incorporate setbacks that provide attractive landscaping and tree- planting.		Yes				
Toronto	Official Plan	2015	2.3 STABLE BUT NOT STATIC: ENHANCING OUR NEIGHBOURHOODS AND GREEN SPACES - 2.3.1 HEALTHY NEIGHBOURHOODS - 6. Environmental sustainability will be promoted in Neighbourhoods and Apartment Neighbourhoods by investing in naturalization and landscaping improvements, tree planting and preservation, sustainable technologies for stormwater management and energy efficiency and programs for reducing waste and conserving water and energy.					Yes
			3.1 THE BUILT ENVIRONMENT - 3.1.1 THE PUBLIC REALM - 6. Sidewalks and boulevards will be designed to provide safe, attractive, interesting and comfortable spaces for pedestrians by: a) providing well designed and co-ordinated tree planting and landscaping, pedestrian-scale lighting, and quality street furnishings and decorative paving as part of street improvements; and b) locating and designing utilities within streets, within buildings or underground, in a manner that will minimize negative impacts on the natural pedestrian and visual environment and enable the planting and growth of trees to maturity.					Yes
			3.1 THE BUILT ENVIRONMENT - 3.1.2 BUILT FORM - 1. New development will be located and organized to fit with its existing and/or planned context. It will frame and support adjacent streets, parks and open spaces to improve the safety, pedestrian interest and casual views to these spaces from the development by: d) preserving existing mature trees wherever possible and incorporating them into landscaping designs.				Yes	

3.1 THE BUILT ENVIRONMENT - 3.1.2 BUILT FORM - 5. New development will provide amenity for adjacent streets and open spaces to make these areas attractive, interesting, comfortable and functional for pedestrians by providing: a) improvements to adjacent boulevards and sidewalks respecting sustainable design elements, which may include one or more of the following: trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers, lighting and bicycle parking facilities; f) safe pedestrian routes and tree plantings within surface parking lots; and		Yes		
3.3 BUILDING NEW NEIGHBOURHOODS - 1. New neighbourhoods will have a comprehensive planning framework reflecting the Plan's city-wide goals as well as the local context. The framework should include: a) the pattern of streets, development blocks, open spaces and other infrastructure, including adequate space for planting of trees;		Yes		
3.4 THE NATURAL ENVIRONMENT - 1. To support strong communities, a competitive economy and a high quality of life, public and private city-building activities and changes to the built environment, including public works, will be environmentally friendly, based on: d) preserving and enhancing the urban forest by: i. providing suitable growing environments for trees; ii. increasing tree canopy coverage and diversity, especially of long-lived native and large shade trees; and iii. regulating the injury and destruction of trees;	Yes			
4.3 PARKS AND OPEN SPACE AREAS - Development Criteria in Parks and Open Space Areas - 6. Any development provided for in Parks and Open Space Areas will: a) protect, enhance or restore trees, vegetation and other natural heritage features and maintain or improve connectivity between natural heritage features;	Yes			
4.5 MIXED USE AREAS - Development Criteria in Mixed Use Areas - 2. In Mixed Use Areas development will: m) provide opportunities for green infrastructure including tree planting, stormwater management systems and green roofs.			Yes	
4.7 REGENERATION AREAS - Development Criteria in Regeneration Areas - 2. For each Regeneration Area a framework for new development will be set out in a Secondary Plan. Development should not proceed prior to approval of a Secondary Plan. The Secondary Plan will guide the revitalization of the area through matters such as: c) a green infrastructure strategy including tree planting, stormwater management systems and green roofs;			Yes	
4.8 INSTITUTIONAL AREAS - 5. Universities, colleges and hospitals will be encouraged to create campus plans in consultation with nearby communities that will: k) identify opportunities for green infrastructure including tree planting, stormwater management systems and green roofs.			Yes	
5.1.3 SITE PLAN CONTROL - 3. To help achieve environmentally sustainable development, the City may use subsection 114(5)(2)(iv) and (v) of the City of Toronto Act, 2006 to secure the following sustainable design features in development that address exterior building and site matters in Tier 1 of the Toronto Green Standard: b) high-albedo surface materials, open grid paving, shade trees, green and cool roofs to reduce ambient surface temperature to minimize the urban heat island effect; e) trees to enhance the urban forest and use of native species to protect, restore and enhance the natural heritage system;		Yes	Yes	
5.3.5 GREAT CITY CAMPAIGNS - 2. Campaigns and campaign projects will engage community groups, business and industry, non-governmental organizations, our universities and colleges, the arts and cultural communities, Council and representatives of other levels of Government to achieve progress over time in the priority areas: d) greening Toronto through naturalization, planting trees and acquiring and protecting natural areas;			Yes	
Chapter 7 Site and Area Specific Policies - 30. 1400 Weston Road - e) The treed slopes in the north and south portions of the lands will be conserved in a natural state where possible.	Yes			
Chapter 7 Site and Area Specific Policies - 115. South Side of Guildwood Parkway, East of Livingston Road - b) Further development on the property will provide a comfortable fit with the natural setting, and be sensitive to the retention of site amenities, including existing tree cover and views to the extent possible. The scale of development will not generate excessive parking needs, such that parking facilities dominate natural site characteristics.	Yes			
Chapter 7 Site and Area Specific Policies - 141. Lands North of Twyn Rivers Drive, East of Staines Road - All agencies and parties involved in the implementation of this area specific policy will be guided by a program of comprehensive resources management, which without limiting the generality of the foregoing, will: vii) selectively encourage the regeneration of the cleared areas and the planting of native tree species and other native vegetation to enhance the natural heritage characteristics of the Upper Rouge;	Yes			
Chapter 7 Site and Area Specific Policies - 204. 1 and 5 Austin Terrace, 285 Spadina Road and 328-330 Walmer Road - b) Further development on the property will provide a comfortable fit with the natural and historical setting, and be sensitive to the retention of site amenities, including existing tree cover and views to the extent possible. The scale of development will not generate excessive parking needs, such that parking facilities dominate natural site characteristics.	Yes			

Chapter 7 Site and Area Specific Policies - 211. Bloor Yorkville/North Midtown Area - a) Neighbourhoods Ramsden Park, Yorkville Triangle & Asquith-Collier - New development in the Ramsden Park, Yorkville Triangle and Asquith-Collier Neighbourhoods will respect and reinforce the stability and the established low-rise character of these areas containing tree-lined streets and houses of two and three storey height, consistently setback from the street line. All new development will be contextually similar and appropriate to the individual settings, patterns of development, unique features, architectural and landscape character, and heritage significance within these areas.		Yes		
Chapter 7 Site and Area Specific Policies - 212. Dupont Street between Ossington Avenue and Kendal Avenue - 3. Built Form - 3.1 Buildings will be set back from the Dupont Street property line to allow a minimum of 4.8 metres from the curb to the front face of the building in order to provide for a wide sidewalk and boulevard with enhanced pedestrian amenities and tree planting.		Yes		
Chapter 7 Site and Area Specific Policies - 212. Dupont Street between Ossington Avenue and Kendal Avenue - 6. Streetscape - 6.1 Improvements to the sidewalks and boulevards should include wider sidewalks, the installation of street furniture and the planting of trees. On the north side of Dupont Street, the widening of the sidewalks will be achieved through redevelopment. When Dupont Street is reconstructed, any undertaking will include consideration of narrowing the vehicular lanes, to allow the widening of the sidewalk on the south side of the street and the creation of the same pedestrian amenities.		Yes		
Chapter 7 Site and Area Specific Policies - 232. Lands in the Vicinity of Humberview Crescent, bounded by St. Philips Road, Weston Road, the CNR right-of-way and the Humber Valley - b) the form of new development respecting the unique character and location of the site, with its arrangement of architecturally and historically interesting buildings, its mature trees, its adjacency to Mallaby Park and the Humber River Valley natural heritage area; c) minimizing damage to existing mature trees;	Yes			
Chapter 7 Site and Area Specific Policies - 242. Lands on the East Side of Torbarrie Road, South of Sheppard Avenue West - Built Form - d) A landscaped area with fencing, trees and other screening measures will be provided between different land uses along the south boundary.		Yes		
Chapter 7 Site and Area Specific Policies - 242. Lands on the East Side of Torbarrie Road, South of Sheppard Avenue West - Tree Preservation - a) A strategy will be identified for preserving trees within the site. Trees within the park and stormwater management block, along the neighbourhood edge to the south and east, and along the Black Creek ravine edge to the east, and along the north boundary will be preserved, where possible.	Yes			
Chapter 7 Site and Area Specific Policies - 277. Lands on the north and south side of Dundas Street West, between Royal York Road and the Humber River - Landscape Plans and Details: Existing trees in good condition should be retained whenever possible.; Streetscape Improvements: Plant street trees along Dundas Street West and any new local roads at 6 to 8-metre intervals that conform to the City of Toronto Urban Design Streetscape Manual and the current Urban Forestry Street Tree Planting Standards. - Plant a double row of street trees on the north side of Dundas Street West where the building setback is greater.		Yes		
Chapter 7 Site and Area Specific Policies - 296. South side of Rexdale Boulevard, east of Highway 427, west of Highway 27 north of the Canadian National Railway (Woodbine Racetrack) - (d) Implementation (i) Subdivision Agreement and other agreements to include a master site plan, servicing and infrastructure development, phasing strategy, tree removal and replacement strategy, urban design guidelines, transit and parking strategy, financial strategy, and including provisions to secure amenities and features, which may include public easements to indoor/outdoor amenity features, public art; public roads among other matters.				Yes
Chapter 7 Site and Area Specific Policies - 322. Markham-Ellesmere Revitalization Area - Parks and Open Space Initiatives - [...] Better community use of the indoor and outdoor facilities at Woburn Junior Public School and Woburn Collegiate Institute will be promoted. Tree plantings along the western and northern boundaries of the high school grounds will be encouraged.		Yes		
Chapter 7 Site and Area Specific Policies - 330. 2277, 2285 and 2295 Sheppard Avenue West, 100 Mainshep Road and 3035 Weston Road - Streetscape j) The existing streetscapes will be enhanced and a well landscaped environment will be maintained. Tree lined streets will be provided throughout the lands and a special character along Sheppard Avenue will be initiated. Within Parcel A, special landscaped streets which incorporate a double row of trees will be provided. Within Parcel A, the streets leading into the proposed subdivision will continue the special streetscaping at the gateway points into the subdivision.; m) In order to define the area, streetscape material such as tree species, signage, lighting, street furniture will be co-ordinated and standardized; and n) Within Parcel A, gateways into the neighbourhood will be characterized by treed and landscaped boulevards.		Yes		

		Chapter 7 Site and Area Specific Policies - 334. Bloor Street West, between Avenue Road and Bathurst Street - e) Public Realm [...] i) the redesign of the street cross-section, including examining the possibility of lane reductions to allow for widened sidewalks and additional street tree planting; [...] The network of parks and open spaces will be expanded and improved. A series of "green fingers" extending from Bloor Street along its north-south connecting streets will be provided as opportunities arise to provide parks, plazas, forecourts, additional street tree plantings, hard and soft landscaping, and seating areas throughout the Bloor Corridor. [...]		Yes		
		Chapter 7 Site and Area Specific Policies - 367. Lands around Dundas/427 (Dundas Street West to the Canadian Pacific rail corridor, between Highway 427 and Shorncliffe Road) - c) Public Realm and Built Form [...] iv. Streets will be designed to provide safe, comfortable and amenable environments for pedestrians, cyclists and vehicles by minimizing curb cuts, encouraging shared driveways and the use of lanes, and including enhanced street tree planting, street furniture and street lighting.		Yes		
		Chapter 7 Site and Area Specific Policies - 368. Lands around Dundas / 427 (North Side of Dundas Street West between The East Mall and Shaver Avenue) - c) Public Realm and Built Form ii. Development will minimize curb cuts, encourage shared driveways and the use of lanes, and include enhanced street tree planting, street furniture and street lighting.		Yes		
		Chapter 7 Site and Area Specific Policies - 6.2 Park and Open Space - 6.2.7 It is the objective of Council to create opportunities for greening and additional park and open space linkages through the creation and addition of plaza forecourts, tree plantings, green or enhanced streetscapes, and boulevard parking reclamations.		Yes		
		Chapter 7 Site and Area Specific Policies - 6.3 The Public Realm - 6.3.1 It is the objective of Council to enhance streetscape design through tree plantings, paving materials, street furniture, landscape planters, decorative pedestrian scale street lighting and public art.		Yes		
		Chapter 7 Site and Area Specific Policies - 403. 20 and 22 Northcote Avenue, 20, 22, 24, 26, 28, 30, 31, 32, 33, 34, 36, 37, 38, 42 AND 48 Gladstone Avenue and 1 and 3 Peel Avenue - (e) Set-back new buildings along the west side of Northcote Avenue - Through redevelopment, any new buildings proposed for the Northcote Avenue frontage of the 20 and 22 Northcote Avenue property should be setback from the property line to maintain the existing green setback and retain the existing trees, to the fullest extent possible. This setback should generally align with the setback for the existing residential buildings to the north. The exact depth of the setback will be determined through the planning application process.	Yes			
		Chapter 7 Site and Area Specific Policies - 453. Ossington Avenue between Queen Street West and Dundas Street West - h) New development is encouraged to provide or contribute to streetscape improvements in the public rights-of-way and adjacent lands that promote a healthy and vibrant pedestrian environment, including, but not limited to: ii. trees and landscaping		Yes		
		Chapter 7 Site and Area Specific Policies - 488. Wychwood Park - Wychwood Park has unique and outstanding features. It is a residential area laid out according to a plan registered in 1891. Although many of the houses are of considerable architectural note, it is the park-like ambience of Wychwood Park as a whole that gives it its unique character. The trees within the Park are of special importance. The manner in which the houses are situated in relation to the mature trees and natural land contours complements the architecture and gives the architecture added importance. The open space around the house is very important to the park like atmosphere.	Yes			
Tall Building Design Guidelines	2013	2.1 Building Placement - f. Provide greater building setbacks at strategic points or along the entire frontage, as appropriate, for architectural interest and to improve pedestrian amenity, including more space for tree planting, wider sidewalks, forecourts, plazas, and other publicly accessible open spaces (see 2.4 Publicly Accessible Open Space and 4.2 Sidewalk Zone).		Yes		
		2.1 Building Placement - g. Where applicable, maintain the character of existing soft landscaped streetscapes by providing generous setbacks for trees and plantings.		Yes		
		2.3 SITE SERVICING, ACCESS, AND PARKING - j. Where below-grade parking structures are permitted to encroach beyond the front face of the building, provide uncompacted soil for a minimum 1 metre depth below grade to support opportunities for tree planting and other soft landscaping along the building frontage.			Yes	
		2.5 PRIVATE OPEN SPACE - a. Locate and design shared private outdoor amenity space to: • include high-quality, universally accessible, and environmentally sustainable materials, four season landscaping, seating, pedestrian-scale lighting, trees, shade structures, weather protection, screening, and programming opportunities, as appropriate.		Yes		
		4.1 STREETScape AND LANDSCAPE DESIGN - c. Provide sustainable streetscape and landscape design by: • protecting existing natural features and trees; • providing sufficient soil depth and high-quality growing medium for new shade trees and plant material	Yes		Yes	
		4.1 STREETScape AND LANDSCAPE DESIGN - d. On streets characterized by soft landscape setbacks or where ground floor uses require more privacy from the adjacent sidewalk, provide additional landscaping between the building face and public sidewalk. Such treatment may include tree and shrub planting, water features, minor grade changes, railings, curbs, low walls, fences, public art, lighting, and seating, etc.		Yes		
		Submission Requirements - 1.6 Heritage Properties and Heritage Conservation Districts - Tree Preservation Plan				Yes

		Submission Requirements - 2.1 Building Placement - Tree Preservation Plan				Yes
		Submission Requirements - 2.4 Publicly Accessible Open Space - Tree Preservation Plan				Yes
		Submission Requirements - 2.5 Private Open Space - Tree Preservation Plan				Yes
		Submission Requirements - 4.1 Streetscape and Landscape Design - Arborist / Tree Preservation Report & Tree Preservation Plan				Yes
Section 3: Performance Standards for Mid-Rise Buildings	2010	Performance Standard #7B: Streetscapes - Avenue streetscapes should provide the highest level of urban design treatment to create beautiful, safe and accessible pedestrian environments and great places to shop, work and live. • Tree planting strategies should ensure sustainable conditions for the growth of mature trees on the Avenues.		Yes		
Townhouse And Low-Rise Apartment Guidelines	2018	1.1 CONTEXT ANALYSIS AND PLANNING FOR LARGER SITES - Evaluate the existing and planned context and demonstrate how the proposed development responds to this context. Larger sites with multiple buildings and public realm elements will coordinate development through a Master Plan. - b. Include in the Planning Rationale or application a "Block" context analysis, showing the proposal and illustrating through text and graphics at an appropriate scale: vi. ground floor uses, setbacks, building entrances, street trees, site circulation, and site servicing elements including major utility elements on the development site and on adjacent sites vii. topographical and landscape features including ravines, water courses, trees and any other significant aspects.				Yes
		1.2 PUBLIC REALM FRAMEWORK - Extend the public realm into developments to enhance public access to transit, parks, open spaces, amenities and other neighbourhood destinations. - 1.2.2 PUBLIC PARKS AND OPEN SPACES - a. Locate and design high-quality parks and open spaces to: iii. preserve and incorporate existing trees and natural topography as part of an open space feature, where appropriate	Yes			
		3.1 STREETS, LANES, MEWS AND WALKWAYS - Provide new streets, pedestrian mews and walkways for safe, comfortable and direct access and address for all new buildings. d. Design streets and lanes to be inviting. Create attractive and comfortable, pedestrian environments with landscaping including canopy trees, pedestrian scale lighting and other amenities. (For lanes, adapt streetscaping elements to fit within tighter dimensions).		Yes		
		3.2 SHARED INDOOR AND OUTDOOR AMENITY AREAS - Design shared outdoor amenity areas to be publicly accessible and a focal point within the development. a. When shared outdoor amenity spaces are required, design these spaces to: iv. preserve existing trees and topography wherever possible and incorporate into the landscape design	Yes			
		3.3 BUILDING PLACEMENT AND ADDRESS - Locate the buildings to frame the edges of streets, parks, and open space. Ensure that buildings fit harmoniously with the existing context and provide opportunities for high-quality landscaping and streetscaping. f. Provide greater building setbacks at strategic locations to avoid long, monotonous facades in order to improve pedestrian amenity and increased space for trees and other landscaping.		Yes		
		3.4 SITE SERVICES, ACCESS AND PARKING - Locate "back of house" areas and elements, such as loading/garbage collection areas, utilities, and parking access, into a building or underground away from view and the public realm. - j. Ensure below-grade parking structures do not limit opportunity for mature landscape and tree growth on site by providing quality soil with appropriate volume and depth.			Yes	
		3.4 SITE SERVICES, ACCESS AND PARKING - Locate "back of house" areas and elements, such as loading/garbage collection areas, utilities, and parking access, into a building or underground away from view and the public realm. - k. Generally, avoid front driveways and garages in street- related townhouses generally and consider only when a unit is 6.0m or wider. Townhouses with front integral garage will: ii. ensure a minimum soil volume of 30m3 to support mature tree growth within the 50% soft landscaped portion of the front yard			Yes	
		5.1 STREETSCAPE, LANDSCAPE AND STORMWATER MANAGEMENT - Provide high-quality, sustainable streetscape and landscape between the building and adjacent streets, parks and open spaces. - 5.1.1 STREETSCAPE - e. Provide privacy for dwellings in close proximity to a street with treatments such as, trees and shrub planting, minor grade changes, judicious use of railings and lighting.		Yes		

		5.1 STREETScape, LANDSCAPE AND STORMWATER MANAGEMENT - Provide high-quality, sustainable streetscape and landscape between the building and adjacent streets, parks and open spaces. - 5.1.1 STREETScape - f. Coordinate space for tree planting with utility locations and other city infrastructure.		Yes		
		5.1 STREETScape, LANDSCAPE AND STORMWATER MANAGEMENT - Provide high-quality, sustainable streetscape and landscape between the building and adjacent streets, parks and open spaces. - 5.1.2 LANDSCAPE - a. Retain and protect existing trees, vegetation, natural slopes and native soils and integrate these features into the overall landscape plan, wherever possible.	Yes			
		5.1 STREETScape, LANDSCAPE AND STORMWATER MANAGEMENT - Provide high-quality, sustainable streetscape and landscape between the building and adjacent streets, parks and open spaces. - 5.1.2 LANDSCAPE - c. Ensure that underground structures do not occupy the full extent of the property in order to provide unimpeded areas for tree growth and water infiltration.			Yes	
		5.1 STREETScape, LANDSCAPE AND STORMWATER MANAGEMENT - Provide high-quality, sustainable streetscape and landscape between the building and adjacent streets, parks and open spaces. - 5.1.2 LANDSCAPE - d. Select plant material that is suitable to the growing conditions of the site and include the following: i. a variety of deciduous and coniferous trees, shrubs and perennials to provide year-round interest, texture, shape, seasonal colour and shade in summer		Yes		
		5.1 STREETScape, LANDSCAPE AND STORMWATER MANAGEMENT - Provide high-quality, sustainable streetscape and landscape between the building and adjacent streets, parks and open spaces. - 5.1.2 LANDSCAPE - e. Where landscaping may have an impact on motorist/ pedestrian sight lines or movement, keep shrubs below 0.85m in height and prune trees so that the lowest branches will be at least 2.0m above ground level. Limit any other landscape features that might cause obstructions to a maximum height of 1.0m.		Yes		
		5.1 STREETScape, LANDSCAPE AND STORMWATER MANAGEMENT - 5.1.3 STORMWATER MANAGEMENT - a. Manage rainwater and snowmelt on-site with best practice designs that encourage infiltration, evapo-transpiration and water re-use: ii. plant trees, shrubs and other absorbent landscaping to provide shade and places for water uptake			Yes	
		5.2 SITE ELEMENTS - Well-designed site elements and the proper placement of utilities help to elevate the quality and experience of the public realm. - 5.2.1 UTILITIES AND OTHER EQUIPMENT - c. Avoid locating utilities and other equipment in areas which may affect the ability of trees to grow to maturity.			Yes	
		5.2 SITE ELEMENTS - 5.2.3 LIGHTING - c. Coordinate the location of lighting with pedestrian clearways, tree planting and other landscaping.		Yes		
Urban Design Guidelines for Sites with Drive- Through Facilities	2005	6.3 PEDESTRIAN SAFETY, AMENITY AND CIRCULATION - 6.3.1 PEDESTRIAN SAFETY, AMENITY AND CIRCULATION To ensure that sites with drive-through facilities enhance pedestrian amenity and are designed to provide and not detract from a safe environment for users, employees, adjacent uses and pedestrians on public sidewalks: • locate lighting, trees, soft landscaping, exterior furniture along pedestrian walkways through the site		Yes		
		6.4 LANDSCAPING - 6.4.1 GENERAL LANDSCAPING REQUIREMENTS - When designing landscapes for sites with drive- through facilities: • provide street trees, boulevard paving, sod and sidewalks as per the City of Toronto Streetscape Manual; • provide a variety of plant material including trees, which meets the requirements of section 6.4.3 of this document		Yes		
		6.4 LANDSCAPING - 6.4.2 EDGE TREATMENT AND SCREENING - Along the Street: Generally, buildings should form the street edge. It is important to screen views from the street edge of stacking lanes, driveways, parking, utilities and services to maintain an attractive and unified experience of the streetscape from the street. Trees and other soft landscaping should be planted to complement other screening measures.		Yes		
		6.4 LANDSCAPING - 6.4.2 EDGE TREATMENT AND SCREENING - Abutting Parks, Open Spaces and other Public Areas not Along the Street: A landscaped transition area should be provided between a drive-through facility and public open space. Existing trees should be preserved as a priori- ty in these areas. Where natural or naturalized areas exist, the landscaping on the drive-through site should be designed to respect and support it by providing native planting. Stacking lanes, driveways, parking, utilities and services should be screened from view of public areas. Fencing may also be required to satisfy requirements of the City of Toronto Parks.	Yes	Yes		
		6.4 LANDSCAPING - 6.4.2 EDGE TREATMENT AND SCREENING - When designing sites with drive-through facilities: • screen stacking lanes, driveways, parking, utilities and services including transformers, gas meters, loading and garbage pick up from view along the street and/or sidewalk, larger site or adjacent uses with landscaping; - provide trees where possible, use high branching deciduous trees where it is necessary to maintain site lines; • provide no less than a 3.0 meter wide landscaped area along the perimeter at the back and sides of the site to accommodate tree planting, fencing, snow storage requirements, etc. A greater width may be required where these requirements overlap, under change of grade conditions, or where walkways and other spatial needs are identified • provide tree planting in perimeter landscaped areas at a rate of one tree per 7.5 meters of linear frontage • preserve existing trees wherever possible allow for flexibility in tree spacing • plant trees 600mm (minimum) from any curb face or parking lot edge to protect from car overhang and mechanical damage		Yes		

Retail Design Manual	2019	New Retail Streets - There are many areas in Toronto where growth is happening as part of the redevelopment of large sites. These large sites are being planned with new public streets, parks and open spaces and multiple buildings, and will become new communities over time. Often these sites are part of planning frameworks that include new higher order transit, subways, LRT lines, etc. The location, design and phasing of retail on these large sites is integral to the creation of complete communities. Retail should be planned as part of these large sites by: • Providing a consistent alignment for new retail entrances and glazing and with adequate space between the curb edge and the front facade to provide generous pedestrian clearways, and other pedestrian amenities, including seating, transit stops, pedestrian weather protection, street trees and other landscaping (see Section 2 for related best practices).		Yes		
		Auto-Oriented Retail Streets - Many areas outside of the downtown and older parts of the city have auto-oriented retail streets. Strip malls and other forms of auto-oriented retail often locate the surface parking between the retail unit and the public sidewalk. While these retail spaces support their local communities, this form of retail is not conducive to a positive pedestrian experience. As the city grows, and these areas are redeveloped, these retail streets should be transformed to better serve pedestrians, and in particular, transit users. This can happen incrementally, block by block, or on large sites. Redevelopment in this context should consider: • Moving new development towards the street edge and providing entrances and glazing along the street. Adequate space between the building and curb should support anticipated pedestrian volumes, active transit users, and amenities including transit stops, seating and street trees (see Section 2 for related best practices).		Yes		
		1.1 BUILDING MASSING AND GEOMETRY - Best Practices - 8. The proportions and design of any overhangs, including the height, depth, as well as location of the overhang, should be carefully considered alongside the streetscape design. This is particularly important with regards to location of street trees to ensure there is adequate space for trees to grow to maturity and to ensure the building, including any projections will not interfere with this growth.		Yes		
		2.1 SIDEWALK INTERFACE - Best Practices - 5. Provide additional open space through building setbacks such as forecourts or plazas that include high quality streetscape amenities including trees, seating, pedestrian scale lighting and public art to enhance the pedestrian experience along retail streets.		Yes		
		2.1 SIDEWALK INTERFACE - Best Practices - 8. Use landscaping such as trees, tree grates or planters on the sidewalks to guide pedestrians towards store entrances.		Yes		
		2.1 SIDEWALK INTERFACE - Best Practices - 10. Provide tree-lined sidewalks for a more comfortable pedestrian scale, weather protection and pleasant connections with nature. Use high-branching tree species to create a canopy high enough to maintain storefront visibility. Coordinate the spacing and location of street trees with retail entrances and signage to ensure good sightlines.		Yes		
Design Guidelines for 'Greening' Surface Parking Lots	2013	Policy not available online. Must contact City employee for copy.				
Drought Tolerant Landscaping: A Resource for Development	N/A	Policy not available online. Must contact City employee for copy.				

