

City of Ottawa Recreation Facility Infrastructure Standards

AQUATIC MAJOR BUILDING COMPONENTS

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

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AQU-01 Aquatic Facility

v1-0

Date: September

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Description

The City standard for indoor aquatic facilities is a 25M lap pool is 6 lanes and a secondary Leisure Pool. Where programming demand warrants, and sufficient budgets exist, an 8-lane lap pool will be considered.

The City standard for a 50M lap pool is 8 lanes. Where programming demand warrants, and sufficient budgets exist, a 10-lane lap pool will be considered. Preference will be given to collocating 50M pool with an indoor Aquatic Facility as described above.

50M Pools also typically include spectator seating for large events and programs. This standard is based on FINA minimum standards. Aquatic facilities are associated with REC-01 Recreation Complexes. Aquatic Facilities will also include the following support spaces: REC-16 Lobby, AQU-02 Wet Change Rooms, AQU-03 Lifeguard Monitor Office, AQU-04 Lifeguard Change, AQU-05 Pool Instruction Room, AQU-06 Pool Deck Washroom, AQU-07 Mechanical Space Pool, pool storage rooms and may include AQU-08 Dry Sauna.

General

- The Aquatic Facility Lap Pool standard is six (6), however to offer more flexibility for aquatic programming, eight (8) lanes is preferred, when and if the project budget, community needs, and site can accommodate the additional lanes.
- An Aquatic Facility is located on the ground floor with the Lap Pool and Leisure Pool basins laid out side by side.
- Spectator seating in 50M Aquatic Facility for 1,000 (including accessible seating) within Aquatic Facilities for large events and programming; to be accessed from the facility lobby
- General pool viewing area to be from ground floor lobby or from second floor if part of a 2-level recreation complex.
- Access to public access defibrillator
- Diving basin incorporated in main 50 m basin deep end

1.0 Area

1.1 25M Aquatic Facility

1.1.1 Gross floor area: minimum 2,300 m²

1.1.2 Pool Basin Dimensions

1.1.2.1 Lap Pool (6-lane, 25 m)

1.1.2.1.1 17 m x 25 m (including 2,000 mm of ramp); 15 m width (not including ramp)

1.1.2.1.2 Lane width: 2,500 mm

1.1.2.1.3 Water Depth: ranging from shallow area (minimum 1.1 m) to deep area (minimum 3,000 mm) to accommodate a range of programming. Depths to meet code requirements OBC, Reg 565, FINA

1.1.2.2 Lap Pool (8-lane, 25 m)

- 1.1221 22 m x 25 m (including 2,000 mm of ramp); 20 m width (not including ramp)
- 1.1222 Lane width: 2,500 mm
- 1.1223 Water Depth: ranging from shallow area (minimum 1,100 mm) to deep area (minimum 3,000 mm) to accommodate a range of programming. Depths to meet code requirements OBC, Reg 565, FINA

1.1.2.3 Leisure Pool

- 1.123.1 Minimum 20 m length x 9,000 mm width (including ramp), 20 m x 7,650 mm (not including ramp).
- 1.1232 Preference for rectangular shape to permit flexible programming
- 1.1233 Leisure pool depth should range between 1,200 mm and 900 mm
- 1.1234 Leisure pool to have warmer water than Lap Pool to meet multiple program requirements

1.1.3 Diving Board

- 1.1.3.1** Minimum of one (1), one-meter spring board at deep end; location to be OBC and FINA compliant

1.2 50M Aquatic Facility

- 1.2.1** Gross floor area: minimum 4,600 m²

1.2.2 Pool Basin Dimensions

- 1.2.2.1** Main Pool (minimum 8-lane, 50 m)
- 1.2.2.2** Basin Size: 22 m x 52 m (includes space for 2,000 mm wide bulkhead)
- 1.2.2.3** Lane width: 2,500 mm
- 1.2.2.4** Water Depth: ranging from shallow area (maximum 3,000 mm) to deep area (minimum 5,000 mm) to accommodate range of program requirements. Depths to meet program, OBC and FINA requirements.
- 1.2.2.5** One (1) moveable bulkhead (2,000 mm wide) per FINA standards
- 1.2.2.6** Diving Boards, per Dive Canada specifications
 - 1226.1 Two (2) 1,000 mm spring boards, side by side; with appropriate spacing; preference for single concrete platform to support both spring boards
 - 1226.2 Two (2) 3,000 mm spring boards for synchro diving; preference for single concrete platform to support both spring boards

1.2.3 Diving Platforms, per Dive Canada specifications

- 1.2.3.1** Diving Tower with 3,000 mm, 5,000 mm, 7,000 mm and 10 m platforms, to meet FINA standards for single and synchro diving.
- 1.2.3.2** Elevator access from pool deck to each dive platform level

1.3 Therapeutic Area

- 1.3.1** When collocated with a Leisure Pool, a separate area at one end of Leisure Pool with bench seating and therapeutic jets
- 1.3.2** Minimum capacity: 25 persons including bench seating
- 1.3.3** Shares same water and temperature with Leisure Pool
- 1.3.4** Layout variable
- 1.3.5** Water depth: 1,000 mm

1.4 Accessible Ramp

- 1.4.1** Maximum slope: 5%
- 1.4.2** Ramp Width: minimum 1,350 mm
- 1.4.3** Location of ramp to be within the leisure pool basin
 - 1.4.3.1** To prevent swimmers from using the facility inappropriately, the ramp will include a barrier in addition to handrail. The barrier is to allow water circulation between the ramp and the tank.

1.5 Deck Space

- 1.5.1** Minimum width 10.0 m around 50M basin
- 1.5.2** Minimum 3,000 mm at sides of 25M basin
- 1.5.3** Minimum 4,000 mm at ends of 25M basin
- 1.5.4** Enough deck space for
 - 1.5.4.1** Two (2) portable 6,000 mm² timing booths at each end of 50M basin
 - 1.5.4.2** 4,900 mm dryland board with 3,000 mm² crash mat
 - 1.5.4.3** Two (2) or three (3) 1,000 mm practice springboards
 - 1.5.4.4** 3,000 mm x 3,000 mm trampoline

1.6 Ceiling Height

- 1.6.1** 25M Aquatic Facility:

1.6.1.1 7,500 mm (underside of roof decking) 6,000 mm underside of roof joists (Minto Recreation Complex) 10.5 m (to ceiling) 8,600 mm (bottom of roof joists)

1.6.1.2 Preference for non-metal beams and roof decking, for example, glulam wood beams and wood decking

1.6.2 50M Aquatic Facility:

1.6.2.1 Minimum 16.0 m to underside of roof deck; 14.0 m to underside of roof trusses

1.6.2.2 Glulam wood beams, wood roof decking

2.0 Access

2.1 Location

2.1.1 Ground floor

2.2 Interior

2.2.1 Access from wet change rooms, lifeguard office, pool instruction room, pool storage, facility operations area (chemical storage, etc.), lobby (locked), pool deck washroom

2.3 Exterior

2.3.1 Emergency exit doors

3.0 Preferred Relationships

3.1 Adjacent

3.1.1 Pool storage, pool instruction room, lifeguard office, sauna (if included), mechanical room(s), pool basement, main corridor, public viewing area, pool deck washroom. Lobby, scoring room, wet change rooms

3.2 Close

3.2.1 Lifeguard change room, mechanical room

3.2.2 Therapeutic pool to be close to diving area

3.3 Daylight

3.3.1 Minimum one (1) exterior wall, preference for North side

3.3.2 Glazing to have anti-glare film

3.4 Views In

3.4.1 Public viewing area (lobby), lifeguard office, exterior, spectator seating

3.5 Views Out

3.5.1 Exterior, public viewing area (lobby), lifeguard monitor office

4.0 Accessibility

4.1 Per AODA, City of Ottawa Accessibility Design and OBC Standards

4.2 Accessible pool ramps to run from pool deck level down to bottom of shallow end (1,100 mm water depth), without steps

