

**Policy Title:** Tree Canopy Policy

Policy Number: MS 380

**Reference:** Section 270 (1) Municipal Act, 2001 and Council Resolution

#59-19

**Date Approved:** February 19, 2019

Date Revised: Not Applicable

Approval: Council

**Point of Contact:** Assistant Superintendent of Operations, Parks

Further to the requirement under Section 270 (1) of the Municipal Act for municipalities to adopt a Tree Canopy Policy, Whitby Town Council approved the following recommendation at a meeting of Council on February 19, 2019:

That for the purpose of complying with Section 270 (1) (7) of the Municipal Act, Council hereby acknowledges the policies as described in Section 4 of Report PW 06-19, and as outlined in detail in Attachments 1 to 17, as may be amended or replaced from time to time, as the Town's policies to protect and enhance the tree canopy and natural vegetation in the municipality.

Please see Appendix 1 below for access to Report PW 06-19 and its respective attachments referenced above.

#### **Appendices**

**Appendix 1** Report PW 06-19: Ontario Municipal Act – Tree Canopy Policies

This Policy is hereby approved by Council Resolution #59-19 on this 19<sup>th</sup> day of February, 2019.



# Town of Whitby Staff Report whitby.civicweb.net

Report Title: Ontario Municipal Act – Tree Canopy Policies

Report to: Committee of the Whole

**Date of meeting:** February 11, 2019

Report Number: PW 06-19

**Department(s) Responsible:** 

Public Works Department
Community and Marketing Services
Department
Planning and Development Department

#### Submitted by:

Suzanne Beale, Commissioner of Public Works

Acknowledged by M. Gaskell, Chief Administrative Officer

#### For additional information, contact:

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Mike Henderson, Acting Assistant Superintendent of Operations, Parks, ext. 3568

#### 1. Recommendation:

- 1. That for the purpose of complying with Section 270 (1) (7) of the Municipal Act, Council hereby acknowledges the policies as described in Section 4 of Report PW 06-19, and as outlined in detail in Attachments 1 to 17, as may be amended or replaced from time to time, as the Town's policies to protect and enhance the tree canopy and natural vegetation in the municipality.
- 2. That the Public Works Forestry Group provide semi annual updates to Council on the status of Forestry, and its related tree management programs, as well as any relevant educational opportunities.

#### 2. Highlights:

 Section 270(1) of the <u>Ontario Municipal Act</u> requires municipalities to adopt a policy prior to March 1, 2019 which sets out the manner in which it will protect and enhance their tree canopy and natural vegetation.

- The Town has policies, by-laws, guidelines, standards and practices already in place regarding the protection and enhancement of the Town's tree canopy and natural vegetation.
- The Town will be developing in 2020 an Urban Forest Management Plan to implement the Town's Official Plan policies and development guidelines, and augment existing practices and procedures.

#### 3. Background:

Section 270(1) of the Ontario Municipal Act requires municipalities to adopt and maintain policies with respect to the following matters;

Note: On March 1, 2019, the day named by proclamation of the Lieutenant Governor, subsection 270 (1) of the Act is amended by adding the following paragraphs: (See: 2017, c. 10, Sched. 1, s. 32)

7. The manner in which the municipality will protect and enhance the tree canopy and natural vegetation in the municipality.

#### 4. Discussion:

#### **Tree Protection Policies**

The Town of Whitby Official Plan contains policies related to the protection of trees, woodlands, and the Natural Heritage System and recognizes the importance of urban forests and tree canopy for their environmental, social, and economic benefits.

The Official Plan policy 3.2.8.2 states that the municipality may prepare plans, guidelines, standards, and by-laws to protect, enhance, and expand the tree canopy. The Official Plan also contains policies regarding requirements for tree planting and preservation as conditions in subdivision agreements and development approvals to provide sufficient tree canopy.

The Official Plan policy 3.2.8.3 indicates Council shall consider the development of an Urban Forest Management Plan (UFMP) that will address matters related to tree canopy targets, structure and function of the urban forest, best management practices for enhancing the sustainability of the urban forest, and the promotion and enhancement of education, partnerships, and communication with the public and stakeholders (refer to Attachment 1).

The Secondary Plans, Port Whitby OPA 104; West Whitby OPA 91; Brooklin OPA 108, require tree planting and preservation through subdivision agreements and development approvals to provide sufficient tree canopy. (Refer to Attachments 2-4)

Town of Whitby Council adopted a Tree Removal and Tree Pruning policy in 1988 relating to the protection and enhancement of the tree canopy (refer to Attachment 5). The Town also has a Parkland Development and Open Space Policy, which

contains sections related to Tree and Open Space Forest Preservation, Ecological Salvage and Tree Planting (refer to Attachment 6).

#### **Tree Protection By-laws**

The Regional Municipality of Durham, By-Law #31-2012 and the Town of Whitby, By-Law #4640-00 regulate, through By-laws, the protection of trees located in parks, open spaces, and woodlots, in partnership with the Central Lake Ontario Conservation Authority. The Town also has a Property and Boulevard Maintenance By-Law #6937-15 that regulates activities within municipal boulevards, including protection of street trees.

#### **Guidelines, Standards and Procedures**

The following departmental guidelines are utilized in consideration of various development proposals to emphasize the importance of trees, tree canopy, preservation and the protection of existing trees. The guidelines are used to oversee documents in the submission, review and approval of all development proposals in these areas.

- Brooklin Urban Design and Sustainable Development Guidelines
- West Whitby Architectural and Urban Design Guidelines
- Planning and Development Department Tree Preservation and Clearing Guidelines,
- Engineering Department Design Criteria and Standards (excerpts)
   Section A6.04 Tree and Plant Protection, Section G Street Tree
   Planting/Protection
- <u>Landscape Plan Guidelines for Site Plan and Subdivision</u>
   <u>Development</u>

(Refer to Attachments # 7 to 8 respectively).

#### **Management and Maintenance Service Level Standards**

The Forestry group utilizes our Service Level Standards as a composite indicator to reflect the social and economic goals of the community. This may include any of the following; safety, customer satisfaction, quality, capacity, reliability, responsiveness and environmental acceptability. The Public Works Service Level Standards assist and support decision making, promote good practice and facilitate community involvement.

Operational Services – Service Level Standards

(Refer to Attachments # 9 to 17 respectively).

#### **Next Steps**

A Tree Assessment Report was completed in 2014 by Aboud & Associates Inc. to assess Whitby's urban forest. Recommendations included the development of a long-term strategy to maintain and improve the urban forest.

In order to implement the recommendations of the Tree Assessment Report, consistent with the policies of the Whitby Official Plan (policy 3.2.8.3), an Urban Forest Management Plan (UFMP) will provide the framework for best management practices to protect and enhance tree canopy and natural vegetation.

The goal of the UFMP is to create and maintain a safe, healthy, diverse, and sustainable urban forest that reflects the needs of the community. Conservation of trees in the urban environment can only be achieved effectively through the development and implementation of a long term UFMP. The UFMP will coordinate the policies and practices surrounding all management and planning activities related to trees.

The Town of Whitby will be developing an UFMP in 2020, led by Public Works – Forestry. This UFMP will include all other Departments and Divisions within the Town to ensure a detailed and comprehensive plan that will guide the Town into the future.

A separate report will be brought forward regarding a proposed Terms of Reference for consultant assistance to prepare the UFMP.

#### 5. Financial Considerations:

Not Applicable

#### 6. Communication and Public Engagement:

Not Applicable

#### 7. Input from Departments/Sources:

Community Marketing Services, Planning and Development were consulted in preparation of this report.

#### 8. Strategic Priorities:

The Town's policies, by-laws, guidelines, standards and practices already in place regarding the protection and enhancement of the tree canopy and natural vegetation align with Whitby Council's 2018 to 2022 Goals, and in particular:

- 5. To continue the Whitby tradition of responsible financial management and respect for taxpayers; and to understand the importance of affordability and sustainability to a healthy, balanced community.
- 10. To become the destination of choice for visitors; to realize the economic, cultural and social potential of our downtowns, waterfront, green spaces and

major attractions; to support and facilitate new community events and increase recreational opportunities along our waterfront.

#### 9. Attachments:

<u>Attachment #1 – Excerpts from the Town of Whitby Official Plan regarding Tree</u> Canopy

Attachment #2 – Excerpts from Port Whitby Community Secondary Plan

Attachment #3 – Excerpts from West Whitby Secondary Plan

Attachment #4 – Excerpts from Brooklin Community Secondary Plan

Attachment #5 – Tree Removal and Tree Pruning Policy 1446-88

Attachment #6 - Parkland Development and Open Space Policy

<u>Attachment #7 – Excerpts from the Brooklin Urban Design and Sustainable</u> Development Guidelines`

<u>Attachment #8 – Excerpts from the West Whitby Architectural/Urban Design</u> Guidelines

Attachment #9 – Service Level Standards Operational Services for Tree Planting
Attachment #10 – Service Level Standards Operational Services for Tree Pruning
Attachment #11 – Service Level Standards Operational Services for Tree
Removal Policy

Attachment #12 – Service Level Standards Operational Services for New Tree Planting Establishment and Maintenance

Attachment #13 –Service Level Standards Operational Services for Woodlot and Ravine Management

<u>Attachment #14 – Service Level Standards Operational Services for Tree Inspections</u>

<u>Attachment #15 – Service Level Standards Operational Services for Stump Removal</u>

<u>Attachment #16–Service Level Standards Operational Services for Pest and Disease Management</u>

<u>Attachment #17 – Service Level Standards Operational Services for Surface Root Treatment</u>

#### **Excerpts from the Town of Whitby Official Plan regarding Tree Canopy**

- 3.2.7 Air Quality
- 3.2.7.1 The Municipality shall work to improve air quality through land use and transportation policies that reduce reliance on private automobiles through the development of compact, mixed-use, and pedestrian-friendly communities, and by continuing to improve and enhance the Municipality's urban tree canopy
- 3.2.8 Tree Canopy
- 3.2.8.1 The Municipality recognizes the importance of urban forests and tree canopy, including street trees, trees on private property, and in parks and natural heritage areas, for their environmental, social, and economic benefits, including their role in climate change mitigation and adaptation.
- 3.2.8.2 The Municipality may prepare plans, guidelines, standards, and by-laws to protect, enhance, and expand the tree canopy, including through the development review process in accordance with the policies of Section 5.4.4.
- 3.2.8.3 Council shall consider the development of an urban forest management plan which shall address, but is not limited to, the following matters:
- a) an assessment of the structure and function of the Municipality's urban forest, including the preparation of an inventory of street trees and tree canopy cover assessment:
- b) the development of municipal canopy targets that support and enhance Regional and watershed plan canopy targets;
- c) the provision of management recommendations for enhancing the sustainability of both the urban forest resource and the community;
- d) the establishment of implementation tools including guidelines, standards, and by-laws to support the plan; and e) the promotion and enhancement of education, partnerships, and communication with the public and stakeholders such as the Conservation Authority, the local school boards, and any other appropriate agencies or groups.

#### 5.3 Environmental Management

- 5.3.1.4 Woodlands and trees shall be preserved through measures including vegetation protection zones, the requirements of the Municipality's Tree Protection By-Law, the Region of Durham's Tree Cutting By-law, and in accordance with the Trees Act and any other enabling legislation. Existing landmark trees and hedgerows shall be inventoried, assessed, and considered for incorporation into the planning and design of any development.
- 5.3.1.5 Reforestation and enhancement of the existing wooded and natural areas within the Municipality, including the establishment of connections and linkages within and adjacent to the Natural Heritage System, shall be

encouraged to assist in the achievement of the Region's woodland cover target and any applicable watershed plan targets. Stewardship by private landowners of woodlands shall be encouraged through sustainable forest management practices. Programs to support such initiatives may be determined in cooperation with the appropriate agency. Council shall consider the development of an urban forest management plan in accordance with Section 3.2.8.3.

