

## PART 7 / PARKING, LOADING, AND MOBILITY

*Part 7 regulates the provision of off-street parking, loading, bicycle parking, and end-of-trip facilities, including requirements related to their number, location, and design, to support development and manage access, servicing, and mobility within the city.*

### 1.0 Off-Street Vehicle Parking

When any development takes place on any lot, off-street vehicle parking shall be provided and maintained in accordance with the regulations contained in this Section.

#### 1.1 General Requirements

##### 1.1.1 Application

###### 1.1.1.1 Existing Buildings, Structures, and Uses

- (1) Section 1.0 shall not apply to buildings, structures, or uses existing on the effective date of this Bylaw, except that:
  - (a) Off-street vehicle parking shall be provided and maintained in accordance with this Section where there is any addition to such existing building or structure, or any change or addition to such existing use, including within an existing CD District.
  - (b) Off-street vehicle parking existing on the effective date of this Bylaw shall not be reduced below the applicable off-street parking requirements of this Section.
  - (c) Notwithstanding paragraph (a), accessible and van accessible parking spaces shall be provided and maintained in accordance with this Section for any addition to such existing building, structure, or use.

###### 1.1.1.2 Voluntary Parking Facilities

- (1) Where off-street vehicle parking facilities are provided when not required, the location, design, and operation of such facilities shall comply with all the regulations of Section 1.0.

##### 1.1.2 Use of Parking Facilities

- (1) All provided off-street vehicle parking spaces shall be used only for the purpose of accommodating the vehicles of clients, customers, employees, members, residents, or tenants who make use of the principal building or use for which the parking area is provided, and such parking area shall not be used for off-street loading, driveways, access or egress, commercial repair work, display, sale, or storage of goods of any kind.
- (2) Notwithstanding subsection (1), parking spaces provided for a residential use shall be used solely for the parking of private non-commercial vehicles, except as otherwise specified in Section 1.3.3.2.

##### 1.1.3 Measurements and Calculations

- (1) Where gross floor area is used as a unit of measurement for the calculation of required parking spaces, it shall include the floor area of accessory buildings and basements, except where they are used for parking, heating, or storage.
- (2) Where number of persons is used as a unit of measurement, it shall mean the greatest number of persons at work or study, at any time of the day or night in a particular building or for a particular use during any season of the year.
- (3) Where seating accommodation is used as a unit of measurement, and such accommodation consists of benches, pews, booths and the like, each 0.5 m of width of such seating accommodation shall be counted as one seat.

- (4) When the calculation of parking requirements results in a fractional parking space equal to or exceeding one-half (0.5), one parking space shall be provided to meet this fractional requirement.

## 1.2 Required Accessible Parking Spaces

### 1.2.1 Required Spaces

Use	Required Accessible Parking Spaces
Apartment Dwellings	(1) The greater of: (a) 1 accessible parking space; and (b) 0.04 accessible parking spaces for each dwelling unit.
Non-Residential Uses	(1) The greater of: (a) 2 accessible parking spaces; and (b) 0.02 accessible parking spaces for each provided parking space.
All Uses	(1) The first accessible parking space provided, and every tenth accessible parking space provided thereafter, must be a van accessible parking space.  (2) Additionally, where visitor parking is provided, a minimum of 1 visitor parking space shall be a van accessible parking space.

### 1.2.2 Siting and Design

- (1) The minimum dimensions of accessible and van accessible parking spaces shall be as follows:

Parking Space Type	Length	Width	Height
Regular Accessible	5.5 m	2.6 m	2.3 m
Parallel Accessible	7.3 m	2.6 m	2.3 m
Regular Van Accessible	5.5 m	3.4 m	2.3 m
Parallel Van Accessible	7.3 m	3.4 m	2.3 m

- (2) All levels of structured parking or underground parking containing accessible and van accessible parking spaces shall have a minimum clear height of 2.3 m.
- (3) Accessible and van accessible parking spaces shall:
- (a) be located close to the elevator, vestibule, and building or lobby entrance of the principal building or use for which the off-street vehicle parking space is provided, including parking spaces provided pursuant to the shared parking regulations in Section 1.4.1.2, with a direct and unobstructed access thereto;
  - (b) have an adjacent access aisle on one side of a regular accessible and regular van accessible parking space, and to the rear of a parallel accessible and parallel van accessible parking space that:
    - (i) shall be a minimum width of 1.5 m;
    - (ii) shall be marked with diagonal lines; and
    - (iii) may be shared in the case of two adjacent regular accessible and regular van accessible parking spaces;
  - (c) have a firm, slip-resistant, and level surface with a slope not greater than 1:50;

- (d) be clearly marked with the following signage:
    - (i) a pole mounted sign not less than 1.5 m above ground level, in conformance with the specifications in Schedule 2 of Division 23 of the *Motor Vehicle Act*, and
    - (ii) a minimum 0.15 m by 0.3 m sign noting “VAN ACCESSIBLE” attached to the pole in the case of a van accessible parking space, except where it is provided as visitor parking; and
  - (e) have the parking surface marked with the international symbol for wheelchair accessibility.
- (4) A pedestrian route connecting the accessible and van accessible parking spaces to the elevator, vestibule, and building or lobby entrance shall:
- (a) have a continuous and unobstructed width of not less than 1.2 m;
  - (b) not exceed a slope of 1:20; and
  - (c) be identified with markings or paint if it is located on a maneuvering aisle.

**1.2.3 Assignment of Spaces**

- (1) Accessible and van accessible parking spaces intended for residential use may not be assigned except to a resident of a dwelling unit with a physical disability provided that up to 50% of the accessible parking spaces may be assigned to a resident without a physical disability on a temporary basis.
- (2) If a resident with a physical disability requests the use of an accessible parking space and one has been temporarily assigned to a resident without a physical disability, then the accessible parking space must be made available to the resident with a physical disability, within sixty (60) days of a request being submitted to the strata corporation or owner, as applicable, responsible for administering the accessible parking spaces.

