



# **WASAGA BEACH PARKS STANDARDS**

March 2021

## TABLE OF CONTENTS

<b>PARK PLANNING &amp; GENERAL GUIDELINES.....</b>	<b>2</b>
1.1 Introduction.....	2
1.2 Parkland Dedication.....	2
1.3 Park Classifications.....	2
1.4 Park Planning Characteristics.....	4
1.5 Facility Fit.....	5
1.6 Professional Park Design Services.....	5
<b>PARK DEVELOPMENT.....</b>	<b>6</b>
2.1 Minimum Park Development Requirements.....	6
2.2 Parkland Conveyance.....	7
2.3 Park Development Options.....	7
2.4 Option 1: Town Design & Implementation.....	7
2.5 Option 2: Developer Design-Build.....	8
2.6 Option 3: No Park Block.....	9
<b>PARK DESIGN REQUIREMENTS.....</b>	<b>10</b>
3.1 General.....	10
3.2 Parkland Design Standards.....	10
3.3 Pedestrian Circulation & Destinations.....	10
3.4 Parking.....	12
3.5 Children’s Playspaces.....	13
3.6 Facility Sizes & Buffers.....	16
3.7 Outdoor Sports Fields & Diamonds.....	17
3.8 Sports Fencing & Amenities.....	18
3.9 Planting & Landscape.....	19
<b>TECHNICAL DESIGN STANDARDS.....</b>	<b>20</b>
4.1 Temporary Construction Fencing.....	20
4.2 Sediment & Erosion Control.....	20
4.3 Tree Preservation & Removals.....	21
4.4 Topsoil Stripping, Screening, & Stockpiling.....	21
4.5 Earthworks & Rough Grading.....	22
4.6 Armourstone Retaining & Seat Walls.....	23
4.7 Granular Walkways & Trails.....	24
4.8 Concrete Walkways & Trails.....	24
4.9 Asphalt Walkways & Trails.....	25
4.10 Chain-link Fencing.....	26
4.11 Play Structures.....	26
4.12 Concrete Playground Curb.....	27
4.13 Subdrainage.....	27
4.14 Playground Safety Surface.....	28
4.15 Shade Structures.....	29
4.16 Site Furnishings.....	29
4.17 Topsoil & Finish Grading.....	30
4.18 Sodding.....	31
4.19 Seeding.....	32
4.20 Trees, Shrubs, & Groundcovers.....	32
<b>PARK DRAWING REQUIREMENTS.....</b>	<b>34</b>
5.1 Park Design Drawings.....	34

## **EXECUTIVE SUMMARY**

The Wasaga Beach Parks Standards was created by the Public Works Department of the Town of Wasaga Beach to define the requirements and standards for municipal parkland development. This document shall guide the design and construction of public parks, whether completed by the Town of Wasaga Beach or by the development community.

The Wasaga Beach Parks Standards shall not be a static document and the information contained herein is subject to change without notice. It is the intent of the Public Works Department to update these standards as required to comply with applicable federal and provincial regulations, municipal policy and by-laws, and the most recent industry standards and guidelines as they relate to parks and recreation facilities/amenities, accessibility, and public health and safety.

The standards should be used in conjunction with other planning policy, engineering standards, and guidelines referenced throughout. The goal is to guide the process of submitting or reviewing a development application within the Town of Wasaga Beach and to inform individuals of parkland requirements. The reader must ensure that they have the most current version of these standards and all other documents referenced therein.

# PART 1 PARK PLANNING & GENERAL GUIDELINES

## 1.1 INTRODUCTION

The Parks & Trails Master Plan (December 2020) defines ‘Parkland’ as:

*“all lands owned, leased and/or managed by the Town and classified as Community Parks, Neighbourhood Parks, Parkettes and Urban Plazas. Parkland typically consists of tableland suitable for the development or installation of built recreational or civic amenities (such as sports fields, playgrounds, courts, gardens, etc.) that may be used for both organized and unorganized activities, although these parks may also incorporate natural features”.*

The Park Standards focuses specifically on the development of parkland within the Town of Wasaga Beach and outlines key requirements and expectations for the following:

- Allocation and planning of parkland through the planning process (Draft Plan);
- Minimum parkland requirements for municipal assumption under the Development Agreement;
- Park development process for the design and construction of public parks and associated amenities (3-options);
- Minimum design, construction, and technical standards;
- Parkland drawing requirements.

This document does not address standards or requirements for the design and development of public open spaces (e.g., natural areas, open space linkages, etc.) or trails. Requirements for open spaces and trails will be defined on a case-by case basis to suit specific site and environmental conditions and community needs.

## 1.2 PARKLAND DEDICATION

For new subdivisions, parkland dedications will be determined through the Draft Plan of Subdivision in accordance with the requirements of the Provincial Planning Act, the Town of Wasaga Beach Official Plan, and Comprehensive Zoning By-law 2003-60. Parkland calculations and requirements in this regard will be determined by Planning and Development Services through the Town’s formal development application process.

Park classification will also be determined through this process to guide the siting and configuration of parkland within the community in context of its intended uses, facilities, and amenities. Classification and intended recreational uses will be in response to recommendations made through the Parks & Trails Master Plan (December 2020), Wasaga Beach Parks, Facilities and Recreation Master Plan (2012), or any other guiding document applicable in this determination.

If it is determined that the parkland facilities, uses, or programming anticipated for a given neighbourhood or the greater Wasaga Beach community requires land that exceeds the calculated parkland dedication, the Town may choose to acquire the balance needed. This land will be subject to the same performance standards as the surrounding conveyance and developers shall be responsible to ensure that the lands are free of encumbrances, fully prepared as described herein and in a condition acceptable to the Town.

## 1.3 PARK CLASSIFICATIONS

The Parks & Trails Master Plan proposes classifications to provide a framework for park planning and policymaking. It also provides a general list of potential amenities that are suitable for each park classification type.

The Wasaga Beach Parks Standards support and recognize the Master Plan classifications, which are as follows:

### COMMUNITY PARKS

Community Parks are used by groups of residents and tourists for community events, festivals, and active recreation. They may contain athletic amenities for organized recreation (such as sports fields, support buildings, and community-wide recreation amenities), as well as pathways, pavilions and/or unique elements that make the park a 'destination'. Full services (water, sanitary, etc.) are generally required.

Community parks should have good transportation access along adjacent arterial or collector roadways and provide adequate parking to meet anticipated demand. Community Parks in urban areas should be appropriately located along transit routes.

Community Parks serve a Town-wide area and beyond and are to be provided at a rate of 2.11 hectares per 1,000 population, with a target size of 4.0 hectares or more.

*Example: Wasaga Sports Park*

### NEIGHBOURHOOD PARKS

Neighbourhood Parks primarily support children's play activities and are often situated within subdivisions to promote walkability. Neighbourhood Parks contain playgrounds, local-level play features, and/or passive open space intended to serve the immediate area. Unlike community parks, most do not have off-street parking, though they may be coordinated with school sites.

Neighbourhood Parks serve the surrounding neighbourhood (800-metre radius) and are provided at a rate of 0.41 hectares per 1,000 population, with a target size of 0.5 to 4.0 hectares.

*Example: Wasaga Village Park*



### PARKETTES

Parkettes are generally smaller and less developed than neighbourhood parks. Their primary purpose is to provide access to green space and respite for nearby residents and travelers. They may contain seating areas, pathways, floral/ornamental gardens, shade trees, etc. Most will not contain playground equipment unless there are no suitable options nearby.

Parkettes serve a localized area (500-metre radius) and are provided at a rate of 0.07 hectares per 1,000 population, with a target size of 0.5 hectares or less.

*Example: Golfview Park*

### URBAN PLAZA

Urban Plazas are publicly-owned lands that are located in highly visible and accessible locations, typically in gateways or higher density urban areas. They serve to support the Town's social and cultural fabric, create a sense of place, and may contain elements of historic or cultural significance that are of local importance. They are typically characterized by hardscaped areas for events and gatherings, public art, seating areas, related civic uses, etc.

Urban Plazas serve a Town-wide area and are provided at a rate of 0.01 hectares per 1,000 population, with a target size of 0.5 hectares or less.

*Example: Beck Square; planned park in Sunnidale Trails (Pacific Homes/Rivers Edge)*

## 1.4 PARK PLANNING CHARACTERISTICS

Further to policy objectives such as land area, classification, and intended uses, the layout and placement of parkland blocks within the overall development plan is critical to the successful realization of healthy, integrated, and sustainable communities. Parks should be located as defining community features that unify the community and are integrated as focal destinations within an interconnected pedestrian and active transportation network. Draft Plans for developments should be structured around the parkland as a central activity node, reinforcing the center as a symbolic and spatial heart of the neighbourhood.

Although it is recognized that the design of each community is influenced by various factors, generally the Draft Plan should demonstrate parkland blocks that achieve the following objectives:

- Lot patterns and road and pedestrian/trail networks should be designed to place parkland in prominent site locations to create visual and physical focal points within the community (corner or focal sites, mid-block locations, etc.);
- Park blocks should be located to provide convenient and accessible pedestrian access, servicing community areas consistent with that defined by their specific park classifications;
- Where possible, parks should be located adjacent to natural features (e.g., watercourses, water bodies, forested areas, etc.) and naturalized SWM facilities to provide greater green space impact;
- Similarly, parkland should also be located adjacent to community institutions (e.g., schools, civic buildings/sites, places of worship, etc.);
- Community Parks shall have a minimum of 120m of street frontage on at least one side with additional walkway connections (blocks or easements) to other nearby streets or community nodes/housing clusters;

- Park parcels with square or rectangular configurations are preferred as they provide the most versatility for incorporation of public amenities, particularly sports facilities. Parks with odd shapes will not be accepted, unless approved by the Town based on design merit;
- Mid-block pedestrian crossings may be required to access parks where appropriate to ensure direct access from walkways, trail easements, and other pedestrian connections;
- Micro-climatic conditions should be considered and managed through park orientation and relationships between natural and built features as much as practical, to maximize and balance sun/shade opportunities and to provide shelter from winds and winter conditions;
- Parks should be located to permit convenient access from public road allowances for maintenance operations.

