

POLICY REPORT

Report Date:February 6, 2019Contact:Dan GarrisonContact No.:604.673.8435RTS No.:13002VanRIMS No.:08-2000-20Meeting Date:March 12, 2019

TO:	Vancouver City Council
FROM:	General Manager of Planning, Urban Design and Sustainability

SUBJECT: Amendments to the Zoning and Development By-law to Revise Design Regulations for 'Outright' Two-Family Dwellings (Duplexes)

RECOMMENDATION

- A. THAT the General Manager of Planning, Urban Design and Sustainability be instructed to make application to amend the Zoning and Development By-law, generally as set out in Appendix A, to amend the external design regulations for two-family dwelling and two-family dwelling with secondary suite, enable associated floor space exclusions, limit the size of garages, limit above ground floor space, and introduce a discretionary clause for the external design regulations and building depth for duplexes in the following District Schedules:
 - (i) the RT-11, RT-11N, RM-7, RM-7N, RM-7A, RM-8, RM-8N, RM-8A and RM-8AN;
 - (ii) the RT-5 and RT-5N District Schedules; and
 - (iii) the RS-1, RS-1A, RS-1B, RS-2, RS-5, RS-6 and RS-7 District Schedules;

FURTHER THAT the application be referred to a public hearing;

AND FURTHER THAT the Director of Legal Services be instructed to prepare the necessary by-laws, generally in accordance with Appendix A, for consideration at the public hearing.

B. THAT, subject to the enactment of the amending by-law described in Recommendation A, the Director of Legal Services be instructed to bring forward, at the time of enactment of such amending by-laws, a related amendment to the Parking By-law, generally in accordance with Appendix B. THAT Recommendations A and B be adopted on the following conditions:

- THAT passage of the above resolutions creates no legal rights for any person, or obligation on the part of the City and any expenditure of funds or incurring of costs is at the risk of the person making the expenditure or incurring the cost;
- (ii) THAT any approval that may be granted following the public hearing shall not obligate the City to enact any rezoning by-laws; and
- (iii) THAT the City and all its officials, including the Approving Officer, shall not in any way be limited or directed in the exercise of their authority or discretion, regardless of when they are called upon to exercise such authority or discretion.

REPORT SUMMARY

This report outlines proposed changes to the design regulations for duplexes allowed as an 'outright' use in several RM, RT and RS zones. Staff, residents and design professionals have some concerns about the design of duplexes, in particular related to the design of roofs, the location and design of entries and the lack of design flexibility. The proposed changes would encourage more coherent design outcomes and improved livability. Further, the changes provide design flexibility through discretionary approval for high quality and innovative designs to achieve other objectives, such as improved accessibility or to accommodate high-performance, near zero-emissions building designs, such as Passive House.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

- Zoning and Development By-law amendments to introduce new RT and RM zones which include two-family dwelling and two-family dwelling with secondary suite as permitted outright uses, with external design regulations (2013 to 2018)
- Housing Vancouver Strategy (2018-2027) and Three-Year Action Plan (2018-2020) (approved 2017).
- Zoning and Development By-law amendments to introduce two-family dwellings with secondary suite and external design regulations in the RT-5/RT-5N districts (2018).
- Making Room Housing Program (launch endorsed June 2018).
- Zoning and Development By-law amendments to introduce two-family dwellings and two-family dwelling with secondary suite as permitted uses, with external design regulations, in most RS zones (2018)
- Council motion to retain duplex in most RS zones as a trial housing option to be further discussed and evaluated (December 2018)

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager recommends approval of the foregoing. The changes proposed in this report are intended to encourage better overall design outcomes and allow design flexibility to enable innovative and energy efficient building designs. More refinements may be needed to respond to engagement over the next year and to advance emerging priorities.

REPORT

Background

The outright approval stream enables faster approvals by relying on external design regulations within the district schedule rather than a more time-consuming discretionary design review. Typically, most low-density housing options, such as one-family homes, laneway houses and, in some zones, duplexes, go through the outright approval process. Most zones that allow 'outright' duplexes include external design regulations for specific building elements, such as roof form, dormer width, and window size for secondary suites.

'Outright' duplexes with external design regulations have been in place in Norquay Village since 2013, in Marpole since 2014, in Joyce-Collingwood since 2016, and in Mount Pleasant, Cambie Corridor, and Grandview Woodland since 2018.

As an early action of the Making Room Housing Program, duplexes were added as a permitted 'outright' use in most RS zones in September 2018. In December 2018, Council confirmed that duplexes in RS zones will remain as a trial housing option to be further discussed, field tested and evaluated over the next year as part of engagement for the city-wide plan. The review of the duplex zoning in RS zones will include assessing take-up, pricing, number of secondary suites and lock-offs included in duplexes, age/size/value of houses demolished to build a duplex, impact on renters and affordable rental units, neighbourhood response, regulatory adjustments, and other aspects.

Following a review of 'outright' duplexes built since 2013, staff have identified some concerns with the outcome of the current duplex design regulations, specifically related to the appearance and durability of roofs. Residents, builders, and design practitioners have also voiced design concerns. Residents are mainly concerned about the lack of integration of the third floor into the roof form, while designers and groups, such as the Heritage Vancouver Society (HVS), expressed concerns about the lack of design flexibility.

Based on the review and commentary received from residents and industry, a number of proposed changes to the duplex design regulations have been identified, as outlined in this report.

Strategic Analysis

'Outright' duplexes are not subject to a discretionary design review involving both Development, Building and Licensing (DBL) and Planning, Urban Design and Sustainability (PDS) staff. Instead, the main design aspects are administered by DBL staff through external design regulations in the respective zones. Through a staff review and concerns voiced by residents, design practitioners and builders, a number of issues with the design of 'outright' duplexes have been identified. These include roof form, location and design of main entrances, massing of duplexes on large lots and the size of garages, as well as concerns regarding limited design flexibility, which impedes the ability to create innovative contemporary and near-zero emissions building designs.

The specific design concerns, as well as proposed changes to the district schedules are outlined in detail below and summarized in Appendix D. If the changes are approved, a "How-To

Guide" for applicants will be published to illustrate the proposed changes and different design solutions (see the draft in Appendix C).

Roof Forms

Duplexes may be two-and-a-half storeys and up to 35 ft. in height. Due to the limitations on building footprint and depth, the permitted density cannot be accommodated in a 2-storey design, and most applications will include either an upper half-storey or a basement. The current design regulation was intended to visually contain the upper half-storey within a simple pitched roof form. However, to maximize floor space and to avoid counting adjacent floor space in FSR, the regulation in its current form inadvertently encourages the upper half storey to be provided as a disconnected element with a separate roof flanked by portions of flat roof deck, as shown in the examples in Figure 1.



Figure 1: Examples of overly complicated upper storey and disconnected roof form

The proposed amendment would require the eave line of the primary sloped roof to extend down to align with the floor level of the upper half storey so that the upper half storey is visually contained within the primary roof (see illustration in Figure 2). This regulation would result in some floor space under the sloped roof with low ceiling height and limited usability. Therefore, an exclusion for floor space under sloped ceilings below 2.3 m (7.5 ft.) in height is also proposed¹. These changes will enable a more coherent roof form that incorporates the upper half storey, which will promote good building performance over time in our rainy climate.

Further, a change to allowable dormer width is proposed. Currently, dormer width is limited to up to 40% of the width of the elevation of the storey below. Changes are proposed to increase dormer width to



Figure 2: Illustration of upper half storey incorporated into the roof

¹ Floor space under sloped ceilings less than 1.2 m (3.9 ft.) in height is already excluded under current regulations.

50% maximum of the storey below, with a minimum setback of 0.6 m (2.0 ft.) from the exterior face of the wall of the storey below. This would increase the amount of functional space at full ceiling height within the half storey under the roof. See Figure 3 for an illustration of the proposed changes to dormers.

