



SOCIAL FACILITY TECHNICAL GUIDELINES

REAL ESTATE, ENVIRONMENT AND FACILITIES MANAGEMENT

Facility Planning and Development

JULY 2024

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1. GENERAL

1.1 INTENT

These technical guidelines are:

- Supplementary technical requirements to the Facilities Standards Manual (FSM) and are to be read in conjunction with the FSM and other city-wide guidelines and requirements.
- To be applied to the design and construction or renovation of City-owned or leased social facilities.
- While recognizing that there is a wide variety of social facilities, each with their own unique needs, the intent of this document is to outline the basic technical requirements for any social facility secured by the City of Vancouver as a capital asset. Additional details can be found within the Facilities Standards Manual.
- To clarify the minimum standard required by the City of Vancouver for materials, finishes, equipment and other items. Variations from these guidelines may be considered but are not to proceed without prior discussion and acceptance by the City of Vancouver.
- To be used as a tool for Facility cost estimates early in the design process.
- To be used as a tool by consultants in developing their designs and specifications.
- To be used as a tool at Facility occupancy stage to gauge whether these minimum standards have been met.

1.2 REGULATIONS AND STANDARDS

Consultants and developers are to ensure that all applicable building codes, government acts and health regulations are met. These include, but are not limited to:

- The City of Vancouver Building Bylaw (VBBL).
- Occupational Health and Safety Regulation (Work Safe BC)
- The Consultant is responsible for ensuring all applicable updates or revisions to the code or regulations are addressed and included in the work.

New and renovated social facilities to be held as capital assets by the City are expected to follow the City's normal permitting and regulatory processes. Development. Building and Occupancy Permits are

required for all new Social facilities. For detailed information concerning these permits and other relevant codes and requirements, contact the Enquiry Centre, Development Services Department.

1.3 SUSTAINABILITY

Refer to Facilities Standards Manual for details.

1.4 UNIVERSAL DESIGN

- Refer to Facilities Standards Manual for details.

1.5 DISCLAIMERS

- Some items that have been noted throughout this document are Operator preferences and the selection should be confirmed with the City of Vancouver regarding their appropriateness for each Facility.
- Any specific products named in this document are not to be taken as the City of Vancouver's endorsement of that product, but rather as an example of a standard of quality that has proven successful in the past. Any other products that meet this level of quality will be considered for use, but their use is not to proceed without prior discussion and acceptance by the City of Vancouver.

2. PLANNING

2.1 INTENT

- The following information supplements the functional programming documents required by the City for each unique social facility.

2.2 PARKING

- Vehicle and bicycle parking provided must meet the minimum requirements of the Parking By-Law.
- Additional vehicle and/or bicycle parking may be required. Consult with the City and Facility operator to confirm.
- Location of bicycle and vehicle parking should be within easy access of the Facility's entrance.

2.3 MAIL (CONFIRM REQUIREMENTS FOR EACH FACILITY)

- Refer to Facilities Standards Manual for details.

2.4 STORAGE

- Storage is a critical design consideration to ensure the most flexible use of public facilities by the widest possible range of users. Ensure that sufficient, appropriate storage is provided.
 - In particular note any Facility need for collapsible and stackable tables and chairs, room dividers and other large items.
 - Provide storage for seasonal and themed items as required.

2.5 GARBAGE AND RECYCLING (CONFIRM REQUIREMENTS FOR EACH FACILITY)

- Refer to the Facilities Standards Manual for additional details.
- Review garbage strategies: location, water, drainage, container size, type and schedule.
- Bin size: minimum 2 cubic yards (1.5 cubic meters), approximately 5'9" (1.75m) long x 3'0" (0.9m) wide and 3'0" (0.9m) high.
- Provide interior and exterior facilities for recycling. The suggested interior space per LEED® under prerequisite 1, "Materials and Resources" for a commercial Facility of up to 465m² in size is 7.6m². Confirm expected recycling volume for each Facility with Operator.

2.6 SERVICE SPACES

- Refer to Facilities Standards Manual for additional service room, including mechanical and electrical rooms, design requirements.
- Provide a separate lockable janitor room with floor sink, space for storing bucket, mops, brooms, vacuum, ladder, supplies for cleaning, shelves for paper products, light bulbs, etc.
 - Provide one per floor in multi-floored Facilities.

2.7 EXITING AND SECURITY

- Public exits shall be planned in such a way that the public does not have to cross through a secure social amenity space for exiting.

