City of Vancouver *Land Use and Development Policies and Guidelines*

Planning, Urban Design and Sustainability Department

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NEW ST. PAUL'S HEALTHCARE CAMPUS (NSPHC) CD-1 GUIDELINES

Adopted by City Council on January 25, 2022

[Note: Council has directed that these guidelines be used by applicants and staff for development permit applications for the site zoned CD-1 (761)]

January 2022

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1 Application and Intent

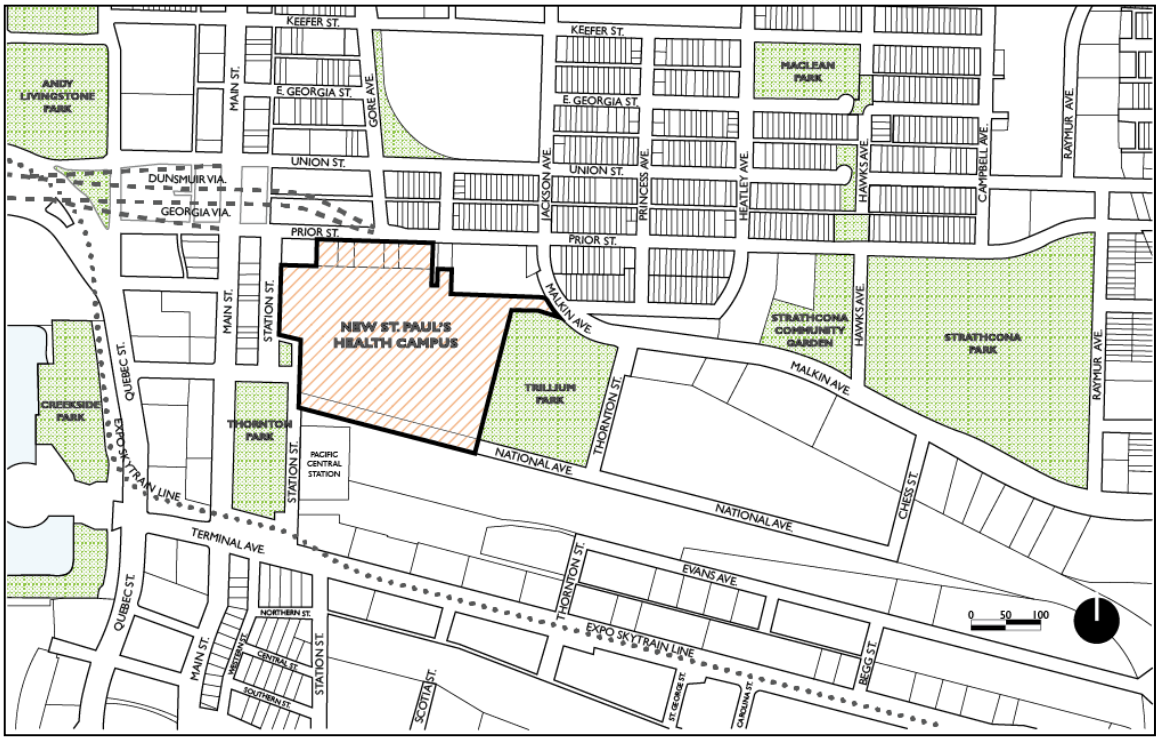

Figure 01 – New St. Paul's Healthcare Campus location and context

1.1 Intent

The intent of these Design Guidelines is to support the design development of the New St. Paul's Health Campus (NSPHC), to achieve innovative, high-quality and green urban design and architecture, vibrant and legible public realm, and appropriate relationship in form and use to the existing and future context.

These Guidelines provide guidance to the applicant for their design process, and to City staff in evaluating Development Permit applications according to clear urban design objectives. They should be read along with the Public Realm Plan that provides further specific urban design direction for the NSPHC.

In addition to the current Council-approved policies and guidelines, these guidelines should also be read in conjunction with:

- CD-1 (761) By-law
- New St. Paul's Hospital + Health Campus Policy Statement
- Green Buildings Policy for Rezoning
- Rezoning Policy for Sustainable Large Developments

1.2 Guiding Principles

The following high-level principles developed by City staff with input from Providence Health Care and the general public form the foundation for the Guidelines.

1.2.1 Community Building and Site Planning

1.2.1.1 **Integrate the Health Campus** – Organize the NSPHC around well-connected public spaces that integrate into the city and adjacent neighbourhoods.

1.2.1.2 **Enhance neighbourhood commercial activity** – Locate and design new retail and commercial developments that serve the local community and bring activity and liveliness to existing and new city streets. Provide opportunity for existing businesses on Main Street and adjacent areas to benefit from new development and activity on the site.

1.2.1.3 **Provide community amenities** – Provide and enhance community amenities (e.g. open space, recreation facilities, childcare, cultural spaces) in accessible locations close to transit to support visitors and workers of the new health campus, and those in adjacent neighbourhoods.

1.2.1.4 **Benefit the local community** – Maximize socio-economic improvement through community benefit arrangements, social procurement, and local employment opportunities during construction. Monitor the social impacts that the development will have on local vulnerable populations and consider services for homeless and low-income populations.

1.2.1.5 **Transition in scale and form** – Consider public views and respect view cones. Respond to the scale of Pacific Central Station and Main Street with edges that frame Thornton Park. Transition down in form and scale to the existing neighbourhoods to the north and Trillium Park to the east.

1.2.1.6 **Support health-related residential uses** – Because the site is designated as a mixed-employment area, no new residential uses will be permitted, with the exception of short-term accommodation (e.g. hotel) and/or institutional health-related residential uses (e.g. residential Community Care Facility uses).

1.2.2 Open Spaces and Public Places

1.2.2.1 **Celebrate local history and the original shoreline** – Reflect the histories of the site (e.g. the original False Creek shoreline, First Nations' histories, Hogan's Alley, Union Station, industrial history, etc.) through building placement and design, public space design, and public art.

1.2.2.2 **Create healthy open spaces and enhance the urban forest** – Embrace health-oriented approaches to open space design, providing a variety of public places that foster social intersection and promote wellness. Manage rainwater in the design of open spaces and support Vancouver's Urban Forest Strategy by retaining the existing significant trees on the site and planting new legacy trees in open spaces and on streets.

1.2.2.3 **Create a Wellness Link** – Create a Wellness Link (i.e. a walking and potentially slow-cycling pathway) through the site with open spaces along the way to sit and rest. The pathway should connect Thornton Park with Trillium Park and beyond to places of interest in adjacent neighbourhoods. The Link would be part of a longer walking and cycling route connecting the False Creek Flats and the historic shoreline with the Seawall and False Creek.

1.2.3 Mobility and Connections

1.2.3.1 **Connect the city fabric** – Integrate the hospital and health campus into a city-serving street network connecting new and existing streets that form the backbone for development.

1.2.3.2 **Mobility for all ages and abilities** – Reflecting the goals of the Transportation 2040 Plan, new and existing transportation connections will accommodate all modes of travel and give priority to people of all ages and abilities who walk, cycle and take transit. East-west and north-south connections across the site should integrate into a broader walking and cycling system for the False Creek Flats. Accessibility will be a priority in all aspects of site and building design. Vehicle circulation, drop-off and parking should be addressed so that those who must drive or be driven are able to access hospital services.

1.2.3.3 **Plan for emergency vehicles and helicopters** – Accommodating the efficient movement of emergency vehicles will be a crucial consideration. Connections will be considered in consultation with the public, immediate neighbourhoods, Fire and Rescue Services, and our government partners (e.g. BC Emergency Health Services, Transport Canada). Noise impacts on adjacent neighbourhoods from sirens and helicopters should be considered and addressed where possible.

1.2.3.4 **Improve transit connections** – Work with TransLink to ensure the new St. Paul's site is strongly integrated into the overall transit network, with efficient connections to downtown and the West End.

1.2.4 Sustainability

1.2.4.1 **Rezoning Policy for Sustainable Large Developments** –The redevelopment of the site will meet or exceed the City's Rezoning Policy for Sustainable Large Developments, including sustainable site design, access to nature, sustainable food systems, green mobility, rainwater management, zero waste planning, and low-carbon energy supply. All buildings should demonstrate leadership in energy conservation and indoor air quality following a standard such as LEED or Passive House.