The following parkland conditions are not considered acceptable under any circumstances:

- Parkland dedications shall not be the result of awkward portions of the lot fabric that could not be developed into marketable residential or commercial properties;
- Blocks with odd shapes and excessive grades will not be accepted as parkland;
- Parks shall not be hidden from view from the street or neighbouring uses;
- Parkland shall be conveyed to the Town free of any physical encumbrances above/below grade;
- Easements in favour of the Town or local utilities creating limitations on the development of functional public space shall not be considered a component of the parkland calculation;
- Stormwater management ponds (SWM Ponds), valley lands, or floodplains are not acceptable as parkland dedication due to the inherent restrictions on development that are encountered on these land types.

## 1.5 FACILITY FIT

Parkland shall possess sufficient shape, configuration, size, and topography to accommodate the intended parkland program and design objectives. As a component of the Draft Plan of Subdivision process, the Town may define the required objectives and user programming for the park blocks and the developer will be required to prepare a Facility Fit Plan to demonstrate that the proposed parkland can accommodate these requirements.

The Facility Fit Plan is generally a park concept plan intended to demonstrate that the parkland dedication is of a sufficient size and configuration to accommodate the required park amenities/facilities, grading, drainage, facility setbacks, fencing, and other requirements. The plan also serves to identify any conflicts between desired facilities, the proposed park parcel's size and configuration, and neighbouring land uses for the Town and developer to resolve early in the development process.

The Facility Fit Plan shall generally demonstrate the following:

- Tree preservation addressed in accordance with the Draft Plan Conditions and other related Town or regulatory authority requirements in this regard;
- Park configuration and size suitable to accommodate intended recreational facilities/amenities;
- Required setbacks accommodated between active recreational facilities/uses and to buffer against neighbouring properties and roadways;
- Orientation, layout and grading of facilities/amenities meeting Town standards;
- Anticipated grading and drainage for the park conforming to the overall engineering stormwater drainage plan approved for the subdivision;
- Required services for the future construction of the park verified and generally located;
- Surface and sub-surface stormwater and sanitary drainage systems (where applicable)

accommodating the predicted needs of the park development;

- Encumbrances identified (easements, utility corridors, etc.)

A Class C cost estimate may be required at this stage to confirm that sufficient capital is available to fulfill the requested park program through allocated development charges or other financing sources. The need for a budgeting exercise will be determined by the Town on a case-by-case basis.

Following approval of the Facility Fit Plan by the Town, associated Draft Plan Conditions would be developed to ensure that the integrity of the expressed objectives is maintained throughout the subdivision's engineering design and development approvals.

## 1.6 PROFESSIONAL PARK DESIGN SERVICES

All park planning, design and construction oversight shall be completed by a landscape architect who is a full member in good standing with the Ontario Association of Landscape Architects (OALA) with Seal and Certificate, who shall be responsible for the preparation of drawings and specifications to the satisfaction of the Town.

# PART 2 PARK DEVELOPMENT

## 2.1 MINIMUM PARK DEVELOPMENT REQUIREMENTS

As a component of the Subdivision Agreement, all new parkland developments shall be designed and developed to meet the minimum standards required by the Town of Wasaga Beach Engineering Standards. A summary of these minimum requirements is as follows:

- Graded to provide positive surface drainage, with care given to preserving the root systems of existing trees to remain. Minimum grades for parkland shall be 2.0% for turfgrass areas.
- Parkland trees shall be preserved and protected unless removals are necessary to accommodate the overall grading/servicing design and/or as formally directed and approved by the Town.
- The entire park shall have or receive a minimum of 150mm of topsoil, unless deeper topsoil profiles are required by the Town for special features (pond embankments, naturalized areas, etc.)
- All high-use areas of parks shall be sodded. Select areas may also be considered for seeding (hydro-seeding and/or terra-seeding) at the discretion of the Town (e.g., naturalization areas, no-mow areas, etc.)
- All public to private property interfaces shall be fenced with 1.5m high black vinyl chain-link fencing. Park frontages along streets and boundaries shared with schools, open spaces, or stormwater management facilities do not require fencing, unless required by the Town.
- NEIGHBOURHOOD PARKS: install services to park block from the road allowance as follows:
  - 25mm diameter water supply line with curb stop;
  - single phase electrical supply line from a local transformer.
- COMMUNITY PARKS: install services to the park block from the road allowance as follows:
  - 150mm diameter water supply line with valve at property line;
  - sanitary sewer stub, including manhole or inspection port at property line;
  - 3-phase electrical power.
- For all park types, the developer is required to provide an appropriately sized storm sewer outlet in the form of a ditch inlet, catch basin, or stormwater management pond. Connections from these structures to the surrounding storm sewer system shall be set at an invert elevation low enough to positively drain the entire park block.
- Where a Community Park has two or more street frontages, all or some of these services are to be provided at each park frontage, as confirmed with the Town.
- All services shall be stubbed and clearly marked with a permanent monument at ground level.

In some instances, natural gas and/or telecommunication utilities (Rogers, Bell, etc.) may be required to service specific facilities or amenities within a park. This would typically be associated with Community Parks, where recreation centres, arenas, or other municipal buildings/facilities may be integrated into public parkland. The need for such utility infrastructure will be assessed on a project-by-project basis, as determined by the Town.



## 2.2 PARKLAND CONVEYANCE

At a minimum, parkland will be completed as per the requirements of Section 2.1 and will be conveyed to the Town at the development's assumption stage under the Subdivision Agreement.

In some specific instances, earlier parkland conveyance may be requested as a result of advanced Town priorities, community pressures for parkland/amenities, or other factors. In these instances, the terms and responsibilities associated with early parkland conveyance will be determined in collaboration with the developer.

As part of the terms of early conveyance, the Town may require the developer to complete servicing, fencing, and rough grading and transfer the park in a pre-graded condition. This would occur at an appropriate time to correspond with the mobilization of the Town's park contractor. In this scenario, all outstanding development 'securities' for items not completed under the Subdivision Agreement (e.g., topsoil, sod, etc.) would be retained by the Town and applied to the same work under the Town's park contract. This transfer would be negotiated in context of ensuring that duplicate work and unnecessary throw-away costs are minimized. Pre-grade condition would typically be set at 150mm below finished grade, which is the depth determined by the unplaced topsoil.

If it is preferred by both the developer and Town that parkland be completed by the Developer, then the 'Developer Design-Build' option (Option 2) outlined in the next section should be followed. Under this option, development assumption would include the fully completed park works in accordance with the parkland agreement established with the Town.

## 2.3 PARK DEVELOPMENT OPTIONS

There are three possible parkland development approaches available for consideration. Two are focused on the transformation of 'park blocks' into active and engaging public parks with passive and

recreational amenities and community focused spaces. The third recognizes that not all developments are appropriate for the inclusion of parkland and provides an option to omit park blocks. The preferred parkland approach applied to any given development will be at the sole discretion of the Town.

Available parkland options are as follows:

OPTION 1: Town Design & Implementation

OPTION 2: Developer Design-Build

OPTION 3: No Park Block

## 2.4 OPTION 1: TOWN DESIGN & IMPLEMENTATION

Option 1 is the most common and preferred approach in the Town of Wasaga Beach. Under this approach, the developer will fulfil the minimum parkland requirements as outlined in Section 2.1 and will transfer ownership and responsibility of the park block to the Town through the assumption process defined by the subdivision agreement. At a time when deemed appropriate, the Town will proceed to retain consultants to design the park to meet the needs of the community and to oversee its construction implementation.

Parks are developed using applicable development charges and/or other available budgets or funding opportunities approved by Council and deemed necessary to meet public needs. As a result, the timing of park development under this approach can take longer and are typically triggered by the occupancy of a certain percentage of the new community. Parks will generally be constructed by the Town based on budget and demand.

The advantage of this approach is that designers have access to the community that the park will service (residents, stakeholders, and future users). As a result, further to needs expressed through guiding planning documents, the design programming and amenities can be developed in collaboration with local residents through a public engagement process.

This process ensures that the results capture the needs, preferences, and desired activities of the community, based on an understanding of actual neighbourhood demographics (e.g., age distribution, cultural diversity, socio-economic factors, etc.)

Furthermore, the ‘process’ of engagement and design can also have extended community-building benefits, as residents collaborate on ideas, becoming invested in the outcome, and ultimately take ownership of the public space. This can forge on-going neighbourhood relationships and increase community stewardship of the park (e.g., reduced vandalism, reporting of issues, etc.)

The following provides a general summary of the respective roles and responsibilities for parkland development under Option 1.

#### **DEVELOPER’S MINIMUM RESPONSIBILITIES**

- Planning Documentation
- Draft Plan of Subdivision (Program Development, Facility Fit Plan, Draft Plan Conditions)
- Subdivision Agreement
- Drawing Submissions (Minimum Park Requirements - see Section 2.1)
- Construction and Assumption (Minimum Park Requirements - see Section 2.1)

#### **TOWN RESPONSIBILITIES**

- Facility Fit Plan for Future Park
- Capital Budgeting
- Park Design Development (Public Engagement, Concept Design, and Functional Plan of Facilities)
- Detailed Park Design (Construction Drawings and Specifications)
- Tendering
- Park Construction

Detailed expectations for each of the above responsibilities will be determined in the early stages

of the Town’s planning and development review process, based on project specific requirements, objectives, and budgets for park development.

## **2.5 OPTION 2: DEVELOPER DESIGN-BUILD**

Under Option 2, the developer retains designers and contractors to design and implement the parkland as a component of the developer’s responsibilities under the subdivision and parkland agreements. As this is done in advance of the development, the design is completed in absence of end-user input. As such, the design program is based on the Town’s guiding planning documents, contemporary recreational trends, anticipated needs/amenities defined by the Town, and general best practices.

The advantage of the developer design-build approach is that parks can be completed early in the implementation of a new subdivision, to deliver usable parks and recreational amenities to early residents. Furthermore, the developer’s early investment in parks can serve to present a complete neighbourhood product to potential homebuyers to drive sales.

Option 2 is available only if both the developer and Town agree that the developer will undertake the design and construction of the park on behalf of the Town. Such an option may be negotiated with the Town if it is deemed advantageous for the subdivision developer and does not impose undue additional administrative or operating costs on the municipality.

Through this option, the Town re-imburses the developer with the development charges collected by the Town for park development following the timeframes, re-payment structure, and terms of the Town’s parkland development agreement.

The following provides a general summary of the roles and responsibilities for parkland development under Option 2.