5.0 Lighting

5.1 Energy efficient, ceiling mounted, high bay fixtures motion sensor controlled (meeting OBC lighting standards)

5.2 Lighting fixtures mounted above deck (not over pools)

5.3 LUX to meet IES standards and O. Reg 565

6.0 Electrical

6.1 Voltage: 120 GFI

6.2 Outlets: GFI weather proof outlets

7.0 Mechanical

7.1 Controls: BAS

7.2 Pool basin drains, pool deck trench floor drains to sanitary system

7.3 Continuous pool gutters

8.0 Ventilation

8.1 Dedicated HVAC unit, designed to create a negative air pressure, removal of chloramines, ceiling mounted ducts, semi-rigid air supply ducts located along outside walls, return air duct located along center line of Aquatic Facility (over pool)

8.2 Separate HVAC control for spectator seating area

9.0 Heating

9.1 In floor heating on pool deck

10.0 Cooling

10.1 Required

11.0 Water Supply

11.1 150 mm supply line to each pool basin

11.2 On deck showers per OBC, wall mounted hose bibs (2), drinking fountain with bottle filler, water efficient shower heads

11.3 Pool water treated Ultraviolet or equivalent

12.0 Fire Suppression

12.1 Emergency wall mounted fire extinguisher cabinets; wall mounted fire alarm bells; sprinklers

13.0 Emergency

13.1 Fire alarm pull stations combination fire alarm/strobe light wall fixtures

13.2 Emergency wall mounted double headed battery powered lighting packs

13.3 Emergency telephone outlet (in lifeguard monitor office)

13.4 Emergency stop button for lap and secondary basin pool filter systems (in lifeguard monitor office next to phone)

14.0 Finishes

14.1 Deck: non-slip ceramic tile, maximum 50 mm x 50 mm with dark grout. To match floor tiles in wet change rooms and pool instruction room

14.2 Walls: ceramic tile 2,000 mm from finished floor; painted concrete block above

14.3 Ceilings: wood decking, wood glulam beams, non-metal

14.4 Basins: white or light colour finish (re O.Reg. 565)

15.0 Communications

15.1 Intercom speakers: wall or ceiling mount

15.2 Emergency Telephone in Lifeguard Monitor Office

15.3 Data: Wi-Fi, data outlets

- 15.4 Wireless audio system
- 15.5 50M Aquatic Facility: Plug-ins for underwater sound system
- 16.0 **Security**
 - 16.1 As per Corporate Security Standards
- 17.0 **Storage**
 - 17.1 50M Aquatic Facility:
 - 17.1.1 One (1) 30 m² Pool Programming Storage Room off pool deck with exterior delivery access
 - 17.1.2 One (1) 30 m² Aquatic Sports Equipment Storage Room off pool deck with exterior delivery access
 - 17.2 One (1) 35 m² Pool Programming Storage Room off pool deck with exterior delivery access
 - 17.3 Non-slip sealed concrete floor with drain
 - 17.4 Painted concrete block; add moisture resistant plywood finish where wall mounted shelving is required
 - 17.5 Shelving, hooks and hangers as required
- 18.0 **Equipment and Furnishings**
 - 18.1 Mobile Life Guard Chairs; number to be determined per OBC standards
 - 18.2 Perimeter wall mounted composite seating
 - 18.3 Lane ropes (with storage under deck), backstroke marker, lap counter, pace clock
 - 18.4 Removable starting blocks at deep end of 25M pool
 - 18.5 Railings at ramps, stairs and ladders
 - 18.6 Powder Coating required for lifeguard chairs, railings and ladders
 - 18.7 50M Aquatic Facility:
 - 18.7.1 Removable starting blocks at shallow and deep ends of 50M pool
 - 18.7.2 Underwater bubble machine or horizontal water sprinkler system for deep end of 50M pool (diving)
 - 18.7.3 Dryland Diving Boards with crash mats
 - 18.7.4 One (1) moveable bulkhead per FINA standards for 50M pool
 - 18.7.5 Three (3) water polo dividing curtains at ¼, ½ and ¾ locations in 50M pool
 - 18.7.6 Optional: underwater viewing window, swing rope, dry sauna
 - 18.7.7 Omega Timing/Scoring System with competitive swimming, synchro/diving/water polo scoring/timing capabilities
 - 18.7.8 Two (2) full colour Video Scoreboards (with Energy efficient lights)
 - 18.7.9 Strength and Conditioning Equipment
 - 18.8 Accessible pool lift
- 19.0 **Special Requirements**
 - 19.1 Toe-in at deep end
 - 19.2 Optional: swing rope (proper anchor location), dry sauna, on-

deck pool viewing area for competitive level facilities, stroller parking

20.0 Best Practices

20.1 25M Aquatic Facility:

20.1.1 François Dupuis Recreation Centre

20.1.2 Richcraft Recreation Complex-Kanata

20.1.3 Minto Recreation Complex-Barrhaven

20.2 50M Aquatic Facility:

20.2.1 Claude Robillard Sports Complex – Montreal

20.2.2 International Aquatic and Sport Training Centre –Windsor

20.2.3 Seton Recreation Facility – Calgary (opening 2019)

AQU-02 Wet Change Rooms

Date: September 2019 Version: v1-0

Description

Wet Change Rooms are spaces for pool users to change in and out of swimwear and include washrooms and grooming areas. Wet Change Rooms can be gender specific and/or universal. Door less entrances are recommended to lobby/circulation areas but lockable doors are required to access the pool deck.

1.0 Area

1.1 Dimensions depends on pool size

1.1.1 Universal: 225 m², 15 x 15 m

1.1.2 Women 115 m², 10 x 11.5 m

1.1.3 Men 115 m², 10 x 11.5 m

1.1.4 May be a combination of separate Male/Female/universal change rooms or single universal change rooms depending on site and public consultation.

1.2 Ceiling Height: 2,700 mm most locations

1.3 Details: small (609.6 mm wide x 457.2 mm deep) Janitor closet in each change room for small maintenance with moveable shelving for storage; a common janitorial room will be in the common area with a slop sink and water supply

1.4 Janitor closet creates cleaning and maintenance efficiencies.

1.5 Special Requirements

1.5.1 Stroller parking area in vestibule to the universal needs change room

1.5.2 Shower clear visual from hallway OBC

2.0 Location

2.1 Ground floor

2.2 Interior

2.2.1 Main corridor, pool deck

2.3 Exterior

2.3.1 Emergency exit (from pool deck and corridor) OBC depending on size check occupancy/size of change room

3.0 Preferred Relationships

3.1 Lobby, front desk, pool instruction room, lifeguard monitor office; storage, janitor closet; preferred to not share with dryland/fitness areas (can be shared but separate shower access is necessary)

3.2 Preference to locate universal change room close to leisure pool rather than lap pool.

3.3 Daylight: preferred

3.4 View in: none

3.5 View out: desirable (high-level frosted Energy efficient windows)

4.0 Security

- 4.1 doors required with privacy locksets on doors leading to pool deck (key required on change room side)

5.0 Accessibility

- 5.1 Fully accessible; where doors are employed, power door operators are required to access corridor and pool deck.
- 5.2 Details: good signage; extra wide doors to get machinery in for repair and maintenance (1,070 mm); easy to navigate.
- 5.3 Adult change table and disposal receptacle

6.0 Lighting

- 6.1 General: Energy efficient recessed ceiling fixtures or strip lighting (preferably not metal because of chlorine; sealed for moisture)
- 6.2 Lighting at mirrors
 - 6.2.1 Details: ceiling mounted occupation sensor, selected lights connected to emergency power source; no sensors on lights in change rooms (do it through building automation (BAS))

7.0 Electrical

- 7.1 Voltage: 120 GFI outlets
- 7.2 Outlets: alternate GFI

8.0 Emergency: emergency exit, ceiling mounted signs and warning systems per OBC

9.0 Mechanical

- 9.1 Drainage
 - 9.1.1 Minimum 304.8 mm x 304.4 mm drains for cleaning and maintenance
 - 9.1.2 Trench drains required

