

DANIEL CLARKE  
ARCHITECT

**PROJECT DETAILS  
ASSESSMENT  
SUMMARY**

*4523 Pender St.*

**Note:**

*This sample PDAS has been edited to exclude  
copies of the Bylaws mentioned,  
the Project Planner,  
Document Tracker Spreadsheet, and  
the Functional Program Summary.*



**PROPERTY**

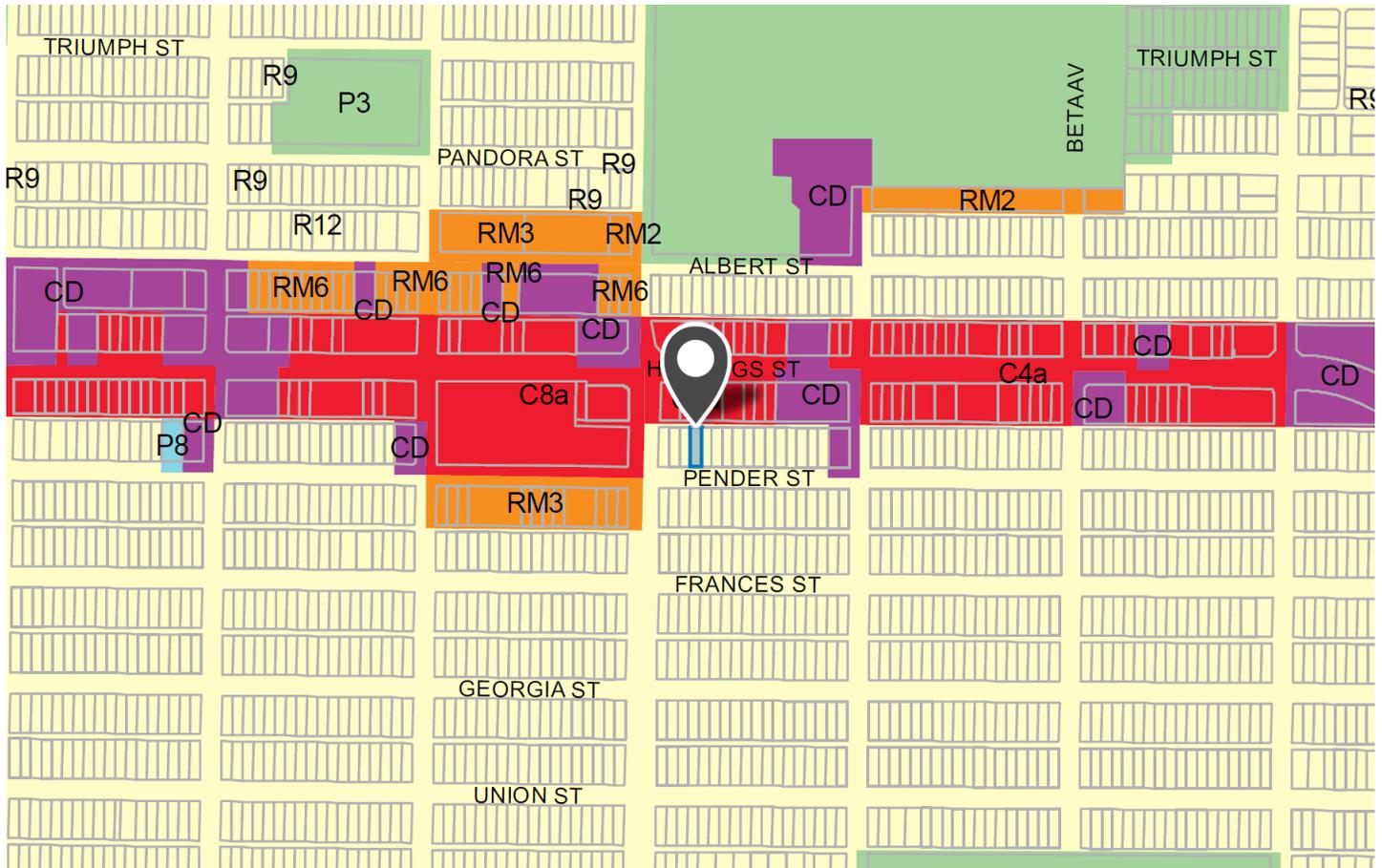
Municipal address: 4523 Pender Street, Burnaby BC  
 Land Title Office Parcel ID: 012-109-681  
 Legal Address: Lot 33 BLK 9 DIST Lot 122 PLAN NWP1308  
 Lot frontage: 10.06m (33'-0")  
 Lot rear width: 10.06m (33'-0")  
 Lot depth: 37.19m (122'-0")  
 Lot area: 374.1 m2 (4026 ft2)

