

# **Growing Space for Trees: Protecting and Enhancing the Tree Canopy While Supporting Infill Housing and Addressing Concerns with Iceberg Homes - Proposals Report**

**Date:** April 17, 2025

**To:** Planning and Housing Committee

**From:** Chief Planner and Executive Director, City Planning and Executive Director, Environment, Climate and Forestry

**Wards:** All

## **SUMMARY**

---

Trees are a critically important asset to address biodiversity loss and the climate crisis, and contribute to the development of attractive, livable and healthy neighbourhoods. New infill housing is important to help address Toronto's housing crisis and requires proactive solutions to ensure the city's existing tree canopy is supported and that there is growing space for trees as new housing is built.

This report identifies proposed Official Plan and City-wide Zoning By-law amendments for consultation in response to Council direction to report on strategies to protect and enhance the city's tree canopy while also supporting infill housing. The report also responds to Council direction to report on strategies to address the impacts on the tree canopy and water management associated with iceberg homes - houses which exhibit a larger below grade footprint than their above grade footprint or with large multi-storey basements.

This report also provides information on implementation of municipal tree protection by-laws, including application requirements and processes for Committee of Adjustment applications, and impacts to trees and growing space of the City's Expanding Housing Options in Neighbourhoods (EHON) initiative. The results of the stakeholder consultation on proposed directions are described, with the final report back with recommended policy and zoning changes proposed for the fourth quarter of 2025.

## RECOMMENDATIONS

---

The Chief Planner and Executive Director, City Planning and Executive Director, Environment, Climate and Forestry recommend that:

1. The Planning and Housing Committee request the Chief Planner and Executive Director, City Planning to use the proposed amendments to Official Plan *Neighbourhood* and *Apartment Neighbourhood* Policies, attached as Attachment 1 to this report, as the basis for public and stakeholder consultation and to bring forward final recommendations in the fourth quarter of 2025.
2. The Planning and Housing Committee request the Chief Planner and Executive Director, City Planning to use the proposed amendments to the City-wide Zoning By-law 569-2013, attached as Attachment 2 to this report, as the basis for public and stakeholder consultation and to bring forward final recommendations in the fourth quarter of 2025.
3. The Planning and Housing Committee request the Executive Director, Environment, Climate and Forestry, to report on amendments to Chapter 813 (Trees) of the Toronto Municipal Code, and any other relevant chapter of the Municipal Code, that may be required to implement the recommendations identified in Recommendations 1 and 2 above, in consultation with the Chief Planner and Executive Director, City Planning and the City Solicitor.

## FINANCIAL IMPACT

---

The City Planning and the Environment, Climate and Forestry divisions confirm that there are no financial implications resulting from the recommendations included in this report in the current budget year or in future years. Staffing resources and expertise needed to advance the due diligence required, and to support enabling work of any of the proposed strategies outlined in the report will be accommodated within the existing approved budgets for relevant City Divisions.

The Chief Financial Officer and Treasurer has reviewed this report and agrees with the financial implications as identified in the Financial Impact section.

## EQUITY IMPACT

---

Strategies to protect and enhance Toronto's tree canopy and growing space, while also supporting infill housing growth in the city's neighbourhoods, contributes to a number of strategies and actions that support equity-deserving groups, including: the Resilience Strategy, TransformTO and the HousingTO 2020-2030 Action Plan. A healthy tree canopy contributes to a healthy, resilient and complete community. Trees assist in cooling outdoor and indoor spaces, reducing utility costs, providing shelter and improving living conditions for all residents and in particular, vulnerable populations.

## CLIMATE IMPACT

---

On October 2, 2019, City Council voted unanimously to declare a climate emergency and accelerate efforts to mitigate and adapt to climate change. At its meeting on January 29, 2020, City Council adopted the 2018 Tree Canopy Study and on December 15, 2021, reaffirmed Toronto's target of 40 per cent tree canopy cover by 2050 to align with the City of Toronto's TransformTO NetZero Strategy. Protecting and enhancing Toronto's urban tree canopy supports climate resilience; it is a key part of the City's green infrastructure that provides multiple benefits, including reducing stormwater runoff and air pollution, and increasing carbon sequestration. The 2018 Tree Canopy Study valued Toronto's urban forest's contribution to ecosystem services as \$55 million annually, including carbon sequestration, energy savings, pollution removal and avoided runoff.

Infill housing helps reduce greenhouse gas (GHG) emissions through the efficient use of land and resources. Density within the built-up area enables low carbon transportation choices, such as walking, cycling and public transit. Housing built in Toronto also reduces sprawl and reduces transportation driven GHG emissions regionally. Density enables the use of existing infrastructure, which avoids carbon-intensive infrastructure built elsewhere. Smaller infill buildings can more easily achieve net zero operational emissions, and low carbon materials are readily available at this scale. These buildings are also more easily deconstructed and much of the existing material can be salvaged and reused.

Infill housing development that is planned and designed to protect and enhance Toronto's tree canopy and provide soft landscaping for growing space supports the City's resilience to the impacts of climate change, notably urban heat island and stormwater runoff impacts.

It is important that iceberg homes be considered through a climate impact lens to protect and enhance the city's tree canopy and allow for soft landscaping for growing space. The addition of sub-surface structures reduces available water for trees and increases stormwater runoff and risks of undesirable ponding and flooding.

## DECISION HISTORY

---

At its meeting on December 13, 14 and 15, 2023, City Council, through item PH8.6, Growing Space for Trees: Protecting and Enhancing the Tree Canopy While Supporting Infill Housing, requested City Planning and Parks, Forestry and Recreation to report by the fourth quarter of 2024 on a suite of strategies related to protecting and enhancing the City's tree canopy and growing space, while also supporting infill housing growth in the city's Neighbourhoods.

<https://secure.toronto.ca/council/agenda-item.do?item=2023.PH8.6>

At its meeting on April 5, 2024, Planning and Housing Committee adopted item PH11.4, - Zoning for Residential Basements - Preliminary Report, that included a request for City Planning to report back on strategies to address the impacts of iceberg homes,

including consideration of ways of identifying applications for iceberg homes, and applying a climate lens to final recommendations.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.PH11.4>

## **BACKGROUND - POLICY AND REGULATORY FRAMEWORK**

---

### **Planning Act**

The Planning Act governs land use planning in Ontario and establishes the means by which a municipality must implement land use planning decisions. Section 2 of the Planning Act requires that municipalities, when carrying out their responsibility under the Act, have regard for matters of provincial interest including: (a) the protection of ecological systems, including natural areas, features and functions; (e) the supply, efficient use and conservation of energy and water; (q) the promotion of development that is designed to be sustainable, to support public transit and to be oriented to pedestrians; ... and (s) the mitigation of greenhouse gas emissions and adaptation to a changing climate.

### **Provincial Planning Statement, 2024**

All decisions of Council in respect of the exercise of any authority that affects a planning matter shall be consistent with the Provincial Planning Statement (2024) (the "PPS (2024)"), and shall conform to provincial plans, including the Greenbelt Plan (2017), and others. It includes policies to reduce greenhouse gas emissions and prepare for the impacts of a changing climate, such as:

- incorporating climate change considerations in planning for and the development of infrastructure;
- promoting green infrastructure, low impact development, and active transportation, protect the environment and improve air quality; and
- plan for stormwater management, including maximize the extent and function of vegetative and pervious surfaces and promote low impact development.

### **Ontario Regulation 462/24: Additional Residential Units**

On November 20, 2024, O. Reg. 462/24 under the Planning Act regarding "ADDITIONAL RESIDENTIAL UNITS" (ARUs) came into effect.

The Province has indicated that the regulation "could facilitate the creation of additional residential units, such as basement suites and garden suites, by eliminating barriers. Removing these requirements could potentially reduce or eliminate the need for rezoning or minor variances, saving time and money and helping to build more homes."

The regulation applies to the creation of an ARU in buildings located on a lot that would result in a maximum of three residential units, including the ARU. The scenarios contemplated in the regulation are:

- addition of a second residential unit in the primary building (plus one garden suite or laneway suite);
- addition of a third residential unit in the primary building (no garden suite or laneway suite); or
- addition of a garden suite or laneway suite (primary building contains no more than two residential units).

The regulation includes provisions that are associated with Toronto's current requirements for garden suites and laneway suites, enabled through the EHON initiative, as they relate to growing space for trees:

- angular plane requirements do not apply in the creation of an ARU in the three scenarios.
- a minimum separation distance of 4 metres is required for the creation of an ARU in scenarios covered by the regulation where ARUs are not all in the same building.
- a permitted maximum lot coverage of 45% is applied to all buildings and structures on the lot, including both the primary building and ancillary buildings, for the creation of an ARU in the three scenarios.

## **City of Toronto Act**

The City's tree by-laws are enacted pursuant to Section 104 of the City of Toronto Act. It grants the City the authority to enact by-laws prohibiting or regulating the destruction or injuring of trees. The Act stipulates that tree by-laws do not apply where a condition is imposed on the approval of a site plan, a plan of subdivision or a consent for the injuring or destruction of trees.

Section 212(1) Paragraph 9 of the Act states "the City shall adopt and maintain policies with respect to the following matter: the manner in which the City will protect and enhance the tree canopy and natural vegetation in the City." This provision came into effect on March 1, 2019.

## **Official Plan**

The Official Plan envisions Toronto as a sustainable city, becoming "more resilient to climate change, demonstrated in our land use planning decisions, infrastructure investments, ... restored biodiversity". Policy 3.4.1 specifies that changes to the built environment will be "environmentally friendly, based on: b) sustaining, restoring and enhancing the health and integrity of the natural ecosystem; 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." Official Plan policy 3.1.16 also states that: "the preservation, long term growth and increase in the amount of healthy trees will be a priority for all development. Development proposals will

demonstrate how the protection, provision and maintenance of trees and their growing spaces above and below ground will be achieved."