- 5.3.7 Natural Heritage System
- 5.3.7 (in its entirety)

#### 5.4.4 Tree Preservation

- 5.4.4.1 The Municipality shall ensure that great care is taken to preserve mature trees and woodlots and other vegetation of heritage significance and/or scenic value in all areas of development and/or redevelopment. Existing landmark trees and tree and hedgerows shall be inventoried, assessed, and considered for incorporation into the planning and design of any development.
- 5.4.4.2 Applications for plans of subdivision and site plan approval may be required to submit a Tree Preservation Plan, prepared in accordance with the Municipality's Tree Preservation Guidelines, identifying trees, shrubs, and other specific areas of natural vegetation that will be preserved. Once approved by the Municipality, the Tree Preservation Plan shall be referenced in the subdivision or site plan agreement.
- 6.2 Urban Design
- 6.2.3.15 Landscaping, Buffering, and Site Amenities
- 6.2.3.15.1 Landscaping shall be provided to: ...
- h) enhance urban forest canopy;

#### 6.2.3.22 Sustainable Design

- 6.2.3.22.1 Development is encouraged to incorporate principles of sustainable design to minimize energy consumption while maximizing energy efficiency and emphasizes the use of renewable energy sources. In this regard, the Municipality shall encourage: ....
- d) the use and siting of vegetation that is drought-resistant, native and non-invasive, that increases the urban tree canopy and that assists in reducing the energy consumption of buildings; ...

#### **Port Whitby Community Secondary Plan**

11.1.19.5 All of the right-of-way's in the Port Whitby Community Secondary Plan area shall be planned to allow for a tree canopy that will provide shade and enhance and establish a vibrant urban environment. In this regard, a Tree Canopy Plan may be required as part of a complete development application, and the trees should be planted as soon as feasible to ensure that a canopy is established in the shorter term.

11.1.20.5 The Municipality shall require tree planting and preservation through subdivision agreements and development approvals so that all areas are provided with sufficient urban tree canopy to maintain a high standard of amenity and identity for the Port Whitby community.

Town of Whitby Official Plan, Office Consolidation July, 2018

#### **West Whitby Secondary Plan**

11.12.6.3 Coronation Road (old and new alignments), Twin Streams Road and Bonacord Avenue shall be designed in a manner that ensures that no more than approximately 60% of the planned right-of-way is devoted to the automobile. In this regard, a minimum of approximately 40% of the planned right-of-way shall be devoted to pedestrian and non-motorized modes of travel and landscaping. These roads shall also be planned to include a tree canopy that will provide shade and enhance and establish a vibrant urban environment. In this regard, a Tree Canopy Plan shall be prepared for each of these roads and the trees shall be planted as soon as feasible to ensure that a canopy is established in the shorter term.

11.12.6.4 Given anticipated densities and the built form, all local roads shall generally include sidewalks on both sides. Exceptions may be considered in Low Density Residential areas, provided accessibility requirements are met. Each of the local roads shall also be the site of street trees that are planted in a manner that provides for the establishment of a vibrant and healthy tree canopy. In order to maximize the amount of tree planting, the co-location of utilities is encouraged.

Town of Whitby Official Plan, Office Consolidation July, 2018

#### **Brooklin Community Secondary Plan**

11.5.29.12 All collector and local roads shall also be planned to include a vibrant and healthy tree canopy that will provide shade and enhance and establish a vibrant urban environment. In this regard, a Tree Canopy Plan shall be prepared for each plan of subdivision. In order to maximize the amount of tree planting, the co-location of utilities is encouraged.

Whitby Official Plan Amendment 108 as Approved by Region of Durham July 12, 2008 (under appeal).

# THE CORPORATION OF THE TOWN OF WHITBY POLICY PROCEDURE

SUBJECT: Tree Removal and Tree Pruning

#### DATE ADOPTED OR RECEIVED BY COUNCIL:

September 12, 1988

#### **RESOLUTION NUMBER:**

1446-88

#### **RECOMMENDATION FROM:**

Parks and Recreation Director's Report, Item 53-88

#### SUMMARY:

The Town is required to carry out tree removal and tree pruning work activities on Municipally owned land. The forestry work activities must be guided by general guidelines and specific standards when the safety of the public is at stake.

The main goal of the Town is to promote, protect and save trees where possible in the Town of Whitby.

In consideration of the public, the Town will advise homeowners prior to the removal of trees which may abut their property.

## Conditions Under Which the Town Will Consider the Removal of Trees on Town Property

#### 1. A TREE POSES A SAFETY HAZARD

In this case a determination is made by the Town Arborist that a tree may not be physiologically dead but may have survived past its normal maturity date. In this case, the majority of the tree's canopy is either missing, dead or in an

#### SUMMARY CONT'D:

irreparable state. Therefore, the Town's Arborist determines if the tree is sound or if it may pose a safety hazard. Should the latter be the case, the tree is removed.

#### 2. THE TREE IS DEAD

A tree is considered dead when the plant fails to bud and leaf during the normal growing season and the cambium tissue is dried out and shows no sign of sap flow.

#### 3. THE TREE IS DISEASED

If a tree carries a disease which is determined to be infectious to other species and it is either impractical or not economical to save the tree it is removed. Prior to taking this action, samples are sent to Provincial authorities for verification and recommendation methods for remedy if available.

#### 4. THE TREE HAS SUFFERED IRREPARABLE DAMAGE

In cases of vandalism or vehicular accidents involving trees which result in extensive damage to the tree, the tree is then removed.

## 5. THE TREE POSES A PHYSICAL BARRIER OR IS OBSTRUCTING TRAFFIC ON A PUBLIC HIGHWAY OR STREET

If during a storm or after a storm trees have fallen or partially fallen on streets, etc., the Town will remove these trees. With regards to the same situation it will occasionally become necessary for the Town to remove trees if, as a result of the storm, a tree's structure is severely stressed from high winds. The Town will remove the tree in consideration of future storms and hazards.

#### SUMMARY CONT'D:

Prior to the removal of trees, the Town will consider the following alternatives to cutting a tree down.

#### (a) Bolting and Cabling

This technique is used to strengthen a tree structure by using rods and/or cables connected to two or more main limbs or sections of sound wood.

#### (b) Surgery and Cavity Treatment

- 1. The use of special knives, chisels and other tools in tracing and removing damaged bark, wood and infected tissue.
- Trees with cavities decayed in excess of one-half (1/2) of the trunk diameter will be braced and supported with rods and filler.

#### (c) Spraying Treatment

Where a known chemical treatment is available for diseased trees, staff will use a manual or a mechanical spraying apparatus to treat the tree.

### CONDITIONS UNDER WHICH THE TOWN WILL PRUNE ON TOWN PROPERTY

#### 1. A NUISANCE TREE

In the case of a tree which is <u>over-hanging</u> on private property and the leaves become a nuisance to the property owner, the tree is pruned.

#### 2. HYDRO TRANSMISSION LINES

Trees are pruned to reduce the likelihood of interference with hydro lines.

#### SUMMARY CONT'D:

#### 3. SHAPING A TREE

Trees are pruned to govern the growing pattern of the tree in height and width.

#### 4. TRAFFIC SIGHT TRIANGLES

To respond to the Town's By-laws where tree branches are obstructing the vision of motorists at street corners.

#### 5. <u>LIGHTING</u>

Trees will be pruned where they impact on light distribution for either street lighting or walkway lighting.

Town Staff involved in pruning trees within the five categories listed above may use any one or any combination of pruning techniques to carry out the required work.

#### PRUNING TECHNIQUES

#### (a) Class I - Fine Pruning

Removal of dead, dying, diseased, damaged, interfering and weak branches within the leaf area of the main trunk and main branches.

Branches 1 cm (1/2") diameter, 30 cm (12") from origin may remain with the main leaf area to their full length.

Branches extending beyond the balanced normal structure shall be removed or shortened.

Suckers and water sprouts on the main trunk shall be removed.

#### SUMMARY CONT'D:

#### (b) Class II - Medium Pruning

Removal of dead, dying, diseased, damaged, interfering and weak branches. Branches, extending beyond the balanced normal structure, shall be removed and shortened.

Branches up to 2 cm (1") in diameter, 30 cm (12") from the origin may remain within the leaf area to their full length.

#### (c) Class III - Safety Pruning

Removal of dead, diseased, damaged and weak branches to a size of 5 cm (2") in diameter.

#### (d) Class IV - Cut Back (Drop Crotching)

The reduction of tops, sides, underbranches and individual limbs to a point nearer the main trunk.

#### ANNUAL FUNDING

The Town will annually allocate funds through the Municipal operating budget to permit the carrying out of a program of tree removal and pruning.

# PARKLAND DEVELOPMENT AND OPEN SPACE POLICY

Latest Revision Dated: April 2002

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#### Parkland Development and Open Space Policy

#### INTRODUCTION

It is the policy of the Town to provide active parkland for residents of the Town of Whitby for the purposes of outdoor enjoyment, recreational pursuits, and athletic opportunity. It is also the policy of the Town to provide preservation of environmental heritage and hazardlands, while affording access for the public to passive recreation and environmental education. Parkland and open space is a valuable component of the urban landscape providing green relief and community identity for a more aesthetic urban experience. Green space also contributes in many ways to a healthier urban environment including filtering of air and moderating temperatures. The Town of Whitby supports the provision and preservation of parkland and open space toward enhancement of the quality of life in Whitby, now and for future generations to come.

This Parkland Development and Open Space Policy is a compilation of policies, practises and standards which the Town has adopted and follows to meet this objective. It recognizes the governance of the Official Plan, the Development Charges Policy and current municipal standards which may be updated from time to time. It addresses the joint responsibilities of both the municipality and developer in continuing the essential role that parkland and openspace provides.

This document has been prepared in two sections depicting the differences in requirements and standards pertaining to parkland and open space. Planning, design and construction standards are described for each land use, with discussion of the maintenance standards to which the lands will be managed by the municipality. Developer requirements as typically reflected in subdivision agreements are also described for each category.

# SECTION 1 PARKLAND PLANNING AND DEVELOPMENT

#### 1.1 Planning Criteria

#### 1.1.1. Official Plan Reference

Reference to Parks appears in section 4.8 of the Official Plan where goals, objectives and policies are specified. Three classifications of parks are described including Local, District and Town parks. Planning criteria for each type of park is described below, furnishing further clarification and expansion upon the direction provided by the Official Plan.

#### Local Parks

- To be provided at the rate of 0.8 hectares per 1000 population.
- Shall not normally be less than 1.5 hectares in size except parkettes which can be smaller.
- Optimum size 2.0 hectares for provision of 1 unlighted athletic facility will be encouraged.
- Local parks are intended to serve the local neighbourhood with walk-to playground facilities.
- To be located centrally within the neighbourhood they are intended to serve.
- To be located within a 500 metre walking distance without crossing any arterial roads.
- To have frontage on a local or collector road, minimum 60 metres continuous frontage.
- Will generally be integrated with one elementary school, except parkettes which are to stand alone for purposes of tot-lot uses.

#### **District Parks**

- To be provided at a rate of 0.8 hectares per 1000 population.
- Shall not normally be less than 4 hectares in size to facilitate at least 2 athletic facilities
- District parks are intended to serve a greater community or series of neighbourhoods.
- To be situated with appropriate separation to other

- district parks.
- May contain illuminated major sports fields, field houses and parking
- To have frontage on a collector or arterial road with minimum 100 metres of continuous frontage.
- Shall generally be integrated with one secondary school or up to 2 elementary schools where possible.

