

# **Parks Development Design Standards**

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Prepared by:

Parks Planning and Development

City of Oshawa

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## **1. Introduction**

The City of Oshawa's Parks Planning and Development section has prepared the following standards to guide the development community, design consultants, members of Council, the public, and City staff, in the design process for new park development and existing park redevelopment. These standards are applicable to the City Of Oshawa's four classifications of parks:

1. Regional Parks;
2. City Parks;
3. Community Parks; and,
4. Neighbourhood Parks and Parkettes.

These standards are also applicable to select amenities or features that are located within the City's open space, or City-owned boulevards.

### **1.1 Disclaimer**

The Parks Development Design Standards are subject to change as new standards and requirements become available, or are identified. All new park development and existing park redevelopment shall comply with all by-laws, jurisdictional agencies, legislations, applicable codes, regulations and standards, including those set out in this document. It is the responsibility of the reader to ensure they have the most current version of this standard and all other referenced documents herein.

### **1.2 Connection with Oshawa Strategic Plan**

The five strategic goals established in the 2020-2023 Oshawa Strategic Plan are incorporated in the Parks Development Design Standards. In particular, the Parks Development Design Standards supports the themes of Wise Land Use; Safe and Reliable Infrastructure; Enrich Our Community through An Active; Healthy and Safe Community; and, Proactive Environmental Management, and Cleaner Air, Land and Water.

## **2. Park Classifications**

### **2.1 Regional Park**

Regional parks are intended to serve residents throughout the Region and may be based upon significant natural features that provide major recreational opportunities and which serve the regional population. Regional parks vary in size and shall be sufficient to contain significant or unique physical features, or major recreational facilities and related support facilities.

Regional parks may contain the following features:

- Unique, natural physical features that provide major recreational opportunities;
- Landscaped areas for passive recreational use;
- Parking areas;
- Lighting, benches, picnic tables, washrooms, change rooms, walkways, waste receptacles, boating and sailing facilities, and other ancillary elements; and,
- Access to water for allotment gardens and community gardens.

### **2.2 City Park**

City parks are intended to serve residents throughout the City of Oshawa through the provision of major-park and recreational opportunities, or cultural facilities that perform a distinctive function on a City-wide basis. City parks may also be established to preserve natural features such as scenic vistas, creek valleys, the lakefront, and other areas. City parks are to be a minimum size of 12 hectares to support sports and other programmable features. City parks may also be sized to consider the natural features present.

City parks typically contain the following features:

- Unique, natural physical features;
- Cultural entertainment or civic centers;
- Historical sites;
- Public art and cultural features;
- Lighted sport, recreation, or entertainment facilities, including arenas and community centers;
- Regulation size sports fields, typically in a hub format to accommodate tournament play;
- Tennis, pickleball, basketball, and other hard court surfaces;
- Skate and BMX parks;
- Major or minor playground with junior and senior play features;
- Major or minor splash pad;
- Landscaped areas for passive recreational use;
- Parking areas;
- Lighting, in accordance with the City's Parks and Open Space Lighting Policy;

- Benches, picnic tables, shade structures, washrooms, change rooms, pathways, multi-use recreational trails, signage and wayfinding, waste receptacles, and decorative fountains;
- Maintenance buildings; and,
- Access to water for allotment gardens and community gardens.

### **2.3 Community Park**

Community parks are intended to provide a range of outdoor and indoor recreational opportunities to a population base of approximately 20,000 people. Community parks are primarily intended to accommodate active sports and recreational activities, but may also include areas for passive recreation. Community parks are to be a minimum of 8 hectares to a maximum of 12 hectares in size.

Community parks typically contain the following features:

- Lighted sport, recreation, or entertainment facilities, including arenas and community centers;
- Regulation size sports fields, typically in a hub format to accommodate tournament play;
- Tennis, pickleball, basketball, and other hard court surfaces;
- Skate and BMX parks;
- Major or minor playground, with junior and senior play features;
- Major or minor splash pad;
- Landscaped areas for passive recreational use;
- Parking areas;
- Lighting, in accordance with the City's Parks and Open Space Lighting Policy;
- Benches, picnic tables, shade structures, washrooms, change rooms, pathways, multi-use recreational trails, signage and wayfinding, waste receptacles, and other ancillary elements; and,
- Access to water for allotment gardens and community gardens.

### **2.4 Neighbourhood Park**

Neighbourhood parks are intended to serve the residents in a neighbourhood planning area, through the provision of active and passive recreational opportunities. Park features are designed to serve a population base up to 5,000 people. Neighbourhood parks are not intended to normally attract significant numbers of park users residing beyond the local neighborhood planning unit. Neighbourhood parks also include tot lots, parkettes and other small parks. Neighbourhood parks are a minimum size of 1.8 hectares except for tot lots, parkettes and other small parks within the Downtown Oshawa Urban Growth Centre. The maximum size is 4 hectares.

Neighbourhood parks may contain the following park features:

- Area for instructional activities;
- Historical sites;
- Public art and cultural features;

- Minor playground with junior and senior play features;
- Minor splash pad;
- Tennis, pickleball, basketball, and other hard court surfaces;
- Skate and BMX parks;
- Sports fields;
- Tennis and other ball courts;
- Areas for unstructured use;
- Landscaped areas, pathways or recreational trails, benches, tables, shade structures, waste receptacles, and fountains as ancillary items;
- Parking areas; and,
- Access to water for allotment gardens and community gardens.

## **2.5 Open Space Areas**

Areas designated as open space may provide opportunities for limited recreation, while ensuring the protection of the natural environment. Areas designated as open space generally include components of the Natural Heritage System, valley lands, conservation areas, marshes, scenic vistas, the Lake Ontario waterfront, parts of the Oak Ridges Moraine, and other natural environmental resources.

Areas designated as open space shall be used for:

- Conservation;
- Reforestation; and,
- Limited recreation, including opportunities for walking and cycling, and connections to the City's active transportation network;

## **2.6 Stormwater Management Ponds**

Stormwater management ponds cannot act as a substitute to parkland; however, may provide limited recreational opportunities. Stormwater management ponds may contain multi-use recreational trails or pathways, and associated amenities.



### **3. General Requirements**

#### **3.1 Grades**

All grading within a park or open space must satisfy the proper function of the programming being provided. All park or open space grading must not adversely impact adjacent properties. Maximum grades for sodded areas to be 3:1. Maximum grades for planted areas to be 2:1. Sports fields to be graded as per the requirements set out in the City's Detail Standards. All grading is to be undertaken by a quality professional. All grading is to be approved by the City's Parks Planning and Development Department.

#### **3.2 Topsoil**

Screened topsoil shall be provided to a depth of 300mm for all sodded areas and conform to the following specifications:

- Friable, consisting of 45% sand, 35% silt, 20% clay and pH value of 6 – 7;
- Free from subsoil, roots, vegetation, debris, toxic materials, stones over 50 mm diameter;
- Imported soil must meet MOE Table 1 Site Condition Standards (SCS).
- If soil to be imported to the site is generated from an excess soil project area, the acceptance of the material must be based on the requirements of O. Reg. 406/19.