**1.3 Required Off-Street Parking Spaces**

**1.3.1 Use-Specific Parking Requirements**

**1.3.1.1 General Requirements**

- (1) Where a use is not specifically mentioned, the required off-street vehicle parking spaces shall be the same as for a similar use.
- (2) Where a use is specifically mentioned, that rate shall apply regardless of what District it is in, unless otherwise specified in this Bylaw.

**1.3.1.2 Required Spaces**

Use	Required Parking Spaces
<b>Residential Uses</b>	
Residential uses in a transit oriented area or frequent transit network area	No parking required
Small-scale multi-unit housing	1.0 for the first dwelling unit, plus 0.5 for each additional dwelling unit
Rowhouse dwellings	No parking required
Short-term rental within small-scale multi-unit housing and rowhouse dwellings	1 for each dwelling unit or portion that is used for short-term rentals, in addition to the required parking space for the principal residential use. A tandem parking space may be provided in conjunction with the principal residential use, provided that the City Engineer is satisfied that such arrangement will not interfere with pedestrian and vehicular movement, fire truck and fire hydrant, or any other access.

Apartment and townhouse dwellings	1.0 for each primary dwelling unit, plus 0.05 per dwelling unit for visitor parking
Apartment dwelling containing a lock-off unit or townhouse containing a secondary suite	1.25 for each primary dwelling unit, plus 0.05 per primary dwelling unit for visitor parking
Purpose-built rental, including market and non-market rental housing	0.5 for each dwelling unit, plus 0.05 per dwelling unit for visitor parking
<b>Congregate housing</b>	
<i>Residential care facilities</i>	1 for each 3 employees, plus 1 for each 6 beds
<i>Assisted living residences</i>	1 for each 5 dwelling or sleeping units where located within a transit oriented area or frequent transit network area, or 1 for each 4 dwelling units.
<i>Group homes</i>	See rate for <i>small-scale multi-unit housing</i>
Supportive housing facilities	1 for each 2.5 dwelling or sleeping units. In addition, for seniors supportive housing, 1 electrically serviced motorized scooter storage space shall be provided for each 4 living units.
Transitional housing	See rate for <i>assisted living residences</i>
<b>Institutional Uses</b>	
Child care facilities	1 for each 93 m <sup>2</sup> of gross floor area. In the R1 District, up to a maximum of 4 spaces.
Civic facilities	1 for each 33.3 m <sup>2</sup>
Dormitories	Subject to the shared parking regulations in Section 1.4.1.2, 0.6 for each dwelling unit inclusive of 0.1 for visitor parking, or as determined through a parking study approved by the General Manager Planning and Development, plus 1 for each 3 employees, plus 1 for each 6 beds in sleeping units.
<b>Educational services</b>	
<i>Public or private elementary schools</i>	1 for each staff member
<i>Public or private secondary schools</i>	1 for each staff member, plus 1 for each 10 students
<i>Post-secondary institutions, trade schools, commercial schools, and other principal educational services</i>	1 for each staff member, plus 1 for each 10 students
Emergency shelters	1 for each staff member
Fire halls, police facilities, and other civic uses intended as a base of operation for emergency services	1 for each 186 m <sup>2</sup> of gross floor area
Hospitals	1 for each 2 staff doctors, plus 1 for each 4 employees, plus 1 for each 5 beds

Religious assembly	1 for each 9 m <sup>2</sup> of gross floor area of the main assembly areas within the building, plus 1 for each 19 m <sup>2</sup> of gross floor area of other assembly areas within the building, including halls, meeting rooms, classrooms, and gymnasiums.
<b>Commercial, Employment, and Industrial Uses</b>	
Commercial uses in the C1 and R Districts, except where a use is otherwise specified in this table.	No parking required
Commercial uses in the C2 District, except where a use is otherwise specified in this table.	No parking required for lots with 250 m <sup>2</sup> or less of commercial gross floor area, or 1 for each 93 m <sup>2</sup> of gross floor area for lots with more than 250 m <sup>2</sup> of commercial gross floor area.
Commercial C District uses (not otherwise specified in this table) when located in a District other than the C1, C2, and R Districts.	1 for each 93 m <sup>2</sup> of gross floor area
Artist studio or workshop, and production and rehearsal studios	1 for each 93 m <sup>2</sup> of gross floor area, and/or of lot area used for production and staging, plus 1 for each 186 m <sup>2</sup> of gross floor area and/or of lot area used for storage purposes.
Assembly and entertainment uses and gaming establishments (private) – see <i>civic facilities</i> for public uses	1 for each 10 seats, or 1 for each 9 m <sup>2</sup> of floor area in areas without fixed seats which are used or intended to be used for public assembly, excluding playing surfaces, plus 1 for each three slot machines in gaming establishments.
Display yards	1 for each 93 m <sup>2</sup> of lot area used for outdoor display, rental, or sales purposes
All E1 and I1 District uses not permitted in a C District or otherwise specified in this table.	1 for each 186 m <sup>2</sup> of gross floor area for sites with a lot area of 9,290 m <sup>2</sup> or less, except 1 for each 1,100 m <sup>2</sup> of gross floor area in respect of multi-storey self-storage buildings where individual storage units are accessed via a common corridor.
Marine Mooring Facilities	1 for each 2 employees
Marinas	1 for each 2 employees, plus 0.7 for each mooring space provided
Office and health care facilities	1 for each 93 m <sup>2</sup> of gross floor area on a site located within a Transit-Oriented Area or Frequent Transit Network Area, or 1 for each 55 m <sup>2</sup> of gross floor area on a site located outside of a Transit-Oriented Area or Frequent Transit Network Area.
Recreation and fitness uses, including golf facilities (private) – see <i>civic facilities</i> for public uses	1 for each 46 m <sup>2</sup> of gross floor area, plus 1 for each 10 spectator seats
Salvage yards, storage yards, transportation facilities, and works yards	0.25 for each 100 m <sup>2</sup> of lot area up to 4,000 m <sup>2</sup> , plus 0.1 for each additional 100 m <sup>2</sup> of lot area exceeding 4,000 m <sup>2</sup> used for outdoor storage purposes.
Visitor accommodation	1 for each 2 sleeping and/or dwelling units