To assist in simplifying gable roof forms by avoiding sections of flat roof, an amendment is proposed to exclude covered porches at upper levels from floor space calculations. In addition to helping create a more coherent overall design, this exclusion would facilitate the provision of weather-protected outdoor space, usable in all seasons (see Figure 4).



Figure 3: Dormer width and setback from storey below



Figure 4: Covered outdoor space in upper storey

Main Entrances

The existing external design regulations for duplexes include specific requirements regarding the location and design of main entrances to the principal dwelling units. To improve the functional and streetscape roles of entrances, several changes to these regulations are proposed.

Corner Sites: In some new duplexes on corner sites, the two main entrances are located on the same frontage. This means that only one side of the building addresses and animates the street. The proposed change would require that on corner sites, one entry be oriented toward each of the street frontages. See Figure 5 for examples of duplexes on corner sites with and without entrances on the flanking street.



Figure 5: Duplex on corner lot without entrance on flanking street (left) and with entrances on both streets (right)

Amendments to the Zoning and Development By-law to Revise Design Regulations for 'Outright' Two-Family Dwellings (Duplexes) - RTS 13002

Covered Entry: The current external design regulations for duplexes require that main entrances be designed with a covered "verandah or porch" with a minimum width or depth of 1.6 m (5.2 ft.)². This approach strongly suggests traditional design solutions. The proposed amendments to require a covered "entry" would allow for both traditional and contemporary designs (see Figure 6 for an illustration). In addition, the minimum dimensions of the covered entry would be increased to 1.8 m (5.9 ft.) to create a more usable entrance area. Under a proposed discretionary approval outlined later in this report, the Director of Planning may also approve a rear entry to a duplex unit on narrow or otherwise constrained lots, to ensure that unit layout is not unduly compromised.



Figure 6: Covered entry – contemporary "cantilevered" design with no posts (Note: Figures 4 and 5 are examples of traditional entry design)

Garage Size and Permeable Surface Parking

The current regulations for accessory buildings allow garages up to 30% of the area of the required rear yard and 80% of lot width. This can result in large three or four-car garages which occupy almost the entire lot width at the lane, thereby limiting the area available for rainwater infiltration and tree retention (Figure 7). In addition, larger garages require larger concrete slabs, which contribute to increased GHG emissions.

The proposed amendment would limit the size of garages for duplexes to 48 sq. m (516 sq. ft.), which is of sufficient size for two cars, with some additional space for bicycles.



Figure 7: Example of three car garage

Additional parking would have to be provided on an open parking pad. Enclosed parking is often used for storage over time and this pushes vehicles onto the street. Open parking encourages the use of on-site spaces for vehicle parking and reduces parking pressure on the street. To increase the feasibility for tree retention and rainwater infiltration, staff propose to also amend the Parking By-law to require a permeable surface treatment for open parking spaces. This could be relaxed for situations where a parking space needs to be fully accessible.

The proposed garage size limit would be applicable to duplexes only; however, a similar change will be explored for other housing types in RS zones, such as single-family homes, to encourage the use of on-site spaces for vehicle parking, improve the feasibility of tree retention and rainwater infiltration, and reduce the GHG emissions from the use of concrete.

² In RT-5, RM-7, RM-7N, RM-7A, RM-8, RM-8N, RM-8A, RM-8AN, current regulations specify minimum width **and** depth of 1.6 m (5.2 ft).

Limit Above Ground Floor Space

Current regulations allow a floor space ratio for 'outright' duplexes up to 0.70 FSR in RS zones. As duplexes are not subject to the above-ground limitations of one-family dwellings (typically limited to 0.45 FSR above ground), on large lots they may be over-scaled relative to the adjacent homes. Therefore a maximum above-ground floor space of 371 sq. m (4,000 sq. ft.) is proposed for duplexes. This would only affect large lots over 511sq. m (5,500 sq. ft.) in size, since the total floor space on smaller lots is less than 371 sq. m (4,000 sq. ft.).

Limiting the above ground floor space to reduce the apparent massing of a building is consistent with the current approach for single-family dwellings in most RS zones. Moving forward, as part of the Making Room Housing Program, staff will be reviewing livability and accessibility issues related to basements suites, as well as impacts on sustainability objectives with regards to GHG emissions and groundwater management.

Discretionary Approval

Presently, the external design regulations for duplexes cannot be varied under any circumstance. Staff propose the inclusion of a clause that would allow the Director of Planning to vary the external design regulations, as well as building depth for Passive House designs. This discretionary review would enable innovative, high quality designs that contribute to future neighbourhood character or that advance other public interest objectives, such as tree retention, enhanced accessibility and designs for near zeroemissions buildings (as shown in the example in Figure 8). Design features considered under discretionary approval may include contemporary flat and shed roofs and may involve buildings with the full FSR on two floors (rather than in a partial basement or third floor).



Figure 8: Passive House Duplex Design in Victoria, Image by Cascadia Architects Inc

The discretionary approval as proposed includes an increase in building depth from 40% to 45% to enable Passive House designs, which is consistent with the existing discretionary approval for Passive House for one-family dwellings³.

Public/Civic Agency Input

Planning staff conducted a detailed review of the design of 'outright' duplexes, including internal consultation with DBL processing staff and the landscape review group. In addition, staff met with practitioners who strongly encouraged greater flexibility to support contemporary designs and green buildings. Staff also met with residents who had expressed specific concerns at the September 2018 public hearing regarding the current duplex design outcomes in Norquay. Further, the proposed changes to the duplex regulations were recently presented and discussed

³ Maximum permitted building depth for one-family dwellings ranges from 35-40% across RS zones, with varying discretionary increases to 40-45% to enable Passive House designs.

with small scale builders, designers and architects at a workshop on February 11. The overall feedback was positive with support for the changes that facilitate more cohesive roof forms and opportunities for greater design flexibility.

Next Steps

Subject to Council approving the proposed changes, a "How-To Guide" will be released to illustrate different design solutions to assist applicants and the public. Staff will monitor and evaluate the design outcomes of these regulatory amendments and report back to Council on any future changes needed to address design concerns. In addition, beyond the discretionary approval noted in this report, Planning staff are exploring other ways that regulations could be structured to advance current and emerging priorities. Possible examples include regulations to encourage reduced GHG emissions from one and two-family buildings to respond to the climate change emergency, and regulations to improve accessibility for one and two-family dwellings.

CONCLUSION

The proposed amendments to duplex regulations are intended to improve the design of duplexes that are being processed through the time and resource efficient 'outright' approval process. The proposed changes would enhance the design and performance of duplexes, improve livability, and provide the opportunity for greater design flexibility to achieve high-performance, near-zero emissions building designs, such as Passive House.

* * * * *

Note: By-laws will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to final preparation for approval.

Draft By-law to Amend Zoning and Development By-law No. 3575 Regarding Regulations for Duplexes

1. This By-law amends or adds to the indicated provisions of the Zoning and Development By-law.

2. In section 2.2.A of the RS-1, RS-1A, RS-1B, RS-2, RS-5, RS-6, and RS-7 District Schedules, Council:

- (a) in subsection (c), adds "for all uses except for two-family dwellings and two-family dwellings with secondary suite," before "the total floor area";
- (b) inserts the following as subsection (d):
 - "(d) for two-family dwellings and two-family dwellings with secondary suite, the total floor area, measured to the extreme outer limits of the building, of all accessory buildings is not greater than 48 m²;"; and
- (c) renumbers the remaining subsections in section 2.2.A.
- 3. In section 2.2.1A of the RT-5 and RT-5N Districts Schedule, Council:
 - (a) in subsection (c), adds "for all uses except for two-family dwellings and two-family dwellings with secondary suite," before "the total floor area";
 - (b) inserts the following as subsection (d):
 - "(d) for two-family dwellings and two-family dwellings with secondary suite, the total floor area, measured to the extreme outer limits of the building, of all accessory buildings is not greater than 48 m²;"; and
 - (c) renumbers the remaining subsections in section 2.2.A.