#### **3.3 Sod and Seed Type**

All maintained lawn areas to be sodded with No.1 Kentucky Blue Grass. All sports fields to be sodded with Rhizomatous Tall Fescue (R.T.F.). All unmaintained naturalized areas to be terra seeded with Simcoe County Native Meadow Mix by OSC, seeded at a rate of 25Kg/Ha (23Lbs/Acre). Refer to detail 'P608 – Sod'.

#### **3.4 Site Servicing**

##### Water Servicing

A 50mm minimum diameter water service is required for neighbourhood parks. A 75mm minimum diameter water service is required for community, city, and regional parks. Water servicing is required to be brought to the property line and stubbed for future use. In cases where programming is known at time of development, water service is to be sized appropriately. No underground water servicing or associated easements, other than for the explicit use of the park, will be permitted within the park. All water servicing design is to be undertaken by a quality professional. All water servicing is to be approved by the City's Parks Planning and Development Department.

##### Electrical Servicing

A 200amp minimum service is required for all neighbourhood, community, city, and regional parks. Electrical servicing is to be brought to the property line and terminated, allow for future use. In cases where programming is known at time of development, electrical service is to be sized appropriately. All electrical servicing is to be undertaken

by a quality professional. All electrical servicing design is to be approved by the City's Parks Planning and Development Department.

### Sanitary Servicing

Sanitary servicing is required for all community, city and regional parks. Sanitary servicing is to be brought to the property line and stubbed for future use. No underground sanitary servicing or associated easements, other than for the explicit use of the park, will be permitted within the park. All sanitary servicing design is to be undertaken by a quality professional. All sanitary servicing is to be approved by the City's Parks Planning and Development Department

### Stormwater Servicing

Stormwater servicing is required for all neighbourhood, community, city, and regional parks. A stormwater connection is to be brought to the property line and terminated for future use, or into the park if required for site drainage. All stormwater servicing design is to be undertaken by a quality professional. All stormwater servicing is to be approved by the City's Parks Planning and Development Department.

## **3.5 Drainage**

Subsurface drainage requirements and overland flow routes for park and open space should be determined early in the design process. Parks are to have positive drainage to a common low point into a storm sewer or outfall, or captured into an enhanced LID feature which drains to a storm sewer or outfall. All residential lot drainage shall occur on private lands, and no drainage ditches, swales, infiltration trenches that service private lots, are to be located within the park. Site drainage is to be provided and approved by a qualified professional prior to City submission. Site drainage for park and open space blocks must be approved by the City's Parks Planning and Development.

## **3.6 Fencing**

### **3.6.1 Park and Open Space Fencing**

Galvanized chain link fencing is required along the property lines of the park adjacent to residential property or other dissimilar land use, as determined by the City. Fencing shall comply with the City's Fence and Hedge By-law. Where fencing is required, consideration shall be given to the park programming and fence heights (i.e., 1500mm high for passive recreation and 1800mm for active recreation).

Decorative metal fencing can be used in certain applications, subject to the review and approval of the City's Parks Planning and Development. All fencing is to be placed entirely within the City's park or open space, and be located 150mm from the property line. Refer to detail 'P301 – Chain Link Fence', unless otherwise noted.

Gates within the fencing will only be permitted through a Gate Access Agreement with the City, and is subject to the City's discretion and approval. The cost of the gate is the homeowner's responsibility, and the City can remove the gate at any time and

reestablish the fence. Gates will not be permitted into an open space block or a naturalized area of a park. Refer to detail 'P302 – Chain Link Gate'.

### **3.6.2 Acoustic Fencing**

Acoustic fencing is required between landscape buffer strips or road right-of-way, and residential property, or other dissimilar land use as determined by the City. Acoustic fencing is to be located entirely on private property, and be located 150mm from the property line. All acoustic fencing is to be designed by a quality professional. All acoustic fencing is to be approved by the City's Parks Planning and Development. Refer to detail 'P304 – Acoustic Fencing'.

### **3.7 Signage**

Park identification signage is to be located along every road frontage of the park block, in accordance with detail 'P501 – Park Sign'. Community parks, city parks, and regional parks, may use custom identification signage as part of a themed signage program specific to the park. All municipal right-of-way and Regional road setbacks are to be met when designing the placement of the signage. Final location of the signage is to be reviewed and approved by the City.

Park user code signage is to be located at every formalized entryway into the park block, and is to be installed entirely within the park block. Community, city, and regional level parks may have additional park user code signage where significant programming is present. Refer to detail 'P502 – Park User Code Signage'.

Regional splash pad signage, including "Splash pad Rules" and "Check & Go" signs, are to be located adjacent any splash pad feature. Refer to detail 'P503 – Regional Splash Pad Signage'.

Wayfinding signage for the City's multi-use recreational trails is currently under development, and will be included in a future version of this document. In the interim, the City will be responsible for installing all required wayfinding signage.

All signage and locations must be approved by the City's Parks Planning and Development.

### 3.8 Facility Setbacks

<b>Minimum Setback Limits***</b>		
<b>Park Facility</b>	<b>From Residential Lots</b>	<b>From Road Allowance</b>
Playground	15m	20m*
Splash Pads	15m	20m*
Basketball Court	15m	20m
Tennis & Pickleball Courts	15m	20m
Skate & BMX Park	15m	20m
Baseball & Softball Diamonds	20m	20m
Soccer & Multi-Purpose Fields	20m	20m
Lit Facilities	30m	20m
Parking Lot	10m	3m
Naturalized Areas	3m	0m
Multi-Use Recreational Trail & Pathways	2m**	0m**
Off-leash Dog Area	30m	20m

\*Setback distance can be reduced to 3m with the inclusion a vertical barrier between the road allowance and park facility. Vertical barrier must be a minimum of 1200mm tall and subject to review and approval by the City.

\*\* Setback established from the edge of trail/pathway.

\*\*\* Park Facilities are to follow all relevant easement setbacks and ROW setbacks etc.

## **4. Trails and Pathways**

There are three classifications of trails and pathways: multi-use recreational trail, nature trail, and park pathway. All classifications are to be designed and constructed as per the City's detail standards as well as follow the Oshawa Accessible Design Standards (O.A.D.S.). Offset gates are to be located at all road and sidewalk intersections, and in accordance with detail 'P305 – Offset Gate'.

### **4.1 Multi-use Recreational Trail**

Multi-use recreational trails are referred to in the Active Transportation Master Plan as an off-road facility Class 2. Multi-use recreation trails serve as City-wide linkages primarily intended for recreational purposes, providing safe, off-road connections, to a wide range of users. They are located outside of the road right-of-way and can be located in both parks and open space. Multi-use recreational trails are to be 3m wide, paved asphalt, constructed to meet four-season winter maintenance, and maintain a minimum vertical clearance of 3m. Refer to detail 'P101 – Multi-Use Recreational Trail'.

