City of Campbell River

Sustainable Official Community Plan

Development Permit Areas: Part V

Schedule "B" to Bylaw No. 3475, 2012

Table of Contents

Schedule B: Development Permit Areas

Development Permit Areas (DPAs): Designation, Justification, Guidelines and Exemptions

Purpose of Designation of DPAs

Section488 (1) of the *Local Government Act* permits a local government to designate development permit areas (DPAs) for the purpose of:

a. Protection of the natural environment, its ecosystems and biological diversity;
b. Protection of development from hazardous conditions;
c. Protection of farming;
d. Revitalization of an area in which a commercial use is permitted;
e. Establishment of objectives for the form and character of intensive residential development;
f. Establishment of objectives for the form and character of commercial, industrial or multifamily residential development;
g. In relation to an area in a resort region, establishment of objectives for the form and character of development in the resort region;
h. Establishment of objectives to promote energy conservation;
i. Establishment of objectives to promote water conservation;
j. Establishment of objectives to promote the reduction of greenhouse gas emissions.

The Official Community Plan outlines objectives that justify designation of a DPA and specifies guidelines for how these objectives must be addressed.

Campbell River DPAs

The City of Campbell River has designated the following DPAs:

a) Form, Character & Performance Development Permit Area;
b) Community Energy & Emissions Development Permit Area;
c) General Environmental Protection Development Permit Area;
d) Bald Eagle and Great Blue Heron Nest Tree Development Permit Area;
e) Streamside Protection Development Permit Area;
f) Estuary Development Permit Area;
g) Foreshore Development Permit Area;
h) Watershed Development Permit Area;
i) Hazard Conditions Development Permit Area;
j) Interface Fire Hazard Development Permit Area.

Exemptions and Variances

Exemptions

Under the *Local Government Act*, some development within designated DPAs may be exempted from development permit requirements. Specific exemption criteria are listed in each set of DPA guidelines.

Development Variance Permit

Under Section 498 of the *Local Government Act*, Council may, by resolution, issue development permits that vary the City of Campbell River's *Zoning Bylaw* or any other bylaw established under the *Act* (Division 7, Development Permits; or Division 11, Subdivision and Development Requirements).

Council will consider issuing development permits for variances that:

a) Facilitate conformance with the applicable guidelines; and
b) Better achieve an objective or policy stated in the *Official Community Plan*.

A development variance permit pursuant to Section 498 of the *Local Government Act* is required where the proposed variance does not meet one or more of the above noted criteria.

1 Definitions

Environmentally Sensitive Area (ESA):

An ESA is any parcel of land, under public or private control, that provides, contains, or includes productive, rare or sensitive habitat or species, ecosystems or landforms. These designated areas are sensitive to disturbance by human activity and they require special treatment in order to protect their value. Environmentally sensitive areas in Campbell River include the following:

1) Bald Eagle Nest Trees and Great Blue Heron Nest Trees.
2) Sensitive Ecosystem Inventory sites: rare woodlands; older forests; older second growth forests; seasonally flooded agricultural fields; terrestrial herbaceous; coastal bluff; sparsely vegetated; and wetland ecosystems.
3) Watersheds, watercourses and their associated aquatic habitats
4) Estuaries and the ocean foreshore

Ditch:

Means the same as defined under the *Riparian Areas Regulation.*

High Water Mark:

Means High High Water Level Large Tide (HHWL) as determined by standardized chart datum for Campbell River.

Qualified Environmental Professional (QEP):

Means an applied scientist or technologist, acting alone or together with another qualified environmental professional, if:

1) the individual is registered and in good standing in British Columbia with an appropriate professional organization constituted under an Act, acting under the association's code of ethics and subject to disciplinary action by that association;

2) the individual is acting within that individual's area of expertise; and

3) the individual is acceptable to the City of Campbell River.

With respect to item 2), above:

a) For Streamside Development Permit Areas: the individual's area of expertise is recognized in the *Riparian Areas Regulation* assessment methods as one that is acceptable for the purpose of providing all or part of an assessment report in respect of that development proposal;

b) For Campbell River Estuary and Foreshore Development Permit Areas, coastal and shoreline erosion aspects: a coastal geomorphologist, or a marine or met-ocean engineer with experience in coastal zone engineering; other professionals with experience in coastal processes and soft shore restorations may be considered on a case by case basis.

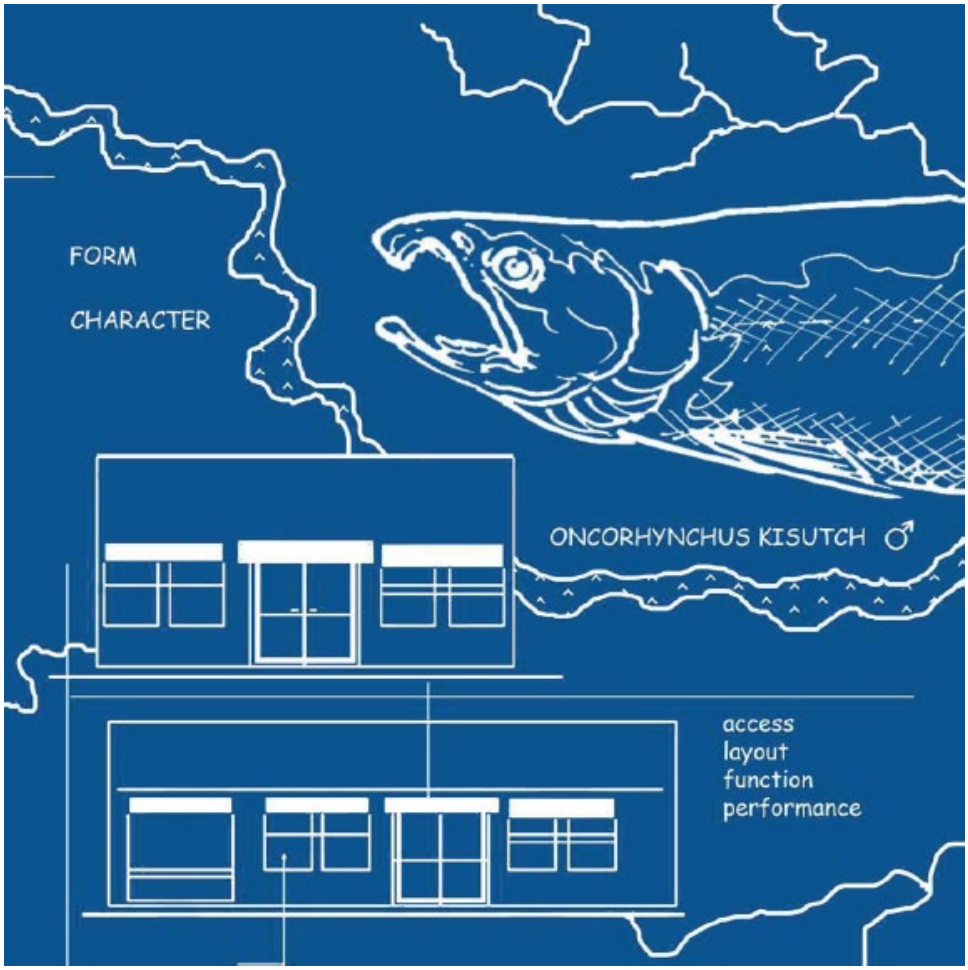
c) For Hazard Lands Assessments: a professional engineer with experience in geotechnical and slope stability engineering, or in flood protection design as the project may warrant.

d) For Bald Eagle Nest Tree Development Permit Areas: a professional with experience in raptor assessments.

Stream:

Means the same as defined under the *Riparian Areas Regulation*.

2 General Form, Character & Performance Development Permit Area



Area Designation

In accordance with the provisions of Sections 488 (1) (e) (f), (i) of the *Local Government Act*, all lands within the boundaries of City of Campbell River shown on "Map 1 – Overview Map" are designated development permit areas for intensive residential, multi-family, commercial and industrial development.

Intensive residential developments include mobile home parks and subdivisions of three (3) or more residential lots with an average lot size less than 450 square metres.

Unless otherwise exempted under the Exemptions section below, land in the designated areas must not be subdivided and construction of, addition to or alteration of a building or other structure must not be started unless the owner first obtains a development permit in accordance with the associated development permit guidelines contained herein.

Justification

The City designates a Development Permit Area to establish design guidelines where it is considered necessary to achieve community objectives that advance the City's goals and objectives outlined within the SOCP and as permitted under the *Local Government Act*. The objective of this Development Permit Area designation is to ensure multi-family, commercial and industrial development is aligned with the SOCP in the following ways:

a) Maintain a form and character complementary to the objectives of the SOCP;

b) Provide for efficient circulation of all modes of transport;

c) Ensure the design respects the locational context (i.e. responds to neighbourhood character through preserving views, landscaping, safety, etc.);

d) Reduce energy use in and greenhouse gas emissions from buildings;

e) Moderate urban water demand in the City so that adequate water supply is reserved for agriculture, natural ecosystem processes and to reduce demand on existing infrastructure;

f) Reduce outdoor water use in landscaped areas; and

g) Reduce waste stream to the landfill to assist in reducing greenhouse gas emissions.

Exemptions

The following are exempt from the development permit application approval process:

- Interior renovations.

- The City will assess minor façade changes that propose colour, material or other façade changes that are consistent with the colour, and applicable additional architectural guidelines addressing materials, colour and façade articulation through an expedited review process.

- Minor renovations, meaning that less than 55 square metres (592 square feet) gross floor area are added to the building or constructed as a new detached building, and the changes are either:
    - consistent with the existing building, having no substantial changes in materials, colours, or façade articulation; or

    - consistent with the development permit guidelines for "Form and Character Considerations", "Colour", and applicable "Additional Architectural Guidelines" addressing materials, colour, and façade articulation.

- Temporary buildings or structures that are erected for offices, construction, or marketing purposes for a period that does not exceed the duration of construction.

- All murals must receive a permit through the Sign Bylaw review process. As part of this process, mural design will be reviewed by the City's Public Art Committee and approved by Council.

- Projects without an automatic irrigation system, or where the sum of all new or renovated irrigation areas does not exceed 100 square metres in area, are exempt from the Water Conservation Guidelines.

Guidelines

Respond to Existing Site Conditions & Views

1) Minimize site disturbance and design sites to incorporate and enhance riparian zones, sensitive ecosystems, watercourses and/or mature stands of trees.

2) Siting, massing and exterior finish of buildings within a development shall be sensitive to topography, and complementary to adjacent development.

3) At points where primary views from within the development terminate, locate prominent landscape and architectural features to act as orientation landmarks or character elements.

4) All utility wires shall be installed underground and all utility equipment shall be screened and where possible not located within the front yard of a development to avoid negatively impacting the appearance or use of the pedestrian realm.

5) To improve the appearance of "entrances" into Campbell River while ensuring high visibility of businesses, projects located adjacent to the Highway 19 right of way shall address the following "gateway" guidelines:

   a) Reflect the local ecological character, e.g. estuary, by using materials and plants naturally occurring on or near the site;

   b) Reflect Campbell River's distinct historic characteristics through ornamental features (e.g. banners, flags, sculptures, art, fencing) and signage;

   c) Use substantial landscaping next to the highway right of way as a buffer to effectively screen parking lots and outdoor storage, including storage of vehicles.

   d) Screening may be complete, or intermittent, providing a balance of screened and visually permeable sections along the property.

   e) Landscaping should have a multistory structure, containing groundcover, shrubs, and trees.

   f) The width of the landscaping buffer along the right-of-way should be a minimum of 1.5 m.

   g) The screen should incorporate continuous vegetation at least 1.0 m high and/or fence along the highway right-of-way. Tall ornamental grasses or shrubs are acceptable. Fencing should not be chain link.

Form & Character Considerations

1) Design buildings to avoid blank walls that face a street or pedestrian pathway. Provide entrances and windows facing streets and pedestrian pathways wherever possible. Where solid walls are unavoidable, use building mass, variation of the facade, textured surfaces, architectural detailing, or graphics and colours to reduce the visual impact of any solid wall.

2) Locate building ventilation systems to avoid or minimize noise and exhaust in pedestrian areas, and outdoor spaces.

3) Provide facade treatments that are inviting to pedestrians and avoid "sterile" surfaces such as mirrored glass and blank walls. Avoid using materials on the ground floor that may impede visual connection between the interior of the building and the street.

4) Large facades should be divided into smaller elements to create an appearance of a series of smaller buildings or elements.

Rain & Sun Protection

1) Weather protection should be provided where common entries to buildings front a sidewalk or open space.

2) The building design program should ensure good daylighting to protected areas through their proportion of height to depths and special measures such as glass roof panels.

3) Canopies should be a minimum of 1.8m (5.9 ft.) clear deep and 2.7m (9 ft.) clear high.

Wind Protection

1) Development should seek to protect pedestrians in general and high activity pedestrian areas in particular, from the negative effects of the prevailing south easterly wind conditions.

2) Provide areas of calm and wind mitigating measures to enhance enjoyment of outdoor areas and to extend the seasonal duration of outdoor activities such as informal social gathering.

Colour

1) The fenestration and articulation of the building should define the buildings character and aesthetic. Colour should not be used as the predominant feature of a building.

2) During design of a building the colour palate should be selected to enhance, not detract from, the surrounding neighborhood.

3) Colours should be applied in large areas of uniform solid colour emphasizing simple geometric forms.

4) Contrasting colour trim is appropriate, but complex, multi-coloured, multi-material schemes are discouraged.

Signage

1) Signage that adds colour and character to the built form is encouraged. Preferred sign forms include projecting signs, wall painted super graphic signs, hanging board signs, signs suspended from canopies and banners.

2) Signage design should complement the background surface. Spot lighting is preferable to backlit signs or box signage.

3) Moving signs, flashing signs or scrolling text signs are not acceptable.

Entrances

1) Where appropriate, entrances should animate exterior public streets and reinforce a scale and rhythm to the street complementary to pedestrian activities, street tree planting and landscaping.

Roofs

1) Roofscapes should be punctuated by special features that enhance the skyline.

2) Roof-top mechanical equipment shall be concealed either within their upper floors or within structures, consistent in form, material, and detailing with the building.

3) Roofs typically should be either sloped (20° minimum) or developed as usable, landscaped open space such roof-decks or roof-top gardens.

Corner Sites

1) Corner sites should be designed to bring visual prominence to the corner and to provide an edge to the intersection.

2) Buildings are encouraged to be located at or close to the corner, wherever possible, to provide a built-form definition to the street.

3) When buildings are not located at the corner, the building(s) should define the open space which is part of the corner and a landscaped area with special features appropriate to the context e.g. flag poles, ornamental trees, seating area, "decorative" paving, architectural structures such as pergolas, etc., should be provided.

4) Consider orienting building components, such as main lobbies, principal entrances, entrance plazas, active interior spaces, and windows or glazing, towards the corner.

Siting, Massing & Orientation

1) Orient buildings towards streets and where possible, frame streets and open spaces to create a sense of enclosure and street vitality and safety.

2) Orient all entrances to a public street and where applicable, position windows, patios and balconies to be clearly visible from the street and overlook public sidewalks and open spaces.

3) Setbacks can be varied where:

    a) A change would improve the relationship between a building and an access route or public road;

    b) A change would improve or reduce the impact of development on surrounding lands, avoid sensitive ecosystems or would result in the preservation of public views or mature trees on site;

    c) The setbacks of existing buildings on either side of the development site have differing setbacks from the street, and it would resolve the difference through the design of the new building, unless the neighbouring buildings are likely to be redeveloped in which case optimal setbacks might be achieved; or

    d) A landscaped or natural leave (retention) area provides additional visual relief for residential uses located at grade along a high traffic corridor.

4) Locate and design entrances to create building identity and to distinguish between individual ground floor units and/or commercial and residential entrances (in mixed use buildings). Alcoves, varied doorway materials and varied compatible colours are encouraged.

5) Emphasize primary entrances with a high level of architectural detail and landscape treatments.

6) Building height variances will be considered where the variance serves to enhance the overall architectural design of a building without negatively impacting key view corridors, sightlines or the pedestrian realm.

Access, Circulation & Parking

1) Developments shall require design of access points to provide for safe access and egress of vehicles and pedestrians, including consideration of minimizing conflicts with pedestrian traffic.

2) Direct access to arterial roads is generally discouraged, but may be permitted when other opportunities are limited and subject to proper review and design by a qualified traffic engineer.

3) Safe, convenient, well-lit, attractively finished and efficient vehicular and pedestrian circulation, internal to a development, should be provided, to ensure adequate access for emergency vehicles, definable separation of parking and walkways from loading and service areas and to provide pedestrian connection to other public walkways and neighbouring sites, where relevant.

4) Variances to parking requirements (providing adequate visitor parking is included for residential developments), may be considered on a site-specific basis where it can be demonstrated that it serves to enhance the overall functionality and character of a development proposal without adversely impacting on neighbouring properties.

5) Organize drop-off areas and parking or service entries at the side and rear of development sites and provide through lobbies with access to the street. Provide access to parking and convenient access to building entries.

6) Developments will use shared service areas where possible within development blocks, including public and private lanes, main aisle driveways, parking areas and service courts.

7) Provide pedestrian connections from existing sidewalks or trails through the development, where applicable.

8) Developments should be designed for ease of movement and consider principles of universal design. Visual, tactile and acoustic elements and barrier-free changes in grade and road crossings should be considered in all aspects of design.

9) Connect and integrate buildings with pedestrian-oriented open spaces such as narrowly-spaced streets, courtyards, gardens, patios, and other landscaped areas. Connect all usable open space with public walkways. The walkway system should incorporate landscaping with trees and benches, overhead weather protection and distinct paving where appropriate. It should also be wide enough for wheelchairs / scooters.

10) Provide public streetscape amenities including benches, planters, garbage receptacles, bike racks, public telephones, and bus shelters with a high quality of design.

11) Parking lots should be partitioned into areas no larger than 0.25ha (0.6 ac.). Parking areas must include several substantive landscape islands, berms, shrubs beds, low walls and decorative fences to break the expanse of parking. Parking lots should be landscaped for comfort, safety and visual interest and to minimize heat gain caused by large contiguous paved surfaces. Rain gardens, bio-swales, and permeable materials are strongly encouraged to absorb storm water and reduce irrigation needs.

12) Development should minimize the visual impact of parking lots and attempt to improve the impact of existing lots.

13) Where surface parking is provided, it should typically be situated to the rear of buildings and screened from public streets.

14) Where provided behind buildings, it should be screened from adjacent properties with a minimum of 2m (6.6 ft.) wide x 1.5m (4.9 ft.) high landscape planting or trellis strips. Trees should also be planted at a minimum ratio of one tree for every four parking stalls.

15) In cases where surface parking may be situated between a building and the adjacent public street:

- Provide a minimum of 1 tree for every 2 parking spaces situated on-site between the building setback line and the adjacent public street;
- Provide special paving and landscaping measures to further enhance the pedestrian movement.

16) Provide landscaping, decorative fencing (e.g. not chain link), and other appropriate treatments for surface parking lots to improve the appearance of lots along public streets and contribute to the continuity of the street edge without compromising the safety and security of the public inside the lot and on public street.

17) Where pedestrians must cross service driveways or accesses to reach parking areas, crosswalks should be clearly designated by such means as pavement markings, decorative elements and signage.

18) Provide curb-cuts or curb let-downs in appropriate locations to facilitate convenient and direct access from the parking space(s) to the building(s) for people with disabilities. Pedestrian movement should be designed to avoid any obstruction by parked vehicles.

19) Minimize the surface area of blacktop parking by using alternate treatments and by complementing the asphalt with a variety of paving materials such as concrete, decorative pavers, etc.;

20) The use of shallow concrete gutters or swales with rolled edges between parking spaces and driving aisles as an alternative treatment for surface drainage is encouraged.

Bicycle Parking

1) Bicycle parking should provide 0.27 spaces per each 100m² (1,076.4 ft²) of gross leasable area;

2) Bicycle racks:

- should be located within 15m (49.2 ft.) of a building entry;
- shall be situated in well-lit locations, clearly visible from building entries and/ or public roads;
- shall be made of sturdy, theft-resistant material, securely anchored to the ground;
- shall be designed to support the bicycle frame, not the wheels, and allow both the frame and the front wheel to be locked to the rack with a U-style lock.

Defensible Space

1) Design symbolic barriers through building siting and design; landscape, e.g. changes in paving, vegetation, or grade; and/or architectural features, e.g. low wall, bollards, raised planters, rather than by continuous solid fences or walls.

2) Design spaces within the development that encourage people to congregate by including such features as seating.

Surveillance

1) Provide natural "surveillance" opportunities, allowing people to easily view their surroundings during the course of everyday activities.

2) Design landscapes and circulation routes to permit clear, unobstructed views of surrounding areas.

3) Encourage "eyes on the street" with windows, doors and activity generators such as seating.

4) Ensure that windows and doors remain visible from the street and cannot be hidden by landscape elements.

Lighting

1) Provide effective/ architectural exterior lighting of buildings, open spaces, parking areas and pedestrian circulation routes for the purpose of discouraging crime and accenting architectural features or detailing.

2) Lighting should be located and designed to ensure that all areas are well lit - avoid glare, light spill and reduce shadows.

3) Lighting along pedestrian pathways should be at a scale appropriate for pedestrians while providing optimum visibility.

4) Illuminate entry points and set light levels to provide for a comfortable transition between neighbouring locations.

5) Provide vandal-resistant light fixtures that are easy to maintain and operate.

Refuse, Recycling, & Services Areas

1) Refuse/recycling areas, shipping, loading or utility areas, satellite dishes and other similar structures, such as outdoor vents, mechanical equipment, or transformers should be located out of view from streets.

2) Refuse and recycling bins must be easily accessible, contained within roofed/walled enclosures and screened from public view.

3) The design of the enclosure of outdoor refuse/recycling areas and the screening of other areas should be coordinated with the overall design of the development.

