

REFERRAL REPORT

Report Date:April 14, 2020Contact:Theresa O'DonnellContact No.:604.673.8434RTS No.:13814VanRIMS No.:08-2000-20Meeting Date:April 28, 2020

FROM: General Manager of Planning, Urban Design and Sustainability

SUBJECT: CD-1 Rezoning: 1059-1075 Nelson Street

RECOMMENDATION

- A. THAT the application by Henson Development Ltd., on behalf of Nelson Street Residences Ltd. to rezone 1059-1075 Nelson Street [Lots 11 and 12, Block 7 District Lot 185 Plan 92; PIDs 005-605-946 and 015-749-916 respectively] from RM-5B (Multiple Dwelling) District to CD-1 (Comprehensive Development) District to increase the permitted floor space ratio (FSR) from 2.75 to 24.70 and the building height from 18.3 m to 178.46 m to permit the development of a 60storey residential building which would contain 102 social housing units, 50 secured market rental units and 328 market strata units, be referred to a Public Hearing, together with:
 - (i) plans prepared by IBI Group Architects in conjunction with WKK Architecture, received March 1, 2019;
 - (ii) draft CD-1 By-law provisions, generally as presented in Appendix A; and
 - (iii) the recommendation of the General Manager of Planning, Urban Design and Sustainability to approve the application in principle, including approving in principle the form of development, subject to the Conditions of Approval contained in Appendix B;

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary CD-1 By-law generally in accordance with Appendix A for consideration at Public Hearing.

B. THAT, if after Public Hearing, Council approves in principle the rezoning and the Housing Agreement described in Part 2 of Appendix B, the Director of Legal Services be instructed to prepare the necessary Housing Agreement By-law for

enactment prior to enactment of the CD-1 By-law, subject to such terms and conditions as may be required at the discretion of the Director of Legal Services, the General Manager of Planning, Urban Design and Sustainability, and the General Manager of Arts, Culture and Community Services.

C. THAT the Noise Control By-law be amended to include this CD-1 in Schedule B, generally as set out in Appendix C;

FURTHER THAT the Director of Legal Services be instructed to bring forward the amendment to the Noise Control By-law at the time of enactment of the new CD-1 By-law.

- D. THAT Recommendations A through C be adopted on the following conditions:
 - THAT the passage of the above resolutions creates no legal rights for the applicant or any other person, or obligation on the part of the City; and any expenditure of funds or incurring of costs is at the risk of the person making the expenditure or incurring the cost;
 - (ii) THAT any approval that may be granted following the Public Hearing shall not obligate the City to enact a bylaw rezoning the property, and any costs incurred in fulfilling requirements imposed as a condition of rezoning are at the risk of the property owner; and
 - (iii) THAT the City and all its officials, including the Approving Officer, shall not in any way be limited or directed in the exercise of their authority or discretion, regardless of when they are called upon to exercise such authority or discretion.

REPORT SUMMARY

This report evaluates an application to rezone the site at 1059-1075 Nelson Street from RM-5B (Multiple Dwelling) District to CD-1 (Comprehensive Development) District. The proposal is for a 60-storey residential building with a floor area of 39,695 sq. m (427,272 sq. ft.) and a floor space ratio (FSR) of 24.7. A total of up to 102 social housing units, 50 secured market rental units and 328 market strata units are proposed.

The application has been assessed and the proposed uses and form of development are supported, subject to design development and other conditions outlined in Appendix B. It is recommended that the application be referred to a Public Hearing, with the recommendation of the General Manager of Planning, Urban Design and Sustainability to approve it, subject to the conditions outlined in Appendix B.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

Relevant Council Policies for this site include:

- West End Community Plan (including West End Public Benefit Strategy) (2013)
- Rezoning Policy for the West End (2013, last amended 2017)
- West End RM-5B Guidelines

- View Protection Guidelines (1989, last amended 2011)
- Higher Buildings Policy (1997, as amended up to 2018)
- Green Buildings Policy for Rezonings (2009, amended up to 2017)
- Zero Emissions Building Catalyst Policy (2019)
- Community Amenity Contributions Through Rezonings (1999, amended up to 2016)
- Rental Housing Stock Official Development Plan (2007, last amended in 2018)
- Housing Vancouver Strategy and Housing Vancouver Three Year Action Plan (2017)
- Family Room: Housing Mix Policy for Rezoning Projects (2016)
- High-Density Housing for Families With Children Guidelines (1992)
- Vancouver Development Cost Levy By-law No. 9755 (2008, last amended 2019)
- Financing Growth Policies (2003)
- Public Art Policy and Procedures for Rezoned Developments (2014)
- Tenant Relocation and Protection Policy and Guidelines (2015, last amended 2019)
- Transportation 2040 Plan (2012)

REPORT

Background/Context

1. Site and Context

The 1,608 sq. m (17,307 sq. ft.) rezoning site is located mid-block on the north side of Nelson Street, between Thurlow and Burrard Streets. The site is comprised of two lots with a total frontage of 40.2 m (132 ft.) along Nelson Street and depth of 40.2 m (132 ft.). The site is flat and contains two plum trees.

Located in Area E in the Burrard Corridor of the *West End Community Plan*, the site is currently zoned RM-5B and developed with a three-storey apartment building on each lot comprising a total of 51 rental apartment units.

The surrounding blocks contain mainly residential buildings (see Figure 1, accompanied by a list of nearby sites and developments), some of which have recently been rezoned or are current rezoning applications. These developments range in heights from three to 57 storeys. The site is located within metres of Nelson Park, Lord Roberts Elementary School Annex (located adjacent Nelson Park), Lord Roberts Elementary School and King George Secondary School.

The site is well served by transit being located 675 m from the Burrard Skytrain Station and within a 50 m walk to bus routes along Burrard Street. On Comox Street, to the south, is a bike route. Burrard Street has a painted bike lane.

Significant developments in the immediate area are shown in Figure 1 and are listed below:



Figure 1: Site and surrounding context

- a) Nelson Park
- b) 1150 Nelson Street Lord Roberts Annex Elementary School
- c) 1115 Nelson Street Nicholson Tower, 20-storey residential building
- d) 955 Thurlow Street 3-storey residential building
- e) 988 Thurlow Street Washington Court, 5-storey residential building
- f) 1070-1080 Barclay Street The Capri and Brookswood, 4-storey and 5-storey residential buildings; Active Rezoning Application 1040 – 1080 Barclay Street, Two, 43storey residential buildings
- g) 1075 Barclay Street 7-storey residential building
- h) 1090 Haro Street Fire Hall #7
- i) 1047 Barclay Street Amicae Housing Co-Operative, 7-storey residential co-op building
- j) 1040 Barclay Street Barclay Mansion, 8-storey residential building; Active Rezoning Application 1040 1080 Barclay Street, Two, 43-storey residential buildings
- k) 1070 Nelson Street The Nelson, 4-storey residential building
- I) 1058 Nelson Street Caroline Court, 7-storey residential building
- m) 1042 Nelson Street Kelvin Court, 6-storey residential building
- n) 1081 Burrard Street St. Paul's Hospital
- o) 1016 Nelson Street Wesley place, 22-storey residential building
- p) 969 Burrard Street The Butterfly, 57-storey and 10-storey residential building
- q) 1028 Barclay Street The Patina, 42-storey residential building with YMCA Facility in podium
- r) 909 Burrard Street Vancouver Tower, 26-storey residential building with grocery store at grade

2. Policy Context

West End Community Plan and the Rezoning Policy for the West End (2013) - In

November 2013, Council approved the West End Community Plan. This policy document provides a framework to guide change, development and public benefits in the West End over a 30-year period. The plan considers long-range and shorter-term goals, and provides policy directions in areas such as land use and built form, housing, transportation and public spaces, heritage, arts and culture, local economy, community facilities and amenities, and environmental sustainability.

The West End Community Plan identifies "Corridors" (Georgia, Burrard, Lower Robson and Lower Davie) generally as the newer areas of the community, well-served by transit, services and amenities, and where the majority of new housing and job space has been built over the past 40 years. Under the plan, these corridors provide additional opportunities to accommodate job space and housing, denser development close to transit, local services and amenities, which help meet the needs of the community. The rezoning site is located in the Burrard Corridor, as illustrated in Figure 2.



Figure 2 – West End Community Plan Character Areas

A Rezoning Policy for the West End was also adopted at the same time as the West End Community Plan. It allows consideration for rezoning on sites within the Burrard Corridor for increased density for market residential when significant public benefits can be achieved for the community.

For the rezoning site, subject to urban design performance, towers may be considered with floor plates measuring 696.8 sq. m (7,500 sq. ft.) in area and with height up to 167.6 m (550 ft.),

except that building proposals within established view corridors should not exceed view cone height limits as set out in the View Protection Guidelines and the Higher Buildings Policy.

West End Community Plan Housing Objectives – Policies which address the West End's market rental housing stock seek to find a balance between protection, growth and renewal of that stock. In areas with existing rental housing, where zoning changes allow for new market development, the housing policies seek to maintain or enhance the existing affordability by requiring replacement of existing market units as social housing. This site is located in the inclusionary housing provision area of the Burrard Corridor (see Figure 3), where additional density can be considered through rezoning if at least 25% of the new floor space is social housing, or if there is one-for-one replacement of the site's existing market rental housing with social housing units, whichever is greater.



Figure 3 – West End Community Plan Opportunities for New Secured Market Rental and Social Housing

Higher Buildings Policy — The Higher Buildings Policy, as amended in 2018, allows for consideration of building proposals in the city's downtown seeking significant additional height above current zoning and policy, with the provision that these higher buildings do not penetrate Council-approved view corridors, with the exception of the Queen Elizabeth view corridor (view corridor 3.2.1).

The policy requires that any higher building development establish a significant and recognizable new benchmark for architectural creativity and excellence, while making a significant contribution to the beauty and visual power of Vancouver's skyline. In addition, any proposal should advance the City's green objectives for carbon neutrality for new buildings by demonstrating leadership and advances in sustainable design and energy consumption.

The policy also identifies other considerations, including the achievement of community benefits, such as on-site open space, and mitigating potential adverse shadowing and view impacts on the public realm as well as on neighbouring buildings.

Housing Vancouver Strategy (2017) – In November 2017 Council approved the Housing Vancouver Strategy (2018-2027) and the 3-Year Action Plan (2018-2020). The strategy seeks to shift the supply of new homes toward the right supply, with targets for new units along a continuum of housing types. The Housing Vancouver targets were based on the core goals of retaining the diversity of incomes and households in the city, shifting housing production toward rental to meet the greatest need, and coordinating action with partners to deliver housing for the lowest income households. Overall 72,000 new homes are targeted for the next 10 years, including 12,000 social, supportive and non-profit co-operative units and 20,000 purpose-built rental units.

Tenant Relocation and Protection Policy – In June 2019, Council amended the 2015 *Tenant Relocation and Protection Policy* (TRP Policy). The TRP policy is intended to protect tenants by mitigating the impacts of displacement resulting from redevelopment activity, while recognizing that some renewal is necessary to maintain the health of the overall rental stock. A Tenant Relocation Plan is required when tenants are displaced as a result of redevelopment or major renovation activity. At a minimum, these terms include four month's free rent or more based on length of tenancy, a flat-rate payment towards moving expenses, and assistance finding three alternate accommodation options that best meet the tenants identified priorities. Eligible tenants may exercise a Right of First Refusal to return to one of the replacement market rental units in the new building with a 20% discount off of starting market rents, or to new social housing units at below-market rates, provided they meet the eligibility requirements under those policies.

Strategic Analysis

1. Proposal

The application proposes a residential building with nine levels of underground parking. A total density of 24.7 FSR and a total floor area of 39,695 sq. m (427,272 sq. ft.) are proposed. The proposed tower has a height of 169.3 m (555.5 ft.) to the top of the roof and 178.5 m (585.5 ft.) to the top of the mechanical screening, resulting in a 60-storey building. In the course of the review of the application, the applicant submitted an addendum which slightly modified the floor plate of the tower and the floor areas dedicated to each housing tenure. The report generally references the statistics on the addendum, shown above, while the form of development analysis, below, is based on the original application design.

The proposed building contains 102 social housing units, 50 market rental units and 328 strata residential units. The entryways, for all tenures, are located on Nelson Street with a secondary entry for the social housing units from Ted Northe Lane. Vehicular access to the nine-storey underground is from Ted Northe Lane. Indoor and outdoor amenity space for the social housing component of the development is located on ground level. While the strata and market rental residential indoor amenity space is located on level 16 with the outdoor amenity space located on the ground level.



Figure 4 – Site Plan

2. Land Use

The rezoning application proposes residential land uses. The site is currently zoned RM-5B (Multiple Dwelling) District and is located in the Burrard Corridor of the West End Community Plan. The West End Community Plan anticipates high density residential development in the Burrard Corridor area. The proposal includes a mix of market strata, market rental and social housing units. See a detailed discussion in Section 4 - Housing.

3. Density, Height and Form of Development (refer to drawings in Appendix E)

This section provides a summary assessment of the proposed form of development that considers issues such as massing and shadowing. A more detailed assessment is presented in the Urban Design Analysis and additional description is provided in the minutes of the Urban Design Panel, with both contained in Appendix D.

Density – The application proposes a density of 24.7 FSR on the site, all from new construction. The West End Community Plan does not limit the density of sites in this area. Instead, the supportable density depends on an assessment of the proposed design.

Form of Development – The new development is comprised of a residential tower with occupied floors extending to 169.3 m (555.5 ft.) in height, an unoccupied rooftop structure above, and underground parking below. The most distinctive visual feature of the tower is its curved outline as seen in elevation from the north or south (Figure 5), which helps it respond to the expectation of the *Higher Buildings Policy* that new tall buildings establish a recognizable new benchmark for architectural creativity. The application also proposes to meet the Passive

House standard to achieve significantly lower energy consumption, which meets the enhanced energy requirements of the policy.



Figure 5 – Perspective Rendering Looking North (proposed tower on left)

Landscaped open spaces at grade on each side of the tower, measuring approximately 4.6 m (15 ft.) wide from the tower columns to the side property lines, separate the new building from the sites to the east and west. Based on the recommendation of the Higher Buildings Policy that buildings should provide on-site open space that contributes to the downtown network of green and plaza space, staff recommend that a statutory right-of-way be provided along the east property line to provide a mid-block pedestrian connection between Ted Northe Lane and Nelson Street. A passage of 2.5 m would match the width provided through the rezoning of the neighbouring site to the east at 969 Burrard Street.

The building's columns at grade are set back from the Nelson Street property line by approximately 1.9 m (6.2 ft.) and from Ted Northe Lane by approximately 10.5 m (34.5 ft.). Setbacks to the side property lines on upper levels vary from 3.47 m (11.4 ft.) to 5.38 m (17.7 ft.), due to the distinctive, recurved profile of the tower as seen from the north and south that widens and narrows twice above level 17. The proposed setback from the lane to the upper levels is the largest at 7.17 m (23.5 ft.) while the setback from Nelson Street is the smallest at 1.72 m (5.6 ft.) to the enclosed building, with the face of balconies proposed to have no setback at all from the street.

Height – The tower is proposed to be slightly higher than the maximum height of 550 ft. contemplated in the *West End Community Plan*. The application proposes an additional 1.7 m (5.5 ft.) of height to accommodate Passive House measures, which would bring the total height including rooftop structures to 178.46 m (585.5 ft.), or slightly below the overall height of the tower under construction to the east at 969 Burrard Street, 178.6 m (586 ft.) which was approved through a CD-1 rezoning in 2017 under the West End Community Plan.