## DEVELOPER'S RESPONSIBILITIES

- Planning Documentation
- Draft Plan of Subdivision (Program Development, Facility Fit Plan, Draft Plan Conditions)
- Subdivision Agreement
- Park Design Development (Concept Design and Functional Plan of Facilities)
- Detailed Park Design (Construction Drawings and Specifications)
- Tendering
- Parkland Development & Financing Agreement
- Park Construction and Assumption

Detailed expectations for each of the above responsibilities will be determined in the early stages of the Town's planning and development review process, based on project specific requirements, objectives, and budgets. At this time, appropriate legal agreements and financial reimbursement, reporting, and accountability/ transparency mechanisms shall be agreed upon prior advancing the Developer Design-Build option (Option 2).

## 2.6 OPTION 3: NO PARK BLOCK

In some instances, the provision of parkland within a development is not desirable and the Town may choose cash-in-lieu of the required parkland dedication. This situation could result from a variety of factors, such as:

- Sufficient parkland is already available nearby to accommodate residents' needs;
- Town identifies a more appropriate or accessible location for parkland;
- Usable/functional land is not available on the development site for parkland purposes (not large enough, not of sufficient quality, not tableland, etc.);
- Taking parkland from a development site may render the development not economically feasible, as a result of the reduction in dwelling units (smaller developments).

As a result, the Town may find it preferable to use the cash-in-lieu to expand or enhance existing parks directly serving the area.



# PART 3 PARK DESIGN REQUIREMENTS

## 3.1 GENERAL

The following section identifies the key design standards, regulations, guidelines, and best practices that affect parkland development and sets minimum performance-based requirements for various park development works, recreational amenities, and supporting features.

This section is not intended to be comprehensive to all possibilities but defines criteria for elements that are common to most Wasaga Beach parkland, particularly at Neighborhood Park and Parkette levels.

Community Parks and Urban Plazas tend to be more complex and include public facilities (e.g., arenas, sports complexes, community centres, etc.), outdoor sports fields and courts for different competitive levels, as well as waterplays, skateboard parks, BMX courses, outdoor skating rinks, and other specialized public amenities. Such features will be reviewed on a project-by-project basis and design parameters supporting each facility will be guided through stakeholder consultation and preferences, contemporary best practices, and design guidance provided by specialists with specific expertise in the relevant works.

## 3.2 PARKLAND DESIGN STANDARDS

- Park development works, servicing and grading shall be designed and constructed in accordance with the requirements of the Wasaga Beach Engineering Standards (WBES), where applicable;
- All building and structures within parkland shall be designed and constructed in accordance with the Ontario Building Code (OBC);
- Design and implementation of all aspects of public parks shall be in full compliance with the

Accessibility for Ontarian with Disabilities Act (AODA) - Design of Public Spaces Standard;

- Design and implementation of children’s playspaces, playgrounds, and water play areas shall be in full compliance with the Canadian Standards Association’s (CSA) CAN/CSA-Z614-20: Children’s Playground Equipment and Surfacing (or latest edition);
- Further to the above, children’s playspaces shall comply specifically with Annex H of CAN/CSA-Z614-20) ‘Children’s Playgrounds and Equipment that are Accessible to Persons with Disabilities’;
- Park design shall consider ISO 22341:2021 ‘Security and Resilience - Protective Security - Guidelines for Crime Prevention Through Environmental Design (CPTED).

## 3.3 PEDESTRIAN CIRCULATION & DESTINATIONS

Pedestrian routes within parks not only serve to provide walking and bicycle access, but also establish an overall spatial structure that unifies and connects various principal and secondary spaces. Beyond their functional role, they are also recreational amenities in of themselves, serving as stable running, walking, and biking surfaces for physical exercise.

The choice of surface materials, widths and grades for pedestrian routes must be well-considered in context of their anticipated use, recognizing that they are essential to providing necessary access to amenities and spaces for users of varying ages and abilities.

The following are some key considerations when planning parkland pedestrian systems:

1. Pedestrian routes should be designed as barrier-free ‘Exterior Paths of Travel’ in accordance with AODA, particularly walkways that connect surrounding neighbourhood

sidewalks or parking lots to park amenities, spaces, or features.

2. It is acknowledged that not all walkways and trails within a larger park setting can be designed for accessibility as a result of grade constraints and sensitive environmental conditions, particularly in natural areas. These routes should be designed as 'Recreational Trails and Beach Access Routes' in accordance with AODA and signed appropriately.
3. All park areas accessible to the public should be designed in consideration of creating safe and comfortable environments for all users. Designs should consider visibility and surveillance and be approached to eliminate or reduce factors that tend to lead to crime, or the fear of crime, within a built environment, in accordance with CPTED principles.
4. Pedestrian routes should directly connect with opens space trails and municipal sidewalk systems surrounding or adjacent to the park.
5. Pedestrian gateways should be established at trail and sidewalk routes entering the park and at parking areas. Gateways should clearly demarcate pedestrian routes and should be enhanced with plantings, signage, and/or wayfinding features.
6. Walkways and trails should connect key amenities, spaces and features within the park and provide barrier-free access.
7. Walkways and trails should be laid out to provide spatial structure to open spaces by bordering edges. They can also be utilized to provide spatial separation between areas intended for different users or age groups (e.g., playspaces, etc.)
8. For exercise and recreational purposes, walkways and trails in large parks (circumference greater than 400m) should provide a walking/running/biking loop around the park's perimeter. Where practical, smaller loops should also be integrated at mid-points to offer a diversity of experiences and to accommodate users of various physical abilities. If constraints exist, portions of these looped systems may be substituted for sidewalks along street frontages, if required to complete the circuit.
9. Walkways and trails should be sized in consideration of anticipated user type (pedestrian, bicycle, in-line skating, etc.), frequency and volume of users, and environmental context. In general, all pedestrian routes shall have the following minimum spatial standards:
  - a) Accessible pedestrian routes: 1.5m wide
  - b) Multi-use Recreational Trails: 3.0m wide (<500 user/day) and 4.0 to 4.5m (>500 user/day)
  - c) Vertical clearance height: 3.0m
  - d) Mow strip (either side of all trails): 1.0m
10. The Town may decide that a park route is critical to year-round pedestrian connectivity and may decide to maintain such routes during winter months. All routes subject to winter maintenance shall be 3.0m wide minimum and be either asphalt or concrete surfaced.
11. Walkway and trail surfaces shall generally be concrete, asphalt, or compacted limestone screenings to ensure that a firm accessible surface is available throughout. The application of surface materials will be evaluated on a case-by-case basis, but will generally consider the following:
  - a) Concrete is recommended to highlight featured amenities/spaces (playground, central seating area, etc.), for areas of high-use and wear, and/or for urban parkettes.
  - b) Asphalt may be considered for high-use running/walking or biking trails, as they provide more energy-absorption for exercise (less joint impact) and tend to wear better than granular trails. Asphalt trails may also be utilized around playgrounds and other amenity areas in neighbourhood parks, where budgets are limited.

- c) Limestone screening surfaces are recommended for recreational trails within larger parks or in natural areas where accessibility is important, but the natural context is not conducive to concrete or asphalt.
- 12. Incorporate curb ramps and tactile walking surface indicators on a concrete base within the walkway surface at transitions between pedestrian and vehicular areas in accordance with AODA and/or the Ontario Building Code (OBC), if applicable.
- 13. Pre-cast concrete unit pavers are generally discouraged but may be considered by the Town as a decorative surface to highlight feature areas or in urban parkette settings.
- 14. Timber boardwalks, woodchip trails, or natural footpaths may be required to respond to certain environmental conditions and will be evaluated on a case-by-case basis.
- 15. Seating and other public amenities (e.g., waste receptacles, etc.) shall provide users with a choice between social and quiet/contemplative seating areas throughout the park.
- 16. For public eating areas, provision should be made for accessible tables/picnic tables (on hard surfacing) with sufficient space for manoeuvring.
- 17. Bike racks should be provided at each play space, activity hub, or destination facility. The quantity is to be determined by the Town on case-by-case basis (5 bike spaces minimum).
- 18. For children’s spaces, bike racks should be self-supporting wheel-in racks, as opposed to bike rings.

### 3.4 PARKING

On-site parking is typically provided for community parks, but on occasion, can be required for neighbourhood parks, depending on local conditions and amenities provided. Typically, neighbourhood

parks are serviced by on-street parking from adjacent municipal road corridors.

Parking accommodations will be determined based on available park facilities and amenities. Drop-off areas, bus parking, and other such accommodations, may also be required on a park specific basis.

As a general guideline, the following parking allocations are provided for various common park uses (Source: Time-Saver Standards for Landscape Architecture (2nd Edition), Charles W. Harris & Nicholas T. Dines, McGraw-Hill Publishing Company 1998):

Park Use	Parking Allocations
General Passive Use	15 spaces
Badminton	2 spaces/court
Baseball	15+ spaces/diamond for players plus an additional 20 spaces/diamond to accommodate spectators (35+ spaces total/diamond)
Lawn Bowling	2 spaces/green lane
Croquet	2 spaces/court
Football, touch	10 spaces/field
Shuffleboard	2 spaces/court
Softball	15 spaces/diamond
Tennis (singles)	2 spaces/court
Tennis (doubles)	4 spaces/court
Volleyball	6 spaces/court

Accessible parking quantities, type, layout, and signage shall be provided to comply with AODA - Design of Public Spaces Standards.

### 3.5 CHILDREN'S PLAYSPACES

Designs prepared for playgrounds, playspaces, and waterplay areas should demonstrate a comprehensive understanding of how children play, as well as consider the physical needs of both children and caregivers. This will involve the development of engaging spaces and environments further to the selection of play equipment and furnishings.

In this regard, careful consideration should be given to the nature of children's play, which generally ranges between the following Types of Play:

#### ACTIVE PLAY

Moving, running, jumping, climbing, sliding, twirling, swinging, spinning, rolling around

#### ARTISTIC PLAY

Drawing, crafting, painting, colouring, writing, singing, drumming, dancing

#### CREATIVE PLAY

Dress-up, pretend play, props, manipulating, building, molding, sifting, pouring, scooping, stacking, combining, altering

#### GAMES PLAY

Organizing, communicating, collaborating, and following rules

#### SENSORY PLAY

Touching different textures, smelling, hearing music and sounds, tasting edible plants and fruits, seeing different perspectives and angles, as well as shapes and colours

#### SOCIAL PLAY

Talking, sharing, cooperating, taking turns

#### REFLECTIVE PLAY

Watching, resting, reflecting, thinking, daydreaming

As the above types of play are generally consistent across all children (regardless of age or physical/cognitive ability), this approach enables a more inclusive approach to 'accessibility'. It focuses on the creation of shared play experiences/features,

as opposed to accommodating differences and disabilities.

