Infill Housing Design Guidelines
The City of New Westminster

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1.0 INTRODUCTION

1.1 Background and Purpose

[City Text]

1.2 Guiding Principles

These Design Guidelines will shape the development of Laneway Houses (LWH) Carriage Houses (CH), Rowhouses (RH) and Townhouses (TH).

Guiding Principles for these forms of infill are:

1. Design infill buildings to be good neighbours by minimizing shade, shadow and overlook onto adjacent properties.
2. Design buildings for durability and sustainability.
3. Provide livable spaces with optimum daylight and ventilation, access to ground level private open space, and functional, efficient interiors.
4. Design outdoor spaces as a valued year round asset.

TH and RH are opportunities to provide attached, ground oriented units close to transit and other community amenities. These higher density, affordable family housing forms will impact the neighbourhood fabric and streetscapes. Guiding Principles specific to these higher density typologies are:

5. Create streetscapes that are pedestrian and cyclist friendly, contributing to well connected neighbourhoods.
6. Maintain a scale of development that is compatible with single family neighbours.

2.0 GENERAL INFILL GUIDELINES

2.1 Neighbourhood Design and Streetscapes

Laneway Houses (LWH) and Carriage Houses (CH) increase the availability of ground oriented dwellings in existing residential neighbourhoods. LWHs and CHs are located in existing rear yards, with minimal impact on the existing streetscapes. Lanes will develop as the "front street" for LWHs, increasing their potential as pedestrian oriented spaces.

Townhouses (TH) and Rowhouses (RH) are opportunities to provide ground oriented, attached, affordable family housing forms in residential neighbourhoods, increasing housing choice. All new developments should contribute to vibrant, engaging streetscapes.

2.2 Crime Prevention Through Environmental Design (CPTED)

All infill housing developments are expected to follow basic CPTED principles including:

- clearly defined boundaries including private, semi-private and private space
- the ability to provide surveillance from indoor and outdoor spaces
- providing secure access points including gates, lighting and locks
- landscape design that does not interfere with sight lines, lighting or provide opportunities for concealment

photo credit: ramsay worden architects

TH / RH streetscape precedent

2.3 Sustainability

Regulations for sustainability are included in a variety of Municipal, Provincial and Federal standards.

These Guidelines encourage all forms of infill buildings to consider additional current and future opportunities for sustainable design where possible including:

- passive solar design integrated into the architecture and landscape design
- energy efficient design and internal infrastructure including structural supports for future solar panels
- opportunities for natural ventilation to optimize air quality and reduce mechanical cooling
- healthy, durable building materials
- drought resistant, low maintenance plants
- architecture and landscape design that integrates water conservation and rainwater management including the use of rain barrels and rain gardens; harvesting rainwater for toilet flushing and maximizing permeable surfaces
- secure storage for bicycles
- safe, pleasant pedestrian connections to the street and the lane

example of rain garden and permeable surfaces

2.4 Livability

This term is used to measure the quality of our living spaces. Infill housing designers are challenged with balancing efficient space planning with comfort and flexibility. Compact, efficient spaces that are private (overlook from neighbours has minimum impact), flexible (spaces adaptable to a growing family or the ability to work from home, for example), with quality outdoor space (sunlight, space to garden, privacy), and optimum daylighting (size and placement of windows) allow infill housing to be a valued housing choice.

well designed compact spaces increase livability

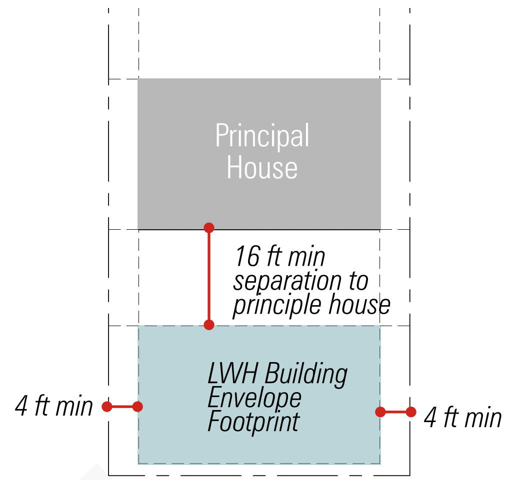
3.0 LANEWAY HOUSE (LWH) AND CARRIAGE HOUSE (CH)

3.1 Definition and Description

LWHs and CHs are compact, detached, ground oriented dwellings located in existing back yards. LWHs are located on properties with a lane. CHs are located on properties without lanes.

LWHs and CHs are permitted to be rental units but not strata titled.

Adaptable units which include a bedroom at the ground level are encouraged to provide aging in place.

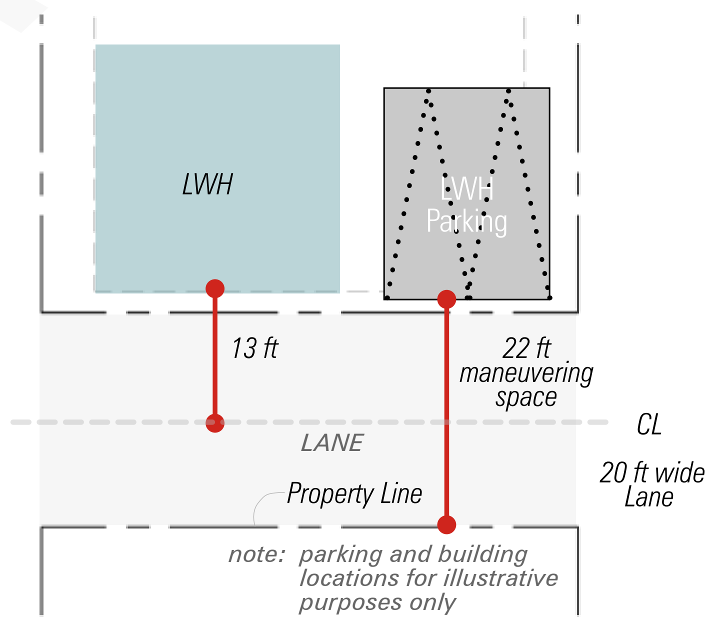


LWH side yards and separation to main house

3.2 Setbacks

Setbacks optimize privacy between developments, access to sunlight and opportunities for open space.

a. Minimum 4 ft / 1.2 m side yards are required for LWHs and CHs including flanking street on corner lots - refer to illustration on following page. Where possible, increased setbacks from the flanking street are should exceed minimums to incorporate front entries, porches and gardens.
b. Future lanes will be required to be 20 ft / 6 m wide.
c. LWH buildings are required to be set back 13 ft from the centre line of the future 20 ft wide lane to allow a minimum 3 ft wide landscape zone.
d. Many lanes in New Westminster are less than 20 ft wide, without sufficient maneuvering space. Where existing lanes are less than 20 ft / 6 m wide, a 22 ft / 6.7 m wide minimum maneuvering space, measured from the property line on the opposite side of the lane is required for parking access.