Through Schedule 3 Application Requirements in the Official Plan, the City is authorized to require a Soil Volume Plan as part of a complete application for Zoning By-Law, Plan of Subdivision, Consent to Sever and Site Plan Control applications. For properties with existing trees, a "Tree Protection Plan" is also required to identify the location, species and size of trees, the extent of injury (where applicable) and to illustrate details of protection measures including the location of protective barriers.

On June 15, 2022, City Council adopted Official Plan [Amendment 583](#) which updated the environment and climate change policies, including policies to enhance the urban forest. New policies include: 3.4.1 a) protecting and improving the health of the natural ecosystem, by (xi) maintaining pervious area where possible, identifying opportunities to reduce impervious area through redevelopment, and prioritizing green infrastructure; d) preserving and enhancing the urban forest by: (i) providing suitable growing environments for trees, including adequate soil volumes; (ii) increasing tree canopy coverage, especially of long-lived native and large shade trees with an emphasis on increasing tree canopy, distribution, and diversity in areas of the city with lower tree canopy coverage; and (iii) regulating the injury and destruction of trees and protecting mature and native trees. OPA 583 is pending Ministerial approval and will come into effect upon Provincial approval.

### **City-wide Zoning By-law 569-2013**

Chapter 10 of the City-wide Zoning By-law applies to all lands, uses, buildings, and structures in the Residential Zone category. The Residential Zone category permits uses generally associated with the *Neighbourhoods* designation in the Official Plan. This zone category is comprised of the Residential (R) Zone, Residential Detached (RD) Zone, Residential Semi-Detached (RS) Zone, Residential Townhouse (RT) Zone, and the Residential Multiple (RM) Zone. Through the EHON initiative, permissions for laneway suites, garden suites and multiplexes (up to four units) have been expanded to all residential zones. Staff have been directed to report back in 2025 on possible city-wide permissions for buildings containing up to six dwelling units as-of-right. City Council recently adopted [By-law 47-2025](#), which permits buildings containing up to six dwelling units as-of-right in Ward 23.

Chapter 15 of the City-wide Zoning By-law applies to all lands, uses, buildings and structures in the Residential Apartment Zone category. The Residential Apartment Zone category permits uses generally associated with the *Apartment Neighbourhoods* designation in the Official Plan. This zone category is comprised of the Residential Apartment (RA) Zone and the Residential Apartment Commercial (RAC) Zone.

### **Zoning Regulations**

Current zoning regulations do not control below ground setbacks for small-scale residential buildings, such as detached houses with large below ground footprints (e.g. an iceberg home).

## **Building Setbacks**

A 2018 Ontario Municipal Board (OMB) decision on appeals of Zoning By-law 569-2013, removed the proposed regulation to apply building setbacks below ground in all zones. A building setback is defined by Zoning By-law 569-2013 as "a horizontal distance measured at a right angle from any lot line to the nearest part of the main wall of a building or structure".

Zoning regulations for laneway suites and garden suites were adopted by Council in 2018 and 2022. Minimum required setbacks for both laneway suites and garden suites apply above and below ground. In addition, the By-law permits enclosed spaces below porches to encroach into the required minimum front yard setback up to the extent of the porch, which is the equivalent to the lesser of 50% of the required minimum front yard setback or 2.5 metres, if they are no closer to a side lot line than the required side yard setback.

On lands under the jurisdiction of the Toronto and Region Conservation Authority (TRCA), City-wide Zoning By-law 569-2013 establishes required minimum building setbacks from a shoreline hazard limit or a stable top-of-bank on a lot, with some exceptions. It also sets out required minimum building separation distances from a shoreline hazard limit or a stable top-of-bank, with some exceptions.

## **Building Length and Depth**

The City-wide Zoning By-law also regulates building length and building depth above and below ground; however, these do not limit the number of levels or storeys below ground. The City-wide Zoning By-law defines building depth as "the horizontal distance between the front yard setback required on a lot and the portion of the building's rear main wall furthest from the required front yard setback, measured along a line that is perpendicular to the front yard setback line". Building length is defined as "the horizontal distance between the portion of the front main wall of a building on a lot closest to the front lot line, and the portion of the rear main wall of the building closest to the rear lot line, measured along the lot centreline". In a Residential Zone category, building length and building depth regulations apply to all main walls of a building above and below ground, excluding the footings for the building. The Residential Apartment Zone category does not include regulations associated with building length or depth.

## **Soft Landscaping**

The intent of the City-wide Zoning By-law's requirements regarding soft landscaping is to ensure provision of growing space for a healthy tree canopy and other vegetation. Trees and vegetation, and the associated growing space, provide aesthetic and health benefits, help absorb stormwater at the source, reduce the urban heat island effect, and support biodiversity by providing refuge, habitat and foraging areas for insects, birds and small animals.

Properties must comply with Zoning By-law requirements associated with landscaping and soft landscaping or seek an amendment or variance. Zoning By-law compliance is verified through the preliminary review of submitted plans to confirm zoning and applicable law compliance (Zoning Applicable Law Certificate), and as part of the

building permit application process. Since no permit application is required to alter landscaping and soft landscaping, many residents may be unaware that they must comply with zoning requirements when they install or modify landscaping on their property.

The City-wide Zoning By-law defines "landscaping" as "an area used for trees, plants, decorative stonework, retaining walls, walkways, or other landscape or architectural elements. Driveways and areas for loading, parking or storing of vehicles are not landscaping". Soft landscaping is defined as "landscaping excluding hard-surfaced areas such as decorative stonework, retaining walls, walkways, or other hard-surfaced landscape-architectural elements". Green roofs, artificial turf, and permeable paving are not included in the calculation of areas dedicated to landscaping or soft landscaping. In addition, the City-wide Zoning By-law regulations for soft landscaping do not require a minimum amount of soil depth or volume.

The City-wide Zoning By-law includes exceptions to Residential Zone and Residential Apartment Zone category landscaping and soft landscaping requirements. For example, the water surface of ancillary structures (e.g. swimming pools or fountains) used to hold water is considered soft landscaping. The Zoning By-law also allows for the area within a minimum building setback covered by any part of a building or structure that is permitted to encroach (e.g. a porch or deck) into the required minimum setback to be excluded from the calculation of landscaping and soft landscaping.

### **Soft Landscaping in Low Rise Residential Zones**

The City-wide Zoning By-law regulates landscaping in residential zones primarily through a minimum required percentage of landscaping in front and rear yards linked to the lot frontage. For example, for a lot with a frontage of 15 metres or greater, a minimum of 60 per cent of the front yard area must be landscaping. Of this, at least 75 per cent of the landscaping must be in the form of soft landscaping. For a lot with a frontage of 6.0 metres or greater, 50 per cent of the rear yard must be soft landscaping. Lots with greater lot frontages can typically accommodate greater amounts of soft landscaping than lots with smaller lot frontages. Landscaping and soft landscaping are only regulated in the side yards of corner lots, where 75% of the required landscaping must be soft landscaping.

### **Soft Landscaping for Apartment Buildings**

The method to calculate the amount of required soft landscaping for apartment buildings varies from other building types in Residential Zones and Residential Apartment Zones. The lot is required to be 50% landscaping, of which 50% must be soft landscaping. When located in the Residential Zone category, a lot with an apartment building must also include a 1.5-metre-wide strip of soft landscaping along any part of a lot line abutting another lot in the Residential Zone category. These requirements are intended to provide buffers between high density developments and adjacent properties.



## **Soft Landscaping for Laneway and Garden Suites**

Laneway suite regulations include specific requirements for soft landscaping. A minimum of either 60% or 85% of the area between all rear main walls of the principal building and front wall of the laneway suite must be soft landscaping, dependent on whether the lot frontage is greater than 6.0 metres. Where the lot frontage exceeds 6.0 metres, a pedestrian walkway with a maximum width of 1.5 metres is not included in the soft landscaping calculation. In addition, the area between the lane and the laneway suite, excluding a permitted driveway and a 1.5-metre-wide pedestrian walkway, is required to be at least 75% soft landscaping.

Garden suite regulations also include soft landscaping requirements. A minimum of either 25% or 50% of the area between all rear main walls of the principal building and the rear property line must be soft landscaping, dependent on whether the lot frontage is greater than 6.0 metres. These provisions are more flexible than those required for laneway suites. Garden suites are typically constructed on larger lots and present more opportunities to accommodate soft landscaping along the sides of a garden suite. This is not typically present in narrow lots adjacent to a public lane. These requirements add to the various ways the City-wide Zoning By-law considers soft landscaping for different types of low-rise residential building types.

## **Lot Coverage**

Lot coverage is used in some areas of the city (mainly Scarborough, North York, and Etobicoke) to regulate the area of the lot that is covered by buildings (i.e., the building footprint). It is intended to provide for a certain ratio of open space on a site and provide opportunities for landscaping, tree planting and ensure sufficient stormwater infiltration. Maximum lot coverage requirements may result in a building that is smaller than what other performance standards (i.e., setbacks, building depth) may permit as these regulations work together to control the built form of the building. While the open space that results from maximum lot coverage requirements could be used for soft landscaping, there is no requirement that all open space on-site be used for soft landscaping beyond the landscaping requirements described above.

## **Iceberg Homes**

"Iceberg home" is a colloquial term coined to describe a house that exhibits a larger below-grade footprint than its above-grade footprint. This includes houses which have more than one level of basement. The creation of the extensive below grade construction typically includes additional or reinforced concrete, which has a higher amount of embodied carbon than other materials used for housing construction. Iceberg homes are regulated by the same regulations as other detached houses.