Etobicoke-York Design Guidelines	N/A	https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/design-guidelines/etobicoke-york/				
North York Design Guidelines	N/A	https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/design-guidelines/north-york/				
Scarborough Design Guidelines	N/A	https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/design-guidelines/scarborough/				
Toronto-East York Design Guidelines	N/A	https://www.toronto.ca/city-government/planning-development/official-plan-guidelines/design-guidelines/toronto-east-york/				
Urban Design Guidelines for Privately Owned Publicly-Accessible Spaces (POPS)	2014	3.1 COURTYARDS - A landscaped open space, located in the interior of a single block or consolidated block with limited direct street frontage. - Location & Scale: Generally, courtyards have a 1:1 proportion of length to width, and should be of a minimum size to include tree plantings and seating areas.		Yes		
		3.2 PLAZAS - An animated gathering place flanked by a public street with predominantly hard surfaced landscape features. - Location & Scale: Generally, plazas have a 1:1 proportion of length to width, and should be of a minimum size to include tree plantings and seating areas.		Yes		
		3.3 GARDENS - A landscaped space of intimate scale, open to a public street and located to provide maximum sunlight during the day. - Edges & Access: Use architectural and landscape elements (e.g. canopies, pergolas, trees, plantings) for definition and enclosure of the gardens.		Yes		
		3.4 WALKWAYS / MID-BLOCK PEDESTRIAN CONNECTIONS - An exterior public pedestrian route at street level, usually providing a connection through the block. Improves pedestrian access and ease of movement. - Landscape & Amenities: Include a repetition of elements, such as pavers, lights, seating, planters and trees.		Yes		
		3.6 LANDSCAPED SETBACKS - A landscaped open space between the building façade and public sidewalk, characterized by hard or soft landscaping treatment. In many cases this will become an extension of the public sidewalk and boulevard. - Location & Scale: The depth will vary with the requirement for the setbacks, for example, plantings/trees or usable public space such as cafés, seating areas, etc.		Yes		
		3.6 LANDSCAPED SETBACKS - A landscaped open space between the building façade and public sidewalk, characterized by hard or soft landscaping treatment. In many cases this will become an extension of the public sidewalk and boulevard. - Landscape & Amenities: Trees and soft landscaping should be featured in the landscaped setback.		Yes		

Vaughan	Growing Up: Planning for Children in New Vertical Communities	2017	5.3 SOFT LANDSCAPING - Soft landscaping elements, including trees, shrubs and ground cover all have a strong impact on the character of open spaces. The creation of landscaped spaces provides much needed relief in the busy urban environment. Plant materials also help to improve air quality, provide shade, absorb stormwater and contribute to the City's tree canopy. The selection and placement of trees and other plant materials need to be carefully considered within the city and neighbourhood context as well as within microclimate conditions created by surrounding existing and planned buildings. a. Retain and incorporate existing trees and other natural features, where possible.	Yes			
			5.3 SOFT LANDSCAPING - b. Use trees and other plantings to create a comfortable microclimate, by providing shade and mitigating wind impacts.			Yes	
			5.3 SOFT LANDSCAPING - c. Ensure that trees and other plantings do not obstruct sightlines or impede the perception of safety.		Yes		
			5.3 SOFT LANDSCAPING - d. Arrange trees and other plantings to provide maximum effect and efficiencies in maintenance and watering and consider methods to capture stormwater (e.g. sloping paved areas towards planters).			Yes	
			5.3 SOFT LANDSCAPING - e. Select trees and plant materials that: • Are low maintenance, drought tolerant, and pest and disease resistant. Refer to the City's Drought Tolerant Landscaping document. • Vary in colour, texture, and scale, and form and provide interest year-round.		Yes	Yes	
			5.6 WEATHER PROTECTION - Toronto has a climate of extreme weather conditions. In this context, the use of landscaping and well-designed, appropriately- scaled architectural elements helps to provide shelter from precipitation, winds, as well as provide respite from sun during the summer months. Weather protection may include natural features such as trees or landscaping or elements such as canopies, colonnades, overhangs or pergolas. The integration of weather protection elements on buildings or within open spaces encourages pedestrians to use these spaces in all seasons and all weather conditions. - a. Give preference to natural weather protection such as trees, or landscaping, before relying on built structures for weather protection.		Yes		
			5.6 WEATHER PROTECTION - b. Provide areas of shade through tree planting or other high- quality structures.		Yes		
	Official Plan	2010	1.1 MOBILITY - Design safe mobility networks to encourage children's independence and active transportation - Pedestrian infrastructure should: be lined with street furniture as well as trees where possible to provide a shade canopy			Yes	
			1.2 PARKS & OPEN SPACES: ACCESS & TYPE - Provide a variety of types of parks and open spaces that are easily accessible and meet a range of needs - ii PROVIDE A RANGE OF TYPES - d. Playgrounds should: 3. provide shade from trees or shade structures to mitigate impact from sun exposure;			Yes	
			1.7 WHIMSY & DESIGN FOR FOUR SEASONS - Incorporate whimsical elements and design for year round enjoyment - EMBRACE THE FOUR SEASONS - e. Design for four seasons should be: 5. able to address extreme weather through resiliency (public spaces should retain storm water, include shade structures and feature extensive tree planting);			Yes	
			3.3.3 Woodlands - 3.3.3.1 To protect and enhance woodlands, by: b. encouraging that minimum vegetation protection zones be restored using a diversity of native tree species that are sensitive to the realities of the impact of invasive species and invasive destructive pests in new development;	Yes			
			3.4 The Oak Ridges Moraine - 3.4.1 General - 3.4.1.5 To assist in the implementation of the Oak Ridges Moraine Conservation Plan by working with the Province in the implementation of tree cutting and site alteration by-laws required by the Oak Ridges Moraine Conservation Act and any subsequent regulations.				Yes
			3.6.6 Stormwater Management - 3.6.6.4 To satisfy the City and demonstrate consistency with the Toronto and Region Conservation Authority (TRCA) Stormwater Management Criteria, innovative stormwater management approaches must be implemented and designed in accordance with the Ministry of Environment Stormwater Management Practices Planning and Design Manual and with reference to TRCA's Low Impact Development Stormwater Management Planning and Design Guide (2010), as may be updated from time to time. For all development, a treatment train approach to stormwater must be considered consisting of source controls (for example, green roofs, permeable paving, improved urban tree canopy), conveyance controls (for example, bioswales and permeable pipes), and end of pipe treatment (for example, wetlands and ponds). Consideration of the suitable treatment train approach will be determined by local studies. Such studies should also include direction regarding the short and long term maintenance needs for the recommended source controls, conveyance controls, and/or end of pipe treatment.			Yes	
3.7 Air Quality and Climate Change - 3.7.1 Improving Air Quality - 3.7.1.2 To reduce air emissions and impacts from air emissions by: a. increasing opportunities for natural carbon sequestration by establishing annual targets to grow the urban forest through tree planting programs;			Yes				
9.1 Elements of a Great City - 9.1.1 The Public Realm - 9.1.1.2 That public streets and rights-of-way are considered significant public places and, therefore, their design should balance their multiple roles and functions by ensuring that they: c. contribute to the greening of the City through the provision of street trees and landscaping;		Yes					

9.1 Elements of a Great City - 9.1.1 The Public Realm - 9.1.1.10 To implement all elements of the City's public realm that are sustainable and contribute to an improved environment by: b. maximizing the planting of trees and requiring sustainable growing conditions for trees; c. incorporating a diverse range of vegetation, including native and/or drought tolerant species; d. incorporating the use of trees, shrubs, and perennials and minimizing use of high- maintenance annual species; [...]			Yes	
9.1 Elements of a Great City - 9.1.2 Urban Design and Built Form - 9.1.2.2 That in Established Community Areas, new development as reflected in any zoning, variance, subdivision, consent or part lot control exemption application, will be designed to respect and reinforce the existing physical character and uses of the surrounding area, specifically respecting and reinforcing the following elements: h. the presence of mature trees and general landscape character of the streetscape;		Yes		
10.1 Implementing the Plan - 10.1.1 Detailed Planning - 10.1.1.7 That, where a Secondary Plan has been prepared, to provide a context for coordinated development, and to demonstrate conformity with the policies of the Secondary Plan, each development application, in particular those applications intended to develop over a number of phases, shall include a Development Concept Report, providing a detailed description of the proposed development, and the manner in which it addresses the policies of the Secondary Plan. The Development Concept Report may form part of the justification for a development application as determined through a pre-consultation meeting with the Planning Department and address the following matters: o. identification and design of streetscape and pedestrian route improvements for the entire subject property including the area from the building face to the curb, with respect to the provision of street trees (including a double row of trees on major avenues, where feasible such as, Highway 7, Steeles Avenue and Yonge Street), signage, street furniture, landscaping, street and pedestrian scale lighting;		Yes		
10.1 Implementing the Plan - 10.1.2 Implementation Tools - Site Plan Control - 10.1.2.21 That prior to development being undertaken in the Site Plan Control Area, Council shall approve one or both of the following: b. drawings showing plan, elevation and cross-section views for each building to be erected, except a building to be used for residential purposes containing less than twenty-five dwelling units, which drawings are sufficient to display: v. the sustainable design elements on any adjoining public street including without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities;				Yes
10.1 Implementing the Plan - 10.1.2 Implementation Tools - Site Plan Control - 10.1.2.25. That in the Site Plan Control process, the City shall consider the design objectives, including but not restricted to the following: k. the size, type and planting details of deciduous and coniferous trees, shrubs, ground covers and vines, shall be with regard to the City's guidelines, and coordinated with the building and surrounding streetscape, where possible;				Yes
10.1 Implementing the Plan - 10.1.2 Implementation Tools - 10.1.2.47. That in addition to matters under the Planning Act, the Committee of Adjustment, in determining whether a consent is to be granted, shall have regard for the following matters in consultation with the appropriate departments and agencies: d. Conservation: i. the Toronto and Region Conservation Authority shall be consulted in respect of applications for consent which are subject to flooding, wind or water erosion, or characterized by steep slopes, groundwater recharge, valuable wildlife or fish habitat, mature tree stands and areas of high aggregate potential.				Yes
10.1 Implementing the Plan - 10.1.3 Pre-Consultation and Complete Application Submission Requirements - 10.1.3.3 The following information, studies and materials, or other information, that may be identified through the Pre-Application Consultation meeting, may be required to be submitted in support of a complete application for an Official Plan Amendment, Zoning By-law Amendment, Consent, Draft Plan of Subdivision, Draft Plan of Condominium and/or Site Plan Approval: h. Other Reports and Studies viii. Tree inventory and preservation study				Yes
12.4.4 The Kleinburg Core Area – General - 12.4.4.1 All development within the Mainstreet Commercial area, identified on Map 12.4.A, will be subject to the Urban Design Policies of this Plan, the Kleinburg- Nashville Heritage Conservation District Study and Plan, a Streetscape Master Plan, a Parking Study with a view to potentially establishing a municipal parking lot, an inventory of significant trees, a Tree Preservation By-law, and other studies as identified in this Plan.				Yes
12.4.10 Urban Design in the Kleinburg Core Area including the Mainstreet Commercial Area - 12.4.10.4 Landscape elements including trees, planting, paving materials and architectural elements, should be utilized to complement building sites and streetscapes, reinforce the relationship between the building and the street and contribute to the visual continuity of the public realm.		Yes		
12.4.10 Urban Design in the Kleinburg Core Area including the Mainstreet Commercial Area - 12.4.10.12 Inventory significant trees with the goal of maintaining the village character wherever possible.	Yes			
12.4.10 Urban Design in the Kleinburg Core Area including the Mainstreet Commercial Area - 2.4.10.29 Where it is not feasible to locate parking below grade, parking should be located to the rear of principal buildings subject to the preservation of significant trees.	Yes			

12.4.10 Urban Design in the Kleinburg Core Area including the Mainstreet Commercial Area - 12.4.10.34 When reviewing applications for variances to the minimum required parking standards in the City's Comprehensive Zoning By-law, in addition to items normally considered, the City shall also require the following items to be submitted by an applicant/landowner: b. A heritage property assessment which includes an analysis of existing landscape and tree conditions, the impact the proposed parking area will have on these site conditions and other characteristics that contribute to the character of the Kleinburg-Nashville Heritage Conservation District and any existing buildings.				Yes
12.6.5 Urban Design - Policies Applicable to All Areas - 12.6.5.8 The visual impact of surface parking areas shall be mitigated with significant landscaping and pavement treatments including low walls, landscape materials, trees and lighting throughout the parking lots and along the edges.		Yes		
12.6.6 Urban Design – Policies Applicable to the Village District - 12.6.6.20 Street trees, as well as a pedestrian weather protection system, including design elements such as awnings and canopies, shall be provided along the Village Promenade and adjacent to the entrances of all buildings.		Yes		
12.6.7 Urban Design – Polices applicable to the Commercial District - 12.6.7.8 Street trees, as well as substantial landscaping, should provide pedestrian comfort and screen surface parking areas.		Yes		
12.7.2 Low-Rise Residential - 12.7.2.7 Prior to draft approval of a Draft Plan of Subdivision Application or approval of any Site Development Application, where the lands were not in a registered Plan of Subdivision, that the following matters, but not limited to, shall be addressed through the Block Plan process and shall include: i. Woodlot/Tree Inventory and Terrestrial Resources Mitigation/Restoration Report;				Yes
12.7.3 Mid-Rise Residential - 12.7.3.7 Prior to draft approval of a Draft Plan of Subdivision Application or approval of any Site Development Application, where the lands were not in a registered Plan of Subdivision, that the following matters, but not limited to, shall be addressed through the Block Plan process include: i. Woodlot/Tree Inventory and Terrestrial Resources Mitigation/Restoration Report;				Yes
12.7.4 Mid-Rise Mixed-Use Area A and Area B - Lands designated Mid-Rise Mixed-Use Area A, Mid-Rise Mixed-Use Area B and Mid-Rise Mixed-Use Area B within the Major Mackenzie Drive Alignment Special Study Area shall be subject to the following: a. Prior to draft approval of a Draft Plan of Subdivision Application or approval of any Site Development Application, where the lands were not in a registered Plan of Subdivision, that the following matters, but not limited to, shall be addressed through the Block Plan process and shall include: ix. Woodlot/Tree Inventory and Terrestrial Resources Mitigation/Restoration Report;				Yes
12.7.5 Mid-Rise Mixed-Use Area C - 12.7.5.8 Lands designated Mid-Rise Mixed-Use Area C and Mid-Rise Mixed-Use Area C within the Major Mackenzie Drive Alignment Special Study Area shall be subject to the following: a. Prior to draft approval of a Draft Plan of Subdivision Application or approval of any Site Development Application, where the lands were not in a registered Plan of Subdivision, that the following matters, but not limited to, shall be addressed through the Block Plan process and shall include: ix. Woodlot/Tree Inventory and Terrestrial Resources Mitigation/Restoration Report;				Yes
12.7.6 Parks - 12.7.6.4 Greenways, as shown on Map 12.7.B, shall include but not be limited to the following characteristics: c. shall utilize existing significant tree hedgerows, natural features and land form character;		Yes		
12.7.6 Parks - 12.7.6.7 Lands utilized for stormwater management facilities shall generally not be considered as any part of the parkland dedication requirement provided via the Planning Act. Where a quantity stormwater management facility located adjacent to a Park is sized and designed to accommodate active recreational facilities, the City may include up to 50% of the land occupied by the recreational facility as part of the required parkland dedication pursuant to the Planning Act. Stormwater management ponds shall be designed in a natural and curvilinear form incorporating appropriate trees and shrubs. To the extent possible, such facilities shall have regard for the pedestrian and bicycle system and greenway corridors and designed in a manner to enhance their aesthetic appeal.		Yes		
12.7.7 General - 12.7.7.2 Development of the Nashville Heights community shall require a comprehensive review through the Block Plan process, which includes Master Environmental and Servicing Plan (MESP) process, and the undertaking of Environmental Assessments for the Western Vaughan Transportation Individual Environmental Assessment and Highway 427 Environmental Assessment Corridor Study for the lands within the Major Mackenzie Drive Alignment Special Study Area, which may result in the phasing of development. [...] All the reports shall include the lands between the west side of Huntington Road, Nashville Road, Major Mackenzie Drive and the future Highway 427 right-of-way, as well as the proposed site for a community centre/park, which must include a facility fit design to be approved by the City, in their analysis, including land use concept plans. e. Transportation Analysis/Study and Travel Demand Management Plan/Study shall adequately address, in consultation with, the Ministries of Municipal Affairs and Housing and/or Transportation and the Region of York, to the satisfaction the City, the following details for: i. Woodlot/Tree Inventory and Terrestrial Resources Mitigation/Restoration Report;				Yes

12.7.12 TransCanada PipeLine - 12.7.12.6 The number of crossings; the signage on the right-of-way in a number, location and form; the types of trees and form of landscaping that can be planted on the right-of-way, and their depth and location; the number of utility crossings and their location; the notification of future purchasers of the existence of high pressure pipelines and appropriate ingress and egress over properties; and the provision of fencing or other means of identifying the limit of the right-of-way; are to be in consultation with TransCanada PipeLines Limited, to the satisfaction of the City.		Yes		
12.8.4 Land Use Policies: Low-Rise Residential - 12.8.4.7 In its consideration of applications for commercial development and redevelopment, Council shall evaluate all applications on the basis of the following criteria: c. The creation or preservation of a landscape buffer zone between residential and commercial shall be provided using existing mature trees wherever possible;	Yes			
12.8.6 Policies Applicable to Area A - 12.8.6.1 Notwithstanding the foregoing, the following policies apply to the lands located north of Arnold Avenue, south of Centre Street on the west side of Yonge Street identified as Area A on Map 12.8.A (7584, 7586, 7588, 7590, 7592, 7594, 7596, 7598, 7600, 7602, 7604, 7610 and 7616 Yonge Street): s. Commercial and residential parking shall be provided at the rates specified in the implementing zoning by-law. Above grade, structured parking is not permitted. Residential parking, except for visitors and handicapped spaces, shall not be permitted at or above grade. Commercial parking is permitted in underground parking structures and in surface parking lots, subject to the following policies: iii. Trees and other landscape features shall be employed to visually break up large expanses of surface parking and to screen the view of parking lots from public streets;		Yes		
12.8.7 Urban Design Policies - 12.8.7.10 At the interface between residential and non-residential properties, the non- residential property generally must provide a landscaped buffer consisting of tightly planted coniferous plant material and fencing installed to a height of 2 metres, and higher branching deciduous trees.		Yes		
12.8.7 Urban Design Policies - 12.8.7.11 Commercial and residential parking shall be provided at the rates specified in the zoning by-law. Above grade, structured parking is not permitted. Residential parking shall be provided in underground parking structures. Commercial parking is permitted in underground parking structures and in surface parking lots, subject to the following policies: b. Trees and other landscape features shall be employed to visually break up large expanses of surface parking and to screen the view of parking lots from public streets;		Yes		
12.9.13 Open Spaces - Landscaped Buffers are linear green open spaces that serve to provide an appealing and “soft” transitional interface between new development areas and the backyards of existing low-rise homes in adjacent neighbourhoods. They can also assist in mitigating any potential visual impacts associated with headlights, loading and parking areas. The scale and extent of these open spaces will vary but shall not be less than 4.0 wide and may consist of trees, shrubs, planting beds, drainage swales and pedestrian pathways.		Yes		
12.11.9 Streetscape and Public Realm - 12.11.9.6 Mature trees within the public and private realm shall be preserved wherever possible. A tree preservation plan must be submitted with all development or redevelopment applications. Soft landscaping shall be maximized and hard surfacing minimized, with the exception of well-designed and planted plazas, forecourts, patios, and streetscapes associated with “Main Street” and Centre Street.				Yes
12.11.9 Streetscape and Public Realm - 12.11.9.9. The pedestrian environment and connections both in the public realm (e.g. streets and sidewalks) and within the private realm shall be improved in the following ways: d. Provide additional planting of street trees and plantings on private lands;		Yes		
12.11.12 Parks and Open Spaces - 12.11.12.1 The following Parks policies apply to the Thornhill Town Centre: d. Public squares are intended as formal spaces for passive recreation, in support of the adjacent development. Public squares should address the following design guidelines: v. The landscape along the street frontage, including high canopy street trees, should be complementary on both sides of the street;		Yes		
12.15.3 Urban Design Policies -12.15.3.4 Site Design - b. Parking areas shall be shaded with trees and include landscape screening.		Yes		
12.15.3 Urban Design Policies - 12.15.3.5 Public Realm - e. A mature canopy of trees shall be established over the longer term along Kipling Avenue, Burwick Avenue and Lansdowne Avenue. In order to achieve this objective, new street trees shall be provided as a condition of development approval wherever possible. Street trees may be located on private property if insufficient space is available within the public right-of- way to fulfill the public realm vision.		Yes		

<p>11.2 Carrville Centre Secondary Plan - 11.2.10 Park Designation -11.2.10.3 In recognition that the Carrville Centre is, by its intended urban character, different than adjacent suburban neighbourhoods, and the fact that traditional standards and requirements for parks and recreation planning may not be met within the Centre, the following policies apply within the Park designation: g. Urban squares are intended as formal spaces for passive recreation, in support of the adjacent higher density, mixed-use development. Urban squares should address the following design guidelines: iv. the landscape along the street frontage, including high canopy street trees, should be complementary on both sides of the street;</p>		Yes		
<p>11.2 Carrville Centre Secondary Plan - 11.2.11 Natural Areas Designation -11.2.11.15 A 5.0 to 10.0 metre edge management and grading adjustment zone should be established adjacent to all natural features. A 10.0 metre buffer shall be provided for valley and stream corridors. The purpose of this zone is to provide flexibility to achieve the following: d. edge/hazard tree management;</p>	Yes			
<p>11.2 Carrville Centre Secondary Plan - 11.2.14 Built Form - 11.2.14.9 In the case of residential development, this semi-public space creates a “buffer zone” between the public and the private domains, which enhances the visual appearance of the street edge and provides outdoor spaces for casual social interaction. Planted and constructed elements in the semi-public space -low hedges, trees, masonry and decorative metal fences and gates -should be designed to provide a transition from the public sidewalk to the finished floor level of adjacent residences.</p>		Yes		
<p>11.2 Carrville Centre Secondary Plan - 11.2.15 Pedestrian Realm -11.2.15.5 To promote the comfortable pedestrian use of streets, parks and open spaces, development is to provide: b. Appropriate landscape treatments shall be provided, including trees and pedestrian lighting throughout parking lots and along their edges. This is intended to improve their appearance and to contribute to the visual continuity of the street edge, while encouraging the safe use of these spaces; g. Street tree planting should form a continuous canopy along the street; tree species should be selected to reinforce the role of the various street hierarchies within the Carrville Centre and to visually and thematically distinguish the streets from one another;</p>		Yes		
<p>11.2 Carrville Centre Secondary Plan - 11.2.15 Pedestrian Realm - 11.2.15.6 In order to reinforce streets as primary public spaces, the locations of parking, driveways and service entrances need to be carefully considered and coordinated with the locations for pedestrian entrances. e. Large surface parking areas are generally discouraged and, in the long term, parking is encouraged to be located below grade. Where surface parking must be provided, the visual impact of large surface lots shall be mitigated by a combination of setbacks, and significant landscaping including: pavement treatments, low walls or decorative fencing, landscape materials, trees and lighting throughout parking lots and along the edges;</p>		Yes		
<p>11.3 Steeles West Secondary Plan - 11.3.3 Development Principles and Objectives - 11.3.3.1 The following principles express the fundamental premises for development within the Secondary Plan area. They will be considered in the review of all development applications and capital projects: l. Promote and demonstrate environmental sustainability. xi. To ensure trees line streets and populate parking areas, and are well maintained.</p>				Yes
<p>11.3 Steeles West Secondary Plan - 11.3.8 Policies for the Provision of Public and Institutional Uses and Community Services - 11.3.8.11 Parks and public squares should be designed based on the following design guidelines: d. The landscape along the street frontage should include high canopy street trees and be complementary on both sides of the street.</p>		Yes		
<p>11.3 Steeles West Secondary Plan - 11.3.10 Urban Design Policies - 11.3.10.9 The following policies apply respecting the height of buildings: b. In the case of residential development, the semi-public space creates a “buffer zone” between the public and the private domains, which enhances the visual appearance of the street edge and provides outdoor spaces for casual social interaction. Planted and constructed elements in the setback - low hedges, trees, masonry and decorative metal fences and gates - should be designed to provide a transition from the public sidewalk to the finished floor level of adjacent residences.</p>		Yes		
<p>11.3 Steeles West Secondary Plan - 11.3.11 Pedestrian Realm - 11.3.11.6 To promote the comfortable pedestrian use of streets. parks and open spaces, development shall provide: b. appropriate landscape treatments, including trees and lighting, throughout parking lots and along their edges, in order to improve the appearance of the lots and along the edges, contribute to the visual continuity of the street edge, mitigate the heat island effect, and encourage the safe use of these spaces;</p>		Yes		
<p>11.3 Steeles West Secondary Plan - 11.3.11 Pedestrian Realm -11.3.11.17 In order to reinforce streets as primary public spaces, the location of parking and service entrances need to be carefully considered. i. Where surface parking is provided, the visual impact shall be mitigated with significant landscaping and pavement treatments including landscape materials, trees and lighting throughout parking lots and along the edges. Attractive fences and generous landscaping between parking and adjacent residential uses should be provided.</p>		Yes		

11.3 Steeles West Secondary Plan - 11.3.11 Pedestrian Realm - 11.3.11.25 The following streetscaping policies shall apply: c. Mature trees within the public and private realm shall be preserved wherever possible. A tree preservation plan must be submitted with all development or redevelopment applications.; f. High-quality public realm elements such as railings, pedestrian lighting and tree pits shall be provided; and g. The pedestrian environment and connections both in the public realm (e.g., streets and sidewalks) and within the private realm shall be improved in the following ways: ii. Provide additional planting of street trees and plantings on private lands;	Yes			
11.3 Steeles West Secondary Plan - 11.3.12 Transportation Policies - 11.3.12.24 Every street shall be designed to accommodate street trees to give streets a unity of form and shade for pedestrians.		Yes		
11.3 Steeles West Secondary Plan - 11.3.13 Environmental and Servicing Policies - 11.3.13.3 The design of rooftops and parking areas should minimize the heat island effect, through rooftop gardens, green roofs and the planting of shade trees between parking aisles.		Yes		
11.3 Steeles West Secondary Plan - 11.3.13 Environmental and Servicing Policies - 11.3.13.4 Streetscaping shall include irrigation systems for street trees where appropriate and feasible.		Yes		
11.4 Highway 400 North Employment Lands Secondary Plan - "2.2.5.1 Employment Area Activity Centre - 4. The urban design guidelines for the area will reinforce the direction with respect to the creation of a pedestrian-oriented environment including guidelines with respect to the design of building facades facing Kirby Road; the size, location, and design of parking areas; and the location and design of loading and garbage facilities. In addition, the urban design guidelines will provide designs for Kirby Road which will recognize its role and function as a multi-purpose street that is both a transportation corridor, with the potential for an interchange at Highway 400, and a pedestrian-oriented place, including wide sidewalks on both sides of the road, buildings with active facades, including primary windows to provide visibility to and from the street, enhanced street trees, and other landscaping, on-street parking and pedestrian lighting."		Yes		
11.4 Highway 400 North Employment Lands Secondary Plan - "2.2.6.2 The Interchange Study Area and the GTA West Transportation Corridor Protection Area - q. Adding to Section 2.3.1, Urban Design, a new subsection f) as follows: "f) The lands along Highway 400 in the Highway 400 North Employment Area as identified on Schedule 2D to this Plan, serve as the major northern Gateway to the City. Urban design guidelines will be prepared for this Area to ensure that development is designed in a manner which enhances the City's image and which reflects the prestige nature of the Employment Area. In particular, the guidelines will address the following: iii. Character Road - Kirby Road is identified as a "Character Road" on Schedule "7" to Amendment #450. This reflects the fact that it is intended to be a multi- purpose street that is both a transportation corridor, with the potential for an interchange at Highway 400, and a pedestrian-oriented place. The urban design guidelines will provide designs for Kirby Road which will recognize its dual role including wide sidewalks, enhanced street trees and other landscaping, on-street parking and pedestrian lighting."		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.2 Urban Form – Precincts - 11.5.2.1 Kipling Avenue should be: b. A picturesque heritage Avenue, with a significant tree canopy and buildings that front directly onto Kipling. There should be active at-grade uses and buildings should be setback, offering a landscaped front yard.		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.2 Urban Form – Precincts - 11.5.2.3 The Fairground Area should be: b. A place that conserves existing significant greenery and tree canopy, that is part of the rural character, and should extend to the surrounding context.		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.3 Block Pattern, Street Network and Linkages - 11.5.3.6 The following policies apply to Kipling Avenue North and South: b. A 26 metre R.O.W., should be maintained for Kipling Avenue north and south. The protection of this R.O.W. width is beneficial for the Avenue in terms of providing opportunities to increase the street tree canopy, and enforce the "green character" prescribed for Kipling Avenue and the Corridor in general; c. The R.O.W. width should accommodate a double row of street trees and a generous pedestrian zone within the boulevard, along the majority of Kipling Avenue; f. Additional landscape enhancements such as double street tree planting, may not be feasible at pinch points where existing heritage buildings fall within the 26 metre R.O.W.		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.3 Block Pattern, Street Network and Linkages - 11.5.3.7 The following policies apply to Kipling Avenue South: d. The widened roadway width will allow for only a single row of street tree planting within a 4.5m boulevard.		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.3.17 The following policies apply to both Porter Avenue East and West: f. Key aspects of the design include: i. a double row of trees for Porter Avenue East, and enhanced landscaping on both sides of the street; ii. a double row of street trees where the R.O.W. allows, along Porter Avenue West;				
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.7 Open Spaces - 11.5.7.2 The following policies apply to Rainbow Creek and Humber River: e. The existing mature tree canopy should be protected and enhanced at every opportunity, especially along Rainbow Creek where residential development is being proposed. Other significant opportunities for enhancement exist around the Fairgrounds and should be considered in conjunction with enhancing the trail system. Any form of enhancement to the natural system within TRCA jurisdiction must be undertaken in accordance with the TRCA Act.	Yes			

