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Introduction and Purpose

Toronto has been known as the “City of Trees.” There are an estimated 10 million trees in the city’s public parks, ravines, natural areas, streets, squares and neighbourhoods. Collectively, these public and privately-owned trees form Toronto’s “urban forest.”

The importance of the urban forest is broad and includes such benefits as natural habitat, improved air quality, shade, stormwater control, pedestrian amenity and aesthetic beauty. The Toronto Official Plan, Toronto Green Standard and Parks, Forestry & Recreation’s Strategic Plan: Our Common Grounds, each identify the need to protect and expand the city’s urban forest with the goal of increasing the tree canopy coverage to between 30% and 40%—the recommended threshold to sustain a healthy urban forest.

To meet this tree canopy target in Toronto, it will require the City and property owners to protect and replace existing trees, as well as increase opportunities to plant new trees and nurture them to maturity.

In collaboration with Urban Forestry, the Urban Design Streetscape Manual provides a selection of standard design options for street tree planting in both soft and hard landscape conditions. The intent of these standard details is to encourage better tree planting environments and larger growing shade trees in the public right-of-way.

This document is a supplement to the Standard Tree Planting design details available in the Streetscape Manual. An outline of each standard option is accompanied by guidance on selecting the most appropriate design for the streetscape context.
Growing Healthy Street Trees

There are approximately 600,000 trees planted on Toronto’s streets. Although street trees currently represent a small proportion of the total tree canopy, they are extremely significant in their contribution to the quality of the urban environment. Increasing both the number and size of street trees in Toronto will not only benefit the urban forest, but also greatly enhance the livability of the city.

In order to plant street trees that mature and thrive, trees must be recognized as part of the city’s “infrastructure,” in much the same way that street lights, benches, litter bins, shelters and utilities are considered integral to a complete street. Sufficient space and conditions for successful tree planting must be secured throughout the design, planning and construction of all projects.

While many factors contribute to the health, size and longevity of a street tree, this guide focuses mainly on the preparation of the site and design of the planting environment. In particular, the following 5 key issues should be considered during the project planning and approval process:

1. ensuring adequate soil volume
2. providing good quality soil
3. coordinating with the location of above and below-grade utilities
4. providing adequate watering and proper drainage
5. establishing maintenance routines and responsibilities (pruning, pest control, weeding, watering, litter removal, etc.)

Notes:
1 At least 15m³ of high quality soil should be provided per tree and each tree (through sharing or alone) should have direct access to at least 30m³ of high-quality soil.
2 High-quality soil shall consist of a minimum 0.9m and maximum 1.2m depth, over and above any required drainage system and/or granular material, be uncompacted, and be sandy loam with the following composition:
   - Sand (50%-60%)
   - Silt (20%-40%)
   - Clay (6%-10%)
   - Organic (2%-5%)
   - pH = 7.5 or less
2 Especially within the first 2 years of establishment

Visit the Urban Forestry website: toronto.ca/trees for additional tree specifications
Understanding the Streetscape

Toronto has a wide range of streets in both urban and suburban contexts. While most suburban streetscapes are generous in scale with ample space to plant trees, urban streetscapes can be more congested with a host of competing needs, such as street-front buildings, markets, outdoor cafés, street furnishings, underground and overhead utilities, bicycle parking and pedestrian traffic, all of which make successful street tree planting a greater challenge.

The Streetscape Manual identifies two general types of street: Green Streets and Main Streets. Green Streets are most closely associated with a suburban or residential context and offer many opportunities for low-cost, soft landscape tree planting. Main Streets, which are more commonly found in the denser urban centres and along avenues, are vibrant places, but may also require more costly and engineered tree planting solutions.

The Manual sub-divides Green Streets and Main Streets into the below listed hierarchy of streetscape types. This hierarchy helps assign appropriate design treatments to reflect the character and significance of each Toronto street.