**1.3.2 Area-Specific Parking Requirements**

**1.3.2.1 Swangard Stadium**

- (1) For the purpose of calculating parking spaces, Central Park shall be deemed to have a single use and the limitation of distance between use and parking spaces of 122 m that is contained in Section 1.4.1.2 shall be increased to 800 m for parking at Swangard Stadium; and notwithstanding Section 1.1.2(1), parking spaces for the Stadium may be located outside the boundaries of Central Park.

**1.3.2.2 Lake City and Big Bend**

- (1) E1 and I1 District uses not permitted in a C District or otherwise specified in Section 1.3.1.2 that are located in the following areas and on lots with a lot area greater than 9,290 m<sup>2</sup> may utilize a minimum required parking rate of 1 parking space per 385 m<sup>2</sup> of gross floor area:
  - (a) Within the Lake City Community Plan Area as identified in the *Burnaby 2050 Official Community Plan* and north of Lougheed Highway; and
  - (b) Within the Big Bend Community Plan Area as identified in the *Burnaby 2050 Official Community Plan*.

**1.3.3 Additional Conditions for Residential Uses**

**1.3.3.1 Car Wash Facility**

- (1) The following minimum number of car wash facilities shall be provided where residential off-street vehicle parking spaces are provided in any district, with the exception of non-market rental housing:

Total Provided Residential Off-Street Vehicle Parking Spaces	Car Wash Facilities Required
1 – 49	0
50 – 300	1
For each additional 300 parking spaces provided or part thereof	1 additional facility

- (2) Car wash facilities must:
  - (a) have a stall with the minimum dimensions of 3.7 m x 5.5 m;
  - (b) drain into a sanitary sewer;
  - (c) be located in an underground parking area, structured parking area or in a roofed covered area integrated with a building;
  - (d) have a sign affixed to it saying “No Parking”;
  - (e) provide equipment suitable for cleaning vehicles and bicycles including a pressurized hose, waste receptacle, vacuum, hot and cold water supply, and a bicycle rack; and
  - (f) be separated from other parking spaces with a partition.

**1.3.3.2 Parking or Storage of Commercial Vehicles, Recreational Vehicles, Trucks, Trailers, Boats, or Equipment in R Districts**

- (1) No commercial vehicle, truck, bus, contractor's equipment, dismantled or wrecked automobile, boat, recreational vehicle, trailer or any similar vehicle, conveyance, craft or equipment shall be parked or stored in the open in an R District, except the following which may be parked or stored in the rear yard only:
  - (a) trucks, commercial vehicles, or equipment required for the construction, repair, servicing, or maintenance of the premises, but only while that construction, repair, servicing, or maintenance is being carried out; and

- (b) where ownership is registered in the name of the resident of the dwelling:
  - (i) one truck or commercial vehicle not exceeding 4,500 kg GVW;
  - (ii) one boat or vessel not exceeding a length of 6.0 m;
  - (iii) one recreational vehicle or trailer not exceeding a length of 6.0 m; and
  - (iv) not more than two uninsured but operable and complete vehicles.
- (2) Notwithstanding subsection (1) paragraph (b) and subject to the vision clearance provisions of Part 4-1.5, one recreational vehicle and one boat having a combined length that does not exceed 12.0 m, may be parked in the open in the R1 District subject to the following restrictions:
  - (a) on a corner lot or on a lot with one street frontage, parking is only permitted within a side yard, side street yard, or rear yard and is not permitted within the required minimum lot line setbacks for side yards and street yards;
  - (b) on a through lot, no parking is permitted within the required minimum lot line setbacks for street yards or side yards, nor in the area between the required setbacks and the face of the dwelling that is oriented to the street from which the dwelling is addressed; and
  - (c) on a lot that has no vehicle access to the rear and side yards, either one recreational vehicle or one boat not exceeding 6.0 m in length may be parked on the front driveway or to the side of the front driveway not less than 1.2 m from the side lot lines and not less than 1.8 m from the front lot line.
- (3) In the R1 District, the parking must be screened by compact evergreen trees or shrubs at least 1.8 m in height:
  - (a) on a corner lot or through lot to obscure the view from the closest abutting street;
  - (b) where the front driveway is used, to obscure the view from any abutting property; and
  - (c) where the land beside the front driveway is used, to obscure the view from any abutting property, and from the abutting street.

## 1.4 Location and Access for Off-Street Parking

### 1.4.1 Location of Off-Street Parking Spaces

#### 1.4.1.1 General Requirements

- (1) Off-street vehicle parking spaces provided in accordance with Section 1.3 for the purpose of accommodating the vehicles of clients, customers, employees, members, residents, visitors, or tenants of a principal building or use, may be provided:
  - (a) on the same lot as the principal building or use for which the off-street vehicle parking space is provided; and/or
  - (b) on a different lot as the principal building or use to be served is located, subject to Section 1.4.1.2.
- (2) Notwithstanding subsection (1), for residential buildings the parking facilities for all residents shall be wholly provided on the same lot as the building required to be served.

