Ground Oriented Residential Infill Guidelines

Design Checklist

Design Checklist	Compliance	Comments or Equivalencies
Siting and Building Design		
1) Reinforce the existing neighbourhood character by incorporating common patterns and elements of the surrounding neighbourhood into the design themes of the new development, through: i. Articulation of façade elements, such as porches, chimneys, projections, recesses, and balconies; ii. Placement, size, shape and number of doors and windows iii. Setbacks of existing housing; iv. Location and visual appearance of driveways, garages and/or parking facilities; v. Selection of appropriate and compatible roof forms, and; vi. Design of hard and soft landscaping.		
2) Development should face the street, through: i. Siting the main entrance to the street and direct pedestrian access to individual units, and; ii. Use appropriate exterior treatments and differentiated facades.		
3) Design pedestrian pathways, patios, retaining walls, lighting and fences to be detailed, functional, and where applicable, aligned with specific neighbourhood policies and context where outlined in Area Plans adopted by the City of Maple Ridge.		
4) Design developments on corner lots or double fronting lots with an equal level and quality of design in detailing on each street front.		

5) Design and site buildings to respond to existing site characteristics and take advantage of natural features (i.e. topography) or views and viewcorridors.		
6) Design to maximize privacy and minimize views onto adjoining sites, particularly for portions of the development abutting the side yards of adjacent single detached residential uses.		
Massing		
7) Design and orient residential units to appear as a 'single family house'. i. New development should respect character elements of the existing residential inventory if identified in an Area Plan. ii. Consider the form, massing and setbacks of the surrounding neighbourhood. iii. Where there is a difference in height of greater than one storey between new and existing development, sensitively transition to directly adjacent properties by stepping down the massing of the building. iv. Relate infill development to the front yard set-backs of the surrounding neighbourhood.		
8) Provide a thoughtful interface with adjacent properties through sensitive side yard setbacks.		
9) Provide variations in the roof forms and building facades to help reduce the visual length of individual buildings. For example, use of dormers, gables, and architectural detailing into the roof structure.		
10) Site and building design should mitigate for potential shadow casts and blocking of daylight on nearby properties.		

Unit Design		
11) Adjust massing and building forms to ensure a variety of unit sizes which may accommodate different family sizes, age-related abilities and affordability.		
12) Design residential units with enough width (minimum 7.5m) to include attractive entrances and windows between garage doors.		
13) Organize interior living spaces to ensure casual overlook of common courtyard space.		
14) Locate and size windows to maximize visual connections with the street, outdoor spaces and increase availability of natural light.		
15) Provide adequate storage space in all residential units		
Entrances		
16) Entrances should: i. Include clear pedestrian access routes to the entrance of each unit from the street that does not cut through the private space of another unit; ii. Each unit is addressed with large numbers visible from the street. Directional signage may be required, depending on number of units; iii. Provide weather protection and adequate exterior lighting, and; iv. Encourage overlook of semi-private and public spaces.		
Decks / Porch / Balcony / Materials		
17) Create a strong relationship between the private and public realm by facing development to the street and locating windows, balconies and patios on to semi-private or public outdoor spaces.		

18) Where undersides of balconies and porches are visible from a street or public walkway, cover exposed areas with exterior finishes to provide a finished appearance to the public.		
19) Use high-quality exterior cladding materials, such as wood, stone, brick, concrete composite or other acceptable alternatives. Low quality vinyl is discouraged as an exterior cladding material, especially for front facing walls.		
20) Where possible, continue detailing in design and materials on the principal façade(s) to the side and rear elevations.		
Landscaping and Open Space		
21) Landscaping both within private, semi-private or common areas should: i. Provide definition for pedestrian corridors; ii. Delineate private and semi-private space from public or common space; iii. Provide adequate screening between private outdoor spaces; iv. Present a pleasing street image; v. Provide a suitable buffer between public road and privacy areas; vi. Soften the transition between adjacent land uses; vii. Create interesting views and focal points in and out of the site, and; viii. Reinforce design continuity with neighbouring properties, through use of plant materials and other landscaping elements, where appropriate.		
22) Maximize the amount of landscaped areas and minimize the amount of impervious paved surfaces to meet Tier A requirements as outlined in the City's Design Criteria Manual for on-site absorption of rainwater.		
23) Utilize permeable pavers and other green infrastructure.		