10.0 Ventilation

- 10.1 Forced air system with ducts located in the ceiling

11.0 Heating/Cooling

- 11.1 Combination of in-floor radiant heat and forced air system with ducts located in the ceiling with air conditioning not recirculated. For cooling central forced air preferred. Change room ventilation is not recirculated.
- 11.2 Generator backup to larger facilities needs to become some type of standard not only for emergency shelters but also maintaining service levels or legislative requirements for re-opening after any type of power loss or emergency.
- 11.3 Local emergency – Critical systems may include PA system,

12.0 Water supply

- 12.1 Toilets, sinks, shower heads – water efficient; multiple wall hydrants / hose bibs for cleaning and sanitizing (both in change room and on pool deck), drinking water spout suitable for fillable water bottle

13.0 Fire suppression

- 13.1 Sprinklers

14.0 Finishes

- 14.1** Floor: ceramic tile; non-slip floor; 50 mm x 50 mm tiles with minimal grout to address colour and mould issues. non-white tiles and grout. Heated floors; All floors to have trench drains, trench width can vary from 21 mm – 102 mm and can be standalone or at the end
- 14.2** Ceilings: minimum in showers/change rooms to use block or consider ceiling green board (mould and moisture resistant materials; preference for no drywall in washrooms/change cubicles, acoustic treatments in locker room/hallways)
- 14.3** Walls: block walls with ceramic tile to 1,500 mm above finished floor (if drywall tile to ceiling). Mould and moisture resistant drywall on ceiling;
- 14.4** Floor to ceiling partitions in universal change rooms universal washrooms should have floor to ceiling wall and doors; phenolic lockers; toilets wall mounted (for best practice example of partitions, see Crestview Pool Change Building)
- 14.5** Additional outlets in case people bring their own accessories
- 14.6** Full-length mirrors
- 14.7** Stand-alone accessible washroom
- 14.8** Universal all-gender: consider a combination open group showers, dry change stalls, lockers, and private shower stalls (with change area).
- 14.9** Male/Female change rooms
 - 14.9.1** All cubicle and shower stall dividers and doors made of solid phenolic panels (wall and ceiling mounted not floor) with stainless steel hardware; concrete block partitions for universal change rooms preferred.
- 14.10** Washrooms
 - 14.10.1** Number of sinks and toilet fixtures based on occupancy
 - 14.10.2** Sinks set in countertop with mirrors, hands free tap, soap dispenser and hand dryer operation, countertops should be made of man-made stone or stainless steel for longevity and cleanliness.
 - 14.10.3** Universal washrooms partitions should be floor to ceiling
 - 14.10.4** High efficiency toilets wall mounted / automatic
 - 14.10.5** Grab bars in washrooms per AODA/OBC
 - 14.10.6** Toilet fixtures to be wall mounted toilets (men and women), hands free operation
 - 14.10.7** Hands free operation for hand and hair dryers
- 14.11** Accessible Washroom
 - 14.11.1** Toilet, sink, hand dryer, mirror, change table, grab bars
- 14.12** Showers
 - 14.12.1** Preference for dial controls, manual operation, client-controlled water temperature, maximum temperature to be set, water efficient shower heads
 - 14.12.2** Regular showers stalls (no shower curtain) – occupancy based
 - 14.12.3** Number of showers to be set by OBC

- 14.124 One (1) accessible shower stall with bench and a door
 - 14.125 Trench drains along wall; darker tile for trench compared to floor
- 14.13 Drying area
 - 14.131 Four (4) hair dryers (motion activated) varying heights
 - 14.132 Wall mounted hooks
 - 14.133 Shelf mirror
 - 14.134 Outlets
- 14.14 Grooming area
 - 14.141 Wall mounted shelf with hair dryers and a mirror over the shelf (located in locker area)
 - 14.142 Full length mirror and wall outlets
- 14.15 Lockers
 - 14.151 Solid phenolic construction
 - 14.152 Combination of full and ½ height lockers, number based on pool occupancy load
- 14.16 Male – Female – Universal Needs Change Rooms
 - 14.161 Best Practice: Richcraft Recreation Complex – Kanata
- 14.17 Universal Needs Change Rooms
 - 14.17.1 Best Practice: Minto Recreation Complex -Barrhaven
- 14.18 Washrooms
 - 14.18.1 Minimum three (3) sinks set in countertop with mirrors, hands free tap, soap dispenser
 - 14.18.2 Two (2) hand dryers
- 14.19 Accessible washrooms
 - 14.19.1 Three (3) fully enclosed accessible washrooms each with toilet, sink, hand dryer, mirror, change table, grab bars (one with shower)
- 14.20 Showers
 - 14.20.1 Three (3) shower cubicles (no doors)
 - 14.20.2 One (1) accessible shower cubicle (with door)
 - 14.20.3 One (1) combination accessible washroom and shower (concrete block walls, door)
- 14.21 Drying Area
 - 14.21.1 Three (3) wall mounted hair dryers
 - 14.21.2 Wall towel hooks
 - 14.21.3 Shelf mirror
 - 14.21.4 Outlets
- 14.22 Grooming Area
 - 14.22.1 Open area with counter, mirrors and electrical outlets; located near wall-mounted hair dryers
- 15.0 Communications
 - 15.1 Data: no Wi-Fi
 - 15.2 Intercom: yes (ceiling or high wall mount)

- 15.3 AV Systems: none
- 16.0 **Security**
 - 16.1 As per Corporate Security Standards
 - 16.2 Occupation sensors connected to BAS for closing of facilities; connected to security, as per Corporate Security Standards
- 17.0 **Storage**
 - 17.1 Small (610 mm wide x 458 mm deep) janitor closet in each change room for cleaning and maintenance with moveable shelving for storage
 - 17.2 Area/Dimensions: closet size; slop sink and mop storage (Minimum 2,500 mm²)
 - 17.3 Access: key access; 1,067 mm door; door opens outwards
 - 17.4 Finishes: concrete block floor and wall
- 18.0 **Equipment, Millwork and Furnishings**
 - 18.1 Equipment
 - 18.1.1 See below
 - 18.2 Millwork
 - 18.2.1 Vanities, shelves; stainless steel sinks or cultured stone (longevity/cleaning)
 - 18.3 Furnishings
 - 18.3.1 Preference for concrete base with mounted benches (built in), benches along perimeter should be wall mounted for ease of cleaning underneath
 - 18.3.2 458 mm (18 in) lockers preferred. Sloped tops to prevent accumulation of belongings
 - 18.3.3 Concrete base/locker mounted on top of it
 - 18.3.4 Benches (built-in), towel hooks

AQU-03 Lifeguard Monitor Office

Date: September 2019 Version: v1-0

Description

A space for pool facility lifeguards to administer and monitor aquatic programming and pool safety procedures in the Aquatic Facility. Includes small kitchenette for lifeguard staff. Lifeguard Monitor Offices are found in AQU-01 Aquatic Facility and are located adjacent to the AQU-05 Lifeguard Change Rooms and Aquatic Facility pool decks.