#### **Town Parks**

- To be provided at the rate of 0.4 hectares per 1000 population.
- Intended to serve a Town-wide population.
- May feature civic, historic, cultural, recreational and heritage significance
- Includes Town-owned lands along the waterfront for public access.

#### 1.1.2. Culture and Recreation Master Plan

The Culture and Recreation Master Plan recommends a standard for provision of recreational facilities per population (example: one ball field per 1500 population). Criteria is established for outdoor athletic fields as well as indoor recreational facilities such as swimming pools and arenas. Although somewhat dated and requiring review, this document still does provide this general guidance. The Parks and Recreation Department also co-ordinates with user groups in forecasting needs for facilities based on their input. The objective is to establish a suitable land-base with a strategic distribution of parks and recreation facilities.

#### 1.1.3. Open Space Linkages

Parkland described above in all three categories is primarily intended for active recreational pursuits, although passive natural areas, woodlands, environmentally sensitive areas and other heritage features may also occur on tableland property. A distinction is made between passive tableland and lowland open space areas such as valley lands, wetlands and other hazardlands which are intended for conservation purposes and are referred to in section 4.9 of the Official Plan. It is the objective of the Town to provide walkway linkages and trail systems for pedestrian and bicycle use connecting parkland with valleylands and other open space greenways wherever practicable and compatible with environmental conditions. Trail linkages may also be contained within the street system for access and continuity where appropriate.

#### 1.2 Parkland Assembly

#### 1.2.1. Dedication by Developer

Parkland will be conveyed to the municipality by the developer in accordance with provisions of the Planning Act and the Town's Official Plan. Land will be conveyed free and clear, satisfying the standards for grading, drainage, fencing and other requirements as stipulated in the Subdivision Agreement. Alternatively, the Town may require cash-in-lieu of parkland dedication for acquisition of land elsewhere within the municipality.

#### 1.2.2. Consolidation in Best Location

Parkland will be consolidated in a location deemed most appropriate by the municipality for the population it is intended to serve, regardless of land ownership. If two or more owners are involved in conveyance of a park, in the first instance they will settle amongst themselves any credits or debts they owe to each other, releasing the Town from the need for mediation in this regard. The Town will however, attempt to consolidate parkland through one landowner wherever is practicable.

#### 1.2.3. Acquisition by the Municipality

If land requirement for consolidation of a park exceeds what is to be generated through dedication by developers, the Town may choose to acquire the balance, ensuring that the park location and configuration satisfies the Town's standards for facility layout, setbacks, and orientation. Land will only be purchased when it is free of encumbrances and is in a condition acceptable to the Town. The Town will pay the owner a reasonable market value for such acquisitions.

#### 1.3 Park/School Relationship

#### 1.3.1. Campus Layout

It is the policy of the Town to site parks and schools together in a campus layout for the benefit of continuity of public land uses, for efficiency in layout of facilities, and for the purposes of integrating or sharing facilities wherever practicable. In accordance with policy of the Official Plan, local parks may generally be located adjacent to one elementary school, and district parks may be located adjacent to one secondary school or a maximum of two elementary schools. Smaller local parks of less than 1.5 ha will not generally be located adjacent to schools as they are intended for tot-lot purposes, typically being too small to withstand impacts generated by school populations. No fences or other physical barriers will be encouraged between park/school boundaries except trees and/or other naturally occurring features. Duplication of swales at the park/school property line will be avoided through co-operative grading efforts and site plan review.

#### 1.3.2. Shared Facilities

The Town and School Boards may choose to share facilities with each other depending on the design program required by each agency. Typically, the agency requesting on overlap of a facility onto the adjacent property will pay for the costs associated with its development. Generally, joint use of park/school facilities will be encouraged providing there is no daily interference with normal site function. Compatible shared uses may include the school's use of the adjacent park ball diamond during school hours, or the evening use of the school's parking lot by the adjacent park patrons. In principle, no cost will be charged for shared facility usage except if grounds maintenance is affected. If wear-and-tear on a park increases on account of school usage, the Parks and Recreation Department may charge the adjacent school a permit fee for the purposes of covering excessive maintenance costs.

#### 1.3.3. Joint Use Agreements

In the case of long-term shared use of facilities where on-going maintenance will be required that exceeds normal maintenance standards, the Town may enter into a written agreement with the School Board in the form of a Joint-use Agreement. A site plan will be prepared on which the shared facilities will be identified. This may include the school's use of the adjacent park's parking lot, where snow ploughing and other maintenance activities not typically done within the park will be undertaken as a responsibility of the School Board for year-round usage. The reverse relationship may also apply where the Town would enter into a joint-use agreement with the School Board. All responsibility including costs, scheduling and liability related to this added function will be incurred directly by the appropriate party.

#### 1.3.4. Community Schools Program

Through partnership with the Durham District School Board and the Durham Catholic District School Board, the Town has established a number of volunteer operated community centres located throughout Whitby. A duly elected volunteer committee oversees recreational programming for its neighbourhood, offering a range of opportunities for children, youth and adults of both an active and passive nature. The Town may establish future Community Schools in newly developed neighbourhoods based on identified need within a certain geographic area. Capital costs for the establishment of office space within a new Community School are borne by the Town. Operating costs are typically shared by the Town and the volunteer committee.

#### 1.4 Tree Preservation

#### 1.4.1. Approved Tree Preservation Plans

Draft Approved Plans of Subdivision may contain a tableland forest or individual trees that are identified for preservation within or adjacent to a Park Block or Open Space. Construction of the subdivision may proceed only in conformity with the approved Tree Preservation Plans prepared for that subdivision. Prior to any sort of excavation, grading or construction happening in the subdivision, the developer will be required to install and maintain in-good-state, snow fencing or other approved type of barrier one metre beyond the dripline of each tree or groups of trees or woodlot to be preserved. No changes to existing grades within the dripline of such trees will be permitted without the written approval of the Town. No stockpiling of construction materials or debris will be tolerated within the tree preservation zone.

#### 1.4.2. Financial Compensation for Tree Removal

The Town will require financial compensation for the removal or damage to trees slated for preservation or in compensation for development where clear cutting is required. For unauthorized tree removal the amount of financial penalty will be based on the valuation methodology outlined in the "Guide For Plant Appraisal - Current Edition" authored by the Ontario Chapter of the International Society of Arboriculture, not to exceed the maximum penalty identified in the Town's Tree Preservation By-Law.

Compensation for tree removal enabling development of a property will be valuated on a case by case basis considering variables of density, species, area in question and quality of trees affected. The Town will require that trees removed or damaged be compensated for or replaced at a balance or net increase in biomass.

#### 1.4.3. Woodlot Maintenance and Acceptance

Prior to acceptance of the tree preservation area by the Town, the developer will convene site inspections with forestry staff of the Parks and Recreation Department and staff of the Planning Department to ascertain what maintenance work is required. This may include hiring the professional services of a Certified Arborist for trimming of dead branches or removal of those trees that could pose risk to person or property, site clean-up of all foreign material, debris and garbage, and removal of other hazards identified. A letter-of-credit may be required under the subdivision agreement to ensure performance of this work. The tree preservation area will be assumed by the Town only after it has been brought into an acceptable condition and inspected for compliance with Town standards.

#### 1.4.4. Ecological Salvage

Plant material salvaged from another site may be accommodated within tableland park areas or open space at the discretion of the Parks and Recreation Department. Acceptance of salvaged material for transplant into a park will consider the logistics of timing, grading requirements, the design program for the park among other site criteria. As parkland is primarily intended for active recreational pursuits where high utilization may result in compaction and trampling, salvaged plant material will be considered on its own merit for appropriateness in that location.

#### 1.5 Stormwater Management

#### 1.5.1. Stormwater Management Ponds

Where stormwater retention, detention and water quality facilities are required in new developments, they shall not be acceptable toward satisfying parkland dedication requirements under the Planning Act, nor will stormwater ponds be accommodated within tableland parks. Stormwater facilities, identified as hazardlands, are referenced in section 4.9 of the Official Plan, and shall occur on lands intended specifically for that purpose or in association with existing hazardlands. The Town will consider however, stormwater ponds adjacent to or in proximity of tableland parkland for the purposes of continuity of green space and to provide pedestrian linkages to open space.

#### 1.5.2. Stormwater and Sewer Facilities

If required and at the developer's expense, stormwater facilities such as overland flow routes may be accommodated within parks only where they do not conflict with the design program for the park and the provision of active recreational pursuits. All recreational facilities must be above top-of-bank and/or the 100-year storm event. If overland flow jeopardizes the integrity of recreational facilities, the developer must consolidate additional lands to satisfy both requirements. If an underground sewer system or other utility is required to pass through the park, its alignment will be reviewed and approved by the Parks and Recreation Department for conformity with the park design program.

#### 1.5.3. Passive Recreational Uses

Stormwater management facilities will be viewed as an intricate part of the public land system. Their design will consider opportunity for passive recreational uses such as pedestrian trails or linkages to larger trail networks within the open space system. If situated within an urban area of high visibility, their design will promote high aesthetic values and visual benefits to the community, while minimizing maintenance requirements for the municipality. While the passive use of the land surrounding the ponds is considered a public resource, recreational use of the ponds themselves will be discouraged for public safety reasons. Restrictive signage will be posted for warning purposes. Perimeter fencing around stormwater management ponds is not promoted as an effective safety measure and therefore its use will be considered only in extenuating circumstances where conflict with adjacent land uses is unavoidable.

#### 1.6 Developer's Responsibility Toward Parkland Development

In addition to requirements a developer has within the planning process towards preparation and approval of a Draft Plan of Subdivision, obligations as they relate to the physical development of parkland are outlined in the subdivision agreement and are further detailed within this policy.

#### 1.6.1. Registration of Park

Conveyance of parkland in accordance with the Planning Act will typically be made to the municipality during registration of Phase 1 of the subdivision unless otherwise stipulated in the Subdivision Agreement. If conveyance must be made in future phases, then the

Town will secure a letter-of-credit for the value of lands to be conveyed. The developer is to identify his development intentions and timing to the Town to enable the budget process under the Development Charges Policy to commence.

#### 1.6.2. No Stockpiling or Storage within Park

Municipal property preserved as open space or intended for parkland development will not be used for the purposes of stockpiling or storage of earth, construction supplies, debris or any other materials, the dumping or burying of any sort of garbage or waste, nor will it be used for the erection of advertising signage or construction trailers. The developer will maintain parkland in a clean condition at all times until the park is taken over by the municipality for the purposes of park construction. Timing of pre-grading and servicing of the park prevents its use for stockpiling of topsoil stripped from the subdivision.

#### 1.6.3. Concept Plan Preparation

The developer will retain the professional services of a qualified landscape architect to prepare a park concept plan during preparation of the Draft Plan of Subdivision as required to demonstrate that:

- Park configuration and size is adequate to accommodate the park design program which is to be identified by the Town
- Sufficient setbacks are possible to buffer residents from active recreational uses
- Orientation of facilities and layout meets with Town standards
- Tree preservation requirements will be addressed satisfactorily
- Relationship of park grading to rear lot grading will conform to Town requirements
- Surface and sub-surface drainage systems can be accommodated

The Developer is responsible to secure approval from all agencies (Hydro, Pipelines etc.) that may be affected by the plan. The Town does not accept responsibility for false portrayal of park amenities or proposed facilities if inaccurate or misleading representations of the park are displayed in sales pavilions. Prospective purchasers are encouraged to approach the Town directly for information on park development.

#### 1.6.4. Topsoil Stripping

Prior to grading of the park by the developer, the full depth of existing topsoil must be stripped. The developer may choose to do so at the time of clearing, grubbing and stripping topsoil for the entire subdivision for efficiency purposes. Topsoil stripped from the park belongs to the park, and will be replaced after the park is developed by the Town. The developer will make access available to the stripped topsoil within the subdivision for restoration purposes (quantity to be at least 150mm depth over entire area) at no cost to the municipality.