<table>
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<tr>
<th>STREETSCAPE TYPES*</th>
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<td>Green Streets</td>
</tr>
<tr>
<td>• Scenic</td>
</tr>
<tr>
<td>• Intermediate</td>
</tr>
<tr>
<td>Main Streets</td>
</tr>
<tr>
<td>• Special</td>
</tr>
<tr>
<td>• Major</td>
</tr>
<tr>
<td>• Existing Main</td>
</tr>
<tr>
<td>• Emerging Main</td>
</tr>
</tbody>
</table>

*visit the Streetscape Manual online for more information about each streetscape type
INTERNAL STAFF ACCESS ONLY from city-dev.toronto.ca/planning/urbdesign/streetscape/

The Streetscape Manual focuses primarily on enhancing the design quality of the city’s arterial road network. Although many local neighbourhood streets are not identified in the Manual, tree planting remains a high priority for these streetscapes (refer to the design options recommended for Planting in Soft Landscapes (T-sL) for these streets).
Streetscape Zones

Each streetscape type can be readily understood as a series of active use areas or “zones.” The space between the curb and property line is the most common place for trees within the public right-of-way and is the area of focus in the Manual.

Although the design treatments may appear quite different between Green Streets and Main Streets, both streetscape types share a common structure of functional zones:

1. Edge Zone / Curb Apron
   - Located next to roadway/curb
   - Provides buffer between vehicles and pedestrians
   - Accommodates car door swing, mirrors, trash bin collection and snow windrows
   - Typically 0.46m min. from curb face is kept clear of permanent installations (e.g. street furnishings)

2. Furnishing and Planting Zone
   - Adjacent to edge zone and/or property line
   - May contain street trees, street furniture, poles, light standards and other fixed objects
   - In some cases may contain boulevard cafés and other marketing activities (see #4. below)
   - Width varies, but elements should be aligned in a manner that does not obstruct Pedestrian Clearway

3. Pedestrian Clearway
   - Accommodates primary pedestrian movement
   - A clear, unobstructed path with a reasonable width (2.1m min. recommended) to serve pedestrian flow
   - Provision of the Clearway is a priority
   - Trees, lighting, weather protection may extend above Clearway provided vertical clearance of 2.1m min.

4. Frontage and Marketing Zone
   - Adjacent to building/property line
   - May consist of marketing, outdoor merchandise displays, boulevard cafés and/or landscaping
   - In some cases may support street furniture and/or trees
Planting Zones

GREEN STREETS

Green Streets are characterized by generous landscaped setbacks, adjacent natural areas, public parks and open spaces. The built elements within these streetscapes are integrated with the natural environment and enhanced with street tree planting, creating open space corridors with a naturalized form.

Tree planting on Green Streets is typically within a soft landscape: refer to T-sL design details for standard tree planting options.

Less often, hard landscape treatments may be required: refer to T-design details for standard planting options.

MAIN STREETS

Main Streets normally include commercial, residential and mixed-use buildings which generate grade-related activities. The buildings create a continuous street wall with a direct or ‘storefront’ relationship to both the pedestrian realm and the vehicular portion of the street.

Tree planting on Main Streets is most often in a hard landscape treatment (curb surround, raised planter, etc.): refer to T-design details for standard tree planting options. Other tree planting systems (e.g. soil cells, breakout corridors) may be used subject to City approval (refer to page 19).

In rare cases, e.g. emerging main streetscapes, soft landscape treatments may be appropriate: refer to T-sL design detail for standard planting options.
Standard Options for Street Tree Planting

The following City of Toronto standard tree planting options for the public right-of-way should be referenced and applied during all streetscape-related projects, including:

- City Planning Development Review (e.g. Site Plan Applications)
- City Road Reconstruction Projects (Initiated by Transportation Services and TTC)
- Business Improvement Area Streetscape Enhancements Programs
- Urban Forestry Operations and Maintenance Projects
- Other Public and Private Streetscape-Related Construction/Enhancement Projects

The Street Tree planting options presented in this guide are classified in two categories: soft landscape and hard landscape. Selection of the appropriate option depends on the Streetscape Type (Main or Green) and the available space for the planting zone.

**Soft Landscape Planting Options:**

- T-sL1 Planting between Curb and Property Line
- T-sL2 Planting between Sidewalk and Property Line
- T-sL3 Planting Double Row of Trees

**Hard Landscape Planting Options: 1830mm Continuous Soil Trench**

- T-1 Open Planting Bed with curb surround
- T-2 Raised Planter
- T-3 Planter Cover

**Other Hard Landscape Planting Options**

Alternative design solutions, which provide comparable or better growing conditions, may be considered subject to City approval. Refer to page 19 for design strategies and considerations.
**Description**

In design option T-sL1, trees are planted between the curb/roadway and sidewalk. The surrounding planting area is grass and mulch (City Standard) or other soft landscape planting (approved by City and maintained by others).

**Design Application**

Most typically applied on GREEN STREETS.

