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SECTION 8.0: PARKS AND LANDSCAPE

8.1 TREE PRESERVATION

This section provides policies, general standards and guidelines for the protection of existing trees during construction and for the planting of new trees. The section outlines tree inventory, preservation and protection requirements to ensure existing vegetation is retained where required, and measures to ensure damage to existing vegetation is minimized.

8.1.1 Tree Inventory Requirements

The Tree Inventory drawing should be utilizing the most current available boundary survey as a base layer reference. For the entire property to be developed, the Proponent shall submit a Tree Inventory drawing for all trees greater than 100 mm diameter-at breast-height (dbh) on the subject property as well as for any trees on adjacent property whose canopies extend onto the property to be developed. For forests or other continually treed areas that are to be protected, the detailed inventory shall extend into the forest 15 m from the edge while the remainder of the forest shall be described on the basis of species present and range of sizes (dbh) for each species. For forests or other continually treed areas that are to be removed in their entirety, a general inventory shall be provided as described above. At the discretion of Town Staff, a sampling procedure may be used to prepare the inventory for well-treed lots. A sampling procedure may be used to estimate the tree inventory within a woodlot setting, with a minimum area of 200m^2 or 5% of the total lot area, whichever is greater. In all instances, any rare or endangered tree species of any size shall be identified and accurately located on the plans. The Town may require, at its discretion that significant trees must be individually inventoried and assessed, even when they occur within large stands. **It is advised that Town Staff be contacted regarding the required scope for tree inventory requirements.**

Inventoried trees shall be numbered, and these numbers must correspond to the arborist report and the Tree Protection Plan as outlined below.

8.1.2 Tree Protection Plan, Edge Management Plan& Report

An arborist report shall be prepared by an ISA Certified Arborist or Registered Professional Forester which details specific and accurate information about trees that may be impacted by the development initiative and identifies the nature of the work to be undertaken, and appropriate protection measures. For all trees that must be individually inventoried, as described above, the report is to include:

- Tree number;
- Species (Scientific and Common Name);
- Location (Onsite, Offsite, Boundary)
- Diameter at Breast Height; (cm)
- Canopy Diameter; (m)
- Assessment of Condition, including health, vigour, and structural integrity;
- Suitability for Retention; and
- Tree Protection Zone (TPZ) (radius in metres).

Additionally, the report should confirm the presence and location of any rare or endangered species and provide recommendations for protection. The arborist assessment should also inventory and assess any areas requiring a general inventory, as described above, and provide an assessment of the impacts of the proposed works and recommendations for retention or preservation. The report should include recommendations for tree protection

measures and all aspects of tree health including tree pruning, fertilization, mulching, irrigation and long-term monitoring and maintenance. Trees identified for removal for health or hazard reasons should first establish that the problem cannot be corrected by pruning or other treatments.

A Tree Protection Plan shall interpret the recommendations of the arborist report, designating trees to be removed, preserved, and compensated on the subject and adjacent property. It shall provide clear direction to the Contractor. The Tree Protection Plan and Tree Inventory may be combined, depending on the complexity of the project and at the discretion of the Town.

A Edge Management Plan may be required in instances where development or activities may impact the ecological integrity, stability, or functionality of a forest edge. A Edge Managment Plan should include a canopy survey indicating either individual trees or tree groupings along the proposed forest edge, detailed assessments of existing vegetation, including the identification of native and invasive species, ecological functions, and potential risks such as erosion or encroachment. Recommendations for enhancement should include supplementary plantings of native species to improve biodiversity and ecological function along proposed forest edge. The plan should define buffer zones to protect the forest edge from adjacent development, and provide clear guidance for implementation, including contractor instructions and protective measures during construction. Monitoring and maintenance protocols, such as schedules for assessing plant health and invasive species control, as well as integration with related reports like Tree Protection Plans or Environmental Impact Studies, may also be required to ensure the forest edge's long-term stability and ecological value. Where required, quarterly inspections and reporting will be required from the consulting arborist on the status of the forest edge.

Any boundary tree identified for injury or removal will need signed consent from neighboring property owner(s). The town has no jurisdiction over boundary trees and, therefore, does not mediate a disagreement over boundary trees. When a Neighbour refuses to approve the removal of a boundary tree it becomes a civil dispute and falls under the legal provisions of the ***Ontario Forestry Act 1990***.