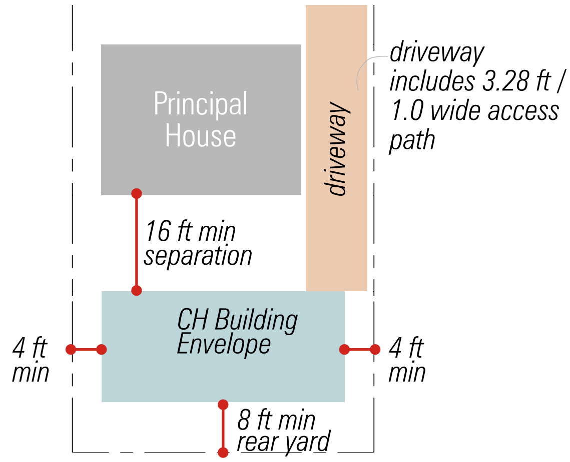


LWH rear yard setbacks

e. A minimum 8 ft /2.4 m rear yard is required for CHs. Rear yards greater than 8 ft are encouraged to accommodate private outdoor space - refer to Section 3.7.b. for detailed windows guidelines.
f. Where possible, rear yards should exceed minimums to optimize planting including trees along the lane.

3.3 Separation to Main House

a. A minimum distance of 16 ft / 4.8 m is required, measured from the closest building face of the Principal House and the LWH or CH.



CH setbacks

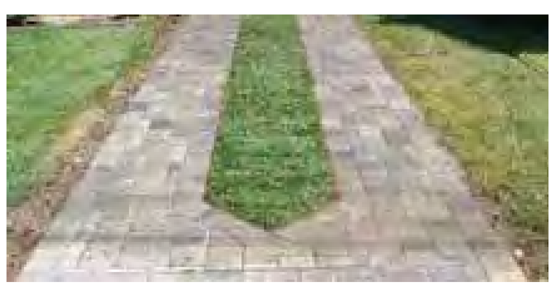
3.4 Parking

a. Parking Access and Location

i. Permeable surfaces including unit pavers, installed over a bed of sand and gravel, crushed stone/gravel and grass pavers are required for driveways and vehicle manoeuvring areas.
ii. Parking is required to be accessed from a lane where one exists.
iii. Corner lot parking access is required to be located 15 ft / 4.57 m from the intersection of the lane and the street.
iv. A driveway of not less than 9 ft / 2.74 m wide plus an additional 1 ft / 0.3 m where adjacent to a wall or fence and not greater than 18 ft / 5.5 m in width is required to access CH parking.
v. Street crossing widths are not to exceed 18 ft / 5.49 m.
vi. Where a lot is fronted by an access controlled street, backing onto the street is not permitted and therefore a turn around is required for CH parking.
vii. Driveways with central grass strips are recommended.
viii. Refer to Section 3.2.b for LWH rear yard guidelines.


example of grass pavers


example of concrete pavers over sand and gravel bed


example of driveway with central grass strip

b. Required Vehicular Parking Spaces
   i. 2 regular sized parking spaces per lot **- CITY TO CONFIRM**

c. Bicycle Parking Spaces
   i. All CHs and LWHs are all encouraged to provide bicycle parking.
   ii. New developments including a principal house, secondary suite and LWH or CH are required to provide a minimum of 3 bicycle parking spaces.
   iii. Bicycle parking should be secure and weather protected.
   iv. Bicycle parking structures are not included in the overall FSR.

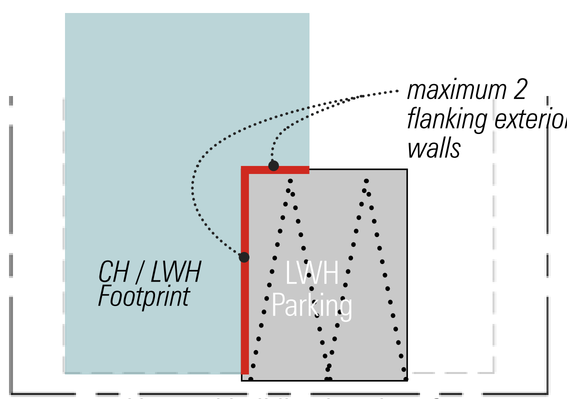
d. Parking Type

Optimizing open space, reducing shade and shadowing on neighbouring properties, and minimizing building "bulk" along the lane are key to design considerations. Parking pads are preferred. If carports are provided, they are recommended to provide flexible outdoor space. Garages increase shade, shadow and "bulk" and are included in the total allowable FSR.

i. Parking Pads
- Permeable parking pad surfaces, including unit pavers, installed over a bed of sand and gravel, crushed stone/gravel and grass pavers are highly recommended.
- Parking pads extending into the LWH or CH footprint shall not be flanked by more than two walls - refer to adjacent illustration.
- One parking space is required to be a parking pad.

ii. Carports
- Carports are intended to provide weather protection for parked cars only and may not include storage or other uses.
- Carport roofs may extend 1.5 ft / 0.45 m beyond the perimeter of the parking stall.

example of carport used as flexible outdoor space



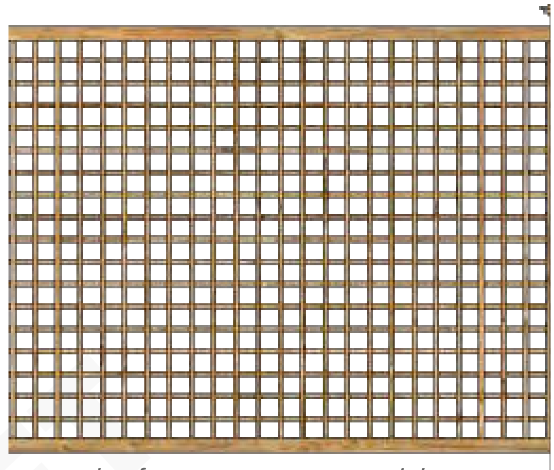
note: parking and building locations for illustrative purposes only

illustrating parking pads extending into the building footprint

- Flat roofs are required in order to minimize shade and shadowing.
- The carport enclosure should be limited to the structure required to support the roof. Any screening materials may not exceed 50% of the vertical "wall" area.
- Wood trellises or screens are encouraged.
- "Garage" doors are not permitted.
- Only one single car carport is allowed.

iii. Existing Parking

- Where parking is provided in an existing double garage, a wall to separate each unit's parking space or a separate garage door is encouraged.



example of carport screen material

3.5 Pedestrian/Service Access Path

Pedestrian access from the street and the lane to LWHs and CHs for emergency responders, deliveries and visitors that includes signage and lighting is an important urban design consideration.

a. A minimum 4 ft / 1.2 m wide, clear access route with a hard surface is required within the sideyard from the street to the entrance of the LWH or CA for fire department access.
b. The LWH/CH entry door should be visible from the access route.
c. An address sign is required at the street entrance of the access route and on the lane to clearly identify the LWH or CH for visitors, mail and other deliveries, and emergency responders.

example of address signs

3.6 Building Size and Massing

Careful attention to the size and mass of CHs and LWHs are key to successfully fitting these new housing forms into residential neighbourhoods. Efficient and compact building design is expected. These Guidelines aim to minimize the impact of shade, shadow and overlook on neighbouring properties, directing the highest portion of the building towards the centre of the lot and for LWHs, also to the lane. Integrating the upper level plan into the roof form, rather than increasing height by "adding" a roof form above the second level, is required to create a compact building form.