Figure 7 – Shadow Effects (Fall Equinox at 4 pm)



The West End – Tower Form, Siting and Setbacks Administrative Bulletin clarifies the intent of the Built Form Guidelines section of the West End Community Plan, and notes that shadowing impacts may result in the maximum heights in the plan not being achievable. The bulletin seeks to minimize shadowing on public spaces including parks and the West End villages between 10 am and 3 pm at the equinoxes. Shadow analyses submitted for these times demonstrate shadowing from the proposal on Nelson Park from 10:00 am to until approximately 10:20 am at the spring equinox, and shadowing of the north sidewalk in the Robson Street village starting at approximately 3:25 pm at the fall equinox, as illustrated in Figure 6 and 7 (light grey area).

These diagrams include the design for 969 Burrard Street, which has been approved as a rezoning but is not yet built, and other rezoning applications in the area. In Figure 6, Burrard Street is the largest shadow in on Nelson Park (dark grey area). Due to the proximity of the subject site to Nelson Park, avoidance of all shadow would require a reduction in height to approximately half of the height in the West End Community Plan.

Staff have considered the height of the proposed tower within its particular context and the factors noted in the Urban Design Analysis, and accept the limited shadow effects on Nelson Park as largely a consequence of the height permitted for the Burrard Corridor. There are no shadow impacts to Robson Street within the specified times.

Tower Floor Plate – In this area of the Burrard Corridor, the West End Community Plan can consider a maximum floor plate size of up to 697 sq. m (7,500 sq. ft.). Additionally, the *West End* – *Tower form, siting and setback Administrative Bulletin* notes that tower floor plates should be no more than 80 ft. in width and 85 ft. in depth. The application proposes a maximum tower floor plate that is 110 ft. in width and 97 ft. in depth. The floor plate is generally considered to include all enclosed areas. Open air, cantilevered balconies are excluded. The proposed average floor plate, if using the maximum insulation and HRV (heat recovery ventilator system) amounts drafted into the CD-1 By-law for Passive House, is 8,108 sq. ft. To compare this with floor plates in nearby towers, the one under construction at 969 Burrard Street has enclosed area of 8,500 sq. ft. and the existing Patina building across the lane at 1028 Barclay Street is 8,200 sq. ft.

Staff have given consideration to the *Zoning and Development By-law,* which allows for the exclusion from floor area of the additional insulation and a heat recovery ventilator system needed to achieve the Passive House standard. Similarly, the *Zero Emissions Building Catalyst Policy* allows the Director of Planning to vary policies and regulations in support of a zero emissions building, including floor plate limits. In recognition of the significant difficulty and ambition of building a 60-storey Passive House, of the benefit construction would have on the green building industry in our city, and of the importance of sustainable construction in achieving the City's sustainability goals, staff support the exclusion these two built features from the floor plate limit within the limits noted in the draft CD-1 By-law.

The application also proposes an averaging approach to the floor plates, whereby some plates are larger and some smaller. Staff support averaging for this design, as it helps to produce the tower's distinctive curved profile on the skyline. The base of the tower, generally below the skyline, does not curve out at the lowest 17 levels, which provides more space to the lower-scaled buildings to the east and west.

At the same time, the site is the smallest that may be considered for a tall tower under the West End Community Plan, and the neighbouring building to the west has no setback from the shared property line. The shape of the proposed floor plate has a letter-plan layout similar to a capital 'H', with especially deep indentations on the north and south side. When compared with a rectangular plate of the same area, these indents increase the overall width and depth of the tower, which in turn affects view, daylight and shadowing impacts.



Figure 8 – Level 19-43 Largest Floor Plan

The impact of the H-shaped floor plate on the ground plane can be seen in the proposed variance to setback from Nelson Street, from the required 3.70 m to 1.72 m at ground level, and to zero metres for the cantilevered balconies at level four and above. Additionally, the bulk and shape of the floor plate contributes to some of the lower units not meeting the horizontal angle of daylight regulations in the Zoning and Development By-law. The application requests that this regulation also be varied. Given these constraints, staff do not support exclusion of any other enclosed area from the plate limit or variation of the setbacks, and recommend reducing the overall width and depth of the floor plate. Reconsideration of the deep indentations on the north and south sides of the building will help address the impacts noted above.

Summary – Staff have considered the overall form of development including the proposed height and floor plate of the tower within the context of the surrounding area and the considerations noted in the Urban Design Analysis in Appendix D, and conclude that the proposed form presents an acceptable balance of the goals in the *West End Community Plan* and related policies.

Staff recommend that, subject to a Public Hearing, the form of development be approved subject to conditions which seek additional design development at the development permit stage (see conditions in Appendix B).

Urban Design Panel – The rezoning application and the proposed form of development were reviewed by the Urban Design Panel on June 12, 2019 (see Appendix D) and received an evaluation of Support with Recommendations. Staff are supportive of the application subject to the conditions outlined in Appendix B. The conditions include improvements to minimize perceived bulk and massing and improved contextual fit, particularly along the lane. The proposal will also undergo further design development during the development permit review process.

4. Housing

The West End Community Plan anticipates high-density residential development in the Burrard Corridor area. Rezoning sites in the RM-5B (Multiple Dwelling) District require either that a minimum of 25% of floor space be provided as social housing (as defined in Section 2 of the Zoning and Development By-law) or that a minimum of one-for-one replacement of the existing market rental housing with social housing units be provided, whichever is greater. The 25% of floor space criterion applies to this application. The 102 social housing units proposed in the application account for 25% of the project's total floor space less the market rental housing floor space. The provision of social housing units, market rental units, and market strata units in the application is consistent with the West End Community Plan.

The 102 social housing units account for double the required 51 replacement rental units and 25% of the project's total floor space, not including the market rental housing floor space. While the West End Community Plan anticipated social housing to comprise 25% of the total floor area, the Plan did not anticipate that market rental housing would also be offered in addition to the required social housing for inclusionary housing projects in the West End. In this case, staff support the exclusion of the secured rental housing floor area from the calculation of the required social housing floor area, as the social housing provided significantly exceeds one-for-one replacement. Additionally, as the secured rental floor area represents less than 10% of total floor area, the focus of the project continues to be social housing delivery.

Achievement towards City-wide Social and Rental Housing Targets – This application, if approved, would add 102 units to the City's inventory of social housing and 50 units to the City's inventory of market rental housing. These units would contribute towards the stated 10-year social and supportive and purpose-built market rental housing targets set out in the 2017 *Housing Vancouver Strategy*. The approval of these units would bring the total number of social housing units approved since 2017 to 4,560 units, and the total number of market rental housing units approved since 2017 to 3,254.

Housing Type	10-YEAR TARGETS	CURRENT PROJECTS
		Units Approved Towards Targets
Social, Supportive, and Co-op Housing Units	12,000	4,458*
Purpose- Built Market Rental Housing Units	20,000	3,204*

Figure 9 – Progress Towards 10-Year Housing Vancouver Targets for Non-Market and Purpose-				
Built Market Rental Housing as of December 31, 2019				

Note that tracking progress towards 10-year Housing Vancouver targets began in 2017.

*Unit numbers exclude the units in this proposal, pending Council's approval of this application

Achievement towards West End Community Plan Social Housing Targets – The plan has an overall target of 1,600 social housing units, anticipated to be achieved in the West End. The plan intends to achieve this target through additional density in the Corridors, infill on existing social housing sites, and future site purchases and grants to non-profits. The plan seeks to secure in its first 10 years approximately 500 social housing units through additional density in the Corridors. If approved, this project will add 102 units towards this 10-year target.

Achievement towards West End Community Plan Secured Market Rental Targets – The plan has an overall target of 1,900 secured market rental housing units anticipated to be achieved in the West End. The plan intends to achieve this target, in part, through additional density and infill on existing market rental sites. If approved, this project will add 50 units towards this target.

Figure 10 – Progress Towards 10-Year West End Plan (Corridors) Targets for Social Housing as	of			
December 31, 2019				

Housing Type 10-YEAR TARGETS (2014-2023)	CURRENT PROJECTS	
		Units Approved Towards Targets
Social Housing Units	500	421*

*Unit numbers exclude the units in this proposal, pending Council's approval of this application. Units represent the gross units approved, completed, or under construction.

Social Housing Family Housing Requirements – The West End Community Plan requires that, except for seniors and supportive housing projects, at least 50% of the social housing units must be two- and three-bedroom units suitable for families and designed in accordance with the High Density Housing for Families with Children Guidelines. This application currently provides 47% two- and three-bedroom units (48 units) and 53% one-bedroom units (54 units). A total of 24 three-bedroom units are provided, accounting for 24% of the total social housing units. A provision to ensure the 50% family housing requirement in the social housing component is included in the draft CD-1 By-law (see Appendix A).

Market Rental Family Housing Requirements – 20 units, or 40% of the total market rental units, are proposed as having two bedrooms. This ratio of provision of family housing is supported by the *Family Room: Housing Mix Policy for Rezoning Projects,* as well as by the West End Community Plan. A provision to ensure the percentage of family housing in the market housing component does not fall below the required 35% is included in the draft CD-1 By-law (see Appendix A). It is recommended that the market rental include 10% three-bedroom units.

Market Strata Family Housing Requirements – 180 units or 55% of the total strata units are proposed as having two or more bedrooms, including 64 having three bedrooms or 20% of units. This ratio of provision of family housing exceeds the requirements of the *Family Room: Housing Mix Policy for Rezoning Projects,* as well as by the West End Community Plan. A provision to require 10% three bedroom units and to ensure the total percentage of family housing in the strata housing component does not fall below the required 35% is included in the draft CD-1 By-law (see Appendix A).

Tenants – If this application is approved, the existing 51 market rental units on the rezoning site (28 units at 1059 Nelson Street and 23 units at 1075 Nelson Street) would be replaced with 102 new social housing units and 50 secured market rental units. Redevelopment of the site would require the relocation of existing tenants during construction.

The *Tenant Relocation and Protection Policy (2019)* applies to this site and the applicant has provided a draft Tenant Relocation Plan (TRP) (summarized in Appendix F). A final Tenant Relocation Plan will be required and secured as a condition of the development permit. An

Interim Tenant Relocation Report will be required prior to issuance of the Demolition Permit, and a Final Tenant Relocation Report will be required prior to issuance of the Occupancy Permit.

At the time of application, 31 units on site were tenanted. All of the tenancies had started more than one year prior to the rezoning application being received, so all tenants qualify for the provisions of the City's *Tenant Relocation and Protection Policy*. Of the 31 tenancies, the average length is approximately six years; however, five tenants have lived in their apartments for more than 10 years, and one tenant has lived in theirs for more than 20 years.

Under the *Tenant Relocation and Protection Policy*, these tenants receive a minimum of four months free rent or more based on length of their tenancy, a flat-rate payment towards moving costs, and assistance finding alternative accommodation. A relocation specialist has been retained and will be offered to all existing residents. Tenants who choose to do so can exercise a First Right of Refusal to return to one of the social housing units if eligible, or to the new market rental units at 20% below market rates. The applicant has provided a draft TRP that meets the minimum requirements and for some of the TRP compensation and assistance requirements exceeds requirements.

Affordability – The target rents in the social housing component will reflect the West End Community Plan's objective to maintain or enhance the affordability currently offered in the older rental stock in the neighbourhood. The aim is to create a range of rents from the shelter component of Income Assistance to a maximum of the Low End of Market (LEM) rents. The minimum level of affordability required under the City definition of social housing is 30% of the units are to rent to households with incomes at or below BC Housing's Housing Income Limits (HILs), at rental rates of no more than 30% of income. These units would target single person households and families with incomes in the range of \$15,000 to \$73,500 per year. Under the minimum requirement, up to 70% of the social housing units could rent at the Low End of Market, which would target singles with annual incomes up to \$74,150 and families with annual incomes up to \$113,040.

While the definition of Social Housing sets the minimum affordability requirement, a key strategy of Housing Vancouver is to shift to the right supply of housing, targeting low and moderate income households. The social housing component of the project will be managed as part of the Vancouver Affordable Housing Endowment Fund (VAHEF) portfolio. The social housing target rents for the social housing units will be set and approved by Council at a future date taking into consideration Housing Vancouver objectives and VAHEF portfolio management strategies. Staff will also consider opportunities to deepen social housing affordability through partnerships with senior levels of government and non-profit partners.

Upon completion, an air space parcel containing all of the social housing units would be transferred to the City. A non-profit organization would be selected through a Request for Proposals in line with the City's Procurement Policies to lease and operate the social housing air space parcel. Recommendations on the operator / lessee of the social housing units, along with the key terms of the lease/operating agreement (including rents, operating and capital maintenance costs, and monitoring and reporting requirements) would be presented to Council in a future report for consideration and approval. The ultimate level of affordability achieved in the social housing units will be approved by Council at that time.

Conditions of approval are included in Appendix B to increase the proposed overall size of the indoor amenity space for the social housing component.

5. Transportation and Parking

Parking and Loading – Vehicular and bicycle parking are provided on nine underground levels accessed from Ted Northe Lane. The application proposes a total of 313 vehicle parking spaces for residential uses (including 17 accessible spaces) and 1,000 Class A bicycle spaces. The provisions generally meet the Parking By-law with the exception of four required passenger loading spaces. The applicant is expected to meet this requirement as a condition of the development application.

As part of the rezoning, the applicant will also be required to fund transportation upgrades in the vicinity of the site, including traffic calming measures in Ted Northe Lane to address neighbourhood traffic impacts from the rezoning, as well as improvements at the intersection of Thurlow Street and Nelson Street.

All Engineering conditions are set out in Appendix B.

6. Environmental Sustainability and Natural Assets

Green Buildings – The *Green Buildings Policy for Rezonings* (2018) requires that residential rezoning applications satisfy either the near zero emission buildings or low emissions green buildings conditions within the policy. The application has opted to satisfy the near zero emissions buildings requirements, and the proposed building is pursuing Passive House certification. Passive House is a world-leading standard for energy efficiency in buildings, and the process of design and certification to this standard significantly advances local construction practices toward zero emissions buildings. The applicant has submitted a letter from a certified Passive House designer that the building, as designed, is capable of achieving Passive House certification.

The applicants have requested that the existing limits of floor space exclusions available for high performance buildings be increased to accommodate additional insulation and mechanical equipment that may be necessary to achieve Passive House certification in this unique design. Staff support this flexibility and recommend higher limits in section 5.5 of the draft CD-1 By-law for the increment in floor area caused by exceeding the requirements of the Vancouver Building By-law (see Appendix A).

The *Higher Buildings Policy* (amended February 13, 2018) requires applications to demonstrate leadership in sustainability and carbon neutral buildings. Certification of this building under the Passive House standard will meet this policy.

Natural Assets – The Urban Forest Strategy was developed to find ways to help preserve, protect and strengthen Vancouver's urban forest and tree canopy for the future. In April 2014, Council amended the Protection of Trees By-law to maintain a health urban forest by requiring permits to remove trees that meet certain conditions. The intent is to retain and protect as many healthy, viable trees as possible, while still meeting the challenges of development, housing priorities and densification. This is in keeping with City goals to achieve resilient and healthy natural systems in our urban areas. A "by-law tree" has a trunk diameter of 20 cm or greater and requires a tree permit when it is proposed to be removed.

There are two plum trees located on the site covered by the *Protection of Trees By-law*, and two common hornbeam City trees are located along Nelson Street. The proposed development footprint requires both on-site trees be removed as they conflict with the underground parking

structure. Due to the maximum site coverage by the underground parking structure, replacement trees of a larger size would not be feasible.