**Positive attributes**

- Defines street edge
- Shades both street and pedestrian clearway
- Buffers pedestrians from street traffic
- Appropriate where little or no setback
- Provides space for canopy to spread evenly, tree achieves more natural shape – less maintenance
- May permit double row of trees, second row may be on public or private property (see also T-sL3)

**Issues to consider**

- Location of overhead and underground utilities
- Continuity of pedestrian clearway from adjacent sites/blocks
- Opportunities to bridge soil/rooting area under sidewalk, driveways and other surrounding surfaces
- Road snow storage kept away from pedestrian clearway, but may negatively impact health of trees (depending on distance trees are planted from curb)
- Trees may experience greater stress from road related activities: salt, snow, pollution, compaction, etc.
## Typical Cross-Section and Space Requirements for Planting Option T-sL1

### T-sL1: Trees in Soft Landscape

<table>
<thead>
<tr>
<th>SOFT LANDSCAPE AREA</th>
<th>PEDESTRIAN CLEARWAY</th>
<th>MINIMUM TOTAL WIDTH REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2m 5.5m</td>
<td>2.1m 1.7m 1.53m</td>
<td>7.80m 7.40m 7.23m</td>
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<tr>
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<td>5.50m 5.10m 4.93m</td>
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<td>2.1m 1.7m 1.53m</td>
<td>4.30m 3.90m 3.73m</td>
</tr>
</tbody>
</table>

### Note:
*Minimum required width varies depending on growing conditions available within the boulevard and/or beyond the property line. See Planting Options: Soft Landscape | Spatial Requirements fold-out at back of this guide for more detailed specifications.
Description
In design option T-sL2, trees are planted between the sidewalk and property line. The surrounding planting area is grass and mulch (City Standard) or other soft landscape planting (approved by City and maintained by others).

Design Application
Most typically applied on GREEN STREETS.

Positive attributes
- Shades pedestrian clearway
- Potential for tree roots to readily utilise additional soil volume on adjacent private properties
- Buffers tree from road activity stresses (e.g. salt spray, snow windrows, pollution, etc.)

Issues to consider
- Location of overhead and underground utilities
- Continuity of pedestrian clearway from adjacent sites/blocks
- Coordination with street furniture placement
- Requires building setback to permit full canopy - otherwise risk of greater maintenance
- May impact/conflict with or may enhance marketing zone activities (coordination required)
- Pedestrian clearway more exposed to traffic and roadway activities
- May cause uncertainty about ownership and maintenance responsibilities
Typical Cross-Section and Space Requirements for Planting Option T-sL2

Note:
* / ** Minimum required widths vary depending on growing conditions available within the boulevard and/or beyond the property line. See Planting Options: Soft Landscape | Spatial Requirements fold-out at back of this guide for more detailed specifications.
T-sL3 Planting Double Row of Trees

Description
In design option T-sL3, street trees are planted in a double row to one side or on either side of the sidewalk. The surrounding planting area is grass and mulch (City standard) or other soft landscape planting (approved by City and maintained by others). This planting option combines the requirements of T-sL1 and T-sL2.

Design Application
Most typically applied on GREEN STREETS, but only suitable for wider boulevards where both planting environments can be equally supportive of healthy, mature trees. Private property may augment planting conditions where available.

Positive attributes
- Combines benefits of T-sL1 and T-sL2 (see previous pages)

Issues to consider
- Refer to issues for T-sL1 and T-sL2
- Stagger trees and space evenly for maximum canopy effect
- Use only where sufficient width exists. The quality of planting conditions should not be compromised to accommodate a double row (i.e., high-quality single row preferred)
- On narrower boulevards, similar effect possible using option T-sL1 and planting a second row of trees on private property
## Typical Cross-Section and Space Requirements for Planting Option T-sL3

**Note:**
* Minimum required width varies depending on growing conditions available within the boulevard and/or beyond the property line. See Planting Options: Soft Landscape | Spatial Requirements fold-out at back of this guide for more detailed specifications.