1.2.4.2 **Regenerative approach and visible green elements** – A holistic and regenerative approach to health will underlie all aspects of the site development, considering people, community facilities, food, transportation, energy, water and ecology. Buildings will have visible and educational green elements.

1.2.4.3 **Renewable energy** – Explore opportunities to use low-carbon energy, including on-site integration of an energy centre to serve the hospital campus and adjacent neighbourhoods.

1.2.4.4 **Disaster preparedness** – Design and construct new buildings, streets, and infrastructure to the appropriate standards in preparation for disasters, including earthquakes, flooding and fire, consistent with best practices.

1.2.4.5 **Climate resilience** – Design and construct new buildings, streets, and infrastructure for resiliency and adaptation to climate change impacts, including sea-level rise, increased rainfall, and higher temperatures.

1.3 Site and Historical Context

Figure 02. Union Station and freight depot (left) and Pacific Central Station (under construction, right) circa 1918.

Bounded by National Avenue to the south, Prior Street and Malkin Street to the north, Station Street to the west, and an anticipated new local street to the east, the NSPHC site is comprised of 7.4 hectares (18.3 acres). The site is characterized by the broad range of uses and development typologies surrounding it: the Chinatown and Strathcona neighbourhoods, made up of a blend of mixed-use, retail, industrial, and small-scale residential properties are to the north; higher-density mixed-use developments extend west towards Creekside Park at the shores of False Creek; Trillium Park is at the east; and to the south are Thornton Park, historic Pacific Centre Station, and newer mixed-use commercial, retail, and industrial developments. The Main Street-Science World transit station straddles the east and west corners of Main Street and Terminal Avenue.

Originally serving as a rich ecological inland waterway utilized for fishing and gathering by the three host Nations of Musqueam, Squamish, and Tsleil-Waututh, the False Creek Flats has experienced dramatic alterations to its landscape and function over the last two centuries. Each Nation had its own relationship to the area, including place names and uses for the lands and resources. The City will continue to work with local First Nations and urban Indigenous residents, and strive, wherever possible, to forge new, positive, and constructive relations that offer benefit to the community at large.

By the early 1910s, plans were developed to infill False Creek east of Main Street to establish a comprehensive industrial and transportation centre. South of Prior Street on Station Street the Great Northern Railway constructed rail yards with a major freight depot followed by Union Station in 1916. This Romanesque brick terminal became the city's predominant terminus for passenger trains from the United States. Numerous maintenance and storage outbuildings were soon added. The Canadian Northern Railway followed suit in 1919 with the construction of Pacific Central terminal next door. This impressive station survives as a landmark to Vancouver's commercial development, while Union Station was demolished in 1965.

A principal objective of the *Design Guidelines* is to conscientiously manage the redevelopment of the site as a healthcare campus to achieve a high-quality development with a strong "sense of place" that weaves into the existing context and sensitively acknowledges the site's First Nations and industrial heritage while also providing vital healthcare services for the community. A thorough understanding of the site's current context and historical associations will be critical to successful designs.

2 Urban Design Principles

The intent of this section is to establish key urban design principles to inform design development throughout the site.

2.1 Comprehensive and Legible Public Realm

The healthcare campus should be designed to create a clear and legible public realm that is supportive of a highly walkable community, provides opportunities for healing, and reinforces a strong sense of place. New public spaces should be diverse and should weave into the existing urban fabric, including the adjacent park and pedestrian network, and reinforce a sense of permeability through the site.

The public realm consists of the road network, public right-of-way, site circulation, and on-site open spaces, and their interfaces with the built form. Site circulation should prioritize universal design principles, accommodating a range of ages and abilities, while integrating seamlessly into existing infrastructure. High-quality open spaces should be designed as natural extensions of the healing environments within the campus facilities. Public realm design will, in part, be evaluated based on how the interface with surrounding buildings enhances and activates these spaces.

2.2 Innovative, Contextual, and Enduring Architecture

The NSPHC should be comprised of distinct buildings of high architectural quality that achieve the objectives of the Guiding Principles. Architectural excellence should be prioritized, acknowledging that St. Paul's will be an important and distinct place-maker in the community for at least the next century. Buildings should be imbued with a sense of permanence. Campus buildings must also be designed to reinforce and enhance the pedestrian experience and the character of the public spaces onto which they front.

An objective of these Guidelines is to allow for an adaptive campus plan which can support future innovations in healthcare and urban design. Campus buildings should be designed to anticipate adaptation for future needs but should also be a natural fit with the current community and feature architectural expressions reflective of their time.

2.3 Sustainable Design

An objective for the NSPHC is to develop an adaptable, state-of-the-art, green, and disaster-resilient facility. Achieving this will require a holistic approach to green design, including a diverse range of environmental, social, and economic sustainability strategies.

The City looks to applicants to be leaders in innovative and creative sustainable and resilient design solutions. Incorporating sustainable features into the campus will provide environmental benefits, such as carbon reduction and stormwater runoff mitigation, while benefiting the health of patients, staff, and visitors.

3 Overall Guidelines

The following Guidelines are intended to provide general urban design performance direction for the whole of the New St. Paul's Health Campus. Though the Campus is divided into distinct parcels, referred to as the four Campus Precincts *to provide for variety of character along and through the site, the overall design strategy should prioritize a universally high-quality, coherent, and contextually responsive urban healthcare community. New development should contribute to creating a vibrant health campus with supporting uses that sensitively respond to and enhance the neighbouring community.*

3.1 Site Design and Parcelization

The New St. Paul's Health Campus is divided into four distinct but interrelated precincts, framed by a comprehensive circulation and open space network. Streets and public open spaces provide the basis for a diverse, dynamic, and green campus. Intuitive wayfinding through effective site planning including open space design, architectural expression, and building interface with the public realm should be prioritized.

The intent of the four Campus Precincts is to provide for a sense of variety of character, use, and scale appropriate for a largescale development in an urban centre, and to set the basic formal parameters for a sympathetic contextual response. Design direction specific to each of the following four precincts may be found in Section 5 – Precinct Guidelines. The four precincts are as follows:

Health Campus Precinct: The Health Campus Precinct constitutes the principle portion of the New St. Paul's Health Campus as the location of the primary hospital building and related outdoor spaces.

West Precinct: The West Precinct addresses the mini park to the south and continues to Prior Street along the length of Station Street to the west and the New High Street to the east. The West Precinct represents the most direct interface with the existing urban context to the west.

North Precinct: The North Precinct will be located adjacent the Health Campus Precinct. The precinct will front the New High Street, Prior Street, and the northwestern property line of the site. The North Precinct constitutes the primary site interface with the adjacent lower-density form Strathcona neighbourhood and is anticipated to provide an urban street wall condition that responds both to existing context and to proposed adjacent developments.

South Precinct: Located directly to the north of Pacific Central Station at the intersection of Station Street and National Avenue, the South Precinct represents a highly visible and important interface with this neighbourhood-defining landmark railway terminal.

3.1.1 Building Siting and Orientation

While the *New St. Paul's Health Campus CD-1 Bylaw* provides for a general development framework including building siting and orientation, reorientation or reallocation of massing may be considered to better align the development with critical urban design and functional objectives. Building siting and orientation should be explored in consideration of the following key objectives:

a) The massing response to surrounding context;
b) The design of a network of open spaces, particularly the design and location of the St. Paul's Plaza;
c) Maximizing outdoor comfort, including solar access;
d) Management of solar heat gain and daylight access in the arrangement and design of glazing, and the orientation of building massing, and;
e) Provision of open space sized adequately to serve intended populations and uses.

3.1.2 Access and Circulation

New and improved connections for walking, cycling, and driving will define the four precincts. This network of streets and pathways will connect the campus back to the urban fabric, including the False Creek Flats “Walk the Line”, and will facilitate the safe movement of patients, visitors, pedestrians, cyclists, and emergency vehicles through the site.