11.5 Kipling Avenue Corridor Secondary Plan - 11.5.7 Open Spaces - 11.5.7.3 The following policies apply to Kipling Avenue: d. Where possible, new streetscaping should integrate any existing mature trees within the streetscape master plan and enhance all heritage landscape frontages with additional planting.	Yes			
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.7 Open Spaces - 11.5.7.4 The following policies apply to The Fairgrounds: f. Porter Avenue, which is the "gateway" entrance to the Fairgrounds, should be clearly defined by a double alleé of street trees and enhanced landscaping including pedestrian scaled lighting and signage. This streetscape should also be applied to the new "Porter Avenue West" to create a continuous east/west landscaped connection of open spaces.		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.7.5 The following policies apply to Neighbourhood Parks, Parkettes and Public Squares: b. Existing parks, parkettes, and public squares should be enhanced where possible, with additional trees, landscaping and furnishings that are in keeping with the overall vision and palate of materials for the Corridor.				
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.8 Open Space Connections - 11.5.8.3 All new and existing neighbourhood streets should provide continuous streetscaping to contribute to the overall tree canopy.		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.9 Landmark Sites, Gateways and Nodes - 11.5.9.3 The following policies apply to Open Space Landmarks: c. Opportunities to enhance the distinct characteristics of the existing landmark sites should be considered as a first priority such as, enhanced landscaping and additional tree planting for the mature canopy of the northern gateway landmark site, which can then be augmented by an architectural feature within the landscape as a terminus to the Avenue.		Yes		
11.5 Kipling Avenue Corridor Secondary Plan - 11.5.24 Parks and Open Space - 11.5.24.1 The following Parks policies apply to the Secondary Plan Area: e. Public squares are intended as formal spaces for passive recreation, in support of the adjacent development. Urban squares should address the following design guidelines: v. The landscape along the street frontage, including high canopy street trees, should be complementary on both sides of the street;		Yes		
11.6 Maple GO Station Secondary Plan - 11.6.1 General - 11.6.1.7 Notwithstanding the policies contained in Section 9.1.2 "Urban Design and Built Form", the following policies shall apply to the Subject Lands: c. To promote the comfortable and convenient pedestrian use of streets, public parks, and public squares development is encouraged to provide: iv. Street tree planting should form a continuous canopy along the street; tree species should be selected to reinforce the role of the various street hierarchies within the Maple GO Station Secondary Plan, and to visually distinguish the streets from one another.		Yes		
11.7 Vaughan Mills Centre - 3.9 Parking and Servicing Facilities - 3.9.1 General - Parking and servicing are necessary aspects of development, and should be directly linked to the areas where they are most effective and reduce impacts on the public realm. The minimum and maximum parking requirements for each land use designation will be set out in the implementing By-law. The following general policies apply to parking and servicing facilities: • Where surface parking or service areas are exposed, a generous separation from the public realm should be provided, and designed to include enhanced landscaping along the streetscape, such as an additional row of trees, or buffered with landscaping or other mitigating design measures. Pedestrian areas and paths should be designed with high quality landscaping features and provided with adequate lighting for pedestrian safety and wayfinding. Off-street surface parking shall not be located between the front of the building and the street.		Yes		
11.7 Vaughan Mills Centre - 3.9 Parking and Servicing Facilities - 3.9.1 General - Parking and servicing are necessary aspects of development, and should be directly linked to the areas where they are most effective and reduce impacts on the public realm. The minimum and maximum parking requirements for each land use designation will be set out in the implementing By-law. The following general policies apply to parking and servicing facilities: • All surface parking facilities shall be landscaped and provide for safe pedestrian circulation and movement. Trees and shrubs shall be planted throughout the parking area to intercept precipitation, reduce surface heating, enhance appearance and protect pedestrians from the elements. The use of native plants is preferred. Distinctive pavement and/or markings should be used to indicate pedestrian pathways and crossings. Further, it is encouraged that grading and landscaping materials for surface parking lots be designed as part of the site's stormwater management system.		Yes		
11.7 Vaughan Mills Centre - 3.9 Parking and Servicing Facilities - 3.9.1 General - Parking and servicing are necessary aspects of development, and should be directly linked to the areas where they are most effective and reduce impacts on the public realm. The minimum and maximum parking requirements for each land use designation will be set out in the implementing By-law. The following general policies apply to parking and servicing facilities: • The amount of landscaping should be proportionate to the overall parking lot size but one tree for every eight parking spaces is recommended.				

11.7 Vaughan Mills Centre - 4.1 The Transportation Framework - 4.2.2 Streetscape elements and materials should be of high quality, inclusive of paving, lighting, bollards, benches, waste receptacles, utility boxes, paving materials, tree grates, vending boxes, signage, wayfinding, and transit shelters, among others. These elements should be coordinated along streets to create a well-designed, cohesive and legible public realm consistent throughout Vaughan Mills Centre. Streetscape elements should be used sparingly, and consolidated wherever possible, in order to reduce clutter and create a clean, legible streetscape environment (see Part B, Section 4.6).		Yes		
11.7 Vaughan Mills Centre - 4.2.4 Collector Streets - 4.2.4.1 General Guidelines - Collector streets are designed to collect and distribute traffic and to provide a supportive role to Arterial Streets. Collector Streets may be served by local transit and should support active ground floor uses by allowing on-street parking and a generous public boulevard. This Plan proposes Collector streets have a design right-of-way of 23-30 metres, include 2-4 travel lanes, and provide access to abutting properties. Collector streets facilitate the majority of vehicular and pedestrian circulation and movement, and also create a less intense development frontage, providing for a more pedestrian-oriented and walkable streetscape environment. These streets provide access to Vaughan Mills Centre from surrounding arterials and should be designed to accommodate on-street parking and future bicycle and transit circulation. Collector streets should also function to support a mix of uses including commercial/retail, residential, community facilities, civic buildings, and open space. In general, all new and existing collector streets should have continuous street tree planting to provide an attractive and comfortable pedestrian environment, and to contribute to the overall tree canopy. Features of these streets should include: • Broad sidewalks with street trees on each side of the street;		Yes		
11.7 Vaughan Mills Centre - 4.2.4 Collector Streets - 4.2.4.2 Bass Pro Mills Drive - Specific Guidelines - An important new recommended major collector street proposed in this Plan is the Bass Pro Mill Drive extension to Weston Road. [...] A proposed street cross-section for Bass Pro Mills Drive includes an expanded public boulevard along the north edge of the street for enhanced landscaping and separation from the employment lands to the south. The boulevard is proposed to accommodate a multi-use path for non-vehicular modes of transportation (walking, cycling, wheelchair, etc.), a double row of trees, and sidewalks for enhanced pedestrian movement. The proposed multi-use path is planned to extend west over Highway 400 along Bass Pro Mills to connect with a proposed trail network on the western side of the Plan Area.		Yes		
11.7 Vaughan Mills Centre - 4.2.4 Collector Streets - 4.2.4.3 The Bass Pro Mills Multi-Use Path - [...] The Multi-use path is intended to incorporate the following design considerations: • A treed urban multi-use trail with a double row of street trees on either side of the pedestrian sidewalk, with a generous central pathway that accommodates pedestrian, bicycle, and wheelchair movement in both directions; • The character of the landscape should be treed but manicured (mowed grass) to provide high visibility and a feeling of comfort and safety for the path;		Yes		
11.7 Vaughan Mills Centre - 4.2.5 Local Streets - 4.2.5.2 Features of local streets should include: • Sidewalks with a single row of street trees on each side of the street;		Yes		
11.7 Vaughan Mills Centre - 4.6 Right-of-Way Design - 4.6.2 The Public Boulevard - • Street trees should be planted in a below grade trench and not in planters, using sustainable methods to encourage longevity and viability; • Street trees should be placed at a rhythm of 7-10 metres in spacing to create a continuous tree canopy; • The burial of overhead utilities should be considered to allow for the healthy growth of street trees. Street tree locations should be coordinated with utilities to minimize root pruning during utility maintenance and to ensure optimum tree growth; and • To reduce the perceived width of the street, parallel on-street parking spaces should be grouped within parking bump-outs (maximum 4 in a row) to provide additional public realm, tree planting, and furnishing space.		Yes		
11.7 Vaughan Mills Centre - 4.6 Right-of-Way Design - 4.6.4 The Planting and Furnishing Zone - The Planting and Furnishing Zone plays an important role within the street cross-section. It functions as a physical buffer between the pedestrian Walking Zone and vehicular traffic, and provides a means of organizing street furnishings, street tree planting and landscaping, and maintenance.		Yes		
11.7 Vaughan Mills Centre - 4.6 Right-of-Way Design - 4.6.6 Pedestrian-Scaled Lighting • Ensure street lighting does not conflict with street trees; • Street lighting should be located at the midpoint between every second street tree, occurring at 14m intervals to coincide with a 7m street tree spacing;		Yes		
11.7 Vaughan Mills Centre - 4.7 Enhanced Streetscapes - [...] In addition to the policies of Part B, Section 4.6 of this Plan, Enhanced Streetscapes shall be designed according to the following design considerations: • Provide enhanced landscape treatments such as a double row of trees where the right-of-way permits, attractive landscaping such as grasses and perennials in the boulevard, generous sidewalks, high quality street furnishing, amenities, signage, and safe and distinct crosswalks, and opportunities for public art. The character of these streets should contribute to creating a unique and distinct identity for Vaughan Mills Centre;		Yes		

11.7 Vaughan Mills Centre - 5.2 Parkland Dedication - 5.2.4 [...] Parking generally will not be appropriate under Neighbourhood Parks where trees are intended to grow to their full potential, and above-grade elements of underground parking would significantly compromise the design and programming of the park. Underground parking will generally be more appropriate under parks and Public Squares designed predominantly for intense daily use and/or civic events and where mature trees and a significant tree canopy are not envisioned. [...]		Yes		
11.7 Vaughan Mills Centre - 5.3 Open Space Typologies - 5.3.1 Neighbourhood Parks [...] Further to Policy 7.3.1.2(c) of VOP 2010, Neighbourhood Parks identified in Schedule E should have the following characteristics or features: • Shade trees and other plantings		Yes		
11.7 Vaughan Mills Centre - 5.4 Green Infrastructure and The Black Creek Corridor - 5.4.1 The Vaughan Mills Secondary Plan proposes areas to be dedicated for Open Space in an effort to both provide an adequate amount of open space. In addition, the Plan encourages the rehabilitation and enhancement of the natural environment, and to prevent new development from occurring within areas that may introduce risk to life and property associated with flooding, erosion, and slope instability. In addition to the public open space policies discussed in Part B, Section 5.1 of this Plan, the following are recommended: • Requirements for trees to be planted along all streets and within private lots; • Green roofs and “living walls” on building exteriors are encouraged. Planting native species, conifers, large-canopied deciduous trees, edible fruit and nut-bearing tree species that attract beneficial insects and birds, and a diverse mix of species are priorities;				
11.7 Vaughan Mills Centre - 7.3 Water, Stormwater and Wastewater Systems - 7.3.2 Stormwater • Portions of Black Creek, as shown on Schedule E: Open Space Network, are proposed for realignment within a natural channel design in accordance with the TRCA and the City. The Creek is proposed to be realigned within a minimum 70 metre open space corridor that shall be restored to a natural state through the planting of native trees, shrubs and other foliage and designed to the satisfaction of the City and the TRCA. The design of the realigned section should be completed as part of the Block Plan process as set out in Section 10.1.1.14 of Volume 1 of VOP 2010 or development approvals process and it should include confirmation of the required corridor width.			Yes	
11.7 Vaughan Mills Centre - 7.3 Water, Stormwater and Wastewater Systems - 7.3.2 Stormwater • To satisfy the City and demonstrate consistency with the Toronto and Region Conservation Authority (TRCA) Stormwater Management Criteria, innovative stormwater management approaches must be implemented and designed in accordance with the Ministry of Environment Stormwater Management Practices Planning and Design Manual and with reference to TRCA’s Low Impact Development Stormwater Management Planning and Design Guide (2010), as may be updated from time to time. For all development, a treatment train approach to stormwater must be considered consisting of source controls (for example, green roofs, permeable paving, improved urban tree canopy), conveyance controls (for example, bioswales and permeable pipes), and end of pipe treatment (for example, wetlands and ponds). Consideration of the suitable treatment train approach will be determined by local studies. Such studies should also include direction regarding the short and long term maintenance needs for the recommended source controls, conveyance controls, and/or end of pipe treatment.		Yes		
11.7 Vaughan Mills Centre - 6.0 Development Approvals - 6.2 [...] The Development Concept Report will be required in accordance with Policy 10.1.1.7 of VOP 2010, including the following: • Identification and design of streetscape and pedestrian route improvements for the entire subject property including the area from the building face to the curb, with respect to the provision of street trees, signage, street furniture, landscaping, street and pedestrian scale lighting;				Yes
11.8 North Kleinburg-Nashville Secondary Plan - Active Transportation - xxi. All streets will be designed as important components of the public realm. Provisions shall be made for the lining of streets with trees in the boulevards and/ or front and exterior side yards. To support the pedestrian realm, sidewalks on both sides of the street are encouraged. These and other matters will be investigated in the preparation of conceptual cross- sections for the various types of streets through the future Urban and Architectural Design Guidelines;		Yes		
11.10 Concord GO Centre Secondary Plan - 4.2 The Street Network - 4.2.8 Streetscape elements and materials should be of high quality, including paving, lighting, bollards, benches, waste receptacles, utility boxes, paving materials, tree grates, vending boxes, signage, wayfinding, and transit shelters, among others. These elements should be coordinated along streets to create a well-designed cohesive and legible public realm consistent throughout the Concord GO Centre. Streetscape elements should be located to minimize clutter and create clean and legible streetscapes.		Yes		
11.10 Concord GO Centre Secondary Plan - 4.2 The Street Network - 4.2.10 Within the Secondary Plan area, Highway 7 and Centre Street are Regional Arterial Roads. Both streets are planned to accommodate rapid transit alignments and related station infrastructure within the right-of-way and to carry high volumes of traffic. These streets are also planned to provide more comfortable pedestrian and cycling environments through the provision of broad sidewalks with street trees as well as the inclusion of cycling lanes.		Yes		

<p>11.10 Concord GO Centre Secondary Plan - 4.2 The Street Network - 4.2.12 Improvements to the pedestrian network in terms of north-south movements across Highway 7 shall also be addressed in conjunction with development applications and improvements to the right-of-way as well as transit infrastructure improvements. Consistent with the Concord West Urban Design Framework and Streetscape Plan, improvements to the intersection of Baldwin Avenue/ Bowes Road and Highway 7 shall be designed to facilitate walking and street life including clearly demarcated pedestrian and cycling amenities within the right-of-way such as crosswalk patterns, intersection ramps, street furniture and street tree improvements. Similar identification of pedestrian infrastructure should be integrated into the proposed intersection on Highway 7 to be located to the east of the railway bridge and west of the Centre Street intersection. In conjunction with upgrades to the railway line, including improvements to the existing line as well as the construction of a new GO train station if required, and/or in conjunction with development applications for the lands adjacent to Highway 7, an overhead pedestrian crossing shall be encouraged by the City through either the development application process or an Environmental Assessment process.</p>		Yes		
<p>11.10 Concord GO Centre Secondary Plan - 4.2 The Street Network - 4.2.17 Major and Minor Collector Streets are located throughout the Secondary Plan area as shown in Schedule D. Collector Streets are designed to collect and distribute traffic to provide a supportive role to Arterial Streets. Collector Streets may be served by local transit and should support active ground floor uses. Bowes Road and Rivermede Road are Major Collectors that border the northwest corner of the Plan area, through the employment lands. North Rivermede Road is a Minor Collector Road. The proposed north-south road in Area 1 is planned as Minor Collector Road with a right-of-way width of 23 to 30 meters. This proposed Minor Collector Road will facilitate the majority of the vehicular and pedestrian circulation and movements within Area 1 and should be designed to accommodate on-street parking, bicycle and transit circulation and create a strong urban environment supported by a mix of uses, high quality streetscaping including broad sidewalks lined with street trees and street furniture and 3 to 5 metre build to setbacks. The intersection of Highway 7 and this Minor Collector Road is intended to function as a signalized intersection.</p>				
<p>11.10 Concord GO Centre Secondary Plan - 4.2 The Street Network - 4.2.18 A number of local streets are proposed for the Concord GO Centre, primarily in Area 1, north of Highway 7. These streets are designed in a grid-like pattern to provide a highly connected block pattern. Local streets are designed to provide access to properties and provide circulation at low operating speeds. Local Streets will generally include two travel lanes. These streets function as neighbourhood streets, have narrower roadways, with on-street parking and connected sidewalks, discouraging heavy traffic flow and higher speeds. The intersection of the north-south local roads with Highway 7 is anticipated to provide right-in and right-out access however, the status of these intersections, including need, will need to be planned and designed in conjunction with the Region. Local Streets should include sidewalks with a single row of street trees on each side of the street and dedicated cycling lanes for some of the streets. Along the two proposed north-south Local Streets in Area 1, the location of cycling lanes should be explored through the development application process and is encouraged to be integrated with the adjacent open space areas.</p>				
<p>11.10 Concord GO Centre Secondary Plan - 7. WATER, STORMWATER AND WASTEWATER SERVICES - 7.2 Stormwater - 7.2.6 To satisfy the City and demonstrate consistency with the Toronto and Region Conservation Authority (TRCA) Stormwater Management Criteria, innovative stormwater management approaches must be implemented and designed in accordance with the Ministry of Environment Stormwater Management Practices Planning and Design Manual and with reference to TRCA's Low Impact Development Stormwater Management Planning and Design Guide (2010), as may be updated from time to time. For all development, a treatment train approach to stormwater must be considered consisting of source controls (for example, green roofs, permeable paving, improved urban tree canopy), conveyance controls (for example, bioswales and permeable pipes), and end of pipe treatment (for example, wetlands and ponds). Consideration of the suitable treatment train approach will be determined by local studies. Such studies should also include direction regarding the short and long term maintenance needs for the recommended source controls, conveyance controls, and/or end of pipe treatment.</p>				Yes
<p>11.11 Woodbridge Centre Secondary Plan - 3.3 Stable Residential Neighbourhoods - 1. The vision for the Stable Residential Neighbourhoods seeks to: b. improve the "green" character of the neighbourhood by enhancing existing heritage forests with additional tree planting and landscaping;</p>		Yes		
<p>11.11 Woodbridge Centre Secondary Plan - 4.1 Land Use Policy Specific to the Woodbridge Commercial Core - 4.1.3 Urban Design Policies - 2. The following design policies are the result of site specific analysis undertaken for Market Lane and the Public Square, which assessed built form, massing, and density for the site. d. Comfortable and Safe Pedestrian-Oriented Environment i. Design the public square as the main urban open space with urban design treatments such as enhanced pavement surfaces, perimeter shade trees, low walls suitable for sitting, and removable furniture.; iv. Provide weather protection such as awnings, trees, a fine grain of retail having multiple entry points.</p>		Yes		

<p>11.11 Woodbridge Centre Secondary Plan - 4.2 Land Use Policy Specific to the Islington Avenue Corridor - 4.2.4 Urban Design Policies 2. A continuous double row of street trees shall be planted along Islington Avenue, taking advantage of the deep setbacks, to visually narrow the width of the corridor and extend the wooded character of the area. Streetscaping shall be guided by a streetscape master plan for the Woodbridge Centre Secondary Plan, building on the Streetscape Master Plan established for the Kipling Avenue Corridor.</p>		Yes		
<p>11.11 Woodbridge Centre Secondary Plan - 5.0 URBAN FORM - 5.1 Block Pattern, Street Network, and Linkages - [...] Additional detail design review and input by various agencies shall be undertaken to assess the recommendations of a Streetscape Master Plan, such as the Vaughan Fire Department (VFRS) and Public Works and Emergency Services, to ensure that consideration for road safety, servicing, and access are being met. Coordinated improvements to the streetscape shall be promoted with: a. coordinated street tree planting with native species; c. continuous tree canopy where possible to visually narrow the width of the streets;</p>		Yes		
<p>11.11 Woodbridge Centre Secondary Plan - 5.0 URBAN FORM - 5.1 Block Pattern, Street Network, and Linkages - 5.1.2 Islington Avenue - Islington Avenue has a "village street" character, with an eclectic mix of house forms, densities and uses. The R.O.W. along Islington Avenue ranges from 23-36 metres. The R.O.W. is reduced to 23 metres in the "Village" section along the avenue, from Davidson Drive to Hayhoe Lane. The following policies shall apply: 3. The existing street tree canopy shall be enhanced along the entire avenue to enforce the "green character" of the area. The opportunity for a double row of street trees is encouraged, taking advantage of the deep setbacks, to create a continuous overhead canopy. The right-of-way shall accommodate a generous pedestrian zone with wide sidewalks and street furnishing within the boulevard.</p>		Yes		
<p>11.11 Woodbridge Centre Secondary Plan - 5.0 URBAN FORM - 5.1 Block Pattern, Street Network, and Linkages - 5.1.3 Highway 7/Islington Avenue Intersection - The focus for the Highway 7/Islington Avenue intersection is to establish a more pedestrian friendly streetscape environment and to create an improved southerly gateway. 1. Opportunities to visually reduce the wide intersection and paving shall be considered such as enhanced streetscaping, street tree planting, special landscape paving, public art, and signage to create a more pedestrian friendly intersection.</p>		Yes		
<p>11.11 Woodbridge Centre Secondary Plan - 6.0 PARKS AND OPEN SPACE FRAMEWORK - 6.1 Open Spaces - 6.1.1 The Humber River Valley Open Space - 2. The existing mature tree canopy shall be protected and enhanced at every opportunity, especially in areas where residential development is being proposed. Any form of enhancement to the natural system within TRCA jurisdiction shall be undertaken in accordance with the TRCA's programs and policies (Ontario Regulation 166/06, the Valley and Stream Corridor Management Program and the Terrestrial Natural Heritage System Strategy).</p>	Yes			
<p>11.11 Woodbridge Centre Secondary Plan - 6.0 PARKS AND OPEN SPACE FRAMEWORK - 6.1 Open Spaces - 6.1.4 Public Squares - 4. Volume 1 of the VOP 2010 defines Public Squares as "intensively used spaces that can accommodate a range of neighbourhood-oriented social opportunities and larger city- wide entertainment and cultural events". In addition, these spaces should support adjacent development and address the following design policies: e. the landscape along the street frontage, including high canopy street trees, shall be complementary on both sides of the street;</p>		Yes		
<p>11.11 Woodbridge Centre Secondary Plan - 6.0 PARKS AND OPEN SPACE FRAMEWORK - 6.2 A Connected System - c. Undertake a detailed streetscape design for Islington Avenue, Woodbridge Avenue, Clarence Street and the Highway 7/Islington Avenue intersection to complete a Detailed Streetscape Master Plan for the entire Woodbridge Centre. Every street shall be designed to accommodate street trees, to give streets a unity of form, to provide a human scale and pedestrian friendly environment, and to contribute to the beauty and ecology of the area.</p>		Yes		
<p>11.11 Woodbridge Centre Secondary Plan - 7.0 THE ENVIRONMENT - 7.1 Natural Heritage Network - The VOP 2010 describes a Natural Heritage Network to be protected from development. It is the policy of Council: 5. That an application for development and site alteration in proximity to Regionally Significant Woodlands must be accompanied by a Tree Inventory and Vegetation Conservation Plan that demonstrates tree canopy conservation and enhancement opportunities.</p>				Yes
<p>11.11 Woodbridge Centre Secondary Plan - 7.0 THE ENVIRONMENT - 7.2 Locally Important Forest Resources and Landforms - In addition to lands within the Natural Heritage Network, other natural features shall be enhanced to maintain the "community within a park setting" of Woodbridge. It is the policy of Council: 1. That existing natural forest stands or groupings of trees shall be conserved. 2. That an application for new development and site alteration affecting a site with existing groupings of trees must be accompanied by a Tree Inventory and Vegetation Conservation Plan that demonstrates tree canopy conservation and enhancement opportunities. 3. That trees on public and private property, having a tree diameter of twenty (20) centimetres or more or having a base diameter of twenty (20) centimetres or more, must be conserved, and the requirements of the City of Vaughan Tree By-law 185-2007 as may be amended, must be adhered to.</p>	Yes			Yes