## **Tree Protection By-laws**

Protecting and enhancing the urban canopy is critical to building climate resilience and improving quality of life in Toronto. There are various municipal by-laws that support these goals by protecting healthy and maintainable trees on streets and private property, and in ravines and parks. Toronto Municipal Code Chapter [813](#) Article III (Private Tree Protection) and Chapter 658 (Ravine and Natural Feature Protection)

covers infill housing and regulates the injury, destruction and removal of all trees located on private property with a trunk diameter measuring 30cm or greater at 1.4 metres above ground level.

The by-laws include compensation requirements for replacement trees when permits have been issued or appeals granted through Community Council, and when a party has undertaken tree removal or injury in contravention of a tree by-law.

The intent of the tree by-laws is to regulate tree injury and destruction while promoting maximum tree protection and retention, and to require compensation planting, while supporting appropriate forms of development.

## COMMENTS

---

Staff are proposing updates to Official Plan policies and the City-Wide Zoning By-law to support growing conditions for trees and maintaining the city's tree canopy as follows:

- Amendments to Official Plan policies for Neighbourhoods and Apartment Neighbourhoods; and
- Updates to the City-wide Zoning By-law respecting landscaping and set-back criteria.

In addition, staff have reviewed implementation of the City's Tree Protection By-laws to assess potential changes that may be required to the Municipal Code By-laws.

### Proposed Official Plan Amendments

Proposed updates to policies in Official Plan *Neighbourhoods* (4.1), and *Apartment Neighbourhoods* (4.2) address a range of scenarios impacting the tree canopy, including additional types of infill development and iceberg homes.

The proposed amendments to the Official Plan address criteria for development in general as well as infill development in *Neighbourhoods* and *Apartment Neighbourhoods*. They highlight the importance of the tree canopy contributing to the character of a neighbourhood and improving quality of life. They encourage flexibility in design to protect trees and growing space, and draw attention to the conditions needed to support tree growth. Attachment 1 provides the proposed policy updates incorporated into Chapter 4 of the Official Plan, which are also highlighted below.

### Official Plan 4.1 Neighbourhoods

Updates to policies in 4.1 *Neighbourhoods* include:

- Addition of "protection of the tree canopy" to policy to respect and reinforce the physical character of *Neighbourhoods* during development. (4.1.5);

- Addition of "protection of the tree canopy" as one of the criteria from Policy 4.1.5 to be met during development along major streets in *Neighbourhoods* (4.1.7);
- Addition of a condition to be met during infill development on properties that vary from the local pattern in terms of lot size, configuration and/or orientation that infill development will maximize contiguous soft landscaping within setbacks (4.1.9); and
- New policy stating that intensification and infill development in *Neighbourhoods* should employ design options to avoid injury or removal of trees, and to plant new trees on the subject property in conditions that support their growth to maturity. (4.1.14).

## **Official Plan 4.2 Apartment Neighbourhoods**

Updates to policies in 4.2 *Apartment Neighbourhoods* include:

- Updated policy to locate, mass and design new buildings to contribute to the quality of life in *Apartment Neighbourhoods* by avoiding tree removal and maximizing areas of soft landscaping that support growth of any newly planted trees on the subject property (4.2.2);
- Policy on how to improve existing site conditions during infill development on a site with existing apartment buildings updated to add preservation or replacement of trees and planting of new trees (4.2.3);
- Updated policy to specify tree planting as part of landscape improvements and to specify soft landscaping within setbacks during development of horizontal additions to existing apartment buildings (4.2.4); and
- Updated policy on a framework for development of larger sites to specify that shared open space include capacity and conditions to support tree growth. (4.2.6).

## **Proposed Zoning By-law Amendments**

The City-wide Zoning By-law seeks to limit the installation of hard surfaces and encourage natural landscaping and places that support the growing of vegetation. The proposed amendments to the City-wide Zoning By-law seek to reinforce and clarify the intent of soft landscaping, and address issues associated with iceberg homes.

To implement Official Plan policies encouraging green infrastructure and the growth of healthy trees, staff recommend the definition of "soft landscaping" in the Zoning By-law be updated to expressly indicate that it does not include artificial turf or permeable pavements. Staff also recommend that structures containing water, except for artificial ponds, be removed from the definition of soft landscaping in Residential Zones and Residential Apartment Zones and that consideration be given to the option to require a minimum percentage of soft landscape for the entire lot instead of per yard. The proposed updates to the City-wide Zoning By-law are shown in Attachment 2. The results of a jurisdictional scan of municipal regulation of soft landscaping are provided in Attachment 3 for context.

## **Artificial Turf**

Artificial turf is not defined in the City-wide Zoning By-law. In their interpretation of the Zoning By-Law, staff do not consider it to be soft landscaping and it is considered hardscape in the Toronto Green Standard. This is because, while its appearance resembles turf grass, it performs like a paved surface. It does not provide healthy soil or growing space for existing and future trees or other vegetation. It also does not allow for organic matter inputs, nutrient cycling, mycorrhizal associations, regulation of soil temperature, and habitat for soil insects. Site preparation to receive artificial turf is similar to that for hard landscaping, typically involving topsoil removal, compaction of the remaining parent soil, and installation of a drainage layer (e.g., crushed stone or gravel), also compacted, atop the remaining parent soil. Artificial turf also contributes to the urban heat island effect, since it can get very hot in the sun; its lack of or reduced permeability can lead to increased stormwater run-off; it may remove carbon-consuming plant material for its installation, and it produces plastic waste at the end of its life. Staff propose an update to the definition of soft landscaping in the City-wide Zoning By-law to confirm that artificial turf is not soft landscaping.

## **Permeable Pavement**

Permeable pavements are surfacing materials which have porous properties, allowing water to more easily percolate through them into the substrate. Typical types of permeable pavements include pervious concrete, porous asphalt and permeable interlocking precast concrete pavers. A crushed stone substrate base is typically installed beneath permeable pavements. Once water has travelled through the material and substrate, it flows into the ground, and the amount of permeability will be dependent on the soil type.

The City-wide Zoning By-law does not regulate the material of construction products. For the purposes of the By-law, permeable pavements are not considered soft landscaping as they do not allow for growing space for trees or other types of vegetation. Staff propose an update to the definition of soft landscaping in the City-wide Zoning By-law to confirm that permeable pavements are not soft landscaping.

## **Soil Depth**

The City-wide Zoning By-law does not require a certain percentage of soil depth as part of soft landscaping requirements. While the Toronto Green Standard for low rise development requires a growing medium soil depth of at least 800mm to facilitate the planting of large growing shade trees, it does not apply to development of less than ten units. More study is needed to confirm whether it would be necessary to require a minimum amount of soil depth for infill housing or iceberg homes in residential zones.

## **Structures Containing Water (including swimming pools, hot tubs, fountains)**

Pools and other water-retaining features can include those intended for recreation, such as a hot tub or swimming pool, or aesthetic purposes, such as a fountain. These features, while they may assist in short-term stormwater retention, do not contribute to

biodiversity objectives and in some circumstances may result in the need to injure existing trees and preclude the planting of new trees given conflicts with root zones. Staff propose an update to City-wide Zoning By-law regulations to confirm that the water surface of ancillary structures containing water, except for artificial ponds, is not to be considered soft landscaping. Such ancillary structures do not support the growing of trees and other vegetation. The exception to this is an artificial pond, which is typically designed to create a miniature ecosystem supporting different types of plant and/or animal life.

## **Iceberg Homes**

Low rise residential homes are sometimes designed with a marginally increased footprint below ground to accommodate more living or storage space. For example, the Zoning By-law permits an enclosed space below a front porch to encroach into the minimum required the front yard setback by the lesser of 2.5 metres or 50% of the required front yard setback. This permission generally equates to approximately up to 15% additional floor area of the main building below ground.

Staff are aware of four CoA applications for iceberg homes since March 2024; three were approved with conditions and one was refused and has been appealed. Two included one-level basements, and the other two included two-level basements. All required variances to building length and building depth. Of those applications, the average building depth that was sought was 30.73 metres, and the average building depth of the applications that were approved was 33.93 metres. Also of those applications, the average building length that was sought was 35.06 metres, and the average building length of the applications that were approved was 39.71 metres. Potential impacts of iceberg homes include those related to injuries to mature trees, limitations on new planting opportunities, soil permeability, drainage, groundwater and stormwater management, and embodied carbon.

Variance applications for iceberg homes have been considered by the CoA and have been the subject of Toronto Local Appeal Body (TLAB) appeals. Concerns have been raised within the surrounding communities regarding potential impacts, including to the tree canopy and to soil permeability, drainage, groundwater and stormwater management, injuries to mature trees, limitations on new planting opportunities, construction impacts on adjacent properties, and the amount of concrete required (embodied carbon). These impacts sometimes have the potential to affect adjacent properties and the broader geographic area. Common variances sought for known examples of iceberg homes include building length and building depth. Typical conditions applied to iceberg homes include:

- Requiring the proposal to be constructed substantially in accordance with the architectural plans submitted to the CoA, to the satisfaction of the Director, Community Planning.
- Requiring a complete application for a permit to injure or remove privately owned tree(s) under Municipal Code Chapter 813, Trees Article III, Private Tree Protection, to the satisfaction of the Supervisor, Urban Forestry, Tree Protection and Plan Review.

To address issues associated with iceberg homes, staff propose required minimum building setbacks for detached houses in all Residential Zones to apply above and below ground. This is in addition to the existing permission in the zoning by-law for enclosed spaces below porches to encroach into the required minimum front yard setback up to the extent of the porch. This would decrease the amount of embodied carbon associated with development below ground and has the potential to ensure the provision of more adequate soft landscaping to conform with the Official Plan. Requiring building setbacks above and below ground aligns with the requirements for laneway and garden suites. In addition, this will contribute to providing sufficient soil depths, enabling stormwater infiltration through an appropriate amount of soft landscaping. Relief can be sought through the CoA if a larger below ground space is desired, and the CoA can add conditions on the approval to address potential concerns with iceberg homes.

