



5.0

Site Plan Landscaping

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5.0 Site Plan Landscaping

The process for review of the site landscape plan package is integrated in both the Site Plan Review Process, and the Engineering review of site plans. Landscape review for a Site Plan Application consists of the submission and review of a Vegetation Management Plan, Landscape Plan, and associated details for acceptance and final approval by the Commissioner of Integrated Planning and Public Works.

5.1 Site Alteration Permit By-law No. 2010-066

There may be components which the consulting Landscape Architect must undertake in conjunction with the Engineering consultant as related to any pre-development site alteration. Refer to Section 3.1.1 and City By-law 10-066 for all requirements on the Site Alteration Permit for more detail.

5.2 Qualifications of Project Landscape Architect

A licensed Landscape Architect who is a current and full member of the Ontario Association of Landscape Architects is required to seal and sign all plan submissions and the landscape certifications that are submitted to the City. On occasion, a qualified arborist or a professional forester may be required to advise the applicant for site vegetation management and to prepare a Vegetation Management/Arborist Report if requested by the City during the site plan review process.

5.3 Site Plan Pre-consultation

Applicants are required to attend a Pre-Consultation meeting with a selection of members of the SPRC prior to making a full submission. A landscape representative from the City's Engineering Services Division is a member of the Site Plan Review Committee (SPRC) and will provide initial design guidance and information to satisfy the site landscape and vegetation management plan submission during the Pre-consultation Meeting. At that meeting, a checklist will be provided, which outlines specific requirements for the landscape plan submission (refer to a current copy of the City's Vegetation Management and Landscape Plan Checklist for Site Plan Review – Pre-consultation).

5.4 SPRC Complete Submission

Generally, the SPRC will require eight copies of the following landscape-related plan submission upon the first formal and complete submission to the City:

- Vegetation Management Plan
- Vegetation Management Report/Arborists' Report
- Landscape Plan;
- Landscape Details Plan (includes associated technical details and cross-sections)
- Cost estimate of total landscape works proposed

These plans form part of a complete submission and must be submitted with the overall package or directly to:

ATTN: SITE PLAN COORDINATOR
CITY OF WATERLOO INTEGRATED PLANNING AND PUBLIC WORKS
100 Regina Street South
PO Box 337, Station Waterloo
Waterloo, Ontario N2J 4A8

The complete landscape package will be reviewed in detail by all members of the SPRC and other interested parties in advance of the scheduled meeting with the applicant. Detailed comments will be provided to the applicant and a decision will be made at the site plan meeting indicating if the landscape plans are deferred, if a resubmission is required, or if the plans are recommended for approval subject to conditions.

5.5 Coordination of Drawings

The Vegetation Management Plan, Landscape Plan, and associated details plans must be coordinated with the site plans (including site elevations, photometric plan) and engineering plans (including existing conditions, site grading

and servicing, sediment/erosion controls and conceptual workspace management plan) package. A confirmatory notation must be included on each of the individual landscape plans stating that such coordination has occurred.

5.6 Applicable Standards

The City's Urban Design Manual contains guidelines and standards which should be adhered to when preparing the site landscape plan submission. The following Municipal and Regional By-laws may be applicable to the landscape proposal and installation:

- Municipal Boulevard By-law No. 04-094
- Municipal Fence By-law No. 05-88
- City Street Tree By-law No. 99-10
- Regional By-law No. 07-029 to Regulate Work on Regional Roads
- Municipal Site Alteration By-law No. 10-066
- City's By-law to Regulate Work on Highways No. 2009-111
- City's Parks By-law to regulate use, regulation, protection, and government of parks in the City of Waterloo No. 03-059
- Site Zoning restrictions concerning landscape elements

Refer also to the following information:

- City of Waterloo Urban Forest Policy (February 2001 update)
- Northdale Land Use and Community Improvement Plan Study – Urban Design and Built Form Guidelines (June 2012)
- Region of Waterloo Transportation Corridor Design Guidelines for Regional roads (June 2010)
- Other applicable Design Guidelines for specific areas (e.g. the North Node, the South Node David Johnston Research and Technology Park, University of Waterloo Northwest Campus Design Guidelines, etc.)