11.11 Woodbridge Centre Secondary Plan - 7.0 THE ENVIRONMENT - 7.4 Sustainable Development Policies - [...] In addition to the policies in Section 9.1.3 of Volume 1 of the VOP 2010, it is the policy of Council: 8. That an application for development and site alteration shall be accompanied by a report demonstrating the proportion of hardscape areas that are shaded within 5 years of tree maturity, with the objective of shading 50% of hardscape areas. Where natural shading is not possible, install artificial shading such as covered walks and/or use light coloured materials (reflectance of at least 0.3 and emissivity of 0.9).		Yes		
11.12 Vaughan Metropolitan Centre Secondary Plan - 4.0 > STREETS AND TRANSPORTATION - 4.2 Public Transit - 4.2.4 The subway station and track facilities extending south from the station box, shall be located within and below a north-south open space reserved primarily for subway entrance and exit facilities, streets, utilities and municipal services, and park amenities, as generally identified in Schedule B. The location and design of the cross-over facilities and track tunnel generally shall permit the planting of mature trees in the open spaces above. Other than structures associated with the subway or park uses, buildings generally shall not be permitted within the subway right-of-way.				
11.12 Vaughan Metropolitan Centre Secondary Plan - 4.0 > STREETS AND TRANSPORTATION - 4.3 Street Network - 4.3.12 Highway 7 through the VMC is intended to evolve into a grand avenue that balances its higher order function to accommodate rapid transit and vehicular traffic with its additional intended role as a pedestrian-friendly street that provides an attractive setting for residential and commercial development. The City shall work with the Region of York, the Province of Ontario and landowners to implement the vision for Highway 7, as illustrated in Figures A and B, and: c. Ensure the design of Highway 7 is guided by Section 4.4 of this plan and includes double rows of trees in the median and on both sides, except at VIVA station locations, where the right-of-way requirement may only permit a single row of trees in each boulevard;		Yes		
11.12 Vaughan Metropolitan Centre Secondary Plan - 4.0 > STREETS AND TRANSPORTATION - 4.3 Street Network - 4.3.16 The Mews identified in Schedule C may be designed, built and operated as a Local Street or a Mews. The appropriate classification shall be determined during the preparation and review of the Development Concept Report or development application for the affected blocks and supported by an access and circulation plan and a traffic impact study, both prepared to the City's satisfaction, in consultation with the Region of York where the local street or mews connects to a Regional Road. As illustrated in Figures K-L, Mews streets shall have a minimum width of 15 metres. They may accommodate a narrow roadway for vehicles and bicycles or be designed for pedestrians and cyclists only, but in either case shall include a generous pedestrian zone, lighting and trees. Generally, a Mews shall not accommodate on-street parking. A mews may be privately owned but shall be fully publicly accessible via an easement agreement. In addition to Mews streets, Laneways intended primarily for parking access and servicing shall be permitted throughout the VMC and shall have a minimum width of 8 metres. Laneways may be privately owned or public.		Yes		
11.12 Vaughan Metropolitan Centre Secondary Plan - 4.0 > STREETS AND TRANSPORTATION - 4.4 Streetscaping - Trees 4.4.7 Trees, and street trees in particular, are intended to be a distinguishing visual element in the VMC's identity. The urban tree canopy provides shade, beauty and wildlife habitats; moderates microclimates for human comfort and buildings; mitigates wind; reduces glare and reflection; and helps to unify a streetscape. All streets in the VMC should be lined with appropriate trees resistant to salt, disease, drought and pests. Street trees shall be consistently spaced, generally 6-8 metres apart on centre. Generous tree and planting pits/trenches should be provided for maximum soil area to allow roots to spread and water and air to penetrate. Drip or other water-conserving systems should be installed in planting pits. Attractive grates or covers over tree pits or low, decorative tree guards should be used in high pedestrian areas. Other plants in planting pits or raised planters may be considered.		Yes		
11.12 Vaughan Metropolitan Centre Secondary Plan - 5.0 > ENERGY, WATER AND THE NATURAL ENVIRONMENT - 5.5 Environmental Site Design - 5.5.4 A significant portion of non-roof hardscapes shall use high-albedo surface materials and/or be heavily shaded by trees.			Yes	
11.12 Vaughan Metropolitan Centre Secondary Plan - 5.0 > ENERGY, WATER AND THE NATURAL ENVIRONMENT - 5.6 Natural Heritage - 5.6.3 The City shall establish a target for the number of trees to be planted in the VMC by 2031 and through the development review process shall seek to ensure that trees proposed in public and private open spaces and streetscapes support achieving the target.				Yes
11.12 Vaughan Metropolitan Centre Secondary Plan - 6.0 > PARKS AND OPEN SPACES - 6.2 Parks and Public Squares - 6.2.2 Further to Policy 7.3.1.2(c) of Volume 1 of the Official Plan, Neighbourhood Parks identified in Schedule D should have the following characteristics or features: • Shade trees and other plantings		Yes		

		11.12 Vaughan Metropolitan Centre Secondary Plan - 6.0 > PARKS AND OPEN SPACES - 6.2 Parks and Public Squares - 6.2.3 Urban Parks, identified on Schedule D, are envisioned to become iconic civic gathering spaces for the VMC. These parks are meant to be highly programed outdoor spaces that provide for year-round urban recreational activities, City-wide entertainment, and cultural events for all Vaughan residents and outside visitors. In addition to the characteristics and features of Neighbourhood Parks identified in Policy 6.2.2, and further to Policy 7.3.1.2.d of Volume 1 of the Official Plan, Urban Parks identified on Schedule D should also include the following characteristics or features: • Large-scale canopy trees and ornamental planting		Yes		
		11.12 Vaughan Metropolitan Centre Secondary Plan - 6.0 > PARKS AND OPEN SPACES - 6.2 Parks and Public Squares - 6.2.8 Parking generally will not be appropriate under Neighbourhood Parks where trees are intended to grow to their full potential and above-grade elements of underground parking would significantly compromise the design and programming of the park. Underground parking will generally be more appropriate under parks and Public Squares designed predominantly for intense daily use and/or civic events and where mature trees and a significant tree canopy are not envisioned.	Yes			
		11.12 Vaughan Metropolitan Centre Secondary Plan - 6.0 > PARKS AND OPEN SPACES - 6.3 Environmental Open Spaces and the Black Creek Corridor - 6.3.1 The Environmental Open Spaces identified in Schedules D and J will play a vital role in greening the VMC and enhancing the functions and health of the environment. They are intended to be developed and managed as mostly naturalized open spaces that perform the following functions: b. To provide for managed reforestation and other re-naturalization initiatives on municipal parkland that support ecological functions, enhance the urban tree canopy and improve the setting, image and liveability of the VMC;			Yes	
		11.12 Vaughan Metropolitan Centre Secondary Plan - 6.0 > PARKS AND OPEN SPACES - 6.3 Environmental Open Spaces and the Black Creek Corridor - 6.3.8 The Black Creek Corridor shall be designed as an inviting and continuous pedestrian and cycling system connected to the VMC's and the City's larger pedestrian and bicycle networks. It will accommodate open space amenities and landscape features, including extensive tree planting and other vegetation that complements and reinforces the ecological features and functions of the creek and maximizes biodiversity.		Yes		
		11.12 Vaughan Metropolitan Centre Secondary Plan - 8.0 > LAND USE, DENSITY AND BUILT FORM - 8.7 Built Form - 8.7.6 Other than features such as balconies, bay windows, canopies, awnings, signage, public art, patios, porticos, stairs and ramps where appropriate, no building elements above ground should be located in a setback zone. This zone should be designed to serve the ground floor uses and feature high quality landscape treatments. Front yard fencing, where appropriate, shall be low and built of attractive, long-lasting materials. Where underground parking is located beneath a setback zone, its design and construction shall not prevent the planting of trees, where appropriate, and shall consider utility requirements.		Yes		
		13 Site Specific Policies - 13.8 2057 Major Mackenzie Drive - 13.8.1 General - 13.8.1.1 Notwithstanding policy 9.1.1.1, the following policies shall apply to the lands identified at 2057 Major Mackenzie Drive, identified on Map 13.8.A: d. the overall development of the lands shall be subject to a comprehensive site plan approved by Council, together with the submission of the following reports to be approved through consideration of a site plan application: ii. existing vegetation assessment and tree preservation plan;				Yes
		13 Site Specific Policies - 13.21 North Humber Extension Area 1 - 13.21.1 General - 13.21.1.1 Notwithstanding policy 9.2.1.1, the lands identified on Map 13.21.A shall be developed in accordance with the following policies: e. The community edge buffer along Regional Road 27 shall be a minimum width of 24m for the subject lands and shall include naturalized landscaping and an acoustical barrier/berm to the satisfaction of the City. The community edge buffer shall not form part of the parkland dedication and shall be dedicated to the City free of all costs and encumbrances, to the satisfaction of the City. A low maintenance acoustical earth barrier/berm ranging between 20m and 24m in width shall be located within the community edge buffer and shall be well landscaped with large caliper coniferous and deciduous tree planting and other naturalized landscaping in accordance with City standards.		Yes		
Design Guidelines	2007	2.2.1 A Green City Approach - The City of Vaughan is made up of almost 40% natural areas and countryside, including watercourses, woodlands (11.3%), forest cover (16%), wetlands (1.5%), greenbelt protection (38%) related open spaces, agricultural lands and a system of multi-use trails that connects many of these areas. Vaughan is home to the headwaters of the Humber and the Don Rivers and also contains parts of the Greenbelt and the Oak Ridges Moraine. Conceptually, the focus on knitting these natural areas together with a network of green streets is Vaughan's "Green Approach" to urban redevelopment.			Yes	
City-wide Urban Design Guidelines	2018	5.2.2 Micro-Climate and Sky View - (b) Orient buildings, outdoor spaces and entrances to maximize sun exposure and passive heating during cool months and to provide shaded areas during warm months. A south-facing orientation that allows winter solar gains is appropriate, provided that it is well-shaded during summer. Deciduous trees and outdoor shade structures will help to provide cool areas during the summer while maximizing sun exposure during the winter		Yes		
		5.2.3 Surface Parking - (j) Islands with shade trees should be provided at the end of a right of way.		Yes		
		5.2.3 Surface Parking - (u) Surface parking lots should be divided into smaller "parking courts" by landscaped islands with a minimum of two deciduous shade trees each and pedestrian pathways. Parking court size for two rows is preferred.		Yes		

5.2.3 Surface Parking - (v) planting one tree for every five parking space as recommended. Trees can be clustered to facilitate snow clearing and increase ecological impact; however, trees throughout the lot provide shade for cars, pedestrians and paving.		Yes		
5.2.3 Surface Parking - (w) Trees planted in parking areas require access to a minimum of 30 cubic meters of good quality soil per tree, or 20 cubic metres when shared.			Yes	
5.2.4 Below-Grade Parking - (5) Where trees and vegetation are planted above parking structures, a minimum depth of 1.2 metres of soil above the structure should be provided to allow for sufficient depth for soil cells and paving.			Yes	
5.7.7 Private Roads - (d) Street trees should line private roads on at least one side with a minimum spacing of 10 metres between trees (as below grade services permit). Street trees should be located within a minimum 2.5 m continuous landscape strip or tree trench to ensure 30 cubic metre soil volumes for longterm tree health.		Yes	Yes	
5.2.13 Site Signage and Wayfinding - (d) Ground signage should not overwhelm the appearance of the streetscape nor restrict the placement or growth of street trees	Yes			
5.2.16 Utilities - (b) Utilities should be placed within the street right-of-way (or in a front yard easement) in a joint utility trench that can be accessed for repairs without disturbing street or site trees.	Yes			
5.3.11 Building Signage - (g) Commercial signage should not overwhelm the appearance of the streetscape nor restrict the placement of street trees.	Yes			
6.1.1 Tree Planting - (a) Landscape design should prioritize provision of soil volumes to support mature tree growth to help achieve York Region's urban tree canopy goal for the City of 25-35%.			Yes	
6.1.1 Tree Planting - (b) On-site trees are a key City asset and should be retained wherever possible. Where this is not possible, re-planting should follow the guidelines set out in the City of Vaughan Tree Replacement Plan.	Yes	Yes		
6.1.1 Tree Planting - (c) Overall tree health in open spaces should be monitored and a tree succession plan created to ensure the long-term viability of the tree canopy.	Yes			
6.1.1 Tree Planting - (d) Trees can be used to create a distinct pattern and identity for the street or site through the use of species that flower, provide a variation in textures, or give fall colour.		Yes		
6.1.1 Tree Planting - (e) Consult the Vaughan Forestry Department to review plans and ensure conformance with current City forestry policy.				Yes
6.1.1 Tree Planting - (f) Plant larger caliper trees wherever possible.	Yes			
6.1.1 Tree Planting (Key Dimensions) - (g) All trees must have access to a minimum of 30 cubic metres of soil (20 cubic metres each for trees with shared soil volume).			Yes	
6.1.1 Tree Planting (Key Dimensions) - (h) Trees should be spaced 8 to 10 metres (6 to 10 metres for small form species) apart parallel to the property line, depending upon the species of tree and site conditions.	Yes			
6.1.1 Tree Planting (Key Dimensions) - (i) Site planning should seek to maximize continuous soil areas for tree planting and vegetation. Soil cell technology may be necessary to achieve required soil volumes.			Yes	
6.1.1 Site Landscape - (a) Select tree and plant species for the appropriate Hardiness Zone and consider climate conditions.			Yes	
6.1.1 Site Landscape - (b) Detailed design for planting and landscape typologies should consider all seasons.			Yes	
6.1.1 Site Landscape - (j) Native planting is encouraged throughout the City to promote biodiversity, distinguish the regional landscape character and promote low input planting strategies.			Yes	
6.1.2 The Green Approach on Intensification Corridors - (g) Underground parking may not project beyond the building footprint within the Green Approach Zone on Intensification Corridors. This is to ensure that sufficient soil volumes can be provided to support mature tree growth and water infiltration, as well as minimizing disturbance to landscaped areas through maintenance of parking structures over time.			Yes	
6.1.2 The Green Approach on Intensification Corridors (Key Dimensions) - (h) Trees should establish a consistent streetscape pattern to minimize transitions between properties. Where possible, a continuous row of trees should be planted at 1.5 metres from the front property line. Where space permits, a second row of trees should be planted approximately 4 metres from the front property line.		Yes		
6.2.2 Private Grade-Related Amenity Spaces & Courtyards - (d) Where amenity spaces are built over belowgrade parking: -The location of tree planting should consider the maintenance requirements of below grade parking areas to avoid removing trees to repair or maintain the parking structure. -A minimum depth of 1.6 metres of soil above the structure should be provided to allow for sufficient depth for soil cells and paving.			Yes	
6.2.2 Private Grade-Related Amenity Spaces & Courtyards - (g) Amenity spaces may include urban agricultural plots, community gardens or fruit trees.		Yes		
6.2.5 Urban Squares - (c) Urban squares should have a defined characteristics and should include unique paving, landscape, seating, lighting and shade trees or structures.		Yes		

			6.2.8 Privately Owned Publicly-Accessible Spaces (POPS) - (i) To maintain sight lines and a full visibility of the open space, high canopy trees are recommended.		Yes		
			7.3.1 Apartment Buildings (c) Appropriate setbacks from the public right-of-way, as outlined in the relevant Building Design Performance Standards, should be provided to create a feeling of separation and privacy for building residents. Generous landscape including tree planting should be provided.		Yes		
			7.3.2 Townhouses - (a) Townhouses should create residential streetscapes with individual building entrances and elements like front yard landscapes, tree planting, and porches to reflect the character of the established neighbourhoods in Vaughan.		Yes		
			7.3.2 Townhouses - (f) Townhouses should be designed to ensure that a generous front yard landscape can be accommodated and soil volumes can support mature tree growth.			Yes	
			7.5.1 Community Facilities - (d) Where provided, surface parking should be located to the rear of buildings. It should be designed with generous landscape, L.I.D. measures and tree planting to contribute to the City's overall canopy.			Yes	
			7.5.1 Community Facilities - (n) Provide outdoor seating, trees and landscape to complement interior programming with outdoor gathering and amenity spaces.		Yes		
Waterloo	Official Plan	2012	3.11 URBAN DESIGN - 3.11.1 General Urban Design Policies - (5) Existing Site Features: Identify opportunities to retain prominent site features and vegetation through sensitive or innovative design strategies and to protect adjacent site features and vegetation on abutting properties through the development review process including, but not limited to, the location and massing of buildings, site grading, landscape and buffer opportunities, tree protection measures and alternative stormwater management strategies.	Yes			
			3.11 URBAN DESIGN - 3.11.1 General Urban Design Policies - (22) Landscape Design: To design sites with a balanced distribution of hard and soft landscaping that contributes toward a coordinated and enhanced site design, streetscape character, create a sense of place, and an aesthetically pleasing comfortable pedestrian environment. Specific treatment may also be required to address a range of considerations such as screening objectives, landscape buffers to promote land use compatibility, the provision of large canopy trees to provide respite from the sun, streetscape character and opportunity for integrated amenity spaces and sustainable design.		Yes		
			3.11 URBAN DESIGN - 3.11.1 General Urban Design Policies - (23) Site Amenities: Design sites and buildings to include a range of on-site amenities such as benches, trash receptacles, bike parking, large canopy trees and/or shade structures to provide for more healthy active outdoor and urban spaces for social gathering, relaxation and enjoyment that results in a higher quality of life.		Yes		
			3.11 URBAN DESIGN - 3.11.1 General Urban Design Policies - (24) Sustainable Design: The City shall promote sustainable design practices in the public and private realm through a variety of strategies, including but not limited to: (c) incorporation and integration of trees, shrubs, hedges planting or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking in the public and private realm;		Yes		
			3.11 URBAN DESIGN - 3.11.4 Urban Design within Station Areas - (4) Pedestrian Oriented: Station Areas shall be pedestrian oriented places that are safe, accessible, connected, and easy to navigate for people of all abilities. Connectivity to and from transit stops to buildings will be a priority and shall be enhanced by: (c) Improving pedestrian comfort with shade trees and landscaped boulevards;		Yes		
			3.11 URBAN DESIGN - 3.11.4 Urban Design within Station Areas - (9) Parking: Parking within Station Areas shall be designed and organized where it will not detract from the public realm or mobility. Design of parking areas shall: (f) Require the perimeters of surface parking lots to be landscaped with trees and other appropriate planting materials; and, (g) Encourage the interior areas of parking lots to include landscaped islands. Landscaped islands should be of sufficient size to ensure growth of trees and complementary vegetation.		Yes		
			8.2 NATURAL HERITAGE - 8.2.1 Supporting Documents and Implementation - 8.2.2 General Policies - (16) If illegal acts, including but not limited to tree removal, wetland filling or draining, or diverting of watercourses, cause a reduction in the form or function of a natural feature, such reduced form or function will not be recognized as existing conditions within the development application review process. Restoration of the damaged area may be required prior to, or as a condition of approval of any development application, excluding site plan applications, and where applicable, through the City's Site Alteration By-law.				Yes

8.2 NATURAL HERITAGE - 8.2.5 Supporting Natural Features - (20) Notwithstanding policy 8.2.5(16) and 8.2.5(18), development or site alteration within Other Woodlands that has the effect of disrupting or reducing ecological function may be permitted subject to an evaluation of significance. Significance will be evaluated based on composition, age, size, connectivity, representation in the vicinity, and potential contribution to community design. Where the removal of an Other Woodland, in part or in whole, is permitted, compensation in the form of woodland restoration or enhancement, on-site or off-site, may be required. Where it is considered appropriate to maintain an Other Woodland, in part or in whole, the protection of trees will be required through such measures as Tree Preservation Plans, landowner stewardship, zoning provisions, or public ownership.				Yes
8.2 NATURAL HERITAGE - 8.2.9 Urban Forest - (2) It is the City's intent to protect existing trees and plant new ones where feasible and appropriate. When considering development applications and site alteration permit applications, the City will require that only the trees that directly impede the proposed work be removed and that the applicant replace them in reasonable amount, with trees of sufficient maturity. The amount and maturity of replacement trees will be determined based on the amount, maturity, species, and health of the trees to be removed. A Tree Preservation Plan may be required to provide an inventory of all trees on the site, an assessment of their health and condition, recommendations regarding which trees should be saved and which will be removed, tree protection measures, and replacement trees. As part of any Tree Preservation Plan, the City may require tree- loss totals and corresponding compensation estimates. Tree Preservation Plans must be prepared by qualified professionals.				Yes
8.2 NATURAL HERITAGE - 8.2.9 Urban Forest - (3) When considering development applications and site alteration permit applications, the City may require the protection and enhancement of hedgerows, especially where: (c) they are composed of mature, healthy trees; (d) they contain trees that are rare, unique, culturally important, or over 100 years in age;	Yes			Yes
8.2 NATURAL HERITAGE - 8.2.9 Urban Forest - (4) Where the City is undertaking infrastructure work, the urban forest will be protected and preserved, where feasible. If it is necessary for infrastructure work to remove any trees, the City will compensate by re- planting in reasonable amount on or off-site, with trees of sufficient maturity. The amount and maturity of replacement trees will be determined based on the amount, maturity, species, and health of the trees to be removed. A Tree Preservation Plan may be required to provide an inventory of all trees on the site, an assessment of their health and condition, recommendations regarding which trees should be saved and which will be removed, tree protection measures, and replacement trees.	Yes			Yes
8.2 NATURAL HERITAGE - 8.2.9 Urban Forest - (5) Opportunities for tree planting on City-owned lands will be identified and implemented in coordination with other public agencies and local interest groups, as required. The City will plant native species that are ecologically appropriate and suitable for site conditions, where feasible.	Yes			
8.2 NATURAL HERITAGE - 8.2.9 Urban Forest - (8) The City will support and enhance the urban forest by implementing urban design standards that protect street trees, in particular in terms of preservation of existing root structures and preventing soil compaction.			Yes	
8.2 NATURAL HERITAGE - 8.2.12 Major Urban Greenlands - (2) The City, in collaboration with the Region, the Grand River Conservation Authority, and other stakeholders, will develop and implement an Urban Greenlands Strategy that: (c) promotes green roofs, community gardens, and tree planting;		Yes		
8.6 AIR QUALITY AND CLIMATE CHANGE - 8.6.2 General - (3) The City will promote and undertake tree planting and landscaping initiatives to enhance and improve the urban forest as a means of improving air quality and minimizing contributions to climate change through shading, sheltering, screening, and increasing carbon sinks. The City will also promote the protection, restoration, wise management, and expansion of the urban forest as a means of pollution mitigation and carbon sequestration.			Yes	
8.7 ENVIRONMENTAL SUSTAINABILITY - 8.7.4 Community Gardens - (4) The City will encourage backyard, roof top, and workplace gardening, as well as edible landscaping and fruit-bearing trees to complement community gardens.		Yes		
10.5 OPEN SPACE LAND USE POLICIES - 10.5.2 Open Space Land Use Designations - 10.5.2.1 Parks and Other Green Spaces - (14) Existing trees within municipal parkland blocks should be saved wherever feasible to support the health of the urban forest. The planting of trees within municipal parkland blocks is encouraged to provide shade and to enhance the urban forest.	Yes			
10.5 OPEN SPACE LAND USE POLICIES - 10.5.2 Open Space Land Use Designations - 10.5.2.1 Parks and Other Green Spaces - (18) The City of Waterloo will endeavour to provide parks and trails that are sensitive to the efficiency and conservation of energy and embrace environmental best practices and will: (b) Undertake design which results in desired microclimate effects such as the planting of large trees to provide cooling shade, and wind protection.		Yes		
10.5 OPEN SPACE LAND USE POLICIES - 10.5.2 Open Space Land Use Designations - 10.5.2.3 Golf Course - (4) Golf courses are encouraged to utilize sustainable best management practices with respect to the functioning of the natural environment and ensure environmental quality remains high. (a) Existing trees within golf courses should be preserved wherever feasible to protect the health of the urban forest. The planting of native tree species on golf courses is strongly encouraged.	Yes			

<p>11.1 SPECIFIC PROVISION AREA POLICIES - 11.1.28 Specific Provision Area 28 (187 King Street S./155 Caroline Street S.) - (6) In this regard, the development of 144 Park Street (formerly 21 Allen St W, 142, 144 and 148 Park St) shall be subject to the following design requirements: (g) that in the absence of or in addition to street trees within the front or flankage yard, the applicant shall provide enhanced street trees within the boulevard with appropriate measures to ensure their long term health. Should the location of overhead power lines and hydro poles not permit the planting of street trees, the applicant shall provide other landscaping measures to the satisfaction of the City of Waterloo;</p>		Yes		
<p>11.1 SPECIFIC PROVISION AREA POLICIES - 11.1.38 Specific Provision Area 38 (247 and 253 King Street North) - (6) In this regard, the development at 247 and 235 King Street North shall be permitted a building that is composed in the following manner: (h) That street trees and landscaping and landscaping features be provided within the front and flankage yards to the satisfaction of the City of Waterloo.</p>		Yes		
<p>11.1 SPECIFIC PROVISION AREA POLICIES - 11.1.45 Specific Provision Area 45 (Northdale Neighbourhood) - Streetscape Elements (28) The Plan establishes a hierarchy of streetscapes which provide more detailed land use and urban design requirements for the enhancement of streets and public right-of-ways within Northdale, as identified on Schedule 'A45a' – Street Frontage Areas and Streetscape Elements. (a) Main Street – The geometry of the Main Streets of Northdale are designed to enhance vehicular flow and currently emphasize vehicular access. Priority will be given to creating complete streets along these corridors wherein key design features include wide sidewalks, bicycle lanes, flexible on-street parking, consistent street tree establishment, landscaped centre medians and boulevards, pedestrian refuge islands, pedestrian scale lighting and co-ordinated street furniture. King Street North and University Avenue West are identified as "Neighbourhood Connectors" in the Regional Transportation Corridor Design Implementation Guideline (Context Sensitive Regional Transportation Corridor Design Guidelines), and shall be planned and constructed in accordance with these guidelines.</p>		Yes		
<p>11.1 SPECIFIC PROVISION AREA POLICIES - 11.1.45 Specific Provision Area 45 (Northdale Neighbourhood) - Streetscape Elements (28) The Plan establishes a hierarchy of streetscapes which provide more detailed land use and urban design requirements for the enhancement of streets and public right-of-ways within Northdale, as identified on Schedule 'A45a' – Street Frontage Areas and Streetscape Elements. (b) Mixed Use Street – Mixed Use Streets will be designed to foster social interaction and engagement while accommodating alternative modes of transportation. Key design features of Mixed Use streets will include wide sidewalks, bicycle lanes, flexible on- street parking, awnings and weather protection, consistent street tree establishment, landscaped centre medians and boulevards, pedestrian scale lighting, and co-ordinated street furniture.</p>		Yes		
<p>11.1 SPECIFIC PROVISION AREA POLICIES - 11.1.45 Specific Provision Area 45 (Northdale Neighbourhood) - Streetscape Elements (28) The Plan establishes a hierarchy of streetscapes which provide more detailed land use and urban design requirements for the enhancement of streets and public right-of-ways within Northdale, as identified on Schedule 'A45a' – Street Frontage Areas and Streetscape Elements. (c) Green Street – A Green Street will give priority to pedestrian circulation and adjacent open space connections with an aim to increase public open space within Northdale. Key design features will include wide sidewalks, geometry that includes tight curb radii, landscaped curb bulbs where on-street parking exists, traffic calming measures including increased side friction and elevated speed reducers where appropriate, differentiated paving patterns that emphasize pedestrian realm, consistent street tree establishment, integrated stormwater management that considers bioswales and rain garden boulevards, pedestrian scale lighting, and co-ordinated street furniture.</p>		Yes		
<p>11.1 SPECIFIC PROVISION AREA POLICIES - 11.1.45 Specific Provision Area 45 (Northdale Neighbourhood) - Streetscape Elements (28) The Plan establishes a hierarchy of streetscapes which provide more detailed land use and urban design requirements for the enhancement of streets and public right-of-ways within Northdale, as identified on Schedule 'A45a' – Street Frontage Areas and Streetscape Elements.</p>		Yes		
<p>11.1 SPECIFIC PROVISION AREA POLICIES - 11.1.45 Specific Provision Area 45 (Northdale Neighbourhood) - Streetscape Elements (28) The Plan establishes a hierarchy of streetscapes which provide more detailed land use and urban design requirements for the enhancement of streets and public right-of-ways within Northdale, as identified on Schedule 'A45a' – Street Frontage Areas and Streetscape Elements. (d) Residential Street – Within Northdale, Residential Streets will be designed to retain or enhance the residential character of the streetscape, having a more intimate streetscape scale than higher order streets such as Main Streets or Mixed Use Streets. Key design features will include traffic calming measures including increased side friction and elevated speed reducers where appropriate, differentiated paving patterns that emphasize pedestrian realm at crossing points and intersections, consistent street tree establishment, integrated stormwater management that considers bioswales and rain garden boulevards, and pedestrian scale lighting.</p>		Yes		

