Director	CAO

COUNCIL AGENDA

Date: October 18, 2021 Item: 6.

DISTRICT OF WEST VANCOUVER
750 17TH STREET, WEST VANCOUVER BC V7V 3T3

6.

COUNCIL REPORT

Date:	September 27, 2021
From:	Michelle McGuire, Manager of Current Planning and Urban Design
Subject:	Proposed Rezoning and Development Permit for 2204 Bellevue Avenue and 177 22nd Street
File:	1010-20-20-083

RECOMMENDATION:

THAT proposed "Zoning Bylaw No. 4662, 2010, Amendment Bylaw No. 5159, 2021" be read a first time.

RECOMMENDATION:

THAT proposed "Zoning Bylaw No. 4662, 2010, Amendment Bylaw No. 5159, 2021" be presented at a public hearing scheduled for November 23, 2021, at 6:00 p.m. in the Municipal Hall Council Chamber, and that notice be given of the scheduled public hearing.

RECOMMENDATION

THAT proposed "Development Permit No. 20-083" be presented at a public meeting scheduled for November 23, 2021, at 6:00 p.m. in the Municipal Hall Council Chamber, to be held concurrently with the public hearing scheduled for November 23, 2021, at 6:00 p.m. in the Municipal Hall Council Chamber, and that notice be given of the scheduled public meeting.

1.0 Purpose

This report outlines an application to rezone 2204 Bellevue Avenue & 177 22nd Street (**Appendix A**) to Comprehensive Development Zone 62 (CD62) to allow for the construction of an 8-storey residential building. The development package includes a bylaw serving to amend the zoning bylaw, and a development permit (No. 20-083) to regulate the form and character of the proposed development.

2.0 Legislation/Bylaw/Policy

Local Government Act

The *Local Government Act* (LGA) requires that a public hearing be held on the proposed rezoning.

Zoning Bylaw No. 4662, 2010 (as amended)

The subject site is zoned RD1 (Duplex Dwelling Zone 1), which regulates duplex and single-family development and associated uses. A rezoning is required to allow for the proposed use and built form. The proposed

Comprehensive Development Zone (CD62) is a site-specific zone that reflects the development proposal (**Appendix D**).

Interim Zoning Amendment Policy 02-80-370

Council's Interim Zoning Amendment Policy guides the timing of Council's consideration of rezoning applications prior to the completion of Local Area Plans (LAPs) for properties located within LAP boundaries (such as the subject site).

3.0 Council Strategic Objective(s)/Official Community Plan

Council's Strategic Objectives

Goal 1.0: Significantly expand the diversity and supply of housing, including housing that is more affordable.

- Objective 1.1 Ensure that 250* housing units are approved per year over the next 5 years, of which approximately 50, are rental units and include accessible housing units.

Goal 3.0: Protect our natural environment, reduce our impact on it, and adapt to climate change.

- Objective 3.1 Achieve yearly targets to reduce energy use and carbon emissions by the community and in District operations, incorporating IPCC targets into yearly targets.

Official Community Plan

The Official Community Plan (OCP) provides direction to strengthen District centres and corridors by increasing housing diversity, supporting local economic vitality, and meeting environmental objectives by directing sustainable development close to transit, shops, services, employment and amenities.

Ambleside Apartment Development Permit Area (DPA) Guidelines

Part 14 of the *Local Government Act* enables municipalities to designate Development Permit Areas within an OCP. The subject site falls within the designated Ambleside Apartment DPA, does not expand its boundaries, and is subject to the existing area-specific built form design guidelines. The objective of the DPA is to ensure that new development in the Ambleside Apartment Area has a high quality of design and is in keeping with surrounding development.

OCP Local Area Plan Policy

The subject site is located within the Ambleside Municipal Town Centre Local Area Plan boundary. Prior to the adoption of a local area plan, pursuant to OCP Policy 2.1.15, rezoning proposals may be considered within a Local Area Plan boundary by:

a. Applying relevant District-wide policies contained in this plan and any existing area specific policies and guidelines; and

b. Requiring the proposal's contribution to rental, non-market or supportive housing, or its advancement of low-carbon construction, or its ability to forward the public interest or provide other community benefits as determined by Council.

The proposal is generally consistent with the OCP.

4.0 Financial Implications

The proposal will deliver Community Amenity Contributions (CACs) and applicable Development Cost Charges (DCCs). CACs address growth-related impacts resulting from rezonings, and DCCs fund upgrades or provision of infrastructure services resulting from development.

5.0 Background

5.1 Previous Decisions

Council, at its June 8, 2020 Special Meeting, passed the following resolution:

THAT the preliminary development proposal for 2204 Bellevue Avenue and 177 22nd Street, as outlined in the report dated May 20, 2020 from the Planning Technician proceed to public consultation prior to the adoption of the Ambleside Municipal Town Centre Local Area Plan in accordance with Council's Preliminary Development Proposal and Public Consultation Policy.

Public consultation is required for rezoning applications prior to submission of a formal application and consideration by Council. Consistent with the policy referenced above, Council's approval to conduct public consultation in advance of the Ambleside Municipal Town Centre Local Area Plan enabled the applicant to proceed and for staff to bring the application forward for consideration.

5.2 History

None

6.0 Analysis

6.1 Discussion

Site Context

2204 Bellevue and 177 22nd Street is a 743.3 m^2 site located at the southwest corner of 22nd Street and Bellevue Avenue (see Figure 1). The site has an approximate 2.7 m grade change from north to south. It is located within 100 m of an access point to the Seawalk, 200 m of bus stops along Marine Drive, and 400 m of the West Vancouver Arena, Community Centre, Seniors Activity Centre, and Memorial Library. Both Bellevue Avenue and 22nd Street north of Bellevue are designated as bike routes.

The property is currently developed with a two-storey strata duplex built in 1976, with vehicle access points off of both 22nd Street and Bellevue Avenue. The site has sidewalks on both street frontages. The property is zoned RD1 (Duplex Dwelling Zone 1) and is surrounded on all sides by areas zoned RM1, 2, and 5 (Multiple Dwelling zones). To the northwest is a 22-storey tower (Bellevue Place), to the west is a 13-storey tower (Villa Maris Apartments), to the northeast is a 9-storey tower (Surfside Towers), to the east is a 9-storey tower (Shoreland), and to the southeast and south are two 3-storey multifamily developments. There is also a park directly south down 22nd Street, which leads to an access point to the Seawalk.

The site is located within the boundaries of the Ambleside Apartment Development Permit Area (DPA) of the OCP. The objective of the DPA is to ensure that new development in the Ambleside Apartment Area has a high quality of design and is in keeping with surrounding development.

Figure 1 – Site Context

The Proposal

The applicant proposes to rezone the site to a Comprehensive Development Zone that allows for an 8-storey residential building. Key features of the proposal are:

- Floor area ratio (FAR) – 2.4
- Site coverage – 46%
- Number of Storeys – 8
- Number of units – 7
- Building Height – 31.05 m[1]
- Underground parking spaces – 17 (including 2 visitor)
- Secured bicycle storage – 21
- Accessible barrier free access throughout
- Passive House Certification using encapsulated mass timber construction and roof top solar panels

The proposal requires a zoning amendment from RD1 (Duplex Dwelling Zone 1) to CD (Comprehensive Development). See Appendix B for the Project Profile and Appendix D for the proposed Development Permit.

Project Evaluation

1. Overall

The proposal generally aligns with the policies of the Official Community Plan and Ambleside Apartment Development Permit Guidelines. Its location takes advantage of transit, amenity, and bike route access. The current use as a duplex is an anomaly in the area and the proposed built form as an 8-storey building fits the context of the site. With the proposed passive house certification and mass timber construction it would be a pioneer project for sustainable apartment design in the District and will provide housing units that are accessible and adaptable.

2. Building and Urban Design

The proposed building is eight storeys in height with one apartment unit on each storey above ground. The seven apartment units will have south-facing balconies and are designed to be accessible, barrier free, and have access to natural ventilation and daylight on all sides.

The design of the building incorporates an internal elevator and external stairwell with open air screening. Zinc, terracotta, basalt, and wood are the primary building materials, which have been chosen for their embodied energy characteristics when considering lifecycle analysis.

[1] Including all mechanical and elevator equipment

The building will have communal ground floor features including a lobby, bicycle storage with 21 secured bicycle spaces, a powder room, multi-purpose amenity area, and resident outdoor space/garden.

Public realm improvements include new landscaping for the site and boulevard. Additional boulevard features include a layby for curbside drop-off and a public pedestrian seating area situated under the mature Hemlock tree on 22nd Street. This public plaza area is approximately 43 m^2 (463 sq. ft.) in size and is proposed to be secured through a Statutory Right of Way, with landscaping consistent with the nearby seawalk and wood bench seating.

3. Housing

The proposed development would provide 7 market residential units. Each unit is 272 m^2 (2,930 sq. ft.) in size with two bedrooms plus a flex room which may be used as an additional bedroom. The units are adaptable to allow for aging in place and future downsizing. The unit design is part of the passive house strategy, allowing for simplified massing and cross ventilation.

4. *Advisory Committees*

The North Shore Accessibility Committee on Disability Issues (ACDI) considered the proposal at its April 15, 2021 meeting and was supportive of the application and its focus on aging in place. They provided recommendations for additional detailed design features. In response, the applicant made various changes including ensuring unit bathrooms were fully barrier free, improving maneuverability of exterior pathways, including high contrast paint in exit stairs, and allocating a bike stall for a larger device.

The Design Review Committee (DRC) considered the proposal at its March 11, 2021 meeting and recommended support of the application, subject to further review of several items by staff. These included stairway adjustments to lessen the impact on the adjacent building, measures to protect the existing Hemlock Tree, screening a transformer from public view, creating an inviting pedestrian connection to the corner public space, and dedicating the corner space to secure it for public use. All items have been addressed within the development permit plans and/or conditions (**Appendix D**).

5. Transportation

Vehicle access to an underground parkade will be provided from 22nd Street on the south side of the site. There will also be a lay-by along Bellevue Avenue to allow for passenger and delivery drop-off. As the lay-by is located where a driveway currently exists, there will not be any on-street parking spaces removed to accommodate it. Additionally, the development plan includes the introduction of a new crosswalk on the west leg of Bellevue Avenue and 22nd Street which will improve pedestrian safety adjacent to the development.

Vehicle parking for the building will be located in a partially exposed underground parkade, spanning two levels. Bicycle storage is included on the main floor for convenient access for residents. The proposed vehicle and bicycle parking meet all zoning bylaw requirements and includes:

- 17 vehicle parking stalls with EV charging capabilities (14 resident stalls, 2 visitor, and 1 accessible),
- 21 secured bicycle storage spaces and 2 short term bicycle spaces

A Transportation Impact Assessment (TIA) was completed by Bunt and Associates. The TIA found that the "development will not noticeably impact on-street parking conditions" and that "forecasted operations remain acceptable at all study intersections in 2023 including analysis of the anticipated trips from the development and additional vehicle trips representative of general growth in West Vancouver." District staff review of the TIA concludes that the findings are satisfactory.

6. Growth Related Contributions

The applicant proposes a voluntary Community Amenity Contribution (CAC) to address the growth related impacts associated with rezonings. CAC offers typically include either the provision of on-site amenities, if applicable, or a cash contribution that can be put toward other public benefits. CAC offers take into consideration community needs, area deficiencies and the impact of the proposed development on District services.

Through a negotiated approach with the District, the applicant offers a cash CAC of $1,233,755. District staff have reviewed the applicant's proforma, with the confirmation by a third party consultant, and conclude that the CAC offered is appropriate and recommend that it be accepted.

In addition to the cash CAC the applicant has offered to register a Statutory Right-of-Way for the plaza area to allow public access to this landscaped amenity area.

7. Sustainability

In addition to providing a residential infill project utilizing existing infrastructure, the development would be the first mass framed timber project in West Vancouver, using low-carbon and sustainable materials to reduce its environmental impact in construction. The building will also achieve Passive House certification, include rooftop solar panels for onsite energy generation, and commit to zero emissions on site.

The 7 single-level universally accessible and adaptable homes will provide opportunities to allow residents to age in place, improving social sustainability outcomes.

7.0 Implementing the Project

7.1 Public Engagement and Outreach

Public Information Meetings

Prior to submission of an application the applicant hosted an in person public information meeting (PIM) on July 9, 2020 at an outdoor venue due to the COVID 19 pandemic. After the application was submitted the applicant then hosted virtual community consultation regarding the proposal including a website (https://www.bellevueand22nd.com/) and survey open from April 15-29, 2021. Should the proposal advance, the applicant will be required to advertise and conduct an information meeting prior to the Public Hearing.

Public Feedback

Following from both the pre-application PIM and the virtual consultation that the applicant hosted a summary was submitted to staff of the comments received. Staff and Council have also received correspondence regarding the proposal including a petition in opposition to the development signed by 42 owners of the property at 2203 Bellevue Avenue.

Comments with concerns about the proposal included:

- Concern regarding the size of the building being too large for the site and overall concern about the height and scale.
- Concerns regarding impact to light and views from adjacent properties specifically 2187, 2167, 2203 and 2222 Bellevue Avenue.
- Concern about construction impacts including noise, dust and related to excavation adjacent to the site to the south.
- Concern about the potential for “light pollution” from the exterior stair.
- Concerns regarding traffic and parking in the area with comments that the area is already congested.

- Concern about the dark colour materials and comment that the building had an institutional expression and did not fit within the area.
- Suggestion to postpone consideration for development of the site until the Ambleside Local Area Planning process.
- Concern about the lack of affordability of the housing units.

Comments in support of the proposal included:

- Support for the sustainable features of the proposal.
- Support for the proposed prefabrication construction methodology to reduce construction time and noise.
- Support for the overall building design and materials.

In response to concerns raised the applicant made changes to the plans and provided additional information as follows:

- Additional view studies were provided to demonstrate view impacts for all properties where concerns were raised (including in Schedule A to **Appendix D**). These studies show that for mid-levels of adjacent buildings there are view impacts for 2187, 2167, and 2203 Bellevue Avenue limited to a portion of the available existing view corridor to varying degrees depending on the building (the analysis demonstrated that there would be available views remaining for all buildings). Staff note that private views are not protected through OCP policies or zoning.
- The building was shifted northward along Bellevue Avenue, to reduce the impact of the core and shadowing on the adjacent property 2222 Bellevue Avenue.
- Reduction in building height of 0.45 m to lessen the overall height of the proposal.
- Confirmation that required emergency lighting for the exterior stairway will be motion activated to address concerns around light pollution. Any additional lighting will be low level and contained to mitigate light spill to neighbours.

Signage

Should the proposal advance, the applicant will be required to install a development information sign with particulars about the second public information meeting and public hearing.

Public Hearing and Notification

The proposed rezoning bylaw is subject to a Public Hearing. The proposed public hearing date is November 23, 2021. Notice of the public hearing and consideration of the development permit will be given in accordance with District procedures.

Website

In alignment with current practise, a description of the proposal, applicable updates and architectural drawings are on the District website.

7.2 Conditions Precedent to Adoption

Prior to adoption of the bylaws and approval of the development permit, the following requirements must be met:

- Payment of the voluntary community amenity contribution; and
- Registration of the Statutory Right-of-Way agreement for public plaza space.

7.3 Other Communication, Consultation, and Research

Planning staff has consulted with District staff from various departments on the review of the development application. The applicant has worked to address each department's noted comments and are satisfied with the proposal, subject to further detail during the building permit phase, if approved.

8.0 Options

8.1 Recommended Option

a) Council give first readings to the proposed bylaws and set the date for a public hearing and a concurrent public meeting.

8.2 Considered Options

a) give first reading to the proposed bylaws and set an alternative date (to be specified) for a public hearing; or

b) defer consideration pending the receipt of additional information (to be specified) be provided and available to assist in consideration of the application; or

c) reject the application.

9.0 Conclusion

Staff assessment of this rezoning application has concluded that the proposal is consistent with the OCP, meets the environmental and social benefits to be considered prior to the adoption of the Ambleside LAP, and is supported. This rezoning application will deliver accessible, sustainable housing, public realm improvements, and an unrestricted cash community amenity contribution.

Staff recommend that the application be scheduled for a public hearing and concurrent public meeting, together with the development package including the proposed bylaws and development permit.

Author: _____
Michelle McGuire, Senior Manager of Current Planning and Urban Design

Appendices:

A. Site Context
B. Project Profile
C. Zoning Bylaw No. 4662, 2010, Amendment Bylaw No. 5013, 2021
    - Schedule A - CD62 Zone
    - Schedule B – Zoning Maps Amendment
D. Development Permit No. 20-083
    - Schedule A – Design booklet including architectural and landscape plans

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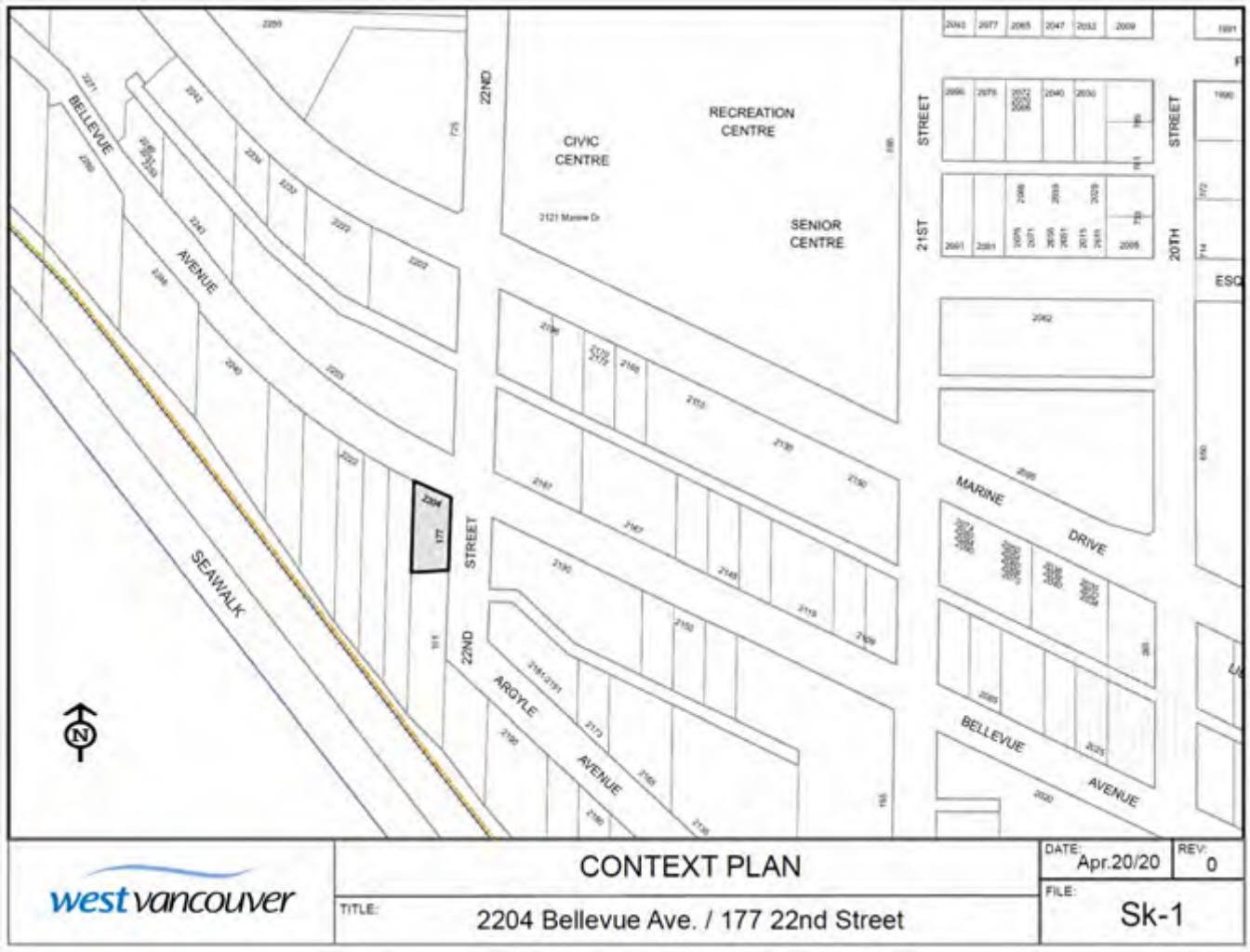
APPENDIX A – CONTEXT MAP



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APPENDIX B – PROJECT PROFILE

Project:	**2204 Bellevue Avenue and 177 22nd Street**
Application:	File No. 20-083
Applicant:	Bellevue Avenue Property Ltd.
Architect:	Perkins and Will
Landscape Architect:	Paul Sangha Creative.
Property Address:	**2204 Bellevue Avenue and 177 22nd Street**
Legal Description:	Strata Lot 1, District Lot 554, Strata Plan VR. 450, Together with an interest in the Common Property in Proportion to the Unit Entitlement of the Strata Lot as Shown on Form 1
PID:	004-045-793
Legal Description:	Strata Lot 2, District Lot 554, Strata Plan VR. 450, Together with an interest in the Common Property in Proportion to the Unit Entitlement of the Strata Lot as Shown on Form 1.
PID:	004-045-807
OCP Policy/Guidelines:	Ambleside Apartment Development Permit Area
Zoning (Existing):	RD1
Zoning (Proposed):	CD62 (2204 Bellevue Avenue and 177 22nd Street)
Proposal:	To rezone the site for an 8-storey residential building with 7 units and public realm improvements.