#### 1.6.5. Co-ordination of Services

The minimum responsibility of the developer toward sub-surface drainage is to provide one catch-basin with a connection to the storm sewer system for each catchment area affecting the park or for each road frontage. Typically this represents one installation for a Local park and two installations for a District park except in the case of multiple and split catchment areas. This responsibility may increase depending on the extent to which stormwater management is accommodated within the park, where such costs are then entirely the developer's. Once the storm sewer requirements for the entire park are known (construction drawings for subsurface drainage) the developer will be required to co-ordinate construction of the entire sewer system (including the Town's portion) and construct the works in conjunction with servicing for the rest of the subdivision for efficiency in cost purposes. The municipality will reimburse to the developer that portion of costs that are the Town's responsibility once the services have been inspected and accepted by the Town, and when the park construction budget has been approved.

As part of the servicing requirements for sanitary, electrical and water supply throughout the subdivision, the developer will bring services 1.5 metres into the park property as follows; to a District park a sanitary sewer stub, a 50mm diameter water supply line and 3-phase electrical power, and for a Local Park, a 50mm diameter water supply line and a single-phase electrical supply line. These services will be stubbed and adequately marked with a permanent monument at ground level.

#### 1.6.6. Grading and Drainage Plan

During the design process which establishes the perimeter park grades through preparation of the subdivision engineering drawings, the developer will retain the services of a qualified landscape architect to prepare a park Grading and Drainage Plan. The Grading and Drainage Plan will articulate the detail of the ultimate finished grades to be achieved upon completion of park construction, accommodating the park amenities required. The developer will also retain the services of a professional engineer to do the storm sewer design for the park including sizing of pipe, catch basin elevations and inverts to be co-ordinated with the Grading plan. Professional fees associated with the engineering component will be the responsibility of the Town. The Grading and Drainage Plan will be reviewed by the Town and will become the approved plan to which the developer will then construct pre-grading of the park.

#### 1.6.7. Pre- Grading and Subsurface Drainage

In advance of the developer undertaking pre-grading of the park, the Grading and Drainage Plan must be approved by the Town. The developer is to grade the park in conformity to the Grading and Drainage Plan providing fill or excavation, whichever is necessary to achieve the contours shown on the plan to minus 150mm of finished grade (minimum for topsoil allowance). Where earth fill is required, the developer will use only compacted engineered fill under proposed hard surfaces, playground areas and ball diamond infields. Unless additional stormwater management requirements are being accommodated within the park, the developer will be responsible for the construction of the lowest catch basin and connection to storm sewer system within the road. The Town will be responsible for the cost of the balance of installation of the subsurface drainage system, and will compensate the developer. The developer will pre-grade the park in conformity to the drainage patterns and subsurface drainage design shown on the plan. If it benefits the subdivision, the developer may bury surplus topsoil within the park in passive areas of buffer planting or ball diamond outfields, only through approval of the Parks and Recreation Department and by demonstrating adequate compaction at 200mm lifts to 85% Standard Proctor Density.

#### 1.6.8. Temporary Restoration

The developer will co-ordinate with the Parks and Recreation Department the most appropriate timing in which to undertake pregrading of the park based on phasing of the subdivision (see also Timing of Park Construction 1.7). The intent of the Town is to reduce repeated disturbances to the park, to take advantage of cost efficiency by eliminating the need for temporary restoration by the developer, and to streamline park construction by the Town immediately upon completion of pre-grading. If it is not possible to coordinate the start of park construction within one year of completion

of pre-grading, the developer will be required to provide temporary restoration of the park in the form of seeding with a seed mix suitable for the soil conditions and approved by the Town.

#### 1.6.9. As-Built Survey of Grading Plan

Upon completion of pre-grading the developer is to provide a survey plan prepared by a registered Ontario Land Surveyor representing the as-built topographic condition of the park. The survey is intended to demonstrate that the park grades are not uniformly high or low, but do reflect as close as possible the intent of the Grading and Drainage plans. The developer will submit the survey plan to the Parks and Recreation Department in the form of hard copy on Mylar and a digital AutoCAD Version 14.dwg format using the Universal Transverse Mercator (UTM) co-ordinate system North American Datum 1983 (NAD83) which is compatible with Town digital mapping capabilities.

#### 1.6.10. Perimeter Fencing and Gates

The developer is to provide a 1.2 metre (4 ft) high black vinyl coated galvanized chain-link fence around the perimeter of the park along the property line. The mesh shall be 38mm diameter with 9 gauge wire before vinyl coating. Terminal posts shall be 88.9 mm (3 ½") OD pipe, line posts of 60 mm (2 3/8") OD pipe and rails of 43mm (1 7/8") OD all galvanized steel. Concrete footings are to be poured into sonotube for the full depth of footing to 1.2 metres below grade.

Homeowners living adjacent to a park may arrange for installation of gates only if they are permitted in that location, and a gate permit is secured from the Parks and Recreation Department. During the time that the park perimeter fence is being installed, the developer may solicit homeowners who wish to pay for gate installation. Alternatively, the homeowner may wait until the developer's warrantee period has expired, and arrange for a gate directly from the Town. All gates will conform to Town standard including terminal posts at 88.9mm (3 ½") OD pipe which are to be used on each side of the gate.

#### 1.6.11. Lots Abutting the Park

If the developer wishes to apply for Building Permits to proceed with construction of homes abutting the park prior to the Town undertaking park construction, he must first ensure that the park is satisfactorily graded and subsurface drainage around the perimeter of the park conforms to the approved Grading and Drainage Plan (refer to section 1.6.6). Perimeter swales and areas around catch basins are to be

sodded, and/or protected using siltation control methods acceptable to the Town.

#### 1.6.12. Securities and Acceptance

The Town shall secure from the developer a letter-of-credit for the value of all work described above in this section and for any additional requirements as stipulated in the subdivision agreement. The letter-of-credit will be based on a cost estimate prepared by the consultant and approved by the Town. The Town will assume responsibility for the park only at such time as the property is ready to be constructed by the Town under the Development Charges Policy. In the case that temporary restoration has been required, acceptance will occur when turf is satisfactorily established.

#### 1.7 Timing of Park Construction

#### 1.7.1. Developer's Phasing

As discussed above in Temporary Restoration item 1.6.8, it is the Town's objective to eliminate duplication of efforts and reduce the time between when pre-grading is completed by the developer and when construction of the park is undertaken by the Town. The developer is to identify his phasing schedule for approval by the Town including a prediction of occupancy. If a park is involved, he is to identify at least one year in advance when pre-grading of the park will commence. He will co-ordinate with the Parks and Recreation Department a suitable grading schedule in accordance with the Town's capital budget for park construction. The Town's priority is to initiate construction of the park (components the Town is responsible for under the Development Charges Policy) when occupancy of homes within the area the park is intended to serve reaches approximately 35%.

#### 1.7.2. Park Construction by Developer

The developer has the option to develop the park on behalf of the Town in advance of the Town's capital budget schedule, if it is deemed advantageous for the subdivision and does not impose additional administrative costs on the municipality. This option will be treated in a way similar to if the developer was the Contractor, performing construction to a set of drawings and specifications approved by the Town, and subject to standard warrantee conditions required by the Town. The Town reserves the right to review and approve the award of the park construction tender. An agreement will be executed and a letter-of-credit will be secured from the developer

to ensure timely completion to a level of quality and workmanship acceptable to the Town. Joint Town/Developer tenders may also be approved to take advantage of cost and time efficiency. The Town will reimburse to the developer the portion of costs the Town is responsible for under the Development Charges Policy within a time frame agreeable to both parties in the construction agreement.

#### 1.8 Town's Process Toward Park Development

#### 1.8.1. Co-ordination and Administration

Several departments of the Town of Whitby and other external agencies may have overlapping jurisdiction in matters affecting parkland and openspace. This could include Public Works' involvement with stormwater management ponds, to CLOCA with fisheries, or Hydro One if a Hydro corridor is involved. In planning matters leading toward Draft Plan approval and in administration of subdivision agreements, the Planning Department will continue to function in the coordinating role between the developer and municipality. The Parks and Recreation Department is responsible for parkland design and construction as well as recreation programming and grounds maintenance. Legal agreements, park licenses and special permits may also involve the Clerk's and Treasury departments.

#### 1.8.2. Parkland Design

The Parks and Recreation Department will establish the design program determining the minimal facility requirements for each park location and will co-ordinate with other agencies (CLOCA, School Boards, Ontario Hydro etc.) to streamline approval processes as necessary. Following approval of the Concept Plan and completion of the Grading and Drainage Plan, the Town will be responsible for the preparation of the remainder of the construction drawings by retaining the services of a qualified landscape architect, and establishing the standard to which these facilities and amenities are to be constructed. Following completion of pre-grading of the park by the developer, the Town's responsibility will be to construct the balance of the park through provisions of the Development Charges Policy.

#### 1.8.3. Identification of Budget

After a plan of subdivision has been Draft Approved, the Town will commence budget preparation to be included in the 10 year capital forecast. The budget may include acquisition of lands that exceed

parkland dedication by the developer, consulting fees as well as park development costs based on estimated cost-per-acre. As construction of the subdivision is confirmed, the Town will fine-tune the budget toward an expected 5 year capital plan, and then a 2 year implementation plan. Although the stream-lining of the Town's construction budget with the developer's phasing program is key to expedite completion of park development in any given subdivision, it should be noted that budgets are approved by Council annually in context of overall Town allocations and priorities.

#### 1.8.4. Facility Development

Construction of facilities and amenities constructed by the Town within parks may include, but will not necessarily be limited to the following improvements:

#### **Local Parks**

- Standard size sports fields including soccer pitches, softball or slow-pitch diamonds including all appropriate furnishings such as backstops, benches and bleachers.
- Playground apparatus including junior and senior play elements
- Pathways, sitting areas and park furnishings
- Passive and free play areas
- Signage
- Tree planting
- Landforms and drainage patterns
- Sub-surface storm sewer systems
- Hydro supply from the property line
- Parking by utilization of adjacent school facilities or on-street parking

#### **District Parks**

All of the facilities listed above for local parks may be applicable to District Parks as well as the following additional improvements:

- Any combination of major athletic facilities including baseball/Tball diamonds, softball, soccer, rugger, rugby, lacrosse box, tennis courts, bowling greens or other
- Water spray pad or other water play feature
- Basketball and hard surface multi-purpose courts
- Gazebos, picnic shelters or other seasonal structures
- Field houses and washroom buildings

- Horticultural areas and displays, natural areas
- Parking on site and/or adjoining a school site
- Walkway lighting as per walkway lighting policy
- Floodlighting of major athletic facilities
- Water supply from property line, valve chamber and irrigation
- Sanitary sewer from property line or as required

#### **Town Parks**

Any facilities described under the Local and District Park section may also apply to a Town park as well as other special features and facilities considered appropriate to the uniqueness of the park. Facility requirements and design standards will be determined on a site specific basis at the time of Concept Plan preparation.

#### 1.9 Design & Construction Standards

The Parks and Recreation Department over the years has evolved standards for park amenity design which have proven to be effective for the usability and comfort of park patrons, ensuring also a minimum quality of construction for durability, cost effectiveness and reduction of long-term maintenance and replacement costs. These standards will change in response to changing needs in maintenance levels, social patterns, recreational programs, as well as to specific site conditions. They are presented here to serve as a guideline for park construction.

#### 1.9.1. Siting for Setbacks

All recreation facilities including their run-off aprons, and playgrounds will be sited so as to ensure a minimum setback of 20 metres from the facility perimeter to the adjacent residential property line. This space may then be used for grading, drainage and buffer planting if deemed appropriate. Athletic facilities shall generally not be sited adjacent to roads where this setback must then be increased or fencing provided to prevent conflict with traffic.