#### 1.4.1.2 Shared Parking

- (1) Except in the case of dwelling units, off-street vehicle parking spaces may be provided and used collectively by two or more buildings or uses, provided that the total number of parking spaces when used together is not less than the sum of the requirements for the various individual uses, and that such parking facilities are not located more than 122 m from any building or use to be served.
- (2) Shared use of off-street vehicle parking spaces provided for any non-residential use, residential visitor use, or sleeping units or studio units in a dormitory, may be permitted where:
  - (a) the maximum parking demand for the uses occur at different periods of the day or week which is substantiated by a shared parking analysis prepared by a qualified registered professional engineer to the satisfaction of the General Manager Planning and Development;

- (b) the shared vehicle parking spaces are located not more than 122 m from the uses to be served; and
  - (c) the shared vehicle parking spaces are not permanently assigned to a specific use and are available at all times of the day and week.
- (3) Where off-street vehicle parking spaces for sleeping units or studio units in a dormitory are shared with another use, the spaces must be shared with the same institution which the dormitory serves and the number of off-street vehicle parking spaces shall not be less than the number of off-street vehicle parking spaces required for such dwelling units and sleeping units.

## 1.4.2 Driveways

### 1.4.2.1 General Requirements

- (1) Vehicular access off a street shall be designed to conform with the standards and specifications of the Works and Services Bylaw.
- (2) Where a lot in an R or C District abuts a street and a lane, vehicular access shall be provided from the lane, except where the General Manager Engineering determines that access from the lane is unsafe, impractical, or would significantly impede traffic flow.
- (3) No more than one driveway access shall be permitted per lot, except that one additional driveway may be permitted where approved by the General Manager Engineering and substantiated by a Traffic Impact Study completed by a registered professional transportation engineer. The study must include site design, safety, and operational analyses to justify the need for such additional driveway access.

### 1.4.2.2 Siting of Driveways

- (1) A driveway crossing shall be located a minimum of:
  - (a) 6 m from the point of intersection of two streets;
  - (b) 4.5 m from the point of intersection of two lanes or of a street and a lane; or
  - (c) 3.0 m from the point of intersection of two lanes or of a street and a lane on a lot with a rear lot line less than 11.5 m in width.

### 1.4.2.3 Driveway Width in the R1 District

- (1) The width of any driveway abutting a lane, as measured at the property line, shall:
  - (a) be no less than 3 m;
  - (b) be no more than the lesser of 9 m or 80% of the rear lot line; and
  - (c) on a lot with a rear lot line greater than 15 m in length, provide a permeable landscaped area along the rear lot line with a minimum depth of 2 m and a minimum width of 13% of the rear lot line that conforms with the permeable surface requirements in Part 4-4.3.
- (2) The width of any driveway abutting a street, as measured at the property line, shall be no less than 3 m and no more than 6 m.

### 1.4.2.4 Driveway Width in All Other Districts

- (1) Except where otherwise permitted in this Bylaw, the width of any driveway as measured at the property line shall be no less than 5.5 m and no more than 6.5 m, except that:
  - (a) driveway ramp width may be reduced to 3 m at the discretion of the General Manager Engineering where it serves a parking facility in an R District with 10 or fewer stalls; and
  - (b) driveway width may be increased where deemed necessary by the City Engineer to accommodate safe vehicular movement up to the following maximums:
    - (i) 7.2 m in the R7, R8, C, or E1 Districts; and
    - (ii) 9 m in the I1 District.

## 1.5 Siting and Design of Parking Facilities

### 1.5.1 Siting of Parking Facilities

- (1) In the C and R Districts, parking spaces shall be sited:
  - (a) to the rear of the front face of a principal building;
  - (b) to the rear of the side face of a principal building along the side yard which adjoins a flanking street on a corner lot;
  - (c) inside a building; or
  - (d) underground.
- (2) No parking area shall be located within the following required yards:
  - (a) Any yard which adjoins a street on a lot in an A, E, or I District, provided that in no case need the setback for such parking area exceed a distance of 4.5 m.
  - (b) Any yard in an E or I District which abuts a lot in an A or R District, or CD District based on an A or R District.
- (3) No part of any parking area shall be located closer than 3.5 m to any apartment or townhouse dwelling.
- (4) The setbacks of parking areas from lot and street lines shall be subject to the screening and landscaping requirements of Part 4-4.4 of this Bylaw.

### 1.5.2 Visitor Parking

- (1) Visitor parking for apartment and townhouse dwellings shall:
  - (a) be identified by a sign with the words "VISITOR PARKING"; and
  - (b) be located in an area that is easy to find, safe, and convenient.
- (2) Security gates at the entrance to underground visitor parking areas shall be permitted subject to the following:
  - (a) access shall be controlled by an intercom system that is located on the property in close proximity to the visitors parking area to ensure the security of the visitors parking area but avoiding impediments to vehicular circulation at its entrance;
  - (b) the security gate shall be able to be easily opened by the operator of the vehicle without involving a third party;
  - (c) a functional turn-around area shall be provided at the entrance to the visitors parking area to permit adequate vehicle maneuvering without the need for reversing the vehicle in the event that the visitor does not gain access to the visitors parking area through the security gate;
  - (d) the underground visitors parking area shall be separated from any underground residents parking area by a further security gate to maintain the security of the residents parking area;
  - (e) the visitors parking area shall be identified by large and clear signage, differentiated from resident parking and available to visitors 24 hours per day; and
  - (f) pedestrian access to the visitor parking area (both external and internal) and from the visitor parking area to the main lobby or an individual residential unit shall be adequately identified with signage that is clear in its directions to the visitor.

### 1.5.3 Electric Vehicle Charging Infrastructure

- (1) All parking spaces provided for dwelling units on a lot shall include an energized outlet capable of providing Level 2 charging or higher, except:
  - (a) parking spaces for visitor parking; and
  - (b) existing or new parking spaces for existing dwelling units.

