



# LANDSCAPE DESIGN GUIDELINES

## Subdivision and Site Plan Developments

**THE CORPORATION OF THE TOWN OF AURORA  
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## **1.0 PURPOSE AND INTENT OF THIS MANUAL**

This document has been developed to assist applicants in the preparation of Landscape Plans as one of the components of the various submissions required in support of development applications to the Planning Department. It is intended to provide a comprehensive reference of clear and consistent landscape standards and to provide guidance and assistance in the realization of high quality landscape environments.

The goal of the manual is to outline general guidelines for the provision of Landscape Works for development proposals in the Town of Aurora. Landscape Works is recognized as being an essential component to any site development, and we at the Town of Aurora see it as a critical item in the success of any development. Landscape Works integrate the built environment with the natural environment, enhance the visual character of neighbourhoods and streetscapes, and contribute to the long-term success of new developments. Our objective is to achieve excellence in the design and implementation of Landscape Works, through sustainable and sensitive development. Additional objectives include the following:

- Assist owners, developers and applicants in the preparation of quality landscape plans for various development application scenarios.
- Encourage open communication between owners, developers and applicants with the Town of Aurora.
- Encourage landscape planning and design that protects, supports and enhances existing cultural and natural landscape features.
- Encourage landscape planning and design that supports and enhances urban design qualities of a proposed development.
- Outlines the requirements for the submission of drawings, drawing formats and uniform and consistent content.
- Outlines the role of the landscape architect throughout the development process

The guidelines contained herein describe minimal acceptable landscape standards for site development, and additional guidelines for enhanced implementation. Proposals that exceed our minimal standards, are of course, greatly encouraged.

Our guidelines have been prepared for the various types of submissions that may occur in the Town of Aurora. This includes primarily Subdivision and Site Plan developments, but is also applicable to developments as a result of Re-zoning applications and Committee of Adjustment applications. Guidelines are also provided for Vegetation Preservation and Management associated with the above developments as well as for minor development projects.

For Site Plan applications, this document should be reviewed in coordination with the *Town of Aurora's Site Plan Guidelines and Application Form*.

**Applicants are encouraged to review development proposals with Parks and Recreation Services staff to discuss the landscape guidelines and any site specific issues prior to the submission of any particular type of application.**

**The Town of Aurora Comprehensive Zoning By-law (latest edition), as well as the guidelines contained herein represent the minimal landscape development requirements as adopted by The Town of Aurora. Applicants shall note that compliance with the Zoning By-law alone does not exempt compliance with these landscape guidelines.**

**Contact Information:**

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## **2.0 LANDSCAPE PLAN REQUIREMENTS**

### **2.1 Landscape Architect**

All landscape plans shall be prepared by an accredited professional Landscape Architect in good standing with the Ontario Association of Landscape Architects (OALA). The Landscape Architect shall coordinate and liaise with all other consulting professionals to ensure accurate representation of the site and the proposed development.

The landscape architect shall be retained by the developer to carry out and provide all necessary consulting services including but not limited to:

- Preparation of detailed landscape design drawings and supply of all landscape drawings as may be required for approval by the Director of Parks and Recreation Services.
- Coordination of the landscape design with engineering plans and any other applicable disciplines contributing to the overall development plans.
- Preparation of the necessary contract(s) for construction of the Landscape Works.
- Provision of contract administration including inspections, monitoring and supervision of the Landscape Works.
- Certification of Completion of the Landscape Works; Certification of Final Acceptance of the Landscape Works; and documentation in support of landscape security reductions and releases pursuant to the subdivision agreement and the Construction Lien Act.
- Coordination and administration of the landscape maintenance activities and supply of maintenance activity reports to the Town.

The services of the consulting landscape architect shall be retained until the landscape works have received final Acceptance by the Director of Parks & Recreation Services.

The consulting Landscape Architect is encouraged to undertake site visit(s) prior to initiating the design of the landscape plan, in order that they may become familiar with the existing condition of the site and the opportunities and constraints the site may offer. The potential for retaining existing site elements, specifically existing vegetation, should be thoroughly examined during the initial site planning.

### **2.2 Preparation and Submission of Plans**

Landscape plans shall be submitted to the Town of Aurora Planning & Development Services department for circulation, and the Parks & Recreation Services department for review and approval, as further described herein. All submissions shall include a cover letter outlining the submission content. Upon subsequent submissions, the cover letter shall advise of specific changes to the plans from the previous submission, if applicable.

All drawing submissions must be folded to 8.5 x 11" format in numerical order with the title block exposed. Digital submissions shall be provided as requested, in .pdf format.

Quantities of plans required for circulation and review shall be determined by the Town's Planner assigned to the subject proposal. For preliminary design submissions when dealing directly with the Town's Landscape Architect(s) only 1 (one) set of plans is required. For more detailed submission requirements refer to section 3.1 for subdivision drawing requirements and section 4.1 for site plan drawing submission requirements.

### **2.3 Plan Context Information**

The landscape plans shall include the following contextual information:

- Project name.
- Lot, concession, municipal address and/or M-Plan and lot number.
- Developer / Applicant's name, address and phone number.
- Landscape Architect's name, address and phone number.
- Professional seal of the Landscape Architect (signed upon final plan submission).
- Drawing Name, Drawing Number and Date.
- Revision Chart.
- Legend for all abbreviations and symbols on the landscape plan.
- Key plan.
- North Arrow oriented to the top edge of the page.
- Metric scale preferably 1: 250 to 1: 400, minimum 1:500.
- If possible, maintain drawing sheet size to 600 x 900mm.
- Director of Parks & Recreation Services "REVIEWED" Stamp (Subdivision Landscape Plans only).

### **2.4 Plan Design Information**

The landscape plans shall include the following existing conditions information:

- All base information shall be coordinated and be consistent with Engineering drawings and Site Plan drawings.
- The location of all existing natural and man-made features to remain.
- Existing vegetation (location, size, condition) and clear indication whether vegetation is to be removed, retained and protected.
- All existing right-of-way information.
- Location of all adjoining property lines, underground services, above ground utilities, roadways, buildings or exiting features.

The landscape plans shall include the following design information:

- All boundaries, property lines and limits of the proposed development including easements, daylight triangles, reserves, etc.; identification of phases of the landscape development if applicable.
- Municipal address numbering where possible; Lot and Block numbers; Street names.
- Neighbouring lands uses.

- Grading information that impacts landscaping, i.e., grade changes that require distinct treatment by planting, retaining elements or other landscape treatments; existing and proposed elevations at critical locations; swales and other stormwater management features as related to landscape areas; slopes and cross-slopes on walkways and pedestrian paving areas. Coordinate with Engineering plans to ensure consistent information or refer all grading information to Engineering plans.
- Existing and proposed buildings, overhangs, entrances, stairways; underground structures if applicable.
- Above and below ground services and utilities.
- Construction and post construction protection, mitigation and preservation measures for existing vegetation designated to be retained.
- Hard surfaced circulation areas and surface treatments.
- Structures such as fences, walls, pillars, screens, steps, railings, etc.
- Streetscape elements; Site furnishings and furniture.
- Plant materials including street trees, lot line trees, planting beds, buffers and screens, naturalized plantings, sodded, seeded or other groundcover areas.
- Plant lists including common and botanical names, size, quantity, nursery conditions, and general remarks.
- Identification keys referencing plant materials, construction detailing, etc.
- Garbage collection facilities.
- Snow storage areas.

The landscape plans shall also include Construction Detail drawings clearly and accurately describing the design intent of all landscape work, including layouts, elevations, and cross-sections as required, with appropriate cross-references to the landscape plans.

Town standard notes and construction details (as itemized in 9.1: Appendix 1), represent the Town's minimum standards, and shall be included on the landscape plans.

## **3.0 SUBDIVISION LANDSCAPE GUIDELINES**

Landscape conditions of Draft Plan Approval, Alternative Design Standards, Urban and Architectural Design Guidelines and environmental reports such as Environmental Impact Studies and Natural Heritage Evaluations may require specific landscape initiatives that are not indicated below. Subdivision Landscape Standards will require coordination and may require enhancements as determined by the above noted documents.

### **3.1 Drawing Submission Requirements**

Initial submission of subdivision landscape plans shall be made concurrent with, and coordinated with the second engineering submission. The landscape submission shall be made directly to the Town's landscape architect(s) for review and comments. Submissions shall consist of one (1) set of hard-copy plans as well as PDF files.

Once the design process has developed to the point of near completion of both the engineering and landscape plans, the administration of completion of the plans and development agreement, as well as final plans submission will be processed by the Town's Planning & Development Services department, in coordination with review staff.

Upon final review of the landscape plans, a set of reproducible plans will be required and forwarded to the Director of Parks & Recreation Services for "Review Signature" and sent back to the developer / consultant for printing of the required number of sets of drawings for the subdivision agreement, as administered by the Planning & Development Services department. In addition to the number of plans required by the Planning & Development Services department, the Parks & Recreation Services department will require the following:

- 1 set of paper prints, full size
- 1 set of paper prints, 11" x 17" size.
- Electronic file in .PDF format of all landscape plans.

The Landscape Plan package shall consist of the following components as applicable to the individual subdivisions:

- Vegetation Management Plans
- Compensation Planting Plans
- Naturalization Plans for Buffers, Forest Edge Rehabilitation, Open Space Regeneration and Trail Corridors.
- Stormwater Management Facility Landscape Plans.
- Streetscape Plans including Boulevard Planting; Boulevard Buffer Planting; Landscaped Medians & Traffic Circles; Entry Features: Corner Lot Privacy Fencing; Acoustic Fencing; etc.
- Construction detail design plans for all landscape features.
- Town of Aurora standard detail Drawings and Notes.
- Maintenance Schedules

- Landscape Cost Estimate

### **3.2 NATURALIZATION PLANTING**

Naturalization planting shall address the mass planting of individual and/or groups of native plant species that are indigenous to the subject area, having regard for the surrounding environment, orientation, drainage patterns, soil conditions and ecological rehabilitation. Existing natural and restored areas affected by the proposed development/improvements which cannot be protected during construction, must be restored with naturalization plantings.

The naturalized landscape shall be designed to provide a diverse native plant community that will further mature and develop into an enhanced natural environment with the objective of minimizing ongoing maintenance liabilities and demand on Municipal staff resources.

Plants should be located in an attempt to create an improved wildlife habitat, utilizing species that provide a source of food and shelter for birds and mammals. Naturalization plantings assembled in rows and uniform arrangements must be avoided.

Naturalization planting shall be designed by the Owner's landscape architect in coordination with the recommendations of environmental reports. The design shall identify all plant communities to be established, methods of slope stabilization, and all other information necessary to implement the proposed landscape improvements. Guidelines to address naturalization planting include, but may not be limited, to the following:

- All plants shall be native material
- Minimum size for coniferous material shall be 1.8m height.
- Deciduous trees shall vary in size: minimum 1.5m high whips up to 40mm caliper stock. Larger sizes may be required for specific purposes.
- Deciduous shrubs shall be 1.2m height minimum.
- Large continuous mulched shrub beds are not recommended due to the aggressive weed competition in natural areas. Single pit plantings are preferred.
- A naturalized no-maintenance seed mix shall be specified for all disturbed areas.

### **3.3 OPEN SPACE LANDS**

Open space lands include natural heritage systems, environmental protection areas, forest edge areas, buffers and general open space areas: Minimum requirements for open space lands include the following:

- Protection and or rehabilitation shall be based on recommendations in Environmental Impact Studies and any other environmental reports.
- The developer shall not disturb or otherwise use any portion of the open space lands for storage of topsoil and fill materials, or vehicles, equipment or any other construction material

- Any grading or restoration shall be subject to approved design plans based on recommendations in environmental reports. Restoration shall be subject to the requirements of section 3.2, above.
- Installation of page wire protection fencing, coordinated with silt control fencing and tree protection fencing shall be provided along all boundaries of the open space lands.
- Post construction, installation of permanent black vinyl chain link fencing shall be provided on the municipal side of lot lines for all residential and other private lands abutting the open space lands.