### **O. Reg. 462/24 (ARUs)**

The regulation includes several provisions that may have implications for Toronto's current requirements for garden suites and laneway suites, enabled through the EHON initiative, as they relate to growing space for trees:

- the non-inclusion of angular plane requirements for the creation of ARUs varies from existing provisions for garden suites and laneway suites, which currently require angular planes. Angular planes can assist with supporting the existing and future tree canopy by providing above grade space for trees.
- introducing a minimum separation distance of 4 metres may enable space where existing trees can be maintained and adds potential for growing new trees. However, a minimum separation distance of 7.5 metres is required for a garden suite or laneway suite that is taller than 4 metres in height.
- requiring a maximum lot coverage of 45% for all buildings and structures on a lot may impact areas where the existing maximum coverage in the zoning by-law is more restrictive. The most common lot coverage in Toronto is approximately 33%, so the increase could impact growing space for trees.

As a result of the new O. Reg. 462/24 (ARUs), in the third quarter of 2025 staff will bring forward City-wide Zoning By-law amendments for multiplexes, garden suites and laneway suites to ensure alignment with the new regulation and to provide clarity for implementation. Staff will also consider the impacts of O. Reg 462/24 and growing space for trees as part of the ongoing EHON monitoring work.

### **Implementation of Tree Protection By-laws**

Property owners are required to submit a permit application for removal or injury of a City-owned tree or tree of 30 cm or more in diameter. This application is required regardless of whether there is an associated planning application. However, as the Tree Protection By-law is not applicable law (meaning that it does not have to be finalized prior to issuing a building permit), the City's practice is to include conditions as part of Committee of Adjustment (CoA) applications. Urban Forestry staff provide comments to

the CoA and may object to an application, request deferral, confirm that Urban Forestry staff have no objections or that staff have no objections subject to certain conditions.

CoA application requirements were updated in 2023 to better address issues related to tree removal or injury. In this regard, application requirements include:

- a. a completed tree declaration form;
- b. up-to-date colour photos showing the entire front and rear yard of the site regardless of if there are trees, and up-to-date colour photos of all by-law protected trees located on the site and within 6m of the site (12m with Ravine and Natural Feature Protected Areas); and
- c. plans showing the location of all by-law protected trees and tree protection zones, with species and diameter of each by-law protected tree at breast height indicated.

Urban Forestry staff undertake a desktop review of CoA application materials and other tools (e.g., review of air photo mapping, permit records, and Urban Forestry's Work Management System) and will also conduct a site inspection if necessary. Urban Forestry staff do not solely rely on CoA submission materials in their review.

Given the volume and variability of CoA applications, it is not feasible to conduct enhanced screening of tree-related application materials at the time of application intake, nor to require the submission of an Arborist Report and Tree Protection Plan for all applications. Urban Forestry may recommend deferral of a CoA application if there is insufficient or incorrect information such that Urban Forestry cannot undertake its review and make recommendations to the CoA.

Urban Forestry is proposing no change to the tree-related CoA application requirements at this time, as the adjustments made in 2023 are sufficient. Urban Forestry will continue to monitor tree-related CoA application requirements and revisit them with City Planning, Legal Services and Toronto Building if there is a need.

### **Expansion of Urban Forestry Committee of Adjustment Conditions to Require New Trees and Protect Growing Space**

Urban Forestry staff currently either object to a CoA application, request deferral, confirm that they have no objections or that they have no objections subject to certain conditions. One such condition, which requires the planting of a new City tree for certain CoA applications, originates from a 2006 City Council decision that:

*"In order to achieve one tree in front of every dwelling, the Committee of Adjustment be requested to impose a condition requiring that; for consent applications involving the creation of one or more new lots and for minor variance applications involving a proposal to construct a new dwelling unit ..., where no street tree exists, the owner shall provide payment in an amount to cover the cost of planting a street tree abutting the site..."*

This condition is being reviewed in consideration with the four tests under the Planning Act that may be imposed on variance or consent applications that result in the loss of

growing space for trees, including but not necessarily limited to: expansion of or addition to an existing dwelling, construction of a new secondary suite, conversion of soft landscaping to hard landscaping (e.g., driveway widening), and outdoor amenity spaces (e.g., pools and sport courts).

Subject to final recommended policy and regulatory changes in the Official Plan and City-wide Zoning By-law, City staff, including Urban Forestry and other relevant divisions, will review the appropriateness of using conditions imposed on a variance or consent approval where growing space for trees may be lost or reduced at the lot level to mitigate the impact of that loss of reduction, where appropriate. If approved, the amendments to the Official Plan policies proposed in this report will help support imposing these conditions.

## **Other Strategies to Protect and Enhance Tree Canopy and Growing Space**

The City currently utilizes a suite of policies, by-laws and Council direction which are administered in the interest of tree preservation and the enhancement of the urban forest. In addition to Official Plan policies and zoning and tree by-laws outlined in this report, these are:

- Municipal Code Chapters 629 – Property Standards, 632 – Property, Vacant or Hazardous, and 918 – Parking on Residential Front Yards and Boulevards
- Tree Protection Policy and Specifications for Construction Near Trees
- The Toronto Green Standard
- Council's reaffirmation of Toronto's 40 per cent tree canopy cover goal by 2050
- Council's direction regarding tree preservation related to EHON building types; laneway suites, garden suites, multiplex's and major streets
- Strategic Forest Management Plan and Toronto's Tree Equity Approach
- Ravine Strategy

Section 212(1) Paragraph 9 of the City of Toronto Act states "the City shall adopt and maintain policies with respect to the following matter: the manner in which the City will protect and enhance the tree canopy and natural vegetation in the City." This provision came into effect on March 1, 2019. Staff are considering whether a policy or further municipal code amendment may be appropriate to implement this legislative direction. Amendments to existing policies and by-laws, or a new policy or municipal by-law may be recommended to strengthen and supplement the existing framework. These are outlined below.

## **Tree Canopy Incentives**

The City of Toronto currently incentivizes tree planting through a variety of initiatives, such as the Backyard Tree Planting program, the Community Canopy Program, as well as with free tree giveaways across the city. Urban Forestry is considering the development of an incentive program specifically related to tree and growing space protection as a supplement to existing tree protection by-laws. Recent peer-reviewed research suggests that a combination of both regulatory mechanisms to protect trees as well as incentive opportunities to promote planting and stewardship may provide additional effective solutions to maximize tree protection and canopy enhancement.



This review will be considered along with potential stormwater management incentives under consideration through EX20.12 Reducing Stormwater Runoff and Mitigating Basement Flooding.

### **Enhancing the Existing Tree By-laws**

In 2015, the City's tree by-laws, Municipal Code 813 - Trees and Municipal Code 658 - Ravine and Natural Feature Protection, were amended to improve customer service, improve response times and enhance enforcement and transparency. In 2022, City Council delegated the authority to make final decisions on tree permit appeals to Community Councils.

Since 2015, the City of Toronto declared a climate emergency (2019) and reaffirmed Toronto's canopy cover target of 40 per cent by 2050 to align with the City's TransformTO Net Zero Strategy (2021). Updating the City's tree by-laws is important to addressing the complex and interrelated challenges of climate change, urban development and environmental management.

Urban Forestry staff are currently reviewing the City's tree by-laws for potential subject matter amendments. Public engagement and further reporting on the tree by-law review are anticipated in 2025.

### **EHON Tree Impact Monitoring Program**

Urban Forestry staff continue to monitor the impacts to tree canopy resulting from infill development approved through EHON policies and zoning by-laws. The laneway suite, garden suite and a subset of multiplex data relates to tree permit applications received and permits issued under the tree by-laws and is described below.

Between November 1, 2019, and December 31, 2024, Urban Forestry had been circulated on 1,305 laneway suite, garden suite and multiplex building permit application notices, and of those, 189 included the submission of a tree permit application requesting tree injury and/or tree removal. A total of 100 tree permit applications have resulted in tree permits being issued, which has authorized a total of 92 tree injuries and 56 tree removals. The remaining 89 tree permit applications have not resulted in a tree removal permit, for reasons including: application still under review, application dormant, application withdrawal, application revision, or permit refusal.

When reviewing the permitted tree impacts alone, 7.6 per cent of building permit application notices for laneway suites, garden suites or a subset of multiplexes resulted in a permit for tree impacts. There are limitations to the monitoring program, as it does not account for outcomes unrelated to tree permitting such as impacts to unregulated trees, trees subject to a tree by-law contravention during construction or the loss of potentially viable planting space because of construction. Despite this, the monitoring of EHON-related tree permit outcomes is considered a valuable proxy for tree canopy and growing space impact.

While monitoring data suggests there has been a minor impact on by-law regulated trees because of the EHON initiative, there has been a slight upward trend in both the number of tree permit applications received in 2024 as well as the number of trees permitted for removal compared to previous years. In 2024, Urban Forestry received 60 permit applications related to EHON construction, compared to 46 in 2023, and 41 in 2022. The number of permitted tree removals in 2024 was 26, compared to 14 in 2023, and 2 in 2022.

There is some flexibility associated with the construction of laneway suites and garden suites with respect to tree-friendly designs and construction processes. Urban Forestry has seen positive outcomes related to the construction of EHON building types, with construction occurring alongside the preservation and protection of existing healthy, mature trees. Specific EHON tree protection Official Plan policies and Council direction can prompt applicants and their design professionals to submit supportable, tree-friendly designs or to revise plans accordingly to accommodate a healthy, mature tree as part of construction of an EHON build.

As of December 31, 2024, Urban Forestry denied a total of four tree permit applications that were submitted to accommodate an EHON build, which together proposed the removal of five healthy trees. One of these tree permit applications was appealed to its respective district Community Council, where the decision to refuse the removal of the tree was upheld. One tree permit application was submitted and subsequently withdrawn.