- (2) Parking spaces provided for new non-residential development shall include an energized outlet capable of providing Level 2 charging or higher in accordance with the following:
  - (a) Energized outlets must be provided for a minimum of 45% of total parking spaces, of which:
    - (i) 100% of all accessible parking spaces shall be included; and
    - (ii) a minimum of 10% of total parking spaces or one (1) parking space, whichever is greater, shall not provide an electric vehicle energy management system.
  - (b) Energized outlets must be provided for 100% of all shared vehicle parking spaces, which shall:
    - (i) include a minimum of one (1) parking space with electric vehicle supply equipment; and
    - (ii) be counted separately from the 45% requirement set out in paragraph (a).
- (3) Energized outlets provided pursuant to this Section 1.5.3 shall be labeled for the use of electric vehicle charging.
- (4) The General Manager Planning and Development may:
  - (a) specify requirements for technical matters, including but not limited to metering and performance standards for electric vehicle energy management systems; and/or
  - (b) issue a variance for the requirements under this Section 1.5.3 in exceptional circumstances where compliance with the requirements is demonstrated to not be feasible.

## 1.6 Development and Maintenance Standards

### 1.6.1 Minimum Dimensions

- (1) The minimum dimensions of off-street vehicle parking spaces shall be as follows:

Parking Space Type	Length	Width	Height
Regular Parking Space	5.5 m	2.6 m	2.0 m
Small Car Parking Space	4.8 m	2.4 m	2.0 m
Tandem Parking Space	11.0 m	2.6 m	2.0 m
Regular Parallel Parking Space	7.3 m	2.6 m	2.0 m
Small Parallel Parking Space	6.7 m	2.4 m	2.0 m

- (2) Notwithstanding Section 1.3, where the total number of parking spaces provided exceeds 25, up to 35% of the spaces on a property may be small car parking spaces which must be clearly posted, easily located, and easy to use.
- (3) The width of the parking space shall be increased by 0.3 m on each side where a parking space adjoins a wall, column, fence, or other structure that:
  - (a) exceeds 0.3 m in height and is located more than 1.2 m from either end of a small car parking space; or
  - (b) exceeds 0.3 m in height and is located more than 1.4 m from either end of a regular parking space, accessible parking space, or van accessible parking space; or
  - (c) exceeds 0.05 m in height and is located less than 0.6 m from the maneuvering aisle.
- (4) No column encroachments or other obstructions are permitted within the required dimensions of a parking space.

### 1.6.2 Paving and Lighting

- (1) All parking areas for more than 4 vehicles shall be provided with adequate curbs in order to retain all vehicles within such permitted parking area, and to ensure that required fences, hedges, or landscaped areas, as well as any buildings, will be protected from parked vehicles.

- (2) All parking areas for more than 4 vehicles shall be surfaced with an asphalt, concrete, or similar pavement so as to provide a surface that is durable and dust-free and shall be so graded and drained as to properly dispose of all surface water.
- (3) Any lighting used to illuminate a parking facility shall be arranged such that all direct rays of light are reflected upon the parking facility and shall not illuminate areas beyond the lot.

**1.6.3 Maneuvering**

- (1) Adequate provision shall be made for individual ingress or egress by vehicles to all parking spaces at all times by means of unobstructed maneuvering aisles.
- (2) Maneuvering aisles of not less than the following widths shall be provided:

Parking Angle	Width of Aisle
90°	6.5 m
60°	5.0 m
45° and less	3.5 m

- (3) Notwithstanding subsection (2), on a lot within the R1 District, required off-street vehicle parking spaces may be configured as tandem parking subject to the following:
  - (a) one tandem parking space accommodating two vehicles shall only be shared between one primary dwelling unit and its associated secondary suite; and
  - (b) access must be accommodated from a lane or local street as per the road classification in the Official Community Plan.

**2.0 Off-Street Loading**

When any development takes place on any lot, off-street loading shall be provided and maintained in accordance with the regulations contained in this Section.

**2.1 General Requirements**

**2.1.1 Application**

**2.1.1.1 Existing Buildings, Structures, and Uses**

- (1) Section 2.0 shall not apply to buildings, structures, or uses existing on the effective date of this Bylaw, except that:
  - (a) Off-street loading shall be provided and maintained in accordance with this Section where there is a change in the principal use, or where the total floor area is increased in excess of 10% over the existing floor area, including within an existing CD District.
  - (b) Off-street loading existing on the effective date of this Bylaw shall not be reduced below the applicable off-street loading requirements of this Section.

**2.1.1.2 Voluntary Loading Facilities**

- (1) Where off-street vehicle loading facilities are provided when not required, the location, design, and operation of such facilities shall comply with all the regulations of Section 2.0.

**2.1.1.3 Classification**

- (1) Off-street loading spaces shall be classified as Class A, Class B, or Class C loading spaces as specified in Section 2.4.

**2.1.2 Measurements and Calculations**

- (1) When calculating off-street loading requirements, the gross floor area shall include the floor area of accessory buildings or basements, except where they are used for parking or heating.
- (2) In the case of mixed uses, the total requirements for off-street loading facilities shall be the sum of the requirements for the various use categories under Section 2.2 computed separately.

**2.2 Required Off-Street Loading Spaces:**

**2.2.1 Commercial, Employment, and Industrial Uses**

- (1) On every lot used as a retail store, business, industry, warehouse or other similar use, except lots with C1 or R District zoning, the minimum number of spaces shall be as follows:

Total Gross Floor Area of Building(s)	Loading Spaces Required
Up to 250 m <sup>2</sup>	No loading required
Over 250 m <sup>2</sup> to 460 m <sup>2</sup>	1 Class B loading space
Over 460 m <sup>2</sup>	Loading requirements to be determined through a loading management plan

**2.2.2 Assembly, Institutional, and Intensive Commercial Uses**

- (1) On every site used as an office building, place of public assembly, place for entertainment purposes, hospital, institution, hotel, club or lodge, auditorium, public utility, school or other similar use, with the exception of child care facilities, the minimum number of spaces shall be as follows:

Total Gross Floor Area of Building(s)	Loading Spaces Required
Up to 2,800 m <sup>2</sup>	1 Class B loading space
Over 2,800 m <sup>2</sup>	Loading requirements to be determined through a loading management plan

**2.2.3 Residential Uses**

- (1) On every lot with apartment or townhouse dwellings, the minimum number of off-street loading spaces shall be as follows:

Total Provided Dwelling Units	Loading Spaces Required
0 - 99	No loading required
100 - 300	1 Class B loading space
For each additional 200 units or part thereof	1 additional Class B loading space

- (2) Notwithstanding subsection (1), for lots fronting a public road where on-street parking is prohibited, a minimum of one loading space is required on-site.