Address	**Site Area:**	**Existing Zone:**	**Proposed Zone**	**Proposed Uses:**
2204 Bellevue Avenue and 177 22nd Street	743.3 m^2	RD1	CD62	Residential

Particulars	RD1	Proposed	Notes
FAR	0.5	2.4	
Site Coverage	40%	46%	
Building height	7.62 m	31.4 m	
Number of Storeys	2 plus basement	8	
Building Floor Area (Gross)		3,493 m²	Exclusion: 1,786 m²
Number of Units		7	
Setbacks			
Front (north, Bellevue Avenue)	7.6 m	6 m	
Rear (south)	9.1 m	6 m	
Side (east, 22nd Street)	1.52 m	3 m	
Side (west)	1.52 m	1.5 m	
Parking			
Residential:	1 per dwelling unit		
Regular Size		12	
Small Car		2	
Accessible		1	
Sub-Total:		*15*	2.14/unit (ratio)
Visitor			
Regular Size		1	
Small Car		1	
Accessible		0	
Sub-Total:		*2*	
Total Parking:		17	
Bicycle Parking/Storage:		21	
EV Charging		Level 2 Charging	

APPENDIX C

District of West Vancouver

Zoning Bylaw No. 4662, 2010
Amendment Bylaw No. 5159, 2021

(2204 Bellevue Avenue and 177 22nd Street)

Effective Date:

4297064v1

District of West Vancouver

Zoning Bylaw No. 4662, 2010
Amendment Bylaw No. 5159, 2021

Table of Contents

District of West Vancouver

Zoning Bylaw No. 4662, 2010 Amendment Bylaw No. 5159, 2021

A bylaw to rezone certain property at 2204 Bellevue Avenue and 177 22nd Street for residential purposes.

Previous amendments: Amendment bylaws 4672, 4677, 4678, 4679, 4689, 4701, 4680, 4710, 4697, 4716, 4712, 4737, 4726, 4736, 4757, 4752, 4767, 4787, 4788, 4784, 4772, 4971, 4805, 4809, 4828, 4854, 4873, 4866, 4895, 4839, 4898, 4927, 4944, 4905, 4974, 4967, 4982, 4962, 4928, 4992, 5001, 5021, 5024, 5009, 4938, 5044, 5055, 5051, 5068, 5065, 5087, 5110, 5106 and 5132.

WHEREAS the Council of The Corporation of the District of West Vancouver deems it expedient to provide for and amendment to the Zoning Bylaw;

NOW THEREFORE, the Council of The Corporation of the District of West Vancouver enacts as follows:

Part 1 Citation

1.1 This bylaw may be cited as Zoning Bylaw No. 4662, 2010 Amendment Bylaw No. 5159, 2021.

Part 2 Severability

2.1 If a portion of this bylaw is held invalid by a Court of competent jurisdiction, then the invalid portion must be severed and the remainder of this bylaw is deemed to have been adopted without the severed section, subsection, paragraph, subparagraph, clause or phrase.

Part 3 Adds the CD62 Zone & Rezones the Site

3.1 Zoning Bylaw No. 4662, 2010, Schedule A, Section 600 (Comprehensive Development Zones) is hereby amended by adding Section 662 as the

CD62 – Comprehensive Development Zone 62 (2204 Bellevue Avenue and 177 22nd Street), as set out in **Schedule A** to this bylaw.

3.2 The Lands shown shaded on the map in **Schedule B** to this bylaw are rezoned from RD1 (Duple Dwelling Zone 1) to CD62 – Comprehensive Development Zone 62 (2204 Bellevue Avenue and 177 22nd Street)

Part 4 Amends the Table of Contents

4.1 Zoning Bylaw No. 4662, 2010, Schedule A, Section 100 Table of Contents is amended accordingly.

Part 5 Amends Zoning Maps

5.1 Zoning Bylaw No. 4662, 2010, Schedule A, Section 852, Schedule 2, Zoning Maps is hereby amended by changing the zoning on the Lands as shown shaded on the map in **Schedule B** to this bylaw,

FROM: RD1 (Duplex Dwelling Zone 1)

TO: CD62 – Comprehensive Development Zone 62 (2204 Bellevue Avenue and 177 22nd Street)

Schedules

Schedule A – CD62 – Comprehensive Development Zone 62 (2204 Bellevue Avenue and 177 22nd Street)
Schedule B – Amendment to Zoning Bylaw No. 4662, 2010, Schedule A, Section 852, Schedule 2, Zoning Maps

READ A FIRST TIME on

PUBLICATION OF NOTICE OF PUBLIC HEARING on

PUBLIC HEARING HELD on

READ A SECOND TIME on

READ A THIRD TIME on

ADOPTED by the Council on

_____
Mayor

_____
Corporate Officer

Schedule A – CD62 Zone

662 CD62 (2204 Bellevue Avenue and 177 22nd Street)

662.01 Permitted Uses

(1) Accessory uses and structures
(2) Apartment building
(3) Child care
(4) Community care
(5) Home based business
(6) Lock-off units

662.02 Floor Area Ratio

(1) Total Maximum: 2.4 FAR
(2) For the purposes of calculating FAR exterior stairways are not counted in FAR

662.03 Site Coverage

Maximum 46%

662.04 Setbacks

Minimum:

Front (north, Bellevue Avenue):	6 metres
Rear (south):	6 metres
Side (east, 22nd Street):	3 metres
Side (west):	1.5 metres

662.05 Building Height

(1) Maximum 31.05 metres
(2) Notwithstanding Section 120.19 maximum height includes all mechanical equipment, elevator equipment and solar energy systems

662.06 Number of Storeys

(1) Maximum 8 storeys
(2) Mechanical equipment or exterior stairs are not included as a storey

662.07 Off-Street Parking

A minimum of the lesser of:

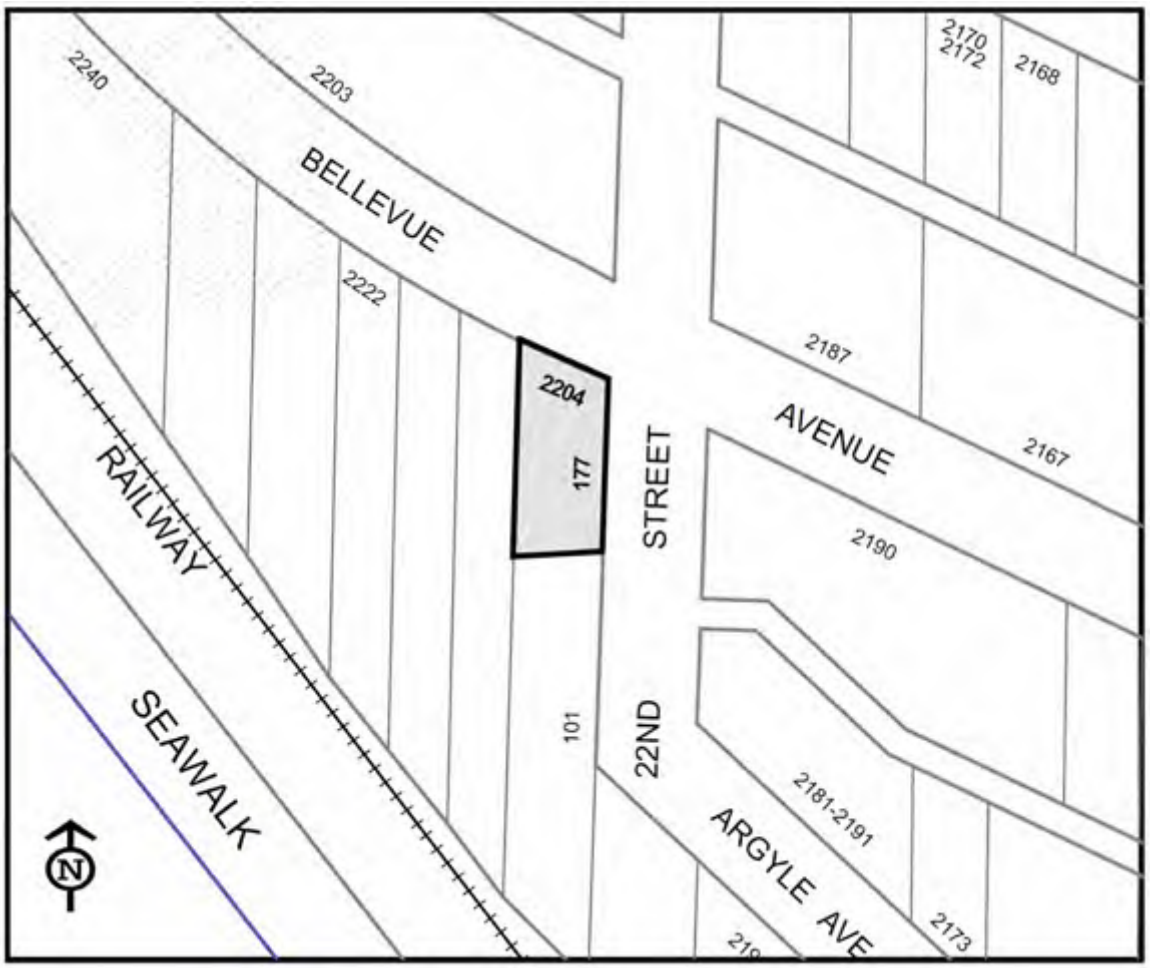
(a) 1 parking space for each dwelling, or

(b) 1 parking space for every 84 square metres of gross floor area, enclosed within the building or located underground.

Schedule B – Zoning Maps Amendment

Amendment to Zoning Bylaw No. 4662, 2010, Schedule A, Section 852, Schedule 2, Zoning Maps.

The area shown shaded on the map below rezones the site to CD62.



Area to be rezoned from RD1 to CD62

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APPENDIX D

District of West Vancouver

Proposed

Development Permit No. 20-083

CURRENT OWNER: BELLEVUE AVENUE PROPERTY LTD., INC. NO. BC1048554

THIS DEVELOPMENT PERMIT APPLIES TO:

CIVIC ADDRESS: 2204 BELLEVUE AVENUE AND 177 22ND STREET

LEGAL DESCRIPTION: 004-045-793
STRATA LOT 1, DISTRICT LOT 554, STRATA PLAN VR. 450, TOGETHER WITH AN INTERST IN THE COMMON PROPERTY IN PROPORTION TO THE UNIT ENTITLEMENT OF THE STRATA LOT AS SHOWN ON FORM 1.

004-045-807
STRATA LOT 2, DISTRICT LOT 554, STRATA PLAN VR. 450, TOGETHER WITH AN INTERST IN THE COMMON PROPERTY IN PROPORTION TO THE UNIT ENTITLEMENT OF THE STRATA LOT AS SHOWN ON FORM 1.

(the 'LANDS')

1.0 This Development Permit:

(a) imposes requirements and conditions for the development of the Lands, which are designated by the Official Community Plan as the Ambleside Apartment Development Permit Area to promote a high standard of construction, to integrate new development with existing views, circulation and the character of existing buildings, and to promote an interesting, pedestrian friendly streetscape design and pedestrian linkages subject to Guidelines BF-B4 specified in the Official Community Plan; and

(b) is issued subject to the Owner's compliance with all of the Bylaws of the District applicable to the Lands, except as varied or supplemented by this Permit.

2.0 The following requirements and conditions shall apply to the Lands:

2.1 Building, structures, on-site parking, driveways and site development shall take place in accordance with the attached **Schedule A**.

2.2 Sprinklers must be installed in all areas as required under the Fire Protection and Emergency Response Bylaw No. 4366, 2004.

2.3 On-site landscaping shall be installed at the cost of the Owner in accordance with the attached **Schedule A**.

2.4 The site development will:

(a) Be designed to meet Passive House requirements and apply for certification with the Passive House Institute.

(b) Exceed step 4 energy code performance which meets the provincial definition of being net zero energy ready.

(c) Reduce reliance on grid source energy by generating electricity on the rooftop with photovoltaic panels

(d) Be permitted to be of encapsulated mass timber hybrid construction as determined by the British Columbia Building Code.

2.5 All balconies, decks, and patios are to remain fully open and unenclosed and the weather wall must remain intact.

3.0 Along with other required Building Permit application submission requirements, the Owner must submit:

3.1 Information and documentation regarding any requested Alternative Solutions to Building By-law regulations.

3.2 The project's compliant PHPP model together with a Passive House Design Summary report that details critical assemblies, components, and strategies.

3.3 A letter from a Passive House Building Certifier noting specifications (assemblies, building components), and stating that the project design and specifications have been reviewed and, in the opinion of the Passive House Building Certifier, the project is capable of achieving Passive House certification. Please note: if specific known challenges to meeting Passive House targets are identified, these must be resolved before applying for a Building Permit.

3.4 A written Passive House Verification Plan, to be used to verify construction assemblies, components, insulation, air barrier, air tightness performance etc., and is designed to be a similar step to the energy checklists (ASHRAE, NECB) provided by Registered Professionals at this point in the permit process for projects not pursuing Passive House.

3.5 The Verification Plan and checklist will be prepared by the project team and verified by the Passive House Building Certifier (as part of his/her design stage review) on behalf of the project team. This plan must include, at a minimum:

(a) The name and credentials of the Passive House Building Certifier who will document and verify construction to plan.

(b) The number of planned site visits and at what intervals.

(c) A written plan for monitoring and grading insulation installation in all assemblies - including inspections of insulation layers below-grade and insulation installation within assemblies - to verify that all assemblies, insulation materials, and components (including windows, doors and ventilation equipment) are installed as per the specifications provided in the Passive House Building Certifier's letter.

(d) A written plan for monitoring and verifying continuous air barrier in all assemblies and components.

(e) A written plan for verifying all key components and assemblies specified in the Passive House Building Certifier's letter.

(f) A written plan for air tightness testing, including who will conduct mid-construction and final blower door tests to the protocol prescribed by the Passive House Institute.

(g) Written plan for ventilation commissioning, including who will conduct.

(h) Written plan for occupant training, including who will conduct.

4.0 Prior to commencing site work or Building Permit issuance, whichever occurs first, the Owner must:

4.1 Provide and implement a plan for traffic management during construction to the satisfaction of the District's Manager of Development Engineering.

4.2 Install tree, vegetation and/or hedge protection measures as required to the satisfaction of the District's Environmental Protection Officer.

4.3 Specifically for retention of the existing Hemlock tree located on 22nd Street a consultant should be retained that specializes in plant health care options and maintenance to provide a written plan prior to the start of the work. Consideration for implementing the following ANSI standards should be given.

(a) Deep root injecting of water soluble fertilizer and moisture control. If regular irrigation not present then a regular watering plan done through May to September.

(b) Mulching to minimize compaction.

(c) Minor thinning and dead wooding if considered necessary.

(d) Installing tree protection barrier and having a tree protection plan to specific dimensions. Root pruning where necessary to accommodate infrastructure and to avoid root damage.

(e) Arborist onsite to monitor excavation and conduct work where needed.

4.4 Submit a "Sediment and Erosion Plan" to the District's Environmental Protection Officer for approval, which the Owner shall comply with and be responsible for maintaining, repairing and implementing the sediment control measures.

5.0 Prior to Building Permit issuance:

5.1 Provide engineering civil drawings detailing works, including but not limited to:

(a) storm water management measures;

(b) site service connections including off-site upgrade requirements;

(c) new boulevard plan along the frontage of the site including curbs, sidewalk and grading plan; and

(d) repaving along the frontage of the Lands;

which must be submitted for acceptance, and security provided for the due and property completion of the engineering works, all to the satisfaction of the District's Manager of Land Development.

6.0 Prior to occupancy, the Owner must:

6.1 Buildings may be certified by any of the Passive House Institute Accredited Building Certifiers operating worldwide. In addition to the documents already required at final inspection, applicants must provide the City with:

(a) a signed letter from a Passive House Building Certifier confirming that work implemented was as prescribed in the Passive House Verification Plan and that they are not aware of any reason the project will fail to certify.

(b) a letter from the Passive House Building Certifier stating that the final PHPP and relevant documentation have been received and are being reviewed for final certification. The Passive House Building Certifier's letter must include a suggested date by which the District may expect to be notified of final certification to the Passive House Institute standard.

7.0 Security for Landscaping

7.1 Prior to building permit issuance, security for the due and proper completion of the landscaping set forth in section 2.4 of this Development Permit (the "Landscaping Works") shall be provided in the amount of $275,000 comes from (the "Landscape Deposit") to the District in the form of cash or unconditional, irrevocable auto-renewing letter of credit issued by a Canadian chartered bank or credit union.

7.2 Release of the Landscape Deposit:

(a) Following installation of the Landscaping Works and upon receipt of a certified letter or report by a Landscape Architect in good standing with the British Columbia Society of Landscape Architects to the District stating that:

a. the Landscaping Works have been installed substantially in accordance with **Schedule A**; and

b. any variations that may have been undertaken to the Landscaping Works are clearly identified, including but not limited to:

i. any adjustments to retaining walls,
ii. changes to the mixture or sizes of any plant materials or trees,
iii. completion of any off-site or boulevard works,
iv. any areas that received alternative treatment,
v. any paving changes, or
vi. any other additional or omitted plantings or alterations,

together with a clear rationale and explanation thereof and stating

c. that a final review with the landscape contractor or consultant of record has been completed, including provision of the date when this final review was completed on,

d. whether there are any outstanding Landscape Works which are outstanding or which need attention, and

e. notwithstanding outstanding works in 5.2(a)(d) above, that the Landscaping Works are complete,

then District will release 75% of the initial value of the Landscape Deposit. The remaining 25% of the initial value of the Landscape Deposit shall be retained by the District as a warranty deposit (the "Warranty Deposit") to ensure successful installation of the Landscaping Works.