Specific minimum requirements are as follows:

1. Playspaces should be located within public parks to be:
  - a) clearly visible from adjacent streets, neighbouring uses, and neighbouring residents to provide passive surveillance.
  - b) along secondary pedestrian pathways, to ensure that primary pedestrian routes do not separate adult supervision areas from playspaces.
2. At a minimum, each playground should incorporate separated play spaces that offer a range and diversity of play types for the following groups:
  - 1 Tot Area: 0 - 5 years
  - 1 Youth Area: 5 - 12 years
  - 1 Swing Area: Adult swings, toddler swings, accessible swings, basket swings, etc.
3. Tot and Youth play structures/areas may be combined for smaller playgrounds, as approved by the Town.
4. Inclusive and/or accessible play features shall be integrated into the playground design and where practical, play equipment should include features that can be used by children with attending adults (e.g., double width slides, etc.)
5. Surface treatments that promote accessibility and inclusiveness for playground users and caregivers should be prioritized.
6. To minimize costs, playground safety surfacing should not be significantly oversized relative to the required fall protection zones for playground structures, unless design merits and approved by the Town.
7. Playgrounds with loose-filled safety surfacing shall be graded generally flat and be contained with a curb to reduce migration and mixing of safety surface material. The top of curb and adjacent finished grade should be 100mm to

150mm higher than the playground safety surface for containment.

8. All playgrounds shall provide a minimum of 1 accessible ramp to allow access into the play space. The ramps should extend to the bottom of the playground pit to ensure that access is maintained should loose safety surface material becomes displaced or migrate.
9. To prevent flooding of playgrounds, safety surfacing may require a drainage under-layer and be sub-drained to an appropriate surface outlet or storm sewer connection, where soils are conducive to compaction and water retention. Requirements for a sub-drainage system will be determined by the Town in consultation with the playground design consultant.
10. Where sub-drainage is required, the playground subgrade shall be sloped at a minimum of 1% and crowned to ensure that sub-surface drainage can access the sub-drain system. Sub-grades are to be maintained/repared throughout construction, particularly following the sub-drain and footing installations.
11. Install wear mats under swings and slide exits, 100mm below the top of the safety surface and anchored in place as per manufacturer's specifications.
12. Playgrounds shall include safety signage indicating the appropriate age range for the use of the equipment and contact information for the Town regarding maintenance and security.
13. Further to playground structures/equipment, children's playspaces should also include the following:
  - a) Consideration of all-season play, highlighting seasonal changes and providing for winter activities.
  - b) Seating areas for adults and caregivers with appropriate amenities, furnishings, and environmental considerations

(shade, wind-protection, etc.) to support supervisory and social activities.

- c) Social areas, seating and activities for teenagers and youth to provide for social interaction, showing-off, people watching, etc.
- d) Pedestrian-oriented or 'morality' lighting in unlit areas for added surveillance opportunities and to extend evening usage hours. At least one (1) light standard must be provided at playgrounds for security.
- e) Small lawn spaces near adult supervision areas for toddlers and larger lawn areas for games and active recreational use by youth.
- f) Landscaping, plantings, or structures for shade and to reduce sun and temperature exposure.
- g) Natural features, materials, and planting incorporated to add to play opportunities.





14. 'Natural Playgrounds' may also be permitted should they be deemed appropriate by the Town based on design merit and acceptance of maintenance commitments. Further to the above playground requirements, natural playgrounds should also consider the following:

- a) Design of natural play spaces shall predominantly use natural materials, landscape features, landforms, and plantings to achieve the intended uses while adhering to the requirements of CAN/CSA-Z614-20 (or latest edition).
- b) Further to achieving a diversity of play types, the play experience should be focused on interaction with natural materials and the environment and opportunities to play with loose materials (manipulative/discovery play).
- c) Activities should be spread around the entire area, allowing for diversified play, running between activities, and reduced exclusionary play (avoid single centralized piece).

- d) Play equipment provided within natural playgrounds (slides, climbers, etc.) should be integrated with landforms to manage access and grade transitions (e.g., hill-slides, web climbers secured to rock features, etc.)
- e) Topographic changes in the landform of a natural playground are beneficial (e.g., berms, stone walls, natural amphitheatres, etc.)
- f) Incorporation of nature learning is beneficial (sundials, rain gauges, nature trails, etc.)
- g) Interpretive signage should be incorporated highlighting the local environment and natural systems, as well as the natural features within the play space (butterfly garden, use of natural material, etc.)
- h) Variations in pathway materials can add to ground-level tactile experiences.



### 3.6 FACILITY SIZES & BUFFERS

When park planning, it is important to consider the relationship of facilities/amenities to each other and to surrounding properties/uses. This is particularly relevant for outdoor sports fields and courts that are lit and/or have the potential for ball spray hazards (e.g., baseball, softball, golf, etc.), or require runouts (e.g., soccer, football, rugby, etc.)

The following provides a list of typical facility sizes and setback buffers to consider when demonstrating 'Facility Fit' for parks. Actual facility footprints, layout, and buffers will be determined through consultation with stakeholders (local sports organizations/users) and design specialists and shall be agreed upon by the Town prior to preparation of the Facility Fit Plan.

FACILITY	SIZE (APPROX.)	BUFFER TO OTHER FACILITIES
Artificial Turf Field	64m x 110m	15m on all sides
Senior Soccer Field	60m x 100m	10m on sides/12m on ends
Junior Soccer Field	36.6m x 55m	5m on sides/10m on ends
Football Field	65yds x 110yds	10m on sides/5m on ends
Senior Hardball Diamond	122m x 122m	15m on all sides
Senior Softball Diamond	80m x 80m	12m on all sides
Intermediate Softball Diamond	70m x 70m	9m on all sides
Multi-use Court	29.6m x 17.24m	N/A (possibly fenced)
Basketball Court	29.6m x 17.24m	N/A
Basketball Half-Court	14.8m x 8.62m	N/A
Tennis Court	18m x 36m	N/A (fenced)
Bocce Courts (set of 2)	13m x 37m	N/A (fenced)
Lawn Bowling Green	40m x 40m	N/A (fenced)
Playground (Neighbourhood)	500m <sup>2</sup>	N/A
Playground (Community)	1,000m <sup>2</sup>	N/A
Waterplay/Splash pad (Neighbourhood)	500m <sup>2</sup>	N/A
Waterplay/Splash pad (Community)	1,000m <sup>2</sup>	N/A
Skateboard Park (Community)	930m <sup>2</sup> to 1115m <sup>2</sup>	N/A
Skateboard Park (Neighbourhood)	185m <sup>2</sup>	N/A
Bike Park	1.50 ha	N/A
Off-leash Dog Park	100m x 100m	15m+ buffer
Outdoor Ice Rink	0.08ha	N/A
Community Garden Plot	0.05 ha	N/A
Fieldhouse (storage/change/washrooms)	12m x 7.4m	N/A
Tennis Clubhouse	55m <sup>2</sup>	N/A
Washroom Building (standalone)	45m <sup>2</sup>	N/A
Storage Building (stand-alone)	55m <sup>2</sup>	N/A

Where sports facilities are located adjacent to private properties or road corridors, an additional 10m buffer (minimum) shall be applied to the above buffers. Buffer requirements will be assessed on a project specific basis and will be confirmed or increased based on perceived conflicts, hazards, or sensitivity of neighbouring uses.

### 3.7 OUTDOOR SPORTS FIELDS & DIAMONDS

Natural turf outdoor sports fields support local recreational and competitive league sport organizations, such as soccer, baseball, softball, rugby, football, and ultimate frisbee. These activities are important to the health and development of the community's youth and the physical and social well-being of adults.

Depending on the level and competitiveness of play, outdoor sports fields range greatly in requirements for design, construction, supporting servicing and amenities, and associated capital and operational costs.

The 'Athletic Field Construction Manual' (latest edition) prepared by the Sports Turf Association sets the accepted standard for the categorization, specification, field evaluation, and layout/dimensioning of natural turf sports fields in Ontario. This manual establishes 5 categories of field construction ranging from national/international competitive use (Category 1) to fields intended for regular casual use by neighbourhood residents (Category 5).

Further to retaining a sports field specialist to guide the design and development of outdoor sports fields, all field sizing and layout, specifications, and details should be based on one of the five field categories, as determined by the Town and specified in accordance with the 'Athletic Field Construction Manual'.

Further to the above, specific minimum requirements are as follows:

#### NATURAL TURF FIELDS

1. For higher quality sports fields, the contractor may be responsible to retain a certified sports field soils specialist/agronomist to test and evaluate the native topsoil, make recommendations for blending/amendment to meet the desired specifications (Category 1 to 5), and to confirm compliance prior to laying the rootzone material.
2. If rootzone mixes are blended/amended on-site utilizing stockpiled native topsoil, then screening and blending must be completed with purpose-intended equipment designed for such applications, to create a consistent and even rootzone blend. Blending with 'buckets' from excavators or other such equipment will not be accepted.
3. If rootzone mixes are imported and blended off-site, the supplier's testing reports are required to confirm compliance with the relevant rootzone specifications outlined in the Athletic Field Construction Manual.
4. All rough and finish grading for sports fields shall be completed with a track type blade using an automatic laser-controlled dual slope or GPS guided system, operated by an experienced operator.
5. Sub-drain trenching for sports fields shall be completed using automatic laser-controlled or GPS guided equipment capable of maintaining a maximum variance of +/- 25mm in the grade line and operated by an experienced operator. Trenching machinery shall be capable conveying excavated materials for removal from site without spillage onto adjacent turf areas.
6. All other machinery used for sports field construction will be equipped with low compaction flotation tires and no equipment will be permitted on fields when saturated.
7. Sub-drains shall be wrapped in a knitted geotextile sock only where surrounding soil material contains greater than 50% silt plus very fine sand, as determined by laboratory



analysis or as recommended by the soil agronomist.

