

Perkins&Will



1040-1080 Barclay Street West

Development Permit Design Rationale Booklet

August 18, 2023





Executive Summary

1040-1080 Barclay Street is set to be a game changer.

This singular vision for a half block in the Burrard Corridor will provide for a diverse mix of housing types, building community and placemaking on the doorstep of the central business district and West End. Setting a new benchmark for social and environmental stewardship, the project's two 550' tall towers will meet stringent energy and thermal requirements (Step Code 4) while providing over 1000+ units of mixed housing for all income levels.

At the heart of the development, a mid-block courtyard between Ted Northe Lane and Barclay Street is set to be the project's star attraction, providing for an animated public realm at street level. With the intent of creating one of the most purposeful mid-block connections in this precinct, this new outdoor living room will be activated by neighbourhood foot traffic and public art – all while providing for five of the development's six “front doors.”

With the pair of towers sharing a common language in their material expression, the use of each tower is distinctly different - the East Tower is a mix of below market and market rental tenures with an active retail tenant, while the West Tower will have social housing in its podium and market condominiums in the tower, along with a 37-space childcare facility atop the podium and retail at grade, accessed at the intersection of Barclay and Thurlow Street. This mix of tenures is intended to set the stage for a vibrant and diverse demographic of residents, all within walking and cycling distance of the downtown core, Stanley Park, the West End, and Yaletown.

With the heart of the site between the towers envisioned as a locus for communal activity, this space will also host innovative green food assets, while below grade the project will provide an enhanced bike storage facility for the new residents' 2000+ bikes, in addition to a Mobi public bike share station which will be located at grade. Along with two new retail units along Barclay and Thurlow Streets, generous planting and landscape lighting along the street will animate the ground plane to ensure the public realm remains accessible and safe for all.

1040-1080 Barclay is set to emerge as a leader in both environmentally and socially sustainable design, especially in regard to community building and placemaking. It is the ambition of Bosa Properties and Kingswood Properties that this development may be held high as the project that set the bar for all to follow, **an exemplar for future developments of this size and density, in parallel with current City of Vancouver policies.**

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Corner of Barclay and Thurlow Street

Section 1.0

Context

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1.1 Regional Context

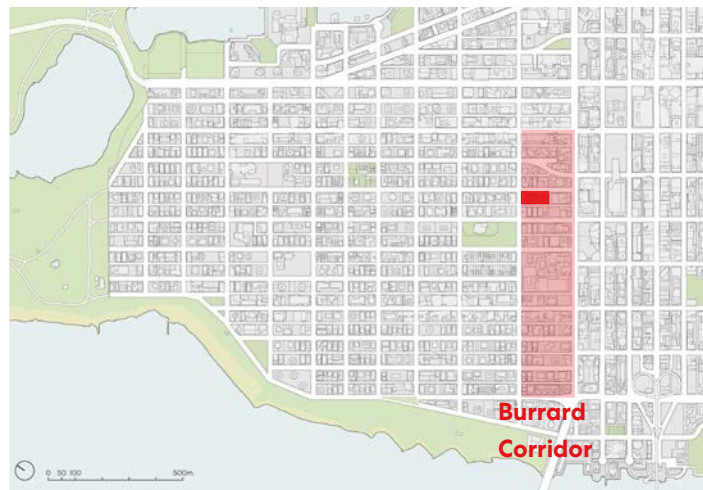
The 1040-1080 Barclay Street project site is located in the Burrard Corridor, a block-wide corridor between Burrard Street and Thurlow Street across downtown from Haro Street to Pacific Street.

The Central Business District (CBD) is the region's employment hub and is characterized by high density, high rise commercial properties, which contrasts with the medium to low-rise density of The West End, a predominantly residential neighbourhood with quiet leafy streets, parks, and beaches.

The Burrard Corridor is envisioned to marry the residential function of the West End with the high density of the CBD.

Being close both to the CBD and the West End, the site has excellent walkable access to a broad spectrum of services and businesses including: rapid transit, retail, restaurants, and entertainment.

With easy access to so much of the best Vancouver has to offer, walking and cycling are the most convenient modes of travel from the site for most purposes, and are anticipated to be the predominant means for most trips of the future residents.



1.2 Urban Context

The Burrard Corridor is currently a mix of low to medium rise residential buildings with a few high rise buildings. This characterization is set to change in the near future due to current the policies set out in the *West End Community Plan* for this area, which strategically calls for growth in this area through additional density.

In the immediate surroundings, there are several well-known landmark buildings, mostly on Burrard Street. On the same block: (1) the Robert Lee YMCA, (2) the First Baptist Church, and further south (3) St. Andrew's Wesley United Church, all of which are heritage buildings. On the eastern side of Burrard Street is (4) The Electra and (5) The Sheraton Wall Centre.

Immediately to the east and sharing a property line with the site on Barclay Street, is (6) The Patina, a 42-level residential tower completed in 2011.

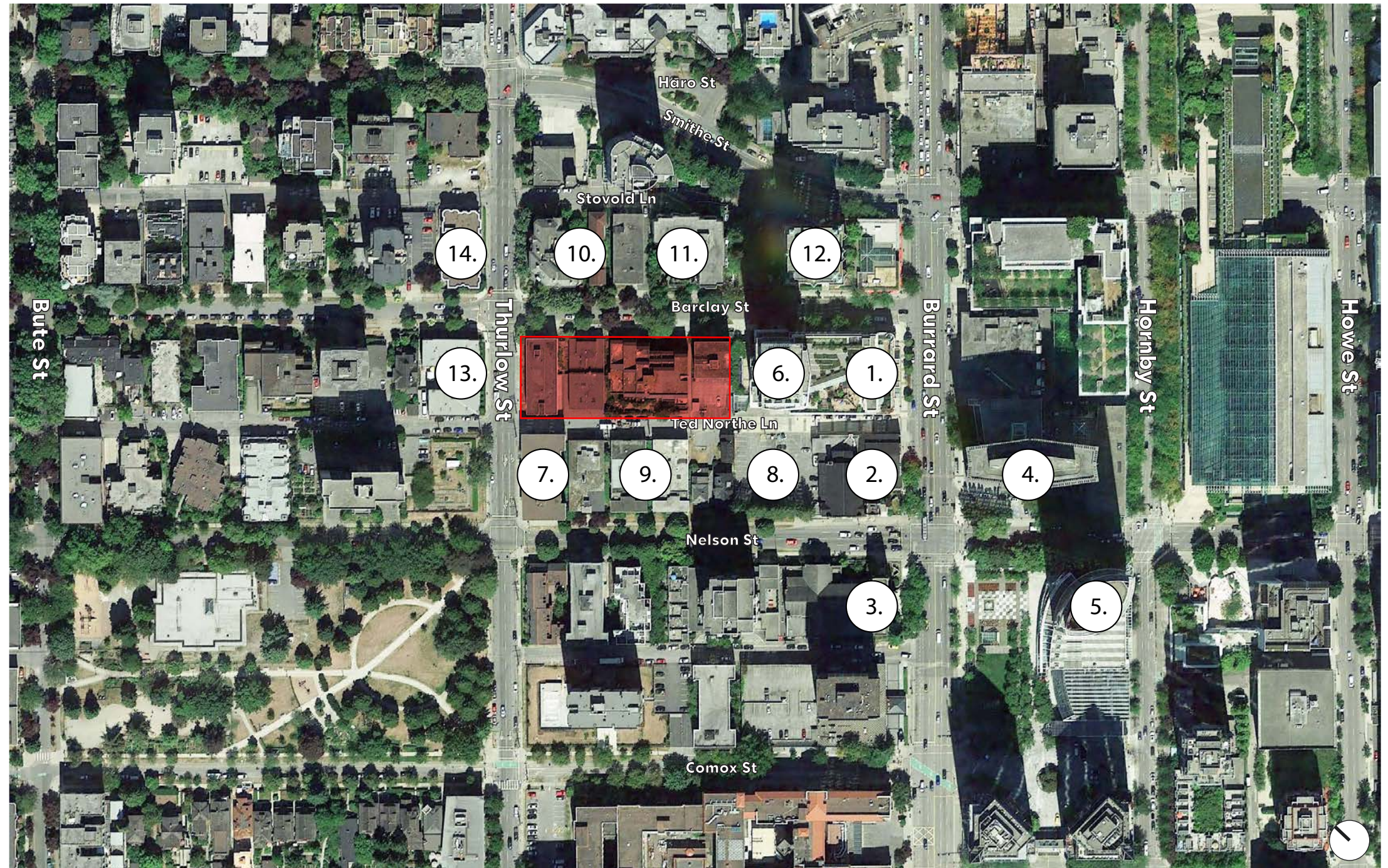
To the south of the Site across Ted Northe Lane, there are two sites of two future tall landmark residential towers, (8) The Butterfly and (9) Passive House, both approximately 550' high.

To the south of the Site on Thurlow Street is the 111-year-old, yellow brick faced, 5-storey apartment building (7) Washington Court, which shows turn-of-the-century Chicago school influences in its presentation.

On the western side of Thurlow Street, opposite the site, are two 3 and 4-storey stucco-faced apartment buildings (13 & 14) both with a quiet street presence with restrained architectural expression.

The property to the north of the Site 1063-1075 Barclay Street (10) is the subject of a rezoning application for a 469' residential tower with a sloped top and a distinctive multi-fluted west facade.

To the north of the site at 1075 Barclay Street is an 80's 6-storey condo building. The remainder of Barclay Street is occupied by The Vancouver Tower (12), a 27-storey condo development built in 1993.



Aerial view of site and surrounding context

Legend

- | | | | |
|--------------------------------------|-------------------------|---------------------------------|----------------------|
| 1. Robert Lee YMCA | 4. The Electra | 8. The Butterfly | 12. Vancouver Tower |
| 2. First Baptist Church | 5. Sheraton Wall Center | 9. The Passive House | 13. The Biltmore |
| 3. St. Andrew's Wesley United Church | 6. The Patina | 10. Barclay Tower | 14. Kristoff's Place |
| | 7. Washington Court | 11. Amicae Housing Co-operative | |

1.3 Photos and Existing Streetscape



Streetscape Photo Key Plan

- Site
- Under Construction
- Approvals
- Easement

The four multi-family residential buildings with addresses at 1040, 1060, 1070, and 1080 Barclay Street, located on the development site are proposed to be demolished (See images A, C, D, H, I, J, K, and L).



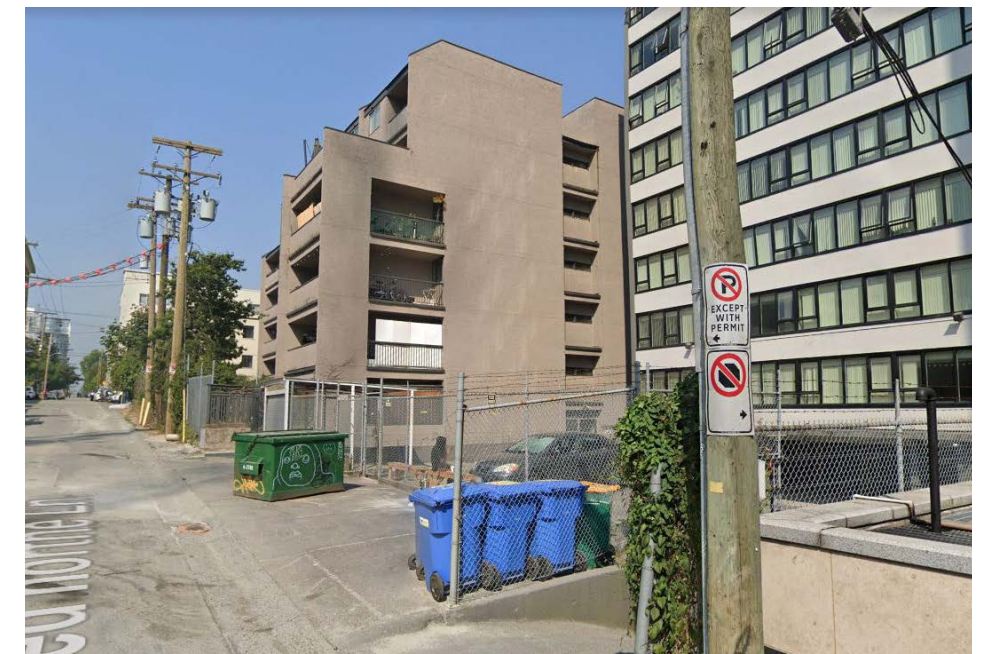
A. North and East frontages of 1080 Barclay Street, *The Capri*.



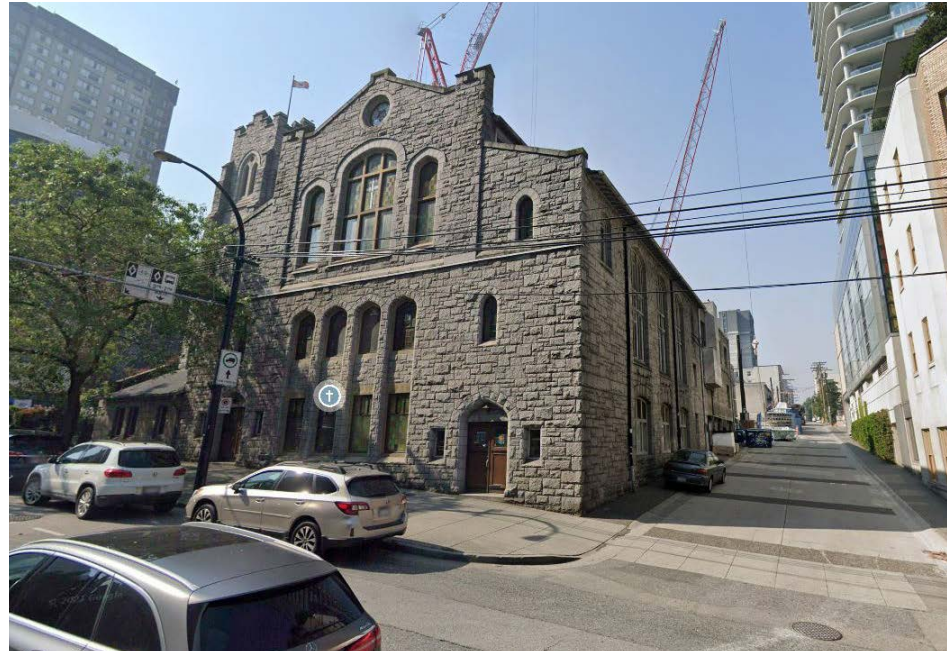
B. North elevation of *Washington Court*, a multi-family residential building at 998 Thurlow Street.



C. North and West frontages of 1080 Barclay Street, *The Capri*.



D. South (rear) frontages of 1040 Barclay Street, *Barclay Mansion* (right) and 1060 Barclay Street, *Barclay Manor* (center), from Ted Northe Lane.



E. Burrard Street and Ted Northe Lane frontages of the **First Baptist Church** at 969 Burrard Street.



F. Burrard Street and Barclay Street frontages of the **Robert Lee YMCA** at 955 Burrard St.



G. Barclay Street frontage of 1028 Barclay Street, **The Patina**, a 40-storey residential building. **The Patina's** parkade entry is on the right.

Nearby Buildings of Note

'The Patina' Tower at 1028 Barclay Street (See Image G)

The Washington Court Apartment Building at 998 Thurlow Street (See Image B)

Nearby Heritage Buildings

St. Andrew's - Wesley United Church at 1012 Nelson Street (See Image O)

First Baptist Church, at 969 Burrard Street (See Image E)

Robert Lee YMCA building, at 955 Burrard Street (See Image F)

'O Canada' House, at 1114 Barclay Street (See Image M)

Nearby Future And Proposed Developments

1059-1075 Nelson Street (Curv Passive House development, approved DP)

969 Burrard Street (The Butterfly development, under construction)

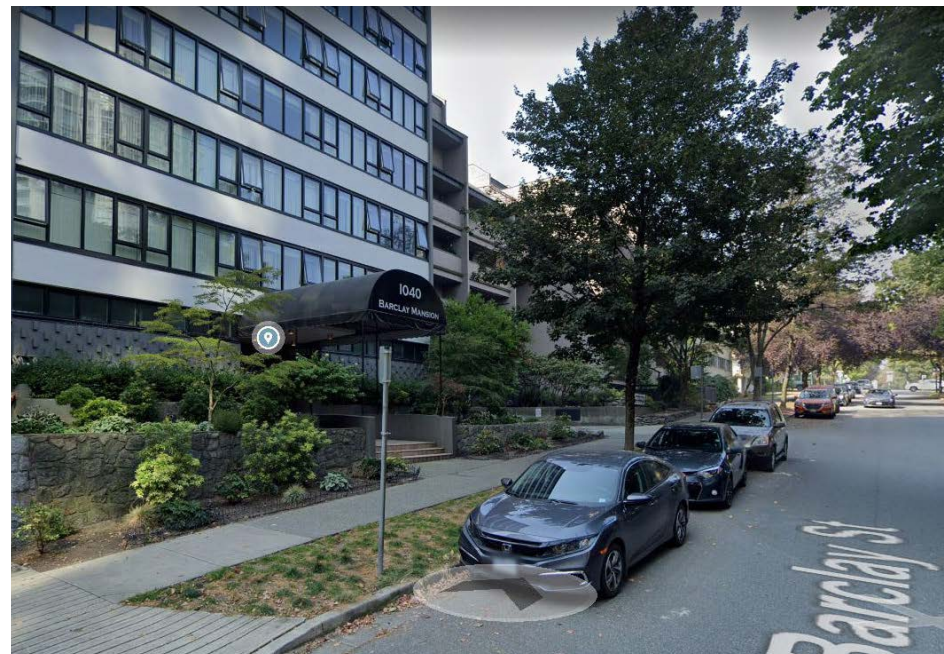
1063-1075 Barclay Street (Barclay Tower, approved Rezoning)

Future Right of Way Easement between Nelson Street to Ted Northe Lane

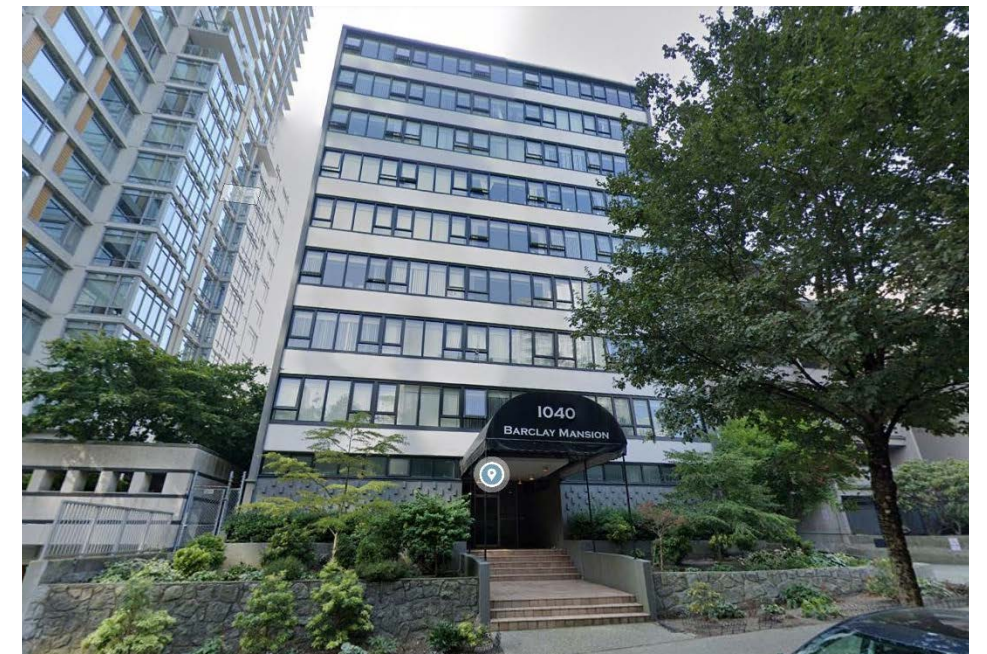
998 Thurlow Street (3-storey addition submitted for DP)

Nearby Parks

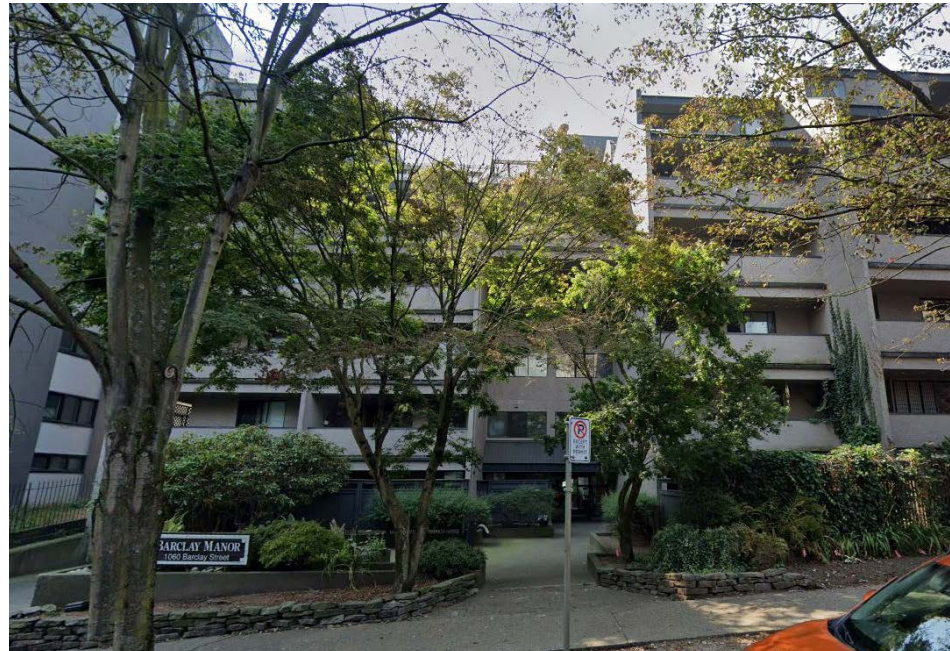
Nelson Park at 1030 Bute Street, bordered by Bute Street and Thurlow Street, and Comox Street and Nelson Street (See image N)



H. North frontage of 1040 Barclay Street, **Barclay Mansion**.



I. Barclay Street frontage of 1040 Barclay Street, **Barclay Mansion**, a 9-storey residential building.



J. Barclay frontage of 1060 Barclay Street, **Barclay Manor**, a 6-storey residential building.



K. Barclay Street frontage of a 4-storey residential building.



L. Barclay Street frontage of a 6-storey residential building.



M. North elevation of **O Canada House** (right), a Bed and Breakfast & Heritage building, and **The Biltmore** (left) at 955 Thurlow Street.



N. **Nelson Park** from the intersection of Thurlow Street and Nelson Street, located between Thurlow and Bute.



O. Burrard Street and Nelson Street frontages of **St. Andrew's Wesley United Church** at 1012 Nelson Street. The church is to be integrated into the future development of **The Butterfly** Development.

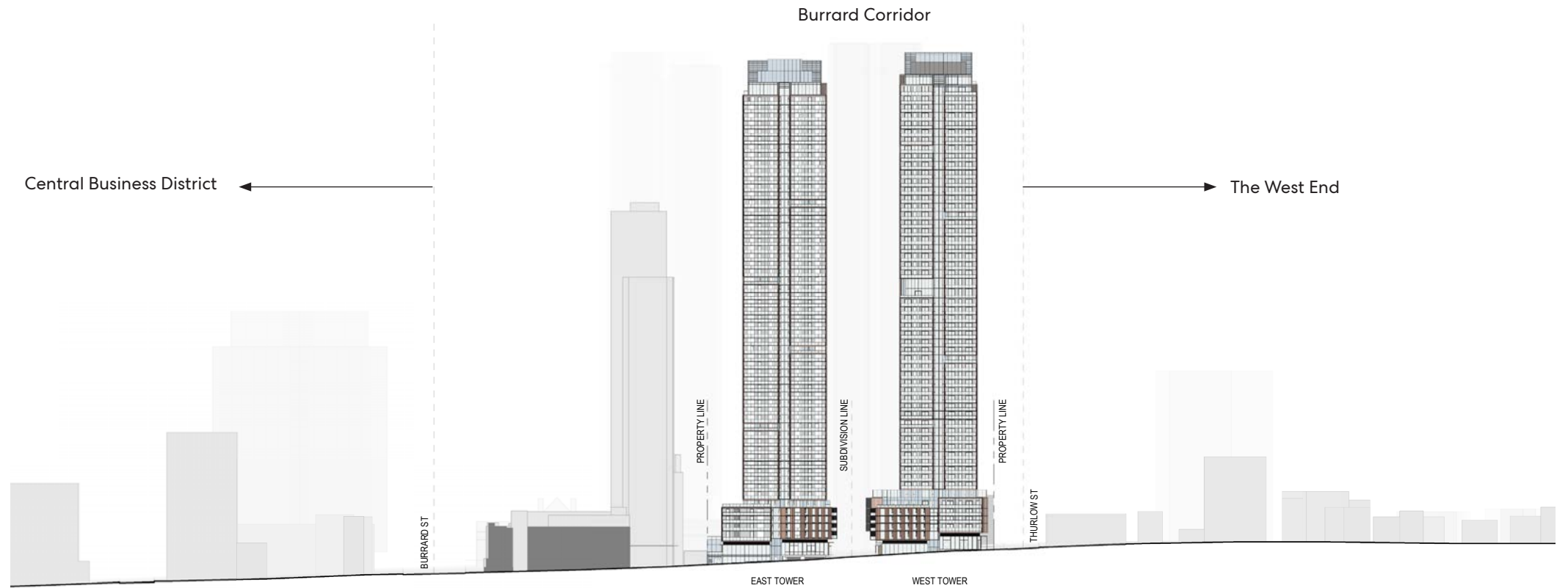
1.4 Site Elevations

The site currently contains four mid-rise residential buildings of varying heights between four and nine storeys. There are three developments under review or construction in immediate proximity to this site:

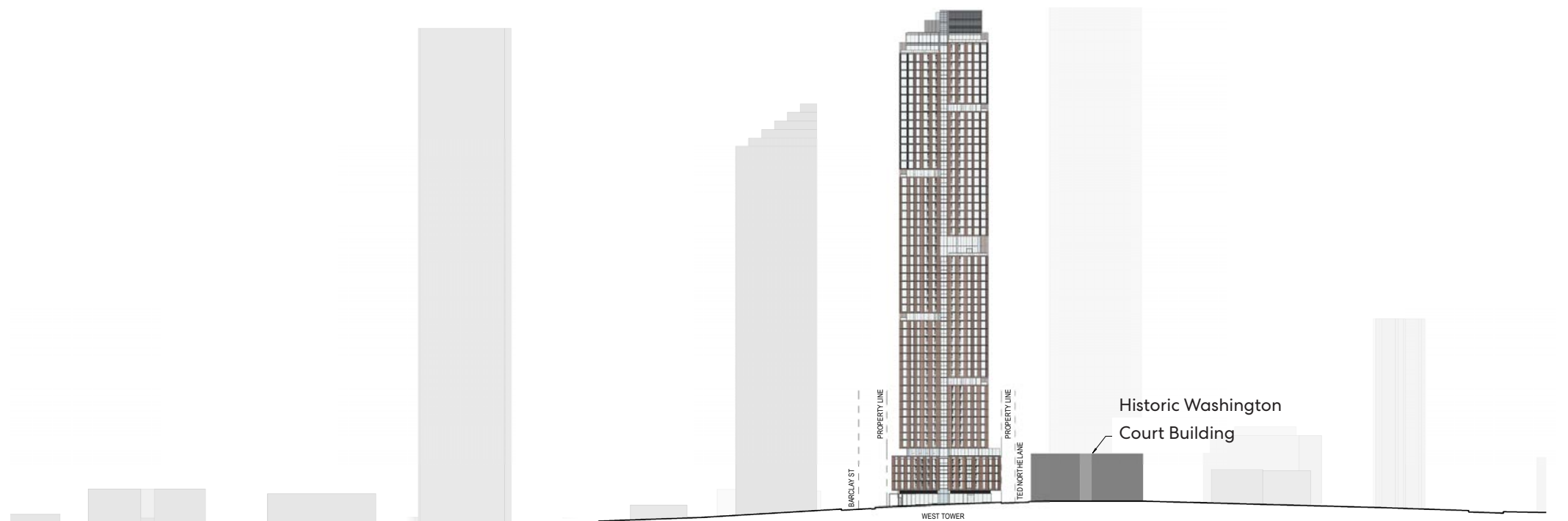
1. 969 Burrard Street is a 57-storey mixed use building (*The Butterfly*, under construction);
2. 1059-1075 Nelson Street is a proposed 60-storey residential building (*Curv*, approved DP);
3. 1063-1075 Barclay Street is proposed as a 47-storey residential building. (*Barclay Tower*, approved for rezoning).

Existing neighbouring buildings include:

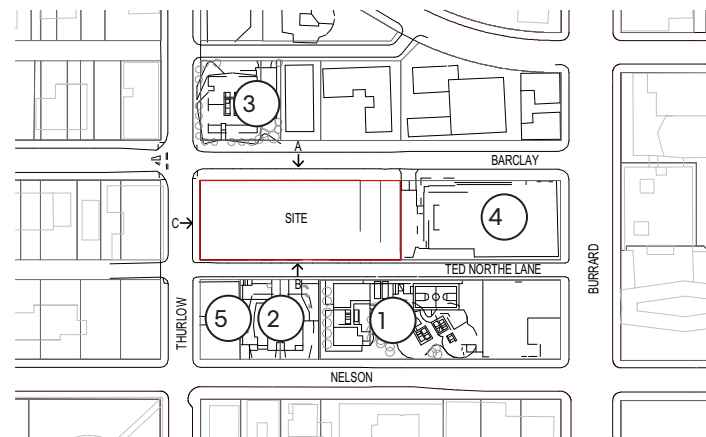
4. 1028 Barclay Street *The Patina*: an existing 40-storey; a residential tower with a grade level parkade that abuts Barclay Street frontage of the site.
5. 998 Thurlow Street *Washington Court*: a heritage style, 5-storey residential apartment block. (3-storey addition DP application submitted).



Barclay Street Elevation



Thurlow Street Elevation



1.5 West End Plan - Principles

Principle 1

Achieve a green, environmentally sustainable urban pattern.

→ RESPONSE

The development is located in the Burrard corridor, an area planned for increased density and community services, protecting the quintessential West End neighborhoods from disruption. The proposal aligns with the Burrard corridor visions, increasing the surrounding urban pattern through a focus on walkability and bike-friendly design. The proposal seeks to activate all street frontages - Barclay, Thurlow, and Ted Northe Lane, working with the surrounding developments to encourage pedestrian activity and access to quality public space.

Through diverse programming including a wide range of housing, a much-needed childcare facility, and job opportunities, the development responds to the urban context and character of both the West End and the Downtown Core.

Principle 2

Support a range of affordable housing options to meet the diverse needs of the community.

→ RESPONSE

The proposed development provides 89 social housing units and 296 condominium units in the West Tower and 100% rental units in the East Tower, providing 637 total rental units, of which 137 units will be below-market. Both non-market units and below-market rental provide a mix of unit sizes, including family units, and quality amenity spaces to encourage co-mingling of residents. With housing options ranging from social housing to home ownership, the development strives to meet the diverse needs of the community.

Principle 3

Foster a robust, resilient economy.

→ RESPONSE

The development supports an equitable and resilient economy and local employment sector by providing housing to a wide range of household incomes.

Through a variety of employment opportunities including 5,562 sf for retail units, the development provides opportunities for small and diverse businesses such as a cafe, wine bar, and restaurant.

In addition to the economic benefit the upfront development investment and construction jobs the project provides, there will also be long-term employment provided by the childcare facility, commercial retail space, and property management operations associated with each tower.

Principle 4

Enhance culture, heritage and creativity in the city.

→ RESPONSE

The developments concept and massing was driven by surrounding West End fabric, paying homage to the culture and heritage surround the site, while allowing for new creativity to submerge.

The proposal's massing has continued to change in response to rezoning conditions. Through a reduced podium height and reduced Thurlow podium setback, the massing respects the neighbouring heritage *Washington Court* building on Thurlow Street.

Principle 5

Provide and support a range of sustainable transportation options.

→ RESPONSE

The site is located within walking distance from rapid transit stations and arterial bus routes.

The proposal encourages cycling with enhanced bicycle facilities and direct access from Barclay Street, as well as a public bike share station located on Thurlow Street, and dedicated car-share vehicles in the parkade.

Principle 6

Protect and enhance public open spaces, parks and green linkages.

→ RESPONSE

The development is articulated in a way that breaks down the scale of towers, sculpted to create a public and accessible mid-block connection between Ted Northe Lane and Barclay Street. The site strategy, made possible due to the presence of two towers, increases green linkages between neighbouring developments. The design creates an urban condition that fosters a sense of tranquillity and community within a bustling area.

The development not only works to create new public space, but also to preserve the surrounding streets and public spaces. The crowns of the development's towers have been shaped and sculpted in accordance with the *West End - Tower Form, Siting and Setbacks Policy (2020)* to not cast shadows on the northern sidewalk of the 1000 Robson block between the hours of 10:00 a.m. and 3:00 p.m. P.D.T. at the spring and fall equinoxes.

Principle 7

Foster resilient, sustainable, safe, and healthy communities.

→ RESPONSE

The site strategy of the development prioritizes activating all frontages of the site, stitching together the new and old to foster and improve the fabric of the West End.

The creation of a new park with trees and planting provides improved access to nature for the surrounding community. The activated streetscape and design of the park is based on CPTED principles to promote passive surveillance and a safe and open urban environment. The location at the heart of the downtown peninsular fosters healthy lifestyles, with walking and biking typically being the most convenient mode of travel.

The development's rigorous application of low energy and water reduction strategies provides resilience to climate change and will provide sustainable accommodation to approximately 2,450 residents.