2.8 GENERAL HAZARDS AND ENTRAPMENT

- For prevention of entrapment, spaces (i.e. holes or openings) accessible to children must be smaller than 9cm (3.5") or larger than 23cm (9").

- Slots that vary in dimension such that either of the above conditions are encountered are not acceptable.
- Small dimension protuberances that may cause eye or puncture injuries are not acceptable.
- In general, edges and corners are to be rounded and eased. Sharp edges and corners are not acceptable.

2.9 BIRD FRIENDLY DESIGN GUIDELINES

- Refer to City of Vancouver Bird Friendly Design Guidelines <http://vancouver.ca/parks-recreation-culture/vancouver-bird-strategy.aspx> <http://vancouver.ca/files/cov/vancouver-bird-strategy.pdf>
- These guidelines are intended to support the design and implementation of bird friendly development throughout the city.

2.10 REDUCING BARRIERS FOR TRANS* AND GENDER-VARIANT COMMUNITY MEMBERS

- T2SLGBTQIA+ Advisory Committee: the 2SLGBTQIA+ Advisory Committee works to create safe, inclusive, and welcoming spaces for transgender and gender diverse, Two-Spirit, and queer individuals. It does this by working with staff to ensure that city facilities are accessible for people who identify outside the gender binary.

[2SLGBTQIA+ Advisory Committee | City of Vancouver](#)
[2SLGBTQIA+ Advisory Committee Full Terms of Reference](#)

- Refer to Vancouver Board of Parks and Recreation “Building a Path to Parks & Recreation for All: Reducing Barriers for Trans* & Gender Variant Community Members”

Note: Trans* (with an asterisk) is an inclusive umbrella term used to refer to communities and individuals with gender identities and/or expression not matching gender binary stereotypes.
https://parkboardmeetings.vancouver.ca/2014/140428/documents/SUMMARY_TGVI-Working-Group_report_Building-a-Path-or-All_2014-04-28.pdf

3. TECHNICAL

3.1 GUARANTEES AND WARRANTIES

- Refer to Facilities Standards Manual for additional requirements for specific guarantee and warranty requirements.
- In general, guaranties and warranties are to be provided per the industry standard.
- Where extended guarantees and warranties are required, they are noted in the following sections as appropriate.
- Where extended guarantees and warranties are provided, the certificates shall be issued to the City of Vancouver.

3.2 HAZARDOUS MATERIALS

- All materials used in the constructing and finishing of the Facility are to be free of hazardous materials, including materials such as asbestos, lead and PCBs. Contact the City of Vancouver Environmental Planning Group with any questions regarding the sourcing of appropriate materials.

3.3 GENERAL FINISH REQUIREMENTS

- All surfaces, edges, corners and protrusions shall be finished to reduce or prevent hazards. All corners shall be rounded, edges eased, and surfaces shall be smooth. Particular attention shall be focused on concrete surfaces, windowsills, flashings, and laminate edges/corners.

3.4 LANDSCAPING

- Refer to Facilities Standards Manual for details on landscaping and irrigation.

3.5 ACOUSTICS

- Exterior noise:
 - Outdoor landscaped areas to be effectively acoustically buffered from any noise from traffic, mechanical equipment or other disruptive noises.
- Exterior -to-interior noise:
 - Exterior noise, such as traffic, mechanical equipment or other disruptive noises is to be controlled by appropriate acoustical design of the exterior partitions to meet the allowable

noise level for residential living, dining, and recreation rooms as defined in the local zoning by-law. Under no circumstances is the exterior noise to exceed a sound pressure level of 45 dB(A) 24-hour equivalent sound level in the interior of the Facility in all spaces occupied by children.

- Interior-to-interior noise between tenants:
 - At party walls between the Facility and any neighbours, an STC rating of 65 is to be achieved.
- Interior noise is to be controlled with appropriate acoustic surface treatment for interior finishes:
 - 75% of ceiling area shall be T-bar ceiling with NRC (noise reduction coefficient) = 0.70 or better, or
 - Alternately the room design shall meet an equivalent acoustical performance.
 - Spaces with ceilings higher than 3m (10'0") require acoustic treatment.

3.6 ARCHITECTURAL MILLWORK

- Refer to the Facilities Standards Manual for details on architectural millwork.

