

9.0 LANDSCAPE AND URBAN DESIGN

9.1 General

- The Developer is responsible to protect and maintain as many of the existing trees within the subdivision limits as possible. The Developer's ISA Certified Arborist or Landscape Architect shall prepare a Tree Preservation Plan identifying any trees which require protection. All trees not designated for removal in the vicinity of construction activity shall be protected against damage by a Tree Protection Zone (TPZ) in accordance with **OPSS 801**. The fence shall be a minimum height of 1.2m and supported by steel posts along the drip-line plus one meter at a minimum. Equipment shall not be parked, repaired or refuelled, construction materials shall not be stored, and earth materials shall not be stockpiled within the TPZ of the protected trees. The Contractor shall ensure that the construction operations do not cause flooding or sediment deposits within designated TPZ's. Where this possibility exists, silt fencing shall be installed on the outside of the TPZ. The Developer is responsible for the replacement of all dead or damaged trees until assumption of the subdivision.
- Boulevard trees shall have a minimum height of 2.4m and diameter of 50mm measured 1.4 m above grade (60mm measured 0.15m above grade), and must be planted in accordance with good nursery practices.
- Boulevard trees must be supported by two stakes installed outside of the planting hole. The stakes shall be removed during the following growing season by the Developer or their designated contractor.
- Only trees indicated for 'Streets' planting in Table 1, below, may be selected as boulevard trees. A minimum of four different tree species shall be selected for any street in order to promote diversity.
- Only the following trees may be used in areas where overhead cables exist, in accordance with the arborist report and at the discretion of the Town:
  - Ironwood (*Ostrya virginiana*), Serviceberry (*Amelanchier canadensis*), Turkish hazel (*Corylus colurna*), European hornbeam (*Carpinus betulus*), Ivory silk lilac (*Syringa reticulata*), Grey Dogwood (tree form) (*Cornus racemosa*).
- Turkish hazel, serviceberry, ivory silk lilac and grey dogwood shall not be planted on streets where overhead cables are not present. Larger-growing species shall be selected.
- Additional species and varieties may be planted subject to written approval from the Town.

Table 1: Deciduous Tree Species

Common Name	Scientific Name	Streets	Parks	SWM
Freeman Maple	<i>Acer x freemanii</i>	X	X	X
Red Maple	<i>Acer rubrum</i>	X	X	X
Silver Maple	<i>Acer saccharinum</i>	X	X	X
Sugar Maple	<i>Acer saccharum</i>		X	X
Ohio Buckeye	<i>Aesculus glabra</i>		X	
Serviceberry	<i>Amelanchier canadensis</i>		X	X
Paper Birch	<i>Betula papyrifera</i>		X	X
European hornbeam	<i>Carpinus betulus</i>	X	X	
Blue Beech	<i>Carpinus caroliniana</i>		X	X
Common Hackberry	<i>Celtis occidentalis</i>	X	X	X
Grey Dogwood (tree form)	<i>Cornus racemosa</i>		X	X
Turkish hazel	<i>Corylus colurna</i>	X	X	
American Beech	<i>Fagus grandifolia</i>		X	X
Maidenhair Tree***	<i>Ginkgo biloba</i>	X	X	
Thornless Honeylocust	<i>Gleditsia triacanthos var. inermis</i>	X	X	
Ironwood	<i>Ostrya virginiana</i>	X	X	X
London Plane Tree	<i>Platanus x acerifolia</i> 'Bloodgood'	X	X	X
Big-toothed Aspen	<i>Populus grandidentata</i>		X	X
Trembling Aspen	<i>Pupulus tremuloides</i>		X	X
Kwanzan Japanese Cherry	<i>Prunus serrulata</i> 'Kwanzan'		X	
Chokecherry	<i>Prunus virginiana</i>		X	X
White Oak	<i>Quercus alba</i>	X	X	X

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Swamp White Oak	Quercus bicolor		X	X
Bur Oak	Quercus macrocarpa	X	X	X
Pin Oak	Quercus palustris	X	X	
English Oak	Quercus robur	X	X	
Red Oak	Quercus rubra	X	X	X
Ivory Silk Tree Lilac	Syringa reticulata 'Ivory Silk'	X		
Little Leaf Linden	Tilia cordata	X	X	
Glenleven Linden**	Tilia x flavescens 'Glenleven'	X	X	
Redmond Linden	Tilia Americana "Redmond"	X	X	
Homestead Elm*	Ulmus x 'Homestead'	X	X	