1.5.1 West End Plan - Built Form Guidelines

1. Reinforce the Dome-Shaped Skyline

New development opportunity should reinforce the legibility of downtown's recognized dome-shaped skyline when viewed from longer distances.

→ RESPONSE

Both towers of the proposal respect the applicable view cone, set back and shadow envelope height limitations and is located amongst other developments that are of similar height. The development is close to the centre of the City skyline dome and reinforces the dome's definition.

2. Strengthen the Urban Frame

Recognize the Thurlow-Burrard and Georgia-Alberni corridors as two edges of an "urban frame" to the lower, existing scale of the West End. Intensify these corridors towards greater clarity, and contrast with, the established neighborhoods.

→ RESPONSE

This proposal strengthens the urban frame through two contextually responsive towers and an active mixed-use podium located between Thurlow and Burrard.

The proposal's tall towers work with neighbouring developments to contrast with the mid-low rise nature of the established and adjacent West End, reinforcing Thurlow Street as a clear edge to the neighbourhood.

3. Adhere to Prevailing View Corridors

Support Council approved view corridors (protected public views) towards shaping the evolving skyline, while also recognizing the need for spatial separation of higher buildings from the more localized scale of the Davie, Denman, and Robson Villages.

→ RESPONSE

No applicable view cones are impacted by the proposed development.

The required minimum 80' tower separation has been provided between each development tower and those of neighbouring developments, and more separation has been provided where possible.

4. Recognize Transitional Role in Form and Scale

Ensure a thoughtful urban design response for new development opportunity by recognizing the local, contextual role new built form can offer in mediating between established development and respective sites. Form and scale to "fill the gaps" can strengthen the image of the city.

→ RESPONSE

Recognizing the unique site location - as a transition between Downtown and the West End - the massing of the development is broken down into smaller volumes to relate the proposed development to both the downtown core and the West End. The scale, massing, height, and positioning of the podium is deliberate and reinforces the character of the existing buildings on Thurlow and Barclay Street. An active mixed-use ground level addresses the urban realm and seeks to invigorate all street frontages.

5. Demonstrate Shadowing Performance

Ensure that new development does not adversely impact shadowing on recognized public open space and Village areas as a performance measure to ensure that these spaces have solar access when citizens are typically more active.

→ RESPONSE

Tower heights and massing have been stepped and shaped to mitigate the proposal's shadow impacts on adjacent public spaces. The development does not cast any shadows on the north sidewalk of the 1000 Block of Robson Street between 10:00 am and 3:00 pm from the spring equinox to the fall equinox.

6. Responsive Form to Private Views

New development should be responsive to adjacent and nearby private views by shaping built form to optimize performance. Responsive building forms can help achieve a distinctive architectural identity.

→ RESPONSE

Both towers are achieving required tower setbacks, and set apart from their neighbours as much as possible to preserve views and privacy of the existing developments. Most balconies on the towers are placed on north and south elevations, maximizing the clear space between towers further promoting view opportunities from adjacent streets and properties. The balcony placement and design minimizes balcony overlook had they been facing each other.

The East podium has been sculpted to allow views and daylight from the neighboring development. Although horizontal angle of daylight is not achieved throughout the entire East podium, the proposal improves the current condition with a greater distance from The Patina (13m).

7. Ground-Oriented Focus in Uses and Public Realm Quality

New Development needs to contribute to public realm vitality by contributing active uses towards pedestrian interest as well as thoughtful building, tenancy, and related public realm design quality.

→ RESPONSE

This proposal is designed to significantly increase the street vitality along Barclay and Thurlow Street through tailored building massing that creates at-grade public open space and a new park between the two towers, which also extends a mid-block pedestrian connection. A variety of retail uses, including patio opportunities, are positioned to create a dynamic public realm on the street edges and in the new park.

1.5.2 West End Plan - Tower Form, Siting and Setbacks

Shadowing of Parks, Public Open Spaces and the West End "Villages"

Shadows must be minimized on the following prioritized hierarchy of spaces:

1. Parks, public open spaces and the West End "Villages";
2. Semi-private open spaces; and
3. Private open spaces.

The 1000 Block of Robson

The intent of the West End Community Plan for Area 'E' in the Burrard Corridor is to accommodate substantial growth through rezoning. However, the increased densities and heights envisaged for Area 'E' challenge realization of another Plan objective, namely the limitation of shadowing on key shopping streets, in this case, Robson Village. It was concluded that for rezoning proposals which fall within Area 'E', shadow impacts on the 1000 block of Robson Street will be evaluated between the hours of 10:00 a.m. and 3:00 p.m. P.D.T. at the spring and fall equinoxes, rather than between 10:00 a.m. and 4:00 p.m.

→ RESPONSE

The two towers have been stepped and sculpted to ensure they will not cast shadows to the West End Shopping Village of Robson Street between the hours of 10:00 am and 3:00 pm at the spring and fall equinoxes. An analysis of the proposal's shadow impacts can be found in section 1.5.3.

Minimum Distance between Towers

The minimum distance between towers shall be 24.4m (80 ft).

The minimum frontage for a site that can be considered for a tower shall generally be 39.6m (130 ft). Corner sites with lesser frontage may be considered for the development of a tower.

→ RESPONSE

Both towers meet the 39.6m (130 ft). frontage.

There is a minimum of 24.4m (80 ft) between the two proposed towers and all existing and planned towers on adjacent sites.

Towers in The Park

The distinguishing feature of a "tower in the park" form is that the tower meets the ground without the presence of a podium element. Towers proposed on sites east of Thurlow (except those on Davie Street or Burrard Street, or north of Haro Street) that can be considered for rezonings under the rezoning policy should be "towers in the park". On these sites, a front yard and side yard on a side street setback shall be a minimum of 3.7m (12 ft). In these cases, the base of a "tower in the park" can be up to 15% larger than the floor plates above a height of 18.3m (60 ft).

→ RESPONSE

A variance is sought for both towers as they both deviate from the strict definition of the Towers in the Park form.

The East podium has a greater average floor plate size due to the simplification of the podium stepping in order to reduce overall podium height. The West podium has a greater average floor plate size to generate a rooftop for childcare outdoor space.

For the East Tower, the proposal has an average podium floor plate size which is about 17% larger than the Tower floor plates. In response to the rezoning conditions, the podium has been simplified to allow for an averaged podium height under 60 ft. The average podium height of 57' was achieved through the elimination of the stepping conditions in the massing present at rezoning, which would have resulted in thicker structural slabs and greater podium height. This simplification since rezoning has allowed for increased energy performance of the envelope due to less thermal bridging from a continuous envelope with less breaks. The massing has also allowed for the development to achieve the required family unit mix, increasing the number of 3 bedroom below-market units from rezoning and further responding to West End Principle 2 and 3 to create affordable housing that meets diverse needs and household incomes. The total of the 6 levels at the base of the tower (below 18.3m or 60 ft) is now 5,721m² (10,550 sf), compared to 961m² (10,350 sf) at rezoning.

As presented at rezoning, the West Tower has an increased base, which allows for a much-needed childcare facility. The base has been sized to provide the required indoor and outdoor space for a 37-spot facility totaling 619 m² (6672 sf) of usable interior space and 450 m² (4847 sf) of outdoor space, meeting the required space in the childcare design guidelines. Through placing the childcare centre at the podium, it allows for an activated public realm at grade while also maximizing access to daylight in the childcare facilities' outdoor space.

The presence of both podiums and their size allows the towers to terminate at a new mid-block urban space through a thoughtful connection to the ground plane and public realm. The podiums allow for a change of scale which resonates with the pedestrian, resulting in quality public space rather than a private side yard.

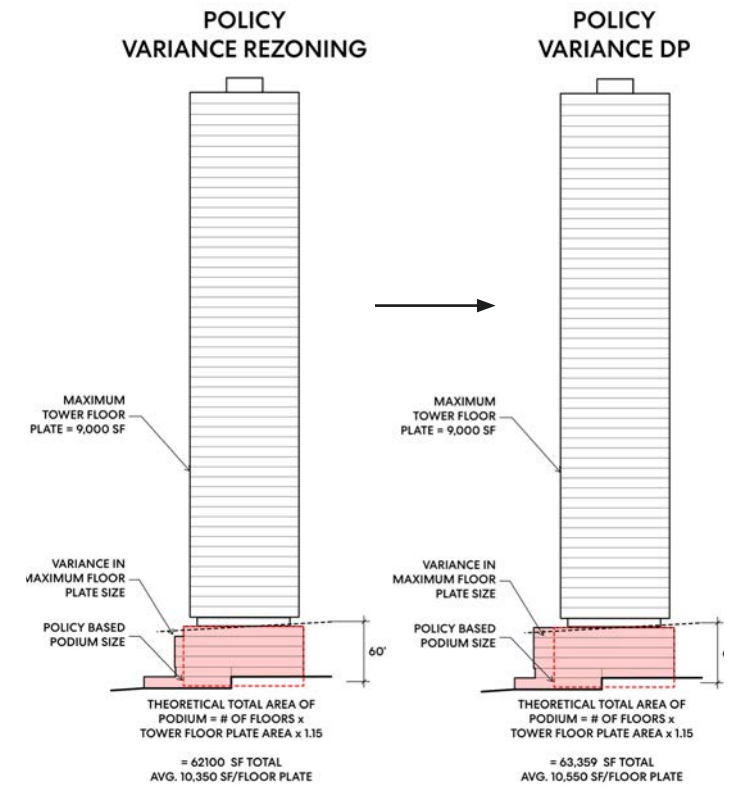
Setbacks

The minimum distance between a tower and an interior property line shall be 12m (40 ft). A reduced setback can be considered where a minimum of 24.4m (80 ft) can be achieved from an existing tower or the likely location of a future tower on an adjacent site. Sites in the Burrard Corridor shall provide a minimum front and side setback of 3.7m (12 ft).

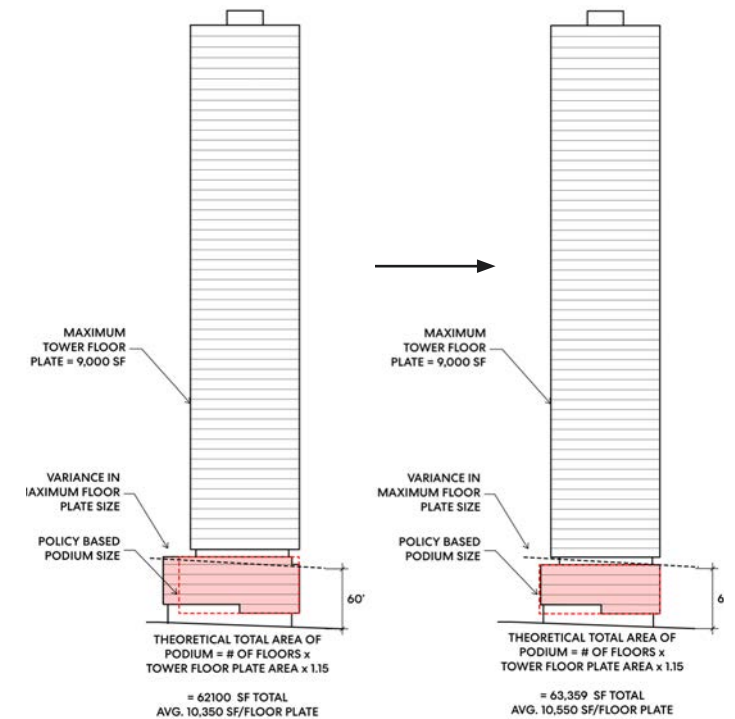
→ RESPONSE

The project respects the 12m (40 ft) setback from the interior property line adjacent to the Patina building.

Both the East and West tower fit within the applicable tower setbacks with two relaxations applicable to podium levels of both towers. First, at rezoning, the design proposed a 3.7m encroachment on the south block of the Thurlow Street setback with the intent of paying homage to the West End building fabric and neighboring Washington Court heritage building. With this development permit, **the design is refined and proposes a 1.75m encroachment.** See section 2.7.1 for further rationale. The East sideyard encroachment of 3.7m was presented at rezoning and has not changed for development permit. The intent of the design is to use the space which would otherwise be a dark and narrow leftover space and give it back to the residents through quality outdoor amenity. See section 2.7.2 for further rationale.



Towers in The Park: East Podium North Elevation



Towers in The Park: East Podium East Elevation

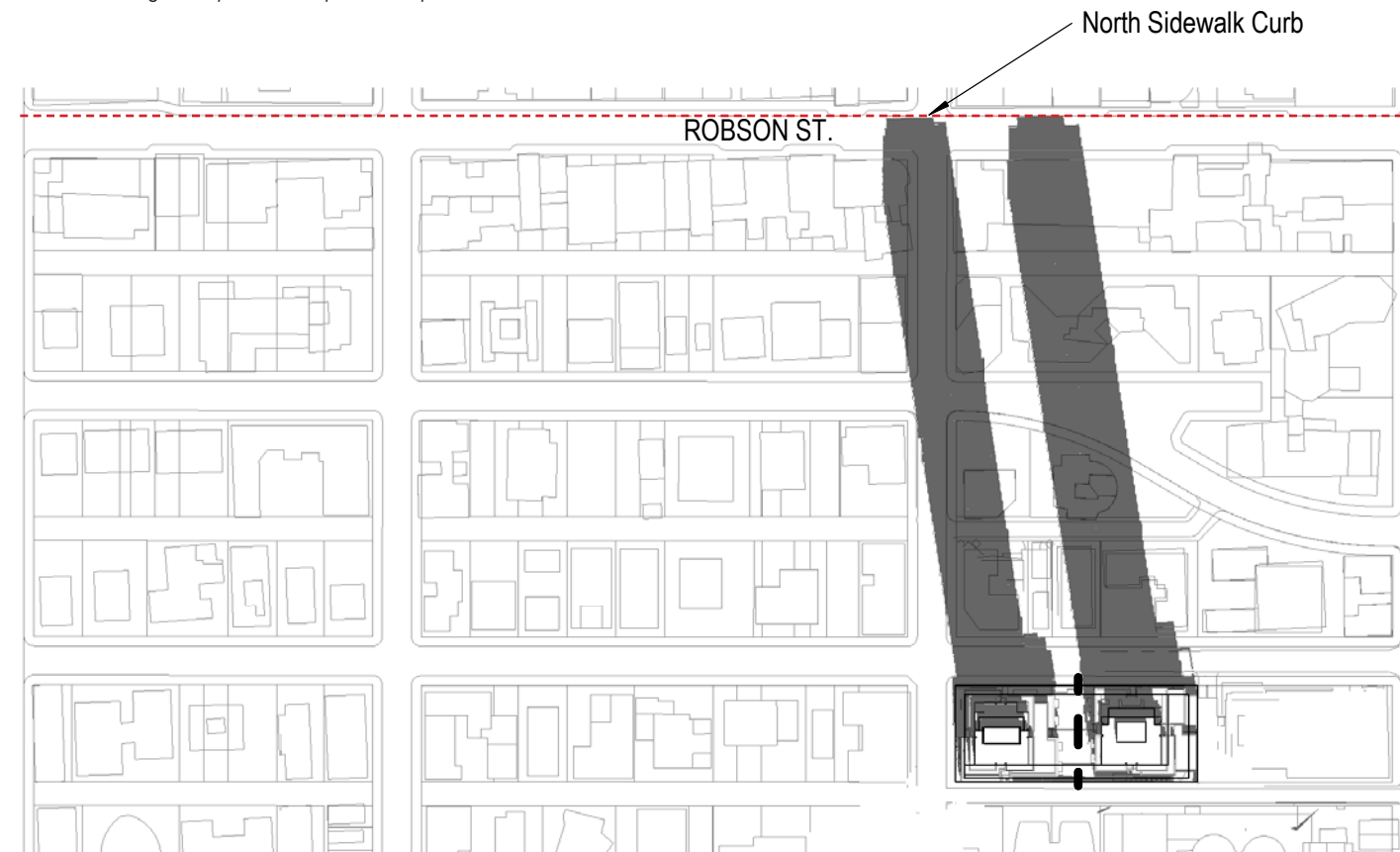
1.5.3 Solar Envelope

In the West End Official Community Plan, an important planning consideration is the shadow impacts on Public Open Spaces, including the 1000 Block of Robson. To accommodate for the additional density allowed in Area E of the Burrard Corridor, the shadow impacts were updated to ensure that the North sidewalk of Robson Street would not have any shadows cast between 10:00 am and 3:00 pm P.S.T. at the spring and fall equinoxes.

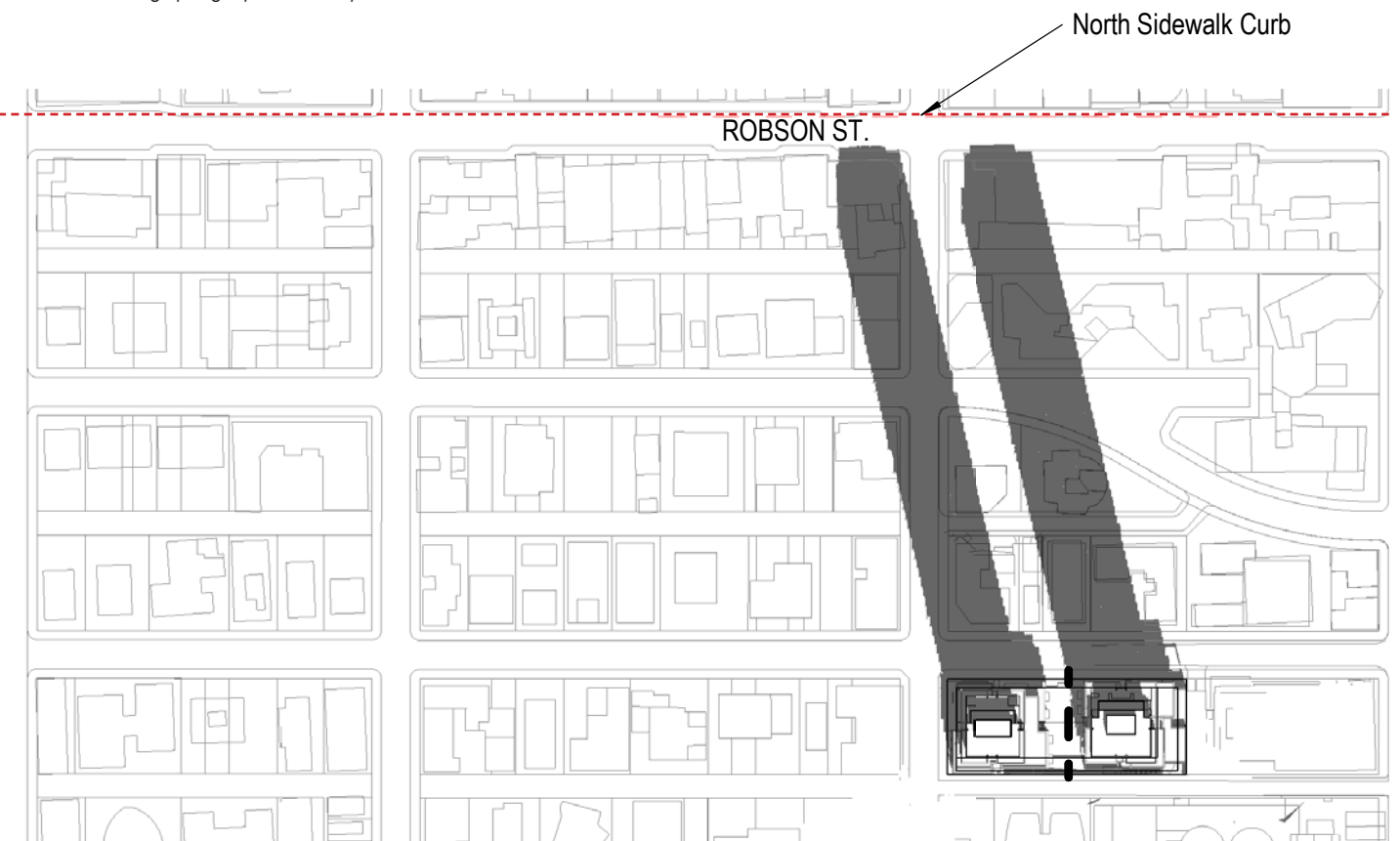
The enlarged shadow studies below show more detail on where the line of shadow is located in relation to the Robson Street side walk curb. The results indicate the shadow line will not cast on the North curb of Robson Street sidewalk before 3:00 pm between Spring Equinox and Fall Equinox, which is compliant with *the West End - Tower Form, Siting and Setbacks Policy (2020)*.

The Robson Street sidewalk has been surveyed and calculations include topographic elevations of the sidewalk street and sidewalk grades.

Shadow casting Fall Equinox, 3:00 pm, 21st September



Shadow casting Spring Equinox, 3:00 pm, 21st March



1.6 Housing Policy

Criteria for 100% Secured Rental and Below-Market Housing as an Alternative to Inclusionary Social Housing in the Burrard Corridor of the West End Community Plan

Council approval for guiding criteria to allow rezoning proposals with 100% secured rental housing in which a minimum of 20% of the residential floor area is secured below-market rental. Such an approach is an alternative to the current inclusionary social housing requirement in the Burrard Corridor (rezoning areas D and E) of the West End Community Plan (the “Plan”).

Alternative Option for Below-Market Rental Housing – Criteria and Conditions

The alternative option for 100% secured rental with minimum 20% below-market rental presents an opportunity to deepen affordability to similar levels to what is currently achievable in the Burrard Corridor. Below-market rental units are secured at rental rates that match the affordability needs of moderate income households. These households may face challenges meeting rental rates offered in new market rental buildings, but may not choose or qualify for social housing.

→ RESPONSE:

137 Below-Market Rental Units comprise 20% of the residential FSR of the rental tower. 35% of the Below-Market Suites are family units with 2 or more bedrooms.

Consider proposals with moderate increases in floor area to a maximum of 20% additional floor area beyond what is enabled by the West End Community Plan and by the West End – Tower Form, Siting and Setbacks Administrative Bulletin. Proposals will be evaluated on an application- and site-specific basis to maintain the overall objectives of the plan in terms of livability, high-quality urban design, and public realm.

→ RESPONSE:

The East Tower is comprised of 100% rental suites. This proposal uses 9,000 sf floor plates for the rental tower,

which is equivalent to 20% additional floor area of a standard floor plate of 7,500 sf as permitted in the West End - Tower Form Siting and Setbacks. The podium floor plates are averaged to be 15% larger than the 9,000 sf Tower floor plates.

Rental Housing Stock Official Development Plan

Rental Housing Policy

Council’s policy regarding real property in the zoning districts is that development on any site consisting of three or more dwelling units that requires the demolition or change of use or occupancy of a rental housing unit on that site, or would have required such demolition or change of use or occupancy had a person, during the three years preceding the date of application for a development permit, not demolished one or more rental housing units or changed their use or occupancy, is not permissible unless

- i) For new development that requires demolition of one or more buildings on that site.
- ii) One-for-one replacement of existing rental housing units with dwelling units on the site or in the same zoning district or one-for-one replacement with another type of affordable housing if permitted under an applicable community plan.

→ RESPONSE:

The site currently has four existing buildings located on it, one strata and three rental. The three rental buildings that this policy applies to are:

1040 Barclay: 9-Storey rental (40 units)

1070 Barclay: 4-Storey rental (27 units)

1080 Barclay: 6-Storey rental (50 units)

Providing a total of 117 existing rental units.

The East Tower of the project will be comprised of 100% rental providing 637 rental units or over 5 times the existing rental housing stock on the site.

At least 35% of the total number of dwelling units include two or more bedrooms.

→ RESPONSE:

Of the rental units, this proposal provides 38% that are family units (2 bedrooms or more).

Housing Design and Technical Guidelines

The City of Vancouver is committed to building affordable, socially inclusive, environmentally sustainable, healthy, safe, and diverse communities. It is with these objectives, as guiding principles in the Housing Design and Technical Guidelines (HDTG).

The purpose of the HDTG is to help guide housing partners through the project development process on social housing projects secured by the City. The HDTG outline the minimum standards required by the City of Vancouver for materials, finishes, equipment and technical specifications. Standardization, using the HDTG, is intended to balance immediate environmental, energy and space efficiencies, ensuring an emphasis on long term durability and resilience of the City asset over the life of the building. The desired outcome is to encourage livability and inclusivity, as envisioned in these policies and in accordance with the regulatory framework set out in the Vancouver Building Bylaw (VBBL) and the Zoning and Development Bylaw (VZDBL).

→ RESPONSE:

1. Ensure that all applicable building codes, government acts and health regulations are met.
2. Refer to the applicable local area plan, policies, and zoning requirements specific to the project location within the City.
3. Common Area and Service area are including, but not limited to hallways / corridors, balconies, elevators, mechanical / electrical rooms are to comply with the requirements, exclusions and exemptions as set out in the Vancouver Zoning By-Law.
4. The unit mix follows: 20% Studio, 30% 1 bedroom, 30% 2 bedrooms and 20% 3 bedrooms as a general guide. All units exceed minimum unit size requirements.
5. Minimum finished narrow unit dimension not to be less than 3.66m (12 ft).

6. In addition to the requirements set out in Section 3.8. of Division B of the VBBL, 5% of all units are wheelchair accessible.

7. 2 elevators, to meet CPTED principles and be visible from the lobby entry.

8. Landscape areas to be designed and built to create a natural and pleasing environment that is sustainable, appropriate to its intended use and easy to maintain.

Moderate Income Rental Housing Pilot Program (MIRHPP) Rezoning Policy

Beginning January 1, 2018, the City began accepting development proposals for new buildings where 100% of the residential floor area is secured rental housing and at least 20% of the residential floor area that is counted in the calculation of the floor space ratio is made available to moderate income households; earning between \$30,000 and \$80,000/year. As per Council direction, rental units for moderate income households will be provided in a variety of unit types (studios, 1, 2, and 3 bedrooms).

Affordability in Moderate Income Rental Units

The incentives outlined in section 3 below are designed to encourage the delivery of new buildings where 100% of the residential floor area is secured rental housing, and at least 20% of the residential floor area that is counted in the calculation of the floor space ratio is made available to moderate income households; earning between \$30,000 and \$80,000 per year.

→ RESPONSE:

The East Tower will be 100% rental, with 20% of the residential area dedicated as below-market rental for moderate-income households.

Requirements for Projects Proponents

Secure the applicable starting rents and the rental units for a term of 60 years or life of the building, whichever is greater.

→ RESPONSE:

The project will meet the requirements for rental rates and times.

Unit Mix Guidelines

In order to ensure a variety of unit types in both the market and below-market housing units, projects should achieve the following unit mix distribution targets.

Housing for Families

The City's Family Room: Housing Mix Policy for Rezoning Projects policy requires that at least 35% of units in secured market rental housing projects have two or more bedrooms.

→ RESPONSE:

The project will provide a variety of unit types meeting or exceeding the 2-3 bedroom unit requirements for family units for both market and below-market rental.

Additional Requirements

Where existing tenants are impacted, comprehensive tenant relocation planning is required in accordance with the Tenant Relocation and Protection Policy.

→ RESPONSE:

The project will meet all requirements in the Tenant Relocation and Protection Policy. A tenant meeting was held on December 8, 2022, which was attended by City of Vancouver staff, where tenant relocation is ongoing and continues to follow policy.

Tenant Relocation and Protection Policy

As there are tenants on site that will be displaced, a Tenant Relocation Plan will be required.

A Housing Agreement will be required to secure replacement rental housing units for those displaced by redevelopment.

1. The Policy Applies to the following instances:**(a) Primary Rental Stock**

Applicable Permits

This policy applies to rezoning and development permit application processes involving existing tenants

2. Exclusions:

The policy on the “secondary” rental stock does not apply to:

Instances where a previous owner of a house, strata, or equity co-op unit has sold the property to a developer, and is now occupying unit as a tenant;

→ RESPONSE:

The current site has four existing properties

1040 Barclay: 9-storey rental (40 units)

1060 Barclay: 5-storey strata (56 units)

1070 Barclay: 4-storey rental (27 units)

1080 Barclay: 6-storey rental (50 units)

The tenant relocation policy applies to the three rental buildings 1040, 1070, and 1080 Barclay with a total of 117 rental units on the site.

3. Tenant Relocation Plan

Applicants seeking a rezoning or development permit for redevelopment or major renovations resulting in permanent relocation of tenants in existing residential rental units will provide a Tenant Relocation Plan. This type of work typically results in the entire building, or part of the building, being demolished or emptied.

At a minimum, the Tenant Relocation Plan must include the following components:

(a) Early communication with tenants

(b) Financial compensation provided based on length of tenancy

(c) Arrangement at the choice of the applicant for an insured moving company or a flat rate payout for moving expenses as follows

(d) Assistance finding new accommodations with Residents

(e) Assistance with relocation

(f) Right of First Refusal

(g) Requirements for Ending Tenancies must comply with rules under the RT

(h) Interim and Final Tenant Relocation Report

(i) Determining low-income tenants and tenants facing additional housing barriers to relocation or securing appropriate housing:

→ RESPONSE: Please refer to the Tenant Relocation Plan, which will continue to follow policy.

Housing Vancouver Strategy

Vancouver’s Housing Strategy focuses on the addition of housing particularly the right supply of housing. The document defines the right supply as :

‘a significant shift toward rental, social, and supportive housing, as well as greater diversity of forms in our ground oriented housing stock.’ - pg 5

‘20 per cent of these new rental units are targeted as developer-owned affordable rental with deeper levels of affordability secured for the long-term.’ - pg 24

→ RESPONSE:

The project will contribute to adding the right supply of housing back into the market through the addition of a significant portion of rental housing along with below-market rental and social housing. The East Tower is comprised of 100% rental which will provide approximately 637 rental units in the area, of which 20% or approximately 137 units will be rented at below-market rates.

The project will also include the addition of approximately 89 social housing units, equaling 23% of the West Tower residential floor area.

Along with providing a diversity of housing types the unit mix is another key factor within the document.

‘One key issue identified is that much of the new supply in the city and region is not appropriate to local needs and incomes – consisting of 1-bedroom condominium units rather than affordable rental homes and homes suitable for families.’ - pg 12

‘For example,... apartments with two or more bedrooms with child-friendly amenity spaces’ - pg 31

→ RESPONSE:

The project provides a variety of unit types including 2 and 3 bedroom units across all housing types. 38% of the rental units, 53% of the Social Housing Units and 61% of the strata units are family suites.

Strategy 1: Prioritize market and below-market rental and social housing near transit hubs and around arterials - pg 33

‘Where housing is located impacts residents’ access to transit, jobs, key services and amenities e.g. schools, parks, childcare, stores, and its safety and suitability for different types of households’ - pg 31

The new 10-year housing targets will introduce substantial new rental and social housing in areas near transit. - pg 32

→ RESPONSE:

The project is located at the edge of the West End with great access to both major transportation routes, jobs and amenities. It is also located near Nelson Park and will include a childcare facility. With a significant percentage of the area dedicated to rental, below-market rental and social housing, the project will provide the desired types of housing with easy access to a wide variety of key amenities.

1.7 General City of Vancouver Policies



Family Room: Housing Mix Policy for Rezoning Projects

Family Room:

POLICY 1: Rezoning applications that include any residential strata housing are required to include a minimum of 35 percent family units (units having two or more bedrooms), including a minimum of 10 percent three-bedroom units and a minimum of 25 percent two-bedroom units.

OR

POLICY 2: Rezoning applications for secured market rental projects are required to include a minimum of 35 percent family units with two or more bedrooms.

→ RESPONSE

38% of the rental units are family units. 61% of the strata units are family suites including 46% two bedroom, 15% three bedroom, and 1% four bedroom units.



High-Density Housing for Families with Children Guidelines (1992)

High-Density

The High-Density Housing For Families With Children Guidelines are intended to be used in conjunction with the Zoning and Development By-Law or an official development plan for new conditional approval residential developments, both market and non-market, of 75 and more units per hectare in density, which are designed specifically for families with children.

The intent of the guidelines is to address the key issues of site, building and unit design which relate to residential livability for families with children.

→ RESPONSE

There is an elementary school and playground on Nelson Park as well as grocery, pharmacies, and childcare in close proximity to the development.

The project will provide a variety of amenity spaces along with 2.4m deep balconies for family units. In-suite storage has been provided where possible.



Community Amenity Contributions through Rezonings

Community Amenity Contributions - Through Rezoning

Community Amenity Contributions (CACs) are in-kind or cash contributions provided by property developers to help address growth costs, area deficiencies, and/or other community needs and impacts. CACs are generally for capital facilities.

There are two types of CAC policy areas in Vancouver:

The citywide CAC area applies to most of the city. For all rezonings in the Citywide CAC area, the CAC is determined through a negotiated approach.

Specific CAC policy areas apply to locations with their own CAC and/or public benefit policies. For all rezonings in the area-specific CAC policies, the CAC is determined through a CAC target and/or negotiated approach.

→ RESPONSE: CAC proposal submitted at rezoning was approved.



Public Art Policies and Procedures for Rezoned Developments

Public Art Policy

The Public Art Policy applies to:

All floor areas contributing to the FSR calculation of any residential, commercial, institutional or industrial rezoning resulting in increased floor space or in a change from agricultural or industrial to commercial or residential use.

Rezoning developments of 100,000 square feet (9,290 square meters) or greater.

The Policy may also apply, at the discretion of the City, to projects where a substantial public benefit is sought.

The public art budget is calculated by multiplying all areas contributing to the FSR calculation (as established for the Development Permit) by the public art rate of \$1.98 per square foot or \$21.3125 per square meter.

Prior to rezoning enactment, the elected option, Onsite Artwork (Option A) or Cash-in-Lieu (Option B), must be confirmed.

→ RESPONSE

The high visibility of this project at the mid block connection offers great opportunity to incorporate meaningful art in a very public manner. A public art liaison has been included as part of the project team. It is intended to curate a successful on-site public art program that takes advantage of the mixed-use nature of this very active project.