**REGULATIONS**

- British Columbia Building Code 2018 – Part 9 applicable
- British Columbia Fire Code 2018
- British Columbia Plumbing Code 2018
- 2018 Canadian Electrical Code (with BC Amendments)
- Burnaby Building Bylaw
- Burnaby Electrical Bylaw
- Burnaby Electrical Connection Bylaw
- Burnaby Gas Bylaw
- Burnaby Noise Bylaw
- Burnaby Planning and Building Fees Bylaw
- Burnaby Plumbing Bylaw
- Burnaby Sign Bylaw
- Burnaby Swimming Pool Bylaw
- Burnaby Tree Bylaw
- Burnaby Waterworks Bylaw

**AUTHORITY HAVING JURISDICTION:**

City of Burnaby



**ZONING: R5 – TWO-FAMILY DWELLING, MEDIUM-DENSITY RESIDENTIAL**

**PERMITTED USES:**

- single-family
- single-family with secondary suite
- two-family – semi-detached (side by side)
- two-family – duplex (stacked)
- group home
- boarding/lodging/rooming house - maximum 5 persons if SFH
- home occupations
- accessory building
- Category A supportive housing facilities, part of a CD rezoning, each unit 25sq.m

**COVERAGE AND YARDS:**

Maximum lot coverage:

- Attached garage or carport – 45% = **168.4 m<sup>2</sup> (1811.7 ft<sup>2</sup>)**
- Detached garage or carport – 40% = **149.7m<sup>2</sup> (1610.4 ft<sup>2</sup>)**

Minimum Yards:

Front – **6m (19.7 ft)** *unless* average of adjacent front yards > **7.5m (24.6ft)** then use that averageSide – **1.5m (5 ft)**Rear – **7.5m (24.6 ft)****AREAS (DUPLEX)**Floor Area Ratio Maximum: 0.6: **224.5 m<sup>2</sup> (2415.6ft<sup>2</sup>)**Gross Floor Area of all accessory buildings maximum **56 m<sup>2</sup> (602.8 ft<sup>2</sup>)**If garage is attached, the portion exceeding 42 m<sup>2</sup> (452 ft<sup>2</sup>) is included as above-grade floor area

Principal Building Maximum Depth:

detached garage: **18.3m (60.0 ft)**attached garage: **18.6m (61.0 ft)**

Principal Building Maximum Height:

- measured from lower of the front and rear average grade elevations to top of structure
- 2 storeys
- Sloping roof (minimum 4 in 12): **9 m (29.5 ft)**
- Flat roof (less than 4 in 12): **7.4 m (24.3 ft)**

A cellar shall not have a floor area (incl. garage/carport) exceeding floor area of storey immediately above

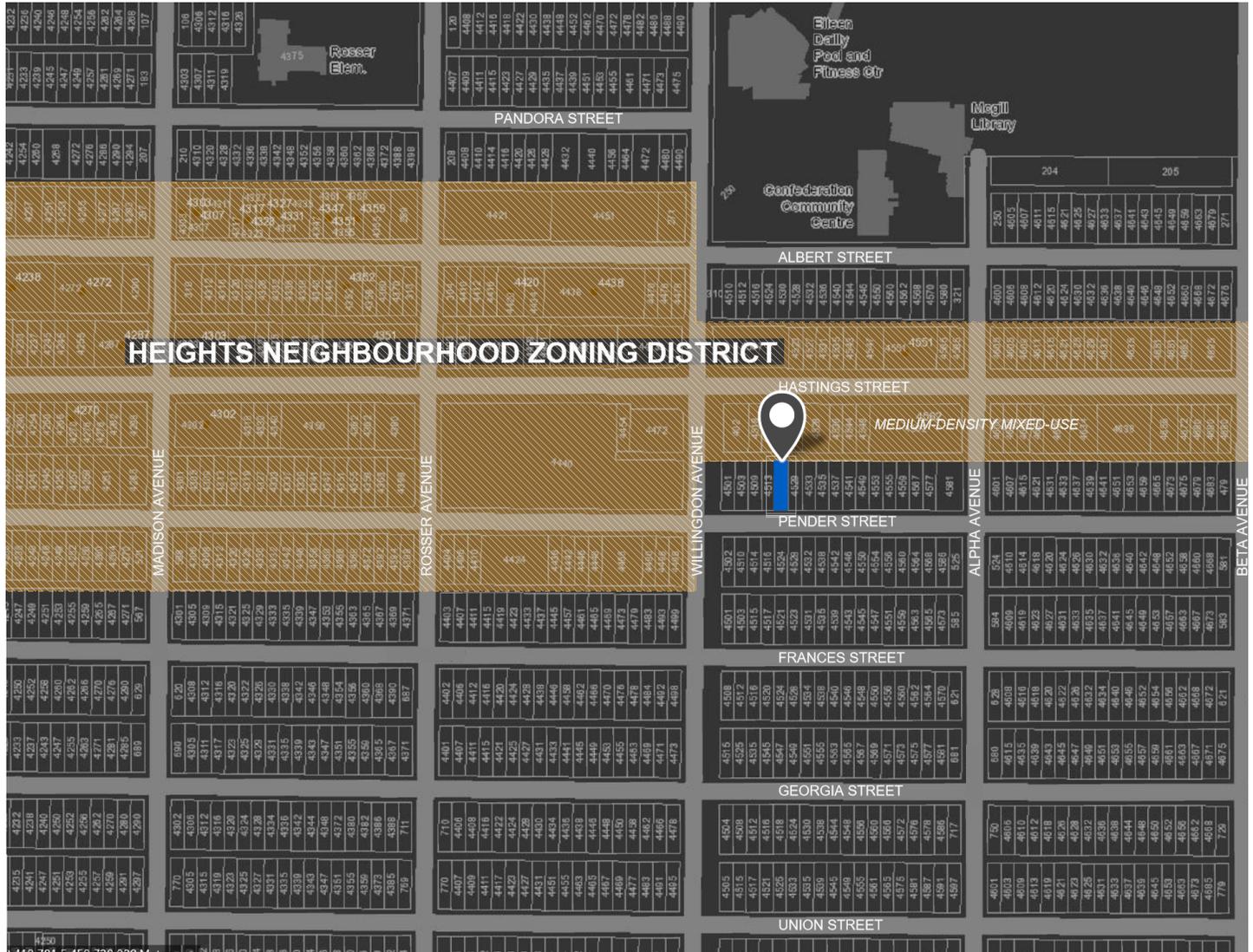
Maximum **116 m<sup>2</sup> (1248.6 ft<sup>2</sup>)** per dwelling Gross Floor Area above a cellar, crawl space, basement, or ground surface**PARKING****2 parking spaces** are requiredEach parking space = **5.5 m long x 2.6 m wide x 2.0 m clear height (18 ft x 8.5 ft x 6.56 ft height)****Increase parking space width by 0.3 m (1 ft)** where adjacent to any structure that is taller than 0.3 m (1 ft) or any structure that is taller than 0.05 m (2 in.) and less than 0.6 m (2 ft) from the end

