

City of Vancouver Land Use and Development Policies and Guidelines

Planning, Urban Design and Sustainability Department

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FALSE CREEK FLATS URBAN DESIGN POLICIES AND GUIDELINES FOR I-2 AND I-3

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False Creek Flats

Map 1 – False Creek Flats Zone District Map for I-2 Sub-area B and I-3 Sub-Areas A and B



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1 Application and Intent

1.1 Plan Principles

These policies and guidelines apply to I-2 Sub-area B and I-3 Sub-area A and are to be used in conjunction with the I-2 and I-3 District Schedules for the Terminal Spine, Creative Campus and Health Hub Sub-Areas of the False Creek Flats and should be consulted in seeking approval for conditional approval uses or discretionary variations in regulations. These policies and guidelines do not apply to the I-2 Sub-Area A Back-of-House sub-area. As well as assisting the applicant, these policies and guidelines will be used to evaluate conditional or discretionary relaxations.

The intent of these policies and guidelines are to:

- (a) Intensify Employment Opportunities: Increase job space around existing and future transit sites that reflect the industrial character and nature of the area. Explore opportunities for higher use of existing buildings for more intensified job space.
- (b) Maximize Flexibility: Ensure that new buildings can adapt and evolve to accommodate future changes in economic production.
- (c) Encourage Vertical Stacking of Industry and Production Spaces: There is increasingly an opportunity to stack many industrial/production businesses in the same building. With the goal of increasing employment and the productive output of the area, the plan supports a return of vertically stacked industrial uses in the Flats.
- (d) Take Advantage of Unique Opportunities: A thriving economy requires space for all scales of businesses from start-ups to headquarters. Large lot sizes create flexibility and scale not available elsewhere in the inner city. Plan for flexible outdoor spaces that can host a variety of uses over 24 hours.
- (e) Create Buildings that Respect & Respond to the Public Realm: Design buildings at the scale of the pedestrian by incorporating elements at the ground floor that help to create attractive, well- functioning and welcoming spaces.
- (f) Reference Industrial & Institutional Urban Fabric: Consider a campus approach to the design and siting of developments on large sites. Accommodate industrial and institutional scales within a finer grained urban setting to facilitate organic growth and phasing over time.
- (g) Create healthy and productive workspaces: Design the public realm to maximize sunlight on public spaces and daylight in work environments.
- (h) Encourage Working Rooftops: Expand economic functions to the roof tops of buildings.
- (i) Create Thoughtful Transitions Respectful of Surrounding Residential Neighbourhoods: Require transitions between working industrial lands and adjacent residential.
- (j) Showcase Functional Workspaces in the Public Realm: Create links between the public realm and industrial function to showcase the industrial character of the Flats.
- (k) Create Buildings and Neighbourhoods that Respond to Sea Level Rise: Low topographic elevations and anticipated sea level rise presents a major challenge for development in False Creek Flats. Provide adaptive, flood resilient building design solutions.
- (1) Re-purpose Vehicle Parking: Minimize surface parking and design for parking areas to transition to work space over time as other modes of transportation improve.

1.2 Structure Plan

The structure plan provides a quick reference for the overall physical framework and context for the False Creek Flats Area Plan, District Schedules and these Policies and Guidelines.

Map 2- Structure Plan



2 General Design Considerations

Development should provide opportunities for flexible and diverse building typologies and light industrial uses at grade. Buildings are encouraged to have more active and engaging ground floors that showcase functional workspace. New and improved connections through the area for walking and cycling are anticipated and will improve transportation.

Proposals will be evaluated by staff based the urban design performance objectives including setbacks, massing, building articulation, access to daylight and views, provision of on-site public open space, transition to surround communities, improved building articulation and animated streetscapes. There is a need to seek ways to create a more comfortable pedestrian experience by greening the streets with tree planting, continuous sidewalks and by encouraging active street frontages for businesses. Site layout and building design should reinforce the urban industrial scale and street network.

2.1 Neighbourhood Character

I-2 - Terminal Spine Sub-Area

The intent for the Terminal Spine Sub-area is to become an intensified industrial area emphasizing the quality of the public realm and serve as a transition from the higher density I-3 zone district to the I-2 Back-of-House sub-area.

I-3 - Health Hub and Creative Campus Sub-Areas

The intent for the Health Hub and Creative Campus sub-areas is to enable intensification opportunities for flexible industrial and light industrial workspace, office space and other employment opportunities while enhancing public life and creating pedestrian interest.