(b) After a one-year period following certification that the Landscaping Works have been completed, and upon final certification by a Landscape Architect in good standing with the British Columbia Society of Landscape Architects that the Landscaping Works are successful, the District will release the Warranty Deposit.

7.3 Additional Landscape Security

(a) No occupancy shall be issued nor will any other final approvals be given, until:

a. all of the Landscaping Works are completed, or

b. the Owner provides security in addition to and separate from the Landscape Deposit, and in the amount of 110% of the value of the uncompleted Landscaping Works for that specific Parcel only (the "Additional Security Deposit") for the due and proper completion of the uncompleted or deficient Landscape Works for that specific Parcel only, as determined and certified by the consultant of record; and

c. the Additional Security Deposit will be released upon final certification by a Landscape Architect in good standing with the British Columbia Society of Landscape Architects following certification that all of the Landscaping Works on the Parcel have been completed.

8.0 In the event that the Landscaping Works are not completed as provided for in this Permit, the District may, at its option, enter upon, carry out and complete the Landscaping Works so as to satisfy the terms of the Development Permit, and recover the costs of doing so from the security deposited or recover any costs incurred over and above the amount of the security deposited, including the costs of administration and supervision.

9.0 This Development Permit lapses if the work authorized herein is not commenced within 24 months of the date this permit is issued.

THE COUNCIL OF WEST VANCOUVER APPROVED THIS PERMIT BY RESOLUTION PASSED ON _____.

_____
MAYOR

_____
CORPORATE OFFICER

THE REQUIREMENTS AND CONDITIONS UPON WHICH THIS PERMIT IS ISSUED ARE ACKNOWLEDGED AND AGREED TO BY THE CURRENT OWNER. IT IS UNDERSTOOD:

- THAT OTHER PERMITS / APPROVALS MAY BE REQUIRED INCLUDING PERMITS / APPROVALS FOR BUILDING CONSTRUCTION, SOIL AND ROCK REMOVAL OR DEPOSIT, BOULEVARD WORKS, AND SUBDIVISION; AND
- THE DEVELOPMENT MUST ATTAIN REQUIREMENTS OF THE BC BUILDING CODE AND ANY VARIANCES TO THE ZONING BYLAW ARE THE RESPONSIBILITY OF THE OWNER AND MUST BE RECTIFED AT THE BUILDING PERMIT STAGE.

FOR THE PURPOSES OF SECTION 9.0, THIS PERMIT IS ISSUED ON _____.

Council Report: September 27, 2021 (#4279887)

Schedules:

A. Design Booklet including architectural and landscape plans

Bellevue and 22nd

Project Proposal

Bespoke Homes. Forward thinking.

The Bellevue and 22nd development... Build Differently. Live Better.

The International Panel on Climate Change (IPCC) 2018 Special Report on Climate Change conveys critical findings and reinforces that now, more than ever, it is imperative to design low emission buildings, or better still, zero emissions buildings. The science is clear, the solutions are available, and we know where we have to go. Buildings represent close to **40%** of global greenhouse gas emissions, and as such, we have a responsibility to prioritize performance in the buildings we design.

The District of West Vancouver declared a climate emergency on July 8th, 2019. The district has dedicated itself to finding ways to reduce Greenhouse Gas Emissions and adapt to climate change. We cannot stand by and allow 'business as usual' to persist. This project will be an important step toward what we need—buildings that do not contribute to climate change, but act as a source of repair.

Buildings ought to be relied upon to do more to counteract their negative consequences. Ultimately, the project strives to be an example of how buildings should respond to climate change and establish a new model for private sector urban development locally, nationally, and internationally.

The project can offer a significant benefit to The District of West Vancouver as a precedent setting development with the potential to:

- Commit to Zero Emissions. The building will not consume fossil fuels, nor rely on combustion of any kind to operate.
- Self Supply Energy. The building will produce a meaningful proportion of the energy it consumes, on site, through photo-voltaic technology, reducing demand on grid-source electricity.
- Use Less. Built to the Passive House Standard, the building will require a fraction of the energy to operate compared to typical West Vancouver homes.
- Store Carbon. The majority of the building will be made of with sustainably sourced BC timber, and will store more carbon than what it required to build it.
- Contribute positively to the livability, health and welfare of the building inhabitants.
- Exemplify best in class healthy material procurement.
- Increase the biodiversity on site through enhancement of the public realm with native landscapes.
- Be resilient to a changing climate and withstand major storm events.

This exemplar application will serve as a demonstration that The District of West Vancouver's ambitious targets can not only be met, but exceeded. It's time we acknowledge that the buildings we make, and how we live, contribute to climate change. We believe that through our conscious actions we can limit the negative consequences of our industry.

Contents

1.0 Project Team

DELTA GROUP

WHO WE ARE

Delta Land Development is a privately held Investment and Development company, operating in Vancouver for the past 35 years.

WHAT WE DO

Since 1997, we have delivered over 6.8 million square feet of award winning projects in British Columbia. We are a boutique shop with a low volume of projects, with the ability to focus on the details and defy convention.

WHY WE DO IT

We are committed to meaningful change in the building and construction industry and how we craft built forms and impact our planet. We aim to achieve shared success and a positive legacy with each of our projects.

Perkins&Will

WHO WE ARE
Perkins and Will is a multi-disciplinary Architecture and Design firm founded on the belief that design has the power to transform lives. We have practised in Greater Vancouver since 1984.

WHAT WE DO
We provide a range of expertise in corporate/commercial, civic, healthcare, higher education K-12 and transportation practice areas. With hundreds of award winning projects annually, Perkins+Will is ranked as one of the top global design firms.

WHY WE DO IT
Since our inception, sustainability has been pivotal in all our work. We are committed to creating regenerative designs which heal their environments and enhance society.

PAUL SANGHA CREATIVE

WHO WE ARE

Paul Sangha Creative is an award-winning landscape architectural practice based in Vancouver. With over 30 years of experience, Principal Paul Sangha's reputation has been built on his passion for timeless, high quality and site-sensitive design

WHAT WE DO

Our strength lies in our ability to unite landscape, built form and site, resulting in thoughtful, experiential landscapes for both public and private spaces. Our award-winning work has established the firm as one of the Pacific Northwest's premier design practices.

WHY WE DO IT

We are passionate about crafting outdoor spaces that inspire, refresh and nourish the soul. Our work is always rooted in a sensitivity to materials, water and ecology, which together form robust and resilient landscapes that thrive through

2.0 Development Statement Brief

2.1 PROJECT DESCRIPTION

PRESENT AND INTENDED USE OF THE SITE:

The proposal is for an 8 storey, mass timber, Passive House residential building. In addition to the main lobby level, each level is one home, creating suites that are accessible, barrier free, and have access to natural ventilation and daylight on all sides, while still presenting in an apartment building form.

The site is currently zoned as RD1, Two Family Residential. It is the only such zoning in the immediate surrounding area. The proposal seeks to rezone the site to better align with the present form and density of the neighbourhood.

The current building is 3 storey residence containing 3 suites. Parking is on grade, and the property is surrounded by a solid wood fence. The proposal seeks to redevelop the property to increase the height to 8 storeys, providing 7 homes and 1 level of amenity uses. The ground level would be landscaped and provide a generous addition to the public realm.

The site is located within the Ambleside neighbourhood. The Ambleside neighbourhood is characterized by a walkable street grid extending to the waterfront. It has a strong concentration of apartment buildings (both strata and rental) as well as civic and cultural facilities such as the West Vancouver Community Centre. It is the civic, social, economic and recreational hub of West Vancouver and serves as West Vancouver's Town Centre.

The Official Community Plan encourages infill projects that match the character of the surrounding neighbourhood. The proposal fits within the typology, height, and scale of adjacent buildings. All parking will be located underground, and traffic increase will be minimal as only an additional 4 homes will be added to the site (from 3 current to 7 proposed).

The project is intended to be built of predominantly mass timber construction. As such, much of the fabrication will be done off site while the parkade is being built. This allows the storeys above grade to be erected quickly, reducing noise and disruption to neighbours.

RATIONALE FOR THE PROPOSAL/ COMMUNITY BENEFITS

The project serves as a benefit to the community by adhering to the broad goals of the community as outlined in the West Vancouver Official Community Plan. West Vancouver has also adopted the Regional Growth Strategy "Metro Vancouver 2040 - shaping our Future (Metro 2040 hereafter). The strategy has 5 key goals.

- Create a compact urban area
- Support a sustainable economy
- Protect the environment and respond to climate change impacts
- Develop complete communities
- Support sustainable transportation choices

This project supports the OCP, the Regional Growth strategy, and the Climate Emergency Response by:

- Creating a sensitive infill project in an existing high density neighbourhood
- Pursuing Passive House certification for energy and emissions reduction beyond the step code
- Generating sustainable energy on site and committing to the use of zero fossil fuels on site. (Zero emissions and possible net carbon positive)
- Providing 7 single level adaptable homes that allow residents to age in place.
- Enhancing the pedestrian public realm by creating a link between the West Vancouver Community centre to the north and the Centennial Seawalk Trail public access to the south. The site will contain a pocket garden at the corner at Bellevue and 22nd with integrated seating to serve as a rest point along this path.

The exemplary sustainability and radical decarbonization features of this project can also serve as an example of and catalyst for ways and means for the district to take a leadership role in addressing emissions and resilience in the face of climate change.

3.0 Sustainability Strategies

3.1 OVERARCHING PRINCIPLES AND GOALS

	PRINCIPLES	GOALS
DEVELOPMENT	• The project will produce the desired return on investment	• Optimize the development potential of the site to ensure high quality and exceptional livability • Lowest building operation cost
COMMUNITY	• The project will enhance livability for all of the inhabitants	• Provide a home layout that is accessible, barrier free, and adaptable. • Make outdoor space meaningful and useful • Provide a dedicated corner public realm space, secured for the public via legal agreement
HEALTH	• The project will positively contribute to the health and welfare of inhabitants • The project will consider the upstream and downstream impacts of materials	• Minimize the use of materials that produce toxic emissions during the production of the material • Eliminate the use of materials in the Perkins + Will Precautionary List and LBC Red List
ART + CULTURE	• The project will contribute positively to culture in West Vancouver	• Create a sense of place and celebrate uniqueness and local identity • Incorporate public art to enhance the public realm.
CARBON	• The project will not contribute to climate change by increasing atmospheric carbon concentration	• Carbon neutral in operation • Carbon neutral in embodied carbon emissions over the life-cycle of the project
ENERGY	• The project will minimize the use of grid-sourced energy • The project will convert solar energy to use in the project • The project will use waste energy sources before grid sources	• Energy target for the project will be 60 kWh/ m²/ year, consumes much less energy than similarly-sized buildings

		PRINCIPLES	GOALS
WATER		• The project will minimize the use of grid-supplied potable water • The project will minimize stormwater flows leaving the site	• Net zero water in operation • Reduce stormwater flows to 40% of typical volume from a West Vancouver development project
MOBILITY		• The project will offer a range of mobility options	• Inhabitants have access to a ground floor, secure bike room as well as electric charging stations at all parking stalls.
BIODIVERSITY		• The project will support biodiversity in the area • The project will support global biodiversity ecosystem	• Provide habitat for local, small animals and insects • The extraction of materials for products in the project should not negatively affect the local ecosystem • Regenerate as much native site biodiversity as possible, while balancing other development objectives
BIOPHILIA		• The project will include elements that celebrate and encourage the love of nature and natural systems, and leverage the inherent health and well-being benefits this brings to the occupants	• Provide access to natural light and air from every space in the building. • Provide views to nature from every space in the building.
RESILIENCY		• The project will be resilient to major storm events • The project will increase the resiliency of natural systems	• Residential spaces to stay operational through major storm events • Accommodate the impacts of climate change over the next 100 years
WASTE		• The project will enable inhabitants and residents to reduce the generation of solid waste	• Zero solid waste production from the community

3.2 SUSTAINABILITY STRATEGIES

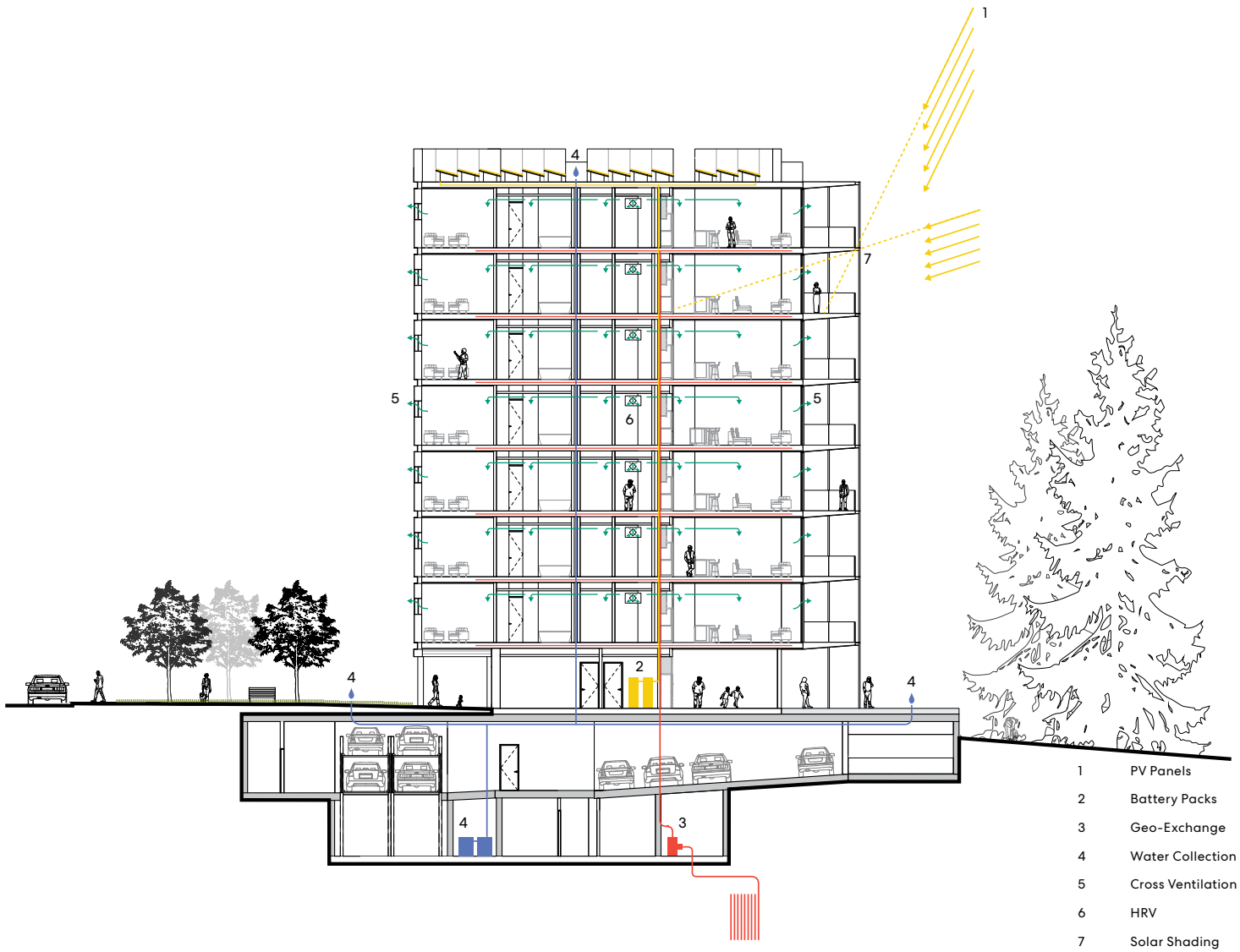
The building has been designed to respond to it's site, with the massing purposefully oriented to maximize daylight, views and passive strategies.

The one-home-per floor layout ensures each home has cross ventilation which is critical to the passive cooling strategies. Public spaces are oriented to the south of the site to take advantage of views and solar gains, while private spaces, such as bedrooms, are located on the cooler north side of the site. Decks along the south facade provide solar shading.

Each home has an individual high efficiency Heat Recovery Ventilator nit. These units have been located adjacent to the outdoor stair case behind the stair screening so as to not be visible to adjacent neighbours.

Water will be collected from the roof and ground plane to be used for on-site irrigation.

Energy is generated on site through photovoltaic panels on the rooftop. The project is also looking into the viability of geo-exchange energy sources.



1	PV Panels
2	Battery Packs
3	Geo-Exchange
4	Water Collection
5	Cross Ventilation
6	HRV
7	Solar Shading

MASS TIMBER STRUCTURE

The project will participate in the Tall Wood Mass Timber Early Adoption Initiative.

By using wood predominantly, and concrete and steel selectively, the structure of the building is projected to be net zero carbon.

BENEFITS:

- Reduce GHG emissions
- Prefabrication reduces construction time and noise for neighbours.

PASSIVEHOUSE CANADA Build better. Feel better.

Certified Passive House

PASSIVE HOUSE

The project prioritizes an envelope first approach that reduced the need for energy consumption. This includes:

- Highly Insulated roofs and walls
- A comprehensive air barrier system to minimize infiltration through the building enclosure
- Triple glazed windows
- Passive cooling using natural ventilation

By pursuing Passive House, the project is projected to go beyond BC Energy Step Code 5.

BENEFITS:

- Ultra low energy building
- Outstanding comfort
- Optimal conditions for health

HEALTHY MATERIALS

The project seeks to avoid the use of harmful substances as identified on the Perkins + Will Precautionary List; and

- Use locally extracted and manufactured materials, whenever possible
- Prioritize the integration of low embodied carbon materials
- Be mindful of materials selected, embracing an honest aesthetic
- Use low-emitting sustainable building materials to foster good air quality
- Dramatically limit the use of human-made materials as finishes inside the building.

BENEFITS:

- Promote better health by avoiding known hazards
- Prioritize natural materials.

ON SITE ENERGY GENERATION

The current PV layout allows for an approximate 22% energy offset ratio. This percentage offsets grid-source GHG emissions. It will be enough to power the common spaces of the building, and potentially the back up power source (see below).

The project is currently looking into the feasibility of incorporating geo-exchange strategies to increase on-site energy generation potential.

BENEFITS:

- Less demand on grid source energy
- Reduced GHG Emissions

COMMUNITY BENEFIT

The project will act as a pilot project for West Vancouver's declared Climate Emergency.

It will be the first multi-family Passive House in West Vancouver and the first project in the District to participate in the Provincial Tall Wood Mass Timber Early Adoption Initiative.

BENEFITS:

- Paves a new path forward
- Generous addition to the public realm
- One home per floor allows aging in place

3.3 PROPOSAL SUMMARY - KEY OBJECTIVES

1. “Repair” and revitalize the corner for a better fit with the neighbourhood.