	1.1 SPECIFIC PROVISION AREA POLICIES - 11.1.45 Specific Provision Area 45 (Northdale Neighbourhood) - Streetscape Elements (33) The public realm, including neighbourhood streets, pedestrian walkways, open spaces and trails should demonstrate leadership in sustainable design. Sustainable neighbourhoods promote compact, walkable, vibrant, mixed-use spaces, which provide benefits to the residents, and the City. The following policies shall influence land use decisions within the public realm: (c) Tree plantings shall be incorporated into streetscaping to promote large street tree canopies and comfortable micro-climates.		Yes		
	12.2 MANAGING GROWTH AND CHANGE - 12.2.10 Committee of Adjustment - (2) Prior to recommending approval of a variance for a new multiple residential building, or an extension or enlargement of an existing multiple residential building in a designated Node or Corridor where the proposed development does not conform to the Zoning By-Law, the Committee of Adjustment shall place a higher priority on the provision of adequate landscaped open space relative to the provision of parking. The criteria by which adequate landscaped open space will be assessed include: (a) Ability to provide a front yard depth capable of supporting large caliper trees; (b) Ability to provide screening, using trees and other landscaping, on properties that abut low density residential areas;		Yes		
	12.2 MANAGING GROWTH AND CHANGE - 12.2.14 Complete Applications - (4) In accordance with policy 12.2.14(1), the following supporting information may be required as part of a complete application, to be determined through pre-application consultation with City staff and other public agencies: (e) Tree Preservation Report and Plan;				Yes
Urban Design Manual	2. GENERAL CITY DESIGN GUIDELINES - 2.1.1 Pedestrian-Friendly Design - (8) Provide boulevard planting along all streets to promote pedestrian safety and safer walking environments, increased weather protection, improved air quality and reduced heat island effect. On streets with curb face sidewalks, provide sufficient building setback for soft landscape treatment including street trees, shrub planting and ground cover.		Yes	Yes	
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.2 Human-Scale Development - (2). Implement strategies to reduce the scale of building height and bulk, such as: modest increase in building setback to accommodate intensive landscape treatment(s) and larger canopy trees; active ground floor uses; vertical articulation along long facades; upper storey building step backs; and, lower storey step-back or pedestrian scale podium structures.	Yes			
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.3 Compatible Development - (2). Provide enhanced landscaping buffers abutting residential properties with opportunity for combination of deciduous and coniferous trees and decorative fencing. Provide larger and fuller canopy trees in wider buffer areas or more vertical tree forms at tighter interval spacing along narrow buffer areas.		Yes		
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.7 Amenity Areas - (6). Provide quality pedestrian-friendly amenities along walkways. Consider opportunities for special paving, street trees, pedestrian scaled lighting, weather protection, and lighting of the building, public art, clocks, information signage and well-designed street furniture such as benches and bike racks.		Yes		
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.8 Landscape Design - (1). Design sites to incorporate existing natural vegetation as focal points or for tree preservation opportunities. Guideline Tip: prepare tree preservation plan to preserve prominent vegetation on site. Review Ministry of Natural Resources Species at Risk Act to ensure plant species are not subject to Ministry regulations. Reference: refer to SPRC for Landscape and Buffer standards.	Yes			Yes
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.8 Landscape Design - (2). Provide sustainable and drought resistant planting with variation to improve disease tolerance and reduce urban heat island effect. Encourage indigenous plant species and prohibit invasive plant species.		Yes	Yes	
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.8 Landscape Design - (5). Design planting schemes that establish a sense of hierarchy and proportion. Maximize opportunities for large tree canopy growth.		Yes		
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.8 Landscape Design - (9). Group trees and shrubs to frame building elevations and provide vertical plant forms to accentuate architectural features.		Yes		
	2. GENERAL CITY DESIGN GUIDELINES - 2.1.8 Landscape Design - (21). Provide a substantial and effective landscape buffer to separate different or more intensive land use(s) adjacent to residential properties. Landscape buffers are to include a combination of deciduous/coniferous trees, shrub planting and decorative fencing. Guideline Tip: refer to Compatible Development guidelines. Guideline Tip: refer to SPRG for specific buffer requirements.		Yes		
	2. GENERAL CITY DESIGN GUIDELINES - 2.2.1 Respect Existing Features + Conditions - (2). Design roads and streets to avoid negative impacts to large trees and prominent vegetated areas.	Yes			
	2. GENERAL CITY DESIGN GUIDELINES - 2.5 SUSTAINABLE DESIGN - (17). Encourage designs that allow for increased soil volumes for root growth and canopy space for future growth of large shade trees to promote an urban forest.			Yes	
	2. GENERAL CITY DESIGN GUIDELINES - 2.5 SUSTAINABLE DESIGN - (18). Design streets to promote sustainable design through the integration of bike racks, street trees, transit facilities and garbage/recycling containers.		Yes		

			3. SUPPLEMENTAL DESIGN GUIDELINES - 3.2.1.4 NODE GUIDELINES - General Streetscape Design - (23). Establish a standard urban trail detail for urban trails in the Uptown. Incorporate legible signage for wayfinding, urban street trees, pedestrian scale lighting and combined surface treatment for walking, cycling and other recreational activities.		Yes		
			3. SUPPLEMENTAL DESIGN GUIDELINES - 3.2.1.4 NODE GUIDELINES - General Streetscape Design - (29). Enhance the urban green within the building setback zones with a combination of hard and soft landscape treatments. Encourage street trees and decorative low level planting. Provide structural soils for street trees in hard surface areas.			Yes	
			3. SUPPLEMENTAL DESIGN GUIDELINES - 3.2.1.5 CORRIDOR GUIDELINES - (13). Design corridors with intensive front yard landscaping that coordinate with the building design and streetscape character. Provide large canopy trees in front yards along Major Corridors.		Yes		
			3. SUPPLEMENTAL DESIGN GUIDELINES - 3.2.1.5 CORRIDOR GUIDELINES - (17). Provide enhanced landscape buffers facing lower density housing. Incorporate large canopy street trees, shrub planting and other decorative landscape treatments.		Yes		
Windsor	Official Plan	2000	Development Strategy - Distinctive Neighbourhood Character - 3.2.1.3 Windsor will keep much of what gives its existing neighbourhoods their character – trees and greenery, heritage structures and spaces, distinctive area identities, parks, and generally low profile development outside the City Centre. Around the neighbourhood centres, the existing character of the neighbourhood will be retained and enhanced. Newly developing areas will be planned to foster their own unique neighbourhood identities with a mixture of homes, amenities and services.	Yes			
			Urban Forestry Policies - 5.3.6.1 Council will recognize and encourage the protection of trees as essential to the health and welfare of the community and the natural environment.	Yes		Yes	
			Urban Forestry Policies - 5.3.6.2 Council will recognize that a diversity of trees contribute to the distinctive character of neighbourhoods and promotes the planting of species which further enhance this character.	Yes			
			Urban Forestry Policies - 5.3.6.3 Council will encourage the planting of trees on public and private property, in particular those species most tolerant of Windsor's climatic conditions and those less susceptible to disease.			Yes	
			Urban Forestry Policies - 5.3.6.4 Council will encourage the planting of native tree species associated with the Carolinian forest region.			Yes	
			Urban Forestry Policies - 5.3.6.5 Council will encourage the planting of trees along watercourses and Linkages to reduce flooding and erosion and to improve natural habitat.			Yes	
			Urban Forestry Policies - 5.3.6.6 The Municipality will create, maintain and enhance treed areas along infrastructure rights-of-way and in public open spaces.		Yes		
			Urban Forestry Policies - 5.3.6.7 Council may require proponents of development and infrastructure undertakings to submit an inventory of trees on site and prepare and implement a tree conservation and replacement plan.				Yes
			Urban Forestry Policies - 5.3.6.8 The Municipality will endeavour to protect trees on public and private lands from damage by mechanical equipment during construction and maintenance activities by developing guidelines and standards to protect trees from damage associated with construction and maintenance operations.				
			Urban Forestry Policies - 5.3.6.9 The Municipality will maintain a city-wide inventory of trees along public rights-of-way as the basis to monitor the effectiveness of urban forestry policies and practices.				Yes
			Urban Forestry Policies - 5.3.6.10 The Municipality will encourage the relocation and transplanting of trees to municipal lands in situations where trees would have been lost due to development activities.	Yes			
			Urban Forestry Policies - 5.3.6.11 The Municipality will maintain the character of its mature tree-lined streets by replacing any tree within the public right-of-way requiring removal with a new tree planted as close as practical to the location of the original.	Yes	Yes		
			Atmospheric Air Quality Policies - 5.3.7.2 Council will contribute to the reduction of air pollution by using the following land use planning approaches: (e) protecting and improving trees and natural areas.	Yes		Yes	
			An application to allow a maximum height of up to 8m through a minor variance may be considered where the external second unit is proposed to contain all of its habitable space above a garage subject to the following criteria: (b) Significant trees and plantings are preserved on the subject property;	Yes			
			Urban Forest - 6.112.4 - Council shall encourage the provision of trees within the City Centre Planning District.	Yes			
Front Yard Parking: 8.11.2.22 Council will limit the construction of parking spaces in the required front yards of dwellings, in order to protect the aesthetic character of older residential neighbourhoods, ensure the availability of on-street public parking, ensure unhampered pedestrian movement within the public right-of-way and prevent harm to boulevard trees.	Yes	Yes					
Pedestrian Scale 8.3.2.2 Council will encourage buildings and spaces that establish a pedestrian scale by promoting: (b) the repetition of landscaping elements, such as trees, shrubs or paving modules; and		Yes					

Tree Conservation: 8.5.2.7 Council will conserve and protect trees in accordance with the urban forestry policies of this Plan (see Environment Chapter)	Yes			
Heritage Resources and Planning Initiatives - (e) Having regard to the following factors when assessing applications such as zoning amendments, site plan control applications, demolition control and payment-in-lieu, which may impact heritage resources: (iii) Respecting the yards, gardens, trees and landscaped grounds associated with the heritage properties and districts which contribute to their integrity, identity, and setting;	Yes			
For Planning Applications: The municipality may require the applicant to submit any of the following information at any time during an application under the Planning Act: (r) Tree Inventory and Preservation Study;				Yes
10.2.1.15 At the time of application for a heritage permit in the Sandwich Heritage Conservation District, Council may require an applicant to submit any of the following information: (c) Tree survey;				Yes
Landscaping Policies - 1.13.15 - The following policies will guide the design and development of Central Riverfront Landscaping: (a) the majority of trees and shrubs will be low-maintenance, open crowned, non-toxic, thornless and produce as little litter (twigs, seeds) as possible;		Yes		
Scenic Drive Policies - 1.13.18 - The following policies will guide the future development of Riverside Drive: (a) Riverside Drive will be developed as a scenic tree-lined drive encouraging reduced traffic speeds and volumes and greater opportunities for cycling;		Yes		
Parking Policies - 1.13.21 - The following policies will guide the design and development of Central Riverfront parking areas: (d) riverfront parking courts should integrate tree planting at a preferred minimum ratio of one tree for every four parking spaces		Yes		Yes
Trees - 1.22.15 Existing street trees shall be maintained and protected, to the extent that it is technically feasible, from damage due to site development, redevelopment, paving modifications, and street and infrastructure works. In order to maintain the tree canopy that helps to define the spatial volume of the block, any trees lost will be replaced with trees of a minimum trunk diameter of ten centimetres (4 inches). The City Forester will determine the species of tree that will maintain the canopy cover. (Note: the same wording if found in policy 1.26.14)	Yes			Yes
1.26 Sandwich Heritage Conservation District - Contextual value 1.26.6 One of the greatest assets contributing to the overall heritage character of Sandwich is the mature trees found on both public and private property. Often they provide an immeasurable benefit to the streetscape, providing continuity and rhythm. Not only are their large canopies important visually, but also for the role they have played historically and continue to do so today in mitigating air quality in the district.	Yes			
1.26 Sandwich Heritage Conservation District - Building Renovations and new construction - 1.26.8 The objective of the Sandwich Heritage Conservation District is to preserve the buildings and streetscape. Owners of property will require a heritage permit for the following changes to their property: (s) Removal of trees with a minimum trunk diameter of 10 centimetres	Yes			Yes
1.26 Sandwich Heritage Conservation District - 1.26.16 Fences, trees and hedges form an important part of the character of each property, and should be reflective of the heritage character of the building or structure. Existing fences, trees and hedges should be maintained, and new ones should reflect heritage designs, materials and species over more modern styles, materials and species.	Yes	Yes		
Screening of Parking Areas - 1.39.12 Parking areas described in Sections 1.39.3 and 1.39.4 shall be subject to the provisions of the zoning by-law and site plan control by-law. Appropriate screening through the use of decorative fencing, decorative walls or living walls, tree planting, low berms and other landscape elements will be required, to the satisfaction of the City Planner. These elements serve to reduce the visual impact of the parking areas from the streetscape. Screening of parked vehicles shall also consider safety of users by permitting views to adjacent rights-of-way or access ways for orientation and safety		Yes		
Woodlots and Tree Stands: 2.7.2.38 Woodlots and tree stands worthy of preservation shall be incorporated into parks as areas for passive recreation, wherever desirable as part of the Public Open Space system and wherever the active recreational needs of the residents of the park service area can be or has been provided for. In cases where active recreational needs have not been provided for, other means will first be pursued for acquisition before using the parkland conveyance requirement under the Planning Act.	Yes			
Landscape Plan - 4.7.2.3 Prior to development approval the owner shall prepare a landscape plan which shall also include the following: (a) a plan showing the inventory of existing trees, their location, size, species and condition; (b) the relationship of the trees to all proposed buildings and paved areas; (c) an identification of which trees are to be removed and which are to be retained and maintained; (d) an analysis demonstrating how the long term survival of the retained trees is to be ensured. Such plans shall be required either as a condition of removal of the "H" (holding) zoning prefix or as a condition of site plan control approval as appropriate. A specific objective of a landscape plan shall be to retain the maximum number of mature healthy trees.				Yes

	Large Lots 4.7.2.4 To provide flexibility for tree retention and maintenance, large lots shall be required for development. In no case shall lot sizes be less than 18 metres in overall width, however, larger lots will be required where the ownership pattern permits the retention of mature healthy trees. Zoning controls will be imposed, where appropriate, to minimize the building coverage and allow for flexibility in siting in order to protect trees. Wherever more than one lot is proposed by the owner, the zoning shall require use of an "H" (holding prefix) and the landscaping plan shall be prepared and a site plan control agreement shall be entered into showing the building envelopes, paved areas and trees to be retained prior to the removal of the "H".	Yes			Yes
	Street design - 4.7.2.5 In Woodland Residential areas, road design may include mountable (V-type) curbs for a less obtrusive road edge, alternative surface treatment for road, walkway and sidewalks, preservation of natural stands of trees on the street right-of-way itself, and curved pavements where appropriate to protect trees and create a natural road edge.	Yes			
	Tree Preservation Agreements - 5.7.6.6 Council may require developers to enter into agreements to preserve as many of the existing trees as is feasible in accordance with the current City of Windsor Parks and Recreation Department Landscape Manual.	Yes			Yes
	Open Space - Shading 7.7.8.17 Open Space areas shall include shade trees to enhance the urban forest where space permits, and shall include native deciduous and evergreen materials, woody shrubs, ground covers, grasses and perennials.			Yes	
	Boulevard Treatments - 7.7.8.18 Open Space areas adjacent to roadways shall include boulevard planting treatments using salt-tolerant, high branching shade trees planted in sodded boulevards whenever conditions permit, to maximize urban forest canopy and to provide a continuous shaded streetscape.		Yes		

2. Tree By-laws

Municipality	Document Title	Year Enacted	By-law
Ajax	Tree By-law	2014	4.2 The provisions of this by-law shall apply to: (a) Any land in the area described in Schedule AA to this by-law; (b) Any land or part of land in an area designated as Environmental Protection, Open Space, Town-Wide Park, Community Park, or Neighbourhood Park pursuant to Schedule AA of the Town's Official Plan; and (c) Any land or part of land in an area zoned as Private Open Space pursuant to the Town's Zoning By-laws.
			5.1 In addition to the exemptions set out in section 135 (12) of the Act, this by-law shall not apply to: (e) A tree located on a lot of less than 1.2 ha which has a single dwelling thereon with the exception of land zoned Private Open Space pursuant to a Zoning By-law of the Town;
Barrie	Tree By-law (private)	2014	Application of by-law: subject to section 5, this by-law applies to all trees in woodlots within the boundaries of the City of Barrie
			Application for permit to injure or destroy trees: c) every application shall be accompanied by a report from either: i) a LA or Reg. Pro. Forester providing information about the woodlot certifying that the injury/destruction of tree(s) is required to permit the establishment or extension of a use permitted by the Zoning by-law and there is no reasonable alternative, OR ii) a Reg. Pro. Forester provides certification that injury/destruction of tree(s) is in accordance with good forestry practices
			Conditions to Permit: c) tree preservation measures i) the owner shall cause the implementation of tree preservation measures consistent with the City of Barrie's Tree Protection Manual; ii) The owner shall cause the installation of all tree preservation measures to be completed under the supervision of the LA or Reg. Pro. Forester and approved by the City. Such measures shall be inspected and bi-monthly report made to Director by LA/Reg. Pro. Forester for duration of construction
Guelph	Tree By-law	2010	Part IV - Permit Exemptions (a-n)

			Part VI - Issuance of Permits: when deciding to issue permit, inspector shall consider: g) the protection and preservation of ecological systems and their functions, including the protection and preservation of native flora and fauna
Kingston	Tree-By Law	2017	Whereas Council deems it to be desirable to enact a Tree By-Law for the purposes of: (a) Regulating and controlling the removal, maintenance, and protection of trees and woodlands. (b) Controlling the clear cutting of trees. (c) Supporting the City's Strategic Plan and the goal of intensifying the city's urban forest. (d) Achieving the objectives of the city's Official Plan by sustaining a healthy, natural environment. (e) Protecting and enhancing the biodiversity of woodlands, wildlife habitat, and related ecological functions. (f) Promoting Good Forestry Practices and Good Arboricultural Practices that sustain healthy woodlands and tree coverage. (g) Contributing to human health and quality of life. (h) Mitigating greenhouse gas emissions and reducing the effects of climate change.
			Application of the By-Law 2. This By-Law pertains to all lands within the geographic limits of the City of Kingston which include the Urban Area and Rural Area as shown on Schedule B and shall apply to: (a) The Injury or Destruction of Trees that are 15 centimetres or greater in Diameter at Breast Height;
			Permit Application Process: 8. Every Person that intends to Injure or Destroy a Tree, either personally or through another Person, shall: (c) Where prescribed by this By-Law or required by the Director, submit an Environmental Impact Assessment (EIA). The EIA shall be prepared by a Qualified Person and shall include the following: (i) A description of the proposal and rationale for undertaking the Tree removal activity where proposed (ii) A survey illustrating the legal boundaries of the property, any easements, rights-of-way or other encumbrances; (iii) An inventory and description of the key features present and their significance, including a reference to all Natural Heritage Features and Areas and their associated Ecological Functions; (iv) A professional opinion by the Qualified Person as to whether the proposal is acceptable considering potential impacts to Natural Heritage Features and Areas and their Ecological Functions taking into account the relevant policies of the Provincial Policy Statement and the Official Plan; and (v) A description of any mitigation required to protect the Ecological Function of identified Natural Heritage Features and Areas. (d) Where required by the Director, submit a report prepared by a Certified Arborist setting out the reasons for the proposed Injury and/or Destruction of the Tree(s) and the Tree Preservation and Protection Plan for any Trees to be retained. The report shall be prepared in accordance with the City of Kingston's Guidelines for the Completion of an Arborist Report and the Guidelines for Tree Preservation and Protection.

			<p>Permit Conditions 12. (1) The Director may impose any conditions on a Tree Permit that are reasonable, which may include, but are not restricted to: (a) Measures that will ensure the Injury or Destruction of a Tree(s) is carried out in accordance with Good Arboricultural Practice and Good Forestry Practice, which may include limitations on the manner and timing of the Injury or Destruction; (b) Conditions recommended by a Qualified Person through the completion of an Environmental Impact Assessment (EIA) or other technical evaluation; (c) Mitigative measures to protect against the Injury or Destruction of a Tree(s) that is not subject to removal, which may include the identification of Tree Zones; (d) A requirement to prepare additional technical documentation that will be used to validate the appropriateness of issuing a Tree Permit and may include: an Environmental Impact Assessment; Landscaping, Replanting and Replacement Plan; a Sivicultural Prescription; a Forest Management Plan; and/or a Tree Preservation and Protection Plan; (e) A requirement to provide compensation in accordance with Section 17 of this By-Law; (f) A requirement to enter into an agreement with the City which sets out the Owner's obligations to replace Trees and any conditions imposed in accordance with this By-Law; and, (g) A requirement to provide financial security for the performance of the Owner's obligations under the agreement.</p>
			<p>Compensation: 3) When replacement Trees can be accommodated on the property, the quantity, species and size of replacement Trees shall be equivalent in value to the value of the Tree(s) Injured or Destroyed as a result of the issuance of the Tree Permit. The City will require financial securities when replacement Tree(s) are proposed in association with a Tree Permit.</p>
	Tree By-Law Guidelines	2009	<p>NOTE: A document for landowners on the application process for a tree removal; explains what trees are able to be removed with/without a permit, etc</p>
Kitchener	By-law	2011	<p>692.2.1 Injury to trees - prohibited - without permit - No person shall injure or cause or permit the injury of a tree or trees within the City without a permit.</p>
			<p>692.4.1 Land less than 1 acre - In addition to Article 3, the provisions of this Chapter do not apply to the removal of a tree or trees situated on land less then 0.405 hectares in size.</p>
			<p>692.4.4 Tree - within 5 metres of occupied building - In addition to Article 3, the provisions of this Chapter do not apply to the removal of trees located within 5 metres of an occupied building.</p>
			<p>692.4.6 Small trees - In addition to Article 3, the provisions of this Chapter do not apply to the removal of trees with a DBH less then 10 centimetres.</p>
			<p>692.7.1 To Director - information - fee - required - Subject to Articles 2, 3 and 4 respectively, every person that intends to injure a tree personally or through another person is required by this Chapter to apply to the Director for a permit by submitting all of the information necessary to determine compliance with this Chapter and paying the fee prescribed.</p>
			<p>692.9.1 Set out - A permit may be subject to conditions imposed by the Director, which may include requirements for: (a) the submission of landscaping or restoration plans and associated maintenance plans; (b) requiring that replacement trees be planted; (c) the undertaking of tree cutting work only under the supervision of an arborist; (d) as to the manner and timing in which injury is to occur; or (e) as to the species, size, number and location of trees to be injured.</p>

			<p>692.14.1 Fine - for contravention - person - Any person other than a corporation who contravenes any provision of this Chapter, the terms or conditions of any permit, or an order issued under this Chapter, is guilty of an offence and is liable: (a) on a first conviction, to a fine not exceeding \$25,000; and (b) on any subsequent conviction, to a fine not exceeding \$50,000. 692.14.2 Fine - for contravention - corporation A corporation that contravenes any provision of this Chapter, the terms or conditions of any permit, or an order issued under this Chapter, is guilty of an offence and is liable: (a) on a first conviction, to a fine not exceeding \$50,000; and (b) on any subsequent conviction, to a fine not exceeding \$100,000. 692.14.3 Fines - exclusive of costs - The fines set out in Sections 692.14.1 and 692.14.2 are exclusive of costs and are collectible pursuant to the Provincial Offences Act.</p>
Mississauga	Private Tree Protection By-Law	2012	Part II: Scope 2. This By-law shall apply to all private property within the City.
			Part IV: Application for Designation Under the Ontario Heritage Act 5. An application to designate a Tree(s) to be of cultural heritage value or interest shall be made in accordance with the Ontario Heritage Act, 2005.
			Part V: General Prohibition and Exemptions 6. (2) No Person shall Injure or Destroy 3 or more Trees each with a Diameter greater than 15 centimetres on a Lot within one Calendar Year without first obtaining a Permit pursuant to this By-law.
			Part VI: Permit 7. Where an Owner applies for a Permit for the Injury or Destruction of a Tree(s) on the Owner's Lot, he or she shall submit the following to the Commissioner: (a) a completed application form; (b) a plan to the satisfaction of the Commissioner illustrating the Trees to be Injured or Destroyed, the Tree(s) to be retained, and any other measures to be taken in relation to the Injury or Destruction of the Tree(s) or Tree preservation, as required by the Commissioner; (c) the fees as described in the Fees and Charges Bylaw; (d) an Arborist Report, if required by the Commissioner; (e) the written consent of the adjacent property Owner if the base of the Tree(s) to be Injured or Destroyed is partially located on the adjacent property Owner's property; and (f) the written consent of the Owner of the Lot where the subject Trees are located, if the Person who is applying for the Permit is not the Owner of the Lot.
Oakville	By-law	2017	<p>4. (1) No person shall cause or permit the injury, destruction or removal of any tree classified as an endangered, threatened, or at risk tree species, as defined in the provincial Endangered Species Act, 2007, S.O. 2007, c. 6, or any tree classified as an endangered or threatened tree species, or a tree species of special concern, as defined in the federal Species at Risk Act, 2002, S.C. 2002, c. 29. (2) No person shall cause or permit the injury, destruction or removal of any tree with a diameter equal to or greater than fifteen (15) centimetres on a lot, or any tree required to be retained or planted as a condition of an approved site plan, without first obtaining a permit pursuant to this By-law. 5.</p>

			<p>7. (1) A person shall file a tree removal permit application for the removal of a tree or trees on a lot by submitting the following to the Designated Official: (a) a completed application form, as specified by the Designated Official; (b) payment of a non-refundable fee as set out in the rates and fees schedule approved by Council as part of the annual budget approval process, with the exception of: (i) not-for-profit organizations or individual(s) facing financial hardship who are eligible for a waiver of the fee; (ii) trees identified as dead, infested with Emerald Ash borer (EAB), or infested with Asian Long-Horned Beetle (ALHB), and approved by the Designated Official, or (iii) any species of Buckthorn approved by the Designated Official, or By-law Number: 2017-038 Page 7 (iv) trees identified as high risk and approved by the Designated Official; (c) an arborist report is required for any high risk tree and may be requested for other trees; (d) a written consent from the adjacent property owner if the tree to be removed is considered a boundary tree; and (e) a written consent from the owner of the lot where the subject tree(s) are located if the applicant is not the owner of that lot.</p>
Peterborough	Tree Notice By-law	2019	<p>No person may Destroy a Tree or permit the Destruction of a Tree except with the prior written consent of all of the Owners and: a) unless exempt pursuant to section 3 of this By-law; or b) except with notice given pursuant to section 4 of this By-law.</p>
			<p>This By-law does not apply to a: a) Woodland or to a Plantation Woodland as defined by the City's Woodland Conservation By-law; b) Tree with a DBH of less than 7.5 centimetres; c) Tree located within a rooftop garden or a solarium; d) Tree located within a Nursery or an Orchard; e) Tree to which the City's By-law 82-82 or Chapter 765 of the City's MunicipalCode applies; f) Tree the subject of a property standards order issued on behalf of the City; or to an g) activity to which subsection 135(12) of the Act applies.</p>
			<p>A person who intends to Destroy a Tree or to permit the Destruction of a Tree must give to the Commissioner no less than seventy-two (72) hours' written notice of the Destruction. The notice is effective when given by e-mail to treebylaw@peterborough.ca or when received in City Hall, 500 George St. N., Peterborough, Ontario, marked to the attention of the City's Urban Forest Manager as "Tree By-law Notice". The notice shall include for each Tree the following particulars: a) each Owner's name, mailing address, telephone number and, if applicable, e-mail address; b) species; c) DBH; d) the reasons, if any, for the proposed Destruction including, as applicable, the Tree's condition; and e) each Owner's plan, if any, to replace the Tree.</p>
Toronto	Private Tree By-law	2015	<p>813-12. Permit required. [Amended 2008-01-30 by By-law No. 118-2008; 2013-02-21 by By-law No. 248-2013]</p> <p>No person shall injure, destroy or remove or permit the injury, destruction or removal of any tree, including a multi-stem tree having at least one stem that has a diameter measurement of 30 centimetres or more measured at 1.4 metres above ground level in accordance with this article, unless authorized by permit to do so.</p>