<table>
<thead>
<tr>
<th>Curb</th>
<th>Soft Landscape Area</th>
<th>Pedestrian Clearway</th>
<th>Soft Landscape Area</th>
<th>Minimum Total Width Required</th>
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</thead>
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<td>5.5m</td>
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<td>11.00m</td>
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<td></td>
<td></td>
<td>1.7m</td>
<td></td>
<td>10.60m</td>
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<td></td>
<td></td>
<td>1.53m</td>
<td></td>
<td>10.43m</td>
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<td>3.2m</td>
<td>2.1m</td>
<td>1.5m*</td>
<td>7.00m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.7m</td>
<td></td>
<td>6.60m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.53m</td>
<td></td>
<td>6.43m</td>
</tr>
</tbody>
</table>
T-1 Option for 1830mm Continuous Soil Trench

T-1A-Concrete Sidewalk / T-1B-Unit Paved Sidewalk

Description
In design option T-1, street trees are planted in an open bed surrounded by mulch (City Standard) and/or low plantings (maintained by others) and a barrier curb. The curb treatment may be granite, precast concrete, or other City-approved material.

The length of the open planting bed varies depending on the sidewalk space available (1800mm minimum, normally increased in 1800mm increments). The open planting bed must be completely soft surface and/or protected with a railing/bollards to ensure pedestrians do not interpret it as a sidewalk.

The curb profile also varies, but should always provide a clear definition between the pedestrian clearway and the planting area.

A variety of furnishings, such as decorative railings, bollards, tree guards, etc. may be installed where approved by the City and maintained by others (e.g. local Business Improvement Area, property owner, etc.) unless otherwise specified.

Design Application
The Open Planting Bed is most typically applied on MAIN STREETS with generous sidewalks. Each planting bed accommodates single or multiple trees

Positive attributes
• Open planting bed gives tree roots greater access to water and air
• Root crown has more room to grow and spread without disturbing surrounding hard surface or girdling tree
• Soft surface increases stormwater and pollution control benefits for sidewalk
• Plant material (normally maintained by others) enhances streetscape appearance
• Barrier curb/plantings protect trees from injury related to sidewalk activities (e.g. snow plowing, salting, pedestrian traffic, bicycle storage, etc.)

Issues to consider
• Continuity of pedestrian clearway from adjacent sites/blocks (trench may be located next to edge zone as shown or between clearway and property line where building setbacks permit)
• Coordination with street furniture placement and utility locations
• Only appropriate where clearway is wide enough for pedestrians to circulate without treading on curb or planted area (2.1m minimum required)
• Ideal where adjacent property owner/Business Improvement Area or City/others agree to maintain enhanced plant material and/or decorative features
Total Required Sidewalk Width
- 4.8m minimum (with 2100mm clearway)

Note: Where decorative paving band is replaced with 400mm min. wide curb, required minimum width reduced to 4.4m

Continuous Trench
- 1830mm width

Curb / Apron
- width varies (815mm typical, 400mm minimum)

Pedestrian Clearway
- width varies (2100mm minimum)

Tree Spacing
- plant on-centre 5.0m min. to 10.0m max. (7.0m to 8.0m intervals recommended)

See Planting Options: Hard Landscape | Spatial Requirements fold-out at back of this guide for more detailed specifications.

T-1B - Unit Paved Sidewalk Option
T-2 Raised Planter

T-2 Option for 1830mm Continuous Soil Trench

**Description**
In design option T-2, street trees are planted in a raised planter surrounded by mulch (City Standard) and/or low plantings (maintained by others). The top ledge of the planter may also function as a seat with optional treatment in granite, wood, or other City-approved material (see typical options below right).

**Design Application**
Most typically applied on MAIN STREETS with wide sidewalks and generous building setbacks. Although narrower applications are possible, a minimum distance of 6m between the tree and building face is recommended.

**Positive attributes**
- Same benefits as for T-1 (see previous pages)
- Raised bed provides additional protection for trees from road and sidewalk activities (i.e. less exposure to salt spray, snow piling, compaction, etc.)
- Informal seating ledges enhance streetscape amenity

**Issues to consider**
- Continuity of pedestrian clearway from adjacent sites/blocks (trench may be located next to edge zone as shown or between clearway and property line where building setbacks permit)
- Coordination with street furniture placement and utility locations
- Only appropriate where clearway is wide enough for pedestrians to circulate comfortably (2.1m minimum required, more width required on busy streets)
- Ideal where adjacent property owner/Business Improvement Area or City/others agree to maintain enhanced plant material, seat cladding and other decorative features (see optional identification detail below)

**Planter Top Typical Options**
Granite, Wood, Concrete, or As Specified

**Optional BIA/Neighbourhood Identification**
Material and Design as approved by City
**Total Required Sidewalk Width**
- 4.8m minimum (with 2100mm clearway)

Note: Where decorative paving band is replaced with 460mm minimum setback of planter edge from curb, required minimum width reduced to 4.5m

**Continuous Trench**
- 1830mm width (1930mm with planter overhangs)

**Curb / Apron**
- width varies (765mm* typical, 460mm minimum to planter edge)

**Pedestrian Clearway**
- width varies (2100mm minimum)

**Tree Spacing**
- plant on-centre 5.0m min. to 10.0m max. (7.0m to 8.0m intervals recommended)

See Planting Options: Hard Landscape | Spatial Requirements fold-out at back of this guide for more detailed specifications.