### **4.2 Nature Trail**

Nature trails are primarily used for recreation as opposed to providing active transportation. Nature trails are typically compacted granular, with a minimum width of 1.8m. A vertical clearance of 2.1m is to be maintained, as per the O.A.D.S. Refer to detail 'P104 – 1800mm Granular Nature Trail'.

### **4.3 Park Pathway**

Park pathways are located within a park boundary and provide pedestrian circulation between park amenities. Pathways are not maintained in the winter, except in locations declared as all-season parks by Council. The primary pedestrian routing within a park is to be 2.4m wide, and the secondary pedestrian routing is to be 1.8m wide. Park pathways are to be asphalt or concrete. Compacted granular / natural surface pathways are site specific and permitted in special cases. Refer to detail 'P102 – 2400mm Asphalt Pathway', and detail 'P103 – 1800mm Asphalt Pathway'.

### **4.4 Pedestrian Bridges**

Pedestrian bridges provide access over creeks and waterways, and are typically situated in park or open space blocks.

Pedestrian bridges are to:

- Be constructed with a galvanized steel frame with wood decking;
- Provide 3m wide clearance between railings;
- Accommodate maintenance vehicles up to 5,000kg;
- Have a running slope less than 5%;
- Provide railings along bridge approaches where side slope grades meet or exceed 2:1;
- Use sod as restoration on areas where a side slope meets or exceeds 2:1; and,

- Include design considerations to mitigate potential erosion on side slopes of bridge approaches from surface runoff.

If bridges are designed to be overtopped in storm events, the frequency is to be reviewed and approved by Parks Planning and Development.

## **5. Community and Allotment Gardens**

Currently under development.

## **6. Sports Facilities**

The City will provide a list of desired sport facilities as determined by the Parks Facility Implementation Strategy for the proposed park development.

### **6.1 Baseball**

There are three standard sizes to be used when developing baseball diamonds, and are categorized by the distance from home plate to the center of the outfield fence as outlined by Baseball Canada. Approved diamond sizes are:

- 88m (Mosquito) baseball diamond with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P801 – Baseball Diamond - 88m';
- 102m (Pee Wee) baseball diamond with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P802 – Baseball Diamond - 102m'; and,
- 122m (Regulation) baseball diamond with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P803 – Baseball Diamond – 122m'.

### **6.2 Basketball**

There are two standard sizes to be used when developing basketball courts, derived from the Federation International Basketball Association (FIBA) rules. Approved court sizes are:

- 19.1m x 32.1m basketball full court which includes the 2m play out spacing beyond the out of bounds line. Refer to detail 'P804 – Basketball Full Court'; and,
- 19.1m x 16m basketball half court which includes the 2m play out spacing beyond the out of bounds line. Refer to detail 'P805 – Basketball Half Court'.

Basketball full courts are to be designed to allow for regulation play and accommodate minor / community level tournaments. Basketball half courts are to be designed to allow for 3v3 play and accommodate informal pick games. Both full courts and half courts, including the play out spacing, are to be constructed out of asphalt and surfaced in acrylic with required playing lines, as defined by the latest official basketball rules from FIBA.

### **6.3 Beach Volleyball**

Currently under development.

#### **6.4 Cricket**

Currently under development.

#### **6.5 Canadian Football**

The approved field size to be used when developing football fields, as outlined by the Canadian Amateur Tackle Rule Book by Football Canada, is 60m x 136.56m, with a run out spacing of 10m. Refer to detail 'P808 – Football Field'.

#### **6.6 Pickleball**

Pickleball courts are to 19.5m x 10.4m, including the play out area, and should be constructed in banks of four, where feasible. Pickleball courts are to be designed to allow for regulation play and accommodate minor / community level tournaments. Pickleball courts are to be constructed out of asphalt and surfaced in acrylic, with required playing lines as defined by the latest official rules from the International Federation of Pickleball. Refer to detail 'P809 – Pickleball Court'.

#### **6.7 Rugby Field**

Currently under development. Refer to detail 'P810 – Rugby Field'.

#### **6.8 Soccer**

There are five standard sizes to be used when developing soccer fields, as outlined by Ontario Soccer. Approved field sizes are:

- 32m x 25m (5v5) with a 6m playout area extending beyond the goal and touch lines. Refer to detail 'P811 – Soccer Field 5v5'.
- 50m x 32m (7v7) with a 6m playout area extending beyond the goal and touch lines. Refer to detail 'P812 – Soccer Field 7v7'; and,
- 68m x 50m (9v9) with a 6m playout area extending beyond the goal and touch lines. Refer to detail 'P813 – Soccer Field 9v9';
- 90m x 45m (non-international 11v11) with a 6m playout area extending beyond the goal and touch lines. Refer to detail 'P814 – Soccer Field 11v11 Non-International'; and,
- 105m x 68m (International 11v11) with a 6m playout area extending beyond the goal and touch lines. Refer to detail 'P815 – Soccer Field 11v11 International'.

#### **6.9 Softball Fast Pitch**

There are three standard sizes to be used when developing softball fast pitch diamonds, and are categorized by the distance from home plate to the center of the outfield fence as outlined by Softball Canada. Approved diamond sizes are:

- 60m with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P816 – Softball Fast Pitch Diamond - 60m';
- 68m with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P817 – Softball Fast Pitch Diamond - 68m'; and,
- 76m with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P818 – Softball Fast Pitch Diamond - 76m'.

## **6.10 Softball Slo-Pitch**

There are three standard sizes to be used when developing softball slo-pitch diamonds, and are categorized by the distance from home plate to the center of the outfield fence as outlined by Softball Canada. Approved diamond sizes are:

- 53m with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P819 – Softball Slo-Pitch Diamond - 53m';
- 84m with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P820 – Softball Slo-Pitch Diamond - 84m'; and,
- 100m with an additional 3m buffer beyond the perimeter fence. Refer to detail 'P821 – Softball Slo-Pitch Diamond - 100m'.

## **6.11 Tennis**

Tennis courts are to be 36.6m x 18.3m, including the play out area, and should be constructed in banks of two, where feasible. Tennis courts are to be designed to allow for regulation play and accommodate minor / community level tournaments. Tennis courts are to be constructed out of asphalt and surfaced in acrylic, with required playing lines as defined by the latest official rules from Tennis Canada. Refer to detail 'P822 – Tennis Court'.

## **6.12 Skate Parks**

The City of Oshawa's skate parks are designed independently of each other, allowing for each site to have its own unique traits. Skate parks are areas equipped with structures and surfaces made for skateboarding, scooters, inline skating, and wheelchairs. Skate parks should provide a venue for all skill levels with ramps, stairs, rails, pipes, and other typical features.