Universal Design

1) All parking spaces allocated for people with disabilities should be located as close as possible to the main entrance to a building.

2) Ensure that access for the mobility impaired (including people with baby strollers) is provided with a minimum clear width of 1.5m (4.9 ft.) to primary access points, the major portion of any open space and any use that may be present on or adjacent to open space.

3) All pedestrian routes will be fully accessible to the disabled community. Pedestrian pathways should also include, wherever possible, a linear textured band of roughened surface for the visually impaired to follow. The band should be appropriately located towards the middle of a pathway and should be designed to avoid potential conflicts with seating areas or plant materials at edges of walkways.

4) Walkways should have a maximum slope of 1:20 and minimum width of 1.2m (4 ft.).

5) Site design should integrate features that accommodate persons of varying ability levels.

6) Seating in public areas should include backrests. A minimum seat depth of 40cm (15.7 in.) should be provided without backrests, or minimum seat depth of 35cm (13.8 in.) where backrests at least 30cm (11.8 in.) high are provided.

General Landscaping

1) Provide on-site furnishings and landscape treatment to enhance the quality and experience of the pedestrian realm.

2) Landscaping should be provided to improve the general aesthetic character of development projects and that maximizes privacy for residential units.

3) Provide screening through landscaping for parking areas adjacent to road frontages and for electrical kiosks and mechanical equipment on private lands in view from public walkways.

Landscape Water Conservation

1) Maximize the percentage of landscape area that is unirrigated/unwatered area, commensurate with landscape aesthetics and plant survival - e.g. using pervious paving, unplanted stone or organic mulch, pervious deck (strive for a minimum of 25% of the total landscape area).

2) Maximize retention or replanting of vegetation with low water-use requirements after the establishment period e.g. existing native vegetation to remain with complementary native plant species (strive for a minimum of 25% of the total landscape area).

3) Minimize mown turf areas that are high water use areas (strive for a maximum of 25% - 50% of total landscape area, with lower percentages preferable) – substitute with areas of lower water use treatments.

4) Provide mulch cover to shrub and groundcover areas, to reduce evaporation from soil.

5) For multi-family, commercial and institutional developments only: Landscape installation standards including growing medium depth and quality shall meet the requirements of the BC Landscape Standard (Latest Edition) and/or the Master Municipal Construction Document (Platinum Edition). In cases of conflict the BC Landscape Standard shall prevail. Notes on the plans or a growing medium report shall indicate proposed growing medium depth and amendments, and shall refer to appropriate sections of the above reference documents, or the qualified professional shall supply a custom specification of similar detail.

6) For multi-family, commercial and institutional developments only: Include the following written declarations signed by a licensed Landscape Architect qualified by the British Columbia Society of Landscape Architects (BCSLA):

    a) At the time of application: "*This landscape plan has been prepared in accordance with the Development Permit Area Design Guidelines of the City of Campbell River for landscape development and irrigation water conservation*".

    b) At the time of substantial performance of the construction: "*This landscape installation complies substantially with the approved Development Permit for landscape, irrigation and water conservation plans, specifications and reports*."

Irrigation System Guidelines

1) If irrigation is to be installed, a Qualified Professional shall prepare an Irrigation Plan and supervise installation. The irrigation plan shall utilize water conservation principles in the layout, design, operation and maintenance of the system.

2) Use of reclaimed or recycled water or rainwater capture from roofs or rain barrels for outdoor water use as a substitute for use of potable water is encouraged.

3) If irrigating slopes greater than 30%, irrigation design shall be prepared in coordination with a qualified geotechnical engineer.

Solid Waste Management

1) New multifamily units, strata facilities, commercial, industrial and institutional buildings must provide onsite waste stream collection and separation facilities by:

    a) Incorporating full recycling options for the completed development (e.g., mixed recycling, and when feasible composting), as well as garbage collection.

    b) Designing adequately for on-site waste diversion, and locating units for convenient use at grade level (e.g. not in a basement), and in an area that does not negatively impact public access, corridors or parking areas.

    c) Making areas for recycling collection, composting and waste disposal sufficiently large and planned so they have the capacity for expansion.

2) Facilities for solid waste collection and separation will be exempted from the overall permitted density.

3) A construction solid waste management plan that details how waste will be minimized and separated during demolition and construction is required for all multi-family, commercial and industrial developments.

4) For building design and construction as well as landscaping installations consider:

    a) Designing with deconstruction in mind to allow for material reuse when the building is at the end of its lifecycle.

    b) Using salvaged materials, both for buildings and landscape.

    c) Specifying materials that are recycled, reused, and renewable or contain recycled content, and minimal packaging.

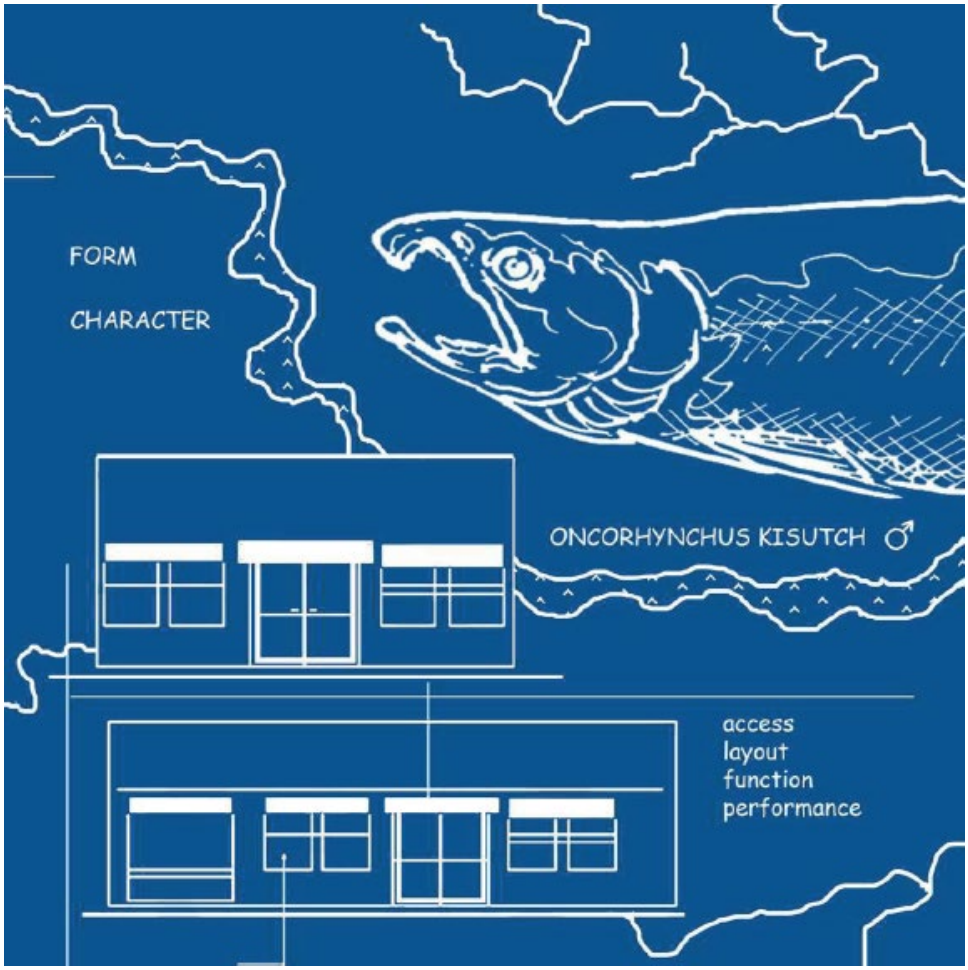
    d) Selecting locally sourced materials for building construction, site preparation and landscaping.

    e) Using products made from wood waste and other wood products.

    f) Designing structures to maximize the use of standard dimensioned materials in building design to reduce waste

3 Specific Form, Character, & Performance Development Permit Area

In addition to the above general development permit guidelines for **Multi-Family, Commercial & Mixed Use, and Industrial** developments within the City, additional guidelines are provided for specific circumstances.



Multi-Family Development Permit Guidelines

These guidelines apply to all multi-family developments.

ADDITIONAL ARCHITECTURAL GUIDELINES

1) Build semi-private or private amenity spaces such as porches or stoops at the front entrance for all ground and street-oriented housing; apartments, attached housing and detached housing.

2) Residential buildings should incorporate individual entrances to ground floor units accessible from the fronting public street.

ADDITIONAL SITING, MASSING & ORIENTATION GUIDELINES

1) Cluster development on the site such that there are varying numbers of units per townhouse block where townhouse blocks form three or more attached units.

2) Ensure articulation of building faces with features such as balconies, porticoes, bay windows, and changes in setback at upper storeys.

3) For small lot buildings, ensure designs achieve harmony among single-family homes in a neighbourhood by providing:

   - A balance of visual continuity with distinctive elements.
   - Enhanced visual interest, without juxtaposition in any one unit of more than one design theme.

4) Ensure a minimum area of private outdoor space per unit which is not less than 3 metres in width and not less than 10 m2 in area. Notwithstanding this guideline, not less than 5% of a lot, in a ground-oriented development, shall be developed as useable open space.

5) All dwelling units should be designed to maximize privacy, day lighting, ventilation, security and safety.

6) New housing projects are encouraged to provide adequate indoor or outdoor common amenity areas and/or facilities targeted to the intended occupants, including play areas, meeting rooms, storage facilities, etc.

7) Single aspect dwellings (dwelling units with exterior access on one side only) will face a good view, good sun, or ideally both, and are more suitable in developments with wide lot frontage and internal floor plans that allow adequate penetration of daylight.

8) Corner and dual aspect units (units with exterior access on two sides) are strongly encouraged to facilitate maximum daylight access and natural ventilation.

Additional Circulation, Access & Parking Guidelines

1) Where ever possible, create rear access for vehicles and leave front access for pedestrians only.

2) Ensure that on-site roadways provide safe and convenient access for emergency vehicles, moving vans and service vehicles.

3) Garage and ancillary units accessed via rear lanes, alley ways or mews are encouraged.

4) Shared or side-by-side driveways are encouraged.

5) Where possible, use high quality, permeable paving materials, or wheel strips for driveways on the site.

ADDITIONAL LANDSCAPING GUIDELINES

1) Landscaping should be provided to improve the general aesthetic character of development projects, and that maximizes privacy for residential units. Use of naturescape principles in landscape plans is encouraged. All landscaping shall be completed prior to the issuance of final approval of building permits, except where adequate security is offered in-lieu by applicants due to seasonal considerations.

2) Exterior private-use areas should be screened from common-use areas, adjacent dwellings, pedestrian circulation, vehicular access or parking areas.

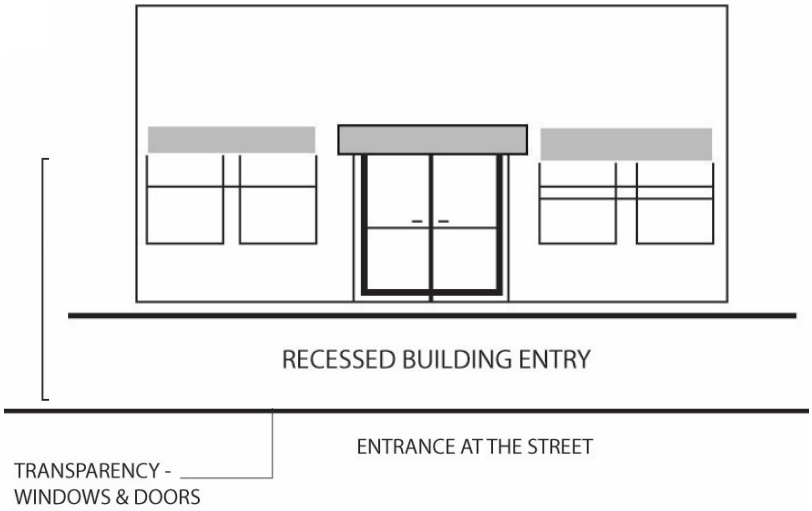
Commercial and Mixed-Use Development Permit Guidelines

These guidelines apply to all commercial and mixed-use developments in the following land use designations:

- Downtown
- Village Centre
- Neighbourhood

ADDITIONAL ARCHITECTURAL GUIDELINES

1) Shop fronts (including large floor plate commercial developments) shall be transparent to allow visibility of (private) uses from the (public) sidewalk and allow for casual surveillance from inside out (as shown in the diagram below).



2) Primary buildings shall recess entries (as shown in the diagram below) from the sidewalk or property line of 1.2m to provide for door swings, visual relief and weather protection with attractive facades, canopies and awnings on primary retail streets. Incorporate frequent entrances into commercial frontages facing the street with a maximum spacing dimension of 15m.

3) The design of buildings shall respond to specific surrounding site conditions (lot shape, location, unusual topography, significant vegetation, views and other natural features).

4) In mixed-use buildings, architecturally differentiate residential entrances from business entrances. On corner lots, locate residential entrances on the lower volume of the two streets

5) The use of articulated building facades is encouraged with variable cladding on walls without window, door or patio relief.

6) Commercial signage should be attractive, pedestrian-oriented and clearly identify uses and shops and building addresses, and be scaled to pedestrians rather than motorists:

- Spot lighting is preferred to backlit signs or box signage.
- Preferred signage types include: projecting signs, wall painted super graphic signs, hanging board signs, signs suspended from canopies and banners, blade signs, flush-mounted fascia signs, window signs, and sandwich boards.

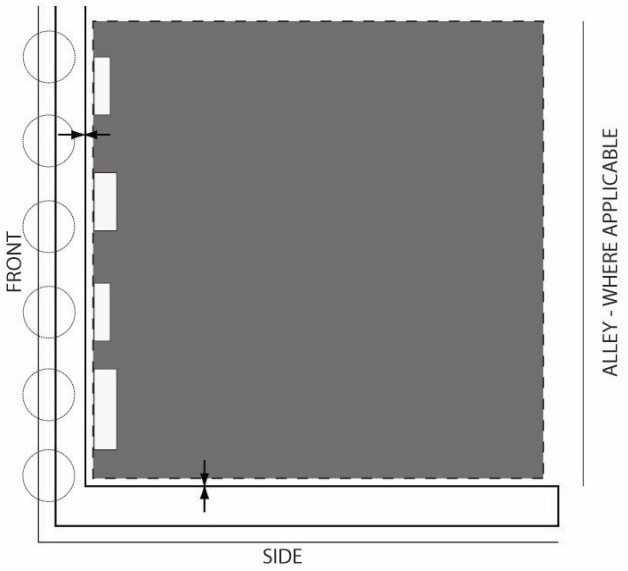
7) Commercial signage should be limited in number, location and size to reduce visual clutter and make individual signs easier to see:

- A maximum of 3 signs should be used in addition to any coordinated signage/podium for a shared lot.
- A minimum clearance of 2.3 metres should be maintained for signs projecting over the sidewalk or other public space.

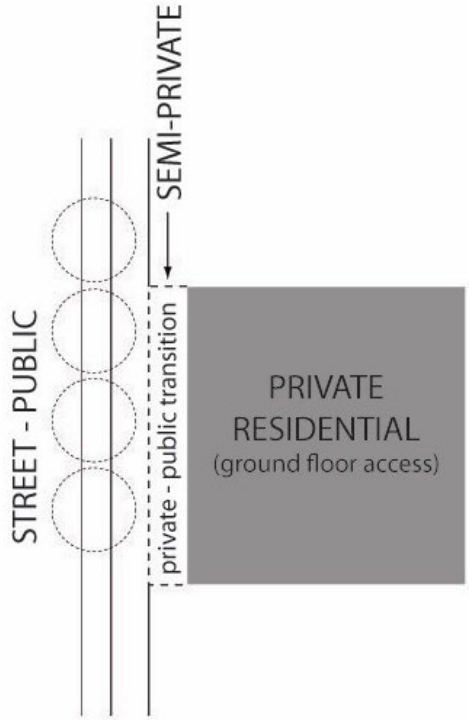
- Signage should not exceed 1.0 metres in height.

ADDITIONAL SITING, MASSING & ORIENTATION GUIDELINES

1) Primary commercial and mixed-use buildings shall be oriented to the public street front and placed within the shaded area (as shown in the diagram below), unless specified otherwise by a permitted Building Type. An increased set back may be considered where a pedestrian courtyard or other features benefiting pedestrian character are provided, or to respond to the building set back from an existing adjacent property.



2) Provide a residential front setback of 3m to create a semi-private entry and transition zone with or without an elevated entryway or stoop (as shown in diagram below).



3) On corner sites, develop both street facing facades as front elevations with pronounced entrances oriented to the corner and/or primary streets.

4) Provide open space accessible to the public adjacent to pedestrian access along the waterfront, with provision for seating and shelter in a landscaped setting.

5) Stepped or alternating massing of buildings is encouraged to give character and avoid a "box-like" appearance.

ADDITIONAL CIRCULATION, ACCESS & PARKING GUIDELINES

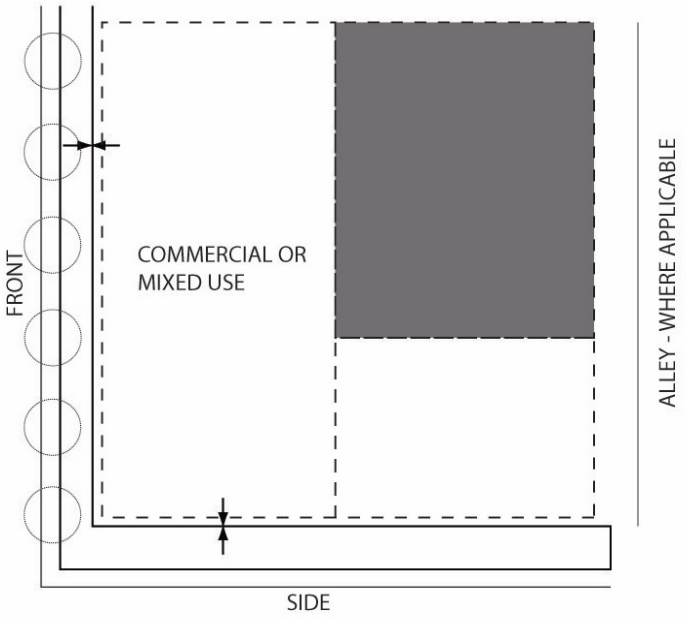
1) Buildings shall provide pedestrian access to storefronts and businesses from the adjacent public street or rear parking area and orient upper story windows and balconies to overlook adjoining public open spaces and capture views.

2) Off-street parking and services are permitted only in the shaded area (as shown in the diagram below), unless subterranean (rear of the building with parking access from the lane or side street).

Parking Structures

1) Multi-level parking structures should not front public streets at grade.

2) Where possible, all garage structures and parking should be located to the rear or beneath buildings, with vehicular access via narrow driveways.



3) In the case of above-grade parking, provide non-parking uses or special facade treatments along street frontages to enhance the building's appearance, animation, and character. On non-street-fronting facades, walls of parking structures should be concealed with sloped, landscaped berms and massed landscaping.

4) Rooftop parking structures should be treated to reduce the visual impact as seen from above. For example, they may be landscaped with trees and overhead planting.

5) Unfinished ceilings, lights, pipes, etc. should not be visible from a public street or sidewalk.

6) Interior site lighting levels (natural or artificial) should be inviting and not radiate a glare or unduly distort environmental qualities.

7) Pedestrian routes within and to/from parking facilities must be clearly delineated, logical in terms of directness.

8) In a situation with little or no surface parking, the ground-level parking areas in a parking structure should have sufficient height clearance to accommodate most light trucks and passenger vans.

9) Large expanses of blank concrete walls are discouraged and opportunities to introduce relevant treatment such as art reliefs is encouraged to create texture and visual interest in the pedestrian realm.

Additional Downtown Development Permit Guidelines

ADDITIONAL GUIDELINES

1) Maintain or replicate the character of the established retail area from the Shoppers Row/Pier Street precinct, with its maritime heritage orientation, into the design of building facades and signage.

2) Development at the waterfront should integrate artwork into a variety of public and private settings and display art to the public as they engage in the activities of the City.

3) Development at the waterfront edge is to provide public water access for active and passive purposes to the maximum extent possible.

ADDITIONAL DOWNTOWN PRECINCT SPECIFIC GUIDELINES

The following guidelines are Additional Downtown Guidelines that apply to the downtown Precincts as illustrated in the figure that follows.

Marine Precinct

1) Building design should seek to incorporate marine features reflective of the "working waterfront". This may include features such as asymmetric form and design, upper storey overhangs, external stairs, contrasting colours, and use of metal and wood finishes.

2) Incorporation of murals that reflect the character and history of the area into building frontages is encouraged.

3) Weather protection awnings and canopies should be incorporated to overhang the sidewalk where practical, and should form part of the architectural programming of the frontage. Internally-illuminated awnings are not acceptable.

Culture, Shopping & Finance Precinct

1) Weather protection awnings and canopies should be incorporated to overhang the sidewalk where practical, and should form part of the architectural programming of the frontage. Canvas awnings are not acceptable.

2) Signage and lighting should be designed in conjunction with each other to add interest and attractiveness to the street. Creative signage and lighting solutions are encouraged.

Civic Precinct

1) Building design should be uncluttered and feature extensive glazing in conjunction with use of natural building materials.
2) Signage should be small scale and subtle, or incorporated into the building architecture. Brightly-coloured signage should be avoided.

3) Spotlighting of buildings is preferred, incorporated within landscaped areas. Illumination of landscaping is also encouraged.