4. In section 4.4 of the RS-1A, RS-1B, and RS-2 District Schedules, Council adds a new section 4.4.3 as follows:

"4.4.3 For two-family dwellings and two-family dwellings with secondary suite, covered porches complying with the conditions of section 4.7.3(g) shall be permitted to project into the required front yard a maximum of 1.8 m provided that such a projection is limited to 30 percent of the width of the building.".

5. In section 4.4.3 of the RT-5 and RT-5N Districts Schedule, Council strikes out "1.6 m" and substitutes "1.8 m".

6. In section 4.4.4 of the RT-11 and RT-11N Districts Schedule, Council strikes out "1.6 m" and substitutes "1.8 m".

7. Council strikes out section 4.7.1A in the RS-1, RS-1A, RS-1B, RS-2, RS-5, RS-6, and RS-7 District Schedules and substitutes the following:

- "4.7.1A The floor space ratio for two-family dwellings and two-family dwellings with secondary suite must not exceed 0.70, except that the area of all floors at or above finished grade and of the floors of any storey, basement or cellar located below a storey which has a floor surface located 1.8 m or more above finished grade, all of which floors are located within the building depth as defined by section 4.16.1 of this Schedule, shall not exceed 371 m²."
- 8. In section 4.7.3 of the RS-1 District Schedule, Council:
 - (a) strikes out subsection (g) and substitutes the following:
 - "(g) covered porches, provided that:
 - (i) for all uses except for two-family dwellings and two-family dwellings with secondary suite, they face a street or a rear property line and are located at the basement or first storey,
 - (ii) for two-family dwellings and two-family dwellings with secondary suite, they face a street or rear property line,
 - (iii) that portion facing the street or rear property line shall be open or protected by guard rails the height of which shall not exceed the minimum specified in the Building By-law,
 - (iv) for all uses except for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded does not exceed 5 percent of the permitted floor area,
 - (v) for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded, when combined with the balcony and deck exclusions under subsection 4.7.3(a), does not exceed 13 percent of the permitted floor area,
 - (vi) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m, and
 - (vii) the ceiling height, excluding roof structure, of the total area being excluded does not exceed 3.1 m measured from the porch floor;";
 - (b) in subsection (h) strikes out "and";
 - (c) in paragraph (i)(iv) strikes out "." and substitutes "; and"; and
 - (d) adds a new subsection (j) as follows:
 - "(j) for two-family dwellings and two-family dwellings with secondary suite, areas of floors existing, proposed or as may be extended over open-to-below space located directly below sloping roof rafters or a sloping ceiling where the ceiling is directly attached to the underside of sloping roof rafters, and where the roof joists have a minimum 7:12 pitch and the related ceiling maintains the same pitch as the roof joists, provided that:

- (i) the distance from the floor to any part of the roof rafters or ceiling is no higher than 2.3 m and no lower than 1.2 m, both measured vertically, and
- (ii) the excluded floor area does not exceed 10 percent of the permitted total floor area.".
- 9. In section 4.7.3 of the RS-1A, RS-1B, and RS-2 District Schedules, Council:
 - (a) inserts the following as a new subsection (g):
 - "(g) covered porches, provided that:
 - (i) for all uses except for two-family dwellings and two-family dwellings with secondary suite, they face a street or a rear property line and are located at the basement or first storey,
 - (ii) for two-family dwellings and two-family dwellings with secondary suite, they face a street or rear property line,
 - (iii) that portion facing the street or rear property line shall be open or protected by guard rails the height of which shall not exceed the minimum specified in the Building By-law,
 - (iv) for all uses except for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded does not exceed 5 percent of the permitted floor area,
 - (v) for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded, when combined with the balcony and deck exclusions under subsection 4.7.3(a), does not exceed 13 percent of the permitted floor area,
 - (vi) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m, and
 - (vii) the ceiling height, excluding roof structure, of the total area being excluded does not exceed 3.1 m measured from the porch floor;";
 - (b) renumbers the remaining subsections in section 4.7.3;
 - (c) in renumbered subsection (h) strikes out "and";
 - (d) in renumbered subsection (i) strikes out "." and substitutes "; and"; and
 - (e) adds a new subsection (j) as follows:
 - "(j) for two-family dwellings and two-family dwellings with secondary suite, areas of floors existing, proposed or as may be extended over open-to-below space located directly below sloping roof rafters or a sloping ceiling where the ceiling is directly attached to the underside of sloping roof rafters, and where the roof joists have a minimum 7:12 pitch and the related ceiling maintains the same pitch as the roof joists, provided that:
 - (i) the distance from the floor to any part of the roof rafters or ceiling is no higher than 2.3 m and no lower than 1.2 m, both measured vertically, and

(ii) the excluded floor area does not exceed 10 percent of the permitted total floor area.".

10. In section 4.7.3 of the RS-5 District Schedule, Council strikes out subsection (g) and substitutes the following:

- "(g) covered porches, provided that:
 - (i) for all uses except for two-family dwellings and two-family dwellings with secondary suite, they face a street or a rear property line and are located at the basement or first storey,
 - (ii) for two-family dwellings and two-family dwellings with secondary suite, they face a street or rear property line,
 - (iii) that portion facing the street or rear property line shall be open or protected by guard rails the height of which shall not exceed the minimum specified in the Building By-law,
 - (iv) for all uses except for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded does not exceed 5 percent of the permitted floor area,
 - (v) for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded, when combined with the balcony and deck exclusions under subsection 4.7.3(a), does not exceed 13 percent of the permitted floor area,
 - (vi) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m, and
 - (vii) the ceiling height, excluding roof structure, of the total area being excluded does not exceed 3.1 m measured from the porch floor;".

11. In section 4.7.3 of the RS-6 District Schedule, Council strikes out subsection (g) and substitutes the following:

- "(g) covered porches, provided that:
 - (i) for all uses except for two-family dwellings and two-family dwellings with secondary suite, they face a street or a rear property line and are located at the basement or first storey,
 - (ii) for two-family dwellings and two-family dwellings with secondary suite, they face a street or rear property line,
 - (iii) that portion facing the street or rear property line shall be open or protected by guard rails the height of which shall not exceed the minimum specified in the Building By-law,
 - (iv) for all uses except for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded does not exceed 5 percent of the permitted floor area,
 - (v) for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded, when combined with the balcony and deck exclusions under subsection 4.7.3(a), does not exceed 13 percent of the permitted floor area,

- (vi) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m,
- (vii) for two-family dwellings and two-family dwellings with secondary suite, the ceiling height, excluding roof structure, of the total area being excluded does not exceed 3.1 m measured from the porch floor, and
- (viii) for all uses except for two-family dwellings and two-family dwellings with secondary suite, the maximum height must comply with section 4.17.32;".

12. In section 4.7.4 of the RS-7 District Schedule, Council strikes out subsection (g) and substitutes the following:

- "(g) covered porches, provided that:
 - (i) for all uses except for two-family dwellings and two-family dwellings with secondary suite, they face a street or a rear property line and are located at the basement or first storey,
 - (ii) for two-family dwellings and two-family dwellings with secondary suite, they face a street or rear property line,
 - (iii) that portion facing the street or rear property line shall be open or protected by guard rails the height of which shall not exceed the minimum specified in the Building By-law,
 - (iv) for all uses except for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded does not exceed 7 percent of the permitted floor area,
 - (v) for two-family dwellings and two-family dwellings with secondary suite, the total area being excluded, when combined with the balcony and deck exclusions under subsection 4.7.3(a), does not exceed 13 percent of the permitted floor area,
 - (vi) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m,
 - (vii) for two-family dwellings and two-family dwellings with secondary suite, ceiling height, excluding roof structure, of the total area being excluded does not exceed 3.1 m measured from the porch floor, and
 - (viii) for all uses except for two-family dwellings and two-family dwellings with secondary suite, the maximum height must comply with section 4.17.32;".
- 13. In section 4.7.6 of the RT-5 and RT-5N Districts Schedule, Council:
 - (a) In subsection (f), strikes out "verandahs or";
 - (b) in paragraph (f)(i), strikes out "; and" and substitutes ",";
 - (c) in paragraph (f)(ii), strikes out "; and" and substitutes ","; and
 - (d) adds new paragraphs (f)(iii) and (iv) as follows:

- "(iii) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m, and
- (iv) for two-family dwellings and two-family dwellings with secondary suite, ceiling height, excluding roof structure, of the total area being excluded does not exceed 3.1 m measured from the porch floor;";
- (e) in subsection (g) strikes out "." and substitutes "; and"; and
- (f) adds a new subsection (h) as follows:
 - "(h) for two-family dwellings and two-family dwellings with secondary suite, areas of floors existing, proposed or as may be extended over open-to-below space located directly below sloping roof rafters or a sloping ceiling where the ceiling is directly attached to the underside of sloping roof rafters, and where the roof joists have a minimum 7:12 pitch and the related ceiling maintains the same pitch as the roof joists, provided that:
 - (i) the distance from the floor to any part of the roof rafters or ceiling is no higher than 2.3 m and no lower than 1.2 m, both measured vertically, and
 - (ii) the excluded floor area does not exceed 10 percent of the permitted total floor area.".
- 14. In section 4.7.5 of the RT-11 and RT-11N Districts Schedule, Council:
 - (a) In subsection (f), strikes out "verandahs or";
 - (b) in paragraph (f)(ii), strikes out "floor space, and" and substitutes "floor space,";
 - (c) in paragraph (f)(iii), strikes out "; and" and substitutes ", and"; and
 - (d) adds a new paragraph (f)(iv) as follows:
 - "(iv) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m;";
 - (e) in subsection (g) strikes out "." and substitutes "; and"; and
 - (f) adds a new subsection (h) as follows:
 - "(h) for two-family dwellings and two-family dwellings with secondary suite, areas of floors existing, proposed or as may be extended over open-to-below space located directly below sloping roof rafters or a sloping ceiling where the ceiling is directly attached to the underside of sloping roof rafters, and where the roof joists have a minimum 7:12 pitch and the related ceiling maintains the same pitch as the roof joists, provided that:
 - (i) the distance from the floor to any part of the roof rafters or ceiling is no higher than 2.3 m and no lower than 1.2 m, both measured vertically, and
 - (ii) the excluded floor area does not exceed 10 percent of the permitted total floor area.".

- 15. In section 4.7.5 of the RM-7, RM-7N and RM-7AN Districts Schedule, Council:
 - (a) in subsection (h), strikes out "verandahs or";
 - (b) in paragraph (h)(i), strikes out "and";
 - (c) in paragraph (h)(ii), strikes out "all other uses, and" and substitutes "all other uses,";
 - (d) in paragraph (h)(iii), strikes out ";" and substitutes ", and"; and
 - (e) adds a new paragraph (h)(iv) as follows:
 - "(iv) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m;";
 - (f) in subsection (i) strikes out "and";
 - (g) in subsection (j) strikes out "." and substitutes "; and"; and
 - (h) adds a new subsection (k) as follows:
 - "(k) for two-family dwellings and two-family dwellings with secondary suite, areas of floors existing, proposed or as may be extended over open-to-below space located directly below sloping roof rafters or a sloping ceiling where the ceiling is directly attached to the underside of sloping roof rafters, and where the roof joists have a minimum 7:12 pitch and the related ceiling maintains the same pitch as the roof joists, provided that:
 - (i) the distance from the floor to any part of the roof rafters or ceiling is no higher than 2.3 m and no lower than 1.2 m, both measured vertically, and
 - (ii) the excluded floor area does not exceed 10 percent of the permitted total floor area.".

16. In subsection 4.7.9(h) of the RM-8, RM-8A, RM-8N and RM-8AN Districts Schedule, Council:

- (a) strikes out "verandahs or";
- (b) in paragraph (ii), strikes out "all other uses, and" and substitutes "all other uses,";
- (c) in paragraph (iii), strikes out "; and" and substitutes ", and"; and
- (d) adds a new paragraph (iv) as follows:
 - "(iv) for two-family dwellings and two-family dwellings with secondary suite, the depth of the total area being excluded for covered porches above the first storey does not exceed 1.83 m;";
- (e) in subsection (i) strikes out "and";

- (f) in subsection (j) strikes out "." and substitutes "; and"; and
- (g) adds a new subsection (k) as follows:
 - "(k) for two-family dwellings and two-family dwellings with secondary suite, areas of floors existing, proposed or as may be extended over open-to-below space located directly below sloping roof rafters or a sloping ceiling where the ceiling is directly attached to the underside of sloping roof rafters, and where the roof joists have a minimum 7:12 pitch and the related ceiling maintains the same pitch as the roof joists, provided that:
 - (i) the distance from the floor to any part of the roof rafters or ceiling is no higher than 2.3 m and no lower than 1.2 m, both measured vertically, and
 - (ii) the excluded floor area does not exceed 10 percent of the permitted total floor area.".

17. In the RS-1, RS-1A, RS-1B, and RS-2 District Schedules, Council adds the following as a new section 4.7.4:

"4.7.4 Notwithstanding the definition of "half-storey" in section 2 of this By-law, for the purposes of this Schedule the maximum permitted floor area contained in a half-storey shall not include floor area excluded in section 4.7.3(j) of this Schedule.".

18. In the RT-5 and RT-5N Districts Schedule, Council adds the following as a new section 4.7.7:

"4.7.7 Notwithstanding the definition of "half-storey" in section 2 of this By-law, for the purposes of this Schedule the maximum permitted floor area contained in a half-storey shall not include floor area excluded in section 4.7.6(h) of this Schedule.".

19. In the RT-11 and RT-11N Districts Schedule, Council adds the following as a new section 4.7.6:

"4.7.6 Notwithstanding the definition of "half-storey" in section 2 of this By-law, for the purposes of this Schedule the maximum permitted floor area contained in a half-storey shall not include floor area excluded in section 4.7.5(h) of this Schedule.".

20. In the RM-7, RM-7N, and RM-7AN Districts Schedule, Council adds the following as a new section 4.7.6:

"4.7.6 Notwithstanding the definition of "half-storey" in section 2 of this By-law, for the purposes of this Schedule the maximum permitted floor area contained in a half-storey shall not include floor area excluded in section 4.7.5(k) of this Schedule.".

21. In the RM-8, RM-8A, RM-8N, and RM-8AN Districts Schedule, Council adds the following as a new section 4.7.10:

"4.7.10 Notwithstanding the definition of "half-storey" in section 2 of this By-law, for the purposes of this Schedule the maximum permitted floor area contained in a half-storey shall not include floor area excluded in section 4.7.9(k) of this Schedule.".

22. In section 4.16.4 of the RS-1 District Schedule, Council adds "for all uses except for twofamily dwellings or two-family dwellings with secondary suite, and to a maximum of 45 percent of the depth of the site for two-family dwellings and two-family dwellings with secondary suite" after "to a maximum of 40 percent of the depth of the site".

23. In the RS-1A, RS-1B, and RS-2 District Schedules, Council adds a new section 4.16.2 as follows:

"4.16.2 Notwithstanding section 4.16.1 of this schedule, the Director of Planning may increase the maximum distance between the front yard and the rear yard of a two-family dwelling or a two-family dwelling with secondary suite to accommodate building features designed to reduce energy consumption in a Certified Passive House to a maximum of 45 percent of the depth of the site, if the Director of Planning first considers the intent of this schedule and all applicable Council policies and guidelines."

24. In the RM-7, RM-7N, and RM-7AN, and the RM-8, RM-8A, RM-8N, and RM-8AN Districts Schedules, Council:

(a) adds a new section 4.16.3 as follows:

"4.16.3 Notwithstanding section 4.16.1 of this schedule, the Director of Planning may increase the maximum distance between the required minimum front yard and the rear yard of a two-family dwelling or a two-family dwelling with secondary suite to accommodate building features designed to reduce energy consumption in a Certified Passive House, if the Director of Planning first considers the intent of this schedule and all applicable Council policies and guidelines."; and

(b) renumbers the remaining sections in 4.16.

