

# City of Ottawa Recreation Facility Infrastructure Standards

## SPORTS FIELDS AND COURTS MAJOR BUILDING COMPONENTS

Parks and Facilities Planning Services  
Recreation, Cultural and Facility Services  
September 2019

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## **SFC-01 Baseball Field**

**Date: September 2019**

**Version: v1-0**

### **General**

Hardball baseball generally consist of an infield, outfield, dug out or players' benches, bullpen, warning track and fencing. Not every field is constructed the same and there are variations depending on the age of players, location, space, resources and level of play however the infield should follow as closely as possible to the parameters below. Senior baseball meets Baseball Ontario Regulation Field. Junior baseball meets age 15 and under provincial regulations and will service adult non-competitive.

### **1.0 Area**

#### **1.1 Senior (SR) Baseball (16 Yrs. and over) (SDD) and (NCBOA 60/90)**

**1.1.1 Overall Dimensions: 163.59m x 163.59m**

**1.1.2 Home Plate to Outfield: 122m (400ft)**

**1.1.3 Playing surface dimensions: 138.598m x 138.59m**

**1.1.4 Warning track 4,500 mm wide**

**1.1.5 Buffer area dimensions: 10m setback to planting; 20m setback to property line and facilities**

**1.1.6 Left/Right Field: 98m; Centre Field: 122m**

**1.1.7 Centrefield: 114.3-121.82m**

**1.1.8 Infield Surface: semi-circle around bases and extending 6m behind backstop, dugout and bull pen, approximately 60 x 60m**

**1.1.9 Pitching Distance: 18.44m (60 feet 5 inches)**

**1.1.10 Between Bases: 27.4m**

**1.1.11 Home Plate to Backstop: 18.29m**

#### **1.2 Junior (JR) Baseball (little league and adult non-competitive) (SDD)**

**1.2.1 Overall Dimensions: 100.96m x 100.96m**

**1.2.2 Home Plate to Outfield: 102-108m (334.6-355ft)**

**1.2.3 Playing surface dimensions: 86.8m x 86.8m**

**1.2.4 Warning track 4,500 mm wide**

**1.2.5 Buffer area dimensions: 10.m setback to planting; 20.m setback to property line and facilities**

**1.2.6 Left/Right Field: 82.3m**

**1.2.7 Centre Field: 102.1m**

**1.2.8 Infield Surface: semi-circle around bases and extending 6m behind backstop, dugout and bull pen, approximately 42 x 42m**

**1.2.9 Pitching Distance: 9,144 mm (30ft)**

**1.2.10 Between Bases: 21.09-24.38m (18.288m typ);**

**1.2.11 Home Plate to Backstop: 9140 mm from home plate**

#### **1.3 46/60 NCOBA (NCOBA competitive little league under 12)**

**1.3.1 Home Plate to Outfield: 60.96-83.82m (200-275ft)**

**1.3.2 Warning track 4,500 mm wide**

- 1.3.3 Buffer area dimensions: 10.m setback to planting; 20.m setback to property line and facilities
- 1.3.4 Left/Right Field: 60.96-83.82m (200-275ft)
- 1.3.5 Infield Surface: semi-circle around bases and extending 6m behind backstop, dugout and bull pen, approximately 15.24 m from pitching plate to grass line
- 1.3.6 Pitching Distance: 14.02m(46ft)
- 1.3.7 Between Bases: 18.9m (60ft);
- 1.3.8 Home Plate to Backstop: 9140 mm from home plate
- 1.4 50/70 NCOBA Intermediate Field Conversion (NCOBA competitive little league extension)
  - 1.4.1 Home Plate to Outfield: 83.8-91.4m (275-300ft)
  - 1.4.2 Warning track 4,500 mm wide
  - 1.4.3 Buffer area dimensions: 10.m setback to planting; 20.m setback to property line and facilities
  - 1.4.4 Left/Right Field: 83.8-91.4m (275-300ft)
  - 1.4.5 Infield Surface: semi-circle around bases and extending 6m behind backstop, dugout and bull pen, approximately 21m (69ft) radius from standard pitching plate
  - 1.4.6 Pitching Distance: 14.6m (48ft 6 inches)
  - 1.4.7 Between Bases: 21.3m (70 feet);
  - 1.4.8 Home Plate to Backstop: 9140 mm from home plate
- 1.5 Junior & Senior
  - 1.5.1 Dug out: 9-12m x 3,000 mm x 2,400 mm (SDD); covered dugout is optional should additional or external funding be available
  - 1.5.2 Bull Pen: 4,000 mm x 12m (SDD) fenced with accessible entry
  - 1.5.3 Coach's Box: 6,100 mm x 3,000 mm; back of the box lines up evenly with the line from second base to third base; the box is 4,570 mm from the third base foul line (SDD).
  - 1.5.4 Batter's Boxes: both the right-hand and left-hand boxes measure 1,220 mm x 1,830 mm; positioned so the midpoints correspond to the midpoint of home plate (SDD).
  - 1.5.5 Catcher's Box: the catcher's box measures 2,440 mm in length from the back of home plate, and 1,090 mm in width (SDD).
  - 1.5.6 Batting Cage: Optional; enclosed area to practice batting; suggested material: netting

## **2.0 Orientation**

- 2.1 Best: South – North Backstop to centre of outfield;
- 2.2 2nd: North – South Backstop to centre of outfield;
- 2.3 3rd: West- East Backstop to centre of outfield;
- 2.4 4th: East- West Backstop to centre of outfield
- 2.5 10° variance of the above cardinal points is acceptable

## **3.0 Access**

- 3.1 Access to the site should be relatively flat with slopes not exceeding 5%

## **4.0 Grading & Drainage**

4.1 Ensure positive drainage: infield .5-1% slope crown the infield; outfield .75-1.5% slope.

4.2 Sub drain infield.

## **5.0 Surfacing (SDD)**

5.1 Outfield: grass: mechanical seed over min 250mm amended topsoil preferred method

5.2 Infield: infield mix composed of approximately: 1/3 washed sand, 1/3 washed dust, and 1/3 custom clay mix; 150mm in depth and compacted

5.3 Warning track: crushed stone (150mm depth)

5.4 Specification 2017 32 91 19 13 (topsoil)

## **6.0 Water Supply (SDD)**

6.1 Required if irrigation requested, standard City water chamber detail.

6.2 Required for high level clay field; upgrade with additional funding

## **7.0 Irrigation**

7.1 Optional high level, high use grass fields may be irrigated

## **8.0 Electrical (SDD)**

8.1 Required if lighting the field 200amp 120V Hydro Kiosk with push button, standard park electrical details.

8.2 Additional receptacles required for batting cages; if partnerfunded

## **9.0 Lighting**

9.1 (Optional) to follow City Standards for lighting

9.2 If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

9.3 Typically, 4-8 light poles at least 1 (one) on right field line, and 1 (one) on left field line 11m from foul line, or outside outfield fence (SDD)

9.4 The minimum mounting height to the bottom row of luminaires for all poles is 15 m (SDD)

## **10.0 Fencing (SDD)**

10.1 Backstop: 6,500 mm height step down to 4,870 mm height; and wing extension 3,660 mm height to edge of infield;

10.2 Outfield and Line Fence: 1,830 mm height; with top rail yellow cap,

10.3 Dug out: 2,440 mm height at rear; 3,660 mm height; Material: Backstop: Chain link mesh; fence enclosure: chain link (black vinyl 6 gauge)

## **11.0 Gates and Openings (SDD)**

11.1 3,050 mm wide for maintenance access in outfield (two required); 1,200 mm gates at dugout (2 required); 1,200 mm openings at dugout (4 required).

## **12.0 Goals**

12.1 Home Plate: the plate is a pentagon with one (1) side measuring 432 mm in length (facing the pitcher's mound), two (2) sides measuring 216 mm in length, and two (2) sides measuring 305 mm in length. The two (2) 305 mm sides form a point and face directly away from the pitcher's plate.

- 12.2 Pitchers plate (optional): the rubber is a white slab, measuring 610 mm by 152 mm.
- 12.3 Bases: first, second, and third base: the bases are white, measure 381 mm, and are 76-127 mm thick. First base and third base are positioned evenly along the foul lines, entirely in fair territory. Second base lines up squarely with first base and third base, so that the four bases form a perfect 27.43m square
- 13.0 **Furniture**
  - 13.1 Player's bench: four (4) total 4,260 mm long with ends capped aluminium
  - 13.2 Bleachers (SDD): (optional) Overall dimensions (L xW xH) 3,660 x 2,740 x 1,730 mm aluminium.
  - 13.3 Recycling facilities as per current guidelines consider required vehicular access to these waste receptacles
  - 13.4 Optional upgrade: wireless scoreboard for competitive level play
- 14.0 **Boards**
  - 14.1 N/A
- 15.0 **Storage**
  - 15.1 Optional will depend on the user group and additional funding
- 16.0 **Parking**
  - 16.1 Parking required for a senior baseball facility or "Miracle Field"; optional for other types of field
  - 16.2 Parking spaces 25, including accessible spaces;
  - 16.3 Bicycle parking within view of playing surface
- 17.0 **Accessibility**
  - 17.1 Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.
  - 17.2 Fields can be designed to provide special-needs children, young adults and adults the opportunity to play the game of baseball on a purpose-built, "Miracle Field" with a cushioned rubberized surface to help prevent injuries that may also include wheelchair accessible dugouts and a completely flat surface to eliminate any barriers to wheelchair-bound or visually impaired players. City of Ottawa example at Notre Dame des Champs Park.
    - 17.2.1 Overall dimensions: 40 x 40 m
    - 17.2.2 Playing surface dimensions: 35 x 35 m
    - 17.2.3 Pitching distance (Home Plate to Backstop): 10.06 m
    - 17.2.4 Between bases: 15 m
    - 17.2.5 Backstop to pitcher's Plate: 17.28 m
    - 17.2.6 Safety: follow CPTED principles; if hydro kiosk on site must be locked
- 18.0 **Options for Multiple Purpose:** Softball and cricket outfield can share space considerations and constraints include wear patterns from constant use of grass or turf, line colour, goal posts, lighting and run out zones.