## **6.13 BMX Parks**

BMX parks are dedicated track facilities that cater to a wide range of rider skill sets and age. Depending on the design of the specific facility, a BMX track can be circuit style layout, or non-linear style layout allowing, for freestyle riding. BMX facilities typically require water service for maintenance.

## **7. Off-leash Dog Areas**

To assist in the location selection, construction, and maintenance of off-leash areas, Parks Planning and Development has prepared a separate document 'Guidelines for Design and Placement of Off-Leash Areas' which is to be reviewed.



## 8. Playgrounds

The City Of Oshawa has two standard playground classifications when developing and redeveloping parks. These classifications include major playgrounds and minor playgrounds. Emphasis should be placed on providing multiple sensory experiences and integrating the natural environment where possible. For Community and City parks, the size of the playground area varies depending on specific programming needs of the park itself. Regional parks are not to have playground areas.

### 8.1 Major Playgrounds

Major playgrounds are destination play areas that provide a higher level of service due to the complex play features that can be accommodated. Major playgrounds can have a broad level of play features, including structures that can accommodate older children. These play structures can also have an important role in place making due to the unique value they bring to the area in which they are built.

The playground design is to include:

- A size between 800 m<sup>2</sup> and 1,000 m<sup>2</sup>, with:
  - Separate junior and senior play areas;
  - Wood fibre safety surfacing (refer to detail 'P201 – Wood Fibre Safety Surfacing and Curb'), with consideration for rubber safety surfacing (refer to detail 'P202 – Rubber Safety Surfacing and Curb'); and,
  - Concrete play curb and accessible entry ramps (refer to detail 'P204 – Playground Accessible Ramp').
- Themed play structures;
- Tactile and sensory play, such as sand (refer to detail 'P203 – Sand Safety Surfacing and Curb');
- Incorporation of topography and elevation;
- Play features that require large footprints (e.g., space nets and zip lines);
- Custom built play features;
- Washrooms, which are important to support these playgrounds.
- Site furnishings for seating, shade, waste / recycling collection, and bicycles.

### 8.2 Minor Playgrounds

Minor playgrounds are play areas that cater to the local neighbourhood in which they are installed, and provide select play features that are typically aimed at younger children 2-12 years of age.

The playground design is to include:

- A size between 150m<sup>2</sup> and 300 m<sup>2</sup>, with:
  - Junior and senior play components;
  - Wood fibre safety surfacing (refer to detail 'P201 – Wood Fibre Safety Surfacing and Curb'); and,

- Concrete play curb and accessible entry ramps (refer to detail 'P204 – Playground Accessible Ramp').
- Traditional play structures, such as platform based play with an attached slide and single bay swings;
- Tactile and sensory play, such as sand (refer to detail 'P203 – Sand Safety Surfacing and Curb'); and,
- Site furnishings for seating, shade, waste / recycling collection, and bicycles.

## 9. Splash Pads

The City Of Oshawa has three standard splash pad classifications when developing and redeveloping parks. These classifications include major splash pads, minor splash pads, and cooling stations.

### 9.1 Major Splash Pad

Major splash pads are destination play areas that provide a high level of service due to the complex water features that can be accommodated. Major splash pads can have a broad mix of both ground level water features and above ground interactive water features. Major splash pads can also have an important role in place making due to the unique value they bring to the area in which they are built.

The splash pad design is to include:

- A size between 300 m<sup>2</sup> and 400 m<sup>2</sup> in size,
- A concrete surface, which can incorporate different colours to enhance play and the aesthetic quality of the facility itself;
- Typical water structures for a major splash pad, such as large dumping buckets, overhead misters, spray cannons, sculptural elements, built in vertical wall sprays, and a wide variety of ground-based sprays;
- Dechlorination features;
- Environmental considerations for auto shut off systems, and recirculation systems;
- Supplementary amenities such as parking and washrooms, which are important to support these splash pads; and,
- Site furnishings for seating, shade, waste / recycling collection, and bicycles.

### 9.2 Minor Splash Pad

Minor splash pads are play areas that cater to the local neighbourhood in which they are installed and provide select water features.

The splash pad design is to include:

- A size between 150 m<sup>2</sup> and 200 m<sup>2</sup> ;
- A concrete surface, with minimal coloured concrete, if any, which is limited to specific focal points for cost considerations;

- Typical water structures for a minor splash pad, such as ground based sprays and select overhead misters and sprays;
- Dechlorination features;
- Environmental considerations for auto shut off systems;
- Supplementary amenities such as parking, which are important to support these splash pads; and,
- Site furnishings for seating, shade, waste / recycling collection, and bicycles.

### **9.3 Cooling Station**

Instead of providing a play experience, cooling stations are designed with an emphasis on providing relief from heat.

The cooling station is to be up to 50m<sup>2</sup> in size; and composed of primarily ground spray or other features with a focus on heat relief.

## **10. Community Engagement**

For all new park developments and re-developments, the City's Parks Planning and Development will undertake community engagement to identify the community's preferred park amenities. Parks Planning and Development will provide the final park amenity selections, based on the results of the community engagement.

## 11. Park Plantings and Street Trees

### 11.1 Park Trees

Park trees provide shade, natural screening, general interest, and naturalization. Park trees are an important component of the park landscape and environment, as they capture carbon, provide stormwater retention, and mitigate erosion. Park trees may be located adjacent seating, playgrounds, and park pathways to provide shade. Park trees may also be located adjacent residential lots and roadways to provide natural screening.

Park trees are to be set back 5m from any sports facility run-out line or buffer. Refer to 'Appendix A – Park Tree Species'. Park trees are to be planted as per details 'P601 – Deciduous Tree Planting', 'P602 – Coniferous Tree Planting', and 'P603 – Tree Planting on Slope'. All park tree plantings and associated planting plans are to be approved by the City's Parks Planning and Development.

### 11.2 Street Trees

Street trees are required to be planted in any new subdivisions, any major reconstruction of a road boulevard, as well as new construction or redevelopment of the urban streetscape. Street trees provide for a diverse and healthy urban forest that enhance the quality of life for the community.

To provide a balanced and canopied streetscape, the street trees should be located an equal distance back from the curb on both sides of the street. The street trees are to be planted on the public right-of-way, to allow for the trees to be managed as part of the City's urban forest system, and be included in the City's asset management system.

Street trees can be planted in one of three approved methods, to be determined based on the site-specific conditions:

1. Lawn boulevard areas, as per detail 'P601 – Deciduous Tree Planting'.
2. At grade, covered tree pit, using a grate, and placed fully within the pedestrian realm, as per detail 'P609 – Deciduous Tree Planting in Hard Surfaces'. The grate is to be square, with a lip or profile which holds the grate flush with the concrete surface. Treatment below the grate is to be mulch and a direct watering connection is to be provided.
3. Raised, open bed, surrounded by a concrete, stone, or metal curb, and placed fully within the pedestrian realm, as per detail 'P610 – Deciduous Tree Planting in Open Bed'.