8.1.3 Tree Preservation Measures

Lot grading should demonstrate best efforts to minimize perimeter disturbance and preserve existing trees. Through the site layout design the developer should attempt to incorporate design alternatives, such as adjustments to grade, which minimize the impact to vegetation. Grading Plans are the preferred base layer reference for Tree Preservation and Tree Compensation drawings.

Tree protection fencing is to conform to TOISD 905 and shall be erected at the minimum of 0.3m outside of the dripline prior to commencement of any clearing, grading or other construction activity. All supports and bracing used to secure the barrier should be located outside the Tree Protection Zone to minimize damage to roots.

In instances where a specimen tree is to be retained in proximity to a construction area, solid plywood hoarding mounted securely to steel
or sturdy wooden posts. Posts should be installed no farther than 2.4m (8ft.) apart.

Tree protection shall not be removed until completion of all construction activity.

Where protection barrier is on slopes greater than 4%, provide a ditch on the elevated side of the fence, lined with filter fabric and backfill to prevent erosion.

Tree protection signage must be mounted on all sides of a Tree Protection Barrier. The sign should be a minimum of 40 cm x 60 cm and made of white gator board or equivalent material. The sign shall be in accordance with TOISD 906.

No grade change, storage of materials or equipment is permitted within this zone. Tree protection barrier must not be removed without the written authorization of Town of Innisfil.

8.1.4 Clearing and Grubbing

Existing site elements shall always be protected during clearing and grubbing operations.

Unusual or abnormal surface or subsurface conditions encountered on site during clearing and grubbing shall be documented and reported immediately to the consultant.

Cleared and grubbed materials shall be stockpiled separately from growing medium stockpiles.

Where noxious, undesirable weeds, or designated invasive species are found on site, grubbed materials shall be disposed of off-site as approved. These materials shall not be used as a constituent of, or as a growing medium.

Stumps and visible surface roots shall be removed except where removal might adversely affect the health or stability of a nearby tree or other preserved element that has been identified for retention.

In natural areas, stumps and roots are an essential part of the natural system, adding stability, nutrients, protection and habitat components to the site. Individual stumps and roots shall be assessed by the consultant to determine whether they should remain or be removed safely. Decisions should be documented in writing and included in the project documents.

Where stump removal is not recommended, the stump can be reduced by means of a mechanical stump grinder or retained as is, cut flush with the ground.

8.1.5 Trenching and Tunneling

No trenching is to occur within Tree Protection Zones. Excavations under the dripline of a tree should be executed with a trencher, vacuum truck, or other method approved by the Town. Roots encountered during trenching operations that are greater than 50 mm are to be pruned by a certified arborist.

Directional boring or micro-tunneling are permitted within a Tree Protection Zone provided that they are in accordance with the arborist report and meet the following standards:

- They occur at a minimum depth of 1.0 m;
- The bore or tunnel is a minimum of 1.0 m horizontally from the outside edge of the trunk of the tree; and

- The open excavation occurs outside the Tree Protection Zone.

All other Tree Protection Zone requirements (e.g. no storage of equipment or materials, no operation of equipment, etc.) shall continue to apply.

8.2 TREE COMPENSATION REQUIREMENTS

Tree compensation calculation methods will be at the discretion of the Town on a case-by-case basis. Town Staff will consider a combination of factors including but not limited to canopy area, lot size, tree density, cultural importance, and/or land designation. Where applicable, the ecological offsetting strategy shall conform to the LSRCA's Ecological Offsetting Policy for development within the Lake Simcoe watershed. The ecological offsetting strategy shall be prepared to the satisfaction of the Town in consultation with the LSRCA, and shall have regard for other offsetting programs and policies. It is advised that Town Staff be contacted regarding the required tree compensation rate requirements.

Where the LSRCA Ecological Offsetting Policy does not apply, the standard compensation rate for trees removed from a landscape setting are calculated using the chart below. The replacement value of a tree is determined by its caliper at breast height, corresponding replacement caliper range, and compensation rate. Trees that have been removed prior to being inventoried will be compensated at the discretion of the Town, to ensure the principle of 'no net loss of trees' is followed.

Removed Tree DBH	Compensation Ratio
100mm - 150mm	1 to 1
151mm - 350mm	2 to 1
351mm – 500mm	3 to 1
>501mm	4 to 1

All replacement trees should be provided at nursery stock standards unless smaller stock is deemed appropriate.