Road rights-of-way, alignments, and designs should integrate the campus into the surrounding street grid. New streets will be designed according to “complete streets” design principles, with the following directives:

a) Emergency vehicles, as well as patients arriving in private vehicles, must be provided with efficient routes to dedicated arrival and drop-off locations;
b) Pedestrian routes should be conceived as a safe haven for walkers of all ages and abilities, with well-scaled sidewalks, active interfaces with buildings, robust landscaping, and a visually engaging public realm, and;
c) Enhanced bike facilities, including end-of-trip facilities, should be provided to incentivize daily cycle commuting.

3.1.2.1 **Parking Loading and Access**

Parking and loading designs should not detract from other objectives of the NSPHC by creating a physical and visual break between the building and its connection to the public realm, with the following directives:

a) Parking must be located underground. While some at-grade drop-off and access will be necessary for healthcare facilities, at-grade parking and servicing should be absolutely minimized;
b) Parking entries and loading should be located to avoid interference with emergency vehicle routes, and minimize impacting key pedestrian open spaces and sidewalks. Locating underground parking entrance and ramps wholly inside a building envelope is highly encouraged;
c) Screening in the form of feature landscaping or architectural treatment must be provided where required to visually divide service areas from the public realm.

3.1.2.2 **Bike Storage and End-of-Trip Facilities**

Bicycle routes, access to storage and / or parking, and end-of-trip amenities, should be carefully designed to incentivize daily cycle commuting. These should be treated as a critical component of a safe and effective hierarchical circulation network that places pedestrians at the highest level of importance.

Access to bicycle storage and / or parking should be located such that they are intuitively and efficiently located for cyclists. Ramps or stairs with wheel runnels should be provided where necessary to ensure easy access for cyclists of all abilities. Bicycle access points should be located such that they enhance the overall performance of the public realm, and are architecturally integrated with the buildings or landscape design.

3.2 Overall St. Paul’s Health Campus Character

The scale of the New St. Paul’s Health Campus development lends itself to bold urban gestures that will define a part of the City that has been underutilized since 1965. The practical programmatic requirements of a healthcare facility can result in large floor plates and massive buildings that may not inherently be conducive to a well-performing urban expression, therefore the design of any such buildings must be approached with a high level of rigour. Further, such larger buildings, as with all other Campus buildings, must prioritize the success of the public

realm with carefully considered articulation of massing, legible and evocative architectural expressions, and a highly permeable interface with grade.

A strong formal and aesthetic interrelationship between Campus buildings, historical and existing context, and the key outdoor spaces will be fundamental to establishing a unique character for the site. As a general rule, peripheral buildings should act as bridges between the existing and the new, blending the site into the urban fabric. Contrarily, buildings located more centrally may take on more expressive forms that respectfully juxtapose the context and provide “urban wayfinding landmarks” when viewed from perspectives close to and far from the Health Campus.

3.3 Building Height & Skyline

The NSPHC will be a highly visible and impactful component on the False Creek Flats skyline, and effort should be made to provide for variety and visual interest at the roofline. Maximum building height is set out in the CD-1 Bylaw and is subject to satisfying the objectives of all applicable policies and guidelines, including the evaluation of:

a) The impact of height, bulk, massing, location, and overall design of the building on the site, surrounding neighbourhoods, buildings, and streets;
b) The provision of on-site large open space, landscape, and the effects of overall design on the general amenity of the area;
c) Provisions for pedestrian needs, and;
d) Provisions for visually interesting and varied rooflines by way of sculpted upper levels.

3.4 Sustainable Buildings

Nature plays a powerful role in a modern healthcare facility, providing a backdrop for rest, reflection, and healing. The protection of the natural world through sustainable building design should be the cornerstone of any design approach for the NSPHC. Strategies for sustainable buildings include:

a) Provisions for passive strategies for building heating and cooling to mitigate undue heat gain enabling, where possible, natural ventilation and appropriate solar orientation;
b) Provisions for green roof technologies that enhance open space for recovery and healing, reduce stormwater runoff, manage and treat stormwater on-site, and mitigate heat island effect;
c) Provisions for integrated rainwater management and green infrastructure.

Design approaches must pursue exceptional sustainable building design, with a focus on envelope efficiency, including air-tightness, improved insulation, minimizing thermal bridges, appropriate glazing ratios to avoid excessive heat gain/loss, and shading. These approaches will improve occupant comfort, significantly reduce heating and cooling costs, and reduce carbon emissions.

3.5 Living and Working Environment

The NSPHC must achieve superior standards of livability for patients and contribute to an excellent work environment, with due consideration given to the following:

a) Excellent indoor environmental quality through access to daylighting and natural ventilation;
b) Providing for multi-angle views of the urban context, landscaped areas, and the North Shore mountains from a variety of interior spaces;
c) Reduction of noise and high acoustic performance, including measures to create an acoustically optimal working environment and patient treatment, recuperation, and relaxation environments;
d) Providing functional, furnishable private outdoor space for dwelling units within the North Parcel with a minimum depth of 1.8 m (6 ft.);

e) Providing access to high-quality and collocated indoor and outdoor common amenity spaces, and;
f) Designing stairs and corridors to have access to daylight, wherever possible.

3.6 Active Uses at Grade and Public Realm Interface

Providing active uses such as retail, community amenity space, and frequent points of entry will result in a sustained level of at-grade activity throughout the day, will give the campus character, will reinforce a sense of safety and security, and will weave the development into the existing urban fabric.

a) Visual and physical permeability should be prioritized in the design of all campus buildings in order to express a building interface that is lively, human-centric, and urban in character, and which provides for a sense of security at all hours;
b) Retail spaces throughout the site should be designed with a minimum 4.8 m (16 ft.) ceiling height, should be provided with significant glazing to maximize visual permeability, and must have entrances facing the adjacent street. Retail spaces with entrances facing interior courtyard spaces only are not permitted. A ceiling height of 5.5 m (18 ft.) or greater is highly encouraged;
c) Retail spaces must have an interior depth of no less than 10.6 m (35 ft.);
d) Retail spaces should be designed with local-serving retail in mind and should express discrete frontages of no more than 15.3 m (50 ft.) in width. Larger retail spaces should be designed to maintain this small-scale character;
e) Kitchen exhaust from restaurant uses must be provided through back-of-house service areas to avoid negative impacts on the public realm or adjacent patient areas;
f) Continuous weather protection must be provided along all retail frontages and at secondary points of entry;
g) Primary building entrances should be clearly expressed with distinct signage, canopies, landscaping elements, and/or other architectural features;
h) Where visual or physical permeability cannot be achieved because of vital healthcare interior programming, the adjacent public realm must be given special consideration to maintain a sense of security and activity in spite of apparently inactive building frontages.

3.7 Security

The principles of Crime Prevention Through Environmental Design (CPTED) should be considered in all stages of development. Some strategies may include:

a) Maximizing opportunities for natural surveillance through the provision of a high level of visual and physical permeability at grade;
b) Providing unobstructed and transparent sightlines to exits and destinations;
c) Anticipating mischief such as graffiti, vandalism, and other such activities by avoiding large expanses of uninterrupted walls, inactive frontages, and unprogrammed exterior alcoves;
d) Fostering territoriality and a sense of ownership for staff, patients, and the community at large;
e) Providing rigorously designed lighting of public spaces;
f) Designing lobbies and other active indoor spaces to be highly visible from the street, and;
g) Parking and loading facilities that comply with the safety and security provisions of the *Off-Street Parking and Loading By-Law*.

4 Open Space

The overall public realm for NSPHC should be based on a legible, integrated, permeable, and accessible network of diverse open spaces that provide robust healing functions that create a distinct sense of place. Open spaces must reflect the unique history of the site and the adjacent community, and should provide for a variety of experiences and should collectively reflect the values of a leading urban healthcare centre.

4.1 Public Open Spaces

The Flats have a distinct and layered character with many different uses, building typologies, views, building materials, and parks spaces reflecting the rich natural and human history of the area. New and existing open spaces should build off of this unique neighbourhood identity while contributing their own well-defined character and providing for a user experience that is welcoming and legible. Wellness and healing should be a primary consideration in the design of all open spaces. The following key principles provide a framework for effective open space design at the health campus:

Legibility and Wayfinding – Open spaces should be inviting, welcoming, and have a high degree solar access. Key public spaces should be proportioned to express their specific nature, defined by streetwalls and/or strong edge treatments and given additional legibility through various architectural forms. Gateway elements at significant points of entry within the public realm should be provided to define various public areas and contribute to the overall wayfinding strategy.

