

DRAFT
MEMORANDUM

September 9, 2020

TO: Mayor and Council

CC: Sadhu Johnston, City Manager
Paul Mochrie, Deputy City Manager
Karen Levitt, Deputy City Manager
Lynda Graves, Administration Services Manager, City Manager's Office
Rena Kendall-Craden, Civic Engagement and Communications Director
Rosemary Hagiwara, Acting City Clerk
Anita Zaenker, Chief of Staff, Mayor's Office
Neil Monckton, Chief of Staff, Mayor's Office
Alvin Singh, Communications Director, Mayor's Office

FROM: Susan Haid, Deputy Director, Long Range and Strategic Planning, Planning, Urban Design and Sustainability

SUBJECT: Consequential and Housekeeping Amendments to Guidelines – RTS 13686

At the Standing Committee on Policy and Strategic Priorities Meeting on May 27, 2020, Council referred to public hearing amendments to the Zoning and Development By-law, various Official Development Plans and the Parking By-law, as well as consequential and housekeeping amendments to various land use documents that were explained in the appendices of the Council report dated May 12, 2020. Council approved the amendments at a Public Hearing on June 25, 2020. However, the appendices detailing the consequential and housekeeping amendments to the land use documents (see attached) were, inadvertently, not included in the public hearing materials.

Amendments to land use documents are not required to be considered at a public hearing (unlike amendments to the Zoning and Development By-law), but were to be included in the public hearing package as many of the amendments were closely related to the by-law amendments. The land use document amendments are to update terms for porches, decks and balconies to align with the new definitions and regulations in the Zoning and Development By-law for those features, correct various references and to correct errors in spelling and metric conversion.

The by-law amendments were enacted on July 24, 2020, but not the amendments to the land use documents. The amendments to the land use documents are being brought forward for Council review and adoption via an administrative motion on September 15.

Susan Haid

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Amendments to Land Use Documents

Document Name	Page	Section	Reference to be Deleted	Replace With
Joyce-Collingwood Station Precinct Plan	70	8.3.10	"Shared rooftop gardens"	"Shared roof decks"
Marpole Community Plan	76	7.2.56	"Shared rooftop gardens"	"Shared roof decks"
Victory Square Policy Plan	16	1.7(b)	"rooftop deck"	"roof deck"
		1.7(c)	"Private rooftop decks"	"Private roof decks"
West End Community Plan	35	7.1.1	"and patios in building setback areas and on rooftops"	"patios in building setback areas, and roof decks"
	36	7.0 (image caption)	"rooftop patios"	"roof decks"
	39	7.0 (image caption)	"rooftop patios"	"roof decks"
	40	7.0 (image caption)	"rooftop patio"	"roof deck"
	90	13.1.1	"first and second floor patios"	"first and second floor roof decks"
	102	14.6.4	"rooftop gardens"	"roof decks"
Norquay Village Character House and Retention Guidelines	7	Appendix A (b)	"All porches has substantial depth"	"All porches have substantial depth"
Victory Square Guidelines	16	4.3.1.6	"Projecting residential balconies"	"Projecting balconies"
	24	7.2	"Common rooftop decks"	"Common roof decks"

C-1 Residential Guidelines	9	7.2(a)	“Common rooftop decks”	“Common roof decks”
C-2 Guidelines	12	4.4(d)	“to accommodate roof gardens”	“ to accommodate roof decks”
	13	4.5(b)	“ to accommodate patios and roof gardens”	“to accommodate patios and roof decks”
	16	5.1(a)	“Elements such as roof gardens and roof decks”	“Elements such as roof decks”
		5.4(b)	“Open balconies can be excluded” from FSR to a maximum of 8% of residential floor area. “	“Balconies can be excluded from FSR to a maximum of 8% of the floor area being provided.”
C-3A Broadway and Arbutus and 2000-Block West 10th Avenue (North Side) Guidelines	17	5.1(a)	“Elements such as roof gardens and roof decks”	“Elements such as roof decks”
C-3A Burrard Slopes Guidelines	20	5.1(c)	“Elements such as roof gardens, gazebos, trellises, pergolas, roof decks”	“Elements such as roof decks, gazebos, trellises, pergolas”
North Burrard C-3A Guidelines	15	5.1(a)	“Elements such as roof gardens and roof decks”	“Elements such as roof decks”
		5.4(b)	“Open balconies can be excluded from FSR to a maximum of 8% of residential floor area”	“Balconies can be excluded from FSR to a maximum of 8% of the floor area being provided”
Chinatown HA-1 Design Policies	27	7.2.2	“Common rooftop decks”	“Common roof decks”
	30	Glossary of Terms	“Balcony: An exterior space incorporated into the façade of a building and accessed through a door from an interior space”	“Balcony: A platform providing useable outdoor space that: <ul style="list-style-type: none"> (a) projects from a building or is recessed into a building; (b) is only accessed from within the building; (c) may be covered

				by a roof or floor above; and is not enclosed, except for a required guard, or where it is recessed between adjacent walls.
HA-2 Gastown Design Guidelines	20	7.2	"Common rooftop decks"	"Common roof decks"
MC-1 and MC-2 Guidelines for Cedar Cottage, Hudson Street, East Hastings (Clark to Semlin) and False Creek Flats (Malkin-Atlantic-Prior) Areas	15	5.1(b)	"Elements such as roof gardens and roof decks"	"Elements such as roof decks"
RM-1 and RM 1-N Courtyard Rowhouse Guidelines	7	2.2.2 (2)	"veranda"	"verandah"
	18	4.4(b)	"0.6 m. (2 ft)"	"1.8 m (6 ft)"
	42	(a)	"verandas"	"verandahs"
	43	"Pioneer"	"veranda"	"verandah"
Britannia/Woodland RM-4 and RM-4N Guidelines	7	5.1	"doermers"	"dormers"
Broadway Station Area RM-4 & RM-4N Guidelines	8	7	"roof garden"	"roof deck"
Joyce Street RM-4N Guidelines	6	7	"roof garden"	"roof deck"
Kitsilano RM-4 Guidelines	3	7	"roof garden"	"roof deck"
West End RM-5, RM-5A, RM-5B, RM-5C and RM-5D Guidelines	28	7.3	"roof garden" "roof gardens"	"roof deck" "roof decks"
	29	8	"Roof top gardens"	"Roof decks"

RM-8A and RM-8AN Guidelines	4	Unit Arrangements: Stacked townhouse Characteristics (iii)	“roof tops or decks”	“roof decks”
	15	5.5 (c)	“roof top decks”	“roof decks”
RM-10 and RM-10N Guidelines	19	7.3	“roof-deck”	“roof deck”
RM-11 and RM-11N Guidelines	15	5.1.1(b)	“Roof top decks”	“Roof decks”
		5.1.1(e)	“roof top decks”	“roof decks”
	17	7.3 (a) (ii)	“roof-deck”	“roof deck”
RM-12N Guidelines	23	5.1.1(d)	“Roof top decks”	“Roof decks”
	24	5.5(c)	“roof top decks”	“roof decks”
	25	7(b)(ii)	“roof top deck”	“roof deck”
Multiple Conversion Dwelling Guidelines (RS-1A, RS-2, RS-4, RS-7S, RT-1 and RT-2 Districts)	1	Title	“Multiple Conversion Dwelling Guidelines (RS-1A, RS-2, RS-4, RS-7S, RT-1 and RT-2 Districts)”	“Multiple Conversion Dwelling Guidelines (RS-1A, RS-2, RS-7, RT-1 and RT-2 Districts)”
		1	“areas zoned RS-1A, RS-2, RS-4, RS-7S, RT-1 and RT-2”	“areas zoned RS-1A, RS-2, RS-7, RT-1 and RT-2”
	3	7	“roof gardens”	“roof decks (which may include a garden)”
RS-6 Design Guidelines	2	5.1(a)(v)	“where roof decks and roof gardens are provided”	“where roof decks are provided”
		5.2(c)	“covered entry porches”	“entries, porches or verandahs”
	3	5.3	“covered porch”	“entry, porch or verandah”
		5.3	“covered porches”	“entries, porches or verandahs”
RS-7 Guidelines	2	2.3	“entries, covered porches”	“entries, porches and verandahs”

	7	5.3(a)	“a covered entry porch”	“an entry, porch or verandah”
		5.3(b)	“covered front porches on multiple dwellings”	“entries, porches or verandahs on multiple dwellings”
	8	5.6	“entry porches”	“entries, porches and verandahs”
RT-2 Multiple Dwellings Guidelines	2	7	“roof gardens”	“roof decks”
RT-4, RT-4A, RT-4N, RT-4AN, RT-5, RT-5N and RT-6 Guidelines	1	2.1 B. (i)	“veranda”	“verandah”
RT-10 and RT-10N Small House/Duplex Guidelines	16	4.4(b)	“The District Schedule permits porches to project up to 1.2 m. (4ft) into the required front yard. In SH/D developments, the location of projecting porches should consider the impact on neighbouring sites. A full 1.2 m (4 ft) projection”	“The District Schedule permits entries, porches and verandahs to project up to 1.8 m (6 ft) into the required front yard. In SH/D developments, the location of projecting entries, porches and verandahs should consider the impact on neighbouring sites. A full 1.8 m (6 ft) projection”
	19	4.7(b)	“A floor space exclusion for inaccessible space under porches has been included in the District Schedule in order to make providing porches easier.”	“A floor space exclusion for unconditioned space under entries, porches and verandahs has been included in the District Schedule in order to make providing entries, porches and verandahs easier.”
	28	5.1.3(a)	“Porches”	“Entries, Porches and Verandahs”
		5.1.3 (a)(i)	“entry porches” “porches”	“entries, porches or verandahs” “entries, porches and verandahs”

		5.1.3(a)(ii)	“entry porches” “porch area” “Porch roofs”	“entries, porches and verandahs” “entry, porch or verandah area” “Entry, porch or verandah roofs”	
	34	5.2.4(b)	“Porches”	“Entries, Porches and Verandahs”	
		5.2.4(b)	“The District Schedule provides a floor space exclusion for porches, to both encourage new porches, and facilitate the opening up of old ones which may have been filled in for extra living space.”	“The District Schedule provides a floor space exclusion for entries, porches, and verandahs to both encourage new entries, porches and verandahs, and facilitate the opening up of old ones which may have been filled in for extra living space. “	
	38	Pre-1940's Character Buildings (a)	“veranda”	“verandah”.	
		Pre-1940's Character Buildings (b)(i)	“fro”	“from”	
		Pre-1940's Character Buildings	“All porches has”	“All porches have”	
	40	Pioneer	“veranda”	“verandah”	
	RT-11 and RT-11N Guidelines	10	4.4(c)	“porches”	“entries, porches and verandahs”
		18	5.3.2	“Porches”	“Entries, Porches and Verandahs”
			5.3.2(a) and (b)	“entry porches”	“entries, porches or verandahs”
20		5.5(b)	“Roof top decks” “rooftop decks”	“Roof decks” “roof decks”	
High Density Housing for Families with Children	5	3.2.3	“roofdeck”	“roof deck”	
	7	3.4.3	“roof terrace”	“roof deck”	

Micro Dwelling	2	3.1(c)	“sundeck”	“deck”
Housing Design and Technical Guidelines	17	8.1.8(d)	“roof-top garden areas”	“roof decks”
		8.1.8(e)	“roof garden areas to”	“roof decks should ”
Balcony enclosure	1	1(a)	“canopies, porches or verandahs, galleries, porticos, sun decks and roof decks or gardens”	“canopies, entries, porches or verandahs, galleries, porticos, decks, and roof decks”

Draft amendments to the Heritage Incentive Program Policies and Procedures, Childcare Design Guidelines and the Rezoning Policy for Sustainable Large Developments.



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

Planning, Urban Design and Sustainability Department

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HERITAGE INCENTIVE PROGRAM POLICIES AND PROCEDURES

Adopted by City Council on ~~March 13, 2019~~ xxx

1 Introduction

City Council approved the Heritage Incentive Program (HIP) to encourage the conservation of heritage designated buildings citywide. The program will be available for a four-year period (2019 -2022) to owners of commercial and non-commercial privately owned buildings that meet program criteria. The HIP will provide grants to assist with heritage conservation cost to a maximum of 50% of the eligible cost, not to exceed \$4.0 million per property. In addition, transferable heritage density (THD) incentive may be available to eligible sites in Gastown, Chinatown, Victory Square, and Hastings Street Corridor as compensation for heritage designation. High level of retention, heritage conservation, and seismic upgrade are mandatory.

2 Background

In 2003, City Council approved a program of incentives to facilitate the conservation and rehabilitation of heritage buildings in Gastown, Chinatown, and the Hastings Street Corridor (Victory Square added later) - Heritage Building Rehabilitation Program (HBRP) and Heritage Façade Rehabilitation Program (HFRP). The HBRP expired at the end of 2015, whereas the HFRP continues to be available. In 2013, City Council approved the Heritage Action Plan (HAP) calling for a comprehensive review of the City's Heritage Conservation Program including heritage incentives. The HIP was developed in response to a citywide demand for a heritage conservation support and recognition of preservation of the city's heritage resources as an important public benefit. This document outlines policies and procedures for the HIP.

3 Participation

The city's heritage resources are rich with a diversity of building typologies, sizes, and uses, and represent a wide spectrum of community and heritage values. Owners of eligible properties throughout the city are encouraged to participate in the HIP. Privately owned commercial, residential, industrial, institutional, religious/spiritual, or mixed-use buildings, including those owned/operated by non-profit organizations, constructed primarily of unreinforced masonry that are listed on the Vancouver Heritage Register (VHR) and legally protected (by designation by-law) are eligible.

4 Goals and Objectives

The City's primary goal is to foster the retention, stewardship, and upgrading of the city's heritage resources by offering financial assistance to owners of eligible properties. The HIP provides grants to assist with heritage conservation construction costs, including seismic upgrades. In addition to grants, heritage properties located within the historic DTES (Gastown, Chinatown, Victory Square, and Hastings Street Corridor – former HBRP catchment area) that are currently not legally protected by heritage designation may be eligible for additional THD incentive as compensation for heritage designation.

The second goal is to support the City's other major initiatives and programs, including cultural, social, environmental, and economic. This is achieved through the conservation of heritage buildings with cultural use, Single Room Occupancy or social housing use, contribution to the City's sustainability targets by implementing "greener" conservation procedures (e.g. greenhouse gas emissions reduction targets, embodied energy retention, land field material reduction), maintaining the community's "sense of place" through preservation of unique historic character, nurturing a sense of communal continuity, and enhancing neighbourhoods' livability.

The third goal is the long-term protection of heritage resources through heritage designation, as well as meaningful and respectful conservation, including an adequate selection of adaptive uses where applicable. The following objectives are embedded within the three identified goals:

- (a) citywide heritage incentives,
- (b) quality heritage conservation,
- (c) seismic/structural upgrades,
- (d) retention and continued use of the entire structure,
- (e) sustainable heritage rehabilitation practices,
- (f) long-term protection for heritage resources.