A tree health coefficient is applied to each tree prior to calculation of total compensation. The coefficient is multiplied to the replacement rate for that tree to determine a compensation rate relative to a healthy specimen. The total replacement rate is accumulated and rounded to the next whole number.

Health of Tree	Health Coefficient
Dead	0
Hazard or Infected	0.25
Poor	0.5
Fair	1.0
Good	1.25

Health of Tree	Definition
Dead	Tree is no longer alive. There is no active growth or foliage.
Hazard or Infected	The tree is severely compromised by structural damage, infection for infestation. It poses a risk to nearby structures or people and requires intervention or removal
Poor	The tree exhibits significant stress dieback or other signs of decline. Growth is stunted and the tree's lifespan or functionality is limited.
Fair	The tree is in average condition. The tree may show minor issues such as thinning foliage, small wounds or limited pest activity but overall the tree is functional
Good	The tree is healthy, vigorous, and free from significant pests, diseases, or structural issues. Growth and foliage are abundant, indicating optimal health and function.

If the minimum number of replacement trees cannot reasonably be met, as determined by Town Staff, tree compensation shall be in the form of shrubs at a compensation ratio of 5 shrubs to 1 tree.

If compensation cannot be provided, a cash in lieu agreement may be entered by the Developer. The rate for cash in lieu will be $500 per replacement tree not planted on the site.

8.3 LANDSCAPE REQUIREMENTS

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.

This section provides guidelines, policies of procedure and practice that are to be adopted by the proponent. Specific guidelines are included for plant materials, including nursery grown trees, topsoil, shrubs, groundcovers, sod and seed mixtures.

8.3.1 Topsoil & Seed Requirements

8.3.1.1 Topsoil

Topsoil shall conform to OPSS 802. Additional to the specifications, the subgrade is to be loosened to a depth of 100 mm immediately prior to topsoil application and the topsoil is to be placed no longer than seven (7) days prior to seeding or sodding. Topsoil depth requirements (after settlement or compaction to 85% SPD) are as follows:

Vegetation	Topsoil Depth Requirements
Boulevards	300 mm minimum continuous depth
Shrub Planting Beds	500 mm minimum continuous depth
Tree Planting Pits/Beds	500 mm minimum continuous depth
Sodded/Seeded Areas (non-boulevard)	200 mm minimum continuous depth

8.3.1.2 Topsoil Stockpiles

Topsoil stockpiles containing more than 100 m3 of material shall be located a minimum of 10.0 m away from any roadway, drainage channel or an occupied residential lot. Topsoil shall not be stockpiled on slopes steeper than 2H:1V and the stockpile height shall not exceed 6.0 m. Runoff from all topsoil stockpiles shall be controlled by a sediment control fence or other approved devices.

Perform weed control, when necessary, in accordance with relevant government chemical pesticide application legislation. Temporary seeding of topsoil with cover crops may be required by the Town to prevent weed growth.

Screen stockpiled topsoil, as necessary. Use a screener having a wire mesh screen size opening of minimum 10 mm and maximum 19 mm to remove stones, soil lumps, foreign material, debris, undesirable plants and roots. Stockpile topsoil shall be reasonably free of weed growth before placement on site.

Temporary topsoil stockpiles are not to be located in open space or park areas.

8.3.1.3 Seed Mixes

Refer to Appendix B for approved seed mix designs.

8.3.2 Plant Material Considerations

8.3.2.1 Stock

All plant material shall be nursery grown and conform to the Canadian Nursery Stock Standard [CNSS](Current edition).

The minimum size requirements for plant material are as follows:

Plant Material	Minimum Size
Deciduous trees	50 mm caliper, Wire Basket
Coniferous trees	200 cm tall, Wire Basket
Deciduous shrubs	50 cm tall, 3 gallon pot
Coniferous shrubs	50 cm wide, 3 gallon pot
Perennials and Ornamental Grasses	1 gallon pot

Caliper shall be measured at 15 cm above the soil line for trees with a caliper up to and including 100 mm. Trees greater than 100 mm caliper shall be measured 30 cm above the soil line. Soil line measurements shall be taken at or close to the root flare

Height shall be measured by the vertical distance between the collar or ground line and the top of the stem of the nursery stock, measured in its natural position.

Whips (bare-root stocks measuring 1.0 m to 1.5 m in height) may be planted in low-profile, rural areas, and stormwater management facilities, provided that they meet the

requirements of the applicable Conservation Authority Guidelines. Seedlings or whips may be used for naturalization or restoration areas.