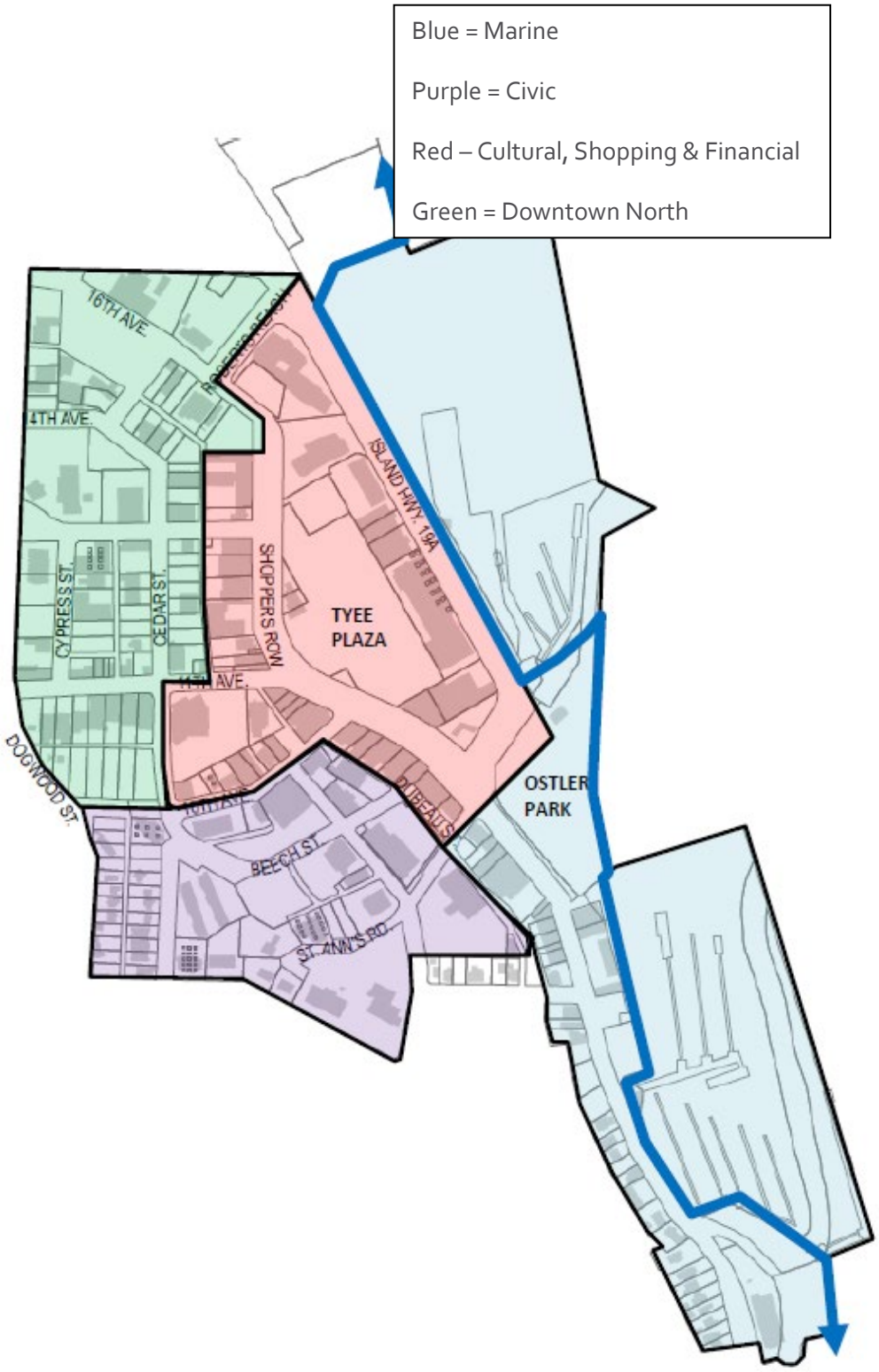
4) Landscaping must primarily use native species in a natural and informal configuration. Water and rock features are encouraged.

Downtown North Precinct

1) Architectural programming should consider opportunities for an industrially-flavoured design.

2) Taller building forms above six storeys may be appropriate but proposals must be accompanied by viewscape impact analysis, including consideration of views from the water.

Downtown Precincts



Additional Village Center Development Permit Guidelines

ADDITIONAL SITING, MASSING & ORIENTATION GUIDELINES

1) Stepped or alternating massing of buildings is encouraged to give character and avoid a "box-like" appearance.

ADDITIONAL CIRCULATION, ACCESS & PARKING GUIDELINES

2) Provide strong connections and linkages between walkways in Village Centres with pedestrian connections and greenways/trails in the residential and open space areas.

ADDITIONAL LANDSCAPING GUIDELINES

1) Provide landscape buffers and treed areas adjacent to South Dogwood Street and Jubilee Parkway.

2) Where covered parking is provided, design of the roof area should be complementary to the overall project design, including consistent roof pitch.

Industrial Development Permit Guidelines

MASSING & ORIENTATION

1) The siting, massing, shape, pattern, roof line and exterior finish of buildings should be sufficiently varied to provide visual interest.

ADDITIONAL CIRCULATION, ACCESS & PARKING GUIDELINES

1) Outdoor parking and loading areas relating to operations of the business should be located to the sides and rear of buildings where possible.

2) Screen parking areas with landscaping where they are visible from a front or flanking street.

ADDITIONAL LANDSCAPING GUIDELINES

1) Refuse and recycling areas shall be screened from surrounding roads.

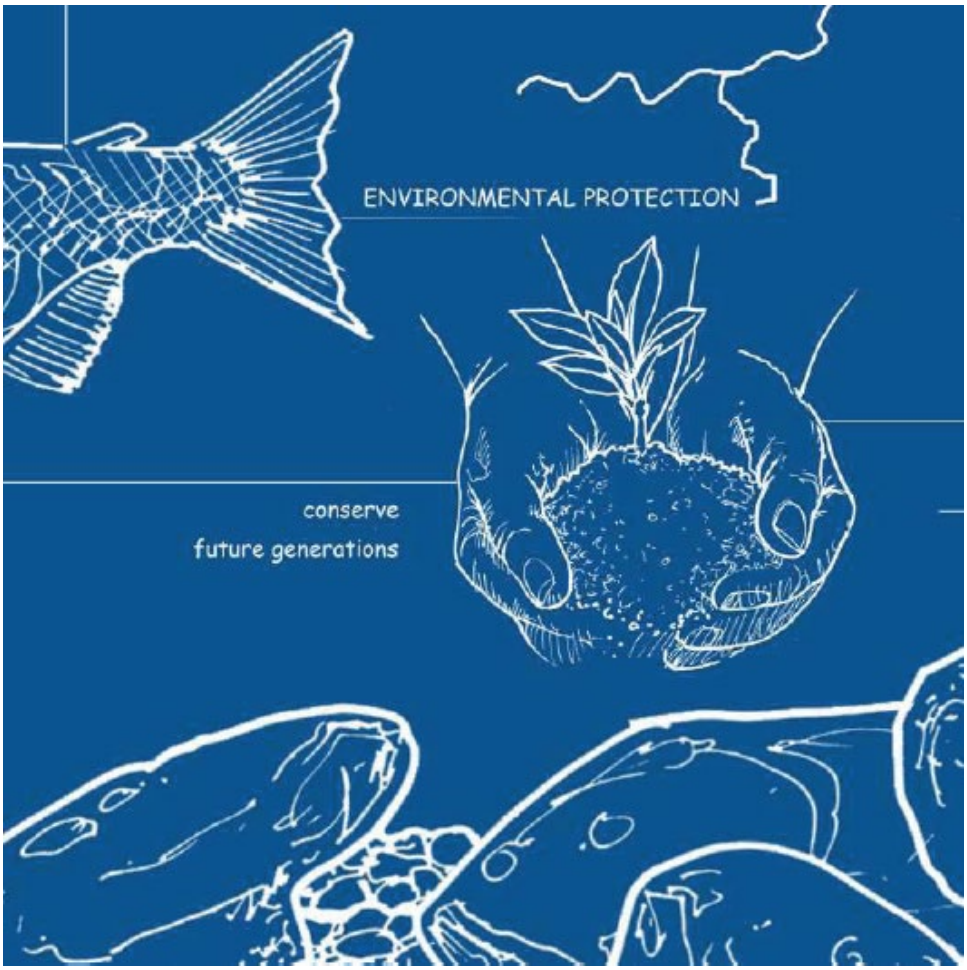
2) Outdoor storage of equipment or materials should be placed at the rear of the site to provide screening from surrounding roads and any visible residential areas.

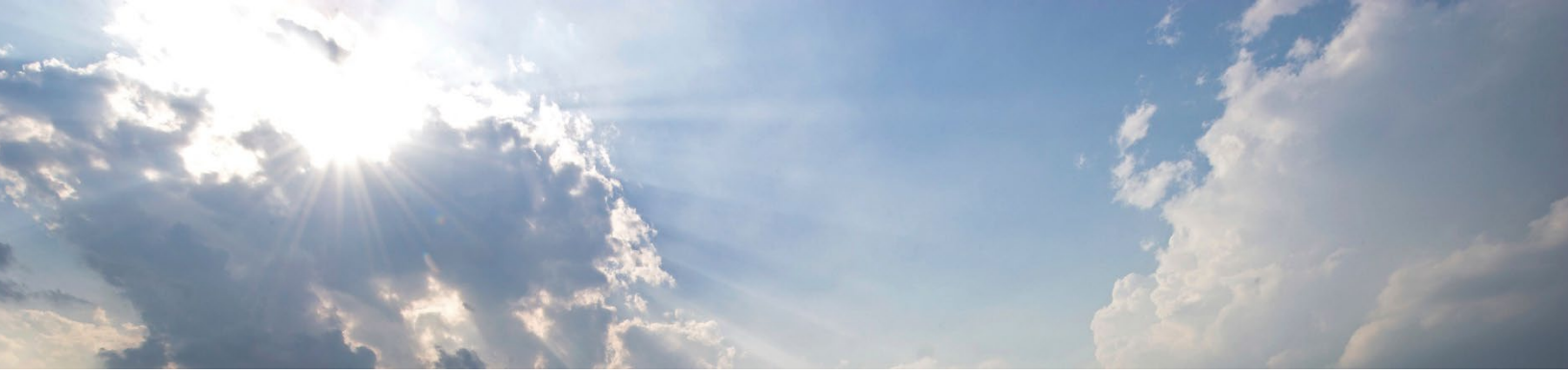
3) Landscaping shall be provided to enhance the appearance of buildings and screen other necessary features. Landscaping shall be provided along all property lines abutting perimeter roads. All areas not used for buildings, outdoor storage or parking shall be landscaped. Irrigation of landscaping should be installed where drought tolerant or xeriscapic landscaping is not provided.

4) Landscaping features and finishing details shall be provided in association with security chain link fencing to reduce the negative visual impact for that part of the fence visible from the street.

5) Signage should be incorporated into the building facades but shall not be permitted above the lowest roof eave or on the building roof. Only one freestanding sign shall be permitted on a site regardless of the number of tenants or businesses. A coordinated signage program shall be provided for all planned multi-tenant buildings.

4 Community Energy & Emissions Development Permit Area





Area Designation

All lands within the boundaries of City of Campbell River shown on "Map 1 – Overview Map" are designated as a Community Energy and Emissions Reduction Development Permit Area. All development applications that propose any commercial development, residential development of three or more dwelling units on one lot (including strata development proposals and Bare land strata development applications), intensive residential development, including mobile home parks, or subdivision of three or more residential lots are subject to the development permit approval.

Justification

Building, site and landscape design can assist in reducing energy use and water consumption. Additionally, requirements for on-site recycling and waste stream separation and diversion will result in a decrease in methane released from landfill and assist in reducing greenhouse gas emissions. The objective of this Development Permit Area designation is to ensure development is aligned with the SOCP by reducing energy use in and greenhouse gas emissions from buildings.

Exemptions

The following are exempt from the development permit application approval process:

- Interior renovations.
- The City will assess minor façade changes that propose colour, material or other façade changes that are consistent with the colour, and applicable additional architectural guidelines addressing materials, colour and façade articulation through an expedited review process.
- Minor renovations, meaning that less than 55 square metres (592 square feet) gross floor area are added to the building or constructed as a new detached building, and the changes are either
    - consistent with the existing building, having no substantial changes in materials, colours, or façade articulation; or
    - consistent with the development permit guidelines for "Form and Character Considerations", "Colour", and applicable "Additional Architectural Guidelines" addressing materials, colour, and façade articulation.
- Temporary buildings or structures that are erected for offices, construction, or marketing purposes for a period that does not exceed the duration of construction.
- Murals, provided that the mural design be reviewed by the City's Public Art Committee and approved by Council.

Guidelines

Passive Solar Design

Passive solar building design utilizes the building's architectural features and orientation to capture, store and distribute solar heat gain without the aid of additional mechanical or electrical systems, with the goal of reducing the amount of energy required to heat the building, while maintaining a comfortable indoor environment. The following guidelines pertain to passive solar design.

1) Consider penetration of sunlight in winter and shading of sun in summer (passive cooling/solar heating) in the design of landscape and buildings.

2) Ensure that new development to the degree possible, does not entirely block views and solar access of existing or anticipated development, and that shadowing impacts on adjacent buildings and open spaces are minimized by ensuring that adjacent buildings are not shading each other at noon on the winter solstice.

3) Subdivision design should demonstrate consideration of a southern orientation for the lotting pattern or within plus or minus 30 degrees of south to facilitate passive solar, along with the appropriate glazing and architectural design.

4) Building design for multifamily, commercial and industrial buildings should demonstrate consideration of southern orientation or within plus or minus 30 degrees of south to facilitate passive solar, along with the appropriate glazing and architectural design.

5) Developers should consider applying the following principles in solar passive design:

    a) Buildings should be oriented such that the largest wall area is facing south.

    b) Buildings should be designed to be compact in form, and should have a south facing wall length of approximately 1.3 to 1.5 times as long as the buildings average depth (on an east-west axis).

    c) South facing window area should maximized up to 8% of total living space floor area, or up to 15% if additional heat storage materials are added such as masonry walls, solid wood wall, or concrete floors. Heat storage materials should be located to be in direct contact with the incoming sunlight.

6) Design measures should be included to limit summer solar gain through south facing windows

7) Overhangs or solar shading devices (such as awnings) should be placed so that windows are completely unshaded at the winter solstice and between fully and half-shaded at noon on the summer solstice.

   a) On east and west aspects, consider using glazing systems that admit daylight while reducing heat gain, and consider limiting glazing area to only what is needed for adequate daylight and views.

8) On south aspects, glazing with high solar heat gain coefficients should be selected. On south aspects avoid heavily tinted or reflective glasses that reduce solar heat gain but also reduce daylight and exterior views and cause excessive glare.

9) On north aspects, glazing area should be minimized and highly insulated (low "U value") glazing should be selected.

10) Within subdivisions, north-south spacing between buildings and building geometry should be designed such that buildings are not shading each other at noon on the winter solstice.

11) Where possible, use exterior shading devices such as fixed awnings or retractable canopies that are adjustable according to season.

12) Where solar thermal and photovoltaic modules are used on buildings with a south orientation, solar energy collection can be optimized by ensuring roofs and the main axis of buildings are within 15 degrees of due south.

Energy Efficient Buildings

1) Building design that allows for natural ventilation is encouraged. This could include operable windows on at least two sides of the building to enable passive cooling through cross ventilation.

2) Building design that promotes daylight exposure for natural lighting is encouraged.

3) Energy efficient lighting for building interiors and exteriors is encouraged.

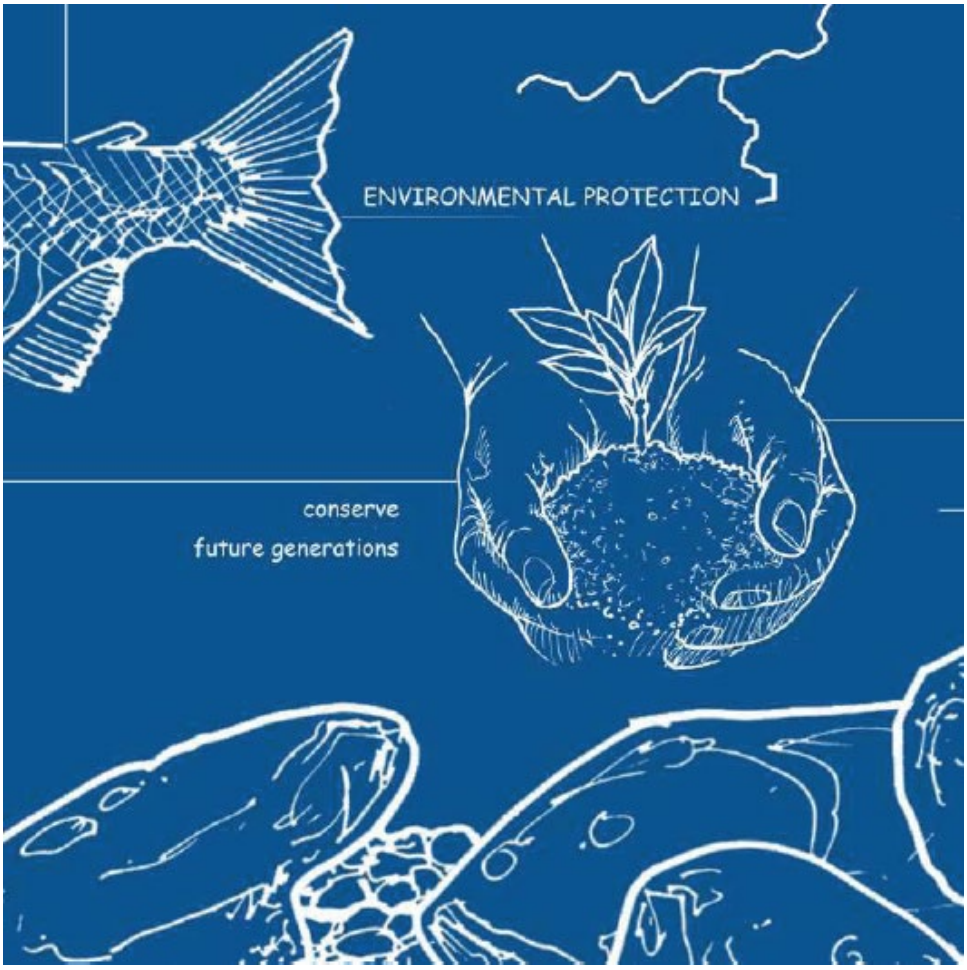
4) Energy efficient building techniques including, but not limited to, increased insulation, heat recovery ventilators, use of materials that encourage thermal storage, and airtight building envelope construction that reduces unintentional air leakage, are encouraged.

5) Green roofs are encouraged to absorb storm water, reduce heat gain and provide outdoor amenity space for residents.

6) Where feasible, district energy systems and renewable energy are encouraged for new buildings.

5 General Environmental Development Permit Area

This section provides general justification, general areas and exemptions, general objectives, and general guidelines that apply to Development Permit Areas for Bald Eagle Nest Trees, Great Blue Heron Nest Trees, Streamside, Campbell River Estuary, Foreshore, Sensitive Ecosystems Inventory sites, Watershed, and Hazard Conditions. Read this section in conjunction with the named Development Permit Areas.



General Area Designation

Two areas within the City of Campbell River are designated as development permit areas for environmental protection, as shown on Map 9 in accordance with the provisions of Sections 488 (1)(a) and (b) of the *Local Government Act* for protection of the natural environment, its ecosystems and biological diversity. The first is the Comprehensive Development Permit Area (DPA), which is all land within Campbell River but outside the *Urban Containment Boundary*. The second is all mapped Environmental DPAs within the *Urban Containment Boundary*. Any property whose boundary lies within the Comprehensive DPA must address the general Development Permit Guidelines. Any property whose boundary lies within a more specific environmental DPA must address both the general and the applicable specific guidelines.

Within the designated area, land must not be subdivided, construction of, addition to, or alteration of a building or structure must not be started, and land must not be altered, unless the applicable Environmental Development Permit(s) are first obtained.

General Justification

Through public consultation, the City has identified goals to ensure that Campbell River protects and conserves aspects of the natural environment for future generations. Environmentally sensitive areas are critical components in maintaining the community's natural attributes and liveability. Ecosystem functions minimize risk for hazard lands, particularly those areas at risk of flooding or geo-technical instability. The City will identify and protect significant natural features and ensure that development proposals respect environmentally sensitive areas, including hazard lands. This protection aligns with the City's participation in the Species and Ecosystems at Risk Local Government Working Group chaired the province. Goals also recognize that the conservation of nature and its ecosystems are a substantial strategy to both mitigate and adapt to climate change.

The goals are as follows:

- Reduce impacts to Environmentally Sensitive Areas (ESAs).
- Minimize air, land and water pollution.
- Protect and maintain the urban forest.
- Minimize the loss of sensitive ecosystem inventory sites.
    - Increase protection for provincially listed red and blue listed species and ecosystems
    - Add to the collective ecological knowledge base through contributions to the BC Conservation Data Centre

The primary function of the development permit area designation is to ensure that decision makers have the ability to secure the necessary information and are able to establish conditions of development that minimize development impacts on sensitive ecosystems, rare or endangered plants and animals, and fisheries and wildlife resources.

General Objectives

The objectives of this Development Permit Area designation is to ensure that all alteration of land, subdivision or development within those areas identify environmentally sensitive areas and protect the associated assets.

General Exemptions

The following activities occurring in an Environmental Development Permit Area shall be exempt from the development permit application process:

1) **Emergency management:** Procedures to prevent, control or reduce flooding, erosion or other immediate threats to life, public or private property, are temporarily exempted from the requirement to obtain a City of Campbell River development permit. Following completion of emergency procedures, submission of a Development Permit may be required depending on the degree of the works and based the discretion of the Director of Development Services or other delegate. Emergencies eligible for an exemption include:

   a) works to prevent damage to, repair or replace public utilities;

   b) clearing of an obstruction, e.g. from a bridge, culvert or drainage flow;

   c) repairs to bridges or safety fences;

   d) actions required to remove a hazard, including a tree, or to address an unstable steep slope, that presents an imminent danger to the safety of persons or are likely to damage public or private property, as determined by a Qualified Environmental Professional.