3.6.1 General Building Envelope Guidelines

a. The roof peak shall not exceed 23 ft / 7.0 m in height measured from the existing average grade of the 4 corners of the LWH/CH building envelope.
b. For sloping sites, vertical dimensions to be measured from the average existing grade of the building envelope to which they relate.
c. All above grade decks, balconies and bay windows are required to be within the building envelope.
d. Creative solutions for optimizing developments on sloping sites are strongly encouraged.
e. The flanking street elevation is the "front" of the CH and design elements that reinforce this public side of the building are strongly encouraged including exterior side yard setbacks exceeding the minimum to accommodate porches and front gardens.

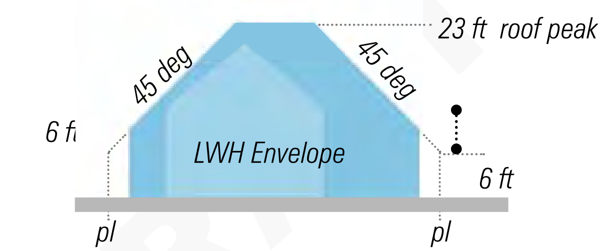
examples of second floor integrated into the roof form

3.6.2 Density

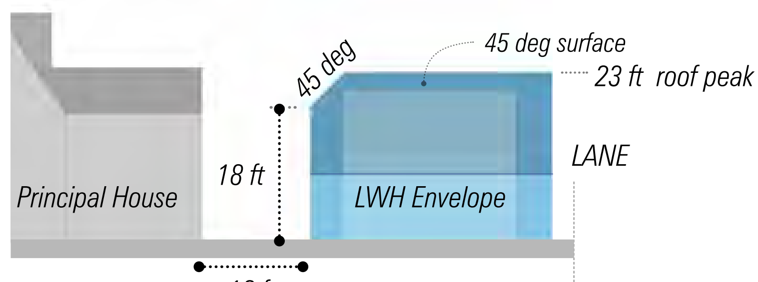
a. 0.5 FSR is the maximum allowable floor area for the Principal House and LWH or CH combined.
b. The minimum total area for a LWH or CH is 350 sf / 32.5 sm. The maximum total area is 968 sf / 90 sm.

3.6.3 LWH Mid-Block Lot Building Envelope:

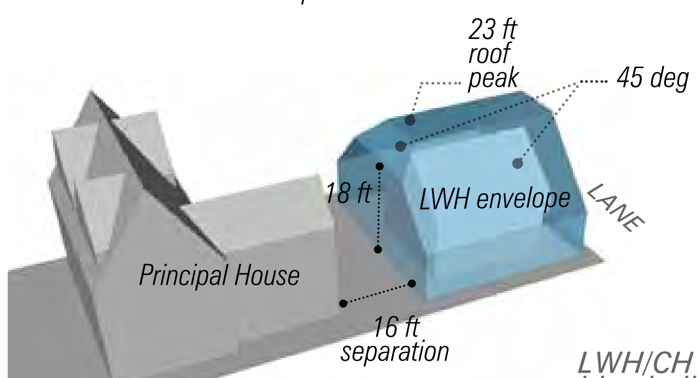
a. To optimize daylight and minimize shade and shadowing of neighbours, the Principal House and open space, a LWH will be constructed within a maximum building envelope, constructed by projecting up 6 ft / 1.8 m from the interior side property lines and then inclining inward at a 45 degree angle to the maximum building height and
b. a minimum distance of 16 ft / 4.8 m from the closest wall on the rear elevation of the Principal House projecting up 20 ft / 6.0 m and then inclining inward at a 45 degree angle to the maximum building height.



rear (lane) elevation



side elevation

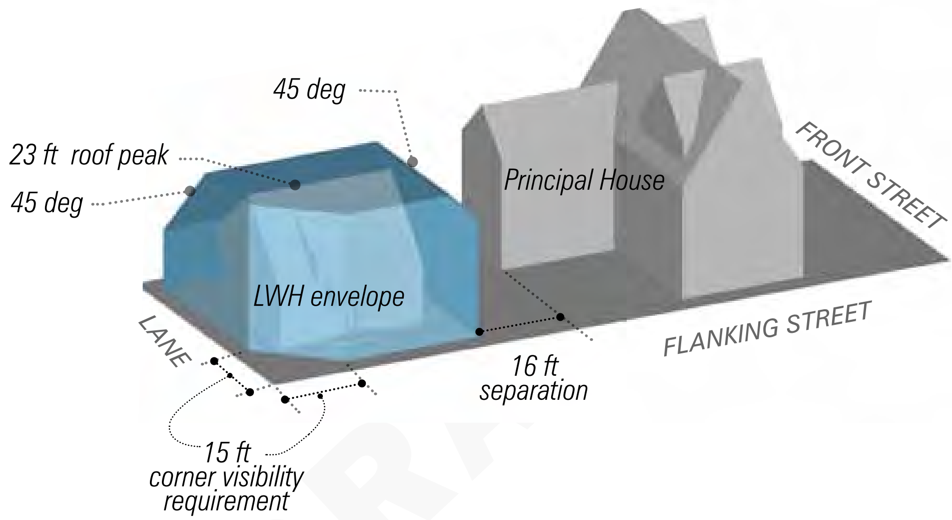


perspective view

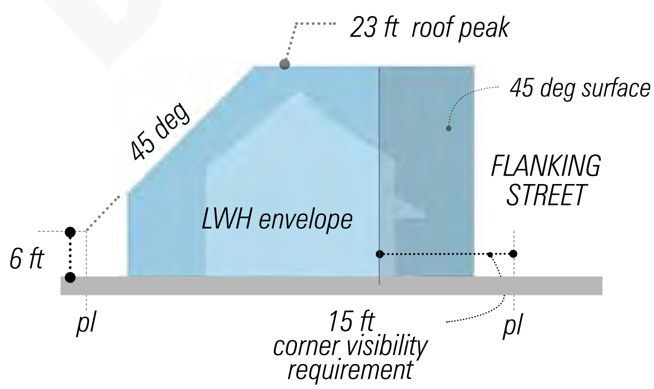
LWH/CH buildings within the blue building envelopes are for illustrative purposes only