## **SFC-02 Basketball Court**

**Date: September 2019      Version: v1-**

### **0 Description**

Exterior basketball facilities generally consist of a lined asphalt surface with hoops, including net. Any obstruction including a team bench should be at least 2,000 mm from the playing court. Options for construction include: full size court, small court, half court and basketball key. Outdoor basketball facilities are intended to service local, community non-competitive play. Court markings for the key, 3-point line, and half are done in paint as per FIBA dimensions.

#### **1.0 Area (SDD)**

##### **1.1 Full Size Court**

**1.1.1** Overall dimensions: 19m x 32m

**1.1.2** Playing surface dimensions: 15 x 28m

**1.1.3** Buffer area dimensions: 5,000 mm setback of extra asphalt and fence if required

##### **1.2 Small Court: small basketball: best practice: Optimiste Park**

**1.2.1** A small court can provide recreational game play where space is limited.

**1.2.2** Overall Dimensions: 18.4m x 21.4m

**1.2.3** Playing surface dimensions: 14.4 x 17.4m

**1.2.4** Buffer area dimensions: 5,000 mm setback of extra asphalt and fence if required

##### **1.3 Half Court**

**1.3.1** Overall dimensions: 19m x 16m

**1.3.2** Playing surface dimensions: 15m x 14m

**1.3.3** Buffer area dimensions: 5,000 mm setback of extra asphalt and fence if required

##### **1.4 Key Court**

**1.4.1** Overall dimensions: 8,900 mm x 5,000 mm

**1.4.2** Playing surface dimensions: 7,700 mm x 5,000 mm

**1.4.3** Buffer area dimensions: 1,200 mm setback of extra asphalt behind net

##### **1.5 Line Markings**

**1.5.1** 3-point line, sides are 6.25m (20.5 feet) from the middle of the basket. The upper parts of the three-point arc are set at 6.75m (22.15 feet).

**1.5.2** Distance between the free-throw line and the backboard: 4.6m (15.09 feet)

## **2.0 Orientation**

**2.1** Best: North – south

## **3.0 Access**

**3.1** Access to the site should be relatively flat with slopes not exceeding 5%

## **4.0 Grading & Drainage**

**4.1** Ensure positive drainage

4.1.1 Finished Grade 1% cross slope. Edges to have 2- 5% slope

## **5.0 Surfacing (SDD)**

5.1 The playing court shall have a flat, hard surface free from obstructions.

5.2 Playing area 50 mm HL3 Fine Asphalt over 300 mm min granular A; geotextile between granular and compacted subgrade (preferred)

5.3 Edges outside asphalt: sodded

5.4 Optional but not recommended: plexi-pave (fine grain asphalt) surface and line painting, all lines shall be drawn in white color, 50 mm in width, and clearly visible.

## **6.0 Water Supply**

6.1 N/A

## **7.0 Irrigation**

7.1 N/A

## **8.0 Electrical (SDD)**

8.1 Required if lighting the field 200amp 120V Hydro Kiosk with push button, standard park electrical details.

## **9.0 Lighting**

9.1 (Not recommended) If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be energy efficient.

## **10.0 Fencing (SDD)**

10.1 Not recommended

## **11.0 Gates and Openings (SDD)**

11.1 N/A

## **12.0 Goals (SDD)**

12.1 Basketball posts and hoops with net; rim height 3,040 mm, fixed footing depth 1,500 mm minimum;

12.2 Junior games can use a lower basket height.

## **13.0 Furniture**

13.1 Players bench (optional) minimum 2,000 mm from playing surface

13.2 Recycling/garbage receptacles as per current City guidelines consider maintenance vehicle access.

## **14.0 Boards**

14.1 N/A

## **15.0 Storage**

15.1 N/A

## **16.0 Parking**

16.1 Vehicular parking optional: if provided parking spaces to include accessible spaces.

16.2 Bicycle parking within view of playing surface

## **17.0 Accessibility**

17.1 Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

## **18.0 Path surface**

18.1 Asphalt preferred.

## **19.0 Options for Multiple Purpose**

- 19.1** Can be painted on base of permanent boarded rink with nets installed on rink boards, can be a compatible alternative use with a tennis court.

## **SFC-03 Cricket Pitch**

**Date: September 2019**

**Version: v1-0**

### **General**

A cricket pitch is a roughly elliptical (oval) field of flat grass, ranging in size from about 90 to 150 meters across, bounded by an obvious fence or other marker. In the center of the field, and usually aligned along the long axis of the ellipse, is the pitch, a carefully prepared rectangle of closely mown and rolled grass over hard packed earth or artificial turf. It is marked with white lines. The City of Ottawa standard service level is a cricket pitch for recreational, community play generally multi purpose with other field amenities

### **1.0 Area**

#### **1.1 Field**

- 1.1.1** The playing area shall be 119 m to 137.16m from boundary to boundary square of the pitch, with the shorter of the two square boundaries being a minimum 59.43m. The straight boundary on both ends of the pitch should be no less than 64.00m in length. The center of the pitch is the starting point for measurements.

#### **1.2 Pitch**

- 1.2.1** The pitch is a rectangular area of the ground 20.12m in length and 3,660 mm in width. It is bounded at either end by the bowling creases and on either side by imaginary lines, one each side of the imaginary line joining the centers of the two middle stumps, each parallel to it and 1,520 mm from it.

#### **1.3 Buffer Area**

- 1.3.1** 12.57m setback off both ends of the pitch
- 1.3.2** 10m setback for planting and 20m setback to property lines from field

### **2.0 Orientation**

- 2.1** Best: North – South along wicket length
- 2.2** Second: Northeast - southwest along wicket length
- 2.3** Third: East-west along wicket length

### **3.0 Access**

- 3.1** Access to the site should be relatively flat with slopes not exceeding 5%

### **4.0 Grading & Drainage**

- 4.1** Ensure positive drainage

### **5.0 Surfacing**

- 5.1** Pitch: City standard is to use artificial turf as the City cannot maintain grass at a mown height suitable for cricket. City standard for grass maintenance is cut at 63.5 mm (2.5 in).
- 5.2** Field: sports field seed mix

### **6.0 Water Supply (SDD)**

- 6.1** Required if irrigation, standard City water chamber detail.

### **7.0 Irrigation**

- 7.1** Optional high level, high use grass fields may be irrigated

## **8.0 Electrical (SDD)**

- 8.1 Required if lighting the field 200amp 120V Hydro Kiosk with push button, standard park electrical details.

## **9.0 Lighting**

- 9.1 Not recommended: if installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be energy efficient.

## **10.0 Fencing**

- 10.1 N/A

## **11.0 Goals**

- 11.1 Two (2) sets of wickets shall be pitched opposite and parallel to each other at a distance of 20 m. 12m between the centers of the two (2) middle stumps. Each set shall be 228.6 mm wide and shall consist of three wooden stumps with two (2) wooden bails on top.
- 11.2 The tops of the stumps shall be 711 mm above the playing surface and shall be dome shaped except for the bail grooves. The portion of a stump above the playing surface shall be cylindrical, apart from the domed top, with circular section of diameter: 34.9 mm—38.1 mm
- 11.3 Stumps conforms to the following specifications
  - 11.3.1 For seniors: height is 711 mm; width is 38.1 mm-34.9 mm; overall width of Wicket is 228.6 mm.
  - 11.3.2 For juniors: height is 685.8 mm; width is 34.9 mm-31.8 mm; overall width of Wicket is 2,032 mm.
- 11.4 Bails when in position on the top of the stumps shall not project more than 12.7 mm above them and shall fit between the stumps without forcing them out of the vertical.
- 11.5 Wickets are the responsibility of the club

## **12.0 Furniture**

- 12.1 Recycling/garbage receptacles as per current City guidelines consider maintenance vehicle access to receptacles.

## **13.0 Boards**

- 13.1 N/A

## **14.0 Storage**

- 14.1 Optional, will depend on user group and additional funding

## **15.0 Parking**

- 15.1 Preferred
- 15.2 Parking spaces 25, include accessible spaces

- 15.3 Bicycle parking within view field of play

## **16.0 Accessibility**

- 16.1 Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.
- 16.2 Access to the site should be relatively flat with slopes not exceeding 5%

## **17.0 Safety**

- 17.1 Follow CPTED principles

## **18.0 Options for Multiple Purpose**

- 18.1** Cricket can be overlaid between two full size soccer fields (preferred), ultimate fields or baseball and softball outfield: considerations and constraints include: wear patterns from constant use of grass or turf, line colour, goal posts, lighting and run out zones.
- 18.2** Ensure safety zones and runouts are met for other fields when multipurpose a cricket pitch with other amenities

## **SFC-04 Football Field**

**Date: September 2019**

**Version: v1-0**

### **General**

Canadian football is generally played on an exterior field. The field can be grass or artificial turf and should follow the below football field measurements for adult, high school, or competitive play. Artificial turf is above the City of Ottawa's service level and typically requires external funding.