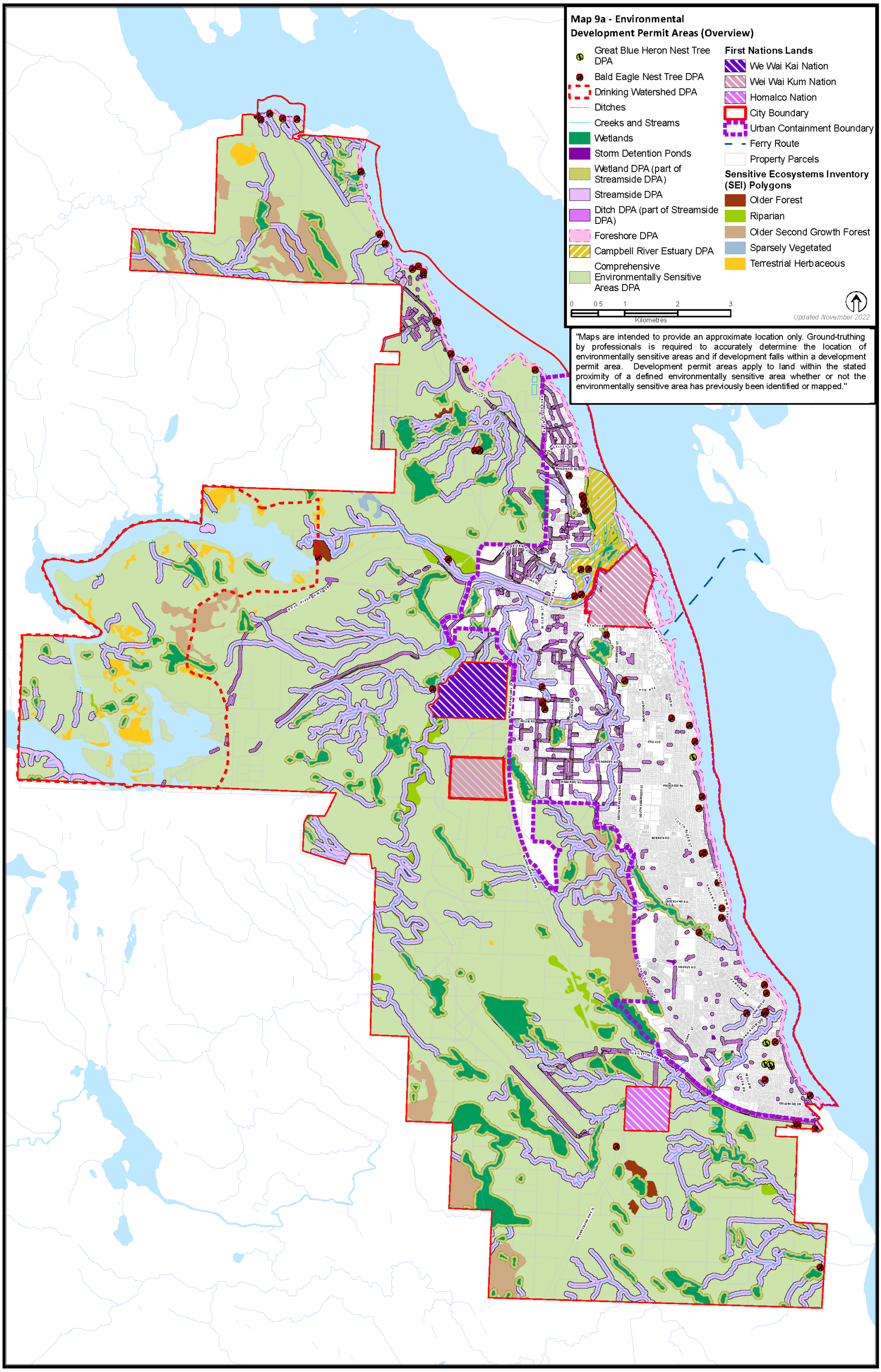
   e) hazard tree condition assessments must specify assessment targets and must reference the Wildlife Tree Committee of British Columbia Wildlife/Danger Tree – Parks Recreations Sites module

   NOTE: All actions used to resolve emergency situations must be reported to the City and the appropriate Federal/Provincial authorities immediately prior to removal or disturbance of the subject property.

2) **Public works and services:** the construction, repair and maintenance of works by the City or its authorized agents and contractors are exempt from the formal development approval process, but the works must be completed in accordance with the assessments and recommendation of a Qualified Environmental Professional (QEP) in accordance with the *Riparian Areas Protection Regulation* Assessment methodology and other applicable environmental regulations and best management practices.

3) **Environmental restoration:** restoration of environmentally sensitive areas by planting native vegetation and/or removing non-native invasive vegetation and/or removing garbage with the use of hand tools following a plan that considers disposal, safety, planting, and erosion and sediment control to the satisfaction of the City. If heavy equipment is necessary for the restoration, a detailed environmental management plan prepared by a Qualified Environmental Professional to the satisfaction of the City is required.

4) **Preliminary geotechnical investigations:** initial geotechnical investigation and evaluation in steep slope and environmentally sensitive development permit areas is exempt from the Development Permit process provided that the works are overseen by a Qualified Environmental Professional under the guidance of an Environmental Management Plan and to the satisfaction of the City.


Map 9a - Environmental
Development Permit Areas (Overview)
Great Blue Heron Nest Tree DPA
Bald Eagle Nest Tree DPA
Drinking Watershed DPA
Ditches
Creeks and Streams
Wetlands
Storm Detention Ponds
Wetland DPA (part of Streamside DPA)
Streamside DPA
Ditch DPA (part of Streamside DPA)
Foreshore DPA
Campbell River Estuary DPA
Comprehensive Environmentally Sensitive Areas DPA
First Nations Lands
We Wai Kai Nation
Wei Wai Kum Nation
Homalco Nation
City Boundary
Urban Containment Boundary
Ferry Route
Property Parcels
Sensitive Ecosystems Inventory (SEI) Polygons
Older Forest
Riparian
Older Second Growth Forest
Sparsely Vegetated
Terrestrial Herbaceous
0 0.5 1 2 3
Kilometres
Updated November 2022
"Maps are intended to provide an approximate location only. Ground-truthing by professionals is required to accurately determine the location of environmentally sensitive areas and if development falls within a development permit area. Development permit areas apply to land within the stated proximity of a defined environmentally sensitive area whether or not the environmentally sensitive area has previously been identified or mapped."

Map 9b - Environmental Development Permit Areas (North)

- Great Blue Heron Nest Tree DPA
- Bald Eagle Nest Tree DPA
- Drinking Watershed DPA
- Ditch
- Stream
- Wetlands
- Storm Detention Ponds
- Streamside DPA
- Wetland DPA (part of Streamside DPA)
- Ditch DPA (part of Streamside DPA)
- Foreshore DPA
- Campell River Estuary DPA
- Comprehensive Environmentally Sensitive Areas DPA

First Nations Lands

- We Wai Kai Nation
- Wei Wai Kum Nation
- Homalco Nation
- City Boundary
- Urban Containment Boundary
- Property Parcels

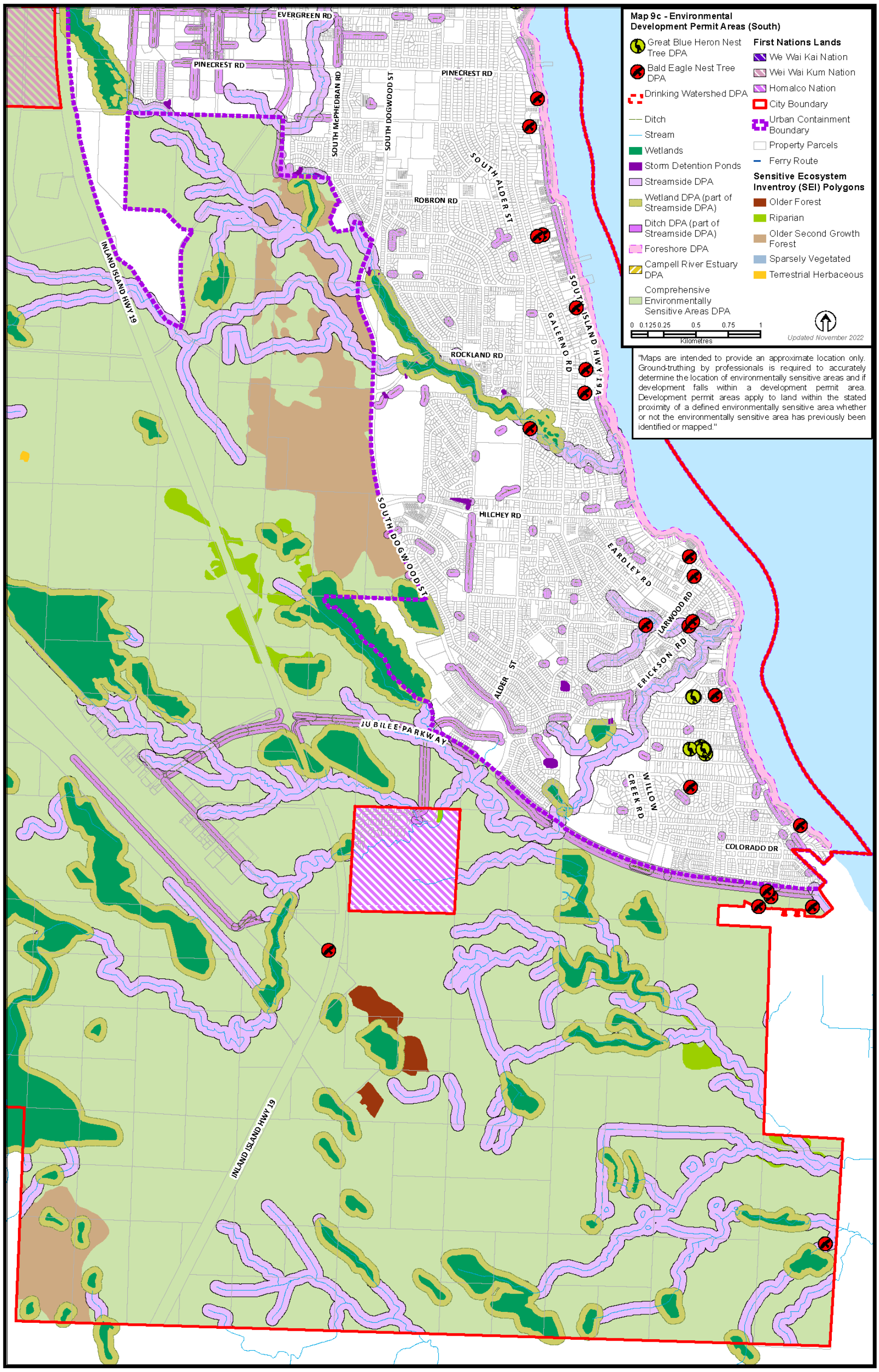
Sensitive Ecosystem Inventroy (SEI) Polygons

- Older Forest
- Riparian
- Older Second Growth Forest
- Sparsely Vegetated
- Terrestrial Herbaceous

0 0.125 0.25 0.5 0.75 1
Kilometres

Updated November 2022

"Maps are intended to provide an approximate location only. Ground-truthing by professionals is required to accurately determine the location of environmentally sensitive areas and if development falls within a development permit area. Development permit areas apply to land within the stated proximity of a defined environmentally sensitive area whether or not the environmentally sensitive area has previously been identified or mapped."


Map 9c - Environmental Development Permit Areas (South)
Great Blue Heron Nest Tree DPA
Bald Eagle Nest Tree DPA
Drinking Watershed DPA
Ditch
Stream
Wetlands
Storm Detention Ponds
Streamside DPA
Wetland DPA (part of Streamside DPA)
Ditch DPA (part of Streamside DPA)
Foreshore DPA
Campell River Estuary DPA
Comprehensive Environmentally Sensitive Areas DPA
First Nations Lands
We Wai Kai Nation
Wei Wai Kum Nation
Homalco Nation
City Boundary
Urban Containment Boundary
Property Parcels
Ferry Route
Sensitive Ecosystem Inventroy (SEI) Polygons
Older Forest
Riparian
Older Second Growth Forest
Sparsely Vegetated
Terrestrial Herbaceous
0 0.125 0.25 0.5 0.75 1
Kilometres
Updated November 2022
"Maps are intended to provide an approximate location only. Ground-truthing by professionals is required to accurately determine the location of environmentally sensitive areas and if development falls within a development permit area. Development permit areas apply to land within the stated proximity of a defined environmentally sensitive area whether or not the environmentally sensitive area has previously been identified or mapped."
EVERGREEN RD
PINECREST RD
SOUTH McPHEDRAN RD
SOUTH DOGWOOD ST
PINECREST RD
SOUTH ALDER ST
ROBRON RD
INLAND ISLAND HWY 19
SOUTH ISLAND HWY 19A
GALERNO RD
ROCKLAND RD
SOUTH DOGWOOD ST
HILCHEY RD
EARDLEY RD
LARWOOD RD
ERICKSON RD
ALDER ST
JUBILEE PARKWAY
WILLOW CREEK RD
COLORADO DR
INLAND ISLAND HWY 19

General Development Permit Area Guidelines

1) For agricultural uses on lands within the Agricultural Land Reserve (ALR) under the *Farm Practice Protection (Right to Farm) Act*, the applicant shall provide a Farm Plan.

2) For developments in the comprehensive development permit area, the QEP report must contain any records listed in the BC Conservation Data Centre and must include data obtained from a search of the Ministry of Environment's *BC Species and Ecosystems Explorer* for the categories "plants and animals" and "Ecological Communities" that includes all potential red listed, blue listed, and SARA listed species along with their Conservation Framework priority.

3) For emergency management, the applicant shall provide an environmental report certified by a Qualified Environmental Professional (QEP), describing follow-up works to restore environmentally sensitive areas present prior to the emergency.

4) For all other circumstances, the applicant shall provide an environmental report certified by a Qualified Environmental Professional (QEP). The report must include:

   a) A site plan certified by a B.C. Land Surveyor that locates:

      i) the proposed development relative to DPA boundaries shown on Map 9 and property lines;
      ii) the environmental sensitive areas as defined under the general definitions and any other significant or rare species or species assemblages found (e.g., red-legged frog, trembling aspen/Pacific crab/slough sedge red listed plan community) in the DPA as identified by the QEP;
      iii) the applicable buffer or setback recommended by the QEP to separate the proposed development from the environmentally sensitive feature.

   b) For activity or construction within the stream channel, documentation of Provincial and Federal approval, with supporting technical reports.

5) If the QEP report described in 4) above identifies environmentally sensitive areas (ESAs) not shown on Map 9, then the applicant and the City shall treat those values as if they are shown on Map 9 for the purposes of applying requirements of the more specific environmental DPAs.

6) If the QEP report described in 4) above confirms that an environmental value relating to a DPA shown on Map 9 is not present or does not affect the subject property, then the applicant and the City shall treat the property as though it is not in the applicable DPA. This includes the case where a QEP determines that there is a physical barrier between the environmental feature and the subject property that creates a functional separation between the two.

7) Clustering of density is encouraged as a means for preserving environmentally sensitive areas.

8) For all projects that involve development within an ESA, the City shall require the applicant to post security at 125%.

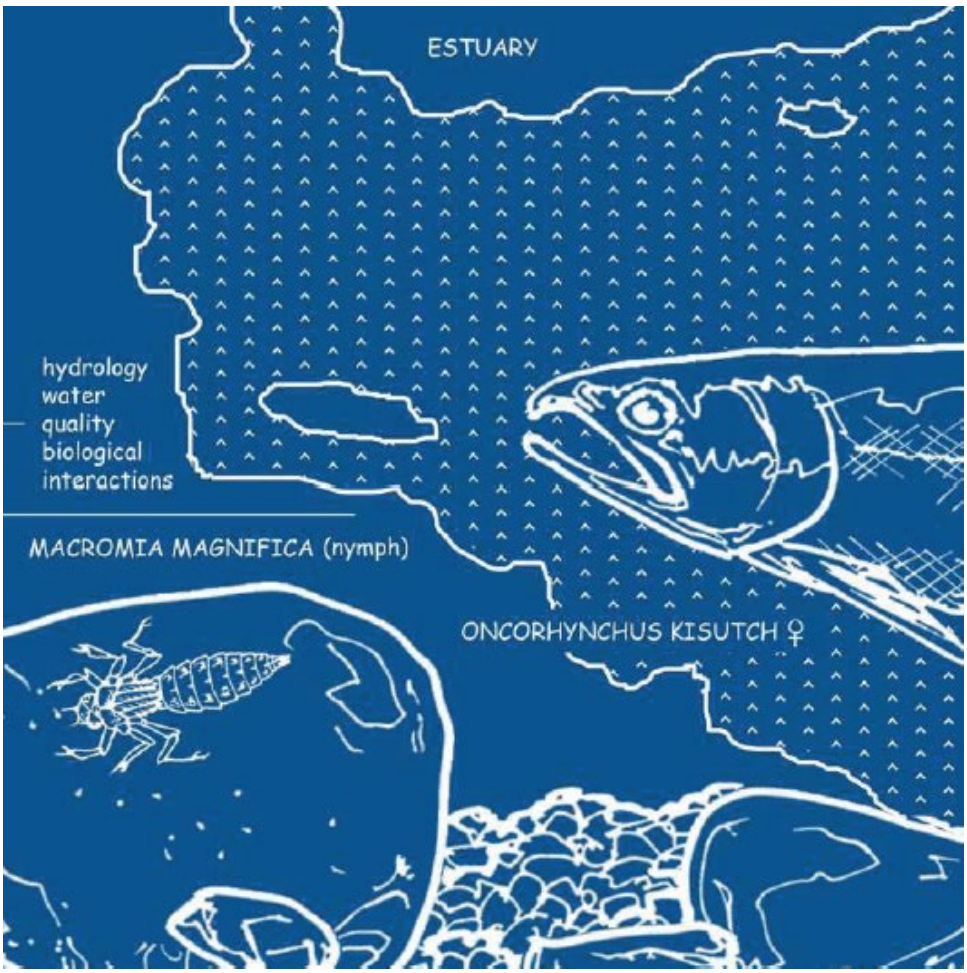
9) The City may, as part of the development permit, vary the setback requirements from an ESA where it can be demonstrated in a less than desirable existing situation that a "net positive improvement" for fish or wildlife habitat will result, or, in a more desirable existing situation that "no net loss" will result, subject to City, Provincial and or Federal agency review and comment.

Further, as a general principle, any buildings that are damaged or destroyed to the extent of 75% or more of the value above the foundation may be considered for approval for variance to permit reconstruction on its existing foundation where "net positive improvement" for fish or wildlife habitat is demonstrated. Any reduction of setback distances within an ESA shall occur in accordance with the findings and recommendations of the technical/environmental report.

10) ESAs may not be donated in lieu of the 5% parkland requirement.

6 Bald Eagle and Great Blue Heron Nest Tree Development Permit Area

Read this section in conjunction with the general development guidelines which also apply in this Development Permit Area.



Area Designation

The Bald Eagle and Great Blue Heron Nest Tree Development Permit Area is designated pursuant to s. 488 (1) (a) of the *Local Government Act*, for the purpose of protection of the natural environment, its ecosystems and biological diversity.

The Bald Eagle and Great Blue Heron Nest Tree Development Permit Area consists of:

a) Within the Urban Containment Boundary all land within 60 metres of a Bald Eagle nest tree or a Great Blue Heron nest tree; and

b) Within the Comprehensive Development Permit Area, all land within 60 metres of a Bald Eagle nest tree and within 200 metres of a Great Blue Heron nest tree.

Bald Eagle and Great Blue Heron nest trees include trees that have a nest whether it is active or not, a nest remnant (any remaining sticks are still visible), a nest tree previously identified by a Qualified Environmental Professional where the nest is currently down, and includes a tree where a nest is under construction.

Distances are measured as a radius from the base of the nest tree or if multiple trees exist in a colony, distance is measured from the outer trees' bases.

Nest locations that have been identified are shown on Map 9. The locations of the Bald Eagle and Great Blue Heron nest trees identified on Map 9 are intended to provide an approximate location only. Ground-truthing by professionals is required to accurately determine the location of the tree or trees to determine if development falls within the development permit area.

For clarity, the development permit area applies to land within the stated proximity of a nest tree whether or not the nest tree has previously been identified or mapped.

Justification

Section 34 of the *Wildlife Act* provides for the protection of Bald Eagles, Great Blue Herons and several other at risk bird species, their eggs and young while the nest is occupied, and the nest at all times. Both eagles and herons are most susceptible to disturbance when human activity patterns near their nest are changed and disturbances are particularly disruptive to nesting birds early in the breeding season.

Bald Eagles are large raptors that build large, heavy nests. This requires large, old trees with an open branch structure. Preventing the loss of nesting and perching trees is a key component in assuring the long term viability in the eagle population.

Great Blue Herons are Blue-Listed (vulnerable) provincially, and federally they are a species of Special Concern due to their small populations and productivity declines. This species is susceptible to eagle predation, human disturbance and development related habitat loss.

Exemptions

The General Environment Development Permit Exemptions also apply to the Bald Eagle and Great Blue Heron Nest Tree Development Permit Area.

A development permit is not required if a QEP certifies in writing that the structure of a Bald Eagle or Great Blue Heron nest tree has deteriorated to the point that the tree can no longer support a nest structure.

A development permit is not required if a QEP certifies in writing that there is insufficient information for an historic Great Blue Heron nest tree to be located.

Bald Eagle and Great Blue Heron Nest Tree Development Permit Guidelines

In addition to the *General Environmental Development Permit Guidelines*, the following specific guidelines shall be addressed for Bald Eagle and Great Blue Heron Nest Tree Development Permit Areas:

1) Maintain the full Development Permit Area as a naturally vegetated buffer.