**2.3 Location and Siting of Loading Facilities**

- (1) Off-street loading spaces and facilities shall be located on the same lot as the use served, but not within the required front or side yard nor closer than 7.5 m to the nearest point of intersection of any two street allowances.

### 2.3.2 Shared Loading

- (1) The General Manager Planning and Development may permit the sharing of the required off-street loading spaces between different uses where:
  - (a) a loading management plan has been provided and the General Manager Planning and Development is satisfied that the operating hours for such uses do not overlap significantly; and
  - (b) the shared off-street loading spaces are not located more than 122 m from the uses to be served.

## 2.4 Development and Maintenance Standards

### 2.4.1 Access

- (1) The location of all points of ingress and egress to a loading area shall be subject to the approval of the City Engineer.

### 2.4.2 Minimum Dimensions

- (1) Off-street loading spaces shall be designed in accordance with the following classifications, unless otherwise approved through a loading management plan:

Loading Class	Length	Width	Height	Conditions
Class A	6.0 m	2.7 m	3.5 m	Suitable for courier vans and small service vehicles
Class B	10.0 m	3.5 m	4.5 m	Additional 2.5 m in length required where no loading dock is provided
Class C	23.1 m	3.6 m	4.5 m	

### 2.4.3 Paving and Lighting

- (1) All loading areas shall be provided with adequate curbs in order to retain all vehicles within such permitted loading areas, and to ensure that required fences, hedges or landscaped areas, as well as any buildings, will be protected from parked vehicles.
- (2) Each loading space shall be surfaced with an asphalt, concrete, or similar pavement so as to provide a durable, dust-free surface, and shall be so graded and drained as to properly dispose of all surface water.
- (3) Any lighting used to illuminate any loading area shall be so arranged that all direct rays of light are reflected upon the loading area, and not on any adjoining premises.

### 3.0 Bicycle Parking and End-of-Trip Facilities

When any development takes place on any lot, end-of-trip facilities and spaces for the off-street parking of bicycles shall be provided and maintained in accordance with this Section.

#### 3.1 General Requirements

##### 3.1.1 Application

###### 3.1.1.1 Existing Buildings, Structures, and Uses

- (1) Section 3.0 shall not apply to buildings, structures, or uses existing on the effective date of this Bylaw, except that:
  - (a) Off-street bicycle parking spaces shall be provided and maintained in accordance with this Section where there is any addition to such existing building or structure, or any change or addition to such existing use, including within an existing CD District.
  - (b) Off-street bicycle parking spaces and end-of-trip facilities existing on the effective date of this schedule shall not be reduced below the applicable requirements of this Section.

###### 3.1.1.2 Voluntary Bicycle Parking Facilities

- (1) Where bicycle parking spaces are provided when not required, the location, design, and operation of such facilities shall comply with all the regulations of Section 3.0.

##### 3.1.2 Measurements and Calculations

- (1) Where number of persons is used as a unit of measurement for the calculation of required bicycle parking spaces, it shall mean the greatest number of persons at work or study, at any time of the day or night in a particular building or for a particular use during any season of the year.
- (2) Where seating accommodation is used as a unit of measurement for the calculation of required bicycle parking spaces, and such accommodation consists of benches, pews, booths and the like, each 0.5 m of width of such seating accommodation shall be counted as one seat.
- (3) Where the calculation of required bicycle parking spaces, Class A supplementary facilities, or end-of-trip facilities results in a fractional requirement, the fractional requirement shall be rounded up to the next whole number.

###### 3.1.2.2 Uses Not Listed

- (1) If a use is not listed in Section 3.2, the number of required bicycle parking spaces shall be calculated based on a similar use as determined by the General Manager Planning and Development.

#### 3.2 Required Bicycle Parking Spaces

- (1) Bicycle parking spaces shall be required for any uses classified in the table below in accordance with the corresponding standards:

Use	Minimum Required Bicycle Parking Spaces	
	Class A (Long-Term)	Class B (Short-Term)
Apartment or townhouse dwellings	1.25 for each dwelling unit	2 spaces per 20 dwelling units, plus one additional space for every additional 20 dwelling units
Assisted living residences	1 for every 20 employees	The greater of 4 spaces or 1 for every 5 residents

Civic facility, assembly and entertainment, and recreation and fitness uses without spectator seating (e.g. community centre, library, or museum), and child care facilities	1 for each 500 m <sup>2</sup> of gross floor area	The greater of 2 spaces or 1 for each 250 m <sup>2</sup> of gross floor area
Civic facility, assembly and entertainment, and recreation and fitness uses with spectator seating (e.g. theatre, auditorium, or stadium)	1 for every 20 employees	The greater of 2 spaces or 1 for every 50 spectator seats
Dormitories	1 for each unit	The greater of 4 spaces or 1 for every 5 units
Hospital	1 for every 20 employees	6 spaces at each public entrance
Manufacturing & Warehousing	The greater of 1 for each 1,000 m <sup>2</sup> of gross floor area and 1 for every 20 employees.	No requirement
Office and health care facilities	1 space for each 170 m <sup>2</sup> of gross floor area	The greater of 2 spaces or 1 for each 1000 m <sup>2</sup> of gross floor area
Retail	1 space for each 340 m <sup>2</sup> of gross floor area	The greater of 2 spaces or 1 for each 500 m <sup>2</sup> of gross floor area
School – Elementary or similar	1 for every 20 employees	The greater of 2 spaces or 1 for every 20 students
School – Secondary or post-secondary	1 for every 20 employees and students	The greater of 2 spaces or 1 for every 20 students
Visitor accommodation	1 for every 20 employees, plus 1 for every 30 sleeping units	The greater of 2 spaces or 1 for every 30 sleeping units