5 Principles

5.1 **Conservation Conservation**

An overarching heritage conservation principle adopted by this program is to conserve heritage value and character-defining elements of eligible heritage buildings in their existing or historic development form, preserving their built form, structure, exterior fabric, and in some cases use while discouraging unsympathetic alterations or inappropriate additions. It is important to emphasize that conserved heritage buildings critically contribute to the continuity of their respective historic streetscapes. Heritage conservation directly and positively contributes to a sense of belonging and enriched community living.

5.2 **Adequate Level of Intervention**

In addition to preservation as the primary heritage conservation approach, a restoration of character-defining elements that were lost in the past would be encouraged as part of a comprehensive conservation proposal for the site. Rehabilitation of a heritage building by adaptive re-use, or rehabilitation of its major components (e.g. reconfiguration of storefronts, rooftop addition, structure replacement or other major works) may also be considered. These are subject to a proper conservation approach and proposed changes not adversely affecting existing character-defining elements or heritage values. If a change of use is considered, the selection of appropriate use would be key to a successful rehabilitation, both from the perspective of future economic performance as well as the magnitude of intervention that could be triggered by it. Generally, adopting the historic use or maintaining existing use requires less physical intervention while triggering a lower level of Vancouver Building By-law (VBBL) upgrade requirements, compared to the choice of use that is new to the existing or originally intended design of the building. For these reasons, an aggressive rehabilitation approach may result in the project being ineligible for incentives under the HIP.

5.3 Sustainable Heritage Rehabilitation

Heritage rehabilitation is considered to be an inherently “green” procedure; moreover, the *sustainable heritage rehabilitation* directly contributes to achieving a variety of sustainability targets: cultural, social, economic and environmental. Heritage conservation is essential to creating and maintaining sustainable built environments and communities. Consideration of sustainability principles (environmental, cultural, social and economic) in combination with appropriate conservation procedures are strongly recommended when preparing heritage conservation proposals for places where a more intense level of intervention is proposed.

Traditionally, a majority of heritage buildings possess many sustainable design features as they reflect thoughtful design practices of the past. Some of them are floor layouts, orientation, passive heating and cooling design features and systems, structural assemblies, material selection, window assemblies, fenestration pattern, and façade solid-to-void ratio. These inherently sustainable features should always be identified and maintained throughout the conservation process wherever possible. Heritage conservation procedures should be developed to prevent unnecessary loss of a building’s inherently sustainable features, which are often unique and considered to be character-defining elements.

For more information see: “Building Resilience: Practical Guidelines for the Sustainable Rehabilitation of Buildings in Canada” by Federal, Provincial, and Territorial Directors of Culture and Heritage in Canada.

6 Incentives

6.1 Grant

The HIP provides grants, subject to Council approval pursuant to section 206(2) of the Vancouver Charter, to encourage private investment and financially assist with the cost of heritage conservation. The eligible grant is \$100 per sq.ft. of the total (gross) floor area of the building, limited to a maximum of 50% of the eligible heritage conservation construction costs (heritage premium cost). The maximum amount of a grant is \$4.0 million per property. The amount of grant varies depending on the size of the building and the proposed scope of conservation (see Sections 10 and 11). The only exception to the size rule may be a few of Vancouver’s special heritage places (e.g. churches or large industrial buildings) that may have additional structural complexities and elaborate interiors/artifacts. These buildings may qualify for the maximum grant amount without qualifying under the total floor area criterion subject to meeting other HIP requirements and being listed in the Vancouver Heritage Register under the category “A”. For a quick reference of the maximum amount of grant that may be available in relation to the size of the building and the qualified investment level (eligible cost) please see Table 1. The following are two examples of how to calculate the eligible grant amount:

- (a) For a building with a total floor area of 10,000 sq.ft., the maximum eligible grant would be \$1,000,000 (10,000 sq.ft. x \$100 = \$1,000,000) subject to the eligible cost being equal or higher than \$2,000,000. If the eligible cost is lower than \$2,000,000 (e.g. \$1,600,000) the grant amount would be adjusted to 50% of that lower amount which would result in a grant of \$800,000.
- (b) For a building with a total floor area of 35,000 sq.ft., the maximum eligible grant would be \$3,500,000 (35,000 sq.ft. x \$100 = \$3,500,000). To qualify for the full amount of eligible grant the eligible cost would need to be a minimum of \$7,000,000. If the eligible cost is lower than \$7,000,000 (E.g. \$5,000,000), the grant amount would be adjusted to 50% of that lower amount which would result in a grant of \$2,500,000.

Building Total Floor Area (sq.ft.)	Max. Eligible Grant (@ \$100/sq.ft.) \$	Min. Eligible Cost (required to qualify for the maximum grant) \$
5,000	500,000	1,000,000
10,000	1,000,000	2,000,000
15,000	1,500,000	3,000,000
20,000	2,000,000	4,000,000
25,000	2,500,000	5,000,000
30,000	3,000,000	6,000,000
35,000	3,500,000	7,000,000
40,000	4,000,000	8,000,000
40,001 or more	4,000,000 capped	8,000,001 or more
"A" listed designated sites with additional complexity (e.g. churches) less than 40,000 sq.ft.	4,000,000	8,000,000

Table 1 – Maximum eligible grant in relation to the size of the building and the cost of conservation work

6.2 Transferable Heritage Density (THD)

Heritage properties located within the THD catchment area may be eligible for the optional THD incentive as compensation for any new or additional heritage designation of the property. This has been introduced as an option to compensate owners of newly designated heritage properties under section 595 of the Vancouver Charter, and to assist with the preservation of the historic character of the city’s oldest urban areas, featuring historic buildings and streetscapes, saw-tooth profile, varied heights of existing built form, and a high level of historic continuity and physical integrity. These special urban environments are most consistently found in the historic areas of Gastown and Chinatown, the character area of Victory Square and along the Hastings Street Corridor (Table 2). The boundaries of the catchment area are consistent with those of the former HBRP area, to ensure continued support for heritage values identified by the DTES communities. The amount of transferable heritage density that may be provided as compensation will vary from site to site. In many cases, this may equal the difference between the maximum allowed density (floor space ratio - FSR) stipulated by the area’s Zoning and the existing built density. The THD may not be available if the heritage conservation work is undertaken under the rezoning application or the property is already designated and no further designation is required.

Any transfer of additional density provided as compensation for designation is subject to the property being designated as a protected heritage property and the owner entering into a Heritage Revitalization Agreement with the City, both of which will be subject to Council approval.

In addition, the City retains the right to not consider providing compensation in the form of transferable heritage density for sites that are found significantly underdeveloped (the existing FSR is less than 35% of allowed FSR) and where a compatible addition has not been considered as part of the proposal. The intent is to encourage redevelopment of severely underdeveloped heritage sites where opportunities for appropriately incorporated additions may exist, and would not adversely affect the site’s heritage value or character-defining elements. This approach would also help to retain the associated economic potential within the DTES area.

Gastown: Unlike other areas, the City’s Zoning By-law does not establish any density regulations in the historic area of Gastown. Instead, the HA-2 Zoning District Schedule sets a maximum building height of 75 ft., which generally applies when developing vacant sites or considering rooftop additions. If the site is occupied by a heritage building that is not legally

protected, the planning policy would consider compensation for heritage designation in the form of a compatible one-storey setback rooftop addition, subject to not exceeding the height limit of 75 ft. The density resulting from a potential one-storey rooftop addition and/or rear/side addition on vacant land, in some cases, would be used to establish the maximum FSR allowed. Owners would have a choice to use the additional density on site, as approved through the process of heritage conservation, or to claim it for transfer through the HIP application. Properties that currently meet or exceed the height limit of 75 ft. are considered fully developed and will not be eligible for the THD. Should the Zoning By-law change in future the updated FSR values would take precedence.

HIP - Transferable Residual Density Catchment Area

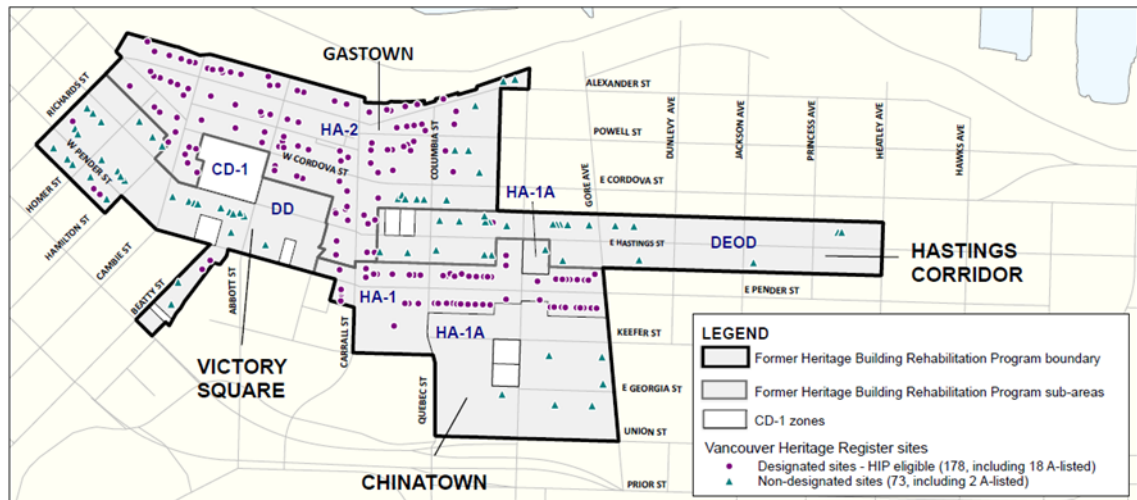


Table 2 – THD Catchment Area: Gastown, Chinatown, Hastings Street Corridor, and Victory Square

6.3 Zoning and Parking By-law Relaxations

Additional incentives consisting of zoning and parking by-law relaxations may be available if considered essential to securing quality heritage conservation. These are usually considered by the Director of Planning or Development Permit Board where strong heritage conservation rationale exists.

6.4 City of Vancouver Building By-law Alternate Compliance

For rehabilitation work on all existing buildings, including heritage, the City of Vancouver Building By-law (VBBL) requires a certain level of compliance. For heritage buildings undergoing a rehabilitation process, there may be some flexibility in order to accommodate the retention and conservation of a building’s character-defining elements and heritage values, the VBBL offers an alternate compliance method to accommodate conservation efforts (for more information see Division B, VBBL 2014).

7 Eligibility Criteria

7.1 To be considered under the HIP, the application must meet the following eligibility criteria:

- 7.1.1. Buildings/sites must be listed on the VHR and legally protected by a heritage designation by-law. If not designated at the time of inquiry, the application may still be eligible subject to its designation prior to a development permit issuance. New designations within the THD catchment area will be eligible for transferable heritage density as compensation for the reduction in market value as a result of the designation.
- 7.1.2. Privately owned commercial (e.g. office, mix-use, rental residential, industrial, religious/spiritual and institutional) and non-commercial (e.g. strata residential use) properties, and buildings that are operated by a non-profit organization and managed under a long-term lease agreement (10 + years) with the City of Vancouver are eligible.

- 7.1.3. Buildings constructed primarily of unreinforced masonry (including when combined with heavy-timber post-and-beam, structural steel, unreinforced concrete, or other historic period structural assemblies) in need of seismic upgrade are eligible.
- 7.1.4. Those heritage properties that have already undergone seismic/structural upgrades that meet or exceed the current VBBL S3 structural upgrade level may be eligible if further substantive upgrades are offered (e.g. fire-safety: sprinklers, seismic: enhanced S3 level, non-structural, accessibility or energy upgrades).
- 7.1.5. Buildings/sites that received City incentives through HFRP or have an active application for City incentives through other programs (e.g. cultural grants, economic revitalization grants etc.) may be eligible, except for the component of the work which was already incentivized.
- 7.1.6. Single-family and duplex dwellings, multi-family conversions, row-houses, and similar smaller building typologies that are primarily of wood-frame construction may be eligible through the Heritage House Conservation Program (see the HHCP Policies and Procedures) for more information.

7.2 The following section described the circumstances where buildings/sites may be ineligible for consideration under the HIP:

- 7.2.1. Buildings/sites that were redeveloped, rehabilitated, or rezoned, and received City incentives in some form (e.g. zoning and land use variances, density transfers, CAC credits, property tax exemption, or grants) in the past (through either HBRP, HRA, or a rezoning process).
- 7.2.2. Major redevelopment projects (either through the development permit or rezoning process) involving single or consolidated sites where eligible heritage resources are found, offering low retention levels of existing heritage structures and/or significantly altering heritage resources to accommodate new construction are ineligible for the HIP incentive.

7.2 The following requirements and conditions also apply:

- 7.3.1. The property owner must not be in arrears in payment of property taxes, or otherwise in contravention with City bylaws.
- 7.3.2. The applicant must comply with approved permits, heritage conservation standards, restoration agreement, design guidelines, policies, by-laws, or complementary standards and provisions that apply before grant funds will be released.

The City retains the right of ultimate approval throughout the review and the decision-making process.

8 Application Requirements & Process

HIP applications will be considered in two phases; pre-application and application phase. The approval of incentives is subject to City Council review and endorsement. Proposals will be received and processed annually, with the application cycle starting on **October 1st** every year (application documentation submission deadline).

8.1 Pre-Application Phase

The purpose of the pre-application phase is to provide public information, assist with inquiries, and engage those interested in participating. Property owners of eligible heritage buildings are invited to submit pre-application packages for the HIP consideration by **June 1st** every year.

8.1.1 Submission Requirements

To apply, the pre-application package consisting of the following documentation must be submitted:

- (a) HIP - Expression of Interest form featuring:
 - A statement outlining how the proposal meets the HIP intent and eligibility criteria
 - Statement of Significance (SOS) for the property
 - Project rationale including the heritage conservation strategy outline

- (b) Professional assessment of current building condition (structural/seismic /life-safety systems)*
- (c) Early cost estimate to complete the heritage conservation scope of work

*Applicants are strongly encouraged to provide as much information as possible at this early stage, in particular, the structural /seismic and fire/life-safety assessment reports, and the heritage conservation strategy. Information collected at this stage will be used to finalize the selection process and short-list candidates. Incomplete submissions may be difficult to assess, would delay processing, or could be found ineligible.

8.1.2 Evaluation Process

The pre-application evaluation process will determine eligibility and prioritize projects, particularly if the demand for incentives exceeds the annual HIP budget. Higher scoring proposals will have a better chance of proceeding to the application phase. The evaluation process will assess all participating proposals against the following five evaluation criteria:

8.1.2.1. The proposed level of upgrades:

- level of retention and conservation
- selection of use (the one that minimizes physical impact is favored)
- sustainable heritage rehabilitation approach

8.1.2.2. The proposed level of upgrades:

- verifiable seismic/structural upgrades are mandatory
- fire and life-safety upgrades are mandatory

8.1.2.3. Building/site is considered to be of special community importance where cultural, social, or housing uses comprise a significant part of their heritage values, and/or building/site is located within historic areas (e.g. Chinatown, Gastown) or character urban districts (e.g. Victory Square, Hastings Street Corridor, Powell Street, Granville Street).