#### Soil Volumes

Regardless of type and size of street tree, a minimum soil volume of 20m<sup>3</sup> is to be allocated per tree. For street trees planted in lawn boulevards, the soil volume is to be provided through continuous, uncompacted soil below the turf. For street trees planted in the pedestrian realm, and surrounded by hard surfacing, the soil volume is to be

provided through soil cells comprised of uncompacted soil. Geogrid is to fully wrap around the soil cells, as per the manufacturer details.

### Soil Specifications

Topsoil for fine grading shall conform to the following specifications:

- Friable, consisting of 45% sand, 35% silt, 20% clay and pH value of 6 – 7;
- Free from subsoil, roots, vegetation, debris, toxic materials, stones over 50 mm diameter;
- Imported soil must meet MOE Table 1 Site Condition Standards (SCS).
- If soil to be imported to the site is generated from an excess soil project area, the acceptance of the material must be based on the requirements of O. Reg. 406/19.

### Separation and Offset Criteria

The location of trees on the public right-of-way shall be as per detail 'P611 - Street Tree Planting Layout', and subject to on-site constraints, such as pre-existing utility infrastructure. The minimum required separation and offset criteria is to be:

- |                       |   |
|-----------------------|---|
| 1. Single trees:      | 8m, unless otherwise approved by the City                           |
| 2. Street lights:     | 3m  |
| 3. Sidewalks:         | 1.5m  |
| 4. Curbs:             | 1.5m, to back of curb   |
| 5. Driveways:         | 1.5m  |
| 6. Transformers:      | 3m  |
| 7. Underground Vault: | 1.5m  |
| 8. Hydrants:          | 1.5m  |
| 9. Water/sewer line:  | 2m, or outside of any Regional easement                             |
| 10. Hydro lines:      | Only small species to be planted adjacent to and under hydro lines. |

All street trees are to be planted outside of designated intersection sight triangles.

### Species Selection and Layout

All boulevards are to be planted with street trees, meeting the minimum separation and offset criteria.

Small deciduous tree species are to be planted in cul-de-sacs, small lots, or other areas where there is limited servicing. Refer to detail 'P611 – Street Tree Planting Layout'. All street tree plantings and layout are to be approved by the City's Parks and Waste Operations and Parks Planning and Development.

- 1) Species variation will depend on the amount of trees planted:
  - a) if more than 5 trees are proposed, a mix of tree types will be selected

- b) if 25 to 50 trees are proposed, no more than 25% of the trees should be of the same genus
  - c) if more than 50 trees are proposed, no more than 15% of the trees should be of the same genus
- 2) Invasive species shall not be planted. The Developer will conform to the City Design Standard and only select trees from 'Appendix B – Street Tree Species' for both City and private property.
  - 3) Species selection should reflect site conditions, such as soil and light conditions, boulevard space, drainage, slope, moisture level and salt exposure. Use of locally sourced plant material is required.
  - 4) Species selection and variety should provide visual interest through diversity and seasonal variety.

### Warranty

A warranty shall be provided on all planted material supplied and planted according to the approved specifications, for a period of not less than two full years from the date of acceptance of the tree plantings. All dead, dying, or diseased, planted material shall be replaced at no cost to the City, in the event that the plants are deemed to be in an unsatisfactory condition at the end of the warranty period. Healthy stock, which is equal in size and species to the defective plant material, shall be supplied and planted as replacement.

### **11.3 Tree Protection**

A Tree Preservation and Protection Plan is required as a component of the first submission. The Tree Preservation and Protection Plan shall:

1. Accurately locate and identify all trees over 150mm in caliper, or groupings of trees 150mm in diameter or larger (when measured 1.4m from the ground), within the plan area;
2. Identify each tree by number. In table format, indicate the number, species, the caliper of tree, the condition, and whether the tree is to be preserved or removed, and the rationale for the action;
3. Be stamped by an ISA certified arborist; and,
4. Refer to the detail 'P604 – Tree Protection Zone'.

The Tree Preservation and Protection Plan is to include the following notes:

1. No contaminants will be dumped or flushed where feeder roots of trees exist;
2. Every necessary precaution shall be taken to prevent damage to trees or shrubs to be retained;
3. Where limbs or portions of trees are removed to accommodate construction work, they will be removed carefully, and in accordance with accepted arboriculture practices;

4. Where root systems of trees are exposed directly adjacent to, or damaged by construction work, they shall be trimmed neatly, and the area backfilled with appropriate material to prevent desecration;
5. Where necessary, the trees will be given an overall pruning to restore the balance between roots and top growth, or to restore the appearance of trees;
6. Trees that have died or have been damaged beyond repair, shall be removed and replaced with trees of equal size and species, or as approved by the City's Parks and Waste Operations, at no expense to the City; and,
7. If grades around the trees to be protected are likely to change, precautions such as dry welling, retaining walls, and root feeding, shall be taken, to the satisfaction of the City's Parks and Waste Operations and Parks Planning and Development.

#### **11.4 Shrub Plantings**

Shrub plantings provide natural screening buffers from dissimilar uses, general interest, and naturalization. Shrubs are an important component of the park landscape and environment, as they capture carbon, provide stormwater retention, and mitigate erosion. Shrubs may be located adjacent seating, playgrounds, and park pathways. All shrub plantings are to be approved by the City's Parks Planning and Development. Refer to detail 'P605 – Shrub Planting'.

#### **11.5 Perennial Plantings**

Perennial plantings can be used to provide general interest as well as enhance the natural environment in the park block. Perennial plantings can be used in formal garden beds, or to augment an unmaintained naturalization area.

Formal, maintained, perennial garden beds should only be used:

- To signify primary park gateway entrances; and,
- As general beautification features in Community, City, and Regional level parks.

All perennial plantings are to be approved by the City's Parks Planning and Development. Refer to detail 'P606 – Herbaceous Planting'.

#### **11.6 Naturalization Areas**

Naturalization areas in park blocks are planned unmaintained areas that provide a buffer between significant environmental features and hazard lands. Naturalization areas can also provide pollinator habitat, erosion control, and stormwater retention. Naturalization areas are to only be used in locations that do not limit recreational programming of the site, and will not adversely impact ongoing operations and maintenance of the park.

#### **11.7 Lawn Areas**

Maintained lawn areas in park blocks provide for unstructured play and activities. Lawn areas are typically used between programmed spaces within the park. Refer to section '3.3 – Sod and Seed Type'.

## 11.8 Landscape Buffer Strips

Currently under development.

## 12. Green Infrastructure

### 12.1 Green Infrastructure

Green infrastructure such as bioswales, rain gardens, etc. are encouraged and should be explored where appropriate. Design should consider the existing topography and natural heritage features of the site. The type of green infrastructure should be chosen based on the programming of the site. Green infrastructure may be used to augment stormwater management infrastructure adjacent new or expanded parking lots, basketball, tennis, or pickleball courts, and other impermeable surfacing.