PUBLIC INPUT (refer to Appendix D)

Pre-Application Community Consultation – A pre-application meeting was held for a proposal for the rezoning site on October 8, 2015.

Public Notification – A rezoning information sign was installed on the property on April 8, 2019. Approximately 9,006 notification postcards were distributed within the neighbouring area on or about May 7, 2019. Notification and application information, as well as an online comment form, were provided on the City of Vancouver Rezoning Centre webpage (vancouver.ca/rezapps).

Community Open House – A community open house was held on May 28, 2019 at the Sutton Place Hotel Vancouver at 845 Burrard Street. Staff, the applicant team, and 178 members of the public attended the open house.

Public Response – Public responses to the proposal have been submitted to the City as follows:

- In response to the May 28, 2019 open house, a total of 93 comment sheets were received from the public
- Approximately 55 emails and online comments were also received



Notification and Public Response

Support for the proposal cited the following:

- Proposal contributes to tackling Vancouver's affordable housing crisis.
- Supportive of Passive House and ecofriendly design.
- Supportive of architecture and urban design treatments.
- Creates a new iconic landmark building.
- Project fits well within the neighbourhood.
- Proposed height, massing, and density are appropriate.
- Supportive of the mixture of residential unit sizes.

Concerns expressed by respondents included the following:

• Inappropriate height, massing, and density.

- Traffic congestion created from new density and construction.
- Shadowing of parks and public spaces.
- Ensure housing is kept affordable.
- Provide adequate tenant relocation.
- Criticism of architecture or urban design.
- Unsatisfied with proposed public benefits.

A detailed summary of public comments in response to the rezoning application may be found in Appendix D.

Staff Response – Public feedback has assisted staff with assessment of the application.

Traffic Congestion – A transportation study was submitted as part of the rezoning application. Results of the study identified that the new vehicle trips generated by the development would be minimal and have no meaningful impact to the existing roadway network conditions. The Transportation Demand Management (TDM) Plan, required at the development permit application stage, will help to reduce vehicular trips to and from the development.

Height and Massing – The height and density proposed for the site are in line with those specified in the West End Community Plan for the Burrard Corridor. The design of the proposed building has been modified slightly to provide for a more slender appearance. Additionally, the proposal now incorporates a 3.7 m (12.2 ft.) front setback. Both changes to the proposal aid with the overall perceived massing of the building.

PUBLIC BENEFITS

In response to City policies which address changes in land use and density, this application for rezoning offers the following public benefits:

Required Public Benefits

Development Cost Levies (DCLs) – DCLs collected from development help pay for facilities made necessary by growth, including parks, childcare facilities, replacement housing (social/non-profit housing) and engineering infrastructure.

This site is subject to City-wide DCL and City-wide Utilities DCL on the proposed 30,878 sq. m (332,368 sq. ft.) of market residential floor area (including market rental). Based on rates effective September 30, 2019 total DCLs of approximately \$9,392,719 are anticipated from this development.

Under provisions of the *Vancouver Charter* and the DCL By-law, the social housing component of the project is exempt from DCLs. The value of this exemption is estimated to be approximately \$2,681,987, based on a floor area of 8,816.9 sq. m (94,904 sq. ft.).

DCL rates are subject to future adjustment by Council including annual inflationary adjustments. DCLs are payable at building permit issuance based on rates in effect at that time. A development may qualify for 12 months of in-stream rate protection from DCL rate increases, provided that an application has been received prior to the rate adjustment. See the City's <u>DCL</u> <u>Bulletin</u> for details on DCL rate protection.

Public Art Program – The Public Art Policy and Procedures for Rezoned Developments requires rezoning proposals having a floor area of 9,290 sq. m (100,000 sq. ft.) or greater to contribute public art or provide 80% cash in lieu as a condition of rezoning. Public art budgets are based on a formula (effective September 30, 2016) of \$21.31 per sq. m (\$1.98 per sq. ft.) for all areas contributing to the total FSR calculation.

With 30,878 sq. m (332,368 sq. ft.) of eligible floor area proposed for the site, a public art budget of approximately \$658,089 is anticipated.

The Public Art rate is finalized at the development permit stage and is subject to periodic adjustments to address inflation.

Offered Public Benefits:

Community Amenity Contribution (CAC) – In the context of the City's Financing Growth Policy, an offer of a community amenity contribution to address the impacts of rezoning can be anticipated from the owner of a rezoning site. Such a CAC is typically made through the provision of either on-site amenities or a cash contribution towards other public benefits and they take into consideration community needs, area deficiencies and the impact of the proposed development on City services.

In-kind Contributions

The CAC offering will consist of the in-kind turnkey delivery of at least 25% of the proposed residential area for social housing, excluded from this calculation is the floor area that is secured for market rental housing. The City has taken into account that the applicant has voluntarily committed to delivering the project to a high sustainability standard known as Passive House, and is also including five floors of secured market rental in the project further described below.

Social Housing – The applicant has offered a total CAC package of \$70,000,000, consisting of in-kind turnkey delivery of at least 25% of the proposed residential area, excluded from this calculation is any floor area that is secured market rental housing, and no less than, 8,816.9 sq. m (94,904 sq. ft.) currently estimated at 102 units. Staff have reviewed the applicant's development pro forma and concluded that the total CAC value offered by the applicant is appropriate and recommend that the offer be accepted.

Secured Market Rental Housing – The applicant also agreed to deliver a minimum of 50 rental units in the development, approximately 3,226 sq. m (34,724 sq. ft.) of rentable floor area as market rental housing, plus related parking. The obligation will be secured by a Housing Agreement registered on title to the Rezoning Lands as a Section 219 Covenant.

See Appendix F for a summary of all of the public benefits for this application.

FINANCIAL IMPLICATIONS

The site is subject to both the City-wide DCL and City-wide Utilities DCL. Based on rates in effect as of September 30, 2019, it is anticipated that the project will generate approximately \$9,392,720 in DCLs from the market residential floor area. Social housing is exempted from DCLs under the provisions of the Vancouver Charter and the DCL By-law. The value of this exemption is estimated to be approximately \$2,681,987.

The applicant will be required to provide new public art on site or make a cash contribution for off-site public art, at an estimated value of approximately \$658,089.

The market rental housing, secured by a Housing Agreement and Section 219 Covenant for 60 years or the life of the building, will be privately owned and operated.

As noted in the Public Benefits section, the applicant has offered an in-kind CAC valued at \$70,000,000, consisting of turn-key social housing of at least 25% of the proposed residential area, excluding from this calculation any floor area that is secured rental housing, and no less than 8,816.9 sq. m (94,904 sq. ft.), currently estimated to 102 social housing units.

Consistent with Council policies, all non-market housing projects are expected to be selfsustaining and require no further operating subsidies, property tax exemptions, and/or financial guarantees from the City.

The City will work with its housing partner(s) (to be selected through a Request for Proposals) on an operating model and tenant mix that optimizes long-term viability of the project that reflects the objectives of the West End Plan and the Housing Vancouver Strategy and aligns with the needs/opportunities across the Vancouver Affordable Housing Endowment Fund (VAHEF or non-market housing portfolio). The lease payment for the site will be based on affordability delivered. Any revenues generated from the project, lease payment and future operating surpluses, will be reinvested for affordable housing within VAHEF.

CONCLUSION

Staff have reviewed the application to rezone the site at 1059-1075 Nelson Street from RM-5A to CD-1 to permit development of a 60-storey, Passive House residential building that includes 102 social housing units, 50 market rental units and 328 market strata units and conclude that the application is consistent with the objectives of the *West End Community Plan* and *Rezoning Policy for the West End*. Further, staff conclude that the proposed form of development is an appropriate urban design response to the site and its context, and is supportable.

The General Manager of Planning, Urban Design and Sustainability recommends that the rezoning application be referred to Public Hearing together with a draft CD-1 By-law as generally shown in Appendix A. Further it is recommended that, subject to the Public Hearing, the application including the form of development, as shown in the plans in Appendix E, be approved in principle, subject to the applicant fulfilling the Conditions of Approval in Appendix B.

* * * * *

1059-1075 Nelson Street DRAFT BY-LAW PROVISIONS

Note: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

Zoning District Plan Amendment

1. This By-law amends the Zoning District Plan attached as Schedule D to By-law No. 3575, and amends or substitutes the boundaries and districts shown on it, according to the amendments, substitutions, explanatory legends, notations, and references shown on the plan marginally numbered Z- (___) attached as Schedule A to this By-law, and incorporates Schedule A into Schedule D, to By-law No. 3575.

[Note: Schedule A, not attached to this appendix, is a map that amends the City of Vancouver zoning map. Should the rezoning application be referred to public hearing, Schedule A will be included with the draft by-law that is prepared for posting.]

Designation of CD-1 District

2. The area shown within the heavy black outline on Schedule A is hereby designated CD-1 ().

Uses

- 3. Subject to Council approval of the form of development, to all conditions, guidelines and policies adopted by Council, and to the conditions set out in this By-law or in a development permit, the only uses permitted within CD-1 (), and the only uses for which the Director of Planning or Development Permit Board will issue development permits are:
 - (a) Dwelling Uses, limited to Multiple Dwelling; and
 - (b) Accessory uses customarily ancillary to the uses permitted in this section.

Conditions of Use

- 4.1 The design and layout of at least 35% of the strata dwelling units must:
 - (a) be suitable for family housing;
 - (b) include two or more bedrooms, of which:
 - (i) at least 25% of the total dwelling units must be two-bedroom units; and
 - (ii) at least 10% of the total dwelling units must be three-bedroom units; and
 - (c) comply with Council's "*High Density Housing for Families with Children Guidelines*".
- 4.2 The design and layout of at least 35% of the secured market rental dwelling units must:

- (a) be suitable for family housing;
- (b) include two or more bedrooms; and
- (c) comply with Council's "*High Density Housing for Families with Children Guidelines*".
- 4.3 The design and layout of at least 50% of the dwelling units used for social housing must:
 - (a) be suitable for family housing;
 - (b) include two or more bedrooms; and
 - (c) comply with Council's "*High Density Housing for Families with Children Guidelines*".

Floor Area and Density

- 5.1 Computation of floor space ratio must assume that the site consists of 1,608 sq. m, being the site size at the time of the application for the rezoning evidenced by this Bylaw, prior to any dedications.
- 5.2 The floor space ratio for all uses combined must not exceed 24.7.
- 5.3 The floor area used for social housing must be no less than the greater of 8,817 sq. m or 25% of the total floor area of the project remaining after subtracting the floor area used for secured market rental housing.
- 5.4 Computation of floor area must include all floors having a minimum ceiling height of 1.2 m, including earthen floor, both above and below ground level, measured to the extreme outer limits of the building.
- 5.5 Computation of floor area must exclude:
 - (a) open residential balconies or sundecks and any other appurtenances which, in the opinion of the Director of Planning, are similar to the foregoing, except that:
 - (i) the total area of all such exclusions must not exceed 12% of the permitted floor area for dwelling units; and
 - (ii) the balconies must not be enclosed for the life of the building;
 - (b) patios and roof gardens only if the Director of Planning first approves the design of sunroofs and walls;
 - (c) where floors are used for off-street parking and loading, the taking on or discharging of passengers, bicycle storage, heating and mechanical equipment, or uses which in the opinion of the Director of Planning are similar to the foregoing, those floors or portions thereof so used, which are at or below the

base surface, except that the exclusion for a parking space must not exceed 7.3 m in length; and

- (d) all residential storage area above or below base surface, except that if the residential storage area above base surface exceeds 3.7 m² for a dwelling unit there will be no exclusion for any of the residential storage area above base surface for that unit.
- 5.6 Computation of floor area may exclude, at the discretion of the Director of Planning or Development Permit Board:
 - (a) residential amenity areas, except that the exclusion must not exceed 10% of the permitted floor area of the residential floor area;
 - (b) despite section 5.4, an area equal to the area occupied by the insulation thickness in a Passive House building that exceeds the thermal energy demand intensity in the Building By-law, as verified by a building envelope professional, to a maximum exclusion of 270 mm of thickness;
 - (c) an area equal to the area occupied by heat recovery ventilators and connected shafts in a Passive House building that exceeds the applicable thermal energy demand intensity in the Building By-law, to a maximum exclusion of 2.8% of permitted floor area;
 - (d) an area equal to the area occupied by the insulated slab band in a Passive House building; and
 - (e) an area equal to the area occupied by a mass tuned damper room at the roof level in a Passive House building.
- 5.7 The use of floor area excluded under sections 5.5 and 5.6 must not include any use other than that which justified the exclusion.

Building height

6. Building height measured from base surface must not exceed 169.3 m to the top of parapet and 178.5 to the top of the mechanical screening on the roof.

Horizontal angle of daylight

- 7.1 Each habitable room must have at least one window on an exterior wall of a building.
- 7.2 The location of each such exterior window must allow a plane or planes extending from the window and formed by an angle of 50 degrees, or two angles with a sum of 70 degrees, to encounter no obstruction over a distance of 24.0 m.
- 7.3 Measurement of the plane or planes referred to in section 7.2 must be horizontally from the centre of the bottom of each window.

- 7.4 The Director of Planning or Development Permit Board may relax the horizontal angle of daylight requirement:
 - (a) the Director of Planning or Development Permit Board first considers all the applicable policies and guidelines adopted by Council; and
 - (b) the minimum distance of the unobstructed view is not less than 3.7 m;
- 7.5 An obstruction referred to in section 7.2 means:
 - (a) any part of the same building including permitted projections; or
 - (b) the largest building permitted under the zoning on any site adjoining CD-1 (____).
- 7.6 A habitable room referred to in section 7.1 does not include:
 - (a) a bathroom; or
 - (b) a kitchen whose floor area is the lesser of:
 - (i) 10 % or less of the total floor area of the dwelling unit, or
 - (ii) 9.3 m²

Acoustics

8. A development permit application for dwelling uses must include an acoustical report prepared by a licensed professional acoustical engineer demonstrating that the noise levels in those portions of dwelling units listed below will not exceed the noise levels expressed in decibels set opposite such portions of the dwelling units. For the purposes of this section, the noise level is the A-weighted 24-hour equivalent (Leq24) sound level and will be defined simply as noise level in decibels.

Bedrooms35Living, dining, recreation rooms40Kitchen, bathrooms, hallways45	Portions of dwelling units	Noise levels (Decibels)
		40

Zoning and Development By-law

9. Sections 2 through 14 of the Zoning and Development By-law apply to this CD-1 ()

* * * * *

1059-1075 Nelson Street CONDITIONS OF APPROVAL

Note: If the application is referred to a Public Hearing, these Conditions of Approval will be referenced in the Summary and Recommendations included in the hearing agenda package. Any changes to the conditions approved by Council will be contained in its decision. Applicants are advised to consult the hearing minutes for any changes or additions to these conditions.

PART 1: CONDITIONS OF APPROVAL OF FORM OF DEVELOPMENT

Note: Consideration by Council at the Public Hearing of the proposed form of development is in reference to plans prepared IBI Group Architects in conjunction with WKK Architecture, received March 1, 2019 and provides that the Director of Planning may allow minor alterations to this form of development when considering the detailed scheme of development submitted with the development application.

THAT, prior to approval by Council of the form of development, the applicant shall obtain approval of a development application by the Director of Planning who shall have particular regard to the following:

Urban Design

- 1.1 Design development to mitigate neighbourhood impacts by reducing the massing of the tower as follows:
 - (a) floor plate depth to be no more than 27.4 m (90.0 ft.),
 - (b) floor plate width to be no more than 30.5 m (100 ft.) on average, and no more than 28.3 m (93 ft.) on floors 1 to 16,
 - (c) setback from Nelson Street to be at least 3.7 m (12.1 ft.), and
 - (d) setback from adjacent properties to the average floor plate to be at least 5.0 m (16.4 ft.).