Other standards may be applicable to the site landscaping design, including but not limited to:

- Electrical Safety Authority
- Waterloo North Hydro
- Hydro One Networks Incorporated
- Ministry of Transportation
- Ministry of Natural Resources
- Grand River Conservation Authority

5.7 Vegetation Management Plan Requirements

A Vegetation Management Plan is required as part of the landscape plan package and will form part of the complete site plan submission for review by the SPRC. The purpose of this plan is to capture information for all existing trees, shrubs, and mass planting beds that exist within the boundaries of the site and within 6m of the property line on adjacent properties and to ensure that the applicant and project team has planned appropriately for the proper protection, removal, and transplanting of all existing vegetation identified on site prior to and during site construction.

The City is committed to the protection of Waterloo's urban canopy. If existing trees are in good health and have good structure and they are not located within the proposed building envelope, we encourage the applicant to do what they can to preserve and protect the tree during construction. If trees will be impacted by the proposed development, the applicant must work through the requirements outlined below in order to obtain final site plan approval, which will allow the removal of those trees.

5.7.1 Site Meeting Requirements

After making a formal submission of the Vegetation Management and Landscape and Details plans to the Site Plan Review Committee for initial comment, the consulting Landscape Architect/Arborist will be required to meet with the City Forester on site to review the proposed Vegetation Management plan and to offer additional recommendations and direction. This meeting must be scheduled with the City Forester at least 48 hours in advance, and the consultant must provide a copy of the current proposed Vegetation Management plan to the City Forester for review at the same time that the meeting is arranged.

5.7.2 Letter of Agreement, Species at Risk, and Courtesy Circulation to Neighbours

If existing vegetation including trees, shrubs, and hedges that are located partially or fully on adjacent properties is proposed for removal, the Engineering Services Division will require a signed Agreement between the adjacent and the impacted Property Owner(s) be submitted prior to final Site Plan Approval. A signed Letter of Agreement will be required for any development application that has the potential to harm (as identified by the City Forester and landscape representative during the review process) existing vegetation on adjacent properties and/or create a hazard situation if required to be removed prior to final Site Plan Approval. Refer to Appendix C (Existing Tree Locations, Species, and Requirements Chart) for specific requirements pertaining to circumstances where tree ownership is not singly under the Applicant/Developer and for requirements concerning the Ministry of Natural Resources Species at Risk. In addition, if a specimen proposed for removal has significant characteristics (maturity, species, etc.), the applicant may be encouraged to circulate a courtesy notification to the surrounding neighbourhood advising of any significant tree removals from the site, or near the boundary of the site.

5.7.3 General Information to be Shown on the Vegetation Management Plan

The following general information must be shown on Vegetation Management Plans:

- Key plan
- The municipal address and provide a description of the project. If the municipal address is not known, please contact the City of Waterloo Building Standards Division
- The name, address and phone number of the Consultant that designed the plans
- The Developer/developer contact information
- Seal and signature with date of Landscape Architect consultant
- Legal Property Description
- Revision date
- North Arrow
- Legend
- Drawing scale (metric)
- Street Names
- Easements
- Geodetic Benchmark with location and elevation
- The date when the geodetic survey was completed and the company that performed the survey
- Property lines and all applicable bearings and distances of each property line
- All elevations in Metres Above Sea Level (MASL)
- Existing contour elevations at acceptable intervals for site engineering purposes
- Existing contours should extend beyond the property line approximately 30m to a point which would illustrate off site drainage patterns to determine impact on drainage and landscaping
- Existing built elements (corners of and locations), hard surface grades, berms, etc.
- Existing sidewalks; complete with elevations, on the adjacent street
- All existing site features including, but not limited to, buildings, sheds, walkways, driveways, fences, retaining walls, major drainage channels, surface texture (i.e. Concrete, gravel, asphalt) swales and ditches
- Location of all existing buildings on adjacent properties
- Civil property address for each property that abuts the site
- All existing above ground and underground services on the subject property and within the municipal road allowance, fronting the property
 - Location of sidewalks, hydrants, utility poles, signs, storm and sanitary sewers, infiltration galleries, water and gas mains, MH, CB, curbs and gutter, etc.