Connectivity and Permeability – The network of public spaces should be well connected with the existing urban fabric. Primary, secondary, and tertiary circulation routes should provide a high degree of cross-site porosity, and enhance the existing infrastructural network surrounding the site.

This comprehensive network is intended to provide multiple options for pedestrian trips to encourage walking and lend round-the-clock vitality to all parts of the neighbourhood through universal and accessible design.

Diversity and Wellbeing – Open spaces throughout the campus should each have their own distinct characters defined by scale, massing, and architectural expression of the surrounding built form, as well as high quality materiality, lighting, and other landscape design elements. Collectively, these spaces should provide for a user experience that is varied and engaging. Spaces should provide for a variety of programming opportunities including play, relaxing in the sun and the shade, gathering with family, and community-oriented events.

Open space design strategies should prioritize the healing and overall wellbeing of people visiting, staying in, or working at the hospital campus. Quiet and secluded but inherently secure spaces should be provided for resting and meditation. Furthermore, active spaces should be imbued with a sense of health and comfort. As movement is an important component of many types of treatment and recovery, site designs should also provide for a variety of walking paths, spaces for tai chi and yoga, and other such activities.

Sustainability and Resiliency – The design of the site should maximize on-grade permeable areas and tree retention. Proposals should include a comprehensive rainwater management plan, landscapes with healing considerations, gathering opportunities, car-sharing, non-standard parking requirements, maximize access to public transit, and a rich array of community amenities. Developments should integrate into and extend the existing urban forest. Where possible, urban agriculture plots should be explored as part of the design of landscaped areas.

The site and landscape design must be treated as a critical component of the overall sustainability and resiliency strategy with due consideration given to the following:

a) Provision of a comprehensive rainwater management plan;
b) Provision of landscape designs that foster social interaction;
c) Provision of community amenities within the site design such as spaces for gatherings and events;
d) Provisions for car and bike sharing, and non-standard parking requirements;
e) Maximizing access to public transit;
f) Provision of a highly sustainable and appropriate material and planting palette with due consideration given to low-maintenance native plant species;
g) Mitigating the heat island effect by minimizing hardscaping, as much as possible, and;
h) Ensuring the continuation of the urban forest canopy through the site.

The New St. Paul's Health Campus will include four principle public outdoor areas:

4.1.1 St. Paul's Plaza

The St. Paul's plaza is the public realm heart of the NSPHC: it is the symbolic front door and, for most people in the community, will provide the first impression of the campus. A clear sightline from Thornton Park through the Plaza to a main point of entrance must be maintained. A total plaza area of no less than 1,675 m^2 (18,000 $ft.^2$) should be provided.

The large plaza should also function as a community space and be a place for meeting, strolling, relaxing, and otherwise gathering. It should be designed to maximize flexibility and adaptability for community events. In keeping with Section 2.5 of these Guidelines, restaurants, cafes, and smaller retail spaces should be provided to further animate this open space on the ground floor, while office and institutional uses above further define the space.

The materiality of the plaza must anticipate a high level of multimodal traffic, and should present a high quality, architecturally superior design and finish.

4.1.2 Wellness Walk

The Wellness Walk around the Health Campus Precinct should provide a primary peripheral pedestrian circulation route linked to the existing pedestrian circulation network, and should be programmed to support the overall health and wellness imperative of the site design strategy. Opportunities for rest, healing, social interaction, and other such programming should be provided as part of the design of the Wellness Walk in concert with elements conducive to easy and legible circulation.

The Wellness Walk will be an integral component of Vancouver's Walk the Line that traces the historic shoreline of False Creek. As such, the Walk should include elements reflective of the natural history of the site in materiality and finishes, infrastructural elements, and vegetation. Interpretive opportunities, such as informational signage and public art installations, should be explored to enhance the walking experience of this public space. Design features of the Wellness Walk may include:

a) Paths providing for a range of movement intensity, such as clear, straight sidewalks for convenient movement around the site and meandering pathways for strolling;
b) Interventions that contribute to a sense of wellness and healing such as quiet seating nodes with water features or other calming sensory experiences, a walking labyrinth, and / or quiet activities such as large-sized chess or outdoor fitness equipment particularly when additional activation is required due to unengaged building frontages;
c) A planting palette reflective of the historical shoreline environment featuring native plant species;

d) A material palette featuring stone and other finishes naturally found on the British Columbia South Coast;
e) A lighting design strategy responsive to specific programming and contributing to an overall CPTED design, and;
f) Seating areas, public art, and other landscape enhancements to punctuate and enhance active uses at grade such as entrances and retail units to provide for a welcoming and contextually responsive site periphery.

Hospital operations are likely to result in moments where practical considerations such as emergency vehicle access and the Wellness Walk will conflict. These places will require special consideration in the site design strategy to mitigate any negative impacts on the public realm.

The Wellness Walk should engage with the City sidewalk network but must be clearly delineated. A minimum consistent width of 4.9 m (16 ft.) should be provided for the entire loop to accommodate the variety of functions anticipated.

4.1.3 Healthcare Boulevard

The Healthcare Boulevard is a centre of activity in the Health Campus Precinct as the primary point of entry for visitors, patients, and staff arriving by vehicle for non-emergency purposes. It is anticipated to be a busy place and a clear hierarchy must be established between pedestrian and vehicular uses in order to achieve a space that is highly functional, legible, and safe. This space should feel inherently welcoming and calming. To achieve this, the following design strategies should be explored:

a) Provide landscape elements and trees throughout enough to absorb noise from vehicles while maintaining a sense of openness and visibility;
b) Provide substantial plantings on either side of the exposed centralized parkade ramps in order to attenuate vehicle noise and improve the overall appearance of the boulevard;
c) Provide superior surface materials to present a high-quality point of entry with due consideration given to universal design best practices;
d) Develop a rigorous lighting strategy to maintain a sense of round-the-clock security, establish a unique character for the Boulevard, and present an active frontage at all hours;
e) Provide comfortable outdoor waiting areas that are highly visible from the street but contribute to a more human-scale atmosphere, such as multi-directional seating and integral planters / benches.

4.1.4 Healing Corridors

The Healing Corridors are intended to provide more passive outdoor spaces supportive of the programming of the St. Paul's Plaza and hospital functions. As an example, a Healing Corridor located off of the food court should be designed as a semi-active seating and outdoor dining area visually and physically accessed off of the adjacent public realm. Passive programming may be provided for further into the spaces, with substantial plantings interspersed with quiet seating areas and other landscape elements supportive of the healing imperatives of the overall landscape design.

4.2 Semi-public Open Spaces

Semi-public outdoor spaces are intended to provide hospital visitors, patients, and staff with places for rest, socializing, and other activities in a more private, controlled environment. Semi-public open spaces will fall into two general categories:

4.2.1 Green Roofs and Therapeutic Green Spaces

Green roofs should be incorporated throughout to provide amenity space for staff and healing functions for patients, while secluded therapeutic gardens provide specific spaces for recovery

and quiet reflection. Similar to other outdoor spaces on the Health Campus, these spaces should provide for a variety of programming opportunities and should anticipate the various needs of patients at different levels of health and abilities.

4.2.2 Courtyards

Courtyards provide the best opportunities for quiet outdoor spaces that are inherently removed from the more active periphery of the NSPHC buildings. These spaces should be adequately scaled to be comfortable to patients, visitors, and staff to use by rigorously balancing access to daylight with building massing necessary to provide for a sense of comfortable enclosure. Highly visible from building interiors, courtyards should be designed as lush and prominent green spaces to strengthen healing functions both internally and externally, but should avoid unnecessarily blocking access to light for interior spaces. Consideration should be given to providing water features to add a level of sensory texture for visually impaired users.

Surrounding built form should form a calming backdrop supportive of the human-scale nature of these spaces, and should present a softer, calming but high-quality architectural expression. Green walls, wire trellises, and other such treatments should be explored where vital hospital programming prohibits transparency between courtyards and interior spaces.