Notes to Applicant: Intent is to reduce the effects of the proposed floor plate on public and private views, shadowing and daylight. In particular, the building should be pulled further back from Nelson Street to improve daylight and sunlight access to Washington Court and provide a setback consistent with the existing RM-5B zoning. This can be achieved without losing the distinctive silhouette of the tower by reducing the width and depth of the unoccupied recesses on the Nelson and lane sides. A minimum of 24 m (80 ft.) separation must be maintained between towers, which can be accomplished by providing a setback of 12 m (40 ft.) from the enclosed portion of the building to the centre line of Ted Northe Lane. Open air balconies above the third floor may extend into the Nelson Street setback up to 1.8 m.

1.2 Design development to provide a 2.5 m setback from the east property line including a public passage and landscaping.

Note to Applicant: Intent is to provide a route between Nelson Street and Ted Northe Lane and to contribute to the pedestrian network of streets and lanes in the West End, at a scale commensurate with the site size. A surface statutory right of way is required.

1.3 Design development to provide a pedestrian route within the statutory right of way, suitable for persons with disabilities, from Ted Northe Lane to Nelson Street.

Note to Applicant: The design should provide a wide, smooth and obstacle-free passage on this site, coordinated with the proposed design of the adjacent eastern property. Pedestrian travel should not be dependent on the adjacent development. Sight lines, fixtures and planting should encourage accessible travel through this passage. See also Landscape conditions.

1.4 Design development to improve the livability of social housing units by increasing their access to daylight.

Note to Applicant: Units should meet horizontal access to daylight regulations.

1.5 Confirmation of the additional insulation and ventilation area for Passive House must be provided at each stage of review, or the tower must be reduced to the dimensions in the West End Community Plan including a floor plate of 697 sq. m. (7,500 sq. ft.) or less.

Note to Applicant: The proposed design is larger than the maximum dimensions and tower floor plate under the West End Community Plan for this site, while the site is the smallest size that qualifies for tower consideration, which presents a challenging contrast. In recognition of the space occupied by insulation and equipment that is beyond the requirements of the Vancouver Building By-law in order to achieve certification under the Passive House standard, the plate size and height has been increased. The required amounts must be confirmed by a CPHC or a registered professional.

1.6 Design development to enhance the pedestrian experience along the laneway interface.

Note to Applicant: On-site improvements should include glare-free pedestrian lighting, landscaping, seating, high quality paving treatments and other public realm improvements, coordinated with lane improvements acceptable to Engineering Services.

1.7 Provision of a highly durable and high performance exterior design, consistent in quality with the rezoning application.

Note to Applicant: Intent is to maintain the proposed quality in all aspects, including but not limited to appearance, durability, and energy performance. The application notes the use of curved metal panels, shows the detailing for complex intersections in plan and elevation, and specifies high performance components such as triple-glazed windows with thermally broken frames. Material choices, including visible areas such as wall returns and soffits, should be noted on the elevation drawings.

1.8 Design development to ensure service equipment, including window washing infrastructure and cell tower and antennae elements, do not protrude into the public view cone(s).

Note to Applicant: Window washing fixtures should be concealed when not in use.

- 1.9 Design development as required to mitigate any wind effects from the tower to pedestrian areas at grade, as recommended by registered professionals with relevant expertise.
- 1.10 Design development of lighting and equipment to mitigate effects on new and existing residences.

Note to Applicant: Measures should include confining the light from exterior fixtures to the property, quieting measures on gates, and acoustic shrouds on equipment located near to grade.

1.11 Submission of a bird friendly strategy for the design of the building.

Note to Applicant: The strategy should identify any particular risks with regard to the Bird Friendly Design Guidelines. See also Landscape conditions for measures in the open space design.

Crime Prevention Through Environmental Design (CPTED)

- 1.12 Design development to respond to CPTED principles, having particular regards for:
 - (a) theft in the underground parking;
 - (b) residential break and enter;
 - (c) mail theft; and
 - (d) mischief in alcove and vandalism, such as graffiti.

Landscape Design

- 1.13 Provision of a detailed Landscape Plan illustrating soft and hard landscaping; Note to applicant: The plans should be at 1/8": 1 ft. scale minimum. The Plant list should include the common and botanical name, size and quantity of all existing/ proposed plant material. Plant material should be clearly illustrated on the Plan and keyed to the Plant List. The landscape plan should include the public realm treatment (to the curb) and all existing or proposed street trees, adjoining walkways, surface materials, PMT/Vista transformers and public utilities such as lamp posts, hydro poles, fire hydrants.
- 1.14 Provision of detailed architectural and landscape cross sections (minimum 1/4" inch scale) through common open spaces, semi-private patio areas and the public realm; Note to applicant: the sections should illustrate, the slab design and location, the soil profile, tree root ball, tree canopy and any associated landscaping. For private patios and amenity areas, illustrate and dimension planters on slab, planter sizes (inside dimension), soil, root ball, retaining walls, steps, patios and portions of the adjacent building, such as residential units or amenity rooms.
- 1.15 Provision of a "Tree Management Plan".

Note to Applicant: It is preferred that the arborist tree management plan become the primary document for tree removal/ protection related matters.

1.16 Provision of an arborist "letter of undertaking" to include signatures by the owner, contractor and arborist.

Note to Applicant: The signatures confirm that all parties are aware of the roles and responsibilities and that the project is on track to satisfy the steps and recommendations outlined by the arborist. For example, advanced planning will be needed to ensure that certain works, such as site supervision checkpoints, are coordinated.

1.17 Coordination for the provision of new street trees or any proposed City owned tree removals adjacent to the development site, where applicable;

Note to Applicant: New street trees to be shown and confirmed on the development permit plans. Contact Engineering (604.871.6131) to confirm tree planting locations and Park Board (604.257.8587) for tree species selection and planting requirements. Provide a notation on the plan as follows, "*Final spacing, quantity and tree species to the satisfaction of the General Manager of Engineering Services. New trees must be of good standard, minimum 6cm caliper, and installed with approved root barriers, tree guards and appropriate soil. Root barriers shall be 8 feet long and 18 inches deep. Planting depth of root ball must be below sidewalk grade. Call Park Board for inspection after tree planting completion".*

1.18 Provision of high efficiency irrigation for all planted areas and hose bibs for all patios and common areas greater than 100 sq. ft.

Note to Applicant: On the plan, illustrate irrigation connection points and hose bib symbols accurately and provide a highlighted note to verify the irrigation is to be designed and constructed. Hose bibs are requested to encourage patio gardening and hand watering on private patio and amenity decks.

- 1.19 Provision of an outdoor Lighting Plan.
- 1.20 Design development to provide a significantly higher quality landscape in lieu of previous Atrium Gardens, having a strong and definitive curvilinear concept, in keeping with the architectural expression.
- 1.21 Design development to strengthen the public-private interface to achieve a pedestrian friendly landscape on private property all around the site at ground level.

Note to Applicant: East edge should include a clear pedestrian passage along the SRW portion. The west edge should ensure there is sufficient buffering to the adjacent property. The Ted Northe Lane and Nelson Street interface should be visually appealing, inviting and articulated with quality hard and soft materials.

- 1.22 Design development to further refine and enhance the sustainability strategy, by the following:
 - a) Explore the opportunities for intensive and extensive green roofs on all available flat rooftops, to be commonly accessible and usable and to provide open spaces with improved solar orientation;
 - b) Add substantially more landscape around all entry areas, to accent and soften them;

- c) Explore opportunities to add vines to any blank wall facades, ensuring the vine support is sturdy and low maintenance (avoid high maintenance modular "green wall" systems);
- d) Add planters with overarching shrubs to common upper level decks, to be visually accessible from below, softening the edges and consisting of woody evergreen plant material for year-round presence; and
- e) Explore opportunities to add edible plants, which can be used as ornamentals as part of the landscape design, in addition to urban agriculture plots.
- 1.23 Design development to expand programming to include Urban Agriculture plots in common outdoor spaces, where possible.

Note to Applicant: Urban agriculture plots should follow the City's Urban Agriculture Guidelines for the Private Realm and include infrastructure required, such as potting benches, hose bibs, etc., and be wheelchair accessible.

1.24 Design development to the landscape treatment to increase the volume of soil, tree canopy cover and planting on slab, by lowering the slab for planting on the main level to the greatest extent possible, rather than planting in raised planters.

Note to Applicant: Wherever possible, planted landscapes on slab should be designed to maximize soil depths. This will require integration of the landscape design and the structural plan. Soil depths should exceed CSLA Landscape Standard. At the perimeter of the building the slab can be angled downward (1 m across and 1.2 m down) to maximize contiguous soil volumes.

- 1.25 Design development to locate, integrate and fully screen parking garage vents in a manner which minimizes their impact on the architectural expression and the project's open space and public realm.
- 1.26 Design development to the Integrated Rainwater Management Strategy to explore opportunities for onsite rain water infiltration and soil absorption, as follows:
 - (a) maximize natural landscape best management practises;
 - (b) minimize the necessity for hidden mechanical water storage;
 - (c) increase the amount of planting to the rooftop areas, where possible;
 - (d) consider linear infiltration bio-swales along property lines, at lower site areas;
 - (e) use permeable paving;
 - (f) employ treatment chain systems (gravity fed, wherever possible); and
 - (g) use grading methods to direct water to soil and storage areas.

Note to Applicant: Refer to the City of Vancouver Integrated Rainwater Management Plan (I.R.M.P), Vol.1 & 2 for further information. A consulting engineer (subject matter expert) will need to be engaged and early phase soil analysis will be needed. Further comments may be outstanding at the development permit stage.

1.27 Provision of plans, plan details and documentation/calculations that support integrated rainwater management, including absorbent landscapes, soil volumes and detention systems, as follows:

- (a) detailed storm water report with calculations describing how the various best management practices contribute to the quality and quantity targets;
- (b) a separate soil volume overlay plan with schematic grading indicating intent to direct rainwater to infiltration zones; and
- (c) an overlay plan that shows amount and ratio of vegetative cover (green roof), permeable/impermeable hardscaping and notations describing the storage location of rainwater falling on each surface, including roofs.

Note to Applicant: The sustainable summary water balance calculations assume soil volumes are capable of receiving rainwater are only valid if water is directed from hard surfaces to infiltration zones.

- 1.28 Provision of a full-size, to scale and dimensioned Tree Management Plan, coordinated with survey and arborist report.
- 1.29 Provision of coordination between Landscape Plan and architectural Site Plan, for most updated information.

Sustainability

1.30 Buildings in the development must meet the requirements for Near Zero Emissions Buildings under the Green Buildings Policy for Rezonings. These requirements are summarized at <u>http://guidelines.vancouver.ca/G015.pdf</u>.

Note to Applicant: The applicant will be required to demonstrate that the development is on track to achieve the requirements at each review stage. For more detail on the above requirements and what must be submitted at each stage, refer to the most recent bulletin Green Buildings Policy for Rezonings – Process and Requirements.

1.31 The applicant commits the proposed development to exceed the sustainable design and emissions improvements required by the Green Buildings Policy for Rezonings, and to demonstrate leadership in sustainable design as required by the Higher Buildings Policy, through the following:

Passive House Design – The development shall be designed to certify under the Passive House standard, including a thermal energy demand of no more than 15 kWh/m² annually.

Engineering Services

- 1.32 The owner or representative is advised to contact Engineering to acquire the project's permissible street use. Prepare a mitigation plan to minimize street use during excavation and construction (i.e. consideration to the building design or sourcing adjacent private property to construct from) and be aware that a minimum 60 days lead time for any major crane erection / removal or slab pour that requires additional street use beyond the already identified project street use permissions.
- 1.33 Provision of any gas service to connect directly to the building without any portion of the service connection above grade within the road right of way.

- 1.34 Provision of construction details to determine ability to meet municipal design standards for shotcrete removal (Street Restoration Manual section 02596 and Encroachment By-law (#4243) section 3A) and access around existing and future utilities adjacent your site. Current construction practices regarding shotcrete shoring removals have put City utilities at risk during removal of encroaching portions of the shoring systems. Detailed confirmations of these commitments will be sought at the building permit stage with final design achievements certified and confirmed with survey and photographic evidence of removals and protection of adjacent utilities prior to building occupancy. Provision of written acknowledgement of this condition is required. Please contact Engineering Services for details.
- 1.35 Water Sustainability Act: Construction dewatering is a Water Use Purpose under the Water Sustainability Act requiring a Provincial approval or license. Applications for Provincial approvals or licenses can be completed online. The application will be received and accepted into the province's online system, and the provincial authorizations team strives for 140 days to get the approval to the applicant. The approval holder must be able to produce their approval on site so that it may be shown to a government official upon request. Dewatering before this approval is granted is not in compliance with the provincial Water Sustainability Act. Provide a letter confirming acknowledgement of the condition.
- 1.36 Provision of a landscape and site plan that generally reflect the improvements to be provided as part of the Services Agreement.
- 1.37 The following statement placed on the landscape plan; *This plan is "NOT FOR CONSTRUCTION" and is to be submitted for review to Engineering Services a minimum of 8 weeks prior to the start of any construction proposed for public property. No work on public property may begin until such plans receive "For Construction" approval and related permits are issued. Please contact Engineering, Development Services and/or your Engineering, Building Site Inspector for details."*
- 1.38 Provision of a finalized Transportation Demand Management (TDM) Plan to the satisfaction of the General Manager of Engineering Services with complete information on TDM measures proposed and including the following clarifications:
 - ACT-02 Improved Access to Class A bicycle Parking
 - Provision of concept design for excellent design of lighting, finishes, grades, convenience.
 - ACT-05 Bicycle Maintenance Facilities
 - Note and dimension location of facilities on plans.
 - Bicycle maintenance facilities to be located with convenient access to from Class A bicycle spaces.
 - Provision of an operational plan detailing:
 - A description of the amenities to be provided,
 - A means of providing access to all residents, commercial tenants, and the public (if applicable), and
 - Plan for maintaining these amenities.
 - If available, provision of any additional information regarding this measure (e.g. tool receipts, instructions for using an online sign-up portal, or marketing/ instructional materials) that demonstrates how the property

owner will operate, administer, and maintain this common facility.

- ACT-09 Walking Improvements Not accepted.
- SUP-01 Transportation Marketing Services
 - Provision of a description of the services to be provided.
 - If available, provision of any additional information regarding this measure (e.g., online signup portals or additional marketing materials) that demonstrates how the property owner will offer this service.
- PKG-02 Parking Supply Minimum vehicle parking as per By-Law to be provided for all site uses.
- 1.39 Subject to the acceptance of the finalized TDM Plan, entry into a TDM agreement to the satisfaction of the GMES which:
 - (a) Secures provision of funding towards long-term TDM monitoring fund in the amount of \$2 per square metre of social housing gross floor area.
 - (b) Secures the provision of TDM measures on the site.
 - (c) Permits the City to access and undertake post occupancy monitoring of the Transportation Demand Management (TDM) measures proposed.
 - (d) Agrees to make reasonable adjustments to the TDM measures as requested by the City, based on the TDM monitoring results.
- 1.40 Design development to improve access and design of bicycle parking and comply with the Bicycle Parking Design Supplement.
 - (a) Provision of details for the stacked bicycle parking system to be provided.
 - (b) Provision of automatic door openers on the doors providing access to the bicycle storage rooms.
 - (c) Show and label all bicycle access routes to reach the outside and confirm the use of the parking ramp, if required.
 - (d) All Class B bike parking to be provided on private property and should not encroach in any way on public property.
 - (e) Provision of a dedicated bicycle elevator with doors on both ends to allow bicycles to easily roll in from one end and roll out the other. The elevator to be a freight style elevator to comfortably accommodate two people with two bicycles and provide minimum interior dimensions of 5'-6" x 6'-8". A separate bicycle call button is to be provided on all floors requiring bicycle access to allow users to call the bicycle elevator directly. Accommodation of oversized bicycles within this elevator may increase requirements. Note to Applicant: A dedicated bicycle elevator is required for all bicycle spaces
- below the first underground level.1.41 Design Development to improve access and design of loading spaces and comply with
 - the Parking and Loading Design Supplement.
 - (a) Provision of Class B loading spaces independent from the pedestrian access into the building. Remove conflicts between pedestrians and loading area.
 - (b) Provision of convenient, internal, stair-free loading access to/from all site uses.
 - (c) Provide a clear unloading area or raised rear dock, minimum 1.8m wide, with suitable access to facilitate goods loading /unloading.