### **3.4 STORMWATER MANAGEMENT LANDSCAPING**

Landscape design plans and implementation of landscape works for Stormwater Management (SWM) facilities shall be administered by the Owner's landscape architect in coordination with the engineering design. Landscaping for SWM facilities shall be in accordance with the latest Ministry of Environment guidelines, Lake Simcoe Region Conservation Authority standards, and the Town's Infrastructure & Environmental Services department Policy # 68 (Stormwater Management Pond and Pond Block Design, Safety and Maintenance).

Landscaping of SWM facilities shall also adhere to the guidelines of Naturalization Planting as outlined in section 3.2, above. In addition, the following requirements are to be addressed:

#### **3.4.1 General Design**

- SWM facilities shall be designed to blend with the natural landscape and therefore geometric forms and standard slope gradient should be avoided in favour of organic shapes; land form grading should be designed to replicate the natural landforms in the area.

#### **3.4.2 Fencing**

- 1.2m high black vinyl perimeter fencing is required where residential or other private lands abut municipal SWM facilities. Fencing shall be located entirely within municipal property. No gates or other means of access shall be permitted to access SWM facilities from private lots.
- Fencing shall not be required where SWM facilities abut municipal road frontages.
- Refer to the Town's Policy # 68 for additional fence or guard requirements for headwalls and outfall structures.

#### **3.4.3 Topsoil**

- Topsoil within SWM facilities shall be a minimum continuous depth of 300mm.
- Topsoil requirements shall be in accordance with section 3.7, below.

#### **3.4.4 Overland Flow Routes**

- Overland flow routes shall be designed to incorporate naturalization planting, and shall be mass planted with the appropriate native vegetation; minimize existing vegetation removal; and should provide infiltration and physical filtration of sediment materials. Application of nursery sod, seed or

rip-rap stone alone in these areas will not be accepted as a suitable method of treatment for over land flow routes

- Grading of overland flow routes must be accomplished in such a manner as to not channel water into concentrated rivulets that will lead to eventual erosion conditions.

### **3.4.5 Planting & Seeding**

- A full range of aquatic plants should be utilized including submergent, emergent and fringe aquatics. Incorporate floating leaf aquatics to enhance pond shading.
- A dense coniferous and deciduous tree buffer should be provided along top of slope areas abutting residential and private properties.
- Shrub plantings shall generally be designed to form thickets and barriers and should be concentrated along the crest of steep slopes, in the flood-fringe zone adjacent deep water areas and around inlet and outlet structures.
- A “no planting” setback of 3.0m is required around the perimeter of SWM facilities where they abut residential properties.
- Woody vegetation shall not be planted within 5m of the toe of embankments and within 8m of the principal spillway structure. Any planting on embankments shall require engineering approval.
- Seeding of groundcover material shall be done by pneumatic blower that incorporates compost/mulch and seed, i.e., terra-seeding or approved equal.

### **3.4.6 Trail Access**

- Municipal SWM facilities abutting valley lands and other open space areas shall be utilized for trail linkages and viewing vistas/lookouts. These trail linkages shall be integrated into the overall greenlands trail network, providing unobstructed public access through the site.
- Trail linkages shall typically utilise SWM facility access roads shall be located no lower than the 5-year storm event water elevation.
- Trail linkages shall be a minimum 3m wide granular surface.
- Trail linkages shall be designed to be accessible, meeting the “*Design of Public Spaces Standard*” of the latest edition of the “*Integrated Accessibility Standards Regulation Guidelines*”

### **3.4.7 Signage**

- Standard warning signage is to be placed along the pond perimeter and adjacent to pedestrian and cycling traffic routes within the pond block.
- Warning signage shall be placed at a minimum of one sign per street frontage, facing the street.
- Maximum spacing for warning signs is 75m.

## **3.5 PARKLAND**

Conveyance of parkland, or cash-in-lieu thereof, shall be determined in accordance with the Planning Act and in accordance with By-law number 4291-01.F, to the satisfaction of the Town.

Construction of parkland facilities and amenities is typically provided by the Town. However, the Town is not adverse to developer constructed parkland facilities and negotiations (i.e., for development charge credits or other types of remuneration) may take place through the subdivision agreement process to the benefit of both the Town and the developer. As a minimum requirement for acceptance of parkland by the Town the following shall be included:

- Confirmation of property information.
- Identification of existing vegetation and protection/mitigation measures as required; removal of vegetation at the discretion of, and as directed by the Town.
- Rough grading of the park based on approved grading and engineering plans.
- Provisions for a minimum of 300mm topsoil, including topsoil fertilizers and amendments, either stockpiled or spread on site as determined by the Town.
- Erosion control and mitigation as required during development construction; Seeding to prevent erosion.
- Temporary perimeter or street frontage protection fencing to discourage encroachment, illegal dumping and construction material/vehicle storage. Fencing shall be provided as required, at the discretion of the Town.
- Permanent 1.2m black vinyl chain link fencing on the municipal side of the property line adjacent all residential and private lands.
- Servicing from the street to the property line including storm and sanitary sewers, minimum 50mm water service and meter, and single phase hydro service.
- Provision of as-built drawings in both AutoCAD and .PDF formats.

### **3.6 STREETSCAPING**

In addition to the minimum guidelines indicated below, streetscaping shall adhere to Architectural & Urban Design Guidelines as may be required for individual or block developments.

#### **3.6.1 Topsoil in Right-of-Ways**

- Boulevard topsoil shall be a minimum continuous depth of 300mm.
- Topsoil for planting beds, centre median and traffic circles shall be a minimum continuous depth of 600mm.
- Topsoil for planting beds, centre median and traffic circles shall be imported, screened, triple mix topsoil consisting of equal parts of good quality topsoil, coarse sand and compost.
- Topsoil requirements shall be in accordance with Section 3.7, below.

#### **3.6.2 Planting Requirements**

- Deciduous trees shall be a minimum 60mm caliper, 1.5m clear stem.
- Coniferous trees shall be a minimum 1.8m height
- Deciduous shrubs shall be a minimum of 600mm height.

#### **3.6.3 Street Trees**

- Generally, 1 tree per 10m spacing shall be provided in unrestricted boulevard areas; small canopy trees shall be spaced 5 – 7m apart.

- A minimum of 1 tree per single lot frontage shall be provided; a minimum of 1 tree per 2 townhouse units shall be provided.
- Provide species diversity utilizing minimum 50% native species.
- Avoid monoculture plantings: maximum of 4 to 6 trees of the same species in one area; a single Species shall account for no more than 5% of the total quantity utilized within the neighbourhood; no Genus should represent more than 10% of the proposed tree population, and; no Family should represent more than 20% of the proposed tree population.
- Setbacks: 1.75m to 2.25m typical to curb (depends on right of way width); 3m to light standards; 1.5m to hydrants; 1.5m to transformer boxes ( 3.0m for the opening side); 1.5m to driveways and curb cuts; 9m to stop signs (with 2m vertical clearance)

### **3.6.4 Buffer Plantings**

- Buffer plantings shall be designed and implemented based on the intended use and location of the buffer. Streetscape buffers are presumed to be located in boulevards.
- Generally, buffer plantings shall consist of a diversity of densely arranged deciduous and coniferous trees, and deciduous shrubs ranging from 600mm height to larger multi-stem species.
- Plant species shall be selected for hardiness and low maintenance requirements.
- Provide low berming (i.e., under 1m height) where space permits.
- Buffer arrangements should allow for groupings of trees and shrubs with open space between, i.e., buffer plantings should not be a continuous screen; allow for visibility through the buffer plantings.

### **3.6.5 Fencing**

- Fencing shall be provided and located in accordance with Urban & Architectural Design Guidelines, Acoustic Reports, and as otherwise mandated by The Town of Aurora.
- On-Lot fencing shall include fence gates where the fence returns to the house.
- Fence colour/stains shall be determined by the consulting landscape architect (in accordance with Urban & Architectural Design Guidelines) and shall be approved by The Town of Aurora prior to fence installation
- No portion of the fence structure, including footings and foundations, shall be located on municipal highways or other lands owned by The Town of Aurora

### **3.6.6 Entry Features**

- Entry features, when requested by the developer, shall be provided in accordance with Urban & Architectural Design Guidelines.
- Typically, no portion of the entry feature structure, including footings and foundations, shall be located on municipal highways or other lands owned by The Town of Aurora.
- Where it is determined (by special approval of The Town of Aurora) that entry features are located on Municipal lands, a long-term maintenance fee shall be required as negotiated through the subdivision agreement.

### **3.7 TOPSOIL REQUIREMENTS**

Native topsoil stripped and stockpiled on site shall be reused for general landscape purposes (except where otherwise noted). The Owner shall be required to perform topsoil testing by an agency approved by the Town to determine nutrient availability for native topsoil as well as for any other topsoil sources to be utilized within the subdivision. The Owner will be required to implement fertilizers and soil amendments in accordance with the topsoil test recommendations.

The developer's landscape architect shall coordinate with civil engineering and site works operations to ensure the minimum depth topsoil is accounted in soil balancing calculations and provided on site.

Where surplus topsoil exists, the Owner shall provide The Town of Aurora the first right of refusal of surplus topsoil, and shall provide the Town with prior notification of topsoil removal from the subdivision.

The Town of Aurora By-law Number 3399-92, Topsoil Preservation By-law is applicable for land disturbance to areas of two hectares or greater. Permit applications, administrative procedures and site criteria are available from the Infrastructure & Environmental Services department.

Stockpiling of topsoil on municipal lands is prohibited unless approved in writing by the Director of Parks & Recreation Services

### **3.8 MAINTENANCE REQUIREMENTS**

A schedule of maintenance activities shall be prepared by the developer's landscape architect and submitted to the Town prior to installation of the Landscape Works, detailing specific tasks and dates of maintenance to be performed.

The developer shall maintain and guarantee all Landscape Works, in accordance with the approved landscape plans and in accordance to the terms of the subdivision agreement, for a minimum period of two (2) years including two (2) full growth seasons. The maintenance activities, as itemized in the maintenance schedule, shall commence immediately upon completion of the landscape works, or portion thereof as approved by the Town, and shall continue until the end of the maintenance guarantee period.

Without limiting the generality of the works described in the maintenance schedule, the developer shall perform maintenance activities a minimum of three (3) times each growing season, to the satisfaction of the Director of Parks & Recreation Services.

The developer's landscape architect shall notify the Town upon the completion of the maintenance activities for each growing season and shall provide a maintenance report at the end of the growing season for each maintenance year, summarizing maintenance activities performed throughout that year. Furthermore,

maintenance reports will be required prior to the issuance of the Certificate of Acceptance and subsequent release of landscape securities.

## **4.0 SITE PLAN LANDSCAPE GUIDELINES**

Landscape works for Site Plan developments are intended to contribute to the creation of pedestrian-scaled environments. Landscaping should focus on street frontages (between building faces), main site and building entrances, corners facing intersections, and areas adjacent to existing residential neighbourhoods. Landscape works should also provide screening for parking lots, soften the effect of dominant building masses, and compliment the adjacent streetscape.

### **4.1 Site Plan Drawing Submission Requirements**

Landscape submissions for Site Plan applications shall be coordinated and administered by the Planning & Development Services Department. Applicants and consulting landscape architects are encouraged to discuss preliminary landscape requirements with Town landscape architects prior to submission of plans; however, landscape plans will not be reviewed unless formally circulated by Planning & Development Services department.

The Landscape Plan package for Site Plan application submission shall include the following components as applicable to the individual Site Plan:

- Vegetation Management Plans (including tree inventory & assessment and compensation plantings)
- Layout & Materials Plan
- Planting Plan
- Construction Detail Design Plans for all landscape features
- Town of Aurora Standard Detail Drawings & Notes
- Itemized Landscape Cost Estimate

### **4.2 General Requirements**

- Where the site is governed by Urban / Architectural Design Guidelines, ensure landscape design and site development fulfils the requirements as set out in the guidelines.
- Landscape design shall be in accordance with the *“Design of Public Spaces Standard”* of the latest edition of the *“Integrated Accessibility Standards Regulation Guidelines”*.
- Any portion of the lot not covered by the building footprint, parking, service and loading areas shall be landscaped.
- Landscape treatment is to extend to the street curb.
- Grassed landscape areas shall be sodded.
- Keep plantings clear of utilities, services and sidewalks; a minimum 1m setback is required on all sides of fire hydrants located in landscape areas.
- Planting designs should incorporate a preferred minimum of 30% coniferous plant materials.
- Site Plan development within the Oak Ridges Moraine shall include predominately native species.