3.6.4 LWH Corner Lot Building Envelope:

a. the same guidelines as LWH mid-block development apply, but increased height at the exterior sideyard (facing the flanking street) by projecting up from the exterior side property line and the corner cut (refer to illustration below) to the maximum building height is allowed



perspective view

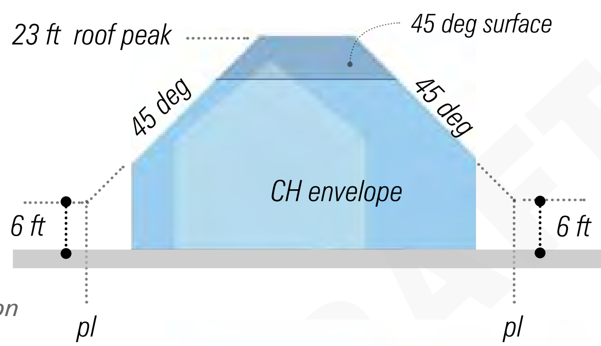


rear (lane) elevation

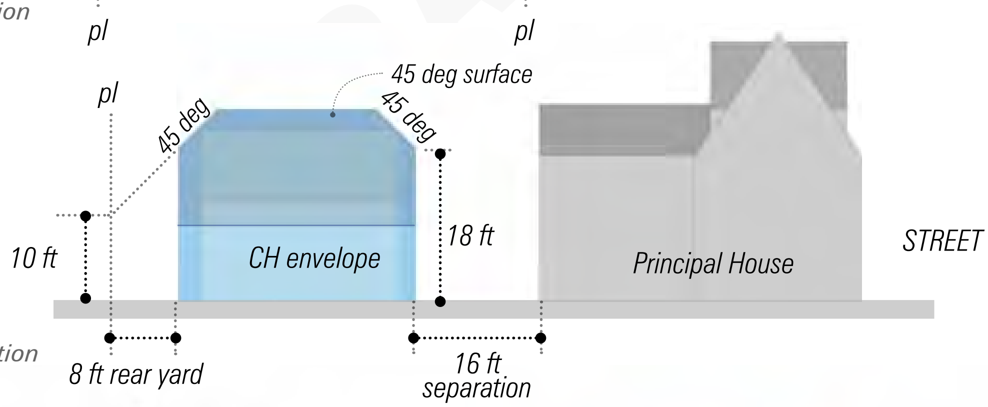
LWH/CH buildings within the blue building envelopes are for illustrative purposes only

3.6.5 CH Mid-Block Lot Building Envelope:

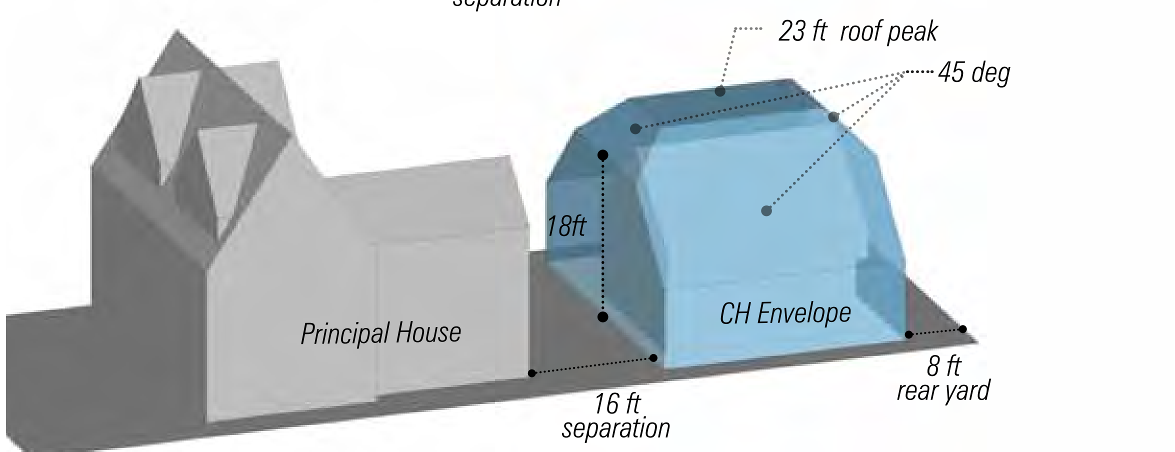
a. To optimize daylight and minimize shade and shadowing of neighbours, the Principal House and open space, a CH will be constructed within a maximum building envelope constructed by projecting up 6 ft / 1.8 m from the interior side property lines and then inclining inward at a 45 degree angle to the maximum building height and
b. projecting up from the rear property line 10 ft / 3.65 m and then inclining inward at a 45 degree angle to the maximum building height and
c. a minimum distance of 16 ft / 4.8 m from the back face of the Principal House projecting up 18 ft / 6.0 m and then inclining inward at a 45 degree angle to the maximum building height.



rear elevation



side elevation

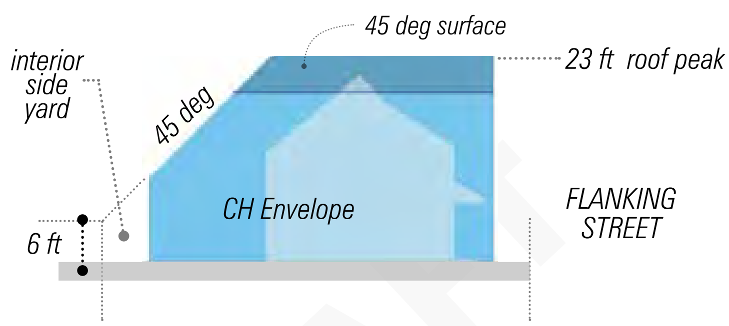


perspective view

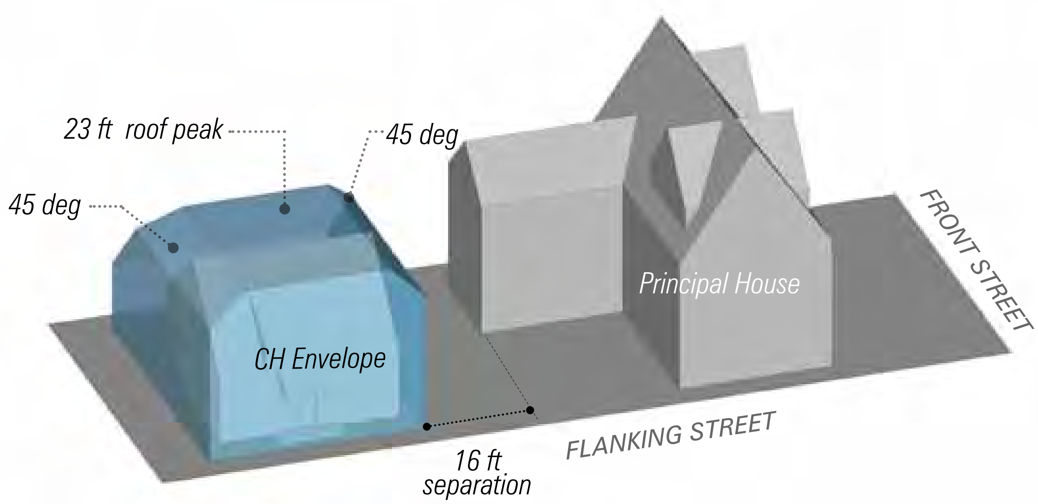
LWH/CH buildings within the blue building envelopes are for illustrative purposes only