4.3 Public Art

A site-wide strategy for Public Art should be developed and be updated at each project phase. The Public Art Plan should provide for visual texture and character. Public art should reflect the site's history, the culture of the Musqueam, Squamish, and Tsleil-Waututh people, and the works of local artists, particularly those from nearby studios.

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.

5 Precinct Guidelines

To best integrate with the existing urban fabric, the NSPHC has been divided into four precincts. Each precinct should contribute to a cohesive sense of place and meet the urban design objectives set out in these Guidelines *but should each also have a distinctiveness that provides for a sense of variety. The Health Campus precinct, being the central component of the site, should be treated with particular importance in an overall hierarchy of places. The other precincts should include buildings that present themselves in scale and expression in a manner sensitive to context.*

5.1 Health Campus Precinct

5.1.1 Intent

The intent of this section is to provide built form guidelines that will contribute to a highly contextually responsive, distinct, and visually appealing St. Paul's Health Campus. These guidelines provide for a design response that lends each of the four precincts their own unique character but works to provide for a successful and new sense of place.

5.1.2 Building Form and Expression

The Health Campus Precinct will be the focal point of the NSPHC. Built form throughout this precinct must reflect this important role through consistently high-quality design, rigorously considered building siting, and massing appropriate for both the functions of the facilities and as a formal response to existing context. In concert with the other precincts, buildings in the Health Campus should be definitive to establish a strong sense of variety and mitigate an overall presentation of architectural monotony while contributing to a cohesive campus character.

Strong, sculptural forms are highly encouraged to provide for visual interest from multiple perspectives. Overall, massing should avoid monolithic forms and should not act as real or implied barriers to movement. Where large floor plates are required because of vital hospital programming, extra attention should be given to an architectural expression that provides for visual interest and mitigates a sense of mass. Approaches to architectural design for the Health Campus Precinct should, in part:

a) Prioritize an overall sense of permanence and quality, and should be rooted in a unique interpretation of contextual fit. References to the historic shoreline and the industrial history of the site in the building form and materiality is highly encouraged;
b) Provide for a varied, visually interesting, and sculptural skyline. Buildings should be shaped at upper levels and large expanses of flat roofs are generally not supportable;
c) Enhance the user experience at all levels, particularly in close proximity at grade. Cantilevers may be considered to contribute to building expression and/or weather protection;
d) Employ architectural elements that contribute to the environmental performance of the campus, such as expressed light shafts or skylights, stack effect towers, expressive louvers or fins, and other such devices, and;
e) Be reflective of the healing and wellness intent of the facility.

5.1.3 Setbacks

In keeping with the imperatives for active and varied public realms, all Health Campus Precinct buildings must present a human-scaled and permeable interface at grade except in the highly specific instances where permeability cannot be achieved. Generally, buildings should express a four-storey streetwall with building stepbacks or other architectural features conducive to pedestrian comfort provided above the fourth level. Particular attention should be given to the expression of the portions of the buildings facing Prior Street and the New High Street.

Buildings should generally be set back in a manner appropriate for the intended performance of their adjacent outdoor spaces, with the following general standards:

a) At the east property line along the New Local Street, a minimum setback of 0.6 m (2.0 ft.) is required;
b) Where Health Campus Precinct buildings front the New High Street, a minimum setback of 4.9 m (16.0 ft.) is required, except that the Director of Planning may relax this setback to no less than 3.0 m (9.8 ft.) in select areas as required by vital hospital programming, subject to review of a design rationale or operations statement, and;
c) At National Avenue, a minimum setback of 1.0 m (3.3 ft.) is required.

Any potion of a building over 22 m (72 ft.) in height should be separated from other taller building elements by a minimum of 15.2 m (50 ft.).

5.1.4 Entrances and Lobbies

The primary entrances to the hospital (Main Entrance and Emergency Department) should be highly identifiable, welcoming, and accessible. They should be characterized by a highly expressive canopy or other noteworthy architectural elements, and should appear as extensions of adjacent lobby spaces. Other entrances, though secondary in nature, should also be treated with a higher level of architectural care and should be a focal point in the public realm onto which they front.

Architectural expression and form should be treated as the primary component of the wayfinding strategy, with signage acting only to augment what should be an intuitive precinct.

Interior lobbies should be an extension of the exterior entrances. These should perform as airy, welcoming spaces that contribute positively to the user experience. Large volumes, particularly at the main non-emergency entrance, are highly encouraged in order to maximize access to natural light for internal spaces and improve airflow. Lobbies should be treated as public spaces and should employ the same rigorous approach to high quality design as the exterior of the Health Campus Precinct buildings.

5.1.5 Open Space and Public Realm

The massing, orientation, and architectural expression of buildings in the Health Campus Precinct must contribute to the successful performance of the outdoor spaces adjacent and within the buildings as described in Section 4 – Open Space of these *Guidelines*. Access to sunlight should be maximized wherever possible through proper building orientation. Building shaping should be provided to minimize shadowing of the sidewalks across adjacent streets.

Due to programmatic constraints requiring large floor plates for specific health and research related uses, there may be a need to cantilever building massing over open space in select locations only (as generally indicated in the Public Realm Plan) in order to achieve desired sightlines, pedestrian connections and other urban design objectives. Cantilevering over open space is generally discouraged and should only be considered in specific instances where the applicant can demonstrate a need due to critical programmatic constraints. In such instances, the following design considerations apply subject to satisfaction of the Director of Planning:

a) Unencumbered access to natural light and openness to the sky are critical components of an accessible, welcoming, and enjoyable public realm. To achieve this, cantilevered building massing should begin above the second level. In strategic locations, such as north of St. Paul's Plaza along Healthcare Boulevard, any potential cantilever may need to begin at a higher point. Any cantilevered massing north of St. Paul's Plaza along Healthcare Boulevard should be designed to be clearly architecturally subordinate to the primary building massing and must achieve contextually responsive and visually appealing architectural expression;

b) Open space below cantilevered building massing should be designed as integral to the open space network and should be experienced as an extension of any adjacent public spaces (St. Paul's Plaza, the Wellness Walk, etc.);
c) Open space below cantilevered building massing should be rigorously designed and treated with a high level of pedestrian interest, including bright, active and inviting soffits, columns, wall surface finishes, warm material and color palettes, feature lighting, seating, appropriate high quality landscape, activity generating features and other pedestrian amenities;
d) These areas should maximize the opportunity to program covered pedestrian space including outdoor dining and gathering, as well as cycle parking, and;
e) Cantilevering of building massing over the Wellness Walk is strongly discouraged. Where critical hospital functions absolutely require, minor cantilevering of building massing over the Wellness Walk may be considered with building elements rigorously designed as enhancements to the pedestrian experience. Long extents of coverage of the Wellness Walk are not supportable.

Green roofs that are visually and physically connected with built form, particularly on lower parts of buildings, should be accommodated to contribute to the healing imperative of the site design strategy.

5.1.6 Access, Servicing, and Circulation

The Health Campus Precinct buildings must contribute to the successful performance of the NSPHC's highly intuitive pedestrian and vehicular circulation network in consideration of the following design strategies:

a) Pedestrian-only and vehicular connectors should be provided to establish a sense of porosity and welcoming;
b) Where physical permeability is not achievable, visual permeability should be achieved through the careful design of sightlines into and through the buildings, particularly at grade;
c) Parking accesses and passenger loading/unloading zones should be located to support efficient vehicular movements and minimize impacts on the pedestrian experience. Drop-offs should be provided in close proximity to the hospital entry and have a clear wayfinding. For more information refer to Section 4 – Open Space;
d) Limit vehicular impacts on sidewalks and the public realm by minimizing the number and size of access drives and internalize maneuvering as much as is feasible. Shared access drives should be provided where possible, and;
e) Emergency vehicles accesses should be from the northeast corner of the precinct in locations that minimize conflicts with pedestrians and reduce potential noise impacts on adjacent neighbourhoods.

5.2 North Precinct

5.2.1 Intent

The North Precinct represents the primary site interface with the Strathcona Community. The form of development should therefore be highly contextually responsive, transitioning and integrating sensitively, both in form and use, with the low-scale building typologies of the adjacent neighbourhood, while still providing an urban street wall condition along New High Street, Prior Street and Dunlevy Avenue.