### **1.0 Area (SDD)**

1.1 Overall dimensions: 177m x 99 m

1.2 Playing surface dimensions: 137m long x 59 m wide including the end zones  
18 m deep

1.3 Goal lines: 101 m apart

1.4 Buffer area dimensions: 10m setback to planting; 20m setback to property line and facilities, 30m setback to property lines when illuminated

### **2.0 Orientation**

2.1 Best: North – South

### **3.0 Access**

3.1 Access to the site should be relatively flat with slopes not exceeding 5%

### **4.0 Grading & Drainage**

4.1 Ensure positive drainage.

4.2 Requires sub drains.

4.3 Grass: 1-2% slope; play out area: maximum 2.5% slope; setback: maximum 4% slope

### **5.0 Surfacing**

5.1 Grass: sod or mechanical seed over minimum 250 mm amended topsoil to meet city standards: seed is preferred

5.2 Artificial Turf: not recommended

### **6.0 Water Supply (SDD)**

6.1 Required if irrigated, standard park water chamber detail.

### **7.0 Irrigation**

7.1 Optional high level, high use grass fields may be irrigated

### **8.0 Electrical (SDD)**

8.1 Required if lighting the field 200amp 120V Hydro Kiosk with push button, standard park electrical details.

### **9.0 Lighting (optional)**

9.1 If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

9.2 Floodlights on direct bury concrete poles typically 3 – 4 light standards per side approximately 30m apart, 6,000 mm from sideline

9.3 Energy efficient lights

### **10.0 Fencing (SDD)**

10.1 Optional: recommended if high level or artificial turf field.

10.1.1 Material: black vinyl 6-gauge chain link fence.

- 10.2 End zone fencing is required when near roads, residents and playareas. In this case end zone fencing shall be: 6,000 mm (20 ft tall) 40m (132 ft long); 18-20m from fence to sensitive area; 23m from end line to fence.
- 11.0 **Gates and Openings (SDD)**
  - 11.1 If field is fenced required two (2) player and one (1) maintenance access (all to meet accessibility standards).
  - 11.2 3,050 mm wide for maintenance access in outfield (two required); 1,200 mm gates at dugout (2 required); 1,200 mm openings at dugout (4 required).
- 12.0 **Goals (SDD)**
  - 12.1 Goal post with upright standard one (1) on each end. Place goalpost on goal line in centre of field. Lower horizontal bar 3,050 mm above grade, top of post 12.19m in height, space between upright 5,640 mm
- 13.0 **Furniture**
  - 13.1 Player's bench: four (4) total 4,260 mm long with ends capped aluminium (located on same side)
  - 13.2 Bleachers (SDD): overall dimensions (L x W x H) 3,660 x 2,740 x 1,730 mm aluminium.
  - 13.3 Recycling/garbage receptacles as per current City guidelines consider vehicular maintenance access to the receptacles.
- 14.0 **Boards**
  - 14.1 N/A
- 15.0 **Storage**
  - 15.1 Optional will depend on user group and additional funding
- 16.0 **Parking**
  - 16.1 Preferred
  - 16.2 Parking spaces 25, including accessible spaces
  - 16.3 Bicycle parking within view of playing surface
- 17.0 **Safety**
  - 17.1 Follow CPTED principles
  - 17.2 If hydro kiosk on site must be locked
- 18.0 **Accessibility**
  - 18.1 Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.
- 19.0 **Options for Multiple Purpose**
  - 19.1 Football and soccer fields can be lined to allow dual purpose.

## **SFC-05 Rugby Field**

**Date: September 2019 Version: v1-0**

### **General:**

Rugby should be played on an exterior grass. "Rugby ground" is the area of land where the field/pitch is laid out. Rugby grounds include the field and the area closely surrounding it. Rugby will generally be played on a full-size grass soccer field at the community, local school level.

### **1.0 Area**

- 1.1 Overall dimensions: 184m x 110m
- 1.2 Playing surface dimensions: 124-144m x 68-70m
- 1.3 Goal line to goal line: 94-100m
- 1.4 In-goal area (past goalline): 10-22m
- 1.5 Width: 68-70m
- 1.6 Touch line: 22m from goal line
- 1.7 Half Line: Half of the field
- 1.8 10m line: 10m from half line
- 1.9 Buffer area dimensions:
  - 1.9.1 10m setback to planting; 20m setback to property line and facilities
  - 1.9.2 30m setback to property lines when illuminated

### **2.0 Orientation**

- 2.1 Best: North - South

### **3.0 Access**

- 3.1 Access to the site should be relatively flat with slopes not exceeding 5%

### **4.0 Grading & Drainage**

- 4.1 Ensure positive drainage
  - 4.1.1 Playing Surface: 1-2% slope
  - 4.1.2 Play out area: maximum 2.5% slope
  - 4.1.3 Setback: maximum 4% slope
  - 4.1.4 Full size fields require sub drains.

### **5.0 Surfacing**

- 5.1 Grass: sod or mechanical seed over minimum 250 mm amended topsoil to meet city standards: seed is preferred
- 5.2 Artificial Turf: not preferred

### **6.0 Water Supply (SDD)**

- 6.1 Required if irrigated, standard park water chamber detail.

### **7.0 Irrigation**

- 7.1 Optional high level, high use grass fields may be irrigated

### **8.0 Electrical (SDD)**

- 8.1 Required if lighting the field 200amp 120V Hydro Kiosk with push button, standard park electrical details.

### **9.0 Lighting (optional)**

- 9.1 If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be energy efficient.

- 9.2 Floodlights on direct bury concrete poles typically 3 – 4 light standards per side approximately 30m apart, 6,000 mm from sideline (SDD for full size soccer),
- 10.0 **Fencing (SDD)**
  - 10.1 Optional, if installed material: black vinyl 6-gauge chain link fence.
  - 10.2 End zone fencing is required when near roads, residents and play areas. In this case end zone fencing shall be: 6,000 mm (20 ft tall); 40m (132 ft long); 18-20m from fence to sensitive area; 23m from end line to fence
- 11.0 **Gates and Openings (SDD)**
  - 11.1 If field is fenced required two (2) player and one (1) maintenance access all to meet accessibility standards.
  - 11.2 3,050 mm wide for maintenance access in outfield (two required); 1,200 mm gates at dugout (2 required); 1,200 mm openings at dugout (4 required).
- 12.0 **Goals**
  - 12.1 Goal post with upright standard one on each end. Place goalpost on goal line in centre of field. Lower horizontal bar 3,000 mm above grade, top of post minimum 3,400 mm in height, space between upright 5,600 mm
- 13.0 **Furniture (optional)**
  - 13.1 Player's bench: four (4) total 4,260 mm long with ends capped aluminium located on same side
  - 13.2 Bleachers (SDD): overall dimensions (L x W x H) 3,660 x 2,740 x 1,730 mm aluminium.
  - 13.3 Recycling/garbage receptacles as per current City guidelines consider vehicular maintenance access to the receptacles.
- 14.0 **Boards**
  - 14.1 N/A
- 15.0 **Storage**
  - 15.1 N/A
- 16.0 **Parking**
  - 16.1 Preferred
  - 16.2 Parking spaces 25, including accessible spaces
  - 16.3 Bicycle parking within view of playing surface
- 17.0 **Safety**
  - 17.1 Follow CPTED principles
  - 17.2 If hydro kiosk on site must be locked
- 18.0 **Accessibility**
  - 18.1 Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.
- 19.0 **Options for Multiple Purpose**
  - 19.1 Rugby, football and soccer fields can be lined to allow dual purpose.

## **SFC-06 SoccerField**

**Date: September 2019**

**Version: v1-0**

### **General**

Soccer is usually played on an outdoor field. The field can be grass or artificial turf. Lines are painted in white and yellow. The size of the field and size of net varies with age of the player and team size. Generally, ages U6-U8 play on a mini field with 3 vs. 3 or 5 vs. 5; U9-U12 play on an intermediate field 6 vs. 6 or 9 vs. 9. U13 to adults play on a full field 11 v 11. Fields can be lit. Based on the City of Ottawa Study of Potential Sports field Sites (2005), the following criteria are preferred for the locations of sports fields:

- Sports fields should have frontage on an arterial or collector street
- A driveway and parking are preferred
- Access to public transit is preferred
- Where multiple sports fields are installed, they should be placed in proximity to one another
- Where field houses or community buildings exist, proximity to these facilities is preferred
- Space that is already open, not requiring the removal of existing trees
- Not located in a flood plain

City of Ottawa standard detail for full field are suitable for inter provincial competition, optional upgrades to artificial turf requires additional external funding, artificial turf fields are suitable for youth international competition. Intermediate and mini fields are suitable for provincial level competition.