8.1.2.4. The extent of deterioration or dysfunction (e.g. vacant or seriously underutilized for a prolonged period of time). The property which is intentionally neglected and where the owner may have not sufficiently responded to warnings or requests from the City to rectify issues may be considered ineligible for incentives.

8.1.2.5. Private/public capital investment ratio (eligible heritage conservation cost - private investment /eligible incentive - public investment. A higher level of private capital investment may yield favourable consideration under this criterion.

Evaluation will be conducted by staff involved with the HIP implementation, consisting of the representatives of the following City departments:

1. Planning, Urban Design, and Sustainability Department – conservation review
2. Development, Buildings, and Licensing Department – seismic/building systems upgrade review
3. Real Estate and Facilities Department – financial review

The results of the evaluation review will consist of an evaluation score, an order of magnitude of potential incentive, as well as a recommendation to either “proceed”, “re-apply”, or “ineligible” for each of the participating projects. The final decision will be made by senior COV staff based on the evaluation score as described in Table 3, by **July 1st**.

	Evaluation Criteria	Item	Score per Item	Score per criterion
1	Conservation program	Retention Level	1	3
		Use Compatibility	1	
		Sustainable Rehabilitation	1	
2	Upgrade levels	Seismic / Structural systems	1	2
		Fire / Life-safety systems	1	
3	Contribution to other major City initiatives	Priority housing	1	3
		Cultural use	1	
		Within historic area	1	
4	Extent of deterioration	Vacant / seriously underutilized	1	1
5	Investment ratio	>2	1	1
	Total Score	10 out of 10	10	100%

Table 3 – Evaluation Scoring Sheet

Although the best effort will be made to accommodate all submissions, it is conceivable that not all of the projects would proceed to the Application Phase or receive the Council’s support. Owners of the eligible projects that were not selected through the pre-application evaluation process will have the opportunity to re-apply in the following calendar year.

8.2 Application Phase

Inquiries that successfully qualified through the pre-application evaluation process would proceed to the application phase where a complete set of documentation will be required by **October 1st**, as follows:

- (a) Heritage Conservation Plan, including:
 - Statement of Significance (for building and the area, if applicable)
 - Conservation Procedures
 - Sustainable rehabilitation rationale and procedures
 - Maintenance plan
- (b) Structural/Seismic Assessment Report, with an upgrade proposal
- (c) Fire & Life Safety Assessment Report, with an upgrade proposal
- (d) Building Systems Assessment Report, with an upgrade proposal (only if proposed)
- (e) The cost estimate by a Quantity Surveyor clearly identifying heritage conservation related costs
- (f) Development Permit (DP) application documentation

All complete HIP applications received by the established application deadline, **October 1st**, will be processed by staff and presented to the Vancouver Heritage Commission (VHC). Following the VHC review, the administrative report will be drafted and HIP applications will be presented to Council for consideration and conditional approval of incentives. If approved, and subject to all conditions that City Council may have, processing will continue, including permits and preparation of necessary legal agreements. The agreements should be registered on title and all required permits issued prior to the commencement of any construction and conservation work on site. The application phase is time sensitive and would require the full cooperation of all parties involved, including applicants and consultants. Late applications will not be able to proceed through the HIP under the current processing path but could be considered again in the next year.

Heritage buildings located on sites involved in a rezoning proposal may be considered for heritage incentive (grant only) subject to compliance with HIP requirements. In this case, financial assistance for onsite heritage conservation may come in the form of approved heritage premium costs or the total HIP grant amount factored into the pro forma and would be subject to a maximum amount as per the HIP criteria, reflecting the size of the building and the quality of the proposed heritage conservation work.

9 Budget

The budget for the HIP is secured primarily by the CAC heritage allocations collected citywide through rezoning activities. A percentage of the total CAC amount is allocated to the Heritage Conservation Reserve (HCR) for processing and distribution through the HIP. Given the diversity of heritage resources, applications of varying complexity levels are expected. Approximately six (6) to eight (8) applications are anticipated annually. The funding required to support this level of heritage conservation activities is projected to be \$18 million annually. The actually available funding may vary from year to year subject to citywide rezoning activities and the CAC payments received.

Important: The HIP will only use the funding that is actually available in the HCR. This may affect the number of annual applications that could be processed or the number of incentive packages offered and may necessitate evaluation procedure to short-list applications (Section 8, Table 3).

10 Eligible Cost

Heritage conservation construction costs and associated professional fees are eligible for consideration. For the purpose of the HIP, the heritage conservation construction cost is defined as the construction cost associated with the conservation work identified by the approved conservation plan and closely defined by its heritage conservation procedure. In addition, the following professional documentation costs are eligible: consultant fees to conduct heritage evaluation and develop the SOS, conservation plan, structural report to assess physical condition / seismic capacity of the building and create an upgrade proposal, other professional assessment reports as the case may be, and quantity surveyor's cost. An estimate prepared by a quantity surveyor is required and will be subject to verification and approval by the COV Real Estate Services. Costs related to any new construction on site (addition), land/building acquisition, contingency, financing fees, developer's profit and similar, are ineligible.

The professional fee cost claim should not exceed 10% of the total submitted eligible cost and cannot be claimed (refunded) should the application receive no support from staff or Council. The cost claimed for seismic/structural and other VBBL upgrades should not exceed 50% of the total eligible cost claimed.

The HIP will provide financial assistance to qualified applicants, as follows:

- \$100 per sq.ft. of the total floor area, up to 50 % of the eligible cost (see Section 6)
- Up to \$4.0 million per building /site, depending on the size and complexity
- If the site/project involves two (2) or more heritage buildings they will be assessed independently.

11 Eligible Work

To be eligible for HIP incentives, the proposed scope of work must meet the following requirements:

- Retention, conservation and the continued use of the building.
- Heritage conservation including but not limited to the conservation of the exterior and interior (as the case may be) architectural features, materials and finishes, seismic and structural upgrades, life-safety building system upgrades. Other building system upgrades may be eligible.

Major re-development projects, offering low retention levels of an existing heritage structure while significantly altering heritage resource (e.g. facade only retention or major addition to the building resulting in removal, or severe structural alterations) may not be eligible.

12 Additions

A compatible one or, in some cases, two-storey setback roof-top addition may be considered if additional height or floor area (density) meet the applicable zoning requirements.

Heritage buildings of up to three (3) storeys may be considered for a one-storey setback rooftop addition. Buildings with four (4) or more storeys may be considered for up to two-storey rooftop setback addition, subject to meeting other architectural, urban design and planning requirements (e.g. height or density limits), as well as the building's structural capacity to carry additional load without triggering removal of existing structure or major structural replacement. Where a proposed rooftop addition could result in the removal or replacement of primary structural components or addition of significant new structural elements adversely affecting existing heritage value (both interior or exterior), the rooftop addition may be limited to a more appropriate level (reduced height), denied, or may result in the project becoming ineligible for incentives.

Side or rear additions may be considered, on a site-specific basis, subject to land availability, its impact on the existing heritage resource, and architectural and urban design considerations. Construction costs related to new additions are ineligible for the purpose of the HIP. This principle also applies to potential rezoning sites occupied by a heritage building.

Severely underdeveloped sites (less than 35% of allowed density) within the THD catchment area may be required to consider further on-site development (rooftop, rear, or side addition) in order to become eligible for the optional THD incentive.

For additions to be considered, high levels of architectural and urban design excellence, as well as adherence to heritage principles of integrity, compatibility, and distinguishability must be demonstrated.

13 Retention Limited to Building Façades

Façade-only retention (facadism) is not considered a heritage conservation procedure and thus a proposal based on this approach will be ineligible for HIP incentives.

Note: In a case where a significant portion of the heritage building was lost to a fire or earthquake, or otherwise found deteriorated beyond repair, the façade-only conservation scope of work may be supportable and eligible for a façade grant incentive through the Heritage Façade Rehabilitation Program (HFRP).

14 Seismic/Structural and other VBBL Upgrades

Seismic/structural, life-safety, and other building systems upgrade requirements will be carefully assessed through the application process to ensure an effective yet appropriate level of upgrade. Although it is not expected that the proposed heritage conservation project will always meet 100% of the Vancouver Building By-law (VBBL) or other applicable by-laws, substantive, tangible, and verifiable upgrades to the existing structure and its building systems are required. Each building is unique and may require its own solutions. Generally, overall upgrade levels should meet the following Major Renovation expectations: seismic and structural upgrades (enhanced S3), life-safety building system upgrades (F2 including sprinklers), conservation of exterior (N3), and energy (E4). Note: new additions may trigger a higher level of compliance with the VBBL requirements (S4, F4, N4, A4, and E6) and potentially adversely affect heritage conservation efforts, ultimately resulting in a non-support for incentives.

The level of upgrade requirements will depend on a building's condition at the time of application and would be determined on a case by case basis. Both the assessed level of current condition and the proposed level of upgrades must meet the requirements of the Chief Building Official and the Director of Planning. Heritage buildings that are primarily made of unreinforced masonry (often involving heavy timber, steel or concrete assemblies as well), that have not been seismically upgraded in the recent past (25 or more years), and are currently not subject to a major reconstruction proposal (rather, undertaking a sensible heritage conservation approach), may be eligible for VBBL heritage relaxations. Worth mentioning is sprinkler system installation, which provides a significant improvement to life safety and asset protection while also allowing building code relaxations for heritage buildings. If the scope of work entails a major occupancy change, property strata titling or significant new addition, the proposal must meet the VBBL requirements (achieve full upgrade).

Structural/seismic, life-safety, and other building systems assessment reports are required at the pre-application stage, identifying the current condition, assessing it against the VBBL, and proposing upgrades for consideration. The proposed scope of work would need to be clearly described, itemized, and quantified, as this information would also be used to establish the project cost.

Upgrades to mechanical, electrical, or plumbing building systems, although desirable, may not be considered eligible for the incentive if determined that the replacement was due as a regular capital upgrade or excessively deteriorated due to lack of appropriate maintenance.

15 Legal

Should Council approve the application, the applicant will be required to enter into an agreement with the City to ensure the continued maintenance of the conserved building. This agreement (Restoration Agreement or Heritage Revitalization Agreement in the cases where THD is considered) will be prepared by Legal Services and once finalized with the applicant, will be registered against title to the Property as a covenant under Section 219 of the Land Title Act. The agreement will require that the conservation work (including seismic upgrades) be supervised by a qualified heritage consultant, will contain the terms and conditions upon which the grant is to be paid and the THD allowed for transfer, if applicable, once the conservation work is complete. It will also require the owner of the property to keep the heritage building in good appearance and good repair after completion of the conservation work. Should the owner decide to further develop the site which received the HIP grant (but not the THD incentive) and by doing so potentially adversely affect the already conserved building, or the property becomes subject to a major redevelopment proposal within the period of fifteen years after completion of the conservation work, the full refund of the grant may be required. If the THD was made part of the incentive package/ compensation no further addition of density may be considered on the site.

The grant will be issued and the transfer of heritage density allowed, if applicable, only after the agreement is registered on title to the property, the property designated, the conservation work completed in accordance with permits and associated agreements and the conservation plan satisfactorily implemented, the Occupancy Permit issued, and the owner has delivered to the City satisfactory proof of payment of the costs incurred in carrying out the conservation work. No portion of additional density provided as compensation for heritage designation will be considered for transfer before the full completion of the project and Occupancy Permit issuance.

16 Completion Procedure

Heritage conservation work contemplated under the HIP incentive application must be completed within a period of three (3) years from the date of the legal agreement being registered on title. A development permit may not be issued unless a legal agreement is in place (registered). If not completed within the three-year (3) time frame as described, no further extension will be granted and the applicant will not be able to claim the HIP incentives even if the project is subsequently completed. In the case where special strenuous circumstances have unexpectedly affected the project's timeline, a one-year (1) extension may be considered. To receive a one-year (1) extension, the applicant would need to apply within the initial three-year (3) term and provide sufficient evidence for consideration. The completion date is the date of an Occupancy Permit issuance.

17 Grant Release Procedure

The grant is claimed by the applicant by submitting a Letter of Completion stating the completion status of all construction work including heritage conservation, implementation of the conservation plan, compliance with the Legal Agreement registered on title, and confirmation of the issuance of the Occupancy Permit. In the enclosure, the applicant should submit the following documentation:

1. Project Completion Status Report prepared by the heritage consultant and endorsed by the property owner,
2. Financial Statement Summary, including an itemized summary of payments prepared by a quantity surveyor, clearly identifying and counting only costs related to the approved heritage conservation scope of work. Copies of all related invoices should be made available for review.
3. Copy of the Occupancy Permit,
4. Financial information for grant disbursement (Note: Funds will be disbursed electronically).

Upon receipt of the Letter of Completion, staff will conduct a site visit to verify the project status as reported. The site visit will be conducted by the Heritage Consultant who supervised the work, the owner or it's representative (usually General Contractor or Architect), and the City's representative (usually the Heritage Planner). Staff will also review submitted financial statements to determine the final project cost and confirm the incentive amount in accordance with HIP procedures and the legal agreement.

Upon successful completion of the site visit, a review of the submitted financial statement and subject to all other HIP requirements being met, the City staff will initiate release of the heritage grant payment.

Should it be found that the conservation work has not been completed as agreed or the required documentation not filed as requested, the City would retain the right to not issue incentives until all requirements have been met, or to reduce the grant payment accordingly. During the process of verifying and adjusting the grant, the City may ask for additional information and retains the right to a final decision on the matter. Only after all of the above has been completed to the full satisfaction of the City, the incentives including the THD would become available.

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Guidelines

Childcare Design Guidelines

Approved by Council February 4, 1993

Last amended xxx

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Background and Context

The City of Vancouver is committed to supporting the creation of high quality and accessible childcare spaces that promote healthy child development and support working families. The City has adopted a number of goals and objectives to support access to quality, affordable licensed childcare, including:

The Healthy City Strategy: A Good Start (2014)

- Vancouver’s children should have access to quality childcare that promotes physical and mental health and social development, and improves school readiness.
- The City seeks to improve access to licensed childcare centres that are affordable and inclusive.

Intent

The intent of the City of Vancouver’s Childcare Guidelines is to inform the creation of safe and quality childcare facilities that provide a range of opportunities for the social, intellectual and physical development of children.

These design guidelines apply where childcare facilities that offer licensed childcare serving children up to School Age (except for those in temporary structures) are required:

- as a condition of rezoning; or
- for conditional approval of development permit applications.