			<p>813-14. Applications; form and content. A. An owner who wishes to injure or destroy a tree shall submit an application on the prescribed form and shall provide the following to the satisfaction of the General Manager: [Amended 2008-01-30 by By-law No. 118-2008; 2015-12-10 by By-law No. 1327-2015] (1) The name, address and telephone number of the applicant. (2) The non-refundable application fee set out in Chapter 441, Fees and Charges, Appendix E, Schedule 1. [Amended 2011-09-27 by By-law No. 1174-2011; 2013-02-21 by By-law No. 248-2013; 2015-12-10 by By-law No. 1327-2015] 813-15 December 10, 2015 TORONTO MUNICIPAL CODE - CHAPTER 813, TREES (3) The purpose for which the permit is required.; (4) A tree survey showing the location of trees on the property.; (5) An arborist report. [Amended 2015-10-12 by By-law No. 1327-2015]; (6) A tree protection plan. [Amended 2015-10-12 by By-law No. 1327-2015; (7) Landscaping and replanting plans.</p> <p>813-29. Penalties - A person who is convicted of an offence is liable: A. To a minimum fine of \$500.00 and a maximum fine of \$100,000.00 per tree; and B. A special fine of \$100,000.00 (under subsection 370 (1) (d) of the City of Toronto Act, 2006).</p>
Vaughan	Private Tree By-law (185-2007)	2007	<p>APPLICATIONS: FORM AND CONTENT 6. An owner who wishes to injure or destroy a tree shall submit to the Manager an application on the prescribed form and shall provide the following: (a) the name, address and telephone number of the applicant; (b) the purpose for which the permit is required; (c) a tree survey showing the location of trees on the property; (d) an arborist report identifying the location, species, size and condition of trees on the property and describing protection measures to be implemented; (e) a tree protection plan identifying the location, species and size of trees on the property and illustrating details of protection measures including protective barriers and hoarding to be implemented to protect trees that are to be retained; (f) landscaping and replanting plans.</p> <p>OFFENCES 19. (1) Any person who contravenes any provision of this by-law is guilty of an offence and is liable: (a) on a first conviction, to a fine of not more than \$10,000 or \$1,000 per tree, whichever is greater; and (b) on any subsequent conviction, to a fine of not more than \$25,000 or \$2,500 per tree, whichever is greater. (2) Any corporation that contravenes any provision of this by-law is guilty of an offence and is liable: (a) on a first conviction, to a fine of not more than \$50,000 or \$5,000 per tree, whichever is greater; and (b) on any subsequent conviction, to a fine of not more than \$100,000 or \$10,000 per tree, whichever is greater.</p> <p>PERMIT REQUIREMENTS AND EXCEPTIONS - 3. (1) No person shall, within the City's boundaries, injure or destroy any one (1) or more trees having a tree diameter of twenty (20) centimetres or more or having a base diameter of twenty (20) centimetres or more unless authorized by permit to do so pursuant to this by-law. (2) Despite subsection (1), a permit is not required: (a) for emergency work; (b) for the pruning of a tree; (c) for the removal of dead branches (d) to injure or destroy trees located on rooftop gardens, interior courtyards, or solariums; or (e) to injure or destroy trees on a nursery or golf course.</p> <p>FILING FOR A PERMIT - 4. An Owner who applies for a permit shall submit to the Manager the following: (1) a completed application; (2) a plan or drawing of the lot to the satisfaction of the Manager illustrating which trees are to be injured or destroyed; (3) payment of the required fees as prescribed by the City; (4) an arborist report, if required by the Manager; (5) where the base of a tree straddles a property line, the written consent to the permit issuance from the affected adjacent property owner; and (6) where the person is not the Owner, the written authorization of the Owner consenting to the application.</p>

3. Urban Forestry Management Plans

Municipality	Document Title	Year	Policy & Recommendation
Ajax	Urban Forest Management Plan - Five Year Management Plan (2011-2015)	2010	32 Recommendations to enhance treescape in the Town of Ajax.
Cambridge	Urban Forest Strategy	2015	49% of the City's current canopy is within protected Open Space designations within the Zoning By-law. The City's properties, especially parks and natural areas, already support a relatively high proportion of canopy cover (with many having 75-100% canopy cover) but still contain some opportunities for canopy cover expansion. The Urban Canopy Assessment (2013) shows that the City owns approximately 18% of the city's total canopy (430.5 ha in properties and 157 ha in right-of-way street trees = 587.5 ha) but that its lands also contain approximately 11% or 308.3 ha of potential plantable spaces. In Cambridge, as in most Canadian communities, approximately 80% of the urban forest canopy is on private lands and owned by many individuals, institutions or agencies.
			10. Draft and explore implementing a private tree by-law to expand the City's tool kit for achieving urban forest targets. Implementation Notes: Developing a private tree by-law should not be considered until the City has adequately addressed its more urgent tree maintenance and management issues on its own lands (e.g., EAB). Once these are addressed, a by-law should be drafted and subject to public consultations. Key considerations for this by-law should include: a requirement for tree replacement or compensation (ideally directed towards a City tree fund or account), and for the City to commit additional resources to education, administration and enforcement related to the by-law before it is passed and implemented.

		<p>Tree By-laws for Private Property - The Region's Conservation of Trees in Woodlands By-law (2008) regulates all woodlands of at least 1 ha in the city such that a permit is required for any tree-related activities in such features. Notably, because woodlands above 4 ha are designated as "significant" at the Official Plan level, and no development is permitted within them, this by-law really applies to woodlands between 1 ha and 4 ha. Permit exemptions are provided for woodlands with approved management plans. Permits are generally provided for selective cutting in woodlands, as well as partial or entire feature removal "if in the opinion of the Tree By-law Committee, the injuring or destruction of the tree or trees is desirable for the appropriate development or use of the property and the general intent and purpose of this by-law is maintained". However, woodlands between 1 ha and 4 ha identified as Locally Significant Natural Areas in Cambridge would also need special consideration if development is proposed within them, as per the Official Plan policies discussed above. A draft Tree Preservation By-law, developed in consultation with various stakeholders and the community and focusing on trees on private property, was drafted and released for public comment in 2012. Ultimately, the draft by-law was not approved or enacted. The draft by-law was developed to address identified issues related to tree clearing prior to development application submissions and postdevelopment protection of trees identified for preservation through the planning process. It was also intended to regulate the removal of trees on private lands, with an emphasis on trees greater than 76 cm dbh. Up to three trees with a dbh between 20 cm and 76 cm dbh could be removed on a given property per calendar year without a permit.</p>
Urban Forest Plan	2015	Recommended Action 1. Undertake a comprehensive review of the Urban Forest Plan and report to Council.
		Recommended Action 2. Create an internal "Urban Forest Group" that includes key City staff involved in work related to trees.
		Recommended Action 3. Establish and coordinate an "Urban Forest Plan Steering Committee".
		Recommended Action 4. Build and expand partnerships for securing funding from a range of sources to sustain urban forest stewardship projects across the City.
		Recommended Action 5. Explore opportunities for direct and indirect support for municipally-led or supported urban forest activities from the GRCA, Region, Province and federal government.
		Recommended Action 6. Establish mechanisms for dedicated funding for urban forestry in the form of: (a) a reserve fund for tree-related disaster response on City lands and (b) a "tree account" to support tree planting and young tree maintenance.
		Recommended Action 7. Explore adding policies related to tree planting and replacement as part of the next Official Plan update.
		Recommended Action 8. Develop comprehensive streetscape guidelines for integration of high-quality tree growing environments and trees into urban streetscapes.
		Recommended Action 9. Update the City's existing Public Tree By-law (71-06) and Grading By-law (160-09) to be more supportive of urban forestry objectives in this Plan.
		Recommended Action 10. Draft and explore implementing a private tree by-law to expand the City's tool kit for achieving urban forest targets.
		Recommended Action 11. Undertake a comprehensive tree preservation planning policy and procedure review
		Recommended Action 12. Review, consolidate and ensure consistency of all development-related tree establishment policies and standards

		Recommended Action 13. In new or infill developments, require (a) regular maintenance of newly-planted street trees, and (b) developers to deposit funds to cover the costs of planting, maintenance and replacement of trees by City staff or contractors	
		Recommended Action 14. Compile a 'master' planting list to guide tree establishment on both public and private lands across the city.	
		Recommended Action 15. Undertake a comprehensive review of Forestry Division workload and service levels to determine appropriate staffing levels to ensure adequate service provision	
		Recommended Action 16. Utilize 2014 street tree inventory to carry out high-priority tree maintenance and address utility conflicts.	
		Recommended Action 17. Develop and phase-in implementation of a cyclical pruning program for City-owned street trees	
		Recommended Action 18. Develop and implement a young tree structural pruning (training) program.	
		Recommended Action 19. Undertake inventory of trees in high-use public park areas and along City-owned woodland edges, and carry out priority maintenance.	
		Recommended Action 20. Update the tree risk management policy (Policy – Safety and Probability Risk Assessment) to reflect new industry standards and Best Management Practices.	
		Recommended Action 21. Revise the City's Property Standards By-law (181-04) to enable the City to order risk mitigation for trees which pose potential high risk to neighbouring public or private property, on a complaints-based and proactive basis.	
		Recommended Action 22. Undertake an inventory of City-owned woodlands.	
		Recommended Action 23. Once an inventory of City-owned woodlands is complete, start to undertake management of priority woodlands.	
		Recommended Action 24. Prepare a Pest Vulnerability Matrix or similar pest and disease threat assessment and management options report utilizing 2014 street tree inventory data.	
		Recommended Action 25. Develop an Emerald Ash Borer strategy, including use of data from the 2014 street tree inventory.	
		Recommended Action 26. Undertake an inventory of ash trees in City-owned parks (if complete park tree inventory not undertaken) and edges of City-owned woodlands.	
		Recommended Action 27. Improve tree species and planting stock selection and establishment practices.	
		Recommended Action 28. Increase the diversity and number of trees planted per year as part of Forestry operations to help attain Plan targets	
		Recommended Action 29. Improve the format and organization of the City's Forestry webpage to make it more user-friendly and engaging.	
		Recommended Action 30. Undertake targeted outreach to various sectors across the City, using the City's plantable spaces tool where appropriate.	
		Recommended Action 31. Increase current efforts to coordinate and implement community-based tree planting, and other urban forest stewardship activities, across different neighbourhoods and land uses in the City.	
		Recommended Action 32. Identify and implement incentive programs that could be implemented to support tree planting, maintenance and / or protection on private lands.	
City	Urban Forestry Management	2014	Recommendation # 2 – Create an interdepartmental "Tree Team" of City staff

Kitchener	UFMS	2019	Recommendation # 4 – Undertake targeted vegetation assessment and management of City parks and natural areas
			Recommendation # 6 – Undertake an Urban Tree Cover (UTC) Potential Plantable Spaces Analysis
			Recommendation # 8 – Develop tree risk management policy and train City Arborists in risk assessment
			Recommendation # 9 – Complete State of the Urban Forest report every five years
			Recommendation # 13 – Develop and implement a Public Tree By-law
			Recommendation # 16 – Develop a Greening Strategy building on the Potential Plantable Spaces Analysis
			Recommendation # 17 – Track municipal tree removals and plantings
			Recommendation # 18 – Expand the City’s capacity to undertake tree-related plan review and site supervision
			Recommendation # 20 – Pursue targeted urban forest education and outreach
			Recommendation # 21 – Increase capacity for coordination of volunteers for stewardship activities
			Recommendation # 22 – Pursue targeted stewardship initiatives, partnerships and funding sources
			Urban Forest Strategy - Kitchener’s Sustainable Urban Forest Strategy 2019-2028
Action 11 - Conserve and protect the urban forest prudently on public and private lands to maximize current and future benefits while minimizing costs and risks. The first action required to conserve and protect the urban forest is to increase community awareness on this issue through education. A review and potential update of existing bylaws and policies that protect city trees, their soil habitat natural areas, and private trees is required.			
Goal 1: Plan for a sustainable urban forest by setting, supporting, developing and monitoring identified priorities and targets.			
Goal 2: Address key gaps required to reduce risk and support implementation of key program components			
Goal 3: Manage the urban forest on city lands as a corporate asset to develop defined service levels, optimize life cycle management plans and long-range funding requirements.			
Goal 4: Develop a sustainable natural area management plan for all city owned natural areas that strives to conserve their natural history and biodiversity, while minimizing the associated risks and costs.			
Goal 5: Increase community awareness and stewardship building community support, participation and ownership.			
Goal 6: Embrace Love My Hood helping people to connect and work together to do great things in their neighbourhood.			
Goal 7: Increase communication and build collaboration with citizens, land owners, organizations, agencies, other cities and city departments.			
Goal 8: Improve customer service by providing better and timely information while always looking for ways to improve service.			
Goal 9: Create a proactive maintenance program for city trees to improve customer service, tree health, resiliency, and reduce costs / risks.			
Goal 10: Create an urban forest emergency response and recovery plan ensuring the city has the ability and resiliency to respond to a changing climate.			
Goal 11: Conserve and protect the urban forest prudently on public and private lands to maximize current and future benefits while minimizing costs and risks.			
Goal 12: Monitor and assess destructive tree pests and invasive species to protect the urban forest and conserve biodiversity.			

		<p>Goal 13: Set a tree canopy target and develop a long-term plan ensuring a vibrant and resilient tree canopy for future generations.</p> <p>Goal 14: Work with the community to develop a non-profit tree planting and stewardship program to maintain and/or increase the tree canopy on private and public lands.</p> <p>Goal 15: Develop a tree planting and soil management plan for city lands, planting trees sustainably with the focus on growing big, long living trees.</p>
Mississauga	Urban Forest Management Plan	<p>Action #1: Adopt the monitoring framework developed for Mississauga's natural heritage system and urban forest.</p> <p>Action #2: Monitor the status of the natural heritage system and the urban forest with support from the region, local agencies and other partners.</p> <p>Action #3: Formalize involvement of city forestry staff in city planning and information sharing related to trees and natural areas.</p> <p>Action #4: Develop consistent and improved city-wide tree preservation and planting specifications and guidelines.</p> <p>Action #5: Update the inventory of city street and park trees, and keep it current.</p> <p>Action #6: Optimize street and park tree maintenance cycles.</p> <p>Action #7: Implement a young street and park tree maintenance program.</p> <p>Action #8: Develop and implement a street and park tree risk management protocol.</p> <p>Action #9: Develop an urban forest pest management plan.</p> <p>Action #10: Undertake targeted invasive plant management in the natural heritage system.</p> <p>Action #11: Develop a targeted urban forest expansion plan.</p> <p>Action #12: Implement a targeted urban forest expansion plan.</p> <p>Action #13: Track and recognize naturalization/stewardship initiatives on public and private lands.</p> <p>Action #14: Implement and enforce improved tree establishment practices on public and private lands.</p> <p>Action #16: Update erosion control, nuisance weeds and encroachment by-laws.</p> <p>Action #17: Review the private tree protection by-law and update as needed.</p> <p>Action #21: Create, post and promote short video clips on topics and issues related to the natural heritage system and urban forest.</p> <p>Action #22: Make the city's tree inventory publicly accessible to support outreach, education and stewardship.</p> <p>Action #23: Improve and maintain awareness about current natural heritage system and urban forest policies, by-laws and technical guidelines.</p> <p>Action #24: Continue to support and expand targeted engagement of local business and utility lands.</p> <p>Action #25: Continue to support and expand targeted engagement of youth and stewardship of school grounds.</p> <p>Action #26: Continue to support and expand targeted engagement of residents and community groups, and stewardship of residential lands.</p> <p>Action #30: Build on existing partnerships with the Region of Peel and nearby municipalities to facilitate information sharing and coordinated responses.</p>

Niagara Falls	Urban Forest Strategy	<p>The City of Niagara Falls Woodland Management Plan is a comprehensive management plan for all City owned or controlled woodlands. This management plan lays out a road map that will ensure the long-term sustainability of City woodlands. The Woodland Management Plan contains 34 City woodlands that were surveyed utilizing the provincial standard Ecological Land Classification (ELC) inventory system and field notes from volunteer data collectors from the Niagara Falls Nature Club.</p>
Oakville	Urban Forest Strategic Management Plan	<p>2008</p> <p>Recommendation 1: The Town should consider amending its Official Plan to designate its municipally owned urban forest as 'green infrastructure'</p> <p>Recommendation 2: The Town should develop a separate Urban Forest Strategic Management Plan for the lands north of Dundas Street consistent with the principles outlined in this document.</p> <p>Recommendation 3: The Town should use the vision and mission statements cited in this plan to guide urban forest management in the Town of Oakville.</p> <p>Recommendation 4: The Town should use the series of criteria and indicators in Table 1 to track progress towards short- and long-term objectives. This should be used to measure, monitor and evaluate the implementation of the UFSMP at the end of each 5-year Management Plan and report to Council on the State of the Urban Forest. Furthermore, the Criteria and Indicators Table should be added to the Town's 2007-2010 Corporate Strategic Plan in order to help track the Town of Oakville's progress on managing its urban forest on a sustainable basis.</p> <p>Recommendation 5: The stocking level in all land use types (except woodlots) should be increased by 10% (based on the assumptions of the UFORE Growout simulation) to achieve an estimated overall canopy cover of 30%.</p> <p>Recommendation 6: The Town should consider incorporating an assessment of potential leaf area by land use type into the 2009 UFORE study.</p> <p>Recommendation 7: The Town will develop each 5-year management plan. The second, third and fourth 5-year management plans will be developed based on a review of the successes and challenges of the preceding management plans.</p> <p>Recommendation 8: The Town will adopt the principle of active adaptive management to accomplish urban forest policy objectives in light of the constantly changing ecological, social and regulatory environment.</p> <p>Recommendation 9: The Town should change the name of the "Large Tree Heritage Business Unit" and "Small Tree Heritage Business Unit" to avoid confusion with other common uses of the term "heritage tree".</p> <p>Recommendation 10: The Town's Official Plan, Section 10.3(b) should be amended to read: "It is the objective of the Town that there will be no net loss of existing urban forests. As such, for every square metre of leaf area that is removed from Town property or from road rights-of-way, that sufficient trees will be replanted to replace the lost square metres of leaf area."</p> <p>Recommendation 11: The Town should amend the Environmental Strategic Plan to refer to the Urban Forest Strategic Management Plan where appropriate.</p> <p>Recommendation 12: The Town should create five urban forest management units in such a manner that their areas are distributed more-or-less equally. These management units will be used to allocate activities within the 5- year management plans.</p>

Recommendation 13: The Town will complete a tree inventory for all street trees within the first 2 years of the first management plan with a focus on collecting information on trees in the oldest and youngest age classes in the first year.
Recommendation 14: The Town should develop an approach to identifying and designating heritage trees based on the approach of the Ontario Heritage Tree Alliance.
Recommendation 15: The Town should enter into a partnership with the USDA Forest Service to establish Oakville as a Reference City for STRATUM in Southern Ontario.
Recommendation 16: The Town should ensure that there is adequate species diversity throughout the urban forest and where possible ensure that the seed source is within the Collection Zone for Oakville as established by the Forest Gene Conservation Association.
Recommendation 17: The Town will complete a tree inventory for all woodlands based on accepted forest stand inventory protocols within the first 5-year management plan.
Recommendation 18: The Town should establish 1 permanent sample plot (PSP) per hectare in each woodland tract so that the woodlands can be monitored systematically over time.
Recommendation 19: The Town should hire an urban forestry specialist with GIS training to administer the tree inventory software and database as well as other asset management systems in the Department in 2008.
Recommendation 20: The Town should consider configuring CityWorks to display a version of the tree layer including location, species and size (crown width, DBH), on the corporate web site for use by the public.
Recommendation 22: The Town's Interdepartmental/Interagency Technical Advisory Committee (IITAC) should collaborate in a review of Tree Habitat Design Guidelines, and the potential role of zoning by-laws in reserving sufficient good tree habitat to support the canopy cover/leaf area targets identified for each Land Use Type (Oakville 2006, Action Items 15 & 17).
Recommendation 23: The Town's Interdepartmental/Interagency Technical Advisory Committee (IITAC) should discuss and consider for adoption the canopy cover targets proposed in the UFSMP.
Recommendation 24: The Town's Interdepartmental/Interagency Technical Advisory Committee (IITAC) should establish canopy cover targets for parking lots and should develop design and implementation guidelines to achieve these targets. (Oakville 2006. Action Items 22).
Recommendation 27: The Town should develop a set of engineering road cross sections using root zone modifications for implementation in difficult sites.
Recommendation 28: The Town should develop removal and replacement plans to increase the age class and species diversity in areas identified as having a canopy dominated by mature Norway and silver maples.
Recommendation 30: The Town should establish a project that will identify (through GIS) areas at risk for exotic invasions (i.e. near natural areas such as woodlots, wetlands, ravines, etc.).
Recommendation 31: The Town's tree asset management system, CityWorks, should include a system of tracking survivorship to inform species selection and management.
Recommendation 32: The Town should develop a Prime Site strategy which will identify priority sites to amend the soil quantity and quality in accordance with the Town of Oakville's Our Solution to Our Pollution report.
Recommendation 37: The Town should produce a GIS-based planting plan incorporating the UFORETree Locator Module, "Tree Habitat Design Guidelines for Oakville" (Town of Oakville 2006, Table 9) and taking into consideration the "Best Species for Air Quality Improvement" and species best suited to the changing climate.

Recommendation 40: The Town must complete the update to its Tree Protection Policy and Street Tree Bylaw
Recommendation 41: The Town should consider transferring the responsibility for private tree protection from the Development Services Department to the Parks and Open Space Department.
Recommendation 42: The Town should hire four additional inspectors to enforce tree protection on both public and private land.
Recommendation 43: The Town's Development Services Department should create guidelines for the implementation of the Tree Protection Policy as it applies to various permitting processes and where possible utilize conditions of approval to protect trees on private property.
Recommendation 44: The Town should investigate the feasibility of developing and implementing a private tree preservation by-law based on the principle of no net loss of leaf area/canopy cover within the urban forest.
Recommendation 47: The Town should develop a Tree Risk Management Plan and establish an inspection protocol based on the data from the Municipal Tree Inventory.
Recommendation 48: The Tree Risk Management Plan will prioritize trees requiring further investigation by a tree risk assessment specialist.
Recommendation 49: The Town's Forestry staff should conduct a pilot project to fine-tune IR photography as a cost saving technique to identify areas that contain hazard trees (Town of Oakville 2006, Action Item 23).
Recommendation 51: The Town should develop a tree cabling policy that includes the provision of an inspection cycle. This policy will incorporate risk and heritage value.
Recommendation 52: The Tree management software (CityWorks) should provide an annual summary of all risk trees to be inspected.
Recommendation 54: The Town should develop a private urban forest stewardship education program (Town of Oakville 2006, Action Item 3).
Recommendation 55: The Town should establish a Citizen Urban Forest Advisory Committee (CUFAC).
Recommendation 56: The Town's Urban Forestry Services should work with the Parks Horticultural Section to formalize a methodology for Public Engagement, based on their existing Volunteer Recognition Program.
Recommendation 57: The Town should hire a Volunteer Coordinator to specifically address the needs of the urban forest.
Recommendation 58: The Town should ensure that the sites on which volunteer planting projects have taken place are not sold or developed.
Recommendation 59: The Town should develop stronger partnerships with NGOs to implement effective volunteer coordination with respect to urban forest initiatives.
Recommendation 60: The Town's Corporate Communications Department should work with Urban Forestry Services to develop effective, wide-spread marketing strategies and branding for various events and workshops.
Recommendation 61: The Town should consider an amendment to the Zoning By-law for Employment, Commercial (excluding the C3R zone), and Industrial land use types to regulate the planting area for trees (i.e., the tree growing area) in support of the Town's canopy cover target.
Recommendation 62: The Town should undertake a study to assess the impact on the Town-wide canopy cover of implementing a "Planting Area for Trees" policy on all land uses which are subject to site plan approval.

			<p>Recommendation 63: The Town's Forestry Section should chair an Interdepartmental Technical Advisory Committee, to include staff from the Town's Forestry, Planning, Engineering and Legal departments to assist in implementing the Urban Forest Strategic Management Plan and to prepare proposals for new policies for consideration by Council.</p> <p>Recommendation 65: The Town should hire the staff and equipment resources necessary to implement this Plan as detailed in Appendix J.</p> <p>Recommendation 66: The Town should implement the Tree Seed and Seedling Development Program to support the Town of Oakville's Urban Forest Canopy Cover</p>
St. Catharines	Urban Forestry Management Plan	2011	Action Item #1: The City of St. Catharines will implement the Urban Forestry Management Plan.
			Action Item #2: The City of St. Catharines will provide the necessary funding to meet the goals of the Urban Forest Management Plan.
			Action Item #3: The City of St. Catharines will include the funds for new or replacement trees in the budgets for road construction projects.
			Action Item #4: The City of St. Catharines will update the inventory of trees on municipal lands and undertake a study of trees on private property.
			Action Item #5: The City of St. Catharines will develop a private property tree bylaw to govern the removal of specific trees on private property.
			Action Item #6: The City of St. Catharines will create a community education and stewardship programmes to assist with protecting and preserving the urban forest and promote tree conservation.
			Action Item #7: The City of St. Catharines will create an Urban Forestry Advisory Committee to advise and make recommendations for the care and preservation of the urban forest in St. Catharines.
			Action Item #8: The City of St. Catharines will review and make the necessary changes in the planning and development guidelines to provide for the care and development of the urban forest.
			Action Item #9: The City of St. Catharines will adopt an aggressive tree replacement policy for the replacement of all removed trees where possible.
			Action Item #10: The City of St. Catharines will access all available opportunities to plant trees.
			Action Item #11: The City of St. Catharines will strive to plant large stature trees to maximize opportunities to increase canopy cover.
			Action Item #12: The City of St. Catharines will prepare a threat evaluation response for the purpose of protecting our urban forest.
			Action Item #13: The City of St. Catharines will strive to promote biodiversity by increasing the number of species used for all tree planting.
			Action Item #14: The City of St. Catharines will manage the urban forest as a continuous resource regardless of property boundaries.
			Action Item #15: The Recreation and Community Services will report to City Council annually on the state of the urban forest.
Thunder Bay	Urban Forest Management Plan	2011	7.2.2 Nuisance Trees: Recommendations: 119. Create policies that will guide land use decisions for publicly owned woodland buffers and incorporate as appropriate by-law provisions that would regulate the loss of woodlands on private property.