No encroachments into parking spaces are permitted

Each parking space must have an energized, labeled EV outlet (minimum Level 2)

### ZONING: OFFICIAL COMMUNITY PLAN ANALYSIS

**HEIGHTS:** 4523 Pender is not within and therefore not subject to requirements of any neighbourhood development zones. The adjacent Heights Neighbourhood Zoning District directly to the North (see map below) plans for primarily medium-density mixed-use developments for properties along Hastings Street and medium-density multi-family developments for properties to the North and South of that.



**ZONING: SELECTED DEFINITIONS (edited excerpt from Burnaby Zoning Bylaw):**

**ACCESSORY BUILDING:** building whose use is ancillary to that of a principal building on the same the lot

**BALCONY:** a cantilevered deck that projects from a building and that may be enclosed only by a guard

**BASEMENT:** the space between two floor levels that is partly underground but has at least one-half its height (from finished floor to the underside of the joists of the floor above it) *above* average natural grade as determined by the Building Inspector

**BAY WINDOW:** a projection from the wall of a building that is at least:

- 46 cm (1.5 ft.) above the level of the adjacent floor surface; and
- 50% glazed when viewed in elevation.

**BEDROOM:** includes dens, libraries, recreation rooms, sewing rooms or other rooms of similar character

**BUILDING:** a structure, located on the ground, which is designed, erected or intended for the support, enclosure, or protection of persons or property

**CARPOR:** a detached accessory building or portion of building that is used as a private garage and less than 60% of the perimeter is enclosed by walls, doors or windows

**CELLAR:** the portion of a building between two floors that is partly *or wholly* underground and has more than one-half its height (from finished floor to the underside of the joists of the floor above it) *below* average natural grade as determined by the Building Inspector; and a cellar shall not be considered to be a storey.

**CRAWL SPACE:** the space at or below natural grade between the underside of the joists of the floor next above and the floor slab on the ground surface below, having a vertical clear height less than 1.2 m (3.9 ft.).

**DECK – COVERED DECK:** a roofed deck that is not cantilevered, projects from a wall of a building, is accessible from the interior of a building and may be enclosed only by a guard

**DEPTH, PRINCIPAL BUILDING:** the horizontal distance between the point of the building nearest the front lot line and the point of the building nearest the rear lot line, excluding the following projections:

- belt courses, cornices, eaves, gutters, sills, chimneys, or other similar features, projecting up to 900 mm (2.95 ft.);
- bay windows projecting up to 900 mm (2.95 ft.); and
- balconies, canopies, sunshades, open porches, verandas and sundecks, including supporting structures, projecting up to 1.2m (3.94 ft.)

**DWELLING – DUPLEX:** a two-family dwelling wherein the two dwelling units are placed one above the other.

**DWELLING – SEMI-DETACHED DWELLING:** a two-family dwelling wherein the dwelling units are placed side by side.

**DWELLING – SINGLE FAMILY DWELLING:** any building consisting of one dwelling unit. Such a dwelling may include a secondary suite, subject to the Accessory Use provisions of Section 3 of this Bylaw.