8.3.2.2 Form Vigour of Trees

All trees shall be true to type, structurally sound with no evidence of dead branches, sun scald, frost cracks, abraded or broken bark, and be free of insect or disease infestation.

All trees shall have a full, well-developed symmetrical crown with one distinctive vertical leader, branches appropriately spaced, and a root system typical of the species. All parts shall be moist and show active green cambium when cut.

All trees must meet these specifications at the time of planting and final inspection by the Town's designate. Trees that are rejected will be replaced at the Proponent's expense.

8.3.2.3 Planting

All tree and shrub plantings shall be in accordance with the Town Standard Planting Details.

8.3.2.4 Pruning

The crown of the tree shall be pruned from the bottom up at the time of planting to remove all dead and damaged branches and to address any structural weaknesses, such as codominant branches, multiple branches arising from one point, included bark, etc. All pruning is to be performed by an International Society of Arboriculture Certified Arborist and is to conform to ANSI A300 Pruning Standards.

After pruning, the tree should have a symmetrical and full crown. Trees that do not meet these requirements will be rejected.

8.3.2.5 Staking

Tree stakes shall be heavy duty gauge T-bars, 50 mm x 50 mm x 1800 mm long.

Ties shall be 50 mm burlap strips or a proprietary flexible tie system which allow the tree a reasonable degree of movement to help build trunk taper. Plastic hoses and wire ties are not acceptable.

Ties are to be removed after one year.

8.3.2.6 Mulching

Mulch shall be shredded cedar bark, free of dyes and chemicals that inhibit plant growth.

8.3.2.7 Rodent Guards

Rodent guards shall be used on deciduous trees for all naturalization plantings, including storm water pond plantings. Rodent guards shall consist of white plastic spiral wrap wound around the base of trunk, up to a height of 60 cm or for seedlings, shall consist of 1200 mm long polypropylene tree shelters, twisted 50 mm into the ground. These guards must be installed after planting and inspection and then removed after two (2) years of growth (for spiral guard) or when seedlings grow taller than the tree shelter.

8.3.2.8 Deer Grazing Protection

In rural areas and stormwater management facilities, new plantings are to be protected with snow fencing in order to reduce incidents of deer grazing.

8.3.3 Acceptance and Warranty

All plant materials shall be maintained by the Proponent, from the time of planting until acceptance by the Town.

A maintenance regime shall consist of proper cultivation, weeding, watering and pruning to establish and maintain plant material in a healthy growing condition.

The Proponent shall arrange a time to have the plant material accepted following the guarantee period. At the time of inspection, all beds and tree pits shall be freshly cultivated, weeded and in a tidy condition, with all rubbish, leaves and dead plant debris removed.

8.4 DESIGN CONSIDERATIONS

In this section the requirements relative to acceptable tree species and related landscaping components with respect to specific applications are provided.

8.4.1 Acceptable Trees

Refer to Appendix B for a list of Acceptable Trees. Varieties and cultivars of the species listed will be reviewed pending specific site conditions and design applications.

In selecting trees for specific applications, consider the following factors:

- Assess conflicts with power lines, sidewalks and underground utilities;
- Select large trees where space is available to maximize planting effect;
- Encourage diversity of species to reduce susceptibility to disease;
- Utilize native species as much as possible;
- Consider long-term maintenance pruning requirements of trees;
- Select species with respect to soil microclimate requirements;
- Select species with respect to salt tolerance and specific moisture requirements.

8.4.2 Mixture and Proportion of Species

The planting of monocultures (dependence on one plant species) within the streetscape is detrimental to the maintenance of tree health, and increases a tree's overall susceptibility to pests and diseases.

As such, the Town encourages biodiversity in the streetscape, stormwater management, and restoration plantings by implementing the following measures:

- The random sequencing of tree species is encouraged within a planting scheme.
- The planting of any one individual species is limited to eight (8) consecutive trees in any given planting scheme, including both sides of a road allowance.
- To ensure diversity, the amount of one tree genus shall not exceed more than 20% of all plantings, and the amount of one tree species shall not exceed more than 10% of all plantings.
- The number of species required in a planting scheme shall be determined by the overall number of trees in the planting, as conforming to the following table.