The Health Hub includes the anticipated new St. Paul's Hospital and health campus on a 7.5 hectare (18.5 acre) site in the north-west corner of the False Creek Flats. It will significantly intensify employment, deliver disaster-resilient infrastructure and create a well-connected public realm that integrates the new hospital and health campus into the city and adjacent neighbourhoods. In addition, the sub-area contains Thornton and Trillium Parks, Pacific Central Station and related railyards.

The Creative Campus sub-area is located in the west and southern sector. With a distinct street grid and unique mix of industrial, office, IT, and creative industries, this transit rich sub-area will become the 'public face' of the False Creek Flats and provide a point of convergence where new connections link amenity and public spaces in this intensified employment node.



Map 3 - False Creek Flats Character Areas.

Large Sites

Large sites in the Flats are generally defined by being **1.25 ha** (12,500 sm) or larger and having frontages longer than the average neighbourhood block of approximately 61 meters. Additional large sites may be created through the consolidation of smaller lots.

The character and intent for large site should be considered with respect to its sub-area and be based on its own unique qualities. Large site design lends itself to a campus approach meaning prioritizing grouped arrangements building that create community outdoor open spaces and internalized vehicular access. New drives and vehicular access should integrate with the existing roads network and public open space network as well as limit the number of sidewalk crossings.



Map 4 - Existing Large Sites in the Flats

2.2 Unique Spaces and Places

The diverse combination of uses and forms of development in False Creak Flats provides for opportunities to create unique and varied places. Creation of opportunities for public engagement in a variety of distinct places is highly encouraged.



Building design, where possible, should seek to reinforce established street orientations emphasizing street level entrances and storefronts. The following strategies are highly encouraged:

- (a) Building faces that align with respective street orientations and established street wall heights.
- (b) Building faces built out to front yard setbacks.
- (c) On corner sites, both street facing facades should be developed as front elevations.
- (d) Reinforce irregular, curved or angled sites resulting in non-orthogonal building geometries.
- (e) Tower elements may be re-oriented with respect to daylight and solar performance, views, and architectural expression.

Figure 1- Orientation



2.4 Views

New development should be considerate of the impact on existing distant views. However as development progresses, the industrial and institutional scales and densities anticipated in False Creek Flats may have an impact on the ability to preserve these existing views. Development should therefore place a higher emphasis on the following strategies:

- (a) Provide an attractive near view. This can include a finer grained urban fabric and building modules, high-quality materials and detailing, visually permeable facades, programming for active outdoor uses and landscape elements.
- (b) Visually linking of open space. This can serve to expand the depth of views and may be achieved with building separations and setbacks.
- (c) The form and shape of tower elements should be informed by view studies.

2.5 Topography: Floodplain

False Creek Flats has low topographic elevations and may be at risk of

flooding during large storms by the end of the century if projected sea level rise occurs. The Flood Plain Standards and Requirements as adopted by Vancouver City Council sets the designated flood plain at 4.6m from GVRD datum. As a consequence, existing grades including street right of ways, are often one to two meters below the anticipated ground floor elevations. A plan to raise street elevations may be considered in the future. Therefore, new development should be designed to be adaptive when incorporating flood resilient construction methods and to accommodate public realm objectives for both the current and potential future at grade conditions. Solutions should be accommodated within the property, be visually interesting, and relate to the pedestrian scale. Examples include increased building setbacks, internalized stairs and ramping as well as adaptable entries, loading and parking.

Figure 2 - Floodplain Strategies







2.6 Light and Ventilation

Daylight and ventilation in work environments can improve energy usage as well as promoting health and productivity. Considerations include:

- (a) solar shading devices, light shelfs and glazing performance;
- (b) building orientation and massing;
- (c) increased floor and ceiling heights; and
- (d) operable windows.

2.7 Weather

In all cases, weather protection should be provided at common building entries and individual entries. Continuous weather protection should be provided along all street frontages, except that, it may not be provided continuously where it can be shown the provision would interfere with well-functioning industrial uses or where pedestrian traffic is not anticipated. Explore opportunities for weather protection that can encourage use as functional outdoor workspace.



2.8 Safety and Security

New development must provide a secure environment. The principles of "crime prevention through environmental design" (CPTED) should be incorporated in all new development. Some strategies include:

- (a) Maximize opportunities for natural surveillance;
- (b) Provide unobstructed and transparent sightlines to exits and destinations;
- (c) Foster territoriality and a sense of ownership;
- (d) No hiding places;
- (e) Lighting of public spaces;
- (f) Lobbies visible from the street and main entrances to buildings fronting the street;
- (g) Personal safety and security should be integral to the design of parking facilities and comply with the Parking By-law.