See section 3.2 for potential public art locations.

Section 2.0

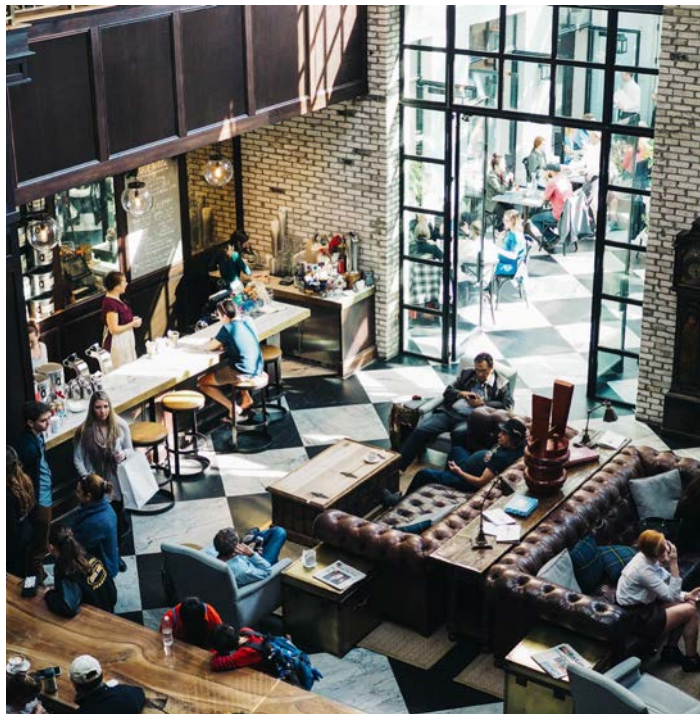
Design Rationale & Architectural Expression

Contents

2.1	Project Vision	24
2.2	Design Principles	26
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2.4	Form of Development Diagrams	28
2.5	Organization of Program	30
2.6	Architectural Expression	40
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2.1 Project Vision

Neighbourhood Hub



With significant contributions to the public realm, retail activation, and a focus on placemaking - this project aspires to be a hub of activity and connection for the wider Burrard Corridor which is in the midst of significant evolution and growth. The proposal creates a streetscape which ties the surrounding developments together in an elegant and calm manner.

Inclusive Community



Create a welcoming, diverse, and inclusive community across all scales of the project which facilitates social interaction - from vibrant communal space, to unique shared amenities.

Distinct and Recognizable



Architectural ambitions that are both contemporary and balanced with considered details to create a lasting silhouette on the skyline and welcomed street presence.

The Heart of Downtown

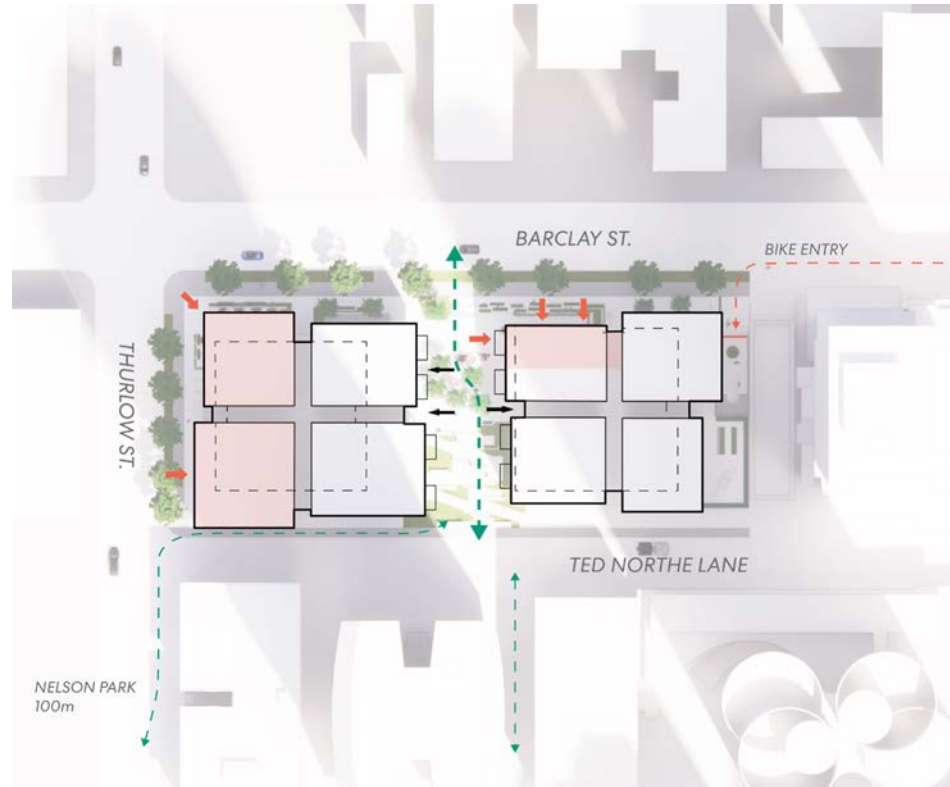


Located in the very center of Downtown, the site's size, scale, and prime location presents a unique opportunity to create a new mixed-use destination connecting the West End with the rest of Downtown.



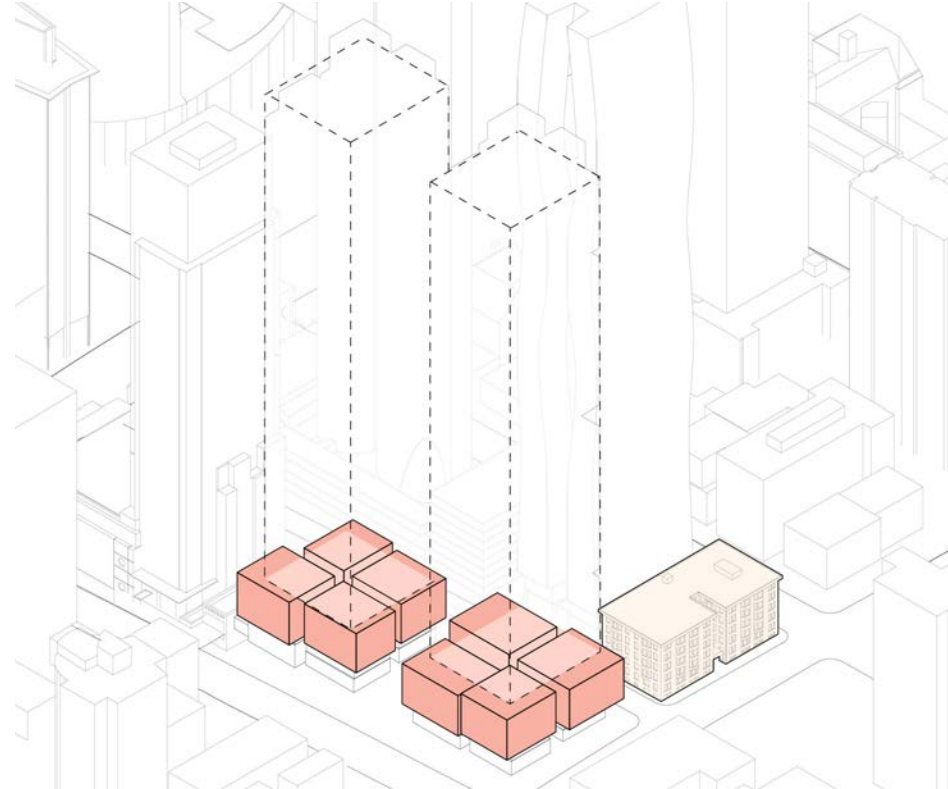
2.2 Design Principles

Activated Streetscape



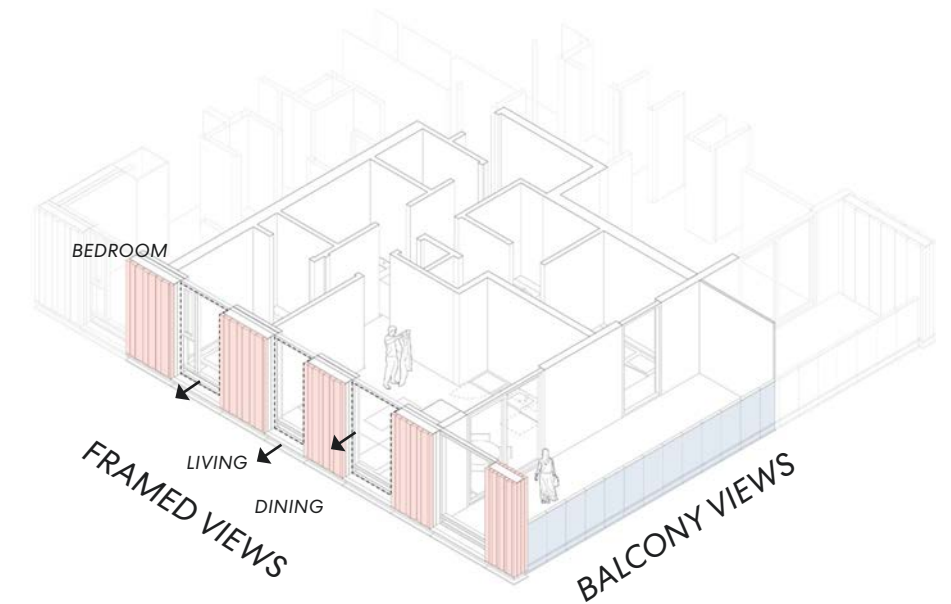
The creation of a mid-block connection allows for porosity through the site while contributing to the network of open spaces throughout the neighbourhood. Retail animates Barclay and Thurlow Street while the landscape design of the mid-block connection draws one in with a space to pause and reflect.

Podium Blockscape



The lower podium levels have been articulated into a series of quadrants to offer a “blockscape” of various extents and heights that create an engaging street experience, knitting this development into the existing West End context.

Balconies & Framed Views



Towers organized into quadrants are defined by balconies oriented toward the north and south, while a definitively solid expression to the east and west facades allows for windows placed to frame views and increase envelope performance.

The panelization of the facade works in harmony with the structure and floorplans to provide unique views and experiences while expansive and operable balcony systems allow for an expanded living space.

2.3 Design Concept

Collections

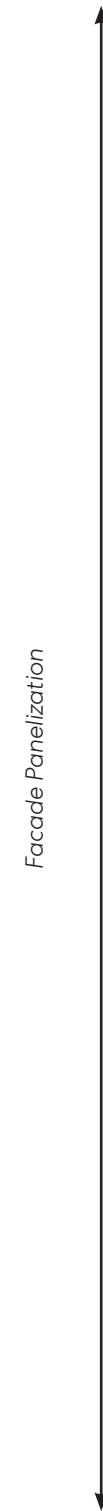
Emerging from the spirit of the project vision and an understanding of the West End neighbourhood, the overall design concept engages both the street edge and the skyline with a distinct and recognizable architecture.

Referencing the varied scales of mid-rise apartment blocks, the project has been principally structured into a series of Collections which provide a flexible framework for overall organization both in plan and section. The varied scales allow for an urban sanctuary, creating spaces for pause and reflection within the architecture and the public space it creates.

From a massing perspective, the vertical collections unifies the tower from street to crown with a cadence of breaks. The horizontal recesses create opportunity for the introduction of residential units with expanded glazing and a double-height West Tower amenity space with expansive views and identity.

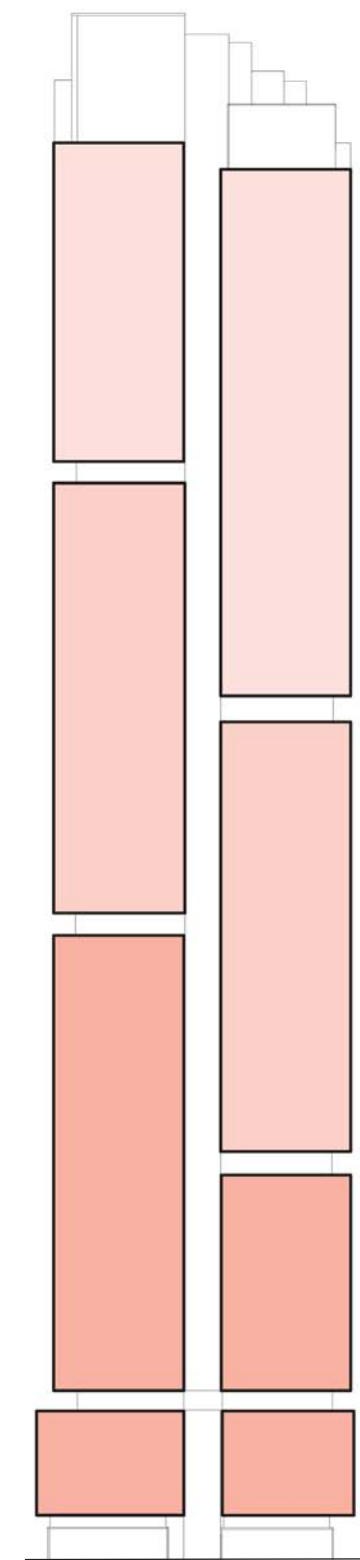


Transparent

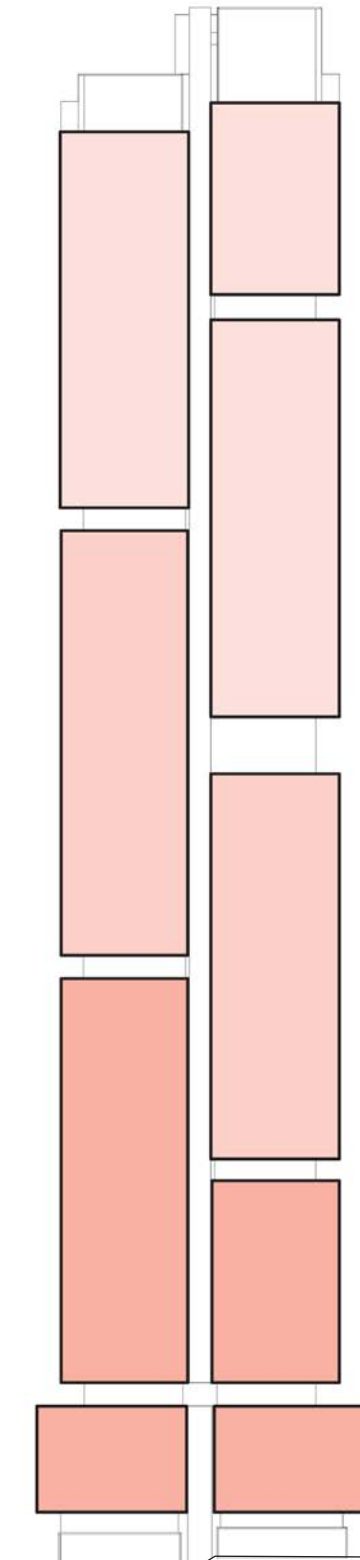


Facade Panelization

Solid



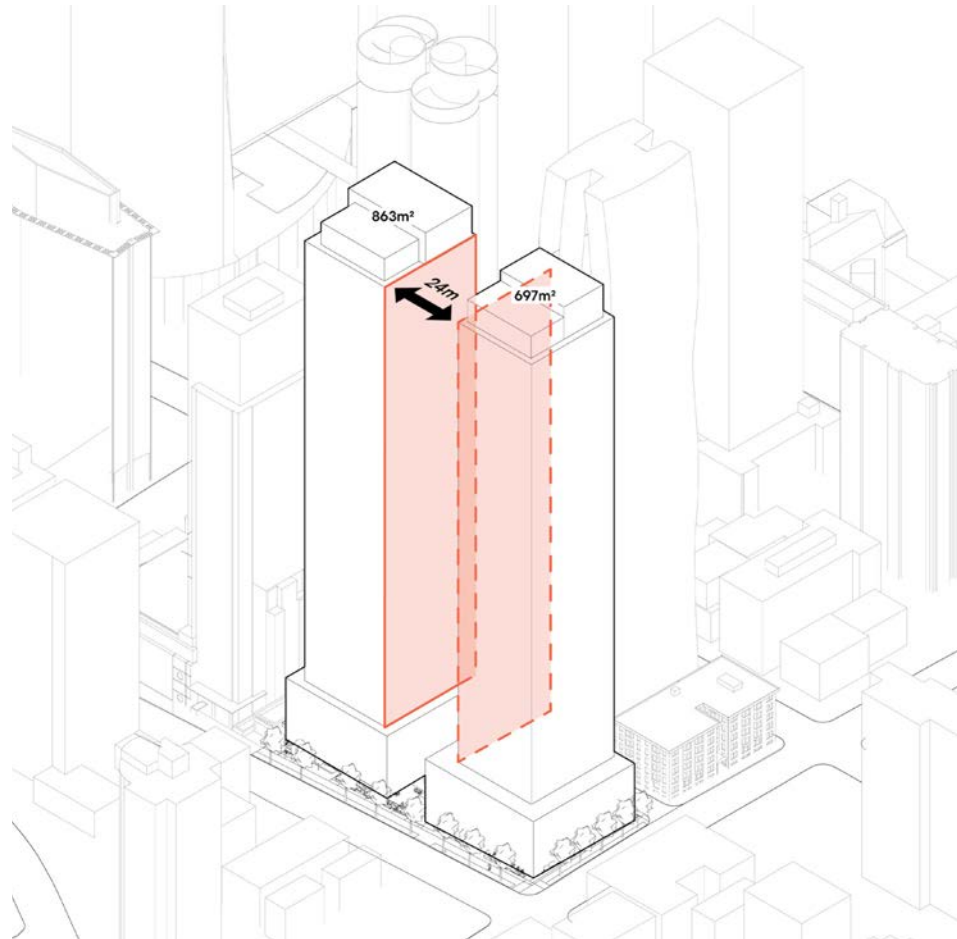
East Tower



West Tower

2.4 Form of Development Diagrams

Typical Massing



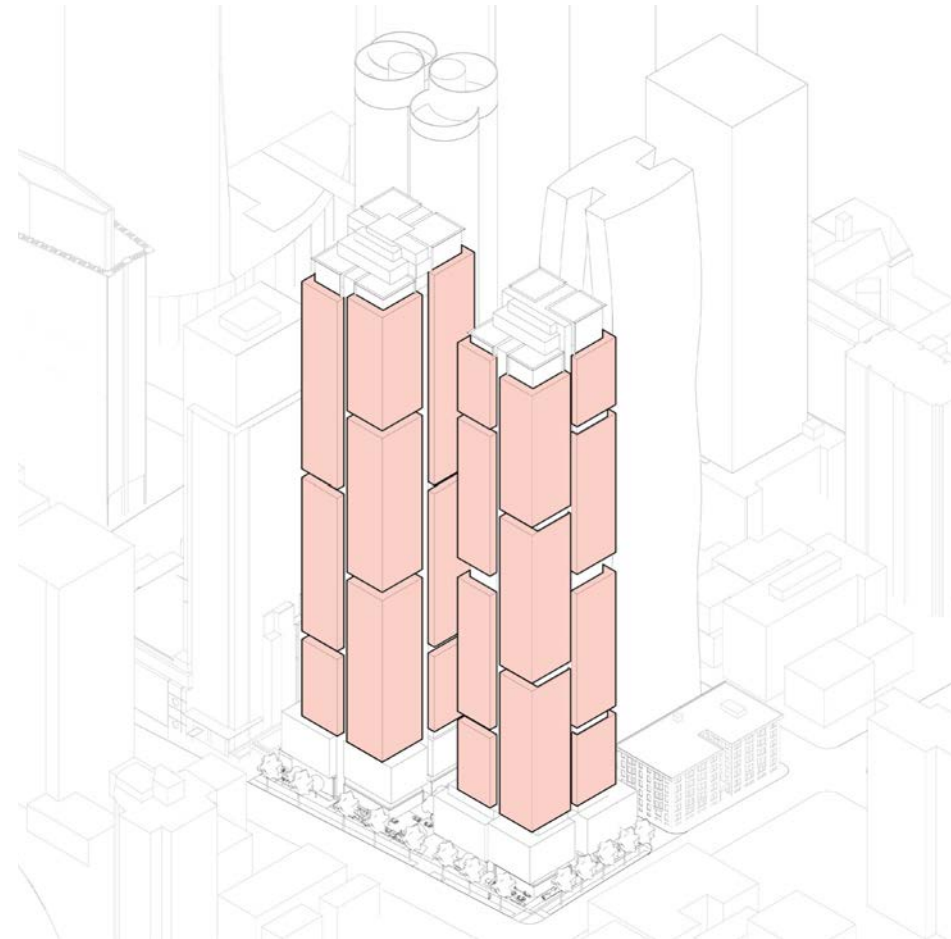
Minimum 24m (80') tower separation between proposed towers.

Maximum floor plate of 863 m² (9,000 sf) in the East Tower and 697 m² (7,500 sf) in the West Tower.

“Tower in the Park” typology with larger floors to land the tower at the base.

The larger podium floor plates lends itself to a massing strategy where the “podium” reads clearly as an extension of the tower, resulting in a “Tower in the Park” expression.

Tower Collections

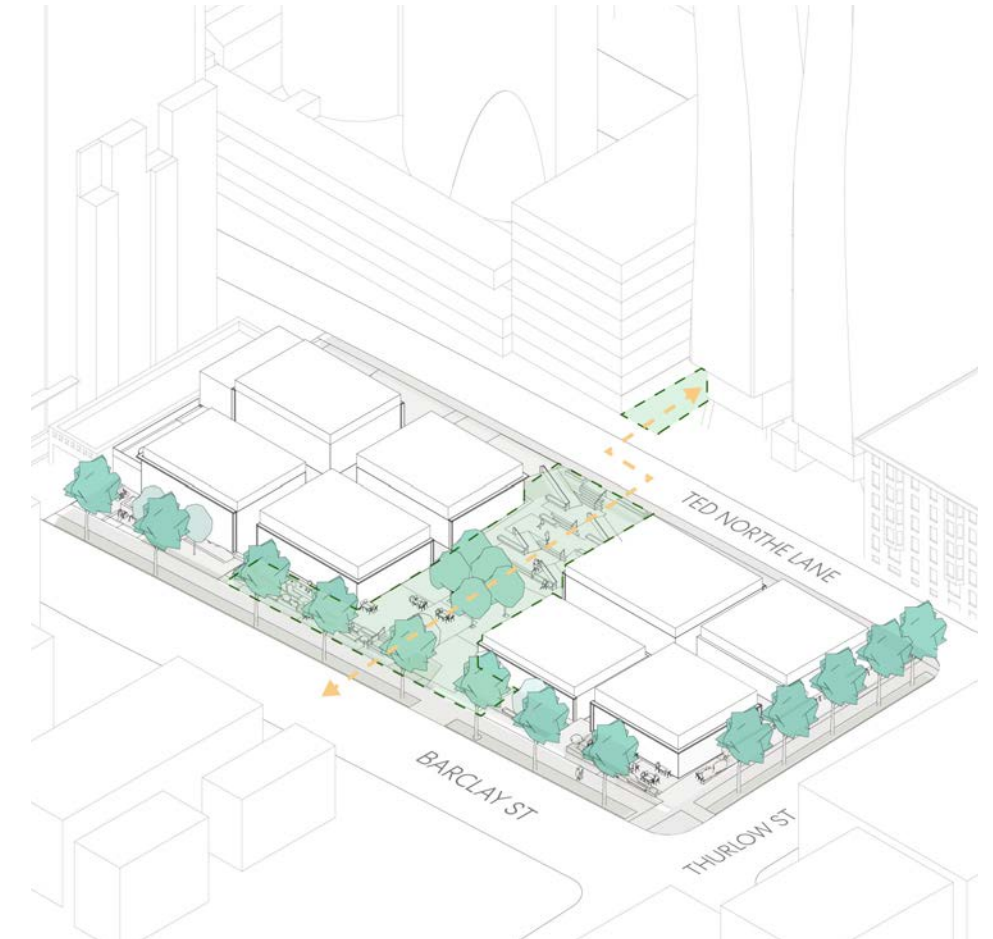


The tower massing has been sculpted in a series of quadrant “collections” to continue the variation of smaller masses from the street into the tower form.

Marking the site as a transition from the CBD to the West End, the East Tower takes on a more singular massing, typical of the downtown core, with the West Tower having greater articulation as a bridge to the variety of scales within the West End neighbourhood.

The two towers create a complimentary pair.

Landscape Connection

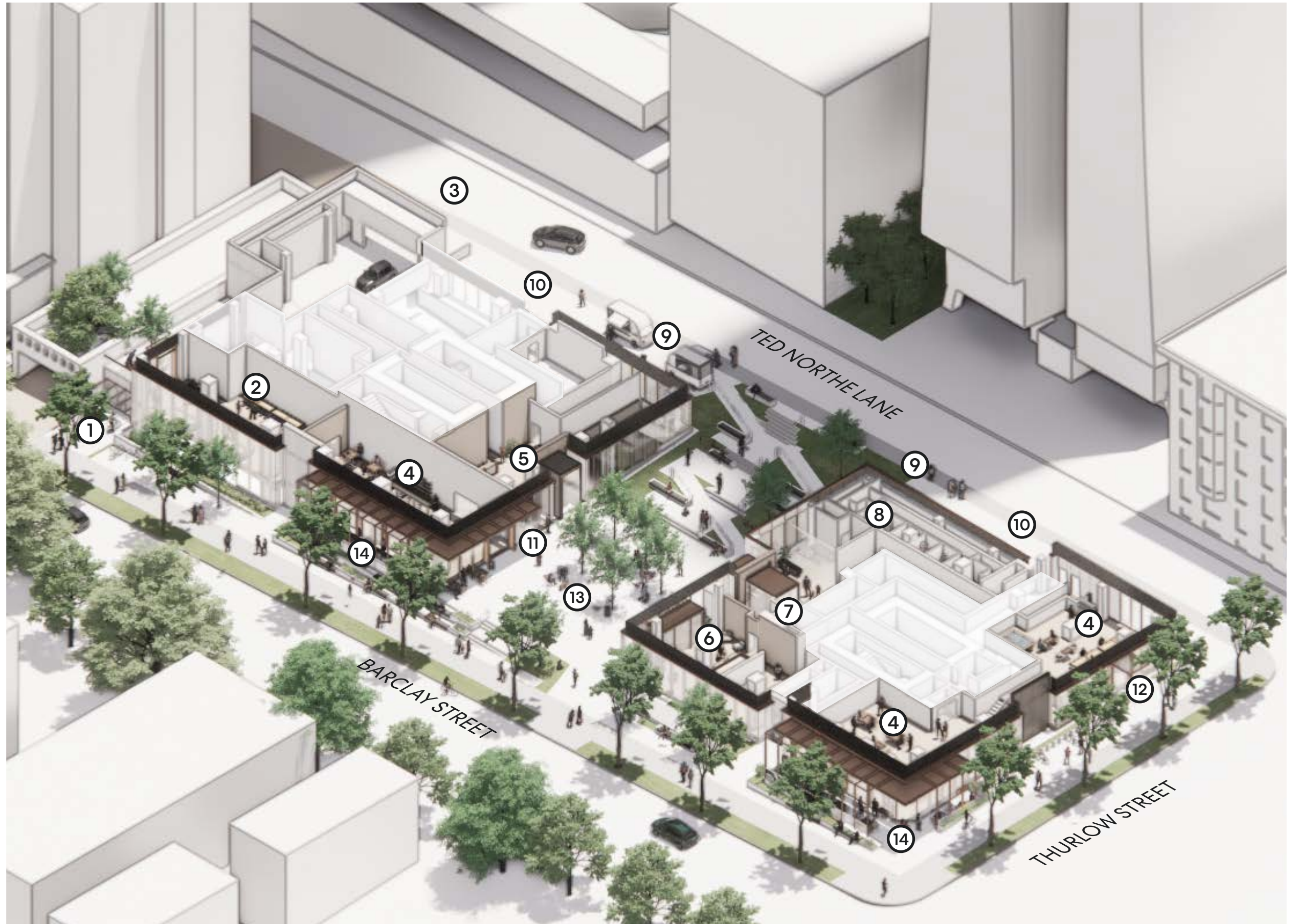


The landscape strategy and connection creates a welcoming and unique experience for both the residents and public realm.

The mid-block connection between Ted Northe Lane and Barclay Street is the heart of the project, with a vibrant and energetic public realm and responding to the ground floor programs.

Activated Streetscape & Landscape Connection

- 1. BIKE PARKING ENTRANCE
- 2. AMENITY
- 3. PARKADE ENTRANCE/CAR SHARE ACCESS
- 4. RETAIL
- 5. RENTAL LOBBY
- 6. CONDOMINIUM LOBBY
- 7. CHILDCARE + SOCIAL HOUSING LOBBY
- 8. SOCIAL HOUSING BIKE PARKING
- 9. FOOD TRUCKS
- 10. LOADING
- 11. PUBLIC ART OPPORTUNITY
- 12. PUBLIC BIKE SHARE
- 13. MID-BLOCK CONNECTION
- 14. RETAIL PATIO



2.5.1 Residential

Contributing positively to the Housing Vancouver Strategy, the development proposes “a significant shift toward rental, social, and supportive housing, as well as greater diversity of forms in our ground oriented housing stock.” - pg 5 of *Housing Vancouver Strategy Document*.

The East Tower provides 100% rental with 20% below-market rental, while the West tower provides 23% social housing and a childcare facility with the balance of area for condo. Both towers serve the needs of their diverse resident types with both indoor and outdoor amenities and retail at grade. All residential entrances sharing a common central courtyard that facilitates an active and shared space for the community.

East Tower:

*Market Rental + Below
Market Rental*

West Tower:

Strata + Social Housing + Childcare



2.5.2 Retail

The project's ground floor and public realm lends itself to a unique retail experience, interacting and welcoming the neighbourhood in. The design of the ground floor, in collaboration with the landscape design, offers a human-scale experience that draws one into the site.

There are two primary retail spaces; and an anticipated restaurant at the corner of Barclay and Thurlow Street and a Cafe located at the corner of the mid-block connection along Barclay. Both have adjacent outdoor patio spaces with proposed weather protection to allow for year-round use.



Corner of Barclay and Thurlow Street



Barclay Street at NW Corner of East Tower

2.5.3 Lobbies

The mid-block connection is home to the four lobbies in the two towers; condominium, social housing, childcare, and rental entry. Each entry and lobby has been designed to be their own, with a unique experience and common thread of the courtyard weaving them together.