As of December 31, 2024, a total of 83 tree permit applications associated with EHON construction were listed as 'under review'. When Urban Forestry requests a healthy tree(s) be preserved instead of removed or critically injured, applicants may need to reassess their proposal to address these concerns. During this period, an applicant may be aware of Urban Forestry's position to not support the proposed impact to the tree(s), though a formal tree permit denial has not yet occurred. In these circumstances, Urban Forestry strives to work with applicants to preserve trees while supporting infill housing, and applicants are advised that a tree permit application can be revised to propose a tolerable amount of tree injury, or tree impacts can be avoided altogether. Applicants do not always follow up with new plans, and these applications can become dormant. Building permit applications that are processed prior to Urban Forestry's review may be affected by these circumstances, and/or applicants may cease to pursue a building permit in these instances where the proposal is not supported by Urban Forestry.

In considering the extent to which the need for permits from Urban Forestry may have prevented building permit applications from moving forward, staff determined that of the 83 EHON-related tree permit applications listed as 'under review' by Urban Forestry as of December 31, 2024, 36 (43%) did not have an associated issued building permit. Of these, Urban Forestry has indicated non-support of proposed tree impacts to 8 tree permit applications and has advised that revisions to these proposals may be required to accommodate tree preservation.

## Upcoming Reports

The EHON Multiplex Monitoring and Garden Suites Monitoring Programs are ongoing, with final reports expected at Planning and Housing Committee in June and July, respectively. The monitoring reports will consider the implementation and effectiveness of the new EHON permissions and recommend revisions to improve implementation and facilitation of EHON developments. Urban Forestry will be reporting on additional monitoring results regarding impacts to the tree canopy. Recommendations will include: City-wide Zoning By-law amendments to address issues such as interpretation and technical matters; improvements to clarity and consistency; ensuring alignment with the new provincial regulation for additional residential units (ARUs); and process improvements such as enhanced tracking of applications and interdivisional coordination. The monitoring reports are not planning to recommend amendments to the amount of landscaped open space required on a lot.

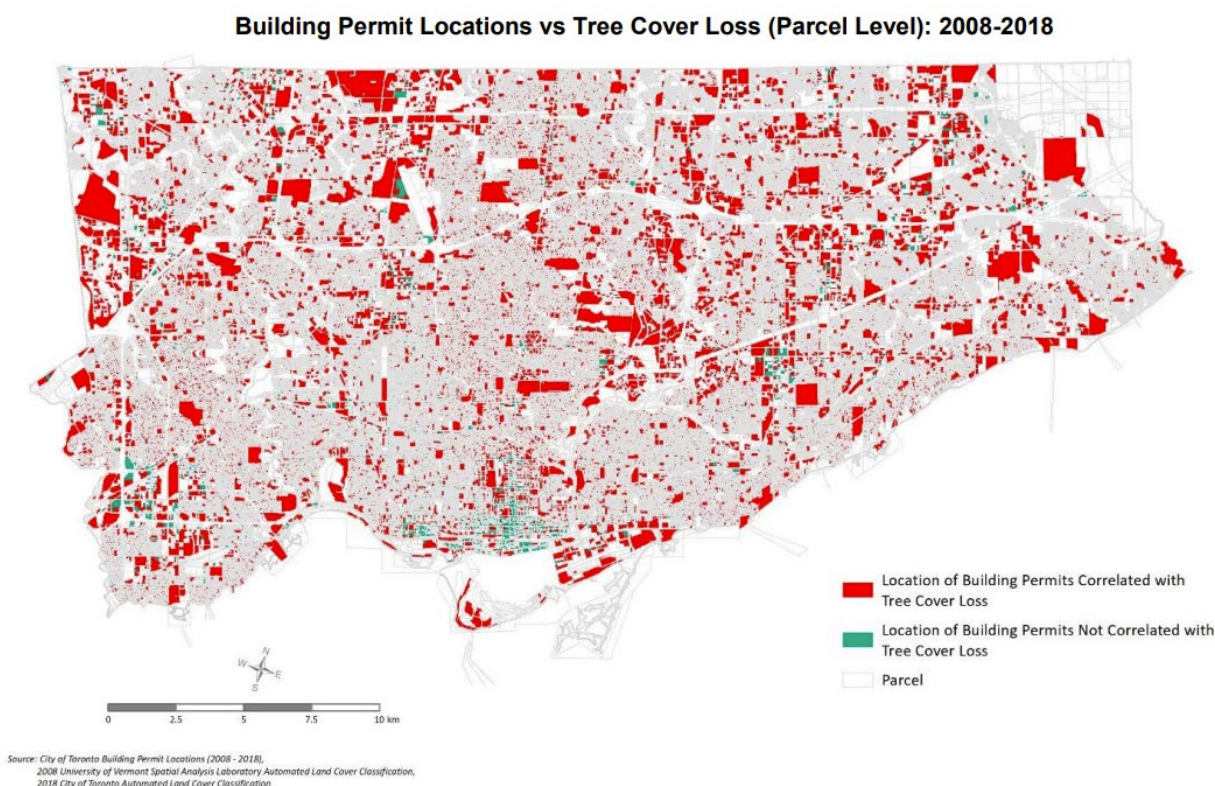
## Impact of Other Low-rise As-of-Right Development on Tree Canopy

Urban Forestry does not track tree permit outcomes to the specific level of low-rise as-of-right development. For comparison to non-EHON related tree removals, Urban Forestry reported on [E14.12](#) at the May 28, 2024 Infrastructure and Environment Committee meeting that a total of 24,207 trees were granted tree removal permits during a 20-month period. The total required compensation associated with these permits were 38,199 in replacement plantings. EHON-related tree removals therefore represent a very small percentage (<1%) of all permitted tree removals, including removals for other low-rise as-of-right development.

There is limited information about low rise development impacts on the City's tree canopy as compared to other types of development. Some information and data gathered as part of the City's 2018 Tree Canopy Study provide some general insights into low rise residential development impacts on tree canopy (more details about the study are provided in Attachment 4). This study indicated that the most land area converted from pervious to impervious land cover was in low rise residential neighbourhoods, with a corresponding reduction in tree canopy in low rise residential lands from approximately 35 per cent in 2008 to 31 per cent in 2018. Although the greatest amount of possible pervious planting area was found in low rise residential neighbourhoods, they experienced the greatest increase in impervious land cover.

Data from the 2018 Tree Canopy Study showed that 85% of parcels with building permits were correlated with parcels showing tree cover loss, as illustrated in the graphic below. While other factors, such as severe weather and/or pests and disease, contribute to tree cover loss, this information suggests that low-rise land uses undergoing development experience a corresponding reduction in tree canopy.

**Figure 1: Building Permit Locations versus Tree Cover Loss (Parcel Level): 2008-2018**



The Tree Canopy Study determined Toronto's annual tree mortality rate during the 2008-2018 study period to be 3.3 per cent overall. Higher mortality rates were observed in higher-density residential and industrial land use areas when compared to mortality rates in parks and open space. In single-family residential land use areas, mortality rates were comparable to the average, though this is the most extensive land use.

## **PUBLIC ENGAGEMENT**

---

### **Consultation on Infill Housing Development and Growing Space for Trees**

Three community consultation sessions were held on the topic of protecting and enhancing the tree canopy while supporting infill housing development: one in-person session at Etobicoke Civic Centre, on Tuesday September 24, 2024, and two virtual sessions, on Wednesday September 25, 2024, and Friday September 27, 2024. The in-person session was attended by about nine participants, and the two virtual sessions were attended by 36 and 26 participants, respectively.

Staff presented information about the City's existing mechanisms for protecting and enhancing the tree canopy during development of infill housing, as well as proposals for updating Official Plan policies and the City-wide Zoning By-law 569-2013, and answered questions and recorded comments on these topics.

Following these sessions, staff solicited further input in December 2024 using an online survey and e-mails sent to stakeholder groups and through Councillors' mailing lists, with responses requested by January 24, 2025. Communications included the proposals for updating Official Plan policies and the City-wide Zoning By-law 569-2013. Participants were invited to provide general input regarding how the City can and does protect and enhance growing space for trees during infill development, as well as specific feedback on the proposals.

A list of stakeholder groups that were informed about the consultation and survey is provided in Attachment 5. The survey and e-mails produced a total of 31 responses, which included 6 responses that were from stakeholder groups, while the other responses were from individuals.

A consistent theme in the input from all parts of the consultation was that, while there was support for policies to protect the tree canopy and growing space during all development, many participants are also concerned about lack of compliance with and enforcement of existing policies, whether these are in the Official Plan, Zoning By-law, or tree by-laws.

A different perspective that was presented by a stakeholder group was that tree protection and planting in *Neighbourhoods* should be more focused on lots with single family homes, rather than infill development. The concern is that if the City's tree protection and planting requirements relating to infill development and intensification are too demanding, this kind of development would be limited to the point of encouraging more greenfield development and sprawl, which would result in the loss of even more trees, as well as other environmental impacts. This input suggested more restrictions on driveways, parking pads, and tree removals for detached rebuilds, and focusing tree planting efforts on large lot frontages where there is currently sparse tree canopy.

A more detailed description of comments received on tree protection and infill housing development is provided in Attachment 6.

### **Comments on Official Plan Updates**

Input received on the proposed Official Plan updates included comments that were both general and specific in nature. Some adjustments were made to the proposed updates to address the comments received during the consultation.

In general, many stakeholders that provided input were in support of strengthening policies to protect and enhance the City's tree canopy, not only during infill development, but during all development in *Neighbourhoods* and *Apartment Neighbourhoods*. Among this group, many stated that they support the proposed updates as presented, and some called for stronger, clearer wording in the policies to provide less leeway for avoiding the protection of trees and growing space during intensification and infill development.

Several participants pointed to the flexibility offered by the EHON Official Plan Amendments as a good way to support both tree and growing space protection and infill housing development. They encouraged the use of mechanisms that enable

concessions on design aspects such as location, setbacks, height and massing in order to protect trees and growing space.