25. In the RT-11 and RT-11N Districts Schedule, Council adds a new section 4.16.3 as follows:

"4.16.3 Notwithstanding section 4.16.1 of this schedule, the Director of Planning may increase the maximum building depth for two-family dwellings or two-family dwellings with secondary suite to accommodate building features designed to reduce energy consumption in a Certified Passive House, if the Director of Planning first considers the intent of this schedule and all applicable Council policies and guidelines."

- 26. In section 4.17 of the RS-1 and the RS-5 District Schedules, Council:
 - (a) inserts a new section 4.17.7 as follows:
 - "4.17.7 In two-family dwellings and two-family dwellings with secondary suite on a corner site, one main entrance must face the front street and one main entrance must face the flanking street.";

- (b) renumbers the remaining sections in section 4.17;
- (c) in renumbered section 4.17.8:
 - (i) strikes out "verandah or porch" and substitutes "entry", and
 - (ii) strikes out "minimum width or depth of 1.6 m" and substitutes "minimum width and depth of 1.8 m";
- (d) strikes out the renumbered 4.17.9 and substitutes the following:
 - "4.17.9 In two-family dwellings and two-family dwellings with secondary suite, roof design must comply with the following provisions:
 - (a) all roofs except for dormer roofs shall have a minimum slope of 7:12 and a maximum slope of 12:12 and shall be either hip or gable or a combination of both, and shall intersect at its lower portion with the exterior wall face of the building or the vertical projection thereof at a line no higher than the lesser of 7.9 m above the base surface or the floor level of a half-storey or attic above the second storey;
 - (b) dormer roofs shall be gable, hip or shed in form and shall have a minimum slope of 4:12;
 - (c) the maximum total width of dormers provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below;
 - (d) all exterior dormer walls shall be set back a minimum of 0.6 m from the exterior face of the wall of the storey below; and
 - (e) notwithstanding section 4.17.9(d), one dormer, which faces an interior side yard and which provides headroom over a stair and any intermediate and top landings which provide access from the second storey to the halfstorey above may have its face wall flush or continuous with the second storey exterior wall face below.";
- (e) in renumbered section 4.17.10, adds "or lock-off unit" after "Exterior windows in a secondary suite"; and
- (f) adds a new section 4.17.11 as follows:
 - "4.17.11 The Director of Planning may vary the requirements of section 4.17 for two-family dwellings and two-family dwellings with secondary suite if, in the opinion of the Director of Planning, the design meets the intent of the regulations for quality and durability of design and architectural expression, or to facilitate a building designed for certification under the Passive House standard or International Living Future Institute's Zero Energy standard, or an equivalent to the satisfaction of the Director of Planning.".
- 27. In section 4.17 of the RS-1A, RS-1B, and RS-2 District Schedules, Council:
 - (a) inserts a new section 4.17.3 as follows:

- "4.17.3 In two-family dwellings and two-family dwellings with secondary suite on a corner site, one main entrance must face the front street and one main entrance must face the flanking street.";
- (b) renumbers the remaining sections in section 4.17;
- (c) in renumbered section 4.17.4:
 - (i) strikes out "verandah or porch" and substitutes "entry", and
 - (ii) strikes out "minimum width or depth of 1.6 m" and substitutes "minimum width and depth of 1.8 m";
- (d) strikes out the renumbered 4.17.5 and substitutes the following:
 - "4.17.5 In two-family dwellings and two-family dwellings with secondary suite, roof design must comply with the following provisions:
 - (a) all roofs except for dormer roofs shall have a minimum slope of 7:12 and a maximum slope of 12:12 and shall be either hip or gable or a combination of both, and shall intersect at its lower portion with the exterior wall face of the building or the vertical projection thereof at a line no higher than the lesser of 7.9 m above the base surface or the floor level of a half-storey or attic above the second storey;
 - (b) dormer roofs shall be gable, hip or shed in form and shall have a minimum slope of 4:12;
 - the maximum total width of dormers provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below;
 - (d) all exterior dormer walls shall be set back a minimum of 0.6 m from the exterior face of the wall of the storey below; and
 - (e) notwithstanding section 4.17.5(d), one dormer, which faces an interior side yard and which provides headroom over a stair and any intermediate and top landings which provide access from the second storey to the half-storey above may have its face wall flush or continuous with the second storey exterior wall face below.";
- (e) in renumbered section 4.17.6, adds "or lock-off unit" after "Exterior windows in a secondary suite"; and
- (f) adds a new section 4.17.7 as follows:
 - "4.17.7 The Director of Planning may vary the requirements of section 4.17 for two-family dwellings and two-family dwellings with secondary suite if, in the opinion of the Director of Planning, the design meets the intent of the regulations for quality and durability of design and architectural expression, or to facilitate a building designed for certification under the

Passive House standard or International Living Future Institute's Zero Energy standard, or an equivalent to the satisfaction of the Director of Planning.".

- 28. In section 4.17 of the RS-6 District Schedule, Council:
 - (a) inserts a new section 4.17.1 as follows:

"4.17.1 Sections 4.17.2 through 4.17.4 and 4.17.6 through 4.17.39 apply to all uses except for two-family dwellings and two-family dwellings with secondary suite, sections 4.17.40 through 4.17.44 apply to two-family dwellings and two-family dwellings with secondary suite, and sections 4.17.5 and 4.17.45 apply to all uses.";

- (b) renumbers the remaining sections in section 4.17;
- (c) in renumbered section 4.17.6, strikes out "section 4.17.2 or section 4.17.3" and substitutes "section 4.17.3 or section 4.17.4";
- (d) in renumbered subsection 4.17.7(a), strikes out "4.17.9(c)" and substitutes "4.17.10(c)";
- (e) in renumbered section 4.17.8, strikes out "4.17.6" and substitutes "4.17.7";
- (f) in renumbered subsection 4.17.10(c), strikes out "4.17.9(a) and (b)" and substitutes "4.17.10(a) and (b)";
- (g) in renumbered subsection 4.17.13(c), strikes out "4.17.12(b)" and substitutes "4.17.13(b)";
- (h) in renumbered subsection 4.17.35(e), strikes out "4.17.34(c) and (d)" and substitutes "4.17.35(c) and (d)";
- (i) in renumbered section 4.17.37, strikes out "4.17.35(a) to (d)" and substitutes "4.17.36(a) to (d)";
- (j) in renumbered section 4.17.38, strikes out "4.17.35(a) to (d)" and substitutes "4.17.36(a) to (d)";
- (k) strikes out renumbered sections 4.17.40, 4.17.41 and 4.17.42 and substitutes the following:
 - "4.17.40 In two-family dwellings and two-family dwellings with secondary suite, there must be two main entrances, one to each principal dwelling unit.
 - 4.17.41 In two-family dwellings and two-family dwellings with secondary suite on a corner site, one main entrance must face the front street and one main entrance must face the flanking street.
 - 4.17.42 In two-family dwellings and two-family dwellings with secondary suite, there must be a covered entry at each main entrance, with a minimum width and depth of 1.8 m.