		<p>7.2.2 Nuisance Trees: Recommendations: 120. Make tree preservation a more significant part of the plan/site review process and ensure that the Urban Forester has an official role in all phases of site development—from application review to final approval. Currently, the Coordinator of Park Planning has this responsibility but is limited by the lack of a municipal Private tree By-Law.</p> <p>7.2.2 Nuisance Trees: Recommendations: 121. Require a comprehensive tree preservation and/or landscape plan be developed for all public projects where trees are present. This plan would show how trees are being protected and restored, and would preferably be completed by a Certified Arborist.</p> <p>Objective 1. Establish a canopy cover goal citywide of 50 percent: Strategy 1.3. Increase private tree planting efforts through educational and public awareness campaigns utilizing advocacy groups such as Trees Thunder Bay and municipal groups such as Earthwise® Thunder Bay.</p>
Toronto	UFS Study	<p>2016</p> <p>4. Council adopt the following policy with respect to the receipt of replacement tree planting funds collected under the Street Tree and Private Tree By-laws (City of Toronto Municipal Code, Chapter 813, Articles II and III): a. That all replacement tree planting funds collected be contributed to the Tree Canopy Reserve (XR1220) at the end of every fiscal year to ensure actual revenues collected are available to expand the tree canopy and facilitate long term planning; b. As part of the annual operating budget cycle, Parks, Forestry and Recreation estimate the replacement funds collected as current revenue to be received, and an equivalent expenditure in the form of a contribution to the Tree Canopy Reserve (XR1220) be included as part of the Operating Budget; c. That the future expenditures for the Tree Planting Strategy be included as part of future Operating Budgets and funded by withdrawals from the Tree Canopy Reserve (XR1220); and</p> <p>Achieve the City's tree canopy target of 40 per cent through partnerships and engagement of private landowners</p> <p>Action #1 – Tree Planting and Support Program for Residential Landowners • Subsidize private tree planting and tree care in partnership with community partners such as LEAF.</p> <p>Action #2 – Direct Tree Rebate Program for Residential Landowners • Provide direct rebate for tree planting on residential lots, together with education and outreach activities.</p> <p>Action #6 – Develop an "Every Tree Counts" Campaign • Develop a simple and clear engagement campaign to raise public awareness about the benefits of trees, tree planting opportunities and stewardship.</p> <p>Growing Toronto's Tree Canopy (Tree Planting Strategy) Emphasis on public engagement, education, and fostering stewardship. Very detailed report with analysis including planting and management tools and guidelines.</p>



Appendix B1: Information Letter

October 28, 2019

To whom it may concern,

We are a team of Master's students in the School of Planning at the University of Waterloo. This semester, we are working with the City of St. Catharines to help guide their future decisions regarding tree protection and management on private property. To achieve this, we are interested in gathering your perspective on the effectiveness of tree management strategies used in your municipality.

We understand that municipalities in Ontario are becoming increasingly involved in tree protection by adopting a variety of strategies and policies. Through our initial assessment, we found that these strategies and policies vary greatly and that municipalities apply different levels of protection to urban trees. Additionally, we discovered that most municipalities have explicit targets for tree canopy coverage and other tree-related activities (e.g. planting and preservation). Therefore, we are interested in learning how strategies and policies are implemented, and how their objectives are measured.

Your participation in this study will involve either an e-mail response to sent interview questions or a telephone interview. Interview questions will revolve around the themes of policy and program implementation and their outcomes. The information gathered from interviews will be used in conjunction with our own research to develop a practice guideline for municipalities and others interested in the topic of tree preservation and management. As this is a student project that must be completed by mid-November we would appreciate your response if possible no later than November 8.

We very much look forward to speaking with you and thank you in advance for your assistance in this project.

Yours sincerely,

Kaitlin Webber, Melissa Le Geyt, Theresa O'Neill & Vignesh Murugesan



Appendix B2: Key Informant Survey Questions

Key Informant Survey Questions

- 1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).**
 - a. When were they adopted?
 - b. Why were they adopted?
 - c. What policy do you find to be the most effective? Why?
 - d. What policies do you find to be ineffective? Why?

- 2. Describe the process your municipality undertook to adopt these policies.**
 - a. What have been the challenges in adopting management policies?
 - b. How were stakeholders brought on board?

- 3. How is the effectiveness of these policies being measured?**
 - a. Have these policies influenced the tree canopy?
 - b. How is tree canopy being measured and tracked?

- 4. Does your municipality have a compensation program for the removal of private trees?**
 - a. If so, how is it employed?
 - b. How effective is it?

- 5. What additional programs exist related to tree preservation and management in your municipality?**
 - a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?



Appendix B3: List of Participating Municipalities

<i>Participating Municipality:</i>	<i>Page #</i>
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Appendix B4: Interview Response Data and Transcripts

1. Town of Ajax

Submitted via email 11/06/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).

- a. When were they adopted?
- b. Why were they adopted?
- c. What policy do you find to be the most effective? Why?
 - The Town has several mechanisms to address private tree removal, including **Site Plan Control By-law, Tree Protection By-law (By-law 137-2006)** and **Boulevard Tree Protection By-law (By-law 138-2007)**.
 - The Tree Protection By-law only applies to lands outside of the Urban Area Boundary, within the Greenbelt Plan Area; and on lands designated Environmental Protection, Open Space or Neighbourhood Park in the Town's Official Plan.
 - The Town's Official Plan has sections (s.2.1.4, 2.2.5) that talk about tree protection and restoration. Policies require reimbursement, in the form of new trees or financial compensation, for healthy trees that are removed in development applications.
 - There is also a policy identifying that a Town-wide tree cutting by-law be established, however one has not been developed that would apply to private properties within the Urban Area. This action has also been identified in the Ajax Climate Risk and Resiliency Plan, recommending an update to the Town's Tree Protection By-law to include private properties within the Urban Area. Politically this has not been prioritized, and the cost of enforcement needs to be examined more closely.
 - The Town completed an Urban Forestry Cover Study in 2008 and subsequently a Urban Forestry Management Plan was completed in 2015, the goal is to enhance tree protection and increase Urban Forestry within the Town.

<https://www.ajax.ca/en/get-involved/resources/Sustainability/Trees/UFMP-14-Dec-2010-Final-with-Appendices.pdf>

- All of the Town's Urban Design Guidelines, including the Employment Area Urban Design Guidelines, and Motor Vehicle Gas Bar / Service Station Guidelines have sections that talk about tree preservation and tree planting.

- d. What policies do you find to be ineffective? Why?



- Site Plan Control By-law, Tree Protection By-law and Boulevard Tree Protection By-law. These by-laws allow Planning and Development Staff to review proposed tree removal during the development application and ask for tree replacement and/or tree compensation cash-in-lieu. All tree compensation cash-in-lieu are deposited into a fund that Operations Staff can withdraw to replant trees elsewhere in the Town to enhance the canopy.

2. Describe the process your municipality undertook to adopt these policies.

- a. What have been the challenges in adopting management policies?
- b. How were stakeholders brought on board?

- Official Plan policies were implemented through Official Plan Amendment No. 38, which also implemented other Climate Change and Environmental policies. This followed the normal Official Plan Amendment process (Open House meetings, Statutory Public Meeting, ect.). There were no major challenges related to the tree protection policies contained within the amendment.
- Politically a Tree Protection By-law that applies to private properties within the urban area has not been prioritized, and the cost of enforcement has not been examined and is viewed as an impediment.

3. How is the effectiveness of these policies being measured?

- a. Have these policies influenced the tree canopy?
 - The Town has successfully protected trees throughout the Town, particularly from development. Where trees have been proposed to be removed through development, applications have resulted a net gain in environmental protection areas and associated vegetation protection zones. Unfortunately, it is too early to determine the success of the policies as the tree canopies have not yet matured. The Town has collected significant money through development applications to enhance planting throughout the Town.
- b. How is tree canopy being measured and tracked?
 - The Urban Forestry Management Plan completed in 2015 indicated that the Town had approximately 18.5% tree canopy. This will be measured again through an updated Management Plan to be completed in the next couple of years. Development applications also track the tree plantings and restoration areas.

4. Does your municipality have a compensation program for the removal of private trees?

- a. If so, how is it employed?
- b. How effective is it?



- Only through Development Applications. The Town uses a tree replacement formula to determine the amount of trees to be replaced and an associated cost where cash-in-lieu is to be provided, see attached. Trees are either replaced on-site, or cash-in-lieu is provided and the Town plants trees elsewhere. This process has been successful.
- The Town also participate the **LEAF Backyard Planting program**:
<https://www.ajax.ca/en/get-involved/trees.aspx#LEAF-Backyard-Planting>

5. What additional programs exist related to tree preservation and management in your municipality?

- a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?
 - **For other additional programs, please refer to our webpage for more detail:**
<https://www.ajax.ca/en/get-involved/trees.aspx>



2. City of Barrie

Submitted via email 11/05/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).

- Official Plan (2018) sets out Goals for Natural Heritage Protection (section 3.5), specifically: <https://www.barrie.ca/City%20Hall/Planning-and-Development/Pages/Official-Plan.aspx>

3.5 NATURAL HERITAGE, NATURAL HAZARDS AND RESOURCES (Mod D (cc))

3.5.1 GOALS

(a) To identify, protect and enhance natural *heritage features and areas* and their connecting linkages including the land, air and water and the life *they support* for the benefit of future generations by encouraging and, where necessary, only allow land uses which protect the natural heritage features and functions of Environmental Protection Areas. **(Mod D (dd)(i))**

(b) To promote the protection of natural vegetated areas as a contiguous unit.

(c) To maintain or enhance the long term environmental quality of the City of Barrie recognizing that the City is the principal *growth* centre of the region. **(Mod D (dd)(ii))**

(d) To encourage the management of Barrie's waterfront and watersheds to maintain or enhance the natural quality of Lake Simcoe, Kempenfelt Bay, Little Lake and valley and stream corridors within the City.

(e) *To protect people and property and to minimize social disruption within the City from natural hazards including flooding and erosion.* **(Mod D(dd)(iii))**

3.5.2 POLICIES

3.5.2.1 GENERAL POLICIES

(a) The City shall encourage the local Conservation Authorities to prepare watershed management plans as input to the City's role in the management of watershed resources.

(b) In the review of plans, programs and development applications, the City shall protect the natural environment and its ecological functions for conservation, recreation, scientific and educational value, and its benefits to human health.

3.5.2.2 LAND MANAGEMENT

(a) In order to maintain and enhance vegetation cover, the City shall support tree planting, **tree preservation**, conservation initiatives and land stewardship strategies.

(b) New development shall be directed to maintain the natural landscape that shapes and defines the City's landform features, natural watershed drainage patterns and vistas.

3.5.2.4 NATURAL HERITAGE RESOURCES (OPA 14, By-law 2013-059)

(a) The Natural Heritage Resources in the City of Barrie are depicted on Schedule H. Schedule H is intended to be used as an overlay to Schedule A: Land Use. Through the



implementation of the following policies, Schedule H can be used as a guide to promote the protection, enhancement, and restoration of the City's natural heritage features and functions.

i. **Level 1** resources represent critical components of the Natural Heritage Resource network. No development shall be permitted within these areas.

☐ Environmental Protection Area policy 4.7.2.2 would apply to all properties identified as Level 1.

☐ The City will strive to designate all properties identified as having a Level 1 Natural Heritage Resource as Environmental Protection.

☐ An Environmental Impact Study (EIS) will be required for any development or site alteration within 120 metres of an area identified as Level 1 on Schedule H.

ii. **Level 2** resources represent significant components of the Natural Heritage Resource network. The features and function of these areas should be retained, however, there is potential for development if no negative impact can be demonstrated or mitigated

- Natural Heritage Mapping and Categories: <https://www.barrie.ca/City%20Hall/Planning-and-Development/Documents/Official-Plan-Schedules/Schedule%20H-Natural%20Heritage%20Resources.pdf>
- Urban Forest Strategy provides long term management guidelines for future forest conditions, e.g. canopy mapping and development of targets for future diversity and canopy percentages.
- Private Tree By-law: Provides legal protection of trees on private property <https://www.barrie.ca/Living/Environment/Pages/UrbanForestry.aspx> Main protection is through the Private Tree By-law. Private Tree protection for trees growing as part of an ecological woodlot (0.5 acres or larger) is provided within the by-law, guided by the official plan and the Urban Forest Strategy. The first version was adopted in 1990, and has been updated several times (latest in 2014). More info at: <https://www.barrie.ca/Living/Environment/Pages/UrbanForestry.aspx>

a. When were they adopted?

Most current versions are as follows:

- OP – 2018
- Urban Forest Strategy - 2014
- Tree By-law – 2014

b. Why were they adopted?

- OP – The OP is used as a guide to promote the protection, enhancement, and restoration of the City's natural heritage features and functions.
- The Urban Forest Strategy was adopted as a guide to the long term management of forest and tree resources within the City.
- The original 1990 private tree by-law was adopted in reaction to rapid growth and development of lands in Barrie to enforce controls on land owners clearing properties. Current version is a continuation of that need.

c. What policy do you find to be the most effective? Why?



- The by-law is the most effective. While land developers and land owners still periodically ignore by-laws, for the most part it is effective in addressing woodlot protection.
- d. What policies do you find to be ineffective? Why?
- None of the policy documents are completely effective when dealing with land development. Planners and Engineers (private sector) do not give much attention to policy statements, nor does the Ontario Municipal Board. However, the Natural Heritage Resources “protected areas” mapping is the greatest improvement in high level planning to identify areas of significant forested/natural lands for protection from development.
- 2. Describe the process your municipality undertook to adopt these policies.**
- Generally through a public consultation process, staff report to Council and adoption of new policy/by-law.
- b. What have been the challenges in adopting management policies?
- Development community, often through planning consultants challenged any new policy that would affect total development area on private lands.
- c. How were stakeholders brought on board?
- Through a lengthy planning process involving all development companies / land owners groups and an open secondary planning process stakeholders (most) were accepting of the policies.
- 3. How is the effectiveness of these policies being measured?**
- Through the Urban Forest Strategy, forest canopy mapping and tree health assessments have commenced. Long term effect of planning policies have yet to be determined. Barrie is a rapid growth area, residential growth will see reduction in tree canopy over the short term, however active replanting programs, private land planting / landscaping requirements and naturalization programs will show overall canopy growth in the long term.
- a. Have these policies influenced the tree canopy? Yet to be determined.
- b. How is tree canopy being measured and tracked? Satellite photography, aerial mapping and urban forest health card assessments.
- 4. Does your municipality have a compensation program for the removal of private trees? – Not currently. The Lake Simcoe Region Conservation Authority does have a compensation payment requirement for the removal of private trees in our municipality, so at this time the municipality has not pursued that avenue.**
- 5. What additional programs exist related to tree preservation and management in your municipality?**
- Community planting initiatives, community planting partnerships, school greening programs, Site Plan control objectives for greening commercial and industrial properties.



- b. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?
- Programs tend to be implemented through partners who are interested in growing a green canopy and healthy properties, etc. These programs as a result are far more successful as they start with the same goal in mind and are easy for municipal staff to support/assist with implementation.



3. City of Cambridge

Submitted via email 11/04/2019

1. **Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).**
 - a. When were they adopted?
 - i. Urban forest plan in 2014, Official Plan 2012, Urban Design Guidelines 2013
 - b. Why were they adopted?
 - i. Urban forest plan was driven by the outbreak of emerald ash borer, and the need to have a systematic approach to urban forest management
 - c. What policy do you find to be the most effective? Why?
 - i. I have limited experience with the urban design guidelines or the official plan. I led the development of the urban forestry management plan.
 - d. What policies do you find to be ineffective? Why?
2. **Describe the process your municipality undertook to adopt these policies.**
 - a. What have been the challenges in adopting management policies?
 - i. The City has limited involvement in trees on private lands. Overall of the three management options (ownership, education, regulation), the City has decided to approach all 3. The City owns much of the most heavily forested lands in the City, with intent to keep these undeveloped. The Urban forest plan had a public consultation process and education component, including seminars on how to maintain trees on private land (for example, Reep seminar 2019). In 2018, the City passed a new private tree bylaw regulating the removal of trees on private land.
 - b. How were stakeholders brought on board?
 - i. Public consultation during policy development is the most common tool we use to engage stakeholders.
3. **How is the effectiveness of these policies being measured?**
 - a. Have these policies influenced the tree canopy?
 - i. The City has done two canopy assessments to begin the process of measuring canopy change and explore which factors have the biggest effect.
 - b. How is tree canopy being measured and tracked?
 - i. We have done two full-city canopy studies, one in 2013 and again in 2018.



4. **Does your municipality have a compensation program for the removal of private trees?**
 - a. If so, how is it employed?
 - i. The private tree bylaw employs a disincentive to removing non-hazardous and non-dead trees. If the owner is able to plant sufficient compensation trees on the property their incentive is reduced or waived. If they are unable to plant enough compensation trees, they pay into a private tree planting reserve fund.
 - b. How effective is it?
 - i. The private tree bylaw has not been formally evaluated, but initial results seem positive. Comments from applicants seem to indicate that they are using a financial cost-benefit analysis to determine whether tree removal is 'worth it'.

5. **What additional programs exist related to tree preservation and management in your municipality?**
 - a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?
 - i. Policies form the foundation of programs, so they are each important in their own way. The private tree bylaw has a clear effect on private property, both large scale development and single family residential.
 - ii. We also recently started a pilot with Reep – a backyard tree planting program. It is subsidized through customer fees and the private tree bylaw replanting fund.
 - iii. There are a number of bylaws and policies that relate to tree preservation: boulevard bylaw, parks bylaw, cemetery bylaw, but most of these prevent damage to trees on public lands



4. City of Guelph

Submitted via email 11/07/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).
 - a. When were they adopted?
 - b. Why were they adopted?
 - [City of Guelph Strategic Plan \(2019\)](#) Protecting the green infrastructure provided by woodlands, wetlands, watercourses and other elements of Guelph's natural heritage system
 - [City of Guelph Official Plan March 2018 Consolidation](#) includes Natural Heritage System policies that protect and enhance natural heritage features and areas, including Significant Woodlands, Significant Wetlands, Cultural Woodlands and Other Wetlands, and protection of the city's Urban Forest, which includes trees located beyond the limits of the Natural Heritage System. The City of Guelph Official Plan also includes policies pertaining to Natural Heritage Stewardship and Monitoring, which include policies on invasive species management, land stewardship, monitoring, etc.
 - [Clair Maltby Secondary Plan](#) (in progress):
 - Comprehensive Environmental Impact study – identifies the need for protection and preservation of wooded natural areas
 - Road cross sections potentially inclusive of trees to be developed – not confirmed
 - Guelph Innovation District Block Plans (in progress)
 - [The City of Guelph has a Private Tree Protection By-law \(2010\) – 19058](#) which applies to regulated trees. A "Regulated Tree" means a specimen of any species of deciduous or coniferous growing woody perennial plant, supported by a single root system, which has reached, could reach or could have reached a height of at least 4.5 metres from the ground at physiological maturity, is located on a Lot larger than 0.2 hectares (0.5 acres) in size and has a DBH of at least 10 cm.
 - If an Owner wishes to Destroy or Injure one or more of the Owner's Regulated Trees or wishes to undertake an activity which might Destroy or Injure one or more of the Owner's Regulated Trees, and if none of the exemptions set out in the by-law are applicable (refer to Part IV – Permit Exemptions of the by-law), then the Owner must submit an Application Fee and Tree Permit Application (refer to Part V – Application for Permit of the by-law)
 - [Municipal Class Environmental Assessment](#) process includes tree inventories and classification/assessment of the NHS, which also factors into the assessment of alternatives (e.g. number of tree removals required).
 - [Brooklyn and College Hill Heritage Conservation District](#) includes the following objectives:



- To protect and enhance heritage property in both the public and private realm including existing heritage residential buildings, institutional structures, road bridges, parks and open spaces, riverscape corridors and associated trees and vegetation.
 - To maintain and conserve individual trees and other substantial forms of vegetation where they form or contribute to character defining attributes of the Brooklyn and College Hill Heritage Conservation District
 - Refer to Section 4.6.5 Trees and other plant material of the plan.
 - City of Guelph Downtown Streetscape Manual and Built Form Standards: enhancing the tree canopy and benefits to urbanized areas through 'complete streets' inclusive of trees.
 - City of Guelph Commercial Built Form Standards (in progress).
- c. What policy do you find to be the most effective? Why?
- i. The Private tree By-law has been the most effective because it is an actual enforcement tool. It is not as much of a deterrent as we would like but there are opportunities to enhance the By-law in the coming years.
- d. What policies do you find to be ineffective? Why?
- i. Nothing specific but generally policies without regulatory tools such as by-laws are ineffective because they are not enforceable.
- 2. Describe the process your municipality undertook to adopt these policies.**
- a. What have been the challenges in adopting management policies?
 - b. How were stakeholders brought on board?
- 3. How is the effectiveness of these policies being measured?**
- a. Have these policies influenced the tree canopy?
 - i. Unknown at this time.
 - b. How is tree canopy being measured and tracked?
 - i. Urban Forest Study (in process) – this will be our first comprehensive study and set the baseline for monitoring tree canopy (every 10 years).
- 4. Does your municipality have a compensation program for the removal of private trees?**
- a. If so, how is it employed? Compensation is required through the Private Tree By-law using a cash-in-lieu of \$500 per tree if planting cannot be achieved on the site where trees are removed. Otherwise compensation for planting on site to replace removed trees is as per Section 5 in the City's Tree Technical Manual (2018).
 - b. How effective is it? The following aspects of the By-law have been effective:
 - In deciding whether or not to issue a Permit in respect of a Regulated Tree, an Inspector must consider certain criteria (refer to Part VI – Issuance of Permits of the by-law)
 - In issuing a Permit, the Inspector may make the Permit subject to such conditions as the Inspector may consider necessary, including (but not restricted to) any one or more of the following requirements:



- That the Destruction or Injuring occurs in a specified manner;
- That each tree Destroyed or Injured be replaced with one or more replacement trees to be planted and maintained to the satisfaction of the Inspector in accordance with Landscaping, Replanting and Replacement Plans approved by the Inspector;
- That if replacement planting is not achievable on the subject land, it be substituted by a payment of cash in lieu in the amount of \$500.00 per tree Destroyed or Injured;
- That if the land is not subject to an application filed under the *Planning Act*, the Applicant provides a written undertaking, release and security to ensure that replacement planting is carried out and maintained in accordance with Landscaping, Replanting and Replacement Plans approved by the Inspector;
- That the Destruction or Injuring only be carried out by or under the supervision of an Arborist;
- That the tree or trees to be retained be protected in accordance with Good Arboricultural Practice during the Destruction or Injuring or other related activities; and
- That specified measures be implemented to mitigate the direct and indirect effects of the Destruction or Injuring on other nearby trees, land, water bodies or natural areas.

5. What additional programs exist related to tree preservation and management in your municipality?

- a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?
- b. Urban Forest Management Plan with feedback and monitoring framework
 - i. Monitoring progress and measuring success using criteria and indicators of forest sustainability
 - ii. Developing, implementing and monitoring effectiveness of tree related policies
 - iii. Increased capacity to manage urban forest through hiring of new staff and funding from Council
 - iv. Increased knowledge of resources achieved through complete and sample inventory of urban forest on private and public land
 - v. Recent implementation of the Tree Technical Manual – best practice for tree protection, planting and maintenance includes compensation calculations to be used for tree compensation
 - vi. Promotes community stewardship
- c. Linear Infrastructure Standards includes specifications for tree planting and protection.
- d. Development Engineering Manual includes specifications for tree planting and protection.
- e. Site Plan User Guide – includes requirement for tree related plans (e.g. Tree Inventory and Preservation Plans, Vegetation Compensation Plans, Landscape Plan, Street Tree Plans), tree protection (e.g. tree protection fencing, root



- protection zones), establishment of street trees and establishment of landscaping requirements on private property (e.g. tree planting standard detail, securities collected, inspections and warranty periods)
- f. Conditions of subdivisions – requirements for establishment of street trees, landscaping, tree compensation plantings, maintenance of plantings/warranty period, conveyance of undeveloped lands (e.g. parkland or NHS) into City ownership
 - g. Guidelines for the Preparation of Environmental Impact Studies – As part of the EIS, an inventory and assessment of natural heritage features and areas must be completed, typically using the Ecological Land Classification system, density assessments, and feature staking exercises to identify the limit of the NHS. In addition, an inventory of trees (of at least 10 cm diameter at breast height (DBH)) within 6 meters of proposed development on the subject property must be undertaken to address the City's Private Tree Protection By-law and often includes a Tree Inventory and Preservation Plan and Vegetation Compensation Plans. EIS's typically include management recommendations and recommendations for monitoring.
 - i. The City of Guelph requires, as a condition of development or site alteration, that an Environmental Implementation Report (EIR) be prepared, which is a summary document containing information including but not limited to:
 1. A description of how all the conditions of the decision have been met;
 2. How municipal infrastructure servicing, including but not limited to trails, stormwater management facilities and protection of the NHS and the associated ecological and hydrologic functions have been addressed; and
 3. Any other special requirements that are required to protect the overall natural environment of the area.
 - Again, we don't have enough information on the effectiveness of these programs. However, they are only effective if required as a condition to a permit under the Tree By-law.



5. City of Mississauga

Submitted via email 11/08/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).

Mississauga Private Tree Protection By-law

(<http://www.mississauga.ca/portal/residents/parks-private-tree-protection>) administers tree on private lands. The most recent by-law was done in 2012. Forestry staff are currently doing another review. This by-law is the main mechanism staff have to protect trees on private lands and is most effective.

Mississauga Official Plan

Chapter 6 – Value the Environment, policies included in this section speak to the protection of Natural Areas throughout the City whether that be hazards lands, valley lands etc. This chapter is important when it comes to development that is proposed adjacent to any lands included in the natural areas. Policies typically requires the protection and enhancement of natural areas, which can contribute to the urban canopy as a whole. Often times, these lands are recommended to be put in public ownership to ensure the long term survival of the natural area.

Chapter 16 – Neighbourhoods contains certain policies for particular neighbourhood areas in Mississauga that are subject to Site Plan Control. These policies are considered to apply to our infill areas and generally encourage the preservation of mature vegetation. This is supplemented by our detached infill guidelines.

http://www6.mississauga.ca/onlinemaps/planbldg/UrbanDesign/NewDwelling_Sept2014.pdf.

Zoning By-law

The Zoning By-law for these areas has regulations on lot coverage and building size however, there are no regulations that restrict the removal of trees. While staff, through development applications, encourage the retention of trees, there really isn't enough authority for staff to refuse or withhold an approval to save trees, unless a tree is designated under the Ontario Heritage Act.

Summary of Challenges

- Through the Site Plan process, if the Zoning By-law requirements are adhered to, staff cannot withhold the approval of an application that proposes to cut down a healthy private tree. In the past, Legal Services has given the opinion that the Zoning By-law trumps the ability to require an applicant to redesign to save a private tree, provided the applicant is meeting private tree by-law requirements such as cash-in-lieu or replacement trees.
- It is similar when assessing a proposal against Official Plan policies that encourage the preservation of private trees. Staff cannot withhold Site Plan approval when the Zoning By-law has been met.
- Applications for permission to cut down trees made under the Private Tree By-law cannot be refused in the instance where it negates the approval of a development application.



- In addition to the footprint of new homes resulting in the loss of private trees, applicants will also apply for permits to construct accessory structures such as cabanas, sheds and pools which often result in the destruction of trees within the rear yard.
 - The City has found that there are instances where landowners cut down trees prior to submitting a Site Plan application or Building Permit. In these instances and where the City is able to prove that this has occurred, fines and penalties are pursued.
- 2. Describe the process your municipality undertook to adopt these policies.**
- a. What have been the challenges in adopting management policies? **When the review of the private tree by-law occurred in 2012, challenges to perhaps have a more restrictive by-law was met with friction of Councillors and residents. While there are groups that advocate for more retention, there are also groups that want to be able to take down trees when they can. Often times, when staff review this topic, the question comes down to how to balance the rights of property owners and encourage tree retention.**
 - b. How were stakeholders brought on board? **Public meetings and working groups**
- 3. How is the effectiveness of these policies being measured?**
- a. Have these policies influenced the tree canopy?
 - b. How is tree canopy being measured and tracked? **Forestry keeps track of replacement tree planting**
- 4. Does your municipality have a compensation program for the removal of private trees?**
- Yes, Please see Private tree By-law**
- a. If so, how is it employed? **Urban Forestry accept Tree Removal Permits. Helps control number of trees removed per year.**
 - b. How effective is it? **It ensures there are replacement trees however, the replacement trees are never at the same caliper as the tree removed typically.**
- 5. What additional programs exist related to tree preservation and management in your municipality?**
- a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies? **One Million Trees Program (<https://www.onemilliontrees.ca/>) Ultimately adds to the overall tree canopy of the City. There has been uptake on behalf of residents and staff to continue this program and plant trees.**



6. City of Niagara Falls

Submitted via email 11/07/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).