8. Sod for sports fields shall be 1 Number One Kentucky Bluegrass Sod: grown from a minimum mixture of three (3) Kentucky Bluegrass cultivars recommended for sports turf areas. Sod cultivar content shall be approved by the Town prior to placement.
9. For sod intended for rootzone mixtures with a sandy loam/loamy sand composition, sod shall be grown in a soil with a sandy loam texture on the U.S.D.A. Soil Textural Triangle.

### BASEBALL INFIELD

1. Infield mixes shall be purpose-intended granular products mixed specifically for baseball and softball uses. Examples include 'Standard Ball Park Mix' by Hutchinson Sand Mixes (lower-end) or a clay-based infield by Marco Clay (higher-end).
2. Stone dust or limestone screenings shall not be used for infields unless otherwise approved by the Town.

### 3.8 SPORTS FENCING & AMENITIES

1. Baseball and softball backstop, foul line, and outfield fencing, as well as all sport court fencing (tennis, pickle ball, multi-court, etc.) shall be in accordance with relevant Ontario Provincial Standard (OPS) specifications for chain-link fencing and designed appropriately for the given facility.
2. Backstop fencing and batter's cages shall be welded structures and should be designed and stamped by a structural engineer licenced in the province of Ontario. Contractors should also submit shop drawings for backstop fencing and batter's cage fabrications for approval by the design engineer and Town.
3. Mesh for baseball, softball, and sport courts shall be placed on the inside of the facility, towards the play environment.
4. Backstop fencing and batter's cages shall have 38mm mesh fabric to prevent climbing and be

made from 6-gauge fabric to minimize the potential of high-impact deformation.

5. Sport court fencing, which tends to taller, should also use 38mm mesh fabric to prevent climbing but can be made from standard 9-gauge fabric.
6. All gates for sports facilities shall be welded and furnished with galvanized malleable iron hinges, latch and latch catch, with provision for a padlock. Access gates shall open outward away from the play environment, shall be self-closing, and shall have a self-latching device.
7. Sports furnishing, goal posts, and nets shall be selected to best suit the intended facility type, volume of use, and project budget with input and approval from Town staff. Furnishings may include player benches, bleachers, soccer goals/nets, football goosenecks, tennis net/posts, etc.

### 3.9 PLANTING & LANDSCAPE

Trees, shrubs, and groundcovers shall be planted in parkland to rehabilitate lost or disturbed forested areas, buffer or support existing natural landscapes, enhance community aesthetics, and to provide improved micro-climactic conditions for park users (e.g., shade, windbreaks, controlled snow drifting, etc.)

Specific minimum requirements are as follows:

1. Selected tree species should be urban tolerant, hardy, low maintenance, reasonably resistant to disease and pests, and suitable in size, form, and structure for their given environment.
2. The plant hardiness zone in the Town of Wasaga Beach is 6a. Native soils in Wasaga Beach are also typically sandy and species selected should consider these soil conditions.
3. A mixture of coniferous and deciduous trees should be planted with sufficient species diversity to minimize the potential for species specific mortality from pests, disease, or changing climatic conditions. To ensure diversity, the plant palette should include no

more than 20% of one tree genus and 10% of one tree species.

4. Emphasis should be given to native species to replace, support, and enhance local forest systems. Non-native non-invasive species will be acceptable in areas where urban conditions, salt-use, and other maintenance practices may create unfavourable conditions for the survivability of native species (e.g., adjacent to parking lots, etc.)
5. Horticultural shrub and perennial plantings requiring a medium to high level of maintenance are generally discouraged, as they do not add value in restoring the park's natural plant communities and require additional resources and budget to maintain. However, such decorative feature plantings would be deemed appropriate at park entrances, gateways, or public congregation areas and will be considered by the Town based on design merit.
6. All plantings in a park shall be located and sized in consideration of public safety, visibility, and surveillance, and should demonstrate consideration of CPTED principles.

# PART 4 TECHNICAL DESIGN STANDARDS

The following section is intended to define minimum technical standards for parkland development. These standards establish a baseline of quality and expectations for the design, specification, detailing, and construction of park amenities and features.

As such, applicants and consultants involved in park development projects, whether advanced by the Town or the developer, shall ensure that they are familiar with the most current version of the technical standards and that all design submissions meet or exceed requirements.

Higher standards will be permitted at the request of the applicant on a case-by-case basis, following review and approval by the Town.

Technical standards in this Section shall be designed, specified, and constructed in accordance with the applicable Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Details (OPSD) – latest edition, unless otherwise noted.

## 4.1 TEMPORARY CONSTRUCTION FENCING

All parkland that is accessible to the public shall be protected and enclosed during construction utilizing temporary construction fencing. The project site, materials, and equipment shall be secured from public access and temporary fencing shall be maintained as an effective barrier throughout construction.

All playspaces and playground equipment installed prior to completion (or formal playspace certification) shall be secured with construction fencing in accordance with Section 8.3 of CAN/CSA-Z614-20 (or latest edition). Construction fencing shall be removed only after playgrounds are certified as compliant with CAN/CSA-Z614-20 by a third-party CSA reviewer and a Substantial Performance Certificate has been issued, unless otherwise directed by the Town.

Specific minimum requirements are as follows:

1. Construction fencing shall be a minimum of 1.2m high orange plastic fencing, secured with wire ties to heavy gauge T-bars spaced every 2.4m O.C.
2. 1.8m high modular metal construction fencing is recommended to enclose unopened and uncertified playgrounds, or other areas of high public risk, as required by the Town.
3. Construction fencing shall be erected prior to commencing any work and removed upon completion of the works, following approval by the Town.

## 4.2 SEDIMENT & EROSION CONTROL

Prior to clearing, grubbing, stripping or removal operations, erosion and sediment control measures shall be installed to control erosion and to protect waterways. Typical methods utilized are heavy duty-silt fence barriers, straw bale flow check dams, mud mats, erosion control blankets, etc. The location and type of measures utilized is site specific and shall be determined by the professional responsible for the park design (engineer, landscape architect, etc.)

Where required, siltation control measures shall be erected prior to commencing any work and shall not be removed until after restoration, groundcover, and landscaping are established, and following approval by the Town.

Specific minimum requirements are as follows:

1. Silt/sediment fence shall be in accordance with the Town of Wasaga Beach Engineering Standards. Light duty silt fence will not be accepted.
2. Mud and debris tracked onto any road, parking area, walkway, trail, or other surface, both on and off the site, shall be immediately cleaned up to the satisfaction of the Town.

### **4.3 TREE PRESERVATION & REMOVALS**

All efforts should be made to preserve existing healthy trees and vegetation communities within park development blocks. No parkland trees shall be removed without the written permission of the Town.

Specific minimum requirements are as follows:

1. An Arborist Report and Tree Inventory/Preservation Plan may be required by the Town as a component of the pre-design studies to ensure that design work for the park is completed in consideration of tree preservation objectives and required construction restrictions.
2. Tree Inventory/Preservation Plans shall be prepared in accordance with the Town's Engineering Standards.
3. All arborist reports and inventories shall be prepared by a certified ISA Arborist.

### **4.4 TOPSOIL STRIPPING, SCREENING, & STOCKPILING**

Prior to grading operations, native topsoil/organic material shall be stripped from all disturbed areas to full depth and screened and stockpiled where suitable for re-use.

Specific minimum requirements are as follows:

1. Strip topsoil when dry enough and in a manner to prevent contamination with subsoil material. Do not handle topsoil while in wet or frozen condition or in any manner in which soil structure is adversely affected.
2. Native topsoil intended for re-use shall be stockpiled and tested in accordance with the Town's Engineering Standards to ensure that the fertility and composition are suitable for use in a public park. Test results shall be submitted to the Town for approval prior to the park development.
3. Native topsoil shall be amended to conform with the Engineering Standard's specifications for 'Topsoil', based on testing laboratory recommendations.
4. Topsoil for general parkland applications shall be screened through a 25mm (1") size screen and be reasonably free from debris, sub-soil, clay lumps, roots and stones over 25mm diameter, and coarse vegetative material occupying more than 2% of soil volume.
5. Where applicable, stockpile sufficient quantities of screened/amended topsoil to ensure enough is available to complete the specified topsoil and finished grading works to the required compacted depths. Once screened topsoil material has been approved for use, the stockpile must not be changed without further approval by the Town.
6. Dispose of surplus or unsuitable stripped topsoil and all topsoil waste/by product off-site in accordance with provincial regulations.

## 4.5 EARTHWORKS & ROUGH GRADING

All earthworks and rough grading for general park areas shall be in accordance with the Town's Engineering Standards and the recommendations of the geotechnical engineer, where applicable.

Specific minimum requirements are as follows:

1. Cut and fill native sub-grade and supply, haul, place, shape, and compact imported fill material as required to achieve compacted sub-grade elevations.
2. Provide suitable imported structural fill below all hard-surface areas, including pathways, paved recreation facilities, and parking areas within the park.
3. Imported fill material requires geotechnical confirmation/certification regarding the source of the material and the suitability of its intended use. If the material source is from any site other than a licensed source pit/quarry, then the geotechnical certification must also indicate that the material has been tested for contamination and has been confirmed to be "clean fill" suitable for publicly accessible sites.

All soils to meet O.Reg 406/19. Additional supporting and informative references in terms of imported fill can be reviewed at the following website: <https://www.ontario.ca/page/rules-soil-management-and-excess-soil-quality-standards>.

4. If imported fill is supplied from a licensed pit/quarry, it shall be Select Subgrade Material (SSM) as per Ontario Provincial Standards (OPS). Provide source and sample of imported SSM fill and obtain approval from the Town prior to delivery.
5. Limestone screenings shall not be accepted as imported fill in parkland, as it changes soil pH and alters availability of nutrients, which can negatively affect existing and new plant material.
6. Fill shall be placed in layers not exceeding 300 mm thick and shall be thoroughly compacted to 95% Standard Proctor Maximum Dry Density (SPMDD) minimum, and/or as approved by the geotechnical engineer. Engineered fill shall be placed and compacted under direct supervision and testing by a geotechnical engineer. Test results shall be submitted to the Town for record.
7. Slope rough grade away from existing features and grade slopes and berms to a maximum of 4:1 for ease of maintenance.
8. Areas intended for turf-grass (except purpose-designed athletic fields) shall have a minimum surface grade of 2.0% for drainage purposes.
9. Swales shall be graded at 2.0% along their length whenever possible, however, a minimum gradient of 1.0% will be accepted over short distances in native sandy soils where constraints exist or to avoid overly steep side slopes for swales.
10. Although not preferred, swales with gradients less than 1.0% will be considered in unavoidable circumstances, provided that a 150mm diameter pipe sub-drain is provided, as follows:
  - a) Sub-drains shall be perforated, corrugated plastic pipe with geotextile placed at 0.5 m offset from property line at a minimum.
  - b) Sub-drains shall be bedded in a 300 mm x 300 mm clear stone trench below the swale and shall conform to applicable OPS specifications.
  - c) In such cases, the subdrain is to connect to a positive outlet (e.g., CB, etc.)