Rental



Childcare + Social Housing

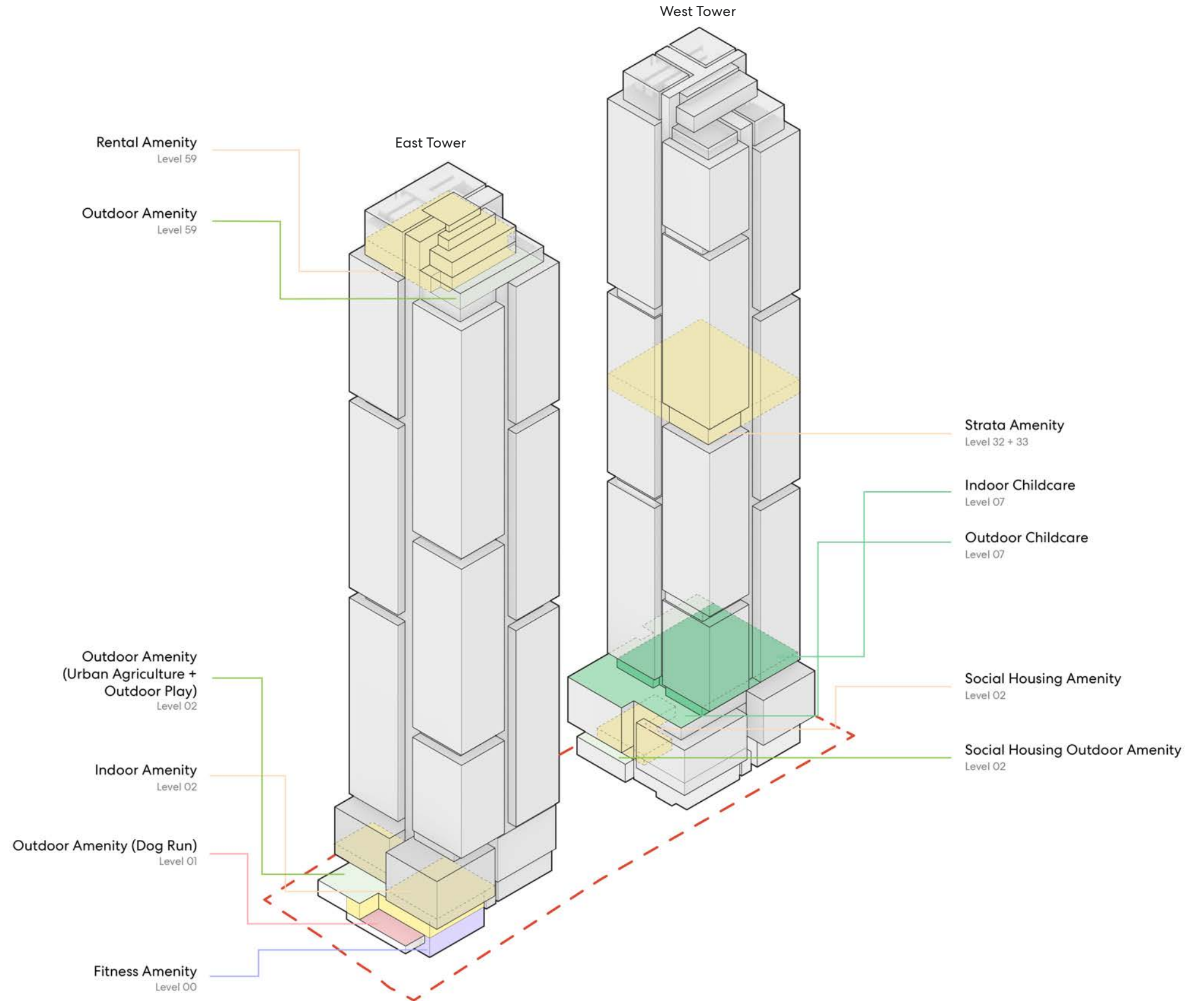


Condominium

2.5.4 Amenities & Childcare

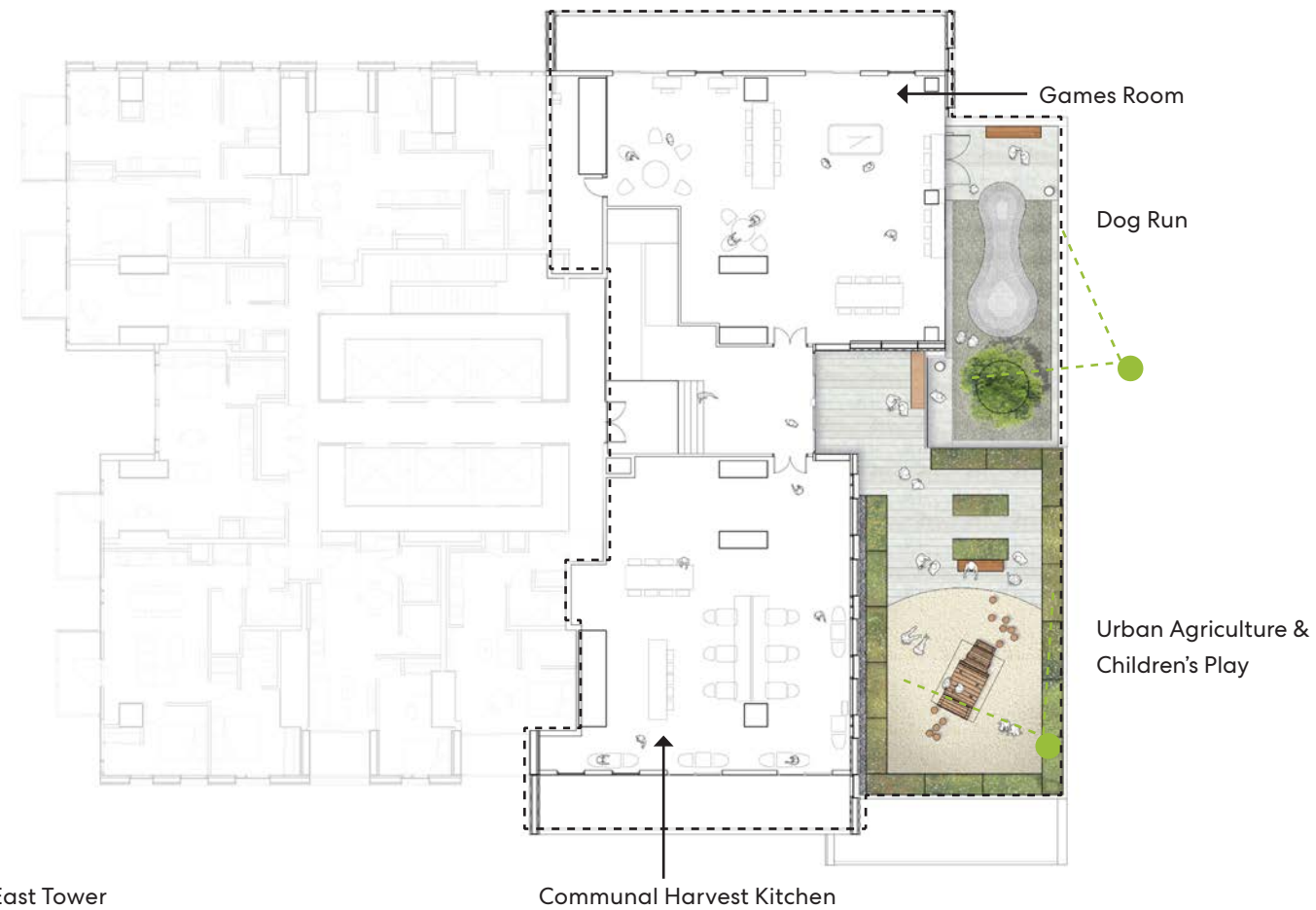
Overview

The goal of the amenity spaces and childcare facility is to meet the needs of the various residents while creating a strong sense of community. Both towers have their own unique amenities including indoor social and fitness spaces, urban agriculture food plots, children's play area, and a dog run, with an overarching goal of fostering social and environmental wellbeing.



Urban Agriculture + Dog Run (East Tower)

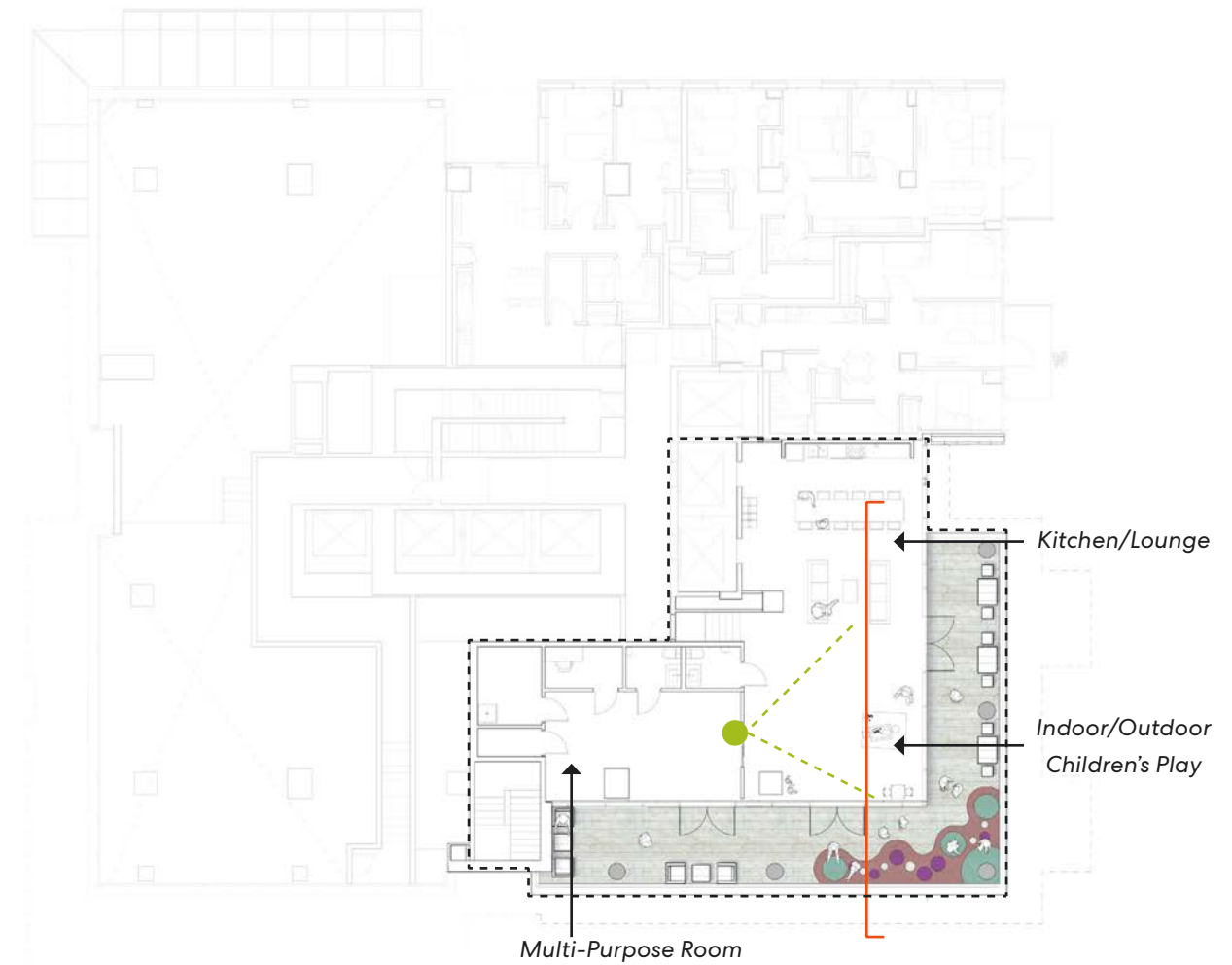
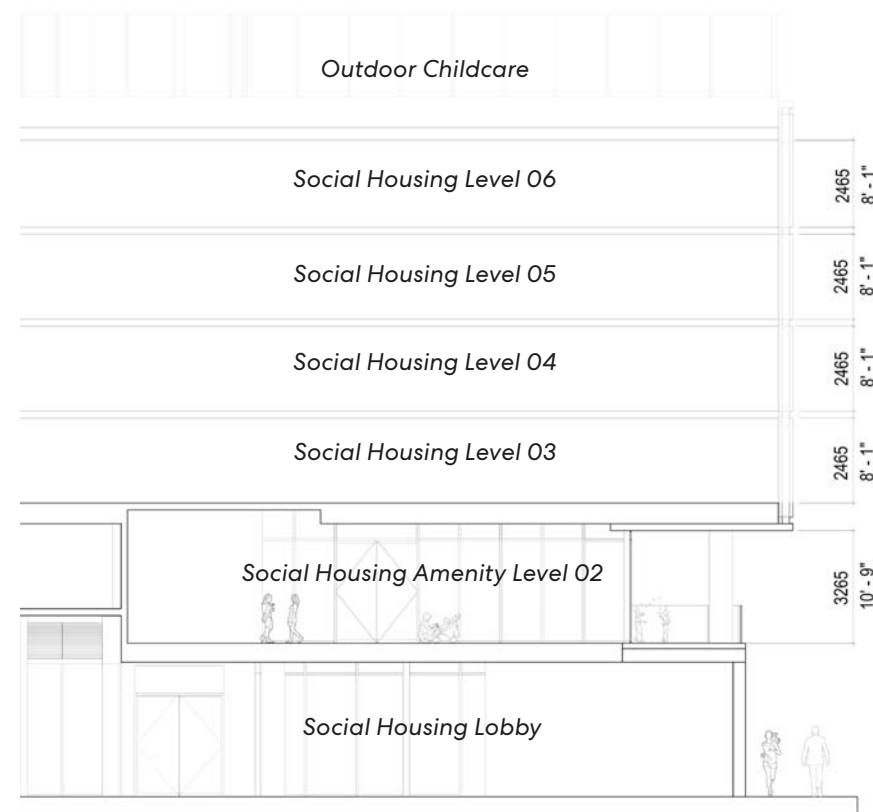
The East Tower has diverse amenity spread throughout the podium and on the rooftop. The podium acts as a social hub for the residents, with programming such as fitness, coworking, food and wellness, urban agriculture, and a dog run. The two rooftops neighbouring the existing development (Patina) blur the indoor and outdoor boundaries through glazing and framed views, allowing for synergy between what is going on inside and out.



L02 East Tower



Social Housing Amenity with Shared Access (West Tower)



L02 West Tower

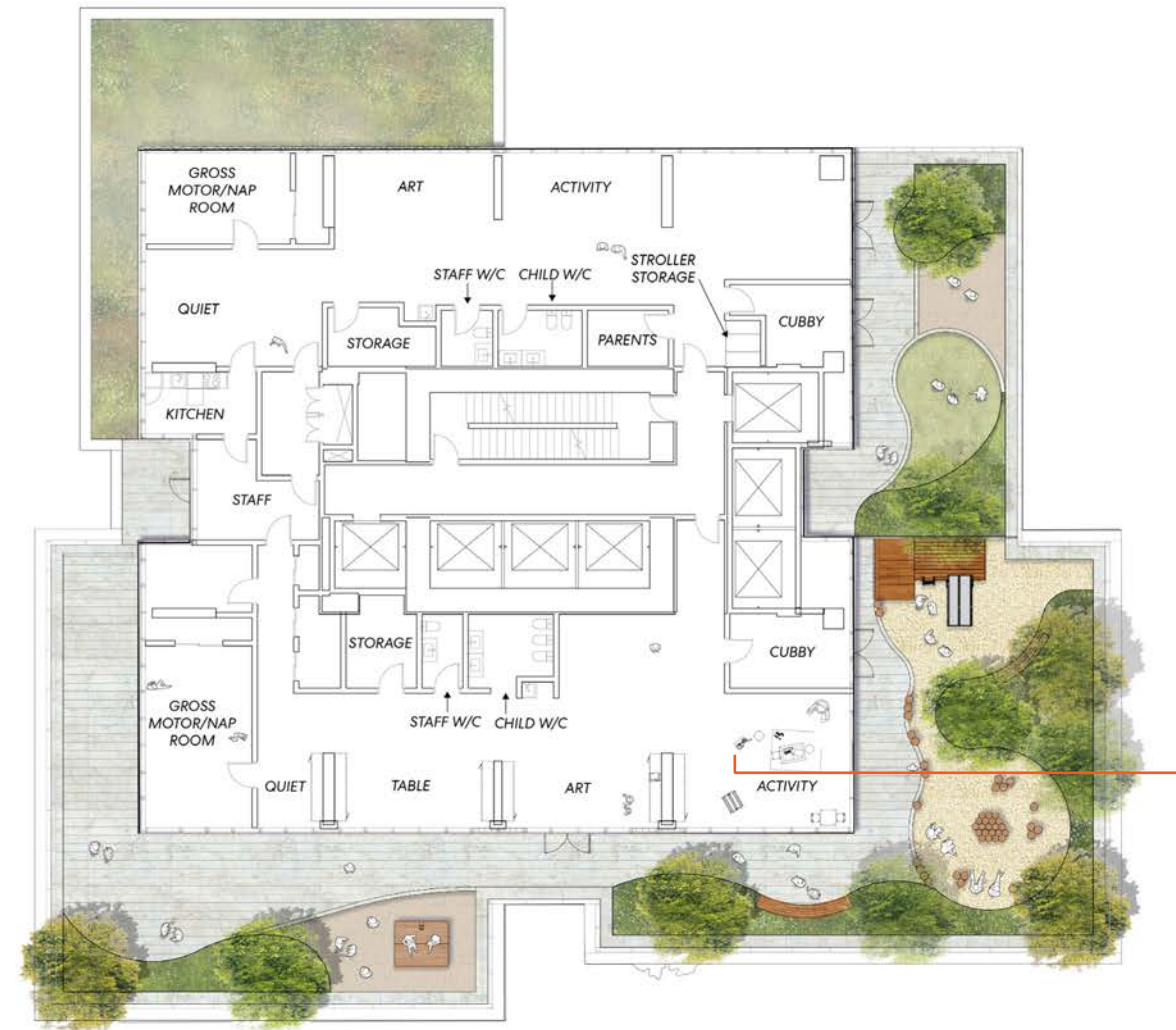
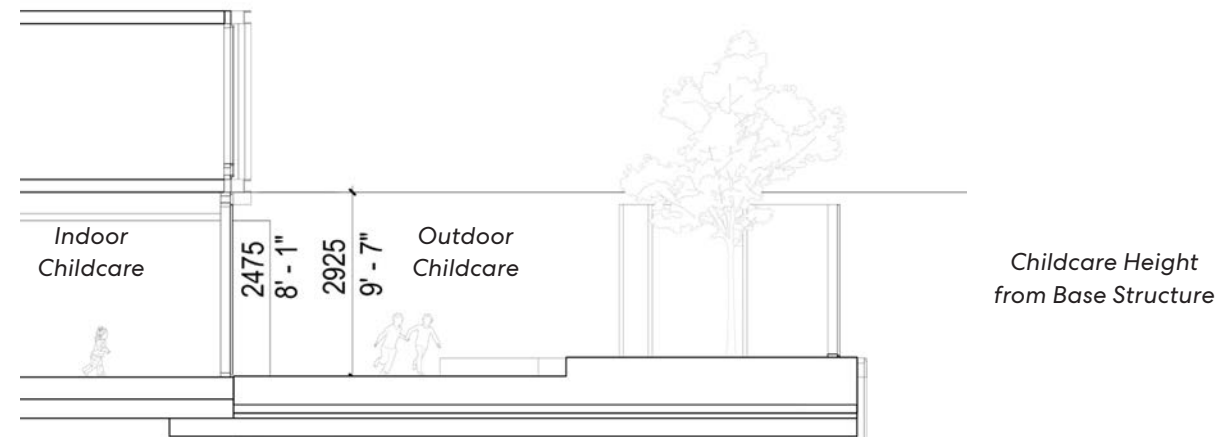
Social Housing Amenity

	Area at Rezoning	Area at Development Permit	CD-1 Condition of Approval
Indoor	92 m ² (990 sf)	184 m ² (1982 sf)	125 m ² (1,335 sf) (15 sf x 89 units)
Outdoor	87 m ² (937 sf)	88 m ² (947 sf)	130 m ² (1,399 ft)

The social housing amenity was designed as per the Housing Design and Technical guidelines as well as the High-Density Housing for Families with Children Guidelines. As per the CD-1 Conditions of Approval, the amenity and units provide at least 8' clear ceiling height in all spaces. The total amenity size on L2 is 1982 sf, and the outdoor 947 sf. The design decision to include greater quality indoor space rather than the required indoor (15 sf x 89 units = 1335 sf) and outdoor (1399 sf) was due to the lack of daylight available from neighboring density. The oversized indoor amenity allows for childplay for both condo and social housing residents that can be used year round and open to outdoors when weather permits. The open-concept accessible amenity space includes all required spaces such as a kitchen, gender-neutral accessible washroom, multi-purpose space for parties, janitor room, storage, and ample indoor and outdoor lounge seating providing quality amenities for all residents.



Childcare Facility (West Tower)



L07 West Tower



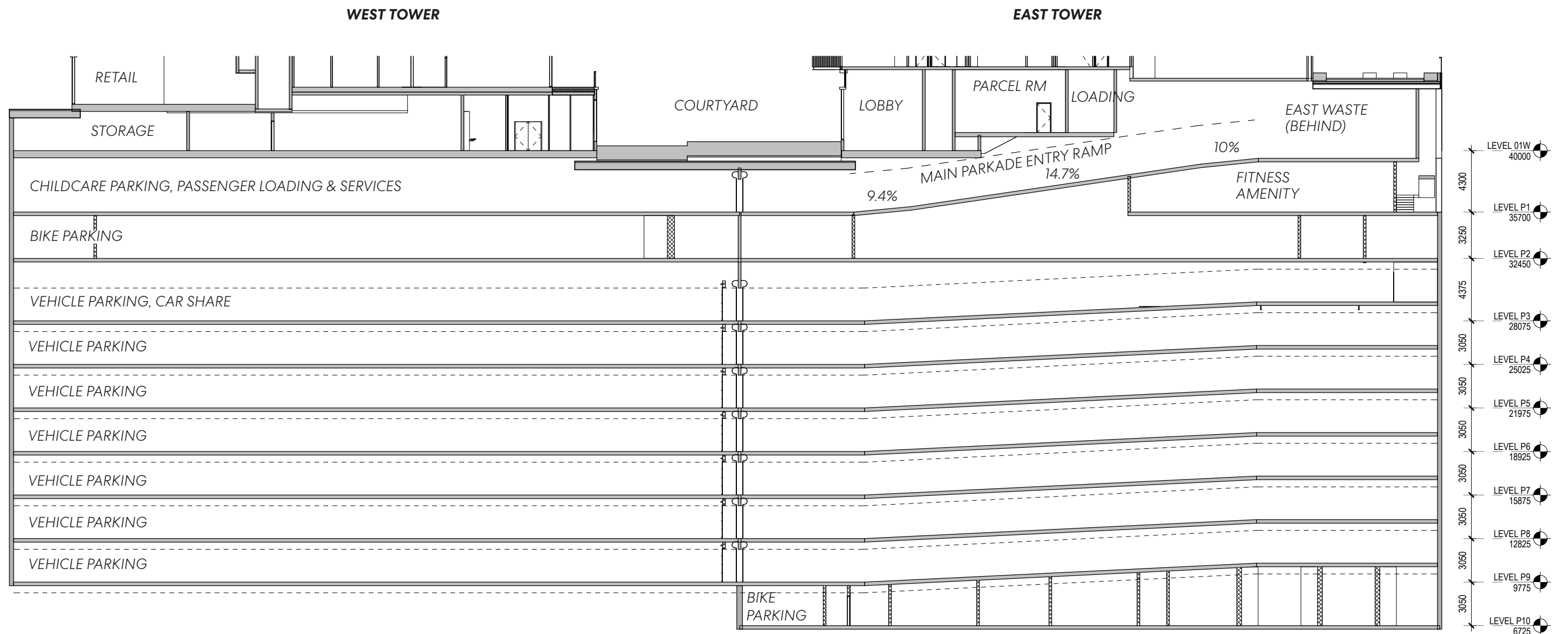
Childcare Facility			
	Area at Rezoning	Area at Development Permit	CD-1 Condition of Approval
Indoor	592 m ² (6,377 sf)	619 m ² (6,672 sf)	429 m ² (4,618 sf)
Outdoor	519 m ² (5,588 sf)	450 m ² (4,847 sf)	416 m ² (4,478 sf) (520 m ² with 20% reduction)

The childcare facility is located on the podium rooftop of the West Tower at Level 07 in order to maximize access to natural daylight for the outdoor program area. The elevation of the childcare facility is below 25m (82 ft) at 20m (65'). The clear slab height is 9' 7", leaving ample room for future mechanical and electrical equipment. The podium setback on Thurlow has been reduced since rezoning, which results in a loss of outdoor childcare. However, with the 1.75m setback proposed over the Thurlow setback, the project is able to achieve the 20% reduction in outdoor area in the CD-1 Conditions of Approval. The facility will accommodate 37 children - 12 spaces for ages 0-3, and 25 spaces for ages 3-5, exceeding the required indoor area requirements. The design emphasizes a strong indoor and outdoor connection, and a strong connection to the public realm down below.

2.5.5 Access & Parking

Overview

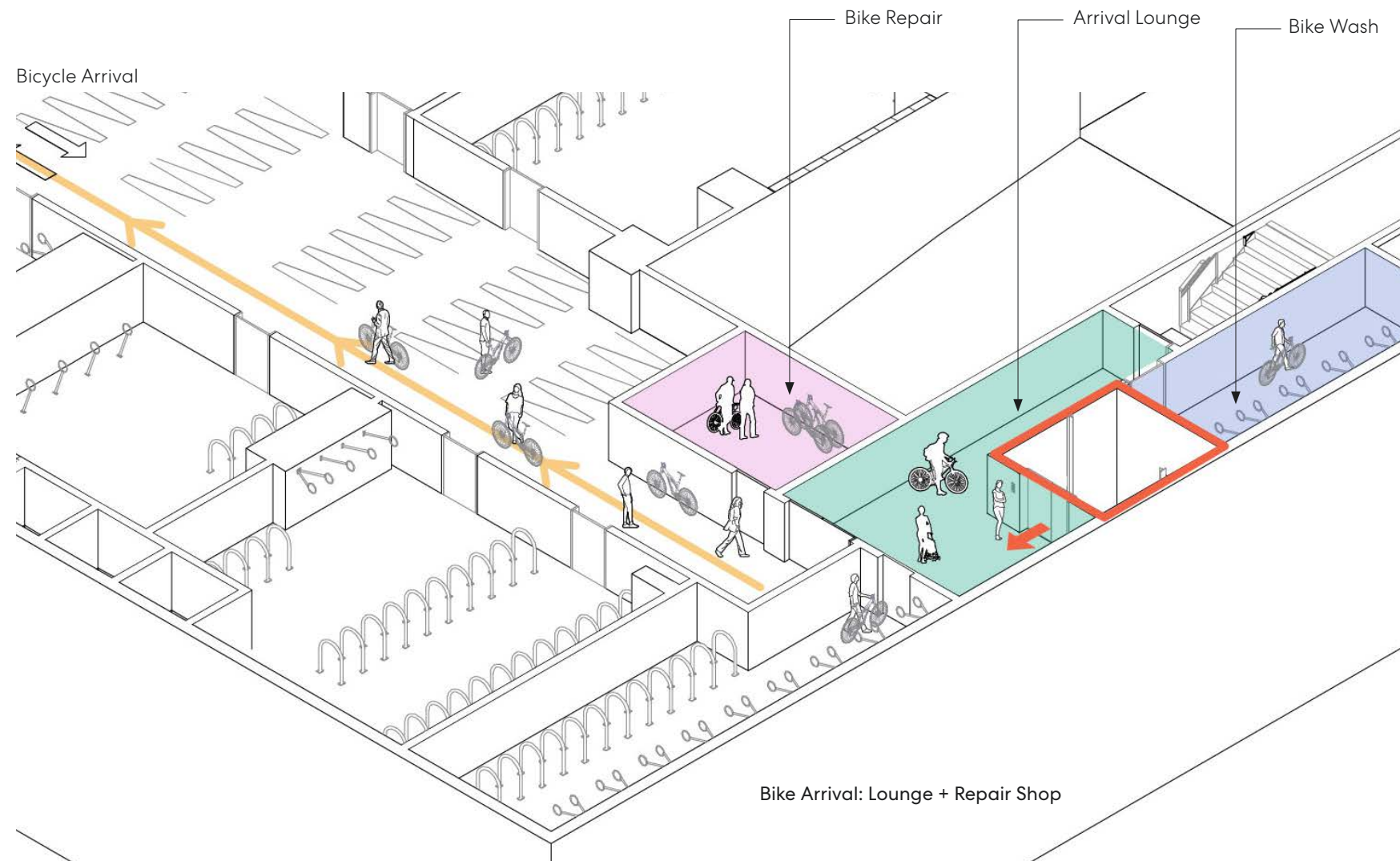
The towers have a shared parkade entry off of Ted Northe Lane, branching into two loops and parkades for the respected tower. The two loops allows for a flexible design which can accommodate phased parkade construction if necessary. The first 3 levels of the parkade are home to a variety of services and bicycle parking for both towers, freeing up space above grade due to the high density site.



2.5.6 Bike Facility

P2 + P10

Located primarily on P2, the bike facilities go above and beyond from being a typical leftover function, instead, serving as an amenity and social hub for all residents. The design includes a designated entry off of Barclay Street, an arrival lounge and repair shop on-site, and x amount of stalls. Both P2 and P10 are bike only, providing safety, ease, and comfort to cyclists.



Entry off of Barclay



2.6 Architectural Expression

Ground Plane



The design of the ground floor has been sculpted to be an active urban link, connecting Barclay Street with Ted Northe Lane. This mid-block connection serves as the front door to all residents living in both towers and families using the childcare facility, providing a unique and calming arrival experience set within a park-like setting.

Podium



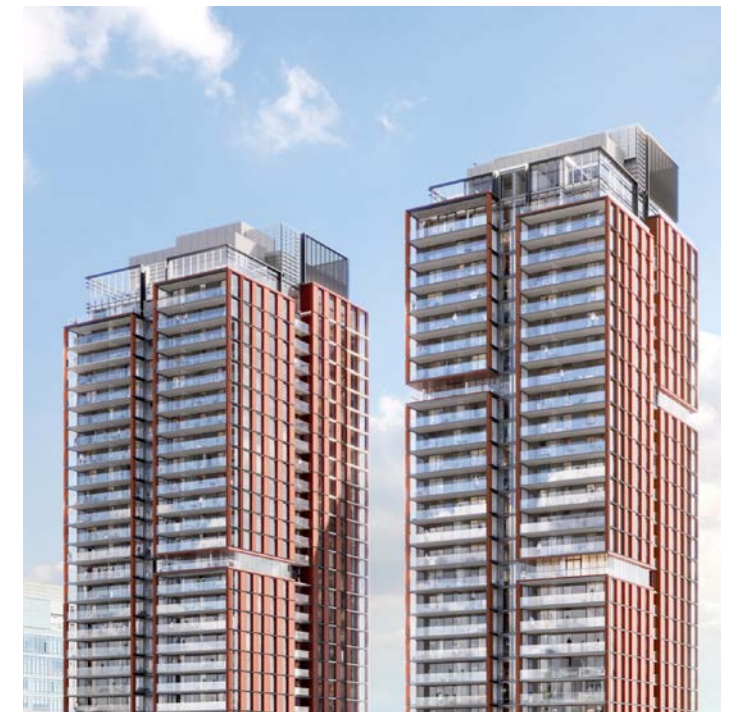
The lower podium levels have been articulated into a series of quadrants to offer a “blockscape” of various extents and heights that create an engaging street experience, knitting this development into the West End fabric.

Tower



The tower silhouettes are contemporary and refined. The pair of towers will provide a calm background to a series of more organic and expressive towers planned for this precinct, but with a distinct colour and legible pattern to create a distinct and recognizable addition to the skyline.

Crown



The design pays specific attention to the top of the tower by providing a lightweight expression atop the stepped collections that unifies their expression on the skyline. The massing steps back as an elegant resolution to the towers which softly illuminate at night.

Material Concept

The material concept for the building is divided into 3 main components: a highly prominent metal cladding system forming “the Collections”, a vertical ribbon of glazing that provides a reveal between the blocks, and an articulated ground floor that responds to the pedestrian scale which also manifests as the Crown of the tower.

Vertical Connection

Rooftop

Mechanical Screening

Privacy + Environmental Control

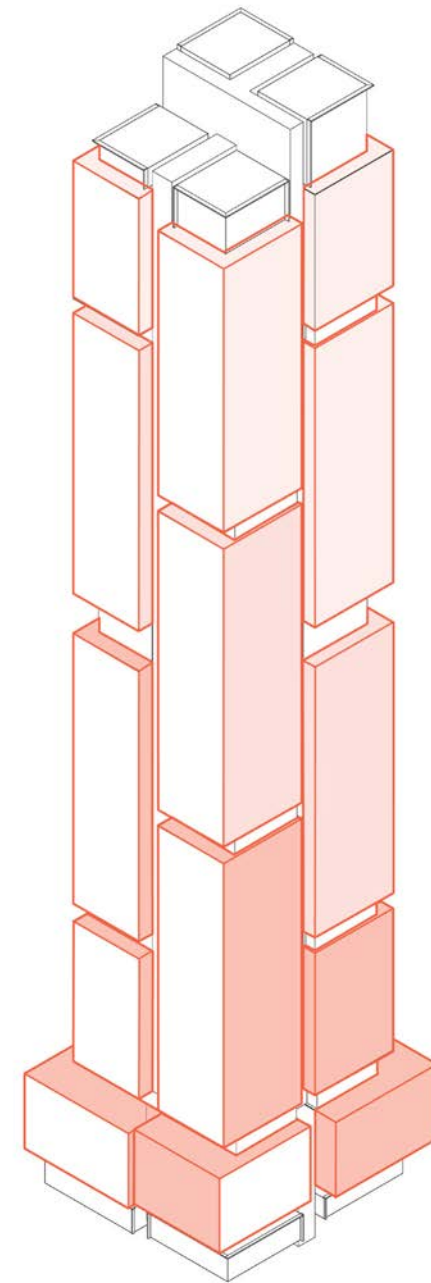
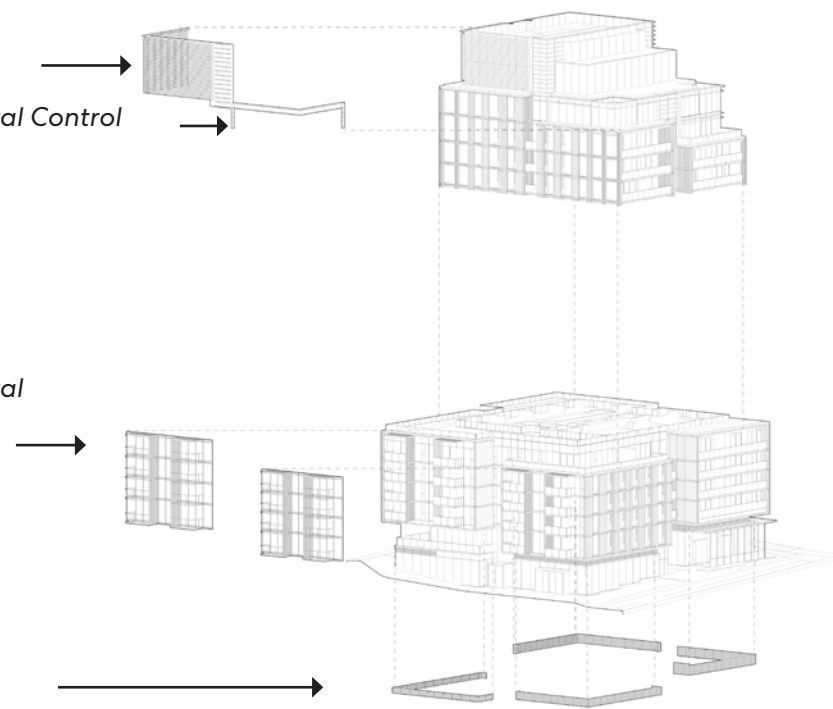
Courtyard Balconies

Privacy + Environmental Control

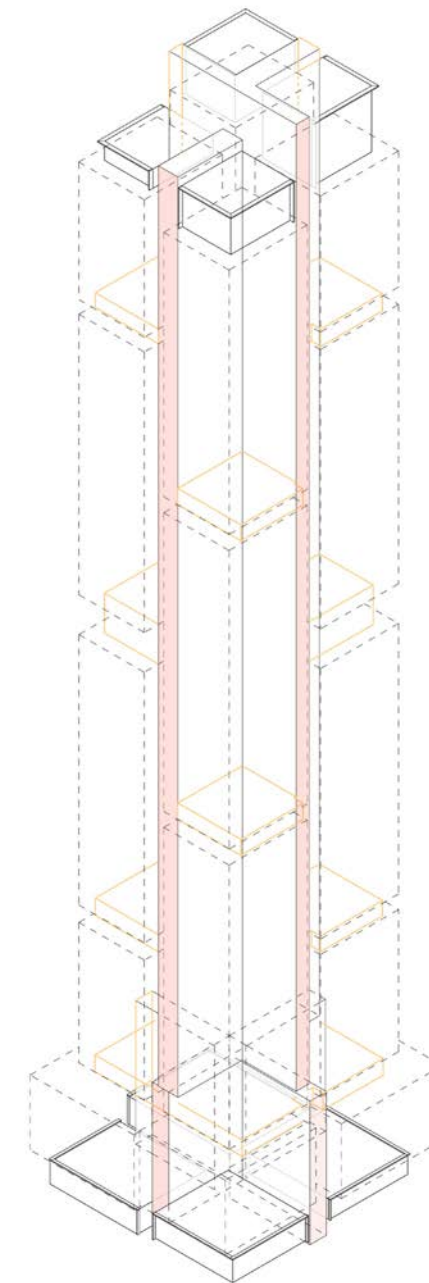
Control

Ground Floor Louvres

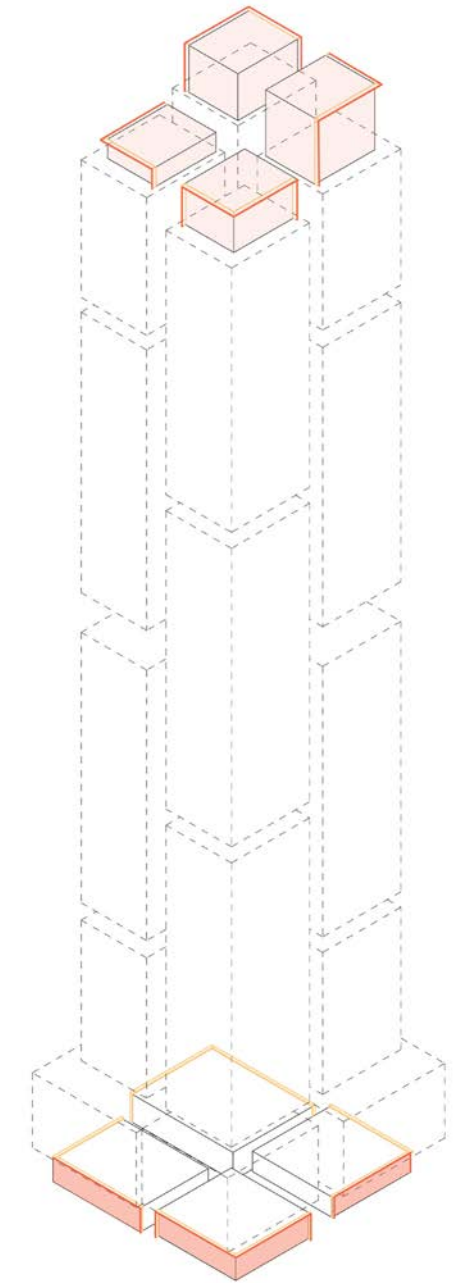
Mechanical Screening



The Collections



Vertical and Horizontal Breaks



Ground Floor to the Crown

2.6.1 Ground Plane

Massing & Design

The Collections of the tower telegraph to the street level, invoking a scale and massing reminiscent of early West End neighbourhood shops and merchant buildings.