\*- or other DED tolerant cultivars  
 \*\*- or other cultivars  
 \*\*\*-male cultivars only

Table 2: Coniferous Tree Species

Common Name	Scientific Name	Streets	Parks	SWM
White Fir	Abies concolor		X	X
Tamarack	Larix laricina		X	X
White Spruce	Picea glauca		X	X
Eastern White Pine	Pinus strobus		X	X
Douglas Fir	Pseudotsuga menziesii		X	X
Eastern White Cedar	Thuja occidentalis		X	X
Eastern Hemlock	Tsuga Canadensis		X	X

- All boulevards to be fine graded with minimum 150mm of topsoil and sodded with #1 Nursery Sod.
- All residential driveways shall be paved from the curb to the garage face in accordance with the structural requirements outlined in Section 2.7. Driveway should be perpendicular to the curb where possible.
- The driveway width shall conform to the zoning by-law for each development project. A separation of at least 1.0m shall be provided between adjacent driveways and they shall not cross the projection of the lot line between two lots. Driveways at curves and cul-de-sacs shall be shown on the Draft Plan prior to approval.
- All driveways shall be 1.5m clear from any transformers and 1.0m clear from any other above ground utilities such as hydrants, catchbasins, street lights, utility pedestals, etc.

Subdivisions

A minimum of one tree on the frontage of every lot created in a development shall be planted in locations shown on the approved landscape plans. A minimum of one tree every six to nine metres shall be planted, depending on species, along lot flankages and on boulevards adjacent to blocks in the developments, such as storm water ponds, parks, schools and industrial/commercial developments. A minimum separation of 1.5m shall be provided between the tree location and any service to the lot **(REPLACE WITH CHART)**.

Fencing, Screening and Buffer Planting

- Where lots abut walkways, 1.8m high privacy fence and 1.5m high black vinyl chain link fence with top rail in accordance with OPSD 972.130 shall be installed in accordance with TNT.SD 118.
- 1.5m high black vinyl chain link fence with top rail in accordance with OPSD 972.130 shall be installed where lots abut open space blocks, parks, stormwater management facilities (as directed by the Municipality) and any other public spaces. Such fences are to be installed entirely on public lands.
- 1.5m high black vinyl chain link fence with top rail in accordance with OPSD 972.130 shall be installed where lots abut agricultural lands. Such fences are to be installed entirely on the residential lands.

VALDOR TO PROVIDE MIN. TREE STANDARD CLEARANCES IN CHART FORM

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- 1.8m high black vinyl chain link fence with top rail in accordance with OPSD 972.130 shall be installed where lots abut schools. Such fences are to be installed entirely on school lands.
- 1.8m high privacy fence shall be installed where lots abut commercial blocks, lots flanking collector roads and lots which have a community mailbox pad on the flankage. The fence around a commercial block and at collector roads shall be upgraded to an acoustic fence if required by the Noise Impact Study. Acoustic fence shall be installed in accordance with the recommendations of the Noise Impact Study.
- At a minimum, privacy and acoustic fences shall be installed as per TNT.SD 121 and TNT.SD 122, respectively, or as approved by the municipality.
- In special circumstances coniferous species can be planted along the acoustical wall to screen the fence and break-up the visual effect of the fence. The Town will review the proposed species and their suitability for such location prior design being finalized.
- All wooden fences shall be stained Sikkens CC Grey, or as approved by the Municipality.
- Stormwater Management Facility fencing - refer to Section 5.5.15.

#### 9.4 Parkland and Open Space

- The following services are to be provided to all parklands:
  - Storm service including maintenance hole
  - Sanitary service including maintenance hole
  - Water service with valve & box (or chamber depending on size of service)
  - Underground primary and/or secondary electrical service cables
- All parkland blocks to be dressed with min. 150mm of topsoil and seeded and fertilized. All large stones and debris are to be removed by the Developer and the block is to remain clean at all times. Any open space blocks that are less than 0.4 ha in size are to be sodded.
- Parkland concept design to be submitted to the Town for review and approval by the Parks, Recreation and Culture Department. Upon concept design approval, the Landscaping Consultant shall provide final drawings complete with all necessary details.