2.9 Access and Circulation

- 2.9.1 Pedestrian Access
 - (a) Primary pedestrian access to all uses should be from the street at street level;
 - (b) Internal public circulation systems such as shopping malls, are highly discouraged;
 - (c) Corridors and elevators should be adequately sized for their intended use such as transporting goods or moving furniture and should not be overly long (no more than 23.0 m in any one direction) or circuitous.

2.9.2 Bicycle Access

- (a) Design buildings to accommodate and encourage cycling. Strategies include easy access to secure bicycle storage, access separate from vehicles, wider aisles, automatic door openers, weather protected exterior bicycle racks, maintenance stations, and enhanced end-of-trip facilities.
- (b) Provide direct routes between bike routes and building entrances, public bike share stations, bike parking, and other end-of-trip facilities.

2.9.3 Vehicular Access

To ensure a safe and active pedestrian environment, vehicular and service functions should not conflict with street frontage and pedestrian activity when possible.

- (a) Vehicular access, loading and service areas should be provided from the lane rather than the street where lanes are provided;
- (b) Where street access is considered, vehicular entrances should be designed integrally with the building or via side yard setbacks.
- (c) Explore opportunities for shared access drives in side yards with adjacent properties.
- (d) Where loading and vehicular access is required from the street, openings should be limited or functional integrated with the adjacent public realm. Consideration should be given to limiting bay openings to one structural bay at an approximate 7.6 m (25 ft) module.

2.10 Heritage

Heritage buildings located in the Flats, contribute to its character and architectural diversity. The Vancouver Heritage Register should be consulted when evaluating existing structures. Provide options that demonstrate a significant retention strategy when re-developing a site with a heritage building. Other older character buildings, although not listed in the Register, should also be considered for retention. In general, reuse of existing structures can contribute to sustainable solutions that are enriched by the historic narrative of a site. Review of developments with potential heritage resources with city staff is encouraged early in pre-application meetings.

3 Use

3.1 Vertical Stacking of Uses

As a means of intensifying industry and production spaces, exploration of vertically stacked uses is encouraged. Objectives for mezzanines and accessories uses include:

- (a) continuity with the adjacent primary use or space;
- (b) locate mezzanines away from front or flanking facades;
- (c) a minimum floor to floor height for mezzanines of 3.1 m (10 ft); and
- (d) convenient access to loading, garbage and elevators for all floors and mezzanines.





3.2 Uses at Grade

Provide active and engaging uses at grade. Emphasize attractive, well-functioning and welcoming frontages that showcase workspace. Strategies including visually permeable frontages, operable window walls, setbacks and weather protection to accommodate outdoor workspaces are encouraged. The Director of Planning may consider relaxations to Conditions of Use in the District Schedules to encourage outdoor workspace and activities on-site based on the compatibility with the surrounding area and adjoining non-industrial districts.

Other than entrances and lobbies, Office uses should be located above the ground floor level. Where accessory retail or service uses are permitted these spaces should be designed to function in concert with the primary use and have their own entrances and street presence.



4 Policies and Guidelines Pertaining to the Regulations of the Zoning and Development By-law and the Parking By-law

4.1 Building Height

The intent for increasing maximum achievable building heights in the False Creek Flats includes intensified employment opportunities, well-functioning and flexible job space, vertical stacking of industrial uses, working and green roof tops and response to sea level rise. New development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. The Director of Planning may increase the maximum achievable building height based on the objectives of all applicable policies and guidelines including the evaluation of:

- (a) Impact of building height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition, the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.
- (b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular Sections 6 and 7 describe open space and landscape objectives for the Public Places and Spaces, Network of Public Spaces, On-Site Public Open Space, streetscapes and landscape.
- (c) The effect on traffic in the area. See 2.9 for Access and Circulation, 4.3 for Side Yards and 4.6 for Off-Street Parking and Loading describing objectives for pedestrian, bicycle and vehicular access and circulation.
- (d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

4.2 Front Yard and Setback

The intent for front yard setbacks is to provide opportunities for building articulation, to step inward as building heights increase and to establish a consistent street wall and building shoulder. The Director of Planning may consider relaxations to regulations controlling front yard setbacks based on the objectives of these policies and guidelines and the following:

- (a) Minor projections into the 0.6m front setback with the intent of improved building performance and articulation. Examples include solar shading devices or cornices.
- (b) Above 18.3 meters (approximately 4 storeys) reductions to setbacks should be balanced by commensurate and equal increases along the same building face. See Figure 7.

(c) On corner lots the flanking street's façade will be evaluated using the same urban design objectives as the front façade.