## 13. Supporting Amenities

### 13.1 Parking

Parking is only to be provided if there are facilities being proposed in the park design that require parking. Should parking be unable to be accommodated due to land size, on street parking should be considered. The number of accessible parking spaces proposed is to follow the ratio set by the O.A.D.S.

<b>Parking Space Requirements by Facility Type</b>	
<b>Facility Type</b>	<b>Number of Spaces*</b>
Playground – Minor	0
Playground – Major	8
Splash Pad – Minor	4
Splash Pad – Major	10
Baseball Diamond	16
Softball Slo-Pitch Diamond	16
Softball Fast-Pitch Diamond	16
Soccer Fields – 11v11 International	18
Soccer Fields – 11v11 Non-International	16
Soccer Field – 9v9	14
Soccer Field – 7v7	10
Soccer Field – 5v5	8
Canadian Football Field	18
Cricket Pitch	18
Rugby Field	22
Basketball Full Court	4
Basketball Half Court	0
Tennis Court	2
Pickleball Court	2
Skate Park	4
BMX Park	10



<b>Parking Space Requirements by Facility Type</b>	
<b>Facility Type</b>	<b>Number of Spaces*</b>
Off-leash Dog Areas	10

\*Lit facilities to have a 1.5 multiplier applied to number of parking spaces.

### **13.2 Site Furniture**

Site furniture includes bicycle racks, benches, tables, and waste / recycling receptacles, and are important components to the overall aesthetic and programming. Site furniture may be located within a park or open space block, as identified below.

#### Bicycle Racks

Bicycle racks are to be installed in groupings of three for neighbourhood parks, and groupings of five for Community, City, and Regional parks. Bicycle racks are to be located adjacent the primary park entrance, or significant programmed features within the park, and accessible from a cycling route, multi-use recreational trail, park pathway, or sidewalk. Bicycle racks are to be installed on a concrete surface, as per detail 'P406 – Bike Rack'.

#### Benches

Benches provide opportunities for rest, passive recreational opportunities, such as bird watching, and seating adjacent programmed features. Benches are to be located along multi-use recreational trails, park pathways, adjacent programmed features, or where significant viewing areas are provided, such as the Lake Ontario Waterfront, or formal perennial gardens. Neighbourhood parks and multi-use recreational trails, are to use the City standard bench, as per detail 'P401 – Standard Bench on Accessible Pad'; while Community, City, and Regional parks may use the alternate City-standard bench, as per detail 'P402 – Alternate Bench on Accessible Pad', or other site-specific seating which fits with the overall park theme. Benches are to be installed on a concrete surface, with an adjacent accessible area.

#### Shade Tables

Tables provide opportunities for families to gather and picnic, and are to be located adjacent significant programmed features, such as playgrounds, splash pads, or sports facilities (e.g., tennis or pickle ball courts). Tables can be paired with integrated shade umbrellas, permanent shade structure, or permanent shade sail (which does not require seasonal removal and installation). Tables should be installed in groupings of three to five for neighbourhood parks, and up to ten for Community and City parks. Tables are to be installed on concrete, as per details 'P407 – Table', 'P408 – Table - Accessible', and 'P409 – Shade Table'.

#### Waste / Recycling Receptacles

Waste and recycling receptacles are to be provided in all Neighbourhood, Community, City, and Regional parks, and waste receptacles are to be provided along multi-use

recreational trails. Waste and recycling receptacles are to be set back from park entrances and parking lots to minimize illegal dumping. Waste and recycling receptacles are to also be set back from seating, and programmed features, such as playgrounds and splash pads to minimize odour and wasp nuisances. Waste and recycling receptacles are to be located along the primary park pathway, and installed on concrete as per detail 'P404 – Waste and Recycling Receptacle'. In Community and City parks where significant programming is present, additional waste receptacles may be provided in areas of high use. Refer to detail 'P403 – Waste Receptacle'.

Waste receptacles along multi-use recreational trails are to be set-back from road entrances, private properties, and seating. The waste receptacle is to be installed on concrete, as per detail 'P405 – Animal Proof Waste Receptacle'.

All site furniture and locations are to be approved by the City's Parks Planning and Development.

### **13.3 Lighting**

All lighting should meet the City's Parks and Open Space Lighting Policy.

### **13.4 City Beautification Areas & Gateways**

Currently under development.

## **14. Design Deliverables**

Parks Planning and Development requires the following submissions for all new park development and redevelopment, regardless of whether the project is delivered under a City initiated capital project or through a developer initiated site plan application process:

### **14.1 Conceptual Design Development**

All conceptual designs are to be reviewed and approved by Parks Planning and Development staff prior to advancing to detail design. Conceptual designs are to have corresponding Class D cost estimates (+/- 50%) provided at time of review in PDF format. The conceptual design is to include:

- Site programming;
- Access and paths of travel; and,
- Supporting amenities.

### **14.2 30% Design Development**

30% design development is to be reviewed and approved by Parks Planning and Development prior to advancing to 60% design development. The 30% design submission is to have corresponding Class D cost estimates (+/- 50% degree of accuracy) provided at time of review in PDF and DWG format. The 30% design is to include, but not necessarily be limited to:

- Proposed location and orientation of project components, including but not necessarily limited to, pathways and naturalization areas;
- Proposed geotechnical/structural engineering approaches;

- Proposed widths and extents of pathways;
- Proposed surface materials; and,
- Proposed edge conditions.

### **14.3 60% Design Development**

60% design development is to be reviewed and approved by Parks Planning and Development prior to advancing to 90% design development. The 60% design submission is to have corresponding Class C cost estimates (+/- 30% degree of accuracy) provided at time of review in PDF and DWG format. The 60% design is to include, but not necessarily be limited to:

- Proposed project components in plan and profile;
- Pathway alignment;
- Location and orientation of projects components and amenities, including site furniture and signs;
- Relevant typical cross sections in detail, including pathways, structures, etc.;
- Location and type of any storm water management features, including sub drains and drainage paths;
- Mapping which identifies locations, and common and scientific name, for tree removals, injuries, and relocations, that may occur as a result of implementing the project;
- Construction access and staging areas; and,
- Mapping of location and types of tree protection measures, injuries, removal, and relocation.

### **14.4 90% Design Development**

90% design development is to be reviewed and approved by Parks Planning and Development prior to advancing 100% construction drawings and documents. The 90% design submission is to have corresponding Class B cost estimates (+/- 15% degree of accuracy) provided at time of review in PDF and DWG format. The 90% design package is to include, but not necessarily be limited to:

- A title page, including drawing table of contents and site location map, as well as relevant project contact information.
- Complete utility information as required to determine location, and incorporate into design to ensure no impacts from construction and access;
- Existing conditions plan and profiles, including;
- Proposed construction access route(s) and staging area(s);
- Demolition plans, including existing vegetation and underground utilities to be protected;
- Mapping which identifies locations, and common and scientific name, for tree removals, injuries, and relocations, that may occur as a result of implementing the project;
- A soil management plan quantifying the extent and quantities of materials to be excavated. Identify materials to be reused on site, and materials to be removed and disposed at appropriate facility;
- Layout plans;

- Grading plans, including contours and typical cross-sections with existing and proposed elevations for constructability. Design for surface runoff, grading impacts, and storm water management measures;
- Construction details;
- Supplementary architectural and/or engineering plans, as required; and,
- Preliminary construction specifications.