2) If the full Development Permit Area cannot be naturally maintained, a QEP assessment report must:

   a) Describe the proposed development

   b) Demonstrate that all avenues to avoid and minimize development in the Development Permit Area have been exhausted

   c) Map all historical and current nest sites within 500 metres

   d) Consult with the WiTS data base and the provincial heron data base, include previous local reports (where applicable) and include any local reports of nesting activity

   e) Map and include an assessment of important buffer, roost and perch trees

   f) Comprehensively describe the habitat noting species present, degree and age of tree cover, invasive species present

   g) Describe connectedness and importance of the Development Permit Area habitat to other natural area corridors

   h) Comment on existing uses in the Development Permit Area and how this impacts habitat. Describe which uses are grand-parented and which uses need to be restored or mitigated with supporting plans to achieve that

   i) Provide specific recommendations for timing or phasing of the development that is consistent with the provincial Develop with Care best management practices so as to avoid construction disturbance during the breeding season

   j) Provide a detailed nest tree monitoring schedule based on recommended provincial methodology to record nesting success and to determine the effect of development disturbances to breeding birds; QEPs must report details on nesting success to the relevant provincial contact / data base

   k) Clarify that the QEP must take written notes and the monitor has the power to stop construction activity if nesting is disrupted by development activities or if the construction activity contravenes local, provincial or federal environmental regulations

   l) Include the requirement to submit a post development QEP report

   m) Include dated photo documentation

   n) Describe signage and/or fencing or some other form of demarcation indicating the buffer boundary to deter encroachment into the buffer during construction and over time

   o) Include cost estimates for all works including materials, monitoring and report writing that are referenced in the report.

3) The shape of the Development Permit Area may be altered to retain important habitat features that are not within the designated standard radius buffer measurement if supported by QEP assessment and provided there is no net habitat loss.

4) Any encroachments into the Development Permit Area or alterations to the standard radius buffer measurement shape of the Development Permit Area must be accompanied by specific QEP mitigation and restoration recommendations including:

   a) Tree protection plans completed by a certified arborist to ensure how the nest tree(s) and other significant tree health will be maintained during site development and over the long term as a result of the develoment (may include hydrological considerations); wind firmness of perimeter trees must be discussed

   b) Demonstration that there is enough room for the whole nest tree failure to occur so as not to create targets and hazard tree concerns

   c) Provide garbage removal and invasive species management plans aimed to improve habitat function

   d) Provide revegation plans that include native species tree recruitment and a minimum 5-year monitoring schedule; natural regeneration is acceptable provided it is supported by QEP rationale and adequate monitorng to ensure success.

5) The post development QEP report must contain the following information:

   a) Summary of construction and nest monitoring notes

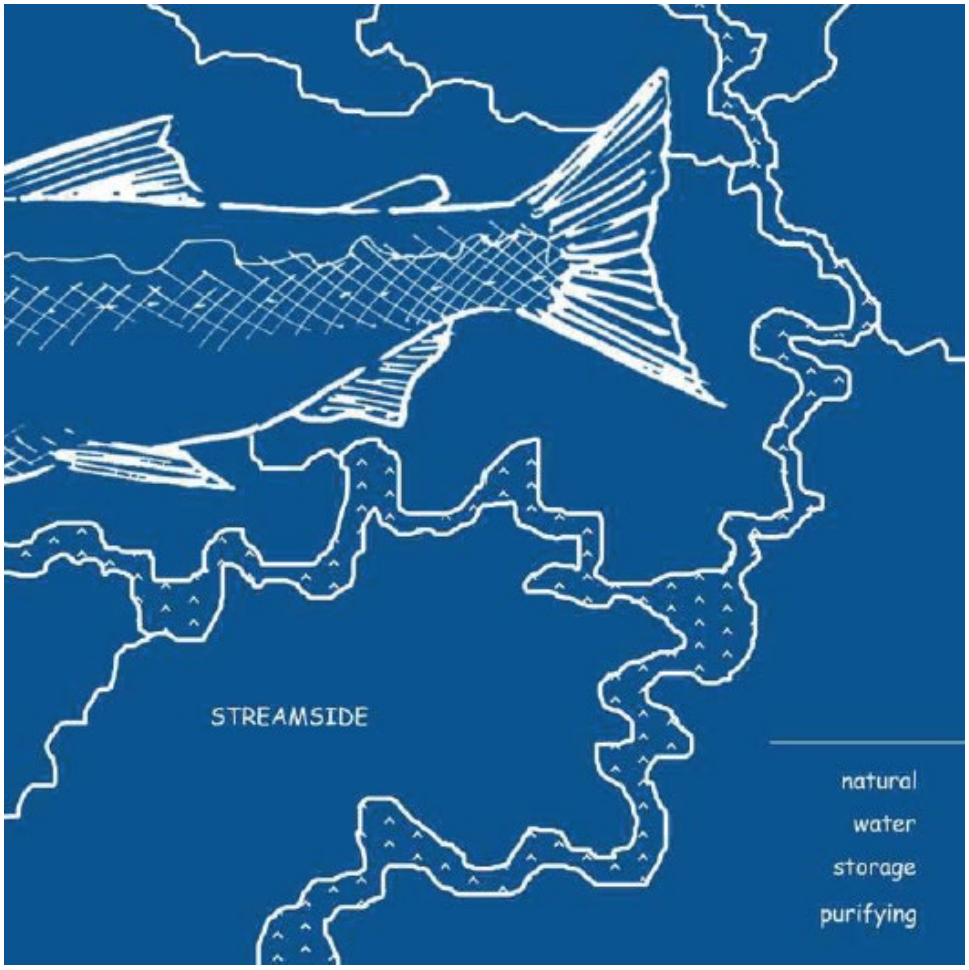
   b) Clear demonstration as to how the Development Permit Area buffer cirteria were met including the initial phases of mitigation and restoration (if required); include dated photo-documentation

   c) Outline oustanding recommendations and the timing for implementation of these including reporting requirements

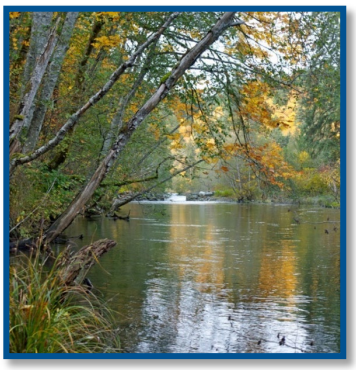
   d) Details confirming that nest success was reported to the relevant provincial contact /data base.

7 Streamside Development Permit Area

Read this section in conjunction with the General Environmental Development Permit Guidelines which also apply in this Development Permit Area.



Area Designation



In accordance with the provisions of Sections 488 (1) (a) of the *Local Government Act*, all land alteration, subdivision or development shall be subject to approval for development permit within 50 metres of a stream or identified watercourse and associated drainage and within 30 metres of an identified ditch as identified on Map 9.

Justification

Declining fish stocks in the Strait of Georgia and increasing environmental awareness have led to the realization that the conservation and restoration of our aquatic resources is essential. Riparian areas function as natural water storage and purifying systems for improved water quality and provide safe corridors for wildlife movement. The riparian areas of municipal waterways, drainages and wetlands need to remain in a largely undisturbed state to protect habitat, prevent flooding, control erosion, reduce sedimentation and recharge groundwater.

Exemptions

Refer to General Environment Development Permit Exemptions which apply also to this section.

Streamside Development Guidelines

In addition to the General Environmental Development Permit guidelines, the following specific guidelines shall be addressed for Streamside Areas:

1) For any development within 50 metres of a mapped stream feature or within 30 metres of an identified ditch, a site visit shall be completed by a Qualified Environmental Professional to determine if the proposed development falls within the provincial *Water Sustainability Act* or the provincial *Riparian Areas Regulation* assessment area defined as:

   - the 30 metre strip on both sides of the stream, measured from the high water mark;
   - for a ravine less than 60 metres wide, a strip on both sides of the stream measured from the high water mark to a point that is 30 metres beyond the top of the ravine bank; and
   - for a ravine 60 metres wide or greater, a strip on both sides of the stream measured from the high water mark to a point that is 10 metres beyond the top of the ravine bank.

2) If the proposed development does not fall within the Riparian Area Regulation Assessment Area, the Qualified Environmental Professional shall prepare a letter certifying that further Qualified Environmental Professional assessment is not required.

3) If the development falls within the assessment area, a report shall be completed by a Qualified Environmental Professional to meet the provisions of the *Riparian Areas Regulation*. If the SPEA cannot be achieved for any reason (including reductions supported by senior government agencies) then the Qualified Environmental Professional shall make recommendations on suitable mitigation or restoration options to improve the quality of the remaining setback area. If no options exist on the subject property, other suggestions for habitat improvement within the watershed shall be presented for consideration by the City.

4) When assessing ditches, a Qualified Environmental Professional can exercise their professional judgment as to whether or not a full *Riparian Area Regulation* assessment is required for submission to the Province. If the Qualified Environmental Professional decides that a *Riparian Area Regulation* assessment report is not required for Provincial submission, a lesser report specifying the required SPEA width and measures to maintain and protect the SPEA shall still accompany the development application.

5) For projects where detailed site plans do not yet exist, the Qualified Environmental Professional shall provide advice on environmental monitoring and measures that may need to be considered when another assessment is undertaken at the building stage if development is proposed in the riparian assessment area. It should be recognized that the preliminary assessment at the subdivision stage provides the SPEA distance but that the measures may place additional restrictions on the development at the next approval stage.

6) To protect aquatic habitat and water quality, the City encourages proposals that either dedicate the conserved area to the City or a conservation oriented non-governmental organization, or that offer to register a covenant on the title of the adjacent lands. The covenant shall be registered prior to any development including subdivision, and is intended to protect the stream and the riparian buffer, and ensure that it remains in a natural and vegetated state and free of development and encroachment. The covenant shall be registered in favour of the City of Campbell River, other public agencies including the Province, or non-governmental organizations, such as a private land trust committed to the management of watercourses or streamside areas. The natural watercourse shall be dedicated where applicable in accordance with the provisions of Section 491 of the *Local Government Act*. Dedication of the Development Permit Area is not required, however individuals may choose to make a donation of environmentally sensitive land, should it be deemed unsuited for development.

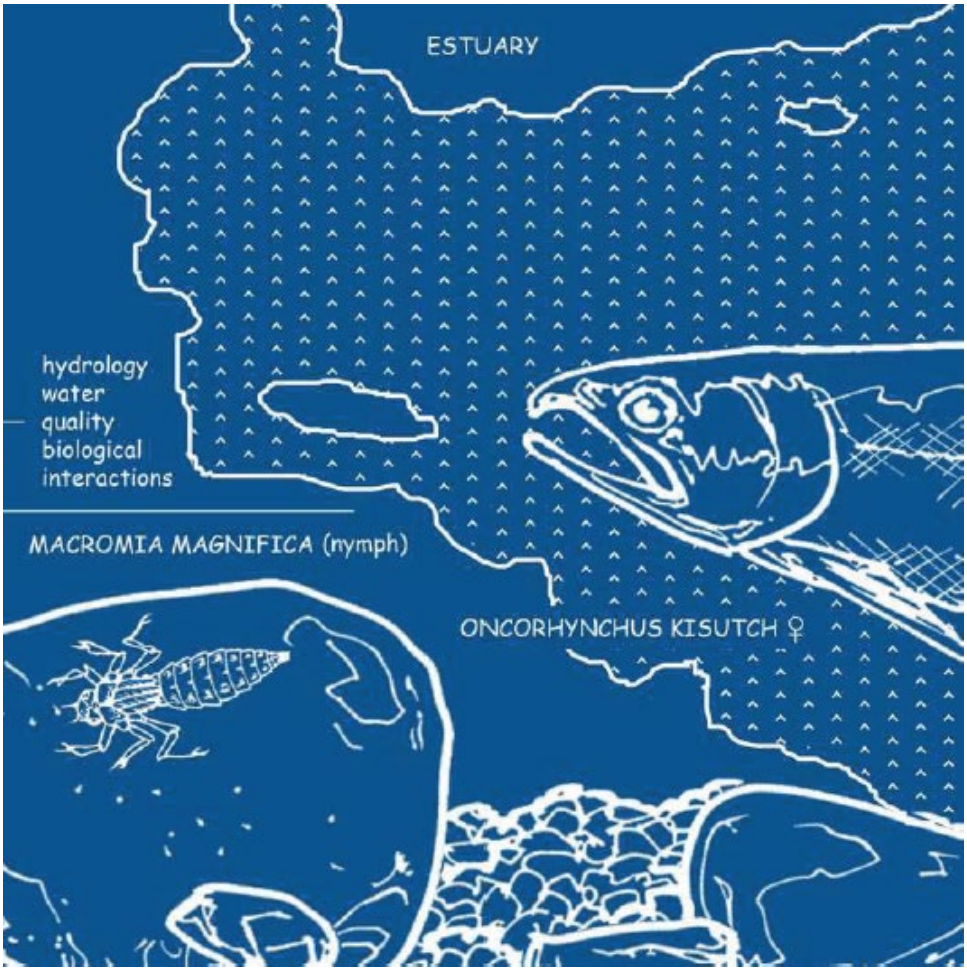
7) In accordance with Section 491 of the *Local Government Act*, the City of Campbell River may require the provision of works, including fencing, to be constructed at the boundary of the streamside protection and enhancement area, to preserve and protect natural watercourses and other specified natural features.

8) All new buildings shall be setback a minimum of 2 metres from the SPEA to provide for useable yard space.

9) Where a net benefit for fish-habitat can be demonstrated, the City may consider proposals to enhance fish-habitat, including in-stream works or the creation of wetland areas, as part of alternative design options for development projects. Approval for these projects shall be subject to approval from applicable provincial and federal government agencies.

8 Campbell River Estuary Development Permit Area

Read this section in conjunction with the general development guidelines which also apply in this Development Permit Area.



Area Designation

In accordance with the provisions of Sections 488 (1) (a) of the *Local Government Act*, all land alteration, subdivision or development shall be subject to approval for development permit within those areas designated as Estuary on Map 9.

Justification

The Campbell River, its estuary and adjacent lands provide essential habitat for native wildlife, threatened and endangered species, resting and feeding habitat for migratory waterfowl, and food chain support to resident and non-resident species (aquatic and terrestrial). To conserve and protect estuarine areas, three key factors must be addressed in considering development and change: hydrology, water quality, and biological interactions.

These factors can be addressed by requiring appropriate pollution control, assimilation or water purification, flood control and base flow, erosion control, and vegetation and habitat protection or restoration where previous damage has occurred.

Exemption

Refer to General Environmental Development Permit for exemptions.

Estuary Development Permit Guidelines

In addition to the General Environmental Development Permit guidelines and the Streamside Protection Development Permit Guidelines, the following specific guidelines shall be addressed for the Campbell River Estuary Development Permit Area.

Developments within and adjacent to the Campbell River Estuary shall be consistent with the comments and recommendations of the *North Campbell River Estuary Area Smart Growth Study*, particularly those for the intertidal and riparian area prepared by Archipelago Marine Research Ltd. and Coastal and Oceans Resources Inc. Tyee Spit Lease area developments must be consistent with the *Tyee Spit Lease Plan.*

In addition, the following guidelines also apply:

1) The restoration or rehabilitation of aquatic, riparian and upland areas that have been lost or degraded by previous land uses are encouraged to maximize their value as fish and wildlife habitat.

2) Drainage works that improve the flushing of Baikie's slough, the adjacent log pond and the booming pocket next to the dry land sort, is encouraged. These drainage works shall incorporate measures to minimize the risk of property damage in the event of flood flows.

3) Dredging in the main channel of the Campbell River is generally not supported unless it is undertaken for public safely or habitat restoration purposes.

4) Silt and debris removal in off-channel areas is generally supported if it does not impact fish and wildlife habitat and it has approval from relevant provincial and federal agencies as required.

5) The development of recreational greenways throughout the Plan area shall be encouraged. Public access will be chosen with respect for estuarine habitat functions.

6) A policy of net habitat gain within the study area shall be adopted for estuarine and adjacent uplands.

   Foreshore developments (outside the slough) shall dedicate or preserve and maintain a natural, vegetated buffer strip within the first 30 meters above the high-water mark, except where access is essential for water transportation or public use or as otherwise directed by a Qualified Environmental Professional. The width of the buffer may be averaged to preserve significant stands of existing trees. In all cases, the width of the buffer may be averaged to preserve significant natural features. The width of the buffer may be reduced if site development and management can achieve the goals of the estuary rehabilitation plan, and if there is a significant net gain in aquatic and/or wildlife habitat. In all cases, reduction in the buffer width will require approval of appropriate federal and provincial agencies, in addition to the City of Campbell River, and minimum building setback shall be 15 metres.

7) Developments adjacent to channels, canals or sloughs located in environmentally sensitive areas shall dedicate or preserve and maintain a natural, vegetated buffer strip within the first 15.2 metres above the high-water mark of the slough. The areas within that highwater mark buffer shall remain free of development, except in accordance with the conditions of the permit. Works shall be constructed, wherever required, to preserve and enhance the banks of the slough.

8) Potentially polluting activities shall maintain a minimum 30 metres setback from the high water mark, except in accordance with the conditions of the permit.

9) Clustering and medium density development of upland land uses shall be encouraged to provide open space while maximizing development opportunities from high value land.

10) The assessment of site contamination on former industrial lands and their associated remediation shall be required for all upland development sites.

11) Project proposals for new development shall include an archaeological impact assessment.

12) All intertidal areas shall be preserved, except in accordance with the conditions of the permit. Works shall be constructed, where required, to preserve and enhance the shoreline by:

    a) When compatible with environmental protection guidelines, providing safe, durable access such that people are afforded a view of the waterfront wherever possible;

    b) Retaining mature vegetation, including existing large trees, shrubs, and aquatic vegetation;

    c) Replanting disturbed areas with native vegetation;

d) Where development over the water is necessary, land fill shall be avoided. The preferred method of development over the water is on pilings or floating structures;

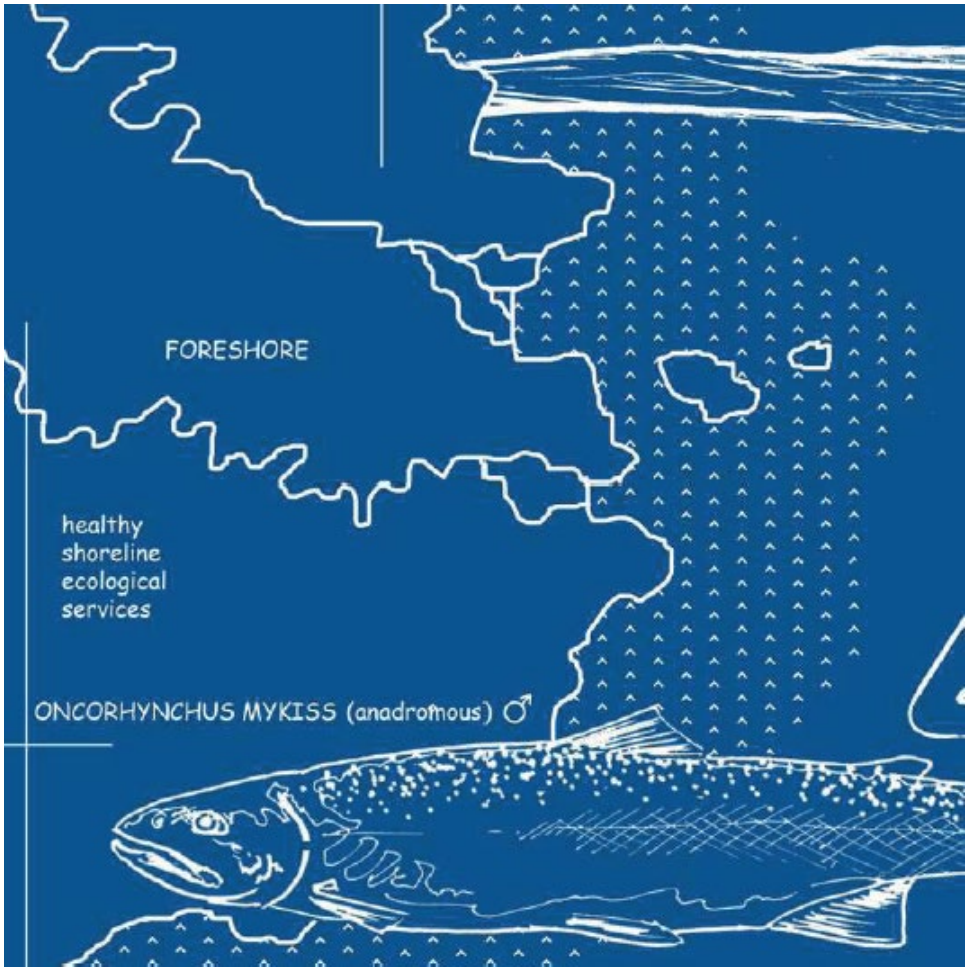
e) No alterations shall be made to the intertidal area without appropriate environmental studies and implementation of mitigation measures;

f) Conformance with these guidelines does not exempt applicants from meeting requirements of other federal and provincial agencies.

13) Design public access to the waterfront for the purpose of recreation or education in a manner that is consistent with the natural values of the site.

9 Foreshore Development Permit Area
(Outside of Campbell River Estuary)

Read this section in conjunction with the General Environmental Development Permit Guidelines which also apply in this Development Permit Area.



Area Designation

In accordance with the provisions of Sections 488 (1) (a) and (b) of the *Local Government Act*, all land alteration, shore line modification, subdivision or development shall be subject to approval for development permit within those areas designated as foreshore on Map 9 and extending 30 metres seaward and landward from the natural boundary at the sea.