- Landscape plans shall identify snow storage areas either within designated grassed areas or within parking areas.
- Driveways, parking areas, storage and loading areas are to be hard surfaced and separated from landscape areas with concrete curbs.
- Provide soft landscape areas adjacent to building fronts (exempting building entrances); building to hard surface interfaces should be avoided.
- Provide plantings such as vines, trees or shrubs to soften and screen the elevation of long retaining walls.
- Fencing, planted buffers and screens should be utilized to minimize the accumulative visual impact of extensive side and rear lots.
- Minimum gradient of landscape areas shall be 2% away from buildings.
- Maximum gradient for landscape areas shall be 40% where planted with extensive, vigorous plant materials and 30% for mowed areas.

### **4.3 Planting Requirements**

- Deciduous trees shall be a minimum of 60mm caliper, 1.5m clear stem.
- Coniferous trees shall have a minimum height of 1.8m.
- Deciduous shrubs shall be a minimum 600mm height.
- A variety of plant material types and a diversity of species are encouraged.
- Side and rear lot line deciduous trees shall be provided at one (1) tree per 10m spacing. Where space permits, coniferous tree plantings are encouraged along side and rear lot lines. (Note: retaining walls and fences at the lot line shall not preclude the planting of lot line trees.)
- Street trees shall be provided in accordance with section 3.6.3.
- Parking areas, driveways, drive-through lanes, storage and loading areas shall be visually screened from the roadway and adjacent properties with buffer plantings.
- Plantings shall be utilised within parking areas to break up lengths of parking stalls, to delineate parking stalls and to define circulation routes.
- Tree plantings shall be used within parking lots and along the perimeter of parking lots to address shading, retain storm water, reduce urban heat island effects and to improve microclimate.
- Buffer plantings shall consist of substantial and generous plantings of deciduous and coniferous trees and low shrubs; deciduous trees may be multi-stem or smaller species.
- Shrub plantings shall be arranged in continuous beds with a minimum double row of each species.
- Shrub plantings shall be maintained at a maximum of 900mm height where shrub beds are located adjacent to pedestrian areas.
- Provide 1.5m setback from parking lot to planting beds to allow for car overhang and snow accumulation.
- Where there are vehicle turning areas (i.e., entrances, loading docks, turnarounds) tree and shrub plantings should be set back a minimum of 3m, and sightlines should be maintained.

### **4.4 Planting Soil Requirements**

- Where native topsoil is utilized with the plan refer to section 3.7.
- Minimum topsoil depth for sodded areas shall be 200mm.

- Planting soil shall be imported, screened, triple mix topsoil consisting of equal parts of good quality topsoil, coarse sand and compost.
- Minimum planting soil depth for trees in sodded areas, landscape strips and buffers is 300mm.
- Minimum planting soil depth for continuous planting beds is 500mm

#### **4.5 Pedestrian Circulation**

- Provide site-internal accessible walkway connections from municipal sidewalks to building entrances and between buildings within the site.
- Provide appropriate placement of curb-cuts, ramps and landings to allow for unrestricted pedestrian access; position handicap parking close to main building entrances
- Walkways are to be hard surfaced and should possess non-slip quality for safety of users.
- External stairs and ramps shall be designed and detailed to current O.B.C. standards; 3 or more steps shall include a handrail.
- Provide separate pedestrian circulation from vehicular circulation wherever possible.
- Paving for walkways & pedestrian surfaces within the site plan should utilize specialty paving that compliments and enhances building architecture and that provides a notable difference from the standard municipal sidewalk paving.

#### **4.6 Fencing, Walls & Structures**

- Lot line fences shall be in accordance with zoning requirements.
- “Board on Board” wood fences are not acceptable. Provide quality design and detailing for all screen fencing.
- Where the site is adjacent to public open space or parkland a 1.2m high black vinyl chain link fence is required along the common property line such that all components of the fence including footings are located on the municipal side.
- Waste Bins shall be screened by a minimum 1.8m high opaque heavy duty fence or wall.
- Where walls are necessary they shall be constructed of materials which coordinate with adjacent building materials and facades.
- Planting beds should be used to reduce the visual effect of extensive fencing.
- Designs for retaining walls greater than 60cm height shall include railings/guards and be certified by a professional engineer.

#### **4.7 Maintenance Requirements**

Maintenance shall be carried out for all landscape works, in accordance with the approved plans and in accordance with the terms of the Site Plan agreement, for a minimum period of two (2) years including two (2) full growth seasons. The maintenance activities shall commence upon completion of the works (or portions thereof as approved by the Town) and shall continue until the end of the maintenance guarantee period.

The municipal maintenance guarantee period shall commence upon completion of the landscape works as certified by the consulting landscape architect, and shall continue until certification of acceptance of the landscape works in accordance with the executed Site Plan agreement.

General maintenance activities are indicated on the Standard Landscape Notes as set out in 9.1: Appendix 1.

## **5.0 VEGETATION MANAGEMENT**

The basic objective of the Town of Aurora's vegetation management and tree preservation initiative is to preserve as many quality trees and vegetation areas as possible. This Department's philosophy is to work with the Developer, its agents and other Departments to achieve this objective. In this regard, the Parks & Recreation Services department is responsible for reviewing and assisting the Developer and his agents in the preparation of plans that reflect site specific attainable goals.

For Subdivision applications, vegetation management and tree preservation initiatives will generally be reviewed prior to Draft Plan of Subdivision approval. The Town, at its sole discretion, may require detailed vegetation management information to be provided prior to Draft Plan approval that may add to or clarify the standard vegetation management initiatives required through the subdivision development process.

For Site Plan applications or other minor development agreements, vegetation management initiatives will be reviewed prior to execution of the respective development agreement.

Minimum standards for vegetation management are identified in the Town of Aurora Urban Forest Management Policy, *Tree Removal / Pruning and Compensation Policy*, and *Tree Protection / Preservation Policy*, and are provided in 9.3 Appendix 3 and 9.4 Appendix 4 respectively.

## **6.0 CONSTRUCTION DETAILS & NOTES**

The landscape plans shall include Construction Detail drawings clearly and accurately describing the design intent of all landscape works, including layouts, elevations, and cross-sections as required, with appropriate cross-references to the landscape plans. Construction Detailing should include, but not be limited to the following;

- Planting of trees, shrubs, ground covers and aquatics.
- Surface treatments and paving materials for pedestrian areas.
- Fences, screens and structures such as pillars, walls, entry features, etc.
- Steps and stairs within landscape areas, including riser width, tread heights, railings.

- Landscape retaining walls and rails, guards. (Structural design of walls over 0.6m in height shall be approved by the consulting engineer and shall be provided on the Grading and Engineering Plans as well as the landscape plans.)
- Site furniture and pedestrian amenities. (Catalog graphics may be provided in place of construction detailing. Provide product/model numbers, manufacturer/supplier information, finishes and any other relevant information.)

The Town of Aurora has standard construction details and notes which represent a minimum standard for typical applications. The Owner's landscape architect shall ensure that the Town standard construction details and notes are provided on the respective landscape plans for Subdivision and Site Plan developments, or alternatively, shall ensure that the Town's minimum standards are reflected in the construction details and notes provided by the landscape architect.

## **7.0 LANDSCAPE COST ESTIMATE, SECURITIES & FEES**

### **7.1 Landscape Cost Estimate**

An Itemized landscape cost estimate is required prior to final submission of subdivision and site plan landscape plans. The cost estimate shall include quantities, unit prices and total costs for all landscape work as indicated on the landscape plans, both private and municipal landscaping. The cost estimate shall be reviewed and approved by the Town prior to commencement of the subdivision agreement or site plan agreement, and shall be the basis of fees and securities as administered by the subdivision agreement.

### **7.2 Landscape Securities**

Landscape securities are required as a condition of the subdivision or site plan agreement in order to ensure the proposed landscape works are completed in accordance with the approved landscape plans.

The value of landscape securities for both site plan and subdivision landscape works shall be one hundred percent (100%) of the estimated landscape costs as approved by the Town.

### **7.3 Reduction & Release of Securities**

Upon satisfactory completion of the landscape works, and once all associated documentation has been provided, including certification of Completion of the landscape works (refer to section 8.1, below), the developer / owner may apply to reduce landscape securities held by the Town.

Landscape securities held under the Site Plan Agreement may be reduced by seventy-five percent (75%) with the balance of twenty-five percent (25%) to be held for the duration of the two (2) year landscape warrantee period.

Landscape securities held under the Subdivision Agreement may be reduced by ninety percent (90%) with the balance of ten percent (10%) to be held for the duration of the two year landscape warrantee period.

Upon satisfactory expiration of the two (2) year landscape maintenance guarantee period, and once all associated documentation has been provided, including certification of Acceptance of the landscape works (refer to section 8.2, below), the landscape securities for both Site Plan and Subdivision Agreements may be released in full.

#### **7.4 Construction Lien Act Securities**

Construction Lien Act securities are applicable only to Subdivision Agreements. The value of securities retained for construction lien act matters shall be ten (10) percent of the total estimated landscape costs for the subdivision. Documentation and requirements for reduction and release of Construction Lien Act securities shall include:

- Copy of advertisements of substantial performance and completion of the landscape works in an appropriate trade journal in accordance with the provisions of the *Construction Lien Act*.
- Certificates of Completion and Acceptance have been issued.
- Statutory Declaration has been received by the Town from the Owner confirming therein that the Contractor and all subcontractors have been paid in full in accordance with the *Construction Lien Act*.
- The Town Solicitor has confirmed that there are no Liens, notices of claims or litigation outstanding or on-going against the Town of the Lands or amount of holdback that the Town is required to retain with respect to the works, which matters have not been resolved to the satisfaction of the Town.
- The Town has received a satisfactory Certificate of Clearance from the Workplace Safety and Insurance Board.

#### **7.5 Landscape Fees**

Landscape fees are required to be submitted to the Town prior to execution of the respective site plan or subdivision agreements.

**7.5.1 Landscape Administration Fees** are required based on a percentage of the total estimated landscape costs as follows:

- 8% fee for estimated costs less than \$100,000
- 7% fee for estimated costs between \$100,000 and \$250,000.
- 6% fee for estimated costs between \$250,000 and \$500,000.
- 5% fee for estimated costs more than \$500,000.

**7.5.2 Landscape Maintenance Fees** are applicable only to subdivision agreements and are based on twenty five percent (25%) of the estimated value of landscape works installed on municipal property that is subject to on-going maintenance obligations by the Town. This includes street trees, right of way buffer plantings, plantings within stormwater management ponds, etc. but typically does not include open space plantings that are not maintained by the Town.

**7.5.3 Street Tree Fees** are applicable only to subdivision agreements. Through the subdivision agreement process the Town may, at its sole discretion, permit the developer to opt out of installation of street tree plantings, in which case a per-tree fee is determined based on the overall quantity of street trees proposed within the development. The fee per-tree is set in advance of execution of the subdivision

agreement. In this situation the Town will install the street trees and waive any further commitments regarding street trees the developer may have, including the landscape maintenance fee portion applicable to street trees.

## **8.0 Completion and Acceptance of the Landscape Works**

### **8.1 Certification of Completion of the Landscape Works**

Upon completion of the Landscape Works (or portions thereof) the consulting landscape architect shall provide in writing to the Director of Parks & Recreation Services, on behalf of the developer, Certification of Completion of the Landscape Works (or portions thereof), indicating that such Works have been completed in accordance with the approved landscape plans.

When received and approved by the Director of Parks & Recreation Services, the Certification of Completion will initiate the two (2) year municipal maintenance guarantee period and reduction of landscape securities.