### 3.3 Class A Bicycle Parking Spaces

#### 3.3.1 Bicycle Parking Spaces

- (1) For apartment and townhouse dwellings, bicycle parking spaces shall be provided in:
  - (a) single space or double space bicycle lockers in a bicycle room;
  - (b) an automated facility; or
  - (c) private garages.
- (2) For uses other than apartment and townhouse dwellings, bicycle parking spaces shall be provided in:
  - (a) a bicycle room within a building, private garage or parking garage;
  - (b) an automated facility; or
  - (c) single space bicycle lockers.
- (3) Manual lifting of the bicycle shall not be required to be placed in the bicycle space, except that wall mounted racks may be permitted at the discretion of the General Manager Planning and Development on account of exceptional site conditions that limit the size and configuration of the parkade.
- (4) Bicycle parking spaces shall be located no more than one level below or above grade and shall have convenient access to outside where provided in a bicycle room or as bicycle lockers, except that a location more than one level below or above grade may be permitted at the discretion of the General Manager Planning and Development on account of exceptional site conditions, development size, provision of voluntary bicycle parking spaces, or where a bicycle-appropriate elevator is supplied offering convenient access to outside.

- (5) Bicycle parking spaces shall be independently accessible by means of an aisle of a minimum width of 1.2 m, and a minimum vertical clearance of 2.0 m, except when provided in an automated facility.

### 3.3.2 Bicycle Rooms

- (1) Class A bicycle rooms shall:
- (a) provide required bicycle parking spaces in the form of bicycle racks or bicycle lockers;
  - (b) not include Class B bicycle parking spaces;
  - (c) have a solid opaque or chain-link (No. 7 gauge or heavier) walls extending from floor to ceiling;
  - (d) have a steel or chain-link (No. 7 gauge or heavier) door that is no less than 0.9 m in width, is automatically operated with a programmed entry system, and has tamper-proof hinges and a steel frame. Where a steel door is installed, a security window is preferred;
  - (e) have motion-activated security lighting enclosed in tamper-proof housing, which uniformly provides light throughout the room; and
  - (f) be designed to accommodate a maximum of 50 bicycle racks, except that a Class A bicycle room may be designed to accommodate more than 50 bicycle racks if the bicycle room is continuously monitored by security personnel during operational hours.

### 3.3.3 Automated Facilities

- (1) Where Class A bicycle parking spaces are provided in an automated facility, the automated facility shall:
- (a) have an entrance that is located no more than one level below or above grade with convenient access to outside that is accessible by means of an aisle of a minimum width of 1.2 m, and a minimum vertical clearance of 2.0 m;
  - (b) store and retrieve bicycles via a radio frequency identification tag and smart card system, or a comparable high security storage and retrieval system;
  - (c) have a designated and preferably weather-protected loading zone;
  - (d) be designed to accommodate a maximum of 100 bicycles; and
  - (e) have motion-activated security lighting enclosed in tamper-proof housing, which uniformly provides light and is dark-sky compliant if located outside.

### 3.3.4 Bicycle Lockers

- (1) Class A bicycle lockers shall:
- (a) be constructed of theft-resistant material with no exposed fittings or connectors;
  - (b) be built with a lockable door which opens to the full width and height of the locker;
  - (c) be individually numbered;
  - (d) be weather-proof where exposed to the elements;
  - (e) for a single space bicycle locker, have minimum dimensions of:
    - (i) 0.7 m in width at the door end;
    - (ii) 0.2 m in width at the end opposite to the door;
    - (iii) 1.8 m in length; and
    - (iv) 1.2 m in height;
  - (f) for a double space bicycle locker, have minimum dimensions of:
    - (i) 1.15 m in width at the door end;
    - (ii) 1.15 m in width at the end opposite to the door;
    - (iii) 1.8 m in length; and
    - (iv) 1.2 m in height; and
  - (g) be accessible only to residents of the one residential unit which the single or double bicycle locker is intended to serve.

### 3.3.5 Bicycle Racks

- (1) Class A bicycle racks shall:
  - (a) be constructed of sturdy theft-resistant material with secure theft resistant anchoring to the floor or wall;
  - (b) support the bicycle frame above the centre of gravity and enable the bicycle frame and front wheel to be locked to the rack with a U-style lock; and
  - (c) have a minimum:
    - (i) vertical clearance of 2.0 m;
    - (ii) width of 0.6 m for each bicycle; and
    - (iii) length of 1.8 m.

### 3.3.6 Bicycle Repair Stations

- (1) Where 10 or more Class A bicycle parking spaces are required, there shall be no less than 1 bicycle repair station for every 400 Class A bicycle parking spaces, and each station shall provide:
  - (a) a bicycle stand that supports the bicycle off the floor;
  - (b) a tire pump; and
  - (c) a bicycle appropriate toolkit secured to the bicycle stand or wall.

## 3.4 Class B Bicycle Parking Spaces

### 3.4.1 Bicycle Parking Spaces

- (1) Class B Bicycle parking spaces shall:
  - (a) be provided in:
    - (i) bicycle racks;
    - (ii) single space bicycle lockers;
    - (iii) an automated facility; or
    - (iv) subject to Section 3.4.5 an attended facility only for assembly and entertainment, civic facility, and recreation and fitness uses provided for in Section 3.2;
  - (b) have wayfinding signage where Class B bicycle parking spaces are not readily visible from the front of the site;
  - (c) except where the Class B bicycle parking spaces are provided in an automated facility or an attended facility, not require manual lifting of the bicycle to be placed in the bicycle space;
  - (d) not interfere with pedestrian or vehicular circulation; and
  - (e) be independently accessible by means of an aisle of a minimum width of 1.2 m, and a minimum vertical clearance of 2.0 m, except when provided in an automated facility.