TABLE 10
Number of Trees and Species in Planting

Number of Trees in Planting	Minimum Number of Species
1-8	1
9-15	2
16-30	3
31-40	4
41-50	5
51-100	6
101+	8

8.4.3 Tree Siting and Setback Requirements

Boulevard tree siting requirements are as follows:

- Boulevard trees are to be large crown trees, optimally planted at intervals ranging from 12.0 m to 15.0 m. Spacing requirements vary depending on the selected species. All species selections must be approved by Town staff.
- In single family detached residential developments as well as multi-unit developments, one (1) shade tree per lot is required. Where a tree cannot be accommodated on a lot, the tree may be planted on other public land within the development property, as directed by the Town. Should the tree not be accommodated on the development property, the Town will accept five-hundred dollars ($500) cash in lieu for each tree not planted.
- Where overhead utilities or other constraints require the use of smaller trees, they may be used at the discretion of the Town, at a spacing of 6.0 m to 8.0 m on center.

When planting near utilities, the location and species of the plant material must be coordinated with engineering plans to ensure the non-obstruction of storm and sanitary sewers, water

service, hydro, telephone, gas lines and other services. All utilities must be demarcated by the Proponent prior to any excavation. Refer to Appendix C for minimum clearance requirements from other above grade features.

8.4.4 Landscape Strip Requirements – Residential Development

The following landscape treatments are guidelines for the location and use of plant material, fencing, berming on private lands adjacent the public road Right-of-Way. The planting density formulae establishes the desirable quantity of each type of plant material based on the proposed land use and the total site area. The following table outlines the landscape strip standards utilized by the Town for residential development adjacent to various road classifications and abutting land uses.

TABLE 11 - Landscape Strip Requirements

ABUTTING USE	MIN. LANDSCAPE STRIP WIDTH	LANDSCAPE TREATMENT GUIDELINES
Highway 400	12 m	• Noise attenuation fencing • Mixed Deciduous and Evergreen trees • 2.0 m high berm with shrub massing • Foundation planting
Arterial/Parkway /Major Collector	6 m	• Entry feature/ornamental fencing • Mixed Deciduous and Evergreen trees • Berming and shrub beds • Foundation planting
Minor Collector/Local	3 m	• Entry feature/ornamental fencing • Mixed Deciduous and Evergreen trees • Berming and shrub beds • Foundation planting
Schools	3 m	• 1.8 m high chain link fence • Mixed Deciduous and Evergreen trees • Mixed shrub bed or hedging
Other Institutional	3 m	• Mixed Deciduous and Evergreen trees • Mixed shrub bed or hedging • 1.8 m high solid fence (with 150 mm x 150 mm posts)
Residential	3 m	• Mixed Deciduous and Evergreen trees • Mixed shrub bed or hedging
Commercial	3 m	• 1.8 m high solid fence (with 150 mm x 150 mm posts) • Mixed Deciduous and Evergreen trees • Mixed shrub bed or hedging
Industrial	3 m	• 1.8 m high solid fence (with 150 mm x 150 mm posts) • Mixed Deciduous and Evergreen trees • Mixed shrub bed or hedging
Open Space/E.P.	3 m	• 1.2 m high chain link fence • Mixed Deciduous and Evergreen trees • Mixed shrub bed or hedging

Planting Density Formula Guideline for Total Site Area Available for Planting

Total Site Area (m^2) ÷ 200 = # of Deciduous Trees 50 mm caliper
Total Site Area (m^2) ÷ 400 = # of Evergreen Trees 2.0 m in height
Total Site Area (m^2) ÷ 50 = # of Deciduous Shrubs 0.6 m - 1.2 m in height
Total Site Area (m^2) ÷ 100 = # of Evergreen Shrubs 0.45 m SPR/1.2 m in height

8.4.5 Park and Playground Requirements

8.4.5.1 Minimum Park Requirements for Residential Developments

Components of Parkland and other Open Space considerations are as follows:

- Contact Parks Project Manager for the typical park entrance sign details.
- Park display sign to be 1.8 m wide by 1.2 m high installed on two 0.75m aluminum or hot-dip galvanized steel poles. Park display sign to be as per the "RT07 Wayfinding Signage Standards and Specifications" page 7-1.1 (Drawing – Pd-1a Urban Pedestrian RTO 7 Map Directory). The sign text and image information will be provided by the Town for each park display sign.
- Park servicing: minimum 25 mm water service, 125 mm sanitary sewer service, 250 mm storm sewer service, and a hydro service are minimum requirements. The Town will provide minimum sizes specific to the project in early stage of designs.
- Park grading: minimum slopes of 2% graded to maintain proper drainage. Using slopes steeper than 4% is undesired.
- Park fencing: 1.8m high chain link fence.
- Must have street frontage
- Park turf: sodding is the minimum standard.
- Development construction: undeveloped, disturbed blocks shall be graded, seeded, and maintained by the Proponent until construction commences thereon.
- Park property shall not be used for storage of material or equipment during construction on development.