2. Enhance and secure access for the public realm via a SRW.

3. Adhere to the objectives of the West Vancouver Official Community Plan.

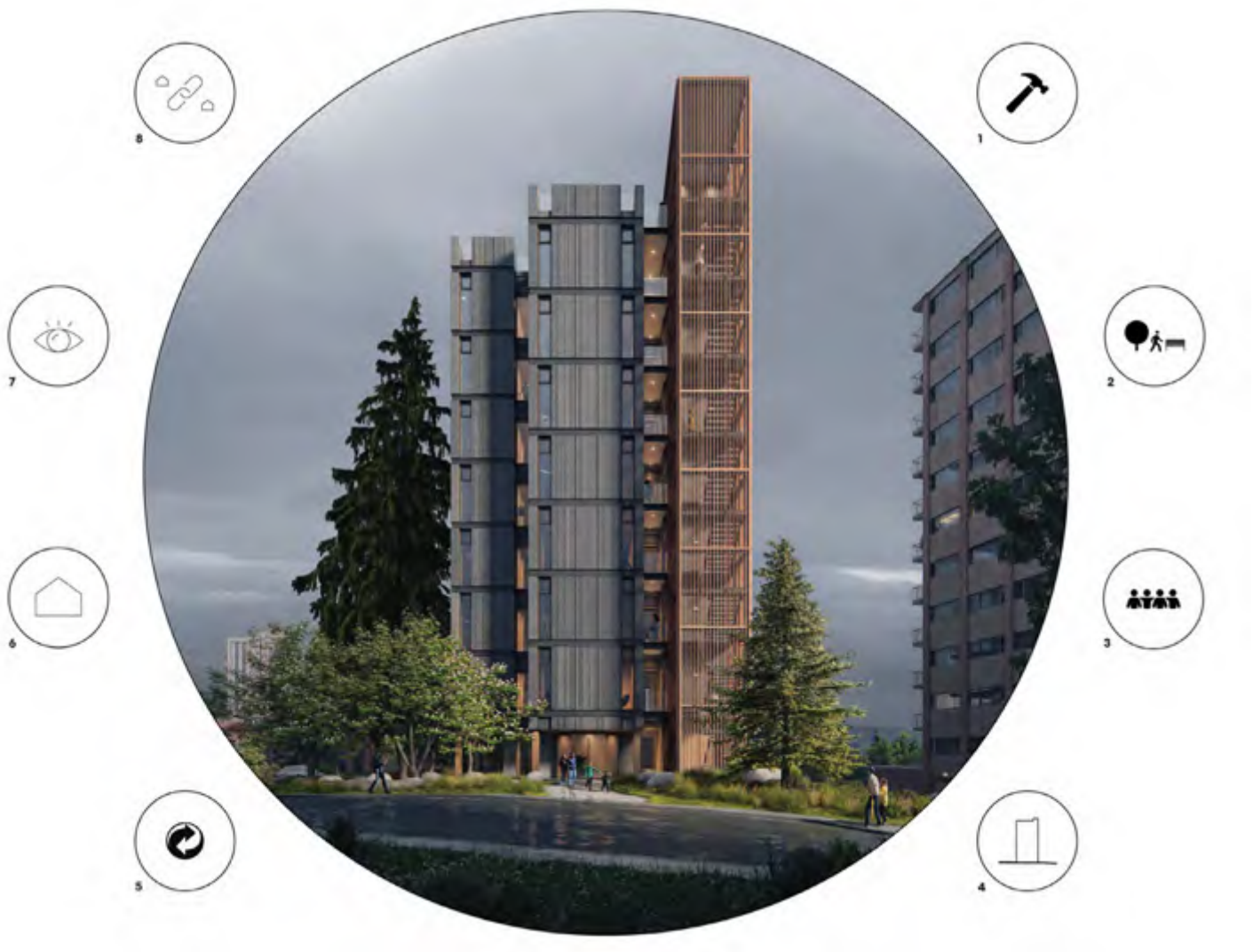
4. Create a building with an elegant, distinctive, and respectful character.

5. Showcase a new path forward that prioritizes an environmental approach, meaningful change in addressing CO^2 emissions and climate change .

6. Create bespoke homes that are livable, adaptable, and healthy.

7. Orient the building towards views

8. Celebrate Place - create a neighbourhood link.



3.4 PROPOSAL SUMMARY - ENVIRONMENTAL GOALS

1. High building airtightness.
2. Passive House certified glazing.
3. Healthy materials, “red-list” free.
4. Generate energy on site.
5. Balanced window to wall ratio - reduced heat loss.
6. Reduced heat loss through high thermal insulation.
7. Electric vehicle charging at all stalls.
8. Distributed heating, cooling and ventilation systems with dedicated heat recovery at each floor.
9. Street level secure bike parking.
10. Natural cross ventilation for each home.
11. Store carbon in the structure. (Target is net positive embodied).
12. Zero emissions and zero fossil fuels used on site.

3.5 PERFORMANCE TARGETS

The proposed project's performance targets exceed those of both the District of West Vancouver and the City of Vancouver (rezoning projects).

	BELLEVUE AND 22ND	DISTRICT OF WEST VANCOUVER	CITY OF VANCOUVER (FOR REZONING PROJECTS)
GHG Emissions Targets (building sector, GHGI, kg/CO2/m2/yr)	< 1 No use of hydrocarbons in operation	3	5
Embodied Carbon & Emissions	Target >40% reduction. Will perform LCA	TBD	40% reduction by 2030 (vs. 2018)
Energy Efficiency - TEUI (Total energy use intensity, kWh/m2/yr) **1 - With Low Carbon Energy System**	~ 50	100-130[1]	120

3.5 BIODIVERSITY MEASURES

The proposed landscape design will increase canopy coverage and plant biomass when compared to the current condition. It will result in a significant increase in biodiversity via the use of native plant species.

	BELLEVUE AND 22ND (PLANNED)	BELLEVUE AND 22ND (CURRENT)
Biomass - cubic feet	4650	720
Canopy Coverage - square ft	3114 +Increase in biodiversity, local, resilient planting	890

4.0 Site and Zoning

4.1 AMENITIES AND SERVICES

The site falls within the boundaries of the Ambleside Town Centre. As such, it has great proximity to nearby civic amenities associated with the West Vancouver Community centre, as well as being located just a few blocks away from both the Ambleside and Dundrave commercial cores.

The site is one block away from the Marine Drive frequent transit corridor and is close to Public access to the Centennial Seawalk Trail through Weston Park

4.2 SURROUNDING BUILDING HEIGHTS

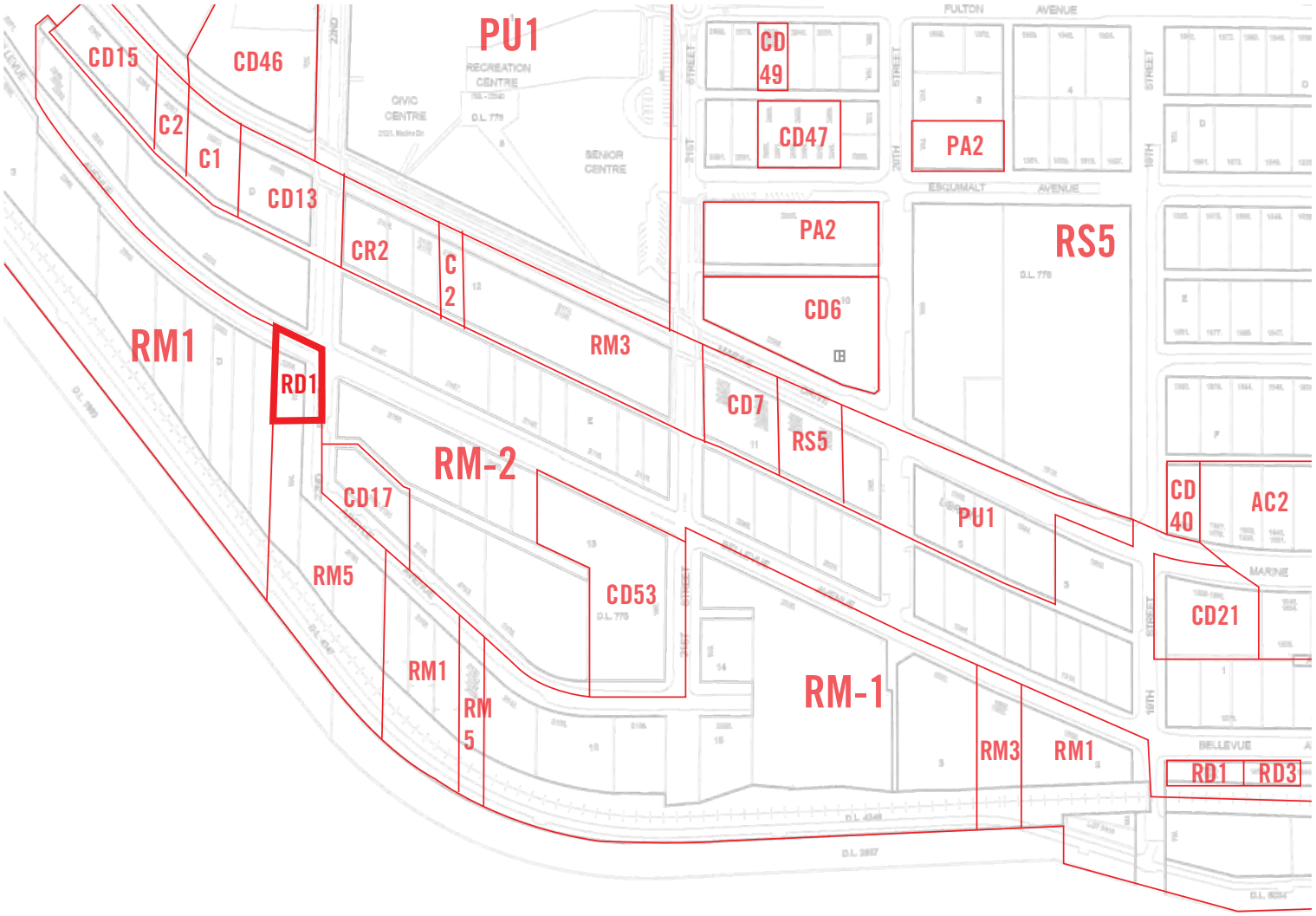
The proposal is for an 8 storey residential apartment. The form, scale, and density fit within the existing fabric of the neighbourhood.

Project proposal - Height to elevator machine room: 31.05 m (102 ft)

Villas Maris - Height to elevator machine room: approx 44m (145 ft)

4.3 ZONING PLAN

The site is currently zoned as RD1 - Duplex Dwelling Zone. It is the only such zoning in the immediate surroundings, with all neighbouring properties zoned as Multiple Dwelling Zones. As per the Official Community Plan, the site falls within the boundary of the Ambleside Apartment Area as defined under the Built Form Guidelines for Development Permit Area Designations. Guidelines BF-B 4. (See page 11).



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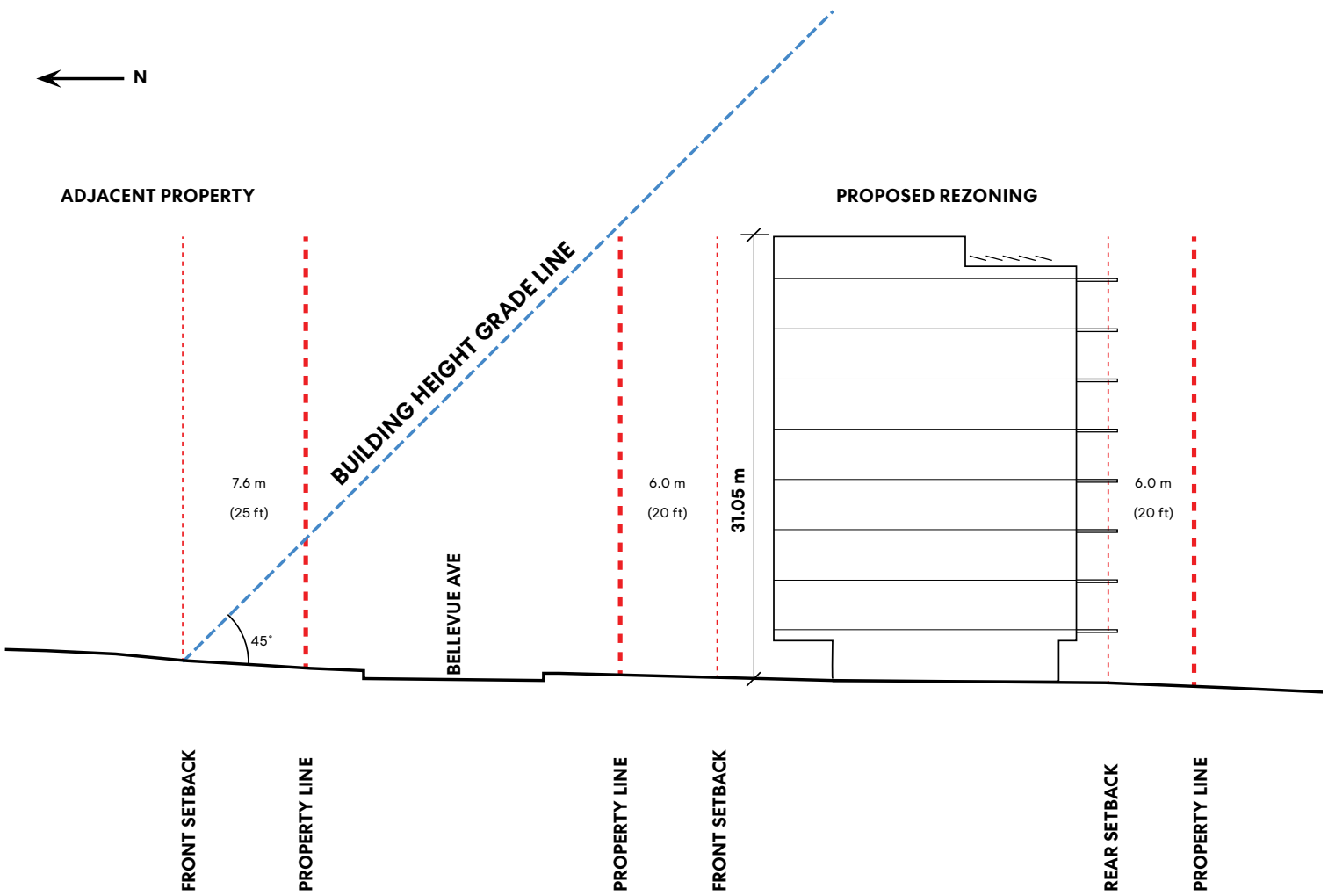
4.4 BUILDING HEIGHT

The proposal seeks to rezone the site to a more compatible and appropriate use for the neighbourhood, an 8 storey residential building. As such, the proposal follows the guidelines set out in the bylaws for apartment building height compliance.

Bylaw 120.20 - Apartment Building Height Grade line.

The floor to floor height of the building (3.45m - 11.3 ft) is higher than a typical tower. This is due to the extra depth of the mass timber floor assembly.



SCALE:1:300

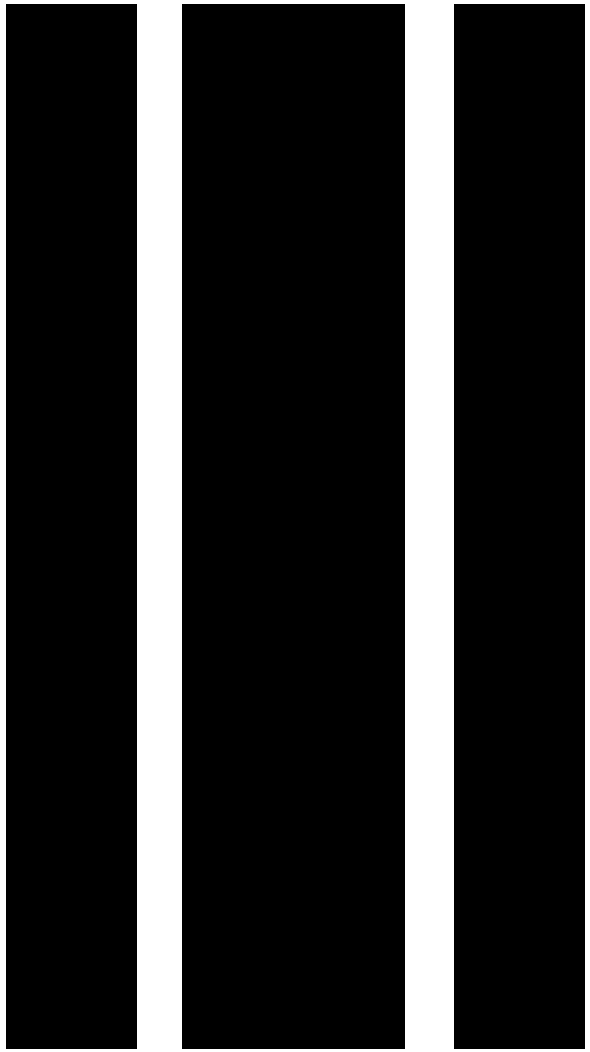
5.0 Design Rationale

5.1 CONCEPT DIAGRAM

The building concept divides the massing into 3 bars. The bars consist of the core, the main bedroom suite and the secondary suite.

A separation between the suites provides privacy that suits multiple family situations and allows residents to age in place.

The bars are pulled apart by glazing slots that provide daylight into the center of the plan and allow for cross ventilation throughout the building.

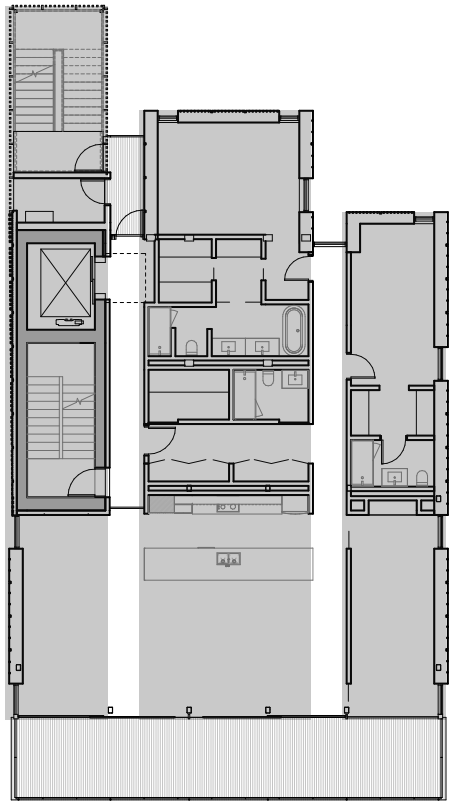


3 BARS

- **CORE**
- **MAIN BEDROOM**
- **SECOND BEDROOM**

The 3 bars concept is reflected both in the plan and elevation of the design.

The bars step along the north facade to respond to the angle of Bellevue Avenue.



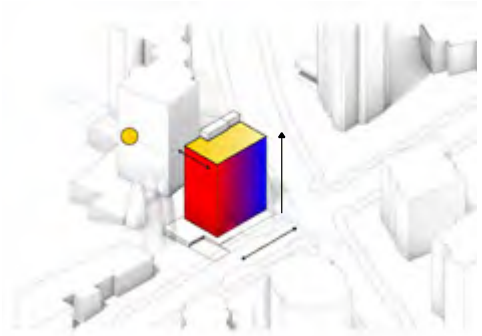
TYPICAL PLAN

NORTH ELEVATION

5.2 MASSING DIAGRAM

The building responds to site conditions and aligns with the broader goals set out in the West Vancouver Official Community Plan. The form responds to the The Ambleside Apartment Area Built Form Guidelines. (See page 11 for reference).

1. Core placement responds to site conditions: parakde entry, adjacent building overlook and tree retention.



2. Massing height lifts above tree line to the south and the width extends to setback lines to maximize solar potential on the rooftop. Program layout responds to warm and cool sides of the building.