4.3 Side Yards and Setbacks

The intent for side yard setbacks is to provide visual and physical breaks along long street frontages and generally step inwards as building height increases. The intent is to create building separations of approximately 15.3 m (50 ft). These separations should be located to generally align or relate to the existing street network. Explore opportunities for the Network of Public Spaces and other public space and landscape objectives as well as for vehicular and loading access where lanes may not exist. Adjacent developments should explore opportunities for shared access drives. For small lots, irregularly shaped lots or where a need is otherwise demonstrated, the Director of Planning may consider relaxations to regulations controlling side yard setbacks based on the objectives of these policies and guidelines and the following:

- (a) fit within the street network, neighbourhood patterns and urban fabric;
- (b) provision of a commensurate amount of open space;
- (c) impact on existing and future development;
- (d) building and tower separations; and
- (e) vehicular access, parking and loading provisions.

Figure 4 - Side Yard Setback Diagram



4.4 Rear Yard and Setbacks

Where rear yard setbacks are regulated by the district schedules, space abutting the lane or rear property line should be considered with respect to adjacent use. Residential uses and buildings

taller than 22 m (72 ft) are also subject to greater setbacks. In addition, rear setbacks may be required for transition to surrounding neighbourhoods, for sun shadow impacts on public open space or by proximity to rail.

4.5 Floor Space Ratio (FSR)

The intent for increasing the maximum achievable floor area is to provide opportunities for intensified employment and well-functioning and flexible job space. At the same time, new development should create an active and engaging public realm within a unique, vibrant, attractive, interesting and amenity rich environment. Not all sites will be able to achieve the maximum floor area. The Director of Planning may consider increases to the maximum achievable floor area based on the objectives of all applicable policies and guidelines and including evaluation of:

- (a) Impact of building height, bulk, massing, location and overall design of the building on the site, surrounding buildings and streets. In addition, the general design considerations listed in Sections 2 and 5 describe the intents and objectives relating to general building expression and architectural components.
- (b) The provision of on-site open space, landscape, and the effects of overall design on the general amenity of the area. In particular Sections 6 and 7 describe open space and landscape objectives for the Public Places and Spaces, Network of Public Spaces, On-Site Public Open Space, streetscapes and landscape.
- (c) The effect on traffic in the area. See 2.9 for Access and Circulation, 4.3 for Side Yards and 4.6 for Off-Street Parking and Loading describing objectives for pedestrian, bicycle and vehicular access and circulation.
- (d) Provision for pedestrian needs including continuous sidewalks, weather protection, safety, and active and engaging frontages that respect and respond to the public realm.

4.6 Off-Street Parking and Loading

Parking and loading are essential services to the function of industrial, manufacturing and production spaces. However, they can detract from other objectives of the False Creek Flats by creating a physical and visual break between the building and its connection to the public realm. In addition parking and loading access and layout should minimize surface parking as well as consider opportunities for it to transition to work space, over time, as other modes of transportation improve.

- (a) Locate parking accesses and passenger loading/unloading in locations that support efficient vehicular movements and minimize circulation on the street network.
 - (i) Parking should be located underground or within the building envelope. Exceptions may be considered for small sites.
 - (ii) Where it is not reasonable to place all parking and loading within the building envelope, at-grade stalls should be located at the rear of the site and not within the front yard or on a flanking street.
 - (iii) Above-ground parking structures are discouraged, but not prohibited. They will not be exempted from density calculations and may require analysis on the impacts to urban design and the public realm at the time of development permit approval. Explore adaptable solutions where parking can transition into employment space in the future.
- (b) Limit impact on sidewalks and the public realm by minimizing the number and size of access drives and internalize manoeuvering as much as is feasible. Explore opportunities for shared access drives in side yards.
- (c) Consider adaptability of loading bays such as having a secondary function as workspace.
- (d) Accommodate loading, deliveries, servicing and maneuvering on-site.



4.7 Building Depth and Building Width

The district schedules regulate that neither the width nor depth of an individual building should exceed 61.0 m (200 ft) without a building separation of a minimum 15.25 m (50 ft). The intent for limiting building width and depth is to create building separations at approximately every 76 m (250 ft). See 4.3 - Side Yards for design intent. The building separations can be treated as side yard spaces creating opportunities for vehicular access, open space, views and to reinforce the existing street network. The Director of Planning may consider relaxations to regulations controlling building depth and building width based on the objectives of these policies and guidelines including:

- (a) fit within the street network, neighbourhood patterns and urban fabric;
- (b) provision of a commensurate amount of open space;
- (c) impact on existing and future development;
- (d) building and tower separations; and
- (e) vehicular access, parking and loading provisions.