General

- Lifeguard Monitor Offices are pool operational and programming spaces with direct views onto the pool deck and pool basins
- Lifeguard Monitor Offices provide life safety equipment and support services for lifeguards with direct access to the pool deck

1.0 Area

1.1 Richcraft / Francois Dupuis example

- 1.1.1** Gross floor area: minimum 40 m²
- 1.1.2** Monitoring office: 25 m²
- 1.1.3** Support area: 10 m²
- 1.1.4** Storage Room: 5,000 mm²
- 1.1.5** Ceiling Height: 2,800 mm

2.0 Access

- 2.1** Off the pool deck at deck level or higher for better visibility; ideally raised 600 mm above pool deck
- 2.2** Interior: access from pool deck, lifeguard change room and lobby
- 2.3** Exterior: n/a

3.0 Preferred Relationships

- 3.1** To be connected to pool deck and lifeguard change room
- 3.2** Daylight: indirect through Aquatic Facility
- 3.3** Views In: from pool deck and basins
- 3.4** Views Out: large Energy efficient windows to pool deck and basins

4.0 Accessibility

- 4.1** Per AODA, City of Ottawa Accessibility Design and OBC Standards

5.0 Lighting

- 5.1** Energy efficient ceiling mount fixtures, task lighting at work stations; not metal

6.0 Electrical

- 6.1** Voltage: 120 GFI
- 6.2** Duplex outlets: consider outlets with built-in USB ports; one per work station, minimum of three additional for temporary work stations; and in kitchenette area for refrigerator and microwave)
- 6.3** Wall clock
- 6.4** Controls for pool spray or water features

6.5 Emergency pool system stop for pumps near to the pool deck door with audio/visual alarm

6.6 Sound system/public address speaker cabinet

6.7 Emergency phone

7.0 Mechanical

7.1 Controls: BAS

8.0 Ventilation

8.1 Ceiling mounted supply with diffusers; with dehumidification

9.0 Heating

9.1 Energy efficient heating

9.2 Ceiling mounted supply with diffusers

9.3 Radiant in-floor is preferred

9.4 Natural gas preferred

10.0 Cooling

10.1 Ceiling mounted supply with diffusers

11.0 Kitchenette

11.1 Water Supply

11.2 Sink in support area

12.0 Emergency

12.1 Fire Suppression sprinklers

13.0 Finishes

13.1 Lifeguard Monitoring Office

13.1.1 Floor: ceramic tile

13.1.2 Walls: ceramic tile 1,500 mm from Finished floor, water and impact resistant material

13.1.3 Ceiling: acoustic treatment

13.2 Storage Room

13.2.1 Floor: non-slip, sealed concrete

13.2.2 Walls: water and impact resistant material, such as plywood

14.0 Communications

14.1 Intercom: speakers wall or ceiling mount

14.2 Voice/Data: outlets defined per work station / occupancy. Minimum 6 outlets.

14.3 Audio System: audio system & controls located in an enclosed cabinet

14.4 Telephone: landline required

15.0 Security

15.1 Per Corporate Security Standards

16.0 Storage

16.1 Millwork cabinets to maximize administrative, lifeguard equipment and first aid supply storage

17.0 Equipment and Furnishings

17.1 Lifeguard monitoring office

17.1.1 Water resistant furniture, open work counter along perimeter of room, including overview of pool deck and basins; cabinetry, shelving, under desk surface storage, enclosed audio cabinet

17.2 Support area

17.2.1 Base cabinet with sink, overhead cabinet, paper towel and soap dispenser; small table and chairs, microwave, fridge with ice maker

18.0 Examples/Best Practices

18.1 Richcraft Recreation Complex – Kanata (2014)

18.2 Minto Recreation Complex – Barrhaven (2015)

AQU-04 Lifeguard Change Room

Date: September 2019 Version: v1-0

Description

A universal space for lifeguards to change into or out of bathing apparel that is separate from public change rooms. The lifeguard change room includes a space for change benches & lockers, a universal washroom, a private shower stall and a private change cubicle. Lifeguard Change Rooms are found in AQU-01 Aquatic Facility and are located adjacent to the AQU-4 Lifeguard Monitor Office and Aquatic Facility pool decks.

General

Lifeguard Change Rooms are small-scale versions of public universal change rooms to allow lifeguards to efficiently transition between wet and dry environments.

1.0 Area

- 1.1 Gross floor area: minimum 40 m²
- 1.2 Change room: 25 m²
- 1.3 Universal washroom: 7,000 mm²
- 1.4 Private shower stall: 3,000 mm²
- 1.5 Private change cubicle: 5,000 mm²
- 1.6 Ceiling Height: 2,800 mm

2.0 Access

- 2.1 Location
 - 2.1.1 At same level at Lifeguard Monitoring Office, ideally raised 600 mm above pool deck
- 2.2 Interior: access from lifeguard monitor office and pool deck
- 2.3 Exterior: n/a

3.0 Preferred Relationships

- 3.1 Adjacent: lifeguard monitor office and pool deck
- 3.2 Close: public pool entry
- 3.3 Daylight: n/a
- 3.4 Views In: none
- 3.5 Views Out: none

4.0 Accessibility

- 4.1 Per AODA, City of Ottawa Accessibility Design and OBC Standards

5.0 Lighting

- 5.1 Energy efficient ceiling mount fixture, BAS

6.0 Electrical

- 6.1 Voltage: 120
- 6.2 Duplex GFI outlets; two (2) in change room (grooming area) and one (1) in universal change cubicle

7.0 Mechanical

- 7.1 Controls: BAS
- 7.2 Floor drains in change room and private shower stall (continuous strip drain)

8.0 Ventilation

8.1 Controls: BAS

9.0 Heating

9.1 In floor

10.0 Cooling

10.1 Required: central forced air preferred

11.0 Water Supply

11.1 Sink and toilet in universal washroom; floor to ceiling doors

11.2 Shower, water efficient shower heads

12.0 Fire Suppression

12.1 Sprinklers

13.0 Finishes

13.1 Floor: non-slip ceramic tile

13.2 Walls: full height ceramic tile in shower stall; 1,500 mm from finished floor and; painted drywall above in change room, universal washroom and private change cubicle

13.3 Ceiling: acoustic treatment

14.0 Communications

14.1 Public address: speakers wall or ceiling mount

14.2 Data: n/a

15.0 Security

15.1 As per Corporate Security Standards

15.2 Lockset from main lifeguard office

16.0 Storage

16.1 N/A

17.0 Equipment and Furnishings (see wet change room)

17.1 Change room

17.1.1 Benches, lockers, grooming station (shelf, mirror, outlets)

17.2 Universal washroom

17.2.1 Paper towel dispenser and disposal, toilet paper holder, napkin disposal, soap dispenser, mirror

17.3 Private change cubicle & shower stall

17.3.1 Floor to ceiling dividers, bench

18.0 Examples/Best Practices

18.1 Richcraft Recreation Complex – Kanata (2014)

18.2 Minto Recreation Complex – Barrhaven (2015)

AQU-05 Pool Instruction Room

Date: September 2019 Version: v1-0

Description

Pool instruction rooms are a core component of the City's AQU-01 Aquatic Facility. They support a wide range of aquatic instructional and aquatic recreational activities and programs including certification courses for first aid and CPR. Recommended up to 50 people.

General

- Pool instruction rooms are located near Aquatic Facility, directly off the pool deck
- Pool instruction rooms are equipped with tables and chairs to suit occupant load
- Storage is required to allow flexibility of use

1.0 Area

1.1 Minimum: 50 m²; room up to 50 people to allow for space to teach lifesaving and first aid courses

1.2 Ceiling Height: 3,000 mm minimum, clear headroom of 2,100 mm from overhead signage

2.0 Access

2.1 Location

2.1.1 Pool deck floor

2.1.2 Close proximity to both the pool deck and hallway/lobby required. Preference is direct connection to pool deck.

2.2 Interior

2.2.1 Access to both the pool deck and hallway/lobby required. View to pool deck is preferred.

2.2.2 At least one accessible door, with minimum of 860 mm clear door width. Appropriate approach clearances and maximum opening force depending on door design.