The ground floor is characterized by expanses of clear glazing allowing visual connection from the sidewalk and mid-block connection to the activity of the adjacent retail and lobby spaces.

A system of light-weight steelwork provides the flexibility to provide weather-protection above doors or access paths with the potential to expand over outdoor seating areas to provide comfort in the off-season and ensure use throughout the year.

Entrances to the retail are demarcated through deeper side fins with a solid transom to provide a consistent area for signage and addressing. The main residential lobbies are accessed via vestibules that provide individual experience while relating to a cohesive whole.

Running consistently under each Collection, a band of horizontal louvres act as a reveal to highlight the glazing below while providing flexibility for future mechanical requirements.

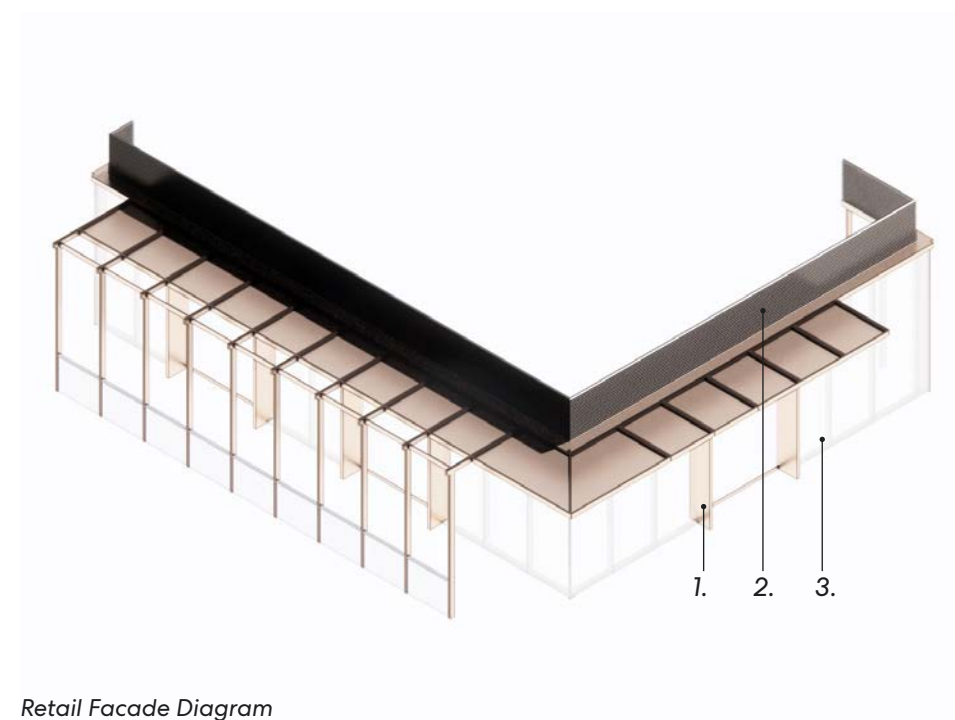


*Looking through the Mid-Block
Connection from Barclay St.*

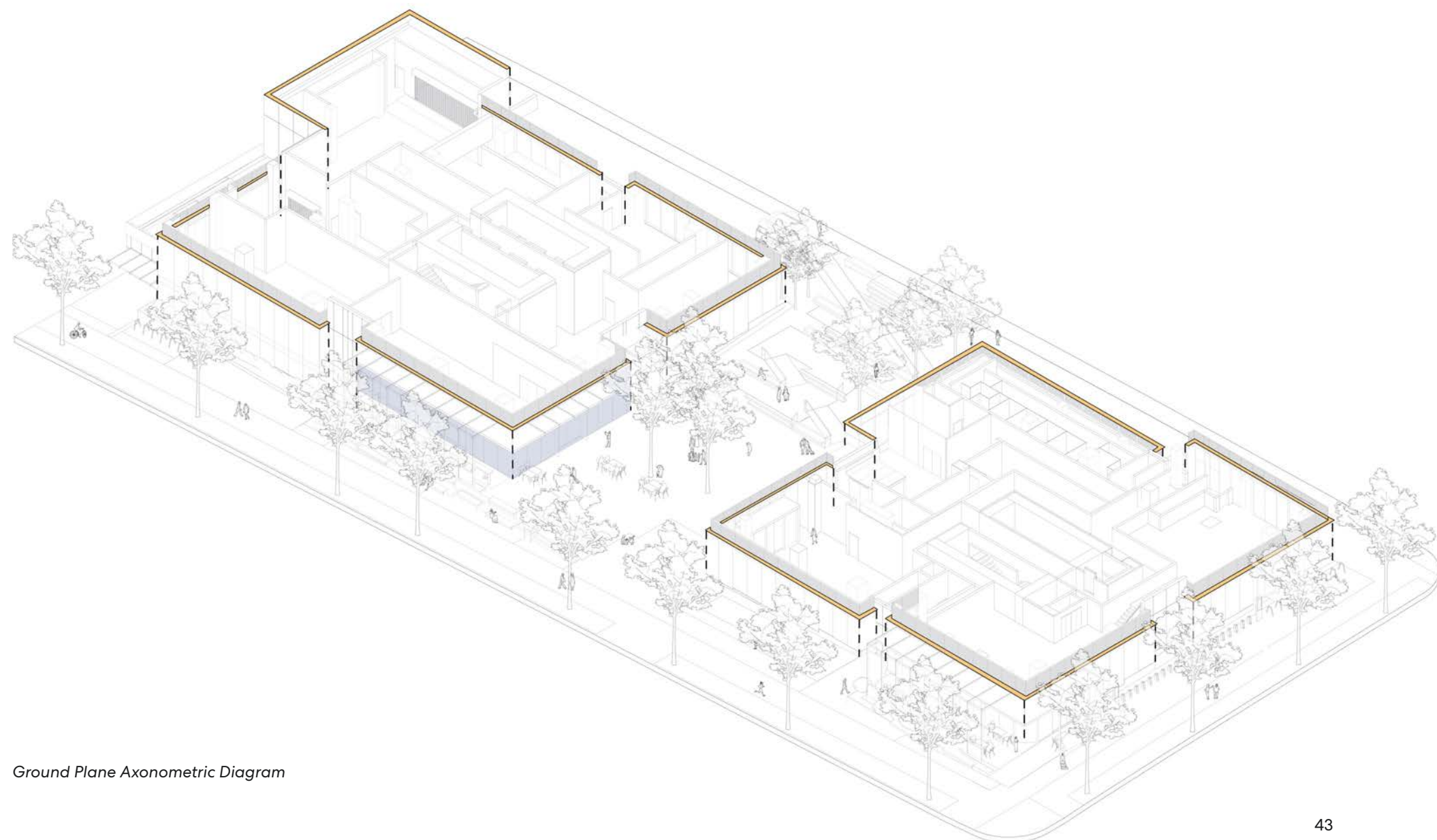
Materiality

The ground floor is primarily comprised of a few well-considered and high-quality materials. Clear transparent glazing wraps all corners facing the streets, complimented by infill of glazed shadow box that continues the expression of the vertical spine reveal. A filigree of warm-hued “bronze” metal mullions, fins, and canopies provides texture and a human-scaled richness to the pedestrian ground plane. A charcoal grey horizontal louver system runs atop the transparent glazing to screen building services in a consistent manner.

-  1. Metal - Bronze
-  2. Horizontal Louver
-  3. Glazing Transparent
-  4. Glazing Shadowbox



Retail Facade Diagram



Ground Plane Axonometric Diagram

2.6.2 Podium

Massing & Design

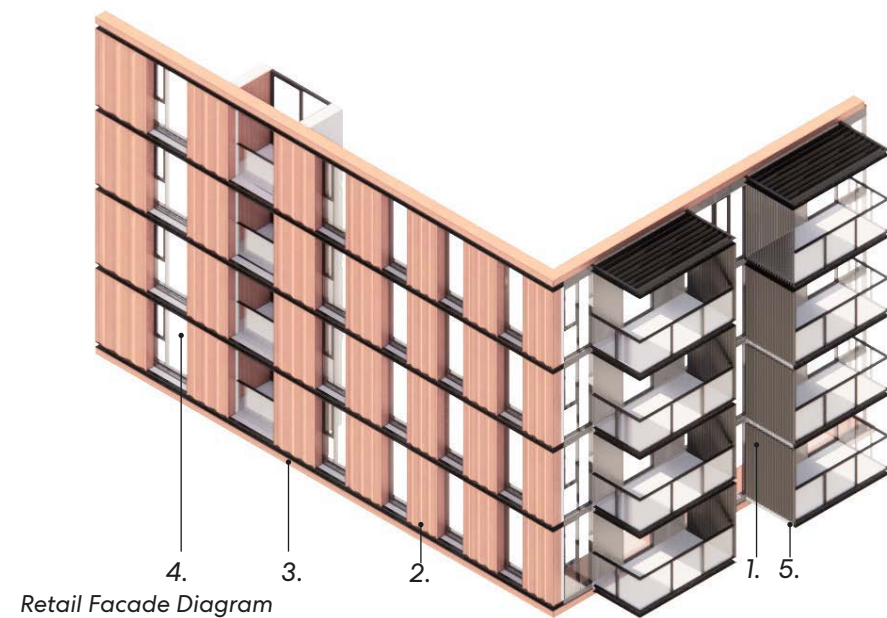
The podium combines the two design principles: activated streetscape and an articulated “blockscape” to create a massing and public realm that is connected to the history of the West End. The massing responds to the sloping site, creating a welcoming and approachable pedestrian experience while acting as a strong base for the two towers. The inner quadrants of both towers are rotated to face the mid-block connection, providing balconies overlooking the public space.



Materiality

The materiality of the podium continues the expression of the towers but with more solidity in the facade to provide more privacy. The primary “Red Cedar” metal material of the collection is continued to the lower levels and complimented by the clear and shadowbox glazing. The inner faces along the mid-block connection are primarily glazed with outboard balconies and privacy screens to match.

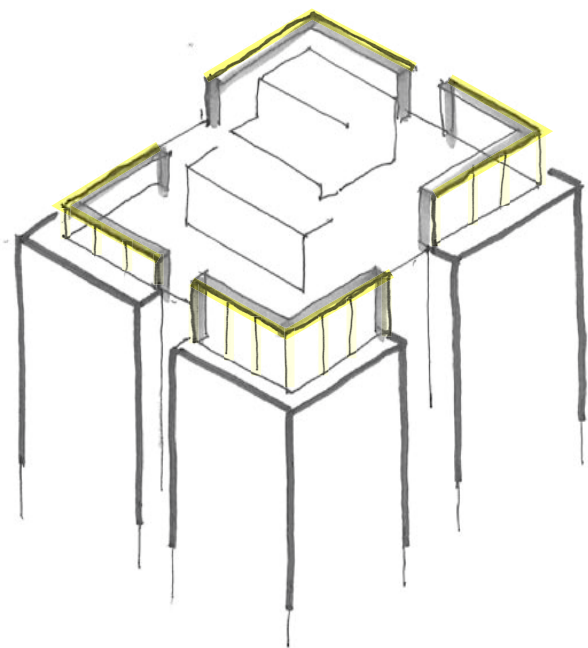
-  1. Privacy Screen Courtyard
-  2. Metal - 'Red Cedar'
-  3. Metal - Charcoal
-  4. Glazing Transparent
-  5. Metal - Balcony Frames



2.6.3 Crown

Massing & Design

Set back from the main Collection massing, the top is expressed as lightweight glazing framed by a metal louver system that provides solar control for interior spaces and screening of rooftop mechanical systems behind. The glazed corners will become lanterns at night, illuminated by interior lighting, while the frame provides for further lighting design opportunities.






Tower Concept Sketch

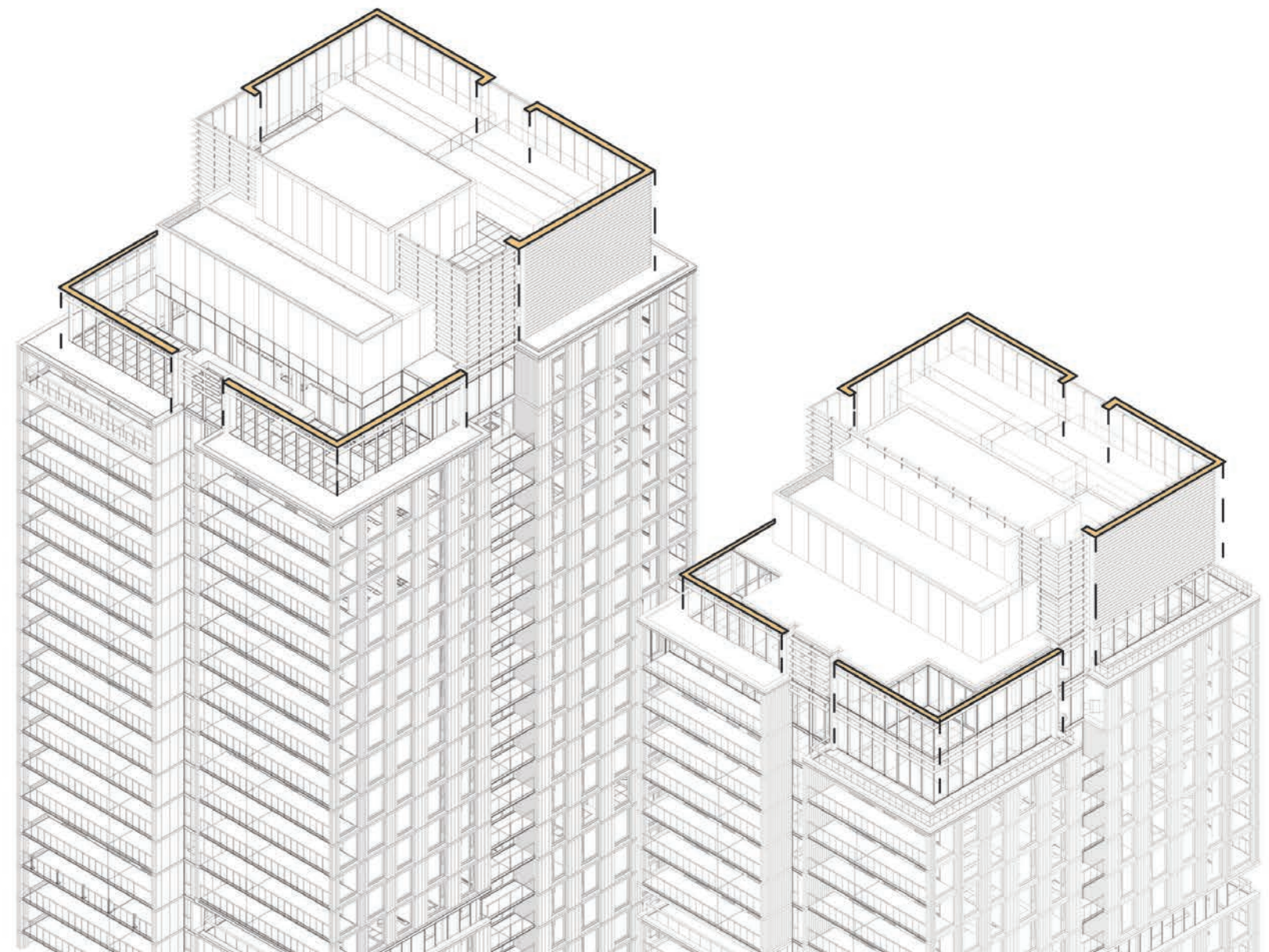
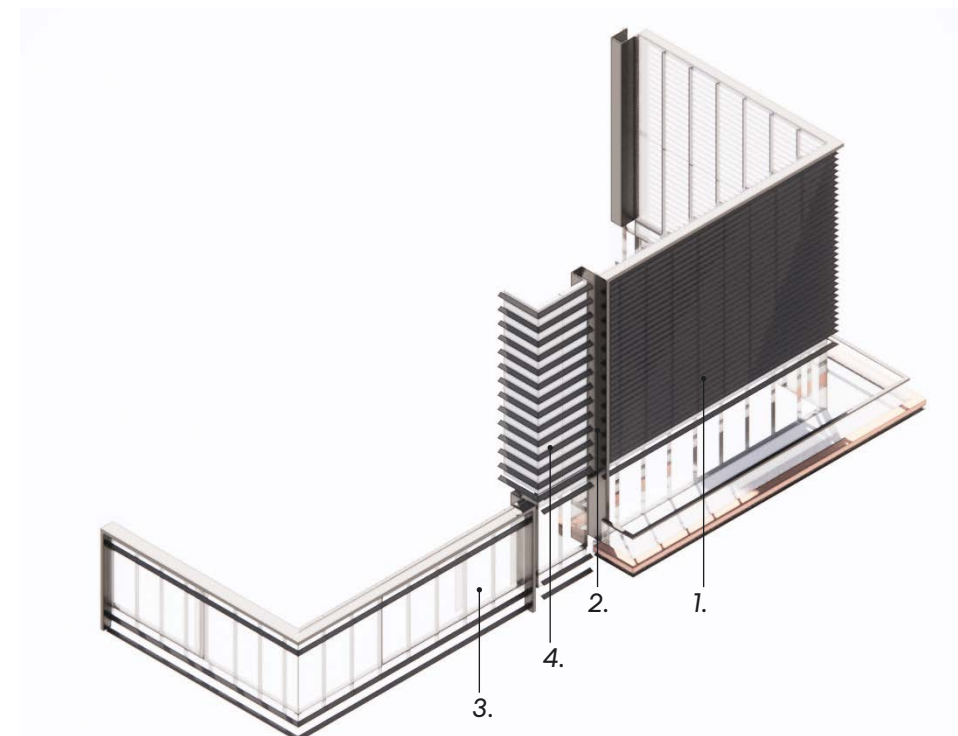


Materiality

A neutral palette of materials is envisioned for the top of the towers, providing a lightweight Crown to the primarily reading of the Collections.

Glazed vision and shadowbox panels are framed by a metal louver system which provides screening of the rooftop mechanical systems.

-  1. Horizontal Louver
-  2. Metal - Charcoal
-  3. Glazing - Transparent
-  4. Glazing - Shadow Box



2.6.4 Tower

Massing & Design

The proposed tower facade is a marked shift from a typical glass tower towards one with warmth and timeless character that is responsive to the requirement for a high-performance insulated envelope.

Informed by the overall design principles, the project's outer expression has been organized as a duality with a rhythm of deep balconies on the north and south faces, and a more solid expression of the east and west facades. Together, a restrained palette and attentive detailing yields a building with an elegant gravitas.

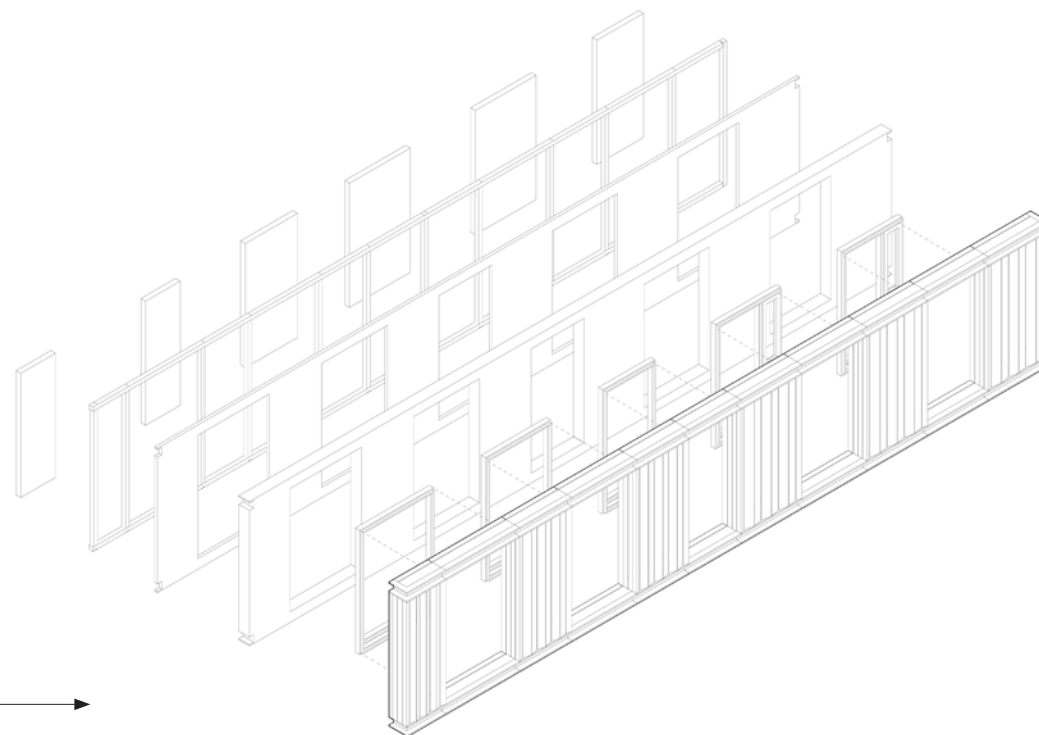
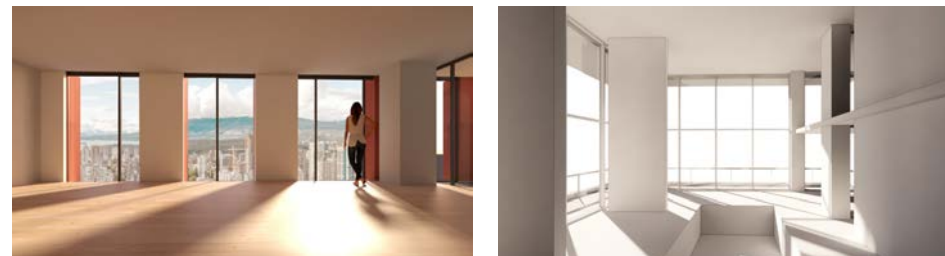


East West Expression

The East and West facades are a direct response to the design concept and principles. The “red cedar” colored facade is textured and carefully articulated, contrasting the elegant formal moves and modular facade system.

Material + Construction

The high-performance facade and assembly not only allows for increased energy performance that exceeds sustainability targets, but also lends itself to a distinct and customized facade expression which becomes more transparent and dissolves into the crown, all while framing views throughout the entirety of the tower.



High-Performance Building Assembly:

- Interior Finish →
- Wall Structure →
- Sheathing + Waterproofing →
- Insulation →
- Window →
- Exterior Cladding →

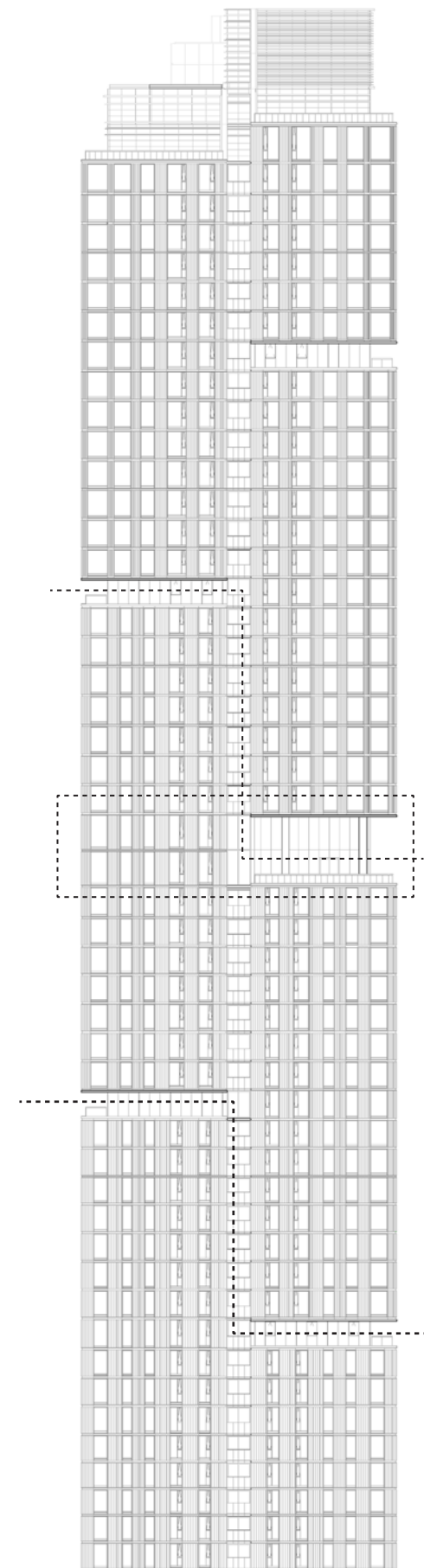
Transparent

Zone 3

Zone 2

Zone 1


Solid

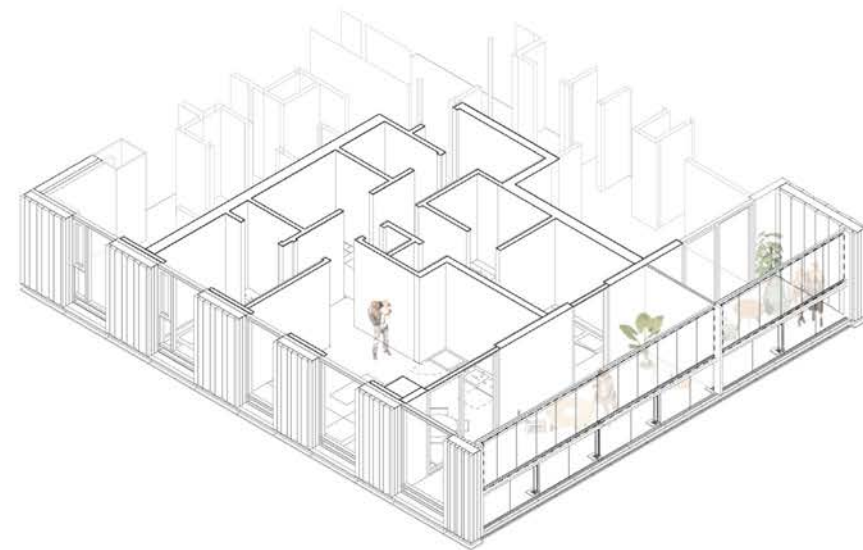


North South Expression

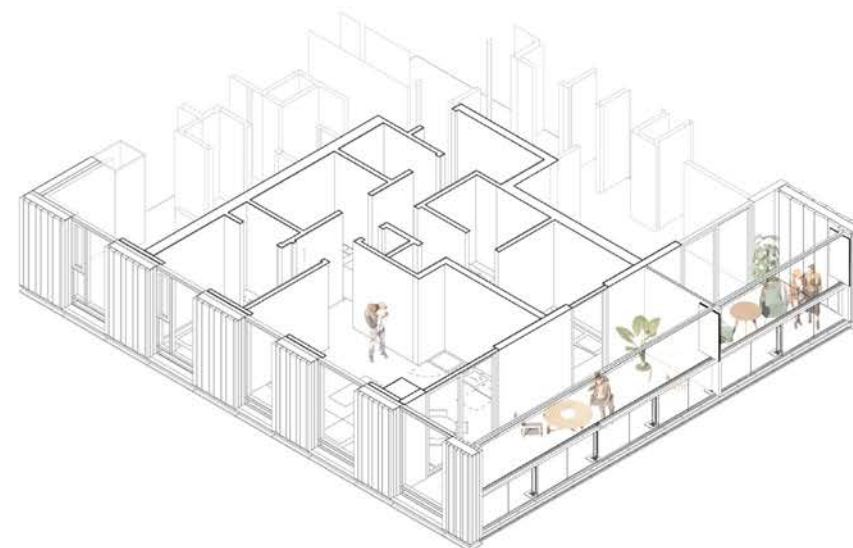
The North and South expression of both towers are dictated by the balcony views, creating an extension of the internal living spaces.

Additionally, an operable and encloseable glazing balcony system is proposed on the upper collections of the West Tower. The enclosure systems allow for a level of flexibility for residents and usability over a broader range of weather conditions.

