

**CITY OF YORKTON
SASKATCHEWAN**

BYLAW NO.15/2007

**A BYLAW IN THE CITY OF YORKTON IN THE PROVINCE OF SASKATCHEWAN
TO ENSURE THE URBAN FOREST IS PROPERLY MAINTAINED AS AN ASSET TO THE
CITY OF YORKTON**

1.0 TITLE

This Bylaw may be cited as the Urban Forestry Bylaw No 15/2007.

2.0 PURPOSE

Chapter 7.1 of the City of Yorkton Development Plan speaks to the importance of the Urban Forest as a community asset. The Council of the City of Yorkton approved the Municipal Development Plan by enacting Bylaw 15/2003 in 2003. Therefore, to ensure the Urban Forest is properly maintained as an asset of the City of Yorkton and its residents, an effective and efficient Urban Forestry Management Program is established in the City of Yorkton. It is the intent of this bylaw that trees will not be removed unless they are deemed to be hazardous.

3.0 INTRODUCTION

Urban Forestry is the generally accepted reference being used when dealing with the maintenance and care of the trees and shrubs that line our streets and beautify our parks.

A community's trees or its "urban forest" constitute a valuable but vulnerable component of the civic infrastructure. Not only do trees and shrubs provide shade, shelter, beauty, wildlife habitat and civic landmarks, they are also a statement of community pride and civic image. Throughout North America, the health of urban forests is in decline. Very few communities plant more trees than they remove and the threats of disease, vandalism, microclimate and neglect continue to diminish the vitality of the urban forest. Renewed attention is needed to conserve this very important community asset. Preserving our urban forest will leave a legacy for future generations to benefit from in many ways. These are the same benefits residents of, and visitors to Yorkton receive today. They include, but are not limited to:

Improved Air Quality

Trees and their foliage act as an air filter for our community by cleaning dust, micro sized metals and other pollutants such as ozone, nitrogen oxides, ammonia and sulfur dioxides.

They reduce the amount of carbon in the air by storing it in the form of wood. They also help reduce carbon in the air by aiding with heating and cooling requirements, thus reducing the amount of carbon dioxide produced from fossil fuels. The bi-product of this process of removing pollutants is oxygen released into the atmosphere.

Improved Water Quality and Erosion Impacts

As development increases, hard non-evaporative surfaces increase, which decreases the soil infiltration by ground water. The result is increased water volume, velocity and pollutant load from runoff. Tree canopies and root systems intercept, slow and reduce storm water runoff through normal tree functions, thus reducing the effects of flooding and erosion. This increases

the amount of rainwater runoff that percolates into the soil, which in turn helps purify the water by removing nutrients and sediments and recharging aquifers.

Reduced Temperature and Energy Use

Trees reduce temperatures in summer by shading surfaces, dissipating heat through evaporation and by blocking wind, which transfers heat from the ground. Trees can also block winter winds and reduce the wind chill factor, which reduces energy loss due to heat dissipation.

Noise Reduction and Visual Screening

Trees provide a calming environment by absorbing noise and improving aesthetics. They soften sound waves that attempt to pass through them and further dampen these sounds by adding sounds of their own. The ‘white noise’ of leaves and branches in the wind and associated natural sounds, mask other man made sounds.

Trees can be used to for screening undesirable and disturbing sight lines. They also reduce glare and filter out harmful UV rays.

Components of good Urban Forestry Management include Arboriculture; Entomology; Pathology; and the execution of good Horticultural practices.

4.0 DEFINITIONS

4.1 Tree

Means a living woody plant with one or more stems and a minimum caliper width of 2.5 centimetres and a minimum height of 1.5 metres.

4.2 Planting

A planting refers to any tree, shrub, bush or other plant material

4.3 Public Trees

All trees within the Urban Forest on property held by the City of Yorkton are classed as public trees. Responsibilities will include care, reforestation, maintenance and total inventory.

4.4 Private Trees

Is located on the premises of a taxpayer’s property, including back lane trees & shrubs, in both the residential or commercial zones of the City. The private tree must adhere to all concerns addressing public safety and insect/disease infestations within the section of the Urban Forest and be controlled should such infestations become threatening to the public trees.

4.4.1 Trees and/or any other planting provided to private property during development, or through other reforestation programs, by the City of Yorkton, shall be deemed the responsibility of the property owners and therefore, considered a private tree.

4.5 Pest Control Officer

The Pest Control Officer, means a person appointed pursuant to *The Pest Control Act* by City Council for the purpose of enforcing that Act, shall enforce the requirements of the municipality under *The Pest Control Act* of Saskatchewan as well as any municipally enforced policies related to pest control and/or management.