The guidelines are to be used by childcare developers, architects and City staff.

Site selection, site planning, and indoor and outdoor design considerations are addressed. Appendix A includes a list of Common Toxic Plants.

In addition to these guidelines, other approvals and permits are required for the design, construction and occupancy of childcare facilities:

- The “Child Care Licensing Regulation” pursuant to the Community Care and Assisted Living Act provides minimum operational and design requirements for Child Care Facilities. The approving agency in Vancouver is the Community Care Facilities Licensing Office (CCFL) at Vancouver Coastal Health which must approve all childcare facility plans and should be consulted in the earliest planning phase.
- Development, Building and Occupancy Permits are required for all new childcare facilities. For detailed information concerning these permits and other relevant codes and requirements, contact the City of Vancouver’s Development and Building Services Enquiry Centre.

Definitions

For the purpose of these guidelines, the following definitions apply:

- Program: A group of children having their own room or rooms that are fully furnished and equipped.
- Facility: A building or portion of a building which houses one or more programs.

Age Groups

- 0-3: A child up to 36 months of age.
- Preschooler: A child between 30 months to School Age.

Program Types

- 0-3: A year-round full-day service for children aged 0-3 typically opening between 7:00 and 8:00 am and closing between 5:30 and 6:00 pm.
- 3-5: A year-round full-day service for children aged 30 months to School Age typically opening between 7:00 and 8:00 am and closing between 5:30 and 6:00 pm.
- Preschool: A part-day service for children from 30 months to School Age Children, attending up to 4 hours each day.

Guidelines

1 General Design Considerations

The planning of a childcare facility should consider site suitability, solar orientation, and access to and from the facility.

1.1 Unsuitable Locations/Sites

- (a) The impact of inappropriate adjacent uses such as commercial loading or service areas, ~~large parking lot havens~~, major mechanical plants, building exhaust fans, electrical substations and major above- grade electrical lines, transformers or other noisy, noxious or dangerous uses should be avoided or mitigated.
- (b) Childcare facilities should be sited away from high traffic arterials to avoid traffic related air pollution and noise impacts.

1.2 Relationship of Site to Grade

Whenever childcare facilities are located above grade, concerns about emergency evacuation of the children must be considered, noting that these concerns correspond to increased height above grade. The safety and security of the outdoor play area must be addressed when there are adjacent uses directly beside or above it. Locations below grade may be unacceptable due to requirements for natural light and outdoor areas.

1.3 Relationship of Indoor and Outdoor Spaces

The indoor and outdoor spaces should be planned together.

- (a) Outdoor space should be at the same level as the indoor space (plus or minus 0.5 m) and contiguous with it.
- (b) A strong visual connection should exist between the indoor and outdoor activity areas.
- (c) Indoor and outdoor spaces should allow for inter-related indoor and outdoor activities and free movement by children.
- (d) The facility should be oriented to facilitate the surveillance of outdoor play areas from the primary indoor activity area.
- (e) Ramps for wheeled equipment should be provided when a level change exists.

1.4 Orientation

The availability of natural light is important to the creation of a suitable childcare space.

- (a) The facility should be oriented so that outdoor play areas receive a minimum of three hours of direct sunlight per day at the winter solstice. Two hours of sunlight should occur during the typical playtimes of 9:30 am - 11:30 am or 1:30 pm - 4:00 pm. This is particularly important for 0-3 programs due to the limited mobility of the children.

1.5 Pedestrian Access

- (a) Pedestrian access should be safe, secure and accessible for wheeled equipment, including wheelchairs, strollers and bikes.

1.6 Vehicular Access and Parking

Parking Requirements are as follows:

- (a) One parking stall for every eight full-time equivalent childcare spaces.
- (b) Two parking stalls for staff.

Considerations related to parking are as follows:

- (c) Safe vehicular access should be provided to the childcare facility.
- (d) Access from the street or drop-off area should be as direct, simple and close as possible to the daycare's entry or elevator, and in no case more than 100 m from the entry.
- (e) Drop-off parking spots should be full size; small car only spaces are not acceptable as they do not allow for easy loading and unloading of children into car seats, etc.
- (f) Access to drop-off parking should not require children to cross the drive aisle.
- (g) Where childcare facilities are located in a school or other community facility^{ies}, drop-off parking may be combined with that of the school/facility provided that the needs of both are adequately met.
- (h) Secure bicycle parking should be provided, in accordance with the City's "Off-street Bicycle Space Regulations"

1.7 Sharing Childcare Space with Other Users

- (a) If any childcare space is shared with other users when the childcare facility is not in operation, issues of joint management, maintenance, liability, supervision and financial support should be resolved. In such circumstances, design should consider all uses and allow for adequate storage and equipment.

2 Facility Size and Shared Spaces

Sufficient space is essential to quality childcare. The following space requirements are based on research and experience with purpose-designed childcare facilities in high-density urban settings.

Note: These guidelines' space requirements are higher than the minimums required by the Provincial Child Care Licensing Regulation.

Be aware that the maximum number of spaces and minimum child to staff ratios depend on the ages of the children and are specified in Provincial regulations. These should be confirmed with Community Care Facilities Licensing (CCFL) of Vancouver Coastal Health.

2.1 Indoor and Outdoor Space by Program Type

The most common program sizes have been used to develop the indoor and outdoor space requirements (Table 1). These program sizes are generally preferred and are most economically viable due to staff ratios requirements under the BC Child Care Licensing Regulation. Facilities proposing to accommodate fewer children per program should consult with CCFL staff.

Table 1: Recommended Indoor and Outdoor Space by Program Type

Program	# of Spaces	Minimum Net Activity Area		Gross Indoor Area		Covered Outdoor		Total Outdoor	
		m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²
Group Daycare Age 0-3	12	82	872	182	1959	33	355	170	1830
Group Daycare Age 3-5	16	101.5	1092	209	2250	34	366	224	2411
Group Daycare Age 3-5	25	128	1378	247	2659	45	484	350	3767
Preschool	20	78	840	153	1647	33	355	140	1507

Note: The Recommended Gross Indoor Area is exclusive of mechanical and electrical rooms, stairwells, elevator shafts and lobbies. Consider an extra 15% of floor area for these items.

- Childcare facilities constructed as a condition of development should meet the minimum net activity areas set out in Table 1 and provide the support spaces as described in Section 3.2 of these guidelines.
- Total net area for support spaces ranges from 40 m² to 62 m² per licensed program (see Tables 2-5 for details).
- A net to gross ratio of 1 to 1.3 should be allowed at the initial planning stage, although an efficiency factor of 80 percent to 85 percent should be the goal (e.g., net activity area + net support area x 1.3 = gross area recommended for planning purposes).

Note: Provincial Childcare licensing has a different method of space calculation for indoor space. Contact CCFL for more information on their space calculation.

Area recommendations for indoor activity rooms and settings, support spaces, and outdoor spaces of common programs are shown in Tables 2-5.

Table 2: 0-3 Group Daycare (12 Space Program)

1 Indoor Activity Rooms and Settings			
1.1	Art Area	9 m ²	97 ft ²
1.2	Table Area	11 m ²	118 ft ²
1.3	Area for Other Activity Settings	20.5 m ²	221 ft ²
1.2	Gross Motor/Nap Room	28 m ²	301 ft ²
1.2.1	Storage for Mats & Equipment	4.5 m ²	48 ft ²
1.3	Quiet Room	9 m ²	97 ft ²
Net Activity Area		82 m ²	883 ft ²
2 Support Spaces			
2.1	Cubby	12 m ²	129 ft ²
2.2*	Kitchen	9.5 m ²	102 ft ²

Table 2 continued: 0-3 Group Daycare (12 Space Program)

2.3	Storage	7 m ²	75 ft ²
2.4	Accessible Child W/C & Diapering Area	8 m ²	86 ft ²
2.5**	Parent's Room	6 m ²	65 ft ²
2.6	Staff Office	7 m ²	75 ft ²

2.7**	Accessible Staff W/C	4.5 m ²	48 ft ²
2.8**	Laundry/Janitorial	4 m ²	43 ft ²
Net Support Area		58 m ²	624 ft ²
Total Net Indoor Area		140 m ²	1507 ft ²
Gross Indoor Area		182 m ²	1959 ft ²
3 Outdoor Area			
3.1	Covered Outdoor Space	33 m ²	355 ft ²
3.2	Open Outdoor Space	137 m ²	1475 ft ²
Total Outdoor Area		170 m ²	1830 ft ²
Total Gross 0-3 Group Daycare Area		352 m²	3789 ft²

* Where a kitchen is shared by two programs the total kitchen area should be at least 12 m².

** Where multiple programs are located in one facility, support spaces may be shared if they are easily accessible and functional for all programs.

Table 3: 3-5 Group Daycare (16 Space Program)

1 Indoor Activity Rooms and Settings			
1.1	Dedicated Art Area (wet messy)	8 m ²	86 ft ²
1.2	Table Area	12 m ²	129 ft ²
1.3	Area for Other Activity Settings	39 m ²	420 ft ²
1.4	Quiet Room	9 m ²	97 ft ²
1.5	Gross Motor/Nap Room	29 m ²	312 ft ²
1.6	Storage with Large Motor/Nap Room	4.5 m ²	48 ft ²
Net Activity Area		101.5 m ²	1092 ft ²
2 Support Spaces			
2.1	Cubby	13 m ²	140 ft ²
2.2*	Kitchen	9.5 m ²	102 ft ²
2.3	Accessible Children's W/C	8 m ²	86 ft ²
2.4	Storage	7.5 m ²	81 ft ²
2.5**	Parent's Room	6 m ²	65 ft ²
2.6	Staff Office	7 m ²	75 ft ²
2.7**	Accessible Staff W/C with Diapering Area	4.5 m ²	48 ft ²
2.8**	Laundry/Janitorial	4 m ²	43 ft ²
Net Support Area		59.5 m ²	640 ft ²
Total Net Indoor Area		161 m ²	1733 ft ²
Gross Indoor Area		209 m ²	2250 ft ²
3 Outdoor Area			
3.1	Covered Outdoor Space	34 m ²	366 ft ²
3.2	Open Outdoor Space	190 m ²	2045 ft ²
Total Outdoor Area		224 224 m ²	2411 2411 ft ²
Total Gross 0-3 Group Daycare Area		433 433 m ²	4661 4661 ft ²

* Where a kitchen is shared by two programs the total kitchen area should be at least 12 m².

** Where multiple programs are located in one facility, support spaces may be shared if they are easily accessible and functional for all programs.

Table 4: 3-5 Group Daycare (25 Space Program)

1 Indoor Activity Rooms and Settings			
1.1	Dedicated Art Area (wet messy)	10 m ²	108 ft ²
1.2	Table Area	14 m ²	151 ft ²
1.3	Area for Other Activity Settings	60.5 m ²	651 ft ²
1.4	Quiet Room	9 m ²	97 ft ²

1.5	Gross Motor/Nap Room	30 m ²	323 ft ²
1.6	Storage with Large Motor/Nap Room	4.5 m ²	48 ft ²
Net Activity Area		128 m ²	1378 ft ²
2 Support Spaces			
2.1	Cubby	14 m ²	151 ft ²
2.2*	Kitchen	9.5 m ²	102 ft ²
2.3	Accessible Children's W/C	9 m ²	97 ft ²
2.4	Storage	8 m ²	86 ft ²
2.5**	Parent's Room	6 m ²	65 ft ²
2.6	Staff Office	7 m ²	75 ft ²
2.7**	Accessible Staff W/C with Diapering Area	4.5 m ²	48 ft ²
2.8**	Laundry/Janitorial	4 m ²	43 ft ²
Net Support Area		62 m ²	667 ft ²
Total Net Indoor Area		190 m ²	2045 ft ²
Gross Indoor Area		247 m ²	2659 ft ²
3 Outdoor Area			
3.1	Covered Outdoor Space	45 m ²	484 ft ²
3.2	Open Outdoor Space	305 m ²	3283 ft ²
Total Outdoor Area		350 70 m ²	3707 3767 ft ²
Total Gross 0-3 Group Daycare Area		597 m ²	6426 ft ²

* Where a kitchen is shared by two programs the total kitchen area should be at least 12 m².

** Where multiple programs are located in one facility, support spaces may be shared if they are easily accessible and functional for all programs.

Table 5: Preschool Space List (20 space program)

1 Indoor Activity Rooms and Settings			
1.1	Art Area	7.5 m ²	81 ft ²
1.2	Table Area	14 m ²	151 ft ²
1.3	Other Activity Settings	47.5 m ²	511 ft ²
1.4	Quiet Room	9 m ²	97 ft ²
Net Activity Area		78 m ²	840 ft ²
2 Support Spaces			
2.1	Cubby	12 m ²	129 ft ²
2.3	Accessible Children's W/C	7 m ²	75 ft ²
2.4	Storage	9 m ²	97 ft ²
2.6	Staff Office & W/C	12 m ²	129 ft ²
Net Support Area		40 m ²	430 ft ²
Total Net Indoor Area		118 m ²	1270 ft ²
Gross Indoor Area		153 m ²	1647 ft ²

Table 5 continued: Preschool Space List (20 space program)

3 Outdoor Area			
3.1	Covered Outdoor Space	33 m ²	355 ft ²
3.2	Open Outdoor Space	107 m ²	1152 ft ²
Total Outdoor Area		140 m ²	1507 ft ²
Total Gross 0-3 Group Daycare Area		293 m ²	3154 ft ²

Note: Based on the assumption that access to a kitchen will be provided in a shared facility. Otherwise add 9 m² for kitchen.

2.2 Shared Facilities and Efficiencies

Most new childcare facilities should house two or more programs, each with different age ranges. This facilitates a sequenced graduation of children among a population of friends and enhances economic viability.

- (a) The design of the shared facility should encourage cross-daycare contact and opportunities to share materials and equipment.
- (b) If facility design permits, support spaces, such as laundry rooms, parents' rooms and staff washrooms may be shared by two or three programs to improve efficiency (see Table 6).
- (c) When four or more programs are aggregated, support spaces may be shared but no reduction in total area should occur. Aggregating four or more programs create additional space requirements for circulation, garbage collection, central storage and janitorial functions. Space gained from sharing office, washroom and parent rooms should be devoted to the above noted spaces.

Table 6: Recommended Indoor and Outdoor Space: Shared Facilities

Program	# of Spaces	Minimum Net Activity Area		Gross Indoor Area		Covered Outdoor		Total Outdoor	
		m ²	ft ²	m ²	ft ²	m ²	ft ²	m ²	ft ²
0-3 (12 space program) & 3-5 (25 space program)	37	210	2260	429	4618	78	840	520	5597 1830
0-3 (two 12 space programs) & 3-5 (two 16 space programs)	56	367	3950	782	8417	105	1130	703	7567
0-3 (two 12 space programs), 3-5 (25 space program) & Preschool (20 space program)	69	370	3983	764	8224	113	1216	745	8019

Note: 25% outdoor space reduction for two 12-space programs has been applied to 56 and 69 space shared facilities. The Recommended Gross Indoor Area is exclusive of mechanical and electrical rooms, stairwells, elevator shafts and lobbies. Consider an extra 15% of floor area for these items.