2.3 Exterior: not required

3.0 Preferred Relationships

3.1 Adjacent: pool deck, washroom, storage area for teaching equipment, hallway/lobby

3.2 Close: pool basin, pool change rooms

3.3 Daylight: if possible, desirable

3.4 Views In: view in from pool deck and corridor/lobby [glass doors, window(s)]; consider noise attenuation with materials selection

3.5 Views Out: to pool deck and corridor/lobby

4.0 Accessibility

4.1 Per AODA and City Accessibility Design Standards

5.0 Lighting

5.1 Energy efficient ceiling mount high bay fixture, BAS, dimmable

5.2 Emergency lighting pack

6.0 Electrical

6.1 Voltage: 120

6.2 Based on room dimension / OBC GFI duplex outlets mounted no lower than 400 mm high, consider outlets with built-in USB ports

6.3 Emergency: one (1) ceiling mounted combination fire alarm/intercom speaker/strobe light

6.4 Network wall clock

7.0 Mechanical

7.1 Controls: wall mounted

8.0 Ventilation

8.1 Air Changes / hour in accordance with ASHRAE standards

9.0 Heating

9.1 Individual temperature control

10.0 Cooling

10.1 Required.

10.2 Central forced air preferred

11.0 Fire suppression

11.1 Wall mounted fire extinguisher

11.2 Floor drain, sanitary drain for sink

12.0 Water supply

12.1 for sink

13.0 Finishes

13.1 Floor

13.1.1 Non-slip tile

13.1.2 In-floor heating system

13.1.3 Ceramic tile size to match pool deck (50 mm x 50 mm)

13.2 Ceilings

13.2.1 Drop ceiling with acoustic treatment

13.3 Walls

13.3.1 Sound proof, with ceramic tile to 1,500 mm above Finished floor, painted drywall above

14.0 Communications

14.1 Telephone: outlets, location

14.2 Data: Wi-Fi, 1 data outlet

14.3 Intercom

14.3.1 Speakers

14.3.2 Equip for AV including screen and projector

14.3.3 Phone and data line, internet required

14.4 Audio Visual Systems

14.4.1 Located in a lockable enclosure (receiver, amplifier, mixer, wireless microphone, wall or ceiling mounted speakers). Equipped for AV, including screen and projector

14.4.2 Phone and data line, internet required – minimum two(2)

15.0 Security

15.1 As per Corp Security standards.

15.2 Blinds on internal and external Energy efficient windows

16.0 Storage

16.1 Area: approximately 13% of instruction room floor area

16.2 Suitable for tables and chairs storage

16.3 Access: double door, lockable

16.4 Floor and Wall finishes: concrete floor, plywood walls, open joist ceiling

17.0 Equipment and Furnishings

17.1 Millwork

17.1.1 Along one full wall with counter top, sink and cabinets for program materials

17.1.2 Folding seating and tables with rolling dollies to allow aquatic instruction and community programming

17.1.3 Clear floor space with turning diameter of 1,675 mm

17.1.4 Sink and counter top

17.1.5 Millwork / cabinets for storage of course manuals, materials, mats, first aid supplies, manikins etc. Ideally to cover one full wall.

17.1.6 Table and chair storage

17.1.7 Lighting on dimmer switches

17.1.8 Window blinds for all windows

17.1.9 Sound proofing between pool and classroom to reduce noise from pool activities to classroom

18.0 Optional Upgrades

18.1 Ceiling mounted projector, ceiling mounted powered screen

19.0 Examples/Best practices

19.1 François Dupuis Recreation Centre addition (2017) with up to 50% larger room dimensions

19.2 Certification courses where first aid and CPR are taught require participants to be spread out and/or lying down.

AQU-06 Pool Deck Washroom

Date: September 2019 Version: v1-0

Description

A Pool Deck Washroom is a single universal room with a toilet/sink accessible from the pool deck in an AQU-1 Aquatic Facility. The washroom is intended for use by wet bathers to avoid the need for pool and AQU-6 Pool Instruction Room users to leave the pool deck and enter the change room facilities. This room will not include shower/bathing facilities.

General

- Pool Deck Washroom finishes designed for use by wet bathers
- Washroom provides a close and quick option for relief of pool bathers and pool instruction room users

1.0 Area

1.1 Gross Floor Area: 8,000 mm²

1.2 Ceiling Height: 2,400 mm

2.0 Access

2.1 Interior: accessible from pool deck with a controlled, operable entry door

2.2 Exterior: none

3.0 Preferred Relationships

3.1 Adjacent: pool deck

3.2 Close: pool basin shallow end

3.3 Daylight: not required

3.4 Views In: none

3.5 Views Out: none

4.0 Accessibility

4.1 As per AODA and City of Ottawa Accessibility Standards

5.0 Lighting

5.1 Energy efficient ceiling mounted fixtures

6.0 Electrical

6.1 Voltage: 120 GFI

6.2 Duplex outlets: one GFI for maintenance

6.3 Emergency: one (1) emergency wall mounted double-headed battery powered lighting pack

7.0 Mechanical

7.1 Controls: BAS

7.2 Sanitary line (toilet, sink)

7.3 Ventilation: air Changes / hour in accordance with ASHRAE standards

7.4 Heating: in floor heating

7.5 Cooling: required, central forced air preferred

7.6 Water Supply: sink and toilet wall mounted

7.7 Fire Suppression: wall mounted fire alarm bells

8.0 Finishes

8.1 Floor: non-slip ceramic tile

8.2 Ceilings: painted moisture-resistant dry wall

8.3 Walls: ceramic tile from Finished floor to 1,500 mm; above painted concrete block or moisture-resistant dry wall

9.0 Communications

9.1 Intercom: ceiling mounted speakers

10.0 Security

10.1 As per Corp Security Standards.

10.2 Lockset from inside; emergency call button – as per AODA

11.0 Equipment and Furnishings

11.1 Hand dryer, toilet paper holder, napkin disposal, soap dispenser, mirror

12.0 Examples/Best practices

12.1 Richcraft Recreation Complex – Kanata (2014)

AQU-07 Mechanical Space Pool

Date: September 2019 Version: v1.0

Description

The Mechanical Space for pools houses all the mechanical equipment required to operate a public pool. The pool mechanical space must have adequate space for operating staff to work in a safe manner and to allow for future modifications, maintenance and additions / removal of mechanical equipment.

The “pool mechanical space” is a utility space consisting of a number of rooms along a basement level “tunnel” below and around the pool basin(s). The “tunnel” around the perimeter of each pool basin is required to facilitate inspection and repairs. This space includes mechanical rooms for the pool equipment, as well as mechanical rooms for the DHW Boilers, and Heating & Cooling for other areas of the facility. This space is to be properly ventilated and cooled to prevent corrosion of the various mechanical systems and equipment. Electrical conduits within the area of the pool equipment/surge tank should be PVC or better to prevent corrosion.

Chlorine gas is the preferred pool sanitizer. If using Chlorine gas, a separate chlorine room is required to conform with the Chlorine Institute Standards and requirements with exterior door only access, viewing window interior to building, ventilation to exterior away from doors, monitoring & alarms, SCBA etc. Exhaust ventilation should extend 2,439 mm upwards above exterior door and be far from any HVAC fresh air intakes. Chlorine (Cl) air monitoring equipment and alarms required exterior to room.

General

- Ramped vehicular access to the pool basement mechanical space is preferred and should be straightforward and safe.
- Access to the service ramp is to be separate from public parking lots and recreation areas for safety in the delivery of pool supplies and chemicals.
- The service area immediately outside of the mechanical space access is to be restricted to pool maintenance personnel only.
- Service vehicles must be able to park within 5,000 mm of the service (garage) door.
- Access to the service area is to be large enough for a tractor-trailer to maneuver easily to deliver chemicals and supplies.

1.0 Area

1.1 Floor Space

- 1.1.1** The pool mechanical space should have enough room for staff to work in a safe manner and allow for future changes, maintenance and additions of equipment. Enough space is required to move equipment using a pump forklift and pallets.

- 1.12 The area is to be laid out and sized with a minimum of 3,000 mm clearance around all equipment and not less than 1,000 mm between individual components for ease of maintenance.
- 1.13 Additional maneuvering space is required for replacement of larger items such as pumps, filters and heaters with the use of a pump forklift or engine hoist.

1.2 Ceiling Height

- 1.21 Minimum of 4,000 mm to allow for overhead piping.