3. Articulate the façade to create a welcoming entry along Bellevue Avenue

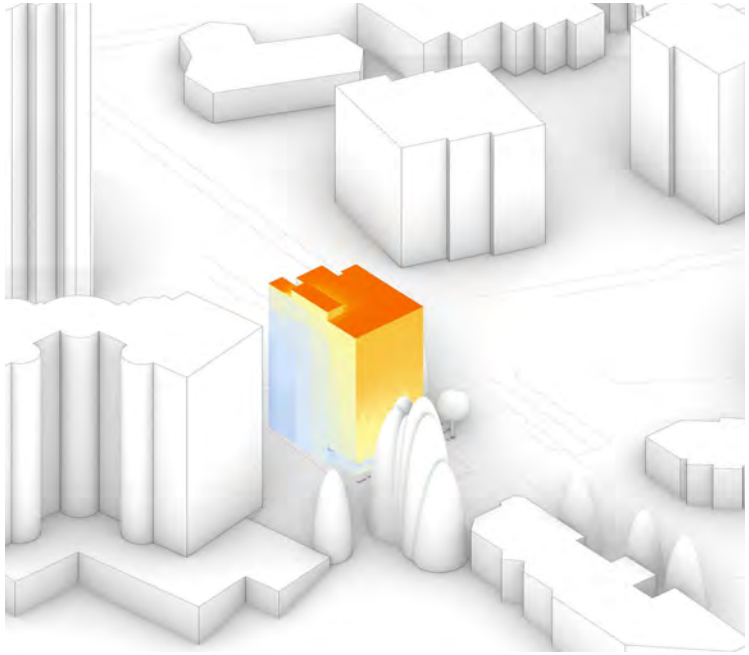
4. Maximizing views to the south with operable windows to the north to provide for cross ventilation through the units.

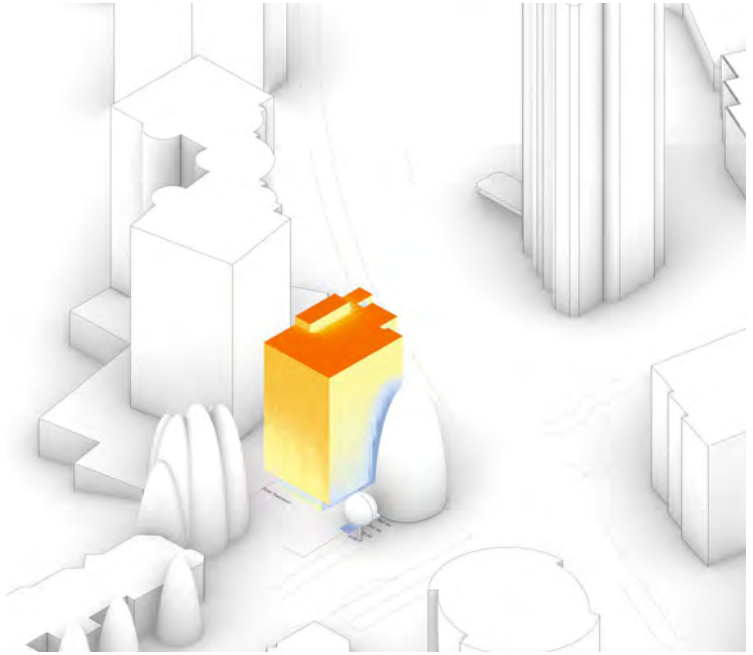
5. Lift massing at ground floor to link the site public realm to public thoroughfare along 22nd Street.

6. Final Form

5.3 SOLAR ENERGY POTENTIAL

As the project aims to generate energy on site, a site analysis was performed to understand the optimal placement of solar panels. The existing building to the west, as well as existing trees to the south and east limit the potential for building integrated PV on the facade. Therefore, the massing was designed to clear the tree line to the south in order to maximize the solar potential on the rooftop.





5.4 CONCEPT IMAGES

The project draws inspiration from the surrounding context and the proximity to the waterfront.

The landscape is a pivotal aspect of the project. The materials and colours of the building facade were chosen to highlight the lush greenery of the proposed planting.

Architectural

1A. Architectural screening and balcony connection details represent the projects intent to create an elegant and refined design

2A Sailing Yacht A - A high performance wind powered yacht showcases the projects dedication to passive sustainability methods, while not sacrificing design aesthetics or beauty

3A Facade colours provide contrast against the greenery of landscape.

4A A contemporary minimalist yacht built almost entirely of wood blends performance and aesthetics with intentional material choices

5A Metal and wood fishing rod showcases high quality attention to detail.

Landscape

1L Basalt Pavers blend hardscape and softscape edges

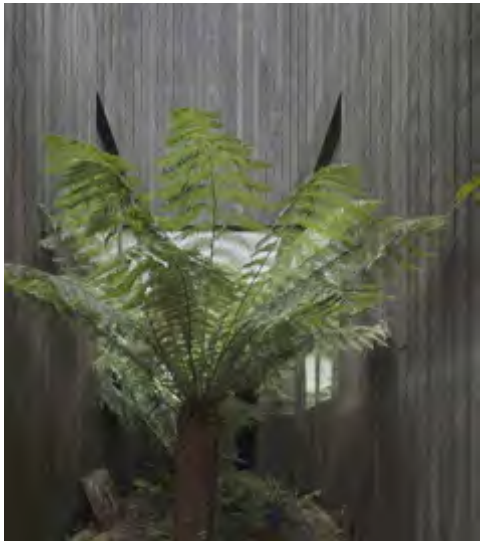
2L Seating stones emulate the boulders along the edge of the Seawalk to the south

3L Waterfront elements such as beach grasses and driftwood are replicated in the site features

1A

1A

2A



3A

4A

5A

1L

2L

2L

3L

3L

2L

5.5 LANDSCAPE PLAN

PAUL SANGHA CREATIVE

Use of resilient, low water use native trees and plants

Increased biodiversity

Pollinator friendly plantings

Year Round Interest

Rainwater harvesting for irrigation

Use of condensate water from decentralized air cooling units for augmenting irrigation supply

High efficiency drip irrigation system

Use of local hardscape materials

Shared community park space

Increase in canopy coverage

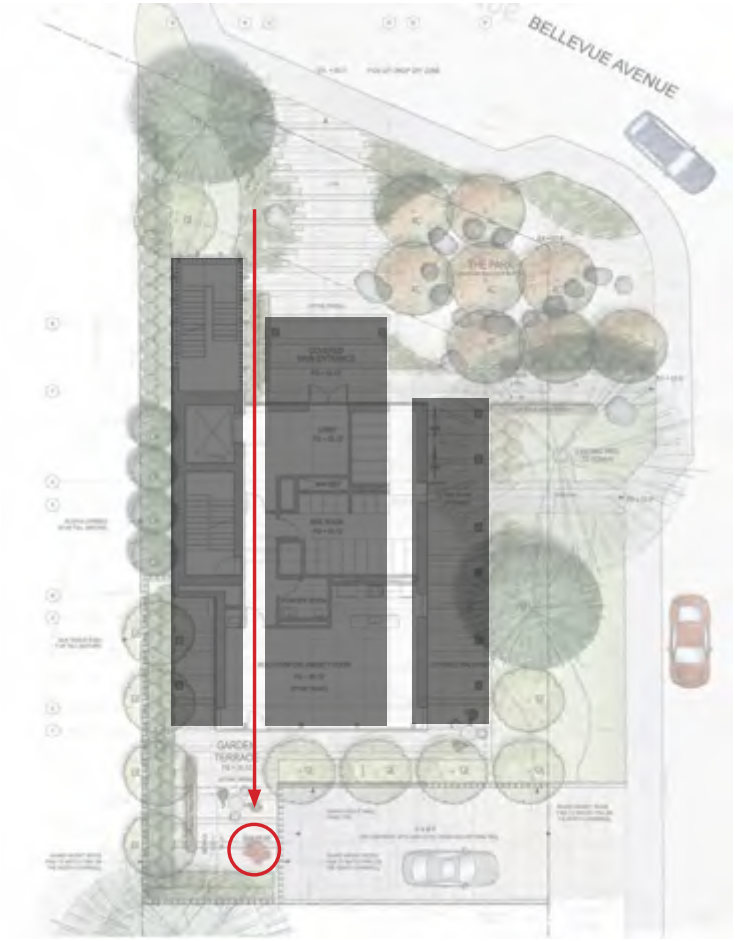
Increase in plant bio-mass

Existing Canopy Coverage (approx.)	**890 ft²**
Proposed Canopy Coverage (approx.)	**3114 ft²** **(with trees at mature height)**
Existing Plants volume (approx.)	**720 cu.ft**
Proposed Plants volume (approx)	**4650 cu.ft**

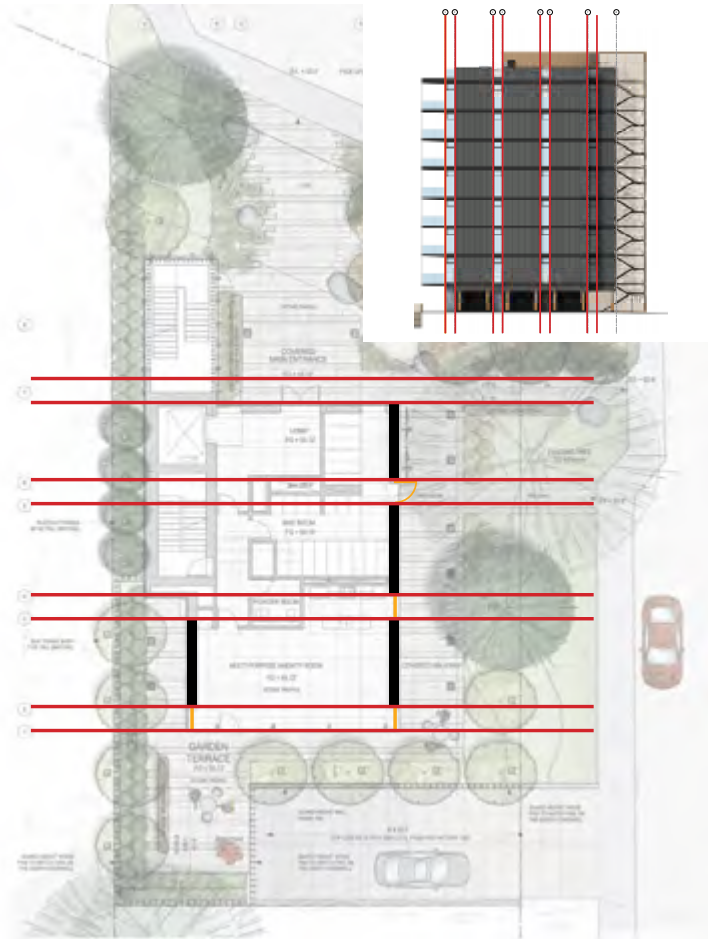
5.6 LANDSCAPE CONCEPT - ARCHITECTURAL INTEGRATION

Paving paths and points of entry follow the conceptual logic of the building above.

Special moments, such as a sculpture in the garden terrace are on alignment with the glazing slots of the building that run north-south through the site, making the sculpture visible from the lobby.



LANDSCAPE DESIGN BY PAUL SANGHA



LANDSCAPE DESIGN BY PAUL SANGHA

5.7 LANDSCAPE PAVING STRATEGY

The exterior paving material continues through the interior ground floor of the building to blend the transition of the interior and exterior spaces.

Outside, the edges of the hardscape paving are eroded to blend the transition between hardscape and softscape.

LANDSCAPE DESIGN BY PAUL SANGHA

5.8 LANDSCAPE SCREENING

The screening language from the exterior stair core is repeated to become the screening element that surrounds the parkade.

LANDSCAPE DESIGN BY PAUL SANGHA

5.9 PUBLIC REALM

The ground floor is tucked in to provide more outdoor area for residents. The covered walkway provides a blend between the private outdoor areas for residents and the public garden on the north corner.

Elements of the public Seawalk to the south are brought up to the corner garden and are replicated in the wood benches and seating stones that represent the boulders and driftwood along the waters edge. This area will be dedicated for public use through a SRW agreement.

- INDOOR AREA
- COVERED OUTDOOR SPACE
- SRW DEDICATION
- PRIVATE RESIDENT AREA

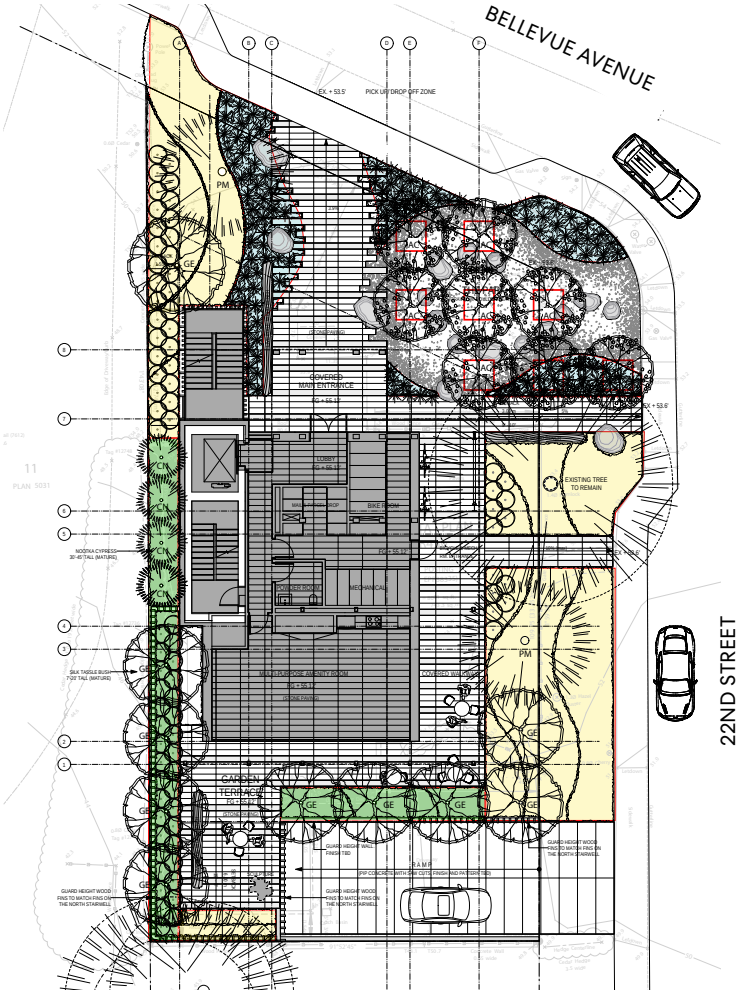
LANDSCAPE DESIGN BY PAUL SANGHA

FEATURE ELEMENTS AT PUBLIC CORNER

LANDSCAPE AT SHORE (1 BLOCK AWAY)

5.10 SOIL DEPTHS

The corresponding planting depths have been planned for the development.



SOIL DEPTHS

- 762 mm - 30” SOIL DEPTH
- 610 mm - 24” SOIL DEPTH
- 457 mm - 18” SOIL DEPTH

Each tree rootball to have one cubic yard soil distributed to 24” depth around the tree

5.11 TREE LIST

PSEUDOTSUGA MENZIESII **(PM)** E
DOUGLAS FIR
NATIVE SPECIES

GARRYA ELIPTICA **(GE)** WINTER SPRING D
SILK TASSLE BUSH
NATIVE SPECIES

CEDRUS NOOTKATENSIS **(CN)** E
NOOTKA CYPRESS
NATIVE SPECIES

ACER CIRCINATUM **(AC)** FALL D
VINE MAPLE
NATIVE SPECIES

LEGEND

SEASONAL INTEREST — SPRING, SUMMER, FALL, WINTER

EVERGREEN E — DECIDUOUS D

5.12 PLANT LIST

ARCTOSTAPHYLOS UVA-URSI
KINNICKKINNICK
NATIVE SPECIES
SPRING E

LEYMUS MOLLIS
DUNE GRASS
NATIVE SPECIES
E

CAREX PANSA
DUNE SEDGE
NATIVE SPECIES
E

ARMERIA MARITIMA
SEA THRIFT
NATIVE SPECIES
SUMMER E

PHILIDELPHUS LEWISII
MOCK ORANGE
NATIVE SPECIES
SPRING D

ANAPHALIS MARGARITACEA
PEARLY EVERLASTING
NATIVE SPECIES
SUMMER FALL D

ASTER SUBSPICATUS
DOUGLAS ASTER
NATIVE SPECIES
SUMMER FALL D

ALLIUM CERNUUM
NODDING ONION
NATIVE SPECIES
SUMMER D

RIBES SANGUINEUM
FLOWERING CURRENT
NATIVE SPECIES
SPRING D

VACCINIUM OVATUM
EVERGREEN HUCKLEBERRY
NATIVE SPECIES
SPRING E

ROSA NUTKANA
NOOTKA ROSE
NATIVE SPECIES
SUMMER D

PHYSOCARPUS CAPITATUS
NINEBARK
NATIVE SPECIES
SUMMER D

LEGEND

SEASONAL INTEREST SPRING SUMMER FALL WINTER

EVERGREEN E DECIDUOUS D

5.13 MATERIAL BOARD

The material palette of the building incorporates natural materials that have been selected for their sustainability characteristics.

The colours are deep and rich to contrast the bright greenery of the proposed landscape design.

1. Zinc

The primary cladding material is zinc. A pre-weathered graphite grey colour has been chosen for optimum performance in a marine environment.

Zinc is less energy intensive to extract than many other metals, and requires lower heat and therefore less energy to process resulting in a lower embodied energy than other popular building metals

2. Terracotta

The core and exterior stair screening is terracotta. IT is a natural material that does not require the use of any harmful materials during the manufacturing process.

The material is resistant to changes in heat and climate, providing longevity and strength.

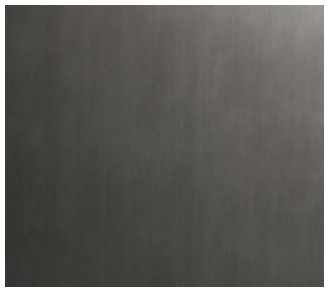
3. Wood

As a mass timber building, the building seeks to expose portions of the structural wood where appropriate.

The soffits, the underside of the south decks and columns at level 01 will be expressed as mass timber elements.

4. Basalt

Ground paving and 1st level flooring will be basalt stone. The cladding of level 01 will also be basalt to match.