**T-2B- Unit Paved Sidewalk Option**

*C* 765mm represents typical distance between the curb and planter edge based on an 815mm curb apron with a two row paver band
**T-3 Planter Cover**

**T-3 Option for 1830mm Continuous Soil Trench**

**T-3A-Concrete Sidewalk / T-3B-Unit Paved Sidewalk**

**Description**
In design option T-3, street trees are planted below a hard surface cover (precast concrete or unit pavers typical) with a 600mm x 600mm tree opening. A metal tree grate (as approved by the City and maintained by others) may be installed in place of the hard surface cover (see below). The tree opening should be protected with a tree grid, tree guard, planting basket, or other City-approved installation.

**Design Application**
Most typically applied on MAIN STREETS with narrow sidewalks, extensive marketing activities (e.g. outdoor cafés, grocery stands, etc.) and/or little to no building setbacks.

**Positive attributes**
- Provides tree growing opportunity in constrained sidewalk environments
- Planter cover maximizes available space for pedestrian circulation
- Tree roots protected from compaction related to pedestrian activity
- Optional guard may further protect tree from injury related to sidewalk activity (e.g. snow removal, bicycle storage, etc.)

**Issues to consider**
- Continuity of pedestrian clearway from adjacent sites/blocks [trench may be located next to edge zone as shown or between clearway and property line where building setbacks permit - consider using planting option T-1 where building setback allows additional clearway to be secured on private property]
- Coordination with street furniture placement and utility locations
- Only recommended where sidewalk zone, clearway and building setbacks are too narrow or crowded to accommodate planting detail T-1 (see previous pages)

Optional Tree Grate (to replace hard cover)
Material and Design as approved by City

Optional protective tree grate being installed

Optional protective tree guard
Total Required Sidewalk Width
- 4.8m minimum (with 2100mm clearway)
- 4.2m minimum (with 1530mm clearway)

Note: Where decorative paving band is replaced with 400mm min. wide curb, required widths reduced to 4.4m and 3.8m

Continuous Trench
- 1830mm width

Curb / Apron
- width varies (815mm typical, 400mm minimum)

Pedestrian Clearway
- width varies (2100mm preferred* minimum, 1530mm absolute minimum)
  *where 2100mm + clearway achieved, consider using T-1

Tree Spacing
- plant on-centre 5.0m min. to 10.0m max. (7.0m to 8.0m intervals recommended)

See Planting Options: Hard Landscape | Spatial Requirements fold-out at back of this guide for more detailed specifications.
OTHER HARD LANDSCAPE PLANTING OPTIONS

OTHER STRUCTURAL SYSTEMS

Alternative design solutions, which provide comparable or better growing conditions (i.e. 30m³ min. of high-quality soil for each tree, see page 2), may be considered subject to City approval.

It is appropriate to consider the use of other structural systems (poured-in-place curbs, suspended slabs, structural soils/cells, etc.) where budget permits and/or conditions above- and below-grade prohibit the application of current City Standards. Alternative structural systems can also be used to augment the City’s standard options or other approved designs.

STRUCTURAL SOIL CELLS

One advantage of soil cells over the current City planting standards is that a significant growing environment can be achieved within a more flexible underground configuration. The depth of the cells can vary according to each module’s width and height and the layout of soil volume can cover an irregular area (not limited by structural spans or a linear footing). This flexibility increases growing opportunities particularly in constrained areas.

When and how should structural cells be used?

**Option A. Bridging Soil Volumes**
Use between planting areas to provide bridging connections below hard surfaces from one soil volume to another. Used in this way, soil cells provide a means to connect isolated trees to an adequate growing environment (note: structural soils or reinforced sidewalks can also be used to achieve bridging).