#### 1.9.2. Athletic Facilities

Sports fields will be sited in the most favourable orientation in relation to the sun and with grading design which favours both teams equally. Consideration will also be given to minimize noise disturbance to

adjacent residents. Field dimensions may vary, but must always have adequate clearance from neighbouring properties and adjacent park uses. No backstops will be placed in free play areas. Lighted sports fields may be provided only in District or Town parks and shielded lighting will be provided to prevent spillage onto adjacent residential property. Lights will be activated by timer for shut-off at park closing hours. For facilities not mentioned here, all appropriate standards will apply.

#### **Ball Diamonds**

- Softball field measures 76.2 metres down the sidelines, 80.6m down the centerline.
- Above dimensions increase for slow-pitch and baseball facilities.
- Run-off area is 6 metres around perimeter containing no grade changes or obstacles.
- Home run fence in outfield allows run-off distance to be reduced to perimeter line
- Home run fence to be 1.8m minimum in height, 3m posts demarking foul line.
- Orientation toward north-east is most favourable, toward southwest is second best.
- Grading to be crowned at centre-line or sheet draining from infield to outfield.
- Maximum and minimum slopes to be1.5% consistently from infield to outfield.
- Engineered fill required under entire infield, backstop and bleacher sitting areas.
- Topsoil depth in outfield may exceed 200mm in uniform consistent depth, no pockets.
- Backstop footings to be poured into sonotube for their full depth to 1.2m minimum.

#### Soccer Fields

- Ideal size of field to be 60m x 100m with a 3 metre run-off area along sidelines and a 6 metre run-off area at the end zones.
- Orientation in north-south direction is best for sun orientation.
- Grading crowned in middle sloping to sides at maximum and minimum 1.5 % slope.
- End-to-end or corner-to-corner grading is not acceptable.
- Goal posts to measure 2.4m x 7.3m and be anchored to prevent tipping.

 Perimeter line demarcation to be provided using powdered chalk or other environmentally safe compound.

#### 1.9.3. Playgrounds

Playgrounds will be set back from the property line of a road by a minimum of 15 metres where the boulevard will also act as a buffer. Low landscape berms may be provided, still affording good visual surveillance into the play area from the road and surroundings. No dense evergreens will be planted near playground areas where views may be obstructed and safety of patrons may be jeopardized.

- Playground equipment design will suite the age group intended to be served.
- Equipment to be manufactured from steel treated with a durable powder paint finish.
- Equipment design and clearances to conform to CSA standards.
- Enclosed within a concrete curbed sand area to be level in elevation to prevent drifting.
- Resilient surfacing (not brick sand to prevent blowing or compaction) to conform to C.S.A. Standards.
- Sand to be to a depth of 450mm and to be at finished grade 150mm below top-of-curb.
- Sub-surface drainage of flexible perforated PVC pipe in clear 10mm diameter stone drainage bed near perimeter of curb so as not to conflict with play structure posts.
- From perimeter of enclosure the drainage pipe is to be solid PVC connected to a nearby catch basin or storm sewer at minimum 1% slope.
- Sitting area to be provided within hard surface area with site furniture and adjacent shade trees.

#### 1.9.4. Hard Surface Play Courts

Tennis courts, basketball courts and other multi-purpose hard surface play areas will be provided in District parks where sufficient space separation is available to minimize noise impacts from bouncing balls on adjacent residential neighbourhoods and where a reasonable space separation is possible from children's playground equipment. Lighted tennis courts may be provided in District parks only with a timer for light shut off at park closing hours.

## Tennis, Basketball and Multi-purpose Courts

 Asphalt surface to be of fine grade HL3A draining at maximum 1.5% slope.

- Tennis court fencing to be at 3 metre height, terminal posts and gates measuring 88.9 mm (3 ½") OD, line posts and rails measuring 60 mm (2 3/8") OD.
- Posts to be set in concrete footings poured into sonotube for the full depth of 1.2 metres below grade .
- Tennis nets will be installed for seasonal use only into sleeves for removal capability.
- Line painting provided by 50mm wide white or yellow durable traffic paint.
- Colourized coating is optional where deemed appropriate.

#### 1.9.5. Water Spray Features

Spray pads or similar water play features may be provided in District parks or those local parks intended for intensified use. Water supply, plumbing and drainage will conform to requirements of the Region of Durham and the Town of Whitby's Plumbing section.

- Water supply to be potable water only.
- Valve chamber to be inside the park property line to contain the metre near surface for one-man reading capability, backflow preventer and all appropriate valves as required.
- Drainage to be connected to storm sewer system or surface drainage where practicable.
- Standing water or recycling of water is not permitted.
- Activated by timer with manual activation and shut-off capabilities.
- Non slip pavement of asphalt, concrete, interlocking paving or rubberized surface.
- Related seating area to be provided.
- Associated with children's playground or other appropriate use.

## 1.9.6. Seating Areas

Benches, waste receptacles, bicycle racks and picnic tables will be provided in key park locations for the comfort and convenience of park patrons. Several standards of site furnishings will be used depending on the prominence of the area into which they are installed. High quality decorative benches and waste receptacles may be appropriate in high profile and intensively used areas, whereas inexpensive wood plank benches and wire baskets/waste receptacles may be used in more passive locations. No site furnishings will be provided in secluded or remote locations where social gathering is deemed undesirable.

Seating areas will be provided in association with active and

- intensive park uses.
- Shade trees will be planted near seating areas for climatic comfort.
- Benches selected will be comfortable, durable, low maintenance and vandal resistant.
- Waste receptacles will be sufficiently large to minimize the need for excessive pickup.
- Site furniture will be permanently mounted onto a concrete slab or concrete footing.
- Picnic tables will be available in designated parks.

## 1.9.7. Parking Lots

Typically parking lots will be paved in asphalt surrounded by either a cast-in-place concrete curb or defined by precast concrete bumper curbs. Granular parking lots may be provided in lower profile areas using compacted limestone only. Granular 'A' is not acceptable. Allow  $3m \times 6m$  for each parking stall and a 6m wide lane. These dimensions can be decreased to  $2.75 \text{ m} \times 5.5m$  with a 6 metre lane in accordance with the zoning by-law if the lot is asphalted and line painted to define each stall.

- Parking lots are typically not snow plowed except if associated with a school for year round use and for which a joint-use agreement is arranged.
- Subsurface drainage and connection to storm sewer is required for all lots enclosed by a poured concrete curb, with surface draining toward the CB at 2% slope minimum.
- Poured curb shall be a minimum of 150mm above finished surface of asphalt parking lot.
- A dropped curb being a minimum of 2.5 metres wide will be provided in a place most convenience for the handicapped user, with appropriate connection to walkways.
- Handicapped parking spaces will measure 4m x 6m with appropriate pavement markings and will be signed accordingly.
- Handicapped parking spaces will be provided at a rate of one space for each district park minimum, and at local parks as requested on a site by site basis.
- Line painting (100mm wide) will be provided on asphalt surfaces to identify each parking stall using yellow high quality durable traffic paint.
- Precast concrete bumper curbs, defining an asphalt or granular lot will be placed 300mm inside of perimeter to afford ease of

- edge grass cutting maintenance.
- Lots with bumper curbs will be graded to sheet drain at minimum 2% slope through and away from curb stones without restricting drainage.
- Each bumper curb will be spaced sufficiently to identify one parking space.
- Curb stones will be pinned down at both ends using 800mm long Re-bar which is recessed 10mm below surface of curb stone.
- Granular base shall be a minimum compacted depth of 250mm of 19mm diameter Crusher Run limestone compacted to 98% Standard Proctor Density.
- Paving surface will be with 40mm HL3 top course asphalt.
- Parking lots left in their granular base will be topped with 50mm of limestone screenings compacted to 98% Standard Proctor Density.
- Compaction and materials testing will be undertaken.
- Lay-by parking provided within boulevards adjacent to parks will be reviewed and approved by the Public Works Department.

## 1.9.8. Pedestrian Walkways

Walkways will be provided in parks to bring patrons to recreation facilities or through passive areas in a convenient, safe and barrier-free manner. Proper connections will be made to municipal sidewalks, roadways, and openspace linkages where appropriate. Seating areas and other pedestrian pavement surfaces may be of asphalt, concrete, unit paving or combination thereof, as dictated by site conditions and design intent.

- Typically park walkways will be 2.4 metres wide in all areas where they also serve to provide access for park maintenance service vehicles
- Walkways will be paved with 50mm fine quality HL3A asphalt, over a compacted granular base of 200mm thick 19mm diameter Crusher Run Limestone.
- Compaction and materials testing will apply.
- Walkways will be crowned or cross sloped at 2% minimum drainage.
- Asphalt edges will be tamped to a 45 degree angle, and adjacent sod will be installed 25mm below finished surface of walkway so as not be create ponding.

- Walkways will meet flush with sidewalks and other pavement surfaces to eliminate all tripping hazards and provide barrierfree access for strollers, bicycles and wheelchairs.
- P-gates will be installed to restrict vehicular access onto pedestrian pathways, yet permit accessibility for strollers, bicycles and wheelchairs.
- Maximum slopes for incline/decline of pedestrian surfaces will conform to Building Code at 8% or 1:12 wherever possible.
- No site drainage over pedestrian walkways will be permitted in low places to avoid creation of concentrated areas of ponding and icing.
- Site grading and sub-surface drainage systems will be utilized to minimize the use of culverts underneath walkways.
- Park pathways will typically not be snow-plowed in the winter, except if they are the only route to a school or neighbourhood destination. Municipal roads and sidewalks are the primary access route.
- Walkway lighting will be provided only in accordance with the Town's Lighting Policy #66-89.

#### 1.9.9. Site Grading and Drainage

Responsibility for site grading and subsurface drainage is shared between the developer and Town (see Developer's Responsibility section 1.6) based on construction drawings as prepared by a qualified Landscape Architect. Standards to which earthworks are undertaken consider the structural integrity of facilities being constructed together with maintenance logistics of the Parks and Recreation Department.

- Subsurface drainage and sewer works will be installed complete with the required catch basins, manholes and connection to subdivision storm sewer system.
- Drainage requirements of the park will be determined sufficiently early in the engineering design process of the subdivision to eliminate the use of culverts
- Engineered fill is required underneath all pavement surfaces, underneath playgrounds and ball diamond infields, compacted in 200mm lifts to a minimum 85% Standard Proctor Density. Fill is not to be contaminated with topsoil.
- Swales will be graded to a minimum 2% slope.
- Berms will be graded to a maximum 4:1 slope, whereas level sodded areas (except athletic fields) will have a minimum slope of 2% for drainage purposes.
- Athletic fields will be graded to 1.5% slope minimum and

- maximum within a 25mm tolerance.
- Minimum 150mm topsoil layer is required under all grassed areas. Topsoil may be thicker in uniform compacted layers, avoiding pockets and potential sinkages.
- Entire park will be restored by sodding except any natural areas.

### 1.9.10. Tree Planting

Providing a strong forestry infrastructure is integral to parkland development. In addition to protecting existing vegetation that is slated for preservation within parkland, new tree planting will be provided to enhance aesthetic values, provide human comfort, define space and to support environmental quality.

- A combination of deciduous and coniferous trees will be provided in accordance with an approved master planting plan, in consideration of the facilities being accommodated.
- Tree planting will be positioned carefully to allow visibility and surveillance into the park from the street and surrounding neighbourhood. Public safety will be considered through the technique of Crime Prevention Through Environmental Design (CPTED).
- Shade trees will be provided adjacent to sitting areas, parking lots and in other locations where comfort zones are desirable.
- Parkland will focus on accommodating a diversity of native trees, flowering species and specialty specimens which ordinarily are not used as street trees.
- The Town shall replace tree mortalities in accordance with budgeting programs for a balance or net increase in biomass.
- Shrub planting and floral displays will be confined to District or Town parks or as gateway features in accordance with the municipality's ability to maintain them.
- The currently existing Tree Dedication Program allows citizens to contribute toward environmental quality while commemorating persons of special importance to them.