### **8.2 Certification of Acceptance of the Landscape Works**

Prior to Certification of Acceptance of the Landscape Works the consulting landscape architect, on behalf of the developer shall provide the following documentation and services:

- Prior written notice to the Director to allow inspection of the landscape works by Parks & Recreation Services staff.
- A site inspection by the consulting landscape architect and report of all Landscape Works being considered for final Acceptance. This report shall confirm the condition of landscape installations as well as confirmation of completion of all previously noted deficiencies.
- Finalization and submission of the municipal landscape maintenance activity reports (applicable only to subdivision agreements).
- Certification and survey by a registered Ontario Land Surveyor confirming location of as-built fencing or other structures on Town lands in relationship to adjacent property lines.

Upon completion of the municipal two (2) year maintenance guarantee period and the above noted documentation, the consulting landscape architect shall provide in writing to the Director, on behalf of the developer, certification of Acceptance of the Landscape Works, indicating that the Landscape Works have been completed and maintained in accordance with the conditions set out in the development agreement and the approved plans.

When received and approved by the Director, the Certification of Acceptance shall initiate final release of securities and assumption of the landscape works on Town lands.

## **9.0 Appendices**

- 9.1 Appendix 1: Town of Aurora Standard Details & Notes**
- 9.2 Appendix 2: Tree Planting and Approved Plant List**
- 9.3 Appendix 3: Tree Removal / Pruning and Compensation Policy**
- 9.4 Appendix 4: Tree Protection / Preservation Policy**
- 9.5 Appendix 5: Checklists**

## Appendix 1:

### Town of Aurora Standard Details & Notes

Index:

LNSU-1	Standard Subdivision Landscape Notes (for subdivision plans only)
PN-1	Planting Notes
TN-1	Topsoil Notes
PL-1	Deciduous Tree Planting
PL-2	Coniferous Tree Planting
PL-3	Planting Pit: Slope Conditions
PL-4	Container Shrub Planting
PL-5	Individual Shrub Planting
PL-6	Bare Root Tree Planting
LM-1	Landscape Maintenance 1 of 2 (for subdivision plans only)
LM-2	Landscape Maintenance 2 of 2 (for subdivision plans only)
LN-1	Standard Landscape Notes 1 of 2 (for site plans only)
LN-2	Standard Landscape Notes 2 of 2 (for site plans only)
TP-1	Tree Preservation Notes
TP-2	Tree Protection Fencing
F-1	Chain Link Fence



1. All landscaping shall be installed in accordance with the Town of Aurora Landscaping and Servicing Standards, and in accordance with the executed Site Plan Agreement.

#### LANDSCAPE ARCHITECT

The Owner agrees to engage a qualified Landscape Architect to carry out and provide all necessary landscape design, contract administration and consulting services including but not limited to:

1. Preparation of detailed landscape design drawings and supply of all drawings as may be required by the Director of Leisure Services;
2. Preparation of the necessary contract(s) for construction of the Landscape Works;
3. Coordination of Landscape Works and obtaining all necessary approvals for installation of the Landscape Works from the Town and all other authorities having jurisdiction;
4. Contract admin. including inspections, monitoring and supervision of Landscape Works;
5. Provision of the Certificate of Completion of Landscape Works and the Certificate of Acceptance of Landscape Works; and
6. Coordination and administration of maintenance activities and supply of maintenance activity reports to the Town.

#### COMMENCEMENT OF LANDSCAPE OPERATIONS

The landscape architect shall arrange a site meeting with the Town of Aurora Parks Division and the contractor, prior to or at the commencement of initial landscape and planting operations, to coordinate the following requirements:

1. Confirmation of commencement of construction for various components of the Landscape Works.
2. Confirmation of construction detailing, materials, colours etc. Provide samples where required.
3. Soil conditions and depth of topsoil shall be determined prior to planting. The Landscape Architect / Contractor shall confirm if 300mm depth topsoil is present. Backfill soil and soil amendments shall be specified based on determination of soil conditions and depth of topsoil.
4. Planting details, planting pit construction and specifications shall be reviewed to ensure compliance with Town standards.
5. Substitutions of plant material (if required) shall be proposed in writing to the Town. Substitutions will not be accepted when the net result is a decrease in diversity of plant species. and for fall planting operations due to the unavailability of spring-dug material.
6. The Landscape Architect / Contractor shall provide notice to the Town of all utility conflicts.
7. The maintenance schedule (Refer to Maintenance Specifications) shall be forwarded to the Town for review and approval.

#### SERVICES, STAKEOUTS & PLANTING ADJUSTMENTS

1. Contractors shall obtain stakeouts from all Utilities prior to landscape installations.
2. Final street tree locations (on Municipal right-of-ways) may require adjustment from Plan locations subject to as-built utilities, services, and driveway locations. The Town of Aurora reserves the right to request additional street tree plantings in suitable locations where as-built conditions prohibit the minimum standard for street tree plantings. Provide notice and coordinate all street tree locations with the Town of Aurora Parks Division prior to planting.
3. Street tree planting species may be substituted at the time of planting, subject to species availability and agreement by the Town of Aurora.

#### 4. STREET TREES TO BE MINIMUM DISTANCE FROM UTILITIES, AS PER THE FOLLOWING:

Light Standards	3.0M	Driveways & Curb Cuts	1.5M
Hydrants	1.5M	Stop Signs (2.0m vert. clearance)	9.0M
Hydro Vault	1.5M		

# STANDARD SUBDIVISION LANDSCAPE NOTES:

SEPTEMBER 2014

DRAWING NO.:

**LNSU-1**



**GENERAL:**

1. All plant material shall be nursery stock conforming to the latest edition of the Canadian Standards for Nursery Stock as published by the Canadian Nursery Landscape Association.
2. All plants shall be healthy, vigorous plants, free from defects, decay, disfiguring roots, sun-scald injuries, bark abrasions, plant diseases and pests and all forms of infestations or objectionable disfigurements.
3. All plants shall be true to name, size, condition and quantity as per plan and plant list specifications.
4. All plant material shall be unwrapped prior to inspection. The Town of Aurora reserves the right to inspect all plant material and reject all material that does not meet the standards listed herein.
5. Substitutions will not be accepted without prior written request by the consulting Landscape Architect and written approval by the Town of Aurora. Additional plant quantities will be required to compensate for approved reduction in size due to unavailability of materials, to the satisfaction of the Town of Aurora.

**TREES:**

6. All trees shall be open-grown for wind-firmness. Trees shall not be leaning or have significant sweep, crook or bend. Deciduous trees shall have approximately two-thirds of their total height in living branches. All trees shall have good crown shape and colour (evergreens) characteristic of their species. Trees shall have a single dominant leader with no side branches taller / longer than the main leader.
7. If required, trees shall be properly target pruned (never flush cut, trimmed, rounded-over, hedged, tipped or topped) and dead / damaged branches shall be removed. Branches that cross-over each other or rub against each other, co-dominant leaders, and branches growing upward inside the crown shall be properly pruned. Trees shall not be treated at any time with wound paint.
8. All trees shall have root ball sizes that meet or exceed nursery standards. Root balls shall be firm and structurally integral with the trunk.

**SHRUBS AND GROUND COVERS:**

9. Shrubs and ground covers shall have full, well branched crowns typical of species or variety. Root systems shall be ample, well-balanced and fibrous, capable of sustaining vigorous growth. Plants that are weak or thin, undersized, or have been cut back from larger grades to meet specifications shall be rejected.

**SOD & SEED:**

10. All sod shall be Turfgrass Nursery Sod conforming to the latest specifications of the Ontario Sod Association and the the Nursery Sod Growers Association.
11. All seed shall be Canada certified No. 1 Grade seed conforming to the Government of Canada Seeds Act and Regulations and to the Canadian Seed Growers Association for purity and germination.

### **TOPSOIL:**

Topsoil shall be a fertile, natural loam, capable of sustaining healthy plant growth; containing a minimum of 4% organic matter for clay loams and 2% organic matter for sandy loams, to a maximum of 25% by volume.

Topsoil shall be loose and friable, free of subsoil, clay lumps, stones, roots or any other deleterious material greater than 50mm diameter. Topsoil shall be free of all litter and toxic materials that may be harmful to plant growth. Topsoil containing sod clumps, crabgrass, couchgrass or other noxious weeds is not acceptable. Topsoil shall not be delivered or placed in a frozen or excessively wet condition.

Topsoil acidity / alkalinity shall be in the range of 6.0pH to 7.5pH. Topsoil in excess of 7.5pH shall be amended to reduce alkalinity. Use only products and methods approved by the Town of Aurora.

### **TOPSOIL TESTING:**

Topsoil testing for all topsoil to be utilized for landscape use shall be completed by an accredited agency approved by the Town of Aurora. Topsoil shall be tested to confirm soil type (i.e. percentage of sand, silt, clay and organic content), macro and micronutrient content and pH levels. Test results shall be forwarded to the Town of Aurora Parks Division prior to commencement of topsoil placement. Fertilizers and soil amendments per topsoil test results shall be incorporated at time of topsoil placement or during planting / sodding / seeding operations.

### **TOPSOIL DEPTH:**

The consulting Landscape Architect shall coordinate with civil engineering and site works operations to ensure the minimum depth topsoil is accounted in soil balancing calculations and provided on site.

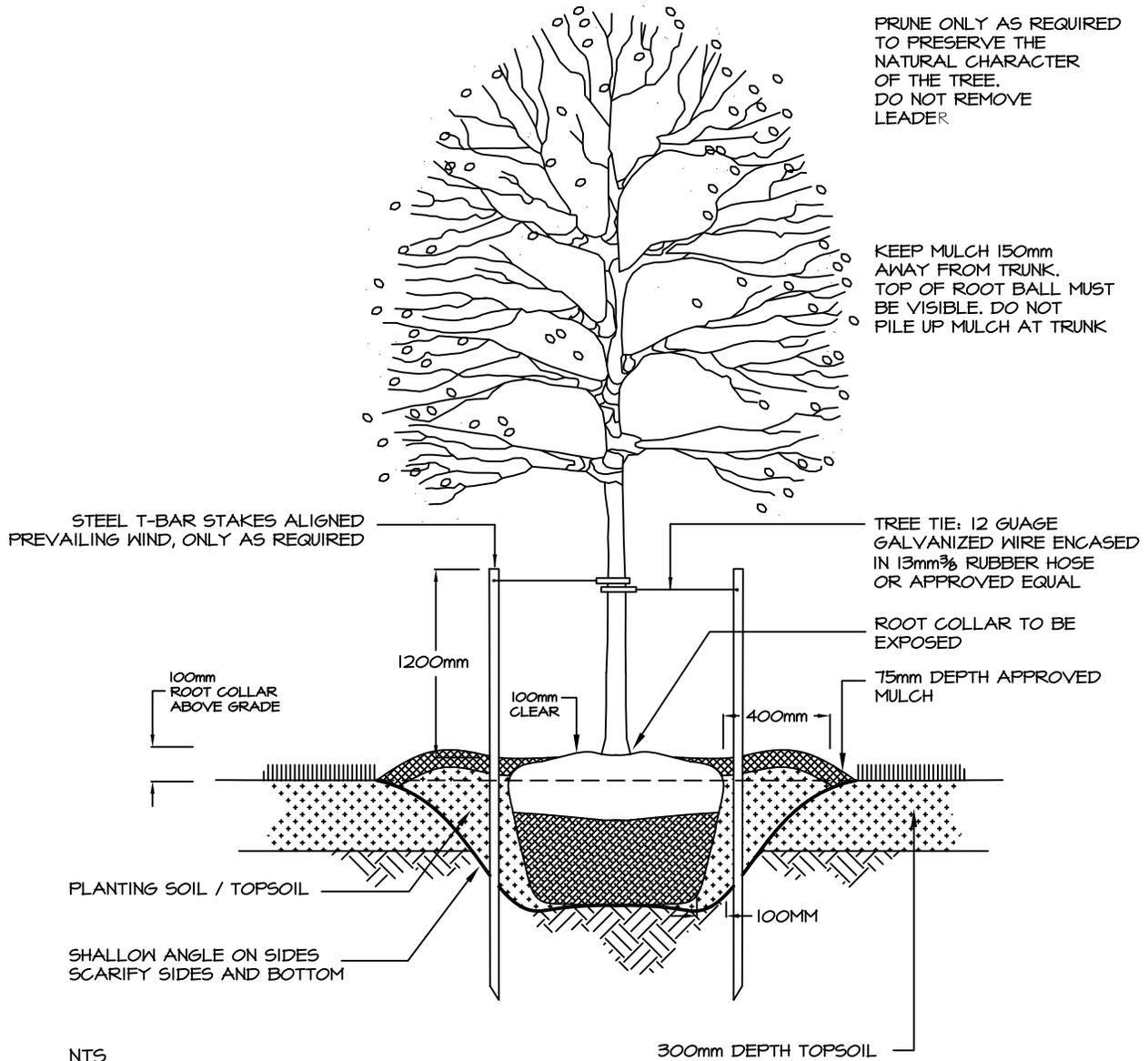
Topsoil depth requirements are as follows:

- |  |                                 |
|--|---------------------------------|
| 1. Storm water management facilities:              | 300mm minimum continuous depth. |
| 2. Created or disturbed open space lands, buffers: | 300mm minimum continuous depth. |
| 3. Boulevards (Street Tree locations):             | 300mm minimum continuous depth. |
| 4. Shrub Planting Beds:                            | 500mm minimum continuous depth. |
| 5. Tree Planting Beds:                             | 600mm minimum continuous depth. |
| 6. Sodded Areas without tree / shrub plantings:    | 200mm minimum continuous depth. |
| 7. Residential Lots:                               | 200mm minimum continuous depth. |

The consulting Landscape Architect shall confirm, in writing to the Town of Aurora, the minimum depth of topsoil placed prior to planting, seeding or sodding operations.