3.6.6 CH Corner Lot Building Envelope:

a. the same guidelines as mid-block apply, but allow increased height at the exterior sideyard (flanking street elevation) by projecting up from the exterior side yard setback to the maximum building height
b. minimizing the visual impact of parked cars on this streetscape is strongly encouraged - consider increasing the rear yard to accommodate parking
c. parking between the CH and Principal House is strongly discouraged



rear elevation



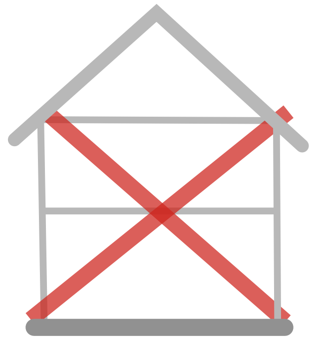
perspective view

LWH/CH buildings within the blue building envelopes are for illustrative purposes only

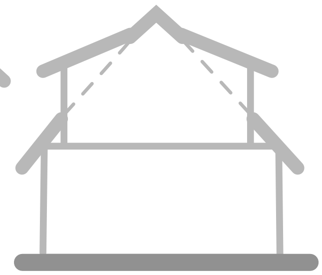
3.6.7. Roof Forms

Roof forms are critical to the design of compact buildings. The height, shape and opportunities for windows impact shade, shadowing and overlook on neighbouring properties, the Principal House and open space.

a. Upper floor areas are required to be integrated into the roof form.
b. One simple, primary roof form is encouraged with secondary roof forms, including dormers, integrated to increase head room and opportunities for glazing.
c. The area of the second floor is recommended to be 60% of the area of the ground floor to ensure a compact overall building form.
d. Total dormer width on each elevation should not exceed 40% of the width of the upper storey.
e. Flat roofs or shallow pitched roofs, especially for 2 storey buildings, can contribute to the visual bulk and increase shade and shadowing. Strategies to moderate the bulk are recommended including minimizing the floor to floor height and stepping back the upper level to locate the tallest portion of the building adjacent to the lane and/or near the centre of the lot.



not allowed: roof form added to second level



required: second level integrated into roof form

example of dormer integrated into simple, overall roof form

example of recommended flat and low sloping roof form

3.7 Privacy and Overlook

a. General Guidelines
   - The location of upper level decks, balconies and stairs should be located and/or screened to minimize overlook into neighbours' yards and interior spaces.

b. Windows
   i. Upper level windows should be oriented to the lane for mid-block LWH developments and the flanking street for corner developments to clearly identify the public "front" of the infill units.

ii. Windows, consistent with these Design Guidelines, are required on dormers, ie: dormers without windows are not allowed.
iii. Skylights, translucent eye level windows and clerestory windows (with sills above 5 ft 9 in / 1.75 m) are required on the upper level, except on the lane elevation, exterior side yard elevation or portions of the building that can be demonstrated not to impact privacy or create overlook.

c. Fences/Screens/Landscape Design:
   i. 6 ft / 1.8 m high fences are required on all interior side property lines, and on rear property lines for CHs.
   ii. Tall, compact plants such as non-invasive varieties of bamboo and evergreen vines including varieties of wisteria and clematis are encouraged as privacy screens.
   iii. Tree planting is encouraged to increase privacy between infill houses, neighbouring and principal dwellings.

3.8 Open Space and Landscape Design

a. A minimum of 160 sf / 14.86 sm clearly defined, at grade, private open space with direct access from the interior and a minimum dimension of 6 ft / 1.8 m is required.
b. Balance requirements for privacy with the value of views "out" in the design of open space.
c. Consider using plants, trees and changes in grade to define open space and optimize soft landscaping.
d. The design and location of all outdoor spaces should focus on the retention of existing trees - refer to Tree Protection and Regulation Bylaw No. 7799

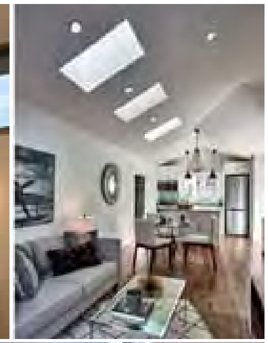




photo credits: lanefab.com

examples of skylights, clerestory and floor level windows

photo credit: smallworks.ca

photo credit: lanefab.com

photo credit: lanefab.com

examples of landscape design and private outdoor space

e. Drought tolerant plants at grade and deciduous trees on the south and west elevations are encouraged.
f. All screen and fence material should be attractive, durable, and contribute to the quality of the residential landscape design.
g. Planting strips are required on the public side of screens or fences.
h. Green walls and/or walls designed to support climbing plants are encouraged.
i. Green or planted roofs are encouraged to optimize views from neighbour's upstairs windows and to manage rainwater.
j. Areas of impermeable paving should be minimized.
k. Permeable surfaces are required for driveways and vehicle maneuvering spaces including unit pavers, gravel, and wheel paths integrated into planted strips.
l. Permeable surfaces are highly recommended on pathways and patios.
m. Areas of soft landscaping are required between the lane and LWH.
n. Trees are a key element in the landscape design and LWHs and CHs are highly encouraged to provide trees on properties without trees and provide additional trees on all other properties.
o. Retaining existing trees within the building envelope is strongly encouraged.
p. Landscape design that incorporates stormwater retention including rain gardens, permeable surfaces, rain barrels and swales are strongly encouraged.

example of planting adjacent to screen/fence

examples of permeable parking surfaces

3.9 Lighting

Carefully considered exterior lighting creates safe, welcoming and clearly identified building entrances, lanes, and access pathways. LWH and CH lighting is expected to be neighbour friendly, avoiding glare into neighbouring and principal dwellings' outdoor or indoor spaces.

a. General Exterior Lighting Guidelines
   i. Energy efficient LED, non-glare, down cast photocells in "warm colour temperatures" ranging from 2700 K to 3000K, are highly recommended.
   ii. All light fixtures should complement the architecture and landscape design.
   iii. Lighting should be at the control of the LWH / CH occupants.
   iv. Motion sensor lights are discouraged.

b. Laneway Lighting Guidelines
   i. Pedestrian level lighting, not to exceed 12 ft / 3.6 m high, is required along the lane to increase safety and visibility.

c. Pedestrian Path Lighting Guidelines
   i. Lighting fixtures are required along pathways at a recommended maximum height of 15 in / 38 cm or flush with the paving surface.
   ii. Mounting heights of light fixtures at the street entrance to the pedestrian service pathway are recommended at maximum 3 ft 4 in / 1.0 m high.

d. LWH and CH Building Lighting Guidelines
   i. Exterior lighting is required at CH and LWH entries, complementary to the overall design.