## 1.9.11. Barrier Free Design

It is the policy of the Town to provide barrier free access to all municipal facilities wherever it is practicable. Within the Parks Bylaw, park access is permitted for bicycles, strollers, wheelchairs and other wheeled devices that do not present hazards to person or property. Park design will address barrier free access by eliminating or

providing alternatives to stairs, curbs and other obstructions.

- All park facilities including athletic fields will be accessible wherever possible.
- Playground structures are not typically wheelchair accessible except those (like Pringle Park) that are designed specifically for that purpose.
- See section 1.9.8. Pedestrian Walkways, which discusses barrier free pavement surfaces.
- Maximum slope for ramps and walkways will conform to the Building Code or surpass the Code wherever possible.

#### 1.9.12. Signage and Park Naming

Each park will be identified with a park sign indicating its formal name.

- A permanent sign will be installed along each major park frontage, constructed in sufficient size to be legible from the road, but not to obscure visibility into the park.
- Park identification signage will be recognizable by its standardized colour, while adopting a size and design that is appropriate for the location.
- Each park will be officially named in accordance with the Town's park naming policy.

Messages such as Poop and Scoop and other by-law restrictions may be consolidated on the park identification sign to minimize sign clutter within the park.

## SECTION 2 OPEN SPACE AND TRAIL SYSTEMS

## 2.1 Planning Criteria

### 2.1.1. Definition and Official Plan Reference

For the purposes of this policy, open space shall be defined as municipally owned lands that are primarily intended for preservation, conservation and enhancement of the natural environment. They may be hazardlands as defined by the Official Plan section 4.9, Environmentally Sensitive Areas as discussed in section 5.3, tableland woodlots to remain in a state of preservation or undeveloped passive areas that are naturalizing or in the process of reforestation. Unlike parkland on which facilities, structures and active recreational uses may be provided, open space lands are not

typically intended for active uses which would involve major site alterations. Appropriate recreational uses within open space lands may include hiking, bicycling, cross-country skiing, nature observation, environmental education and other activities that do not disrupt the integrity of the natural environment.

#### 2.1.2. Open Space Linkages

It is policy of the Official Plan to establish a greenway system consisting of parks, woodlands, conservation areas, valley lands and other open spaces which would link urban Whitby and Brooklin to the Lake Ontario waterfront and to the Oak Ridges Moraine. Utility corridors, unopened road allowances and easements will be utilized wherever possible in establishing a continuous linked system of paths and trails for pedestrian and cyclist use. The Town shall endeavour through the subdivision development process and through the infrastructure design of roads, bridges, stormwater management facilities etc. to establish these linkages for the continuity of green space and uninterrupted access wherever possible. Active parkland and passive open space may be integrated together to facilitate this objective.

## 2.1.3. Valley lands and Setbacks

Top-of-bank related to lowlands, stream valleys and other hazard lands is typically defined by the Central Lake Ontario Conservation Authority for the protection of wetland resources including fisheries. In consultation with CLOCA, the Town may also require the setback from top-of-bank for the purposes of erosion control, slope stability, associated tableland vegetation, recreation, pedestrian and maintenance access. Lands required as tableland setbacks will not be acceptable as satisfying parkland dedication or cash-in-lieu payment under the Planning Act. Hazard lands related to a plan of subdivision will be encouraged to be conveyed to the municipality for conservation and protection in perpetuity.

## 2.2 Developer's Responsibility

## 2.2.1. Preparation of Survey Plan

In addition to Registered and/or Reference Plans (40M or 40R) typically associated with a subdivision, the developer will provide a survey plan showing all available existing and as-built physical conditions related to the open space block being conveyed to the Town. This will include property lines and easements, topography

(contour lines) to the property line and/or beyond top-of -bank, existing vegetation to be preserved, all other natural and man-made features to remain, as well as any constructed improvements such as stormwater management ponds, weir structures, pathways or bridges if applicable. The developer will submit the survey plan to the Parks and Recreation Department in the form of hard copy on Mylar and a digital AutoCAD Version 14.dwg format using the Universal Transverse Mercator (UTM) co-ordinate system North American Datum 1983 (NAD83) which is compatible with Town digital mapping capabilities.

#### 2.2.2. Concept Plan Preparation

The developer will hire the services of a qualified landscape architect to prepare a Concept Plan depicting the recommended alignment of a recreational trail system if it relates to the open space lands being conveyed to the Town. Trail alignment will consider all natural and existing features and vegetation so as to minimize site alterations, yet will meet the standards for walkway grading (see item 1.9.8) wherever possible. The Concept will show where bridge crossings, re-grading or other site improvements are required, as well as linkages to the community it will serve. Actual trail construction is typically the responsibility of the Town under the Development Charges Policy unless otherwise stipulated as a condition of subdivision approval. A planting scheme for valley or open space lands will also be shown where rehabilitation is a condition of development. The above noted Survey Plan will form the basis on which the Concept Plan will be prepared.

## 2.2.3. Perimeter Fencing

Unless otherwise stipulated in the subdivision agreement the Developer will provide perimeter fencing along the property line between open spaces and other land uses consisting of a 1.2 metre high black vinyl-coated chain link fence to the Town standard as described in item 1.6.10. It is the intent of perimeter fencing to control undesirable encroachments as well as to restrict access into preservation areas to only those points of entry defined by a walkway, trail, boardwalk, bridge or other such intended feature. Gates into open space lands will not be permitted unless special conditions warrant. In such cases a gate permit must be secured through the Parks and Recreation Department necessitating the associated fees, inspections and approvals.

## 2.2.4. Stormwater Management Facilities

Where stormwater management facilities are required as part of a subdivision agreement, they will be provided in accordance with construction drawings approved by the Town. When associated with an open space block being conveyed to the municipality, and where the Town requires vehicular access for maintenance reasons, the design of stormwater management facilities will also consider public access for potential linkage to the larger recreational trail system. Dual access roads and trail linkages will be designed to provide the most gradual slopes suitable for vehicular and for pedestrian use. Stormwater management ponds themselves are not intended for recreational purposes although the lands around them are an integral component of the public land inventory. See also Section 1.5.

#### 2.2.5. Condition Upon Acceptance

Open space lands being conveyed to the Town are not to be used for dumping of any sort as enforced by Parks Bylaw and will undergo clean-up measures to the satisfaction of the Town prior to acceptance for on-going maintenance by the Parks and Recreation Department. The developer will be responsible to remove all garbage, debris, and all forms of foreign materials from open space lands, including those trees and/or branches which are deemed by the Town to be hazardous to person or property. The developer will convene site inspections with staff of the Town of Whitby to ensure that open space lands are in an approved condition prior to acceptance. This may also entail acceptance of tree preservation measures, rehabilitation or reforestation requirements, and any other site improvements as identified in the subdivision agreement. A letter-of-credit will be secured for the open space lands to ensure performance of this work.

## 2.2.6. Public Awareness Packages

Conditions of Draft Plan approval may require a subdivision backing onto an open space or environmentally sensitive area to provide environmental awareness packages to residents of the area, particularly those living directly adjacent to the open space lands. Subject matter addressed in the home owners packages will be tailored specifically to the area in question and may also contain general discussion and guidelines for responsible environmental behaviour. Special circumstances may require a developer to register on title of those lots which are affected by a conservation easement, environmental covenants, conditions or restrictions to which home owners may need to adhere.

#### 2.3 Maintenance Standards

### 2.3.1. Preservation Objective

It is the objective of the Town to protect wetland resources through best management practices as well as to conserve and protect the ecological function of woodlots, environmentally sensitive and naturalization areas for the preservation of natural vegetation, wildlife and environmental health. As custodians of open space lands, the Parks and Recreation Department applies a standard of maintenance which responds to this objective of environmental quality, while recognizing the need to reduce hazards to person and property. The following guidelines apply to open space properties:

- Manicuring (grass cutting) of open space properties will be restricted to only those areas that are deemed by the department to be high profile in character or adjacent to sidewalks where public visibility is required. Otherwise, hazardlands, valley lands and other naturalizing open spaces will receive no special maintenance treatment.
- Downed tree limbs in existing or evolving woodland settings will remain on the forest floor to encourage a diversity of wildlife habitats and succession of species. Selective removal of trees or limbs will occur only near walkways or fence lines where safety to person or property is being threatened.
- Extermination of weeds will be limited to those species that are classified as noxious under the Weed Control Act, and will be controlled by methods of selective removal by the Parks and Recreation Department only after such time as a complaint has been filed. A high level of tolerance will be encouraged for naturalizing lands which, if left alone, will evolve into meadow or woodland communities.
- Chemical applications within valley lands, hazardlands and stormwater management facilities will be greatly discouraged to prevent contamination of wetland resources and wildlife habitats. Chemical control will be limited to hazardous pest or disease infestations which may present a danger to public health or the environment, and will be undertaken in accordance with statutory health protocol.
- The Town will support active reforestation efforts to accelerate the rate of natural succession, encouraging a diversity of native species, toward the creation of woodland habitats in valley lands, the Lake Ontario shoreline or other open spaces where such landscape treatment is deemed appropriate.

#### 2.3.2. Top-of-Bank Mowing Strip

Setback from top-of-bank will be secured by the Town for the purposes of erosion control, bank stability, protection of vegetation, recreation and as necessary to protect wetland resources from the proximity of development. Access to top-of-bank is also required by the Town in the event that vegetation control and fence maintenance is necessary. Although the Town will not normally be moving the Town owned land beyond rear lot lines of residential properties, the Town will tolerate a "mowing strip" if undertaken by the resident. The mowing strip may be up to 5 metres (16.5 feet) in depth or to the natural tree line whichever is less. Mowing below top-of-bank will not be permitted at any time even if the top-of-bank lies within the 5 metre zone of tolerance. No removal of woody plant material will be permitted within mowing strips except that which is deemed necessary for removal by the Parks and Recreation Department. Mowing strips will remain the property of the Town of Whitby, and the Town reserves the right to withdraw or modify the mowing-strip understanding at any time. Mowing strips that violate the guidelines outlined above, will be considered violations of encroachment under this policy. In consideration of adjacent residential property, active reforestation programs by the Town will not be undertaken within mowing strips.

#### 2.4 Encroachments

### 2.4.1. Definition of an Encroachment

Encroachment is defined as the unauthorized use of public lands for personal uses. This would include but is not necessarily limited to installation of structures and other permanent improvements, alteration to fence lines, installation of vegetable gardens and landscaping features, as well as maintenance or removal of vegetation beyond the tolerable mowing strip noted above. Encroachments for the exclusive use by a resident living adjacent to an open space will not be permitted under this policy whether the property is fenced or exposed.

#### 2.4.2. Encroachment Permits

If special conditions warrant consideration of an encroachment which does not adversely affect environmental integrity or public use of the land, a resident may apply for an encroachment permit from the Clerk's Department of the Town of Whitby. Administration costs, legal fees, plus an encroachment fee may all be applicable and costs will

be paid by the applicant whether the permit is approved or rejected. Violation of this policy by unauthorized encroachments will necessitate removal of the encroachment by the offender, a financial penalty under the Bylaw and/or legal action by the municipality. The Town will review encroachments on an individual basis.