### **TOPSOIL FOR FEATURE PLANTING AREAS, MEDIANS & TRAFFIC CIRCLES:**

Topsoil required for feature planting beds, centre median and traffic circle planting beds shall be imported, screened, triple mix topsoil (consisting of equal parts of good quality topsoil, coarse sand and compost). Imported topsoil shall meet all of the topsoil requirements noted above and shall be approved by the Town of Aurora prior to placement.



**NOTES:**

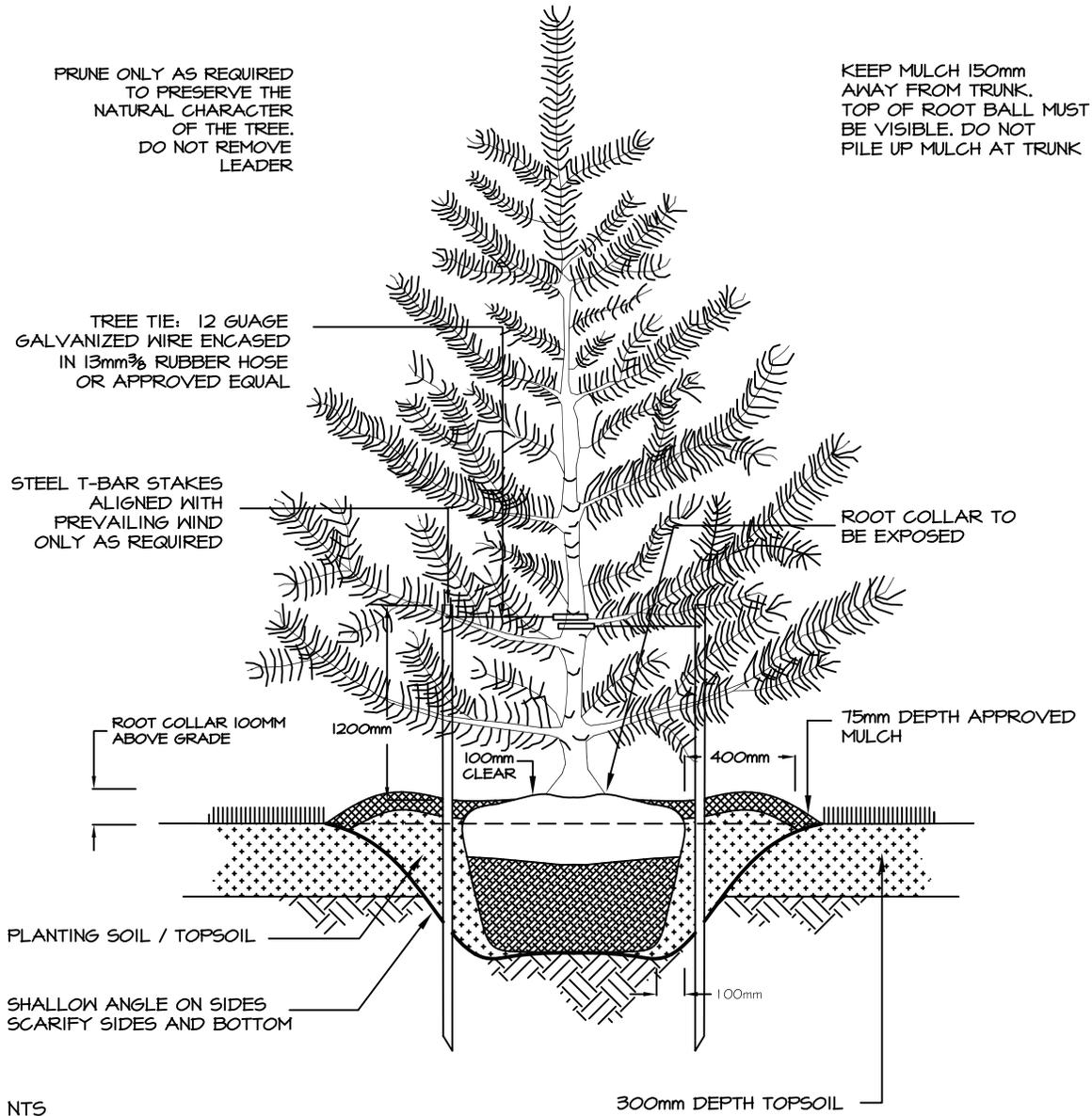
- DO NOT AUGER TREE PITS. TREES PLANTED IN AUGERED PITS WILL NOT BE ACCEPTED.
- CONFIRM SOIL CONDITIONS PRIOR TO PLANTING: FOR HEAVY CLAY CONDITIONS, SET TREE 100MM HIGHER THAN SURROUNDING GRADE.
- SCARIFY AND LOOSEN SIDES OF PLANTING PIT. ENSURE FIRM COMPACTED SOIL IN BOTTOM OF PIT.
- BACKFILL PLANTING SOIL SHALL BE IN ACCORDANCE WITH TOWN OF AURORA TOPSOIL SPECIFICATIONS. INSTALL BACKFILL SOIL IN LAYERS AND CONCURRENTLY TAMP AND WATER TO ELIMINATE AIR POCKETS.
- REMOVE ROPES, BURLAP AND / OR WIRE BASKET FROM TOP HALF OF ROOT BALL.
- ALL MULCH SHALL BE SHREDDED CONIFEROUS BARK MULCH.

# DECIDUOUS TREE PLANTING

APRIL 2014

DRAWING NO.:

**PL-1**



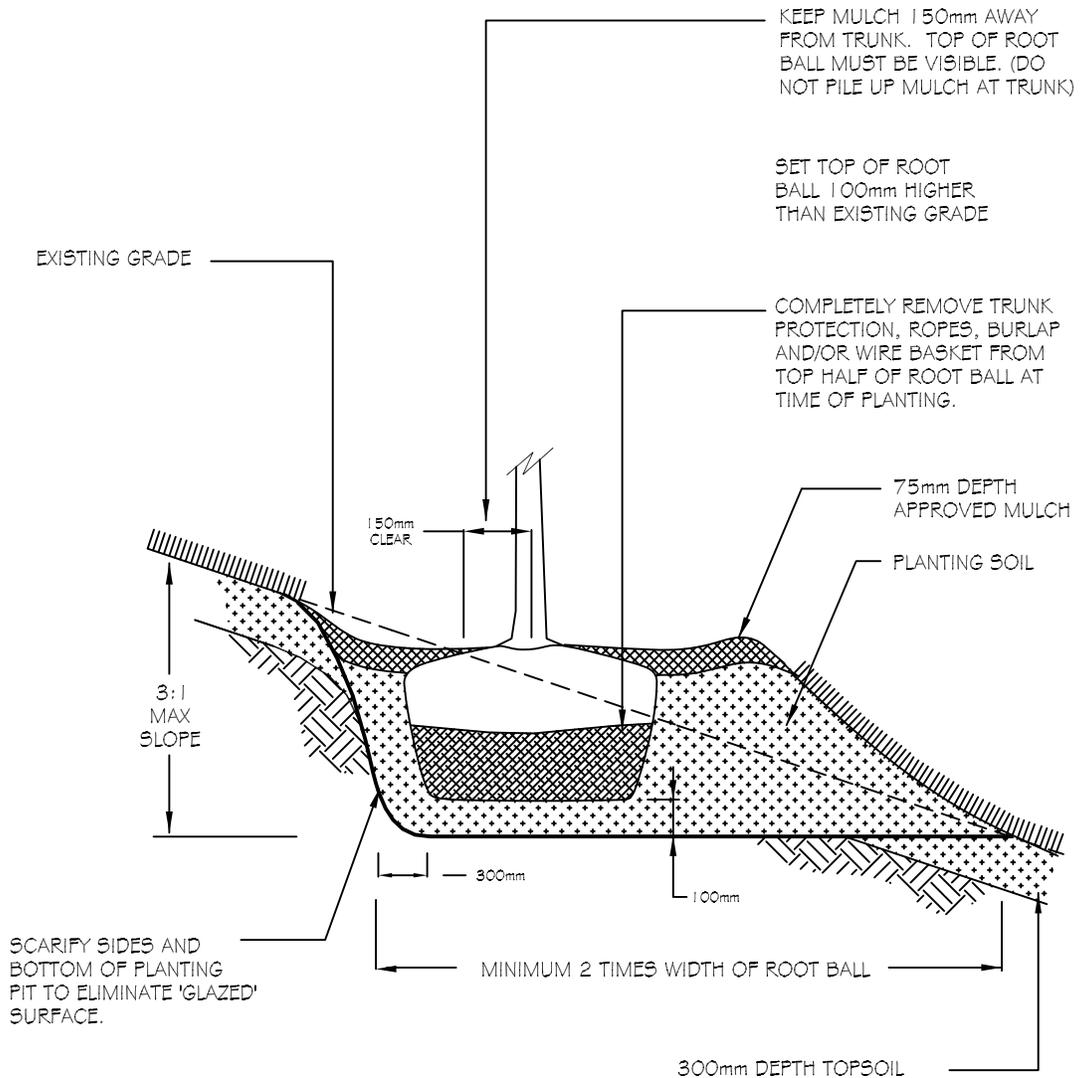
**NOTES:**

- DO NOT AUGER TREE PITS. TREES PLANTED IN AUGERED PITS WILL NOT BE ACCEPTED.
- CONFIRM SOIL CONDITIONS PRIOR TO PLANTING: FOR HEAVY CLAY CONDITIONS, SET TREE 100mm HIGHER THAN SURROUNDING GRADE.
- SCARIFY AND LOOSEN SIDES OF PLANTING PIT. ENSURE FIRM COMPACTED SOIL IN BOTTOM OF PIT.
- BACKFILL PLANTING SOIL SHALL BE IN ACCORDANCE WITH TOWN OF AURORA TOPSOIL SPECIFICATIONS. INSTALL BACKFILL SOIL IN LAYERS AND CONCURRENTLY TAMP AND WATER TO ELIMINATE AIR POCKETS.
- REMOVE ROPES, BURLAP AND / OR WIRE BASKET FROM TOP HALF OF ROOT BALL.
- ALL MULCH SHALL BE SHREDDED CONIFEROUS BARK MULCH.