Justification

A healthy shoreline typically provides a concentration of ecological services. In the Campbell River area in particular, a natural sediment shore serves to:

» Filter pollutants including sediment;

» House photosynthesis/primary productivity/carbon cycling in shallow productive zones;

» Support diverse marine shoreline ecologies, including:

- Nursery rearing, migration, and food production (invertebrate and forage fish) for juvenile salmonids;
- Shoreline aesthetic;
- Forage fish spawning along sediment shorelines – forage fish are a critical food source for salmonids, marine mammals, and waterfowl; and
- Eelgrass beds, salt marsh and kelp beds – these are important food production areas (primary producers) and critical habitats for a wide variety of marine species that include forage fish, salmonids and crabs).

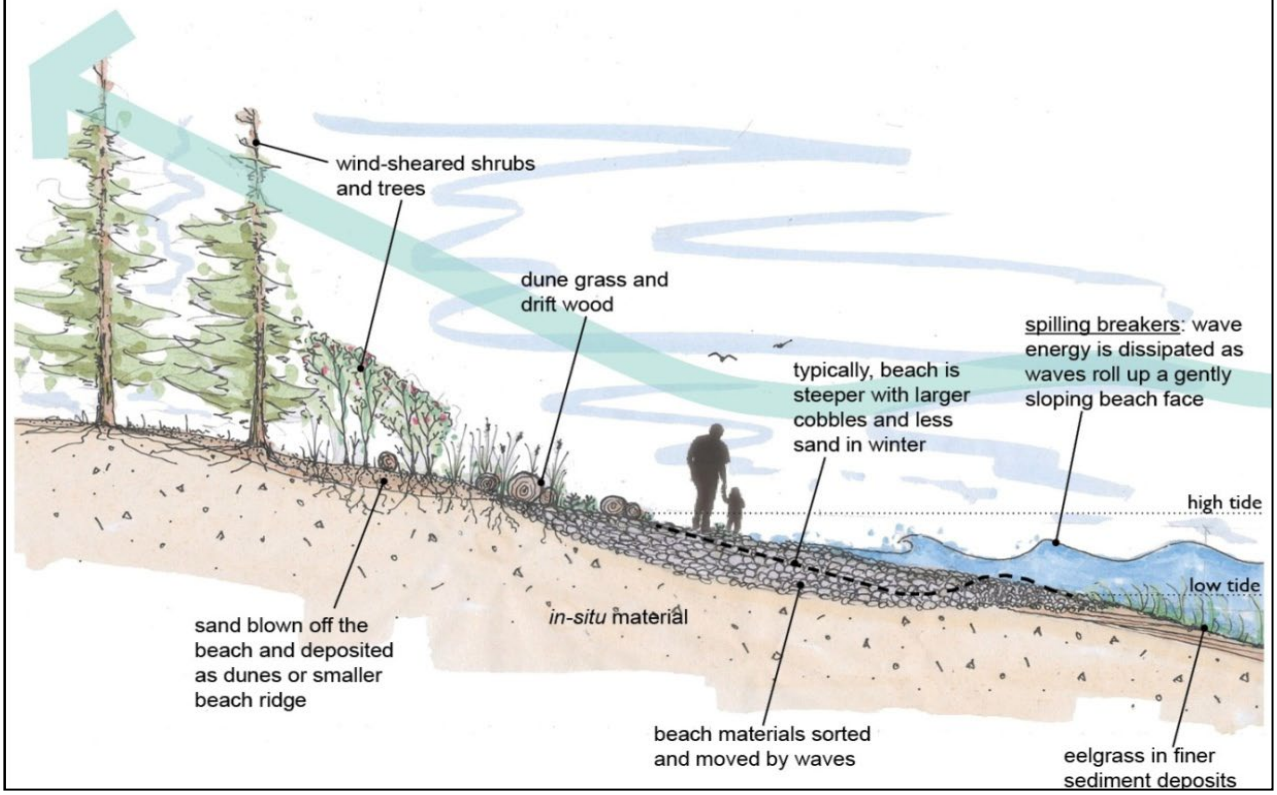
» Dissipate wave energy, protecting property values and reducing risks from sea level rise.

In general, hardening the shoreline through the construction of seawalls and rip rap revetment is strongly discouraged because seawalls disrupt beach formation and reduce ecological and property values. Seawalls generate reflective or plunging waves that dramatically lower the beach cross section below the seawall over time, resulting in the destruction of critical habitat for forage fish spawning (particularly surf smelt and sand lance). Seawalls and rip rap revetments can also lead to increased rates of erosion for adjacent sections of shoreline.

Setbacks from the marine shore and higher construction elevations will become increasingly important as sea level rise escalates the risk of coastal flooding, erosion and associated impacts.

TYPICAL SEDIMENT SHORE:

Under natural conditions, different sections of shorline along the coast may constantly lose sediment (ie: moving to the left; an eroding shoreline), constantly gain sediment (ie: moving to the right; a sediment sink or "accreting" shoreline), or lose some years and gain others (ie: accreting some years and eroding others; a "wobbly" shoreline).



The Marine Foreshore has important historical values. First Nations communities frequented the shoreline as is evidenced by numerous midden deposits and other artifacts commonly found along the shoreline on the east coast of Vancouver Island. Portions of the Campbell River shoreline may contain archaeologically significant features.

Exemptions

Refer to General Environmental Development Permit for Exemptions.

Foreshore Development Permit Guidelines

In addition to the General Environmental Development Permit Guidelines, the following specific guidelines shall be addressed for Foreshore Development Permit Areas:

1) A detailed description of the shoreline's current physical and ecological condition shall be prepared by a Qualified Environmental Professional.

2) Development of the shoreline area shall not impede public access along the shoreline below the natural boundary.

3) A minimum 30 metre setback from the high water line shall be maintained for new buildings and structures, additions to existing buildings and structures, or the placement and removal of fill, other than beach nourishment fill, except where a Qualified Environmental Professional demonstrates a lesser setback is appropriate and to the satisfaction of the City.

4) All occupied areas of buildings will be constructed at an elevation at or greater than the construction level established by an appropriately-qualified professional and accepted by the City Engineer. For clarity, parking, loading, and storage areas may be located below this elevation.

5) New upland structures or additions shall be located and designed to avoid the need for shore protection works. Only if all options to locate and design without the need for shore protection measures are exhausted will such works be considered for approval by the City.

6) Using geotechnical analysis of the site and shoreline characteristics, subdivision concepts shall ensure that the lots created will not require shore protection measures to provide useable, safe building sites.

7) New driveways and septic systems shall not be located in the development permit area. If such a location cannot be avoided, the encroachment shall be minimized, and the design and construction of the road or septic system be supervised by a Qualified Environmental Professional to ensure that the objectives and Guidelines are met to the satisfaction of the City.

8) Environmental Assessments for reduction in the 30 metre foreshore setback shall include recommendations for protection and restoration required for existing native vegetation to minimize disruption to habitat and to protect against erosion and slope failure.

9) When works are undertaken within the 30 metre setback area, existing trees and shrubs to be retained shall be clearly marked prior to development, and temporary fencing installed at the drip line to protect them during clearing, grading and other development activities.

10) Where the development permit area includes native plant species or plant communities dependent on a marine shoreline habitat that are identified as sensitive, rare, threatened or endangered, or have been identified by a Qualified Environmental Professional for protection, their habitat areas shall be left undisturbed. If disturbance cannot be entirely avoided, development and mitigation/compensation measures shall be undertaken under the supervision of a Qualified Environmental Professional with advice from applicable senior government agencies.

11) If the area has been previously cleared of native vegetation, or is cleared during the process of development, restoration shall be required. Vegetation species used in replanting and restoration shall be identified by a Qualified Environmental Professional and be selected to suit the soil, light and groundwater conditions of the site, should preferably be native to the area, and be selected for erosion control and/or fish and habitat wildlife habitat values as needed. Suitably adapted, non-invasive, non-native vegetation may also be considered acceptable.

12) All replanting shall be maintained and monitored for a time period as directed by a QEP.

13) Prior to land disturbance within or adjacent to the development permit area, a stormwater management plan and erosion and sediment control plan prepared by a qualified professional is required that is consistent with the City's current development servicing bylaw and any geotechnical evaluations as required.

14) Prior to land disturbance an environmental management plan is required that articulates:

    a) site and project description;

    b) roles and responsibilities for construction manager and Qualified Environmental Professional;

    c) sequence of major construction activities;

    d) scaled site map;

    e) spill management protocol;

    f) waste management protocol; and

    g) management protocol for hazardous materials.

15) Bluff shorelines require special attention due to the risk of slope instability, with measures to prevent saturation of the bluff face, prevent excessive removal of backshore vegetation, prevent construction of excessive beach access structures and ensure appropriate setbacks from the top of bank. These measures shall be prepared by a geotechnical engineer.

16) Risk slope stabilization must give priority to bioengineering approaches.

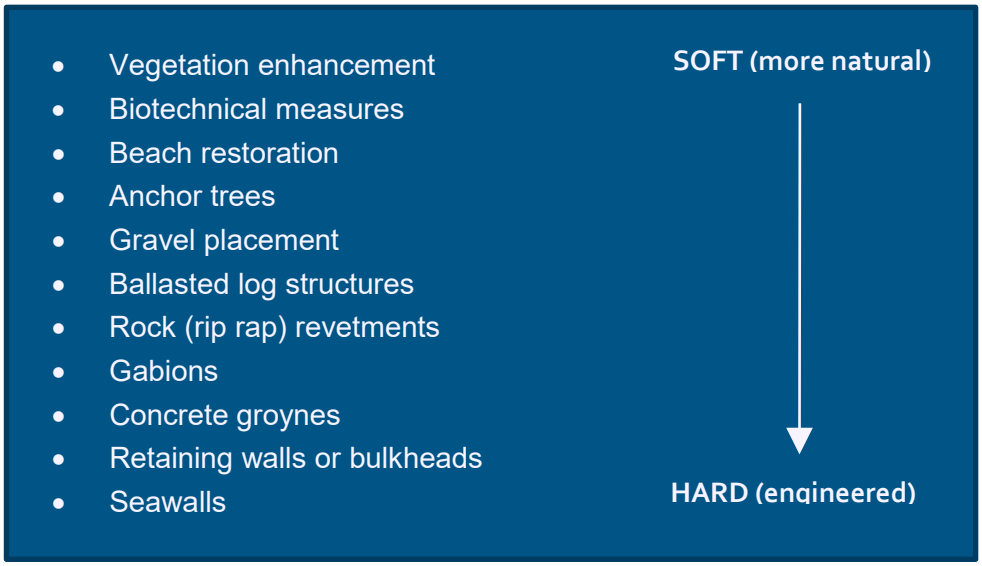
17) If geotechnical analysis specifically allows, vegetation may be strategically pruned by or under the guidance of a professional for views.

18) Routine maintenance to hardened foreshore structures, such as rip rap, may not require a development permit provided that no new material (other than replacement material) is added to the structure and no materials are taken away. The works must not alter the footprint, including the height or slope, of the existing structure. The property owner is responsible for contacting the provincial and federal governments to secure permission and determine conditions that must be met. The City must be notified of the proposed works (as the protection of City infrastructure may be of concern) and all senior government agency permissions must be provided to the City to support the exemption.

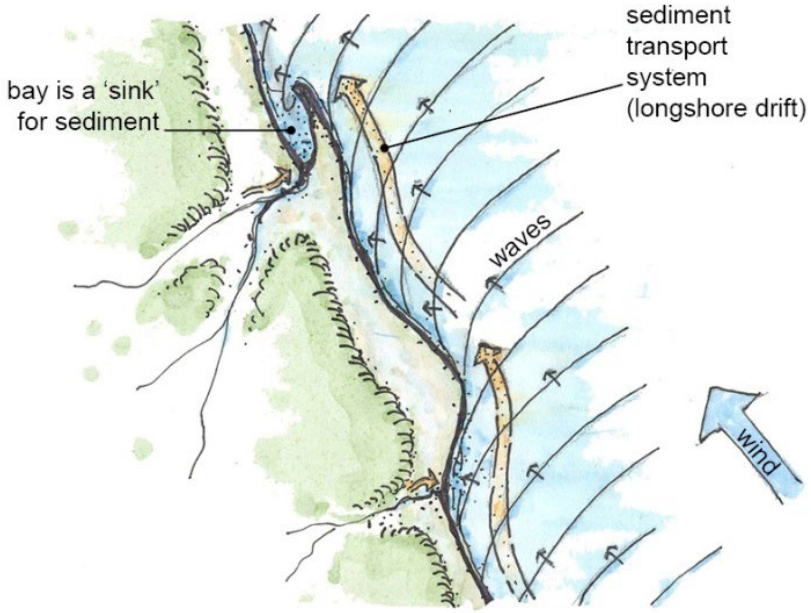
19) Shoreline protection measures as outlined in the following section shall be adhered to as required.

Shoreline Protection Measures

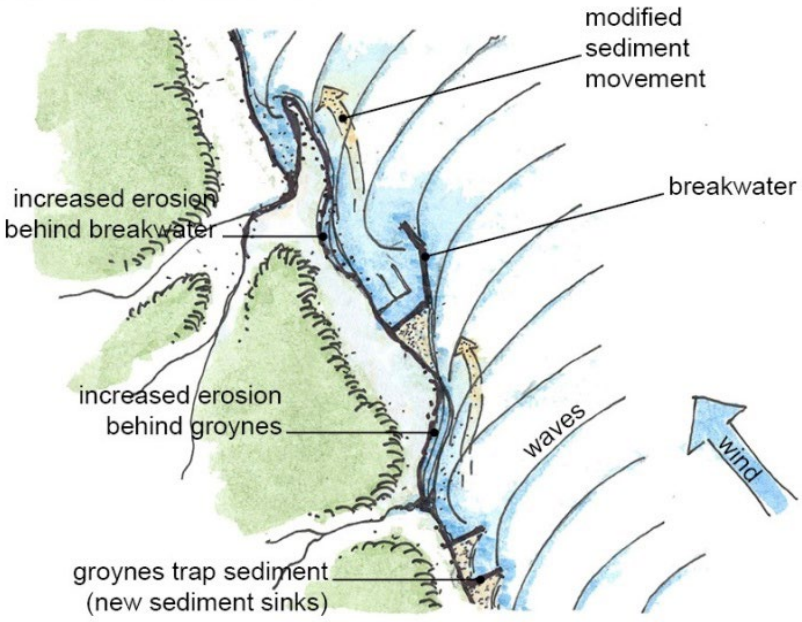
Shore Protection Measures are the range of modification measures to the shoreline, or adjacent seaward or landward areas, for the purpose of protection against erosion. Structural protection methods are often referred to as "hard" and "soft." "Hard" measures refer to those with solid, hard surfaces, such as concrete bulkheads, while "soft" structural measures rely on less rigid materials, such as biotechnical vegetation measures or beach enhancement. There is a range of measures varying from soft to hard.



NATURAL SHORELINE:



MODIFIED SHORELINE:



In general, **the harder the construction measure, the greater the impact on shoreline processes**, including sediment transport, geomorphology, and biological functions.

Groynes and breakwaters should be avoided to prevent disruption of sediment movement along the shoreline and to prevent possible exacerbation of erosion for adjacent parts of the shoreline. Also, in situations where sediment supply is starved by 'upstream' alterations or blocks to sediment supply, beach nourishment may be required, especially where a more natural beach cross-section has been restored.

1) Shoreline protection measures shall be limited to that necessary to prevent damage to existing structures or established uses on adjacent upland and only if all options to locate and design without the need for shore protection measures have been exhausted.

2) When required, only the softest possible shore protection measure that will still provide satisfactory protection such as beach nourishment designs shall be considered

3) Shore protection measures should include the addition of appropriately sized material to the upper beach, creating a natural beach slope and beach armour.

4) Use of seawalls and rip rap embankments are generally not acceptable except when no alterative shore protection design is possible (e.g. on existing narrow lots at the base of the marine scarp).

5) Shore protection measures that will cause erosion or other physical damage to adjacent or down-current properties will not be supported.

6) New structural shore protection measures along the shoreline may be considered for the protection of existing structures or to protect habitat restoration projects or hazardous substance remediation projects, if the following criteria are met:

    a) A report provided by a Qualified Environmental Professional that provides conclusive evidence that the existing structure is at risk from shoreline erosion caused by tidal action, currents, or waves. Evidence of normal sloughing, erosion of steep bluffs, or shoreline erosion itself, without a scientific or geotechnical analysis, is not sufficient demonstration of need.

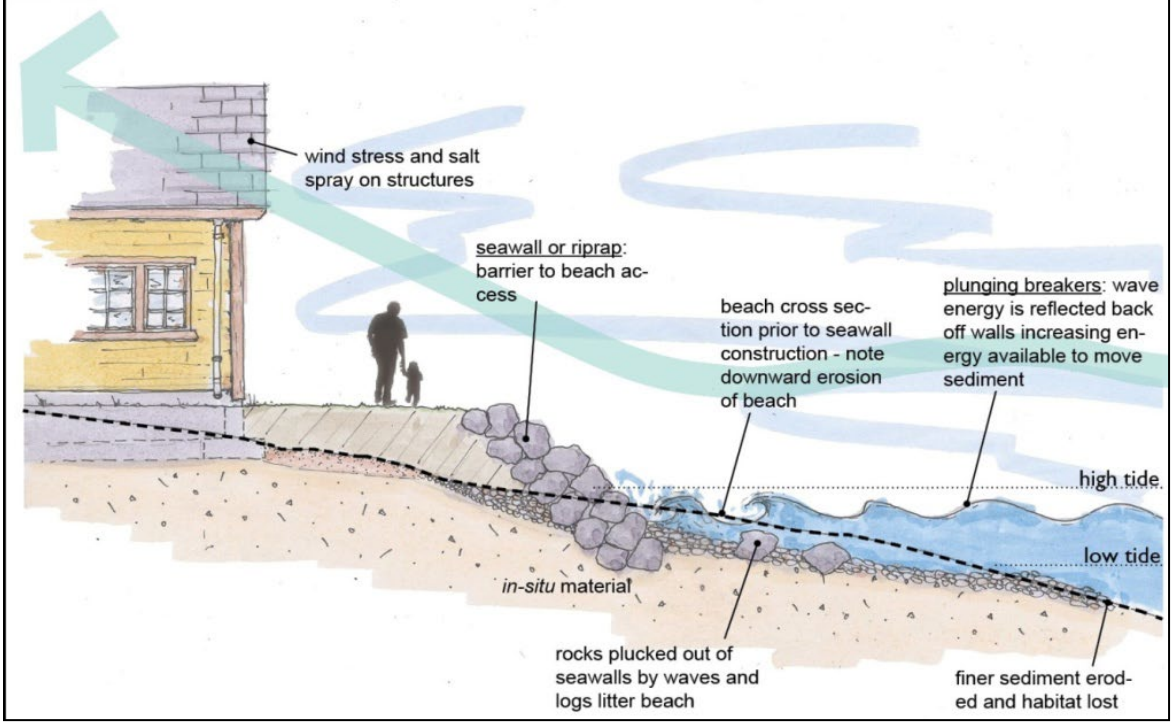
    b) The erosion is not being caused by upland conditions, such as the loss of vegetation and/or drainage conditions. The geotechnical analysis should evaluate on-site drainage issues and address drainage problems affecting the shoreline before considering structural shoreline stabilization.

    c) Non-structural measures, such as locating new buildings and structures further from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient.

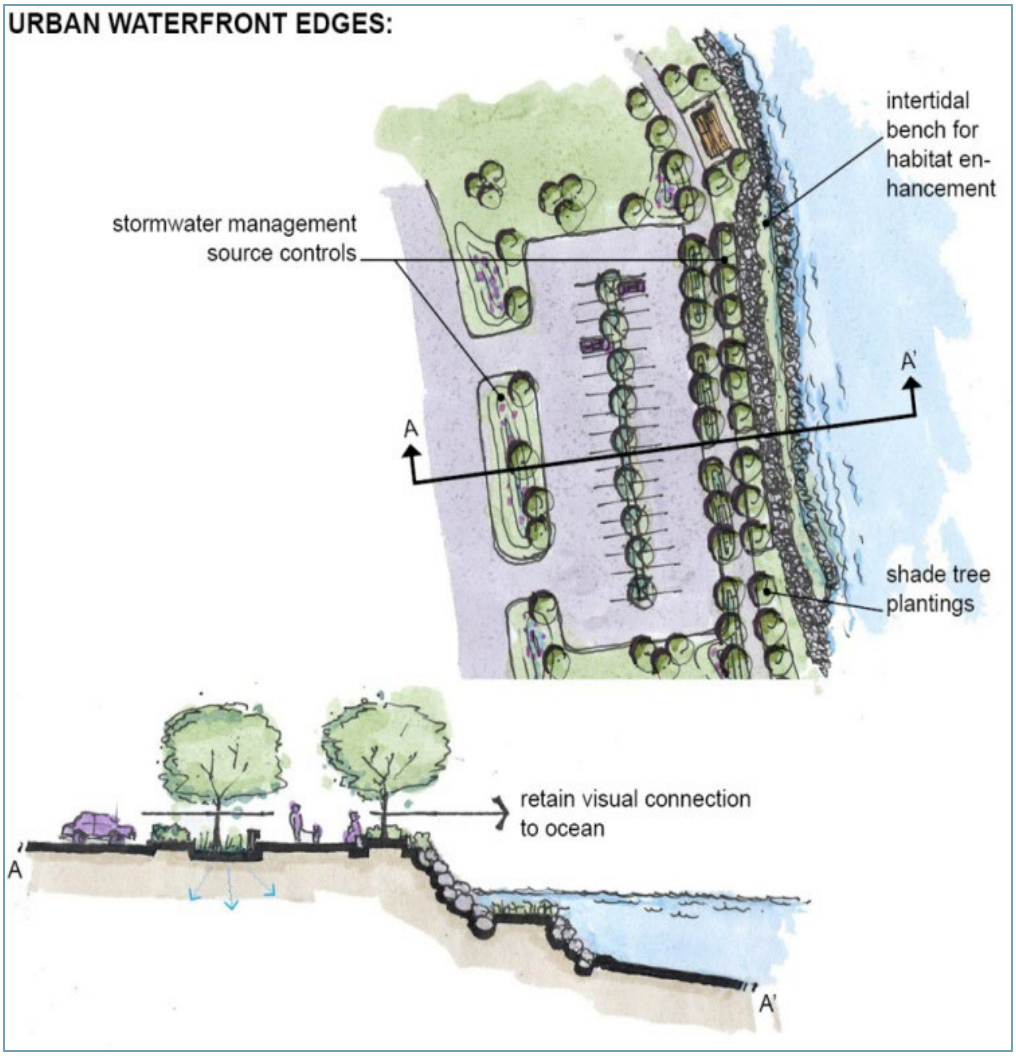
    d) The shore protection works will not result in a net loss of shoreline ecological function, as determined by a Qualified Environmental Professional.