### 2.5 Recreational Opportunities

#### 2.5.1. Appropriate Recreational Uses

Uses appropriate to open space lands consist of those activities which do not require significant site alterations or disturbance to the natural environment. These uses may include but are not necessarily limited to walking/hiking, cross-country skiing, bicycling, nature observation, nature interpretation and environmental education. Through the Parks By-law the Town prohibits the use of motorized vehicles such as trail bikes and snowmobiles within all parks and open space lands, except as necessary by authorized agencies for the purposes of maintenance and surveillance. Other uses prohibited by By-law include unleashed dogs, littering, composting, building of tree forts, and removal of vegetation, wood or soil. Patrons utilizing open space lands for appropriate passive recreational purposes are encouraged to remain on the trails provided for this purpose.

### 2.5.2. Trails Master Plan and Budget Preparation

It is the policy of the Town to provide a network of recreational trails for public access within open spaces and utility corridors wherever such trails are compatible with environmental conditions and property function. The Town shall endeavour to prepare a Master Plan and Hierarchy of Trail Systems which would assist in preparation of budgets toward systematic trail construction. Trail implementation will occur on a priority basis and in accordance with the Town's financial capabilities and Development Charges Policy. Paving materials may vary in accordance with the hierarchy of trails proposed.

## 2.5.3. Infrastructure Opportunities

The Town will co-ordinate with the Region of Durham, the Province of Ontario and other agencies to maximize opportunities for trail linkages through construction of bridges, underpasses, roadways and other infrastructure improvements where unobstructed access to trail systems may be possible. The Trail Master Plan noted above will assist in identifying the key locations where access is critical and may

be achieved through foresight in engineering design.

#### 2.6 Naturalization

#### 2.6.1. Active Reforestation

Naturalization of valley lands, hazardlands and other passive tableland properties will typically occur by default where the "do nothing" approach applies to maintenance standards, see 2.3.1. If left alone (no grass mowing) a field or meadow will start producing woody shrubs and will eventually evolve into a woodland community. This process is called natural succession. If however, opportunity exists and resources are available, active reforestation by predetermined planting initiatives will be encouraged thereby accelerating the rate of natural succession, reducing the probability of weed growth, enhancing soil stability and wildlife habitats.

#### 2.6.2. Volunteer/Community Initiatives

The Town supports the involvement of service clubs, community groups and volunteers in active reforestation programs on passive tableland and other naturalizing locations. This may include events in honour of Earth Day, Arbour Day or any other appropriate celebration or cause. As funding is not necessarily available in the municipal budget for these events, the organizing committee of the event will seek funding sources from corporate sponsors or will undertake fund raising initiatives. The Town will provide staff and technical expertise to ensure that the planting is done in accordance with acceptable design standards and planting techniques.

#### 2.6.3. Biological Salvage

Salvage of trees, shrubs and herbaceous plant material may be a requirement of a subdivision agreement where a development site is slated for clearing. Salvaged plant material may be transplanted into open space lands in accordance with an approved concept plan or environmental management strategy with the approval of the Parks and Recreation Department. The specific location of transplanted material will anticipate possible future trail alignments and other site improvements to avoid the possibility of trampling. Biological salvage and transplant will occur under the approval of the Town and/or the Central Lake Ontario Conservation Authority.

## 2.6.4. Bioengineering

Bioengineering techniques for bank stabilization and erosion control have been successfully used along the Pringle Creek and are encouraged by the Central Lake Ontario Conservation Authority as a softer alternative to gabion baskets, rip-rap and concrete structures. Plant material that is suitable for bioengineering construction includes Scrub Willow, Alder and Dogwood. Once this plant material reaches an appropriate size and maturity, it may be harvested by cutting at the correct time of the year, with the prior approval of the Parks and Recreation Department, and utilized in other locations where such plant material is needed for other bioengineering projects. Harvesting will be done by qualified personnel only, and will ensure the well being and longevity of the parent plants.

#### 2.7 Public Awareness

#### 2.7.1. Adopt-A-Park Programs

The Town encourages schools, community groups and service clubs to adopt open space sites for commitment to long term surveillance and custodianship. Events may be programmed by the adoptee to include seasonal garbage clean-up, environmental education, reforestation programs, and other activities compatible with an environmental stewardship objective. The Town will provide signage announcing the adoption of the site by the group, as well as the necessary materials such as garbage bags, gloves and wood chips. Staff and technical support will be available to the group as required for such environmental partnerships.

## 2.7.2. Education Packages

The Town may require that environmental awareness literature be prepared for home owners backing directly onto open space sites and environmentally sensitive areas (see also 2.2.6 Public Awareness Packages). Public awareness material which promotes environmental responsibility, may address but is not necessarily limited to topics of no dumping, no trampling, pet control, organic gardening, waste disposal and water quality. Education programs may also be prepared as partnership programs with adjacent schools to supplement the school curriculum.

# Attachment #7 Excerpts from the Brooklin Urban Design and Sustainable Development Guidelines

11.5.29.12 All collector and local roads shall also be planned to include a vibrant and healthy tree canopy that will provide shade and enhance and establish a vibrant urban environment. In this regard, a Tree Canopy Plan shall be prepared for each plan of subdivision. In order to maximize the amount of tree planting, the co-location of utilities is encouraged.

Whitby Official Plan Amendment 108 as Approved by Region of Durham July 12, 2018 (under appeal).

#### Attachment #8

#### **Excerpts from the West Whitby Architectural / Urban Design Guidelines**

11.12.6.3 Coronation Road (old and new alignments), Twin Streams Road and Bonacord Avenue shall be designed in a manner that ensures that no more than approximately 60% of the planned right-of-way is devoted to the automobile. In this regard, a minimum of approximately 40% of the planned right of-way shall be devoted to pedestrian and non-motorized modes of travel and landscaping. These roads shall also be planned to include a tree canopy that will provide shade and enhance and establish a vibrant urban environment. In this regard, a Tree Canopy Plan shall be prepared for each of these roads and the trees shall be planted as soon as feasible to ensure that a canopy is established in the shorter term.

11.12.6.4 Given anticipated densities and the built form, all local roads shall generally include sidewalks on both sides. Exceptions may be considered in Low Density Residential areas, provided accessibility requirements are met. Each of the local roads shall also be the site of street trees that are planted in a manner that provides for the establishment of a vibrant and healthy tree canopy. In order to maximize the amount of tree planting, the co-location of utilities is encouraged.

Whitby Official Plan Amendment 108 as Approved by Region of Durham July 12, 2018 (under appeal).



Document I	<b>No</b> .: SL	.R-Park-01
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**Division:** Parks

**Program:** Forestry

Service: Tree Planting

Rationale: (check all that apply below)

**Legislative** □

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By: Operational Services** 

**Document Owned By: Director of Operational Services** 

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

**Reviewers(s):** Superintendent of Operations - Parks

**Approvers(s):** Director of Operational Services, Commissioner of Public Works

## **Objectives**

- To enhance the overall health and canopy cover of the urban forest through:
  - o The use of industry accepted planting techniques,
  - The installation of appropriate trees in terms of species diversity and characteristics for each classification of planting.
- To plant trees in conjunction with road allowance in-fill and replacements, parks and open space.

#### **Level of Service**

- All trees are to be planted in accordance with the current edition of the International Society of Arboriculture (ISA) Best Management Practices — Planting Guidelines.
- All tree species shall be chosen by the Forestry Foreman or approved designate (or sometimes in consultation with the homeowner), based on species characteristics and site conditions.
- All trees shall be nursery grown under climatic conditions similar to Whitby. Trees shall be true to name, type and form, structurally sound, free from disease, infestation, abrasions, and other damage. They shall possess strong fibrous root systems and be well branched.
- Any adjustment to the specified tree size, condition or species must be approved by the Superintendent of Operations - Parks, the Director of Operations, or an approved designate.

#### Replacement Tree Planting:

- Trees that are removed shall be replaced with the appropriate species. Where conflicts with existing site conditions occur, the Forestry Foreman or approved designate may elect not to replace the tree. In the case of pest, disease, or cultural problems, a tree of similar habit and form will be chosen.
- Planting shall generally occur from April to June and September to November, or as conditions permit.

 Trees selected shall be 30 (thirty) to 50 (fifty) millimeters (mm) caliper in size.

#### In-fill Planting:

- Shall occur for understory planting as determined by Forestry Foreman or approved designate.
- Shall occur in vacant boulevard locations where trees never existed or were removed and not replaced.
- Planting shall generally occur from April to June and September to November, or as conditions permit.
- Tree selected shall be 30 (thirty) to 50 (fifty) millimeters (mm) caliper in size.

#### Park and Open Space Planting:

- Trees that are removed shall be replaced with the appropriate species. In case of pest and disease problems or conflict with site conditions, a tree of similar habit and form will be chosen.
- Planting shall generally occur from April to June and September to November, or as conditions permit.
- Tree size shall be determined by the Forestry Foreman based on species characteristics and site conditions.
- Trees may be planted in conjunction with community tree planting projects with approval of the Superintendent of Operations (Parks) or designate, such as Earth Day or private donations.
- Tree species shall be of native origin in open space and naturalized areas.

## **Additional Service Requirements**

 Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**

• Each year, the schedules are updated by a staff member at the Operations Centre, and are renamed to reflect the current year.



**Document No.**: SLR-Park-03

**Division:** Parks

**Program:** Forestry

**Service:** Tree Pruning

Rationale: (check all that apply below)

**Legislative** ⊠

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By:** Operational Services

**Document Owned By: Director of Operational Services** 

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

Reviewers(s): Superintendent of Operations - Parks

**Approvers(s):** Director of Operational Services, Commissioner of Public Works

## **Objectives**

 To provide an effective tree pruning program that maintains the safety, health and aesthetics of Town owned trees.

#### **Level of Service**

- All trees are to be pruned in accordance with the International Society of Arboriculture (ISA) Best Management Practices - Pruning Guidelines.
- The public, unless authorized by the Forestry Foreman, is not permitted to prune or otherwise alter in any way a Town owned tree.
- Whitby Hydro oversees all hydro line clearing/utility pruning.
- Tree pruning in active parkland shall be conducted as deemed necessary by the Forestry Foreman or their approved designate. Park trees shall be pruned for structure, health, and to allow safe clearance for park maintenance equipment.
- All street tree pruning shall be scheduled by the Forestry Foreman or approved designate based on the following programs and priorities:
  - Proactive "block pruning" shall be conducted annually on a 5 (five) year cycle and shall involve the inspection, and if deemed necessary, pruning of street trees within a designated region of the Town.
- Pruning objectives shall be established as follows:
  - To remove dead or otherwise structurally weak limbs in order to maintain a safe environment for the public,
  - To ensure visibility for traffic signage and provide required vehicle and pedestrian clearance.
  - To ensure the health and longevity of the Urban Forest,
  - To address tree related concerns of adjacent landowners as appropriate,
  - Meet the needs of reasonable risk management,
  - Increase operational efficiency,
  - Reduce the occurrence for public inquires.

#### Attachment #10

- Reactive pruning shall be initiated by public inquiry, storm damage, or other events that may impact the structure or health of a Town owned tree.
- Reactive pruning shall have the same objective as noted above, however schedule of inspection and work completed shall be variable based on the following priorities:
  - o Imminent hazards shall be removed immediately following inspection,
  - Structural pruning shall be schedule according to operational efficiency,
  - Aesthetic pruning shall be scheduled according to operational efficiency or incorporated into the block pruning program at the discretion of the Forestry Foreman or their approved designate.
- Tree crown size will not be reduced by topping or pollarding.
- With exception to pruning in maintained parkland, usable wood, if practical, shall be cut in manageable lengths and made convenient for complementary removal by residents or public.
- Upon completion of any pruning operation, and prior to leaving the job site, brush and debris shall be removed and the area raked and swept clean.

### **Additional Service Requirements**

• Every effort is made to maintain program schedules, however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**

Manuals can be found in the Forestry Foreman/Arborist office.