- 4.5.1 Any public or private planting, which becomes infected, or has the potential to become infected, with one or more of the pests as identified in the Pest Control Act of Saskatchewan or any municipally enforced policy(s), shall be referred to the Pest Control Officer.
- 4.5.2 The decision of, as well as any corrective action prescribed by the Pest Control Officer, is final.
- 4.5.3 All costs associated to the prescribed corrective action is the responsibility of the property owner.

4.6 ISA (International Association of Arboriculture)

The International Society of Arboriculture is a worldwide professional organization dedicated to fostering a greater appreciation for trees and to promoting research, technology, and the professional practice of arboriculture. Through research, technology, and education The ISA promotes the professional practice of arboriculture and fosters a greater public awareness of the benefits of trees. This policy refers to standards of practices related to the Prairie Chapter of the ISA.

4.7 Replacement Cost Method (Appendix C)

This is an ISA approved method of calculating the value of a tree is used when the plants are of a size that can be replaced. The value is based upon the cost of replacing the same species of the largest available transplantable tree.

4.6 Trunk Formula Method (Appendix D)

This is an ISA approved method of calculating the value of a plant when it is too large to be replaced. This values uses the cost of replacing the largest locally available plant and adjusting it for the size difference, the condition and location of the appraised tree.

4.7 Cost of Repair

This is an ISA approved method to calculate the cost to perform any wound treatments, cabling, bracing, pruning, fertilizing, watering, aeration, alleviation of compacted soil, other soil practices and insect and disease treatment.

4.8 Cost of Cure

This is an ISA approved method similar to cost of repair except it calculates the expenses that are needed to bring a damaged tree as close to its original condition as possible.

4.9 Compounded Replacement Cost

This is an ISA approved method used mostly for large plants that are bigger than those available for planting. This value is determined by taking the replacement cost and the maintenance costs and increasing them by an interest rate until the replacement plant would grow to be as large as the original plant.

5.0 URBAN FOREST INVENTORY

An inventory of public trees shall be maintained for the purposes of maintaining up-to-date information on removals, new plantings, sewer root problems, and a total inventory by species. The value of the Urban Forest inventory shall be established using the ISA approved Trunk Formula Method Worksheet and Condition Class Form (Appendix C)

5.1 General

All trees planted in the City of Yorkton should be of a species that are suited to this climatic zone, and have been grown in the same zone or next immediate zone so as to ensure hardiness of all nursery stock species. Section 6.0 of the City of Yorkton Municipal Zoning Bylaw No 14/2003 provides detailed information related to planting requirements within the City of Yorkton.

Plantings included in the landscape of municipal facilities are considered part of the Urban Forest for the purpose of this policy.

Exception: for the purpose of experimentation only, and by the development of an Arboretum site such species as are uncommonly available to this geographic area. This diversification is needed to develop other species that can adapt to this climatic zone.

See Appendix A: Recommended Species for Planting

5.2 Boulevards

Trees planted on the boulevard shall offer characteristics to provide a natural aesthetic to the City of Yorkton. Trees shall be of a species within the hardiness zone and suitable to the planting site. Caution will be used in selecting fruit bearing trees as boulevard trees to minimize the amount of “potential issues” with fruit on sidewalks. Fruit trees have their place in the landscape. Careful consideration is needed in the selection process.

See Appendix A: Recommended Species for Planting

5.3 Medians

All trees planted on the medians must be of suitable species for the particular median to be planted. Most trees that are hardy in this climatic zone will be suitable for planting on the median given the size and width of the median has been taken into consideration with the actual mature size of the tree to be planted.

Consideration must be given to the effect a tree might have on traffic lights, line of vision, undesirable suckering/root growth patterns, and the blocking of street signs and directions on the city streets. Any hazards that might develop from the planting of a tree in a particular location must be avoided at the planning stages.

See Appendix A: Recommended Species for Planting

5.4 Easements

Trees may be planted on easements, however consideration must be given to the purpose of the easement. All trees planted within an easement must be of suitable species for the particular easement to be planted. Most trees that are hardy in this climatic zone will be suitable for planting within the easement given the size and width of the easement has been taken into consideration with the actual mature size of the tree to be planted.

5.5 Park Areas

Where possible, trees will be planted in parks to allow for the urban forest to grow. Planting patterns in park settings will be that of group planting as opposed to row planting. In

instances where row planting is effective, then row planting will be used, but group plantings would be the recommended design.