5.2.2 Building Form and Expression

Building massing should generally respond to the emergent character of a downgraded Prior Street as a collector with "great street" treatments (e.g. wider sidewalks, green infrastructure, street trees, curb bulges, etc.), working in concert with prospective developments on adjacent properties and the neighbourhood to design and present a cohesive urban street wall while

responding to the lower-scale nature of the Strathcona neighbourhood. Generally, a four-storey street wall should be provided, and should be designed with noticeable stepbacks at upper levels to mitigate shadowing across Prior Street. Retail use should be provided at-grade where the building interfaces with Prior Street and the New High Street. Buildings should be designed to maximize cross-ventilation and noise mitigation within residential units.

Non-residential uses in the North Precinct should have a typical floor-to-floor height of no less than 4.5 m (15 ft.), and residential uses should be no less than 3 m (10 ft.). Higher than average floor-to-floor heights may be considered subject to the overall impact on the performance of the adjacent public realm and contextual fit.

5.2.3 Setbacks

Setbacks for new development in the North Precinct should generally serve to reinforce the transition in scale from the Strathcona neighbourhood and the NSPHC, respond to adjacent development proposals, and provide for an architectural expression that is varied and visually appealing. Setbacks should be provided as follows:

a) Where buildings face Prior Street, a minimum setback of 2.0 m (6.6 ft.) is required, which should be extended up approximately 20 m (65.0 ft.). An additional 2.4 m (8.0 ft.) step back should be provided above;
b) Provide an additional 3.0 m (9.8 ft.) ground level setback along Prior Street for commercial patios, public seating and enhanced public realm;
c) Where buildings face Dunlevy Avenue, a minimum setback of 2.0 m (6.6 ft.) is required. An additional step back should be provided above the sixth level. A further 3.0 m (9.8 ft.) ground level setback should wrap the corner of Prior Street for enhanced public realm;
d) Any height above six storeys is to be located and shaped to mitigate shadowing of the north side of Prior Street, and;
e) If residential dwelling units are provided at grade, a minimum setback of 3.0 m (10.0 ft.) should be provided to allow for adequate private outdoor space with substantial landscape buffer.

5.2.4 Open Space and Public Realm

The following open space design strategies are to be explored in the development of the North Precinct:

a) Design open spaces as high-quality interfaces with all adjacent contexts in keeping with Section 4 – Open Space of these *Guidelines;*
b) Building design, including the orientation of programming, at block corners should provide for enhanced pedestrian interest and activity. Entrances at these locations should be provided from the corners, and consideration should be given to outdoor seating and dining areas, corner plazas, or other pedestrian amenities intended to provide for an active public realm;
c) Maximize opportunities for social gathering such as patios, public seating, generous sidewalk including landscape, etc. Provision of common rooftop amenity spaces are highly encouraged;
d) A common courtyard should be provided along the south property line that provides an integrated transition between the Wellness Walk and the North Precinct with direct pedestrian access;
e) Where the public realm interfaces with at-grade residential units, substantial landscaped areas should be provided to separate public and private spaces but should not negatively impact the effect of eyes-on-the-street, and;
f) All dwelling units must be provided with furnishable and usable outdoor space with a minimum depth of no less than 1.8 m (6.0 ft.), except in the case of studio units where Juliet balconies may be considered subject to the provision of high-performing common outdoor amenity space. Balconies cantilevered into required setbacks may be considered provided contextually sensitive and visually appealing architectural expression can be achieved.

5.2.5 Access, Connections, and Circulation

As with all buildings in the NSPHC, the form of development in the North Precinct should generally contribute to the performance of the public realm, including the pedestrian experience. Active uses, such as retail or service, should be provided at grade, particularly facing the New High Street and Prior Street.

Loading and parking functions should generally be concentrated on Dunlevy Avenue, should be located to minimize conflicts between vehicles and pedestrians, and should be integrated within the envelope of a building. A consolidated access ramp located within the North Precinct should be explored that serves as loading access for the CSRC buildings, parking and loading access for the residential building and access to the MHSU parking and drop-off. Any consolidated access ramp must be located wholly within a building envelope and must provide enhanced landscape and architectural treatment in order to minimize impacts on the Wellness Walk.

5.2.6 Dwelling Uses

The North Precinct is recognized as a potential location for dwelling uses, and the livability of dwelling units should be a paramount consideration where housing is pursued. Housing should generally follow the provisions of the City of Vancouver's *High-Density Housing for Families with Children Guidelines* in addition to the following design directives:

a) Units should comply with the City's *Access to Daylight, Views, and Ventilation in Dwelling Units* bulletin and should maximize access to passive ventilation;
b) Twenty-five percent of dwelling units should be family-oriented units, with a minimum of five percent of those units being comprised of three bedrooms or more, and:
c) At-grade residential units should be provided with a minimum 3.0 m (10.0 ft.) of separation from the property line for the provision of outdoor space with a substantial landscape buffer, and;
d) At-grade residential units should be expressed as discrete units when viewed from the street.

5.3 West Precinct

5.3.1 Intent

The West Precinct provides the primary site interface with the adjacent mixed-use properties on the west side of Station Street and the anticipated Hogan's Alley development on the viaduct lands to the north. By virtue of their orientation closest to Main Street and their strategic location close to Thornton Park, buildings in this precinct will constitute the most outwardly expression of the campus as a whole. These guidelines are intended to provide design direction to ensure a precinct that is highly contextually responsive and acts as an appropriate transition in scale to the larger campus buildings to the east.

5.3.2 Building Form and Expression

Development in the West Precinct should be divided into multiple building forms and expressions to harmoniously interface with adjacent developments. At grade, buildings should be highly visually permeable to establish a sense of activity and security along both Station Street and the New High Street. Formally, the lower levels of the building should generally be expressed as a continuous four-storey street wall facing the New High Street in order to reinforce a sense of human scale. Buildings should be generally orientated orthogonally to the established street grid.

Active retail uses should be provided on all frontages, except where other active uses are provided such as hotel lobbies, office entrances, and childcare drop off areas. Loading areas off Station Street should be internalized as much as possible, and where this cannot be achieved,

they should be screened with substantial landscaping interventions. The following additional design strategies should be considered for all buildings in the West Precinct:

a) Provide a transition in building scale from the mid-rise typologies of the west side of Station Street with the larger buildings of the Health Campus;
b) Treat façades facing both Station Street and the New High Street with equal significance developed in consideration of the history of the site;
c) Consider mirroring the unique sawtooth profile of the buildings on the west side of Station Street by providing vertical and horizontal modulation in the built forms along Station Street;
d) Establish a formal relationship between buildings at the south end of the West Precinct with the Station Street mini-park and heritage tree;
e) Provide for a sense of permeability through the Precinct from Station Street. Buildings in the West Precinct must not create a barrier between the NSPHC and the existing mixed-use neighbourhoods to the west;
f) Clearly delineate building entrances with expressive canopies or other architectural features, and;
g) Provide due consideration to the expression of highly visible upper storeys by providing visually appealing architectural elements or building sculpting up the full height of the buildings.

The following additional design guidance is provided for specific areas within the West Precinct:

5.3.2.1 **Southern sub-area (Hotel)** – Building massing should generally take on a flatiron form to clearly respond to Station Street, the New High Street, the Station Street mini-park and heritage tree, and Thornton Park alignments. The building should provide a visually appealing backdrop to Thornton Park to the south and formally frame the St. Paul's Plaza to the southeast. Setbacks at lower levels should not be provided to reinforce the building presence on the mini-park and Thornton Park. Retail should be provided at grade facing west, north, and east.

Hotel tower elements over 22.0 m (72.0 ft.) in height should be separated from adjacent office tower elements by a minimum distance of 24.4 m (80.0 ft.).

5.3.2.2 **Northern sub-area (Innovation Center)** – Building masses should generally be arranged as several distinguished volumes atop a podium. Discrete building forms should be separated by a minimum distance of approximately 15.2 m (50.0 ft.) and should be orientated orthogonally to the existing urban grid. Designs should take into account the development potential of the orphaned parcel to the northwest and provide subsequent contextual responses (heights, massing, etc.) to create a consistent street wall along Prior Street.