11. Tolerances: all earth grade surfaces shall on completion be shaped to the grades and cross sections specified within the following vertical tolerances of established grade over a 3m straightedge (not uniformly high or low):
  - a) General landscape areas, embankments, ditches, and swales: +/-25mm
  - b) Concrete, asphalt, and granular sub-surfaces: +/- 10mm
  - c) Playground subsurface: +/- 10mm
  - d) Sports Fields and play courts +/- 10mm
12. Finished rough-grade surfaces to be free of debris or stones larger than 25mm diameter.
13. Dispose of surplus/unsuitable fill or deleterious material off-site in accordance with provincial regulations.
14. For standards and guidelines related to grading of outdoor sports fields, refer to Section 3.

#### **4.6 ARMOURSTONE RETAINING & SEAT WALLS**

Armourstone retaining walls are common in park settings to retain low grade transitions (0.5m - 1.5m on average) and offer a natural aesthetic. Armourstone is also considered a locally sourced and readily available natural material.

For this reason, armourstone is also often used as informal seating or edging in many park environments, either in free-standing single units or in rows. As armourstone has an uneven surface and does not offer back support, it should only be used for secondary seating in support of nearby primary seating, such as benches and picnic tables.

Armourstone retaining walls 1.0m high or greater shall be designed, stamped, and certified by a structural engineer licensed in the Province of Ontario.

Specific minimum requirements are as follows:

1. Armourstone retaining/seat walls shall be firmly set on a granular base so that units exhibit no tendency to rock or slide when lateral force is applied and shall be buried 100mm - 150mm below grade.
2. Non-woven geotextile shall provide a barrier between the stone and the backfill to prevent erosion of soil/granular backfill material through the stone seams.
3. Armourstone seat walls shall ideally be set approximately 400mm - 500mm high to provide a comfortable seating height for both adults and children.
4. Retaining walls shall be stepped appropriately to match grading requirements.
5. Armourstone blocks shall be:
  - a) square cut quarried limestone, split face, with uniform dark grey colour, exhibiting split faces or naturally weathered faces, with reasonable flat bottom, top and sides;
  - b) show no excessive drill or machine marks and shall be placed with best face outside, so the wall presents an integrated uniform appearance;
  - c) appropriately sized to suit project requirements.
6. Where seams are required to be tight (e.g., playspaces, outdoor classrooms, etc.) stones shall be cut to create tight seams. In these locations, crevices and openings between stones shall not exceed 25mm.
7. Granular base shall be 150mm Granular 'A' compacted to 98% SPMDD, unless otherwise recommended by a geo-technical engineer.

8. Geo-textile shall be Terrafix 270R or approved equal.
9. Where upland surface drainage or groundwater conditions warrant, sub-drainage may need to be incorporated behind the wall to alleviate groundwater build-up.

#### 4.7 GRANULAR WALKWAYS & TRAILS

Typically, parkland trails and walkways will be 3.0m wide granular surface trails, constructed and signed in accordance with the Town's Engineering Standards. Alternative widths may be considered when spatial conditions are constrained or when supported by site specific project objectives, at the sole discretion of the Town.

Specific minimum requirements are as follows:

1. Granular walkways and trails shall be limestone screenings over a Granular 'A' base, placed on a non-woven geotextile layer as per the Town's Engineering Standards, unless otherwise recommended by a geo-technical engineer.
2. Provide curb ramps and tactile walking surface indicators on a concrete base within the granular surface, at transitions between pedestrian and vehicular areas, in accordance with AODA and/or the Ontario Building Code (OBC), if applicable.
3. Maximum grade for granular walkways and trails is 8% to reduce the potential of surface erosion.

#### 4.8 CONCRETE WALKWAYS & TRAILS

Concrete surfaces are suitable for urban parks where concrete materials match the context and aesthetic of the space (e.g., urban plazas, parkettes, etc.) Furthermore, concrete surfacing should be utilized for high traffic areas in all parks, such as playgrounds, washrooms, and other amenities.

In consideration of those using assistive mobility devices (e.g., wheelchairs, walkers, etc.) or those pushing strollers, concrete jointing should be sawcut and all required tooling should be troweled flat to provide a smooth user experience. However, the edge of concrete walkways and slabs should have tooled edges to provide tactile relief detectable by canes or other similar assistive devices.

Specific minimum requirements are as follows:

1. Concrete walkways and trails shall be 150mm cast-in-place (CIP) concrete on a 150mm Granular 'A' base, unless otherwise recommended by a geo-technical engineer.
2. Concrete surfaces shall meet the following criteria:
  - a) 32 MPa compressive strength, C-2 exposure at 28 days with 7% +/- 1.5% air entrainment, measured at point of placement in accordance with CAN/CSA-A23.1.
  - b) Finish: light broom finish, perpendicular to the general direction of pedestrian travel.
  - c) Expansion Joints: full depth expansion board with joint edges tooled and then trowelled flat for a smooth accessible surface. Raised tooled joint edges will not be accepted. Expansion joints shall be placed to suit design parameters and where concrete abuts adjacent concrete surfaces, curbs, and building foundations.
  - d) Control Joints: saw cut to 1/4 depth of slab and spaced to suit design parameters (between 1.5m and 3.0m O.C. based on slab proportions and to achieve relatively square panels). Saw cut joints shall be by wet diamond blade, commencing 8 to 24 hours after concrete placement, as soon as the concrete surface has hardened sufficiently to resist dislodging aggregate while cutting.

- e) Slab Edges: outside edges of concrete walkway shall be tooled.
- 3. Where subsurface soils are poor or questionable, or where conditions merit, welded wire mesh (WWM) shall be incorporated into the slab design. Size of mesh and slab placement depth shall be determined by the design consultant based on specific design objectives and conditions.
- 4. Granular base shall be Granular 'A' compacted to 98% SPMDD, unless otherwise recommended by a geo-technical engineer.
- 5. Provide curb ramps and tactile walking surface indicators (TWSI) at transitions between pedestrian and vehicular areas in accordance with AODA and/or the Ontario Building Code (OBC), if applicable.
- 6. Tolerances: all work shall be subject to the following vertical tolerances of established grade over a 3m straightedge (not uniformly high or low):
  - a) Granular base:  $\pm 10\text{mm}$
  - b) Concrete surface (after texturing):  $\pm 6\text{mm}$
  - c) Concrete thickness:  $\pm 8\text{ mm}$

#### 4.9 ASPHALT WALKWAYS & TRAILS

Asphalt surfaces may be considered for high use running/walking or biking trails, as they provide more energy-absorption for exercise (less joint impact). They may also be considered in other park applications where grades are too steep for granular surfaces (or where water crosses) or where hard surfacing is desired, but budgets are constrained.

Specific minimum requirements are as follows:

- 1. Asphalt walkways and trails shall be 50mm HL3 hot mix asphalt on 200mm Granular 'A' base, unless otherwise recommended by a geo-technical engineer.
- 2. Hot mix asphalt shall be continuously rolled to achieve a density not less than 97% Marshall Bulk Density.
- 3. Granular base shall be Granular 'A' compacted to 98% SPMDD, unless otherwise recommended by a geo-technical engineer.
- 4. Provide curb ramps and tactile walking surface indicators (TWSI) on a concrete base within the asphalt surface, at transitions between pedestrian and vehicular areas, in accordance with AODA and/or the Ontario Building Code (OBC), if applicable.
- 5. The finished surface shall be of uniform texture and shall be free of segregation, flat spots, oil spills or other defects.
- 6. Tolerances: all work shall be subject to the following vertical tolerances of established grade over a 3m straightedge (not uniformly high or low):
  - a) Granular base:  $\pm 10\text{mm}$
  - b) Asphalt surface:  $\pm 5\text{mm}$

#### 4.10 CHAIN-LINK FENCING

Chain-link fencing shall be provided to separate privately owned lands from municipally owned lands/blocks as required in the Development Agreement. Such fencing shall be constructed wholly on municipal property.

Park frontages along streets and boundaries shared with schools, open spaces, or stormwater management facilities do not require fencing, unless required by the Town.

Specific minimum requirements are as follows:

1. Chain link fencing and gates shall be 1.5m black vinyl fencing with a top rail per OPSD 972.130 and shall include all required posts, concrete footings, bracing, rails, fence fabric, lockable gates, and all hardware, attachments, and accessories.
2. Remove debris and correct ground undulations along fence line to obtain smooth uniform gradient between posts and provide minimum clearance between bottom of fence and ground surface of 25mm.
3. Chain link fencing and gates shall meet the following requirements:
  - a) The mesh fabric shall have 50mm diamond-shaped openings made from 9-gauge wire before vinyl coating, unless otherwise indicated (e.g., sport facilities).
  - b) Terminal posts shall be a minimum of 89mm (3 ½") OD pipe, line posts 60mm (2 3/8") OD pipe and rails 43mm (1 7/8") OD pipe.
  - c) All piping shall be Schedule 40, galvanized steel.
  - d) Mesh fabric to be installed on inside face towards park.
4. Concrete footings shall be as per OPSD 972.130.
5. Where ground conditions prevent the creation of smooth sided augured post holes, footings shall be poured into sono-tubes to full depth. Voids around the outside of the form shall be filled with compacted limestone screenings.
6. Private access gates are not permitted through Municipally owned fences, other than as stipulated in the Town's Corporate Gate Policy.

#### 4.11 PLAY STRUCTURES

Play equipment elements, structures, and layout shall be reviewed and approved by the Town, based on recommendations provided by the design landscape architect and supplier, conveyed through functional plans, detailed budget estimates, and/or a play equipment program document.