24) Minimize erosion potential by discouraging excessive changes to existing slopes, maintaining existing vegetation on slopes, and planting new and existing slopes with stabilizing vegetation.		
25) Where possible, retain existing mature trees through siting and design and ensure accordance with the City of Maple Ridge Tree Protection and Management Bylaw No. 7133-2015, as amended from time to time.		
26) Incorporate deciduous tree species into street front landscaping to define site boundaries, enhance public space, and to permit light penetration in winter. Refer to recommended tree species within the City of Maple Ridge Street Tree Species and Replacement list.		
27) Enhance existing vegetation with new planting whenever construction activity has destroyed vegetation.		
28) Use drought tolerant and/or native plant species, pollinator plants and "non-irritant"/allergy friendly species for landscaping.		
29) Incorporate rain gardens and vegetated swales into parking area landscaping to increase the natural absorption of rainwater runoff from paved areas into the ground, impervious liners and drainage will be required if located within an escarpment area.		
Courtyards		
30) A courtyard is intended to be a semi-private outdoor common space for use by all residents that: i. Is a focal organizing element of the development; ii. Is flexible space which integrates well between the site and building(s); iii. Be of a shape and size that permits a range of activities; iv. Provides for a variety of passive and active gathering opportunities, including		

programmable spaces; v. Defined through the use of plants, trees, and landscaping; vi. Have adequate natural light, and; vii. Not designed for parking.		
31) Where possible, design 'L' or 'U' shaped courtyards facing north-south to maximize solar gain.		
32) Facilitate neighbourly interactions by orientating private patios and entries around the courtyard.		
33) Activate the transition between private entrances, outdoor living spaces, and the courtyard with stoops, stairs, and porches where appropriate.		
34) Where principal unit entrances are not fronting a street, design entrances with an address, to face the courtyard and not an internal side setback.		
35) Use multi-functional elements to provide seating, screening and/or recreational opportunities in the courtyard such as: i. Communal gardens to provide residents with the opportunity to interact as well as grow food; ii. Amenities for pets, in particular for exercise and relief; iii. Opportunities for children to experience cognitive and imaginative play, as well as active play, and; iv. Seating for gathering and elderly or mobility challenged residents.		
36) Incorporate elements (railings, seating, etc.) that provide amenity and assistance to residents and that are of high quality and made of durable material to minimize maintenance.		
Fencing / Screening / Outdoor Lighting		
37) Ensure that the height and location of a landscape screen: i. Adequately protects privacy to adjacent properties;		

ii. Maintains driving site lines from adjacent roads, maneuvering aisles, parking lots, and; iii. Enhances the quality of the streetscape and outdoor living spaces.		
38) All screen and fence material should beattractive, durable and contribute to the quality of the residential landscape design.		
39) Define public and private space through the use of front and exterior side yard landscape screens or fences.		
40) Provide fencing in combination with landscaping.		
41) Avoid the use of chain link fences, in particular along street frontages.		
42) Provide adequate lighting for all entrances and associated sheltering elements.		
43) Provide pedestrian level lighting along all pedestrian routes and open spaces.		
44) Design outdoor lighting to minimize light pollution and ensure lighting glare does not pose a nuisance to adjacent residences, pedestrians or motorists and/or visible from the public right-of-way or adjacent residential land.		
Address and Signage		
45) Where signage is used to indicate a name of the complex (a courtyard development), it must conform to the Maple Ridge Sign Bylaw No. 4653-1992, as amended from time to time. In the event of a conflict between the Maple Ridge Sign Bylaw and these guidelines, the Bylaw shall take precedent.		
46) Integrate and complement the address and/or signage design and materials to the scale and architectural detail of the building(s). With this, each unit address should be clearly identified and lit.		

47) Ensure the address and signage (if a courtyard development) is visible from the street and clearly outlines unit location without being visually obtrusive yet accessible to emergency and other services.		
Vehicle Access, Parking and Circulation		
48) Locate parking and servicing in the building, or to the rear of the site with access from a lane, or flanking street for corner lots. Where a parking garage fronts a street, recess the parking from the front façade of the building and not protrude beyond the front entrance of a unit.		
49) Provide architecturally compatible and adequately screened attached and detached parking structures.		
50) Reduce the visual impact of parking and parked cars. i. Design parking areas to be no greater than half the width of the full front façade of the building. ii. Minimize the visual width of the driveway through the use of landscaping strips, trees, building edges, pedestrian pathways adjacent to the parking area, and use of pavement treatment. iii. Enhance the appearance of garage doors by using quality materials and details that work with the rest of the development. iv. Where cantilevered car ports are installed, ensure posts are set back and foundation reinforced. v. Pair one driveway for two units instead of one driveway each.		
51) Minimize impervious materials for surface parking and design to provide additional outdoor flex space when not used by cars through permeable pavement or alternative surface treatments.		