### **1.0 Area (SDD)**

#### **1.1 Full Field**

- 1.1.1 Overall dimensions: 94m x 130m
- 1.1.2 Playing surface dimensions: 54.864m x 91.44m
- 1.1.3 Buffer area dimensions: 10m setback to planting; 20m setback to property line and facilities

#### **1.2 Intermediate Field**

- 1.2.1 Overall Dimensions: 70-75m x 90-95m
- 1.2.2 Playing surface dimensions: 50-55m x 70-75m
- 1.2.3 Buffer area dimensions: 5,000 mm setback to planting; 10m setback to property line and facilities

#### **1.3 Mini Field**

- 1.3.1 Overall Dimensions: 57.5m x 75m
- 1.3.2 Playing surface dimensions: 37.5m x 55m
- 1.3.3 Buffer area dimensions: 5,000 mm setback to planting; 10m setback to property line and facilities

### **2.0 Orientation**

- 2.1 Best: North— South (longitudinal)
- 2.2 Second: Northeast- Southwest (longitudinal)
- 2.3 Third: East— West (longitudinal)

### **3.0 Access**

**3.1** Access to the site should be relatively flat with slopes not exceeding 5%

### **4.0 Grading & Drainage**

**4.1** Ensure positive drainage area of play 1-2% slope

**4.2** Playout area maximum 2.5% slope

**4.3** Setback area maximum grade 4%

**4.4** Full size fields require subdrains.

**4.5** Artificial turf requires full drainage.

### **5.0 Surfacing**

**5.1** Grass: mechanical seed over minimum 250 mm amended topsoil preferred method

**5.2** Artificial turf: consists of a vertical draining gravel blanket and slit film or monofilament blended fibers, tufted into a primary backing with a secondary backing. Sections are bonded together with glue and turf tape plus stitched seams.

**5.2.1** Infill system: consists of a mixture of rubber granules and silica sand (or) (for R) rubber granules only.

**5.2.2** The system's shock attenuation shall have an average G-max value less than 120 for a non-padded system, based on ASTM-F355A. At no time shall the G-max value exceed 170 for a non-padded system throughout the life of the warranty.

### **6.0 Water Supply (SDD)**

**6.1** Required if irrigated, standard park water chamber detail, alternatively a well can be installed to reduce ongoing watering costs.

### **7.0 Irrigation**

**7.1** Optional: high level, high use grass fields may be irrigated, recommend irrigating Class 1 fields.

### **8.0 Electrical (SDD)**

**8.1** Required if lighting the field 200amp 120V Hydro Kiosk with push button. Standard park electrical details.

### **9.0 Lighting (optional)**

**9.1** If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

**9.2** Floodlights on Direct bury concrete poles typically 3 - 4 light standards per side approximately 30m apart, 6,000 mm from sideline (SDD)

### **10.0 Fencing (SDD)**

**10.1** Optional: soccer goal screen 4,880 mm high centred behind penalty area.

**10.2** If high level or artificial turf fencing the field area is recommended.

**10.3** Material: black vinyl coated chain link 6 gauge.

### **11.0 Gates and Openings (SDD)**

**11.1** Player gates (2 minimum) required (must meet current accessibility requirements) and one (1) maintenance vehicle access required if fencing the field.

- 11.2 3,050 mm wide for maintenance access in outfield (two required); 1,200 mm gates at dugout (2 required); 1,200 mm openings at dugout (4 required).
- 12.0 **Goals (SDD)**
  - 12.1 Full: 7,320 mm x 2,430 mm
  - 12.2 Intermediate 5,490 mm x 1,830 mm
  - 12.3 Mini: 4,880 mm x 1,830 mm
    - 12.3.1 If mini field is overlain on full field permanent goals cannot be installed for the mini field; goals must be removable.
- 13.0 **Furniture** (optional)
  - 13.1 Player's bench: four (4) total 4,260 mm long with ends capped aluminium
  - 13.2 Bleachers (SDD): overall dimensions (L x W x H) 3,660 x 2,740 x 1,730 mm aluminium
  - 13.3 Recycling/garbage receptacles as per current City Guidelines consider vehicular maintenance access to the receptacles.
- 14.0 **Boards**
  - 14.1 N/A
- 15.0 **Storage**
  - 15.1 N/A
- 16.0 **Parking**
  - 16.1 Preferred, required for community, district and multi field park
  - 16.2 Parking spaces 25, including accessible spaces
  - 16.3 Bicycle parking within view of playing surface
- 17.0 **Accessibility**
  - 17.1 Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.
- 18.0 **Safety**
  - 18.1 Follow CPTED principles
  - 18.2 If hydro kiosk on site must be locked
- 19.0 **Options for Multiple Purpose**
  - 19.1 Football and soccer fields can be lined to allow dual purpose.
  - 19.2 Soccer, football, recreational ultimate, field hockey, softball and cricket outfield can share space: considerations and constraints include: wear patterns from constant use of grass or turf, line colour, goal posts, lighting and run out zones.

## **SFC-07 Softball Field**

**Date: September 2019**

**Version: v1-0**

### **General**

A softball field generally consist of an infield, outfield, dug out or players' benches, bullpen, warning track and fencing. Not every field is constructed the same and there are variations depending on the age of players, location, space, resources and level of play however the infield should follow as closely as possible to the parameters below. The City of Ottawa standard detail for senior softball also meets Canadian Slo-Pitch Softball requirements. The City of Ottawa junior softball standard detail is suitable for junior softball competition and adult non-competitive

### **1.0 Area (SDD)**

#### **1.1 Senior (SR) Softball:**

- 1.1.1** Overall Dimensions: 134.3-149.9 m x 134.3-149.9 m
- 1.1.2** Home Plate to Outfield: 83.8-91.44 m
- 1.1.3** Playing surface dimensions: 88.3-95.9 m x 88.3-95.9 m
- 1.1.4** Warning track: 4,500 mm wide
- 1.1.5** Buffer area dimensions: 10m setback to planting; 20m setback to property line and facilities
- 1.1.6** Left/Right Field: 85 m
- 1.1.7** Centre Field: 83.82-91.44 m
- 1.1.8** Infield Surface: Semi circle around bases and extending 6,000 mm behind backstop, dugout and bull pen: approximately 46 x 46mm: standard Detail (ref: Standard Tender Documents for Unit Price Contract: Volume No. 2 of 3: Material Specifications & Standard Detail Drawings).
- 1.1.9** Pitching Distance: 15.24 m
- 1.1.10** Between Bases: 18.3-21.35 m
- 1.1.11** Home Plate to Backstop: 8000 mm Standard Details (ref: Standard Tender Documents for Unit Price Contract: Volume No. 2 of 3: Material Specifications & Standard Detail Drawings).
- 1.1.12** Dug out (optional for SR softball): 9-12m x 3,000 mm x 2,400 mm alternative
- 1.1.13** Players bench, four (4) total
- 1.1.14** Bull Pen: 4,000 mm x 12 m
- 1.1.15** Coach's Box: 6,100 mm x 3,000 mm; back of the box lines up evenly with the line from second base to third base. The box is 4,570 mm from the third base foul line

#### **1.2 Junior (JR) Softball (and adult non-competitive)**

- 1.2.1** Overall Dimensions: approximately 100-134 m x 100-134 m: Standard Detail.
- 1.2.2** Home Plate to Outfield: 53.34-83.82 m
- 1.2.3** Playing surface dimensions:

- 1.2.4 Buffer area dimensions: 10m setback to planting; 20m setback to property line and facilities
- 1.2.5 Left/Right Field: 55typ
- 1.2.6 Centre Field: 53.34 m - 83.8m
- 1.2.7 Infield surface: Semi circle around bases and extending 6m behind backstop, dugout and bull pen
- 1.2.8 Pitching Distance: 10.67 - 19.8 m
- 1.2.9 Between Bases: 16.77 - 18.3 m
- 1.2.10 Backstop to Home Plate: 7,600 mm-9,100 mm: Standard Details.

## **2.0 Orientation**

- 2.1 Best: South - North Backstop to centre of outfield
- 2.2 2nd: North - South Backstop to centre of outfield
- 2.3 3rd: West- East Backstop to centre of outfield
- 2.4 4th: East- West Backstop to centre of outfield

## **3.0 Access**

- 3.1 Access to the site should be relatively flat with slopes not exceeding 5%

## **4.0 Grading & Drainage**

- 4.1 Ensure positive drainage
  - 4.1.1 Infield .5-1% slope crown the infield
  - 4.1.2 Outfield .75-1.5% slope
- 4.2 Sub drain infield required.

## **5.0 Surfacing (SDD)**

- 5.1 Outfield: grass; mechanical seed over minimum 250 mm amended topsoil preferred method
- 5.2 Infield: sports field mix 150 mm compacted depth
- 5.3 Warning track: crushed stone (150 mm depth)
- 5.4 Specification 2017 32 91 19 13 (topsoil)

## **6.0 Water Supply (SDD)**

- 6.1 Required if irrigated, water chamber as per City standards.

## **7.0 Irrigation**

- 7.1 Optional high level, high use grass fields may be irrigated

## **8.0 Electrical (SDD)**

- 8.1 Required if lighting the field 200amp 120V Hydro Kiosk with push button. Standard park electrical details.

## **9.0 Lighting (optional)**

- 9.1 If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.
- 9.2 Typically, 4-8 light poles at least one (1) on right field line, and one (1) on left field line 11m from foul line, or outside out field fence (SDD)..
- 9.3 The minimum mounting height to the bottom row of luminaires for all poles is 15 m (SDD).

## **10.0 Fencing (SDD)**

- 10.1 Backstop: 6,500 mm height step down to 4,870 mm height.