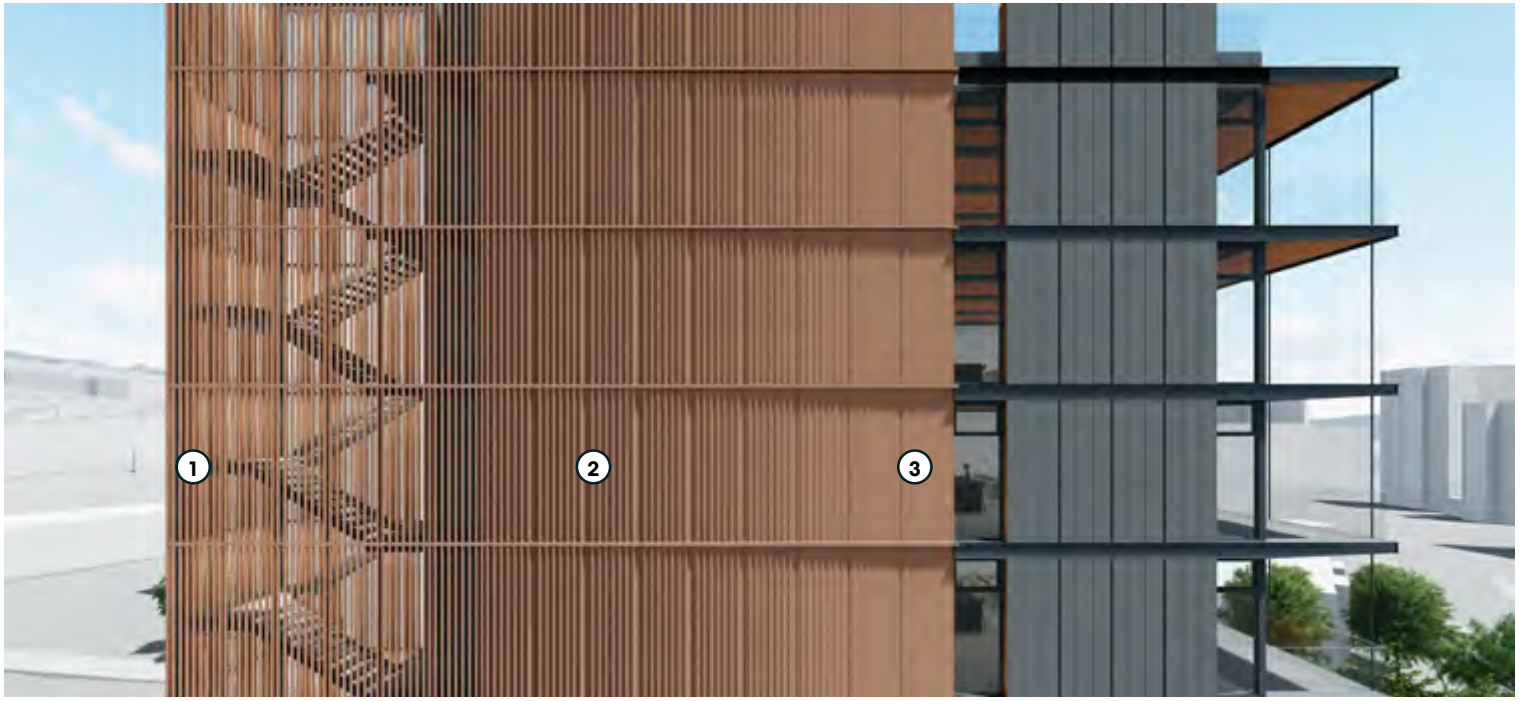
5. Dark Metal

A horizontal band is provided at each level to break down the scale of the facade.

Window mullions will match the same colour.

5.14 CORE WALL

The core wall creates a pattern as the terracotta material transitions from a solid panel to the south, to a screening element around the exterior stair to the north.



1. SCREEN 2. PATTERN 3. SOLID

5.15 PUBLIC REALM - VIEWS

The landscape design incorporates a SRW protected pocket garden at the corner of Bellevue and 22nd. This garden recognizes the significance of the corner as an important link between the civic community centre located directly to the north, and the public access point to the Seawalk to the south.

A private resident garden has been included to the south of the site off of the shared amenity space. The garden is elevated due to the natural topography change across the site, and is screened to provide privacy for residents.

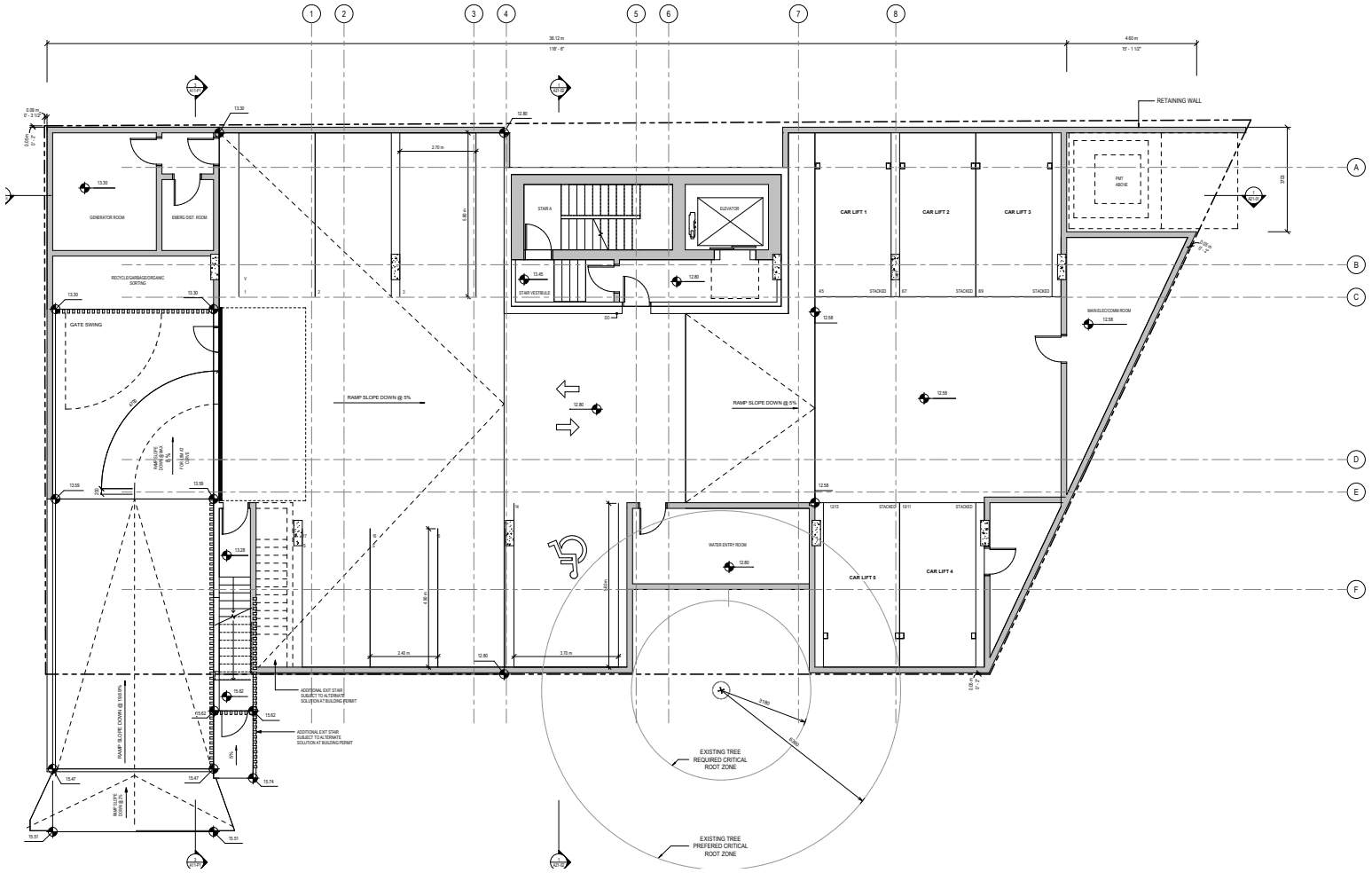
North East Corner - Public Garden

North East Corner - Public Garden

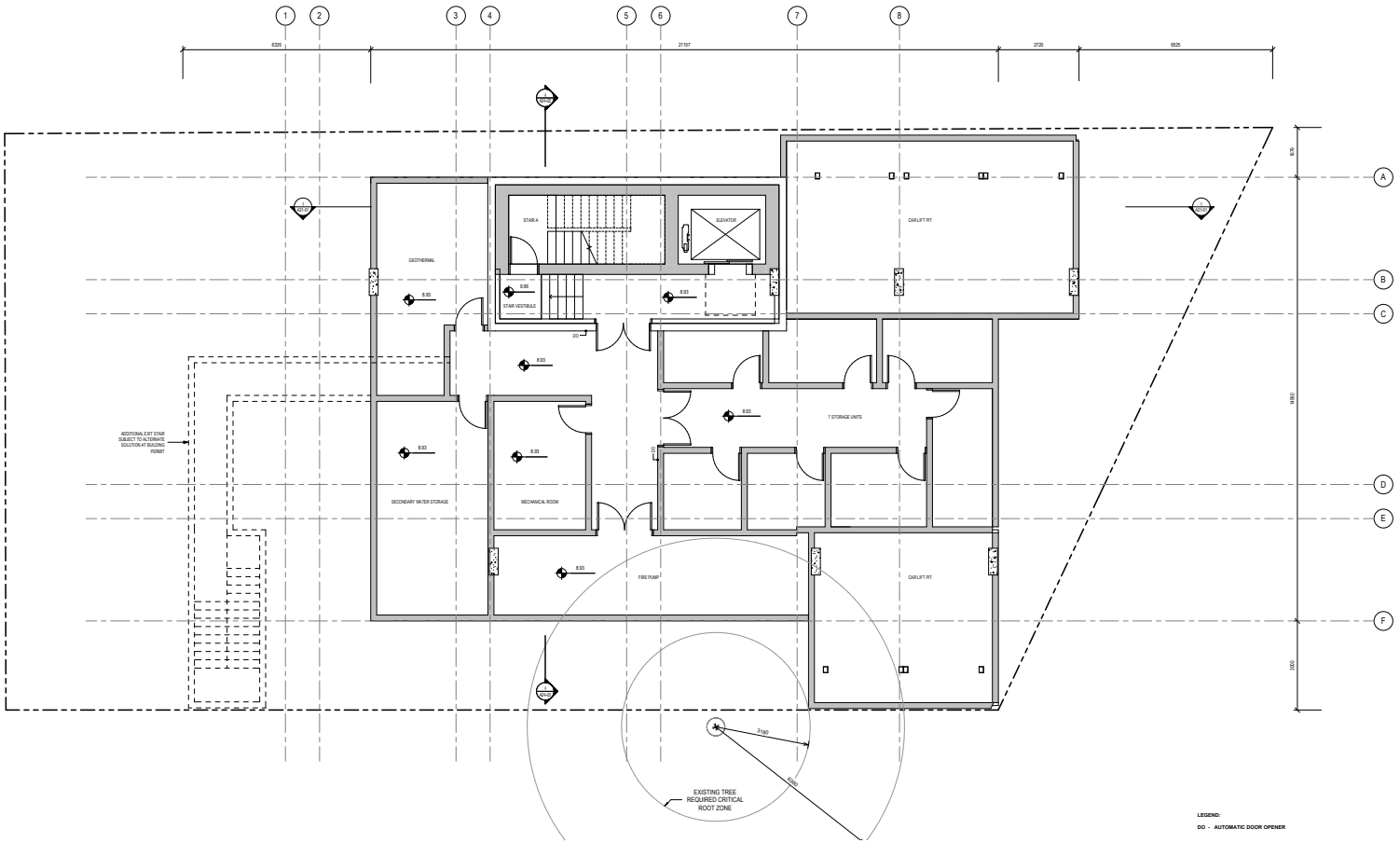
South West Corner - Private Garden

6.0 Architectural Drawings

6.1 PARKING PLAN - LEVEL P1

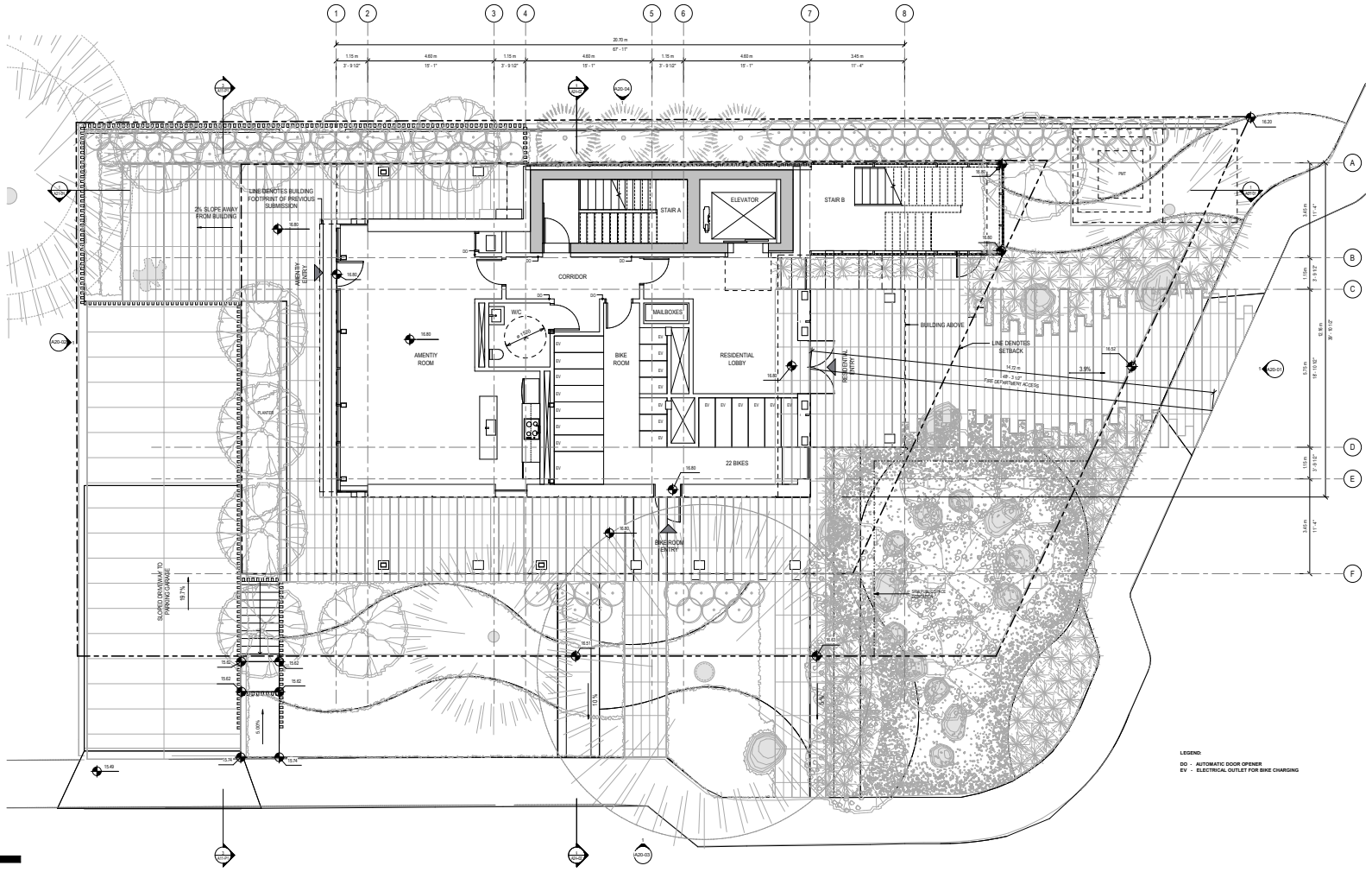


6.2 PARKING PLAN - LEVEL P2

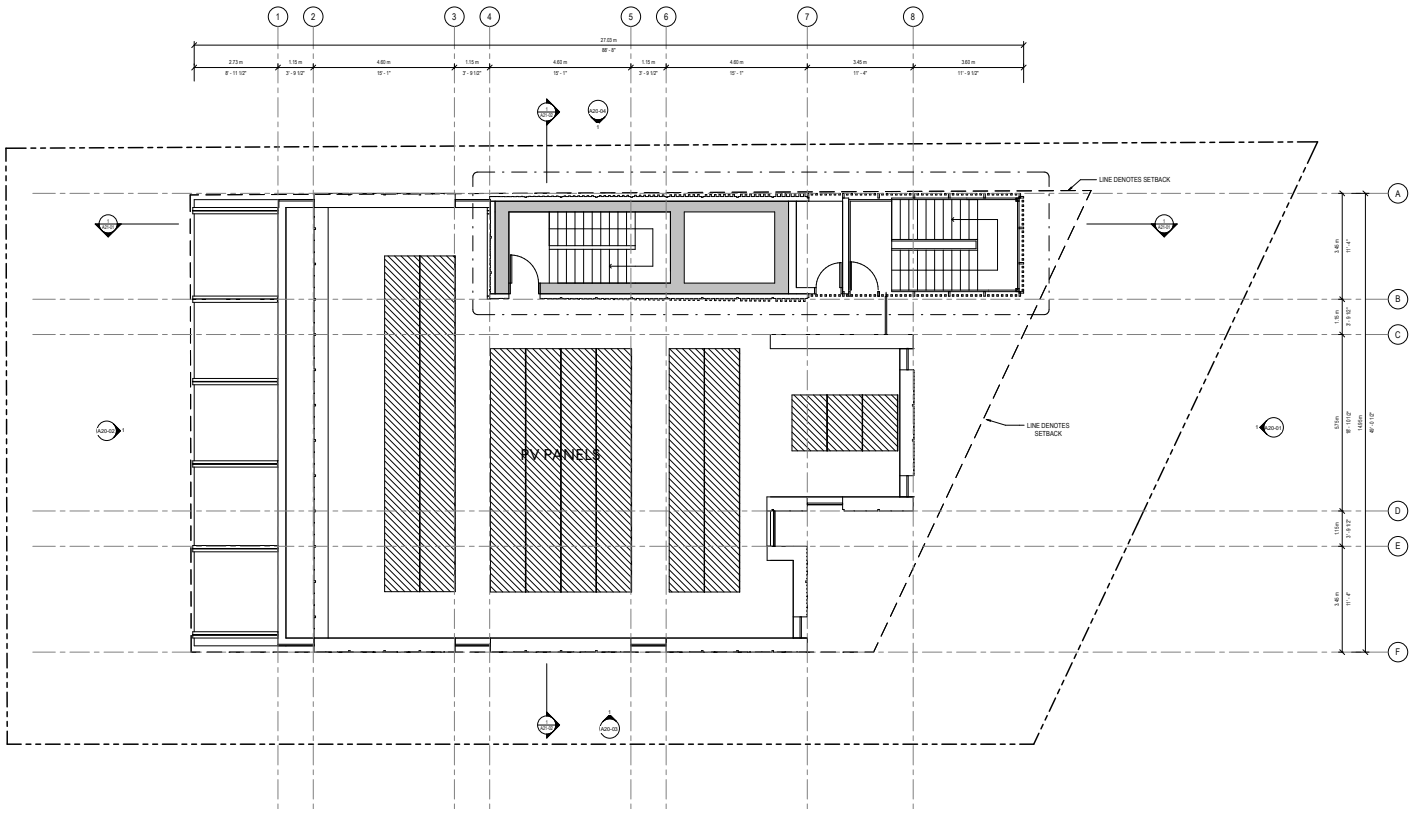


0 5 10 m

6.3 PLAN - LEVEL 01

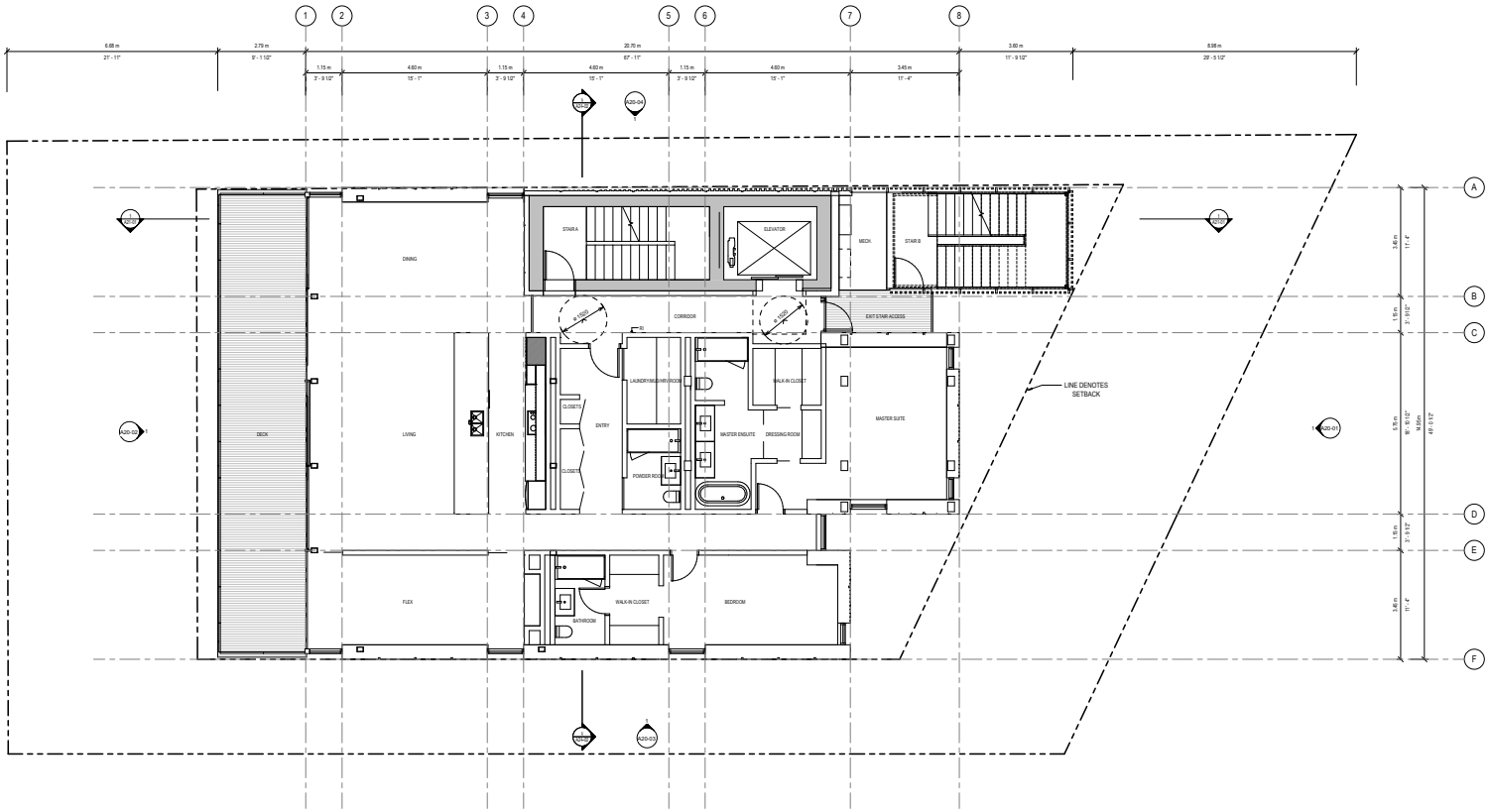


6.4 ROOF PLAN



0 5 10 m

6.5 PLAN - LEVEL 02-08



LEGEND:

RI - ROUGH IN FOR AUTOMATIC DOOR OPENER

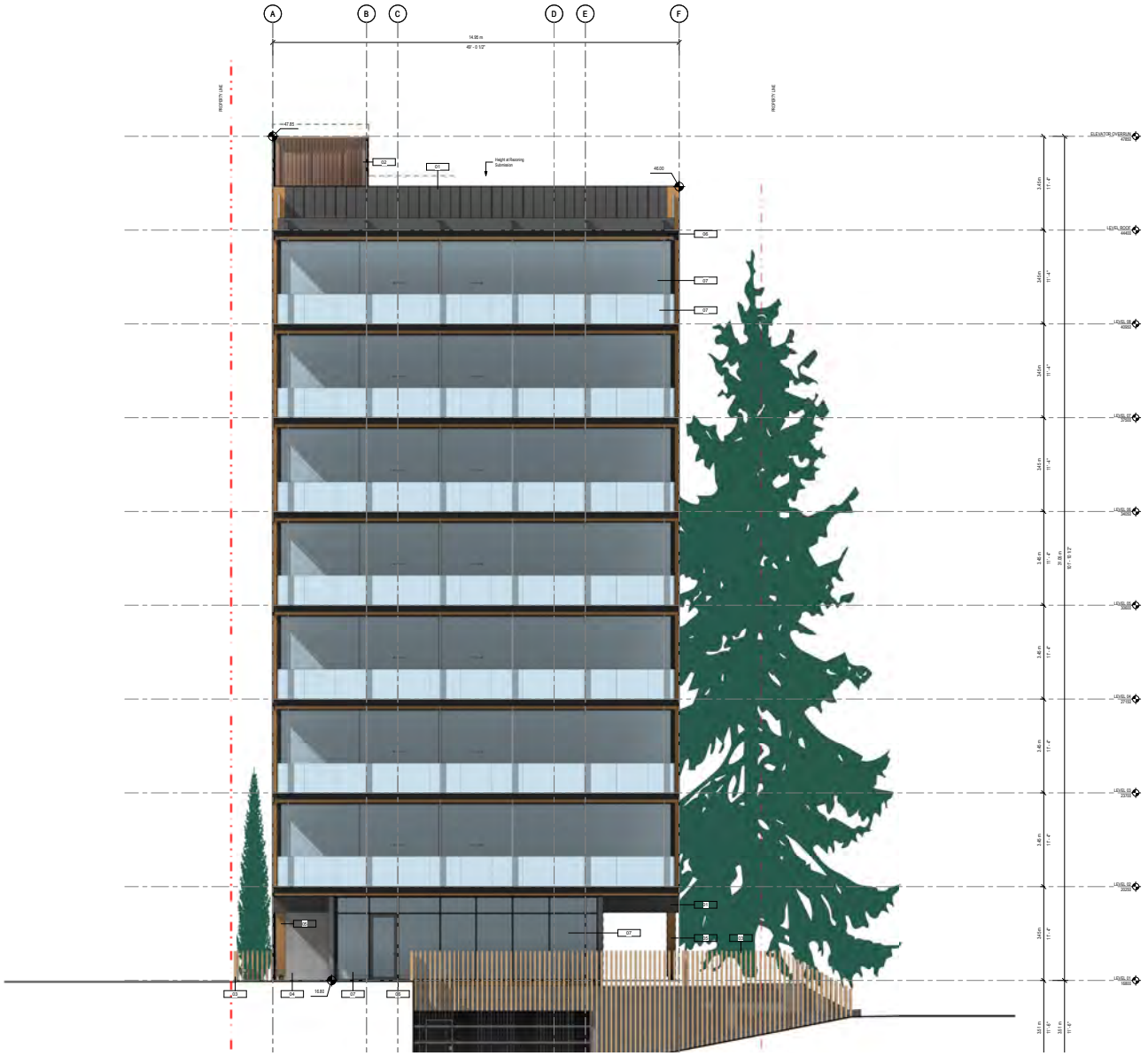
0 5 10 m

6.6 ELEVATION - NORTH

Keynote Legend	
Key Value	Keynote Text
01	GREY ZINC METAL PANEL
02	TERRACOTTA
03	WOOD SCREEN
04	BASALT
05	GLULAM
06	DARK GREY METAL
07	GLASS

0 5 10 m

6.7 ELEVATION - SOUTH

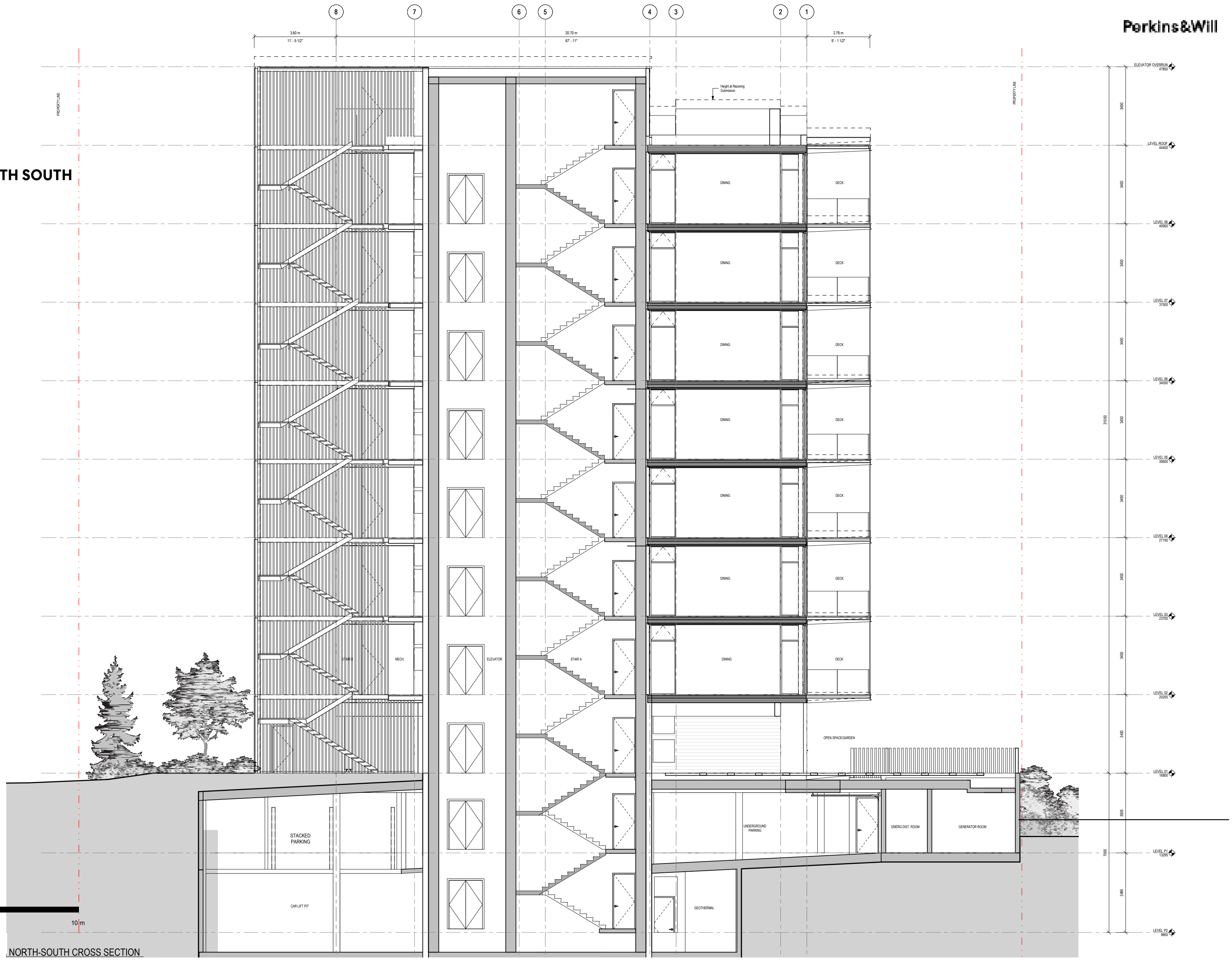


Keynote Legend	
Key Value	Keynote Text
01	GREY ZINC METAL PANEL
02	TERRACOTTA
03	WOOD SCREEN
04	BASALT
05	GLULAM
06	DARK GREY METAL
07	GLASS

6.8 ELEVATION - WEST

6.9 ELEVATION - EAST

6.10 SECTION - NORTH SOUTH



0 5 10 m

51

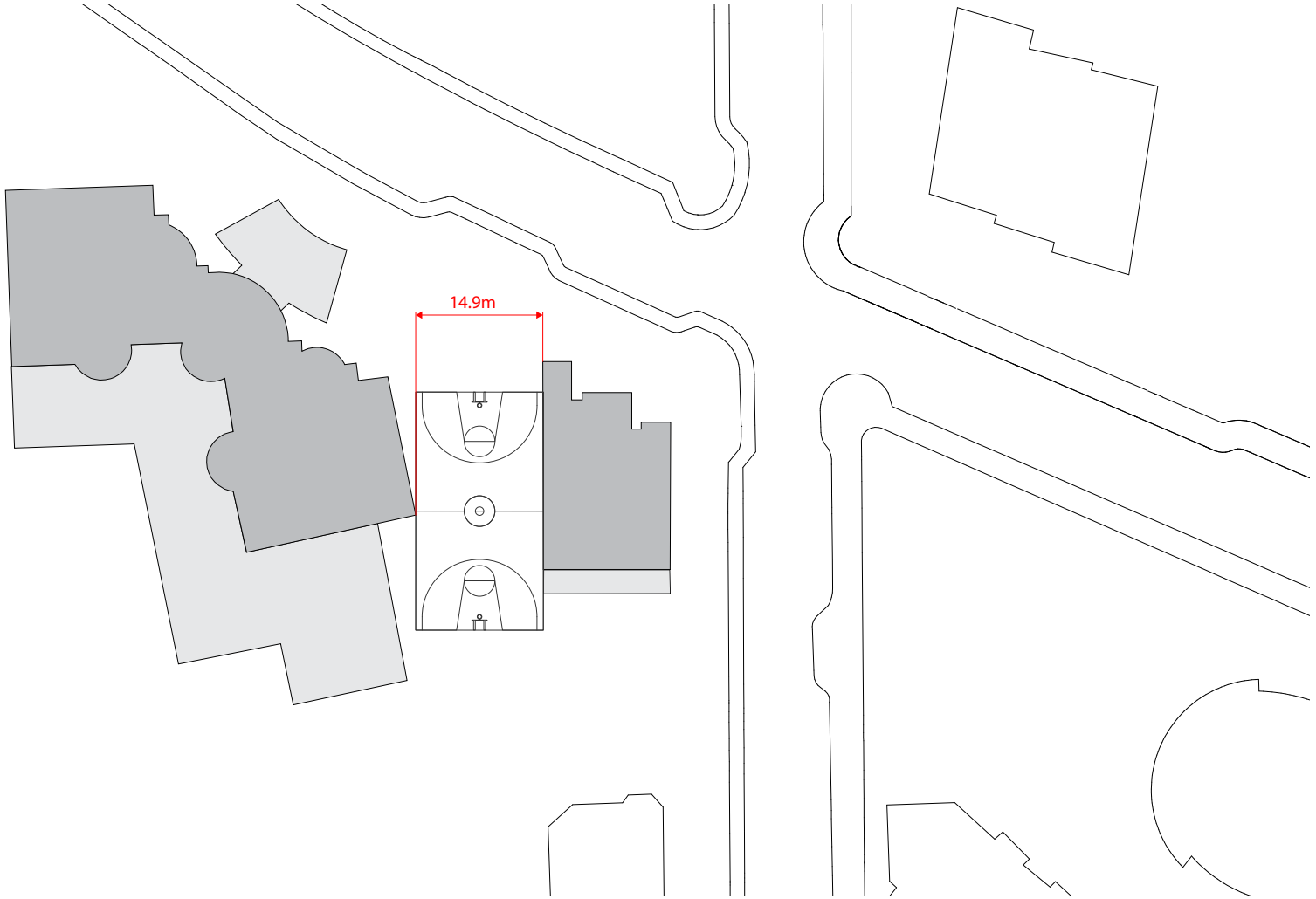
NORTH-SOUTH CROSS SECTION

6.11 SECTION - EAST WEST

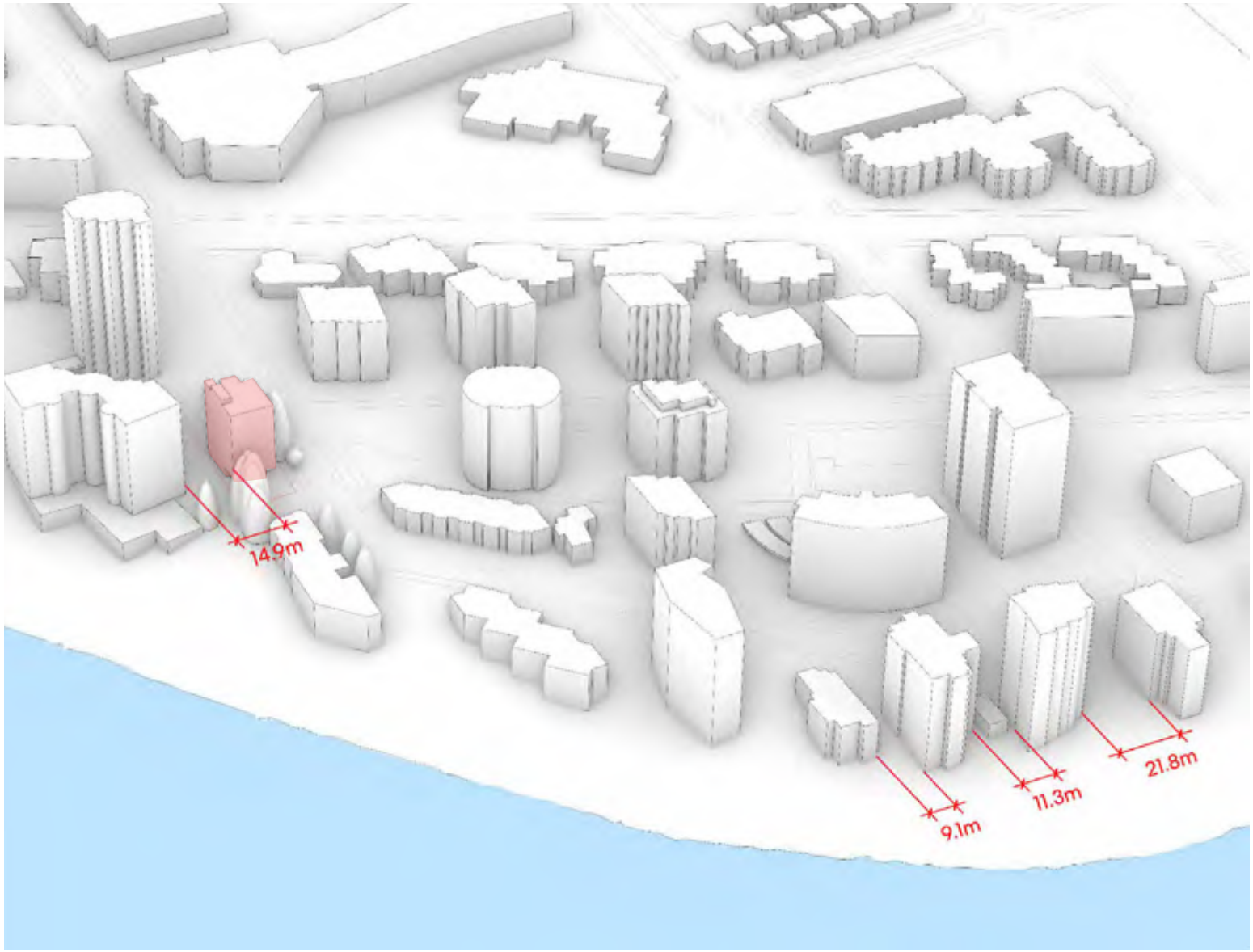
7.0 View Studies

7.1 DISTANCE BETWEEN BUILDINGS

The distance between the proposed project and closest portion of the adjacent tower is 14.9m. This is equivalent to the same width of a standard basketball court