### 3.4.2 Bicycle Racks

- (1) Class B Bicycle racks shall:
  - (a) be located where feasible, near all main pedestrian entries, in an accessible, well-lit and weather-protected location, that allows for visual surveillance by occupants of the building or by building security;
  - (b) be constructed of sturdy theft and weather-resistant material with secure theft-resistant anchoring to the floor or wall;
  - (c) support the bicycle frame above the centre of gravity and enable the bicycle frame and front wheel to be locked to the rack with a U-style lock; and
  - (d) have a minimum;
    - (i) vertical clearance of 2.0 m;
    - (ii) width of 0.3 m for each bicycle; and
    - (iii) length of 1.8 m.

### 3.4.3 Bicycle Lockers

- (1) Class B bicycle lockers shall:
  - (a) where feasible, be located near all main pedestrian entries, in an accessible, well-lit and weather-protected location, that allows for visual surveillance by occupants of the building or by building security;
  - (b) be constructed of theft-resistant material with no exposed fittings of connectors;
  - (c) be built with a lockable door which opens to the full width and height of the locker;
  - (d) be weather-proof where exposed to the elements; and
  - (e) have minimum dimensions of;
    - (i) 0.7 m in width at the door end;
    - (ii) 0.2 m in width at the end opposite to the door;
    - (iii) 1.8 m in length; and
    - (iv) 1.2 m in height.

### 3.4.4 Automated Facilities

- (1) Where Class B bicycle parking spaces are provided in an automated facility, the automated facility shall:
  - (a) store and retrieve bicycles via a radio frequency identification tag and smart card system, or a comparable high security storage and retrieval system;
  - (b) have a designated and preferably weather-protected loading zone;
  - (c) be designed to accommodate a maximum of 100 bicycles; and
  - (d) have motion-activated security lighting enclosed in tamper-proof housing, which uniformly provides light and is dark-sky compliant if located outside.

### 3.4.5 Attended Facilities

- (1) Up to 90% of the required Class B bicycle parking spaces for assembly and entertainment, civic facility, and recreation and fitness uses provided in Section 3.2 may be provided in the form of an attended facility which has a drop off and pick up area that is located no more than one level below or above grade and has convenient access to the outside.

## 3.5 End-of-Trip Facilities

### 3.5.1 General Requirements

- (1) Where 4 or more Class A bicycle parking spaces are required to be provided under this Bylaw for non-residential uses, end-of-trip facilities shall be provided in accordance with this Section.
- (2) If facilities are to be separated by gender, the number of spaces allocated to each gender shall be distributed equally, unless otherwise demonstrated to the satisfaction of the General Manager Planning and Development.

### 3.5.2 Required Amenities

- (1) The minimum number of toilets, sinks, and showers required is as follows:

Required Class A Bicycle Parking Spaces	Minimum Number		
	Toilets	Sinks	Showers
4 - 20	2	2	2
21 - 40	2	4	4
41 - 60	4	6	6
For each additional 15 or part thereof	1 additional	1 additional	1 additional

- (2) A minimum number of the following shall be provided:
  - (a) 2 change spaces, at least one of which must be a private change space, for each shower provided;
  - (b) 1 grooming station for each shower provided;
  - (c) 1.5 clothing lockers for each Class A bicycle parking space provided; and
  - (d) 1 drying hook, or equivalent, for each Class A bicycle parking space provided.

### 3.5.3 Design Standards

- (1) End-of-trip facilities shall be securely located, well-lit and accessed via an interior entry door.
- (2) All required showers shall be provided for in private stalls and shall include a shelf for staging toiletries, and a hook to hang a towel.
- (3) Private change spaces shall be provided for in opaque stalls, and each stall shall be accessed separately from the shower, and contain a bench or similar with dimensions no less than 0.6 m in length, 0.3 m in depth and 0.4 m in height.
- (4) Each grooming station shall be equipped with a mirror, electrical outlet, and a counter top.
- (5) Each clothing locker shall be a minimum of 0.45 m in depth, 0.3 m in width, and 0.9 m in height and have built-in hooks and perforations to allow for adequate ventilation.

## 3.6 Location of Facilities

### 3.6.1 General Requirements

- (1) Required bicycle parking spaces and end-of-trip facilities shall be provided for on the subject lot, except as otherwise specified in Section 3.6.
- (2) Notwithstanding subsection (1), the required number of Class B bicycle parking spaces may be located in the public street or sidewalk, subject to an encroachment agreement with the City, if permitted by the General Manager Planning and Development. In such cases, the property owner shall be required to cover costs associated with installation, maintenance, and replacement of the required bicycle parking spaces.

### 3.6.2 Shared Facilities

- (1) Bicycle parking spaces may be provided and used collectively by two or more buildings or uses, provided that:
  - (a) Class A bicycle parking spaces required for residential uses are not shared with non-residential uses;
  - (b) the operating hours for such uses do not overlap significantly;
  - (c) the shared spaces are not located more than 122 m from the building or uses to be served; and
  - (d) the shared spaces are not permanently assigned to a specific use or building and are available at all times of the day and week.
- (2) End-of-trip facilities may be provided and used collectively by two or more buildings or uses, provided that:
  - (a) the operating hours for such uses do not overlap significantly;
  - (b) the shared spaces are not located more than 122 m from the building or uses to be served; and
  - (c) the shared facilities are not permanently assigned to a specific use or building and are available at all times of the day and week.