3.7 BUILDING ENVELOPE AND ROOFING

- Refer to Facilities Standards Manual for additional details.
- Where a Facility includes the building envelope and/or roofing as part of the City of Vancouver's capital asset, the following shall pertain:
 - The building envelope design and construction is to be in accordance with the principles and recommendations contained in the latest edition of Walls, Windows and Roofs for the Canadian Climate by the National Research Council of Canada (NRCC 13487) and per the Building Envelope Consultant's recommendations.
- If a floor of a social amenity is over an unheated space, consider the use of in-slab heating or, at minimum, increasing the insulation above the required RSI values by the City of Vancouver Building Bylaw and ASHRAE 90.1.

3.8 GLAZING

- Refer to Facilities Standards Manual for additional details.
- Windows (general):
 - Refer to the Facilities Standards Manual for additional details.

- Where a sill is 457mm (18”) or less above the floor, or where impact with a window may occur, use tempered and/or laminated glass as appropriate:
 - Tempered only at interior single glazed windows.
 - Tempered only at interior where exterior grade is within 610mm (2’0”) of the interior floor level.
 - Tempered at interior and laminated at exterior where the exterior grade is a significant drop below the interior floor level (i.e. a storey or more)
 - Consider the location of Low-E coating, if used, in conjunction with the location of tempered and/or laminated glass as appropriate for each Facility.
- Exterior openings:
 - All opening windows to be:
 - Limited to a maximum opening of 100mm (4”) where accessible by children.
 - Screened.
 - Where a window opens into a walkway or occupiable landscaped area, provide either a sliding window or restrict its swing so as not to create a safety hazard outside.

3.9 DOORS AND HARDWARE

- Refer to Facilities Standards Manual for additional information on hardware.
- Main facility entry doors from the street and from the parkade to be equipped with a power-assisted door operator button for accessibility. Coordinate accessible operator button function with security requirements for these doors.
- Wood doors:
 - To meet AWMAC requirements for millwork (refer to Facilities Standards Manual for details).
 - To be solid wood core, except bi-fold and sliding doors to closets may be AWMAC hollow core doors.
- Hardware:
 - Refer to Facilities Standards Manual for details.
 - Additional support for half doors when not mounted in regular door frame; use heavy-duty piano hinge for full height of door.
 - Door stops to be wall mounted where possible complete with backing provided in the wall.

- Sliding doors to have the ability to pin in place at open position.
- Kick plates are required on the push side of all doors with closers and at all storage room doors.
- Locks:
 - All locks to meet the City of Vancouver Security Standards.
 - Lock type and grade to be established for each Facility.
 - Final keys to be provided at Occupancy.
 - Interior locking strategy to be confirmed for each Facility with the following to be used as a guide:
 - All doors to have the same master key.
 - All exterior entry doors to be on same key (see also Security).
 - Internal doors and exterior storage to be on the same key, zoned where individual programs can be isolated.
 - Service rooms to be on the same key.
 - All doors to have locks with “classroom” function except
 - Storage rooms and Laundry rooms may have “classroom or “storeroom” function.
 - Janitor and service rooms to have “storeroom” function.
 - Washrooms to have “privacy” function.

3.10 FINISHES

- Partitions:
 - Acoustic measures:
 - Acoustical insulating tape and strips, as required by wall assembly to meet required STC ratings.
 - Acoustical sealant, non-hardening, as required by wall assembly to meet required STC ratings.
 - Acoustical insulation, as required by wall assembly to meet required STC ratings.
 - Provide adequate blocking inside walls at all millwork locations and furniture locations where furniture will be fixed to walls and at wall-mounted door stops.
- Wall finishes:

- Paint: painting and finishing to be to the “Premium Grade” Master Painter and Decoration Association Recommendations and Standards; products to be MPI approved Institutional Low Odour VOC quality paint.
- Provide a two (2) year MPI Guarantee or 100% two (2) year Maintenance bond both in accordance with MPI Painting Specification Manual requirements.
- All painting work to be inspected by a Paint Agency Inspector acceptable to the specifying authority and the operator.
- Provide documentation that the MPI approved Institutional Low Odour VOC quality paint is being used.
- All surfaces, including those to be covered with wall vinyl, to have one coat of Hihide sealer primer to suit surface.
- Apply three finish coats and additional coats to cover as required.
- Paint to be brush and roller applied, completely dried and sanded between coats and finished to a smooth surface without streaks or marks.
- Gloss levels:
 - Kitchens, washrooms, laundry and janitor’s room walls and ceilings to be G5 (semi-gloss).
 - Painted doors and door frames to be G5 (semi-gloss).
 - All other surfaces to be either G5 (semi-gloss), G4 (satin), or G3 (eggshell) as required for the particular Facility.
 - G1 and G2 (matte) finishes are not acceptable.
- Wall protection to be provided as required for each Facility. Top edges and corners of wall protection material to be in turn protected (details to be provided). Acceptable materials:
 - Plastic laminate.
 - Vinyl-acrylic sheet material (PVC-free) such as Acrovyn® or pre-approved alternate.
 - Sheet flooring.
 - Or pre-approved alternate.
 - Note that due to re-finishing costs, wood is not preferred.
- Tile: quarry and ceramic tile installation is to be in accordance with the recommendations of the Terrazzo Tile and Marble Association of Canada.
- Ceiling finishes (coordinate with acoustic requirements):
 - No ceiling (this may occur in janitor, storage and utility rooms):
 - Paint all exposed structure and services (refer to paint section above).
 - Gypsum board:

- Paint (refer to paint section above).
- Commercial quality suspended acoustic lay-in panel T-bar system:
 - Tiles to be minimum 16mm (5/8") thick.
 - System to have an NRC of .70 or better.
- Access to be provided to all above-ceiling services.
- All kitchens and washrooms to have ceiling finishes that are washable.
- Floor finishes:
 - Carpet and resilient flooring installation to be in accordance with the recommendations of the National Floor Covering Association as detailed in their "Floor Covering Specification Manual" as issued by the BC Floor covering Association.
 - Use adhesives and sealants that have low VOC levels per LEED® requirements listed under credit 4.1 "Low-Emitting Materials, Adhesives and Sealants".
 - Maximize recycled content and end-of-life recycle-ability.
 - Carpet requirements:
 - Carpet systems must meet or exceed the Carpet and Rug Institute's Green Label Plus testing and product requirements per LEED® requirements listed under credit 4.3 "Low-Emitting Materials, Carpet Systems".
 - Underpad, if required, acceptable product: 6mm (1/4") Duracushion, or preapproved alternate.
 - The carpet pattern must be integrated, not applied.
 - Carpet may be broadloom or carpet tile.
 - Carpet to be solution dyed nylon, level loop construction, pile weight 950g/m2 (28 oz/yd2) minimum if broadloom, or 610g/m2 (18 oz/yd2) minimum if carpet tile.
 - All edges to be sealed.
 - Provide 5% extra of carpet of the same dye lot as installed for future maintenance requirements.
 - Carpet installer to guarantee in writing the installation of the carpet for two (2) years against loose fitting, breaking of seams, breaking away from the sub-base or any other installation defect.
 - Carpet manufacturer to provide a ten (10) year guarantee that the carpet shall retain 90% or more of its pile fibre. The guarantee shall also cover against defects of zippering, unravelling, colour fading, deterioration and delamination of backing materials, pulls, piling, matting, shedding or any other manufacturing defect.

- Resilient (smooth, non-absorbent, non-slip and washable) flooring required in kitchens, washrooms, laundry, janitorial closets, and others as required for each Facility.
- Flooring to be:
 - Homogeneous sheet vinyl with heat welded seams, for example Tarkett or other pre-approved alternate (minimize VOC off-gassing).
 - Homogeneous sheet rubber with welded seams.
 - Or pre-approved alternate.
 - Linoleum is not acceptable.
 - All edges to be sealed.
- Resilient flooring may be tiles in less intense use contexts such as office environments, for example. The appropriateness of tile use vs. sheeting flooring to be reviewed for each Facility. If tiles are used, they are to be:
 - 0.25% dimensionally stable to minimize joint size.
 - Acceptable product: Karndean International Heavy Duty Commercial Vinyl Tile, or pre-approved alternate (minimize VOC off-gassing).
- Either sheet flooring or tiles to be 0.11" or 2mm thick, minimum. Provide 5% extra of resilient flooring material of the same production run as installed for future maintenance requirements. Provide sheet materials in full roll width by the length required.
- Resilient flooring installer to guarantee in writing the installation of the flooring material for two (2) years against loose fitting, breaking of seams, breaking away from the sub-base or any other installation defect.
- Provide a minimum of five (5) year guarantee that the resilient flooring will provide the specified level of appearance and wear, subject to proper care and maintenance.
- At high wear and tear locations in the Facility, such as the main entrance, consider the use of a more durable flooring material such as ceramic tile. All surfaces must be nonabrasive, washable and cleanable.
- Base to be rubber, continuous throughout, and minimum 100mm (4") high.
- Where demountable partitions and other items are indicated for installation on top of flooring material, install flooring material before these items are to be installed.