Specific minimum requirements are as follows:

1. Play structures shall conform to the requirements of CAN/CSA-Z614-20: Children's Playground Equipment and Surfacing (or latest edition) and the Accessibility for Ontarian with Disabilities Act (AODA) - Design of Public Spaces Standard.
2. All prefabricated play structures shall be installed by the manufacturer (or their trained sub-contractors) in accordance with the manufacturer's specifications and layout plans.
3. Playground equipment may be installed on concrete pier footings or steel stringer footings.
4. Submit the following to confirm regulation compliance and for Town record:

- a) CSA compliant layout plans for the play structures prepared by the manufacturer/supplier, including all required dimensions, fall protection zones, and no-encroachment zones.
- b) Engineered fabrication drawings for each playground product, outlining the materials, colours, options for approval by the Town prior to fabrication.
- c) Product information, specifications, installation instructions and a detailed part list as required by CAN/CSA-Z614-20 - Clause 8.1.
- d) Manufacturer's certification of structural integrity of the equipment in accordance with CAN/CSA-Z614-20 - Clause 9.1.
- e) Maintenance data for care and cleaning of the equipment.
- f) Following installation, the manufacturer/installers shall submit a signed 'Certificate of CSA Compliance' formally confirming that the design, fabrication, and installation of all play structures are in full compliance with CSA. Compliance must be provided by a third-party CSA inspector.

#### 4.12 CONCRETE PLAYGROUND CURB

Playgrounds with loose-filled safety surfacing shall be contained with a curb to reduce migration and mixing of safety surface material.

Specific minimum requirements are as follows:

1. Concrete play space curbs shall meet the minimum dimensional requirements of OPSD 600.110 - Concrete Barrier Curb, and shall be:
  - a) 30MPa compressive strength, C-2 exposure at 28 days with 7% +/- 1.5% air entrainment, measured at point of placement in accordance with CAN/CSA-A23.1.
  - b) Finish: Light broom finish, perpendicular to the longitudinal curb alignment.
  - c) Control Joints: Saw cut to 1/4 depth of curb thickness and spaced maximum 2.0m O.C. Saw cut control joints shall be by wet diamond blade, commencing 8 to 24 hours after concrete placement, as soon as the concrete surface has hardened sufficiently to resist dislodging aggregate while cutting.
2. Granular base shall be 150mm Granular 'A' compacted to 98% SPMDD, unless otherwise recommended by a geo-technical engineer.
3. The curb shall be depressed to accommodate a minimum of 1 accessible ramp permitting accessible entry into the playspace in an appropriate location.
4. Tolerances: all work shall be subject to the following vertical tolerances of established grade over a 3m straightedge (not uniformly high or low):
  - a) Granular base:  $\pm 10\text{mm}$
  - b) Concrete curb height (after texturing):  $\pm 6\text{mm}$

#### 4.13 SUBDRAINAGE

To prevent flooding of playgrounds, a sub-drainage system may be required under loose-filled playground safety surfacing, where soils are conducive to compaction and/or water retention, as determined by the Town. Sub-drains will drain positively to an appropriate surface outlet or storm sewer connection. Omission of the sub-drain system may be considered by the Town Engineer if supported by a report from a qualified soils consultant, in areas of native sandy material only.

Specific minimum requirements are as follows:

1. A perimeter sub-drain shall surround the playspace. The edge of the sub-drain trench shall be offset from the inside face of the playground curb by 200mm. Depending on soil conditions, linear lateral subdrains may also be required and spaced every 3.0m to 5.0m.
2. Sub-drain pipe shall conform to the following requirements:
  - a) 100mm to 150mm dia. perforated, corrugated, HDPE sub-drainage pipe (Big 'O') and fittings wrapped in a knitted sock geotextile.
  - b) 150mm to 200mm dia. non-perforated (solid) HDPE outlet drainage pipe (Big 'O') and fittings.
  - c) Appropriate fittings and rodent grates to attach to perforated polyethylene drainage pipe as per manufacturer's specifications.
  - d) Nominal pipe sizes as required by design.
  - e) Bedding, embedment and backfill material shall be 19mm diameter clear stone Type I or Type II.
  - f) Non-woven geotextile shall be Terrafix 270R or approved equal.
3. Pipes shall be appropriately sized to suit conditions.
4. Sub-drains shall be bedded in a 300mm deep (min.) x 400mm wide trench wrapped in geotextile with a 300mm fabric overlap.
5. Lay pipe on 50mm bedding material at a minimum slope of 0.5%, with maximum variation from true slope of 3mm over 3m, prior to embedment.
6. If outletting to storm sewer infrastructure, make watertight connections to existing drains or new/existing manholes and catch basins, in accordance with Town standards.
7. Provide rodent grates at sub-drain outlets where daylighting to surface ditches, swales, or ponds.
8. For standards and guidelines related to sub-drainage for outdoor sports fields, refer to Section 3.

#### 4.14 PLAYGROUND SAFETY SURFACE

Playground safety surface shall be engineered wood fiber with a minimum 300mm settled depth, meeting the requirements of CAN/CSA-Z614-20 (or latest edition). Minimum depths should be increased to conform to the fall protection requirements of adjacent play equipment/ structures and to accommodate variations in sloped sub-grade conditions.

Playgrounds with loose-filled safety surfacing shall be graded generally flat and be contained with a curb to reduce migration and mixing of safety surface material. The top of curb and adjacent finished grade should be 100mm to 150mm higher than the playground safety surface for containment.

Specific minimum requirements are as follows:

1. Playground safety surface shall be proprietary engineered wood fiber chips, purpose-intended for use in playgrounds.
2. Loose-filled safety surfacing shall be placed over a continuous non-woven geotextile with 450mm fabric overlap.
3. Where drainage is a concern in poor soils, the Town may require that engineered wood chips be placed over a 75mm thick min.  $\frac{3}{4}$ " clear stone drainage layer wrapped in a non-woven geotextile. A proprietary drainage system is also acceptable upon approval by the Town.
4. Geotextile shall be Terrafix 270R or approved equal.

In some cases, poured-in-place EPDM rubber safety surfacing may be required for Community Parks in consideration of enhanced accessibility objectives or where prevalence of drug-use may be of concern (better visibility of hazards such as needles, glass, etc.), based on design merit and where budget permits.

Where required by the Town, EPDM rubber shall be sub-drained and supplied and installed in accordance with manufacturer's specifications.

#### **4.15 SHADE STRUCTURES**

Shade is an important component of user comfort, as it provides protection from harmful UV exposure and results in micro-climatic cooling. Where mature trees are not available, it is sometimes necessary to erect structures to provide shade to support amenities. The establishment of these structures also has design benefit, as they provide a visual focus to key park areas through their architectural presence and the introduction of colour and form.

Examples of shade structures include prefabricated picnic pavilions, gazebos, trellises, shade sails, etc. These features are often incorporated into primary seating areas, as well as around children's play areas and adult supervision/social spaces.

Specific minimum requirements are as follows:

1. Prefabricated shade structures/sails and associated structural pier footings or concrete slabs shall be designed and installed, in accordance with the manufacturer's specifications and layout plans.
2. If utilizing concrete pier footings, a concrete paved surface shall be provided under the shade structure.
3. Designs shall include provisions to accommodate electrical conduit, wiring, power outlets, and light fixture attachments associated with the shade structure to meet the Town's project specific lighting and event needs.
4. If a slab footing is utilized, electrical conduit for the structure's power supply shall penetrate the concrete slab to be tight to the base of the nearest post for adequate concealment.
5. Submit the following to confirm design compliance and for Town record:
6. Engineered shop drawings for the shade structure and the structural concrete slab/pier footing, stamped by a structural engineer licenced in the province of Ontario.
7. Inspection and formal certification of the shade structure installation and structural concrete slab/pier footing installation by the manufacturer's/contractor's structural engineer.
8. All manufacturer's product information, specifications, installation instructions and maintenance data for care and cleaning of all shade structure components.
9. The contractor shall be responsible for securing necessary building permits for the shade structure, if required.

#### **4.16 SITE FURNISHINGS**

Town standard site furnishings shall be provided for all parks (e.g., benches, bike racks, waste receptacles, picnic tables, etc.) Should the park's context or design approach require unique or customized furnishings to support the desired aesthetic, alternatives may be considered by the Town based on design merit, on a project specific basis.

Similarly, where Town standards do not currently exist, selection of appropriate furnishings will be conducted in coordination with Town staff in consideration of context, costs, and maintenance requirements.

Specific minimum requirements are as follows:

1. Install site furnishing products true, plumb, and firmly anchored as per manufacturer's specifications.
2. Site furniture shall be mounted to concrete paved surfaces/pads or be secured to concrete footings.
3. All fasteners and anchors used to secure furnishings shall be stainless steel, unless alternatives are approved by the Town.
4. Submit the following to confirm design compliance and for Town record:
  - a) Engineered fabrication drawings for each site furniture product, outlining the materials, colours, and options for approval by the Town, prior to fabrication.
  - b) All manufacturer's product information, specifications, installation instructions and maintenance data for care and cleaning of all site furnishing components.
5. For parkland, the following site furnishings shall be supplied by Toronto Fabricating and Manufacturing Co., (905) 891-2516:

Bench

- Model No.: 1077-S
- Metal Finish: Hot dipped galvanized
- Colour: Primed and painted - Black
- Footing/Attachment: Secured to concrete pad with stainless steel tap-con fasteners

Bicycle Ring

- Model No.: 937SM
- Metal Finish: Hot dipped galvanized
- Colour: N/A
- Inscription: Park name to be cast into ring
- Footing/Attachment: Surface-mounted to concrete pad with stainless steel tap-con fasteners

5/10-Bicycle Rack

- Model No.: 962BR-5 and 962BR-10
- Metal Finish: Hot dipped galvanized
- Colour: N/A
- Footing/Attachment: Free-standing or surface-mounted to concrete pad with stainless steel tap-con fasteners, as required by Town

6. Specifications for supply of waste receptacles and picnic tables to be confirmed in consultation with Town staff.
7. For standards and guidelines related to sports furnishings for outdoor sports fields and courts, refer to Section 3.

#### **4.17 TOPSOIL & FINISH GRADING**

Parkland shall typically receive a minimum of 150mm of topsoil, unless deeper topsoil profiles are required by the Town for special features (pond embankments, naturalized areas, etc.)