### **Comments on City-wide Zoning By-Law Updates**

Consultation attendees and survey respondents were asked to provide input on the proposed by-law updates (on structures containing water, artificial turf, and permeable pavements), on whether soft landscaping should be regulated across an entire lot, and whether there are better ways to regulate landscaping and soft landscaping on Residential Zone and Residential Apartment Zone properties.

As part of the input received, there was overwhelming support for amendments to confirm that artificial turf and swimming pools not to be considered as soft landscaping in the City-wide Zoning By-law. Most people supported permeable pavements not being considered as soft landscaping. Certain comments suggested that permeable materials should be considered as soft landscaping but did not suggest how permeable materials would be differentiated from impermeable materials during on-site inspection. It was suggested that consideration of whether a landscaping element was soft or hard landscaping should be based on its absorption rate or permeability. A limited number of comments suggested considering green roofs as soft landscaping. Many participants noted that enhancing definitions in the City-wide Zoning By-law would help achieve the proposed Official Plan objectives regarding the quality of landscaping and soft landscaping.

### **Comments on City's Tree By-Laws**

The public provided input on the City's tree by-laws and how they regulate tree injury and removal during infill development. Input was also received on the City's specific and restrictive approach to tree protection for EHON development types (e.g. to deny a tree permit to remove healthy trees if it is in conflict with a secondary suite).

Feedback received was generally supportive of the City's tree by-laws, though some of the responses indicated that the by-laws were perceived as ineffective in saving mature trees. There were numerous recommendations for increasing by-law compliance inspections and fines for illegal tree removal. Some respondents indicated that they would like to see stronger protections in place for trees, such as lowering the threshold of protection from 30cm to 15cm or 20cm for trees on private land, which is the threshold in other cities, and increasing the size of minimum tree protection zones. Some comments recommended a rebate for tree protection and planting, as well as an incentive for maintaining rainwater on site.

Comments from the public were largely supportive of the City's approach to tree protection for EHON construction. Some respondents indicated that permits should be denied to remove healthy trees in general, and that EHON dwellings should be redesigned to accommodate trees or otherwise not be constructed. Suggestions included allowing for flexibility in the by-law that would not reduce floor space for EHON housing, so that height could be increased in the interest of tree preservation.

## **Comments on Committee of Adjustment Process and Urban Forestry Application Requirements**

Through the online survey, the public provided feedback on application materials submitted with a Minor Variance and Consent application that were helpful and those that the public would like to see collected and shared in advance of the CoA hearing.

The public identified that it would be helpful if there were criteria for the types of applications that required Urban Forestry materials to be submitted with Minor Variance and Consent applications. For example, removing Urban Forestry application requirements for an underground garage renovation.

Additional information the public noted could be shared in advance of the CoA hearing included a certified arborist report for all applications, more details on what trees may be impacted by the development, their diameter and the proposed project footprint as well as what new tree types and other plantings may be proposed. Comments also advised publishing fines for removing trees in Committee decisions and having Urban Forestry provide an internal review of the site conditions to the CoA.

## **Consultation on Iceberg Homes**

A stakeholder engagement session was conducted with design professionals and architectural firms that design iceberg homes to gain perspectives on designs and how potential impacts are mitigated. Major topics discussed included typical characteristics and variances or amendments to zoning by-laws, special design considerations, how to mitigate impacts of stormwater and groundwater, and trees and landscaping. A more detailed description of input received on iceberg homes is provided in Attachment 7.

## **Next Steps**

The proposed Official Plan and City-wide Zoning By-law updates presented in this report (Attachments 1 and 2) will be used for the basis of public consultation. A combination of open house/public meetings will occur virtually, along with a facilitated stakeholder workshop and a meeting with the development industry. Following consultation, staff will report to Planning and Housing Committee on the outcomes of the consultation, and present recommended Official Plan and City-wide Zoning By-law Amendments for consideration by Q4 2025.

## **CONTACT**

---

Liora Zion Burton, Planner, Strategic Initiatives, Policy & Analysis, City Planning, 416-392-7864, [liora.zionburton@toronto.ca](mailto:liora.zionburton@toronto.ca)

Trevor Swann, Planner, Policy & Research (Zoning), City Planning, 416-338-7238, [trevor.swann@toronto.ca](mailto:trevor.swann@toronto.ca)

Nicholas Trevisan, Manager, Tree Protection Strategic Projects, Environment, Climate and Forestry, 416-392-0724, [nicholas.trevisan@toronto.ca](mailto:nicholas.trevisan@toronto.ca)

## **SIGNATURE**

---

Jason Thorne, MCIP and RPP  
Chief Planner and Executive Director,  
City Planning

James Nowlan  
Executive Director  
Environment, Climate and Forestry

## **ATTACHMENTS**

---

Attachment 1: Proposed Official Plan Policy Updates Incorporated with the In-Force Official Plan Showing Differences (separate attachment)

Attachment 2: Proposed Revisions to the City-wide Zoning By-Law 569-2013 (separate attachment)

Attachment 3: Jurisdictional Scan of Municipal Regulations for Soft Landscaping (separate attachment)

Attachment 4: Information about Toronto's 2018 Tree Canopy Study

Attachment 5: Notification List of Groups for Stakeholder Consultations

Attachment 6: Detailed Input from Community Consultation, Survey and E-mailed Comments

Attachment 7: Detailed Input from Stakeholder Consultations on Iceberg Homes

Attachment 8: Detailed Decision History of Protecting and Enhancing the Tree Canopy While Supporting Infill Housing and Addressing Concerns with Iceberg Homes



#### **Attachment 4: 2018 Tree Canopy Study Findings**

According to the City's 2018 Tree Canopy Study, Toronto's tree population increased from 10.2 million to 11.5 million trees, and city-wide canopy cover increased from 26.6-28 per cent to 28-31 per cent over the last ten years. The Study consultants used automated continuous land cover data together with other spatial data to examine possible correlations with positive and negative tree canopy cover change. A preliminary analysis was undertaken with existing data, including building permits, development applications, emerald ash borer tree removals and ice storm service calls. The analysis showed that urban intensification, emerald ash borer and ice storm damage may explain negative tree canopy cover change in associated areas over the ten-year study period.

The Tree Canopy Study also indicated that the most land area converted from pervious to impervious land cover was in low rise residential neighbourhoods. This is of concern because the analysis also showed that the greatest amount of possible pervious planting area was similarly found on low rise residential neighbourhoods (approximately 5,292 ha). Using the automated land cover classification analysis, tree canopy in low rise residential lands decreased from approximately 35 per cent in 2008 to 31 per cent in 2018. These residential lands also experienced the greatest increase in impervious land cover, which is defined as any hard surface other than buildings and roads (e.g., driveways, patios).

The conversion of pervious surfaces or "soft" surfaces, capable of supporting tree growth, to impervious or "hard" surfaces that do not, is a barrier to achieving the City's 40 per cent canopy target by 2050. Broadly, the conversion of lands from pervious cover to impervious cover has potential negative implications for stormwater management, water quality, loss of healthy soils, biodiversity, urban heat island effect, and the reduction of growing space for potential tree planting. If adjacent to existing trees, loss of soft landscaping can cause decline and mortality due to compaction; root injury; or the alteration to, or loss of, usable soil that supports tree growth.

## Attachment 5: Stakeholder Consultation Notification

The following stakeholder groups were sent notification of the community consultations in September 2024 on proposed changes to the Official Plan and Zoning By-law to protect growing space for trees and support infill housing development:

More Neighbours Toronto	Building Industry and Land Development Association (BILD)	Federation of North Toronto Residents' Associations (FoNTRA)
Environmental Defence	Residential Construction Council of Ontario (RESCON)	Confederation of Resident and Ratepayer Associations (CORRA)
The Neighbourhood Organization (TNO)	Long Branch Neighbourhood Association	South Eglinton Ratepayers And Residents Association (Serra)
Right to Housing Toronto	Harbord Village Residents' Association	South Forest Hill Resident Association
Maytree Foundation	Harbourfront Community Association	South Hill District Homeowners' Association
Housing Matters	Harbourview Estates Residents Association	South Pape Area Residents
Centre for Independent Living in Toronto	Harmony Housing Co-Operative	St Andrews Ratepayers Association
Co-operative Housing Federation of Toronto	Harvard-Triller-Grafton-Callender Residents Assoc.	St Lawrence Neighbourhood Association
Tenants for Social Housing	Heathwood Ratepayers' Association	St. Andrew's Ratepayers Association
Agincourt Village Community Association	Heathwood Ratepayers, President	St. Lawrence Neighbourhood Association
Albion Neighbourhood Services	Henry Farm Community Interest Association	St. Stephen's Community House
Alexandra Park Community Association	High Park Residents' Association (HPRA)	Summerhill Residents' Association

More Neighbours Toronto	Building Industry and Land Development Association (BILD)	Federation of North Toronto Residents' Associations (FoNTRA)
Annex Residents' Association	High Park Tenants' Association (HPTA)	Sunnylea-Kingsway Community Association - SKCA
Applegrove Community Complex	Highland Creek Community Association	Sunnyside Community Association
Avenue Road–Eglinton Community Association	Hillcrest Residents Association, President	Sunnyside Residents' Association
Avenue-Bay Cottingham (ABC) Residents' Association	Houselink And Mainstay Community Housing	Swansea Area Ratepayer's Association
Balmy Beach Neighbourhood Association	Hugh Garner Housing Co-Op	Teddington Park Residents Association (TPRA)
Bathurst Finch Network	Humber Bay Shores Condominium Association	The Kew Beach Neighbourhood Association
Bathurst Quay Neighbourhood Association	Humber Bay Shores Residents Association	The Pocket
Bathurst Quay Neighbourhood Association	Humber Summit Ratepayers Association	The Republic Residents Association
Bay Cloverhill Community Association	Humber Valley Village Residents' Association	The Roots Of 7 Oaks
Bayview Cumber Neighbourhood Association	Humberlea Community Group	Thistletown Historical Society
Bayview Manor Ratepayers Association	Humewood Neighbourhood Ratepayers Association	Thompson Orchard Community Association
Bayview Sheppard Neighbourhood Alliance	Huron-Sussex Residents' Organization	Thornccliffe Park Tenants' Association