3.11 SPECIALTIES

- Toilet partitions:
 - Plastic laminate covered high density particle board, acceptable product:
 - Bobrick 1040 series.

- Or pre-approved alternate.
- Metal with baked enamel finish; acceptable product:
 - Shanahan's baked enamel metal toilet partitions.
 - Or pre-approved alternate.
- Phenolic if budget allows acceptable product:
 - Bobrick 1080/1180 series FRP faced phenolic core partitions.
 - Or pre-approved alternate.
- Hardware: heavy duty stainless steel with tamper-proof screws, concealed where possible.
- Washroom accessories:
 - Paper towel dispensers to accommodate single-fold towels with no saw tooth cutting bar. Alternate types may be considered depending on Operator preference - confirm type required for each Facility.
 - Hand Dryers to be Dyson air blade model number - EF1-CA-EDA0551A.
 - Provide a waste receptacle in each washroom: confirm type required for each Facility.
 - Soap dispensers: generally, provide one at each sink (confirm type and locations required for each Facility).
 - Confirm any other requirements for each Facility.
 - Provide a change table in one of each male and female washrooms. It may be a prefabricated item. Acceptable product:
 - Koala Kare surface mounted change station that supports static loads up to 400 lbs. complete with child protection straps.
 - Or pre-approved alternate.
- Lockers:
 - Half-sized lockers or quarter sized lockers (to fit a backpack, if a coat closet is provided) required for staff if not provided as millwork or as part of office furnishing (confirm number and type required for each Facility).
- Blinds:
 - All blinds to be commercial grade; chain operated roller style preferred.
 - Blinds to be installed on all exterior windows.

- Blinds to be installed at interior windows as required for each Facility.
- All cords or chains to terminate 1.5m (5'0") above the floor, or to be supported on a hook at that height.
- Mailboxes:
 - One large mailbox accessible from interior at main entrance (confirm need for this Facility).
- Entrance mats:
 - At all entrances from the outdoors provide walk-off mats (minimum size should allow for an adult to take two steps before stepping onto another flooring surface). Either a recessed grille or surface walk-off mats are acceptable.
- Notice boards:
 - Tackboards:
 - Corkboard complete with trim, or pre-approved alternate.
 - White boards
 - Magnetic white boards
 - Confirm size, type and mounting locations for each Facility.
- Signage:
 - To conform to the City of Vancouver Sign By-Law.
 - To conform to requirements for disabled persons and reduce barriers for trans* & gender variant community members.
 - Multilingual signs may be required (confirm requirements for each Facility).
 - Ensure signage is provided for the following:
 - To identify the Facility.
 - To indicate the entrance to the Facility.
 - At dedicated parking stalls.
 - For all necessary wayfinding.
 - At entries.
 - At service rooms.
 - Provide any other signage required for each Facility.

- Ensure all signage required by Building Code, including Fire and Life Safety Evacuation Plans, is provided.
- Fire and Life Safety Plans:
 - Fire safety plans to be reviewed with the Operator prior to submitting to the Fire Department at Occupancy.
 - Ensure a copy is provided to the City of Vancouver with the operations and Maintenance Manuals.
- Fire Extinguishers:
 - To be recessed.
 - If surface mounted, all corners and edges are to be rounded.
- Elevator:
 - Refer to Facilities Standards Manual for details.

3.12 EQUIPMENT

- All appliances to be “Energy Star” where “Energy Star” has that appliance category.
- Provide minimum one (1) year warranty on all appliances except provide a minimum two (2) year warranty on microwave ovens.
- Kitchen appliances (confirm requirements for each facility):
 - If a commercial dishwasher is required it shall have a sani-cycle, 70°F heat booster, and back-flow preventer valve. Note that these dishwashers require deeper than standard millwork: millwork to be designed to suit.
 - Refrigerator: 21.5 cubic feet, frost free, with freezer compartment (bottom mounted preferred), or as required by the City of Vancouver.
 - Additional freezer may be required if the Facility plans a lunch program.
 - Stove with oven: 760mm (30”) wide, with 4 burners; placement of controls to be suitable for child safety, for example at back; self-cleaning convection oven. (separate wall oven and range top are also acceptable).
 - Range hood to mechanically exhaust stove to the outside; exhaust rate (CFM) to be determined by HVAC engineer.
 - Microwave oven: 2.0 cubic feet, 1100 watt, minimum.