- Use different line weights and hatch marks to identify different features on the plans

5.7.4 Specific Information to be Shown on the Vegetation Management Plan

The following specific information must be shown on Vegetation Management Plans:

- Accurate locations of individual trees, hedges and other significant vegetation on site and on adjacent lands within 6m of the property line with corresponding tree tag number
- Accurate descriptions of the existing canopy spread
- Existing Vegetation Table, complete with columns for Tree Tag No., Species (botanical and common names), Size (DBH measured in cm), Crown, existing condition of tree (if possible include health and structural information), impacts of development, location (ex. site, property address of adjacent property, etc.), and the Recommended Action (to preserve, transplant, or remove)
- Tree Protection Fence Detail. The fencing detail must demonstrate the requirement for a 1.2m high Paige wire farm fence, using 150mm cedar posts at 2.44m height, located at 21m on centre spacing. Between these posts, 2.44m high T-bar stakes should be placed at a maximum of 3m on centre. Use caution when installing the cedar posts on site so not to cause damage to any tree roots below the surface
- Tree protection measures shall be shown on the plan a minimum of 1m outside of the drip line of the existing tree to be protected or to the approval of the DS landscape representative
- On sites where space is tight, the Minimum Distance Chart (below), which identifies the minimum distance between tree protection fencing from existing trees based on size of existing tree, shall be used to locate the location of protection fencing on site:

<i>Trunk Diameter (DBH)</i>	<i>Minimum Protection Distances Required</i>
<10 cm	1.8 m
11 – 40 cm	2.4 m
41 – 50 cm	3.0 m
51 – 60 cm	3.6 m
61 – 70 cm	4.2 m
71 – 80 cm	4.8 m
81 – 90 cm	5.4 m
91 – 100+ cm	6.0 m

- Standard municipal signage for tree preservation on site. Refer to Appendix L – Standard drawings
- Location(s) of any proposed tree preservation fence on site, along the property line, or on adjacent properties identified and shown on the VMP and the Conceptual Workspace Management Plan and Sediment/Erosion Control Plan
- Include a note specifying detailed recommendations for care of existing trees that are proposed to be preserved by the City Forester. Examples may include (but are not limited to):
 - Additional watering during construction
 - Mulch cover over exposed tree roots
 - Trunk/root fertilizer injection recommendations (including ratio)

5.7.5 General Notes to be Included on the Vegetation Management Plan

The following general notes must be shown on Vegetation Management Plans:

- Include the date which the landscape consultant met with the City Forester on site to discuss site vegetation management
- The Vegetation Management Plan has been coordinated with the site, landscape, and engineering plans
- Every effort must be made to preserve and protect existing vegetation that exists on adjacent properties
- Declaration by consulting Landscape Architect that all vegetation (trees, shrubs, other significant elements) on site and within 6m of the site on adjacent properties have been located and identified on the Vegetation Management Plan. This should be signed and dated by the consulting Landscape Architect and/or Landscape Designer

- Vegetation approved to be removed from the site may not be removed until the applicant has received their Building Permit. Existing vegetation must be protected during building demolition. In instances where a building permit is not required, vegetation may not be removed from the site until final Site Plan Approval is obtained
- Existing vegetation that is approved to be preserved and protected that is impacted by construction works will be replaced with the same species or approved alternate to the satisfaction of the City of Waterloo
- The Developer agrees to maintain the existing trees on site in accordance with the approved Vegetation Management Plan. Any future cutting of trees which have been identified for preservation on the approved Vegetation Management Plan and Landscape Plan shall be replaced and/or an alternate planting plan be submitted for approval by the Commissioner
- Landscape Consultant to certify the installed tree preservation fence for compliance with the approved plans, and submit a written request to the City's Landscape Representative (Integrated Planning and Public Works, City of Waterloo) requesting a site inspection. This inspection must occur prior to issuance of Building Permit
- Tree Preservation Fencing must remain installed on site for the duration of construction
- Standard Tree Preservation Notation, including:
 - Within the Designated Tree Protection Zone:
 - There shall be no construction
 - There shall be no altering of grades
 - There shall be no compaction of soils
 - There shall be no storage of construction materials, equipment, soil, construction waste or debris
 - There shall be no disposal of any liquids (oils, paints, gas, etc.)
 - There shall be no access by vehicles (parking, construction, or other)
 - If minor works are required within the Designated Tree Protection Zone:
 - The contractor shall use hand tools
 - There shall be no machinery access
 - Exposed tree roots shall be cleanly pruned by a qualified arborist and shall be protected with mulch and soil to prevent roots from losing moisture
 - Tree roots located outside of the Designated Tree Protection Zone shall be properly pruned and protected from moisture loss during site construction activity as noted above