- 4.17.43 In two-family dwellings and two-family dwellings with secondary suite, roof design must comply with the following provisions:
 - (a) all roofs except for dormer roofs shall have a minimum slope of 7:12 and a maximum slope of 12:12 and shall be either hip or gable or a combination of both, and shall intersect at its lower portion with the exterior wall face of the building or the vertical projection thereof at a line no higher than the lesser of 7.9 m above the base surface or the floor level of a half-storey or attic above the second storey;
 - (b) dormer roofs shall be gable, hip or shed in form and shall have a minimum slope of 4:12;
 - (c) the maximum total width of dormers provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below;
 - (d) all exterior dormer walls shall be set back a minimum of 0.6 m from the exterior face of the wall of the storey below; and
 - (e) notwithstanding section 4.17.43(d), one dormer, which faces an interior side yard and which provides headroom over a stair and any intermediate and top landings which provide access from the second storey to the half-storey above may have its face wall flush or continuous with the second storey exterior wall face below
- 4.17.44 The Director of Planning may vary the requirements of section 4.17 for two-family dwellings and two-family dwellings with secondary suite if, in the opinion of the Director of Planning, the design meets the intent of the regulations for quality and durability of design and architectural expression, or to facilitate a building designed for certification under the Passive House standard or International Living Future Institute's Zero Energy standard, or an equivalent to the satisfaction of the Director of Planning.
- 4.17.45 Exterior windows in a secondary suite or lock-off unit must have:
 - (a) a minimum total glazing area of 10% of the total floor area of the room, in each of the kitchen, living room and dining room; and
 - (b) a minimum total glazing area of 5% of the total floor area of the room, in all other rooms, except bathrooms and laundry rooms.".
- 29. In section 4.17 of the RS-7 District Schedule, Council:
 - (a) inserts a new section 4.17.1 as follows:

"4.17.1 Sections 4.17.2 through 4.17.5 and 4.17.7 through 4.17.39 apply to all uses except for two-family dwellings and two-family dwellings with secondary suite,

sections 4.17.40 through 4.17.44 apply to two-family dwellings and two-family dwellings with secondary suite, and sections 4.17.6 and 4.17.45 apply to all uses.";

- (b) renumbers the remaining sections in section 4.17;
- (c) in renumbered section 4.17.5, strikes out "section 4.17.2 or section 4.17.3" and substitutes "section 4.17.3 or section 4.17.4";
- (d) in renumbered subsection 4.17.7(a), strikes out "4.17.9(c)" and substitutes "4.17.10(c)";
- (e) in renumbered section 4.17.8, strikes out "4.17.6" and substitutes "4.17.7";
- (f) in renumbered subsection 4.17.10(c), strikes out "4.17.9(a) and (b)" and substitutes "4.17.10(a) and (b)";
- (g) in renumbered subsection 4.17.35(b), strikes out "4.17.34(a)" and substitutes "4.17.35(a);
- (h) in renumbered subsection 4.17.35(e), strikes out "4.17.34(c) and (d)" and substitutes "4.17.35(c) and (d)";
- (i) in renumbered section 4.17.37, strikes out "4.17.35" and substitutes "4.17.36";
- (j) in renumbered section 4.17.38, strikes out "4.17.35(a) to (d)" and substitutes "4.17.36(a) to (d)";
- (k) strikes out renumbered sections 4.17.40, 4.17.41 and 4.17.42 and substitutes the following:
 - "4.17.40 In two-family dwellings and two-family dwellings with secondary suite, there must be two main entrances, one to each principal dwelling unit.
 - 4.17.41 In two-family dwellings and two-family dwellings with secondary suite on a corner site, one main entrance must face the front street and one main entrance must face the flanking street.
 - 4.17.42 In two-family dwellings and two-family dwellings with secondary suite, there must be a covered entry at each main entrance, with a minimum width and depth of 1.8 m.
 - 4.17.43 In two-family dwellings and two-family dwellings with secondary suite, roof design must comply with the following provisions:
 - (a) all roofs except for dormer roofs shall have a minimum slope of 7:12 and a maximum slope of 12:12 and shall be either hip or gable or a combination of both, and shall intersect at its lower portion with the exterior wall face of the building or the vertical projection thereof at a line no higher than the lesser of 7.9 m above the base surface or the floor level of a half-storey or attic above the second storey;

- (b) dormer roofs shall be gable, hip or shed in form and shall have a minimum slope of 4:12;
- (c) the maximum total width of dormers provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below;
- (d) all exterior dormer walls shall be set back a minimum of 0.6 m from the exterior face of the wall of the storey below; and
- (e) notwithstanding section 4.17.43(d), one dormer, which faces an interior side yard and which provides headroom over a stair and any intermediate and top landings which provide access from the second storey to the half-storey above may have its face wall flush or continuous with the second storey exterior wall face below
- 4.17.44 The Director of Planning may vary the requirements of section 4.17 for two-family dwellings and two-family dwellings with secondary suite if, in the opinion of the Director of Planning, the design meets the intent of the regulations for quality and durability of design and architectural expression, or to facilitate a building designed for certification under the Passive House standard or International Living Future Institute's Zero Energy standard, or an equivalent to the satisfaction of the Director of Planning.
- 4.17.45 Exterior windows in a secondary suite or lock-off unit must have:
 - (a) a minimum total glazing area of 10% of the total floor area of the room, in each of the kitchen, living room and dining room; and
 - (b) a minimum total glazing area of 5% of the total floor area of the room, in all other rooms, except bathrooms and laundry rooms.".
- 30. In section 4.17 of the RT-5 and RT-5N Districts Schedule, Council:
 - (a) strikes out section 4.17.1;
 - (b) renumbers sections 4.17.2 and 4.7.3 as 4.17.1 and 4.17.2;
 - (c) in renumbered 4.17.2, strikes out "There must be" and substitutes "In two-family dwellings and two-family dwellings with secondary suite, there must be";
 - (d) inserts a new section 4.17.3 as follows:
 - "4.17.3 In two-family dwellings and two-family dwellings with secondary suite on a corner site, one main entrance must face the front street and one main entrance must face the flanking street.";
 - (e) in section 4.17.4:
 - (i) strikes out "verandah or porch" and substitutes "entry", and

- (ii) strikes out "minimum width and depth of 1.6 m" and substitutes "minimum width and depth of 1.8 m";
- (f) in section 4.17.5, strikes out "Roof design must" and substitutes "In one-family dwellings and one-family dwellings with secondary suite, roof design must";
- (g) inserts a new section 4.17.6 as follows:
 - "4.17.6 In two-family dwellings and two-family dwellings with secondary suite, roof design must comply with the following provisions:
 - (a) all roofs except for dormer roofs shall have a minimum slope of 7:12 and a maximum slope of 12:12 and shall be either hip or gable or a combination of both, and shall intersect at its lower portion with the exterior wall face of the building or the vertical projection thereof at a line no higher than the lesser of 7.9 m above the base surface or the floor level of a half-storey or attic above the second storey;
 - (b) dormer roofs shall be gable, hip or shed in form and shall have a minimum slope of 4:12;
 - (c) the maximum total width of dormers provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below;
 - (d) all exterior dormer walls shall be set back a minimum of 0.6 m from the exterior face of the wall of the storey below; and
 - (e) notwithstanding section 4.17.6(d), one dormer, which faces an interior side yard and which provides headroom over a stair and any intermediate and top landings which provide access from the second storey to the halfstorey above may have its face wall flush or continuous with the second storey exterior wall face below.";
- (h) renumbers 4.17.6 as 4.17.7; and
- (i) adds a new section 4.17.8 as follows:
 - "4.17.8 The Director of Planning may vary the requirements of section 4.17 for two-family dwellings and two-family dwellings with secondary suite if, in the opinion of the Director of Planning, the design meets the intent of the regulations for quality and durability of design and architectural expression, or to facilitate a building designed for certification under the Passive House standard or International Living Future Institute's Zero Energy standard, or an equivalent to the satisfaction of the Director of Planning.".
- 31. In the RT-11 and RT-11N Districts Schedule, Council:
 - (a) inserts a new section 4.17.4 as follows:

- "4.17.4 In two-family dwellings and two-family dwellings with secondary suite on a corner site, one main entrance must face the front street and one main entrance must face the flanking street.";
- (b) renumbers the remaining sections in section 4.17;
- (c) in renumbered section 4.17.5:
 - (i) strikes out "verandah or porch" and substitutes "entry", and
 - (ii) strikes out "minimum width or depth of 1.6 m" and substitutes "minimum width and depth of 1.8 m";
- (d) strikes out the renumbered 4.17.6 and substitutes the following:
 - "4.17.6 In two-family dwellings and two-family dwellings with secondary suite, roof design must comply with the following provisions:
 - (a) all roofs except for dormer roofs shall have a minimum slope of 7:12 and a maximum slope of 12:12 and shall be either hip or gable or a combination of both, and shall intersect at its lower portion with the exterior wall face of the building or the vertical projection thereof at a line no higher than the lesser of 7.9 m above the base surface or the floor level of a half-storey or attic above the second storey;
 - (b) dormer roofs shall be gable, hip or shed in form and shall have a minimum slope of 4:12;
 - the maximum total width of dormers provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below;
 - (d) all exterior dormer walls shall be set back a minimum of 0.6 m from the exterior face of the wall of the storey below; and
 - (e) notwithstanding section 4.17.6(d), one dormer, which faces an interior side yard and which provides headroom over a stair and any intermediate and top landings which provide access from the second storey to the half-storey above may have its face wall flush or continuous with the second storey exterior wall face below.";
- (e) in renumbered section 4.17.7, adds "or lock-off unit" after "Exterior windows in a secondary suite"; and
- (f) adds a new section 4.17.8 as follows:
 - "4.17.8 The Director of Planning may vary the requirements of section 4.17 for two-family dwellings and two-family dwellings with secondary suite if, in the opinion of the Director of Planning, the design meets the intent of the regulations for quality and durability of design and architectural expression, or to facilitate a building designed for certification under the Passive House standard or International Living Future Institute's Zero

Energy standard, or an equivalent to the satisfaction of the Director of Planning.".

32. In the RM-7, RM-7N, and RM-7AN, and the RM-8, RM-8A, RM-8N, and RM-8AN Districts Schedules, Council:

- (a) inserts a new subsection 4.17.5(b) as follows:
 - "(b) on a corner site, one main entrance must face the front street and one main entrance must face the flanking street;";
- (b) renumbers the remaining subsections in section 4.17.5;
- (c) in renumbered section 4.17.5(c):
 - (i) strikes out "verandah or porch" and substitutes "entry", and
 - (ii) strikes out "minimum width and depth of 1.6 m" and substitutes "minimum width and depth of 1.8 m";
- (d) strikes out the renumbered 4.17.5(d), (e), and (f) and substitutes the following:
 - "(d) all roofs except for dormer roofs shall have a minimum slope of 7:12 and a maximum slope of 12:12 and shall be either hip or gable or a combination of both, and shall intersect at its lower portion with the exterior wall face of the building or the vertical projection thereof at a line no higher than the lesser of 7.9 m above the base surface or the floor level of a half-storey or attic above the second storey;
 - (e) dormer roofs shall be gable, hip or shed in form and shall have a minimum slope of 4:12;
 - (f) the maximum total width of dormers provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below;
 - (g) all exterior dormer walls shall be set back a minimum of 0.6 m from the exterior face of the wall of the storey below; and
 - (h) notwithstanding section 4.17.5(g), one dormer, which faces an interior side yard and which provides headroom over a stair and any intermediate and top landings which provide access from the second storey to the half-storey above may have its face wall flush or continuous with the second storey exterior wall face below.".

(e) in section 4.17.6, adds "or lock-off unit" after "Exterior windows in a secondary suite"; and

(f) adds a new section 4.17.7 as follows:

"4.17.7 The Director of Planning may vary the requirements of section 4.17 for two-family dwellings and two-family dwellings with secondary suite if, in the opinion of the Director of Planning, the design meets the intent of the regulations for quality and durability of design and architectural expression, or to facilitate a building designed for certification under the Passive House standard or International Living Future Institute's Zero Energy standard, or an equivalent to the satisfaction of the Director of Planning."

Note: By-laws will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to final preparation for approval.

Draft By-law to amend Parking By-law No. 6059 regarding uncovered parking spaces on duplex sites

- 1. This By-law amends the indicated provisions of the Parking By-law No. 6059.
- 2. In Section 4.8, Council adds:

"4.8.14 Requirement for Two-Family Dwellings and Two-Family Dwellings with Secondary Suite

On a site with a two-family dwelling or a two-family dwelling with secondary suite, any uncovered parking space must have a permeable surface.".

Outright Duplex How-to Guide

DRAFT - Current as of March 2019



The following information is provided to help you better understand the expectations of the exterior design regulations for duplexes in applicable RS, RT, and RM District Schedules of the Zoning and Development By-law. It is intended only to complement the By-law and does not form part of the By-law. Always refer to the By-law for complete information.

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Overview

"Outright" duplex is permitted in the following zones:

- RS-1, RS-1A, RS-1B, RS-2, RS-5, RS-6, and RS-7.
- RT-5, RT-5N, RT-11, RT-11N
- RM-7, RM-7N, RM-7AN, RM-8, RM-8A, RM-8N, RM-8AN

Duplex:

- Is permitted for new construction only
- Can be strata-titled
- Cannot be built in conjunction with a Laneway House

In RS zones, duplexes:

- May include secondary suites or lock-off units on lots with a site area of 334 m² (3,595 ft²) up to 511 m² (5,500 ft²);
- <u>Must</u> include at least one secondary suite on lots with a site area of 511 m² $(5,500 \text{ ft}^2)$ or greater.

Duplexes are intended to provide additional housing options for families in RS zones. It is not required nor expected that duplexes on standard 4,000 ft² lots (33ft by 122ft) will provide secondary suites in all cases, noting that the permitted floor area of 0.70 FSR or 2,800 ft² may be more suitable for two family-sized units without suites.



Tree protection

A duplex should be located and designed to preserve existing trees, including those on neighbouring properties and City property. Relaxations for setbacks and parking requirements may be allowed in order to retain significant trees. A permit is required to remove a tree. Replacement trees are required as per the Protection of Trees Bylaw.

All utility connections should be located outside of tree protection areas.

An arborist's report should be prepared as part of the site analysis to evaluate the utility connections and the duplex location. You may arrange a consultation with one of the City's landscape development specialists at the Development and Building Services Centre.



Parking

Parking spaces may be contained within an accessory building (garage), which cannot exceed 48 m² (516 ft²) with 2 spaces.

Additional parking spaces should be surface parking.

Surface parking material must be permeable. Examples of permeable materials include permeable pavers, gravel, grass-crete or a mix of concrete wheel paths and landscape strips. However, for the purpose of calculating the amount of impermeable site coverage, these materials are considered impermeable, except gravel.

The requirement for a fully permeable space may be waived to facilitate accessibility by persons with disabilities.

The minimum required number of parking spaces is:

- 2 spaces for duplex
- 3 spaces for duplex with secondary suite(s)
- Lock-off unit: no additional parking requirement



Parking

On sites with no lanes, internal parking spaces may be located on the ground floor of the duplex. In such cases, the driveway and garage door as viewed from the street should be minimized; landscape setbacks and upgraded surface treatments should be considered in order to maintain a "residential" look at the front yard.

Driveways should be tapered to provide minimal width at the property line where possible (See Crossing A below).

A 4.3 m (14.0 ft) wide garage could be considered. With this design, the parking space needs to be deeper than 7.3 m to facilitate proper manoeuvring. The Planning Department is prepared to exclude from FSR the extra depth necessary for manoeuvring.







Parking

A 1.0m (3.0ft) landscaped setback is typically required adjacent to the side property line for surface parking spaces and driveways.

Depending on the site width, the landscape setback may be reduced as follows:

Lot width	Landscaped setback	
Up to 12.2m (40.0 ft)	n/a. Vine planting is acceptable instead. Plans should provide a fence detail showing vine supports.	
12.2m (40 ft) - 15.2m (50.0 ft)	0.6m (2.0ft)	
More than 15.2m (50.0 ft)	1.0m (3.0ft)	



Secondary Suite, Lock-Off Unit

Secondary suite means a smaller dwelling unit within a larger one-family dwelling or twofamily dwelling. It must have a separate external entry door and may have shared internal door connecting the units. One parking space is typically required for each secondary suite; however, for duplexes with secondary suites, a minimum of 3 parking spaces is required even when two suites (i.e. 4 dwelling units in total) are provided.