- Laundry room (confirm requirements for each Facility):
 - Commercial washing machine is preferred, but residential style washing machine may be considered.
 - Consider specifying a front-loading machine for water conservation.
 - Commercial dryer is preferred, but residential dryer may be considered.
 - May be stackers or side-by-side machines.
- Entrances:
 - Provide walk off mats at entrances if recessed grilles are not provided (minimum size should allow for an adult to take two steps before stepping onto another flooring surface).

3.13 FURNISHINGS

- Furniture:
 - The legal requirements for funding or provision of furniture and equipment will vary from project to project and should be confirmed for each Facility. The list below is provided for guidance, but the final list shall be confirmed during the design phase:
 - Office:
 - ergonomic office chair and under-counter file for each workstation,
 - workstations (systems furnishings preferred, where applicable)
 - visitor chairs,
 - large file and
 - miscellaneous furnishings as required for each Facility.
 - Stacking chairs on a dolly and folding tables for evening use of space – confirm quantity at design stage.
 - Furniture to replace required millwork at the option of the project team (for example, office system furniture desk with transaction top in lieu of a reception counter).
- Seismic:
 - All furnishings greater than 1.22m (4'0") high to be secured to prevent tipping.

3.14 MECHANICAL

- HVAC:
 - Refer to Facilities Standards Manual for additional details.
 - HVAC system to be designed to suit spaces with operable windows.
 - All rooms to be adequately ventilated to remove odours, especially from laundry, kitchen and washroom areas (to meet ASHRAE Standard 62).
 - Exhaust Fans to be 1.5 sone or less.
 - All air intakes to be located away from sources of fumes or dust, including parking and/or loading areas.
 - If baseboard heaters or radiators are used, they are to be shielded to prevent child access to hot surfaces where applicable. Electric base baseboard heaters are discouraged.
 - Equipment to be easily accessible for maintenance. For example, filters and remote condensing units shall be accessible without the use of temporary scaffolding or Genie Lift type equipment (unless approved and signed off by REFM during design). Install permanent cat walks for access and utilize best practices for fall arrest if required for service access.
 - Units shall not be located over parking stalls.
 - Refer to Facilities Standards Manual for additional details.
- Controls:
 - Refer to the City of Vancouver DDC Technical Guidelines for more details.
 - Controls to be DDC and to have internet access.
 - Each major room is to be controlled individually.
 - Perimeter to be on separate zones if the layout of spaces / windows create problem areas.
 - Install a permanent carbon dioxide monitoring system. Install monitoring devices at areas with the highest occupancy per the Controls Engineer's direction.
 - Refer also to Landscape (irrigation controls), Roofing (leak detections system monitoring), Metering and Lighting Controls sections for other items to be on DDC.
- Plumbing:
 - Refer to the Facilities Standards Manual for additional information.
 - All drains in outdoor landscaped areas with playgrounds, especially if they are also roof drains, to have sediment traps. Type and style of trap to be confirmed with the City of Vancouver for each Facility.
 - Traps to be accessible for clean-out.

- If there is not sufficient head room in the space below for a sediment trap, then at minimum provide a wye 45deg. elbow complete with clean-out access. Review with the City of Vancouver for each Facility.
- At roof drains in occupiable landscaped areas, use two level drains (at play surface and at roof membrane) and provide sediment traps in hard surfaces near loose fill and entrances - refer also to the "Drainage and Grading" section in 3.4 Landscaping.
- Interior floor drains to be provided in each washroom, kitchen and janitor room.
 - All floor drains to have pre-approved trap primers.
 - Trap primers to be accessible within the same room as the floor drain behind access panels.
- Each plumbing fixture to have its own automatic shut-off valve.
- In each kitchen (confirm requirements for each facility):
 - Provide a two-compartment stainless steel sink complete with faucet ledge.
 - Provide a separate single compartment stainless steel hand washing sink, complete with faucet ledge, in the largest kitchen to support a catered lunch program. If space allows, also provide this sink in other kitchens.
- Consult with City and Facility operators to determine the number and location of indoor and outdoor drinking water fountains and bottle filling stations.
- Shower heads:
 - Mount shower heads at 1,980mm (6'-6") for men and 1,800mm (6'-0") for women.
 - Shower heads should be flush vandal proof types from the approved list of products.
 - Provide one handicap accessible shower with a telephone type adjustable shower head, with a quick disconnect.
 - One shower in each bank of showers shall be equipped with a twin handle shower control to provide tempered and cold water. All other showers shall have self-closing shower controls.
- Metering:
 - Facilities to have dedicated gas, electricity and water metering and/or sub-metering.
 - Where a Facility occurs in a mixed-use building, meters and/or sub-meters are to be located in service rooms that are easily accessible to the staff of the Facility.
 - All meters to be connected to DDC and trended for monitoring.