- 1.42 Design development to improve the parkade layout and access design and comply with the Parking and Loading Design Supplement to the satisfaction of the General Manager of Engineering Services, including the following:
 - (a) Improve two-way traffic flow at ramp turns throughout parking levels.
 - (b) Provision of the required passenger spaces to be publicly accessible and located no lower than Level P1. One passenger loading space is to be located at grade to provide flexibility.

Note to Applicant: the following information is required for drawing submission at the development permit stage to facilitate a complete Transportation review:

- A complete tech table is required showing the calculations for the minimum required parking, loading, bicycle spaces and the number of spaces being provided.
- All types of parking and loading spaces individually numbered, dimensioned, and labelled on the drawings.
- Dimension of column encroachments into parking stalls.
- o Dimensions for all columns in the parking levels.
- o Dimensions for typical parking spaces.
- Dimensions of additional setbacks for parking spaces due to columns and walls.
- Dimensions of manoeuver aisles and the drive aisles throughout all parking levels and at the parkade entrance and all gates.
- Section drawings showing elevations and minimum vertical clearances for parking levels, loading bays, ramps, and security gates. These clearances must consider mechanical projections and built obstructions.
- Areas of minimum vertical clearances labelled on parking levels.
- Design elevations on both sides of the ramps and drive aisles at all breakpoints, loading bays, disability spaces, and at all entrances. The slope and length of all the ramped sections at all breakpoints and drive aisles to be shown on the submitted drawings.
- Indicate the stair-free access route from the Class A bicycle spaces to reach the outside.
- Provision of stair-free loading access to all site uses.
- The location of all poles and guy wires to be shown on the site plan.

Green Infrastructure

- 1.43 Provision of a Storm Servicing and Drainage Plan detailing the different surface types and how rainwater will be directed or retained in each area. Include the following:
 - (a) Buildings, patios and walkway locations
 - (b) Underground parking extents
 - (c) Location of any proposed detention tank, water quality treatment and flow control system with connections to the sewer system
 - (d) All routing of rainwater throughout the site
 - (e) Area and depth of landscaping to support the claim of absorbent landscaping as a rainwater capture method
 - (f) Service connections (existing and proposed), including elevations, pipe geometry and slope.

- 1.44 The rainwater management system for the building and site shall be designed such that the peak flow rate discharged to the sewer under post-development conditions is not greater than the peak pre-development flow rate for the return period specified in the City of Vancouver's Intensity-Duration-Frequency curve (IDF curve). The City of Vancouver's 2014 IDF curve shall be utilized for pre-development design flow calculations, and the City's 2100 IDF curve, which takes into account the effects of climate change, shall be utilized for post-development design flow calculations.
 - (a) For this calculation, the 10-year, 5-minute time of concentration storm event should be used as this area is within the downtown core.
 - (b) Provide all calculations, including pre- and post-runoff coefficients, and a summary of all assumptions used in the model.
 - (c) When modeling, care should be taken to ensure only the volume of water actually directed to absorbent landscaping should be used and not the potential storage volume.
 - (d) Provide a digital copy of the model. Ensure sample calculations are provided and supporting documentation for all modelling parameters as well.
- 1.45 As per the Water quality requirements, the volume of water (24 mm for low pollutant generating surfaces like roofs and 48 mm for high pollutant generating surfaces like driveways) that leaves the site must be treated to a standard of 80% TSS removal by mass by using either individual BMPs that meet the standard or treatment trains of BMPs that, when combined, meet the standard.
 - a) Staff note that an 'Oil-Water Seperator' will be used to meet this requirement. For proprietary treatment devices:
 - i. Provide product information for all treatment practices.
 - ii. Products need to meet either the Washington State Department of Ecology's Technology Assessment Protocol (TAPE) or ISO 14034 ETV certification. The applicant may propose other technologies but must provide supporting information that shows the technology meets the standard.
- 1.46 Provision of detailed drawings of all proposed rainwater management systems including but not limited to, dimensions, inverts, stage-storage-discharge characteristics, design criteria and all assumptions.

Note to Applicant: Page 3 of the IRMP Report makes reference to controls implemented offsite. Please clarify what, if any, offsite improvements are being considered for this project. Additional comments will likely be provided if offsite improvements are proposed.

- 1.47 Prior to Development Permit issuance, an Operation & Maintenance (O&M) Manual for all rainwater systems (i.e. green infrastructure), must be submitted to the satisfaction of the Integrated Water Management Branch and will included as a schedule in the covenant detailed below. The O&M Manual shall be tailored specifically for the GI practices proposed on-site and submitted as a standalone document. The applicant is welcome to contact IWM Branch to discuss specific details. The O&M Manual shall include, but not be limited to the following components:
 - (a) Phasing Considerations (i.e. early stage requirements immediately following construction, and on-going requirements once the site is established.

- (b) A table or schedule that describes the level of effort and frequency of tasks required to maintain optimal performance for each individual component of the system.
- (c) Fact sheets (or similar reference material), for proposed plantings
- (d) Contact information for any proprietary systems to be located on-site (for example oil/grit separators).
- (e) Checklists to assist non-technical persons in assessing operation and maintenance performance and requirements.
- 1.48 A Section 219 Rainwater Management Agreement Covenant will be required once the Final RWMP is accepted by the City. The Final RWMP will be attached to the covenant and be register on the property's title. The Engineer of Record will be required to inspect the RWM system as necessary during and after construction in order to determine whether it has been substantially completed according to the covenant and Final RWM Plan. The EOR is to inform the City by letter bearing the Engineer's professional seal whether the system has been so constructed, and, if not, sealed "as-built" drawings showing the details of the modified system must be provided.

Housing

- 1.49 Design development to improve the livability and meet requirements for the social housing, as follows:
 - (a) Inclusion of required area for all social housing indoor and outdoor amenity spaces as per the Housing Design and Technical Guidelines;

Note to Applicant: Size of indoor amenity area to be increased and an accessible washroom and storage space to be added. Dimensions and areas of common indoor and outdoor spaces should be provided on the drawings.

(b) Elevators to be located within direct access of the primary entrance on Nelson Street;

Note to Applicant: The path to the elevators should be clear and easily identifiable from the main lobby. Requiring residents to move through an amenity room to access the elevators is not permitted.

- (c) Provision of social housing building common areas, including equipment storage and maintenance, general storage, and heat treatment room as per the Housing Design and Technical Guidelines;
- (d) Provision of a separate lockable janitor room with floor sink, space for storing bucket, mops, brooms, vacuum, ladder, supplies for cleaning, shelves for paper products, light bulbs, etc., appropriately sized to adequately meet the needs of the building. In addition, provide two smaller janitor's closets that contain a floor sink and storage distributed evenly to be accessible to upper levels;
- (e) Provision of 3.7 sq. m (40 sq. ft.) of in-suite storage, including a minimum clear horizontal dimension of 1.2 m in all directions;

Note to Applicant: If in-suite storage cannot be achieved in all units, priority is for in-suite storage for family units (2- and 3-bedrooms) and additional storage locker should be provided below grade where not possible. Accessible units must have in-suite storage.

- (f) Provision of washer/dryer units in all of the social housing units or washer/dryer units in the family units and accessible units and shared washers and dryers in a common laundry room for the studio and 1-bedroom units. Common laundry to be located adjacent to the non-market amenity room and ideally with visual connectivity and direct access to outdoor playground;
- (g) Provision of acoustic separation between plant room and social housing units; and
- (h) Provision of leak detection system located below the pool and relocation of market housing so the pool is not located directly above the social housing air space parcel.
- 1.50 Description of purpose of loading zone at social housing lane entrance.
- 1.51 For the social housing, provision of separate, lockable mechanical and electrical rooms to safely accommodate items such as hot water tanks, electrical panels, data lines, telephone and security equipment panels, gas, water or hydro meters and any other mechanical or electrical equipment that need to be accommodated within the building.
- 1.52 Provision of a minimum of 1 vehicle parking space for every 2 family units (2- and 3bedroom units) and 1 parking space for every 10 studio and 1-bedroom units, including accessible parking spaces, for the social housing units.

Note to Applicant: As part of the DP drawings, clearly mark the provision of vehicle parking spaces for the social housing units. Please also refer to relevant conditions under Engineering.

- 1.53 Design development to include accessible urban agriculture planters on Level 1 for social housing and market amenity area along with supporting infrastructure including high efficiency irrigation and /or hose bib, potting bench, tool storage and compost box.
- 1.54 Prior to issuance of development permit, applicant to display a sign on the site, throughout construction, that acknowledges that social housing is being provided as part of the City of Vancouver's initiatives. Sign design, format, and location to be approved by the City.
PART 2: CONDITIONS OF BY-LAW ENACTMENT

That, prior to enactment of the CD-1 By-law, the registered owner shall on terms and conditions satisfactory to the Director of Legal Services and to the General Manager of Planning and Development, the General Manager of Arts, Culture and Community Services, the General Manager of Engineering Services, the Director of Facility Design and Management and the Approving Officer, as necessary, and at the sole cost and expense of the owner/developer, make arrangements for the following:

Engineering Services

Arrangements to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services for the following:

2.1 Consolidation of Lots 11 and 12, Block 7, District Lot 185, Plan 92 to create a single parcel.

Note to applicant: Delete all structure proposed within the two BC Hydro rights of way registered as 327882M and 328433M; or make arrangements with the utility company for the release of these rights of way.

- 2.2 Provision of a 2.5 m statutory right-of-way along the east property line to facilitate a pedestrian connection between Nelson Street and Ted Northe Lane.
- 2.3 Subject to the acceptance of the finalized TDM Plan, entry into a TDM agreement to the satisfaction of the General Manager of Engineering Services.
- 2.4 Provision of a Section 219 Rainwater Management Agreement Covenant.
- 2.5 Provision of a Services Agreement to detail the on-site and off-site works and services necessary or incidental to the servicing of the site (collectively called the "services") such that they are designed, constructed and installed at no cost to the City and all necessary street dedications and rights of way for the services are provided. No development permit for the site will be issued until the security for the services are provided.
 - (a) Provision of adequate water service to meet the fire flow demands of the project.

Based on the confirmed Fire Underwriter's Survey Required Fire Flows and domestic flows submitted by Vector Engineering Services Ltd. dated March 26, 2019, no water main upgrades are required to service the development.

Note to Applicant: The main servicing the proposed development is 200 mm. Should the development require water service connections larger than 200 mm, the developer shall upsize the existing main on Nelson Street from 200 mm to 300 mm. The developer is responsible for 100% of the cost of the upgrading.

Should the development's Fire Underwriter's Survey Required Fire Flow calculation change as the building design progresses, a resubmission to the City of Vancouver Waterworks Engineer is required for re-evaluation of the Water System.

(b) Provision of adequate sewer (storm and sanitary) service to meet the demands of the project.

Local Servicing Upgrade:

- Implementation of development(s) at 1059-1075 Nelson St require the following in order to maintain acceptable SAN sewer flow conditions:
- Upsize 160 m of 200 mm SAN main to 375 mm on L/S Barclay St (Ted Northe Lane) from MH fronting 1075 Nelson ST (MH__FJD082) to MH at L/S Barclay St and Burrard St (MH__FJD08G).
- The lane has an architectural finish which shall be restored by the developer after construction
- o Note: The condition is shared with RZ-2018-00005 at 1070 Barclay St.

Off-site Servicing Upgrade: None

The lengths and diameters of these improvements are approximate and subject to detailed design by Developer's Engineer.

The developer may submit a flow monitoring study to confirm the extent of the upgrade, which is to be reviewed and accepted by City Engineer. The study shall provide data for minimum 3 months of wet weather flow and dry weather flow, to allow for model calibration and flow estimate verification. The required upgrades may be modified based on the outcomes of the flow monitoring study, at the discretion of the City Engineer. Contact utilities.servicing@vancouver.ca for direction prior to initiating any flow monitoring work.

The post-development 10-year flow rate discharged to the storm sewer shall be no greater than the 10-year pre-development flow rate. The pre-development estimate shall utilize the 2014 IDF curves, whereas the post-development estimate shall utilize the 2100 IDF curves to account for climate change.

Developer's Engineer to submit design brief, calculations and/or model, and design drawings to the City. All submittals including upgrade design drawings (90% design stage or better) are required to be reviewed and accepted by the City Engineer prior to development permit issuance.

Development to be serviced to the proposed 375 mm SAN and existing 300 mm STM sewers in L/S Barclay St (Ted Northe Lane).

Note to Applicant: The Sewer servicing plan for this area is under development. Developer to contact City Engineer prior to commencing design or analysis of sewer system as the upgrade requirement may be modified based on servicing plan (requirement will be approximately equivalent to the above condition).

(c) Provision of new or replacement duct banks adjacent the development site that meet current City standards. Duct banks are to consist of electrical and communication ducts sized to meet City needs in a configuration acceptable by the General Manager of Engineering Services and in conformance with applicable electrical codes and regulations. A detailed design will be required prior to the start of any associated street work. Note to Applicant: As-constructed documentation will be required that includes photographic and measured evidence of the installed number of conduits, their final locations and depths.

- (d) Provision of street improvements along Nelson Street adjacent to the site and appropriate transitions including the following:
 - o Minimum 2.44 m wide broom-finish saw-cut concrete sidewalk.
 - Adjustment to all existing infrastructure to accommodate the proposed street improvements.
- (e) Provision of improvements at the intersection of Thurlow Street and Nelson Street including:
 - Upgrades to the existing traffic signal including accessible pedestrian signal and associated enabling works to modify or relocate existing infrastructure. Adjustments to signal infrastructure may require a full rebuild of the signal.
 - New drop ramps at all corners, as required to accommodate the APS installation and to meet current standards.
 - Adjustment to all existing infrastructure to accommodate the proposed street improvements.
- (f) Provision of upgraded street lighting (roadway and sidewalk) adjacent to the site to current COV standards and IESNA recommendation.
- (g) Provision of lane lighting on standalone poles with underground ducts.
- (h) Provision of cash contribution of \$100,000 for traffic calming measures to address neighbourhood traffic impacts from the rezoning to Ted Northe Lane.

Note to Applicant: Appropriate traffic calming measures to be determined within five years of occupancy. The amount above includes funding for transportation analysis to assess potential requirements. Improvements delivered and timing will be at the sole discretion of the General Manager of Engineering Services.