More Neighbours Toronto	Building Industry and Land Development Association (BILD)	Federation of North Toronto Residents' Associations (FoNTRA)
Bayview Village Association	Islington Ratepayers and Residents Association	Thorncrest Village Residents' Association
Bayview Woods Association	Junction Residents' Association	Todmorden Neighbourhood Association
Beach Hill Neighbourhood Association	Junction Triangle Community Action Network	Topham Park Community Association
Beach Metro Community News	Kensington Residents Association	Topham Park Homeowners Association
Beach Triangle Residents' Association	Kingsway Park Ratepayers' Inc	Toronto Entertainment District Residents Association (TEDRA)
Beaconsfield Village Residents Association	Korean Senior Citizens Society Of Toronto	Toronto Womens' Housing Co-Op
Bedford Park Residents' Organization	Lakeshore Ratepayers' & Residents' Association	Trefann Court Residents' Association
Bedford-Wanless Ratepayers' Association	Lawrence Park Ratepayers' Association	Trinity Bellwoods Community Association
Bennington Heights Residents Association	Leaside Residents Association	Upper Avenue Community Association
Bloor West Village Residents' Association	Liberty Village Residents Association	Upper Jarvis Neighbourhood Association
Bloor-By-The-Park, Chairman	Long Branch Residents Association	Valleyanna Residents Association
Bloordale Community Improvement Association	Lytton Park Residents Organization	Valleyfield Ratepayers Association
Bloor-East Neighbourhood Association	Mainstay Housing	Victoria Village Community Association

More Neighbours Toronto	Building Industry and Land Development Association (BILD)	Federation of North Toronto Residents' Associations (FoNTRA)
Brch Cliff Village Community Residents Association	Manse Valley Community Association	Warren Park Ratepayers Association
Brian Village Association	Markland Wood Homeowners Association	Wellington Place Neighbourhood Association
Brockton Triangle Neighbours	Maryvale Community Association	Wenderly Park Community Association
Buttonwood Hill Residents Association (BHRA)	McGill-Granby Village Residents' Association	West Bend Community Association
Cabbagetown Residents' Association	Midland Park Community Association	West Lansing Homeowners Association
Castle Hill Neighbourhood Association	Midland Park Residents Association	West Rouge Community Association
Cathedral Court Co-Op Homes Corp	Mimico Lakeshore Community Network	West Toronto Community Legal Services
Cd Farquharson Community Association	Mimico Lakeshore Network	West Toronto Junction Historical Society
Centennial Community and Recreation Association	Mimico Residents' Association	West Willowdale N.E.Neighbourhood Association
Central Neighbourhood House	Moore Park Residents' Association	West Willowdale Neighbourhood Association
Charles Area Neighbourhood Alliance	Moss Park Residents Association	Weston Village Residents' Association
Christie Pits Residents' Association	Mount Dennis Community Association	Weston Village Residents Association (Wvra)

More Neighbours Toronto	Building Industry and Land Development Association (BILD)	Federation of North Toronto Residents' Associations (FoNTRA)
Church Wellesley Neighbourhood Association	New Toronto Lakeshore Village Residents	Willowdale Central Ratepayers Association
Cliffcrest Scarborough Village SW Residents	New Toronto Ratepayers Association	Winchester Park Residents' Association
Concerned Citizens of Quarry Lands Development	Newtonbrook West Residents Association	Woodbine Gardens Community Association (Wgca)
Confederation of Resident and Ratepayer Associations in Toronto	North Bendale Community Association	Woodbine Gardens Homeowners Association
Corktown Residents and Business Association	North Etobicoke Tenants Association	Woodbine Heights Association
Cornelius Parkway Ratepayers' Association	North Rosedale Ratepayers' Association	Woodbine Village Residents Association
Cottingham Square Community Association	Northcliffe Village Residents' Association	Wychwood Barns Community Association
Danforth East Community Association	Oak Street Housing Co-Op	Yonge Corridor Condominium Association
Danforth Residents Association	Oakvale Avenue Residents Association	York Mills Heights Residents Association, President
Davenport Neighbourhood Association	Old Orchard Grove Ratepayers Association	York Mills Neighbours Association
Deer Park Residents Group	Oriole Park Residents' Association	York Mills Valley Association
Dentonia Park Co-Operative Homes Inc	Ossington Community Association	York Quay Neighbourhood Association

More Neighbours Toronto	Building Industry and Land Development Association (BILD)	Federation of North Toronto Residents' Associations (FoNTRA)
Don Mills Residents Assoc	Palmerston Area Residents Association	Yorkdale West Comm Ratepayers Assoc
Dorset Park Neighbourhood Association	Parkdale Community Health Centre	Kensington Market Community Land Trust
Dovercourt Park Community Association	Parkdale Community Information Centre	Regal Heights Residents' Association
Downsview Lands Community Association	Parkdale Residents Association	Republic Residents Association
Downsview Residents Association	Parkview Hills Community Association	Richmond Gardens Ratepayers and Residents Association
Dufferin Grove Residents' Association	Playter Area Residents Association	Richmond Park Community Association
Dufferin-Eglinton Community Group	Pleasant View Community Association	Ridgegate Ratepayers Association
East Waterfront Community Association	Pocket Community Association	Rockcliffe Smythe Community Association
East York Tenants' Alliance	Primrose Housing Co-Op, Co-Ordinator	Roncesvalles-Macdonell Residents' Association
Edward's Gardens Neighbourhood Association	Quantum Owners And Residents Associaton (Quora)	Rosedale-Moore Park Association
Eglinton Park Residents' Association	Ralph Thornton Community Centre	Royal York Gardens Tenants Association
Faywood And Vicinity Ratepayers Association	Rathnelly Area Rate Payers Association	Rustic Maple Leaf Homeowners Group
Federation Of South Residents Associations	Glen Agar Residents' Association (GARA)	Scarborough Historical Society And Archives

More Neighbours Toronto	Building Industry and Land Development Association (BILD)	Federation of North Toronto Residents' Associations (FoNTRA)
Fieldstone Co-Operative Homes	Glen Andrew Community Association	Scarborough Rosewood Community Association
Finch North Homeowners' Association, President	Glenorchy Residents Association	Seaton Village Residents' Association
For Ward 9 Community Development Co-Operative	Gooderham & Worts Neighbourhood Association	Silview Community Association
Forest Hill Homeowners Association	Governors Bridge Ratepayers Association	Sos Preservation Group
Foxwell Ratepayers' & Neighbourhood Association	Governor's Bridge Ratepayers Association	South Armour Heights Residents Association
Friends of Kensington Market	Grange Community Association	South Armour Heights Residents' Association
Friends Of Silver Creek	Greater Beach Neighbourhood Association	North Corso Residents Association
Garden District Residents' Association	Greater Yorkville Residents' Association	South Corso Italia Neighbourhood Association (SoCoRes)
Garment District Neighbourhood Association (GDNA)	Greenhills Community Association	South Eatonville Residents Association
	Guildwood Village Community Association	South Eglinton Davisville Residents Association

The survey in December 2024 was also sent to the Ontario Association of Landscape Architects and almost all of the above organizations (corrections were made to the original list due to bouncebacks etc). It was also sent to the Mayor and Councillors' offices for distribution with newsletters.



## **Attachment 6: Detailed Input from Community Consultation, Survey and E-mailed Comments**

### **Official Plan Policies:**

The following provides details about the input received on each of the proposed updates to Official Plan policies, and describes changes made in response, where applicable:

Policy 4.1.5 - Addition of "conservation of the tree canopy": Comments were generally supportive of this proposal, though there was some concern that Policy 4.1.5 in general is not enforced enough.

Policy 4.1.9 - Addition of "maximize contiguous soft landscaping within setbacks that is supportive of maintaining and expanding the urban tree canopy": Comments were generally supportive though some wanted the wording to be stronger and more specific. Language that is very specific is generally more appropriate for design guidelines than the Official Plan.

New Policy 4.1.14: Several comments wanted the wording to be phrased as a requirement rather than encouragement. While the proposed wording was strengthened, making this a requirement was considered to be too restrictive that could deter development.

Policy 4.2.2 - Addition of two requirements for locating, massing and designing new buildings to avoid removal of trees protected under the Municipal Code, and to maximize areas of soft landscaping on the subject property that support growth of any newly planted trees to maturity. This was originally proposed as a single requirement phrased as avoiding tree removal *or* maximizing areas of soft landscaping. Several comments wanted this to be stronger and not phrased as one option or the other. The updated proposal made this into two separate requirements.

Policy 4.2.3 - Addition of "trees" and "planting trees" to improvement of quality of landscaped open space: Comments were generally supportive of this proposal.

Policy 4.2.4 - Addition of "including the planting of new trees" in the description of improved landscaped open space, and specification that landscaping be "soft landscaping that can support tree growth": Comments were generally supportive of this proposal, though some wanted the wording to be stronger and more specific. Language that is very specific is generally more appropriate for design guidelines than the Official Plan, though the language from the original proposal was strengthened a bit.

Policy 4.2.6 - Addition of description of shared open space to be "with the capacity and conditions to support growth of large trees": Comments were generally supportive of this proposal, though one suggested stronger wording. The language from the initial proposal was strengthened with the addition of the word "conditions".