5.8 Landscape Plan and Details Plan Requirements

A Landscape Plan is required to be submitted as part of the landscape plan package and will form part of the site plan set that the Commissioner considers for approval. The submission of this plan is required as part of a complete site plan submission package and it must be submitted upon the first full plan submission for the SPRC's review. The purpose of this plan is to provide proposed works on the property, including the site layout, planting and grading details. Specifically, the landscape plan must provide information concerning proposed walkways (and details of the surface material/finish), amenity areas including site furnishings, art forms, retaining walls, privacy fencing, etc. This plan will be accompanied by a details plan with technical details, cross-sections, manufacturer/style information for products, and installation details as required. Other items may be required (such as street tree installations, etc.) on an individual site basis.

5.8.1 Information to be Shown on the Landscape and Details Plan

The following information must be shown on the Landscape and Details Plan:

- Key plan
- The municipal address and provide a description of the project. If the municipal address is not known, please contact the City of Waterloo Building Standards Division
- The name, address and phone number of the Consultant that designed the plans
- The Developer/developer contact information
- Seal and signature with date of Landscape Architect consultant
- Legal Property Description
- Revision date
- North Arrow

- Legend
- Drawing scale (metric)
- Street Names
- Easements
- Geodetic Benchmark with location and elevation
- The date when the geodetic survey was completed and the company that performed the survey
- Property lines and all applicable bearings and distances of each property line
- Existing contours and spot elevations in Metres Above Sea Level (MASL)
- Proposed site layout
- Proposed surface materials and installation details (including product information)
- All proposed site features including, but not limited to, buildings, sheds, walkways, driveways, fences, retaining walls, major drainage channels, surface texture (i.e. Concrete, gravel, asphalt), berms, swales, ditches, amenity areas and site furnishings, garbage storage areas, fencing, etc.
- Location of all existing buildings on adjacent properties
- Civil property address for each property that abuts the site
- All proposed above ground and underground services on the subject property and within the municipal road allowance, fronting the property:
 - Location of future sidewalks, hydrants, utility poles, signs, storm and sanitary sewers, infiltration galleries, water and gas mains, MH, CB, curbs and gutter, etc.
- Use different line weights and hatch marks to identify different features on the plans

5.8.2 Standards and Requirements to be shown on the Landscape and Details Plan

The following information is to be included on the final Landscape Plan:

- A note that the Developer has agreed to maintain existing trees and new plantings in accordance with the approved Vegetation Management Plan
- A note that the Developer shall only conduct vegetation replacement in accordance with the Final Landscape Plan approved by the City
- A note stating that the Landscape and Details Plan(s) have been coordinated with the Vegetation Management Plan, the Site Plan, and the Engineering Plans
- Relevant note(s) for obtaining a work permit from the Municipality and/or Region prior to installation of approved landscape materials (includes street trees) within the public right-of-way
- A Plant List, which includes all proposed plant materials by name (both botanical and common), the key, size, condition, maximum on centre spacing, and the proposed quantity of each material
- On the plan, identify the location(s) where each plant material is proposed. Identify with the Plant Key using the format Species Key / Quantity proposed in the specific cluster
- A note with the Plant List “Any species substitutions must be to the satisfaction of the City of Waterloo.”
- A note stating the City’s Warranty Requirements
- Identify proposed swale locations on site. Ensure the plant materials are not located within the centerline of the swale

Additional Landscape Design Considerations

The City encourages all applicants to address the following considerations in their landscape plans and submissions:

- In tight buffer locations and planting islands where trees are encouraged to be installed, consider using structural soils, structural cells, and/or trench planting methods to achieve the minimum target 30 cubic meter soil volumes recommended for tree growth. A maximum of two trees total may be provided within this 30 cubic meter volume space, and one large-growing tree must have a minimum of 17 cubic meters soil volume for planting
- An optimal 900 mm depth is recommended for planting medium over structures to accommodate shrubs and trees. A letter from the structural engineer which acknowledges the requirement for plant materials on a structure shall be required to be submitted to the Engineering Services Landscape Representative for review prior to final Site Plan Approval. Provide a cross-section detailing how this depth will be

accommodated. Special conditions will be included in the Registered Agreement to support the requirement for the installation and future maintenance of plant materials on a structure

- In areas where landscaping near site services and utilities (hydro, gas, etc.), is required or where site works are anticipated in the future, the use of a root barrier product may be beneficial to protect the utilities and the proposed trees from each other. Provide a cross-section detailing the root barrier product, and identify on the Landscape Plan the location. Generally a 4' depth root barrier product is recommended
- Locate trees a minimum of 2m offset from the centerline of any underground servicing connections. Use 4' root barrier product as required by the City's Engineering Services Division
- Maintain trees a minimum of 3m radius away from fire hydrants, light standards, utility poles, or water valves
- Maintain low landscaping for unobstructed access to Fire Department Connections
- Install and maintain landscaping within 3m x 3m driveway visibility triangles at a maximum of 50cm height. Locate trees outside of this triangle area
- Install and maintain landscape materials in the municipal daylight triangle (3m x 15m in both directions at intersection) at a maximum height of 50cm. Locate trees outside of the daylight triangle area
- As permissible by the Region, install and maintain landscape materials in the Regional Daylight corner at a maximum height of 60cm. Locate trees outside of the daylight triangle area
- Provide a variation of tree species on site. Use the chart below as a reference:

<i>Number of Trees at a Site</i>	<i>Maximum Percentage of Any Single Species at a Site</i>
10-19	55
20-39	43
40-59	35
60 or more	20

- If a decorative fence is proposed, provide technical details, including manufacturer and style information if applicable. If a decorative board fence is required, ensure a minimum of 6" x 6" post size and a minimum of 45cm diameter concrete footing is provided
- Provide a cross-section of any proposed retaining walls, including the following specific information:
 - Proposed product/material the walls will be constructed out of
 - The minimum and maximum proposed height(s) of the walls
 - The maximum width of capping proposed on top of the wall and maximum proposed base of wall
 - Drainage/backfill
 - Tiebacks, footing
 - Cross-section detailing the proposed termination of the wall
 - Fastening details of the fence to the wall (if applicable)
- The landscape plan must show to scale the accurate widths of any proposed retaining walls
- Proposed retaining walls may not encroach within the minimum landscape buffer
- Include a note with the detail that any modifications to the retaining wall that must be approved by the City. No substitutions without approval of City of Waterloo

5.8.3 Applicant Responsibility in the Public Realm

Section 41 (4) of the Ontario Planning Act (R.S.O. 990 c. P13, as amended) and subsequently the City's Official Plan and Site Plan Control By-law promote sustainable design elements on any adjoining highway under a municipality's jurisdiction through site plan development. It includes without limitation trees, shrubs, hedges, plantings or other ground cover, permeable paving materials, street furniture, curb ramps, waste and recycling containers and bicycle parking facilities provided within the public realm as deemed appropriate for individual site plans. Street trees will be required to be installed in the public boulevard, and additional public amenities may be required to complete the project.

Works completed on Regional Roads require approval from Regional of Waterloo, and must be completed in accordance with applicable Regional policies and requirements.