**DWELLING – TWO FAMILY DWELLING:** any building divided into two dwelling units.

**DWELLING UNIT:** one or more habitable rooms constituting one self-contained unit with its own, separate entrance, which is occupied or intended to be occupied as the permanent home or residence of only one family and contains one kitchen or one set of cooking facilities.

**FLOOR AREA – GROSS FLOOR AREA:** the total area of all the floors measured to the extreme outer limits of the building (refer to Supplementary Regulations)

**FLOOR AREA RATIO:** gross floor area of all buildings on a lot (minus permitted exclusions) divided by the area of the lot

**GRADE OR GRADE LEVEL, NATURAL:** the existing, undisturbed ground level adjacent to the exposed wall of a building, except for an approved minor slope equalization

**GROUP HOME:** a residential care facility for a maximum of six persons in care that is operated in a private single family dwelling on a residential lot and licensed under the Community Care Facility Act.

**HEIGHT:** refer to Supplementary Regulations

**HOME OCCUPATION:** an occupation or profession that is incidental to the use of a dwelling unit for residential purposes, or to the residential use of a lot occupied by a dwelling and includes:

- (a) the office or studio of a person engaged in business, art, health, crafts or instruction,
  - (b) the keeping of not more than two boarders or lodgers in each dwelling unit,
- € the operation of a home-based child care facility.

**IN-LAW SUITE:** one or more habitable rooms used for living and sleeping purposes by relatives of the owner or tenant pursuant to a licence issued by the Building Department the continued use of which is subject to section 911 of the Local Government Act.

**LOT COVERAGE:** the area of the projection of the outline of all buildings and structures on the lot as a percentage of the lot area but excluding

- belt courses, cornices, eaves, gutters, sills or other similar ornamental protrusions;
- bay windows;
- chimneys, fire escapes and steps;
- canopies and sun shades;
- terraces, balconies;
- uncovered swimming pools; and
- underground or open-sided, roofless parking areas

**ROOF – FLAT ROOF:** a roof on a building that has one or more roof surfaces that have a pitch of less than 4 in 12 and cover an area greater than 20 percent of the area of all roof surfaces as measured in plan view.

**ROOF – SLOPING ROOF:** a roof that has one or more roof surfaces sloped 4 in 12 or steeper and covers an area at least 80 percent of the area of all roof surfaces as measured from above.

**SECONDARY SUITE:** an accessory *dwelling unit* fully contained within a single family dwelling.

**STOREY** means a habitable space between two floors, or between any floor and the upper surface of the floor next above, except that the topmost storey shall be that portion of a building included between the upper surface of the topmost floor and the ceiling above. A basement is a storey; a cellar is not a storey.

**STOREY – HALF STOREY:** a storey under a gable, hip, gambrel or shed roof having a gross floor area not more than fifty percent of the gross floor area of the storey immediately below, and includes a roofed deck that is an extension of the topmost storey.

**ZONING: SUPPLEMENTARY REGULATIONS**  
**(edited excerpt from Burnaby Zoning Bylaw):****6.4 HEIGHT OF BUILDINGS AND STRUCTURES:**

(3) The following types of structures or structural parts are excluded from calculating building height: aerials, electrical service masts, television and radio antennae, chimneys, flues, flagpoles, vents, transmission towers and water tanks; but no such structure shall cover more than 20 percent of the lot or, if located on a building, more than 10 percent of the roof area of the building.

(6) The height of a detached accessory building shall be measured from the calculated average natural grade of all sides of the building to the highest point of the structure, subject to the applicable exceptions in subsections (3) and (4), except that the height of a detached garage or carport may be measured from the finished grade at the point used for vehicular access.

**6.6 ACCESSORY BUILDINGS AND USES:**

(1) (b) Where a garage or carport or other accessory building or structure is attached to the principal building, it is to be considered a part of the principal building and shall comply in all respects with the requirements of this Bylaw applicable to the principal building.

€ An accessory building shall be located at least 1.2 m (3.94 ft.) from any lane,

(2) (a) An accessory building shall not have more than one storey and shall not exceed 3.7 m (12.13 ft.) in height except that a hip or gable roof may be constructed to a height not exceeding 4.6 m (15.1 ft.).

(b) The gross floor area of all accessory buildings on a lot

(i) in an A or RM District shall not exceed 10 percent of the area of the lot,

(ii) in an R District that is developed with a semi-detached dwelling shall not exceed 74.4 m<sup>2</sup> (800 sq.ft.), and

(iii) in an R District that does not have a semi-detached dwelling shall not exceed 56m<sup>2</sup> (602.8 sq.ft.). (B/L No. 10397-96-07-22)

€ Not more than two-thirds of the width of the rear yard of any lot in A or R District shall be occupied by accessory buildings.