#### 9.5 Tree Preservation Report

- A Tree Preservation Report is to be completed and signed by an Arborist or Landscape Architect, who is Certified by the International Society of Arboriculture (ISA), an ISA Board Certified Master Arborist, a member of the American Society of Consulting Arborists (ASCA) or a Registered Professional Forester (RPF).
- Tree Preservation Report shall include a tree inventory, a tree management plan, and a list of removals and preservation requirements for trees to be retained and compensation calculations in keeping with the applicable municipal bylaw for trees to be removed.

##### 9.5.1 Tree Inventory

- All existing trees with a diameter of 10.0cm or greater at breast height (DBH) on the subject site, as well as all trees on adjacent properties within 6.0 meters of the subject property limits, shall be inventoried.
- Each tree shall be tagged or numbered in field.
- All inventory information shall be compiled in a table and presented as a part of the tree management plan and report.
- The following information to be provided for all inventoried trees:
  - Tree number (tag number)
  - Tree species name including botanical name
  - Tree diameter at breast height (DBH, measured in centimeters at 1.4m above ground level)
  - Radius of the tree drip line as measured in meters from the trunk to the observed limits of the branching of the tree (drip line)
  - Tree health condition rating using the following rating system
    - Dead (No live foliage observed)
    - Poor (Less than 40% live foliage observed)
    - Fair (More than 40% less than 80% live foliage observed)
    - Good (More than 80% live foliage observed)

- The identification of all municipal owned trees, historical and heritage trees, if applicable
- Recommendation to be indicated as either: retain, to be removed or to be relocated
- Forested areas (woodlots) within Town of New Tecumseth are regulated under the applicable County of Simcoe Tree Cutting By-Law.
- If the development includes a tree plantation that has not been managed for its intended purpose for a period of 15-years, it will be subject to the same regulatory provisions as a woodlot, as per the applicable County of Simcoe Tree Cutting By-Law.
- If the development site is located within a woodlot, a general assessment of all vegetation on the site is required for the Town's review. A further detailed assessment and compensation calculations will be required based on review comments from the Municipality.
- Wherever possible, existing vegetation should be incorporated into new development areas.

#### 9.5.2 Tree Management Plan

- A Tree Management Plan (TMP) shall be created in conjunction with the grading plans, erosion and sedimentation control plans, landscaping and site servicing plans. The TMP must be accompanied by and read in conjunction with the TPR as outlined in Section 9.5.3.
- Drawing scale to be 1:500.
- The following information shall be incorporated into the Tree Management Plan:
  - Show surveyed location of all trees (10cm DBH or greater) at their actual size with actual size of the dripline as observed in the field.
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  - Show grading information (original grades, proposed grades, extents of cut and fill areas, areas of potential disruption to surface drainage). Show all existing structures, roads, ROW, driveways and natural features.
  - Show proposed lot fabric, building envelope footprints, property boundaries, roads, easements, edges of curb, sidewalks, street furniture, structures and **servicing locations** (include all applicable).
  - Show location of construction vehicle access, soil stockpiles and temporary storm water management ponds.
  - Show limits and locations of tree protection zones (TPZ) for all trees to be retained (preservation limits for TPZ will be established based on the limit of dripline plus 1.0 metre into the development area or in accordance with the Tree Preservation Report).
  - Show location and type of tree protection measures complete with details.
  - Include tree inventory table.
  - Include standard Tree Preservation Notes.

#### 9.5.3 Tree Preservation Report

- A Tree Preservation Report (TPR) shall be created to review the current condition of the trees with relation to the grading plan and proposed site works. The TPR must be accompanied by and read in conjunction with the TMP as outlined in Section 9.5.2.
- The following information, at a minimum, is to be included in the Tree Preservation Report:
  - Background information relating to the prior uses of the site and any relevant information pertaining to the site.
  - Documentation on the methods of the tree inventory and analysis of potential tree impacts.
  - Include a tree inventory table and any additional information relating to the trees on the site. Photographs can be included where applicable.
  - Review of the site proposal and analysis of the potential impacts to the trees.
  - Tree preservation requirements and methodologies with site monitoring requirements during and post construction.
  - Summary of trees to be removed and reason for removal.
  - Compensation calculation for trees proposed for removal in keeping with the applicable municipal by-law.
  - Woodlot tree removal compensation calculations, if applicable.
  - Report summary.
  - Appendices as required.