All trees that are planted in park areas must be of species that conform to Section 4.1 plus the design and the intended use of the area. The trees/shrubs should be planted in groupings to compliment each other and other species. Consideration of their respective growth habits must be made when choosing the trees to be planted at any particular site and preparation of landscape designs must be made prior to commencement of the work.

5.6 Private Plantings on City Property

Citizens are encouraged to plant trees on the frontages of city property in residential areas to help enhance their neighborhood. Often the purpose is to offer additional protection from prevailing winds and privacy to their own yards. However, application for approval must be made to the Department of Leisure Services with written approval required prior to commencement of planting.

Process for Private Plantings on City Property shall be as follows:

- 5.6.1 Application must be made in writing to the Director of Leisure Services.
- 5.6.2 The Director, or his designate, will conduct a site visit to determine suitability of the planting with long range plans for that area and the effect of the planting on the surrounding properties.
- 5.6.3 All trees planted must conform to the criteria placed on the planting of trees as determined by this policy.
- 5.6.4 Final placement of the trees will be at the discretion of the Director or his designate, with staking done to assist the homeowner in best location of new trees.
- 5.6.5 Prior to commencement of the work proposed, citizens must sign a release acknowledging that the City of Yorkton will retain ownership of the tree.
- 5.6.6 Written permission is required by the Director of Leisure Services and will only be considered upon compliance with the preceding requirements.
- 5.6.7 Failure to comply could result in some or all of the trees planted being removed from the property on which they are located with the cost being the sole responsibility of the property owner.
- 5.6.8 Upon the conclusion of the program, any changes to the property would be included in the Urban Forestry Inventory and forwarded to the property's tax file for future reference.

6.0 PLANTINGS ON CITY PROPERTY

The City of Yorkton may offer, from time to time, a planting program for private properties within the City of Yorkton. This program may be offered to provide additional protection from prevailing winds, privacy for residential yards and to re-establish the urban forest in a particular area of the City.

- 6.1 The City of Yorkton shall submit to a property owner, a written offer to plant a tree on their private property.
- 6.2 Included in the offer will be the species and type of tree being offered as well as any pertinent information on the tree.
- 6.3 If the property owner accepts the offer to have this tree planted on their private property:
 - 6.3.1 The property owner must sign a release indicating that they accept ownership of the tree and all associated costs for its future maintenance requirements.

- 6.3.2 Once the release has been received by the City, the City shall inform the property owner of the timeline for planting.
- 6.3.3 All planting costs are the responsibility of the City.
- 6.4 If the property owner does not want the tree being offered, they can:
 - 6.4.1 Indicate their wishes on the release and send it back to the City or,
 - 6.4.2 Not send the release back to the City.
 - 6.4.3 The City will remove this property from their planting schedule and a tree will not be planted on this property.
 - 6.4.4 Upon the conclusion of the program, any changes to the property would be included in the Urban Forestry Inventory and forwarded to the property's tax file for future reference.

7.0 TREE PRUNING

7.1 Street Tree Pruning

Pruning will be undertaken by the City of Yorkton in order to keep the Urban Forest in the best possible condition as established by good arboriculture standards.

Upon completion of the tree inventory, the street tree pruning program will proceed to make best use of both fiscal and human resources in the areas of the city in the most need of having the trees pruned.

Review of the information available in the inventory will be made annually to establish the course of action required to maintain the Urban Forest through a five-year period.

Prior to the commencement of any street tree pruning, public notification will be undertaken using the "City News" section of the newspaper indicating areas to be affected.

Boulevard trees adjacent to sidewalks will be pruned to a minimum height of thirteen feet to allow for ease of pedestrian and maintenance access.

7.2 Tree Pruning in Parks

This service will be undertaken by the City of Yorkton as necessary to maintain those trees located in the parks to good arboriculture standards.

7.3 Pruning on Private Property (Including Back Lanes)

Local contractors are available to provide pruning services on private property. Private pruning may be necessary on private property including back lanes in both the residential and commercial zones.

The purpose of back alleys and lanes are to act as a right of way for public utilities and back yard access. Back alleys/lanes are not recognized green spaces and therefore, the City of Yorkton does not consider plantings located in the back alleys/lanes as part of the City of Yorkton Urban Forest as it relates to this policy.

Procedure for Processing Pruning Requests shall be as follows:

- 7.3.1 Applications for pruning should be made in writing to the office of the Director of Leisure Services.
- 7.3.2 Using a City of Yorkton street offset map, a site inspection will be completed by the Parks Branch of Leisure Services to establish whether the planting is located on public or private property.