4.8 Building Massing

Objectives in the False Creek Flats for intensified employment opportunities and wellfunctioning workspaces are anticipated to result in a form of development with greater densities, building heights, and floor plates. Form and massing should therefore be carefully considered with respect to the objectives of these policies and guidelines including access to daylight on the public realm, creating engaging public spaces, building articulation, an attractive near view, and finer grained urban settings.

(a) **Stepped Massing**: The intent for the stepping of building setbacks is to reduce apparent bulk and massing as building height increases to improve access to daylight and views on the adjacent public realm and developments.

To encourage a more varied architectural expression, the Director of Planning will consider relaxations to the front, side and rear setbacks based on the evaluation of sun shading analysis and the contextual relationship to existing and anticipated future development. Projections (+) into setbacks should be balanced by a commensurate recesses (-) from the setbacks.

Application drawings should include sun shading diagrams and context analysis for evaluation of these objectives.



Figure 7 - Stepped Massing Section Diagram

- (b) **Longer Buildings**: Where the need for longer or wider buildings can be demonstrated, relaxations to regulations controlling building width, depth, and separation may be considered based on design merit and the provision of a commensurate amount of quality open space and pedestrian interest. Consideration should also be given to significant facade articulation and on-site connections by transparent bridges and walkways on the upper floors. Break up long frontages and expanses of wall planes with substantial recesses, setbacks or building separations.
- (c) **Tower Elements:** Tower elements (considered to be any portion of a building over 22.0 m (72 ft.) in building height) should:
 - (i) be separated from other commercial tower elements by 15.2 m (50 ft)
 - (ii) be separated from residential tower elements by 24.0 m (80 ft).

Where adjacent sites are not fully developed, the proposed tower should maintain a distance of 7.6 m (25 ft) from the interior side and rear property lines unless residential uses are permitted on the adjacent lots in which case the setbacks should increase to 12.5 m (41 ft.).

(d) **The Network of Public Space**: Building massing should respect the importance of sunlight on the Network of Public Space. Development along Walk-the-Line and the Network of Public Space should seek to minimize shadowing on the opposite sidewalks, mini-parks, urban plazas and other public places.

- (e) **Street Wall and Shoulder**: The intent is for development to be built out to the 0.6m front yard setback and create a consistent 4 storey, 18.3 meter shoulder.
- (f) **Roof**: The profile and silhouette of roofs should be considered as part of the skyline. Elevator penthouses, mechanical rooms, equipment, vents and other appurtenances should be integrated with the architectural treatment of the roof and screened from view.

Figure 8 – Building Massing Diagram



(a) Stepped Massing



- **c**) Tower Separation
- (d) Network of Public Spaces
- e Consistent Street Wall and Shoulder
 - Roof: Architecturally integrated and visually interesting.
- **g**) Side Yard Setback Relaxation

5 Architectural Components

The intent for architectural components and materials is to recognize the area's unique industrial heritage as well as the following objectives:

- (a) Reinforce the near view with high-quality materials, detailing and active storefronts.
- (b) Express a finer grain urban fabric by articulating smaller structural bays and modules.
- (c) Generic "big box" building designs that exhibit little facade interest and transparency to the street should be avoided.
- (d) Storefronts should be transparent at grade and are encouraged not to contain long blank walls.
- (e) High clearance warehouse-type spaces should have clerestorey windows at the upper storey of the facade.

- (f) Building interface at the public realm should emphasize details and proportions at the scale of the pedestrian with particular consideration to the objectives of animated streetscapes and showcasing functional outdoor workspaces.
- (g) Reference the "heavy duty" context with details and expression.



5.1 Roofs

- (a) Encourage working rooftops to expand economic functions to the roofs of buildings.
- (b) Roof tops should be designed to be attractive where seen from above through use of landscaping, green roof technologies, choice of materials and colour.
- (c) Elements such as gazebos and trellises may be considered, building height and floor area permitting.

5.2 Windows

Windows at grade are important to enhance pedestrian interest, particularly where retail uses are not required at grade.

- (a) For retail, service or office uses:
 - (i) maximize transparency through use of high transom, low sill window designs, as well as openable windows where appropriate. For service and office uses, design should allow for adaptation to retail use in the future.

- (b) For industrial uses:
 - (i) provide windows for viewing to industrial processes where possible; and
 - (ii) where windows cannot be used, use other means to add visual interest such as expressed vertical elements, vines, murals, and detailing. Avoid long stretches of blank wall.
- (c) Uses and functions which do not lend themselves to enhancing pedestrian interest should be located away from ground floor windows.
- (d) Use of mirrored or highly reflective glazing, window decals or other vision obscured treatments are discouraged, and may not be permitted, especially at grade.