- 10.2 Wing extension: 3,660 mm height to edge of infield
- 10.3 Outfield and Line Fence (senior softball): 1,830 mm height; with top rail yellow cap.
- 10.4 Dug out (senior softball): 2,440 mm height at rear; 3,660 mm height.
- 11.0 **Gates and Openings (SDD)**
  - 11.1 3,050 mm wide for maintenance access in outfield (two required); 1,200 mm gates at dugout (2 required); 1,200 mm openings at dugout (4 required).
- 12.0 **Goals**
  - 12.1 Home Plate
- 13.0 **Furniture**
  - 13.1 Player's bench: two (2) total 4,260 mm long with ends capped aluminium
  - 13.2 Bleachers (SDD): (optional)
  - 13.3 Recycling/garbage receptacles as per current City Guidelines consider maintenance vehicular access to receptacles.
- 14.0 **Boards**
  - 14.1 N/A
- 15.0 **Storage**
  - 15.1 Optional will depend on user group and additional funding
- 16.0 **Parking**
  - 16.1 Preferred for senior/ adult field
  - 16.2 Parking spaces 25, including accessible spaces
  - 16.3 Bicycle parking within view of playing surface
- 17.0 **Accessibility**
  - 17.1 Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.
  - 17.2 Fields can be designed to provide special-needs children, young adults and adults the opportunity to play the game of baseball on a purpose-built, "Miracle Field" with a cushioned rubberized surface to help prevent injuries that may also include wheelchair accessible dugouts and a completely flat surface to eliminate any barriers to wheelchair-bound or visually impaired players. City of Ottawa example at Notre Dame des Champs Park.
  - 17.3 **Dimensions**
    - 17.3.1 Overall: 40 x 40m
    - 17.3.2 Playing surface dimensions: 35 x 35m
    - 17.3.3 Pitching Distance: 10m
    - 17.3.4 Between Bases: 15m
    - 17.3.5 Backstop to pitcher's plate: 17.28m
  - 17.4 **Safety**
    - 17.4.1 Follow CPTED principles
    - 17.4.2 If hydro kiosk on site must be locked
- 18.0 **Options for Multiple Purpose**

- 18.1** Softball and cricket outfield can share space: considerations and constraints include: wear patterns from constant use of grass or turf, line colour, goal posts, lighting and run out zones.

## **SFC-08 Sports Dome (Single)**

**Date: September 2019**

**Version: v1-0**

### **Description**

Domes are air supported structures covering sports fields to enable year-round use of an artificial turf playing field. They can support a variety of sporting activities and additional space outside the fields for walking, travelling, team warm up, spectator area and administration. Domes may be permanent structures or seasonal installations. Permanent structures may also have an associated building to serve as a club house, changing facility, meeting space and washroom. Domes are above the City's service level and where a partnership opportunity exists, the City's minimum standard would be as follows

#### **1. Area**

##### **1.1. Dimensions**

**1.1.1.** 82.3m x 152.4m (one full size FIFA regulation field plus warm up and administration space and walking area)

##### **1.2. Ceiling Height**

**1.2.1.** Height equivalent to 30% of the width of the dome

#### **2. Access**

**2.1.** Ground level air lock entry for pedestrians and maintenance vehicles.

**2.2.** Fully accessible path to entry

**2.3.** Generally flat with slopes not to exceed 5%

**2.4.** Washrooms

#### **3. Entry/ Exit**

**3.1.** Air lock revolving door is the primary entrance

**3.2.** A double door air lock barrier required for accessible entry and maintenance vehicular entry must meet all accessibility requirements.

**3.3.** Emergency exits minimum two (2) with exit signs and lighting as per OBC

#### **4. Preferred Relationships**

**4.1.** Daylight: not desirable into dome space

**4.2.** View in: from corridor (window(s) glass doors); view in from outside of

**4.3.** View out: to hallway and exterior

#### **5. Security**

**5.1.** As per Corporate Security Standards

#### **6. Lighting**

**6.1.** Required: must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

#### **7. Electrical**

**7.1.** Voltage: 120

**7.2.** Outlets: mounted no lower than 400 mm high

#### **8. Emergency**

**8.1.** Eight Emergency wall mounted double-headed battery powered lighting packs, fire alarm pull station

**8.2.** Network wall clock

## **9. Mechanical**

**91.** The main heat and inflation unit maintains the shape of the dome by constantly monitoring the internal pressure and adjusting the amount of fresh air introduced into the structure.

**92** Controls: BAS controlled

## **10. Ventilation**

**101.** Air changes: fresh air constantly cycles into the structure to maintain this slightly higher internal pressure

## **11. Heating**

**11.1.** Required: as air travels through the inflation unit, a heat exchanger can warm the air.

## **12. Cooling**

**121.** Fan

## **13. Water supply**

**131.** None

## **14. Fire suppression**

**14.1.** Three Wall mounted fire extinguishers, wall mounted fire alarm bells

## **15. Finishes**

**15.1.** Floor

**15.1.1.** Playing field: artificial turf

**15.1.2.** Firm, stable, slip-resistant, matte finish, no change in level

**152** Dome

**15.2.1.** Fabric: interior and exterior fire-retardant fabric with inner core of insulation, exterior fabric must withstand sunlight (UV radiation), cold, mildew, or chemical pollutants

**15.2.2.** Anchor System: anchor sleeves and track attached by reinforced cable to concrete slab or footer

## **16. Communications**

**161.** Wi-Fi

## **17. Security**

**17.1.** As per Corporate Security Standards

## **18. Storage**

**181.** Preferred

**18.1.1.** Dimensions 45 square metres

**182** Access

**18.2.1.** Double door, lockable

**183.** Floor and Wall finishes

**18.3.1.** Sealed concrete floor, plywood walls

## **19. Parking**

**191.** Asphalt parking area required

**192** Parking to include accessible spaces

**193.** Bicycle parking: best practice

## **20. Equipment and Furnishings**

- 20.1.** Movable soccer nets
- 20.2** Net dividers
- 20.3.** Clear floor space
- 20.4** Recycling/garbage receptacles as per current City guidelines consider maintenance vehicular access to receptacles.

**21. Optional Upgrades**

- 21.1.** Self-supported climbing wall
- 21.2** Walking/running track
- 21.3.** Wallet & Cell Phone Lockers

**22. Examples/Best practices**

- 22.1.** Municipality of Russell Township - Russel Township Sports Dome (2018)

## **SFC-09 T-Ball Field**

**Date: September 2019**

**Version: v1-0**

### **General**

T-ball generally consist of an infield, outfield, players benches, and backstop fencing. Not every field is constructed the same and there are variations depending on the age of players, location, space, resources and level of play however the infield should follow as closely as possible to the parameters below. City of Ottawa standard is suitable for local level competition.

### **1.0 Area (SDD)**

- 1.1 Overall Dimensions: 82.124m x 82.124m
- 1.2 Playing surface dimensions: 81.72m x 81.72m
- 1.3 Buffer area dimensions: 10m setback to planting, 10m setback to property line and facilities
- 1.4 Left/Right Field: 35.53m
- 1.5 Infield Surface: Semi circle around bases and extends beyond home plate and players benches approximately 34.48m x 34.48m.
- 1.6 Between Bases: 18.29m
- 1.7 Backstop: 12.19m from homeplate

### **2.0 Orientation**

- 2.1 Best: South – North Backstop to centre of outfield
- 2.2 2nd: North – South Backstop to centre of outfield
- 2.3 3rd: West- East Backstop to centre of outfield
- 2.4 4th: East- West Backstop to centre of outfield

### **3.0 Access**

- 3.1 Access to the site should be relatively flat with slopes not exceeding 5%

### **4.0 Grading & Drainage**

- 4.1 Ensure positive drainage
  - 4.1.1 Infield .5-1% slope crown the infield;
  - 4.1.2 Outfield .75-1.5% slope
- 4.2 Sub drain infield required.

### **5.0 Surfacing (SDD)**

- 5.1 Outfield: grass; mechanical seed over min 250mm amended topsoil preferred method.
- 5.2 Infield: sports infield mix 150mm compacted depth

### **6.0 Water Supply**

- 6.1 N/A

### **7.0 Irrigation**

- 7.1 N/A

### **8.0 Electrical**

- 8.1 N/A

### **9.0 Lighting**

- 9.1 N/A

### **10.0 Fencing (SDD)**

- 10.1 Backstop: 3,660 mm height.
  - 10.2 Material: chain link mesh
- 11.0 Gates and Openings**
  - 11.1 N/A
- 12.0 Goals**
  - 12.1 Home Plate
- 13.0 Furniture**
  - 13.1 Player's bench: two (2) total
  - 13.2 Bleachers: (optional) overall dimensions (LxWxH) 3,660 x 2,740 x 1,730 mm aluminium Bleachers: (optional) overall dimensions (L x W x H) 3,660 x 2,740 x 1,730 mm aluminium Bleachers: (optional) overall dimensions (L x W x H) 3,660 x 2,740 x 1,730 mm aluminium
  - 13.3 Recycling/garbage receptacles as per current City Guidelines consider maintenance vehicle access to receptacles.
- 14.0 Boards**
  - 14.1 N/A
- 15.0 Storage**
  - 15.1 N/A
- 16.0 Parking**
  - 16.1 Parking optional
  - 16.2 Bicycle parking within view of playing surface
- 17.0 Accessibility**
  - 17.1 Promote universal accessibility Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.
  - 17.2 Fields can be designed to provide special-needs children, young adults and adults the opportunity to play the game of baseball on a purpose-built, "Miracle Field" with a cushioned rubberized surface to help prevent injuries that may also include wheelchair accessible dugouts and a completely flat surface to eliminate any barriers to wheelchair-bound or visually impaired players. City of Ottawa example at Notre Dame des Champs Park.
- 18.0 Dimensions**
  - 18.1 Overall: 40 x 40m
  - 18.2 Playing surface dimensions: 35 x 35m
  - 18.3 Pitching distance: 10 m
  - 18.4 Between bases: 15 m
  - 18.5 Backstop to pitcher's plate: 17.28 m
- 19.0 Safety**
  - 19.1 Follow CPTED principles
- 20.0 Options for Multiple Purpose**

Soccer, Football, Ultimate, Field hockey, Softball and cricket outfield can share space: considerations and constraints include: wear patterns from constant use of grass or turf, line colour, goal posts, lighting and run out zones.