Lock-off units are small, self-contained units with an external door and a shared internal door which can be locked, enabling both the principal dwelling unit and suite to be independent (e.g. used periodically for long-term rental), or unlocked and used as part of the principal dwelling. Unlike secondary suites, lock-off units do not trigger parking space requirements and are not separately addressed.

Each secondary suite must be of minimum 37 m^2 (400 ft²). There must be no more than one secondary suite for each dwelling unit.

Lock-off units must be at least 26 m² (280 ft²) and a maximum 29.7 m² (320 ft²). There must be no more than one lock-off unit for each dwelling unit. The maximum unit size will help to distinguish lock-off units from secondary suites, which are intended to be larger and provide longer-term rental housing.

In the case where the secondary suite or lock-off unit is located in the basement, the floor level should be no more than 1.5m (5.0ft) below finished grade.





1. Entrances

Entrance to principal dwelling units

The duplex main entrance doors are required to be visible from the street. This is intended to ensure recognizable, easily identifiable entrances for residents, visitors, deliveries and emergency services.

For mid-block sites, for side-by-side duplex units, placing two entrances on the front facade at the main level is acceptable.

For corner sites, one main entrance must face the front street and one must face the flanking street to provide activation of both street frontages.

For front-to-back duplex units, the legibility of the rear unit entrance may be improved as follows:

• The rear entry may be fully open to the street. In a case where that is not practical, the rear dwelling unit should have an approximately 1.8m (6.0 ft) side yard setback to reveal at least half of the rear unit's entry.



- Where the side walls of the front and rear dwelling units align and an entry "notch" is proposed for the rear dwelling unit, a canopy may be provided, with a separate entry arbour at the front property line. Canopies may project into a side yard to the same amount as an eave projection (refer to the regulation for eave projection into required yards).
- In order to maintain the visibility of the rear dwelling unit, projections such as chimneys or bay windows should not block the view to the rear dwelling unit from the street.

The requirement that each entrance face the street may be waived where it unduly compromises the overall design including the functional layout of the units. For example, for front-to-back duplexes on lots of 10m (33.0 ft) or less in width, a rear-facing entrance to the rear unit may be considered. In such cases, the location of the rear unit should be clearly identified with a well-designed entrance walkway that may incorporate a landscape border, upgraded surface treatments, and an entry trellis or gate.

Entrance to secondary suites and lock-off units

Entrance to suites and lock-off units should be secondary in prominence to the primary duplex unit entries.

Entrances to suites and lock-off units are typically from the rear, and may be through sunken patios.

Patio entrances to suites may be located in the front yard and should be minimized in size and screened with landscaping and not guardrails where possible.

For example, sunken patios more than 0.6m (2.0 ft) below grade should include terraced landscape planters at the border. Planter terraces should be no more than 0.60 m (2.0 ft.) in height to avoid a



requirement for a guardrail. Careful attention to design of the doorway, windows, and steps down to the entry is necessary to ensure that it does not detract from the dominance of the main entrances, yet provides a livable, functional entry and outdoor amenity space for the secondary suite.

Covered entry

Main entrance to each unit of the duplex should be covered for weather protection.

A covered entry is not required to have posts or a traditional porch appearance.

A covered entry must be provided with a minimum width and depth of 1.8 m (6.0 ft). A shared entry is acceptable, but it should have a usable seating area for both units (i.e. 2x 6ftx6ft).

The entry should be one floor in height. Twostorey entry or porticoes are not acceptable.





2. Roof form

All roofs except for dormer roofs must be hip, gable or a combination of both forms, and must have a minimum slope of 7:12 to maximum 12:12, and must not exceed 10.7 m (35.0 ft) in height. Spring height should be no more than 7.9 m (26.0 ft) above the base surface.

Where a half storey is proposed, it should be clearly seen from the street as being contained within the roof form.



The Director of Planning may consider flat roofs or shallow

roofs for Near Zero Emissions Buildings, such as a certified Passive House or Net Zero Energy design, or an equivalent standard, as well as for high quality and innovative design. You may consult with a development planner for design review before submission.

Not-acceptable roof forms:

Mansard roofs, or pitched roofs with a flat top are not acceptable. Below are some examples of roof form that should be avoided.



3. Dormers

Dormer roofs must be gable, hip or shed in form and have a minimum slope of 4:12;

The maximum total width of dormer roofs provided on a half storey above the second storey must not exceed 50% of the width of the elevation of the storey below.

All dormer walls (except where it provides headroom over a stair) should be set in a minimum of 0.6m (2.0 ft) from the wall below. The eave height of dormer roofs should be as low as practical to reduce the perceived scale of the partial upper storey.

Dormers facing the side yard should be set at least 3.0m (10.0 ft) away from the wall face of the front elevation to maintain the prominence of the main roof as viewed from the street.



4. Windows

Exterior windows in a secondary suite or lock-off unit must have:

- (a) a minimum total glazing area of 10% of the total floor area of the room, in each of the kitchen, living room and dining room; and
- (b) a minimum total glazing area of 5% of the total floor area of the room, in all other rooms, except bathrooms and laundry rooms.



5. Materials

For design considerations, the finishing materials of duplex should be durable, sustainable and create less waste. Materials that perform well over a long period of time also increase the affordability of the dwelling.

Materials should be used in a way that is true to their nature. For example, stone facing should be used as a foundation element, and as the base of columns, but should not be used as a facing on upper levels with no clear means of support below.

The same materials should be used in consistent proportions on all facades and not just on the street face. Materials should carry around corners and terminate at logical points to avoid appearing as a thin veneer or 'false front'

Questions

For permitting information and site-specific inquiries, please contact the Development and Building Services Centre at csg.enquiry.centre@vancouver.ca, or call 311 or 604.871.7611.

	Summary of proposed Zoning and Development By-law Changes					
Design Element	Current Regulation	Proposed Change	Rationale for Change			
Roof: - form and slope	hip and/or gableminimum slope of 7:12.	 add requirement for eave line to extend down to align with the floor level of the half-storey to contain the half-storey within the roof form 	- enable more coherent roof forms and better building performance over time			
	 space under sloping roof below 1.2m excluded 	 additional FSR exclusion for space under sloping roof between 1.2 and 2.3 m 	 new roof regulation will lead to more space under sloped ceilings, which is less functional and should therefore be excluded from FSR 			
	- maximum dormer width 25% to 40%, depending on location	- maximum dormer width to 50%	- increase amount of functional space in upper storey			
	 covered porch exclusions vary among zones 	 increase covered porch exclusion to include porches at upper levels 	- allow for covered outdoor amenity space within the roof form			
Main Entrances - corner sites	- no regulations	 require one main entrance facing each street frontage 	 improve design of flanking street elevation, more street animation 			
- design	 covered porch or verandah required, min 1.6 width <u>or</u> depth (variations among zones) 	 replace with covered entry, min 1.8 m width and depth 	 increases entry space for better functionality, allows traditional and contemporary designs 			
Above Ground Floor Space	- currently no limitation	- limit above ground floor space to 371 m ²	- avoid excessive massing of duplexes			
Discretionary Design Approval	 currently no discretion possible 	 introduce clause to vary design regulations and building depth 	 allow flexibility for near zero-emissions buildings and individual high-quality designs 			
Garage Size	- limit is 30% of rear yard or 48 m ² , whichever is greater	- limit to max. 48 m ² for	 prevent excessively large garages to increase feasibility for tree retention and rainwater management 			
Permeable Parking	 currently no requirement for duplex 	- require open parking to be permeable	 greater feasibility for tree retention and rainwater management 			
Window size in lock-off units	 currently, requirements for window sizes for lock-off units located in guidelines 	 incorporate same window size requirements for lock-off units as already exist for secondary suites 	 improved light and ventilation in lock-off units 			

Summary of proposed Zoning and Development By-law Changes