- Provision of funding for the installation of parking regulatory signage on streets adjacent to the site to the satisfaction of the General Manager of Engineering Services.
- (j) Provision of street trees where space permits. Final spacing, quantity, location, and species to be reviewed and approved by City of Vancouver.
- 2.6 Provision of all utility services to be underground from the closest existing suitable service point. All electrical services to the site must be primary with all electrical plant, which include but not limited to System Vista, Vista switchgear, pad mounted transformers, LPT and kiosks (including non-BC Hydro kiosks) are to be located on private property with no reliance on public property for placement of these features.

In addition, there will be no reliance on secondary voltage from the existing overhead electrical network on the street right-of-way. Any alterations to the existing overhead/underground utility network to accommodate this development will require approval by the Utilities Management Branch.

Note to Applicant: Please ensure that in your consultation with B.C. Hydro that an area has been defined within the development footprint to accommodate such electrical plant. Please confirm that this space has been allocated and agreement between both parties has been met.

Social Housing

- 2.7 Make arrangements to the satisfaction of the Director of Legal Services in consultation with the General Manager of Arts, Culture and Community Services, the General Manager of Planning, Urban Design and Sustainability, and the Director of Facilities Planning and Development, to secure the applicant's obligation to design, build and deliver to the City an air space parcel containing the social housing units and associated parking and bike storage for such social housing. The agreement or agreements will include, but not be limited to, the following:
 - (a) Total net floor area for the social housing must be at least the greater of 8,817 sq. m. and 25% of the total floor area of the project, noting that the secured market rental housing floor area is excluded from the calculation of the social housing floor area requirement;
 - (b) All associated storage lockers, vehicle and bicycle parking to be provided is not included in the above net floor area;
 - (c) Breakdown of unit types (i.e. studios, one-bedroom units, two-bedroom units, accessible units, etc.), sizes, parking numbers and finish specifications must be as per the City's *Family Room: Housing Mix Policy for Rezoning Projects, High Density Housing for Families with Children Guidelines,* and the *Housing Design and Technical Guidelines*;

Note to Applicant: For the social housing, increase the number of family units (2and 3-bedroom) to at least 50% of the total social housing units. Provision of 5% accessible units is outlined in the *Housing Design and Technical Guidelines*, and should be distributed proportionally across unit types.

- Unit design and associated storage and amenity space must be as per the City's Family Room: Housing Mix Policy for Rezoning Projects and High Density Housing for Families with Children Guideline and Housing Design and Technical Guidelines;
- (e) The air space parcel for the social housing must be designed to be as autonomous as possible, with design considerations maximizing the efficiency and minimizing the cost of operations over the life of the project and within the larger development;
- (f) Grant the City an option to purchase, for a nominal purchase price, the social housing air space parcel, exercisable upon completion of construction of the social housing; and
- (g) Provide that, as a condition of issuance for the Building Permit, a Letter of Credit will be required in an amount equal to the estimated cost to complete and deliver

the Social Housing Parcel to the City. This includes the costs to finish and equip, provide all furnishings and equipment; complete all landscaping, if any; and cover all soft costs such as consultant design fees and permit fees for the Social Housing Parcel.

Note to Applicant: All social housing units must be designed and delivered in compliance with the City's *Housing Design and Technical Guidelines*.

Note to Applicant: The value of the Letter of Credit will be determined at the time of application for a Building Permit for the project.

- 2.8 Make arrangements to the satisfaction of the Director of Legal Services and the General Manager of Arts, Culture and Community Services to enter into a Housing Agreement applicable to the social housing air space parcel for 60 years or the life of the building, whichever is greater, which will contain the following terms and conditions:
 - (a) A no separate sales covenant;
 - (b) A no stratification covenant;
 - (c) A provision that none of such units will be rented for less than one month at a time;
 - (d) A requirement that all units comply with the definition of "social housing" in the applicable DCL By-law; and
 - (e) Such other terms and conditions as the General Manager of Arts, Culture and Community Services and the Director of Legal Services may in their sole discretion require.

Note to Applicant: This condition will be secured by a Housing Agreement to be entered into by the City by by-law enacted pursuant to section 565.2 of the Vancouver Charter.

- 2.9 The Social Housing will:
 - (a) be secured by letters of credit ("Amenity LCs") provided to the City prior to issuance of the building permit, the amount of which will be settled as part of the rezoning enactment documents; all LC's will be in compliance with and in the form set out in the City's Letter of Credit Policy AF-002-02: http://citywire.city.vancouver.bc.ca/departments/fs/treasury/documents/Policy -AF00202-LettersofCredit-2016-06-24.pdf; and
 - (b) to the extent possible, be built with separate dedicated building systems so that its operating costs are accounted for and managed separately from the balance of the respective development.

Secured Market Rental Housing

- 2.10 Make arrangements to the satisfaction of the Director of Legal Services and the General Manager of Planning, Urban Design and Sustainability to enter into a Housing Agreement applicable to the secured market rental units for 60 years or the life of the building, whichever is greater, which will contain the following terms and conditions:
 - (a) A no separate sales covenant;
 - (b) A no stratification covenant;
 - (c) A provision that none of such units will be rented for less than one month at a time;
 - (d) All rental units will be secured as rental for a term of 60 years or the life of the building, whichever is greater; and
 - (e) Such other terms and conditions as the General Manager of Planning, Urban Design and Sustainability and the Director of Legal Services may in their sole discretion require.

Note to Applicant: This condition will be secured by a Section 219 Covenant and a Housing Agreement to be entered into by the City by by-law enacted pursuant to section 565.2 of the Vancouver Charter prior to enactment of the rezoning bylaw.

Tenant Relocation Plan

- 2.11 Enter into a Section 219 Covenant and/or such other agreements as the General Manager of Arts, Culture and Community Services and the Director of Legal Services determine are necessary to require the applicant to:
 - (a) Provide a Tenant Relocation Plan to the satisfaction of the General Manager of Arts, Culture and Community Services as per the *Tenant Relocation and Protection Policy* that is effective at the time of submission of the Development Permit Application.
 - (b) Provide a notarized declaration that demonstrates that each tenant has been given written notice of the intent to redevelop the property; that indicates the number of units occupied on the date of the notice; and includes copies of a letter addressed to each tenant summarizing the Tenant Relocation Plan offer and signed as received by each tenant.
 - (c) Provide an Interim Tenant Relocation Report prior to issuance of the Demolition Permit. The Report must outline the names of any tenants who have ended their tenancy; the reason for its end (e.g. tenant decision or mutual agreement to end tenancy); the outcomes of their search for alternate accommodation (if assistance was requested by the tenant); the names of tenants still remaining in the building; the status of the applicant's search for relocation options (if assistance was requested by the tenant) and/or additional assistance rendered, as required through their Tenant Relocation Plan.

Note to Applicant: In the discretion of the General Manager of Arts, Culture and Community Services, if a long period of time elapses between Public Hearing and before issuance of Demolition Permit, the City may request an additional Interim Tenant Relocation Report be submitted.

(d) Provide a Final Tenant Relocation Report prior to issuance of the Occupancy Permit. The Report must outline the names of tenants; indicate the outcome of their search for alternate accommodations; summarize the total monetary value given to each tenant (moving costs, rents, any other compensation); and include a summary of all communication provided to the tenants.

Sustainability

2.12 The applicant will enter into an agreement with the City, on terms and conditions acceptable to the General Manager of Planning, Urban Design and Sustainability and the Director of Legal Services, that requires the future owner of the building to report energy use data, on an aggregated basis, for the building as a whole and certain common areas and building systems. Such an agreement will further provide for the hiring of a qualified service provider to assist the building owner for a minimum of three years in collecting and submitting energy use data to the City.

Soils

- 2.13 If applicable:
 - (a) Submit a site profile to the Environmental Protection Branch (EPB);
 - (b) As required by the Manager of Environmental Protection and the Director of Legal Services in their discretion, do all things and/or enter into such agreements deemed necessary to fulfill the requirements of Section 571(B) of the Vancouver Charter; and
 - (c) If required by the Manager of Environmental Protection and the Director of Legal Services in their discretion, enter into a remediation agreement for the remediation of the site and any contaminants which have migrated from the site on terms and conditions satisfactory to the Manager of Environmental Protection, City Engineer and Director of Legal Services, including a Section 219 Covenant that there will be no occupancy of any buildings or improvements on the site constructed pursuant to this rezoning until a Certificate of Compliance satisfactory to the City for the on-site and off-site contamination, issued by the Ministry of Environment, has been provided to the City.

Public Art

2.14 Execute an agreement satisfactory to the Director of Legal Services and the General Manager of Arts, Culture and Community Services for the provision of public art in accordance with the City's Public Art Policy, such agreement to provide for security in a form and amount satisfactory to the aforesaid officials; and provide development details to the satisfaction of the Public Art Program Manager (a checklist will be provided).

Note to Applicant: Please contact Karen Henry, Program Manager, 604-673-8282, to discuss your application

Note: Where the Director of Legal Services deems appropriate, the preceding agreements are to be drawn, not only as personal covenants of the property owners, but also as Covenants pursuant to Section 219 of the Land Title Act.

The preceding agreements are to be registered in the appropriate Land Title Office, with priority over such other liens, charges and encumbrances affecting the subject site as is considered advisable by the Director of Legal Services, and otherwise to the satisfaction of the Director of Legal Services prior to enactment of the by-laws.

The preceding agreements shall provide security to the City including indemnities, warranties, equitable charges, letters of credit and withholding of permits, as deemed necessary by and in a form satisfactory to the Director of Legal Services. The timing of all required payments, if any, shall be determined by the appropriate City official having responsibility for each particular agreement, who may consult other City officials and City Council.

* * * * *

1059-1075 Nelson Street DRAFT CONSEQUENTIAL AMENDMENTS

Note: By-laws will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting.

DRAFT AMENDMENTS TO THE NOISE CONTROL BY-LAW NO. 6555

Amend Schedule B (Intermediate Zone) by adding the following:

" [CD-1 #] [By-law #] 1059-1075 Nelson Street"

* * * * *

1059-1075 Nelson Street ADDITIONAL INFORMATION

1. Urban Design Panel Minutes

June 12, 2019

EVALUATION: Support with Recommendations (12-1)

• Introduction:

Rezoning Planner, Nicholas Danford, introduced the rezoning application by noting that this application at 1059-1075 Nelson Street proposes to rezone the subject property under the enabling policy, the West End Community Plan, Rezoning Policy for the West End and the Higher Buildings Policy from RM-5B to CD-1 to allow for a 60-storey Passive House residential building that includes social housing, rental units and strata condos.

The project proposes a 60-storey residential building has an absolute building height of 550 ft. with an additional 5 feet to consider the applicant's commitment to build to a Passive House, sustainable building standard. The roof appurtenance extends an additional 30 feet and is excluded from the height.

The building would include 113 social housing units, 49 market rental and 323 strata units. Total floor area of 431,500 sf on top of 8 levels of underground parking accessed from the rear lane. The project has a FSR of 24.94.

Site Size & Context

- Site size approx. 17,000 sq. ft.
- Located mid-block on Nelson between Thurlow and Burrard
- Frontage along Nelson 132 ft. and depth 132 ft.
- Currently the site houses one three storey walk up and one four storey walk up apartment containing 51 units.
- The site is surrounded by residential uses:
 - To the west of the site is Washington Court which is a 5 storey apartment building.
 - To the north across the lane is a rezoning application in process at 1040 1080 Barclay Street which are two 44-storey apartment buildings.
 - Also across the lane at the corner of Barclay and Burrard is the existing Patina Building, a 41-storey residential building beside the YMCA.
 - Directly to the east of the site is the location of the 59-storey residential building; along with an 8-storey building directly adjacent the site.
 - To the south across Nelson at 1058 Nelson is an 8-storey Class B listed heritage apartment building and along with another 6-storey apartment building.
- The site is located in Area E of the Burrard Corridor in the West End Community Plan.
- In this area building height is limited to 550 ft. and a maximum floor plate size of 7,500 sq. ft.

Senior Green Building Planner, Sailen Black, reviewed the energy requirements of the Green Buildings Policy for Rezonings which requires buildings to achieve either a performance limit for Thermal Energy Demand Intensity of 30 kWh/m², or be designed to a

Passive House certification. In addition, Mr. Black noted that the Higher Buildings Policy for 2019 requires a limit of 15 kWh/m², or Passive House certification. Mr. Black noted that the Passive House standard provides a dramatic reduction in energy use which helps respond to Council's declaration of a Climate Emergency. The standard is a rigorous 3rd party verification process with global expertise, and its application at this scale of building will help build the supply of both advanced building components and local consulting expertise. The voluntary selection of Passive House by the applicant demonstrates leadership in sustainable design and exceeds the requirements of both policies.

Development planner, Paul Cheng, noted that the rezoning application is supported by the Higher Buildings Policy and the Rezoning Policy for the West End. This particular site has been identified in this policy to attain a maximum overall building height of 550 ft., providing uniform design coordination, which penetrates through the Queen Elizabeth View Cone. The Site is kitty corner from Nelson Park, at the Thurlow and Nelson Street intersections. Smallest site dimensions for consideration of a tower under the West End are approximately 131'by 132'. The rezoning application is for a 60-storey residential tower, with a maximum height of approximately 550 ft. and a density of 24.94 FSR (approximately 431,594 square feet).

Advice from the Panel on this application is sought on the following:

- 1) Does the proposed building make "a significant contribution to the beauty and visual power of the city's skyline" with respect to:
 - a) the building's effect on the Queen Elizabeth View Cone;
 - b) the building's effect on the skyline from various other viewpoints?
- 2) Taking into account the overall width and depth of the tower floorplate (approximately 97' depth x 109.5' width), does the proposal provide a sufficient amount of variability in texture, modulation or visual interest to the elevations of the building?
- 3) Please provide any further commentary on the proposed architecture.

In addition to achieving a significant community benefit such as 25% social housing, the rezoning policy states the following: "Higher Buildings should be considered with careful effort to provide a lasting and meaningful public legacy to Vancouver and should include careful consideration of the following:

- *(i)* The building should include activities and uses of community significance and/or public amenity;
- (ii) The development should provide on-site open space that represents a significant contribution to the downtown network of green and plaza space;
- (iii) The building should not contribute to adverse microclimate effects;
- (iv) Careful consideration should be given to minimize adverse shadowing and view impacts on public realm including key streets, parks and plazas, as well as neighbouring buildings;..."
- 4) Given the expectations of the rezoning policy, please provide commentary on the proposed public amenities and public on-site open space.

Excerpt from Administrative Bulletin: "Building height and mass should minimize shadowing on parks, public open space and the West End Shopping "Villages" between the hours of 10:00 a.m. and 4:00 p.m. P.D.T. at the equinox. In the "Villages" during these hours, shadows should not extend beyond the curb of the sidewalks on the north side of the street. In the case of parks, depending on the activities in the parks (e.g. school yards), shadow analysis over a longer time frame may be required.

5) Has the proposal successfully demonstrated a "careful consideration to minimize adverse shadowing and view impacts on the public realm"?

The planning team then took questions from the panel.

• Applicant's Introductory Comments:

Applicant noted their goal for the project was to develop a high-quality Passive House landmark in Vancouver. The shape of the building was inspired by a geographic island with water flow on the sides of the island.

The split gap in the middle of the building allows it to look visually smaller.

There are 5 activity zones of amenity space. At the entry, there are market and non-market spaces. The east side has shared amenity area with 26 bike racks. On the west side, there is open space for the non-market housing with sustainable features.

There are plants all around the building. On the upper levels, there is an atrium garden. Every third level there will be a tree and garden on the south and north sides of the building. To respect the east and west neighbors, there will be a meter of trees and shrubs to provide neighbors privacy.