- 7.3.3 If it is deemed to be a private planting the following process shall be followed:
 - 7.3.3.1 The City of Yorkton may, by written notice delivered to an Owner or posted on the Owner's property, require the Owner to carry out the required pruning within 20 days from the date of the delivery or posting of the notice.
 - 7.3.3.2 All costs associated to the removal of the planting will be the sole responsibility of the property owner.
 - 7.3.3.3 If an Owner fails to comply with an order sent pursuant to Subsection 7.3.3.1, the City of Yorkton may do or cause to be done, any acts necessary to ensure compliance with subsection 7.3.3.1, and the cost of doing such work is a debt due and owing to the City by the Owner and may be added to the taxes of the property.
- 7.3.4 If it is deemed to be a public (City) tree:
 - 7.3.4.1 An assessment of the planting will be made using the ISA approved Tree Evaluation Form. (Appendix B)
 - 7.3.4.2 Should the assessment find that corrective pruning, etc., is required, the City of Yorkton will schedule the work within a reasonable time line.
 - 7.3.4.3 Corrective action to be taken will be indicated on the Evaluation form and communicated to the complainant.
 - 7.3.4.4 If required, all costs associated to the necessary corrective action will be the responsibility of the City.
 - 7.3.4.5 Upon the conclusion of the evaluation, any change to the tree would be included in the Urban Forestry Inventory.

8.0 REQUESTS FOR REMOVALS

As requests are received, consideration will be given to each individual tree on the merits of the request and the impact its removal would have on the surrounding neighbourhood. These requests are reviewed by a certified arborist with consideration given to factors such as probability of survival if the tree is moved, the costs associated with moving and establishing the tree in a new site, or removing and replacing the tree. Removal shall be considered as the last option in all cases. Applications for removal shall be made in writing to the Director of Leisure Services.

Any and all tree removals from the Urban Forest are included under this policy. This policy applies to any and all construction and/or repair work that would require the removal of any tree within the Urban Forest. Projects being completed by the City of Yorkton are not exempt under this policy.

- 8.1 Using a City of Yorkton Street Offset Map, a site inspection will be completed by the Parks Branch of Leisure Services to establish whether the planting is located on public or private property.
- 8.2 If the planting is deemed to be on private property:
 - 8.2.1 The tree in question is considered the responsibility of the property owner.
 - 8.2.2 All costs associated to the removal of the planting will be the sole responsibility of the property owner.
- 8.3 If it is deemed to be a public tree:
 - 8.3.1 An assessment of the tree will be made using the ISA approved Tree Evaluation Form. (Appendix B)
 - 8.3.2 Should it be established that the tree is healthy and of no immediate hazard to public safety, all viable options to save the tree will be discussed with the

property owner and will be done on a case-by-case basis. Any required maintenance for the tree will be at the sole cost to the City.

- 8.3.3 Should it be established that the tree is not healthy and of immediate hazard to public safety the tree will be removed at the sole cost to the City.
- 8.3.4 If it is not deemed a hazard tree and the complainant request for removal continues, the value of the tree will be established using the ISA approved Replacement Cost Method Worksheet. (Appendix C).
- 8.3.5 The reforestation fee shall be set at a maximum of twenty percent (20%) of the appraised value of the tree with a minimum reforestation fee set at \$500.00.
- 8.3.6 The complainant/property owner shall be solely responsible for the cost of removal and remediation of the site as prescribed by the City of Yorkton.
- 8.3.7 The complainant/property owner shall be informed, by way of being provided a Tree Removal Permit (Appendix E) from the Parks Branch that he/she shall be responsible to pay to the City the reforestation fee prior to removal. The estimated costs associated to the removal and remediation shall be provided at this time, however the property owner is responsible to pay for the actual costs associated to the removal and remediation once completed.
- 8.3.8 Once payment is received in full, removal of the tree will be scheduled.
- 8.3.9 Upon the conclusion of the evaluation, any change to the tree would be included in the Urban Forestry Inventory.

9.0 SEWER ROOTS

Often times residents will submit complaints to the City indicating they have roots in their sewer lines causing poor drainage and other issues. Tree roots are attracted to moisture and in the past sewer lines were made with materials that tree roots could penetrate. Tree roots of some species can travel a significant distance to find moisture and therefore it is very difficult to find the tree that is the cause of the sewer issue. It may not be the most obvious tree and thus difficult to pinpoint if there are a number of trees in the area. Removing one tree will not prevent this from occurring again in the future as other tree roots will also enter the system. For some time now, the City has been using piping materials that are impervious and therefore root problems in these lines rarely occur.