52) Conform road grades, streets, lanes and driveways to the existing grades as closely as possible to ensure minimal disruption of slopes and vegetation.		
53) Parking plans must conform and align with the Maple Ridge Off-Street Parking and Loading Bylaw No. 4350 - 1990, as amended from time to time. In the event of a conflict between the Maple Ridge Off-Street Parking and Loading Bylaw and these guidelines, the bylaw shall take precedent.		
Refuse, Recycling and Service Areas		
54) Locate refuse, recycling and service areas to be: i. Inside each unit (garage) or common indoor service area; ii. Easily accessible to residents and service vehicles; iii. Incorporated into the overall design of the development, and; iv. Animal resistant. For convenience and efficient use of space, two residential units may have a shared or combined space. Recycling and solid waste must be in accordance with Maple Ridge Solid Waste and Recycling Regulation Bylaw No. 6800-2011, as amended from time to time.		
55) Provide a structure designed to be compatible with the architecture of the building and screen from public view, all garbage, recycling or other waste containers when waiting for pick-up to avoid containers being left on the street and that allows for adequate maneuvering space for refuse removal vehicles.		
56) Locate ancillary devices, such as building ventilation systems to minimize noise, exhaust nuisances or setting off carbon dioxide detectors.		

57) Install one set of service connections for multiple units (i.e. one water meter) to maximize efficiency and minimize visual impacts of services.		
Energy Efficiency and Conservation		
58) Design energy efficient landscapes. This can be accomplished through:i. Use of native and/or drought-resistantspecies;ii. Design the landscape to moderate the effect of wind;iii. Locate deciduous trees on the south sideof buildings to provide shade and minimizeunwanted heat gain during summer and toprovide solar access and passive solar gainduring winter;iv. Allow natural draining to occur throughout the site;v. Allow daylight into the buildings, and;vi. Redirect water from rooftop runoff anddownspouts into vegetated areas or rainbarrels for later irrigation use.		
59) Consider microclimate conditions created by surrounding existing and planned buildings for the selection and placement of trees and other plant material.		
60) Use energy efficient heating, air conditioning and ventilation systems.		
61) Utilize energy efficient light fixtures, such as LED or solar powered lights, and avoid unnecessary use by incorporating timers, photo sensors or motion detectors.		
62) Reduce building energy consumption through the use of alternative energy sources and of high quality durable materials with a long lifespan, where possible.		
63) Solar energy devices are encouraged. In Residential and Commercial zones, solar energy devices shall be permitted provided that: i. the device shall be attached to either a principal or accessory building; ii. the device shall not extend above the ridgeline of the roof, and;		

iii. the device shall not extend beyond the outermost edge of the roof.		
Safety & Hazards		
64) Design developments to maximize opportunities for natural surveillance, allowing people to easily view what is happening around them during thecourse of everyday activities.		
65) Incorporate Crime Prevention through Environmental Design principles into the design with convenient, safe, identifiable and universally accessible access routes to building entrances.		
66) Design buildings to minimize the visual impacts of elevation due to flood construction level (FCL) requirements within a floodplain, such as landscaping to transition grade changes, use of retaining walls, terracing and rockeries, raised courtyards, porches, etc.		
Accessible Design		
67) Include developments with units that have barrier-free access or can be easily adapted to support universal accessibility1, and include consideration for the design of common open areas, sidewalks and pathways (wide enough for wheelchairs and scooters), slope, step riser heights, grade changes and appropriately located curb cuts/curb let-downs.		
68) Utilize best practices for universal design and design layouts for identified accessible units (i.e. layouts with a Master Bedroom on the same floor as the Main Living area, and one-level units in conjunction with split level units).		

69) Consider interior details and finishes (e.g. door hardware, flush thresholds, wider doorways, lever door handles, coloured entry doors, an accessible washroom on the main floor, heights of light switches, electrical outlets and fixtures and non-slip flooring throughout).		
70) Consider exterior details and finishes, including zero step entry, adequate lighting, signage, non-slip paving, and accessible parking stalls to accompany identified units.		
71) Design that allows for low-maintenance building and landscaping materials associated with accessible units or units targeted to those with accessibility challenges.		
Noise and Vibration		
72) Design and construct buildings to maximize sound attenuation between units, between public roads and units, and between adjacent land uses and units.		
73) Consider noise abatement and vibration mitigation measures for all new building construction within 50 meters of the railway corridor. i. Assess the level and impact of noise and vibration on a development site by a qualified acoustics and vibration consultant through the preparation of a noise and vibration impact study, undertaken early in the process. ii. Assess the impact of all noise and vibrational sources affecting the development site and provide recommendations for noise abatement and vibration mitigation for the site.		