5.3 Entrances

The intent is to create buildings and spaces that relate to and respect the public realm as well as to showcase functional workspace. Characteristics of these buildings include:

- (a) Main building entries should be clearly identifiable, transparent and accessible from the street.
- (b) Locate secondary entrances and individual small tenant entries with frequency along adjoining sidewalks. Separate uses or accessory retail spaces should have separate and distinct entries.
- (c) Reinforce visually and physically, the connection of interior spaces to the public realm. Strategies, such as operable folding storefronts and roll-up doors, are encouraged to introduce opportunities for outdoor workspace.
- (d) Provide pedestrian interest and comfort at entries provided through specifically designed seating, signage, lighting and features that indicate the building's use and function,

5.4 Building Articulation

- (a) Express an approximately 7.6 m (25 ft) structural bay spacing on street facing facades, especially at the four lower floors or podium.
- (b) Building articulation can be achieved with materiality, shadow lines and exposed structural components.
- (c) Feature banding to break up perceived wall height may be used to assist in achieving horizontal articulation.
- (d) Highly visible circulation and building systems are encouraged.
- (e) Vertical service elements, such as stair and elevator shafts, may be used to assist in articulation, as well as being expressive of their function.

5.5 Exterior Walls and Finishing

- (a) Exterior building design should reflect the industrial and institutional urban fabric of the sub-area by using appropriate, durable, and high-quality materials.
- (b) Exterior materials that are encouraged include:
 - (i) contemporary metal cladding systems;
 - (ii) heavy timber structural elements;
 - (iii) glass and steel;
 - (iv) masonry, architectural concrete or brick.
- (c) Stucco and vinyl are discouraged as primary exterior materials and may not be permitted by the Building By-law.

5.6 Awnings and Canopies

- (a) In terms of appearance, a uniform canopy or awning across the entire building façade may be inappropriate to the diverse and varied character of the Flats. Design architecturally integrated, high quality awnings and canopies, but ensure some variety in form, and/or the ability for tenants to vary them.
- (b) Ensure that awnings and canopies are deep enough and close enough to the ground to provide shelter. The recommended minimum depth to height ratio is approximately 7:10.
- (c) Transparent or translucent glazed canopies that permit the passage of light are encouraged.
- (d) Section 2.7 describes where weather protection should be provided.

Figure 10 – Weather Protection



5.7 Lighting

- (a) Building, entry path and parking lighting should be integrated into the site and building design.
- (b) For exterior lighting, incandescent and other white light sources are encouraged, while sodium vapour light sources are discouraged. Better performing, more efficient light sources such as LED's are highly encouraged.
- (c) Exterior lights should be oriented away from adjacent residential properties, with cut-off shields to minimize light.
- (d) For larger developments or campuses or where proximity to adjacent development is a concern, a site lighting plan indicating light levels and light fixture types should be provided.
- (e) Review opportunities to utilize lighting design standards and guidelines that reduce negative impacts to birds and other wildlife.

5.8 Signs

- (a) Corporate signage should be subordinate to the design of the building and architecturally integrated with the development.
- (b) Internally illuminated or back light sign boxes are discouraged.
- (c) Signage that compliments the industrial urban fabric and character established in the Flats is encouraged. Examples include neon, signage painted on walls, signs with individual letters placed directly on the building or signs incorporating materials that reinforce the character specific sub-areas such as steel, glass and heavy timber.
- (d) One freestanding, ground oriented pylon sign is appropriate at each entrance to a large campus site, complimented by wayfinding signage at key decision points along internal drives or paths.
- (e) At grade uses are encouraged to have minimal, clear, pedestrian oriented signage located at premises entries.



6 Open Space

6.1 Public Places and Spaces



Create unique, vibrant, attractive, interesting and amenity rich environments that appeal to the increasingly mobile employees of the twenty-first century. It is hoped these interesting and inviting places will support innovation by providing venues that support the spillover of new ideas and breakthroughs within the local economy.

Objectives and character descriptions of the key public pathways and connections envisioned for False Creek Flats include:

(a) **Innovation Corridor – Railtown to Mount Pleasant**: A new off-Main complete street will connect Gore to Station to Lorne, and will serve as a primary north-south link for all transportation modes and tie the innovation nodes together along this corridor.