Removing trees does not solve this problem and diminishes the Urban Forest, therefore the City of Yorkton established Section 5.1.a)1) of the Charging and Servicing Procedures for Waterworks Sewer and Water Services Bylaw 19/2006. This section specifically deals with residential sewer root issues. Therefore, all inquiries related to sewer roots will be directed to the Department of Planning and Engineering who have the mandate to work with the Waterworks Sewer and Water Services Bylaw 19/2006.

10.0 REFORESTATION

The purpose of reforestation in the Urban Forest Environment is to replace trees and supplement the existing forest population with additional trees where the population is low. Where possible, the City of Yorkton will endeavor to maintain a positive tree planting to removal ratio.

For the purpose of establishing the value of the Urban Forest inventory, the ISA approved Trunk Formula Method Worksheet (Appendix D) shall be used. Please refer to section 7.0 for information on establishing the replacement costs of the Urban Forest.

11.0 WATER PROGRAM

Proper watering is the most important factor for successful planting of trees and shrubs. To ensure adequate watering, newly planted trees will be watered a minimum of 7 times per year in the first year. In the second year, trees will be watered a minimum of 5 times a year. The minimum watering amounts depend on precipitation and additional watering may or may not be required.

11.1 Street Trees

Where street trees are added or replaced on boulevards, efforts will be made to involve the homeowner as a partner in the tree planting. When planting new trees, city crews will water trees at time of planting and encourage the homeowners to water these trees on a regular schedule after the planting. In cases where homeowners would prefer not to have a tree on the boulevard, an assessment would be done, as per section 6.0 above, on the request, but the final decision would be based on the urban forest requirements.

11.2 Park Trees

Newly planted park trees will have a scheduled water maintenance program to ensure the success of the tree. The minimum seven times in the first year and five times in the second year program would apply. Where possible in new development, irrigation to tree beds would be installed

12.0 DESTRUCTION AND USE OF CHEMICALS

No person shall apply or administer in any form any chemical that would cause death to any tree held by the City of Yorkton.

No person shall cut, prune, or alter the appearance of any publicly owned tree, which would cause death or put the tree at risk of public safety.

If a person is found to have improperly pruned, or alter a public tree, that person will be held responsible for the cost of repair, replacement, and/or maintenance of the tree and may include referral to the R.C.M.P.

13.0 COMPENSATION FOR DAMAGED TREES

The City may endeavor to achieve compensation to the full value of any tree(s) that are willfully damaged or become damaged as a result of an accident, through execution of legal statutes dealing with destruction of public property.

The City of Yorkton will follow the International Society of Arboriculture Plant Appraisal Guide to achieve a value for all trees affected by this policy.

14.0 AUTHORITY

14.1 Administrative Authority

The office of the Parks and Arena Manager/Pest Control Officer (PCO) will execute the authority over the Urban Forest and the administration of the Urban Forestry Management Program.

14.2 Appeal Authority

Appeals regarding decisions made through this policy must be made in writing to the Director of Leisure Services.

Failing satisfactory response from the Director, an appeal may be made to the City Manager.

Any subsequent appeals to the decision made by the City Manager should be made in writing to City Council of the City of Yorkton.

Given the value of the Urban Forest to our Community, removals shall always be considered the last option in all cases.

15.0 EFFECTIVE DATE OF BYLAW

This bylaw shall come into force and take effect on the day of final passing thereof.

MAYOR

CITY CLERK

Introduced and read a first time this 29th day of October A.D., 2007.

Read a second time this 29th day of October A.D., 2007.

Read a third time and adopted this 17th day of March A.D., 2008.

APPENDIX A – Recommended Species for Planting

<u>Common Name</u>	<u>Botanical Name</u>
Silver Maple	Acer Saccharinum
Black Ash	Fraxinus nigra
	Fraxinus nigra “Fall Gold”
Green Ash	Fraxinus pennsylvanica
Machurian Ash	Fraxinus mandshurica
Little Leaf Linden	Tillia cordata
Basswood	Tillia americana
Bur Oak	Quercus macrocarpa
Amur cherry	
Hawthorn	
Ohio Buckeye	
Russian Olive	
Hackberry	

Note: The American Elm is probably the best available species for boulevard planting, however, given the current approach and threat of Dutch Elm Disease, it is not recommended that this species of tree continue to be planted in the City of Yorkton until such time effective control measures are developed or it runs its course and is no longer a threat.