# CONIFEROUS TREE PLANTING

APRIL 2014

DRAWING NO.:  
**PL-2**



NTS

NOTES:

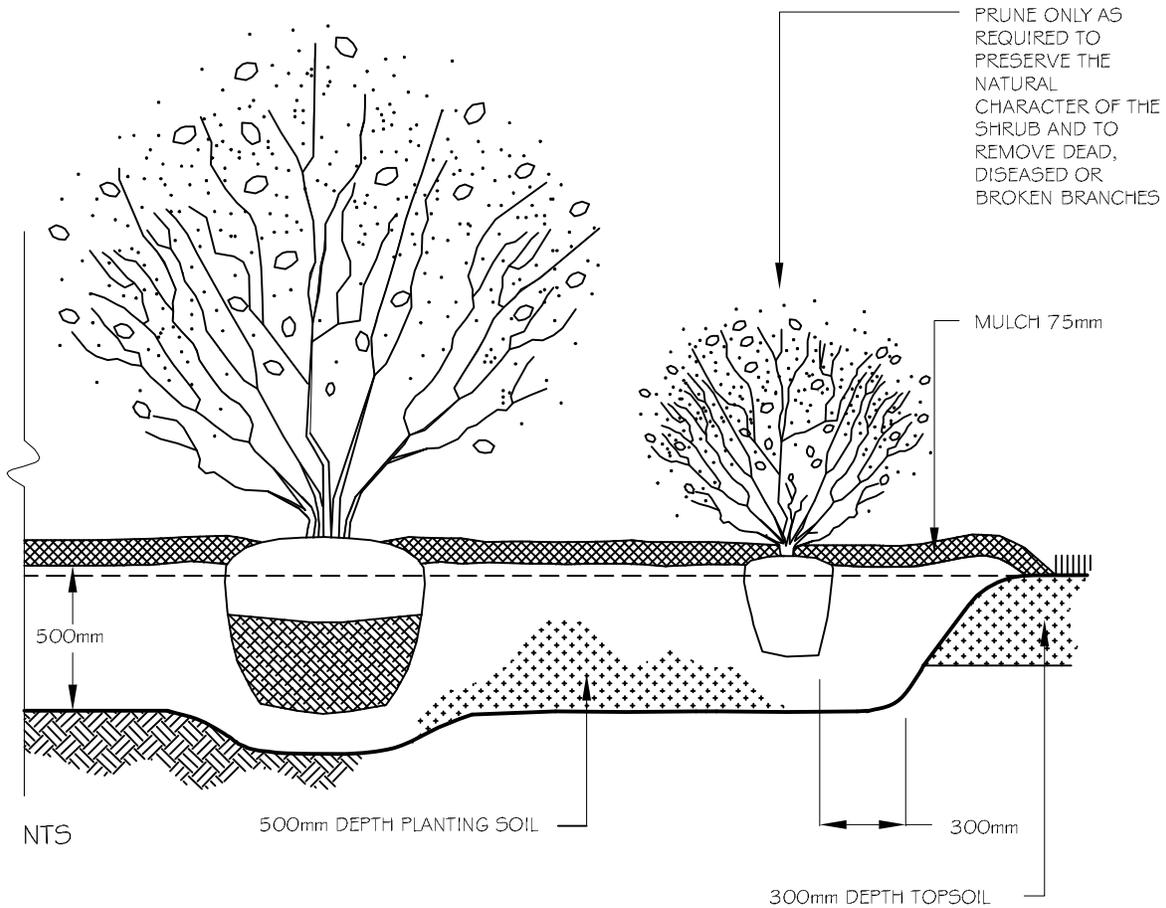
- ENSURE POSITIVE DRAINAGE ON SUB-GRADE OF PLANTING PIT.
- THE ABOVE DETAIL IS APPLICABLE TO DECIDUOUS AND CONIFEROUS TREE PITS.
- THE ABOVE DETAIL DOES NOT REPRESENT ANY PARTICULAR SPECIES.

## PLANTING PIT: SLOPE CONDITIONS

NOVEMBER 2005

DRAWING NO.:

**PL-3**



**NOTES:**

**PLANTING SOIL:**

**SUBDIVISIONS:** CONFIRM NATIVE TOPSOIL CONDITIONS PRIOR TO PLANTING. REFER TO TOPSOIL NOTES, TN-1.  
**SITE PLANS:** REFER TO STANDARD LANDSCAPE NOTES, LN-1.

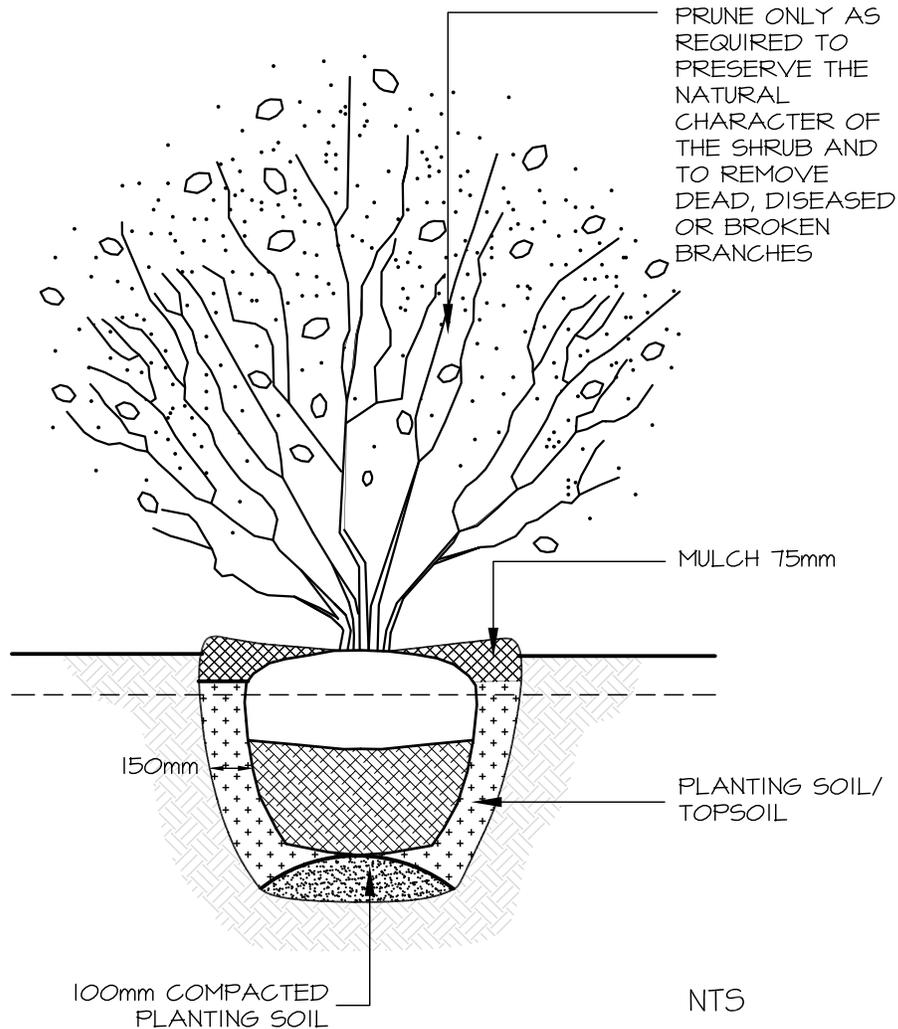
ENSURE TOPSOIL IS WELL AERATED AND PULVERIZED, FREE OF DEBRIS AND CONTAMINENTS. LIGHTLY COMPACT IN PLANTING BED AND WATER WELL TO ELIMINATE AIR POCKETS AND PREVENT SETTLEMENT.

**ROOT CONDITION:**

**PLASTIC POT:** REMOVE ENTIRELY. ENSURE ROOT BALL IS FIRM AND INTEGRAL WITH THE PLANT.  
**FIBRE POT:** REMOVE TOP 1/3 OF POT. CUT REMAINING SIDES AND LOOSEN POT FROM SOIL.  
**BURLAP:** REMOVE ALL ROPES AND BURLAP FROM TOP 1/2 OF ROOT BALL.

**MULCH:** TO BE SHREDDED CONIFEROUS BARK MULCH: PROVIDE SAMPLES PRIOR TO PLANTING.

**PLANTING PIT:** FOR INDIVIDUAL SHRUBS DIG PLANTING PITS 300mm WIDER ON ALL SIDES OF ROOT BALL. FOR PLANTING BEDS PROVIDE A CONTINUOUS EXCAVATED PLANTING PIT.



**NOTES:**

**PLANTING SOIL:**

SUBDIVISIONS: CONFIRM NATIVE TOPSOIL CONDITIONS PRIOR TO PLANTING. REFER TO TOPSOIL NOTES, TN-1.  
 SITE PLANS: REFER TO STANDARD LANDSCAPE NOTES, LN-1.

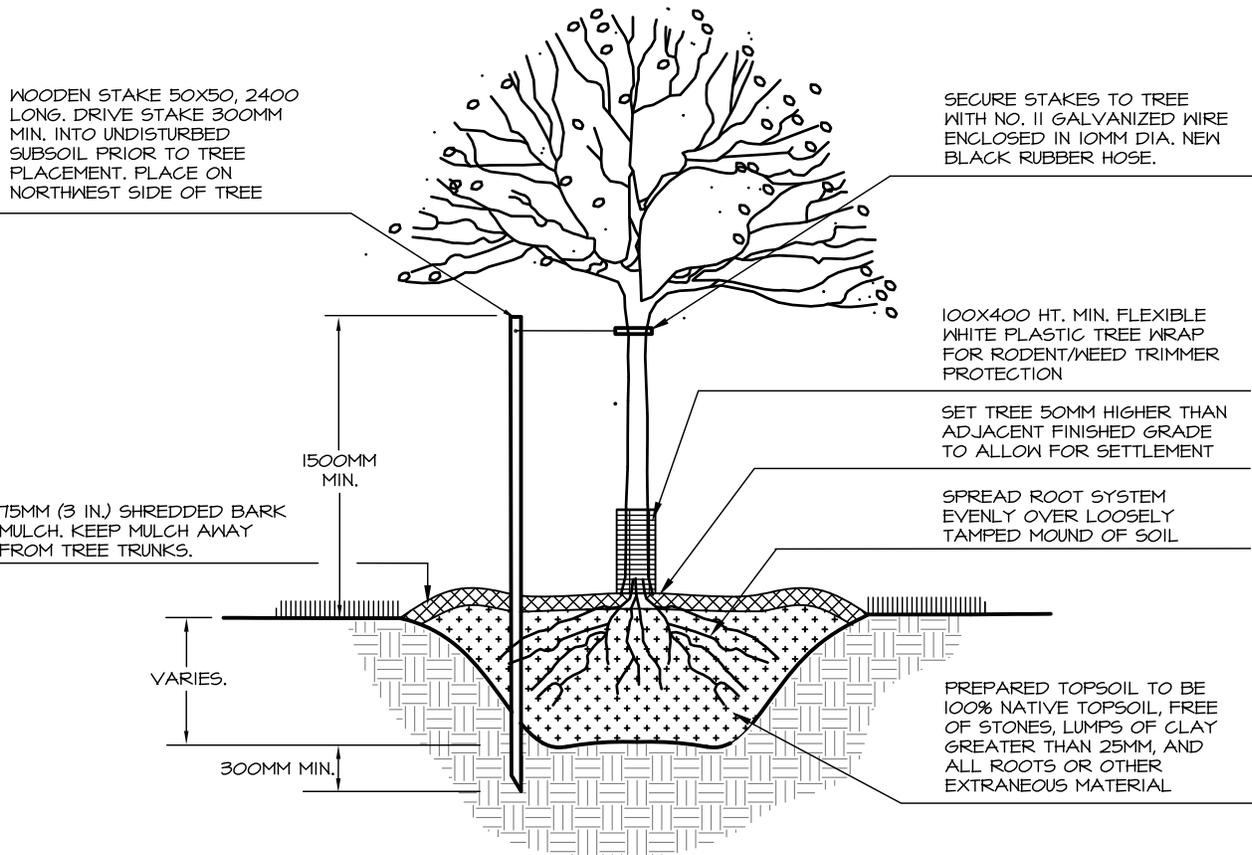
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 BURLAP: REMOVE ALL ROPES AND BURLAP FROM TOP 1/2 OF ROOT BALL.