(d) Subject to Clause (f), an accessory building between the rear building line and the rear lot line of an interior lot shall be not less than 1.2 m (3.94 ft.) from the side property lines, except where such accessory building is situated within the rear 9.0 m (29.53 ft.) of the lot, and not less than 21.5 m (70.54 ft.) from the street on which the principal building fronts. In this case a setback from the side lot line need not be provided.

**6.8 HOME OCCUPATION:**

(1) A home occupation shall involve no internal or external structural alterations to the principal building (dwelling) and there shall be no exterior indication that the building is being utilized for any purpose other than that of a dwelling, and no building, structure, fence or enclosure other than those in conformity with permitted residential uses in the Zoning District in which it is located, may be erected.

(2) The premises shall not be used for manufacturing, welding or any other light industrial use, and the home occupation carried on therein shall not produce noise, vibration, smoke, dust, odour, litter or heat other than that normally associated with a dwelling unit nor shall it create or cause any fire hazard, electrical interference, excessive pedestrian or vehicular traffic in the common areas or parking areas of a multi-family building or traffic congestion on the street. (B/L No. 10398-96-08-26)

(4) There shall be no external storage of materials, containers or finished product.

(5) No stock in trade shall be kept or handled and no commodity sold upon the premises.

(6) Such occupation shall not involve the use of mechanical equipment save as is ordinarily employed in purely private domestic and household use or for recreational hobbies, except for such equipment as may be used for a resident physician or dentist.

(7) No person who is not a resident in the dwelling shall be employed in such occupation, except that one non-resident employee is permitted for a home-based child care facility.

**6.9 CELLARS AND BASEMENTS:**

(2) The height of a basement or cellar, measured between floor and ceiling surfaces, shall not be less than 2.3 m (7.5 ft.).

(3) In the R Districts, where a part of the principal building used for vehicular access is depressed into the grade, that part of the building shall be excluded when determining whether the building has a basement or a cellar.

(4) For the purpose of providing pedestrian access to a basement or cellar, the surface of the ground adjoining a building may be lowered without affecting the determination between a basement and cellar, if the lowered surface is not on the same side of the building as a depressed vehicular access and does not

- exceed an area of 14.0 m<sup>2</sup> (150.7 sq. ft.),
- extend more than 3.0 m (9.8 ft.) from the building,
- exceed a width of 4.5 m (14.8 ft.) along the wall, and
- extend more than 0.75 m (2.5 ft.) into the required side yards.

(5) ... for the purpose of providing light to a basement or cellar, the surface of the ground adjoining a building may be lowered without affecting the determination between a basement and cellar, if the window wells do not

- extend more than 0.9 m (3.0 ft.) from the building,
- extend more than 0.75 m (2.5 ft.) into the required side yards, and
- exceed in length 25 percent of the length of the wall.

(6) ... on a lot developed with a single family dwelling a cellar exceeding a floor area of 32 m<sup>2</sup> (345 sq. ft.) shall meet the requirements of the British Columbia Building Code and all other requirements of this Bylaw for a secondary suite.

#### **6.10 MINIMUM FLOOR AREA FOR DWELLING UNITS:**

(1) No single family, two family or row house dwelling shall contain less than 56 m<sup>2</sup> (602.80 sq. ft.) of floor area for each dwelling unit except that a single family dwelling in an R1 District shall contain at least 93 m<sup>2</sup> (1001.08 sq. ft.) of floor area. Notwithstanding the foregoing, a secondary suite shall contain at least 32m<sup>2</sup> (345 sq.ft.) of floor area.

#### **6.12 YARDS:**

(1) Projections into Required Yards:

The following features may project into a required front, side or rear yard:

- Steps or stairs
- Belt courses, cornices, eaves, gutters, sills, chimneys, or other similar features, but such projections shall not exceed 900 mm (2.95 ft.)
- Bay windows, that do not project more than 900 mm (2.95 ft.) and the total length of all such windows shall not exceed 50 percent of the length of the exterior wall from which they project.
- Balconies, canopies, sunshades, open porches, verandas and sundecks, but such projections, including the supporting structures, shall not exceed 1.2 m (3.94 ft.), or 50 percent of the width of a required side yard.
- An uncovered patio or terrace, which may be open or enclosed, in any yard subject to the fence height limitations. The provision of an awning or similar temporary covering for such a terrace shall be permitted.
- Arbors and trellises, fish ponds, ornaments, flag poles, or similar landscape features.
- An uncovered swimming pool, but such pool shall not be constructed within required front yard nor nearer than 3.0 m (9.84 ft.) to any property line.
- A covered or roofed swimming pool, subject to the provisions of clause (g) and to the regulations governing accessory buildings contained in Section 6.6 of this Bylaw.
- Underground parking structures, subject to suitable landscaping or architectural treatment and proper maintenance, except that where such a structure extends above the surface of the finished grade, its horizontal projection shall not exceed 3.0 m (9.84 ft.) in a required front yard.

#### **6.14 FENCES:**

(1) A fence, wall or other structure that is not a building must either comply with these height restrictions or comply with the setback requirements for buildings.