APPENDIX B - Tree Evaluation Form

Site/Address: _____

Map/Location: _____

Owner: Public Private Unknown Other

Date: _____ Inspector: _____

Date of last inspection: _____

Hazard Rating

_____ + _____ + _____ = _____

Failure Potential	Size of Part	Target Rating	Hazard Rating
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_____ Immediate action needed
 _____ Needs further inspection
 _____ Dead tree

TREE CHARACTERISTICS

Tree # _____ Species: _____
 DBH: _____ # of trunks: _____ Height: _____ Spread: _____
 Form: generally symmetric minor asymmetry major asymmetry stump sprout stag-headed
 Crown class: dominant co-dominant intermediate suppressed
 Live crown ratio: _____% Age class: young semi-mature mature over-mature/senescent
 Pruning history: crown cleaned excessively thinned topped crown raised pollarded
 crown reduced flush cuts cabled/braced none multiple pruning events
 Approximate dates: _____
 Special Value: specimen heritage/historic wildlife unusual street tree screen shade
 indigenous protected by government agency

TREE HEALTH

Foliage color: normal chlorotic necrotic Epicormics? Y N Grown obstructions:
 stakes wire/ties signs
 Foliage density: normal sparse Leaf size: normal small
 curb/pavement guards
 Annual shoot growth: excellent average poor Twig Dieback? Y N
 other _____
 Woundwood development: excellent average poor none
 Vigor class: excellent average poor
 Major pests/diseases: _____

SITE CONDITIONS

Site Character: residence commercial industrial park open space natural woodland/forest
 Landscape type: parkway raised bed container mound lawn shrub border wind break
 Irrigation: none adequate inadequate excessive trunk wetted
 Recent site disturbance? Y N construction soil disturbance grade change line clearing site clearing
 % dripline paved: 0% 10-25% 25-50% 50-75% 71-100% Pavement lifted? Y N
 % dripline w/fill soil: 0% 10-25% 25-50% 50-75% 71-100%
 % dripline grade lowered: 0% 10-25% 25-50% 50-75% 71-100%
 Soil problems: drainage shallow compacted droughty saline alkaline acidic small volume
 disease centre history of fail clay expansive slope aspect: _____
 Obstructions: lights signage line-of-site view overhead lines underground utilities traffic
 adjacent veg. _____
 Exposure to wind: single tree below canopy above canopy recently exposed windward, canopy edge
 area prone to windthrow
 Prevailing wind direction: _____ Occurrence of snow/ice storms: never seldom regularly

TARGET

Use Under Tree: building parking traffic pedestrian recreation landscape hardscape
 small features utility lines
 Can target be moved? Y N Can use be restricted? Y N
 Occupancy: occasional use intermittent use frequent use constant use

TREE DEFECTS

ROOT DEFECTS:

Suspect root rot: Y N Mushroom/conk/bracket present: Y N ID: _____

Exposed roots: severe moderate low Undermined: severe moderate low

Root Pruned: _____ distance from trunk Root area affected: _____%

Buttress wounded: Y N When: _____

Restricted root area: severe moderate low Potential for root failure: severe moderate low

LEAN: _____ deg. from vertical natural unnatural self-corrected Soil Heaving: Y N

Decay in plane of lean: Y N Roots broken: Y N Soil cracking: Y N

Compounding factors: _____ Lean severity: severe moderate low

CROWN DEFECTS: Indicate presence of individual defects and rate their severity (s=severe, m=moderate, l=low)

DEFECT	ROOT CROWN	TRUNK	SCAFFOLDS	BRANCHES
Poor taper				
Bow, sweep				
Codominants/forks				
Multiple attachments				
Included bark				
Excessive end weight				
Cracks/splits				
Hangers				
Girdling				
Wounds/seam				
Decay				
Cavity				
Conks/mushrooms/bracket				
Bleeding/sap flow				
Loose/cracked bark				
Nesting hole/bee hive				
Deadwood/stubs				
Borers/termites/ants				
Cankers/galls/burls				
Previous failure				

HAZARD RATING

Tree part most likely to fail: _____

Inspection period: _____ annual _____ biannual _____ other _____

Failure Potential + Size of Part + Target Rating = Hazard Rating

_____ + _____ + _____ = _____

Failure potential:

1-low; 2-medium; 3-high; 4-severe

Size of part:

1 - <6" (15 cm); 2 - 6-18" (15-45 cm);

3 - 18-20" (45-75 cm); 3 = >30" (75 cm)

Target rating:

1-occasional use; 2-intermittent use;

3-frequent use; 4-constant use

HAZARD ABATEMENT

Prune: remove defective part reduce end weight crown clean thin raise canopy crown reduce
 restructure shape

Cable/Brace: _____ Inspect further: root crown decay aerial monitor

Remove tree: Y N Replace? Y N Move Target: Y N Other _____

Effect on adjacent trees: none evaluate

Notification: owner manager governing agency Date: _____

COMMENTS

Diagnostic Worksheet

Date: _____

Tree genus: _____

Client: _____

Species: _____

Site address: _____

Variety/Cultivar: _____

Common name: _____

Approximate age: _____

Tree location: _____

Signs and Symptoms:

Spread within the area:

- Within one tree Group of same species Other plant species Group within site Neighboring site

Structures Affected:

- Foliage Fruit/flowers Twigs/branches Bark/trunk Roots

Spread within the tree:

- Localized Widespread Uniform pattern Random pattern

Patterns of abnormalities:

Foliage

- Anthracnose Chlorosis Mottling Scab Sooty mold
 Blight Disfigurement Necrosis Scale Spots
 Blisters Galls Powdery mildew Scorch Wilting
 Curling Leaf dropping Rusts Shot holes Other _____

Twigs/Branches

- Bleeding Dieback Scaling Wound Other _____
 Blight Distortion Shepherdis crooking Vascular
 Cankers Frost cracks Stunting discoloration
 Decay Lightning Sunscald Witch's brooms

Bark/Trunk

- Cankers Discoloration Gumming/bleeding Loose bark Swelling
 Cracking Frost cracks Holes in bark Slime flux Wounds
 Decay Galls/burls Lightning Splitting Other _____

Roots

- Decay Distortion Girdling root Wounds Other _____
 Discoloration Galls Shriveled

Signs

- Egg masses Frass Galleries Mycelia Other _____
 Exit holes Fruiting bodies Insect parts Pupal casings

Site history:

Soil

- Compaction Excessive salt Improper irrigation Nutrient Other _____
 Contamination Grading pH deficiency

Environment/surroundings

- Competition Pollution Temperature Water Other _____
 Infrastructure Poor species extremes deficiency
 conflict selection

Tree History

- Animal damage Construction Improper Mechanical injury Vandalism
 Chemical injury damage maintenance Poor wound Wind damage
 Improper planting forming (vigor) Other _____

Additional comments and observations: _____

APPENDIX C – Replacement Cost Method Worksheet

Appraised Value =
[Installed Plant Cost x Species % x Condition % x Location %]
+ Removal and Cleanup Cost (if needed)
Installed Plant Cost = Replacement Plant Cost + Installation Cost

Case # _____ Property _____ Date _____

Appraiser _____

Field Observations

1. **Species** _____
2. **Condition** _____ %
3. **Trunk Circumference** _____ in./cm and/or **Diameter** _____ in./cm or
Shrub or Vine Size (height/spread/volume) _____
4. **Location % = [Site _____ % + Contribution _____ % + Placement _____ %] ÷ 3 = _____ %**
5. **Removal and Cleanup Costs** for appraised
plant or plant that will be replaced = \$ _____

*Regional Plant Appraisal Committee and/or
Appraiser-Developed or Modified Information*

6. **Species** rating _____ %
7. **Replacement Plant Size** (diameter) _____ in.cm
8. **Replacement Plant Cost** = \$ _____
9. **Installation Cost** = \$ _____
10. Other Regional Information _____

*Calculations by Appraiser Using Field and/or
Regional Information*

11. **Installed Plant Cost = Plant Cost (#8) \$ _____**
+ Installation Cost (#9) \$ _____ = \$ _____
12. **Adjusted Installed Plant Cost = Installed Plant
Cost (#11) \$ _____ x Species rating (#6) _____ % x
Condition (#2) _____ % x Location (#4) _____ %** = \$ _____
13. Add **Removal and Cleanup Costs (#5)**
(if appraised plant is replaced) \$ _____ = \$ _____
14. The **Appraised Value** is either #12 or #13 = \$ _____
15. If the **Appraised Value** (#14) is \$5,000 or more, round
it to the nearest \$100; if it is less, round to nearest \$10.
16. **Appraised Value** (#14) = \$ _____

*A median cost is the most appropriate cost to use because there are an equal number of costs greater than and less than the median. Equally important, plants and installation are available at those specific costs.

Condition	Description	Condition Class (Percent Value)
Excellent	Perfect specimen. Excellent form and vigor for species. No pest problems or mechanical injuries. No corrective work required. Minimum life expectancy 30 years beyond the time of inspection	100
Good	Healthy and vigorous. No apparent signs of insect, disease or mechanical injury. Little or no corrective work required. Form representative of species. Minimum life expectancy 20 years.	80
Fair	Average condition and vigor for area. May be in need of some corrective pruning or repair. May lack desirable form characteristics of species. May show minor insect, disease or physiological problems. Minimum life expectancy 10 years.	60 – 40
Poor	General state of decline. May show severe mechanical, insect or disease injury, but death not imminent. May require major repair or renovation. Minimum life expectancy 5 years.	20
Dead or Dying	Dead or death imminent within 5 years.	0

Site Location	Percent Value*
Specimen or historical trees	110
Average residential, landscape trees	80 - 90
Aboretum, park and recreation trees	70 – 80
Golf course trees	60 – 80
City street trees, shopping malls	60 – 80
Shelterbelt	60 – 80
Industrial area trees	50 – 70
Out of city highway trees	40 – 60
Native, open woods trees	20 – 40
Undesireable location	0 – 20

*Functional or placement deficiencies will reduce site location values.