Specific minimum requirements are as follows:



1. Imported topsoil for parkland shall be in accordance with the Town's Engineering Standards.
2. Imported topsoil shall be tested in accordance with the Town's Engineering Standards to ensure that the fertility and composition are suitable for use in a public park. Test results shall be submitted to the Town for approval prior to placement. Once topsoil material has been approved for use, the source or stockpile must not be changed without further approval by the Town.
3. Amend native topsoil with soil additives (compost, sand, bonemeal, peat, etc.) or a slow-release fertilizer treatment, where required by soil tests and agronomic analysis as per Item 4.4 of these standards.
4. Schedule placement of topsoil mixture and finish grading to permit sod and seeding operations under optimum growing conditions.
5. Tolerances: all topsoil finish grade surfaces shall be shaped to the grades and cross sections specified within the following vertical tolerances of established grade over a 3m straightedge (not uniformly high or low):
  - a) General landscape areas, embankments, ditches and swales: +/-25mm
  - b) Sports fields and courts: on a project specific basis
6. For standards and guidelines related to topsoil/rootzone for outdoor sports fields, refer to Section 3.

#### 4.18 SODDING

All high-use areas of parks shall be sodded. Select areas may also be considered for seeding (hydro-seeding and/or terra-seeding) at the sole discretion of the Town.

Specific minimum requirements for sod are as follows:

1. Sod for general parkland shall be in accordance with the Town's Engineering Standards.
2. Provide source of sod for approval by the Town. Once sod source has been approved, it must not be changed without further approval by the Town.
3. All sodding shall occur within 7 days of topsoil placement and finished grading. The developer will be responsible for weed eradication if they fail to place the specified sod within this period.
4. Ensure finished sod surface is flush with adjoining grass areas, pavement or top surface of curbs and provide close contact between the sod and the underlying root zone mix by rolling with a light roller.
5. Water sod immediately after laying to obtain moisture penetration into top 100mm of topsoil.
6. On slopes, lay sod sections longitudinally along contours and start laying sod at the bottom of the slope.
7. Peg sod on slopes steeper than 3:1 with wooden pegs (17 x 8 x 200mm) or approved proprietary system. Pegs shall be staked 100mm below top edge of the first sod sections at 200mm O.C. and not less than 4 pegs per square meter with pegs driven to 50mm above surface. Remove sod pegs after sod has established.
8. Maintenance requirements during contract establishment and warranty periods, warranty duration, and sod acceptance criteria will be determined by the Town and developer prior to tendering.
9. For standards and guidelines related to sodding of outdoor sports fields, refer to Section 3.

#### 4.19 SEEDING

Naturalized areas, no-mows, and environmental rehabilitation areas shall be seeded with native seed mixtures, as directed by the Town.

Specific minimum requirements are as follows:

1. Terra-seed and mulch all naturalization areas with an approved meadow mix.
2. Hydro-seed and hydro-mulch turf grass seeded areas (or naturalization areas) when approved by the Town for project specific reasons.
3. All seeding and mulching shall occur within 7 days of topsoil placement and finished grading. The developer shall be responsible for weed eradication if they fail to place the specified seed and mulch within this period.
4. For each seed mix application, the permanent seed mix, annual nurse crop, mulch type and associated application rates should be identified. This includes the seed supplier's product name and code (if a proprietary mix) and the type and percentages of seed types in each mix.
5. Turf seeding shall be performed between April 30 and November 1 and naturalization meadow mix seeding shall be performed between April 30 and November 30.
6. Seed shall be delivered in containers with the appropriate 'certified seed' tag attached in accordance with the regulations of the Canada Seeds Act.
7. Ensure that the soil is moist to a depth of 150mm prior to seeding.
8. Maintenance requirements during contract establishment and warranty periods, warranty duration, and seed acceptance criteria will be determined by the Town and developer prior to tendering.

#### 4.20 TREES, SHRUBS, & GROUNDCOVERS

Trees, shrubs, and groundcovers shall be planted in parkland to rehabilitate lost or disturbed forested areas, buffer or support existing natural landscapes, enhance community aesthetics, and to provide improved micro-climactic conditions for park users (e.g., shade, windbreaks, controlled snow drifting, etc.)

Specific minimum requirements are as follows:

1. General Plant Material shall be in accordance with the Canadian Landscape Standard (latest edition), published by the Canadian Nursery Landscape Association (CNLA) and the Canadian Society of Landscape Architects (CSLA), except where specified otherwise.
2. Trees: All trees shall be supplied balled and burlapped or in wire baskets (no potted material will be accepted) and shall meet following minimum criteria:
  - a) Deciduous trees shall be a minimum of 50mm caliper with their lower branches limbed up above 1.8m from the ground-plane;
  - b) Ornamental and multi-stem trees shall be a minimum of 40mm - 50mm calliper dbh;
  - c) Coniferous trees shall be supplied at a minimum height of 1.5m;
  - d) Trees shall possess a dominant central leader that is either un-pruned or has been re-trained at the nursery using appropriate horticultural practices. Trees with cut or co-dominant leaders will not be accepted.

4. Shrubs/Perennials/Groundcovers: are to be supplied potted and shall meet the following minimum criteria:
  - a) Deciduous and coniferous shrubs shall be supplied in 3 gal. pots, minimum;
  - b) Perennials, ornamental grasses, and groundcovers shall be supplied in 1 gal. pots, minimum;
  - c) Shrubs, perennials, and groundcovers chosen for areas where visibility and surveillance are key objectives should be no higher than 1.0m (at maturity).
5. Planting Soil Mixture shall be 50% screened topsoil, 20% coarse sand, and 30% compost, as specified. Provide source and sample of soil mixture for approval by Town prior to commencing work.
6. Mulch to be shredded cedar bark, free of dyes and chemicals, or approved equal.
7. Tree Stakes to be 40mm x 40mm x 5mm x 1800mm long heavy-duty gauge T-bars.
8. Ties to be 50mm wide burlap strips looped in a loose figure 8 or another woven biodegradable tie system that remains flexible during winter months.
9. Trunk Protection to be 100mm dia. HDPE pipe, 500mm long or to lowest branch, except in naturalization areas where it is to be white spiral plastic tree guard.
10. Remove stakes and ties 1 year after planting and remove trunk protection at the completion of the contract warranty period.
11. For tree and shrub groupings, provide a continuous mulched understorey that is 75mm deep and continuous across the entire planted area.
12. Trees shall only be planted once finished grade has been established.
13. Plants installed during the period between May 15th to October 15th for which a Certificate of Substantial Performance has been issued, shall be warranted for twelve (12) months from date of Substantial Performance, providing adequate maintenance has been provided.
14. Plants installed after October 15th for which a Certificate of Substantial Performance has been issued, shall be Warranted for twelve (12) months from May 15th of the following year, providing adequate maintenance has been provided.
15. Plant material must be replaced during the warranty period, as required by the Town. Replacement of plants only at the end of the warranty period will not be acceptable.
16. The Town will accept trees only after it is verified that all plants and materials meet the following criteria:
  - a) completely free of disease and/or insect infestation;
  - b) are in a healthy and vigorous growing condition;
  - c) corrective pruning has been completed;
  - d) tree stakes are removed;
  - e) all accessories are in good condition as specified;
  - f) planting areas and tree saucers are freshly cultivated and free of weeds and debris.

# PART 5 PARK DRAWING REQUIREMENTS

The following section is intended to serve as a supplemental to the Town of Wasaga Beach Engineering Standards. As such, applicants and consultants involved in park development projects shall ensure that they adhere to the submission, drawing, and approvals process outlined through the Engineering Standards.

## 5.1 PARK DESIGN DRAWINGS

Park drawings shall be in AutoCAD format and shall consist of the following:

- Cover Sheet
- Existing Conditions, Site Protection, & Removals Plan
- Tree Inventory/Preservation Plan
- Layout Plans
- Grading Plans
- Planting Plans
- Detail Sheets including standard and special details with material and construction specifications
- Electrical & Lighting Plan
- Irrigation Plan
- Other Plans as required

All drawings must be in AutoCAD format acceptable to the Town and shall be stamped, signed, and dated by a Professional Landscape Architect or Engineer, where applicable (e.g., supporting civil, structural, electrical, and/or mechanical engineering works). The digital submission of design drawings shall be in pdf file format.

The following standards shall be adhered to in preparation of these drawings.

1. Drawings shall be metric size A1 (594 mm x 841 mm)
2. Scales for drawings shall be as follows:

General Overall Plan Drawings	1:250 or 1:300
Plan Enlargement Areas	1:100 or 1:150
Elevation Drawings	1:25 or 1:50
Details	1:10, 1:20, or 1:25

Scales shall be shown on all drawings

3. The drawings shall show clearly:
  - a) all street names in larger font and bold;
  - b) all lot lines and numbers per registered plan of subdivision;
  - c) north arrows pointing towards the top or right of page;
  - d) Geodetic or temporary benchmark locations (brass tablets)
  - e) Town's name in lower right corner;

- f) up-to-date revisions block;
  - g) ditch/swale and berm details, profiles and cross-sections;
  - h) grading, complete with underside of footing, basement floor, top of foundation wall, first floor elevations and site corner elevations existing and proposed, recommended seasonal high ground water table (where park building are proposed/present and applicable);
  - i) snow storage areas to demonstrate that there are no conflicts with proposed plantings;
  - j) all existing and proposed light standards and servicing and utility infrastructure (above and below ground);
  - k) all limits of construction and phasing;
  - l) all easements and appropriate labels;
  - m) any special design information not covered by standard drawings;
  - n) key plan on each drawing;
  - o) supporting engineering drawings for civil, structural, electrical, or mechanical prepared in accordance with the Town's Engineering Standards;
  - p) any other requirement of the Engineering Standards not listed but relevant.
4. The Developer's Landscape Architect shall add their professional seal, signed and dated, to all submitted drawings.
  5. All drawings shall include a blank/empty box location within the title block for the Town to stamp "Accepted for Construction", near the stamp of the signing landscape architect or engineer, where applicable. On the cover sheet/index, staff will affix the stamp at the bottom right-hand corner such that the stamp may be visible when drawings are folded or rolled.
  6. The Town Engineer shall be consulted as to the manner of showing information not set out in the above requirements.