(2) The height of a fence or wall shall be determined by measurement from the ground level at the average grade level within 900 mm (2.95 ft.) of both sides of such fence or wall.

- (3) That portion of a retaining wall which projects above the surface of the ground which it supports shall be considered as a fence and subject to the regulations of this subsection.
- (4) Notwithstanding Clause (2), in cases where a retaining wall has been constructed along a property line, the height of a fence or wall shall be determined by measurement from the surface of the ground which the retaining wall supports at the average grade level within 900 mm (2.95 ft.) of such retaining wall. (B/L No. 8096-83-09-19)
- (5) Subject to the vision clearance provisions of Section 6.13 the following height limitations shall apply to fences or walls.
- (a) Except for screening required under this Bylaw and fences enclosing an outdoor play area, fences up to 1.07m (3.51 ft.) high may be located anywhere on a lot.
- (b) Fences or walls up to 1.8 m (5.91 ft.) high may be located on any lot to the rear of a required front yard.

**6.15 SCREENING AND LANDSCAPING:****(1) Lots and Required Yards:**

- ... any part of a lot not used for building, parking or loading facilities or outdoor recreation shall be fully and suitably landscaped and properly maintained.
- ...all those portions of a required side yard not used for permitted parking or outdoor play area shall be fully and suitably landscaped and properly maintained.

**(2) Storage Yards:**

- No storage yard or area shall be permitted in any required yard.
- Screening consisting of a solid 2.4 m (7.87 ft.) fence or wall, which shall be uniformly painted and well maintained and not used for advertising or display purposes or for the posting of notices, or, a compact evergreen hedge not less than 1.8 m (5.91 ft.) in height, which shall be maintained in good condition at all times, shall be provided as follows:
  - (ii) Required front screening shall be so situated as to conform with the applicable front yard setback provisions.
  - (iii) Where a side or rear yard is required to be landscaped, the required screening shall be located on the line established by the yard setback provisions.

**(3) Parking Areas, Loading Areas and Display Yards:**

- Any parking area shall be separated from an adjoining street, or from a directly abutting lot in an A, R or RM District, by a fully and suitably landscaped and properly maintained strip of not less than 1.8 m (5.91 ft.) in width.
- Screening of 1.8 m (5.91 ft.) in height shall be provided and properly maintained:
  - where any parking or loading area abuts a lot in an A, R, or RM District, or is separated therefrom by a street or lane, except however, that where a parking area abuts a lane, the screening along the lane shall be not less than 800 mm (2.62 ft.) nor more than 1 m (3.28 ft.) in height for a distance of not less than 6.0 m (19.69 ft.) from all points of ingress and egress to and from such parking area;
  - where any display yard abuts a lot in an A, R, or RM District, or is separated therefrom by a lane.

**6.17.1 PARKING OR STORAGE OF COMMERCIAL VEHICLES, TRUCKS, RECREATION VEHICLES, OR BOATS**

No commercial vehicle, truck, bus, contractor's equipment, dismantled or wrecked automobile, boat, recreation vehicle, trailer or any similar vehicle, conveyance, craft or equipment shall be parked or stored in the open, except the following which may be parked or stored in the rear yard only:

- one truck or commercial vehicle not exceeding 4,500 kg GVW (9,920.631 lbs. GVW) ownership of which is registered in the name of the resident of the dwelling;
- 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;
- not more than two uninsured but operable and complete vehicles, ownership of which is registered in the name of the resident of the dwelling.

(2) Notwithstanding subsection (1) and subject to the vision clearance provisions of section 6.13, one recreation vehicle and one boat having a combined length that does not exceed 12.0 m (39.37 ft.), may be parked in the open, provided that no parking is permitted in the required front yards or required side yards, nor in the area between the required front yard and the face of the dwelling that is oriented to the street from which the dwelling is addressed;

(3) The parking must be screened by compact evergreen trees or shrubs at least 1.8 m (5.91 ft.) in height,

- on a corner lot or through lot to obscure the view from the closest abutting street,
- where the front driveway is used, to obscure the view from any abutting property, and
- where the land beside the front driveway is used, to obscure the view from any abutting property, and from the abutting street.

#### **6.20 COMPUTATION OF GROSS FLOOR AREA AND FLOOR AREA RATIO:**

(1) The following shall be included as gross floor area:

- all suites or dwelling units;
- all corridors, hallways, landings, foyers, staircases and stairwells;
- enclosed balconies, enclosed sundecks, enclosed porches and enclosed verandas

(3) accessory buildings shall be included as gross floor area; but 42 m<sup>2</sup> (452.1 ft<sup>2</sup>) of the floor area of a garage or carport shall be excluded

(4) For single family dwellings and two family dwellings, gross floor area and above grade floor area, for any portion of a building, with the exception of staircases and stairwells, where the height from the floor to the ceiling directly above exceeds 4.5 m (14.8 ft.), shall be calculated in accordance with the following:

- cumulative floor area of such portion(s) of the building, multiplied by two; less
- 9.3 m<sup>2</sup> (100.1 sq. ft.) for each dwelling unit on a lot with a ceiling which exceeds the height specified in this section.