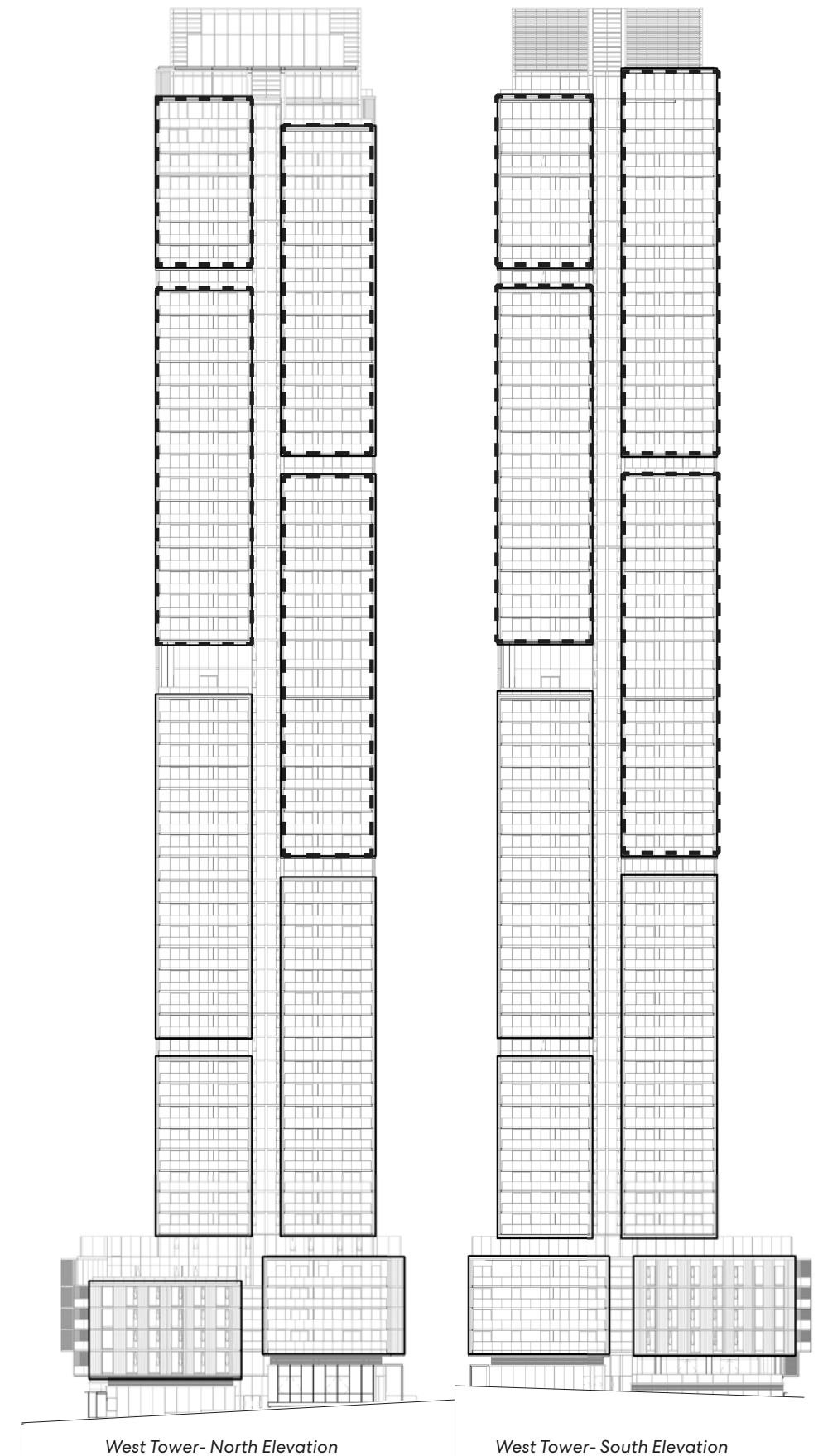
 Enclosed Balcony System



Enclosed Balcony System



Balcony System Folded Open



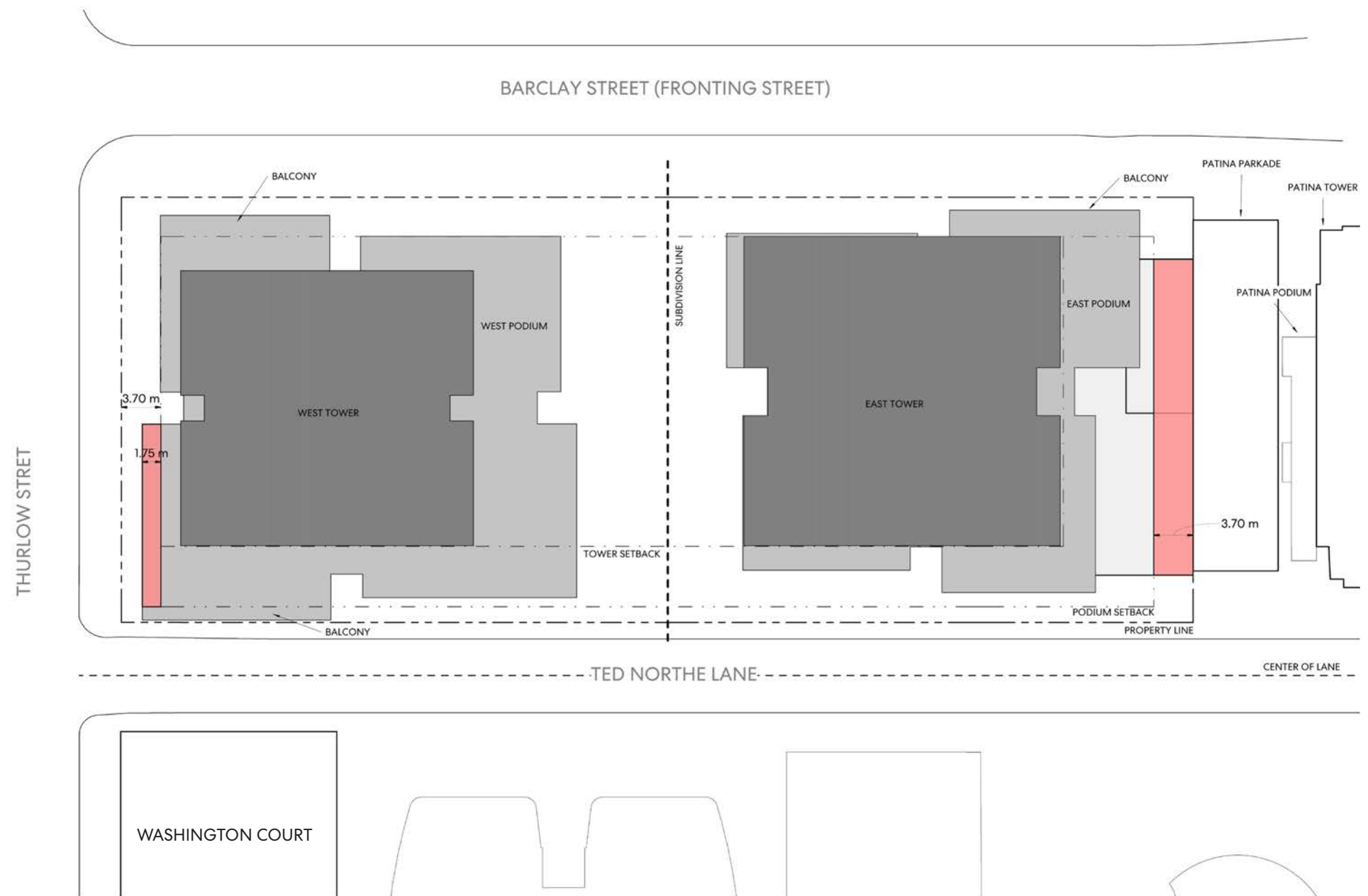
2.7 Relaxation Requests & Rationale

Overview

The proposal seeks two relaxations in the development permit application. Both the East and West tower fit within the applicable tower setbacks with the relaxations applicable to podium levels of both towers.

1. At rezoning, the design proposed a 3.7m encroachment on the south block of the Thurlow Street setback with the intent of paying homage to the West End building fabric and neighboring Washington Court “heritage” building. With this development permit submission, the design is refined and proposes a 1.75m encroachment. See section 2.7.1 for further rationale.

2. The East sideyard encroachment of 3.7m was presented at rezoning and has not changed for development permit. The intent of the design is to use the space which would otherwise be a dark and narrow leftover space (given the development to the east has a zero outline condition), and give it back to the residents through quality outdoor amenity. See section 2.7.2 for further rationale.



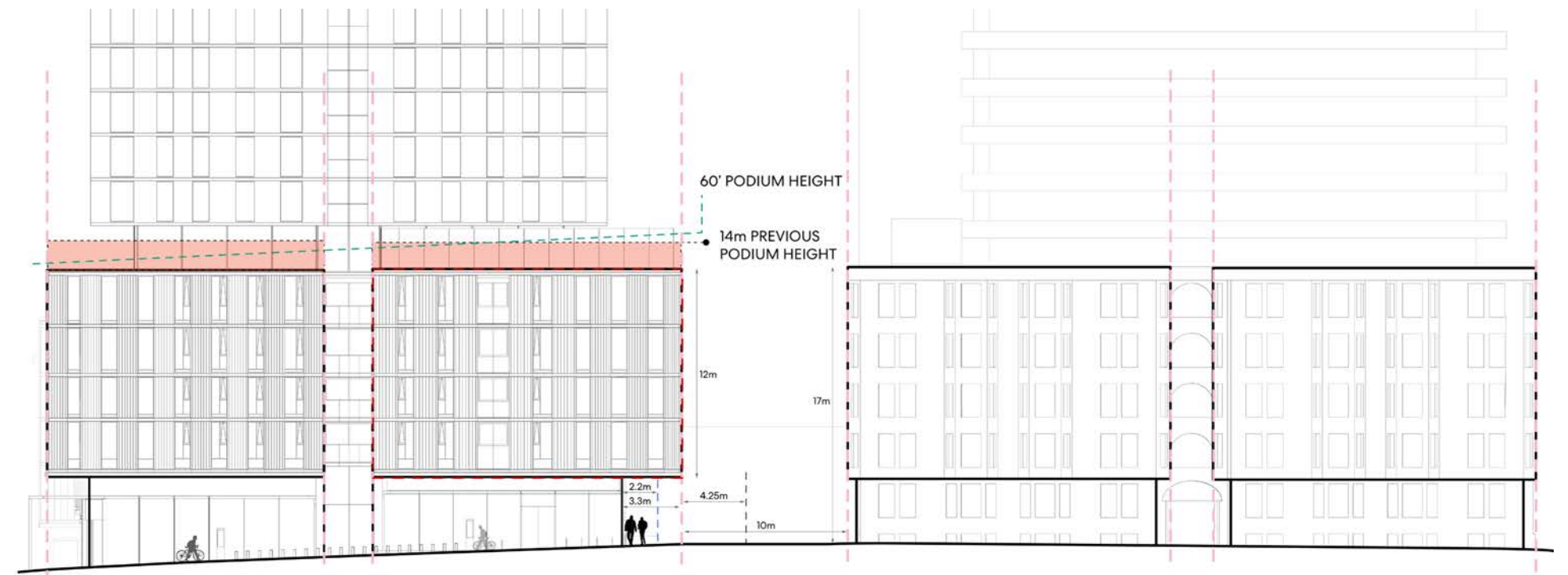
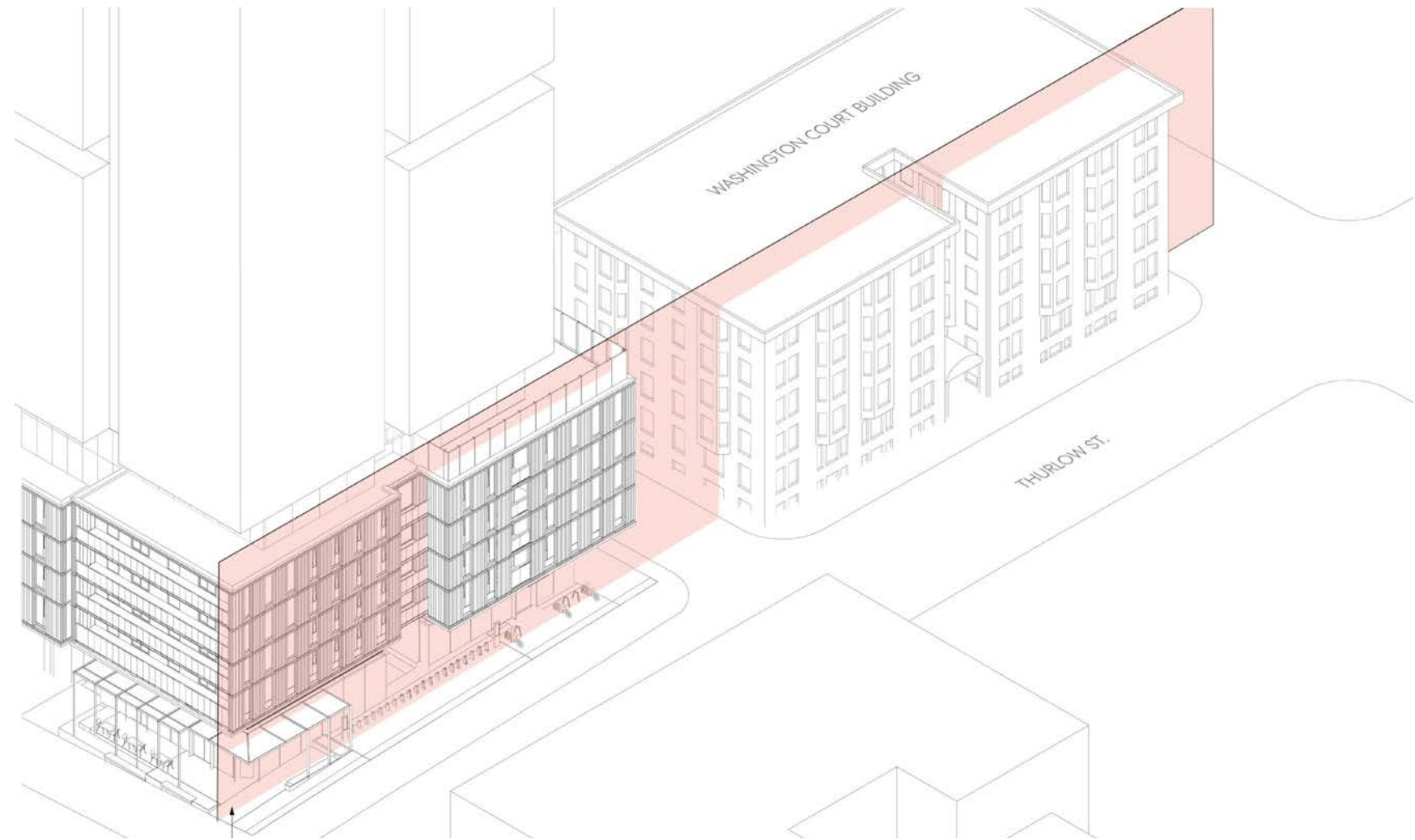
■ Setback Encroachments



2.7.1 West Podium Setback

Overview

Recognizing the zero lot line condition of the *Washington Court* building, the proposal transitions from the requested podium setback at the corner of Thurlow street and Barclay street to a mid-point between the existing heritage building and the new standard. This requested relaxation of 1.75m for levels 2-6 (reduced by one level since rezoning), is an important design decision and was chosen for the massing of the project, but most importantly to contribute positively to the public realm, responding to the West End urban fabric, while meeting the needs of the residents in the West podium.



Proposal Reinforces the Traditional West End Streetscape

Urban Design

At rezoning, the design proposed a 3.7m encroachment on the Thurlow Street setback (zero lot line) with the intent of paying homage to the West End building fabric and neighboring Washington Court heritage building. The podium was designed to offer a blockscape that pushes and pulls, not melting into the same plane which conforms to the typical high rise massing that makes up much of our city.

With this development permit submission, the design has been refined and now proposes a 1.75m encroachment (halfway point) to respect the prominence of the Washington Court building, while still allowing for the positive contribution the development hopes to make for both the urban fabric and Thurlow public realm experience. 1.75m was decided upon to allow the South “block” of the podium to push away from the tower and achieve the architectural expression set out at the beginning of the report.

Policy Compliant Setback of 3.7m



Zero lot line proposed at Rezoning for South block of podium



1.75m Setback Proposed & Reduced Podium Height Proposed at DP

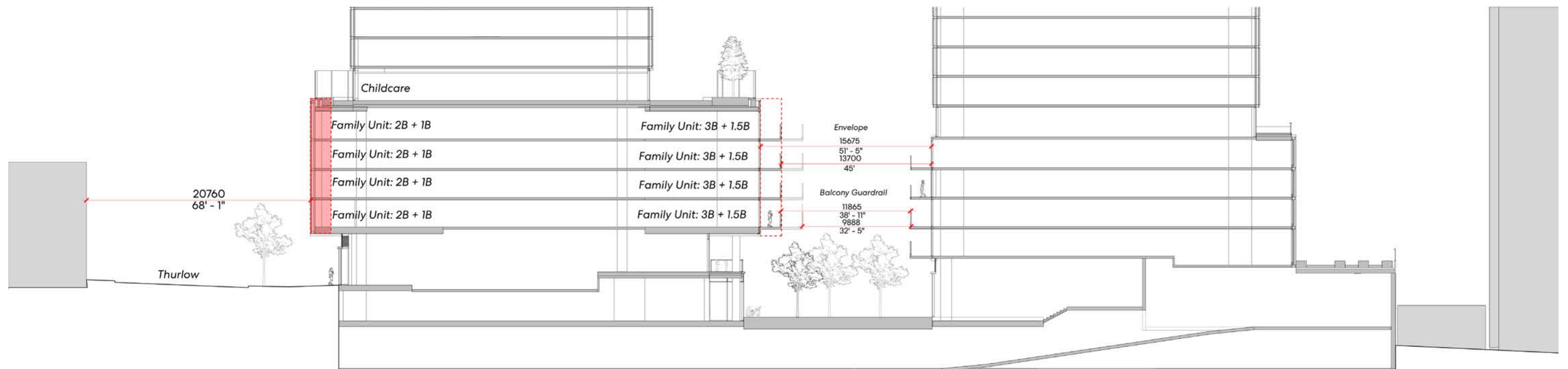
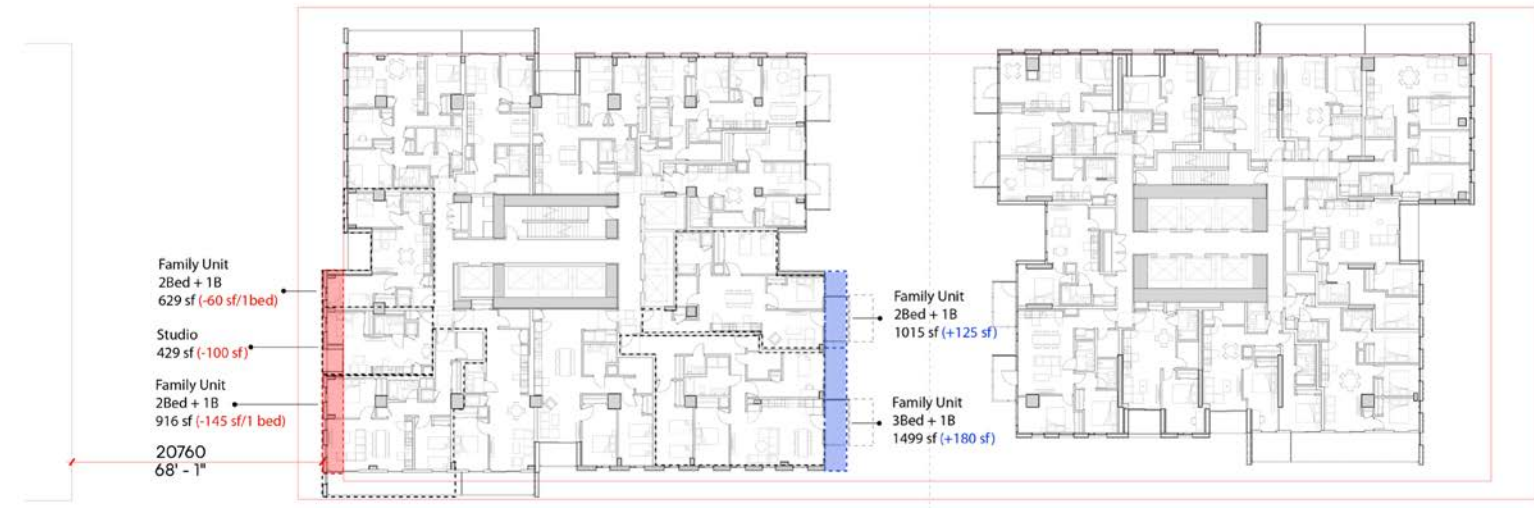


Social Housing + Family Units

Per the CD-1 agreement, total net residential floor area allocated to social housing must constitute 23% of the total residential floor area of the West tower building containing the strata housing, social housing, and childcare. Currently, the West tower achieves the requirement.

In complying with the 3.7m Thurlow setback, the design would have to relocate the lost area, 1220 sf (305 sf per level 03-06) to the interior courtyard to not infringe on other setbacks and maintain the 23% social housing ratio. The reallocation of this area to the interior podium block would have negative impacts on the mid-block connection while creating inefficient family units. The reallocation would add area to family units on the East of the podium creating oversized units, while decreasing the family unit count due to reduced unit sizes on the West.

Due to the high performance facade system, and with minimal balconies on the West facade of the podium, the noise impact from Thurlow Street on the units is expected to be minimal with the 1.75m encroachment. Additionally, through the inclusion of air conditioning, residents liveability and air quality will not rely on the operable windows in the summer months, further reducing sound concerns.

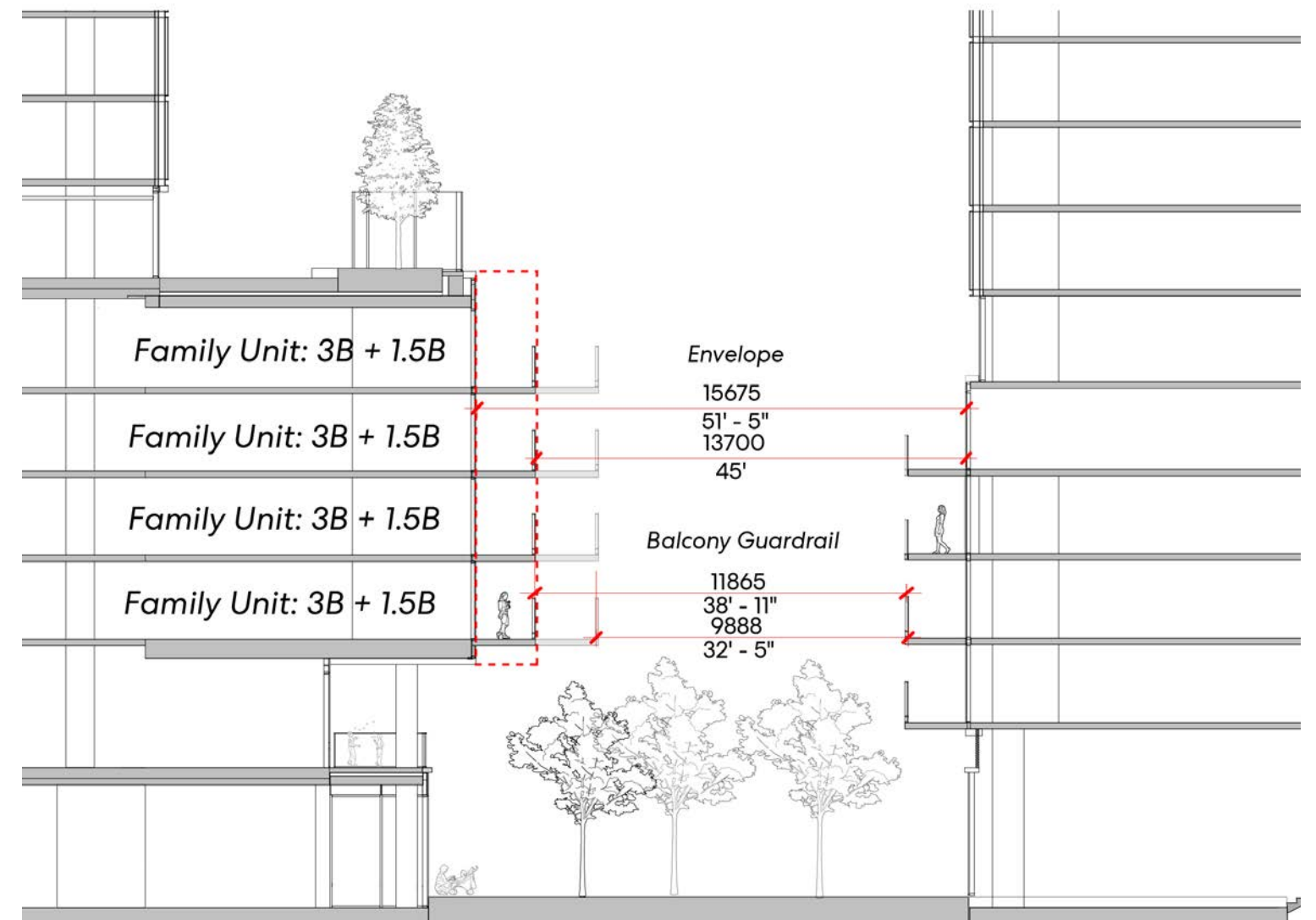


Mid-Block Connection

The mid-block connection is the heart of the project, one that the development permit application has worked to strengthen and emphasize per the CD-1 Condition 1.4: “Design development to increase the scale and prominence of the public mid-block connector space, including enhancements to the pedestrian experience along the lane.”

If the area in the proposed setback along Thurlow Street were to be relocated to the courtyard, it would have a number of impacts and result in a decreased scale and prominence of the public mid-block connection. Although at ground level the space remains the same, the decreased width between podium balconies (less than 35’) will hinder the ability to draw the public realm in, blocking lines of site for a pedestrian approaching the site and along the lane. Additionally, CD-1 Condition 1.39(n) asks to improve the outdoor childcare access to sunlight. The podium massing shift will relocate an optimal area of the outdoor childcare facility facing Thurlow Street and Nelson Park, which has the most sunlight given the dense surroundings, to an area with less sunlight access.

At rezoning, the distance and massing of the podiums was sculpted to allow for the affected podium units and outdoor childcare area to maintain adequate sunlight and horizontal angle of daylight while allowing for privacy and sound protection. Decreasing the distance between the podiums would erode these attributes for both the residents and the community to a distance we are not comfortable with.

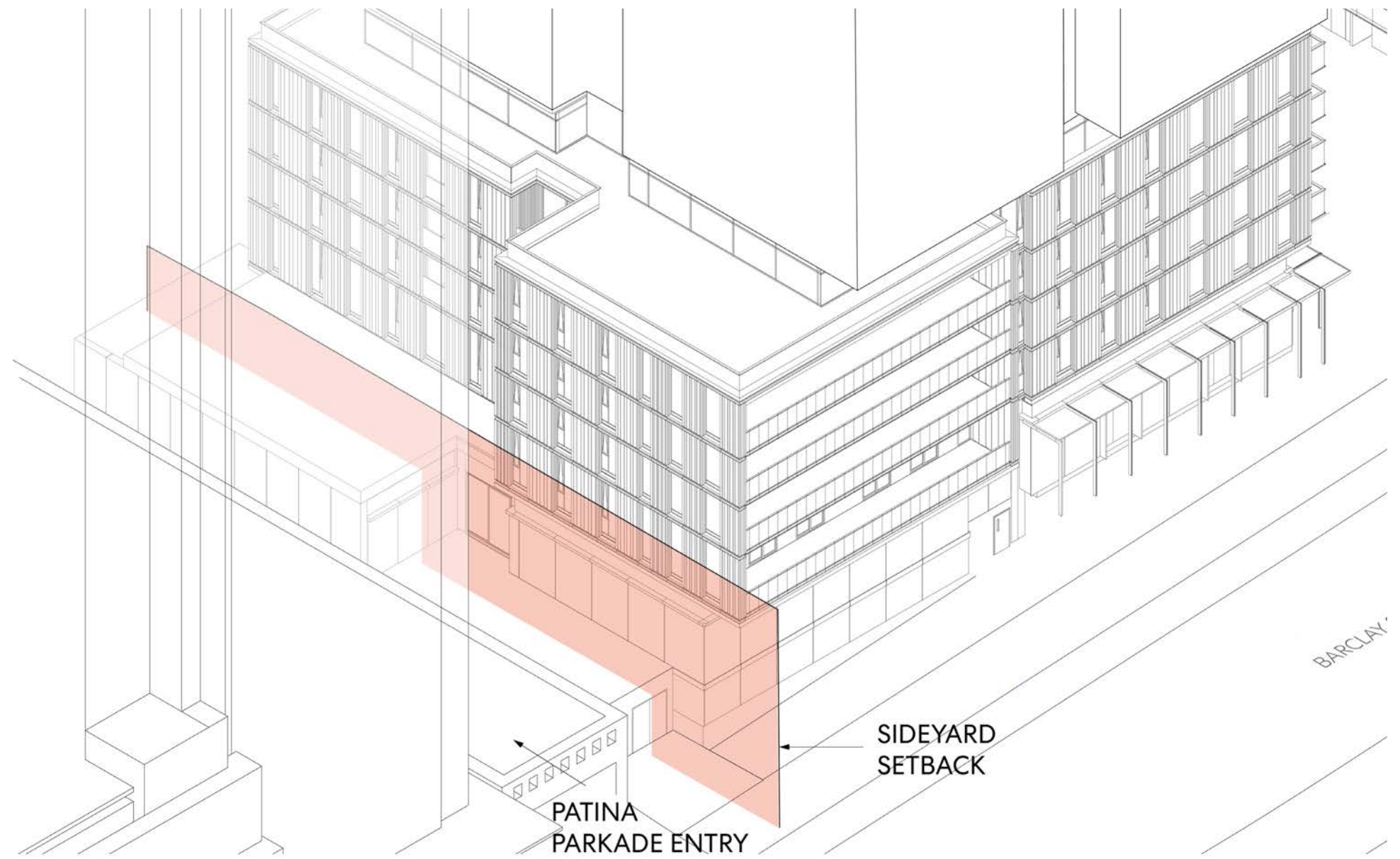
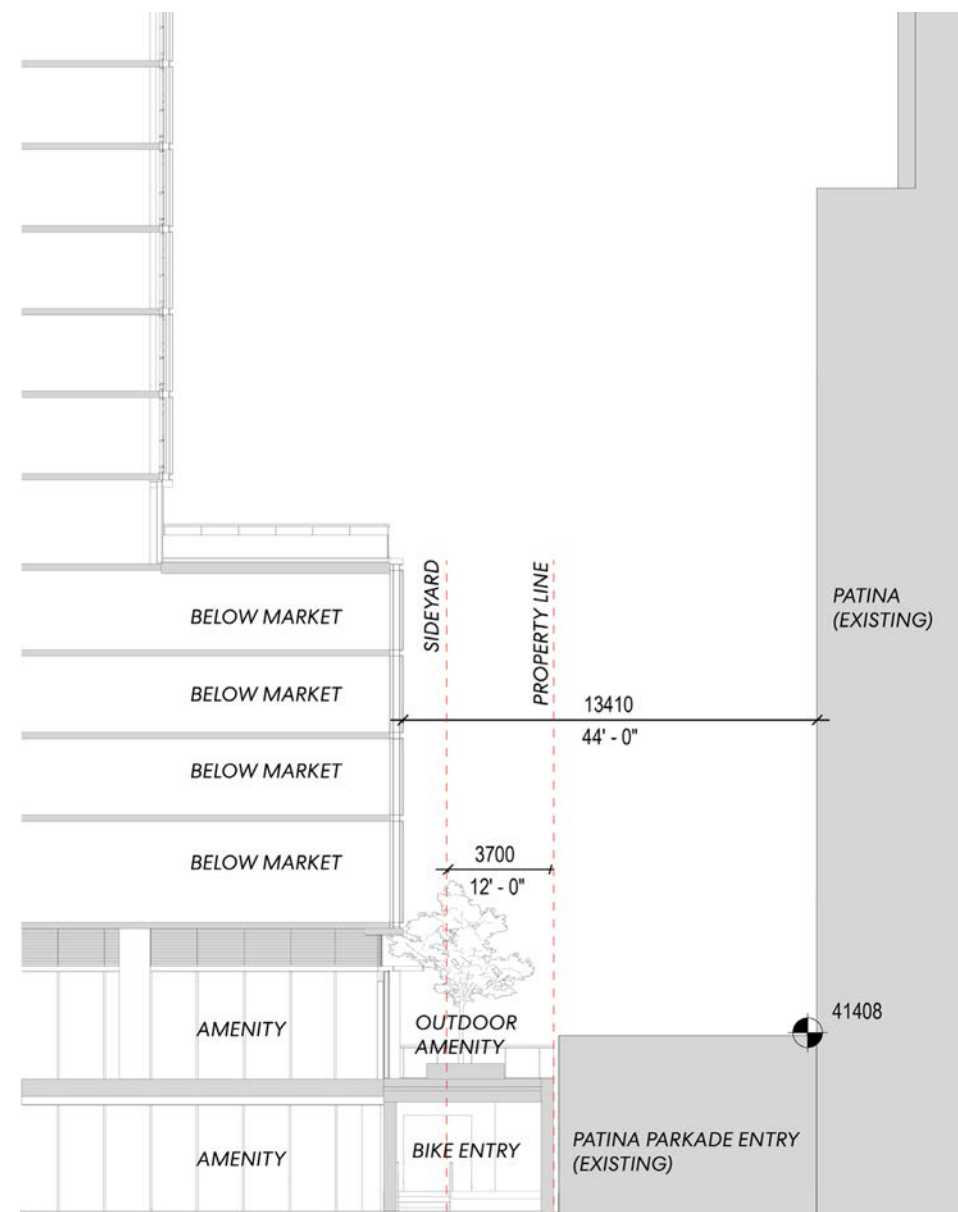


2.7.2 East Side Yard Encroachment

This application seeks a variance for the need to provide a grade level side yard at the eastern property line to respond to the built urban context.

The neighbouring Patina development to the east of the site has a parkade entry structure occupying their sideyard at grade on the Barclay St frontage which extends to the shared property line.

Due to the built condition, respecting the sideyard setback would only ever result in a very narrow, dark space, between buildings which would not be of little to no benefit to the public realm, or the residents of the project.





Section 3.0

Public Realm

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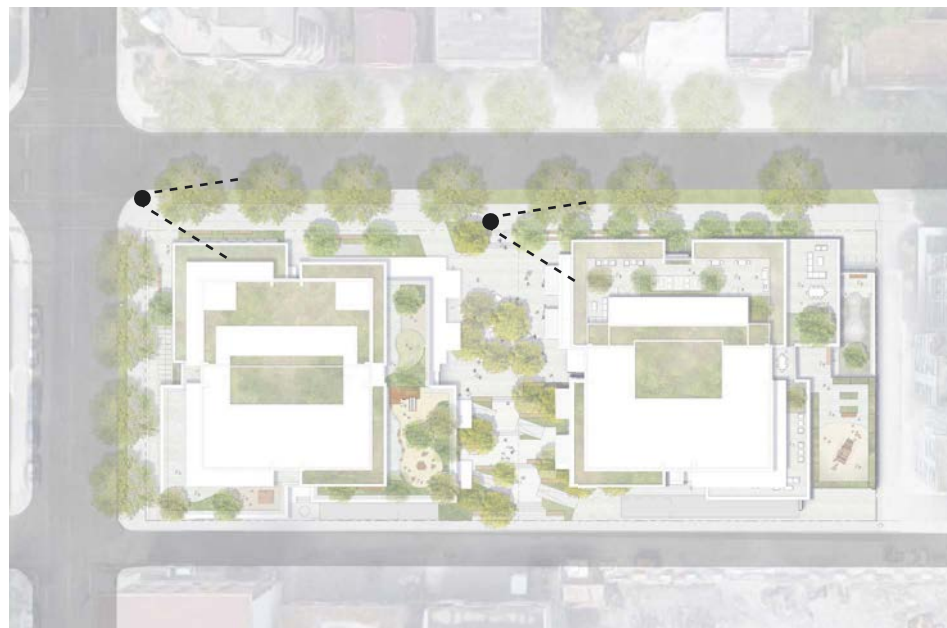
3.1 Landscape

The landscape design works in harmony with the natural slope of the site, providing an ease of access into the ground floor while allowing for a flexible public space. An extension of the architecture, the landscape was designed in parallel with the ground floor functions and massing to provide a tranquil urban sanctuary, connecting the various green corridors through adjacent sites.