The Official Plan for the City of Niagara Falls recognizes the values and benefits of trees and woodlands and encourages the retention of tree cover for aesthetic and environmental reasons. However, individual trees on private lands are not specifically protected through the policies.

These general policies have been ineffective in situations where Owners/Developers clear their land prior to submission of a Planning Application.

The Environmental policies in the Official Plan were approved in 2014. (Official Plan link: <https://niagarafalls.ca/city-hall/planning/official-plan.aspx>)

The protection of wooded areas that are part of a stand that is greater than 0.2 ha in size has been uploaded to the Niagara Region's Tree and Forest Conservation By-law which: sets out the requirements for woodland management, and can provide exemptions where a tree study has been approved through an application under the Planning Act. The City has also used this By-law to protect an individual tree on private lands that was deemed to be significant by Council due to its species and size.

The use and reference to the Region's By-law has been effective in preventing the pre-cutting of trees. There is a penalty under the by-law for not obtaining a permit. (link: <https://www.niagararegion.ca/government/bylaws/tree/default.aspx?redirect=1>)

2. Describe the process your municipality undertook to adopt these policies.

The City of Niagara Falls does not have specific policies to protect individual trees or small wooded areas on private property. The City has significant tree cover outside of its Urban Area Boundary, especially to the south where they overlap with wetlands. Within the Urban Area Boundary there has not been an overall canopy cover target set. There is reference to canopy cover within individual watershed plans, however there are only limited areas within our Urban Area Boundary that have a completed watershed plan.

3. How is the effectiveness of these policies being measured?
 - a. Have these policies influenced the tree canopy?



- b. How is tree canopy being measured and tracked?
- 4. Does your municipality have a compensation program for the removal of private trees?**

The Official Plan does contain a policy supporting a compensation program for the removal of private trees however a formal program has not yet been created.

- 5. What additional programs exist related to tree preservation and management in your municipality?**

A Woodland Management Plan was completed by the Parks Department for City owned/controlled woodlands identifying the health and potential improvement areas of these woodlands and surrounding natural features. The objectives of the Woodland Management Plan would benefit from a formal tree compensation program. (link: <https://niagarafalls.ca/living/conservation/woodland-management-plan.aspx>)

As noted previously, the City has uploaded the protection of wooded areas greater than 0.2ha under the Region's Tree and Forest Conservation By-law. This regulation has been the most effective method to deal with tree cutting prior to development.

The City also has 2 individual trees that have been designated as culturally significant under the Ontario Heritage Act. The designation is registered against title. There must be a demonstrated level of historical significance associated with the tree/tree stand to offer this protection and therefore it can only be applied on a limited basis.



7. Town of Oakville

Submitted via email 11/05/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).

The urban forest is managed in a variety of ways. Requirements for tree planting and management is rooted in policy. As you can see below, the various policies from the different levels of government nest into one another, and form the rationale for what we are asking for.

Ontario's Provincial Policy Statement:

- promotes green infrastructure to complement infrastructure (1.6.2)
- supports improved air quality, and climate change adaptation, by promoting design and orientation of land use, that consider the mitigating effects of vegetation and maximizing vegetation within settlement areas where feasible. (1.8.1)

Ontario's Planning Act through site plan control allows municipalities to:

- require drawings showing sustainable design elements on any adjoining highway, including trees (41(4)2.(e))
- require the owner to provide trees for the landscaping of the lands or the protection of adjoining lands. (41(7)(a)6.)

Oakville's Official Plan (Livable By-Design) 2009

- under the landscaping section it states that the urban forest should be maintained with healthy trees, provided with suitable growing environment, be enhanced with increasing tree canopy. Landscaping should also provide shade and wind protection. (6.10)
- under the parking section it states that parking areas should incorporate landscape areas that provide shaded and support tree growth.(6.13)
- under sustainability it states that a general objective for sustainability is to progressively increase the urban forest to achieve a canopy cover of 40% Town-wide beyond the life of the plan. (10.1.1)
- under urban forests, for every square metre of leaf area that is removed from Town property or from Town road rights-of-way, sufficient trees will be replanted to replace the lost square metres of leaf area.(10.12.1)

Oakville's Zoning By-law 2014-014

- section 4.11 provides landscaping regulations. The required widths for landscaping are particularly useful for providing the space on sites needed for, among other things, tree planting.



Oakville's Site Plan By-law 2005-062

- outlines that the entire town is a site plan control area, and that all development is subject to site plan control. Site plan approved by the Director of Planning or the Site Plan Committee basically includes all medium and high density residential, all non-residential development, and residential development within 50m of Lake Ontario or on severed parcels. All other low density residential development site plan approvals go through the Director of Development Services.

Oakville's Private Tree Protection By-law 2017-038

- is a by-law to regulate or prohibit the injury or destruction of trees on private property. Applies to any property not subject to site plan control (not development). Basically restricts the number and size of trees that can be removed on a property and stipulates replanting requirements. This is not a process that I am regularly involved with. For more information I recommend you contact Michelle Drmanic, Tree Protection Inspector, in Development Engineering (call Service Oakville main line and they can put you through).

Livable by Design Manual (Part C) (2017)

- A comprehensive set of detailed standards and technical direction to achieve the best possible site development and functionality. Includes canopy cover targets and planting standards.

All the by-laws were adopted in order to implement provincial / town policy. Town policy responding to the values of the local community as expressed through studies (like the Residential Character Study) and through council direction. (like the Mayors challenge to increase canopy cover in the town to 40% by 2057)

The policies that I rely on the most in my review of development applications, with regards to supporting the urban forest, would be the section 41 provision in the Planning Act which requires owners to provide trees for the landscaping of the lands, and the Official Plan policy which provides a measureable objective of increasing the urban forest canopy to 40% town wide. These are important because they form the backbone of my rationale for asking for tree planting as part of a development review. The 40% canopy cover objective, because it is measureable, establishes a deliverable that town staff are striving to achieve. This objective led to the incorporation of land use canopy cover targets being included in the Urban Forest Strategic Management Plan. These targets giving me the ability to fairly and equally apply the policy, so all developments can do their part. As a reviewer I use these targets as a benchmark to gauge whether more trees are required on a site or whether what the applicant is proposing is sufficient.

But I have to point out that although these policies are particularly important, all of the policies related to landscape are important. (nothing is ineffective) Design is a real balancing act, with competing interests. Carving out some breathing room for supporting ecological systems is critical, in a world where short term savings is often valued more than long term sustainability.



Above ground canopy cover is flashy and it is what draws the most political attention, but what is arguably more important is what happens below ground. Rooting environment, soil volume, planting bed widths, etc. are the unsung heroes of canopy cover. Without appropriate space for tree planting, trees will not grow to their potential, and canopy cover objectives will not be achieved. The policy direction we have at the town has given us the ability to develop strong implementing regulations and standards. Living by Design Manual (Part C) provides soft and hard landscape standards including canopy cover targets and planting space requirements.

2. Describe the process your municipality undertook to adopt these policies.

Challenges in adopting these policies/regulations would include appeals to the then OMB with regards to the zoning landscape regulations. At a site plan or plan of subdivision level, implementing policies that stipulate providing suitable growing environments for trees is challenging, due to development pressures and other policy direction for more intense development of the land. (trying to find that balance)

With regards to the planning policy process and stakeholders, since I'm not a planner I'm not well suited to answer this question. You may consider reaching out to one of our policy planners, such as Kirk Biggar, with specific questions.

3. How is the effectiveness of these policies being measured?

With regards to canopy cover, the policy effectiveness is measured through ongoing studies. For example, the town undertakes regular reviews of the Urban Forest Strategic Management Plan. The management plan is a 20 year plan that sets out the steps necessary to achieve short, medium, and long-term goals for the urban forest within the framework of the town's official plan. The 20 year period (2008-2027) is supported by a series of four management plans of five year duration. Annual operating plans complement the five year plan. The principle of adaptive management permits flexible tree operations by town staff that responds to changes in the environment, the community and the direction of town policy.

The UFSMP in my work, is mainly used only for the canopy cover targets to make sure I am asking for enough tree planting. It is not used to determine whether or not to ask for tree planting. The municipality's power to require tree planting comes from the policies stated earlier, not from the UFSMP.

On the macro level, for the Management Plan, tree canopy is measured using town wide aerial photo imagery, various sampling methods, in the field verification, and a lot (and I mean a lot) of statistics. If you need specifics on this I recommend contacting Curtis Marcoux in the towns Forestry Department.

On the micro level, though site plan control, applicants are required to submit a canopy cover plan and canopy calculation chart in addition to the standard landscape package. A canopy



cover plan illustrates the retained existing and proposed tree canopy for a development site. A canopy calculation chart itemizes and tabulates the contributions to tree canopy coverage for the site. Through these submissions the applicant demonstrates compliance with applicable land use canopy cover targets. [Development application guidelines](#) for preparing these documents are available online.

4. Does your municipality have a compensation program for the removal of private trees?

As mentioned earlier the town has a private tree by-law (Private Tree Protection [By-law 2017-038](#)). The by-law regulates the removal of private trees, establishes a permit system for tree removals, and criteria for replacement planting. If you have any questions after you review the by-law, I recommend contacting Michelle Drmanic. Please note that this by-law does not apply to development applications falling under site plan control.

In 2017 the Tree Protection By-law was updated. The reason for undertaking a review of the current by-law was in large part a result of reviewing canopy loss under the current by-law through the Notification Form process and the property owner's ability to remove 4 trees between 20 cm – 76 cm per year. Significant canopy is lost annually and when added together represents more than 1% canopy loss for the period 2012-2016. To try to reverse this trend significant changes were proposed to the by-law such as:

- All removals of trees greater than 15 cm will now require a permit issued by the town as well as all trees required to be retained or planted as a condition of an approved site plan;
- A permit fee will now be charged for all removals except for dead, high risk ALHB and EAB infested trees, or a buckthorn species.
- Property owners are now required to post a tree removal permit at the site where the tree is being removed a minimum of five business days prior to removal.
- Residents applying for the removal of high risk trees will now have to provide an arborist report and the tree(s) will be inspected by forestry staff within 5 business days following receipt of a permit application
- Where an extreme risk tree has been removed, the property owner will be required to notify the town and provide supporting documentation.
- The proposed bylaw retains the automatic permission to remove a tree or part of a tree that poses an extreme risk where the likelihood of failure is imminent without prior inspection by town staff. Staff will be reporting back to Council further on this matter. A separate confidential memo from the Legal department is attached to this report for the Mayor and Members of Council only.
- There are now new conditions of approval requirements for tree replacement
- Tree planting requirements have been made much more practical for residents who are required to replant a tree(s) as a condition of tree removal.
- In the fall of 2017, arborist firms and certified arborists working in Oakville will have to be licensed by the town.



As with all regulations, the effectiveness of these stronger regulations will be monitored, and adjusted if needed. The full [Updated Private Tree Protection By-law 2017-038](#) staff report can be viewed on line.

With regards to removal of municipal street trees (not private), as per Livable Oakville, for every square metre of leaf area that is removed from Town property or from Town road rights-of-way, sufficient trees will be replanted to replace the lost square metres of leaf area.

5. What additional programs exist related to tree preservation and management in your municipality?

You can't regulate everything. There needs to be a balance of sticks and carrots. In the town, with regards to canopy cover, a large amount of existing canopy is on private property, and a large amount of potential growing space for trees is located on private property. For the town to meet its canopy cover goals, it needs the support of local residents and business owners. For example, 2,072 trees were planted on private properties in 2017/2018 under the revised private tree by-law. An additional 101 trees and 89 shrubs were planted on private properties in 2017-2018 through Oakville Green's Backyard tree planting program.

I don't think it is a matter of what's better, policies or programs. To be successful you need both.

More information on private [tree planting](#) is available online.



8. City of Oshawa

Submitted via email 11/18/2019

Email response below:

I have spoken with our Landscape Architect and Forestry supervisor and reviewed the questions with them. Unfortunately, the City of Oshawa does not currently have any policies related to private tree management although it is something that the City is working to create.

Our current practice for tree management on private property is related to development applications. Through the subdivision approval process and site plan approval process we require applicants to provide tree preservation plans identifying all existing trees on the property and advising which ones, if any, are proposed to be removed. For certain applications where there are significant trees, trees on neighbouring properties that may be affected by the proposed development or portions of woodlots proposed to be removed we will also ask the applicant to submit an arborist report to evaluate the condition of the existing trees. In some instances, in consultation with the local conservation authority, an environmental impact study (EIS) may also be required if the tree removal is related to a woodlot.

The only piece of documentation that I can provide is a link to the forestry section of the City's website: <http://www.oshawa.ca/residents/trees.asp>



9. City of St. Catharines

Submitted via email 11/12/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).

- a. When were they adopted?
- b. Why were they adopted?
- c. What policy do you find to be the most effective? Why?

Zoning by-law and urban design guidelines have been very effective at setting minimum requirements for new development. We have seen increased site plan standards and landscaping for new development.

- d. What policies do you find to be ineffective? Why?

With limited recourse for the removal of trees (before or after development) tree protection plans have had limited success.

2. Describe the process your municipality undertook to adopt these policies.

- a. What have been the challenges in adopting management policies?

Council and the general public are concerns about policies which restrict what can be done on private property. Further, a tree protection by-law is only as effective as it's enforced. Staffing for review, implementation and enforcement is also a concern.

- b. How were stakeholders brought on board?

Committees of Council and the general public have been consulted through the development of these polices through meetings, and general outreach.

3. How is the effectiveness of these policies being measured?

- a. Have these policies influenced the tree canopy? We don't currently have a consistent, accurate method of measuring the canopy or tracking changes.
- b. How is tree canopy being measured and tracked?

4. Does your municipality have a compensation program for the removal of private trees? No.

- a. If so, how is it employed?
- b. How effective is it?

5. What additional programs exist related to tree preservation and management in your municipality?

- a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?

Tree giveaways are successful in the number of trees given away, but we don't know how many are planted or survive.



10. City of Thunder Bay

Submitted via email 11/06/2019

Email conversation below:

The UFMP was adopted by our Council in 2011, was more of a wish list and recommendations than a guide. It remained, as so many plans do, on a dusty shelf with little appeal for higher ups to initiate.

In it's current form however, it meshed idealistically at some level with the climate change initiative, storm water management plan, and sustainability.

We have, after a significant reorganization started to finally implement recommendations in the UFMP. A long way to go but we are making headway finally.

As a result of EAB being found here in 2015 and reactions/actions taken to deal with the issue, our little group has begun to undertake an updated UFMP that will deal with issues that were not readily apparent in the 2011 plan.

The biggest impact to our ability to deal with canopy issues is the arrival of EAB here in Thunder Bay. Before the arrival, we were not keeping up with the number of removals in our tree planting efforts. Early detection of the insect, promotion of the impacts of potentially losing over 25% of our canopy as a result and identifying to council the cost of replacement vs treatment finally freed up some much needed funding.

Our climate here is likely helping us in conjunction with our treatment program. We have not had a significant "hot" tree in two years, our pheromone monitoring has actually indicated a decrease in the number of adult beetles being caught. I know that this can and likely will change at any given time but for now, we have been very lucky.

Due to the UF budget increase to deal with EAB, we started ramping up our tree plant in anticipation of the eventual loss of many of our ash. It's really too soon to say that our canopy has increased but a recent canopy study seems to reflect a gradual increase.

Our most recent canopy study done internally has identified areas that need our focus in tree plant. This study was conducted using 2017 imagery and will be compared with 2019 imagery as soon as we are able to access.

Moving forward, the canopy study(s) will be used in the 2020 UFMP to direct our tree planting efforts and will tie directly into the storm water management/climate change initiatives.

We do have a tree protection Bylaw for our owned trees on City Boulevards and Parks which we are currently reviewing to hopefully add some more teeth to it. Currently our Bylaw only allows us to collect 2 trees for each removed and does not reflect that impact of the removal of a large diameter tree vs the planting of 2 small 50mm caliper trees in replacement. Moving forward, we will be attempting to change the Bylaw to reflect tying the DBH to the number of replacements, i.e. 1 tree per 10cm dbh and a valuation using the Landscape Guide.



I'd like to include a private tree bylaw in our efforts but suggestions so far have gotten negative responses.

We are losing a lot of our private and municipal canopy to efforts from local utilities who seem to strong arm homeowners into complete removal of back yard easement assets instead of trimming and we are constantly battling with the local municipal electrical provider who has gone back to very questionable arboriculture practices and their desire to top boulevard trees or completely remove them instead of trimming.

Another initiative that we began last year was to remove the onus of tree planting from the developer and contractor. We take the money that would be allocated to the tree plant requirements under site plan control and look after planting the trees using our own contractor. This means no more warranty period for the contractor and no more battles with them. So far, it's working with little to no push back.

We also started working with our engineering department in regards to large capital rebuilds. In addition to doing all of the tree related work prior to construction projects, we follow directly behind completion and replant boulevards regardless if there was a tree there or not. Homeowners feel that this is part of the construction process and we very little push back regarding tree plant.

We've tossed around the idea of a City supplied and sponsored tree plant on private property. Gone as far to look at suppliers and cost of the program but as yet, have not initiated it yet. Not for the lack of interest but more the lack of time and manpower. Like most urban cities with a managed urban forest, we continually ask for an increase in compliment to deal with issues and continually get ignored at budget time. It's seems that large events turn on tiny hinges in our field of practice.

Like many cities in Ontario, Thunder Bay has a high percentage of lead in our water delivery system. We've been focusing large scale construction on the removal of City owned lead pipe up to property lines. Another canopy issue it seems as lead pipe trumps trees and we've lost a good number of mature boulevard street trees in the process mostly in areas that cannot afford to lose canopy as Thunder Bay is a flood prone city.

We've been working hard with our engineering department to identify trees that we want/need to keep. The need to get out in front of the proposed project long before it goes out to tender is critical. Contractors who are aware the we have identified the tree as important will need to find a work around and to that end we've started looking for smaller trench box structures that we will purchase and make available to contractors in order to avoid open trench 3:1 slope that dooms the street tree that is close by.



11. City of Toronto

Submitted via email 11/14/2019

1. Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).

a. When were they adopted?

- i. Toronto's Official Plan contains policies related to Natural Heritage, Parks and Greenspace. It was last updated in 2015.
- ii. Municipal Code Chapter 813, Article III, Private Tree Protection was last amended and updated in 2015.
- iii. The City's Strategic Forest Management Plan was adopted in 2013.
- iv. The Toronto Green Standard is Toronto's sustainable design requirements for new private and City-owned developments. It was last updated (Version 3) in 2018.

b. Why were they adopted?

- i. The City of Toronto has various by-laws in place to protect and preserve tree, as well as associated natural land features. They have been developed in response to a growing understanding of how trees are damaged, as well as an increasing awareness of the loss of benefits that result from tree damage.

City of Toronto Municipal Code, Chapter 813, Trees, provides for the protection of City-owned street trees of all diameters and trees on private property having a diameter of 30 cm or greater. City of Toronto Municipal Code, Chapter 658, Ravine and Natural Feature Protection, provides for the protection of all trees and natural features in designated areas of the city.

By-laws to protect trees as well as ravines and natural features were created with the intent of deterring unnecessary injury and removal of trees and natural features and to promote tree preservation. The tree by-laws exist within the framework of Toronto's Official Plan. The policies within the OP strive to balance economic, social and environmental factors.

c. What policy do you find to be the most effective? Why?

- i. The Municipal Code Chapter 813, Article III, Private Tree Protection and Chapter 658, Ravine and Natural Feature Protection are the most effective tools at our disposal for private tree management. These By-



laws provide Urban Forestry with the authority to regulate private tree injuries and removals. Compensation planting for tree removals are required under the By-law, which is an essential mechanism for fostering the sustainability of our urban forest. The Tree By-laws - Compensation Planting Ratios policy standardizes compensation requirements of the By-laws.

d. **What policies do you find to be ineffective? Why?**

- i. Maintaining and expanding the urban forest is an important part of city building for the City of Toronto, however, the City must balance tree preservation with other aspects of development. In scenarios where private trees must be injured or removed to accommodate an as-of-right build, Urban Forestry will not use the By-laws and related policies to frustrate the development process. Permit conditions will still be applied, as required. This is not to say that the By-laws and policies are ineffective, but to point out that all By-laws and policies have limitations.

2. Describe the process your municipality undertook to adopt these policies.

a. **What have been the challenges in adopting management policies?**

- i. Consistent application of the policies across the City was one of the challenges. The inconsistencies could have been the result of a myriad of factors: different kinds of projects and nuances in different parts of the City, staff with different levels of training and experience, etc. Urban Forestry has since adopted additional procedures, policies and training to increase consistency. An example of an adopted policy that has been effective in addressing inconsistencies is the aforementioned Tree By-laws - Compensation Planting Ratios policy.
- ii. Compensation planting verification is a challenge due to the immense operational resources required. Also, as planting guarantee deposits are not collected for private trees, when compensation planting is lacking, we could only reiterate private compensation planting permit conditions to the applicant or property owner or to initiate a by-law contravention investigation. To improve compensation planting verification, Urban Forestry has secured additional resources to increase staffing and is also in the process of drafting and implementing new procedures and training.
- iii. Stakeholder buy-in is sometimes a challenge that we face. Compensation requirements of By-laws can become a significant financial cost depending on the scope of a project and the number of tree injuries and removals. However, consistent and fair application of the By-laws allows us to defend our position. It is worth noting that the financial disincentive to injure or remove trees has influenced project design to preserve trees.

b. How were stakeholders brought on board?

3. How is the effectiveness of these policies being measured?

- a. Have these policies influenced the tree canopy?



- i. The existence and evolution of our By-laws and policies have a positive correlation with tree canopy as Toronto's tree canopy has increased over the past decade. For further details, please keep an eye out for our canopy study which will be released soon.
 - b. How is tree canopy being measured and tracked?
 - i. Toronto produces a canopy study every 10 years and data is collected and analyzed using LiDAR and satellite imagery. The continuous land classification method, which is an algorithm based method, is used with LiDAR. Satellite imagery is analyzed using the random point sampling method, where random satellite images are classified manually.
4. **Does your municipality have a compensation program for the removal of private trees?**
 - a. If so, how is it employed?
 - i. **NO**
 - b. How effective is it?
5. **What additional programs exist related to tree preservation and management in your municipality?**
 - a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?
 - i. Community Stewardship Program
 - ii. Tree Planting Strategy
 - iii. Ravine Strategy
 - iv. Biodiversity Strategy
 - v. Parkland Strategy

Above are examples of programs of the City of Toronto that complement formal policies. The effectiveness of these programs should be evaluated in conjunction with the effectiveness of the formal policies as programs and policies serve different purposes and fill different gaps. The Community Stewardship Program provides education, experience and fosters community development, which are areas not encompassed by formal policies. The Planting Strategy expands the City's ability to influence private tree planting beyond compensation planting requirements of permitted tree injuries and removals.



12. City of Waterloo

Submitted via email 11/22/2019

1. **Describe how private tree management is addressed in your municipal policy (e.g. Official Plan, By-Laws, Urban Forestry Management Plan, Urban Design Guidelines).**
 - a. When were they adopted? **No Private Tree Bylaw (PTB). Public tree bylaw in place (last update 2014).**
 - b. Why were they adopted? **N/A**
 - c. What policy do you find to be the most effective? Why?
Public education: understanding env. benefits and appreciation of trees and the urban forest.
Stormwater Credit Program: an incentive program where residents can gain credits for caliper sized trees on their property to acknowledge the stormwater benefits provided by large trees. For more info, see website.
<https://www.waterloo.ca/en/living/stormwater-management.aspx#Trees>
 - d. What policies do you find to be ineffective? Why?
Private Tree Bylaws that are not enforced (ie. politically or lack of staff) or that simply collect application and replacement tree funding but do not actually save large canopy, significant or heritage trees. Many cities have PTBs in place. The better question to ask is how many trees have been saved (*not replaced with new trees).
2. **Describe the process your municipality undertook to adopt these policies.**
 - a. What have been the challenges in adopting management policies?
 - b. How were stakeholders brought on board?
3. **How is the effectiveness of these policies being measured? Public Tree protection bylaw is effective, but rarely does it needed to be enforced.**
 - a. Have these policies influenced the tree canopy? **unknown**
 - b. How is tree canopy being measured and tracked? **In-house GIS staff.**
4. **Does your municipality have a compensation program for the removal of private trees? Yes**
 - a. If so, how is it employed? **Developers undertake a vegetation management plan to review and identify # of trees, to be replaced or cash-in-lieu.**
 - b. How effective is it? **For cash-in-lieu, the program is effective as the City plans for, plants and monitors all trees planted. However, success is highly dependent on effective communication between the various internal departments (ex. Operations and Planning). Most staff are very familiar with value and protection**



of trees and work collaboratively to identify and save significant trees within development applications.

5. What additional programs exist related to tree preservation and management in your municipality?

- a. How would you compare the effectiveness of the programs in relation to the effectiveness of formal policies?

In my 25+ years' experience, I have worked in municipalities where I oversaw PTBs and in other municipalities without PTBs. If the goal of PTBs is to save and protect significant trees (size, species, age, cultural), I have found PTB not to be effective. This is particularly so where municipalities lack adequate staffing to oversee and enforce the bylaw. In these situations, the PTB simply collects application fees and replacement tree funding, but very rarely is an identified tree saved. It is a punitive approach that becomes burdensome to enforce and a great annoyance to the average resident. I have witnessed many healthy trees nearing the identified protection caliper size (often 20cmDBH) suddenly be removed as the property owners did not want the liability of having a protected tree on their property. I have also witnessed the mass destruction of trees just prior to a PTB being adopted.

If the goal is to save and protect significant trees, less punitive measures (carrot vs. stick) and education programs are much more effective. If property owners are given rebates for significant trees (however you wish to define that), those trees become an asset to the property NOT a liability. Where municipal staff, developers and local residents are able to come together and share an understanding and appreciation of the many benefits (environmental, social, economic) of trees, the outcomes are much better for the trees.



13. City of Windsor

Phone call conducted on 11/14/2019

* The following notes were taken by Kaitlin Webber from a telephone call with staff members from the City of Windsor.

- Idea for a private tree by-law has been presented to Council (planning tried twice, individual councillor tried third time) - in general, lots of interest, but not from Council
- By-law (135-2004) "Trees on Highways" - public tree by-law for City ROW (restricts the planting of Poplar, Willow, Thorney Honey Locust or Manitoba Maple) and City trees (fines \$1000-\$10,000)
 - Challenge of implementing by-laws - city resources for policing
- Designating trees through Ontario Heritage Act - used this to protect 2 trees (one died) - difficult process to undertake but effective
- Case of 200-year-old tree in the papers:
<https://nationalpost.com/news/canada/sycamores-last-stand-battle-over-200-year-old-ontario-tree-pits-owner-against-neighbours>
- Official Plan as policy trigger - one thing to have a "mother earth" statement, another thing to actually employ
- UFMP - currently in the process - working with consultant
- Currently in the process of updating environmental planning policies - expected next year
- Also in the process of re-writing landscape manual - governs most tree requirements at Site Plan level
 - One subdivision - homebuilders footprints ruined trees
 - Assess property - if there is a tree there and one desired to be saved
 - As subdivisions moving into wooded areas, enacting it - the problem is way system works, as long as there is no planning application
- Compensation through site plan control process
 - Replacement value at caliper-per-caliper - inspired from Winnipeg (e.g. if 100mm caliper tree removed, two 50mm trees can be planted)
- ERCA - Essex region conservation authority
 - District Rotary - 100 clubs - with ERCA - one tree per "rotarian"
 - Paul Giroux - linking with club to do tree planting on one street - raise money to provide funding
- Constraints - issue of human resources for monitoring
- Most planting programs happen on public lands
- Something as a follow-up/next step/concerns - dealing with climate change issues - as temperatures move upward - some trees existing are more stressed