**MULCH:** TO BE SHREDDED CONIFEROUS BARK MULCH: PROVIDE SAMPLES PRIOR TO PLANTING.

**PLANTING PIT:** FOR INDIVIDUAL SHRUBS DIG PLANTING PITS 150mm WIDER ON ALL SIDES OF ROOT BALL.



**NOTES:**

1. REMOVE ANY BROKEN, DEAD OR ANY DISEASED BRANCHES ACCORDING TO STANDARD HORTICULTURAL PRACTICES. DO NOT CUT LEADER
2. TREE STAKE TO BE REMOVED AT THE CLOSE OF THE SECOND GROWING SEASON, OR UPON THE EXPIRATION OF THE WARRANTY PERIOD



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### **CONSTRUCTION MAINTENANCE:**

Construction Maintenance shall begin upon commencement of the Landscape Works and shall continue until Municipal Completion (Substantial Performance) of the Landscape Works, or portions thereof, whereupon the Municipal Maintenance Guarantee Period shall take over.

The Contractor shall ensure that all on-going landscape installations are protected and maintained in good condition and suitable for their intended use.

The Contractor shall respond expeditiously to requests from the Town of Aurora when deficiencies are noted and remedies required.

### **MUNICIPAL MAINTENANCE GUARANTEE PERIOD:**

The Municipal Maintenance Guarantee Period for all Landscape Works shall be a minimum of two (2) years including two (2) full growth seasons for all plant materials. Planting which is replaced under guarantee shall incur the same minimum two (2) year guarantee beginning at time of notification of replacement.

Maintenance activities shall commence upon Municipal Completion (Substantial Performance) of the Landscape Works, or portions thereof as certified by the consulting Landscape Architect and approved by the Town of Aurora, and shall continue until certification of Acceptance of Landscape Works in accordance with the executed Development Agreement.

### **MAINTENANCE SCHEDULE:**

Prior to startup of Landscape operations the Landscape Architect shall coordinate with the contractor to prepare a Maintenance Schedule identifying maintenance obligations to be performed for the Construction Maintenance Period and the Municipal Maintenance Guarantee Period. The Maintenance Schedule shall be forwarded to the Town of Aurora Parks Division for review and approval.

The Landscape Architect / Contractor shall notify the Town upon each maintenance application and shall provide a maintenance report at the end of the growing season summarizing maintenance performed throughout the year. Maintenance reports for each year of the guarantee period shall be required by the Town as a condition of approval of Acceptance of the Landscape Works and release of landscape securities.

### **MAINTENANCE OF HARD LANDSCAPE:**

Maintenance inspection of hard landscape components (i.e. unit paving, fences, walls etc.) shall be performed a minimum of once per year to ensure the integrity and safe, intended use of the landscape component. Deficiencies observed shall be documented and remedied in a timely manner.

Where deficiencies are observed, or when a complaint is received by the Town, written notification shall be issued by the Town to the consulting Landscape Architect. The Landscape Architect shall direct the contractor to take appropriate action to remedy the deficiency. Action shall be taken within two (2) weeks of notification, to the satisfaction of the Town.

### **DEBRIS & GARBAGE REMOVAL:**

All lands subject to the Agreement including vacant lots/blocks, open space areas and storm water management facilities shall be inspected for building debris, remnant silt fencing, garbage and miscellaneous debris. Such materials shall be removed and disposed of off-site. Inspections shall be three (3) times per growing season or as directed by the Town for the duration of the maintenance guarantee period.

### **PLANT MATERIAL MAINTENANCE ACTIVITIES:**

General maintenance requirements for trees, shrubs and groundcovers shall be performed a minimum of three (3) times per growing season and shall include, but not be limited to the following activities:

1. Watering in accordance with Watering Requirements, below.
2. Weed control: cultivation / hand removal of weeds in tree pits and shrub beds.
3. Disease and insect control: Method and application to approval of Town of Aurora Parks Division.
4. Topping / restoring mulch to ensure 75mm depth; clearing mulch from trunk flare.
5. Pruning of dead and damaged branches. Wound dressing as required.
6. Fertilizing (when required) based on topsoil test recommendations. Do not fertilize spring-planted trees at time of planting; fertilize in fall after leaf abscission.
7. Replacement of unacceptable or dead material.
8. Straightening of trees that lean, adjustments of supports and stakes.
9. Raising / adjusting trees that settle or are planted too low.
10. Burlap wrapping of all conifers prior to winter freeze-up.
11. Any other procedure consistent with good horticultural practice necessary to ensure normal, healthy growth of planted material.

### **GENERAL SOD & SEED MAINTENANCE ACTIVITIES:**

General maintenance of sod and seeded areas shall include, but not be limited to the following activities:

1. Reseeding / resodding dead / bare areas and areas of poor seed / sod performance.
2. Grass cutting to control weeds and promote growth:
  - Sodded areas / boulevards: bi-weekly to 75mm height.
  - SWM Facilities: 3 times per growing season to 150mm height.
3. Weed control: by grass cutting. Spray application for severe weed infestation as required and only upon approval by Town of Aurora Parks Division.
4. Fertilizing (as required) based on topsoil test recommendations or as directed by Town of Aurora Parks Division.

### **WATERING REQUIREMENTS:**

Watering (in addition to watering at time of planting / sod / seeding) is required to ensure germination and / or to maintain continuous healthy growth throughout the maintenance period:

1. Sod and seeded areas: apply sufficient water to penetrate the soil to 100mm depth.
2. Planting beds: apply sufficient water to penetrate soil to 200mm depth.
3. Individual trees: apply 20 litres per tree, minimum, per watering.
4. Apply water at a rate that will prevent saturation and run-off.
5. Watering during periods of excessive drought shall be completed at a minimum rate of one (1) application per week, until weather permits otherwise.
6. Watering shall be completed in late fall for all conifers to ensure sufficient soil moisture prior to freeze-up.



**GENERAL:**

1. All landscaping shall be installed in accordance with the Town of Aurora Landscaping and Servicing Standards, and in accordance with the executed Site Plan Agreement.
2. The Owner agrees to retain the consulting Landscape Architect to administer and inspect landscape installations, and to certify the Landscape Works in conformance to the approved plans upon Completion and again upon Municipal Acceptance of the Works at the expiry of the Maintenance Guarantee period, in accordance with the executed Site Plan Agreement.

**TOPSOIL REQUIREMENTS:**

1. Topsoil shall be a fertile, natural loam, capable of sustaining healthy growth; containing a minimum of 4% organic matter for clay loams and 2% organic matter for sandy loam, to a maximum of 25% by volume. Topsoil shall be loose and friable, free of subsoil, clay lumps, stones, roots or any other deleterious material greater than 50mm diameter. Topsoil shall be free of all litter and toxic materials that may be harmful to plant growth. Topsoil containing sod clumps, crabgrass, couchgrass or other noxious weeds is not acceptable. Topsoil shall not be delivered or placed in a frozen or excessively wet condition. Topsoil acidity / alkalinity shall be in the range of 6.0pH to 7.5pH.
2. Where required, at the discretion of the Town, the Owner shall be required to provide topsoil test recommendations to the Town confirming topsoil type (i.e. percentage of sand, silt, clay and organic content), macro and micronutrient content and pH levels. The Owner shall ensure fertilizers and soil amendments are incorporated into the topsoil in accordance with topsoil test recommendations.
3. Topsoil depth requirements are as follows:
  - Boulevards (Street Tree locations): 300mm minimum continuous depth.
  - Shrub Planting Beds: 500mm minimum continuous depth.
  - Tree Planting Beds: 600mm minimum continuous depth.
  - Sodded / Seeded Areas: 200mm minimum continuous depth.

**SERVICES, STAKEOUTS & PLANTING ADJUSTMENTS**

1. Contractors shall obtain stakeouts from all Utilities prior to landscape installations. Tree and shrub pits shall not be permitted within one point five (1.5) metres of the sides or rear and three (3) metres of the front of any pad-mounted transformer, or within one (1) metre of any underground Hydro road crossing location. All excavations within one (1) metre of any buried Hydro or Gas utility shall be hand-dug. Tree or shrub pits shall not be permitted within one and one half (1.5) metres of a fire hydrant. Plantings will not be permitted within a switchgear facility easement.
2. Final street tree locations (on Municipal right-of-ways) may require adjustment from Plan locations subject to as-built utilities, services, and driveway locations. The Town of Aurora reserves the right to request additional street tree plantings in suitable locations where as-built conditions prohibit the minimum standard for street tree plantings. Provide notice and coordinate all street tree locations with the Town of Aurora Parks Division prior to planting.



**MUNICIPAL MAINTENANCE GUARANTEE PERIOD:**

The Municipal Maintenance Guarantee Period for all Landscape Works shall be a minimum of two (2) years including two (2) full growth seasons for all plant materials.

Maintenance activities shall commence upon Municipal Completion (Substantial Performance) of the Landscape Works, or portions thereof as certified by the consulting Landscape Architect and approved by the Town of Aurora, and shall continue until certification of Acceptance of Landscape Works in accordance with the executed Site Plan Agreement.

**GENERAL MAINTENANCE ACTIVITIES:**

General maintenance requirements for trees, shrubs and groundcovers shall be performed a minimum of once per growing season and shall include, but not be limited to the following activities:

1. Watering (in addition to watering at time of planting / sodding / seeding) to ensure and maintain continuous healthy growth throughout the maintenance period.
2. Weed control: cultivation / hand removal of weeds in tree pits and shrub beds.
3. Disease and insect control: Method and application to approval of Town of Aurora Parks Division.
4. Topping / restoring mulch to ensure 75mm depth; clearing mulch from trunk flare.
5. Pruning of dead and damaged branches. Wound dressing as required.
6. Fertilizing (when required) based on topsoil test recommendations. Do not fertilize spring-planted trees at time of planting; fertilize in fall after leaf abscission.
7. Replacement of unacceptable or dead material.
8. Straightening of trees that lean, adjustments of supports and stakes.
9. Raising / adjusting trees that settle or are planted too low.
10. Burlap wrapping of all conifers prior to winter freeze-up.
11. Any other procedure consistent with good horticultural practice necessary to ensure normal, healthy growth of planted material.

General maintenance of sod and seeded areas shall include, but not be limited to the following:

1. Reseeding / resodding dead & bare areas and areas of poor seed / sod performance.
2. Regular grass cutting.
3. Fertilizing as required.

Maintenance inspection of hard landscape components (i.e. unit paving, fences, walls etc.) shall be performed a minimum of once per year to ensure the integrity and safe, intended use of the landscape component. Deficiencies observed shall be documented and remedied in a timely manner.



1. Protection Fencing for all vegetation designated to preserved shall be installed by the owner's forces and approved by the Town of Aurora prior to commencement of any demolition, grading or construction activites on the lands. Protection fence shall be erected outside the drip line of trees. Groups of trees and vegetation to be protected shall be done in a like manner with protective fencing around the entire grouping(s). All protection measures shall be monitored by the owner's arborist / landscape architect for the duration of the construction period.

2. Areas within the protective fencing shall remain undisturbed and shall not be used for the storage of building materials or equipment. No rigging cables shall be wrapped around or installed in trees. Surplus soil, equipment, debris or materials shall not be placed over root systems of the trees within the protective fencing area. No contaminants shall be dumped or flushed where feeder roots of trees exist.

3. Limbs or portions of trees removed to accommodate construction work shall be cleanly cut utilizing the collar cut method, in accordance with sound arboricultural techniques by a certified licensed arborist.