1.3 Floor

- 1.31 The floor is to be properly sloped for efficient drainage with enough space to handle large spills.
- 1.32 Minimal puddling to prevent injury.
- 1.33 Mechanical space floor to be far enough below the pool water level to ensure that the pumps are in a constant flood condition to help prevent loss of prime.
- 1.34 Pumps should be at least 457.2 mm above the floor to avoid water splash.

2.0 Access

2.1 Interior

- 2.11 Accessible from the pool deck, with a secondary entrance from the facility lobby, with controlled, operable entry doors.
- 2.12 Elevator access is required to bring equipment to main facility level.

2.2 Exterior

- 2.21 A restricted service entry is required at the basement pool mechanical floor level for easy delivery of pool chemicals with a level transition to allow for a pallet truck.
- 2.22 An overhead garage door opening is required to ensure accessibility from outside for direct delivery of chemicals and equipment.

2.3 Testing Room

- 2.31 A Testing Room is required with a testing counter, c/w with drawers (to store information and keep test logs) and a sink. All controllers, meter and gauge displays are to be mounted at this location.
- 2.32 To meet Occupational Safety and Health Administration regulations, a dual emergency deluge shower and eyewash station close to chemical storage room is required in close proximity to the testing room and chemical storage room.
- 2.33 The testing counter with include a pool water supply loop (line) for each pool to be tested, 4 duplex electrical outlets strategically located for metering and chemical monitoring equipment, appropriate chemical monitoring devices for PH and CI PPM, computer station for BAS, room to store files/logs, a refrigerator for testing reagent (120V).

2.4 Chlorine Room

- 24.1** Dedicated Chlorine gas room to include automatic sensing device controllers. Chlorine room to have required exterior access only.
- 24.2** Pool water to be looped into the Chlorine room for Chlorine injection, to keep all Chlorine lines within the contained space.
- 24.3** If not using gas chlorine, there should be a designated space in the pool mechanical area for chlorine slurry within in a secondary containment vessel/space

2.5 Chemical Storage room

- 25.1** Chemical storage room should have double door access or 2,100 mm wide garage door to allow for pallet truck delivery
- 25.2** Room to be a cool and dry space, appropriate ventilation and be mechanically cooled
- 25.3** To contain a hose bib connection
- 25.4** To have individual storage compartments (8) with a partial block wall between compartments to keep chemicals separated. Each compartment should be wide enough for a pallet skid to fit.
- 25.5** It is preferable that chemical and chlorine rooms are in close proximity and could share the same dual deluge shower and emergency eye washstation.

2.6 CO² Room

- 26.1** This is a dedicated CO² room for the filtration of pool water. CO² is preferred for PH control.
- 26.2** The CO² room is to be placed on an exterior wall adjacent to the loading bay for the refilling of CO² cylinders (quick connects to delivery truck).
- 26.3** CO² monitoring equipment and alarms are required outside of the contained CO² room.
- 26.4** If not using CO², there should be a designated contained space in the pool mechanical area.

2.7 Boiler Room

- 27.1** Boiler room for Pool Water Heating, Pool HVAC recovery, DHW.

2.8 Laundry Room

- 28.1** Designated space for industrial washer/dryer to launder towels, work wear, etc.
- 28.2** Does not have to be a separate room but could form part of the pool mechanical workshop.

2.9 Single Universal Washroom

- 29.1** Dimensions per AODA and City Accessible Design Standards

2.10 Workshop

- 210.1** Includes space for workbenches (2 benches @ 1,000 mm x 2,400 mm)

2102 Six (6) duplex 120 V power receptacles for power tools, one 240V outlet, storage space/shelving

2103 May be expanded to include laundry facilities

2.11 Garbage/Recycling Room

211.1 Must be large enough to store garbage and recycling containers for pool operations and facility operations.

211.2 Proper ventilation and mechanical cooling required

211.3 Space can be shared with CO² container space if required.

211.4 To be placed on exterior wall with overhead garage door to access exterior garbage dumpsters.

2.12 Surge Tank

212.1 A surge tank is a concrete drainage tank located in the basement pool mechanical space adjacent to each pool basin. Displaced pool water spills into the perimeter pool gutters, which drain into the surge tanks.

212.2 The tank is to be accessible for ease of inspection.

2.13 Parts Suppliers and Redundancy

213.1 Pool mechanical parts should be specified and sourced from North American suppliers to ensure quick and economical access to replacement parts.

213.2 Pool mechanical systems are to include critical system redundancies to reduce down time while waiting for spare parts and/or for maintenance.

3.0 Preferred Relationships

3.1 Adjacent: pool deck, exterior pool service area

3.2 Close: customer Service/Reception, washrooms

3.3 Daylight: desirable but not essential

3.4 Views In: not desirable

3.5 Views Out: not required

4.0 Accessibility

4.1 per AODA and City of Ottawa Accessibility Standards

5.0 Lighting

5.1 Corrosion-resistant, Energy efficient ceiling mounted fixtures.

5.2 Enough light fixtures should be on backup power to monitor this area during outages and to allow safe evacuation.

6.0 Electrical

6.1 As required for safe operation of equipment.

6.2 Voltage: 120; 600 Volt building supply will be required for equipment operation

6.3 Emergency: one (1) emergency wall mounted double-headed battery powered lighting packs and one (1) fire alarm pull station.

6.4 Wall mounted power source for Network Clock

6.5 Main electrical room/generator transfer switchgear

6.6 Standby emergency generator for emergency lighting and basic building systems

6.7 Emergency generator located in close proximity to electrical room, but a distance from HVAC fresh air supply (ex. Dectron room)

7.0 Mechanical

7.1 Controls: BAS

7.2 Floor drains should have the capacity to respond to large water breakdown.

7.3 Mechanical area for filtration equipment and pumps.

7.4 Each pool will have its own equipment which should be separated in some way.

7.5 Each pool must incorporate UV as a secondary disinfectant to Cl. Four (4) Duplex electrical outlets will be strategically required for each area: slurry feeds, chemical mixers, potential for air compressor required for each system (if regenerative filters).

7.6 Pool HVAC (ex. Dectron/Seresco) room – unit to be in the interior of the building for maintenance. To provide dehumidification, heating & cooling of pool deckspace

8.0 Ventilation

8.1 Air changes/hour as per ASHRAE

8.2 Chemical storage room to have dedicated ventilation.

9.0 Heating

9.1 Dedicated heating and cooling system, air supply from ceiling mounted ducts, air returns located on walls.

9.2 Energy efficient heating. Natural gas preferred.

10.0 Cooling

10.1 Required. Central forced air preferred.

11.0 Water Supply

11.1 Minimum 150 mm pool supply line for each pool basin

11.2 Drinking Fountain with bottle filler

11.3 Universal washroom

11.4 Workshop slop sink

11.5 Laundry room

11.6 Testing room

11.7 Janitor room

12.0 Emergency

12.1 Fire Suppression

12.1.1 Two (2) wall mounted fire extinguishers

12.1.2 Wall mounted fire alarm bells location dependant on layout & fire code.

12.1.3 Extra extinguishers required at chemical storage, including water extinguisher & dry chemical extinguisher.

12.1.4 An extinguisher in each mechanical area/room, and strategic throughout tunnel

12.1.5 Fire sprinkler room, with SCBA kits/station & capping kit to be provided exterior to the room.

12.2 Eyewash & Deluge Shower

12.2.1 Eyewash station and full emergency deluge shower required adjacent to the chlorine and chemical rooms

13.0 Finishes

13.1 Floor

13.1.1 Sealed, concrete flooring; slip resistant where potential to be wet

13.1.2 Resilient flooring with firm, stable, slip-resistant, matte finish for high circulation areas

13.2 Ceilings

13.2.1 Open web truss, vaulted ceilings

13.3 Walls

13.3.1 Poured or concrete block to accommodate damp environment

13.3.2 Colour – above 2,400 mm from finished floor level, walls and ceiling to be painted high-gloss white to increase light reflectivity. Below 2,400 mm, walls to be a flat or semi-gloss white.