- (b) **Arts Walk**: The lane between First Avenue and Second Avenue has a unique character and the potential to contribute to the public space network. While maintaining its primary function for servicing, it provides an opportunity to animate a walking link between the Innovation Hub and Emily Carr. This link is envisioned to be lined with commercial galleries, or an "arts walk." The future lane treatment could include lighting, seating and other public realm improvements.
- (c) **Central Spine**: A key connection to the Creative Campus is a prominent public linkage along Central Street, through the Innovation Hub to the Seawall that will provide the southwestern starting point of Walk-the-Line. Development should explore opportunities for shared programming as a means to showcase adjacent workspace.
- (d) **The Five Points**: The meeting point of the CN and BNSF yards has the potential to link five key desire lines for the flats public space network. Opportunities for public spaces on an elevated structure would provide key vantage points over the rail with views to downtown and the mountains.
- (e) **Walk-the-Line**: Walk-the-Line is envisioned as a multipurpose route that connects the various sub-areas into a cohesive whole. The general concept is to roughly trace the old shore line of False Creek, extending the Seawall through the Flats on an approximately 4.5km loop.
- (f) **Central Valley Greenway**: Maintain this important cycling route along East 1st Avenue until such a time as a future Industrial Avenue linkage is realized.

 VELUE SPACES

 VELUE SPACES

Map 5 – Public Spaces and Places

Development should respect the importance of sunlight between 10:00am and 2:00 pm between the March and September equinoxes on the Network of Public Spaces and Walk-the-Line route as listed below and shown below on Map 5.

- (i) Central Street from Main Street to Station Street;
- (ii) Industrial Avenue from Main Street to Cottrell Street;
- (iii) Cottrell Street from Industrial Avenue to the future Northern Street extension;
- (iv) Station Street from Northern to East First Avenue;
- (v) East First Avenue from Main Street to Thornton Street;
- (vi) Thornton Street from East First Avenue to Great Northern Way;
- (vii) Great Northern Way from Thornton Street to Fraser Street;
- (viii) Fraser Street from Great Northern Way to Earle Finning Way;
- (ix) the Railyards between Foley Street and Glen Drive;
- (x) East Fifth Avenue from Glen Drive to Clark Drive;
- (xi) Glen Drive from East Fifth Avenue to William Street;
- (xii) William Street from Glen Drive to Raymur Street;
- (xiii) Malkin Avenue from Chess Street to Atlantic Street;
- (xiv) National Avenue from Thornton Street to Quebec Street; and
- (xv) the public open space nodes at the intersections of Hawks Avenue and Malkin Avenue, Thornton Street and National Avenue, Evans Avenue and Glen Drive, the eastern terminus of Industrial Avenue and the 1700 Block of Glen Drive.

6.2 Semi-Private Open Space

Social semi-private open space is desirable for both employees, visitors and residents and should be provided to accommodate the intended users wherever possible. It could be located at grade or on the rooftop as part of a landscaped rooftop garden and should maximize sun exposure.

6.3 On-Site Public Open Space

The following should guide design and location of open spaces on private land.

- (a) Consider opportunities to compliment public open space design including:
 - (i) Create inviting and comfortable places for people;
 - (ii) Reintroduce water and natural systems;
 - (iii) Encourage lively building edges and more welcoming street experience;
 - (iv) Respect existing public views and explore creating new views of prominent features such significant landmarks;
 - (v) Support the display of local art, craft or industry;
 - (vi) Explore opportunities for unconventional open spaces;
 - (vii) Improve wayfinding and legibility;
 - (viii) Encourage 24/7 activity and public life; and
 - (ix) Consider ways to ensure a safe, clean, clutter free environments.
- (b) Large sites, greater than 1.25 hectares, should incorporate green spaces for employees and the public as part of site landscape design.
- (c) Open space on privately owned land should be considered with the same objectives to reinforce the network of public spaces. Enhanced front and side yard setbacks can provide opportunities that help link open spaces.
- (d) Where practical, the public open space and greenways will be constructed on City owned land or City Right of Way (R.O.W.). In some circumstances, an additional R.O.W. may be requested from development to provide a more useable trail width.
- (e) Landscaping elements and public art, including temporary projects, are encouraged.
- (f) Reflect the industrial history of the area as well as contemporary life, innovation and experimentation.

6.4 Public Art

Public art should be considered based on the following process and objectives:

- (a) Consideration for 24/7 access and use of the site;
- (b) Opportunities for rotating installations and diversity of scale and material;
- (c) Opportunities for art to be embedded in public spaces and infrastructure;
- (d) Consider opportunities to create diversity throughout the site and in unexpected places; and
- (e) Create public spaces built upon people being together in innovative ways.

7 Landscaping



7.1 Streetscape

The following design objectives apply to public open space:

- (a) Provide continuous sidewalks for the site's full frontage to encourage pedestrian use.
- (b) Landscape design should provide for views into buildings for pedestrian interest, as well as special features such as opportunities to sit, view or take part in walking or active recreation.
- (c) Explore opportunities for integrated rain water management.
- (d) Provide a high quality public realm with street trees, landscaping, lighting, street furniture, signage and wayfinding, and green infrastructure where possible.
 - (i) Street trees should be provided on all streets not currently having them, or where their spacing is inconsistent. Through the enquiry and approval process, the Parks Board and Engineering staff may specify species, spacing, and location.