MODIFIED (HARDENED) SEDIMENT SHORE:

Shorelines are typically hardened with seawalls or riprap walls to protect property values. However, this is often done with significant loss of other shoreline values. On sediment shorelines, important habitat function is lost, and with typical disruption to beach sediment movement processes, aesthetic value of the beach, public access to the beach, and damage to neighbouring properties can result.



URBAN WATERFRONT EDGES:



7) An existing shore protection measure may be replaced if the existing works can no longer adequately serve its purpose provided that:

   a) The replacement shore protection measures are of the same size and footprint as the existing works, unless required to prevent shoreline erosion as determined by a Qualified Environmental Professional.

   b) Replacement walls or bulkheads shall not encroach seaward of the natural boundary of an existing shore protection measure unless there are significant safety or environmental concerns that could only be addressed via such an encroachment. In such cases, the replacement shore protection measures should utilize the 'softest' approach possible and abut the existing shore protection works and senior government agency approval is also required.

   c) Where impacts to critical marine habitats would occur by leaving the existing works, existing works can be removed as part of the replacement measure.

8) All structural shore protection measures shall be installed within the property line or upland of the natural boundary, whichever is further inland. "Soft" shoreline protection measures that provide restoration of previously damaged ecological functions (e.g. beach nourishment) may be permitted seaward of the natural boundary subject to obtaining necessary approvals from the provincial and federal governments.

9) Materials used for shoreline stabilization shall consist of inert materials. Stabilization materials should not consist of debris or contaminated material that could result in pollution of tidal waters.

10) Where revetments are proposed:

   a) The size and quantity of materials used shall be limited to that necessary to withstand the estimated energy of the location's hydraulic action and prevent collapse.

   b) Designs shall be prepared by a Qualified Environmental Professional.

11) Where bulkheads are proposed:

   a) They shall not to be located where geo-hydraulic processes are critical to shoreline conservation. Feeder bluffs, marshes, wetlands, spits or hooks should be avoided.

   b) They shall be located parallel to and landward of the natural boundary of the sea, as close to any natural bank as possible.

   c) They shall allow the passage of surface or groundwater without causing ponding or saturation.

   d) They shall be constructed of stable, non-erodible materials that preserve natural shoreline characteristics. Adequate toe protection including proper footings and retention mesh should be included. Beach materials shall not be used for fill behind bulkheads.

12) All upland fill and beach nourishment materials should be clean and free of debris and contaminated material. All fill and beach nourishment proposals are subject to review and approval by the appropriate provincial and/or federal authorities.

13) The construction of elaborate stairways, boardwalks and other means to acquire access down the beach face shall be restricted unless an engineered design is accompanied by a geotechnical evaluation and an average of 30 metre (with a 5 metre minimum) wide shoreline zone over a minimum 50% of the shore length can be maintained.

14) The following guidelines should be applied for the construction and replacement of existing docks and boat launch facilities:

a) Docks and wharves shall ensure that public access along the shore is maintained, and should serve multiple users rather than one dock per property.

b) Docks and wharves shall be sited to avoid impacts on sensitive ecosystems such as eelgrass beds, fish habitat, and natural processes such as currents and littoral drift.

c) Docks shall be constructed in a manner that permits the free flow of water beneath. Supports should be located on a hard substrate.

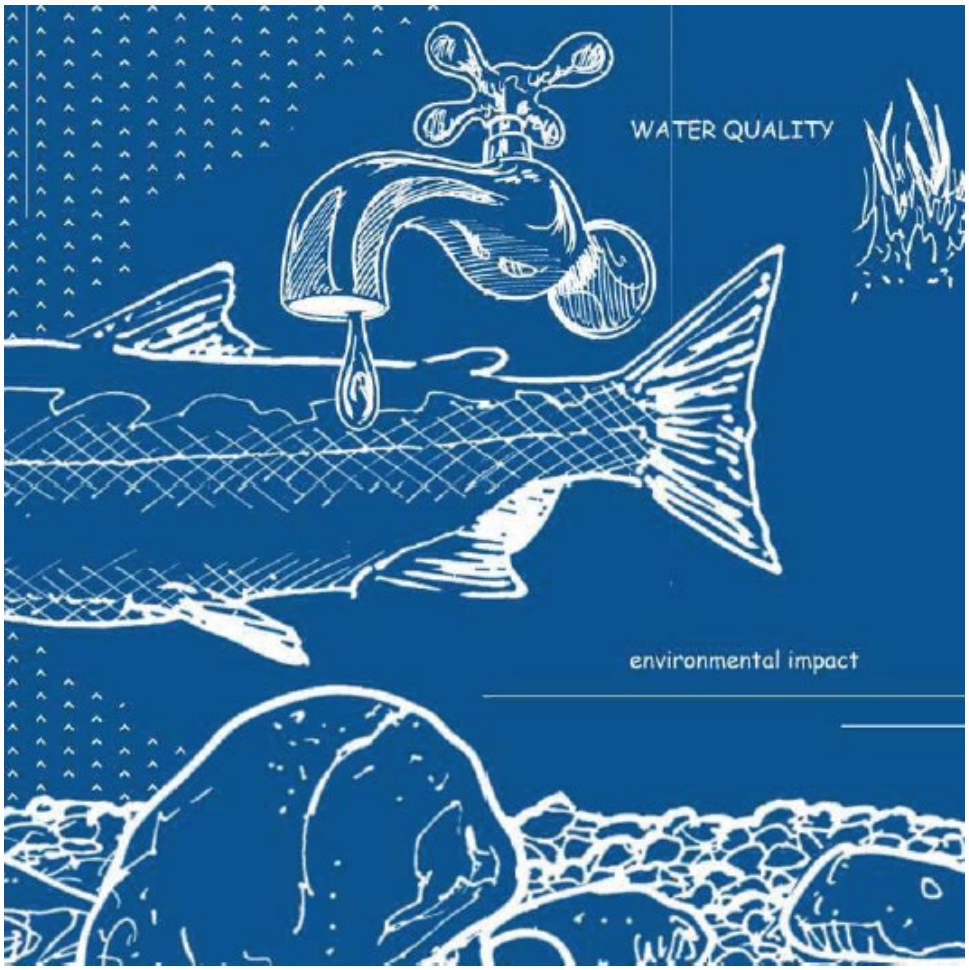
d) Floating docks shall not rest on the bottom at any time and a minimal, moveable ramp shall be utilized to connect the dock with the shore rather than a fixed wharf or pier.

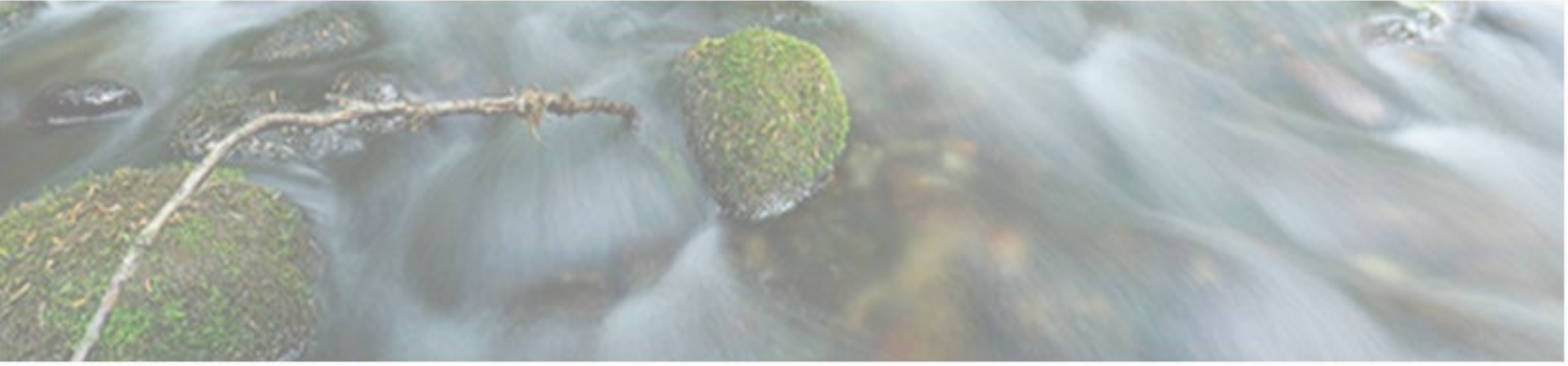
e) Piers and pilings and floating docks are preferred over solid-core piers.

f) Docks shall not use unenclosed plastic foam or other non-biodegradable materials that have the potential to degrade over time. Docks shall be constructed of stable materials that will not degrade water quality. The use of creosote-treated pilings shall be discouraged.

10 Watershed Development Permit Area

Read this section in conjunction with the General Environmental Development Permit Guidelines which also apply in this Development Permit Area.





Area Designation

In accordance with the provisions of Sections 488 (1) (a) of the *Local Government Act*, all developments within those areas designated as Watershed on Map 9 shall be subject to approval for development permit in accordance with the following development permit guidelines.

Justification

The designated area is part of the lakes system from which Campbell River obtains its drinking water supply. The water quality in the area is subject to possible degradation as a result of development occurring on and around the lake.

The geographic limit of the Watershed Protection Development Permit Area includes all lands within the drinking watershed boundary which includes all land, roads and water conveyance routes within the City from which run-off enters the watershed.

The objective of this Development Permit Area designation is to provide for long term water quality protection within the drinking watershed and provide protection for the natural environment, its ecosystems and biological diversity.

Exemptions

Refer to General Environmental Development Permit Guidelines for Exemptions.

Development Guidelines

In addition to the General Environmental Development Permit guidelines, the following specific guidelines shall be addressed for the Watershed Development Permit Areas:

1) Environmental Impact Assessment (EIA) is required to define and evaluate the cumulative effects of a proposed development on the lakes and watercourses including the impact on:

   a) water quality and quantity (ground and surface water);

   b) hydrology;

   c) air quality;

   d) aquatic biology;

e) fauna (wildlife);

f) flora (tree and vegetation inventory);

g) soils; and

h) micro-climate

Applicants are required to prepare a management plan to mitigate any potentially negative impacts determined by the EIA. Preparation of EIAs should be undertaken by qualified environmental professionals (QEP) and subject to appropriate City, Provincial and Federal agency review and comment.

2) Storm water shall be managed on-site and must ensure that annual off-site runoff is below 10% of annual rainfall. To achieve this, impervious surfaces are restricted to a maximum of 10% of the total site area.

3) Sediment drainage management plans for construction are required for all developments. Water quality is sensitive to turbidity resulting from erosion, sediment and run-off. This plan can be included as part of the EIA and mitigation measures. If submitted separately, the plan is required prior to development permit issuance and is subject to City review and approval.

4) Proposed development within the Watershed Development Permit Area requires maintenance or enhancement of landscaping (or naturescaping) in watercourse setbacks. The objective of landscaping and planting should be to protect, enhance or restore water quality, aquatic and terrestrial habitat, and to minimize runoff and erosion impacts. Prior to planting in the identified setback, a vegetation management plan must be prepared to a professional standard satisfactory to the City. The Plan can be included as part of the EIA and mitigation measures. Vegetation should be selected from a City-approved listing of species or from native plants and ground cover (naturescape). Lake views are an important aesthetic value; vegetation management plans and native plant species lists will permit sufficient flexibility to retain views.

5) The use of chemical fertilizers or pesticides is prohibited within this area.

6) No removal of trees or clearing of vegetation within the watercourse landscaped setback of 50 metres from the high-water elevation will be permitted without the prior written approval of the City.

7) Where a net positive improvement for aquatic habitat can be demonstrated, vegetation may be removed for development projects, subject to appropriate City, Provincial and Federal agency regulations (particularly for fish habitat), review and comment. Development may also be approved where vegetation removal results in no net loss of aquatic habitat, also subject to appropriate City, Provincial and Federal agency regulations, review and comment. This regulation includes boat launches. Boat launches typically denude riparian areas and create conduit for sedimentation and run-off.

8) There will be only one float or dock per fee simple or bareland strata property. Where multi-unit stratas (e.g. townhomes or apartments) are proposed or existing, there shall be one float or dock as common property per development. Permit conditions for private floats, wharfs and docks includes the following:

a) Dock construction materials must be inert (e.g. natural untreated cedar, precast concrete or steel). Materials that can leach contaminants (for example, creosote treated or chromated copper arsenate (CCA preserved wood) are prohibited.

b) No disruption to vegetation, slope or foreshore habitat from construction or the structure without demonstration of net positive improvement to the riparian areas. This includes the seasonal removal and storage of floating structures.

c) Structures should be maintained to appropriate safety standards to avoid disruption to vegetation, slope or foreshore habitat.

d) Construction plans must be submitted prior to permit approval and construction. Plans should include:

   i) Name of legal owner and lot number/address where the dock will be installed.

   ii) sketch plan indicating lot and proposed location of dock.

   iii) Horizontal distance that dock will extend into lake from the shore and structure dimensions.

   iv) Type of installation (floating or fixed on pilings).

   v) Construction materials to be used.

e) No storage of hydrocarbons (fuel, lubricating oils) on these structures or within 50 meters (suggested riparian setback).

9) Gravel extraction is prohibited where there is less than 50m between the associated disturbance and the closest surface water body (including ephemeral streams) or where run-off and ground water drain into the watershed. Pit water and runoff should be allowed to infiltrate rather than contributing to surface runoff, provided an adequate width of soils between the worked area and the surface water exists for adequate soil filtration (at least 30 metres).

10) On-site oil/sediment/water separators are required for uses in all zones to remove point-source pollution from storm water runoff.

11) Adequate financial security, as determined by the City, should be provided prior to beginning construction of any building or disturbance of a site located in the Watershed Development Permit Area. Prior to any development occurring, a cost estimate of the landscaping work within the vegetated riparian setbacks prepared by a qualified professional must be submitted to the City. Alternately, this cost should be determined as part of the EIA preparation. The value of the financial security shall be 125% of the amount required to pay for the costs of repair caused by construction or site disturbance such as sediment drainage maintenance or dock/wharf construction.

12) No sewage disposal system may be located so that the absorption field is within 100 metres of the surveyed high water elevation. If no suitable site exists, a setback of 30 metres may be considered providing that a professional geotechnical engineer and public health inspector certify that the site is suitable for the proposed sewage disposal system, that it presents no risks

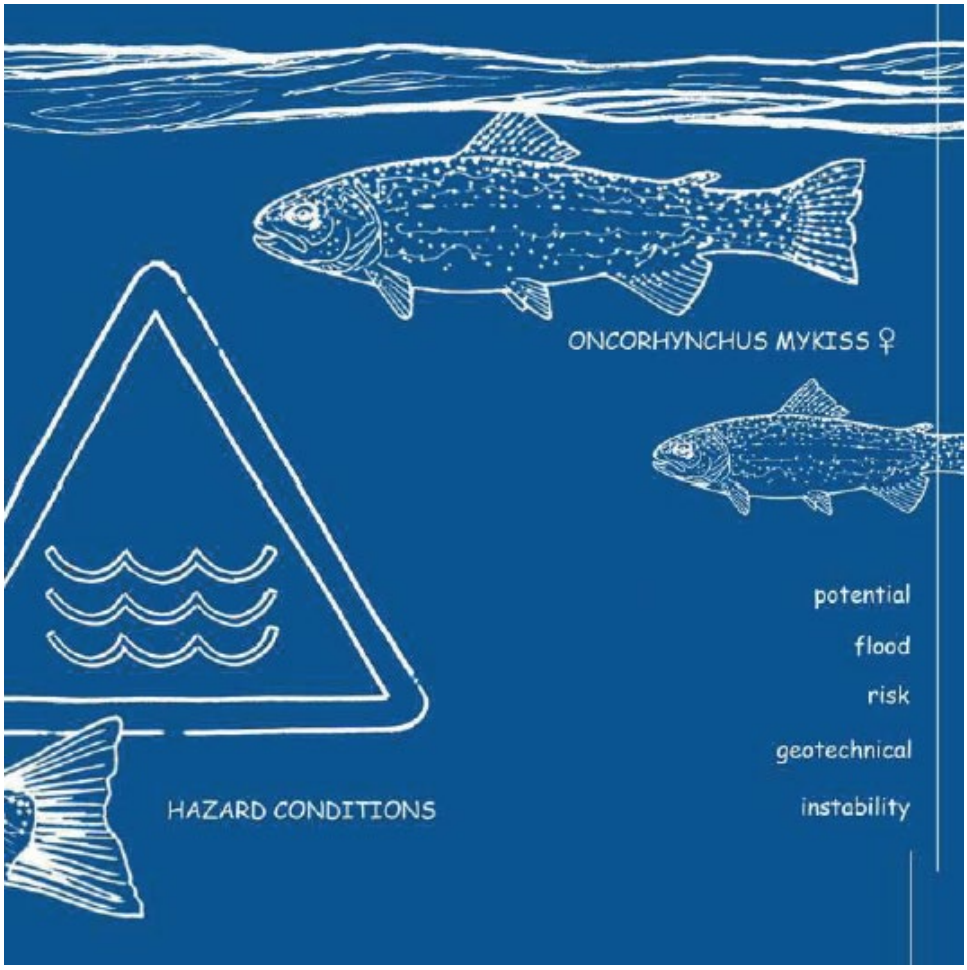
to the quality of water within the adjacent lake, and that the system complies with both the applicable Provincial regulations and the conditions specified in the "Permit to Construct".

13) Alteration of the natural drainage of the site should be minimized.

14) Fuel storage and refuelling facilities will only be permitted on land as outlined above, and shall have adequate provision for containment of spills.

11 Hazard Conditions Development Permit Area

Read this section in conjunction with the general environmental development guidelines which also apply in this Development Permit Area



Area Designation

In accordance with the provisions of Sections 488 (1) (b) of the *Local Government Act*, all land alteration, subdivision or development shall be subject to approval for development permit within those areas identified on Map 10: Hazardous Conditions Development Permit Area shall be subject to approval for development permit in accordance with the following development permit guidelines.

Development permit approval in steep slope areas will be required prior to any site clearing, site excavation, tree or vegetation removal (subject to exemptions below).

Justification

The purpose of designating these areas is to minimize loss of life and damage to property and the environment in areas identified as having potential for flood risk and/or geotechnical (slope) instability by initiating minimum standards and legislative requirements for safety and protection.

Exemptions

The following development is exempted from the requirement to obtain a development permit for Hazardous Conditions:

In a flood hazard area:

1) Additions which serve to increase the building footprint by less than 25%, or which serve to relocate sleeping areas above the calculated flood level.

2) Development, where a report has been received from a qualified engineer demonstrating that the land may be used safely for the use intended. A building permit may be issued in this situation, on condition that construction be strictly in accordance with the recommendations in the report.

In a steep slope area:

3) Development, where a geotechnical report has been received in conjunction with an application for building permit or subdivision approval.

4) Removing or moving soil in quantities below the thresholds identified in the Soil Deposition Bylaw;

5) Erecting fencing;

6) For trees:
   a) Removing dead trees provided that the stump remains undisturbed;

   b) Planting new trees;

   c) Removal of trees where the tree trunk diameter is less than 5cm (measured 1m from the base); and

   d) Where the tree trunk diameter is greater than 5cm (measured 1m from the base) pruning, limbing and topping of trees provided a Certified Arborist provides a written opinion stating that the activity will not kill the tree.

7) Domestic yard maintenance, gardening and planting, including:

   a) Planting new vegetation and maintaining existing vegetation through mowing, pruning, and similar activities;

   b) Removing any dead vegetation provided the root structure is not disturbed; and

   c) Removing any vegetation with stem diameter less than 5cm (measured 1m from the base), and not resulting in areas of exposed soil on a steep slope.

Hazard Conditions Development Permit Guidelines

In addition to the General Environmental Development Permit guidelines, the following specific guidelines shall be addressed for the Hazard Conditions Development Permit Areas:

1) In a flood hazard area:

   a) All buildings for residential occupancy shall require the underside of the floor system for living space to be above the identified flood levels.