2.3 Reduction in Outdoor Areas

A reduction in outdoor areas may be considered in the following situations, to the satisfaction of the Managing Director of Social Policy and Projects:

- (a) All outdoor areas may be reduced by up to 25% if an appropriate playground or park within a 0.5 km safe walking distance is available for regular use; or
- (b) Outdoor area for 0-3 programs only may be reduced by up to 25% (see Table 6) if:
 - two 0-3 programs have contiguous outdoor spaces;
 - the outdoor spaces can be used as one larger play space with covered outdoor area adjacent to each program; and
 - the resulting combined outdoor space is easily supervisable.

3 Internal Design Considerations

Comfortable surroundings reduce anxiety and aggression, promote understanding, and enable children to engage in genuine exploratory and discovery behaviours.

Childcare facilities should be designed to ensure that the facility, the outdoor space and pedestrian and vehicular approaches are defensible spaces and can be readily seen from the childcare and surrounding uses.

All major indoor activity spaces used by children should have a direct source of natural light from a minimum of 10% of the wall area of the room. Natural light is also preferred for staff offices and rooms, while support areas such as washrooms, kitchens and storage rooms do not require natural light.

3.1 Indoor Activity Spaces

Provision of a range of activity settings is a key determinant of the quality of the childcare program. Activity settings are those areas in which activities or programs directly involving the children take place. They should be designed to accommodate a variety of discrete activities. Most childcare facilities accommodate activity settings in the following discrete spaces: the Activity Room, the Gross Motor/Nap Room, and the Quiet Room. See Table 3 below for details.

Table 7: Activity Settings by Program and Room

Program	Room	Activity Settings
Group Daycare – 0-3	Activity Room	Art-Sensory
		Dramatic Play
		Blocks
		Climbing & Crawling
		Puzzles and Manipulative Toys
		Water, Sand, Sensory
		Reading
	Gross Motor/Nap Room Quiet Room	Quiet Room
Quiet Retreat		
Group Daycare – 3-5 and Preschool	Activity Room	Art
		Water
		Sand/Texture
		Dramatic Play
		Science
		Puzzles and Games
		Manipulative Toys
		Blocks
		Gross Motor, Circle
		Reading
	Wheeled and Construction Toys	
	Gross Motor/Nap Room	Quiet Room

3.1.1 General Considerations for Activity Setting

- (a) Movement activities require a dedicated area which should include convenient storage for wheeled toys, large blocks, musical instruments, and climbing equipment.
- (b) Activity settings are defined by the following: physical location, visible boundaries, work and sitting surfaces, materials storage and display, a mood or personality.
- (c) Activity settings should be delineated by a combination of fixed and movable elements:
 - (i) Fixed elements include changes in level, ceiling height, materials, room corners, partial walls, special windows.

- (ii) Movable elements include movable and hung partitions, bookcases, storage units and furniture. Where changes in level are employed ramps should be used.
- (d) Activity settings should include places to observe, to play alone, to play alongside, and to play together.
- (e) Retreat points should be provided adjacent to activity areas and should be visually monitorable by staff in the main activity area.

3.1.2 The Activity Room

This should be the largest of the program spaces.

Design Considerations

- (a) It should include a mixture of open spaces and smaller alcove-type spaces and be designed to accommodate a variety of activity settings. The design should emphasize flexibility by utilizing movable elements to define spaces.
- (b) An irregular square with alcoves and nooks is recommended. Avoid long narrow rooms. The plan should direct children from one activity to the next and delineate, protect and support activities in each setting.
- (c) The messy/wet area will be used for art activities and eating. There should be enough space for art/eating tables, easels, water and texture tables, and adequate storage. Enough space is required to seat all children at once for snacks and meals.
- (d) An art sink with clay trap, at least 1.0 m of counter space and closed cupboards above and below should be provided.
- (e) Circulation within an activity room should be clear and straightforward, but not overly simplified and uninteresting. The optimum circulation path is highly visible and snakes through a childcare, overlooking each activity. "Shopping" among activities is itself an activity. Circulation paths should respect the boundaries of activity areas by meandering around but not passing through activity settings. Allow sufficient space for children engaged in activities to play uninterrupted by others passing by them.

Adjacency

- (f) The Activity Room should connect and flow to the Gross Motor/Nap Room and the Quiet Room to enable shared use and to enhance flexibility.
- (g) Location of the activity settings are such that noisy and quiet, intense and calm and messy (or wet) and tidy activities are separated (see Section 6.1). These areas should be shown on submitted plans.
- (h) The messy/wet area should be located adjacent to the kitchen and to the outdoor play area so that on sunny days doors can be open and activities can flow between indoor

3.1.3 Gross Motor/Nap Room

When used as a gross motor room it can be the setting for noisy, boisterous, physical activities such as climbing or group games or larger scale, intense, small group activities such as large blocks, music and noise makers. It also can accommodate large scale group activities such as singing, and circle time.

Design Considerations

- (a) As a nap room, it should be sized to accommodate all children for napping and allow children to sleep without being disturbed by activities around them.
- (b) Activity setting can be planned for this room with the inclusion of storage.
- (c) Facilities for ages 0-3 may consider providing two smaller rooms for napping so that fussy infants do not disturb sleeping infants. Again, these rooms can accommodate more than one activity and should both open up to the primary activity space

Adjacency

- (d) The room should be located away from outdoor play areas.
- (e) An enclosed Gross Motor/Nap Room should be provided which can be opened up to the Activity Room to promote shared use.

3.1.4 The Quiet Room

A quiet room fulfills a number of other useful functions: a space where children can be quiet and escape briefly from the hubbub of the activity room, a room for the use of professionals working with children on a one-to-one basis, napping and/or a place where sick children can rest while waiting for parents to pick them up.

Design Considerations

- (a) The Quiet Room should be a separate room with a door, which can be used for quiet activities for smaller groups (3-8 children). There should be enough space for a small table, chairs and some storage.

Adjacency

- (b) An enclosed Quiet Room should be provided which can be opened up to the Activity Room to promote shared use.

3.2 Support Spaces

3.2.1 Kitchen

A kitchen should be provided for the preparation and clean-up of snacks and lunches.

Design Considerations

- (a) Two programs could share one kitchen if it is located to be readily accessible to both.
- (b) Kitchens should be located and designed to allow staff to supervise children in the Activity Room while in the kitchen.
- (c) If there is a shared kitchen, 0-3 programs should have separate fridges and small microwave ovens properly mounted at counter height. If infants are in the childcare program, include microwave for bottle warming and fridge.

Circulation/Path

- (d) Kitchen location should not require staff to pass through the space in order to access laundry, janitorial, washrooms, etc. to mitigate food safety concerns.

3.2.2 Cubby Area

Design Considerations

- (a) A cubby area should be provided for each program. One cubby for each child should be provided. Daycares with part-time children should include extra cubbies.
- (b) There should be sufficient open floor space for a group of eight children with one staff to get dressed for winter conditions separated from the activities of the other children.

Adjacency

- (c) The cubby area is best located immediately inside the entry used by children when using the outdoor play yard. This arrangement ensures that wet and muddy outer clothes and boots are not brought into the activity areas of the childcare.
- (d) Each cubby area should be easily accessible to the washroom and to the outdoor covered play area.
- (e) If possible, parents of children aged 0-3 should enter through the cubby area so that shoes can be removed before entering areas where children are playing on the floor.

3.2.3 Storage

Storage is a key factor in providing good childcare.

Design Considerations

Three categories of storage should be provided for each childcare program:

- (a) active storage - accessible to children from activity setting;
- (b) semi-active storage shelves and cabinets accessible to staff above or near activity settings; and
- (c) a storage room for longer-term storage and larger equipment.

Storage includes open and closed, fixed and movable, and multi-use and specialized storage elements.

- (d) All daycares should provide storage space for parent-owned strollers, bike trailers, and for car seats left for a return trip in another vehicle.
- (e) The storage room for longer-term storage may be shared by the programs within the facility.
- (f) All storage should be designed to address seismic safety concerns by ensuring that tall, heavy cupboards and other furniture items are fixed to the wall.

Adjacency

- (g) Dedicated built-in storage for sleeping mats adjacent to the sleeping area, personal storage for children and staff, a variety of wall cabinets and shelves, floor units and open visible storage should be provided.

3.2.4 Children's Washrooms and Diapering Area

For programs including children under 36 months, children with disabilities or children who need additional support, a dedicated diaper changing area should be provided within the washroom.

Design Considerations

- (a) When designing the diaper changing area keep in mind that children cannot be left unattended for even a moment. Everything the caregiver might need to complete the change should be within reach.

- (b) The space should be separated from activity areas by a low gate or other partition 75 cm to 90 cm high to protect children from potential harm.

The diaper changing area should include:

- (c) a changing surface approximately 80 cm high and 60 cm deep by any length sufficient to conduct diapering and dressing routines for two children simultaneously;
- (d) an adjacent sink large and deep enough to bathe and wash off children, outfitted with elbow faucet handles to prevent contact with contaminated hands, and equipped with a hand-held shower attachment;
- (e) space for several large, lined containers with lids for soiled diapers within arm's reach of the caregiver but out of reach of the child;
- (f) shelves or drawers for storing all supplies: wipes, clean diapers, salves, towels, etc. within easy reach of the caregiver but out of reach of the child;
- (g) enough shelf space for storage of children's individual supplies;
- (h) hooks or shelves for mobiles and small toys, and a mirror along or behind the changing surface;
- (i) adequate ventilation to remove odours without drafts and sufficient heat to allow for children's comfort during changing and bathing;
- (j) a nearby toilet for disposing and flushing away feces; and
- (k) room for 3 to 4 potties.

Staff should be able to visually supervise the entrance to the washroom from the main activity area.

- (l) In 0-3 programs the children's toilets should be unscreened.
- (m) For 3-5 programs there should be one partially screened toilet. The number of fixtures must conform to the CCFL regulations.
- (n) Do not provide a urinal.

Adjacency

- (o) It should be located near and have visual access to the main activity area and be close to the laundry.

3.2.5 Staff/Accessible Washroom

A separate staff/accessible washroom should be provided.

Design Considerations

- (a) One individual staff/accessible washroom with one toilet and a sink for each facility should be provided. Staff from more than one program may share a washroom.
- (b) An additional washroom should be provided if there are more than two programs in a facility, or if a program is too far from the staff washroom.
- (c) The washroom should be large enough to permit assisted toileting.
- (d) Provision of an accessible shower within the staff washroom is a desirable feature.

3.2.6 Parents' Room

A small separate room should be provided for parents as a resource room for reading, staff/parent conferences, or breast feeding.

Design Considerations

- (a) It should be private from the program areas and separate from the staff office with a one way glass to observe the activity area.
- (b) One parent room may be shared by two or more programs.

3.2.7 Staff Offices

Staff offices should be provided for administrative activities, storage of confidential files, private interviews and meetings, and as a refuge during staff breaks.

Design Considerations

- (a) A single staff office may be shared by two or more programs.
- (b) If a single office is shared by more than two programs, a staff lounge should also be provided.

3.2.8 Laundry/Janitorial Area

Design Considerations

- (a) A laundry area should be provided, which is not accessible to children. A washer, dryer and folding counter should be provided.
- (b) One laundry area may be shared between two programs.
- (c) A janitorial area, which is not accessible to children, with a floor sink, storage shelves and impervious wall coverings should be provided. This may be shared between two programs.
- (d) If there are more than two programs, or if a program is too far from the laundry/janitorial area, another laundry/janitorial area is recommended.

3.2.9 Shared Support Spaces

Design Considerations

- (a) Where four or more programs are located together, additional shared support spaces should be provided. Support spaces should provide for central bulk storage, garbage collection, reception and janitorial functions. See Section 5.1 for further information.

3.3 Entry/Exit Security

Design Considerations

- (a) The entry should be designed to facilitate supervision and security and to provide a welcoming reception.
- (b) Entries and routes should be well lit.
- (c) The main entry should be immediately recognizable as a childcare with effective signage.
- (d) Care should be taken with design to ensure that potential security problems are recognized and avoided, particularly when facilities are not located at grade.

- (e) There should be only one entry door with additional locked or alarmed doors as required by regulations for emergency egress only. Multiple entries can pose circulation and security problems.
- (f) It should not be necessary to enter one program's space to access another.

Circulation/Path

- (g) Ideally, for security and programming reasons, the entry should be directly from the covered outdoor play space.
- (h) The preferred entry sequence is via the cubby area and from there to the primary activity space. This arrangement minimizes tracking wet and dirt into the childcare. This is particularly important in 0-3 programs where children spend much of their time on the floor.
- (i) If the entry is through a hallway or stairway and not directly from the outdoors, the route should provide views to the outdoors, community spaces, or into the childcare.

3.4 Circulation

Design Considerations

Design to reduce circulation requirements and increase natural surveillance for supervision.

- (a) Corridors may be necessary in facilities where three or more programs are located. In these circumstances long, harshly lit institutional hallways should be avoided. Partial walls to delineate a circulation path may be necessary.
- (b) Access should be provided to all childcare programs within a facility to permit visiting of siblings, occasional use of each other's program spaces, staff sharing and support.

4 Outdoor Design Considerations

A sufficiently large outdoor play area is necessary to provide opportunities for children of varying abilities to experience adventure, challenge and wonder in as natural an environment as possible. Provincial childcare regulations require that all children spend some time outdoors every day regardless of the weather.

4.1 General Design Considerations

- (a) Each licensed program requires a dedicated, on-site fenced outdoor play area that is planned together with the indoor area.
- (b) The outdoor play space should have a favourable microclimate (i.e., wind protection and direct sunlight), have a rich range of materials and settings including contact with the living natural world, and be safe and secure.
- (c) Outdoor space should be at the same level as the indoor space (plus or minus 0.5 m) and contiguous with it.
- (d) Ramps for wheeled equipment should be provided when a level change exists.
- (e) The outdoor area should be protected against flooding.
- (f) The outdoor play space should include a covered area and an uncovered area to accommodate the various outdoor activities. Between 1/3 and 1/2 of the outdoor area should be clear space for group activities and physical movement.

- (g) Play structure **locations** along walls or back to back with another play structure may be used to reduce fall zones.