An energy model was completed for the project. This project uses a custom system to provide innovative energy efficiency.

The bottom of the building is less than the maximum width to provide neighbors more room.

The applicant team then took questions from the panel.

• Panel's Consensus on Key Aspects Needing Improvement:

Having reviewed the project it was moved by Ms. Besharat and Mr. Sharma and was the decision of the Urban Design Panel:

THAT the Panel SUPPORT the project with the following recommendations to be reviewed by City Staff:

- Further shaping and sculpting of the crown form to improve the crown.
- Further design development of the building form to help mitigate the floor plate in relation to the ground plane and public realm.
- Further design development of the public realm to support the interaction of the neighborhood.

- Explore and provide options for the public amenities.
- Further reconsider of the gap and its functionality in terms of meeting sustainability objective and growing capability of the plant material.
- Further consideration of the indoor and outdoor amenities for residents.

• Related Commentary:

There was general support for the project.

Panel members supported the Passive House approach of the project.

Many panel members supported the form of the building.

Most panel members liked the simplistic feel of the project.

Panel members supported the skyline and view cone consideration.

Panel members were concerned shadowing effect on the nearby school and park.

Most panel members were concerned about the lack of amenities for resident and community.

Some panel members noted the project lacks consideration of the public realm.

Panel members expressed concerns for the planting treatment on the building and the ability to provide a positive growing environment and to maintain the planting in the future, particularly in relation to the trees.

Some panel members showed concerns for the massing and the height of the building. Many panel members found that the overall size of floor plate was too large. Some panel members expressed concerns regarding the lack of community contribution.

• Applicant's Response: The applicant team thanked the panel for their comments.

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2. Public Consultation Summary

Rezoning Application (Submitted March 7, 2019)

Public Notification – A rezoning information sign was installed on the property on April 8, 2019. Approximately 9,006 notification postcards were distributed within the neighbouring area on or about May 7, 2019. Notification and application information, as well as an online comment form, was provided on the City of Vancouver Rezoning Centre webpage (<u>www.vancouver.ca/rezapps</u>).



Community Open House – A community open house was held on May 28, 2019 at the Sutton Place Hotel Vancouver at 845 Burrard Street. Staff, the applicant team, and 178 members of the public attended the open house.

Public Response – Public responses to the proposal have been submitted to the City as follows:

- In response to the May 28, 2019 open house, a total of 93 comment sheets were received from the public
- Approximately 52 emails and online comments were also received

Notification and Public Response

Total Notifications		9,006
Open House Attendees	178	
Comment Sheets	93	
Other Feedback	55	

Note: Each comment form or online response can include a number of comments which may reference points in support, potential concerns and questions or neutral/general statements. Therefore, staff focus on qualitative theming of comments and overall percentages are not provided.

Some duplication of responses may result where respondents chose to provide feedback to a rezoning application more than once using a number of mediums (open house comment sheet, online feedback, form letter, petition, etc.).

Comments of Support:

- Proposal contributes to tackling Vancouver's affordable housing crisis (Approximately 51 responses): Respondents acknowledged that having a mixture of housing types such as strata, rental, and social housing would be beneficial by creating housing for a variety of income levels. The proposal received favourable feedback because the proposal will create social housing and increase Vancouver's overall housing supply.
- Supportive of Passive House and ecofriendly design (Approximately 37 responses): Respondents felt the Passive House and other eco-friendly design features were a significant benefit of the proposal. Respondents believed Vancouver will be recognized as having the tallest Passive House building worldwide and that the project will reinforce Vancouver's objectives of being the Greenest City.
- Supportive of architecture and urban design treatments (Approximately 29 responses): Respondents felt that the building's architecture will add distinction to Vancouver's skyline and will complement the existing buildings in the surrounding area. Respondents referred to the building's architecture and urban design as appealing, attractive, modern, international, and world class.
- Creates a new iconic landmark building (Approximately 23 responses): Respondents acknowledged that the building would create an iconic new landmark within the City of Vancouver. The proposal was seen as having unique character and would be a welcomed addition to Vancouver's skyline.
- **Project fits well within the neighbourhood (Approximately 16 responses):** Respondents felt that the proposal adheres to the policies outlined within the West End Plan. In addition, the proposal would be a welcomed fit to the West End neighbourhood and would ultimately strengthen the City's Downtown.
- Proposed height, massing, and density is appropriate (Approximately 13 responses): Respondents considered the building's massing, height, density, and overall scale to be attractive and appropriate for the area.
- Supportive of the mixture of residential unit sizes (Approximately 7 responses): Respondents felt having residential units consisting of 2/3 bedrooms would give the opportunity for families to live in the neighbourhood.

Comments of Concern:

- Inappropriate height, massing, and density (Approximately 26 responses): Respondents felt the proposal's height, massing, and density was inappropriate for the area and that too much density was being placed on a single block. The proposal's massing was criticized for being too close to other buildings and would be immense for the size of the property. In addition, the height of the proposal was seen as an issue because as it would block views and sunlight. Respondents stated other neighbourhoods in the City of Vancouver should take on density rather than have it within the West End neighbourhood.
- Congestion created from new density and construction (Approximately 13 responses): Respondents believe that additional density in the neighbourhood as well as the project's construction will lead to automobile traffic and congestion, especially along Nelson Street and in the lane of the site.
- Shadowing of parks and public spaces (Approximately 12 responses): Respondents voiced their concern that the proposal will cast a sizable shadow during parts of the day on Nelson Park and along Nelson Street.
- Ensure housing is kept affordable (Approximately 11 responses): Respondents criticized the proposal's strata and higher end condos as being unaffordable and acknowledged that building rental and low income housing should be prioritized instead of building strata housing. Respondents acknowledged that the rental and social housing has to truly be affordable and kept affordable over time. In addition, respondents were concerned with the loss of the existing rental units and that at any new rental units will be more expensive.
- **Provide adequate tenant relocation (Approximately 7 responses):** Respondents voiced their concern that existing rental tenants of the site should be given priority when moving back into the new building, as well as be given support so they can afford the new rental housing.
- Criticism of architecture or urban design (Approximately 6 responses): Respondents felt that the proposal lacked visual aesthetics and that the curved architecture of the building should go along the entire building towards the base of the structure. The proposal's architectural design was criticised for being too bulky and that it would benefit from being more slender. The choice of glass was criticized as it would create glare off the building.
- Unsatisfied with proposed public benefits (Approximately 6 responses): Respondents felt that there were insufficient public benefits associated with the project. For example, the project's CACs could be directed towards community organizations in the West End or have a community amenity space that could be operated by local community organizations. In addition, respondents mentioned the opportunity of having a ground or top floor that would be publically accessible.

The following are the miscellaneous comments received from the public (note: these were topics that were not ranked as highly as above).

- Housing types should have shared entranceways
- Concern with the loss of private views
- Proposal could be taller
- Shadowing of public spaces is minimal
- Proposal will add diversity to the neighbourhood
- Support for proposal's public space design
- Insufficient public space design
- Support for proposal's amenity space
- Support for greenspace inside building
- Proposal should have a reduced number of parking spaces
- Proposal should include more rideshare or car-share.
- Lack of public art
- City has inadequate development processing times
- Proposal caters to developers and foreign market influences
- Proposal will create noise pollution and disruptions
- Proposal design needs to ensure mobility for those with disabilities
- Support for retail at grade

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1059-1075 Nelson Street

3. URBAN DESIGN ANALYSIS

This section provides a detailed assessment of the application received on March 1, 2019 and the material provided to the Urban Design Panel for June 12, 2019, including consideration of issues such as shadowing and views. The area around the site is described in the Site and Context section found earlier in this report, and a basic description of the proposed design is provided in the Form of Development section of the report. Additional description is provided in the comprehensive Minutes of the Urban Design Panel (see Appendix D). Floor plans and perspective drawings may be found in the attached Form of Development Drawings (see Appendix E).

Density

The subject site is currently zoned to permit a density of 2.75 FSR (floor space ratio) under the RM-5B zoning that is typical of the West End. The site is 40.2 m (132 ft.) wide by 40.2 m deep, with a total area of 1,608 sq. m (17,307 sq. ft.), which would allow for up to 4,422 sq. m of floor area under current zoning.

In 2013, the *West End Community Plan* set a new direction for growth along defined 'corridors' of increased height and density. The area between Burrard, Thurlow, Robson and Pendrell streets was defined as the Burrard Corridor. Within this corridor, density is evaluated under urban design considerations on a site by site basis rather than being specified in advance. However, the urban design recommendations in the Plan, such as height limits and floor plate sizes, will generally limit the total floor area that is achievable on a given site. In the Burrard Corridor area, the Plan recommends a cap of 696.8 sq. m (7,500 sq. ft.) on floor plates in order to maximize views and sunlight on sidewalks.

Vancouver's Zoning and Development By-law allows for floor area exclusion for certain building components used to achieve the Passive House standard, including up to 179 mm of wall insulation and up to 2% of area for a high performance heat recovery ventilator (HRV) system.

Height

The current RM-5B district schedule conditionally permits a height of up to 58.0 m (190.3 ft.). The zoning by-law also allows decorative roofs to be excluded from the height of buildings over 30.5 m (100 ft.), provided they do not add floor area and they help to integrate mechanical appurtenances such as elevator rooms.

Many sites in West End are also limited by view cones, which have different effects depending on their origin point. For this site, the primary view cone is the Queen Elizabeth View Cone (3.2.1). Under the *Higher Buildings Policy* (amended July, 2018), proposals may extend into the Queen Elizabeth view cone, subject to consideration of a number of goals including:

- Higher Buildings must establish a significant and recognizable new benchmark for architectural creativity and excellence, while making a significant contribution to the beauty and visual power of the city's skyline; and
- The buildings should achieve community benefits (i.e. as a recipient site for density transfers; retention of important heritage components; provision of significant cultural or social facilities; or provision of low cost housing);

- The building should include activities and uses of community significance and/or public amenity;
- The development should provide on-site open space that represents a significant contribution to the downtown network of green and plaza space;
- The building should not contribute to adverse microclimate effects;
- Careful consideration should be given to minimize adverse shadowing and view impacts on public realm including key streets, parks and plazas, as well as neighbouring buildings;
- Higher buildings should demonstrate leadership and advances in sustainable design and energy efficiency which must be accomplished by either achieving Passive House Certification; or achieving certain energy performance targets and connecting to a low carbon energy system.

Among the different policies in this section, the Higher Buildings Policy sets out the most onerous expectations for the design of new buildings, and it is the benchmark for much of the following commentary.

Additional policies include the *West End Community Plan*, which allows rezoning applications in the Burrard Corridor area between Burrard, Thurlow, Robson and Pendrell streets to be considered up to a maximum height of 550 ft. Under the *Rezoning Policy for the West End*, developments in this area (map area 'D') are expected to deliver 25% of their area as social housing as their primary contribution to public objectives, and to limit their typical floor plate to 696.8 sq. m (7,500 sq. ft.).

The West End – Tower Form, Siting and Setbacks Administrative Bulletin (January 2017) clarifies the intent of the Built Form Guidelines section of the West End Community Plan, sets out limits to the width and depth of floor plates, and seeks to minimize shadowing on public spaces including parks and the West End villages between 10 am and 4 pm at the equinoxes.

Finally, under the *Zero Emissions Building Catalyst Policy*, the Director of Planning may consider using discretion to facilitate a zero emissions building such as a Passive House project. Examples of regulations, policies and guidelines that may be considered for relaxation or variance include floor plate limits and built form guidelines.

Proposal

The application received in March 2019 proposes to rezone 1059-1075 Nelson Street from RM-5B to CD-1 to permit the development of a 60-storey Passive House residential building with an overall height of 585 ft. Passive House is a world standard for exceptional energy efficiency in buildings that will significantly advance the City's goals for zero emissions buildings if achieved at this scale. The subject property is 1,608 sq. m (17,307 sq. ft.) in area with a 40.2 m width and 40.2 m depth. The total floor area in the application is approximately 39,695 sq. m (427,271 sq. ft.) with a floor space ratio of 24.7.

The application proposes a singular residential tower extending to a height of 550 ft., which would pass into View Cone 3.2.1. The application also proposes to exclude up to 35.5 ft. from height to accommodate a rooftop structure including screens, mechanical rooms and Passive House features.

The proposed average floor plate size is 7,500 sq. ft., excluding the insulation and mechanical

amounts permitted to be excluded from floor area in the Zoning and Development By-law for a Passive House building. The tower provides 3.47 m wide side yards at its largest floors and 8.77 m from Ted Northe lane, more than the 2.1 m required in the current zoning but less than the 3.7 m recommended in the West End bulletin. The proposed setback from Nelson Street is 1.72 m to the south wall, less than the 3.7 m front yard required in zoning, and zero to the balcony. The application indicates shadow impacts to Nelson Park and the shopping area along Robson Street.

<u>Architecture</u>

The most distinctive feature of the design is its recurved silhouette on the skyline, creating a profile that is unique in the context of the West End. Deep recesses on the north and south sides, which are proposed to contain small trees on every third floor, create a vertical line that mirrors the curved profile. The east and west sides are relatively smooth in comparison. A balcony projection at level 17 provides open spaces for the adjacent amenity rooms.

The bottom third of the tower of the tower is straight-sided and uses smaller floor plates, leaving more room for on-grade open space and more setbacks from the adjacent residential sites to the east and west (Figure 2). The larger floor plates occur only on upper levels.



Figure 1: Tower Shape

Figure 2: Site Plan



The exterior façade is comprised of metal cladding panels with a finely brushed finish, and triple glazed windows with thermally broken frames. Modular wall panels are contemplated, with a thickness of 450 mm (17.7 in.) to accommodate the substantial amount of insulation that is a typical feature of Passive House projects. Additional insulation is proposed to follow the stepping floor plates that create the curved profile of the tower. The application contains more advanced drawings of the façade than is typical at the rezoning stage, which likely reflects the technical challenge of building a certified Passive House tower at a height that has never been done before.

The architectural design was generally supported by the Urban Design Panel, who felt that the design had responded to the Higher Building Policy goal for tall buildings to make a significant contribution to the beauty and visual power of the city's skyline. The Panel also expressed concern about the functionality of the deep recesses in terms of sustainability and the proposed

planting (see Appendix D for additional comments). Staff feel the distinctive profile of the tower is handled well, and supports this aspect of the design as helping to meet the skyline goal of the *Higher Buildings Policy*.



Community Benefits

The Higher Buildings Policy also recommends that proposals should achieve community benefits, i.e. as a recipient site for density transfers; retention of important heritage components; provision of significant cultural or social facilities; or provision of low cost housing. The application proposes to include 102 units of social housing, located on levels 2 to 15. Provision of 25% of the market strata floor area as social housing is required under the Rezoning Policy for the West End, but given the small size of the site and absence of a heritage opportunity, staff accepts the housing as meeting this part of the Higher Buildings Policy.

Open space

The Higher Building Policy recommends that projects provide on-site open space that represents a significant contribution to the downtown network of green and plaza space. Similarly, the West End Plan includes as a basic principle the protection and enhancement of 'green links' among its public spaces.

By providing somewhat smaller floor plates at its lower level, the design offers more open space at grade. In response to the goals of a green network, the application proposes to set aside 1 m (3.3 ft.) on its east side and plant a row of trees, which could make a visual contribution to the 2.47 m (8.1 ft.) right of way that is intended for a public pedestrian path on the adjacent site at 969 Burrard Street. However, there is no guarantee the Burrard project would be completed first. If Burrard does not proceed as planned, there would be no public passage.