Document No.: SLR-Park-04

**Division:** Parks

**Program:** Forestry

Service: Tree Removal – Maintained Areas

Rationale: (check all that apply below)

**Legislative** ⊠

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By:** Operational Services

**Document Owned By: Director of Operational Services** 

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

Reviewers(s): Superintendent of Operations - Parks

**Approvers(s):** Director of Operational Services, Commissioner of Public Works

## **Objectives**

- To guide the removal of Town owned trees when deemed necessary.
- To promote good urban forest management practice.

#### **Level of Service**

- Tree removals are approved and scheduled by the Forestry Foreman or their approved designate.
- Work shall be scheduled as operationally efficient and in keeping with the level of risk present. Whenever possible, large removals will be scheduled for midsummer or winter seasons when firm ground conditions reduce potential damage to adjacent grounds and facilitate cleanup.
- Where possible, written notice shall be provided to the adjacent property owner prior to tree removal.
- With exception to removals in maintained parkland, usable wood, if practical, shall be cut in manageable lengths and made convenient for complementary removal by residents or public.
- Town staff shall remove all wood not picked up by residents after 5 (five) working days.
- All stumps shall be cut as low to the ground as possible in preparation for stump grinding according to the Service Level Standard for Stump Removal.
- Upon completion of a tree removal, all branches shall be removed from the site and the area shall be raked and swept clean.

## **Additional Service Requirements**

• Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**



**Division:** Parks

**Program:** Forestry

Service: New Tree Planting Establishment and Maintenance

Rationale: (check all that apply below)

Legislative

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By: Operational Services** 

**Document Owned By: Director of Operational Services** 

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

**Reviewers(s):** Superintendent of Operations - Parks

**Approvers(s):** Director of Operational Services, Commissioner of Public Works

## **Objectives**

- To ensure long-term tree health by providing a program of intensified maintenance during the period of new tree establishment.
- To contribute to plant health care and reduce the resources required for pest management and tree maintenance at maturity.

#### Level of Service

- Trees shall be classified as new planting during the first 2 (two) years of their establishment following the date of original planting.
- Trees which have been planted as part of the street tree replacement, road allowance in fill or park planting programs shall be placed on a new planting tree maintenance plan while they are classed as such.
- Newly planted trees shall be watered a minimum of 3 (three) times per growing season during the first 2 (two) years following planting, or as deemed necessary by the Forestry Foreman.
- During planting, all trees shall be pruned to remove all dead, broken, diseased, or dying limbs.
- All new planting trees shall be inspected twice to determine pruning requirements and promote proper structure and the characteristic form of the species.
   Inspections will also note stake removal, mulch level, soil level, soil moisture, damage and disease.
- Mulch rings extending from the trunk in a radius of 50 (fifty) centimeters (cm)
   shall be established around all new planting trees.
- Tree Care Notices are delivered to residents where new trees are planted on boulevards.

## **Additional Service Requirements**

• Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**

Maintenance logs are stored in the Forestry Foreman/Arborist office.



**Document No.**: SLR-Park-07

**Division:** Parks

**Program:** Forestry

**Service:** Woodlot and Ravine Management

Rationale: (check all that apply below)

Legislative

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By:** Operational Services

**Document Owned By:** Director of Operational Services

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

Reviewers(s): Superintendent of Operations - Parks

**Approvers(s):** Director of Operational Services, Commissioner of Public Works

#### **Statement**

Naturalized wooded areas should be left in their natural state and not manicured. The benefits of leaving woody material to decompose include habitat for wildlife, recycling of nutrients and organic material, and regeneration sites for plant life, water resources, and tree roots.

## **Objectives**

- To manage and maintain woodlots and ravine ecosystems in a sustainable way using accepted forestry practices.
- To provide safe and healthy naturalized woodland areas for public enjoyment.

#### **Level of Service**

- Calls from residents are received and recorded at Operational Services. These calls shall initiate an inspection of the tree(s) in question.
- Inspections shall assess the overall health of the tree(s) in question and determine appropriate action to ensure pedestrian, public, and private property safety.
- Assess woodlot and ravine edges prior to residential development as coordinated by the Planning Department.
- Potentially hazardous trees shall be evaluated by the Forestry Foreman or approved designate and hazards eliminated.
- Brush and wood resulting from tree removal or maintenance shall remain on site in a location away from property lines, pathways, and waterways to decompose naturally.

## **Additional Service Requirements**

 Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**

## **Town of Whitby**

## **Public Works – Operational Services Division**

Service Level Standards		
Document No.: SLR-Park-02		
Division: Parks		
Program: Forestry		
Service: Tree Inspections		
Rationale: (check all that apply below)		
Legislative □		
Health & Safety ⊠		
Stewardship of Assets and Environment ⊠		
Corporate Policy □		
Customer Satisfaction/Perception ⊠		
Document Maintained By: Operational Services		
Designant Owned Bry Director of Operational Complete		

**Document Owned By:** Director of Operational Services

Effective Date: September 28, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff Reviewers(s): Superintendent of Operations - Parks

Approvers(s): Director of Operational Services, Commissioner of Public Works

#### Statement

Tree inspections are organized within three categories. Each category below shall be reviewed separately.

- 1. Home Owner Municipal Tree Concern Inspections.
- 2. Block Pruning Program Inspections.
- 3. Mature Tree Inspections – healthy trees with known structural defects that need to be monitored regularly to track any negative changes.

## 1. Home Owner Municipal Tree Concern Inspections

#### **Objectives**

 To inspect all resident concerns in a timely manner. Each concern will be prioritized according to the necessary level of service. (i.e. emergency/safety concerns).

#### Level of Service

- Calls from homeowners concerning boulevard trees are received and recorded daily by Operational Services staff.
- An International Society of Arboriculture (ISA) Certified Arborist inspects calls
  daily. Inspection will determine the overall health of the tree. Contact with
  homeowner is established. If not, a copy of the tree inspection notice is left at the
  door recommending the appropriate plan of action, or appropriate action will be
  taken immediately without notice, if deemed necessary.
- Emergency calls will be inspected immediately. These are assessed and if public safety is at risk, action will take place immediately.
- ISA Certified Arborists perform the work based upon work schedules set up by the Forestry Foreman in priority sequence.
- Completed work order information is transferred to the ongoing tracking list. This
  tracking list includes tree replacement, stump removal, and turf repair.

## **Additional Service Requirements**

Not applicable.

#### **Work Instructions**

## 2. Block Pruning Program Inspections

#### **Objectives**

- To maintain streetscape aesthetics and overall health of the Town's boulevard trees through a regular tree pruning and inspection regimen.
- To maintain sightlines and overhead clearance for traffic and pedestrians.
- To inspect overall health of trees including structural, insect and disease problems, to determine any required work.

#### **Level of Service**

- All boulevard trees are pruned and inspected on a 5 (five) year cycle.
- Regular block pruning and inspection of Town trees at more frequent intervals helps to improve tree health.
- A qualified Arborist inspects the Town trees on boulevard street blocks and assesses the need for pruning.
- Block pruning is organized through an established rotation of chosen block sections.
- Regular observation of trees by work crews can help identify any new changes in a tree's health.
- Block pruning is predominately carried out during the winter months.

## **Additional Service Requirements**

 Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**

## 3. Mature Tree Inspections

## **Objectives**

 To inspect mature trees in the Whitby and Brooklin downtown cores on a regular basis to monitor any changes that may affect the safety of the public, thereby reducing public liability concerns.

#### Level of Service

• A qualified Arborist visually inspects these trees once (1) per year to monitor any changes in the condition of the tree. If any negative changes have occurred, the inspector will put a plan into action to rectify the problem in a timely manner.

## **Additional Service Requirements**

 Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**



Document No.: SLR-Park-05
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**Division:** Parks

**Program:** Forestry

**Service:** Stump Removal – Maintained Areas

Rationale: (check all that apply below)

Legislative

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By:** Operational Services

**Document Owned By: Director of Operational Services** 

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

Reviewers(s): Superintendent of Operations - Parks

**Approvers(s):** Director of Operational Services, Commissioner of Public Works

## **Objectives**

- To improve the aesthetic appearance of boulevards and maintained parkland areas.
- To prepare the site of tree removal for a replacement tree.

#### **Level of Service**

- Stump and root flare areas are to be ground 15 (fifteen) to 30 (thirty) centimeters (cm) below the finished grade level. Surplus stump chips to be removed from site.
- Stumps shall be removed as part of the replanting schedule in spring and fall.
- Stumps shall be removed in boulevards and maintained Town parkland areas where accessibility permits the use of equipment.
- Provide soil and seed for stumped area if a tree replacement is deemed not practical or necessary.

### **Additional Service Requirements**

 Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**

Utility locates are required before commencing with this work.



Document No.: SLR-Park-06

**Division:** Parks

**Program:** Forestry

**Service:** Pest and Disease Management

Rationale: (check all that apply below)

**Legislative** ⊠

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By:** Operational Services

**Document Owned By:** Director of Operational Services

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

Reviewers(s): Superintendent of Operations - Parks

**Approvers(s):** Director of Operational Services, Commissioner of Public Works

## **Objectives**

To evaluate tree related insect or disease problems, and as required, take
effective action to control infestation in Town owned trees with minimal social,
economic, and environmental impact.

#### Level of Service

- Pesticide Control Measures will be evaluated using Integrated Pest Management Principles. Integrated Pest Management will weigh costs, benefits, and impact on health and the environment to identify, if deemed necessary, the most suitable method of pest control.
- Trees are treated only as necessary to ensure the tree's survival.
- Trees are not treated for aesthetic or nuisance issues.
- Application timing for treatment on targeted trees will vary for individual types of pests.
- Insect/disease information and recommendations will be provided to residents where applicable.

#### Operational Guidelines and Safety:

- To minimize the use of airborne pesticides, systemic or biological control will be considered. Biological control is through the use of parasitic and predacious insects.
- Application procedures will adhere to the specifications of the Ontario
   Ministry of the Environment and Climate Change Pesticides Act, Ontario
   Regulation 63/09.

#### Pesticide Applicator Requirements:

 Only those employees that hold a valid Pesticide Exterminator License endorsed by the Ontario Ministry of the Environment and Climate Change are allowed to apply pesticides.

## **Additional Service Requirements**

• Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**



Document No.: SLI	R-Park-09
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**Division:** Parks

**Program:** Forestry

**Service:** Surface Root Treatment

Rationale: (check all that apply below)

Legislative

Health & Safety ⊠

**Stewardship of Assets and Environment** ⊠

**Corporate Policy** □

**Customer Satisfaction/Perception** ⊠

**Document Maintained By: Operational Services** 

**Document Owned By: Director of Operational Services** 

Effective Date: January 1, 2009

Next Review Date: December 1, 2019

Audience: Council, Senior Management Team, Staff

**Reviewers(s):** Superintendent of Operations - Parks

Approvers(s): Director of Operational Services, Commissioner of Public Works

## **Objectives**

To alleviate surface root issues in Town boulevard locations.

#### Attachment #17

#### **Level of Service**

- Calls from homeowners concerning boulevard tree root issues are received and recorded daily by Operational Services staff.
- An International Society of Arboriculture (ISA) Certified Arborist inspects calls daily. Inspection will determine if any work is required. Surface roots are only dealt with if there is a safety concern and not for aesthetic purposes.
- Root issues may be dealt with by actual removal of roots or covering with top soil and grass seed, or any other treatment as recommended by the Forestry Foreman or approved designate.
- Removal of roots will generally be scheduled with stump grinding operations during spring and fall tree planting.

## **Additional Service Requirements**

 Every effort is made to maintain program schedules; however emergency situations, weather changes, equipment break downs and various other factors can alter the schedule.

#### **Work Instructions**