**Option B. Expanding Soil Volumes**
Use to expand the soil volume of trees planted in a contained planting area which is not large enough to provide optimum tree growing conditions. Used in this way, soil cells extend the soil volume laterally beyond the planting bed below areas traditionally unsuitable for tree growth (sidewalks, parking lay-bys, etc.).

**Option C. Providing Soil Volumes**
Apply in high profile areas where space for tree planting is limited, constrained by underground utilities, building setbacks or pedestrian traffic. Soil cells provide an opportunity for a wide range of surface treatments, while still providing sufficient soil volume below to allow trees to reach maturity.

Example of soil cells being installed (Bloor St. W.)
References

Building Toronto Together: A Development Guide
toronto.ca/developing-toronto/darp_guide

City of Toronto Urban Forestry Website
toronto.ca/trees/

Development Infrastructure Policy and Standards (DIPS)
toronto.ca/wes/techservices/involved/transportation/future_streets/

Parks, Forestry & Recreation's Strategic Plan: Our Common Grounds
toronto.ca/parks/commongrounds

SPQA City Standard Construction Standards for Roads
toronto.ca/calldocuments/conspecs_roads

Toronto Green Standard
toronto.ca/planning/greendevelopment

Toronto Official Plan
toronto.ca/planning/official_plan

Toronto Public Utilities Coordinating Committee (TPUCC)
tpucc.com (password access only)

Toronto Urban Design Streetscape Manual
insideto.toronto.ca/streetscapemanual (internal City staff access only)

Transportation Services
Right of Way Mgmt, Permit Applications for work within the Public Right of Way
Toronto Street Trees
General Notes:
1. At least 15m³ of high quality soil should be provided per tree and each tree (through sharing or alone) should have direct access to at least 30m³ of high-quality soil.
2. High quality soil shall consist of a minimum 0.9m and maximum 1.2m depth, over and above any required drainage system and/or gravel/merial, be uncompacted, and be sandy loam with the following compositions:
   - Sand 50%-60%
   - Silt 20%-40%
   - Clay 9%-14%
   - Organic 2%-5%
   - pH = 7.5 or less
3. Especially within the first 2 years of establishment.

### T-sL1 Planting Between Curb and Sidewalk
Refer to Streetscape Manual Standard Street Tree Design Details T-sL1 for complete specifications:
- Trees planted 5.0m min. to 10.0m max. on centre (7.0m to 8.0m intervals recommended)
- Where possible, use soil cells, structural soil or other approved technique to extend rooting zones below and beyond hard surfaces
- Tree planting from curb: as far away from curb and as close to sidewalk as possible (do not centre in soft landscaped area unless 4.0m minimum offset from curb is achieved)
- Tree planting from building face: 6.0m minimum recommended, 3.0m minimum

### T-sL2 Planting Between Sidewalk and Property Line
Refer to Streetscape Manual Standard Street Tree Design Details T-sL2 for complete specifications:
- Trees planted 5.0m min. to 10.0m max. on centre (7.0m to 8.0m intervals recommended)
- Tree planting from edge of sidewalk: 1.5m min. recommended, 1.2m min. for balled and burlapped, 0.8m min. for bare root planting
- Tree planting from building face: 6.0m minimum recommended, 3.0m minimum

### T-sL3 Planting Double Row of Trees
Refer to Streetscape Manual Standard Street Tree Design Details T-sL3 for complete specifications:
- Trees planted 5.0m min. to 10.0m max. on centre (7.0m to 8.0m intervals recommended)
- Offset/stagger each row for maximum canopy effect
- Follow T-sL1 and T-sL2 for minimum widths, tree locations, planting and soil specifications
- Tree planting areas should be equally high-quality for matched tree growth, otherwise apply single row only (T-sL1 or T-sL2)
- Tree planting from building face: 6.0m minimum recommended, 3.0m minimum

Sidewalk conditions may vary. Required minimum widths subject to City approval. Refer to the Streetscape Manual for specification details.