4.2 Environment

Design Considerations

- (a) The outdoor space should be protected from dirt, wind, pollution, noise, fumes and noxious smells or any hazardous elements. It should be acoustically buffered from traffic and parking.
- (b) Exhaust vents from building or parking garages and other hazardous elements should not be located adjacent to outdoor play areas.
- (c) Sunlight access (refer to Section 1.4) should be protected by design techniques such as glazing in south-facing fences or parapets. North-facing sites are problematic if sun cannot reach the transition zone between indoor and outdoor space.
- (d) Non-glare surfaces should be used on highly-exposed sun areas. Some shading should be provided for a portion of the outdoor play area to offer a retreat on hot days. Where a facility has limited shade, consider shade sails, plantings, arbours, and ground coverings that minimize heat retention, especially for children aged 0-3.

4.3 Activity Zones

Outdoor space should be organized to offer specific activity zones for exploration by the children. It is recommended that the outdoor play area be divided into play zones, as follows:

Table 8: Activity Zones

Play Area	Location	Activity
Covered Play Area	This is a transition zone from the indoors to the outside and should be located adjacent to the entry.	This zone is intended for quiet or concentrated activities such as painting/art, clay/water table, outdoor meals and for active play on rainy days. It is also used for napping in infant programs.

Table 8 continued: Activity Zones

Creative Zone	This should be located near the indoors and may be part of covered area.	Activities may include carpentry and art projects that are messy and/or noisy.
Sand and Water Zone	This area should be near the covered play area, the Social Zone and the Dramatic Zone.	This zone provides for play either standing or sitting and encourages projective and fantasy play. Activity areas should include sand, water table, water source, table and other small toys as well as storage for these play props.
Social Zone	A central location that is shady in the summer and sunny in winter.	This zone should provide a quiet place to sit, tell and listen to stories, talk with staff or friends.
Dramatic Zone		A place to for imaginative play and dress-up should be provided. This zone provides for symbolic and parallel play and for associative and co-operative activities. Space should be provided for a house setting, props and utensils, large blocks and interlocking construction toys. It is appropriate for the wheeled toy route to extend into this area.
Physical Zone	This zone should be located away from quieter zones but adjacent to the Dramatic Zone.	An area with equipment for balancing, climbing, sliding and swaying is recommended. Equipment should be designed to provide graduated challenges to the appropriate program.

Other Play Considerations

- (a) Wheeled Toy Path: a paved path or route for wheeled toys should wind around other activity areas.
- (b) Physical development can also be promoted through the use of mounds, boulder clusters, paths for wheeled toys and other features throughout the outdoor setting.
- (c) Natural elements should be included everywhere to provide an experience of nature including vegetable plots, fragrant flowers, soil for digging, sand, water, trees and shrubs, and wind toys such as sails or banners.

4.4 Landscaping

Design Considerations

- (a) The outdoor space should offer a variety of surfaces and terrains.
- (b) Significant areas of soft landscaping should be provided in all outdoor play yards whether above grade or ~~at~~ grade.
- (c) Natural features and vegetation are important. This may include grassed areas, shrubs, trees and planters to allow for gardening opportunities. Hardy native plants and edible landscaping is encouraged while plants with thorns should be avoided. Appendix A provides a list of common toxic plants that should be avoided in childcare design.
- (d) A hose bib should be provided for watering purposes; it would also be useful to support sand play and water play by filling wading pools or operating a sprinkler to run through on a hot day.
- (e) A resilient fall surface, as approved by the Public Health Inspector, should be provided at all places where children can climb, slide, or fall. Assume that children will climb everywhere possible.
- (f) Loose materials such as engineered wood chips and pea gravel can be contained with curbs or planters, surrounds of wooden decking or other edging solutions. Areas of loose materials should be separated from the entry to indoors by an expanse of paving which can be swept clean periodically.

4.5 Fences and Boundaries

Design Considerations

- (a) The boundaries of the outdoor space should be secure and supervisable from many vantage points within the outdoor space and have a strong visual connection with the main indoor activity area.
- (b) Fences and gates should be designed to be non-climbable. For above-grade facilities, fencing should incorporate opportunities for children to view their surroundings and the world below.

4.6 Outdoor Storage and Security

Design Considerations

- (a) Outdoor childcare areas should be secure, with controlled access during program hours. Consideration should be given for security and controlled access outside of program hours to discourage vandalism, littering and theft of equipment.

- (b) Convenient and secure storage is key to the regular use and maintenance of outdoor play equipment. Storage should be protected from rain and wind to prevent equipment from rusting or getting water-logged and dirty. It should be securely locked to prevent unauthorized entry.
- (c) Outdoor toys, wheeled vehicles, play equipment and maintenance equipment should be stored convenient to points of use. All storage should be secure from unsupervised entrance by children and outfitted with appropriate hooks, bins and shelving.
- (d) Maintenance and landscaping material and equipment should be stored separately from program equipment.

4.7 Rooftop Play Spaces

Rooftop play areas allow access to open outdoor space on densely developed sites, and present opportunities for separation from traffic and noise and greater access to sunlight. However, they may involve increased construction costs and present additional technical design challenges to address constraints such as more severe climate (i.e. wind), weight, and safety above grade.

Design of play spaces above grade should incorporate planning principles already discussed in sections on indoor and outdoor spaces with additional consideration for the opportunities and constraints offered by the above grade location. The design should allow for the safe exposure of children to natural elements and sun, wind, rain, plants, water and animals.

Design Considerations

- (a) Locate to reduce noise from children disturbing adjacent uses and to reduce noise from rooftop equipment disturbing the play space.
- (b) Play space should be free of skylights, roof vents and/or other mechanical equipment.
- (c) Select a location that is protected from exaggerated wind effects around buildings. A wind test area model may be required to determine the adequacy of setting and design.
- (d) Wind effects can usually be mitigated through design techniques such as fences, screens and deflectors. Awnings should be retractable or designed to resist the wind.
- (e) Provide anchorage for all planting and equipment against the wind, and normal use. Use smaller equipment to reduce weight and wind effects.
- (f) The roof structure must be designed to carry the weight of landscaping and play equipment, including heavy elements such as sand, water and shade trees. Location of heavy elements over beams and columns may be needed. Consider options for lighter weight soil, equipment and surfacing. The effect of weight is a major cost determinant.
- (g) Use wind tolerant and draught resistant landscape planting (small soil pockets dry out quickly). All vegetation should be irrigated.
- (h) Protect against future roof leakage. Provide sectional play elements that allow for incremental roof repair. Consider a redundant roof layer for extra protection.
- (i) Provide adequate drainage. Clean outs should be accessible and have catch basins

Appendix: Common Toxic Plants

This list includes the more common toxic plants used in landscaping in North America. It is **not** an exhaustive list of all toxic plants. The B.C. Poison Control Centre reports that many of these plants do not cause toxicity unless ingested in very large amounts and that symptoms may vary from a mild stomach ache, skin rash, swelling of the mouth and throat to involvement of the Heart, Kidneys or other organs. If in doubt about a particular plant, check with your local Botanical Garden or consult the **AMA Handbook of Poisonous and Injurious Plants**.

Table 1: Common Toxic Landscape Plants

Botanical Name	Common Name	Toxic Part
Aconitum spp	Monkshood, Wolfbane	all parts
Actaea spp	Baneberry, Cohosh	berries & roots
Aesculus spp	Chestnut, Buckeye	
Allium Canadense	Wild Garlic, Wild Onion	bulbs, flowers, stems
Anemone spp	Anemone, Pasque Flower	whole plant
Arisaema spp	Jack-in-the-Pulpit, Bog Onion	whole plant
Atropa belladonna	Deadly Nightshade	whole plant
Aucuba japonica	Aucuba, Japanese Laurel	fruit
Baptisia spp	Wild Indigo, Rattle bush	whole plant
Buxus sempervirens	Boxwood, Box	
Calla palustris	Water Arum, Wild Calla	whole plant, esp root
Caltha spp	Marsh Marigold	whole mature plant
Calycanthus spp	Carolina Alspice, Spice bush	seeds
Capsicum spp	Chili Pepper, Bird Pepper	fruit & seeds

<i>Celastrus scandens</i>	Bittersweet	fruit
<i>Clematis</i> spp	Clematis	whole plant
<i>Colchicum</i> spp	Autumn Crocus	whole plant
<i>Convallaria majalis</i>	Lily-of-the-Valley	whole plant
<i>Daphne mezereum</i>	Daphne, February Daphne	whole plant
<i>Datura</i> spp	Jimson Weed	whole plant, esp seeds
<i>Delphinium</i> spp	Larkspur, Delphinium	
<i>Dicentra</i> spp	Bleeding Heart	
<i>Digitalis purpurea</i>	Foxglove	whole plant
<i>Dirca palustris</i>	Leatherwood	whole plant
<i>Echium</i> spp	Bugloss, Snake Flower	whole plant
<i>Euonymus</i> spp	Burning Bush, Spindle Tree	fruit
<i>Euphorbia</i> spp	Spurge, Gopher Purge	latex
<i>Galanthus nivalis</i>	Snowdrop	bulb
<i>Gelsemium sempervirens</i>	Yellow Jesamine	flowers
<i>Gymnocladus dioicus</i>	Kentucky Coffee Tree	seeds
<i>Hedera</i> spp	English Ivy	berry & leaf
<i>Heliotropium</i> spp	Heliotrope	whole plant
<i>Helleborus niger</i>	Christmas Rose	whole plant
<i>Hyacinthus orientalis</i>	Hyacinth	
<i>Hydrangea</i> spp	Hydrangea	flower bud
<i>Ilex</i> spp	Holly, English Holly	fruit
<i>Iris</i> spp	Iris, Flag	roots, flowers
<i>Jasminum nudiflorum</i>	Jasmine	
<i>Kalmia</i> spp	Mountain Laurel	leaves, nectar

Table 1 continued: Common Toxic Landscape Plants

Botanical Name	Common Name	Toxic Part
<i>Laburnum</i> spp	Laburnum, Golden Rain Tree	all parts
<i>Lantana camara</i>	Lantana	
<i>Leucothoe</i> spp	Pepper Bush, Sweet Bells	leaves, nectar
<i>Ligustrum vulgare</i>	Privet	whole plant
<i>Lobelia</i> spp	Cardinal Flower	whole plant
<i>Lonicera</i> spp	Honeysuckle	possibly berries
<i>Lycoris</i> spp	Spider Lily	bulb
<i>Morus rubra</i>	Red Mulberry	
<i>Narcissus</i> spp	Daffodil, Jonquil, Narcissus	bulb
<i>Nerium oleander</i>	Oleander	whole plant
<i>Nicotiana</i> spp	Flowering tobacco	whole plant
<i>Ornithogalum</i> spp	Star of Bethlehem	whole plant
<i>Parthenocissus quinquefolia</i>	Virginia Creeper	fruit
<i>Pernettya</i> spp	Pernettya	leaves & nectar
<i>Physalis</i> spp	Chinese or Japanese Lantern	fruit
<i>Pieris</i> spp	Lily-of-the-Valley Bush	leaves & nectar
<i>Podophyllum peltatum</i>	May Apple	whole plant
<i>Prunus</i> spp	Cherries, Plums, Peaches	pit kernels only
<i>Quercus</i> spp	Oak	
<i>Ranunculus</i> spp	Buttercup	sap, roots
<i>Rhamnus</i> spp	Buckthorn, Cascara	fruit & bark
<i>Rheum rhabarbarum</i>	Rhubarb	leaves
<i>Rhododendron</i> spp	Azalea, Rhododendron	leaves, nectar

Rhodotypos spp	Jetbead	berries
Rhus vernix	Poison Sumac	
Ricinus communis	Castor Bean	seeds
Robinia pseudoacacia	Black Locust	leaves, roots, bark
Sambucus spp	Elderberry	whole plant except cooked berries
Scilla spp	Squill, Star Hyacinth	whole plant
Senecio spp	Groundsel, Ragwort	whole plant
Solanum spp	Nightshade, Potato, Jerusalem Cherry	uncooked sprout, green skin
Sophora spp	Scholar Tree	seeds
Symphoricarpos spp	Snowberry, Waxberry	berries in large quantities
Taxus spp	Yew	most of the plant, but not the red aril around the seed
Wisteria spp	Wisteria	
Zantedeschia aethiopeca	Calla Lily	leaves
Zephyranthes atamasco	Zephyr Lily, Rain Lily	bulb
Sophora spp	Scholar Tree	seeds
Symphoricarpos spp	Snowberry, Waxberry	berries in large quantities

Table 2: Common Toxic Tropical Plants

Botanical Name	Common Name	Toxic Part
Aloe spp	Aloe	latex beneath skin
Amaryllis	Amaryllis, Belladonna	bulbs
Anthurium	Anthurium	leaves & stems
Arum	Arum, Solomon's Lily	whole plant
Caladium spp	Caladium, Elephants Ear	whole plant
Clivia spp	Kaffir Lily	whole plant
Crinum spp	Spider Lily	whole plant, esp bulb
Dieffenbachia	Dumbcane	leaves
Epipremnum aureum	Pothos	whole plant
Eriobotrya	Loquat	pit kernel
Hymenocallis spp	Spider Lily	bulbs
Monstera deliciosa	Monstera, breadfruit	leaves
Philodendron spp	Philodendron	leaves
Spathiphyllum	Spathe Flower, Anthurium	whole plant



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

Planning, Urban Design and Sustainability Department

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REZONING POLICY FOR SUSTAINABLE LARGE DEVELOPMENTS

Adopted by City Council on July 25, 2018

*Effective Date: September 1, 2018**

Amended: xxxx

Note: This policy replaces Revised Action A-2 of the EcoDensity/EcoCity Revised Charter and Initial Actions

** Note: The affordable housing requirements in this policy apply to all large developments city-wide, except those areas that have recently adopted community plans (e.g. Cambie Corridor Unique Sites, large inclusionary housing projects in the West End) and large developments that have submitted a formal rezoning enquiry (application for rezoning advice) as of June 20, 2018. Those projects with an accepted letter of enquiry will proceed under the previous affordable housing requirements contained in the Rezoning Policy for Sustainable Large Developments amended December 16, 2014.*

This policy is effective September 1, 2018 and is mandatory for all large development rezoning applications accepted as complete on or after September 1, 2018.

Large developments are those that:

- (a) Involve a land parcel or parcels having a total site size of 8,000 sq. m (1.98 acres) or more, or
- (b) Contain 45,000 sq. m (484,375 sq. ft) or more of new development floor area

Projects that are limited in scope may be excluded from the requirements of this policy, including:

- (a) Text amendments to the existing zoning for minor changes to large developments
- (b) Projects that contain less than 4,700 sq. m (50,590 sq. ft) of new development.

In such cases, a request for partial or total exemption from the policy requirements should be discussed with the rezoning planner prior to rezoning application submission. Alternatives can be considered and, if warranted, some of the requirements may be waived by the Director of Planning in cases of hardship or conflict between requirements.

OVERALL POLICY INTENT

Large developments are expected to demonstrate leadership in sustainable design. While the policy is divided into sections for ease of readability and implementation, it is expected that large developments will use an integrated design approach and employ district-scale solutions where appropriate.