8.4.5.2 Development Adjacent to Park Property

Where development abuts a Park or Open Space, runoff from the development property shall not drain into the Park or Open Space. A rear lot catch basin may be required.

8.4.5.3 Park and Open Space Features

Required park and open space features include:

- Chain link fence (1.8 m) to Town standards where Park property is adjacent to private lots. No gates into parks, open spaces, or stormwater management facilities are permitted from private property. Park frontage on streets is not fenced.
- Site furniture, including benches and trash cans.

- Park walkways that are to be maintained in the winter must be 3 m width, asphalt surfaced. Otherwise, park walkway material is stone dust.
- Lighting of Park walkways in Neighbourhood Parks is generally not recommended.
- Lighting of sports facilities in Neighbourhood Parks is generally not recommended.
- Playgrounds must conform to the latest Canadian Standards Association (CSA) standards for play spaces and equipment.
- At least one (1) light standard must be provided at playgrounds for security.

8.4.5.4 Parking Supply Standards

Parking lots may be required for Neighbourhood Parks, if there is no adjacent parking.

Parking Supply Standards for Community or Town-wide parks:

- Sixteen (16) spaces per ball field, thirty-two (32) spaces if fields are lit.
- Sixteen (16) spaces per soccer field, thirty-two (32) spaces if fields are lit.
- Fifteen (15) spaces for general park users.
- Twelve (12) spaces (four (4) per court) per group of tennis courts.

8.4.5.5 Park Development Standards

All Parks and Open Space developed in the Town of Innisfil shall comply with the following standards:

Can/CSA Standard Z614 – Children's Playspaces and Equipment (latest edition).

Accessibility for Ontarians with Disabilities Act (AODA), 2005, including all associated Regulations. Refer to *US Guide to ADA Guidelines for Accessible Play Areas for clarification and requirements of "accessible" play features.*

8.4.5.6 Playground Equipment Standards

The playground will be separated into distinct play area sections: a Junior play area for children eighteen (18) months to five (5) years old and a Senior play area for children five (5) years to twelve (12) years old.

It is acceptable to mix products from different manufacturers on a project site.

Specify steel posts, not aluminum for lower costs. Timber and wood components are not acceptable.

All playgrounds must have a minimum 1.5 m wide, hard surface pathway from the street or sidewalk to the play area for accessibility.

All playground equipment must be installed by a certified playground installer and must meet CSA standards.

8.4.5.7 Typical Playground Requirements

A typical program for a Neighbourhood Park must include at a minimum:

- Swings – two (2) seats for toddlers, four (4) belt seats, and one (1) accessible seat.
- Jr. creative structure: two to three (2-3) decks with minimum one (1) roof, transfer station & stairs, two (2) plastic slides – single and dual track, climber, tunnel or bridge between decks, three to four (3 - 4) activity panels, and talk tube or alternate.
- Sr. creative structure: three to six (3-6) decks with minimum one (1) roof, transfer station with stairs, accessibility ramp, two (2) plastic slides – straight and spiral both open, three (3) climbers, rock wall or similar activity, four to five (4-5) activity panels, and sliding pole.
- Spring/spinning toys: two (2) units varying types.

A typical program for a Community Park must include at a minimum:

- Swings – five (5) seats for toddlers, six (6) belt seats, and one (1) accessible seat.
- Jr. creative structure: two to three (2-3) decks with minimum one (1) roof, transfer station & stairs, two (2) plastic slides – single and dual track, climber, tunnel or bridge between decks, three to four (3-4) activity panels, and talk tube or alternate.
- Sr. creative structure: five to seven (5-7) decks with minimum one (1) roof, transfer station with stairs, accessibility ramp, two to three (2-3) plastic slides – straight and spiral both open, three to four (3-4) climbers, rock wall or similar activity, five to seven (5-7) activity panels, and sliding pole.
- Spring/spinning toys: three to four (3-4) units varying types.