Figure 4: Open Space at Grade

Commentary from the Urban Design Panel included consensus recommendations for further design development of the public realm to support the interaction of the neighborhood, and to explore and provide options for public amenities. Although a useful public plaza would be difficult to fit here, staff feel that the subject site can accommodate a 2.47 m right of way for public passage. This would better ensure a connection between Ted Northe Lane and Nelson Street, and make a more significant contribution to the network of green space in the West End.

Microclimate

The Higher Building Policy notes that the building should not contribute to adverse microclimate effects. The application notes that a wind engineer has been engaged and will continue to work with the applicant to minimize microclimate effects. Given the relatively simple form of the tower base, staff do not expect unusual effects to the public and recommend further work at the development permit stage.

Shadowing

The Higher Building Policy recommends that careful consideration be given to minimize adverse shadowing and view impacts on the public realm, including key streets, parks and plazas, as well as neighbouring buildings. The West End Plan likewise aims to protect and enhance public open spaces and parks.

The application indicates shadow impacts to Nelson Park and the shopping area along Robson Street. For this application, shadow impacts can be attributed to two factors: the considerable height of the building, which extends to the limit of the West End Policy, and the shape and size of the floor plates, which extend beyond the recommended limits for width and depth.

Shadowing Related to Height

At 550 ft. in height to the top of occupied space, the application will cast a shadow of considerable distance across the Burrard Corridor. The application also includes unoccupied mechanical and service spaces extending beyond the 550 ft. mark for up to 30 ft. of additional structure, which adds to the shadow cast.

The West End – Tower Form, Siting and Setbacks bulletin recommends that height and mass should minimize shadowing on parks, public open space and the West End Shopping "Villages" between the hours of 10:00 a.m. and 3:00 p.m. Pacific Daylight Time at the equinox. (At the time of this application in 2019, the Spring equinox was on March 20 and the Fall equinox was on September 22, and Daylight Savings Time was in effect in British Columbia from March 8 to November 1.)

During these times, the two spaces affected by the proposal are the grounds of Lord Roberts Elementary School and the north edge of Nelson Park.

Diagrams provided with the application show that shadowing onto Lord Roberts begins sometime before 10:00 am at and is off the school grounds before 11:00 am (light grey shadow). Narrow slivers of shadow also fall on Nelson Park, which occupies most of the block where Lord Roberts in located. These diagrams include the design for 969 Burrard Street, which has been approved as a rezoning but is not yet built. In Figure 5, Burrard Street is the wider shadow on Nelson Park (dark grey).



Figure 5: Shadow at Spring Equinox, 10:00 am

Shadowing at 10:00 am at the Fall equinox (in 2019) is similar, with the application showing the shadow as more advanced than in the Spring and therefor affecting less of the school. If the rezoning approved in 2017 for 969 Burrard Street (dark grey shadow) is built first, the tower from that site would account for the majority of the school and park shadowing.



Figure 6: Shadow at Spring Equinox, 11:00 am

By 11:00 am during the equinoxes, the shadow is nearly parallel with Nelson Street and has cleared all public park and school space.

Given the scale of height reduction necessary to avoid all shadow onto these spaces at the specified times, staff accept the shadowing associated with the proposed height as a consequence of the intended scale of the Burrard Corridor in the West End Plan. However, additional work is recommended on the shadowing associated with the proposed width in the following section.

The West End bulletin recommends that in the shopping "Villages," shadows should not extend beyond the curb of the sidewalks on the north side of the street before 3:00 pm at the equinox. In this application, limited amounts of incremental shadow (i.e. additions to existing shadows) on the public portion of the sidewalk are indicated after 3:00 pm at the Spring equinox.



More substantial shadows covering the public sidewalk and extending up the walls of some storefronts at the Fall equinox, but most of these are from existing buildings rather than the application.



Figure 7: Shadow at Fall Equinox, 4:00 pm

As the 4:00 pm shadows occur after the specified time, staff do not recommend changes to the design.

Shadowing Related to Plate Size and Shape

The proposed floor plate size is the maximum contemplated in West End policies at 696.8 sq. m (7,500 sq. ft.) on average and not including the wall insulation and mechanical amounts permitted in the Zoning and Development By-law in connection with a Passive House building. For commentary on the exclusion, see the section on Sustainable Design that follows. The application proposes to average the floor plates, in this case by making a number of plates (including the lower third of the tower) approximately 13.86 sq. m (149 sq. ft.) less than the average, and other plates on the upper floors larger. The two largest exceed the average by 39.07 sq. m. (421 sq. ft.).



Figure 8: Floor Plate Averaging

As indicated in the Form of Development section earlier in this report, staff are supportive of an averaging approach, which has been successfully used on other West End rezoning applications to support a diversity of shapes and forms. There do not appear to be undue impacts with the amount of averaging shown here (2% smaller or 5% larger) when compared to an equally large floor tower that is not averaged.

However, the design also features relatively deep indentations, especially on the north and south sides. These appear to be the largest contributor to the wider than recommended width of the tower. The *West End – Tower form, siting and setback* bulletin recommends that tower floor plates should be no more than 24.4 m (80 ft.) in width. The application provides a comparison showing the largest floor at approximately 33.54 m (110 ft.) in width, which is 21% or 5.84 m (19.2 ft.) wider than a square plan of the same total area, and 37% or 9.2 m (30 ft.) wider than recommended. The depth of the floor plate, which does not vary from one level to another, is also oversized relative to the recommended maximum.

Given a site size at the lowest limit that can be considered for a tall tower, the absence of a compelling reason for the proposed floor plate shape, and the amount of overage, staff recommend reducing the overall dimensions of the floor plate in order to reduce its impact on shadowing in the neighbourhood. Subsequent to the original application, the architects provided an indicative design to illustrate a floor plate with the same area but with substantially reduced indents and overall dimensions that retains the distinctive profile of the original tower with its smaller base. Staff are supportive of this direction and recommend conditions of approval at the development permit stage to secure the improved dimensions (see condition 1.1 in Appendix B).

View Impacts

While some impact to distant views is to be expected as a consequence of the development intensity intended for the Burrard Corridor in the *West End Plan*, and there is no policy to maintain distant views from private residences, the effect of a building that is significantly wider than anticipated should be reconsidered. In terms of distant views, the most affected residents are in nearby high-rise towers, like Wesley Place at 1022 Nelson Street and Patina at 1028 Barclay Street. The recommended conditions of approval to reduce the building depth and width should provide an improvement over the proposal.

The application does provide a setback of at least 80 ft. from other tall residential buildings, as recommended in the *Rezoning Policy for the West End*. In the case of the setback from the expected development on the other side of Ted Northe Lane, the application provides more than the recommended amount of separation from the wall of one tower to another. Repositioning the tower slightly north, in combination with the reduced plate depth, will help to open up the Nelson Street side and avoid balconies on the property line as proposed.

An application for a tower of this scale must also consider the impact to its immediate neighbours. In this respect, the enclosed space of the lowest three levels has been notably sculpted back from free-standing columns to reduce its massing relative to the levels above. The lower third of the project also contains the smallest floor plates. These design features help preserve more daylight and near views for the Washington Court residents facing the site, and reduces the impact on views and daylight for the future residents of social housing on the lower floors.

Sustainable Design

After the application was made, the applicants proposed additional increases in the building's overall area and mass to accommodate various design elements, presented as integral to the building achieving the Passive House standard. These requests include a centralized HRV system, further wall thickness for insulation, enclosure of the previously open sky-gardens on the front and rear facades, and flaring the building at the base in order to accommodate pillars within the envelope of the building.

The applicants requested these elements be excluded from the total floor area and floor plate size calculations. Based on updated material received on September 30, 2019, the amendments resulted in an increase to the average gross plate size to 8,108 sq. ft., with a 25.52 floor space ratio.

On consideration of the additional information provided by the Passive House consultants on the design team, staff recommend increasing the permitted exclusion for wall insulation to be up to 270 mm, and increasing the permitted exclusion for the HRV system to be up to 2.8%. These exclusions would apply to the floor space ratio calculation and floor plate size. As with the rezoning application design, the average floor plate excepting the insulation and HRV systems needed to achieve the Passive House standard must continue to meet the West End policy limit of 7,500 sq. ft. at the development permit stage.

The exclusion of other built elements that are not among the Zoning and Development By-law exclusions for Passive House is not supported, and these elements must be counted in the floor plate. This includes the proposed enclosed gardens on every third floor and the space above, and the contemplated enlargement or flare at the base of the building, and enclosure of part of the open balconies.

Conclusion

Staff have considered the proposed height, floor plate shape and plate size of the tower, within the context of this particular set of circumstances which includes a site with a limited frontage of 40.2 m (132 ft.) and the proximity of nearby residences; and conclude that the proposed form of development does not yet present an acceptable balance of multiple goals in the West End Community Plan and related policies. However, the recommended adjustments, especially those to the floor plate dimensions, will improve the relation of this development with its physical context.

In other respects, the application is successful in achieving a simple but distinctive silhouette that contributes to the diversity of the West End skyline, while also attaining an extremely high level of energy efficiency through the Passive House standard which is unparalleled at this height. The architectural design of the tower has been supported by the peer review provided by the Urban Design Panel, while also testing new approaches to sustainable design. Staff anticipate that the high level of design that has been demonstrated will continue through the future stages of the project.

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1059-1075 Nelson Street FORM OF DEVELOPMENT DRAWINGS

Site Plan

Typical Floor Plans *Typical Social Housing Floor*



Typical Smallest Floor



Typical Largest Floor



Elevations



North Elevation

West Elevation

Perspectives From Nelson Park



Birds Eye Perspective (Tower on the left)



Front Entryway



1059-1075 Nelson St SUMMARY OF TENANT RELOCATION PLAN TERMS

Tenant Relocation and Protection Requirements	Tenant Relocation Plan Offer Under the Tenant Relocation and Protection Policy, June 2019
Financial Compensation	 Compensation in the form of free rent, a lump sum payment, or a combination of both, has and will continue to be given for each unit eligible for the Tenant Relocation Plan according to the following schedule: 4 months' rent for tenancies up to 5 years; 5 months' rent for tenancies over 5 years and up to 10 years; 6 months' rent for tenancies over 10 years and up to 20 years; 12 months' rent for tenancies over 20 years and up to 30 years; 18 months' rent for tenancies over 30 years and up to 40 years; and 24 months' rent for tenancies over 40 years Many tenants received 2 months' compensation above the minimum required compensation outlined above.
Notice to End Tenancies	 Landlord will provide regular project updates to tenants throughout the development approvals process. A minimum of four months' notice to end tenancy after all permits are issued will be given (e.g. all development, building, and demolition permits in place).
Moving Expenses (flat rate or arrangement of an insured moving company)	 A flat rate of \$1,000 will be provided to all eligible tenants, exceeding the policy minimums of \$750 for a studio and 1-bedroom and \$1,000 for a 2- and 3-bedroom unit.
Assistance in Finding Alternate Accommodation (3 options)	 Applicants distributed the Tenant Needs Assessment Surveys. These surveys will be used in relocation efforts and to identify tenants' needs and preferences. Applicant has committed to monitor rental market and provide tenants requesting assistance with three options in Vancouver, including two options in the West End (unless otherwise agreed upon) that best meet the tenants' identified priorities. Options will be tailored to residents, wherever possible (e.g. pet friendly, smoke- free, mobility considerations). All options should rent at no more than Canadian Mortgage and Housing Corporation's average rents for the area, unless otherwise agreed to with the resident (i.e. resident may be looking for newer, bigger, unit etc. and prepared to pay more for such).

	 A relocation specialist has been retained and will be offered to all residents of both buildings.
Additional Support for Low Income Tenants or Tenants Facing Other Barriers to Appropriate Housing	 For low income tenants and tenants facing other barriers to housing, as defined in the TRP Policy, the applicant has committed to assisting in securing a permanent, suitable affordable housing option.
First Right of Refusal (Where starting rents are anticipated to be higher than what the tenant currently pays, provide a 20% discount off starting rents for any returning tenants)	• All eligible tenants will be offered the right of first refusal to return to one of the social housing units if eligible, or the new market rental units at 20 per cent below market rates as per the policy. Any subsequent rent increases for returning tenants will be in line with the Residential Tenancy Act.

1059-1075 Nelson Street PUBLIC BENEFITS SUMMARY

Project Summary:

To build a 60-storey tower with 102 social housing, 50 market rental and 328 market strata residential

Public Benefit Summary:

The project would also result in kind CAC contribution of \$70,000,000, a public art contribution and a DCL payment.

	Current Zoning	Proposed Zoning
Zoning District	RM-5B	CD-1
FSR (site area = 17,307 sq. ft.)	2.75	24.7
Floor Area (sq. ft.)	47,594 sq. ft.	427,272 sq. ft.
Land Use	Residential	Residential

Summary of Development Contributions Expected Under Proposed Zoning

City-wide DCL ¹	\$6,039,126
City-wide Utilities DCL ¹	3,353,593
Public Art	\$658,089
In-kind social housing units	\$70,000,000
TOTAL VALUE OF PUBLIC BENEFITS	\$80,050,808

Other Benefits (non-quantified components):

- 50 market rental units
- Pedestrian connection along the east side of the site facilitated by a statutory right-of-way.
- Passive House construction certification.

¹ Based on rates in effect as at September 30, 2019; rates are subject to future adjustment by Council including annual inflationary adjustments. DCLs are payable at building permit issuance based on rates in effect at that time. A development may qualify for 12 months of in-stream rate protection, see the City's <u>DCL Bulletin</u> for details.

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1059-1075 Nelson Street APPLICANT, PROPERTY, AND DEVELOPMENT PROPOSAL INFORMATION

APPLICANT AND PROPERTY INFORMATION

Street Address	1059 – 1075 Nelson Street
Property Identifier (PID) & Legal Description	005-605-946, Lot 11 Block 7 District Lot 185 Plan 92 015-749-916, Lot 12 Block 7 District Lot 185 Plan 92
Applicant/Developer	Henson Development
Architect	WKK Architects & IBI Group (IBI Architecture)
Property Owner	Nelson Street Residences Ltd., Inc.

SITE STATISTICS

Site Area 1,608 sq. m (17,308 sq. ft.)

DEVELOPMENT STATISTICS

	Permitted Under Existing Zoning	Proposed				
Zoning	RM-5B (Multiple Dwelling) District	CD-1				
Uses	Primarily residential with compatible retail, office, service and institutional uses	Residential				
Max. Density	2.75 FSR	24.7 FSR				
Floor Area	4,422 sq. m (47,594 sq. ft.)	Market strata 27,652.5 sq. m (297,649 sq. ft.) Market rental 3,225.5 sq. m (34,719 sq. ft.) Social housing 8,816.9 sq. m (94,904 sq. ft.) Total 39,694.9 sq. m (427,272 sq. ft.)				9 sq. ft.))4 sq. ft.)
Maximum Height	Outright: 18.3 m (60 ft.) Discretionary: 58 m (190 ft.)	Top of roof: 169.3 m (555.5 ft.) Top of mechanical screening: 178.5 m (585.5 ft.)				
Unit Mix		Social housing Market rental Market strata Total	1BR 54 30 148 232	2BR 24 20 116 160	3BR 24 - 64 88	Total 102 50 328 480
Parking, Loading and Bicycle Spaces	Per Parking By-law	Parking Bicycle Parking Loading Spaces		299 1,026 2		
Natural Assets Trees	On-site Trees – 2 City Trees – 2	On-site Trees Remove – 2 New – TBD City Trees Remove – 0 New – TBD				

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