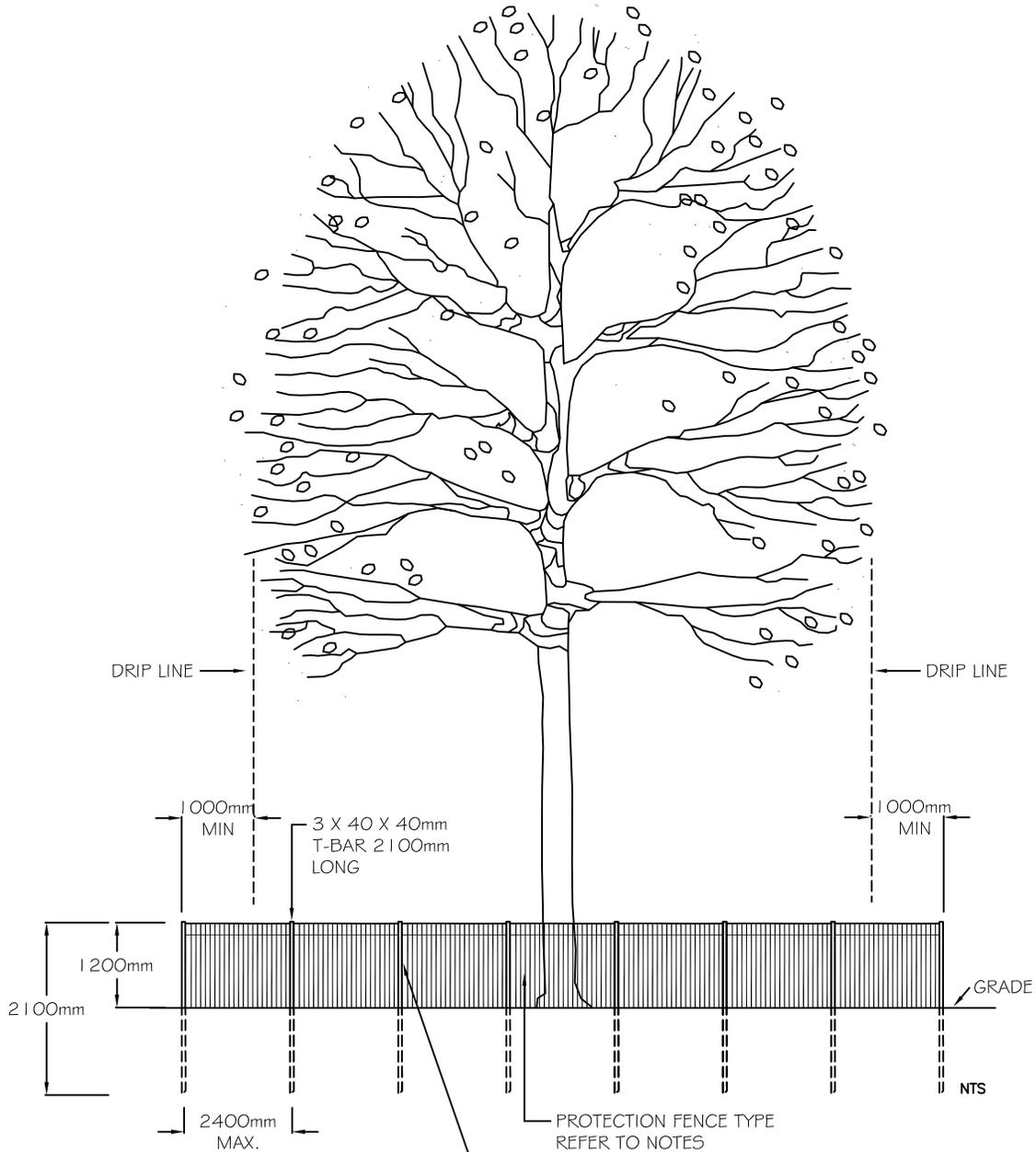
4. If grades around trees to be protected are likely to change, the owner's forces shall be required to take any precautions such as dry welling and root feeding or any other method recommended by the arborist / landscape architect and approved by the Town of Aurora.

5. Root systems of protected trees that are exposed or damaged by construction work shall be trimmed neatly. The area shall be back-filled with an appropriate material or the roots shall be sprayed with an approved antidesiccant to prevent drying. Where necessary, the trees will be given an overall pruning to restore the balance between roots and top-growth or to restore the appearance of the tree, as directed by the arborist.

6. Preserved trees and/or remaining trees that become exposed through tree removals shall be inspected by the project arborist after tree removal has been completed and trees identified as being in poor health, having poor or unstable structure, or are considered hazardous, shall be removed. The arborist shall monitor said trees throughout construction and for a period of two (2) years thereafter and take the necessary precautions to address tree conditions in a timely manner or as directed by the Town of Aurora.

7. Trees designated to be preserved and that have become damaged or die throughout the construction period, or for a period of two (2) years thereafter, shall be replaced in one of the following ways: i) Trees shall be replaced one-for-one with trees of similar species and equal diameter at breast height (DBH) or, ii) Trees shall be replaced with several trees of similar species providing an accumulative DBH equal to the total DBH of trees lost or, iii) Trees shall be evaluated monetarily by a certified arborist according to the Aggregate InchReplacement Method as per the Town's Tree Removal, pruning and Compensation Policy and Replacement planting shall be of an equivalent value. Method and location of replacement planting shall be to the approval of the Director of Parks and Recreation Services.

8. Any trees designated for removal shall have the stumps completely excavated and removed from the site.

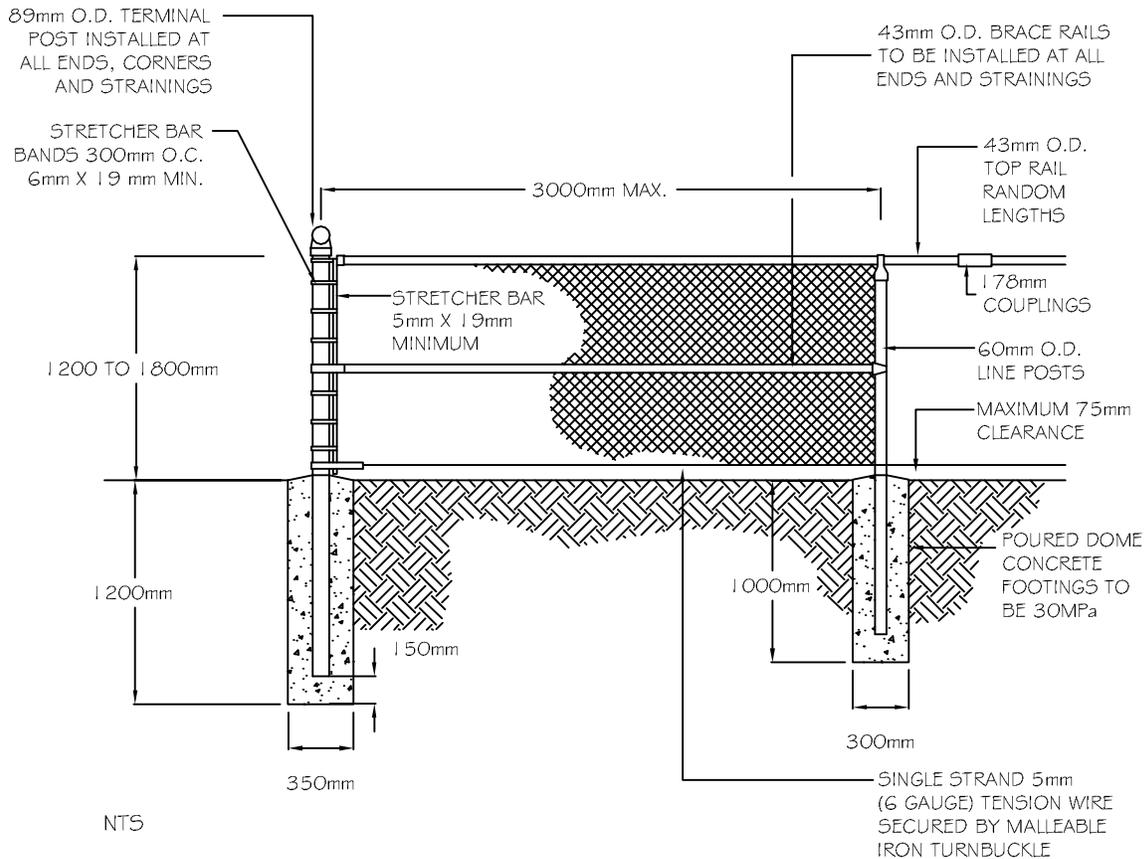


NOTE:  
 LOCATION OF PROTECTION FENCING TO BE APPROVED BY THE TOWN OF AURORA

FASTEN FENCE TO POSTS WITH #10 GALVANIZED WIRE TIES - MINIMUM 3 PER POST

TYPE 1 PROTECTION FENCE  
 PLASTIC MESH SAFETY FENCE OR WOOD SLAT SNOW FENCE

TYPE 2 PROTECTION FENCE  
 MINIMUM 8 STRAND PAGE OR FARM WIRE FENCE



NOTES:

- ALL PIPING SHALL BE STANDARD CONTINUOUS WELD, SCHEDULE 40 PIPE, GALVANIZED, NO TUBING, CONDUIT OR OPEN SEAM MATERIAL WILL BE PERMITTED.
- CHAIN LINK FABRIC TO BE BLACK VINYL COATED 38mm (1-1/2") WOVEN MESH OF 3.5mm (9 GAUGE) GALVANIZED WIRE FASTENED TO ALL SUPPORTS WITH 3.5mm (9 GAUGE) GALVANIZED WIRE 450mm (18")O.C.
- ALL FENCE COMPONENTS TO BE BLACK VINYL COATED.
- REFER TO FENCE DETAIL F-2 FOR CHAIN LINK GATE SPECIFICATIONS.
- ALL GIVEN DIMENSIONS IN METRES OR MILLIMETRES.

## **Appendix 2:**

### **Tree Planting and Approved Plant List**

(Refer to the Urban Forest Management Policy, Appendix 2 – Policy “B”)



## **Appendix 3:**

### **Tree Removal / Pruning and Compensation Policy**

(Refer to the Urban Forest Management Policy, Appendix 3 – Policy “C”)

**Appendix 4:**  
**Tree Protection / Preservation Policy**

(Refer to the Urban Forest Management Policy, Appendix 4 – Policy “D”)

## **Appendix 5:**

### **Checklists**

Site Plan Landscape Completion Checklist – Substantial Completion

Site Plan Landscape Completion Checklist – Warranty Period Completion

Subdivision Agreement – Landscape Certification Check List







1 Municipal Drive,  
 Box 1000,  
 Aurora, ON L4G 6J1  
 Phone: 905-727-3123  
 Fax: 905-727-1953

Town of Aurora Parks and Recreation Services

**SUBDIVISION AGREEMENT  
 LANDSCAPE CERTIFICATION CHECK LIST**

This "checklist" is to be completed and submitted to the Town of Aurora Parks and Recreation Services at the time of **The Landscape Architects Certification** of the approved landscape works in order to initiate the landscape letter of credit (security) release process and to initiate the municipal two year standard maintenance and warranty period. *Enter percentage completion amounts only for items that apply.*

Town of Aurora File Number: \_\_\_\_\_

Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

*I hereby notify the Corporation of the Town of Aurora that landscape works have been installed and completed in accordance with the approved landscape plans and as per the subdivision agreement requirements.*

**List of Approved Landscape Plans**

1	11
2	12
3	13
4	14
5	15
6	16
7	17
8	18
9	19
10	20

**The following has been completed (enter percentage amount into box)**

Notes:

Street Tree Planting		_____
Buffer Planting		_____
Open Space Planting		_____
Stormwater Pond landscape works, include planting		_____
Topsoil placement & depth		_____
Sodding and/or seeding		_____
Wood Privacy Fencing		_____
Chain Link Fencing		_____
Post & Wire Fencing		_____
Pedestrian Feature Paving (do not include municipal sidewalks)		_____
Site Furniture		_____
Stairs/Steps and Railings		_____
Traffic Circles, meidans, etc. Include Planting		_____
Entry Features/Site Structures		_____
Miscellaneous (add description)		_____

Date of Completion of Works: \_\_\_\_\_

Signature and Stamp of Landscape Architeci \_\_\_\_\_

Company Name and Address: \_\_\_\_\_

\_\_\_\_\_