8.4.5.8 Creative Play Structures

Only certified playground suppliers are permitted to supply and install play structures. Playground structures are subject to inspection by a registered playground inspector.

<u>Decks:</u>

- Steel with plastisol coating preferred or plastic wood is acceptable.
- Provide a transfer deck on structure to make it accessible.
- Provide minimum one (1) set of stairs.

<u>Climbers:</u>

- Chain net, cable net, and cargo net climbers shall have one piece coupling or nut and bolt couplings. Screw couplings are not acceptable.

Activity Panels:

- Do not place a poly panel at the end of a ramp.
- Use steel bars at ends of ramps.
- Vary steel bars, poly windows, activity panels to add interest to structure.
- Provide 40% of activity panels on ground level for wheelchair users.

Percussion musical panels are not permitted, except in low vandalized areas.
All other activity panels will be considered but must be approved by the Town.

8.4.5.9 Play Areas

Perimeter:
Playground play area borders are to be cast-in-place concrete curbs.

Ensure minimum setbacks are provided from each piece of play equipment as per CSA standards.

Drainage:
Provide a subdrain system comprised of a minimum 100 mm (4") diameter corrugated poly drain pipe with filter sock embedded in a French drain of 300 mm wide x 400 mm deep 19 mm diameter clear stone set into the subgrade.

Slope subgrade to drain towards drain pipe at 1.0%.

Provide a non-woven geotextile filter fabric between the safety surface and French drain.

Provide a minimum three (3) legs of drain pipe to cover all sides and centre of play area.

Slope drain pipe a minimum 0.5% to drain towards a catch basin or discharge into a swale.

Ensure placement of drainage pipe does not interfere with play equipment footings.

In poorly drained areas: In addition to above, provide a drainage layer immediately beneath the safety surfacing comprised of 100 – 150 mm (4"- 6") 19mm diameter clear drain stone with a non-woven geotextile filter fabric.
Safety Surfacing:
Refer to Appendix B for a list of approved materials.

8.4.5.10 Play Equipment

Spring Toys:
Spring Toys must be removable by Parks Maintenance personnel.

Swing Standards:
All swing posts shall be embedded in footings (anchor footing to bedrock where depth of cover is not at least 1200 mm). All footings are to be a minimum 1.5m deep (Innisfil frost depth).

Top cross bar shall be min. 2440 mm (8 '-0") above finished grade.
All swing chains shall be ¼" galvanized steel.

Refer to Appendix B for a list of approved materials.

Slide Standards:
Must be attached to creative play structures.

Poly slides are to be used except in highly vandalized areas, where stainless steel slides may be used.

8.4.5.11 Fencing

Commercial grade, galvanized steel, chain link fence or our black vinyl coated chain-link shall be the preferred option within residential developments, however, this should be confirmed by the Town.

Park, soccer and ballfield perimeter - #9 gauge [3.5 mm]

Baseball field backstops – 50 mm (2") square mesh, #6 gauge [5 mm]

Basketball/multi-purpose court – 3.0 m (10 ft.) high

8.5 STORMWATER MANAGEMENT FACILITIES

Refer to Section 4.0 for requirements regarding the stormwater management facilities.

8.6 INVASIVE SPECIES CONTROL PLAN

An Invasive Species Control Plan (ISCP) will be required when invasive plant species are present on the lands which, in the opinion of the Town, could cause adverse effects to human health, degrade ecosystems, or cause adverse economic impacts to the Town. Such species may include, but are not limited to, Giant Hogweed (*Heracleum mantegazzianum*), Invasive Phragmites (*Phragmites australis subsp. Australis*), Dog Strangling Vine (*Cynanchum rossicum*) and Poison Ivy (*Rhus radicans*).

Prior to implementation, the ISCP shall be accepted by the Town and any necessary permits and licenses shall be obtained from the Ministry of Natural Resources and Forestry (MNRF), the MECP, and the Conservation Authority, as applicable.

The plan shall identify:

- Species to be controlled;
- Methods of control;
- Required permits / licenses / Letter of Opinion;
- Timing restrictions (e.g., for effectiveness and to reduce impacts to native plants and wildlife);
- Management frequency;
- Monitoring; and
- Reporting.

Pending approval of the ISCP and receipt of applicable permits, the control measures are to commence immediately and extend until the invasive species has been effectively controlled. Should the invasive species not be controlled at the time of municipal Assumption, the Town will determine an acceptable solution, at its discretion.