Note that City staff may involve external agencies such as TransLink, Vancouver School Board, and Vancouver Coastal Health to inform the rezoning review.

REQUIREMENTS

A. Sustainable Site Design

A.1 Objective

The proposal must contribute to meeting the City's Greenest City 2020 Action Plan targets of improving access to nature and planting trees. The proposal must also contribute to meeting the Urban Forest Strategy, Biodiversity Strategy and Rain City Strategy objectives

A.2 Intent

Principles of sustainable site design should be applied to large site land development and management practises. This can be done by retaining or mimicking natural processes and remodelling healthy systems. Including nature in the city improves the health and wellbeing of the community, provides habitat, enhances ecosystem function and services, creates public open spaces for people to gather and socialize, and creates opportunities for people to directly experience nature in the city. Sustainable site design is directly linked to rainwater management and proposed designs should reflect this by providing integrated solutions that meet the requirements of Sections A and E. In addition to natural systems, large developments should ensure a rich mix of uses to bring the majority of daily needs within a 5 minute walk of residents, contributing to walkable communities with the associated health, social, and environmental benefits. Consideration of building orientation and shading will be important for meeting energy performance requirements of the Green Buildings Policy for Rezoning.

A.3 Requirement

A.3.1 Development projects should consider current and future need for parks and incorporate design responses suitable for the site. Provision of parks space and recreation amenities shall be determined on a case by case basis, in consultation with the Vancouver Board of Parks and Recreation (Park Board).

Park dedication will be required where the Park Board determines that the site size is able to support it. At times, the Park Board may consider park dedication on smaller sites. On smaller sites where park dedication is not achievable, sites should be evaluated to determine how they can contribute to improving the connectivity of the park system. Anticipated population density and site size will be significant drivers in determining appropriate land dedicated for park. The Park Board's 1992 Management Plan metric of 1.1ha/1000 residents will be updated as Vancouver Board of Parks and Recreation strategies are updated.

Reference should be made to Vancouver Board of Parks and Recreation city wide strategic plans to guide delivery of parks and recreation opportunities, these plans will assist in identifying requirements, including, but not limited to, site area per capita metrics.

A.3.2 At the parcel scale, maximize opportunities for a variety of open spaces that are contiguous, such as accessible rooftops, courtyards, or ground-level spaces. Non-accessible roofs should include extensive green roof treatment in combination with other sustainable features (e.g. solar panels, water storage). Accessible rooftops should prioritize common use (rather than private) with intensive green roof areas. Residential uses proposing significant private rooftop patios and decks may be subject to rooftop vegetative cover targets that strike a balance between hardscape and softscape ratio.

A.3.3 Setbacks to some underground parking structures will be required to achieve benefits such as:

- (a) access to continuous soil volumes for rainwater management practises
- (b) soil conservation by minimizing site disturbance
- (c) significant tree retention
- (d) establishing long lived trees, planting, habitat and food production

Note: Consideration to relax this requirement may be given to highly urbanized or sites with unique conditions causing conflict with this requirement.

- A.3.4 Sites should explore and identify opportunities to maximize ecosystem benefits, biodiversity, and habitat provision through the redevelopment. Sites with existing high value ecosystems or significant established habitat or biodiversity should explore retention and enhancement of those items where possible. This could include creating connections between adjacent existing parks or biodiversity hotspots, habitat corridors, etc.
- A.3.5 Protect and retain healthy site trees and their soil protection zones, where feasible.
- A.3.6 Projects should strive to meet the canopy cover and vegetative cover targets specified in the Sustainable Large Developments Admin Bulletin.
- A.3.7 Incorporate opportunities for long-living “legacy” trees and landscape approaches that mimic natural environments (such as forest succession and habitat) by providing adequate growing conditions to support large species (e.g. typology A as per the Sustainable Large Developments Admin Bulletin).
- A.3.8 Adequate soil volumes are required for all plantings. For soil depth requirements on development projects, refer to the most recent version of the ~~BCLNA Landscape Standard~~ **Canadian Landscape Standard**. In many cases, staff will require that the standards be exceeded, and specify a performance standard for soil volumes, depending on the particular application and site context. Also, refer to recommended topsoil/ growing medium requirements specified in the City’s Integrated Rainwater Management Plan
- A.3.9 To protect natural and planted areas from damage, residential buildings with an occupant load greater than 30 (excluding townhouse developments) shall have at least one dog relief area marked with a legible sign.

Note: A dog relief area is for the sole purpose of allowing dogs to relieve themselves. It is not intended to be an off leash space for socialising of dogs, and should not be fully enclosed. Dog relief areas are well-draining areas, ideally at grade, that are easily cleaned, designed and constructed to be low maintenance, and suitable for intensive use.

A.4 Submission Checklist

- A.4.1 At time of rezoning application, applicants must provide the following that show how items A.3.1 to A.3.9 will be achieved, noting that for large master-planned sites, staff may defer some detailed submission documents to development permit stage.
- (a) A Parks and/or Open Space plan(s), as per the Sustainable Large Developments Admin Bulletin.
 - (b) A schematic Site plan, Landscape plans and sections for each development parcel to verify the location of open spaces in relation to the parking garage setbacks, tree retention (where applicable) and excavation limits. Additional details can be provided in the design guidelines for the project.
 - (c) A written Landscape/ Planting Strategy with landscape plans showing details for soft and hard landscaping, including a plant palette for drought tolerant, native, or adaptive plant species.
 - (d) Provide an assessment of existing high value ecosystems or significant established habitat or biodiversity, both on-site and adjacent to the site.
 - (e) Incorporate retained and proposed elements on Open Space Plan or Landscape plan and written strategy to highlight ecological and biodiversity benefits, in response to the Biodiversity Strategy, Bird-Friendly Guidelines and Re-Wilding Strategy.
 - (f) Overlay sheets showing vegetation cover area and ratio percentage, including: overall vegetative cover locations and calculations,
 - (g) Separate calculations for types of vegetative cover, including soft landscape area, tree canopy, extensive and intensive green roof cover, (excluding hardscape area). Note: the calculations should forecast canopy cover of trees at time of maturity.
 - (h) An overall Tree Strategy, including: detailed arborist report documenting status of all existing trees, a written rationale for proposed retention plan, proposed tree planting plan, proposed tree management plan.

- (i) A Soils Strategy (written and plans) with an accurate soil volume overlay sheet to describe the area and type/quality of soils. This is to be informed by the Rainwater
- (j) Management Plan, but should consider soil conservation practises, low impact construction practises, site constraints, enhancement opportunities and landscape soil standards.

A.4.2 At time of development permit application, for individual development parcels, applicants must provide the following to show how requirements A.3.1. to A.3.9 will be achieved:

- (a) A detailed site plan, landscape plans, sections for each development parcel to verify the location of open spaces in relation to the parking garage setbacks, tree retention (where applicable) and excavation limits. Additional details can be provided in the design guidelines for the project.
- (b) A written rationale and Landscape Plan/Planting Plan verifying details for soft and hard landscaping, including a plant palette for drought tolerant, native, or adaptive plant species.
- (c) A written rationale and verification on the Landscape plan of retained and proposed ecological and biodiversity benefits, in response to the Biodiversity Strategy, Bird-Friendly Guidelines and Re-Wilding Strategy. This should include a detailed assessment of existing high value ecosystem resources or significant established habitat or biodiversity, both on-site and adjacent to the site.
- (d) Detailed overlay sheets showing vegetation cover area and ratio percentage, including: overall vegetative cover locations and calculations, separate calculations for types of vegetative cover, including soft landscape area, tree canopy, extensive and intensive green roof cover, (excluding hardscape area). Note: the calculations should forecast canopy cover of trees at time of maturity.
- (e) A detailed Arborist Report and Tree Management Plan;
- (f) A site specific soil volume overlay sheet to describe the area, volume and type/quality of soils with emphasis on specifications for tree planting, re-landscape specifications, special soils and rainwater infiltration/absorption.

B. Sustainable Food Systems

B.1 Objective

The proposal will contribute to increasing city and neighbourhood food assets and supporting local and sustainable food systems as outlined in the Greenest City 2020 Action Plan and the Vancouver Food Strategy.

B.2 Intent

The City will require the applicant to demonstrate the overall increase of food system assets. Food assets are defined as resources, facilities, services, and spaces that are available to residents of the city (either at the citywide or neighbourhood scale) that enable a healthy, just, and sustainable food system.

B.3 Requirements

B.3.1 Deliver a minimum of three food assets.

B.3.2 If site is greater than 40,470 sq. m (10 acres), food assets will be expected to have more significant presence and impact than for smaller sites. Arrangements must be made for programming and maintenance of food assets for a minimum of five years (starting from date of occupancy).

B.4 Submission Checklist

B.4.1 At time of rezoning application, applicants must provide the following to show how items B.3.1 to B.3.2 will be achieved:

- (a) Identification and description of a **minimum of three food assets** to be delivered
- (b) Description of how selected food assets fit with the site context
- (c) Early indication of how the food asset may be effectively programmed and maintained
- (d) Drawings showing food asset locations and adequate space provision and infrastructure

- (e) If site is greater than 40,470 sq.m (10 acres), provide a summary of arrangements for programming and maintenance of food assets for a minimum of five years

B.4.2 At time of development permit application, applicants must provide the following to show how items B.3.1 to B.3.2 will be achieved:

- (a) Detailed design and layout for the three food assets:
- (b) If site is greater than 40,470 sq.m (10 acres), provide documentation for operationalizing the asset, including any confirmed programmers, coordinators, or operators where relevant and outline of maintenance plans.

C. Green Mobility

C.1 Objective

The proposal will contribute to meeting the following citywide goals:

- (a) Transportation 2040 and Greenest City targets of having walking, cycling, and public transit trips make up at least 66% of all trips by 2040 and to reduce motor-vehicle kilometer traveled per resident by 20% from 2007 levels.
- (b) Greenest City target to reduce community-based greenhouse gas emissions by 33% by 2020 levels and the Renewable City target to reduce greenhouse gas emissions 80% below 2007 levels before 2050
- (c) Greenest City Clean Air target to always meet or beat the most stringent air quality guidelines.

C.2 Intent

The intent is to encourage sustainable transportation to:

- (a) Make walking and cycling safe, convenient and enjoyable
- (b) Support access to fast, frequent, and reliable transit
- (c) Reduce reliance on private automobiles
- (d) Accelerate the transition to electric vehicles, particularly for shared vehicles
- (e) Improve air quality and resident health

C.3 Requirements

C.3.1 Provide a Transportation Demand Management Plan as per the Parking Bylaw.

~~C.3.2 Provide charging outlets for 10% of commercial structured parking, where applicable.~~

C.3.32 For sites 40,470 sq. m (10 acres) and larger, provide one publically-accessible fast charging hub with at least two chargers.

C.4 Submission Requirements:

At time of rezoning application, applicants must provide the following to show how items C.3.1 to C.3.3 will be achieved:

- (a) Submit a Transportation Demand Management Plan
- (b) Include a summary of electric vehicle charging provision in the project statistics.
- (c) Identify fast charging hubs on site plans, where applicable.

At time of development permit application, applicants must provide the following to show how items C.3.1 to C.3.3 will be achieved:

- (a) Submit a Transportation Demand Management Plan
- (b) Include a summary of electric vehicle charging provision in the project statistics.
- (c) Identify fast charging hubs on site plans, where applicable.

D. Potable Water Management

D.1 Objective

The proposal will contribute to the Greenest City goals of reducing potable water use by 33% from 2006 levels and meeting stringent water quality standards.

D.2 Intent:

The City of Vancouver is moving to an integrated water management approach, where all water within and around the city will be managed together as one system. This approach improves resiliency against climate change, allows the City to address current and future water demands and to protect aquatic systems. The City's objective for potable water management (conservation and efficiency) is to promote the sustainable use of the City's potable water supply, aspiring to offset growth impacts on water demand and avoid, defer, or minimise the financial, environmental and social costs associated with expanding potable water infrastructure. At a building scale, water conservation and efficiency can provide a beneficial reduction in water use by reducing waste, using less water to accomplish the same function or task and by using alternative non-potable water sources that match the appropriate level of water quality to its end use. Water conservation and efficiency can provide operation cost management benefits and on-site supply resiliency.

D.3 Requirements

Integrated Water Management Approach

- D.3.1 An integrated approach to water management at the site scale should be used. Opportunities to conserve water and use it more efficiently, as well as methods for managing rainwater more effectively through green infrastructure and harvesting rainwater for non-potable use should be taken advantage of.

The integrated water management approach for the building(s) and the site shall be demonstrated through the production of a Water Balance for the building(s) and parcel that quantifies water inputs, uses, and outputs. This shall include input water sources including potable water, and rainwater, and outflows to the sanitary, combined, and storm sewers. The Water Balance shall be produced for the 'baseline' and 'proposed' scenarios and demonstrate compliance with the minimum potable water use reductions over baseline specified in D.3.2 and D.3.3, achieved by taking an integrated approach to water management at the site scale.

Note: The Water Balance and accompanying supporting data, calculations, plans, reports and other materials shall be prepared by subject matter experts (such as an Engineer, Geoscientist, or other professional) and signed/sealed by same, subject to review by the City. Refer to Sustainable Large Developments Admin Bulletin for baseline calculation assumptions and other details.

- D.3.2 A minimum 20 per cent reduction in indoor potable water use is to be achieved through any combination of water conservation, efficiency and/or onsite non-potable water re-use. The reduction in potable water use shall be demonstrated by provision of 'baseline' and 'proposed' indoor water use figures, which shall be calculated as outlined in the Sustainable Large Developments Admin Bulletin.
- D.3.3 A minimum 50 per cent reduction in outdoor potable water is to be achieved through a combination of water conservation, efficiency and/or onsite non-potable water re-use. The reduction in potable water use shall be demonstrated through the use of the City of Vancouver's Water Wise Landscape Guidelines and the provision of 'baseline' and 'proposed' outdoor water use figures, calculated using the most recent version of the LEED Outdoor Water Use Reduction Calculator or other approved method. Note that planted landscapes on structures will require irrigation and as such these areas must be included when preparing the landscape plan and determining outdoor water use.

D.4 Submission Checklist

At time of rezoning application, applicants must provide the following to show how items D.3.1 to D.3.3 will be achieved:

- (a) Provide a preliminary Water Balance for the building(s) and parcel with the content and supporting documentation as per the specifications outlined in the Sustainable Large Developments Admin Bulletin.

At time of development permit application, applicants must provide the following to show how items D.3.1 to D.3.3 will be achieved:

- (a) Provide a refined Water Balance for the building(s) and parcel using final proposed occupancy figures.

E. Rainwater & Groundwater Management

E.1 Objective

The proposal will contribute to the City's Rain City Strategy and Integrated Rainwater Management Plan's target of capturing and treating 90% of annual rainfall on public and private property. It also aims to preserve sewer capacity, reduce the risk of combined sewer overflows and maintain wastewater treatment effectiveness through the ~~prohibition~~ reduction of groundwater flows entering the sewer system in alignment with the Metro Vancouver 2010 Integrated Liquid Waste and Resource Management Plan.