5.3.3 Setbacks

Building setbacks in the West Precinct should be provided as follows:

a) Where West Precinct buildings face the New High Street, a minimum setback of 1.0 m (3.3 ft.) is required;
b) Along Station Street, a minimum setback of 1.0 m (3.3 ft.) is required;
c) Where deeper setbacks are provided, the resultant wider outdoor spaces must be rigorously programmed or provided with engaging site elements to maintain a sense of safety and activity at all hours;
d) A minimum 4.0 m (13.0 ft.) setback is required at the southernmost property line of the precinct;
e) Step backs or other architectural modulation should be provided above the fourth storey of all Precinct buildings in order to express a consistent four-storey street wall facing the New High Street and Station Street. Some variation in the height of the street wall may be entertained facing the western property line to mirror the unique sawtooth profile of the buildings on the west side of Station Street, and;

f) No setbacks are required at the shared property lines between the West Precinct and the property at 220 Prior Street, however upper level step backs or other architectural modulation should be provided to present a visually interesting skyline and to absolutely mitigate shadowing on the Hogan's Alley development to the north of Prior Street.

5.3.4 Open Space and Public Realm

Open spaces in the West Precinct are generally anticipated to comply with Section 4 – Open Space of these Guidelines with particular consideration given to the following:

a) An active and attractive hotel forecourt should be provided in the Southern Sub-area as an apparent extension of the mews connecting New High Street with St. Paul's Plaza and the main entrance of the hospital. Explore providing a future mid-block pedestrian crossing at this location in coordination with Engineering;
b) Additional permeability should be provided through the Northern Sub-area;
c) A modest gateway plaza should be provided at the southwest corner of New High Street and Prior Street serving as an arrival landmark for pedestrians approaching from the north;
d) Retail entrances must be provided facing the adjacent streets. Entrances that face internal courtyard spaces only are not supported;
e) Where service areas are proposed facing Station Street, substantial landscaping should be provided to minimize potential impacts on the public realm. Service areas should be internalized wherever possible;
f) Opportunities for outdoor patio spaces should be explored on both Station Street and the New High Street, particularly in areas with significant access to daylight.

5.3.5 Access, Connections and Circulation

Loading and parking access for the office building in the Northern Sub-area should be consolidated to absolutely minimize the number of curb cuts, driveways, and potential resultant impacts on the public realm at Station Street. Arrangements to provide for shared service access should be explored for future development at the orphan site at 220 Prior Street to further reduce the number of curb cuts on Station Street. Drop-off areas for hotel guests and other users should be strategically designed to minimize impacts on the performance of the public realm.

Developments in the West Precinct must contribute in their form, massing, and architectural expression to the legibility of the site circulation network.

5.4 South Precinct

5.4.1 Intent

Buildings within the South Precinct are intended to provide a formal response to the heritage Pacific Central Station and its prominent role as an historical anchor in the community. South Precinct buildings should also respond to existing and future open spaces, acting to frame the view of the St. Paul's Plaza when viewed from Thornton Park.

5.4.2 Building Form and Expression

The building form and massing should be informed by its heritage context and respond to this prominent location and parcel configuration. Design strategies and directives for the buildings in the South Precinct include:

a) Providing contemporary references of form and height of Pacific Central station;
b) Minimizing shadows on Thornton Park;
c) Maximizing solar access to the St. Paul's Plaza;
d) Orientating the massing of the building to street grids, and;

e) Providing retail uses at grade to create an engaging public realm with consideration given to creating opportunities for “spill-out” activities on the sunny side of the Precinct.

While mimicry of heritage is not supported, proposals may present a unique interpretation of heritage forms, materials, and exhibit a thorough understanding of the classical composition of the adjacent building. Additionally, the expression of the building should:

a) Respond in form and finish to the existing and future public open spaces within and around the NSPHC;
b) Be designed with a high level of architectural rigour applied to all façades in consideration of its high level of visibility from multiple angles, and;
c) Act in concert with the adjacent development at the southeast corner of Station Street and Terminal Avenue to formally frame Pacific Central Station.

The building should present a minimum four-storey street wall to better respond to its corner situation. Further stepping back of the building form may be provided at upper levels as needed to mitigate shadowing on adjacent open spaces and to provide for modulation and visual interest at the roofline.

5.4.3 Setbacks

a) A minimum setback of 2.0 m (6.6 ft.) is to be provided facing Station Street and at the south side yard. An additional 2.4 m (8.0 ft.) shoulder step back should be considered above the fourth storey at the south side of the building to establish a stronger formal relationship with Pacific Central Station, and;
b) A minimum 1.0 m (3.3 ft.) setback is required where the building fronts National Avenue.

5.4.4 Access, Connections and Circulation

a) Locate parking access and loading/unloading to the east of the site, away from the intersection and where do not negatively impact pedestrian traffic, and;
b) Locate bike accesses in locations that do not impact the public realm and pedestrian flows.

6 Architectural Components

6.1 Intent

The building form and expression of the New St. Paul's Healthcare Campus should exhibit excellence in architecture that reflects its central use and nature, but that also recognizes the site's history. The design and scale of architectural elements and frontages should be relatable to the pedestrian environment to create a strong sense of place rather than leave a generic impression. Large blank or monotonous street walls must be avoided. Architecture should be highly legible and designed to add visual interest that enhances the pedestrian experience and public spaces.

6.2 Ground Floor Expression

Active and engaging uses at grade with highly transparent storefronts should be provided. Where not possible, strategies including visually permeable frontages or careful envelope material treatments and articulation should be provided. Long blank walls are not supported. Other than entrances and lobbies, office uses should not be located at the ground floor level. Additionally, new development should recognize the industrial character of the area, including:

a) Expressing a finer grain urban fabric and generally follow narrow increments;
b) Build out facades to meet front yard setbacks, providing forecourts and other articulation of the street wall where they facilitate activation of the pedestrian realm including space for outdoor seating, and:
c) Providing clear and identifiable entrances to buildings.

Other design components that further enhance the pedestrian experience include operable windows or sliding glass walls, dynamic building components, and striking signage. Creative storefront merchandising will also be necessary to provide appealing views into these spaces and contribute vibrancy to adjacent street life. Anything that impedes a visual connection to interior space such as in-store shelving, or window films signage should be avoided.

6.3 Roof Expression

Upper levels and roof expression should be carefully designed to present a varied and unique skyline. Elevator and stair penthouses, helipad structures, mechanical rooms, equipment, ducts, vents, and other appurtenances should appear integral with the overall architectural expression of the buildings. Green roofs must be incorporated on lower levels and, where possible, on higher levels.

6.4 Materiality

The material palettes of campus buildings must, along with the architectural expressions, present a high quality and durable appearance that reinforce a sense of permanence and distinctiveness. Buildings facing Station Street in the West Precinct should feature a material palette in keeping with material variety of the west side of the street and reflect the industrial history of the area. Buildings within the Health Campus Precinct will be highly visible and should feature a material palette consistent with high-quality contemporary hospital design. Additionally, stone, brick, terracotta, and metal panels are encouraged. Cementitious panels or other non-durable materials are not supported.

Effective passive solar shading devices that are integrated with the building expression should be incorporated.

The following material palettes are provided for consideration:

Contemporary West Coast

- Simple structures in wood, concrete, or steel
- Architectural concrete or stone walls, stairs, and platforms
- Wood or woodgrain panels, screens, and louvers
- Contoured, tessellated, or perforated metal panels
- Wood and metal railings

Shoreline

- Robust structures including wood piles, steel and wood trusses
- Large windows
- Wood siding and simple volumes
- Nautical design features, particularly those representative of First Nations watercraft
- Concrete planters with tall reeds and grasses

Urban Industrial

- Dramatic industrial structural systems such as steel and heavy timber
- Large expanses of glazing with mullion grids reminiscent of steel windows
- Corrugated metal in select applications
- Corten steel panels
- Rough or architectural concrete in select applications
- Industrial grating, stairs, and like components

6.5 Sky Bridges

If programming between campus buildings is clearly demonstrated to the satisfaction of the Director of Planning to absolutely prohibit circulation at or below grade, sky bridges may be considered in select locations but are in general, they are discouraged. Sky bridges, if proposed, must provide a high level of visual interest when viewed from the public realm and must appear as integral elements of the overall architectural expressions of the buildings they link. Sky bridges must be visibly transparent and should be as narrow as possible to mitigate undue shadowing of spaces below, and should be located no lower than the fourth storey to prevent visually compressing the public realm.