#### **14.5 100% Construction Contract Drawings and Documents**

100% construction contract drawings and documents is to include final tender ready drawings including, but necessarily limited to:

- A title page, including drawing table of contents and site location map, as well as relevant project contact information.
- Complete utility information as required to determine location, and incorporate into design to ensure no impacts from construction and access;
- Existing conditions plan and profiles;
- Proposed construction access route(s) and staging area(s);
- Demolition plans, including existing vegetation and underground utilities to be protected;
- Mapping which identifies georeferenced locations, and common and scientific name, for tree removals, injuries, and relocations, that may occur as a result of implementing the project;
- A soil management plan quantifying the extent and quantities of materials to be excavated, as may be appropriate considering the environmental constraints as the site. Identify materials to be reused on site, and materials to be removed and disposed at appropriate facility.
- Layout plans;
- Grading plans, including contours and typical cross-sections with existing and proposed elevations for constructability. Design for surface runoff, grading impacts, and storm water management measures;
- Construction details;
- Supplementary architectural and/or engineering plans, as required;
- Final construction specifications; and,
- Final construction schedule of pricing, meeting City's template (to be provided).
- Coordination of drawing package with relevant site furnishing suppliers.
- Complete and submit all construction tender drawings and specifications in non-encrypted PDF format, meeting the City's accessibility standards, to be submitted and reviewed by the City's Purchasing Services branch. Accessibility standards for tender submission will be provided to the successful proponent upon award.

#### **15. Submission Standards**

- All submissions are to be in electronic non-encrypted PDF and DWG.
- Drawings are to be black and white (with the exception of corporate logos, seals, and raster images) and sized to 24"x36" sheet. Font is to be Arial or Tahoma, size between 2mm and 2.5mm height (excluding titles and headings).

- Reports, including associated report drawings, can be colour, sized to 8.5x11. Font is to be aerial, size 12pt. Reports must be submitted in accessible format, with appended accessibility report.
- All Plant Material Schedules are to identify the botanical name, common name, quantity, identification symbol using botanical name abbreviation typology, size, container type, and unique comments if applicable.
- All background studies undertaken are to be provided to Parks Planning and Development in approved electronic formats such as PDF and DWG. Background studies are to be marked as 'Draft' until reviewed and approved by the City. Approved reports are to be marked 'Final' or 'Approved' with the date of completion, and submitted to the City.
- All as-built drawings for park development and redevelopment projects are to be provided to Parks Planning and Development in PDF and DWG electronic file format. Files are to be marked as 'Approved As-Built,' along with the associated professional seals, and include the date of completion.

## **16. Appendices**

Appendix A – Park Tree Species

Appendix B – Street Tree Species

## Appendix A: Park Tree Species

Any species without specific cultivars on this list, is inclusive of all cultivars, as indicated by the asterisk (\*) preceding the scientific / botanical name.

If there are multiple species with the same ID Symbol selected on a plant schedule, then the ID Symbol is to be updated to include a third letter for differentiation.

For ID Symbol's which include the '+' symbol below, the '+' symbol is to be replaced with the letter of the specific cultivar.

Deciduous Trees			
Common Name	Scientific / Botanical Name	ID Symbol	Size at Maturity
Freeman Maple	* <i>Acer freemanii</i> spp.	Af+	Large
Autumn Blaze Maple	<i>Acer x freemanii</i> 'Jeffersred'	AfJ	Large
Amur Maple	<i>Acer ginnala</i>	Ag	Small
Red Maple	* <i>Acer rubrum</i> spp.	Ar+	Varies
Sycamore Maple	<i>Acer pseudoplatanus</i>	Ap	Large
Silver Maple	* <i>Acer saccharinum</i> spp.	As+	Large
Sugar Maple	* <i>Acer saccharum</i> spp.	As+	Large
Black Maple	* <i>Acer saccharum</i> var. <i>nigrum</i> spp.	As+	Large
Ruby-Red Horse Chestnut	<i>Aesulus carnea</i> 'Briotii'	AcB	Large
Ohio Buckeye	<i>Aesulus glabra</i>	Ag	Large
Horse Chestnut	<i>Aesulus hippocastanum</i>	Ah	Large
Serviceberry	<i>Amelanchier canadensis</i>	Ac	Small
Birch	* <i>Betula</i> spp.	B+	Large
Bitternut Hickory	<i>Carya cordiformis</i>	Cc	Large
Shagbark Hickory	<i>Carya ovata</i>	Co	Large
Northern Catalpa	<i>Catalpa speciosa</i>	Cs	Large
European Hornbeam	<i>Carpinus betulus</i> 'Fastgiata'	Cb	Medium
Musclewood - Blue Beech	<i>Carpinus caroliniana</i>	Cc	Medium
Hackberry	<i>Celtis occidentalis</i>	Co	Large
Katsura	<i>Cercidiphyllum japonicum</i>	Cj	Large
Red Bud	<i>Cercis canadensis</i>	Cc	Small
Yellowwood	<i>Cladrastis lutea</i>	Cl	Small
Pagota Dogwood	<i>Cornus alternifoila</i>	Ca	Small
American Hazelnut	<i>Corylus americana</i>	Ca	Large
Turkish Hazel	<i>Corylus colurna</i>	Cc	Small
American Beech	<i>Fagus grandifolia</i>	Fg	Large
European Beech	<i>Fagus sylvatica</i>	Fs	Large
Copper Beach	<i>Fagus sylvatica</i> 'Cuprea'	FsC	Large