### **City-wide Zoning By-Law:**

Various ideas were presented regarding regulating landscaping and soft landscaping on properties. Most of these ideas cannot be implemented through zoning permissions but may be achievable through other means. Ideas included:

- Attempting to obtain contiguous spaces for soft landscaping
- Incentivizing desired materials
- Increasing the number of by-law enforcement officers to enforce tree by-laws and soft landscaping requirements
- Discouraging select species of plants (including non-native plants) while promoting the use of native plants and biodiversity
- Allowing below grade technology (e.g. Silva cells) to be considered when considering what is soft landscaping
- Requiring a percentage of land be occupied by flora
- Allow (through permits) more overnight on-street parking to reduce the number of hard surface areas, such as parking pads and driveways
- Implementing additional enforcement and oversight onto landscaping and tree service companies
- Implementing a tax on stormwater runoff
- Evaluating the rate at which development is occurring in relation to the quality and number of green spaces and the tree canopy in the city
- Consideration of how private and public spaces could be better developed to react to more frequent flooding and larger rainfall events
- Planting additional trees in publicly owned spaces
- Restricting development and growth to allow for more naturalized areas

### **Committee of Adjustment (CoA):**

In addition to the input received described in the body of the report, at the community consultation, residents noted that the two-week notice period for CoA applications did not allow enough time for residents to prepare materials or deputations for a hearing. Additionally, it was noted that the CoA process was hard to navigate as a regular citizen without expertise or resources on the process. It was also mentioned that Indigenous perspectives, rights and issues around tree protection are not considered in CoA decision making.

## **Attachment 7: Detailed Input from Stakeholder Consultation on Iceberg Homes**

Consultations were conducted with design professionals and architecture firms with experience designing iceberg homes to help gain perspectives on how they are designed and how they mitigate issues associated with iceberg homes. Major topics discussed included how frequently iceberg homes are constructed, typical characteristics and variances or amendments to zoning by-laws, special design considerations, and ways to mitigate impacts on stormwater, groundwater, trees, and landscaping.

### **Characteristics of Iceberg Homes**

Stakeholders noted an increase in the desire for larger homes, including the ability to extend below ground to multiple levels. Iceberg homes have been constructed in municipalities across Ontario, including Georgina, Muskoka, Oakville, and Burlington. The lots in these municipalities are typically larger than those in Toronto, suggesting that designing for properties in Toronto presents unique challenges.

It is not uncommon for designs to include a basement that extends beyond the footprint of the portion of the building above ground, but most of the projects discussed did not include significant below ground development and would not be considered an iceberg home. Examples of this include the modest extension of basement levels below a first floor terrace that could include an outdoor eating space and a barbeque. More extensive examples include multiple levels below ground across a significant portion of the lot. The internal uses of extensive below ground development are typically used for extensive underground garages, vehicle elevators, indoor swimming pools, home gyms, spa facilities, or recreation spaces.

It was suggested that, while not all iceberg homes are long structures and do not extend across the majority of a lot, many are located on relatively deep lots. Stakeholders noted that the length of iceberg homes occasionally corresponds with the depth of the lot, and that variances are almost always sought from the Committee of Adjustment for building length and building depth, ranging from 20 to 24 metres, with some exceeding 30 metres.

Stakeholders indicated that the spaces located above an underground basement extension are typically covered with landscaping, raised planters, soft landscaping, or driveways.

### **Input on Designs**

Stakeholders indicated that the design of iceberg homes includes input from structural engineers as the design has the potential to require a different review under the Ontario Building Code relative to standard basements, including required means of egress and regulations regarding fire and gas separation. Stakeholders also noted that a geotechnical study is almost always completed when designing an iceberg home to assess the subsurface conditions on site.

The above ground massing of the building is not necessarily different if a basement extension was to be constructed under a ground floor deck or terrace. The roof of the basement extension can serve as a ground floor terrace.

Consultation participants were asked whether they believed any portion of iceberg homes could potentially create concerns for first responders. It was suggested that designs are required to adhere to the Ontario Building Code, which includes regulations regarding fire and gas separations.

## **Water**

It was suggested that engineers typically reference 100-year storms when designing iceberg homes. In contentious situations, water management systems are designed in reference to worst-case scenarios. It was asserted that no attempts to save money in lieu of functionality or liability are typically pursued, and third-party review can be completed.

Stakeholders indicated that incorporating waterproofing into building designs and the installation of cisterns to handle excess stormwater can mitigate overland water flows, which are not controlled by zoning by-laws. Engaging the appropriate consultants and water management engineers early in the design process can aid in managing stormwater runoff. Stakeholders noted that some designers already pursue this when designing a new building.

If the water table is too high, a design could result in the building “floating” in relation to the groundwater. It was suggested that buoyancy issues can be managed through the installation of a release valve to allow water to enter the house, making it heavier. Alternatives to this include making the building heavier, which typically involves establishing thicker foundation walls (constructed of reinforced concrete) or anchoring the house through the use of helical piers. The greater the amount of concrete used, the greater the amount of embodied carbon included in the building.

Stakeholders noted that new construction provides a greater opportunity to improve the drainage on the site depending on the existing conditions compared to the extension of an existing building below ground. Replacing soil below ground with an increased amount of aggregate can improve drainage capabilities for the proposed design.

It was noted that concerns from neighbours typically related to water displacement and having potential effects on neighbouring properties. The Committee of Adjustment also frequently ties approved designs to the plans reviewed by the Committee, with the intent to alleviating concerns of interested parties and to ensure buildings are not redesigned once variances have been granted.

Some municipalities have expressed concerns regarding the drainage of lots for iceberg home applications at the Committee of Adjustment. Some municipalities have required a letter by a stormwater engineer confirming proper design as a condition to approval. This letter gave the owners of neighbouring properties additional confidence that the design had been done correctly, and could be an effective tool alleviate concerns of third parties.

## **Trees and Landscaping**

Stakeholders indicated variability in the amount of soil depth provided above portions of buildings wholly below ground. Factors included whether vegetation and trees were present at the time of construction and whether the municipalities or other approval authorities (e.g. TRCA, Committee of Adjustment) required certain types of vegetation to be planted above the structure. Examples of soil depths suggested included a range of 0.9 metres when planting a tree and 0.6 metres when planting other types of soft landscaping, such as sod, flowers, and shrubs.

Participants indicated that designs are occasionally altered to accommodate mature trees, and the replanting of trees removed through construction is sometimes required as a condition of approval from the Committee of Adjustment.

## **General Comments**

Other general comments received from the stakeholder consultation participants included that the construction of iceberg homes helps alleviate potential concerns associated with shadows and shade, as the additional floor areas of iceberg homes is below ground and does not create massing or shadow impact on adjacent properties or change visual bulk of a building that can be viewed from the street. It was suggested that applying additional zoning regulations may not be the best approach to control iceberg homes, and that increasing standards for water retention and runoff would have a greater impact on alleviating environmental concerns.

## **Attachment 8: Detailed Decision History of Protecting and Enhancing the Tree Canopy While Supporting Infill Housing and Addressing Concerns with Iceberg Homes**

At its meeting on October 1, 2021, City Council adopted MM36.33, Assessing the Impacts of Iceberg Houses, which requested staff to report back on issues associated with iceberg houses.

<https://secure.toronto.ca/council/agenda-item.do?item=2021.MM36.33>

At its meeting on May 25, 2022, City Council, through item IE30.18, Planting Spaces on Private Property, requested Parks Forestry and Recreation, in consultation with Municipal Licensing and Standards, Toronto Building, and City Planning to report on potential strategies to protect and enhance the City's tree canopy and growing space, while also supporting infill housing growth in the City's Neighbourhoods.

<https://secure.toronto.ca/council/agenda-item.do?item=2022.IE30.18>

At its meeting on May 10, 2023, City Council, through item PH3.16 Expanding Housing Options in Neighbourhoods: Multiplex Study - Final Report requested City Planning and Parks, Forestry and Recreation to report in the third quarter of 2023 with a status update on work previously requested in Items 2021.PH29.2 and 2022.IE30.18, which respectively requested staff to consider strategies to protect and enhance growing space and the City's tree canopy and growing space, while also supporting infill housing growth in the City's Neighbourhoods, and to report back regarding potential strategies to protect and enhance the city's tree canopy and growing space, while also supporting infill housing growth in the city's Neighbourhoods.

<https://secure.toronto.ca/council/agenda-item.do?item=2023.PH3.16>

At its meeting on December 13, 14 and 15, 2023, City Council, through item PH8.6, Growing Space for Trees: Protecting and Enhancing the Tree Canopy While Supporting Infill Housing, requested City Planning and Parks, Forestry and Recreation to report by the fourth quarter of 2024 on a suite of strategies related to protecting and enhancing the City's tree canopy and growing space, while also supporting infill housing growth in the city's Neighbourhoods.

<https://secure.toronto.ca/council/agenda-item.do?item=2023.PH8.6>

At its meeting on April 5, 2024, Planning and Housing Committee adopted item PH11.4, Zoning for Residential Basements - Preliminary Report, that included a request for City Planning to report back on strategies to address the impacts of iceberg homes, including consideration of ways of identifying applications for iceberg homes, and applying a climate lens to final recommendations.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.PH11.4>

At its meeting on May 28, 2024, Infrastructure and Environment Committee adopted item IE14.12, Annual Report on Tree By-law Removal Permit Appeals and Requests, which reported on the total number and outcomes of tree removal permits considered by Urban Forestry.

<https://secure.toronto.ca/council/agenda-item.do?item=2024.IE14.12>

At its meeting on February 5, 2025, City Council adopted EX20.12, Reducing Stormwater Runoff and Mitigating Basement Flooding, which in part directed Toronto Water, in consultation with Toronto Building, City Planning and Development Review, to report back with a strategy to address stormwater management in the minor variance process, including an overview of existing policies, as part of the report back to City Council in the third quarter of 2025.

<https://secure.toronto.ca/council/agenda-item.do?item=2025.EX20.12>