## **SFC-10 Tennis Courts**

**Date: September 2019**

**Version: v1-0**

### **General**

Tennis courts consist of a firm rectangular asphalt surface with a low net stretched across the centre and fencing around the court. The City of Ottawa prefers new construction to have a minimum of a double court layout. The same surface can be lined to play singles, double, progressive tennis or pickleball. The net height for pickleball and progressive tennis is lower than for tennis. The City of Ottawa standard is suitable for community level play.

### **1. Area (SDD)**

#### **1.1. Tennis**

- 1.1.1.** Overall dimensions: 32 x 37m (double court and buffer)
- 1.1.2.** Playing surface dimensions (individual court): 10.97m x 23.77m per court
- 1.1.3.** Buffer area dimensions: 2,740 mm at sides, 6,610 mm at ends
- 1.1.4.** Tennis net height: 914 mm
- 1.1.5.** Post height: 1,070 mm
- 1.1.6.** Asphalt surface extends to fencing

#### **1.2. Pickleball Lines**

- 1.2.1.** Playing surface dimensions (individual court): 13.4m x 6,100 mm
- 1.2.2.** Pickleball net height at centre: 860 mm

#### **1.3. Practicewall**

- 1.3.1.1.** Full half court practice wall should be a smooth painted concrete wall, height above ground 3,000 mm with footing, below frost, and signed and sealed by a Professional Structural Engineer.
- 1.3.1.2.** A half court and concrete practice wall may be installed with fencing and asphalt, sized and lined as a half court for more formal practice.
- 1.3.2.** Overall dimensions: 16.45m x 18.5m
- 1.3.3.** Playing surface dimensions: 10.97m x 11.89m per court
- 1.3.4.** Buffer area dimensions: 2,740 mm at sides, 6,610 mm at ends

#### **1.4. Progressive tennis: Uses modified tennis balls, racquets, nets and courts for young players.**

##### **1.4.1. ½ Court/red court (requires additional removable nets on existing court)**

- 1.4.1.1.** Net height: 800 mm
- 1.4.1.2.** Length: 10.97m
- 1.4.1.3.** Width:(singles): 5,490 mm

##### **1.4.2. ¾ Court/orange court (played within a full court)**

- 1.4.2.1.** Net height: 800 mm
- 1.4.2.2.** Length: 18.29m
- 1.4.2.3.** Width:
  - 1.4.2.3.1.** Singles: 6,400 mm
  - 1.4.2.3.2.** Doubles: 8,230 mm

##### **1.4.3. Full court transition/green court (played within a full court)**

- 1.4.3.1.** Net height: 91.5 cm

1.4.3.2. Length: 23.77 m

1.4.3.3. Width:

1.4.3.3.1. Singles: 8,230 mm

1.4.3.3.2. Doubles: 10.97m

## **2. Orientation**

2.1. Best: North — South (longitudinal)

2.2. Second: Northeast — Southwest (longitudinal)

## **3. Access**

3.1. Ensure accessible path to the court with grades not exceeding 5%

## **4. Grading & Drainage**

4.1. Ensure positive drainage

4.1.1. Finished Grade 1% cross slope.

4.1.2. Edges outside fencing to have 2- 5% slope

4.2. Sub drain exterior grass edge outside fencing.

## **5. Surfacing (SDD)**

5.1. Court Surface to be 50mm HL3 Fine Asphalt PG 58-34 SP 9.5B over 300mm minimum granular A and compacted subgrade.

5.2. Tennis line painting to be white, 50mm in width

5.3. Pickleball lines are to be yellow 50mm in width

5.4. The playing court shall have a flat, hard surface free from obstructions.

5.5. Asphalt surface to extend to fencing.

## **6. Edges outside fencing**

6.1. Sodded

## **7. Water Supply**

7.1. N/A

## **8. Irrigation**

8.1. N/A

## **9. Electrical (SDD)**

9.1. Required if lighting the court 200amp 120V Hydro Kiosk with push button.  
Standard park electrical details.

## **10. Lighting (preferred)**

10.1. If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

## **11. Fencing (SDD)**

11.1. Exterior fencing: 3,050 mm in height with two 3,000 mm -4,000 mm openings at centre of court (in line with nets).

11.2. Material: black vinyl chain link 6 gauge.

## **12. Nets (SDD)**

12.1. Net posts in ground sleeves

12.2. Post height: 1,070 mm

12.3. Tennis net height: 914 mm

## **13. Furniture**

13.1. Bench: (preferred) two (2) benches at entry with shade

- 13.2. Recycling/garbage receptacles as per current City guidelines consider maintenance vehicle access to receptacles.

**14. Boards**

- 14.1. N/A

**15. Storage**

- 15.1. N/A

**16. Parking**

- 16.1. Preferred
- 16.2. Parking include accessible spaces
- 16.3. Bicycle parking within view of court

**17. Accessibility**

- 17.1. Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

**18. Path surface**

- 18.1. Asphalt preferred.

**19. Options for Multiple Purpose**

- 19.1. Pickleball and tennis courts can be lined on the same surface (preferred option)
- 19.2. Progressive tennis can be painted within a double tennis court portable nets may be required.

## **SFC-11 Pickleball Courts**

**Date: September 2019**

**Version: v1-0**

### **General**

Pickleball courts consist of a firm rectangular asphalt surface with a low net stretched across the centre and fencing around the court. The City of Ottawa prefers new construction to have a minimum of a double court layout. The City of Ottawa standard is suitable for community level play.

#### **1. Area (SDD)**

1.1. The preference for new pickleball courts is to develop a double court as a minimum.

1.1.1. Overall dimensions: 31.2m x 37m (double court and buffer)

1.1.2. Playing surface dimensions (individual court): 13.4m x 6,100 mm

1.1.3. Buffer area dimensions: 2,740 mm at sides, 6,610 mm at ends

1.1.4. Pickleball net height at centre: 860 mm

#### **2. Orientation**

2.1. Best: North - South (longitudinal)

2.2. Second: Northeast - Southwest (longitudinal)

#### **3. Access**

3.1. Ensure accessible path to the court with grades not exceeding 5%.

#### **4. Grading & Drainage**

4.1. Ensure positive drainage

4.1.1. Finished Grade 1% cross slope.

4.1.2. Edges outside fencing to have 2- 5% slope

4.2. Sub drain exterior grass edge outside fencing.

#### **5. Surfacing (SDD)**

5.1. Court Surface

5.1.1. To be 50mm HL3 Fine Asphalt PG 58-34 SP 9.5B over 300mm min granular A and compacted subgrade.

5.2. Pickleball line painting to be yellow or white, 50mm wide

5.3. The playing court shall have a flat, hard surface free from obstructions.

5.4. Asphalt surface to extend to fencing.

#### **6. Edges outside fencing**

6.1. Sodded

#### **7. Water Supply**

7.1. N/A

#### **8. Irrigation**

8.1. N/A

#### **9. Electrical (SDD)**

9.1. Required if lighting the court 200amp 120V Hydro Kiosk with push button.  
Standard park electrical details.

#### **10. Lighting**

10.1. If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be energy efficient.

## **11. Fencing (SDD)**

- 11.1. Exterior fencing for dedicated pickleball court: 1,500 mm in height with two (2) 3,000 mm-4,000 mm openings at centre of court (in line with nets).
- 11.2. Material: black vinyl chain link 6gauge.)

## **12. Nets (SDD)**

- 12.1. Net posts in ground sleeves
- 12.2. Post height: 1,070 mm
- 12.3. Net Height: 860 mm at centre

## **13. Furniture**

- 13.1. Bench: (preferred) two (2) benches at entry
- 13.2. Recycling/garbage receptacles as per current City guidelines consider maintenance vehicle access to receptacles.

## **14. Boards**

- 14.1. N/A

## **15. Storage**

- 15.1. N/A

## **16. Parking**

- 16.1. Preferred
- 16.2. Parking include accessible spaces
- 16.3. Bicycle parking within view of court

## **17. Accessibility**

- 17.1. Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

## **18. Path surface**

- 18.1. Asphalt preferred.

## **19. Options for Multiple Purpose**

- 19.1. Pickleball courts can be lined within a full-size multi-court rink (SR36)
- 19.2. Pickleball courts can be lined within a basketball court (example: Richcraft Recreation Complex-Kanata)
- 19.3. Pickleball courts can be lined for progressive tennis

## **SFC-12 Ultimate Field**

**Date: September 2019**

**Version: v-01**

### **General**

An Ultimate Frisbee field is a grass field, 37 meters wide and 100 meters long. Each end zone is 18m deep. The City of Ottawa standard detail is suitable for local competition level of play.