3.15 ELECTRICAL

- **Power:**
 - All outlets to be childproof; to have childproof and shatterproof faceplates.
 - GFCI receptacles to be Tamper Resistant.
 - Electric Panels to be bolt on Square D or Cutler Hammer.
 - Power to be provided in exterior landscaped areas.
 - Appropriate power provisions to be made for:
 - Photocopier.
 - Stove/oven.
 - Washer/dryer.
 - Freezer.
 - Fridge.
 - Microwave.
 - Portable phones and answering machines.
 - Power in kitchen to be to residential standards plus additional outlets (confirm number required for each Facility).
 - Refer to Facility Standard Manual for requirements on wiring methodology.
- **Lighting:**
 - LED lighting is required.
 - Minimize the number of fixture types and lamp types; no more than four (4) fixture types for indoor use. No more than three (3) fixture types for exterior uses.
 - No halogen or incandescent lamps permitted.
 - Exterior lighting is required in play areas and other occupy-able landscaped areas, to illuminate entries, exits and as required for security.
 - Where the building has an emergency generator, the emergency lighting system shall be powered by the generator and not be powered by separate battery packs.
- **Lighting Controls:**
 - Each room or area is to have its own light switch/controls – to be designed to be simple and intuitive.
 - Storage rooms must have occupancy sensors.
 - Occupancy sensors may be provided throughout to turn off lighting, in which case the wall switches function only to turn lighting on.

- Lighting control system to be connected to DDC system. Refer to City of Vancouver DDC Technical Guidelines for additional information and requirements.
- Fire Alarm:
 - Coordinate set-up of fire alarm monitoring with the monitoring company of the City's choice – to be confirmed for each Facility.
 - Coordinate with Smudging requirements. Refer to Facilities Standard Manual.
- Cable:
 - Provide home runs to Electrical room from all offices and meeting/staff rooms (confirm cable requirements for each Facility).
 - Provide cable outlet in activity room, parents' room, and as required by the Operator.
- Telephone:
 - Provide outlets as required for each Facility.
 - Alarm, fire, intruder, and emergency elevator phone can capture regular lines when needed.
- Data:
 - Provide outlets as required for each Facility.
 - Include 1 with fixed IP address for DDC controls.
 - Structured cabling to be CAT 6.

3.16 SECURITY

- Refer to the City of Vancouver Electronic Security Systems specifications, and Facilities Standards Manual for additional information.
- Secure access system planning:
 - To ensure a proper security solution for each Facility (particularly if the Facility is located in a multi-use building), it is required that meetings occur with the Security Consultant, the City of Vancouver, the Operator and any other interested parties at appropriate points in the design and construction phases.
 - Utilize an appropriate entry security system e.g. bell, buzzer, intercom, etc. which will operate during program hours (confirm type required for this Facility).
 - If the entrance is remote from the Facility a video enterphone system shall be provided linking the entrance to the Facility.

- Secure access to and from the parking to be addressed to suit the proposed plan for each Facility.
- If the Facility is accessed by elevator, secure access to the elevator and secure control of the elevator shall be addressed.
- Access equipment:
 - Access equipment must be compatible with the City of Vancouver standards. Acceptable product:
 - Keyscan System Vantage
 - Pass cards / fobs or keypad controlled from Facility:
 - If swipe cards or fobs provided, confirm number required for each Facility.
- Security systems:
 - Security systems to conform to the City of Vancouver Security Standards (confirm for each Facility the security systems required).
 - For intruder alarm type systems, acceptable product is the Ademco Vista, or preapproved alternate.
 - For surveillance type systems, refer to the City of Vancouver Security Standards for acceptable products. Note that these systems are generally not required for social amenity and will only be used in certain unique conditions.
 - Entrance and exit doors may require chimes or other door monitoring system (confirm requirements for each Facility).