13.3.3 Color code all piping with pastel colors, such as light grays and greens. This helps to identify the purpose of each pipe and reduces visual clutter.

13.4 Communications

13.4.1 Data: Wi-Fi and wall or ceiling mounted data outlets to serve information monitors

13.4.2 Wall or ceiling monitors to provide program and public information

13.4.3 Intercom: ceiling mounted speakers

13.4.4 Exterior intercom at loading dock to front desk

13.5 Security

13.5.1 Per Corporate Security Standards

14.0 Storage

14.1 N/A

15.0 Equipment and Furnishings

15.1 Modular casual seating system to suit layout and circulation

16.0 Examples/Best practices:

16.1 Richcraft Recreation Complex – Kanata (2014)

AQU-08 Dry Sauna

Date: September 2019 Version: v1-0

Description

A small room designed as a place for bathers to experience dry heat sessions as a form of therapy. City standard is a dry sauna, as opposed to a wet sauna to generate steam for bather perspiration. Saunas are found in AQU-01 Aquatic Facility and are located off pool decks within view of the AQU-4 Lifeguard Monitor Office. Aquatic Facility are not required to have a Sauna but they are often preferred and therefore included in this document.

General

Saunas are small sealed, temperature-controlled rooms finished with natural cedar (floor, walls, ceiling and benches).

1.0 Area

1.1 Gross floor area: 15 m²

1.2 Ceiling Height: 2,800 mm

2.0 Access

2.1 Location

2.1.1 Off pool deck level

2.2 Interior

2.2.1 Pool deck

2.3 Exterior

2.3.1 n/a

3.0 Preferred Relationships

3.1 Adjacent

3.2 Pool deck

3.2.1 Close

3.2.2 Lifeguard monitor office, wet change rooms

3.3 Daylight

3.3.1 n/a

3.4 Views In

3.4.1 From pool deck and lifeguard monitor office

3.5 Views Out

3.5.1 None

4.0 Accessibility

4.1 Per AODA, City of Ottawa Accessibility Design and OBC Standards

5.0 Lighting

5.1 Energy efficient ceiling mount fixture, motion sensor controlled

6.0 Electrical

6.1 Voltage: 120

6.2 Duplex GFI outlets; one (1) for maintenance

6.3 Per sauna heating element requirements

7.0 Mechanical

7.1 Controls: BAS

7.2 Floor drains – continuous strip drain

8.0 Ventilation

8.1 Controls: BAS

9.0 Heating

9.1 Energy efficient heating element

10.0 Cooling

10.1 n/a

11.0 Water Supply

11.1 n/a

12.0 Fire Suppression

12.1 Sprinklers

13.0 Finishes

13.1 Floor

13.1.1 Cedar strip pallets over concrete floor with drain

13.2 Walls

13.2.1 Cedar strip over concrete block

13.3 Ceiling

13.3.1 Cedar strip over concrete

14.0 Communications

14.1 Intercom – speakers wall or ceiling mount

15.0 Security

15.1 As per Corporate Security Standards

16.0 Storage

16.1 n/a

17.0 Equipment and Furnishings

17.1 Double tier cedar benches

18.0 Examples/Best practices

18.1 Richcraft Recreation Complex – Kanata (2014)

18.2 Minto Recreation Complex – Barrhaven (2015)

AQU-09 Outdoor Wading Pool

Date: September 2019 Version: v1-0

Description

City standard for an Outdoor Wading Pool is a permanent seasonal supervised multiple depth, accessible outdoor pool for children aged 1 – 7 years, predominantly located in community and neighbourhood parks.

General

- Concrete pool featuring two (2) separate basins with water depths suitable to children's age groups 0 – 3 and 4 – 7 years.
- Shade shelter required adjacent to pool
- Support building (ODF-10 Comfort Station, ODF-02 Fieldhouse, REC-03 Community Building) with washrooms and pool operation and program storage required

1.0 Area

1.1 Composed of two (2) basins

1.1.1 Ages 0 – 3: area 50 m²; water depth 500 mm

1.1.2 Ages 4 – 7: area 100 m²; water depth 760 mm

2.0 Access

2.1 Exterior

2.1.1 Accessible concrete ramp (maximum 5 %) access required for each basin

3.0 Preferred Relationships

3.1 Adjacent

3.1.1 Shade shelter, park furniture

3.2 Close

3.2.1 Washrooms, pool operation & program storage

3.3 Views In

3.3.1 From shade shelter

3.4 Views Out

3.4.1 To park

4.0 Accessibility

4.1 per AODA and City of Ottawa Accessibility Standards

5.0 Lighting

5.1 N/A

6.0 Electrical

6.1 See electrical requirements for ODF-2 Fieldhouse, REC-3 Community Building

7.0 Mechanical

7.1 Wading pool is filled and drained daily during operating season

7.2 Pool water supply: minimum 70 mm diameter; in-ground valve chamber

7.3 Pool drainage: minimum 150 mm to sanitary, quick draining as per existing infrastructure capacity

7.4 Access to hose hook up for cleaning

8.0 Finishes

8.1 Basin floors, walls, steps and ramps, shotcrete, non-slip finish

8.2 Stainless steel powder coated railings

8.3 Pool apron poured-in-place concrete, non-slip finish

8.4 Finish to prevent slipping but not so aggressive that patrons are unable to walk on it in bare feet

9.0 Communications

9.1 Telephone and data outlet in fieldhouse or community building

10.0 Security

10.1 N/A

11.0 Storage

11.1 In Fieldhouse or Community Building

11.1.1 Pool program storage: 3,000m²

11.1.2 Pool operation (chemical) storage: 4,500 m²

11.1.3 Pool operational storage to be vented

11.2 Access

11.2.1 915 mm single door, lockable

11.3 Floor finish

11.3.1 Concrete

11.4 Wall Finish

11.4.1 Plywood

12.0 Equipment and Furnishings

12.1 Eye wash station in pool operation storage

12.2 Park furniture (benches, picnic tables) located under shade shelter and/or near wading pool

12.3 Furnishings should be secured to prevent unauthorized movement

13.0 Examples/Best practices

13.1 Chaudière Park (2013), with exception of drain pipe (limited by existing street sanitary capacity)

AQU-10 Outdoor Lap Pool Date:

September 2019 Version: v1-0

Description

Outdoor Lap Pool is a minimum six (6)-lane, heated, 25 m concrete pool basin with an accessible ramp entry to the shallow end and a 1,000 mm diving board at the deep end. The outdoor lap pool is always paired with an AQU-12 Seasonal Change Building.

General

- Minimum 3,600 mm clear concrete deck around pool perimeter apron pool, preferably with additional surrounding green space
- Pool area secured by fence enclosure that provides access to the public through the seasonal change room building during operation hours only. Minimum 2,400 mm fence height
- Shade shelter required adjacent to pool

1.0 Area

1.1 Lap Pool (6-lane, 25 m)

- 1.1.1** Size: 17.4 m x 25.0 m, including accessible ramp entry
- 1.1.2** Inside lanes: 2,500 mm wide; outside lanes: 2,700 mm wide
- 1.1.3** Water Depth: deep end (15.4 m x 6.8 m); shallow end (15.0 m x 7.1 m) and sloped area (15.4 m x 11.0 linear m) water depth best practice is Crestview
- 1.1.4** Option for slide

- 1.2** Accessible Ramp Entry: width 1,300 mm; slope: maximum 5% from deck level to shallow end bottom (no step)

2.0 Access

2.1 Exterior

- 2.1.1** Controlled public access to pool enclosure through seasonal change building
- 2.1.2** 2,400 mm service gate in pool enclosure fencing
- 2.1.3** Ability to fully secure seasonal change building from entry during non-operating hours; security gate

3.0 Preferred Relationships

3.1 Adjacent

- 3.1.1** Seasonal Change Building
- 3.1.2** Shade Structure
- 3.1.3** Green Space