#### **1. Area (SDD)**

- 1.1. Overall dimensions: 57m x 120m
- 1.2. Playing surface dimensions: 37m x 100m
- 1.3. Buffer area dimensions: 5,000 mm playout; 10m setback to planting, property line and facilities
- 1.4. Youth field overall dimensions: 36.58m – 45.72m x 22.86m – 27.432m, endzones: 13.716m

#### **2. Orientation**

- 2.1. Best: north-south (longitudinal)

#### **3. Access**

- 3.1. Access to the site should be relatively flat with slopes not exceeding 5%

#### **4. Grading & Drainage**

- 4.1. Ensure positive drainage

#### **5. Playing Surface**

- 5.1. 1-2% slope
- 5.2. Play out area: maximum 2.5% slope
- 5.3. Setback: maximum 5% slope
- 5.4. Full size fields generally require sub drains.

#### **6. Surfacing**

- 6.1. Grass: mechanical seed over min 250mm amended topsoil preferred method

#### **7. Water Supply**

- 7.1. Required if irrigated, standard park water chamber detail.

#### **8. Irrigation**

- 8.1. Optional: high level, high use grass fields may be irrigated, recommend irrigating Class 1 fields.

#### **9. Electrical (SDD)**

- 9.1. Required if lighting the field 200amp 120V Hydro Kiosk with push button. Standard park electrical details.

#### **10. Lighting (optional)**

- 10.1. If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

#### **11. Fencing**

- 11.1. N/A

#### **12. Gates and Openings**

- 12.1. N/A

#### **13. Goals**

- 13.1. 18m from brick mark to end zone

#### **14. Furniture**

#### **14.1.      Players benches: optional**

14.2. Recycling/garbage receptacles as per current City guidelines

**15. Boards**

15.1. N/A

**16. Storage**

16.1. N/A

**17. Safety**

17.1. Follow CPTED principles

17.2. If hydro kiosk on site must be locked

**18. Accessibility**

18.1. Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

**19. Options for Multiple Purpose**

19.1. Recreational ultimate can share with full size soccer, football fields, and cricket.

## **SFC-13 Lawn Bowling**

**Date: September 2019 Version: v1-0**

### **General**

Lawn bowling, or "bowls," is a game played on a flat lawn or green at least 36.6 m<sup>2</sup>. In a match, the object is to roll bowls so that as many as possible are nearer to the "jack" (a smaller white bowl) than the nearest opposing wood. It is normally played outdoors, and the outdoor surface is either natural grass or artificial turf. Generally, greens are built in a square shape as close to 40 metres as possible. This allows for games to be played in either direction. The advantages of playing in different directions are that: the wear on the green is more even, and; the players do not need to face towards the sun when playing. It is not unusual to find greens that are rectangular. On rectangular greens games are played in one direction only. The length of a rectangular green is still between 31 metres and 40 metres.

Bowling green specifications for the lawn bowls variation of the sport are stipulated in World Bowls' Laws of the Sport of Bowls.

### **1. Area**

#### **1.1. Overall dimensions:**

**1.1.1.** 31.4-31.8m x40.4-40.8m

#### **1.2.** Playing surface dimensions: in the direction of play will be between 31m and 40m.

#### **1.3.** Buffer: the green is surrounded by a ditch between 200 mm and 380 mm wide, and between 50 mm and 200 mm deep. The ditch has a bank against its outer edge. The top of the bank should be at least 230 mm about the surface level of the green.

### **2. Orientation**

#### **2.1.** Best: if rectangular then long side North-south

### **3. Access**

#### **3.1.** Access to the site should be relatively flat with slopes not exceeding 5%

### **4. Grading & Drainage**

#### **4.1.** Must be positively drained may require sub surface drainage.

### **5. Surfacing**

#### **5.1.** Grass or approved synthetic material.

### **6. Water Supply**

#### **6.1.** N/A

### **7. Irrigation**

#### **7.1.** N/A

### **8. Electrical (SDD)**

#### **8.1.** Required if lighting: 200amp 120V Hydro Kiosk with push button. Standard park electrical details.

### **9. Lighting**

#### **9.1.** If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be energy efficient.

## **10. Fencing (SDD)**

**10.1.** Fencing is preferred, 1,500 mm height

**10.2** Material: black vinyl coated 6-gauge chain link.

## **11. Gates and Openings (SDD)**

**11.1.** 3,050 mm wide for maintenance access in outfield (two required); 1,200 mm gates at dugout (2 required); 1,200 mm openings at dugout (4 required).

## **12. Goals/Nets**

**12.1.** N/A

## **13. Furniture**

**13.1.** Seating benches are required

**13.2** Recycling/garbage receptacles as per current City guidelines consider maintenance vehicular access to receptacles.

## **14. Boards**

**14.1.** N/A

## **15. Storage**

**15.1.** Required for balls

## **16. Parking**

**16.1.** Parking strongly recommended

**16.2** Parking include accessible spaces

**16.3.** Bicycle parking within view field of play

## **17. Accessibility**

**17.1.** Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

## **18. Safety**

**18.1.** Follow CPTED principles

**18.2** If hydro kiosk on site must be locked

## **19. Options for Multiple Purpose**

## **SFC-14 Horse Shoe Pit**

**Date: September 2019 Version: v1-0**

### **General**

Horseshoes is an outdoor game played between two people (or two teams of two people) using four horseshoes and two throwing targets (stakes) set in a lawn or sandbox area. The game is played by the players alternating turns tossing "horseshoes" at stakes in the ground. Modern games use a more stylized U-shaped bar, about twice the size of an actual horseshoe. A horseshoe court shall be a level rectangular area 1,830 mm wide and a minimum of 14.02 m long. As the stakes present a hazard for impalement all horse shoe pits in parks must be fenced and gated. A north-south setting is recommended for outdoor courts to minimize the effects of the sun.

The below guidelines are based on Horseshoe Canada Association official rules governing the sport of horseshoe pitching.

### **1. Area**

- 1.1.** Overall dimensions: 7,000 mm x 15.25m -18.21m
- 1.2.** Playing surface dimensions: 2,400 mm x 9,150 mm – 12.2m (pin to pin)
- 1.3.** Pitchers box: the pitcher's box is the square 1,830 mm by 1,830 mm area at each end of the court. It is composed of two parts: The Pit and the pitching platforms.
- 1.4.** Pit: the pit is a rectangular area filled with the substance onto which the shoes are pitched. Its maximum length (in the direction in which the shoes are pitched) is 1,830 mm and its minimum length is 1,095 mm. Its maximum width is 915 mm and its minimum width is 790 mm. The pit must be centered in the pitcher's box. If the pit is less than the maximum dimensions, the extra space shall be filled with the same material of which the platforms are made, or some other material different than the pit substance, and shall be level with the pit and platforms.
- 1.5.** Pitching Platforms: the pitching platform flank the pit to its left and right sides and are parallel to each other. They shall be level with each other and to the top of the pit. They shall be 460 mm to 520 mm wide (depending on the width of the pit) and shall be a minimum of 1,830 mm long.
- 1.6.** Extended Platform: the pitching platform on either side of the pit can be extended forward (towards the opposite pit) an additional 3,050 mm to accommodate pitching at shorter distances. The front of the extended platforms may be 722 mm from the opposite stake. The extended platforms shall be level with and be of the same width and material as the full distance platforms. It is recommended that the 4,270 mm between the front ends of the platforms be filled in (using the same material as the platforms) to provide a continuous level walking surface between the two pitcher's boxes.
- 1.7.** Backboards: every pit should have a backboard. It should be at least 1,220 mm behind the stake, be at least 305 mm high and extend the width of the pit. For spectator visibility, a mesh netting or chain link material is recommended. If of

solid material, it should be a color that will provide a contrasting background to keep the stake visible for the contestants.

- 1.8. Protective Barrier: all court complexes shall be surrounded by a protective barrier. The barrier should be at least 2,440 mm behind the stake. A chain link type fence at least 1,220 mm high is recommended.

## **2. Orientation**

- 2.1. Best: North-south

### **2.2. Multiple Court Orientation**

- 2.2.1. Side-by-Side: To eliminate distraction and safely separate activity, stakes of courts adjacent to each other shall be a minimum of 3,050 mm apart. A greater distance (at least 3,660 mm) is preferable.

- 2.2.2. Back-to-Back: A minimum of 4,880 mm and a protective barrier must separate the stakes of back-to-back courts.

## **3. Access**

- 3.1. Access to the site should be relatively flat with slopes not exceeding 5%

## **4. Grading & Drainage**

- 4.1. Required.

## **5. Surfacing**

- 5.1. Pit: clay, sand, dirt and synthetic compositions are all legal substances to put in the pit. The minimum depth of the substance shall be 100 mm. A 200 mm depth is recommended.

- 5.2. Court: grass: seed or sod over 100 mm minimum topsoil

## **6. Water Supply**

- 6.1. N/A

## **7. Irrigation**

- 7.1. N/A

## **8. Electrical (SDD)**

- 8.1. Required if lighting 200amp 120V Hydro Kiosk with push button. Standard park electrical details.

## **9. Lighting**

- 9.1. If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

## **10. Fencing (SDD)**

- 10.1. Required: minimum 1,200 mm in height, preferred 1,500 mm height preferred.
- 10.2. Material: black vinyl coated 6-gauge wire to conform with standard City standard details.