photo credit: smallworks.ca

examples of entry lighting

examples of pathway lighting


photo credit: jwt architecture

example of simple building forms

3.10 Architectural Expression including Lane Frontage

These Guidelines anticipate buildings that enhance existing neighbourhoods. A specific architectural approach is not intended, but design excellence and innovation is expected. Weather protection and passive energy performance inherent in the design including long lasting materials with low maintenance costs support sustainability goals. The architecture should be clearly residential.

a. LWH and CH Entrance Guidelines

i. Entrances to LWHs and CHs on corner lots should be oriented to the flanking street.

ii. LWH and CH entrances should incorporate a landing or "stoop", connected to the access path leading to the street, and to the lane for LWH.

iii. LWH entries are encouraged to be visible from the lane but not directly on the lane, ie: recessed or set back into the building envelope.

iv. LWH entrances should incorporate a recessed space that is welcoming, weather protected, and is sufficiently large for a person in a wheelchair to exit the property and safely wait for passing motor vehicles.

v. All access pathways are recommended to be 4 ft / 1.2 m wide to accommodate wheelchairs.

example precedents of lane elevations including entries and garage doors

a. Lane Frontage Guidelines

i. All lane elevations, especially those without doors facing the lane, should include design elements that are identified with traditional "front" street elevations including bay windows, planters and window boxes, large windows indicating main living spaces, street address, entry gates, lighting and cladding material that reinforce this as the public oriented building face.
ii. Mid-block LWHs oriented to the lane will help develop lanes as an active, pedestrian oriented public space as the number of LWHs increase.
iii. The residential address should be clearly visible to vehicles and pedestrian on the lane.
iv. Garage doors are required to be partially glazed and complementary to the lane elevation.
v. Space for garbage and recycling containers should be provided for all dwelling units on the property and screened from view, contributing to the lane as an active, pedestrian oriented public realm.

photo credit: lanefab.com

precedent of LWH lane elevation

4.0 TOWNHOUSES (TH) AND ROWHOUSES (RH)

4.1 Definition and Description

Townhouses (TH) and Rowhouses (RH) are attached, ground oriented, family oriented units.

RHs are fee simple developments with parking for each fee simple lot. THs are strata title developments with shared or designated parking typically at the rear of the property.

Double loaded and stacked TH are not permitted.

All TH and RH developments are intended to fit into the existing single family context through appropriate building form, scale and location.

4.2 Density and Lot Characteristics

a. The maximum permitted base density is 0.75 FSR.
b. In addition to the base density, basements not to exceed 50% of the unit footprint may be provided.
c. The density may increase to 0.85 FSR for corner sites and sites with dimensions equal to or greater than 132 ft / 40.2 m wide and 120 ft / 36.57 m deep to increase opportunities for housing choice.
d. Development sites are generally not permitted to have frontages greater than 150 ft / 45.7 m.

precedent townhouse forms

4.3 Setbacks

Setbacks provide adequate separation between neighbours, support a streetscape with transitions between varying front yard depths and optimize functional front and back yards.

a. Side yard requirements are minimum 6 ft / 1.82 m for street oriented developments and minimum 14 ft / 4.26 m for courtyard developments, for both interior and flanking street setbacks.

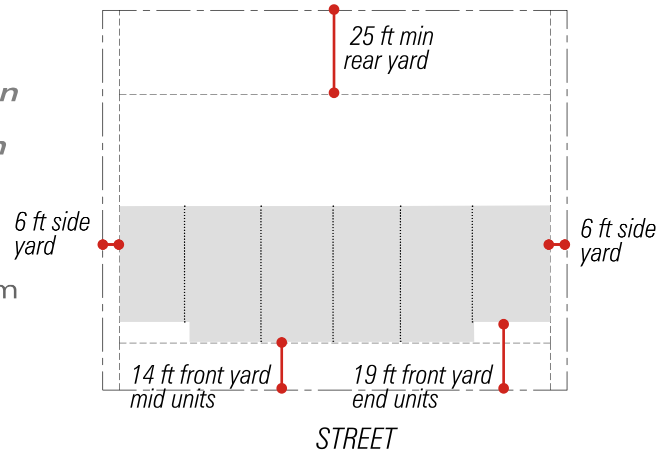
b. Developments with a mix of street fronting and courtyard THs are required to provide side yard setbacks appropriate to each unit type.

c. Front yard setbacks optimize valuable front yard and back yard outdoor spaces. Minimum TH and RH front yard setbacks are 14 ft / 4.26 m except street oriented interior end units where the setback is 19 ft / 5.8 m minimum to relate to single family neighbours and to encourage variety along the streetscape.

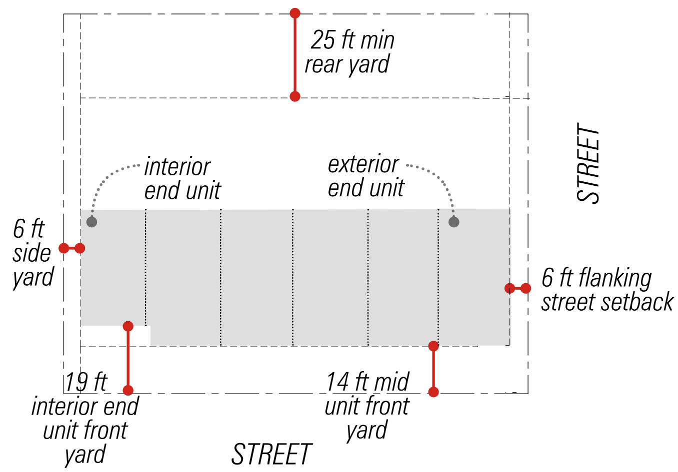
d. Front porches are allowed to encroach 6 ft / 1.82 m into front setbacks to encourage livable porches, provide a buffer from traffic noise and contribute to a friendly, animated streetscape.

e. Rear yards are required to be 25 ft / 7.6 m minimum from the rear property line.

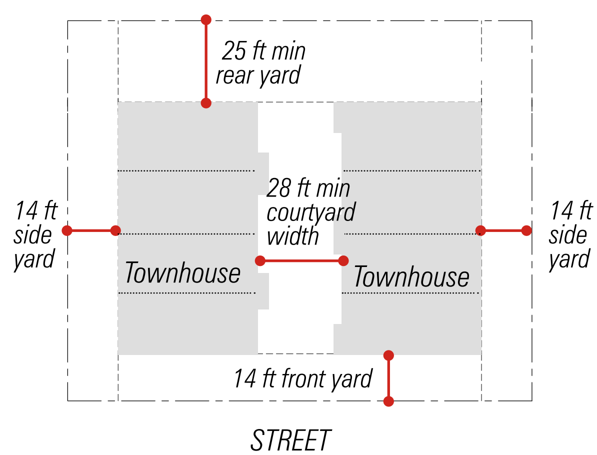
f. The minimum courtyard width is 28 ft / 8.53 m measured between the main building facades.



street oriented mid-block setbacks



street oriented corner setbacks



courtyard development setbacks

4.4 Vehicular and Bicycle Parking

4.4.1 General Parking Guidelines

a. A driveway of not less than 9 ft / 2.74 m wide plus an additional 1 ft / 0.3 m where adjacent to a wall or fence and not greater than 18 ft / 5.49 m in width is required to access parking.

b. Corner lot parking access should be located 15 ft / 4.57 m from the intersection of the lane and the street.

c. A 2 ft/ 0.6 m wide landscape strip is required adjacent to driveways.