3.2 Views In

- 3.2.1** To pool and deck from seasonal change building
- 3.2.2** To pool and deck from exterior (park) setting

3.3 Views Out

- 3.3.1** From pool and deck to exterior (park) setting

4.0 Accessibility

- 4.1.1 per AODA, OBC and City of Ottawa Accessibility Standards
- 4.1.2 On-deck tactile border around pool to be a material and colour that is non-heat absorbing

5.0 Lighting

- 5.1 Pedestrian type pole standards with Energy efficient fixtures on pool deck to illuminate pool deck during closing procedure and night time security
- 5.2 Exterior roof soffit and/or wall mounted Energy efficient fixtures on change building for security as per Corporate Security Standards

6.0 Electrical

- 6.1 Two (2) GFI outlets on exterior wall of seasonal change building facing pool deck

7.0 Mechanical

- 7.1 Pool water supply: minimum 150 mm diameter
- 7.2 Pool drainage: minimum 150 mm to sanitary
- 7.3 Drinking fountain with bottle filler wall mounted on change building facing deck
- 7.4 On deck showers on change building facing deck, quantities based on pool capacity
- 7.5 Minimum 1 accessible shower
- 7.6 Exterior wall mounted hose bib on change building facing deck
- 7.7 Separate delivery space for pool chemicals removed from pool deck or interior of building

8.0 Finishes

- 8.1 Basin floors, walls, steps and ramps: shotcrete, non-slip finish
- 8.2 Finish to prevent slipping but not so aggressive that patrons are unable to walk on it in bare feet
- 8.3 Stainless steel powder coated railings
- 8.4 Tactile border to be non-heat absorbing in material and colour
- 8.5 Pool apron poured-in-place concrete, non-slip finish

9.0 Communications

- 9.1 Telephone and data outlet in change building

10.0 Security

- 10.1 As per Corporate Security Standards

11.0 Storage

- 11.1 In Seasonal Change Building
 - 11.1.1 Pool program storage: 4,500 mm² (with direct access off the deck)
 - 11.1.2 Pool operation (chemical) storage – divided as per OBC and health and safety: 9,000 mm²
 - 11.1.3 Pool operational storage to be vented
- 11.2 Access
 - 11.2.1 915 mm single door, lockable
- 11.3 Floor finish
 - 11.3.1 Concrete

11.4 Wall finish

11.4.1 Plywood

12.0 Equipment and Furnishings

12.1 Park furniture (benches, picnic tables) located on pool deck, in enclosed greenspace and under shade

12.2 Shaded Life Guard Chairs (2), 1,000 mm diving board, lane ropes, backstroke marker

12.3 Buoy line marker to indicate drop-off

12.4 Shade structure(s) to cover part of pool deck

12.5 Furnishings should be secured to prevent unauthorized movement

13.0 Examples/Best practices

13.1 Like Crestview Pool (2017), but with 20% larger storage areas

AQU-11 Seasonal Change Building

Date: September 2019 Version: v1-0

Description

A Seasonal Change Building provides change, washroom, program and operational support to AQU-11 Outdoor Lap Pools or if capable of four season use, could support ICE-08 Exterior Rink-Boarded. A universal change room is preferred with private change stalls, private toilet stalls and a universal washroom, as well as a client service counter, administration space, lifeguard area, pool mechanical room and program and operation storage rooms. Can be alongside ODF-10 Comfort Stations and ODF-02 Fieldhouses.

General

- Change building to be three-season naturally ventilated facility with robust finishes.
- Pool area secured by fence enclosure that provides access by the public through the seasonal change room building during operation hours only.
- Change building to have generous roof overhang all sides.

1.0 Area

- 1.1** Change Building: gross floor area 200 m²
- 1.2** Universal Change Room 75m²
- 1.3** Universal Washroom 8,000 mm²
- 1.4** Client Service Counter & Administration 22 m²
- 1.5** Lifeguard Area 5,000 m²
- 1.6** Pool Mechanical Room 50 m²
- 1.7** Program and Operation Storage 15 m²
- 1.8** Janitor Room 5,000 mm²
- 1.9** Circulation: maximum 10% of gross floor area
- 1.10** Lifeguard area adjacent to customer service with ability to secure belongings. With access to refrigerator and microwave, millwork – cabinetry or shelving

2.0 Access

2.1 Exterior

- 2.1.1** Controlled access to pool enclosure through seasonal change building
- 2.1.2** Ability to fully secure seasonal change building from entry during non-operating hours

3.0 Preferred Relationships

3.1 Adjacent

- 3.1.1** Pool Deck, Universal Change Room, Pool Administration Space, Lifeguard Area, Pool Mechanical Room
- 3.1.2** Lifeguard Area to the Pool Administration Space
- 3.1.3** Client Service Counter to the Pool Administration Space

3.2 Close

- 3.2.1** Pool Deck to the Universal Washroom, Program and Operation Storage

322 Pool Administration to the Universal Change Room

323 Universal Change Room to the Janitor Room

3.3 Views In

331 To client service counter from main entrance

332 To pool administration from pool and deck

3.4 Views Out

341 From pool administration to pool and deck

4.0 Accessibility

4.1 per AODA, OBC and City of Ottawa Accessibility Standards

5.0 Lighting

5.1 Ceiling mounted Energy efficient fixtures for all interior change building spaces

5.2 Exterior soffit and/or wall mounted Energy efficient fixtures on change building for security

6.0 Electrical

6.1 Duplex Outlets: two (2) GFI at sink counter in universal change room (grooming)

6.2 One (1) GFI in universal washroom

6.3 Two (2) GFI in janitor room

6.4 Two (2) GFI on exterior wall of seasonal change building facing pool deck

6.5 Five (5) outlets in client service/administration space, consider outlets with built-in USB ports

6.6 One (1) outlet per storage room

6.7 Three (3) in pool mechanical room

7.0 Mechanical

7.1 Pool mechanical room and system to be designed by mechanical engineer

7.2 On deck showers on change building facing deck, quantities based on pool capacity, water efficient shower heads

7.3 Minimum one (1) accessible shower

7.4 Drinking fountain with bottle filler wall mounted on change building facing deck

7.5 Exterior wall mounted hose bib on change building facing deck

7.6 Six (6) toilets / three (3) sinks in universal change room, one (1) toilet and one (1) sink in universal washroom, one (1) utility sink in janitor room

7.7 Eye wash station in pool mechanical room

7.8 Floor drains in universal change room, universal washroom, janitor room and pool mechanical room

7.9 Strip deck drain for on-deck showers

8.0 Finishes

8.1 Floors: sealed concrete, non-slip finish

8.2 Walls: concrete block

8.3 Ceiling: open web truss

9.0 Communications

9.1 Telephone and data outlets at client service counter and administration

10.0 Security

10.1 As per Corporate Security Standards

10.2 Change building to form part of perimeter fence enclosure around pool

10.3 Main public entrance to be secured after hours by metal grill

10.4 Floor mounted safe in administration space; to meet cash handling policy must be out of view of public

11.0 Storage

11.1 Pool program storage: 4,500 mm²

11.2 Pool operation (chemical) storage: 9,000 mm²

11.3 Pool operational storage to be vented

11.4 Access: 915 mm single doors, lockable

11.5 Floor finish: concrete

11.6 Wall finish: plywood

12.0 In Seasonal Change Building

12.1 Pool program storage: 7,000 mm²

12.2 Pool operation (chemical) storage: 10.0 m²

12.3 Equipment and Furnishings

12.4 Eye wash station in pool mechanical room

12.5 Benches in private change rooms

12.6 Flexible work surfaces with lower drawers and upper cabinets in administration space

12.7 Accessible counter at client service

12.8 Lane rope storage for 6-8 ropes and pool equipment

12.9 Water resistant furniture

12.10 Bolted safe to floor (refer to Cash Handling Policy) – in administration space or lifeguard area

13.0 Examples/Best practices

13.1 Crestview Pool (2017)