## **11. Gates and Openings (SDD)**

- 11.1. 3,050 mm wide for maintenance access in outfield (two required); 1,200 mm gates at dugout (2 required); 1,200 mm openings at dugout (4 required).

## **12. Goals/Nets**

- 12.1. Posts: centered in the pit, require removal of posts at night.

## **13. Furniture**

- 13.1. Seating is recommended

- 13.2. Recycling/garbage receptacles as per current City guidelines consider maintenance vehicle access to receptacles.

**14. Boards**

- 14.1. Backboards

**15. Storage**

- 15.1. Required for posts

**16. Parking**

- 16.1. Parking optional
- 16.2. Parking include accessible spaces
- 16.3. Bicycle parking within view of pit

**17. Accessibility**

- 17.1. Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

**18. Safety**

- 18.1. Follow CPTED principles; if hydro kiosk on site must be locked

## **SFC-15 Beach Volleyball Court**

**Date : September 2019 Version: v1-0**

### **General**

Beach Volleyball is a sport played by two teams each on a sand court divided by a net. The playing area includes the court, service zone, area behind the end line, and the free zone surrounding the court on all sides. The free playing space is the space above the playing area, which is free from all obstructions. The free playing space shall measure a minimum of 7,000 mm in height from the playing surface. The court and free space should be rectangular and symmetrical. Courts can be provided as a single court within a park or part of a complex of courts. Two side lines and two end lines mark the playing court. There is no centre line. Both side and end lines are placed inside the dimensions of the playing court. Court lines are the responsibility of the user and should be ribbons made of a resistant material, and any exposed anchors should be of a soft, flexible material. The service zone is an which extends to the edge of the free zone. The City of Ottawa standard is suitable for local competition game play with options for competition level that are above standard.

### **1. Area (SDD)**

#### **1.1. Standard detail**

**1.1.1.** Overall dimensions: 24-36m x 15-19m

**1.1.2.** Playing surface dimensions: 18m x 9,000 mm

**1.1.3.** Buffer area dimensions: 3,000 mm-5,000 mm at sides 3,000 mm-8,000 mm at ends

**1.1.4.** Optional: for Official Competitions, the free zone is a minimum of 5,000 mm and a maximum of 6,000 mm from the end lines/side lines. The free playing space shall measure a minimum of 12.5 m in height from the playing surface.

### **2. Orientation**

**2.1.** Best: North — south

### **3. Access**

**3.1.** Access to the site should be relatively flat with slopes not exceeding 5%

### **4. Grading & Drainage (SDD)**

**4.1.** Required, 100 mm perforated pipe with filter sock within 100 mm granular *A* separated from sand surface with filter cloth.

### **5. Surfacing (SDD)**

**5.1.** The surface must be composed of levelled sand, as flat and uniform as possible, free of rocks, shells and anything else which can represent risks of cuts or injuries to the players; sand must be at least 400 mm deep and composed of fine loosely compacted grains.

**5.1.1.** Optional: for Official Competitions, the sand should also be sifted to an acceptable size, not too coarse, and free of stones and dangerous particles. It should not be too fine to cause dust and stick to the skin.

**5.2.** Lines: the lines must be of a colour which contrasts sharply with the colour of the sand.

5.2.1. Optional: for competition all lines are 50 mm wide.

**6. Water Supply**

6.1. N/A

**7. Irrigation**

7.1. N/A

**8. Electrical (SDD)**

8.1. Required if lighting 200amp 120V Hydro Kiosk with push button. Standard park electrical details.

**9. Lighting**

9.1. Not recommended: if installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

**10. Fencing**

10.1. Not required

10.2. Material N/A

**11. Gates and Openings**

11.1. N/A

**12. Goals/Nets**

12.1. Nets are placed vertically over the middle of the court there is a net whose top is set at the height of 2,430 mm for men and 2,240 mm for women and are removable.

12.2. Note: The height of the net may be varied for specific age groups as follows.

12.3. 16 and under 2,240 mm

12.4. 14 and under 2,120 mm

12.5. 12 and under 2,000mm

12.6. Optional: for competition play the net height (over the two side lines) must be exactly the same and must not exceed the official height by more than 20 mm. The height is measured from the centre of the playing court with a measuring rod. The net is 8,500 mm long and 1,000 mm(+/- 30 mm)wide when it is hung taut, placed vertically over the narrow axis at the middle of the court. The net is 100 mm square mesh with top and bottom bands 70 -100 mm wide. For Official Competitions, an 8,000 mm net with smaller meshes and brandings displayed between the ends of the net and the posts may be used, provided that the visibility of the athletes and officials will be preserved. A flexible rod, 1,800 mm long and 10 mm in diameter, made of fibreglass or similar material delimits crossing space above the net.

**13. Posts (SDD)**

13.1. The posts supporting the nets are placed a distance of 700 mm -1,000 mm from each side line to the post padding, they are 2,550 mm in height and are preferably adjustable, not removable.

13.1.1. Optional: for competition the posts should be 1,000 mm outside the side lines.

- 13.2. The posts are round, smooth, fixed to the ground and should be padded. City standard detail shows the post embedded in 300 x 300 mm concrete base set below frost and top set below 400 mm sand surface.

**14. Furniture**

- 14.1. Seating (optional)
- 14.2. Recycling/garbage receptacles as per current City guidelines consider maintenance vehicle access to receptacles.

**15. Boards**

- 15.1. N/A

**16. Storage**

- 16.1. Required; storage box, bunker or access within field house for net and lines.

**17. Parking**

- 17.1. Parking optional
- 17.2. Parking include accessible spaces
- 17.3. Bicycle parking within view of playing surface

**18. Accessibility**

- 18.1. Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

**19. Safety**

- 19.1. Follow CPTED principles; If hydro kiosk on site must be locked

## **SFC-16 Field Hockey**

**Date: September 2019**

**Version: v1-0**

### **General**

Any official field hockey game governed by the International Hockey Federation (IHF) is played on a synthetic turf field. Grass is rarely used for national and international games, although local hockey clubs and school may still use grass surface. City of Ottawa standard is a grass field suitable for local clubs and schools. The pitch on which field hockey is played has a length of 91.4 meters and a width of 55.0 meters. Markings should be drawn in white and as solid lines or arcs, with a width of 75 mm which is already factored into the measurements given below.

#### **1. Area (IHF)**

- 1.1. Overall Dimensions: 95m x 131.4m
- 1.2. Playing surface dimensions: 55m x 91.4m
- 1.3. Buffer area dimensions: 10m setback to planting; 20m setback to property line and facilities

#### **2. Orientation**

- 2.1. Best: North – South

#### **3. Access**

- 3.1. Access to the site should be relatively flat with slopes not exceeding 5%

#### **4. Grading & Drainage (IHF)**

- 4.1. Artificial turf requires full drainage.
- 4.2. Field Area: 19 mm clear crushed limestone or dolomite sub base.

#### **5. Surfacing (IHF)**

- 5.1. Artificial turf: consists of a vertical draining gravel blanket and monofilament blended fibers, tufted into a primary backing with a secondary backing. Sections are bonded together with glue and turf tape plus stitched seams.
  - 5.1.1. Infill system consists of a mixture of rubber granules and silica sand (or (for R) rubber granules only.
  - 5.1.2. The system's shock attenuation shall have an average G-max value less than 120 for a non-padded system, based on ASTM-F355A M no time shall the G-max value exceed 170 for a non-padded system throughout the life of the warranty.

#### **6. Water Supply**

- 6.1. NIA

#### **7. Irrigation**

- 7.1. NIA

#### **8. Electrical (SDD)**

- 8.1. Required if lighting the field: 200amp 120V Hydro Kiosk with push button. Standard park electrical details

#### **9. Lighting (optional)**

- 9.1. If installed all lighting must meet the Illuminating Engineering Society of North America (IES) standards and be Energy efficient.

#### **10. Fencing (SDD)**

- 10.1. Optional: soccer goal screen 4,880 mm high centered behind penalty area
- 10.2. Material: black vinyl coated 6-gauge wire.

**11. Gates (SDD)**

- 11.1. If field is fenced pedestrian and vehicular gates are required as per City standard details.

**12. Goals (IHF)**

- 12.1. Each post is placed 1,830 mm away from the center of the backline, one on either side, with a depth of 1,200 mm. This makes the total goal width 3,660 mm.
- 12.2. These have a height of 500 mm from the ground. The backboard runs the length of the goal and is 3,660 mm across. The sideboard depth is 1,200 mm at ground level and both are placed in parallel for each goal, perpendicular to the backboard. The color of the backboard and sideboards should be darker than that of the pitch.

**13. Furniture**

- 13.1. Players benches
- 13.2. Recycling/garbage receptacles as per current City guidelines consider maintenance vehicle access to receptacles.

**14. Boards**

- 14.1. N/A

**15. Storage**

- 15.1. N/A

**16. Parking**

- 16.1. Preferred
- 16.2. Parking include accessible spaces
- 16.3. Bicycle parking within view of playing surface

**17. Accessibility**

- 17.1. Promote universal accessibility. Ensure all aspects of the site meet all current Accessibility Design Standards for exterior spaces.

**18. Safety**

- 18.1. Follow CPTED principles

**19. Options for Multiple Purpose**

- 19.1. Local and school field hockey can be played on any full-size soccer or football field.