7.2 Site Landscape

- (a) Existing trees and significant landscape features should be evaluated for retention where possible;
- (b) Landscaping should be used to help mitigate impacts between residential and industrial uses as well as rail;
- (c) Landscape design on other parts of the site should relate to anticipated activities;
- (d) A layered landscape treatment should be provided to screen surface parking and loading areas while providing strategic visual access to entries and access areas.
- (e) Strengthen urban forest connectivity;
- (f) Consider planted roof tops;
- (g) Enhance habitat for birds, pollinators and other flora and fauna and following the Bird Friendly Design Guidelines; and
- (h) Limit extent of underground parking layout and design to accommodate retention of existing trees and for the provision of new ones.

8 Utilities, Sanitation, and Public Services

8.1 Water and Sewer Services

Upgrades to water and sewer services throughout the False Creek Flats may be required by future development proposals.

(a) Some water mains may need to be upgraded or replaced to support future development in the False Creek Flats including along National Avenue, Thornton Street, and in the North East corner of the False Creek Flats.

- (b) The City of Vancouver is committed to increasing outdoor public access to drinking water through the Access to Water program. Throughout the Area, the City's waterworks branch will look for opportunities to install water fountains through redevelopment prioritizing locations along bike routes, near parks, public plazas, and other areas with a high demand for water.
- (c) The sewer system in False Creek Flats was initially constructed in the early 1900s through to the 1950's and largely rebuilt and separated in the 1970's. However, certain sewer mains are nearly 100 years old, and will likely require rehabilitation in the near term outside of the City's sewer separation program.

8.2 Integrated Rainwater Management

The Flats area is the outfall for the Terminal and China Creek drainage areas. As a result of this large catchment, a large diameter storm main exists under Terminal Avenue which discharges directly to False Creek making the entire drainage area a good candidate for integrated rainwater management techniques to improve water quality. Where possible, employ engineered systems (rain gardens, pervious paving and cisterns) and roof-top systems (including green roofs) to capture, treat and convey rainwater into the City's storm water system.



8.3 Garbage and Recycling

Garbage and recycling are essential services that can detract from the pedestrian experience and nearby development unless careful design is used to screen them.

- (a) Garbage and recycling facilities should be located adjacent to the lane, fully enclosed by a roof and sides or within the building envelope, and screened from the lane and street where possible.
- (b) A location for onsite queuing and pick-up is highly encouraged.

8.4 Neighbourhood Energy System

Where the General Manager of Engineering Services deems a connection to the NES is available and appropriate, buildings within any development will be required to connect to the NES prior to occupancy, or post-occupancy through a deferred services agreement, or otherwise, at such time that a system becomes available. Buildings will be subject to the Neighbourhood Energy Utility Connectivity Guidelines & Requirements.

8.5 Underground Wiring

In order to improve the visual environment for residents, developments on larger sites (45.0 m frontage or wider) should investigate with the City Engineer the feasibility of using underground wiring for electric, telephone and cable services, including the removal or partial removal or existing overhead plant.

9 Environmental Considerations

9.1 Soils: Retention, Cleansing and Replacement

Provide soil remediation on all sites as required by the Environmental Management Act, the Vancouver Charter and all city policies with respect to the remediation of city streets. Additional considerations include:

- (a) Limit excavation thereby reducing soils remediation;
- (b) Reintroduce water and natural systems such as urban forests, wetlands and pollinator meadows;

- (c) Topsoil should be retained and soil quality improved where necessary;
- (d) Contaminated soils should be replaced with quality soils to enhance plant growth and ground water quality; and
- (e) Employ soil remediation techniques such as piling and ground densification to ensure buildings are seismically stable and not subject to liquefaction.

9.2 Green Buildings

Development should explore opportunities for:

- (a) Green building technologies to help advance the criteria for healthy productive workspaces;
- (b) Green roof tops, including potential business opportunities such as a permanent home for urban agriculture or other rooftop businesses or uses;
- (c) Passive design features and technologies



- including complimenting the burgeoning green building economic sector;
- (d) Support innovation with respect to green building and renewable energy system design, operation and placemaking;
- (e) Green fleet programming and electric vehicle charging infrastructure; and
- (f) Passive strategies to building heating, ventilation and cooling including solar orientation and operable windows.

9.3 Energy: Conservation and Efficiency

Building materials, systems and construction methods should be considered to conserve energy and reduce long-term operating costs.