(6) For the purpose of computing floor area ratio, the following shall not be included as floor area:

- areas of undeveloped floors located above a storey or a half-storey, or adjacent to a half-storey, with a vertical clear height of less than 1.2 m (3.9 ft.) and to which there is no permanent means of access other than a hatch;
- crawl spaces;
- garages and carports up to a maximum of 42 m<sup>2</sup> (452.1 sq.ft.)
- balconies, sundecks and covered decks, up to a maximum area of 8 percent of the permitted gross floor area;
- covered porches up to a maximum area of 3.7 m<sup>2</sup> (39.8 sq.ft.) for a dwelling unit where the porches

(i) are not enclosed,

(ii) face a street or rear property line and are located at the first storey,

(iii) do not project more than 1.2 m (3.9 ft.) into the required front yard, and

(iv) do not exceed a height of 3.7 m (12.1 ft.) measured from the porch floor to the top of the supporting structure.

(7) Notwithstanding Section 6.20(6), on a lot developed with a single family dwelling, a garage or carport located in a cellar shall be included as floor area of the cellar.

#### **6.24 IMPERVIOUS SURFACES**

(1) This section applies only for the construction of a new principal building, whether on new or existing building foundations.

(2) A maximum of 70 per cent of the total area of a lot to which this section applies shall be covered by impervious materials, which include:

- buildings and structures;
- asphalt, concrete, grouted pavers;
- subject to subsection (f), ungrouted pavers having a surface area on their largest face of more than 0.21 m<sup>2</sup> (2.25 sq.ft.);
- but does not include

- ungrouted pavers having a surface area on their largest face of not more than 0.372 m<sup>2</sup> (4 sq.ft.) arranged in a line of single pavers to form a pedestrian walkway with a permeable gap between the pavers;
- water surfaces of structures designed to retain water, including swimming pools, reflecting pools, and ornamental ponds.

## **BUILDING CODES**

Part 9 BCBC application is permitted

### **BCBC PART 9 CONTENTS SUMMARY**

- Section 9.1. General
- Section 9.2. Definitions
- Section 9.3. Materials, Systems and Equipment
- Section 9.4. Structural Requirements
- Section 9.5. Design of Areas and Spaces
- Section 9.6. Glass
- Section 9.7. Windows, Doors and Skylights
- Section 9.8. Stairs, Ramps, Landings, Handrails and Guards
- Section 9.9. Means of Egress
- Section 9.10. Fire Protection
- Section 9.11. Sound Transmission
- Section 9.12. Excavation
- Section 9.13. Dampproofing, Waterproofing and Soil Gas Control
- Section 9.14. Drainage
- Section 9.15. Footings and Foundations
- Section 9.16. Floors-on-Ground
- Section 9.17. Columns
- Section 9.18. Crawl Spaces
- Section 9.19. Roof Spaces
- Section 9.20. Masonry and Insulating Concrete Form Walls Not In Contact with the Ground
- Section 9.21. Masonry and Concrete Chimneys and Flues
- Section 9.22. Fireplaces
- Section 9.23. Wood-Frame Construction
- Section 9.24. Sheet Steel Stud Wall Framing
- Section 9.25. Heat Transfer, Air Leakage and Condensation Control
- Section 9.26. Roofing
- Section 9.27. Cladding
- Section 9.28. Stucco
- Section 9.29. Interior Wall and Ceiling Finishes
- Section 9.30. Flooring
- Section 9.31. Plumbing Facilities
- Section 9.32. Ventilation
- Section 9.33. Heating and Air-conditioning
- Section 9.34. Electrical Facilities
- Section 9.35. Garages and Carports
- Section 9.36. Energy Efficiency

### **ENERGY EFFICIENCY**

Energy Step Code: BCBC 9.36.6, Step 1 – match EnerGuide energy model consumption, and perform airtightness test of entire house

## **ADMINISTRATIVE**

### **REQUIRED FORMS FOR OWNER AND BUILDER**

- Application to Access and Copy Building Records
- Zoning Bylaw Checklist and Floor Area Calculation
- Agent Authorization for Demolition and Building Permits
- Homeowner's Declaration
- Schedule F – Owner(s) Undertaking
- Application Form for Demolition Permit
- 2018 BC Building Code Analysis Summary
- Drawing Checklist
- Documentation Checklist
- Energy Checklist
- Energy Compliance Report (Pre-Construction)
- Energy Verification Report (Mid-Construction)
- Energy Compliance Report (As-Built)
- Change of Contractor for Building Permit (when applicable)
- Certification of Minimum Thermal Resistance
- Building Permit Application for Single and Two Family Dwellings
- Building Envelope Compliance Letter for New Single and Two Family Dwellings
- Building Envelope - Schedule E-1 and Schedule E-2
- Electrical Permit for Temporary Current Application
- Consent to Construction
- Tree Cutting Permit Application Form
- Occupancy Certificate Application Form
- Clean Up Certification (where applicable)