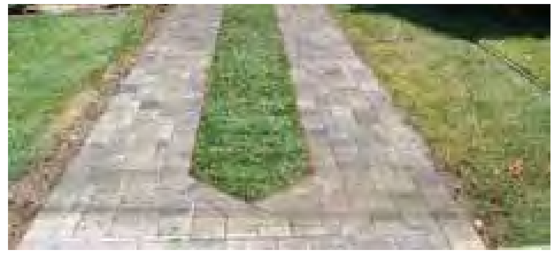
d. Driveway lengths should be minimized.

e. The maximum street crossing width is 18 ft / 5.48 m.

f. Permeable surfaces are required on driveways and vehicular manoeuvring areas.

g. Driveways with central grass strips are recommended.

h. Opportunities for hard surfaces or covered surfaces to be appropriate for all weather play and recreation are encouraged.



example of driveway with central grass strip

examples of permeable parking surface materials

i. Parking pads are preferred, to minimize shade and shadowing and reduce the visual impact of parked cars on residents and adjacent developments.

j. Carports are intended to provide weather protection for parked cars only and may not include storage or other uses. Flat roofs are required to minimize shade and shadowing.

k. Carports larger than 2 car spaces are not permitted.

l. The carport "enclosure" should be limited to the structure required to support the roof. Any screening materials may not exceed 50% of the vertical "wall" area.

m. Carport roofs may extend a maximum of 1.5 ft / 0.45 m beyond the perimeter of the parking stall.

n. "Garage" doors are not permitted on carports.

o. Carports may not be enclosed on more than 2 sides.

p. Carports are not permitted to be attached to TH or RH buildings.

q. Garages are not permitted in TH or RH developments.

examples of carport designs

4.4.2. Townhouse Developments - Vehicular Parking

i. One off-street parking space is required per unit.

ii. One additional visitor off-street parking space is required per development.

iii. Shared off-street parking areas are highly encouraged to maximize opportunities for green open space and minimize the visual impact of parked cars.

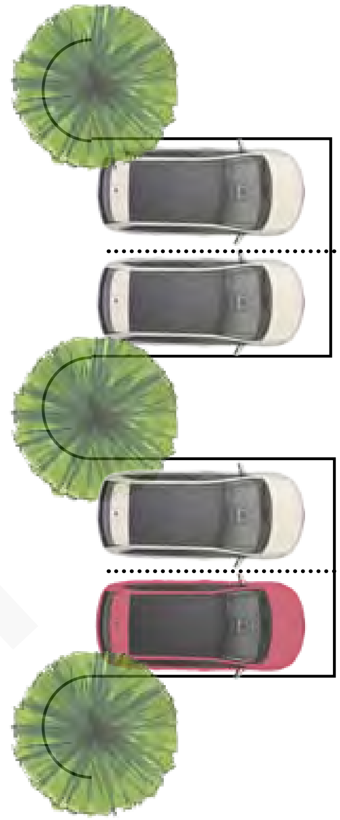
iv. Tree planting is encouraged between clusters of parked cars to provide shade, optimize landscaping opportunities and reduce the visual impact of parked cars.

4.4.3 Townhouse Developments - Bicycle Parking

i. Requirements for bicycle parking are described in Section 155 in the New Westminster Zoning Bylaw.

ii. All bicycle parking should be secured and weather protected.

iii. Space for bicycle parking is recommended at each TH unit.



example of shared parking areas and tree planting

example of secure bicycle storage

4.4.4 Rowhouse Developments

i. One off-street parking space is required per rowhouse unit.
ii. Off-street visitor parking is not required.

4.5 Building Size and Massing

4.5.1 General Guidelines

a. The maximum building length is 125 ft / 38 m.

b. The maximum height is 35 ft / 10.7 m measured from the average, existing grade at the 4 corners of the building envelope to the roof peak.

c. Simple roof forms are preferred.

d. Roof forms designed to reinforce the identity of individual units are preferred.

e. Roof overhangs, bay windows, steps, decks and chimneys are allowed to extend beyond the building envelope.

f. All developments should be located to minimize the impact of shade and shadowing on outdoor spaces.

g. Top floors should step back to minimize shade and shadow on outdoor spaces and provide usable deck space where practical.

h. Upper level balconies and decks including rooftop decks are encouraged where they do not overlook neighbouring properties.

i. RH and street oriented TH unit entries should not be oriented to internal side yards.

j. Courtyard TH entries are encouraged to face the courtyard, not an internal sideyard.

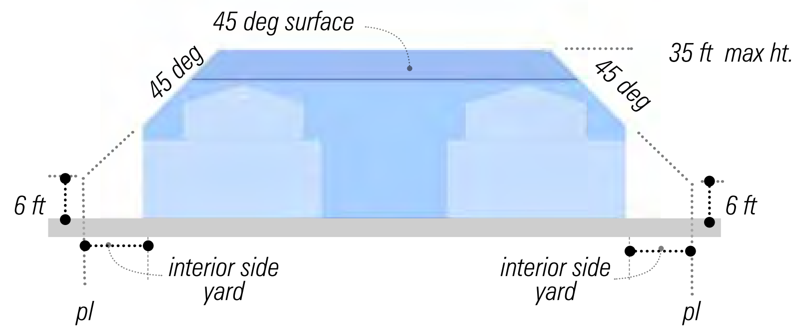
photo credit: stewart howard architects

4.5.2 Courtyard Developments

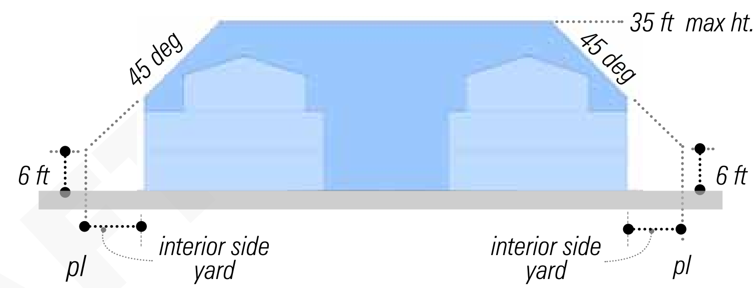
a. TH building envelopes for mid-block lots:
   i. to optimize daylight and minimize shade and shadowing on neighbours, all developments will be constructed within a maximum building envelope projecting up 6 ft / 1.8 m from the interior property line and then inclining inward at a 45 degree angle to the maximum building height and
   ii. projecting up 6 ft / 1.8 m from rear property line and then inclining inward at a 45 degree angle to the maximum building height