6.6 Lighting and Signage

A rigorously designed lighting and signage strategy is integral to effective site legibility, security, and character. Lighting should be provided to draw attention to and enhance the key outdoor spaces at all hours, and must serve both a utilitarian purpose but also contribute to the overall expression of such spaces. The experience of the pedestrian throughout the site must be prioritized and designs must strategically establish a sense of spatial hierarchy to reinforce paths of travel and programmatic intents of outdoor spaces. Lighting should also be used to reinforce or add another layer of character and visual interest to buildings throughout the campus.

Signage should primarily augment the site's high level of legibility and wayfinding. Building and site signage interventions should appear integral to the architectural and landscape design, should be highly legible, and must contribute to the overall performance of the public realm. At grade, signage should be oriented toward the pedestrian particularly along the New High Street and the Wellness Walk. At the Healthcare Boulevard, signage should be highly legible for both pedestrians and motorists. Larger building signage applications, done well, can effectively contribute to the outward appearance and performance of a building at all hours, but can also add visual clutter to the streetscape. All signage should be of high quality, durable materials, and must be easily maintained when needed. Signage must comply with the provisions of the City of Vancouver's *Sign Bylaw*.

6.7 Projections

Projections into the required setback of approximately 0.6 m (2.0 ft.) with the intent of improved building performance and/or articulation may be considered. Examples include solar shading devices or elements providing weather protection.

6.8 Garbage and Recycling

Garbage and recycling facilities must be fully enclosed within the building envelope and be designed with sufficient and universally accessible areas for pick up.

7 Other Environmental Considerations

7.1 Intent

The health campus should deeply incorporate biophilic design, creating rich and complex indoor and outdoor natural environments, while achieving other objectives of passive design (reduced heating/cooling TEDI), rainwater retention and filtration, mitigating urban heat island and other tactics or considerations.

7.2 Resilience

The New St. Paul's Health Campus must be an adaptable facility that will be hazard and climate change resilient over the life of the buildings and provide exceptional post-disaster functionality. The design for all critical campus buildings must demonstrate that a resilience lens has been applied. This site is in a flood plain and is subject to urban heat island effect and rainwater flooding; these are key climate hazards that will drive resilience planning for this project.

A comprehensive multi-hazard and vulnerability assessment of the campus and critical buildings is required, using methodologies approved by the City of Vancouver which will inform the design (and ongoing refinements) of the campus as a post-disaster facility. The assessment should involve key stakeholders such as those who use the hospital, key City of Vancouver staff, clinical planners, building engineers, utility providers, and others. This assessment will include seismic and non-seismic hazards.

Design approaches that advance sustainability and resilience should be sought throughout the design process, with considerations for such passive approaches such as operable windows, shading to avoid overheating, etc. Examples of some of these strategies can be seen in Boston's Spaulding Rehabilitation Center.

The New St. Paul's Health Campus is a collection of facilities and services, but it is also a community of people. In addition to environmental and structural resilience, the New St. Paul's Health Campus should strive to incorporate flexible social and communal spaces into facility design.

Socially connected, trusting communities are shown to have more robust health and wellbeing, and experience faster, more effective recovery in the event of emergencies and disasters. In support of a holistic approach to health, the New St. Paul's Health Campus should seek out opportunities to facilitate social connection and bolster informal support networks on the Health Campus. It may do so through the design and incorporation of physical gathering and social spaces into facilities, and/or by offering structured (programmed or organized) social and cultural events.

Flexible, multi-use communal spaces can serve a variety of needs for both Health Campus staff and patients, and can serve as locations for both informal and formal, structured social activities. While structured activities around social connection and belonging for the entire Health Campus community provide opportunities for informal networks of care to alleviate potential strain of increasing demand on health services. Moreover, investing in social spaces and activities will benefit users of the Health Campus every day, and facilitate pro-social, resilient actions by community members in the event of climate or geological shocks.

7.2.1 Seismic Hazards

Following the multi-hazard and vulnerability assessment, a multi-climate hazards risk assessment should be completed to ascertain the performance of the campus and campus buildings critical to the provision of life-saving medical services over the lifetime of the buildings.

A risk assessment for non-seismic, multi-climate hazards (including coastal flooding, extreme heat events) and others as peer-reviewed by a panel of experts to the satisfaction of the Chief Building Official should be completed. The resulting design should demonstrate resilience to climate change. The hospital campus and all hospital buildings critical to the provision of life-saving medical services must retain a high degree of post-disaster functionality in the context of 2050 climate data.

7.2.2 Non-Seismic Hazards

A risk assessment for non-seismic, multi-climate hazards, including coastal flooding, extreme heat events, and others as peer-reviewed by a panel of experts to the satisfaction of the Chief Building Official should give the foundation for a rigorous design approach to non-seismic disaster preparedness. The hospital campus and all hospital buildings critical to the provision of life-saving medical services must retain a high degree of post-disaster functionality in the context of 2050 climate data.

7.2.3 Floodplain

As stipulated in the *New St. Paul's Hospital and Health Campus By-law* a minimum flood construction level of 5.0 m geodetic should be established and with an additional 0.2 m (0.6 ft.) required to accommodate subsidence. Further accommodations should be made for settlement, wave effect, and other site conditions or service expectations. A relaxation to provide a flood construction level no lower than 4.8 m geodetic may be entertained subject to planned flood protection measures or provision of sufficient evidence supportive of such a relaxation in a risk management assessment to the satisfaction of the Chief Building Official. A Flood Construction Level of 5.4 m is highly encouraged if possible. Measures to mitigate the risk flood damage to critical building components must be explored for all campus buildings, including locating mechanical equipment on higher levels, using flood-resistant building materials on the ground floor, and ensuring a highly robust site drainage strategy.

Flood resilient design and construction methods should be applied 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.

7.3 Green Infrastructure and Integrated Rainwater Management

a) Refer to *Rainwater Management Bulletin* for full requirements.

b) A site wide strategy for rainwater management focusing on green infrastructure solutions should be developed following a tiered approach. On-site infiltration, green roofs, and rainwater harvesting/reuse are considered as the most preferred approach and detention-only strategies as the least preferred. This is large public site – there is an expectation that development should be able to meet the Tier 1 criteria.

c) Considering continuous native soil is limited to perimeter of the buildings, stormwater infiltration opportunities should be fully explored at such locations and wherever possible. Where infiltration is not possible, use lined biofiltration landscapes to treat, slow, and retain some runoff. Bio-filtration over slabs should ensure sufficient soil volume to support trees and planting.

d) For high pollutant areas including roads, driveways, parking lots and passenger drop zone the rainfall depth to be treated increases to the first 48 mm of rainfall.

e) Peak flow discharge rate should meet sewer requirement.

f) The rainwater management plan should be integrated with the open space plan, site plan and landscape plan to form a comprehensive rainwater management plan. Grading plan and landscape plan should demonstrate stormwater management. When proposed stormwater management plan is to be implemented in phases, area plans that delineate drainage areas and identify appropriately sized green infrastructure practices for each area should be provided.

g) Consider the health care co-benefits and improved microclimate, solar aspect, shading, wind, temperature and plant selection in the overall stormwater management plan and especially in the design of Wellness Walk.

h) Green approaches to rainwater management plan are to be prioritized on site and within right of way to promote better health outcome and demonstrate a leadership in achieving human health improvements from green infrastructure.

Preferred examples are:

1. Rainwater Harvesting for irrigation and toilet flushing.
2. Stormwater tree trenches using soil cells or structural soil under sidewalks or bike lanes can be used to treat and retain stormwater, maximize soil volumes for tree roots, encourage large canopies, and encourage biking and walking.
3. Green roofs and green walls to mitigate urban heat island effect and improve mental health and air quality.
4. Traffic calming device such as curb bulge rain gardens to reduce traffic accidents.
5. Wide bio-retention planting as part of the streetscape to create separation and buffer between cars and pedestrians.