Design Standards for Street Trees

Refer also to the City's Urban Forest Policy. Generally, the following standards apply:

- Street trees shall be balled and burlap or wire basket
- No tree planting is permitted within boulevards that are less than 1.5m in width
- Centre planting of trees within the boulevard for boulevards less than 2.5m in width
- Trees must be located 18m away from an intersection
- Trees must be located 3m away from a driveway access
- Space the trees 8-10m on centre for large species and 6-8m on centre for small species
- Locate trees a minimum of 3m away from utility poles and light standards

5.9 Landscape Cost Estimate and Performance Deposit

Once the Vegetation Management and Landscape plans are finalized, the consulting Landscape Architect must submit to the City's landscape representative for review and acceptance prior to the registration of the Site Plan Agreement a cost estimate for proposed landscape items (includes soft and hard items) on site. Schedule 'E' of the Registered Agreement shall reflect 50% of the estimated value of all landscape works for the site. The cost estimate must include line items for individual elements. Cost estimates not broken down in line item format will not be accepted. Appendix C provides approximate costs of standard landscape items for consistency and uniformity across developments. The cost estimate template is subject to modifications. The consulting Landscape Architect shall ensure the most current template and costs are included in the cost estimate.

Prior to the issuance of the building permit, and before any works begin on-site, tree preservation fencing must be installed on site and on adjacent properties in accordance with the approved site plan set. This protective fencing must be inspected by a City landscape representative for compliance prior to the issuance of the Building Permit. Engineering staff will collect the Letter of Credit prior to final engineering acceptance, and includes performance securities for:

- Site landscape surface works
- Non-landscape surface works
- Below ground servicing

5.10 Cash-in-Lieu of Street Trees and Design Standards

The Municipal and/or Regional Capital Project Forecast will direct whether street trees are required to be installed within the public boulevard, abutting the development property, or if cash-in-lieu will be required prior to final Site Plan Approval. If cash-in-lieu of street trees is required, it will only be taken for sites that are located adjacent to a public right-of-way that has future capital funds planned or approved, where the installation of street trees is feasible. It is anticipated that the tree installation will be undertaken through the roadwork projects or by municipal staff at an appropriate time. In the event that the cash-in-lieu for street trees provided cannot be used for the installation of street trees on the development site, the funds will be returned to the applicant.

Large-canopy species will be required to be provided if no overhead lines exist. If overhead lines exist, a small-growing tree species will be required. Cash-in-lieu amounts for one large tree is \$450 while for a small tree, the cost is \$350. These costs may be subject to modification from time to time. Current costs will be applied. While the Region requires tree species to be native to the Region of Waterloo, the City of Waterloo regularly publishes a List of Preferred Street Trees, which includes both native and non-native species that have proven to do well in an urban environment and allow for variation of species within the municipality. Refer to Appendix C for the current List of Preferred Street Trees. The applicant is responsible for watering, maintenance and warranty of the trees after installation, until establishment.

5.11 Landscape Requirements Following Final Site Plan Approval

5.11.1 Preservation of Existing Trees on Site

Prior to the issuance of the building permit, the following items are required to be submitted to the Landscape Representative in the Engineering Services Division:

- A letter of compliance for the installed tree preservation fencing
- A request for the landscape representative to complete an inspection of the tree protection fencing

The Landscape Representative must accept the installed tree preservation fencing prior to the issuance of the Building Permit. Further, it is the developer's responsibility to ensure that all tree protection measures are maintained in accordance with the approved plans during the course of construction and that any breaches are repaired immediately. The consultant shall inform the City landscape representative when the control measures are in place so that a City inspection can also be scheduled and completed.

5.11.2 Tree Removals from Site

All existing vegetation should remain in its natural condition on site until the Building Permit has been issued. Existing vegetation shall not be removed from the site until such time of Building Permit issuance. In instances where a Building Permit is not required, tree removals from a site should not occur until a time that final site plan approval is issued. On occasion, a situation may allow for the removal of vegetation from the site prior to building permit issuance. If this is the case, work with the City landscape representative to obtain necessary permission in advance of those removals.

5.12 Permits

5.12.1 Installation of Landscape Works within the Municipal Boulevard

In accordance with By-law 2009-111, By-law to Regulate Work on Highways, prior to the installation of street trees and/or other landscape features in accordance with the approved landscape plans within the municipal right-of-way, the landscape contractor must obtain a work permit from the Transportation Services department at least seven (7) days prior to any work being undertaken unless otherwise permitted by the Director of Engineering Services.