**PERMITS REQUIRED**

- **Preliminary Plan Approval (PPA)**
- Demolition Permit
- Tree Cutting Permit
- **Building Permit (BP)**
- Electrical Permit for Temporary Current
- Temporary Hydro Connection Permit (TCP)
- Electrical Permit
- Gas Permit
- Sewer Connection Permit
- Fire Alarm Permit (only if no other work)
- Fire Sprinkler Permit
- Heating System Permit

**REQUIRED FORMS FOR SUBCONTRACTORS**

- Air Test Certificate
- ASHRAE Lighting Compliance Document
- Backflow Prevention Assembly Test Report
- Certification of Fire Sprinkler System
- Certification of the Design of the Forced Air Heating System and Commitment for Field Review
- Certification of the Forced Air Heating System
- Certification of the Heating System
- Certification of the Rough-in Forced Air Heating System
- Electrical Annual Operating Permit Inspection Request Form
- Electrical Contractor Declaration
- Electrical Contractors Declaration for Work Done Previously by Others
- Electrical Installation - Home Owner Declaration
- Electrical Permit Application - Single Family Dwelling or Duplex
- Fire Sprinkler Permit Application
- Forced Air Heating Permit Application
- Gas Permit Application
- Plumbing Hydronic Heating Permit

**BROCHURES THAT YOU MUST READ**

- Permits and Inspections for New Single and Two Family Dwellings
- Access to Building Department Records
- Accessory Buildings
- Adaptable Dwelling Units
- Be a Good Neighbour – Construction
- Bedroom Egress Window
- Building permit application requirements for ...
  - Interior Finishing for Single and Two Family Dwellings
  - prefabricated aluminum awnings and patio/deck covers for single and two family dwellings
  - New Residential Garages
  - New Single and Two Family Dwellings
- Combustible Drain Waste and Vent Piping and Plumbing Fixtures
- Dampproofing (Proprietary) Systems
- Demolition Permit
- Demolition of Existing Structures when Building New Single or Two Family Dwelling
- Electric Vehicle (EV) Charging Bylaw
- Encroachments
- Energy Step Code (Part 9 Buildings)
- Enhanced Building Permit Drawings and Third Party Review
- Fire Sprinkler Permits
- Form Survey
- Geoexchange (Geothermal) Systems for Single and Two Family Dwellings
- Glass Guards
- Heating System Permits
- Hot Water Heaters
- Hydronic/Radiant Heating Pipe Installation
- Infill Housing
- In law Suites (existing)
- Landscaping for New Single and Two Family Dwellings
- Legal Survey Requirements for Single and Two Family Dwellings
- Letters of Assurance for Single and Two Family Dwellings
- Methane gas
- Occupancy Certificates for New Buildings

- Parking Areas and Driveways for Single and Two Family Dwellings
- Plumbing and Gas Final Inspections for New Single and Two Family Dwellings
- Plumbing Fixture Standards
- Rainscreen for Single and Two Family Dwellings
- Revisions to Plans
- Roof & Floor (Wood) Trusses Design & Layout Drawings
- Secondary Suites
- Spas, Hot Tubs, Whirlpools and Hydromassage Bathtubs
- Swimming Pools

**BROCHURES SPECIFIC TO THE CONSTRUCTION PROCESS, FOR WHICH YOU ARE STILL RESPONSIBLE AND SHOULD READ**

- Construction Site Safety
- Sediment Control Measures for Residential Construction Sites
- Management and Disposal of Construction Wastes
- Hours of Construction
- Building Permits and Inspections

## MISCELLANEOUS

### CONSTRUCTION COST:

Standard, cookie-cutter: \$250 / ft<sup>2</sup>; 2400 ft<sup>2</sup> house = **\$600,000**

Custom: \$400-\$1000 / ft<sup>2</sup>; 2400 ft<sup>2</sup> house = **\$960,000 - \$2,400,000**

- Garage (attached or detached) not included
- Hard construction cost only
- Taxes not included
- Soft costs (land, fees, consultants, real estate, levies, airtightness tests) not included

### CONSIDERATIONS, OPPORTUNITIES, CHALLENGES

- Burnaby does not currently permit Laneway Homes or Accessory Dwelling Units (ADUs) but City Council has been considering this format since 2018 as a possible option at increasing housing supply.
- Whereas most municipalities which have adopted the Energy Step Code have mandated Step 3, Burnaby currently stipulates Step 1. A house required to comply with Step 1 must be tested for airtightness in accordance with BCBC, but there is no airtightness target which it must achieve. However, the City of Burnaby may revise the Step 1 requirement to a higher Step at any point in the future.

### CONSULTANTS REQUIRED:

An architect and engineers are not required for a two-family house

Energy advisor / energy modeler