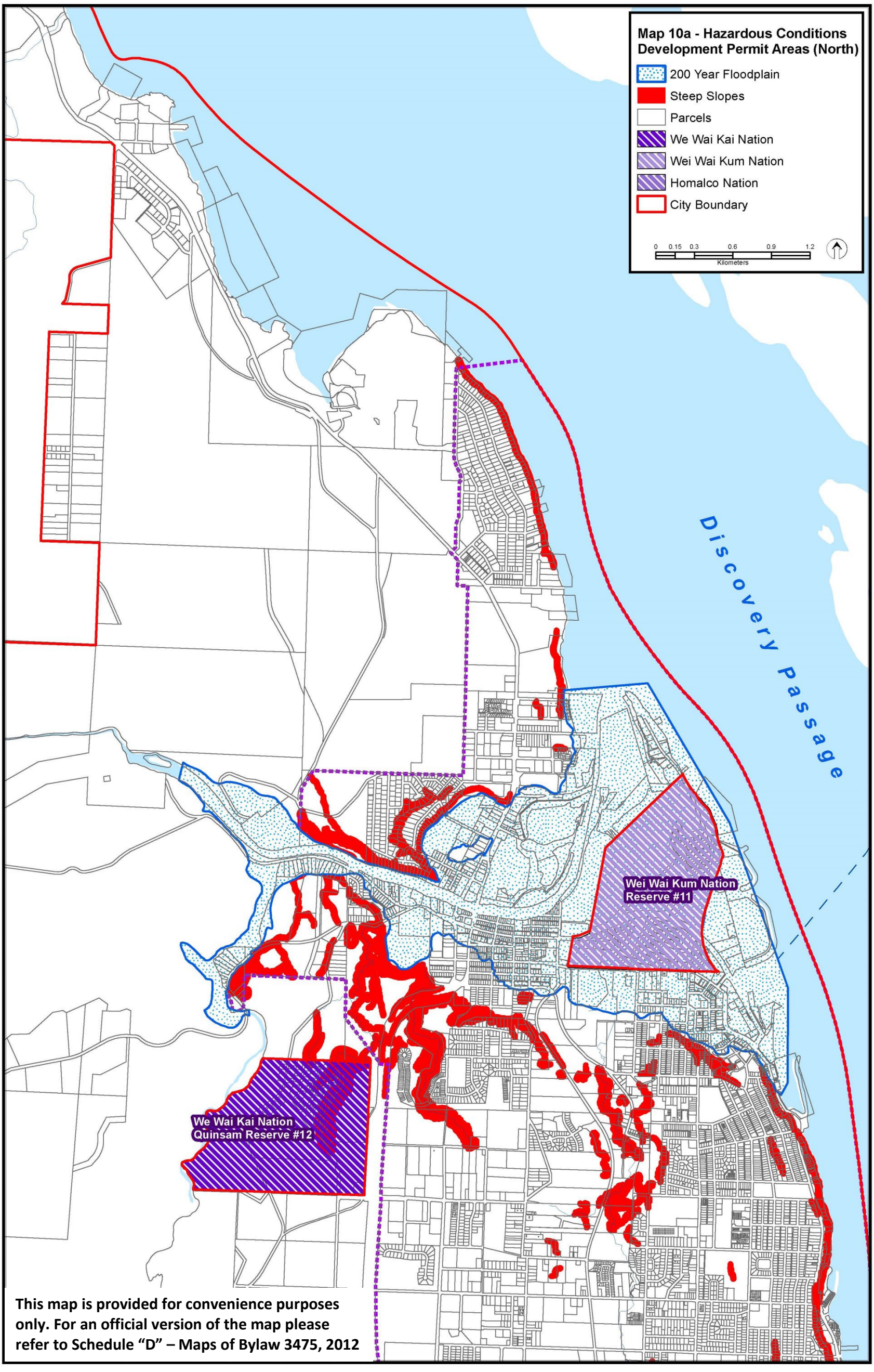
   b) All other development, including floor space ancillary to residential occupancies (such as underground or grade level parking), and floor space for commercial and industrial occupancies, may be permitted below the identified flood levels, on the condition that all electrical and mechanical equipment are either located above the identified flood levels or where a qualified engineer has confirmed they may be safely located below the calculated flood level.

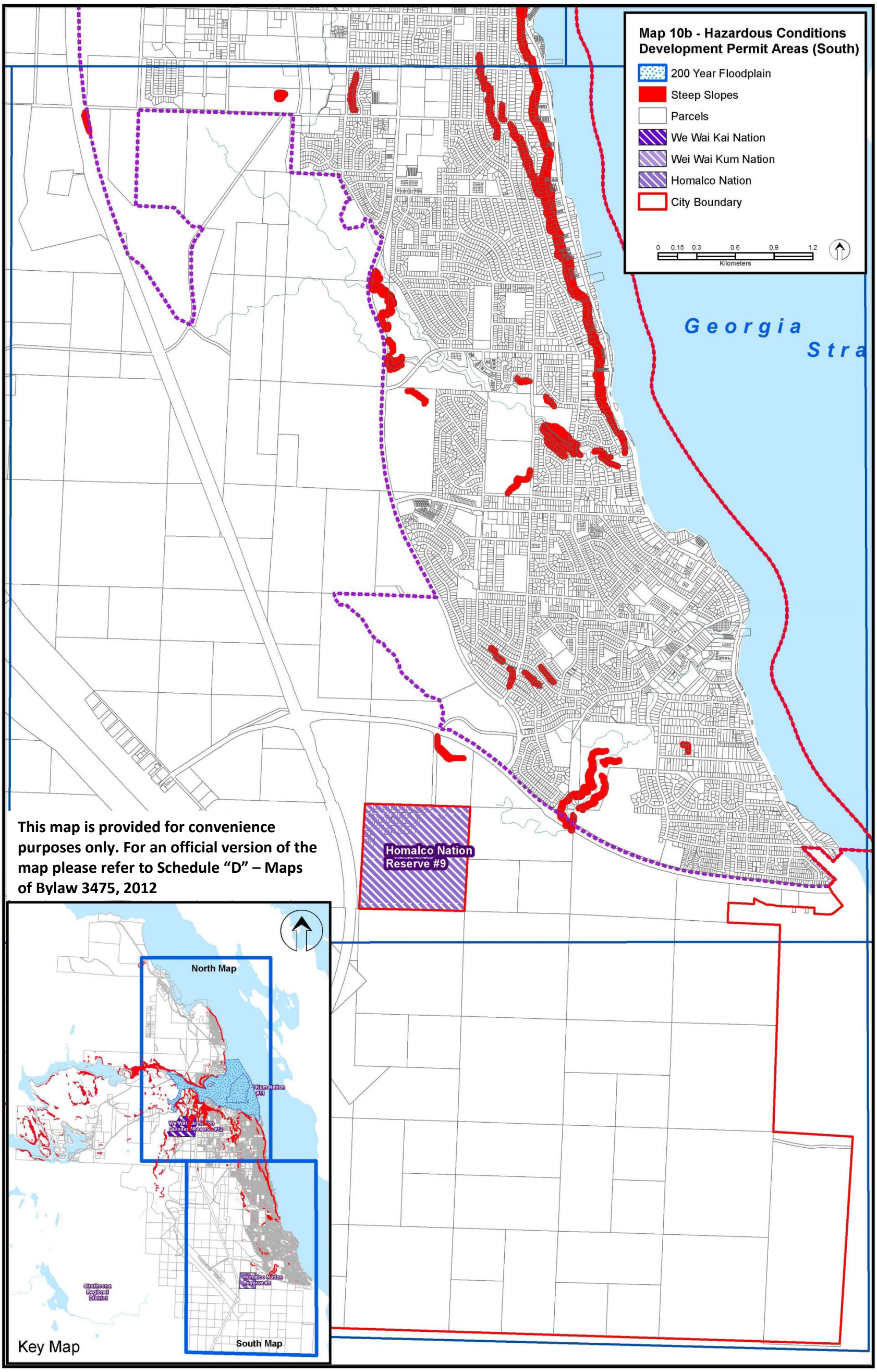
   c) A development permit will be required to ensure that building foundations are designed by a qualified professional engineer. In this regard, the applicants shall be required to submit a report that the land may be used safely for the use intended. In the designated 200-year floodplain area, subdivision approvals will require an engineer's report demonstrating that the land may be used safely for the use intended.

2) For a property whose boundaries lie within 20 m of a slope that is both at least a 30% grade and 10 m high from the crest to the toe (a "steep slope"):

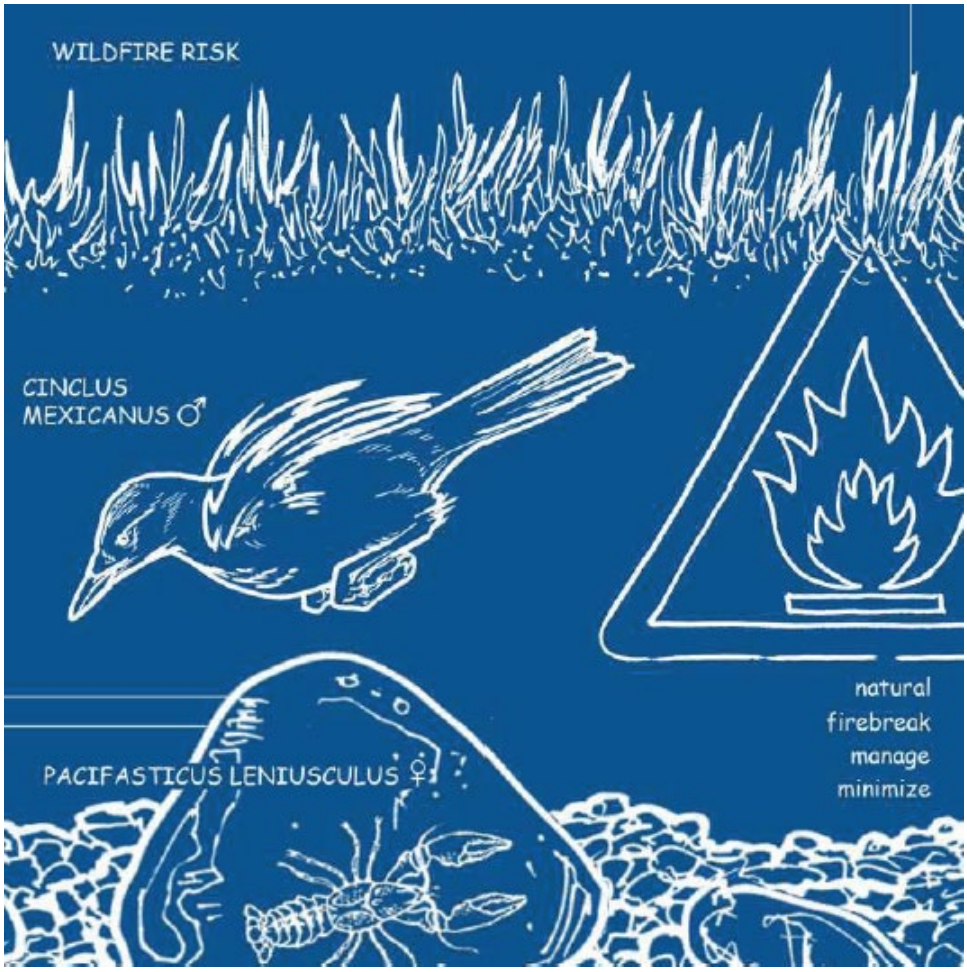
a) Applicants shall submit a geotechnical report, prepared by a QEP. This report shall address all issues related to site drainage, soil slippage (surface and deep seated), seismic constraints, site clearing, vegetation retention, and how this relates to development usage, setbacks and design. The geotechnical report shall be co-ordinated with the environmental report required by other City Development Permit Areas, if applicable, to create a combined solution that mitigates both hazard and environmental impacts and protects environmentally valuable resources.

b) Risk slope stabilization must address bioengineering approaches prior to hard engineering solutions.


Map 10a - Hazardous Conditions
Development Permit Areas (North)
200 Year Floodplain
Steep Slopes
Parcels
We Wai Kai Nation
Wei Wai Kum Nation
Homalco Nation
City Boundary
0 0.15 0.3 0.6 0.9 1.2
Kilometers
Discovery Passage
Wei Wai Kum Nation
Reserve #11
We Wai Kai Nation
Quinsam Reserve #12
This map is provided for convenience purposes only. For an official version of the map please refer to Schedule "D" – Maps of Bylaw 3475, 2012


Map 10b - Hazardous Conditions
Development Permit Areas (South)
200 Year Floodplain
Steep Slopes
Parcels
We Wai Kai Nation
Wei Wai Kum Nation
Homalco Nation
City Boundary
0 0.15 0.3 0.6 0.9 1.2
Kilometers
Georgia
Stra
Homalco Nation
Reserve #9
This map is provided for convenience purposes only. For an official version of the map please refer to Schedule "D" – Maps of Bylaw 3475, 2012
North Map
South Map
Key Map
Strathcona
Regional
District

12 Interface Fire Hazard Development Permit Area



Area Designation

In accordance with the provisions of Sections 488 (1) (a) and (b) of the *Local Government Act*, all the lands shown as a hazard on Map 11 as a Development Permit Area shall be subject to approval for development permit in accordance with the following development permit guidelines for the purposes of:

a) protection of the natural environment, its ecosystems and biological diversity;

b) protection of development from hazardous conditions.

Development permits are required for all forms of development within a Development Permit Areas except those described under 'Exemptions'. 'Development' means any residential, commercial or industrial structures or ancillary uses.

Justification

The City has designated all lands shown as a hazard on Map 11 as a Development Permit Area pursuant to provisions in the *Local Government Act*. The justification for this designation is to ensure that the City has the ability to regulate development within high wildfire hazard risk areas to minimize associated risk to people and property from wildfire hazards.

Exemptions

1) Minor renovations involving 25% or less of the façade of an existing building (but not including expansion of the floorplate or cantilevered elements) are exempt from the Development Permit application approval process.

Development Guidelines for Interface Fire Hazard

1) For new development in high risk interface fire hazard areas, applications must be accompanied by a wildfire hazard assessment and interface mitigation plan prepared by a qualified professional that minimizes the risk associated with the proposed development/ building concept.

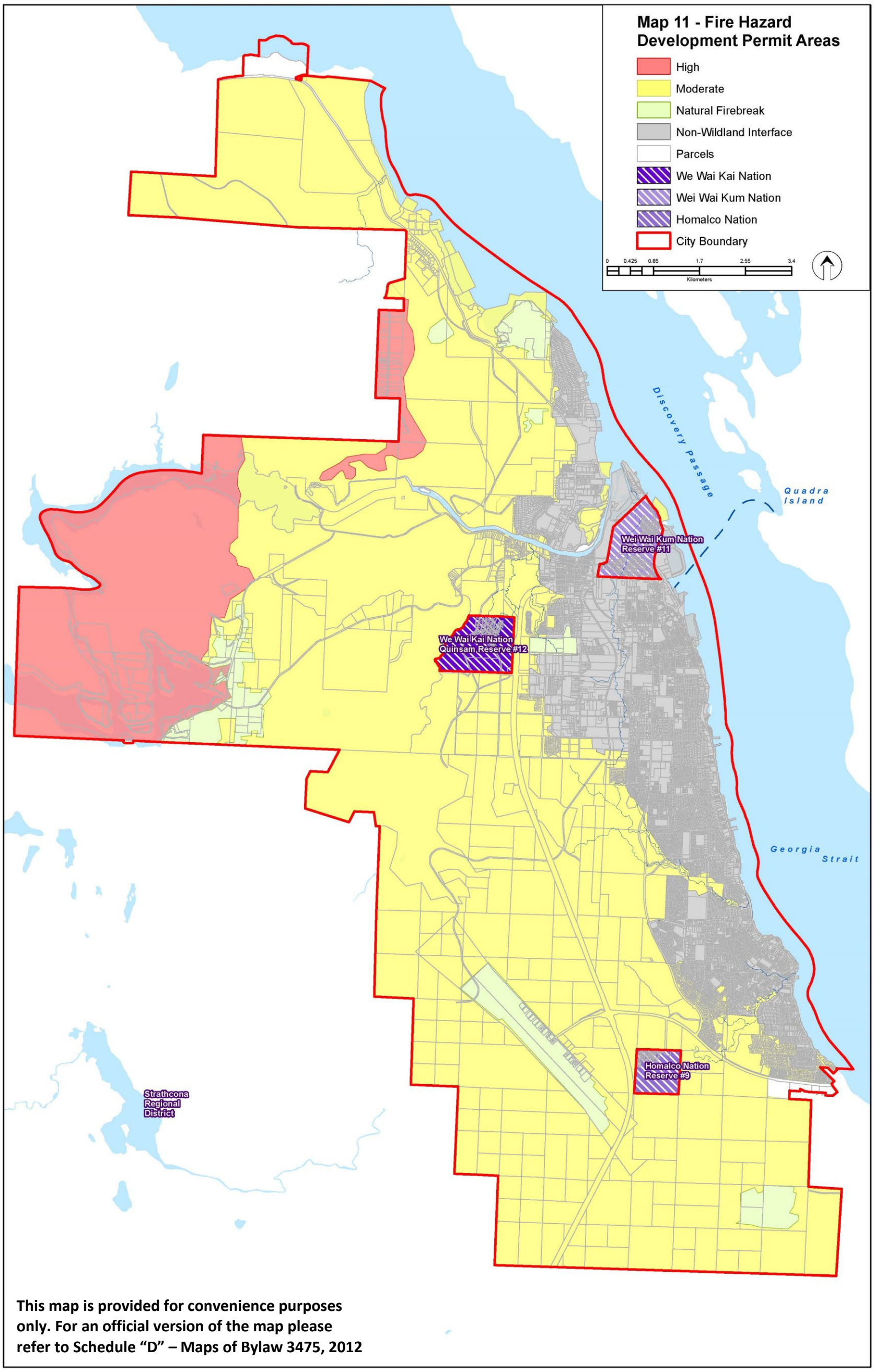
2) A report, prepared by a Registered Professional Biologist is required with recommendations for minimizing interface fire hazard in a manner that seeks to preserve, where possible, sensitive ecosystems that may occur in close proximity to development. Registration of a restrictive covenant that prohibits any outdoor burning may be required.

3) Development will be encouraged to be clustered to accommodate the clustering of residential densities.

4) The development of a trail system is encouraged around developments that can accommodate fire vehicle access for fighting wildfire in interface areas.

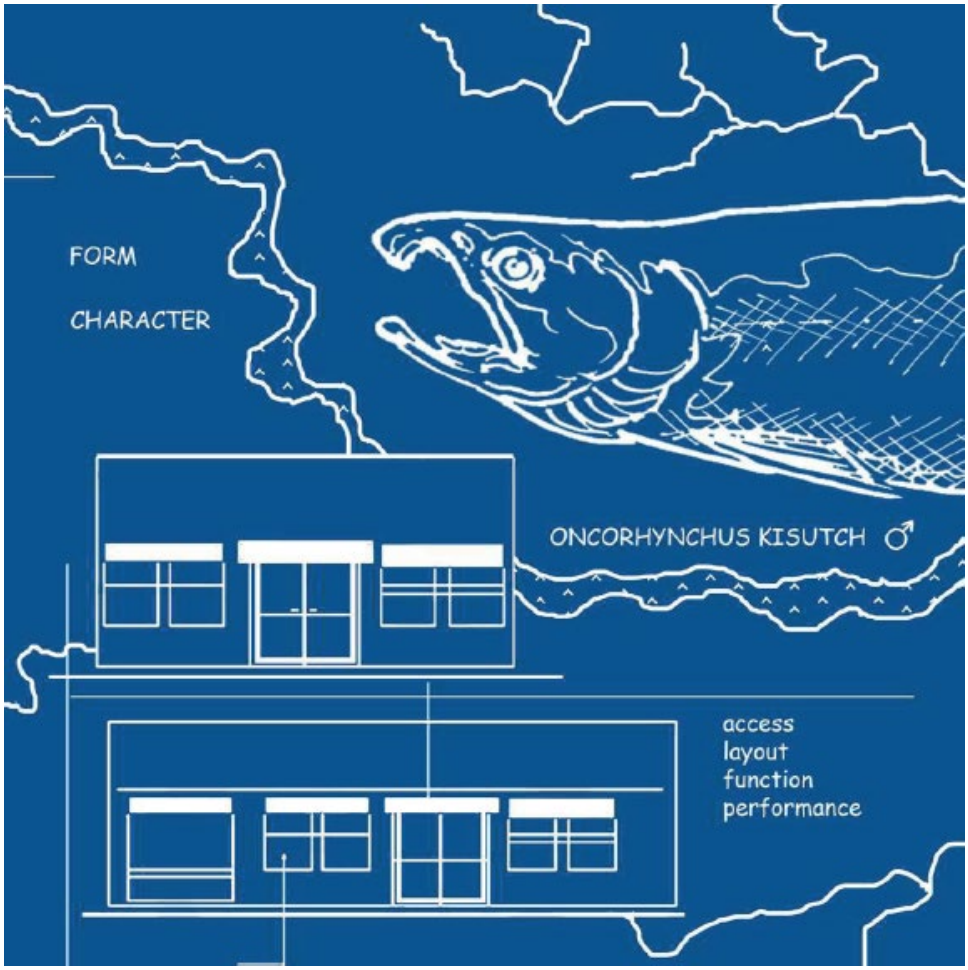
5) Developments shall incorporate fire breaks adjacent to residential areas. These may be in the form of cleared parkland, roads, or trails.

6) Landscape plans be prepared in consultation with both a Registered Professional Biologist and a Registered Professional Forester, and provide recommendations for ensuring minimal fuel loading within landscaped areas.



This map is provided for convenience purposes only. For an official version of the map please refer to Schedule "D" – Maps of Bylaw 3475, 2012

13 Development Approval Information Area



Area Designation

All lands within the boundaries of City of Campbell River shown on "Map 1 – Overview Map" are designated as a Development Approval Information Area.

Unless otherwise exempted under the Exemptions section below, land in the designated areas must not be subdivided and construction of, addition to or alteration of a building or other structure must not be started unless the owner first obtains a development permit in accordance with the associated development permit guidelines contained herein.

Justification

Campbell River's Official Community Plan is built around a framework of community sustainability goals. Development has the capacity to contribute to, or detract from, those goals. The objective of the Development Approval Information area is to inform the City about the anticipated impacts the proposed development will have on achievement of the City's goals as expressed in this Plan.

Information Requirements

The City intends to provide a brief Development Checklist to applicants which summarizes key information requests relating to each of the goals in this plan. It is anticipated that this checklist will make it easier for applicants to assess and demonstrate consistency of their proposals with community goals, helping to streamline the application process.

In addition to this checklist, the City may require specific information to assess the anticipated impacts of the development on the community. For example, this information may include traffic impact assessments, environmental reports, and other analyses relating the proposed development to community goals and policy objectives.