5.12.2 Installation of Landscape Works within the Regional Boulevard

Installation of any landscape features including but not limited to street trees, boulevard landscaping, paving, etc. on a regional road will require a permit in accordance with the Region of Waterloo Work Permit (By-law No. 07-029 to Regulate Work on Regional Roads) requirements. A copy of the work permit shall be submitted to the landscape representative in the Engineering Services Division prior to the works being undertaken.

5.13 Post Construction Landscape Inspections

The City's Registered Site Plan Agreement requires that a one (1) year warranty and maintenance period will be implemented prior to release of the letter of credit to ensure the plant materials are established in healthy, thriving condition. Two site inspections will be completed for landscape items:

- A Substantial Completion Inspection will be completed immediately upon completion of site landscaping and receipt of certification
- A Final Acceptance Inspection will be completed at the end of the one (1) year warranty period

Due to unfavorable environmental conditions, landscape compliance inspections will be completed between May 1st and October 31st of a calendar year. For this same reason, it is not recommended that plant materials be installed between October 31st and April 30th of a calendar year. It is the applicant's responsibility to contact City Landscape staff to conduct required inspections.

The City is considering the implementation of fees for the amount of site compliance site inspections that may be required to achieve compliance with the approved plans. If this advances, the City will notify the industry prior to initiation, and will be applied at the discretion of the Director of Engineering Services.

Refer also to Section 2.3 Performance Deposit for additional background information.

5.13.1 Substantial Completion Inspection of Landscape Elements

Upon completion of site landscape installation, the Landscape consultant is required to provide certification to the City confirming the site landscaping has been installed in accordance with the approved site plan landscape plan. This certification letter must be sealed by the Landscape Architect. Upon receipt of the certification, an Inspector from the City will complete a preliminary site inspection to confirm that the site landscaping has been completed in compliance with the approved plan. Specifically, the landscape certificate shall confirm the following items are compliant with the approved plans:

- All trees to be preserved and protected remain and are not damaged
- No hazard trees exist on site
- All plant materials shall be No. 1 nursery grown, meeting specifications for size, height, spread, quality, method of cultivation, and baling and burlap specifications as set out in the current edition of the Guide Specification for Nursery Stock prepared by the Canadian Nursery Landscape Association
- All new plant materials installed remain in good condition. Materials shall have normal, well-developed branches and vigorous root systems. They shall be healthy, vigorous plants free from defects, decay, sun scald injuries, abrasion of the bark, insect pests and all forms of infestation or objectionable disfigurements
- All plant materials have been installed with acceptable installation methods and techniques to promote good condition and growth of said materials in the future in accordance with the approved site plan
- All hard surface areas, landscape structures, site furnishings, wind screens, amenity areas, etc., have been installed as per the approved plan
- A certification letter is provided by a Structural Engineer for applicable items

If the site landscaping is determined to be compliant and there are no other deficient items, the applicant may be eligible for a reduction in the performance deposit posted.

5.13.2 Final Completion Inspection of Landscape Elements

Prior to the expiration of the one (1) year warranty period, the consultant Landscape Architect is required to submit a second sealed certification to the City, confirming the site landscaping remains compliant with the approved plans. Upon receipt of written certification from the consulting Landscape Architect, a landscape representative from the City will complete a final site inspection of the site landscaping. Specifically, the landscape certificate shall confirm the following items are compliant with the approved plans:

- All trees to be preserved and protected remain in good health showing no visible signs of decline, and are not damaged
- No hazard trees exist on site or on immediately adjacent to the site
- All newly installed plant materials remain in good condition and in the correct quantity. Materials shall have normal, well-developed branches and vigorous root systems. They shall be healthy, vigorous plants free from defects, decay, sun scald injuries, abrasion of the bark, insect pests and all forms of infestation or objectionable disfigurements
- All plant materials have been installed with acceptable installation methods and techniques to promote good condition and growth of said materials in the future in accordance with the approved site plan
- All hard surface areas, landscape structures, site furnishings, wind screens, amenity areas, etc., remain with no deficiencies which may cause concern over user safety

The consulting Landscape Architect may contact the City to request this inspection within six weeks of the expiration of the warranty/maintenance period. If all landscape items are found to be compliant on site, and no deficiencies have been identified through engineering inspections, the remainder of the performance deposit will be released.