The landscape design folds together the rooftops, childcare, and public realm to create a harmony of different plant species that have been chosen for their resiliency and seasonality, all with careful consideration to sunlight and programmatic use of the indoor and outdoor spaces.



Barclay Frontage



3.2 Public Art

In tandem with guiding policy frameworks such as the West End Community Plan, Downtown Public Space Strategy, and Culture|Shift, the public art on site serves to enhance public space, culture, and heritage through artist-centered community engagement. The artwork considers the diverse built and social context of the West End and also enhances the cultural vitality of the neighborhood with a new welcoming, accessible art destination to be embraced and enjoyed by the community. Public art consultants have been brought on and with two preliminary concepts the art intends to facilitate accessible cultural experiences in the public realm and reinforces the role of the plaza as a social space.



Primary Opportunity Urban Plaza

With the urban plaza functioning as a space for social collision with flexible seating, this primary opportunity lends itself well to creating “one moment” to experience the artwork with a singular focus. Situated on the largest flat area, the space offers high visibility for passerbys along Barclay Street with its bold visual impact to draw visitors in. The artwork will facilitate efficient use and movement through the space while still allowing the community to gather around, under, or over the artwork, creating a dynamic and engaging environment.

Integration opportunities:

- Self-standing artwork anchored to the ground
- Artwork interacting with the trees or landscaping elements

Opportunity for Extension Larger Urban Plaza

The larger site offers more diverse integration possibilities through the different landscape and architectural elements, with the opportunity for extension lending itself well to creating “several moments” to experience the artwork with a series of artworks or a long continuous experience. This would allow for a dynamic experience for viewers walking through the plaza, expanding both the artwork’s footprint and possibilities for immersive experiences.

Integration opportunities:

- Self-standing artwork(s) anchored to the ground
- Artwork(s) interacting with with the architecture and landscaping elements



Section 4.0

Sustainability

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4.1 Sustainability Strategies Preliminary Summary



Water



Materials and Embodied Carbon



Vegetation and Biodiversity



Community



Transportation



Social Equity



Energy



Vegetation and Biodiversity

- 37% vegetation cover will be made up of native and adaptive plant species.
- 20% tree canopy cover will enhance the urban forest, creating a bird-friendly urban environment and greenway connection.
- Generous depths of growing medium for all plants supports the project's rainwater management plan improving the stormwater retention and infiltration capabilities of the site.



Materials and Embodied Carbon

- Optimizing the structure for post tensioned concrete to reduce concrete volumes where possible.
- Low refrigerant emission profiles and durable materials selected for mechanical systems.
- Low-emitting, healthy, and low-carbon building materials selected for interior finishes



Energy

- A high-performance building envelope is designed to maximize occupant comfort and energy conservation.
- Energy modelling provides evidence that Green Building and Higher Building Policy energy targets for TEUI, TEDI, and GHGI will be exceeded.
- Commissioning and energy metering will help ensure the performance targets set at design stage are maintained during occupancy.



Water

- Outdoor water conservation of 69% for the West tower and 73% for the East tower through integration of drip irrigation and native and adaptive plant species.
- Indoor water conservation target of 26% for indoor water use through selection of low flow fixtures.



Transportation

- Access to exceptional public transport. The development has a walk score of 98, transit score of 100, and bike score of 86.
- Provision of a first-class bike facility including maintenance, wash, and repair workshop promotes active transportation modes.
- 100% of residential parking and approximately 45% of non-residential parking will be EV ready with Level 02 charging capabilities.
- Provision of a 9 stall EV charging car share facility with Level 02 charging capabilities to discourage single occupant vehicle ownership.



Social Equity

- Social Housing accounts for 9% of the total residential floor area and 89 units.
- Below Market-Rental Housing accounts for 11% of the residential floor area and 137 units.
- Accessibility is considered in all public aspects of design and layout. Accessible design includes elevator access to all floors, signage designed for visual impairment, accessible parking spaces close to exits, and adaptable units modified to suit the tenants needs.
- Air-conditioning will be provided in all units to create a comfortable and resilient environment for all residents.



Community

- Integration of significant residential space will revitalize the neighborhood and local economy.
- An on-site childcare facility designed for 37 children will promote social interaction between children and parents within the building.
- Edible informative landscaping will improve connection to nature between the West End and Downtown Core.

4.2 Rezoning Policy for Sustainable Large Developments

In order to continue to ensure large development projects provide leading practices and advance Vancouver's sustainability goals, the city has implemented and updated a policy for developments with a land parcel or parcels having a total site size of 8,000 m² (1.98 acres) or more, or containing 45,000 m² (484,375 sf) or more of new development floor area and will comply with the applicable sections of the policy.

→RESPONSE: The proposal includes approximately 130,721 sm (1,407,073 sf) of new floor area. This chapter provides a brief summary of how the Policy requirements are met. Please refer to the Rezoning Policy for Sustainable Large Developments Report which provides more detail on the strategies listed below, as well as supporting documentation used as evidence.

A. Sustainable Site Design

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

→RESPONSE: The site provides 37% vegetation totaling approximately 1513 m² (16,285 ft²). 20% tree canopy cover is provided across the site. Soil depths vary from 200mm to 900mm across the site.

The sloped nature of the site allows for a substantial depth for growing medium over structure in a continuous area. Taking advantage of this opportunity, a diverse landscape includes urban trees and a mix of evergreen and deciduous shrubs and groundcover. A diverse plant community provides meaningful habitat for birds and insects and subterranean ecosystem, resulting in longevity and health of plant material.

B. Sustainable Food Systems

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

→RESPONSE: Three sustainable food assets are provided including Edible Landscaping and Garden Plots, Outdoor Dining and Food Gathering Infrastructure, and an Indoor Urban Farm

Edible plant cover is woven into the landscape consisting of berry bushes, herbs, and fruit trees. Eighteen garden plots at Level O2 amenity will be provided on the East tower.

Water and electric connection will be provided along Barclay Street and Ted Northe Lane, providing hookup for 4 electrified food trucks. Seating steps will be provided at mid-block connection and adjacent to the food trucks.

A 58.8 m² Indoor Urban Farm will be provided including 8 grow banks. The grow banks will be located within the West portion of the parkade at level P1.

C. Green Mobility

The proposal will contribute to meeting the following citywide goals:

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

→RESPONSE: A Transportation Demand Management Plan provides evidence that the Project meets the applicable number of points for retail, residential and social housing.

An energized outlet capable of providing a level O2 charging station will be provided for 100% of residential parking stalls. 9 parking stalls designated to a car share vehicle fleet will be equipped with Level O2 electric vehicle charging.

D. Potable Water Management

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

→RESPONSE: The indoor water balance calculation shows a reduction in indoor water use of 26%, achieved using low flow plumbing fixtures.

The outdoor water balance calculation shows a reduction in outdoor water use of 73% for the East tower and 69% for the West tower, achieved by utilizing a high efficiency irrigation system as well as native and adaptive plant species.

E. Rainwater & Groundwater Management

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

→RESPONSE: A Hydrogeological Study and Integrated Rainwater Management Plan provides evidence that the Project meets the Policy requirements.

Tier 1 and 2 infrastructure is prioritised over tier 3 strategies where possible, managing approximately 33.2% of the rainfall for the East tower and 43.7% for the West tower. A detention tank and Jellyfish filter system will treat and detain the remaining volume generated by the first 24mm of rainfall.

F. Zero Waste Planning

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

→RESPONSE: The project team has chosen seven specific zero waste actions. The design integrates the chosen zero waste actions and allocates the necessary space on site.

A Zero Waste Design and Operations Plan will be provided to the City within 18 months of occupancy. The project will ensure success in zero-waste design and operation plans through regular oversight, education, and enforcement of selected zero-waste actions.

G. Affordable Housing

The proposal will follow the Policy guidance amended on July 20th, 2021. The guidance states that for projects in areas that have recently adopted community plans and large developments that have submitted a formal rezoning enquiry as of June 20, 2018, can proceed under the previous affordable housing requirements (the 20% policy) contained in the Rezoning Policy for Sustainable Large Developments amended December 16, 2014.

The proposal is in an area defined under The West End Community Plan and submitted a formal rezoning enquiry with a letter of enquiry accepted on September 30th, 2016 (Appendix 8.9 Affordable Housing). The proposal will contribute to meeting the 20% Policy's citywide goals:

- 20% of residential floor area to be assigned to affordable housing
- Affordable Housing to be provided in a variety of unit types and sizes.

→RESPONSE: Social Housing accounts for 9% of the total residential floor area and 89 units.

Below Market Rental Housing accounts for 11% of the total residential floor area and 137 units.

Affordable housing is divided between studio, 1 bed, 2 bed and 3 bed apartments.

H. Resilience

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

→RESPONSE: The project team assessed the project's risks and mitigation strategies and completed the resilience worksheet for 2050 projected climate conditions. The project team will continue to evaluate current and future climate projections to design a building that can meet current needs and adapt to a changing climate.

Drinking water fountains are provided in entrance lobbies for the East and West Tower. The water fountains are fed from city pressure and capable of supplying drinking water without power.



Section 5.0

Responses to CoV Rezoning Conditions

PART 1: URBAN DESIGN

1.1	<p>Design development to reduce the building heights to comply with the CD-1 By-law and mitigate the shadow impacts on the north sidewalk of Robson Street between 10 am and 4 pm west of Thurlow Street, and between 10 am to 3 pm east of Thurlow Street, at the spring and fall equinoxes.</p>	<p>Both towers have a maximum height of 167.7 m (550 ft) and comply with the applicable view cone set back and shadow envelope height limitations as stipulated in the Rezoning submission, which mandates that the tower heights and massing have been stepped and shaped to mitigate the proposal's shadow impact on adjacent public spaces. The development does not cast any shadows on the north sidewalk of the 1000 Block of Robson Street between 10am and 3pm on spring and fall equinoxes. •See Design Rationale Booklet (1.4) for more information.</p>
1.2	<p>Design development to provide a 3.7 m (12 ft.) setback from the west property line to improve the public realm and reduce the apparent scale of the podium element, as seen by pedestrians on Thurlow Street.</p>	<p>Recognizing the zero-lot line condition of 998 Thurlow Street (Washington Court building), the proposal transitions from the requested podium setback at the corner of Thurlow and Barclay to step in midway with a portion of the upper podium levels O3 to O6 nearest to the 998 Thurlow Street (Washington Court) building (a level of the podium has also been removed – see Response 1.3 below). At grade, the building massing provides for the full setback of 3.7 m from Barclay Street to the Ted Northe Lane as requested. At Level O3, the 3.7 m provided at Rezoning has now been reduced to a 1.5 m encroachment, proposed to maintain the architectural expression of the podium in relation to the West End blockscape character, and which will also minimize the net loss to the social housing density in the podium along with the amount of usable outdoor rooftop area dedicated to the Child Care's play area. The suggestion to add the floor area lost along Thurlow Street to the courtyard's interior was studied and found to be untenable given the numerous requirements placed on the courtyard (rainwater management, green food assets, multiple building entries, horizontal angle of daylight etc.). •See Design Rationale Booklet (2.7.1) for more information.</p>
1.3	<p>Design development to the West Tower podium massing to reduce the podium height to no more than 18.3 m (60 ft.).</p> <p>Note to Applicant: Due to the sloped site condition, a maximum height for the podium massing of 18.3 m (60 ft.) can be averaged for all sides of the west tower. The floor-to-floor height for the retail unit at the corner should be maintained at 4.6 m (14 ft.) as much as possible. A partial sunken floor condition may be considered.</p>	<p>998 Thurlow Street, known as Washington Court, is an existing building directly south of the Barclay project site along Thurlow Street. The podium of the West Tower seeks to contextually respond to the existing built form recognizing the presence and stature of this building through similar massing and setbacks. The Barclay design responds to this CD-1 comment by recognizing overall the 60' (18.3 m) podium maximum height. Due to the sloping site, an averaging strategy was agreed upon in discussions with the City for a 60' average of all facades of the West podium. Although corners of the podium may protrude into the 60' height envelope, the average of the podium is 58'. The same averaging exercise was deployed on the East podium, with an average podium height of 57'. •See Design Rationale Booklet (2.7.1) for more information.</p>
1.4	<p>Design development to increase the scale and prominence of the public mid-block connector space, including enhancements to the pedestrian experience along the lane.</p> <p>Note to Applicant: The ground plane design is generally well received, including the treatment of the western lane interface toward Thurlow Street as a significant contribution to public open space. On-site improvements should include pedestrian lighting, landscaping, seating, high quality paving treatments and other public realm enhancements, coordinated with lane improvements acceptable to Engineering Services. The mid-block connector between Barclay Street and Ted Northe Lane should contribute more 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 will be required.</p>	<p>To further enhance the public mid-block connection given its prominence and importance in activating the site, enhancements to pedestrian lighting, landscape planting, seating, accessibility, and high quality paving treatments are to be provided for along with an increased connectivity to the surrounding pedestrian and cycling networks. •See Design Rationale Booklet (3.1) for more information. •See Sheet DP-W050, DP-W110, DP-E050. DP-E120, and landscape drawings.</p>

1.5	<p>Design development to improve the proposed façade design by increasing the size of vertical and horizontal recesses and massing breaks, while maintaining the high-quality and durable exterior finishes consistent with the rezoning application.</p> <p>Note to Applicant: Maintain the proposed quality in all aspects, including but not limited to appearance, durability, and performance, by retaining the use and extent of the specific finishes. Material choices including visible areas such as soffits should be noted on the elevation drawings.</p>	<p>The proposed façade has continued to evolve to increase the size of vertical and horizontal recess and massing breaks and the high-quality and durable exterior finishes have been maintained. The proposed logic of massing breaks on the West tower at rezoning has migrated onto the East tower, creating a cohesive language between the towers.</p> <ul style="list-style-type: none"> •See Design Rationale Booklet (2.6.4) for more information. •See Design Rationale Booklet (2.6.5) for more information.
1.6	<p>Design development as required to mitigate wind effects in the open tower corridors, on the podium rooftops including child day care outdoor space, and at the pedestrian mid-block connector path at grade, as recommended by registered professionals with relevant expertise.</p> <p>Note to Applicant: Also refer to Social Policy and Child Day Care condition 1.39.</p>	<p>Noted. See wind study by Gradient</p>
1.7	<p>Consider incorporating more landscaping at the building voids and roofs and some to be commonly accessible.</p>	<p>To all extents possible, each tower and podium rooftop has implemented a landscape strategy to either provide for rainwater run-off (green roof) or an outdoor roof terraces combined with garden plots for residents. Non-accessible roofs will be covered with extensive green roof in order to provide for the project's vegetative cover.</p> <ul style="list-style-type: none"> •Refer to landscape drawings.
1.8	<p>Identification on the architectural and landscape drawings of any built features intended to create a bird friendly design.</p> <p>Note to Applicant: Refer to the Bird Friendly Design Guidelines for examples of built features that may be applicable and provide a design rationale for the features noted. Also refer to Landscape condition 1.18</p>	<p>Where possible bird-friendly strategies will be implemented, as per current City of Vancouver guidelines. The tree canopy on the plaza level creates bird habitat.</p> <ul style="list-style-type: none"> •See Design Rationale Booklet (3.1) for more information.
1.9	<p>Design development to respond to CPTED principles (show on drawings, having particular regards for:</p> <p>Note to Applicant: Building features proposed in response to this condition should be noted on the plans and elevations. Consider use of a legend or key to features on the drawings. Consultation with the social housing operators and Park Board staff with experience of specific CPTED risks in this area is recommended and should be included in the response to this condition.</p>	<p>CPTED measures will be provided through ample lighting and appropriate planting specifications around the building exteriors to ensure the safety of the public realm, with concierge supervision also to be provided in the interiors of both east and west tower podiums.</p>
	(a) theft in the underground parking	<p>The underground parking will have a single access at grade with a security gate. Public access to the parkade is provided via a dedicated elevator with direct access to the outside. The tower elevators will not be accessible for the public use. The parking area is designed to reduce non visible corners.</p> <ul style="list-style-type: none"> •See Sheet DP-W050 to DP-W110 AND DP-E050-DP-E120 – 1040-1080 Architecture Drawings.
	(b) break and enter	<p>Underground parking levels have secured access.</p> <ul style="list-style-type: none"> •See Sheet DP-W050 to DP-W110 AND DP-E050-DP-E120 – 1040-1080 Architecture Drawings.
	(c) mail theft	<p>Mailrooms have been placed strategically in the lobby of both towers to allow for active surveillance to discourage theft</p> <ul style="list-style-type: none"> •See Sheet DP-W110 and DP-E120 – 1040-1080 Architecture Drawings.
	(d) mischief in alcove and vandalism, such as graffiti	<p>Architectural massing, glazing, and lighting locations have been carefully resolved to avoid alcoves, allow visual connections and well-lit conditions to discourage vandalism and graffiti around the buildings. The land and mid-block connection have residential units facing the public right of way which encourages natural surveillance.</p> <ul style="list-style-type: none"> •See Sheet DP-W050 to DP-W110 AND DP-E050-DP-E120 – 1040-1080 Architecture Drawings.

PART 1 : LANDSCAPE DESIGN		
1.1	<p>Design development to ensure maximized tree growing medium and planting depths for trees, shrubs and green roofs to ensure long term viability of the landscape.</p> <p>Note to Applicant: Structural slabs need to be designed to handle loads and ensure adequate depth and continuous soil volumes. A soil cell system with expanded soil volumes should be considered for trees in the central courtyard. Growing mediums and planting depths should exceed CSLNA standards.</p>	<p>Soil cells are used to increase the planting medium underneath the plaza paving and to create a continuous soil volume for the healthy growth of the trees.</p>
1.11	<p>Provision of a detailed Landscape Plan illustrating soft and hard landscaping</p> <p>Note to Applicant: The plans should be at 1/8 inch: 1 ft. scale minimum. The Plant list should include the common and botanical name, size and quantity of all existing and 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.</p>	<p>Noted. Refer to landscape drawings.</p>
1.12	<p>Provision of detailed architectural and landscape cross sections (minimum 1/4 inch scale) through common open spaces, semi-private patio areas and planters.</p>	<p>Noted. Refer to landscape drawings.</p>
1.13	<p>Provision of a vegetative cover calculation sheet, included with the landscape plans.</p> <p>Note to Applicant: Include a comparison of the percentage vegetative cover for the overall site and a separate calculation of the total roof area.</p>	<p>Noted. Refer to landscape drawings.</p>
1.14	<p>Provision of additional large scale details for roof planters.</p> <p>Note to Applicant: large patios should include hose bib(s) to encourage balcony gardening.</p>	<p>Noted. Refer to landscape drawings.</p>
1.15	<p>Provision of a soil depth overlay sheet, included with the landscape plans.</p>	<p>Noted. Refer to landscape drawings.</p>
1.16	<p>Provision of an Outdoor Lighting Plan.</p>	<p>Noted. Refer to landscape drawings.</p>
1.17	<p>Provision of a high-efficiency automatic irrigation system for all planted areas.</p> <p>Note to Applicant: Provide a partial irrigation plan demonstrating intent, including notations, legend, and symbols to confirm stub out and hose bib locations. Hose bibs to be provided for large private patios (sized 9.3 m (100 sq. ft.) or larger). Any limitations to the installation of hose bibs on private decks to be brought to the attention of staff in the written response.</p>	<p>Noted. Refer to landscape drawings.</p>
1.18	<p>Provision of landscape features intended to create bird friendly design.</p> <p>Note to Applicant: Bird friendly plants should be included on the plant palette, enabling bird habitat conservation and bird habitat promotion. Refer to the Bird Friendly Design Guidelines for examples of landscape features that may be applicable and provide a design rationale for the features noted. Refer to: http://council.vancouver.ca/20150120/documents/rr1attachmentB.pdf http://council.vancouver.ca/20150120/documents/rr1attachmentC.pdf</p>	<p>Noted. Refer to landscape drawings.</p>
1.19	<p>Coordination of new proposed street trees with Engineering and the Park Board, confirming quantities, species, sizes and locations, and addition of the following note on the plans: "Final location, quantity, tree species to the satisfaction of the General Manager of Engineering. Contact Engineering Services (Streets Design Branch) at 604-871-6131 to confirm planting location. New tree must be of good standard, minimum 6 cm calliper 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. New street trees to be confirmed prior to issuance of the building permit. Call Park Board at 311 for tree species selection and planting requirements. Park Board to inspect and approve after tree planting completion."</p>	<p>Noted. Refer to landscape drawings and updated Diamond Head report. ·See Sheet DP-W050, DP-W110, DP-E050, DP-E120, landscape drawings, and arborist report.</p>

PART 1: HOUSING WEST TOWER (SUB-AREA A)		
1.20	Total net residential floor area allocated to social housing must be at least 23% of the total residential floor area of the west tower building containing the strata and social housing.	Noted. Project will comply with 23% social housing allotment.
1.21	50% family units, 30% 2 bedroom, 20% 3 bedrooms	Noted. Project has provided for more than 50% family units in its social housing allotment, including 20% allotted for 3 bedroom units. · See Sheet DP-W001 – 1040-1080 Architecture Drawings
1.22	Design development to improve the livability and meet requirements for the social housing as per the City of Vancouver’s Housing Design and Technical Guidelines, including, but not limited to:	Noted. Housing Design and Technical guidelines have been followed and provided for to the extent possible, including provisions for livability, accessibility, and amenities.
	(a) Indicate the extent of the social housing Air Space Parcel (ASP) with a contrasting colour hatch or outline, including all below grade spaces.	Noted. ASP to be provided as part of Subdivision Plan and legal agreements as per the Rezoning Enactment conditions. ·See Sheet DP-W021 to DP-W023 – 1040-1080 Architecture Drawings
	(b) Adjust the unit sizes to ensure they are closer to the minimum unit size in the Housing Design and Technical Guidelines (excluding in-suite bulk storage), to maximize the total number of units. Design development of studio units to approximately 37 sq. m (398 sq. ft.). Note to Applicant: Dens are not to be provided in social housing units.	Noted. Unit sizes have been further adjusted to comply where possible with the minimum unit size requirements and unit mix, including the addition of Studios. ·See Sheet DP-W112 to DP-W118 – 1040-1080 Architecture Drawings
	(c) Provision of 5% of the total units as wheelchair accessible, distributed by unit type, and identify wheelchair accessible units on the drawings and show examples of unit layouts based on Section 10.2 of the Housing Design and Technical Guidelines. Note to Applicant: Unit layouts for accessible units need to be provided.	Noted. Units have been identified on the drawings locating the 5% which are to be wheelchair accessible. ·See Sheet DP-W112 to DP-W118 – 1040-1080 Architecture Drawings
	(d) Provision of 3.7 sq. m (40 sq. ft.) of in-suite storage, including a minimum clear horizontal dimension of 1.2 m (3.9 ft.) in all directions. Note to Applicant: In-suite storage should be provided, to the extent possible, for all social housing units. If in certain circumstances it cannot be achieved, priority should be given to in-suite storage for family units (two- and three-bedrooms) and additional storage lockers should be provided below grade, where not possible. Accessible units must have in-suite storage.	Noted. In-suite storage has been provided for all social housing to the extent possible, with family and accessible units being prioritized and provided for. Approximately 88% of the social housing units have in-suite storage, with the remainder to be provided below grade. ·See Sheet DP-W112 to DP-W118 – 1040-1080 Architecture Drawings
	(e) Provision of floor-to-floor finished heights in the social housing units that are a minimum of 2.4 m (8 ft.) clear ceiling heights, free of obstructions and projections, per the Housing Design and Technical Guidelines, including in all circulation areas, common use spaces, as well as inside the units in living rooms and bedrooms. Note to Applicant: This requirement should be shown in the drawings including unit sections.	Noted. Floor-to-floor heights will be provided for as per the City’s design and technical guidelines. ·See Sheet DP-W112 to DP-W118 – 1040-1080 Architecture Drawings
(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 one-bedroom units. Common laundry to be located adjacent to the non-market amenity room and ideally with visual connectivity and direct access to outdoor play space as per the Housing Design and Technical Guidelines.	Noted. In-suite laundry has been provided in all units. ·See Sheet DP-W112 to DP-W118 – 1040-1080 Architecture Drawings	

<p>1.23</p>	<p>Design development of all common areas / services areas of the social housing air space parcel (ASP) to meet requirements for the social housing, as per the City of Vancouver's Housing Design and Technical Guidelines, including, but not limited to:</p> <p>(a) Provision of all common areas / service areas for the social housing ASP to meet the requirements for the social housing, as per the City of Vancouver's Housing Design and Technical Guidelines.</p> <p>Note to Applicant: Common areas / service areas of the social housing ASP include such areas as the indoor and outdoor amenity areas, office, lobby, mailroom, accessible washrooms, janitor rooms, general storage space, garbage and recycling rooms, equipment storage and maintenance, heat treatment room, mechanical and electrical rooms, elevators, and loading bay.</p> <p>(b) Inclusion of required area for all social housing indoor and outdoor amenity spaces as per the Housing Design and Technical Guidelines.</p> <p>Note to Applicant: Increase the size of the indoor amenity area to meet the requirements of a minimum of 1.4 sq. m (15 sq. ft.) of amenity per housing unit. Provide an accessible washroom with access from hallway. Provide kitchenette and storage space. Dimensions and areas of common indoor and outdoor spaces should be provided on the drawings.</p> <p>(c) Provision of a separate lockable janitor room with floor sink, space for storing bucket, mop, brooms, vacuum, ladder, supplies for cleaning, shelves for paper products, light bulbs, etc., that are appropriately sized to adequately meet the needs of the building. In addition, provide smaller janitor closets that contain a floor sink and storage, distributed on every third floor.</p> <p>(d) Provision of separate, lockable mechanical and electrical rooms, with dedicated mechanical and electrical equipment and systems, 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.</p>	<p>Noted. All items above will be provided for wherever possible and as space permits. •See Sheet DP-W112 to DP-W118 – 1040-1080 Architecture Drawings</p> <p>d) The main mechanical and electrical rooms will be shared with the other occupancies, however equipment will be separated per use.</p>
<p>1.24</p>	<p>Provision of parking spaces for low-end of market social housing units equal to the rate required for secure market rental housing in section 4.3.3 of the Parking By-law, and applicable Transportation Demand Management (TDM) measures.</p> <p>Note to Applicant: Parking spaces provided in the rezoning application drawings are insufficient. Parking spaces to be provided for the low end of market social housing units. Maximum of 70% of the social housing units will be low-end of market units. As part of the development permit drawings, clearly mark the provision of vehicle parking spaces for the social housing units. Indicate electric vehicle charging stations in accordance with parking by-law and applicable TDM measures. Please also refer to relevant conditions under Engineering.</p>	<p>Noted. 18 dedicated social housing stalls have been provided, including 14 standard stalls and 4 accessible stalls. •See Sheet DP-W102 – 1040-1080 Architecture Drawings</p>
<p>1.25</p>	<p>Confirm and identify bicycle parking dedicated to social housing. Provide a separate room for bicycles. This room can be shared with child day care.</p>	<p>Social housing bicycle storage is located on the Level P2 bike storage, with a dedicated room for both social housing and child care staff bike parking. •See Sheet DP-W103 – 1040-1080 Architecture Drawings</p>

1.26	<p>Design development to reduce number of elevators for social housing and child day care to two total elevators sized to the requirements of City's Childcare Design Guidelines and remove wall in lobby between social housing and child day care.</p> <p>Note to Applicant: Consider removing elevator at D2 between gridlines 13 and 14 unless required for overall project. Provide additional openings from social housing elevators on level 8. Provide access to social housing floors and childcare by their respective users.</p>	<p>The recommendation to reduce the three elevators to two for social housing and daycare use was studied with the project's elevator consultant. As per their feedback, the overall result of this would be poorer elevator performance combined with excessive peak wait times, such that the decision has been to maintain the three elevators as proposed at Rezoning.</p> <p>·See Sheet DP-W102 – 1040-1080 Architecture Drawings</p>
1.27	<p>Design development to consider locating social housing and child day care parking stalls on separate levels to allow separate elevator lobbies from the parkade.</p> <p>Note to Applicant: Although the lobby at grade will be shared, most parents will use the parent drop-off spaces in the parkade and having separate elevator lobbies will reduce the number of interactions between users.</p>	<p>Social housing and day car staff vehicle parking is located on P3 in a secure area. Day care drop off passenger loading stalls are located on P1 in a traffic calm area. On both levels the elevator lobby from the social housing and the day care elevator are separated, but share a common vestibule.</p> <p>·See Sheet DP-W102 – 1040-1080 Architecture Drawings</p>
1.28	<p>Identify location and size of dedicated social housing garbage/recycling room.</p> <p>Note to Applicant: Preference for social housing garbage and recycling to be separate and dedicated. Note that if shared, dedicated bins required for each group will be required.</p>	<p>Social housing and child day care garbage/recycling rooms have been consolidated into one room on Level P1. Waste bins are dedicated to each use and will not be shared.</p> <p>·See Sheet DP-100 to DP-104 – 1040-1080 Architecture Drawings</p>
1.29	<p>The social housing should be designed in accordance with the High-Density Housing for Families with Children Guidelines for the social housing units, including, but not limited to:</p>	
	<p>(a) A private open space (e.g. balcony) for each family unit at a minimum of 1.8 m (5 ft. to 11 in.) deep by 2.7 m (8 ft. to 10 in.) wide</p> <p>(b) Outdoor amenity area to include areas suitable for a range of children's play activities and urban agriculture, ranging in size from 130 sq. m (1,399 sq. ft.) to 280 sq. m (3,014 sq. ft.) and situated to maximize sunlight access.</p>	<p>Each family unit has a balcony with dimensions as required.</p> <p>Outdoor amenities will meet area and program requirements to the extent possibles.</p>
1.30	<p>Design development of outdoor play area that is shared by both the social and market housing units. Provide confirmation that all outdoor children's play areas are shared between the social housing and strata residents.</p> <p>Note to Applicant: Provide detailed drawings of outdoor play area, including materials, play elements, and equipment (if provided). Natural landscapes that encourage imaginative play and motor-skill development are recommended. See High-Density Housing for Families with Children Guidelines for detailed information regarding outdoor play areas.</p>	<p>Further discussion with staff required.</p>
1.31	<p>Design development to include accessible urban agriculture planters for social housing and strata amenity area along with supporting infrastructure including high efficiency irrigation and/or hose bib, potting bench, tool storage and compost box, as per the Urban Agriculture Guidelines for the Private Realm at https://vancouver.ca/files/cov/urban-agriculture-guidelines.pdf.</p>	<p>Further discussion with staff required.</p>

PART 1: SUSTAINABILITY		
1.37	<p>All new buildings in the development will meet the requirements of the Green Buildings Policy for Rezoning (amended May 18, 2022) located here https://guidelines.vancouver.ca/policy-green-buildings-for-rezonings.pdf</p> <p>Note to Applicant: Refer to the most recent bulletin Green Buildings Policy for Rezoning – Process and Requirements</p>	<p>Noted. The current sustainability report submitted at Rezoning resubmission has provided for recent updates to the Green Buildings Rezoning policy.</p>
PART 1: SUSTAINABLE FOOD ASSETS		
1.38	<p>Fulfill, to the satisfaction of the Director of Social Policy, the Sustainable Food Systems requirements of the Rezoning Policy for Sustainable Large Developments by providing the following three food assets: edible landscaping and garden plots, outdoor dining and food gathering infrastructure, and an indoor urban farm.</p> <p>(a) Edible landscaping and garden plots: Design development to include edible landscaping and resident garden plots satisfying the following requirements:</p> <ul style="list-style-type: none"> (i) Provide the minimum garden plot space as negotiated at rezoning, which includes a combination of individual or shared garden plots to meet the minimum commitment of 23 plots (0.9 m (3 ft.) x 2.4 m (8 ft.)) in size, with sufficient solar exposure from March until October to enable vegetable production. (ii) Follow the garden plot design requirements of the Rezoning Policy for Sustainable Large Developments Administrative Bulletin and the City's Urban Agriculture Guidelines for the Private Realm, or any other applicable policy at the time of development permit. (iii) Provide support facilities for the garden plots as outlined in the Urban Agriculture Guidelines for the Private Realm. (iv) Provide significant landscape allocation to plants with edible leaves, fruits, flowers, nuts and berries, in alignment with the characteristics and design guidelines outlined in the Rezoning Policy for Sustainable Large Developments Administrative Bulletin, and complementary educational signage. Edible landscaping is expected in public areas as well as roof terraces, specifically at ground level, level 1 amenity, level 2, level 7 and level 58 roof. <p>(b) Outdoor dining and food gathering infrastructure: Design development to include various infrastructure to enable sharing of food in the public realm at grade, including:</p> <ul style="list-style-type: none"> (i) Provide access to a class B loading bay to enable vehicular access for potential food trucks, market vendors, etc.; (ii) Provide covered outdoor public seating; (iii) Provide secured parking location for a minimum of four food trucks in the public realm (food truck parking must be secured on private property, not on City property including road right of way); and (iv) Provide electrical infrastructure to support a minimum of four food trucks or other potential food-based activities such as community food markets, including appropriate receptacles and weatherproof locking kiosks. Receptacles may be duplex locking receptacle (15A, 120V NEMA L5-15R), 3 prong locking receptacle (20A, 120V NEMA L14-20R), or 4 prong locking receptacle (30A, 208V NEMA L14-30R), each on a dedicated circuit, specifications and layout to be determined through the development permit process. <p>(c) Indoor urban farm additional food asset(s): Design development to include a minimum 38 sq. m (410 sq. ft.) indoor urban farm satisfying the following requirements:</p> <ul style="list-style-type: none"> (i) Urban farm to be provided as a turn-key fit, furnished and equipped on-site space with appropriate utility connections; (ii) Urban farm to be activated by a farm operator for use to produce fruit, herbs, and/or vegetables; (iii) Provide access to a Class B loading bay to enable delivery/pick up of farm materials and produce; and (iv) Location is to be determined through the development permit but is expected either in the P1 parkade or, preferably, in a visible public location on the ground floor. <p>Note to Applicant: Indicate food assets on all landscape and architectural plans/drawings submitted as part of the development permit process, and provide the following specific information to facilitate staff review:</p> <ul style="list-style-type: none"> Test fits of the garden plots, urban farm, and food truck space demonstrating sufficient capacity to accommodate the minimum size requirements and required support facilities; A plan indicating all edible landscaped areas, accompanied with an edible species planting list; An urban farm operations plan; A shadow study for all garden plot areas. <p>Staff are available at foodpolicy@vancouver.</p>	<p>To the extent possible these items are currently provided for.</p> <p>a) Edible landscape and planter boxes have been provided, refer to landscape drawings for locations</p> <p>b) Four sets of water and electric connection will be provided along Barclay Street and ted northe Lane providing hookup for 4 electrified food trucks. The electrical receptacles will include weatherproof locking kiosks and will each be on a dedicated circuit. Exact receptacle specifications will be determined during the construction documentation phase. Seating steps will be provided at mid-block connection and in front of the café adjacent to the food trucks along Barclay Street. Movable furniture will be provided and located under a canopy of trees within the mid-block connection. Two on-site Class B loading spaces along ted northe Lane can be used for secured food truck parking. Two other food trucks would be parked along Barclay Street. Food truck vendors may use one of the two remaining Class B loading bays for short-term loading purposes. All Class B spaces will be coordinated with a loading management plan.</p> <p>-See Sheet DP-W050, DP-W110, DP-E050. DP-E120, and landscape drawings.</p> <p>c) A 410 square foot space will be provided including 4 grow banks, a work bench and a sink. Please refer to Appendix B for details. The 4 grow banks will be located in the parkade below the west tower on P1. Direct access to loading for the farm will simplify operations and servicing. The urban farm will provide significant fresh produce to an on-site food and beverage operation. Food varieties are still to be determined but may consist of micro green, lettuce, and strawberries.</p> <p>-See Sheet DP-E121 – 1040-1080 Architectural Drawings and landscape drawings.</p>