4.6 Open Space and Landscape Design

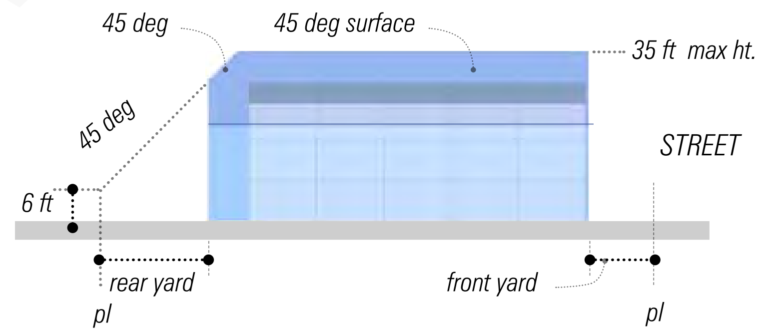
a. A minimum of 160 sf / 14.8 sm of private open space at grade with a minimum dimension of 6 ft / 1.8 m is required for all TH and RH units.
b. Balance requirements for privacy with the value of views "out" in the design of open space. Consider using plants and trees and changes in level to define open space and optimize soft landscaping.
c. The design and location of all outdoor spaces should focus on the retention of existing trees - refer to Tree Protection and Regulation Bylaw No. 7799.



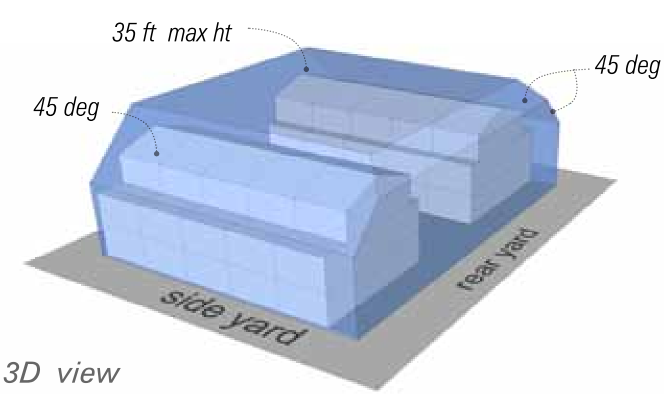
rear view



front view



side view



3D view

TH/RH within the blue building envelopes are for illustrative purposes only

d. Trees are a key element in the landscape design and TH and RH units may be required to include trees in the landscape plan.
e. Retaining existing trees within the building envelope is strongly encouraged.
f. Drought tolerant plants at grade and deciduous trees on the south and west elevations are encouraged.
g. All screen and fence material should be attractive, durable, and contribute to the quality of the residential landscape design.
h. Screens or fences are required along the property line to reduce the visual impact of parked cars on neighbours.
i. Recycling and garbage containers should be located adjacent to parking areas and screened from view using materials consistent with the overall design.
j. Where possible, provide areas of shared open space in TH developments located to optimize sun and as places to play, garden and recreate. Consider incorporating areas of permeable, hard surface for all weather use.
k. Planting strips are recommended on the public side of screens or fences facing streets or lanes.
l. Areas of impermeable paving should be minimized.
m. Permeable surfaces including unit pavers, gravel and wheel paths integrated into planted strips are highly recommended on parking areas.
n. Permeable surfaces are highly recommended on pathways and patios.
o. Areas of soft landscaping along the lane including trees are recommended to support the development of a pedestrian oriented public space.
p. Landscape design that incorporates stormwater retention including rain gardens, permeable surfaces, rain barrels and swales are strongly encouraged.

example of fence/ screen combined with planting

illustrates compact outdoor spaces with trees, planting and permeable surfaces

4.7 Architectural Expression

These Guidelines encourage new development that emphasizes livability and responds to the West Coast climate through the use of durable, long lasting materials, passive design elements including solar shading on the west and south elevations, outdoor spaces located to optimize sun and surveillance and generous areas of glazing to optimize daylighting.

4.7.1 Overall Expression including Streetscape

a. Simple, contemporary building forms combined with primary roof shapes with minimum 2 ft/ 0.6 m deep overhangs are strongly encouraged.
b. Third floor areas are encouraged to be integrated into the roof form.
c. Dormers are encouraged where they are clearly secondary to the primary form, where the highest point on the dormer is lower than the primary ridge height and the combined dormer width does not exceed 50% of the width of the upper storey.
d. End units in street facing or courtyard developments or corner units adjacent to the street, should include design elements and materials that express the street elevation as the public face including bay windows, generous glazing and landscape design where orienting the front entrance to the street is not practical.
e. RH and TH developments should contribute to walkable and appealing streetscapes.
f. Neighbouring developments or large developments should provide architectural diversity to ensure a varied streetscape.
g. Section 4.4 of these Guidelines encourages a varied streetscape with increased setbacks for end units. This form of development respects existing single family neighbours and creates a streetscape with inherent variety.

examples of simple, contemporary building forms with front gardens and gates

4.7.2 Entrance Guidelines:

a. Entrances should be expressed in the overall form as a welcoming, sheltered design element. Consider incorporating wood into the entry design including doors and soffits. Wood timbers are strongly recommended.
b. Entrances should provide a transition between private space and public or semi-public adjacent spaces, provide a welcoming space including a raised front stoop to enhance privacy and weather protection.
c. Entrances should be oriented to the street.
d. Entrances are expected to incorporate a garden or landscaped area, garden gate and 4 ft / 1.2 m wide pathway connecting to the public sidewalk or common walkway.

examples of front entry sequence

4.7.3 Courtyard Guidelines:

a. Courtyard entry elements are recommended at the transition to the public realm to provide security, a location for mailboxes and to reinforce placemaking.
b. Courtyard spaces should optimize privacy between facing units and incorporate an entry sequence between the semi-public pathway and private unit entries including changes in level, layered landscaping, gates, garden walls and changes in materials.

example of courtyard entrance elements

4.7.4 Cladding Materials:

a. Masonry, lapped siding and/or other textured cladding materials are strongly encouraged, especially at the ground floor level.
b. Front or flanking street cladding materials should wrap around the building sides a minimum of 4 ft / 12. m to avoid a "wallpaper" effect.
c. Synthetic materials intended to mimic natural materials are not recommended. Cultured stone products are strongly discouraged.
d. A maximum of two cladding materials are recommended.
e. Changes in materials should incorporate appropriate trim and detailing and occur at significant changes in plane including floor level changes and step backs.

example of simple, proportional details and material use at unit entry

4.7.5 Privacy and Overlook:

a. Strategies to minimize overlook across the courtyard, including offsetting windows are encouraged.
b. The location of upper level windows, decks, balconies and stairs to upper levels should be located and/or screened to minimize overlook.
c. Decks and balconies should not be oriented to interior side yards.
d. Skylights, translucent eye level windows and clerestory windows (with sills above 5 ft 9 in / 1.75 m) are recommended to reduce overlook at interior side yards.

photo credit: stewart howard architects

example of courtyard development