APPENDIX D – Trunk Formula Method Worksheet

Case # _____ Property _____ Date _____

Appraiser _____

Field Observations

1. **Species** _____
2. **Condition** _____%
3. **Trunk Circumference** _____ in./cm **Diameter** _____ in./cm
4. **Location %** = [Site _____% + **Contribution** _____% + **Placement** _____%] ÷ 3 = _____%

Regional Plant Appraisal Committee and/or Appraiser-Developed or Modified Information

5. **Species Rating** _____%
6. **Replacement Tree Size** (diameter) _____ in./cm
(Trunk Area) _____ in²/cm²TA_R
7. **Replacement Tree Cost** \$ _____
(see Regional Information to use **Cost** selected)
8. **Installation Cost** \$ _____
9. **Installed Tree Cost** (#7 + #8) \$ _____
10. **Unit Tree Cost** \$ _____ per in²/cm²
(see Regional Information to use **Cost** selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
(TA_A or ATA_A; use Tables 4.4-4.7) }
or c²(#3) _____ x 0.08 } = _____ in²/cm²
or d² (#3) _____ x 0.785 } }
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
TA_A or ATA_A _____ in²/cm² (#11) – TA_R _____ in²/cm² #6) = _____ in²/cm²
13. **Basic Tree Cost** = TA_{INCR} (#12) _____ in²/cm² x **Unit Tree Cost** (#10) \$ per in²/cm² +
Installed Tree Cost (#9) \$ _____ = \$ _____
14. **Appraised Value** = **Basic Tree Cost** (#13) \$ _____ x **Species rating** (#5) _____% x
Condition (#2) _____% x **Location** (#4) _____% = \$ _____
15. If the **Appraised Value** is \$5,000 or more, round it to the nearest \$100; if it is less, round to the nearest \$10.
16. **Appraised Value** = (#14) \$ _____

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

APPENDIX D Cont'd

Condition and Location Class

Condition	Description	Condition Class (Percent Value)
Excellent	Perfect specimen. Excellent form and vigor for species. No pest problems or mechanical injuries. No corrective work required. Minimum life expectancy 30 years beyond the time of inspection	100
Good	Healthy and vigorous. No apparent signs of insect, disease or mechanical injury. Little or no corrective work required. Form representative of species. Minimum life expectancy 20 years.	80
Fair	Average condition and vigor for area. May be in need of some corrective pruning or repair. May lack desirable form characteristics of species. May show minor insect, disease or physiological problems. Minimum life expectancy 10 years.	60 – 40
Poor	General state of decline. May show severe mechanical, insect or disease injury, but death not imminent. May require major repair or renovation. Minimum life expectancy 5 years.	20
Dead or Dying	Dead or death imminent within 5 years.	0

Site Location	Percent Value*
Specimen or historical trees	110
Average residential, landscape trees	80 - 90
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Golf course trees	60 – 80
City street trees, shopping malls	60 – 80
Shelterbelt	60 – 80
Industrial area trees	50 – 70
Out of city highway trees	40 – 60
Native, open woods trees	20 – 40
Undesireable location	0 – 20

*Functional or placement deficiencies will reduce site location values.

APPENDIX E – Tree Removal Permit

Authorization is hereby granted to remove the tree(s) listed below subject to the conditions herein and upon receipt of the appropriate Tree Removal Fees.

Name of Applicant: _____

Address: _____

Postal Code: _____ Phone: _____

Number of tree(s) to be removed: _____ Species: _____

Site Location (draw map):

Conditions of Removal:

I, _____, hereby agree to the following terms and conditions of removal

1. To pay the prescribed fee listed on the reverse side of this agreement in accordance with the fee schedule set forth in the City of Yorkton Urban Forestry Management Program.
2. That the area where the tree is removed be reconstructed suitable with the surrounding area.

Applicant Signature

Date

Authorized by

Title

Post Removal Inspection Date: _____

Post Removal Inspection Comments: _____

Reforestation Surcharge: _____