PART 1: CHILD DAY CARE		
1.39	Design, construct, equip and finish a licensable 37-space child day care facility in accordance with the Childcare Design Guidelines, Childcare Technical Guidelines, and Provincial Childcare Licensing Regulations comprising no less than 429 sq. m (4,618 sq. ft.) indoor space and 520 sq. m (5,597 sq. ft.) outdoor space (exclusive of mechanical and electrical rooms, stairwells, elevator shafts and lobbies), with indoor and outdoor program space for 12 children under 3 years, and 25 children aged 3-5 years in accordance to relevant guidelines and regulations. Other requirements include, but may not be limited to, the following:	Compliance provided for indoor area. 20% reduction in outdoor area due to West podium setback along Thurlow Street.
	(a) Confirm that elevation of child day care is not in excess of 25 m (82 ft.).	The child day care is located on Level 06 of the west tower and is not in excess of 25m (82 ft), approximately 20m (65 ft) from street level. ·See Sheet DP-W301 – 1040-1080 Architectural Drawings
	(b) Confirm in section drawings that child day care slab-to-slab height allows sufficient space for mechanical and electrical equipment to maintain minimum 2.4 m (8 ft.) clear ceiling heights throughout the facility, as noted in the Childcare Technical Guidelines.	The child day care clear ceiling height will be maintained at a minimum 2.4 m (8ft.) clear ceiling throughout the facility.
	(c) Provide shadow studies at Autumn Equinox and February 1st (winter solstice not required); include known shadow impacts of adjacent buildings Note to Applicant: Ensure sun access is available in each outdoor program area for at least three hours a day, including two hours during play hours (9 am-noon, 1:30-4 pm)	Refer to design rationale booklet for shadow study. Due to surrounding density, winter sunlight access is limited across the entire site. The analysis informed the placement of the outdoor child day care to the southern edge of the site which receives the greatest amount of winter sun.
	(d) Provide wind studies to ensure adequate anchoring for play structures and other equipment e.g. shade sails.	Play structures will be provided with particular attention to placement on the roof deck in wind sensitive areas. Also please refer to wind study which has been completed.
	(e) Provide a table of areas identifying amount of gross childcare indoor space and outdoor space proposed per program area (0-3 and 3-5), that meets or exceeds the Childcare Design Guideline recommended minimum activity and support areas	Functional plan and tables has been provided in DP booklet. ·See Sheet DP-W020 – 1040-1080 Architectural Drawings
	(f) Design development of elevator banks to streamline number of elevators, provide stroller storage and bike trailer storage at entry level, and diminish impact of elevators on available space at child day care level.	After review with the project elevator consultant, the decision has been made to maintain the elevator configuration as submitted for Rezoning; storage of strollers to be provided next to dedicated child care elevator. ·See Sheet DP-W102 and DP-W115 – 1040-1080 Architecture Drawings
	(g) Provide seven (7) parking stalls for the child day care facility, including: five (5) child day care pickup/drop-off stalls located in the same area, and two (2) child day care staff parking stalls located together; all with a clear, legible and safe route to child day care elevator. Note to Applicant: Child day care pickup/drop off stalls are currently provided on two levels P1 and P1.5.	Noted. Required stalls are provided. ·See Sheet DP-W102 – 1040-1080 Architecture Drawings

1.39	<p>(h) Design child day care loading area to enable sharing between Child day care and Social Housing users and provide a short, legible and clear path of travel from Class B loading area with direct access to dedicated child day care elevator wide enough for larger items.</p> <p>Note to Applicant: Loading area will be used by maintenance staff bringing e.g. landscape materials and equipment, such as large amounts of sand/fibar/soil and play equipment</p>	<p>Child day care and Social Housing are provided with a loading corridor connected Class B loading area and dedicated elevators. ·See Sheet DP-050 – 1040-1080 Architecture Drawings</p>
	<p>(i) Identify location and size of Child day care Garbage/Recycling room.</p> <p>Note to Applicant: Preference for child day care garbage and recycling to be separated from other uses. If shared with Housing, dedicated bins are required for child day care garbage and child day care recycling, and that diaper waste will be a part of daily refuse (smells, etc.). Garbage/recycling will be accessed by child day care staff daily and should be located in close proximity to the Child day care elevator.</p>	<p>Child day care garbage/recycling has been provided for on Level P1. ·See Sheet DP-W104 – 1040-1080 Architecture Drawings</p>
	<p>(j) Identify location of child day care bicycle parking and end-of-trip facilities.</p> <p>Note to Applicant: Consider child day care bike parking for staff at parkade level, potentially shared with social housing, and bike parking for parents at grade</p>	<p>Bike storage provided on Level P2 with social housing bike storage. ·See Sheet DP-W103 – 1040-1080 Architecture Drawings</p>
	<p>(k) Identify location for longer-term storage of child day care seasonal equipment, emergency supplies, maintenance equipment and materials (e.g. filters for HVAC, paint cans, tools, etc.).</p>	<p>HVAC equipment and maintenance supplies to be kept in janitor's closet on child care level, seasonal equipment to be stored in external storage accessible from outdoor play area. ·See Sheet DP-W115 – 1040-1080 Architecture Drawings</p>
	<p>(l) Relocate mechanical room to parking or other level to maximize indoor space for child day care, and provide communications in a closet-sized room.</p> <p>Note to Applicant: Access to communications room may be provided off staff room or laundry room, but not in a storage room (child day care storage rooms are typically filled to capacity).</p>	<p>HVAC equipment will need to be located on the same level given the child care location is six storeys above the parking level. At the time of detailed design coordination with the mechanical consultant, every effort will be made to locate it elsewhere.</p>
	<p>(m) Clarify amount of usable outdoor play proposed for each program</p>	<p>Refer to Urban Design Item 1.2. At the time of the Rezoning submission, the usable outdoor play area requirement had been met but has since been reduced to provide the setback of the podium along Thurlow Street. ·See Design Rationale Booklet for more information.</p>
	<p>(n) Outdoor area ensure ample sunlight access and shade for each program area</p>	<p>The outdoor play area has been located to maximize sunlight access, but given the context of present and future towers that will surround the site it is noted that only a minimal amount of direct sunlight can be provided during the day. ·See Design Rationale Booklet for more information.</p>

ENGINEERING WEST

1.4	<p>Provision of construction details to determine ability to meet municipal design standards for shotcrete removal (COV Design Guidelines and ConstructionStandards and Encroachment By-law (#4243) section 3A) and access around existing and future utilities adjacent your site.</p> <p>Note to Applicant: 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. Please contact Engineering Services for details. Additional details can be found at https://vancouver.ca/streets-transportation/street-design-construction-resources.aspx</p>	<p>Shotcrete extents to be reviewed by geotechnical and surveyor consultants with Engineering Services prior to submission of the Stage 1 BP.</p>
1.41	<p>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.</p>	<p>Noted.</p>
1.42	<p>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.</p>	<p>Noted.</p>
	<p>Provision of an updated and finalized Transportation Demand Management (TDM) Plan to the satisfaction of the General Manager of Engineering Services. An updated TDM plan package is required.</p> <p>Note to Applicant: A TDM Plan with a minimum of 12 points for social housing use. The proposed plan achieves 33 points. A single TDM measure may count towards multiple land uses if it is usable by each land use. Refer to Schedule B of the TDM policy for detailed requirements for each measure. Provide TDM Plan as a separate package with complete information on TDM measures proposed, including the following clarifications:</p>	<p>Noted.</p>
1.43	<p>(a) ACT-02 – Improved Access to Class A bicycle Parking:</p> <p>i) Provision of design specifications for the excellent standard of lighting and finishes for the Class A bicycle parking and note the location on the architectural plans. Note to Applicant: Automatic door openers and bicycle elevators are requirements of the parking Bylaw and cannot be counted towards TDM points.</p>	<p>Noted. Refer to Level P2 of the DP Architecture set for enhanced bike storage facilities, including the provision for enhanced Class A bicycle storage. • See Sheet DP-W103 and DP-E105 - 1040-1080 Architecture Drawings and Sheet</p>
	<p>(b) ACT-05 – Bicycle Maintenance Facilities:</p> <p>i) Updated Architectural plans to note and dimension the location of facilities. ii) Bicycle maintenance facilities to be located with convenient access to/from Class A bicycle spaces. iii) An operational plan detailing the following: • a description of the amenities to be provided; • a means of providing access to all residents; and • a plan for maintaining these amenities. iv) 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. v) Provision of stair free access to and from the Class A bicycle rooms to the bicycle maintenance facilities. vi) Provision of access from the rental and social housing units to and from the bicycle maintenance facilities.</p>	<p>Noted. Refer to Level P2 of the DP Architecture set for enhanced bike storage facilities, including the provision for bicycle maintenance facilities. • See Sheet DP-W103 and DP-E105 - 1040-1080 Architecture Drawings and Sheet</p>

1.43	<p>(c) ACT-07 – Public Bike Share Space: i) Updated Architectural plans to illustrate the size and location of the PBS space as specified by City staff.</p>	<p>Noted. Refer to the site plan of the DP Architecture and Landscape sets for the PBS location. · See Sheet DP-W050 and DP-E050 - 1040-1080 Architecture Drawings and L3.01 – 1040-1080 Landscape Drawings</p>
	<p>(d) ACT-09 – Walking Improvements: i) This measure cannot be accepted as Walking Improvements provided for TDM measure points cannot be located on the site and must be located on adjacent sites.</p>	<p>This measure has been removed and replaced by FIN-01. · See updated TDM report from Bunt</p>
	<p>(e) COM-02 – Car Share Vehicles and Spaces: i) Updated Architectural plans to identify/note/dimension car share spaces. ii) Spaces to be located with convenient, public access at-grade, or on P1. iii) Detailed information as to how and a design to enable members of the car sharing organization access into the building’s underground parking 24 hours a day, 7 days a week.</p>	<p>Noted. · See Sheet DP-E104 and DP-W104 - 1040-1080 Architecture Drawings and updated TDM report from Bunt</p>
	<p>(f) SUP-02 – Real-Time Information: i) Updated Architectural plans to identify the general location(s) for proposed displays. ii) A description of the content (e.g. transit lines, walk time to transit locations, availability of on-site car share vehicles, availability of nearby shared bicycles, etc.) to be displayed, and service provider.</p>	<p>This measure has been removed and replaced by SUP-01. · See updated TDM report from Bunt</p>
	<p>(g) SUP-03 – Multimodal Wayfinding Signage: i) Updated Architectural plans to identify the general location(s) for proposed displays. ii) A conceptual design of the content (e.g. transit lines, walk time to transit locations, availability of on-site car share vehicles, availability of nearby shared bicycles, etc.) to be displayed.</p>	<p>Noted. · See updated TDM report from Bunt</p>
	<p>(h) OTH-01 – Innovative Strategies: i) Updated Architectural plans to identify the location of on-site or off-site amenities and services. Note to Applicant: Provision of a description/operational for the services to be provided, a means of providing access to all residents, tenants, and employees and a plan for maintaining these amenities. iii) On-site daycare cannot be accepted as a TDM measure. iv) Provision of an operational plan on how the 20 year free bicycle repair services for residential uses will be provided.</p>	<p>Noted. Updated TDM report now provides for 5 Innovative Strategies. · See updated TDM report from Bunt</p>
1.44	<p>Subject to the acceptance of an approved TDM Plan, entry into a TDM agreement, to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services, which identifies the following:</p>	<p>Noted.</p>
	<p>(a) Secures provision of funding towards long-term TDM monitoring fund in the amount of \$2 per sq. m of gross floor area.</p>	
	<p>(b) Secures the provision of TDM measures on the site.</p>	
	<p>(c) Permits the City to access and undertake post occupancy monitoring of the Transportation Demand Management (TDM) measures proposed.</p>	
	<p>(d) Agrees to make reasonable adjustments to the TDM measures as requested by the City, based on the TDM monitoring results.</p>	

1.45	Arrangements shall be made, to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services, for Phase 2 (West Tower) to take access to underground parking from the adjacent development site Phase 1 (East Tower); and provision of a knockout panel to be located at the proposed security gate providing access from Phase 1 (East Tower) to Phase 2 (West Tower).	Noted.
1.46	Provision of an updated TAMS to include coordinated TDM measures. Note to Applicant: Different TDM measures proposed in each document.	Noted.
1.47	<p>Design development to improve access and design of bicycle parking by performing the following:</p> <p>(a) Provision of a dedicated bicycle elevator for all bicycle spaces located below the first underground level for Phase 1.</p> <p>Note to Applicant: The elevator must provide direct access to all Class A bicycle spaces. Currently the P10 level does not have elevator access. The elevator is to have 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 with durable finishes to comfortably accommodate two people with two bicycles and provide minimum interior dimensions of 1.7 m (5.5 ft.) x 2.0 m (6.7 ft.) 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.</p> <p>(b) Exploration of opportunities to relocate Class B bicycle parking for the east tower to a more visible location.</p> <p>(c) Provision lockers for all Class A bicycle spaces not located within a Class A bicycle parking room.</p> <p>(d) Provision of 1.2 m (4 ft.) minimum manoeuvring aisle width for vertical and horizontal Class A bicycle parking spaces and 1.5 m (5 ft.) minimum width manoeuvring aisle for oversized Class A bicycle parking spaces.</p>	<p>In general these items are currently provided for, including the provision of a bike elevator, enhanced Class B parking, and required aisle width.</p> <p>•See Sheet DP-E100, DP-E105, DP-W100, and DP-W103 - 1040-1080 Architecture Drawings</p>

1.48	<p>Design development to improve access and design of loading spaces and demonstrate compliance with the Parking and Loading Design Supplement by performing the following:</p> <p>(a) Confirmation that the slope of the loading bay does not exceed 5%.</p> <p>(b) Provision of a minimum 10.7 m (35 ft.) of stall length for the parallel Class B loading space.</p> <p>(c) Provision of minimum 4.0 m (13 ft.) width for the first Class A passenger loading space located in each tower.</p>	<p>Loading requirements are currently provided for, including confirmation that no slope exceeds 5% in the loading area, and that Class A and B sizes have been met.</p> <p>•See Sheet DP-W110 & DP-E120 - 1040-1080 Architecture Drawings</p>
1.49	<p>Design development to improve the parkade layout and access design and demonstrate compliance with the Parking and Loading Design by performing the following:</p> <p>(a) Confirmation that column encroachments, setbacks and parking space widths comply with the Parking and Loading Design Supplement. Note to Applicant: Column encroachments are not permitted in single module stalls. 2.3 m (7.5 ft.) of vertical clearance is required for access and manoeuvring to all disability spaces.</p> <p>(b) Shared accessible parking spaces are not supported, accessible spaces to be located behind the residential parking gate. Note to applicant: Accessible spaces and Class A passenger loading spaces are not to be shared use.</p> <p>(c) Provision of parabolic mirrors at the top and bottom of all parkade ramps.</p>	<p>The current parking layout conforms with Bylaw parking stall and drive aisle widths. Accessible parking stalls will also be in compliance, and parabolic mirrors will be provided throughout.</p> <p>•See Sheet DP-E101 to DP-E106 and DP-W100 to DP-W104 - 1040-1080 Architecture Drawings</p>
1.50	<p>Design development to improve accessibility and function of the proposed shared vehicle spaces through provision of the following:</p> <p>(a) A 2.9 m (9.5 ft.) stall width for shared vehicle parking spaces.</p>	<p>Noted</p>
	<p>Provision of the following information as part of the drawing submission at the Development Permit stage to facilitate a complete Transportation review:</p> <p>(a) A complete tech table is required showing the calculations for the minimum required parking, loading, bicycle spaces and the number of spaces being provided.</p> <p>(b) All types of parking and loading spaces individually numbered and labelled.</p> <p>(c) Dimension any/all column encroachments into parking stalls.</p> <p>(d) Identification of all columns in the parking layouts.</p> <p>(e) Dimension typical parking spaces.</p>	<p>Parking data has been updated and is provided in the architecture drawing set(s).</p> <p>•See Sheet DP-W005 and DP-E005 - 1040-1080 Architecture Drawings</p>

1.51	(f) Dimension additional setbacks for parking spaces due to columns and walls.	Parking data has been updated and is provided in the architecture drawing set(s). •See Sheet DP-W005 and DP-E005 - 1040-1080 Architecture Drawings
	(g) Dimension manoeuvring aisles and the drive aisles at the parkade entrance and all gates.	
	(h) Provision of section drawings showing elevations and minimum vertical clearances for parking levels, loading bays, ramps, and security gates.	
	(i) Details on the ramp/parkade warning and/or signal systems and locations of lights, signs and detection devices to be shown on the plans.	
	(j) Areas of minimum vertical clearances labelled on parking levels.	
	(k) Design elevations on both sides of the ramps and drive aisles at all breakpoints, loading bays, disability spaces, and at all entrances. Note to Applicant: The slope and length of the ramped sections at all breakpoints to be shown on the submitted drawings.	
	(l) Indication of the stair-free access route from the Class A bicycle spaces to reach the outside. Note to Applicant: Stair ramps are not generally acceptable.	
	(m) Existing street furniture including bus stops, benches etc. to be shown on plans.	
	(n) The location of all poles and guy wires to be shown on the site plan.	
1.52	Provision of a lighting simulation to support all offsite lighting upgrades to City standards and IESNA recommendations. Note to Applicant: A lighting simulation is required prior to development permit issuance.	Noted.



1.53	<p>Provision of a complete Rainwater Management Plan (RWMP) to be submitted to clearly indicate how the onsite system achieves the prescribed performance requirements as detailed in the Zoning and Development Bylaw and the Rainwater Management Bulletin.</p> <p>Note to Applicant: Subset of the submission list items and additional notes are provided below based on the RWMP submission dated March 8, 2022. Ensure all information expected in a complete RWMP as described in the appendix of the Rainwater Management Bulletin are included in the updated version.</p>	<p>Given the constraints of the site(s), Tier 2 has been explored and maximized as much as possible at the ground plane and roof/terrace levels. The RWMP has been updated since Rezoning, and is provided here for reference along with updated architecture and landscape drawings, along with a current hydrogeological report. Additional calculations and separate PDFs will be provided as requested.</p> <p>•See 1040-1080 Architecture and Landscape Drawings, Binnie RWMP reports, East and West towers</p>
	<p>(a) C.2. Outline the rainwater management approach proposed to meet the water quality requirement. The approach shall include descriptions on how the water quality requirement is to be achieved on site and include supporting calculations and specifications necessary to demonstrate adequate design.</p> <p>Note to Applicant: Provide information on how the water quality requirement will be achieved on this site, as water quality treatment is required for the first 24 mm (~70% annual average rainfall) of all rainfall from the site that is not captured in Tier 1 or Tier 2 practices and 48 mm (~90% annual average rainfall) of treatment is required for high traffic areas. For the DP submission, the following should be included for review for all proprietary devices:</p> <ul style="list-style-type: none"> i. Product name and manufacturer/supplier. ii. Total area and % Impervious being treated. iii. Treatment flow rate. iv. Supporting calculations to demonstrate adequate sizing system based on the contributing drainage area. v. Include discussion of the specified treatment device's % TSS removal efficiency certification by TAPE or ETV. vi. Location of device in drawing or figure in the report. 	
	<p>(b) C.4. Provide justification for not prioritizing Tier 1 or 2 approaches, and specify the alternate system to meet requirements. Note to Applicant: The amount of proposed Tier 1 and 2 methods of capture is unacceptable for this proposed Sustainable Large Development mixed-use development and a significant increase is necessary. Additional opportunities not thoroughly explored include rainwater harvesting, green roof, and routing of hardscape surfaces to landscaping. With projected increases to both sewer and water utility rates, the feasibility of a rainwater harvesting and reuse system to meet non-potable water demands should be thoroughly evaluated and considered. Appropriate justifications must be stated for each available method in each Tier to determine if exemptions may be granted. Note to Applicant: Explore grading or routing of hardscape areas into landscaping. Coordination with the landscape architect for soil storage capacities will be required to support this proposal. Supporting grading and routing details should be provided to support this strategy including delineated contributing hardscape and receiving landscape areas along with grading or details to support the feasibility of this approach.</p>	
	<p>(c) C.5. Provide an overview of each BMP and design specifics to support the design claim for meeting target requirements. Design detail of each BMP should be coordinated with other disciplines, if necessary, and the report should include the necessary rainwater management specific supporting drawings and calculations.</p>	

<p>1.53</p>	<p>(d) C.6. Provide a pre-development site plan that includes the following: orthophoto, delineated catchment(s), area take off for all different surface types, and onsite and downstream offsite drainage appurtenances.</p> <p>(e) C.7. Provide post development site plan(s) that includes the following: building location/footprint; underground parking extent; proposed service connections to the municipal sewer system; location and labels for all proposed rainwater management practices; area take off for all different land use surface types within the site limits; and delineated catchments to demonstrate BMPs are appropriately sized. Note to Applicant: Confirm the surface type for the area within the Level 8 daycare podium indicated as 300 mm landscaped surface cover. It is not clear from the drawings if this area is landscaped or part of the hardscaped patio surface.</p> <p>(f) C.8. Provide a schematic sketch or detail demonstrating how the overall rainwater management system is hydraulically connected with each other and the proposed tie-in to the municipal service connection.</p> <p>(g) C.11. Provide a completed Rainwater Management Project Summary Form as a PDF in a separate file to the RWMP. For a fillable copy of the form, refer to the rainwater management webpage.</p> <p>Note to Applicant: As it is acknowledged that not all design components are advanced fully at this stage, placeholders will be accepted in this resubmission with the expectation the final RWMP will include all relevant details.</p> <p>Note to Applicant: Please contact the City of Vancouver's Rainwater Management Group for any questions or concerns related to the conditions or comments prior to resubmission with the Development Permit application. A meeting may be scheduled upon request by contacting rainwater@vancouver.ca.</p>	<p>Given the constraints of the site(s), Tier 2 has been explored and maximized as much as possible at the ground plane and roof/terrace levels. The RWMP has been updated since Rezoning, and is provided here for reference along with updated architecture and landscape drawings, along with a current hydrogeological report. Additional calculations and separate PDFs will be provided as requested.</p> <p>•See 1040-1080 Architecture and Landscape Drawings, Binnie RWMP reports, East and West towers</p>
<p>1.54</p>	<p>Provision of a Rainwater Management Agreement to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services registered prior to issuance of a Development Permit.</p>	<p>Noted.</p>
<p>1.55</p>	<p>Provision of a final signed and sealed Rainwater Management Plan (RWMP), which includes a written report, supporting calculations, computer models and drawings to the satisfaction of the General Manager of Engineering Services prior to the issuance of any Building Permit.</p>	<p>Noted.</p>
<p>1.56</p>	<p>Provision of a final signed and sealed standalone rainwater Operations and Maintenance (O&M) Manual to the satisfaction of the General Manager of Engineering Services prior to the issuance of any Building Permit.</p>	<p>Noted.</p>

<p>1.57</p>	<p>Provision of a Final Hydrogeological Study, to the General Manager of Engineering Services and the Director of Planning’s satisfaction, which addresses the requirements outlined in the Groundwater Management Bulletin, including but not limited to:</p> <p>(a) A Groundwater Management Plan which includes: (i) A description of the phased construction plan for the underground parkade that will be shared by both the East Tower and West Tower and how that will affect the proposed groundwater management method(s) for the development. (ii) The bulk excavation depth and foundation slab depth in metres below ground surface and metres geodetic. (iii) Adequate characterization and if required, monitoring of hydrostratigraphic units above the proposed slab depth, which may include any discrete high permeable zones which would contribute to groundwater discharge from the site. (iv) A quantitative estimate (in litres per minute) of both the anticipated construction dewatering/drainage rate and the permanent (post- construction) dewatering/drainage rate for City approval, including calculations, assumptions and the methodology used to determine the rates.</p> <p>Note to Applicant: One hydrogeological study, including all details for both proposed towers, is expected.</p> <p>Note to Applicant: The City does not support the long-term discharge of groundwater to our drainage system. Every effort should be made to prevent or limit this discharge.</p> <p>(b) An Impact Assessment which achieves analysis to confirm that there are no significant risks from groundwater extraction/diversion.</p> <p>Note to Applicant: The City does not accept the dewatering of peat due to associated risk of offsite settlement.</p> <p>Note to Applicant: The proposed development is considered a Sustainable Large Development, and as such is subject to the requirements outlined in the Groundwater Management Bulletin and Rezoning Policy for Sustainable Large Developments. This rezoning submission is not compliant with the City’s requirements as it does not meet the submission requirements for a hydrogeological study. The City will permit the applicant to provide the required hydrogeological study in their subsequent submission as noted in the conditions above.</p> <p>Note to Applicant: Construction-related discharge to the sewer to be measured and reported to the City. This monitoring must include daily average flow rates, and be submitted monthly to groundwater@vancouver.ca. A hold will be placed on the issuance of a building permit for excavation. To remove the hold, provide an anticipated start date for excavation, and the contact details for the professional services that have been retained to conduct this monitoring, to groundwater@vancouver.ca</p>	<p>Noted. Refer to Hydrogeological report from GeoPacific, along with updated architecture and landscape drawings. In general, these items are currently provided for, with some further discussion required with City staff. •See 1040-1080 Architecture and Landscape Drawings, GeoPacific hydrogeological report, East and West towers dated April 26, 2023</p>
<p>1.58</p>	<p>Submission of a Key Plan to the City for review and approval prior to submission of any third party utility drawings is required. The review of third party utility service drawings will not be initiated until the Key Plan is defined and achieves the following objectives:</p> <p>Note to Applicant: Use of street for temporary power (e.g. temporary pole, pole mounted transformer or ducting) is to be coordinated with the city well in advanced of construction. Requests will be reviewed on a case by case basis with justification provided substantiating need of street space against other alternatives. If street use for temporary power is not approved, alternate means of providing power will need to be proposed. An electrical permit will be required.</p> <p>(a) The Key Plan shall meet the specifications in the City of Vancouver Engineering Design Manual Section 2.4.4 Key Plan https://vancouver.ca/files/cov/engineering- design-manual.PDF</p> <p>(b) All third party service lines to the development is to be shown on the plan (e.g., BC Hydro, Telus, Shaw, etc.) and the applicant is to provide documented acceptance from the third party utilities prior to submitting to the City.</p> <p>Note to Applicant: Use of street for temporary power (e.g. temporary pole, pole mounted transformer or ducting) is to be coordinated with the city well in advanced of construction. Requests will be reviewed on a case by case basis with justification provided substantiating need of street space against other alternatives. If street use for temporary power is not approved, alternate means of providing power will need to be proposed. An electrical permit will be required. Provision of a Rainwater Management Agreement to the satisfaction of the General Manager of Engineering Services and the Director of Legal Services registered prior to issuance of a Development Permit.</p>	<p>Noted.</p>

1.59	<p>Applicant to ensure the waste room designs are in compliance to City of Vancouver's Guidelines in the Garbage and Recycling Storage Amenity Design Supplement, particularly the following: (Refer to pdf for further details (1.59a-e))</p> <p>(a) Designated waste rooms for each building use, e.g. retail, social housing, and market housing.</p> <p>(b) Number of containers for each stream to meet the capacity of each use type.</p> <p>(c) Ideally, waste rooms to be located no lower than one level below grade. If this requirement cannot be met, justification should be made and confirmation from hauler is required to ensure all containers are serviceable.</p> <p>(d) The total area of each waste room should equate to at least 2 to 2.5 times the physical footprint of the containers.</p> <p>(e) If container staging is required during collection days, a staging area should be provided on site, not on City property, and should be identified on the design drawings.</p>	<p>Noted. Waste room design in general accordance with City of Vancouver guidelines.</p> <p>•See DP-W104, DP-E106, and DP-E120 - 1040-1080 Architecture Drawings</p>
1.60	<p>Applicant to provide a waste collection plan at the development permit application stage. The plan should include the following:</p> <p>(a) Types of waste streams to be provided in each waste room.</p> <p>(b) Number of containers to be provided for each stream in each waste room.</p> <p>(c) Waste collection frequency for each stream.</p> <p>(d) Letter from waste hauler confirming the serviceability of all waste rooms.</p>	<p>Noted. Letter of commitment has been submitted in the updated sustainability report(s) that the current waste management plan will be implemented.</p>
1.61	<p>Provision of outdoor waste or recycling bins in public open spaces on site</p>	<p>Noted.</p>
	<p>Provision of updated architectural and landscape plans to reflect the Public Bike Share (PBS) space in compliance with the Design Standards for Public Bike Share to the satisfaction of the General Manager of Engineering Services, including the following items and notes:</p> <p>(a) Size: At a minimum a 16.0 m x 4.0 m (53 ft. x 13 ft.) sized station shall be accommodated. The full length of the space is to be continuous. The physical station with docked bicycles is 2m wide and has a required bicycle manoeuvring zone of 2.0 m (7 ft.) for a total width of 4.0 m (13 ft.).</p>	<p>Noted. PBS location and size in accordance with City requirements – refer to updated Architecture and Landscape drawings.</p> <p>•See DP-W050 - 1040-1080 Architecture and Landscape Drawings</p>

<p>1.62</p>	<p>(b) Location: The station must be fully located on private property while still clearly visible to the public with 24/7 public access. The location is to be near the intersection of Barclay Street and Thurlow Street to allow easy access to the street.</p> <p>Note to Applicant: The proposed PBS space as shown on Drawing A-04-03, at the northeast corner of the site outside the East Tower is not acceptable. This proposed location is closer to mid-block and does not provide for easy access to the street(s) and may encourage sidewalk riding.</p> <p>Note to Applicant: Shift the PBS space from the proposed location outside the East Tower, west to the northwest corner of the site near the intersection of Barclay Street and Thurlow Street to allow for east access to the street. Locate the PBS space outside the West Tower and relocate the proposed Class B bike racks elsewhere on site and modify proposed landscaping.</p> <p>(c) Access: Consideration for placement of building elements (e.g. Fire Department connections, HVAC vents, hose bibs, etc.) and landscaping that require frequent access and maintenance directly adjacent to the PBS space. These elements shall not be in conflict or cause frequent disruption to the PBS station.</p> <p>(d) Surface treatment: A hard surface, CIP concrete (saw cut or broom finished) is required with no utility access points (including vents, drains, etc.) within the PBS station footprint (except as noted below). Any utility access point within 1.0 m (3 ft.) of the PBS space is to be identified and shown in a detailed drawing submitted. Other firm, paved materials are subject to approval.</p> <p>(e) Grades: The surface must be leveled with a maximum cross slope of 3% and have a consistent grade (i.e. no grade transitions) along the length with a maximum slope of 5%. At minimum, spot elevations at the four corners of the station must be provided.</p> <p>Note to Applicant: The PBS space must be flush with the level of the sidewalk. Provide spot elevations at the four corners of the PBS space.</p> <p>(f) Sun exposure: There must be a minimum of 5.0 m (16 ft.) vertical clearance above the PBS space in order to maximize sun exposure as station operates on solar power. Ideally the station should receive 5 hours of direct sunlight a day.</p> <p>(g) Power: Provision of an electrical service and electrical power is to be available in close proximity to the PBS station. Show power source connection on the landscape and site plans.</p>	<p>Noted. PBS location and size in accordance with City requirements – refer to updated Architecture and Landscape drawings. •See DP-W050 - 1040-1080 Architecture and Landscape Drawings</p>
<p>1.63</p>	<p>Submission on updated landscape and site plan to reflect the public realm changes including all of the off-site improvements sought for this rezoning. Where a design detail is not available, make note of the improvement on the site and/or landscape plans. Submit a copy of the updated plan to Engineering for review noting the following:</p> <p>“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 and Major Projects and/or your Engineering, Building Site Inspector for details.”</p>	<p>Noted. Refer to updated Landscape drawings.</p>