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### T-sL1 Planting Between Curb and Sidewalk
<table>
<thead>
<tr>
<th>CURB</th>
<th>SOFT LANDSCAPE AREA</th>
<th>PEDESTRIAN CLEARWAY</th>
<th>MINIMUM TOTAL WIDTH REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2m</td>
<td>5.5m</td>
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<td></td>
<td></td>
<td>1.7m</td>
<td>7.40m</td>
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<td>1.3m</td>
<td>7.23m</td>
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### T-sL2 Planting Between Sidewalk and Property Line
<table>
<thead>
<tr>
<th>CURB</th>
<th>SOFT LANDSCAPE AREA</th>
<th>PEDESTRIAN CLEARWAY</th>
<th>MINIMUM TOTAL WIDTH REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2m</td>
<td>5.5m</td>
<td>2.1m</td>
<td>7.10m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.7m</td>
<td>6.70m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.3m</td>
<td>6.43m</td>
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</table>

### T-sL3 Planting Double Row of Trees
<table>
<thead>
<tr>
<th>CURB</th>
<th>SOFT LANDSCAPE AREA</th>
<th>PEDESTRIAN CLEARWAY</th>
<th>SOFT LANDSCAPE AREA</th>
<th>MINIMUM TOTAL WIDTH REQUIRED</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.2m</td>
<td>5.5m</td>
<td>2.1m</td>
<td>7.10m</td>
<td>11.00m</td>
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<tr>
<td></td>
<td></td>
<td>1.7m</td>
<td>6.70m</td>
<td>10.60m</td>
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<td></td>
<td></td>
<td>1.3m</td>
<td>6.43m</td>
<td>10.43m</td>
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</tbody>
</table>

* A reduction from 2.0m to a minimum 2.0m wide soft landscaped area may be considered under the following conditions:
  - Trees planted in raised planting bed or protected by a fence/guard approved by the City of Toronto
  - Additional growing environment exists beneath/beyond sidewalk (see notes above)

1 Planting less than 6.0m from a building face may limit tree size and compromise natural canopy shape resulting in more maintenance.

2020
### T- Planting Options: Hard Landscape | Spatial Requirements

Sidewalk conditions may vary. Required minimum widths subject to City approval. Refer to the Streetscape Manual for specification details.

#### T-1 Open Planting Bed
**T-1A Concrete Sidewalk / T-1B Unit Paved Sidewalk**

Refer to Streetscape Manual Standard Street Tree Design Details T-1 for complete specifications
- Trees planted 5.0m min. to 10.0m max. on centre (7.0m to 8.0m intervals recommended)
- Length of open planting bed varies depending on space available. Minimum curb length is 1000mm. Length typically increased in 1000mm increments
- Extend continuous soil trench or planting bed a minimum of 2700mm (4500mm recommended) beyond the last tree planted at each end of the trench
- Open planting bed must have 3.2m min. curb length to plant more than 1 tree

#### T-2 Raised Planter
**T-2A Concrete Sidewalk / T-2B Unit Paved Sidewalk**

Refer to Streetscape Manual Standard Street Tree Design Details T-2 for complete specifications
- Trees planted 5.0m min. to 10.0m max. on centre (7.0m to 8.0m intervals recommended)
- Extend continuous soil trench or planting bed a minimum of 2700mm (4500mm recommended) beyond the last tree planted at each end of the trench

*Minimum dimension for two rows of pavers (815mm) minus raised planter curb-side overhang (±50mm)

**Minimum required setback from curb face to vertical obstruction

***Typical raised planter overhang, but varies depending on design and decorative treatments applied (total minimum required width must be adjusted to reflect raised planter design and dimensions)

#### T-3 Planter Cover
**T-3A Concrete Sidewalk / T-3B Unit Paved Sidewalk**

Refer to Streetscape Manual Standard Street Tree Design Details T-3 for complete specifications
- Trees planted 5.0m min. to 10.0m max. on centre (7.0m to 8.0m intervals recommended)
- Extend continuous soil trench or planting bed a minimum of 2700mm (4500mm recommended) beyond the last tree planted at each end of the trench

*Option T-3 is for narrow/crowded conditions only. Where 2.1m or greater pedestrian clearway is available in the public ROW or secured with an easement on private property, consider planting option T-1

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### T- Hard Landscape Options

<table>
<thead>
<tr>
<th>T-1A</th>
<th>T-2A</th>
<th>T-3A</th>
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<tbody>
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<td>CONTINUOUS TREE TRENCH</td>
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<td>PEDESTRIAN CLEARWAY</td>
<td>PEDESTRIAN CLEARWAY</td>
</tr>
<tr>
<td>MINIMUM TOTAL WIDTH REQUIRED</td>
<td>MINIMUM TOTAL WIDTH REQUIRED</td>
<td>MINIMUM TOTAL WIDTH REQUIRED</td>
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<tr>
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<td>4.49m</td>
<td>4.33m</td>
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April, 2010