<b>Deciduous Trees</b>			
<b>Common Name</b>	<b>Scientific / Botanical Name</b>	<b>ID Symbol</b>	<b>Size at Maturity</b>
Tricolour Beech	<i>Fagus sylvatica 'Rosea-marginata'</i>	FsR	Large
Ginkgo (male)	* <i>Ginkgo biloba spp. (male)</i>	Gb+	Large
Honeylocust	* <i>Gleditsia triocanthos spp.</i>	Gt+	Large
Kentucky Coffee Tree	<i>Gymnocladus dioica</i>	Gd	Large
Espresso Coffee Tree	<i>Gymnocladus dioica 'espresso'</i>	GdE	Large
Black Walnut	<i>Juglans nigra</i>	Jn	Large
Golden Rain Tree	<i>Koelreuteria paniculata</i>	Kp	Large
Tulip Tree	* <i>Liriodendron tulipifera spp.</i>	Lt+	Large
Amur Maackia	<i>Maackia amurensis</i>	Ma	Small
Osage Orange "White Sheild"	<i>Maclura pomifera 'White Shield'</i>	MpW	Large
Magnolia	* <i>Magnolia spp.</i>	M+	Small
Crabapple	* <i>Malus spp.</i>	M+	Small
Dawn Redwood	<i>Metasequoia glyptostroboides</i>	Mg	Small
Mulberry	* <i>Morus spp.</i>	M+	Large
Black Gum	<i>Nyssa sylvatica</i>	Ns	Large
Hop Hornbeam / Ironwood	<i>Ostrya virginiana</i>	Ov	Medium
Amur Cork	<i>Phellodendron amurense</i>	Pa	Large
London Plane Tree	<i>Platanus x acerifolia</i>	Pa	Large
American Sycamore	<i>Platanus occidentalis</i>	Po	Large
Carolina Poplar	<i>Populus x canadensis 'Eugenei'</i>	PcE	Large
Trembling Aspen	<i>Populus tremuloides</i>	Pt	Large
Cherry	* <i>Prunus spp.</i>	P+	Small
Black Cherry	<i>Prunus serotina</i>	Ps	Large
Pear	<i>Pyrus communis</i>	Pc	Small
Oak	* <i>Quercus spp.</i>	Q+	Large
Willow	* <i>Salix spp.</i>	S+	Large
Sassafras	<i>Sassafras albidum</i>	Sa	Large
Japanese Pagoda	<i>Sophora japonica 'Regent'</i>	SjR	Medium
Mountain Ash spp	<i>Sorbus Cultivars</i>	Sc	Medium
Ivory Silk Tree Lilac	<i>Syringa reticulata 'Ivory Silk'</i>	Srl	Small
Linden	* <i>Tilia spp.</i>		Large
Princeton Elm	<i>Ulmus americana 'Princeton'</i>	UaP	Large
Valley Forge Elm	<i>Ulmus americana 'Valley Forge'</i>	UaV	Large
Pioneer Elm	<i>Ulmus x 'Pioneer'</i>	Up	Large

<b>Deciduous Trees</b>			
<b>Common Name</b>	<b>Scientific / Botanical Name</b>	<b>ID Symbol</b>	<b>Size at Maturity</b>
Accolade Elm	<i>Ulmus japonica wilsoniana</i> 'Morton'	UjW	Large
Nannyberry	<i>Viburnum lentago</i>	VI	Small
Zelcova	<i>Zelcova serrata</i>	Zs	Medium

<b>Coniferous Trees</b>			
<b>Common Name</b>	<b>Scientific / Botanical Name</b>	<b>ID Symbol</b>	<b>Size at Maturity</b>
Fir	* <i>Abies spp.</i>		Large
Weeping False Cypress	<i>Chamaecyparis nootkatensis</i> 'Pendulata'	CnP	Small
Hinoki False Cyprus	<i>Chamaecyparis obtusa</i>	Co	Small
Eastern Red Cedar	<i>Juniperus virginiana</i>	Jv	Large
Larch	<i>Larix decidua</i>	Ld	Large
Tamarack	<i>Larix laricina</i>	Ll	Large
Norway Spruce	<i>Picea abies</i>	Pa	Large
White Spruce	<i>Picea glauca</i>	Pg	Large
Black Spruce	<i>Picea mariana</i>	Pm	Large
Serbian Spruce	<i>Picea omorika</i>	Po	Large
Colorado Spruce	* <i>Picea pungens spp.</i>		Large
Austrian Pine	<i>Pinus nigra</i>	Pn	Large
Red Pine	<i>Pinus resinosa</i>	Pr	Large
White Pine	<i>Pinus strobus</i>	Ps	Large
Douglas Fir	<i>Pseudotsuga menziesii</i>	Pm	Large
White Cedar	<i>Thuja occidentalis</i>	To	Small
Emerald Cedar	<i>Thuja occidentalis</i> 'Emerald'	ToE	Small
Hemlock	<i>Tsuga canadensis</i>	Tc	Large



## Appendix B: Approved Street Tree Species

Any species without specific cultivars on this list, is inclusive of all cultivars, as indicated by the asterisk (\*) preceding the scientific / botanical name.

If there are multiple species with the same ID Symbol selected on a plant schedule, then the ID Symbol is to be updated to include a third letter for differentiation.

For ID Symbol's which include the '+' symbol below, the '+' symbol is to be replaced with the letter of the specific cultivar.

Deciduous Trees			
Common Name	Scientific / Botanical Name	ID Symbol	Size at Maturity
Autumn Blaze Maple	<i>Acer x freemanii 'Jeffersred'</i>	AfJ	Large
Amur Maple	<i>Acer ginnala</i>	Ag	Small
Green column Maple	<i>Acer nigrum 'Greencloumn'</i>	AnG	Large
Red Maple spp.	* <i>Acer rubrum spp</i>	Ar+	Large
Sycamore Maple	<i>Acer pseudoplatanus</i>	Ap	Large
Sugar Maple	<i>Acer saccharum spp.</i>	As+	Large
Black Maple	<i>Acer saccharum var. nigrum</i>	As	Large
Serviceberry	<i>Amelanchier canadensis</i>	Ac	Small
Hackberry	<i>Celtis occidentalis</i>	Co	Large
Katsura	<i>Cercidiphyllum japonicum</i>	Cj	Large
Ginkgo / Maidenhair Tree	<i>Ginkgo biloba spp. (male)</i>	Gb+	Large
Honeylocust	<i>Gleditsia triocanthos spp.</i>	Gt+	Large
Espresso Coffee Tree	<i>Gymnocladus dioica 'espresso'</i>	GdE	Large
Tulip Tree	<i>Liriodendron tulipifera spp.</i>	Lt+	Large
Amur Maackia	<i>Maackia amurensis</i>	Ma	Small
Black Gum	<i>Nyssa sylvatica</i>	Ns	Large
Hop Hornbeam / Ironwood	<i>Ostrya virginiana</i>	Ov	Medium
London Plane Tree	<i>Platanus x acerifolia</i>	Pa	Large
Kwansan Cherry	<i>Prunus serrulata "Kwansan"</i>	PsK	Small
Pear	* <i>Pyrus calleryana spp.</i>	Pc+	Small
Oak	* <i>Quercus spp.</i>	Q+	Large
Oakleaf Mountain Ash	<i>Sorbus thuringiaca 'Fastigiata'</i>	StF	Medium
Ivory Silk Tree Lilac	<i>Syringa reticulata 'Ivory Silk'</i>	Srl	Small
Linden	<i>Tilia Americana spp.</i>	Ta+	Large
Accolade Elm	<i>Ulmus japonica wilsoniana 'Morton'</i>	UjW	Large
Pioneer Elm	<i>Ulmus x 'Pioneer'</i>	Up	Large
Zelcova	<i>Zelcova serrata</i>	Zs	Large