E.2 Intent

Rainwater should be recognized as a resource to enhance the community and environment. The use of water sensitive site design and green infrastructure practices or source controls adds resiliency to the City's drainage system in a changing climate and keeps harmful stormwater pollutants from entering our receiving waters. Green infrastructure approaches are to be maximized on site to the greatest extent possible, following a tiered approach, with onsite infiltration and rainwater re-use and being the most preferred approach, and detention being the least preferred.

City sewers are limited in their capacity and are not designed to convey groundwater. Problems arise when developments ~~such as those~~ with deep basements and/or underground parkades that intercept the water table implement sub-drain systems that pump water to the sewer as a means to intercept groundwater seepage and limit hydrostatic forces on foundation walls and floor slabs. The intent of this policy is to prevent ~~permanent long-term~~ groundwater discharges to the City sewers. Accordingly, developments are required to wholly manage groundwater onsite.

Definitions:

- (i) Groundwater: ~~Water occurring below the surface of the ground within voids in a rock or soil matrix~~ ~~Water within voids within a soil or rock matrix~~
- (ii) Water table: The level below which the soil or rock voids are saturated with water at a pressure of 1 atmosphere or greater

E.3 Requirements

E.3.1 All buildings and the site as a whole shall be designed such that no groundwater from systems at or below the yearly high water table is discharged to City sewers. Exceptions may be made for temporary construction dewatering.

E.3.2 A Hydrogeological Study shall be undertaken at the site that evaluates the potential for the proposed building(s) and site design to intercept the yearly high water table. The study shall be prepared by a subject matter expert, and include at minimum the items identified in the ~~Groundwater Management Administrative Sustainable Large Developments Admin~~ Bulletin. If

any groundwater interception is proposed (post-construction), a Groundwater Management Plan must be submitted as part of the Hydrogeological Study. The Groundwater Management Plan will demonstrate that no permanent groundwater discharge to City sewers will occur, and must include at a minimum the items identified in the ~~Groundwater Management Administrative Sustainable Large Developments Admin~~ Bulletin.

Note: If temporary construction dewatering is proposed, an Impact Assessment must be submitted as part of the Hydrogeological Study. The Impact Assessment will demonstrate that no significant negative impacts result from groundwater extraction, and must include at a minimum the items identified in the ~~Groundwater Management Administrative Sustainable Large Developments Admin~~ Bulletin

E.3.3 The rainwater management system for the building(s) and site shall be designed such that the peak stormwater flow rate discharged to the sewer under post-development conditions is not greater than the pre-development peak flow rate for the return period specified in the City of Vancouver's Intensity-Duration-Frequency curves (IDF curves). The City of Vancouver's 2014 IDF curve shall be utilized for pre-development design flow calculations, and the City of Vancouver's 2100 IDF curve, which takes into account the effects of climate change, shall be utilized for post-development design flow calculations. Refer to the ~~Groundwater Management Administrative Sustainable Large Developments Admin~~ Bulletin for further details.

E.3.4 The first 24 mm of rainfall falling on all pervious and impervious surfaces across the site shall be retained on site by means of infiltration, evapotranspiration, and/or re use for the purpose of reducing the volume of rainfall entering the City's sewers. To achieve this on-site retention target the rainwater management system shall manage rainfall in accordance with the green infrastructure tiered approach outlined in the Sustainable Large Developments Admin Bulletin.

Note: Landscaped areas designed with the appropriate depth of growing medium over native subsoil may be deemed to meet the 24 mm retention criteria. Appropriate growing medium depths shall be based on providing sufficient storage volume within the media to meet the retention criteria as outlined in the Metro Vancouver Source Control Guidelines and meet horticultural needs as outlined in the Canadian Landscape Standard ~~and meet horticultural needs as outlined in the Metro Vancouver Source Control Guidelines.~~

E.3.5 The first 24 mm of rainfall from all pervious and impervious surfaces shall be treated to remove 80% Total Suspended Solids (TSS) by mass prior to discharge from the site. For impervious surfaces with high pollutant loads, including roads, driveways, and parking lots the rainfall depth to be treated increases to the first 48 mm of rainfall. Treatment can be provided by either one green infrastructure practice or by means of a treatment train comprised of multiple green infrastructure practices that can be demonstrated to meet the 80% TSS reduction target.

E.4 Submission Checklist

At time of rezoning application, applicants must provide the following to show how items E.3.1 to E.3.5 will be achieved:

- (a) Provide a preliminary Rainwater Management Plan completed by a ~~certified professional~~ registered professional Engineer as per the specifications outlined in the Sustainable Large Developments Admin Bulletin.
- (b) Provide a preliminary Hydrogeological Study completed by a professional with experience in hydrogeology as per the specifications outlined in the ~~Groundwater Management Administrative Sustainable Large Developments Admin~~ Bulletin.
- (c) Geotechnical Study shall be undertaken at the site that evaluates the potential and risks for onsite rainwater infiltration. The study shall be prepared by a subject matter expert and ~~certified professional~~ registered professional, and include at minimum:
 - (i) Infiltration testing at likely locations for infiltration practices and a proposed design infiltration rate;
 - (ii) Soil stratigraphy;
 - (iii) Depth to bedrock and seasonally high groundwater; and
 - (iv) Assessment of infiltration risks such as slope stability and soil contamination.

At time of development permit application, applicants must provide the following to show how items E.3.1 to E.3.5 will be achieved:

- (a) Provide a final signed and sealed Rainwater Management Plan completed by a professional engineer and signed and sealed Geotechnical Study prepared by a subject matter expert and ~~certified professional~~ registered professional. The content and supporting documentation is to be updated to reflect all material changes to the proposed development and new/refined supporting data, calculations, plans, reports and other materials following submission of the preliminary Plan and preliminary Geotechnical Study
- (b) Provide a final signed and sealed Hydrogeological Study, including Groundwater Management Plan and Impact Assessment, if applicable, completed by a certified professional with experience in hydrogeology. The content and supporting documentation is to be updated to reflect all material changes to the proposed development and new/refined supporting data, calculations, plans, reports and other materials following submission of the ~~preliminary initial~~ Hydrogeological Study submitted at time of Rezoning Application.

F. Zero Waste Planning

F.1 Objective

The proposal will contribute to the City's Greenest City target on Zero Waste and the objectives set out in the City's Zero Waste 2040 strategic plan with respect to waste avoidance, reduction, increased opportunities for material re-use and recycling, and reduced greenhouse gas emissions, and the overall goal of eliminating Vancouver waste disposed to landfill and incinerator by 2040

F.2 Intent

Projects are expected to be leaders in waste minimization and waste diversion. The ultimate objective is to facilitate the reorientation of peoples' habits and practices toward the City's zero waste target. The key objectives of a project's Zero Waste Design and Operations Plan are to foster ongoing waste reduction and increased diversion of products and materials from the waste stream through avoidance, re-use, composting and recycling. The intent is to achieve the following:

- (a) Infrastructure and systems to facilitate product repair and re-use.
- (b) Infrastructure and systems to enable the reduction and/or elimination of single-use items (e.g. dishwashers to enable use of reusable dishware).
- (c) Innovative and leading edge measures to support waste diversion and minimize the environmental impacts of waste collection activities, such as the use of a pneumatic collection system, high-capacity waste containers (i.e. deep burial), and communal composting.
- (d) Increased opportunities to re-use/donate/exchange materials.
- (e) Connections with charities and other non-profit organizations to support the rescue and redistribution of nutritious food that would otherwise be disposed.
- (f) Reduce waste operations-related environmental emissions, notably GHG emissions, through strategies such as reduced service-vehicle trips.

F.3 Requirements:

- F.3.1 Buildings must be designed with adequate and well-designed storage spaces/collection points for waste management materials, including multi-stream recycling, food scraps, and extended producer take back items - as described in the Sustainable Large Developments Admin Bulletin.
- F.3.2 Zero waste/waste management communications and education programs for residents and businesses must be created and implemented, including a minimum number of actions from the Sustainable Large Developments Admin Bulletin.

- F.3.3 Buildings must incorporate zero waste efforts beyond the provision of standard recycling bins. A number of additional zero waste actions are required, as per the Sustainable Large Developments Admin Bulletin.
- F.3.4 Post Occupancy Plan Implementation Report. The applicant must provide the City with a report on implementation of the Zero Waste Design and Operations Plan within 18 months of occupancy. The implementation report shall include:
- (a) Types and quantities of waste diverted.
 - (b) Types and quantities of waste disposed.
 - (c) Names and locations of recycling processing facilities used.
 - (d) Description of on-site re-use options, product stewardship facilities, NGO drop-off bins, etc. and estimates of the amount of waste reduced through those initiatives.
 - (e) Description of annual education initiatives undertaken.
 - (f) Overview of exterior litter removal program.
- Summary of initiatives to reduce GHG emissions related to waste.
- (g) Summary of other initiatives undertaken to facilitate zero waste on-site.

F.4 Submission Checklist

At time of rezoning application, applicants must provide the following to show how items F.3.1 to F.3.4 will be achieved:

- (1) A Zero Waste Design and Operations Plan that includes the sections outlined below. The Plan should identify which zero waste actions are included in the design (see Sustainable Large Developments Admin Bulletin for details on required actions):
 - (a) Vision/goal statement
 - (b) Description of project and diversion objectives
 - (c) Space Allocations (site-wide and/or building scale)
 - (d) Operations
 - (i) Occupant/public education and outreach
 - (ii) Facility operations training and support
- (2) Acknowledgement of intent to provide a Plan Implementation Report post-occupancy, with details regarding who will be responsible for submitting.

At time of development permit application, applicants must provide the following to show how items F.3.1 to F.3.4 will be achieved:

- (a) A refined, detailed Zero Waste Design and Operations Plan for each building. The refined Plan should reference, in the Space Allocation section, plan drawings confirming physical spaces provided.
- (b) Prior to DP issuance, a Letter of Commitment to supply a Plan Implementation Report post-occupancy will be required with details regarding who will be responsible for submitting.

G. Affordable Housing

G.1 Objective

The proposal will contribute to meeting the affordable housing objectives and targets of the Housing Vancouver Strategy (2018-2027), in particular to achieve the target of 12,000 new units of social, supportive and co-op housing through the delivery mechanisms outlined in the Affordable Housing Delivery and Financial Strategy (2018-2027).

G.2 Intent

The intent of this policy is to clarify the minimum requirements and priorities for delivering affordable housing on large development sites while providing flexibility in delivery to ensure financial viability and to accommodate varying development contexts. The Affordable Housing Delivery and Financial strategy identifies large developments as important sites to contribute to the delivery of social and supportive housing options for lower-income households and housing

for moderate-income households. The priority for securing dirt sites under this policy contributes to the City's ability to provide publicly-owned sites for affordable housing development in a sustainable way to meet both current and future housing needs.

The affordable housing requirements in this policy apply to all large developments city-wide, except those areas that have recently adopted community plans (e.g. Cambie Corridor Unique Sites, large inclusionary housing projects in the West End) and large developments that have submitted a formal rezoning enquiry (application for rezoning advice) as of June 20, 2018. Those projects with an accepted letter of enquiry will proceed under the previous affordable housing requirements (the 20% policy) contained in the Rezoning Policy for Sustainable Large Developments amended December 16, 2014.

G.3 Requirements

The inclusionary housing requirements for large developments are a minimum of 30% of total residential floor area set aside for affordable housing. This includes two components: a minimum 20% social housing target and minimum 10% moderate income housing target, as detailed below:

- G.3.1 A minimum of 20% of total residential floor area set aside for social housing, prioritizing the transfer of unencumbered dirt site(s) to the City of sufficient size to accommodate the 20% of floor area as social housing.

Note: If it can be demonstrated by the proponent that providing dirt site(s) is not possible due to project context, consideration will be given to delivery of all or a portion of the 20% floor area requirement as turn-key social housing designed in accordance with the Housing Design and Technical Guidelines, with ownership transferred to the City in the form of an Air Space Parcel.

- G.3.2 A minimum of 10% of total residential floor area set aside for affordable rental housing targeted to households with moderate incomes of \$30,000 to \$80,000/year provided in a variety of unit types (studios, 1, 2 and 3 bedrooms). Rental rates for these units will be secured through a Housing Agreement with the City.

The approach described above clarifies the City's policy priorities and outlines a standard approach to affordable housing delivery on large development sites. However, given the diversity amongst large development sites in Vancouver, the General Manager of Planning, Urban Design and Sustainability may recommend alternative approaches to Council where there is clear rationale and evidence in the context of individual projects that demonstrates an alternative approach is merited and would contribute to the goals of the Affordable Housing Delivery and Financial Strategy.

G.4 Submission Checklist

Refer to the Sustainable Large Developments Admin Bulletin.

H. Resilience

H.1 Objective

To better position the city to deal with significant shocks and stresses, particularly: earthquakes, extreme weather, extreme temperatures, sea level rise; and to assist in improving disaster preparedness and social connection. To meet the objectives of the Climate Change Adaptation Strategy, including the objective to increase resilience of the built environment to future climate conditions.

H.2 Intent:

The City of Vancouver is undertaking two initiatives related to resilience:

- (a) A broader Resilience Strategy, with forthcoming policies related to Vancouver specific shocks and stresses

- (b) The Climate Change Adaptation Strategy update, adopted by Council in 2012, the adaptation strategy is being updated with new climate projections and actions

While specific resilience policies are being developed, development projects should consider social and physical resilience and incorporate design responses where possible. Projects must identify building strategies that eliminate, reduce, and mitigate adverse impacts including those due to changing climate conditions.

H.3 Requirement

- H.3.1 Show how resilience is incorporated in the design. Submit a resilience worksheet summarizing design features that improve resilience for the development.

Notes: that this submission should be treated as a public disclosure and the City may display some or all of the information publically. Submission of the completed worksheet will meet this requirement, no further action is required.

- H.3.2 All buildings with an occupant load greater than 30 (except townhouse developments) shall have at least one accessible, self-closing drinking water fountain, located in a common area inside buildings at or near the level 1 entrance and visible from the exterior. The fountain must be capable of operating on city water pressure alone and without electricity. The apparatus must also include an appropriate fitting for filling water bottles. Fountains are to be installed on the shortest dead leg possible off of a line that is flowing regularly; this line would preferably be serving a washroom

H.4 Submission Checklist

At time of rezoning application, applicants must provide the following to show how items H.3.1 to H.3.2 will be achieved:

- (a) A preliminary resilience worksheet and text summary of any design features that contribute to site/building resilience.

At time of development permit application, applicants must provide the following to show how items H.3.1 to H.3.2 will be achieved:

- (a) An updated resilience checklist and text summary of any design features that contribute to site/building resilience.