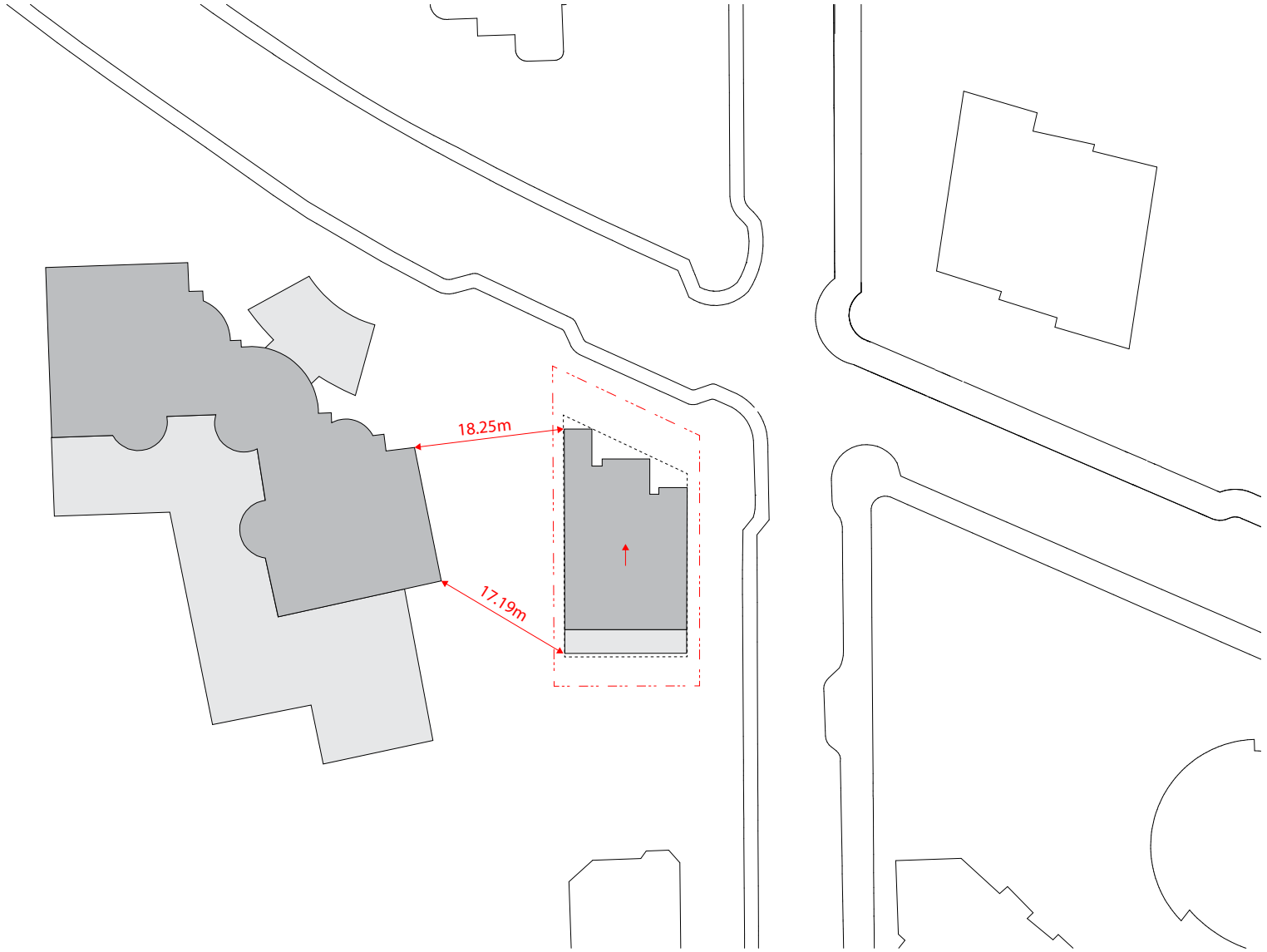


Distance between buildings in relation to the surrounding context.



7.2 BUILDING SHIFT

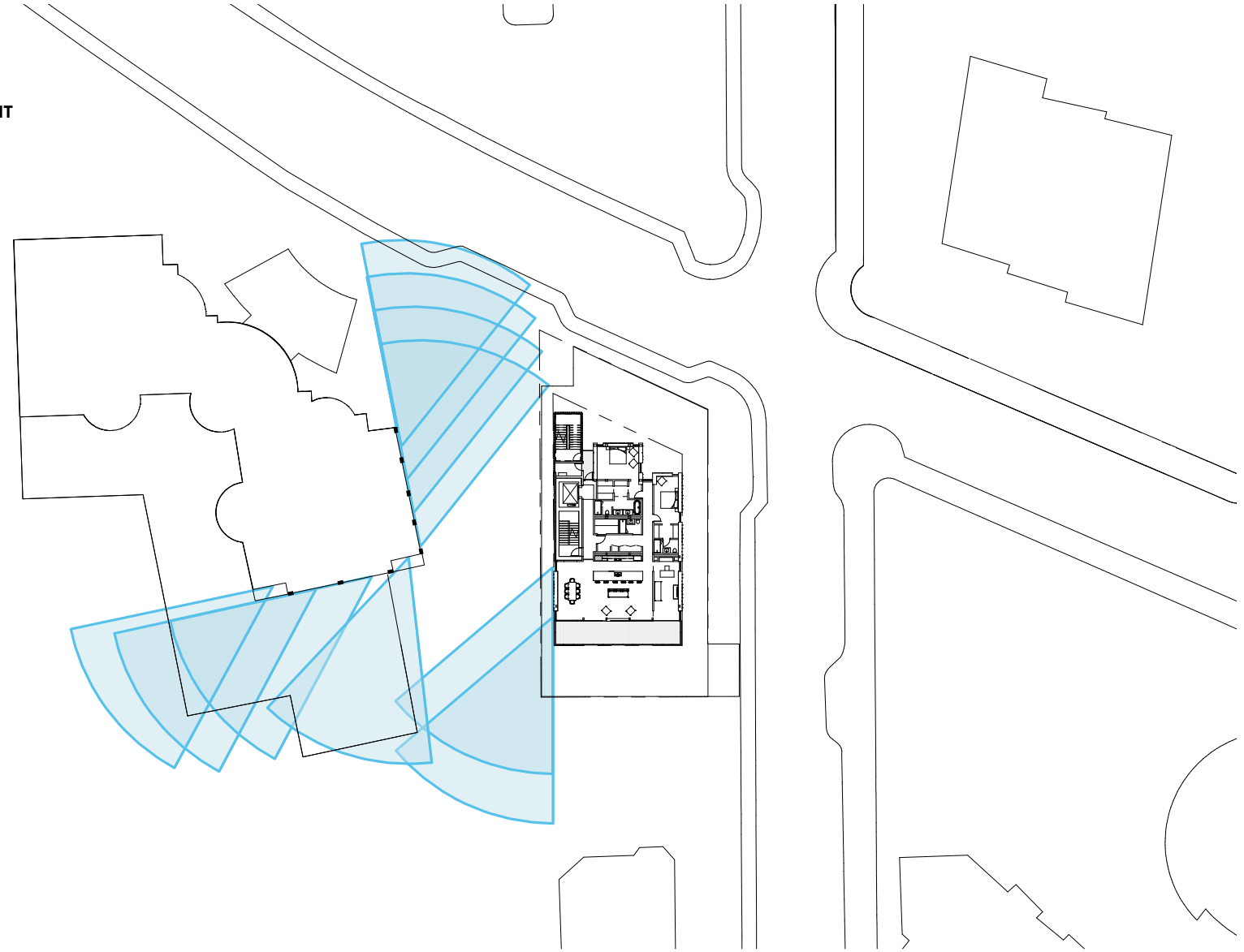
In response to comments received through public consultation, the building was shifted north to the front setback line. This was in recognition of the buildings relationship to the adjacent Villa Maris where the buildings facades are at an angle to one another. Moving the project to the north helps to increase the distance between the two buildings.



7.3 HORIZONTAL ANGLES OF DAYLIGHT

Horizontal daylight angles as per Vancouver City Bylaw.

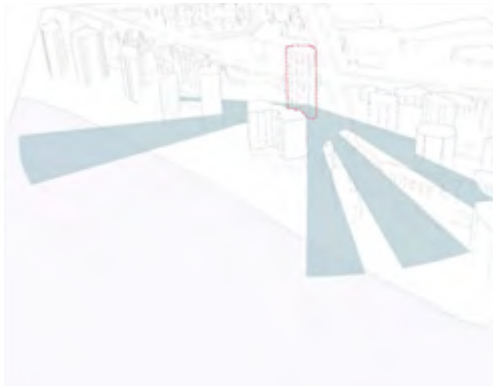
Each exterior window must be located so that a plane or planes extending from the window and formed by an angle of 50 degrees, or two angles with a sum of 70 degrees, will encounter no obstruction over a distance of 24.0 m and must be measured horizontally from the centre of the bottom of each window.



7.4 VIEW ANALYSIS

The view analysis is from the living room space of the stated building. The view analysis shows the proposed building's impact on Bellevue Place (2209 Bellevue Ave) compared to the view impact of the existing building and surrounding site trees at the ground level, level 04, and level 07.

Existing Condition - Ground Level.

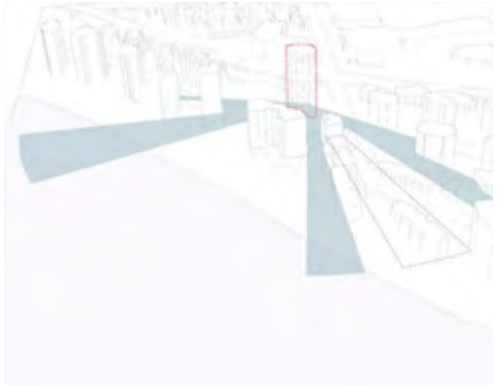


Existing Condition - Level 04

Existing Condition - Level 07

Proposed Building - Ground Level.

Degree of waterfront view altered 0°



Proposed Building - Level 04

Degree of waterfront view altered 12°

Proposed Building - Level 07

Degree of waterfront view altered 15°

The view analysis is from the living room space of the stated building. The view analysis shows the proposed building's impact on Surfside Towers (2187 Bellevue Ave) compared to the view impact of the existing building and surrounding site tree at the ground level, level 04, and level 07.

Existing Condition - Ground Level.

Existing Condition - Level 04

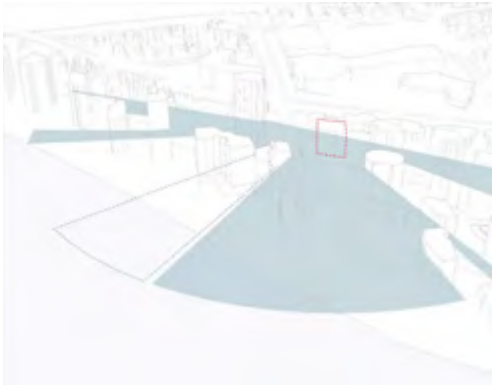
Existing Condition - Level 07

Proposed Building - Ground Level.

Degree of waterfront view altered 0°

Proposed Building - Level 04

Degree of waterfront view altered 16°

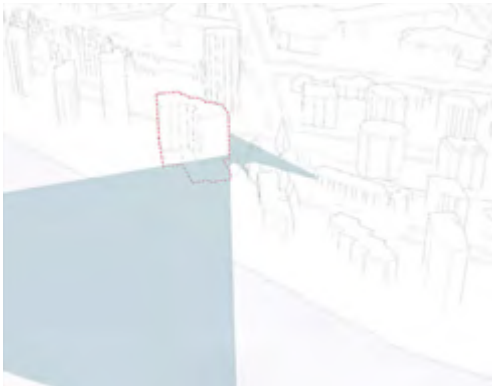


Proposed Building - Level 07

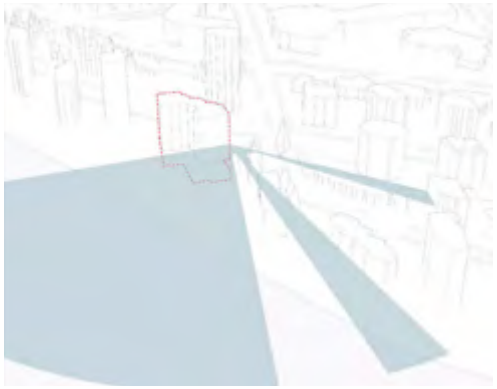
Degree of waterfront view altered 16°

7.4 VIEW ANALYSIS

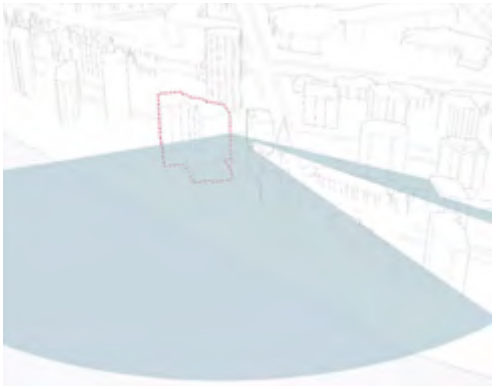
The view analysis is from the living room space of the stated building. The view analysis shows the proposed building's impact on Villa Maris (2222 Bellevue Ave) compared to the view impact of the existing building and surrounding site trees at the ground level, level 04, and level 07.



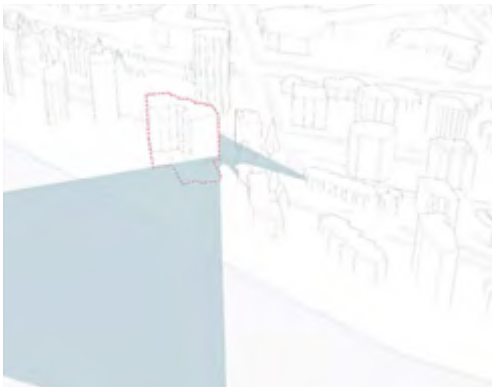
Tower Level 1 - Existing



Tower Level 4 - Existing

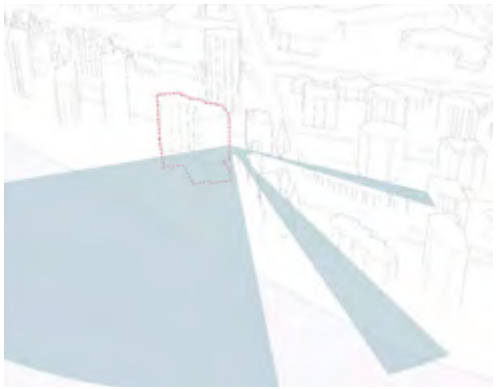


Tower Level 7 - Existing



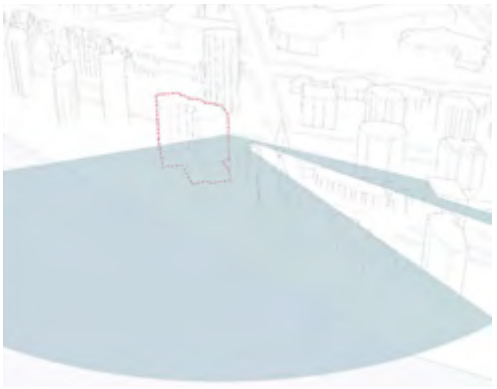
Tower Level 1 - Proposed

Degree of waterfront view altered 0°



Tower Level 4 - Proposed

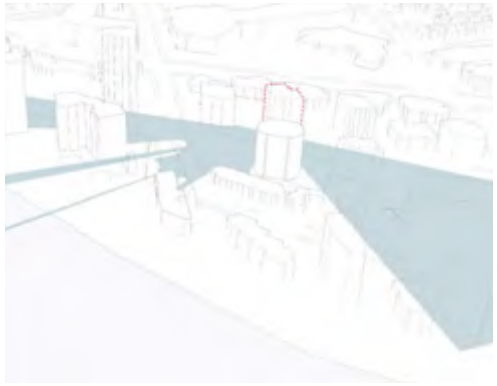
Degree of waterfront view altered 0°



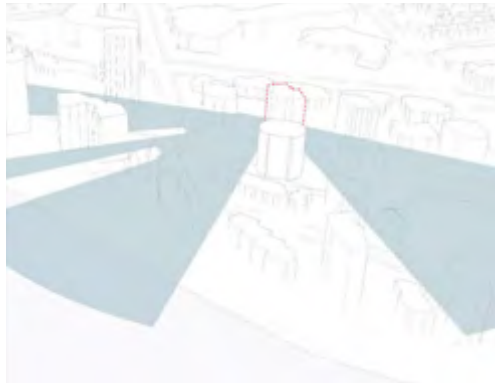
Tower Level 7 - Proposed

Degree of waterfront view altered 0°

The view analysis is from the living room space of the stated building. The view analysis shows the proposed building's impact on Vandmar West (2167 Bellevue Ave) compared to the view impact of the existing building and surrounding site tree at the ground level, level 04, and level 07.



Level 1 - Existing

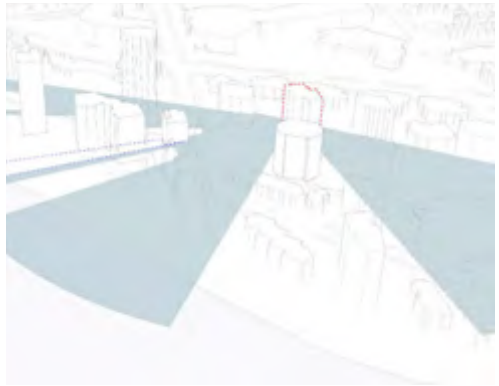


Level 4 - Existing

Level 7 - Existing

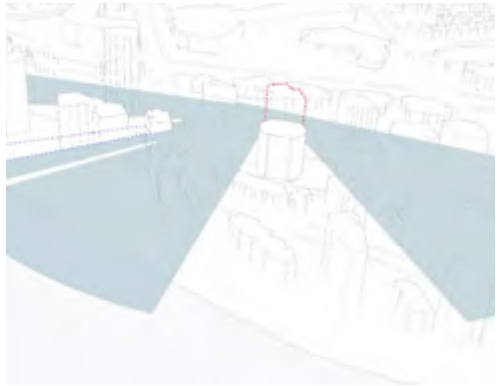
Level 1 - Proposed

Degree of waterfront view altered 4°



Level 4 - Proposed

Degree of waterfront view altered 5°



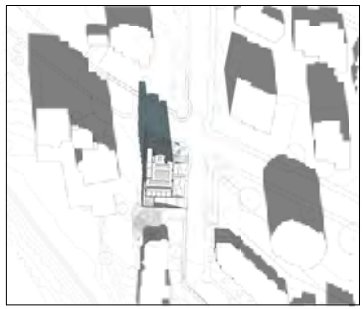
Level 7 - Proposed

Degree of waterfront view altered 6°

7.5 SHADOW ANALYSIS

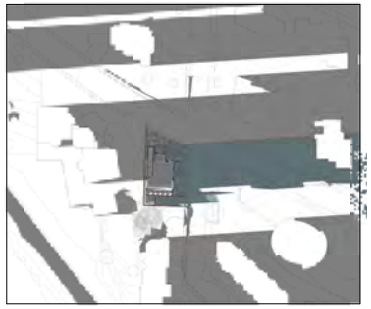
Shadows are shown between 10am and 3pm on the Spring/Fall Equinox, Summer Solstice, and Winter Solstice.

March 21st - 10 am



March 21st - 12 pm

March 21st - 2 pm

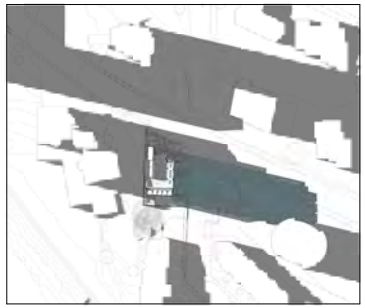


March 21st - 6 pm

June 21st - 10 am

June 21st - 12 pm

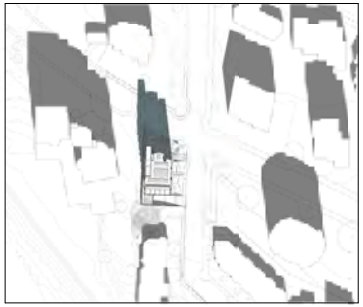
June 21st - 2 pm



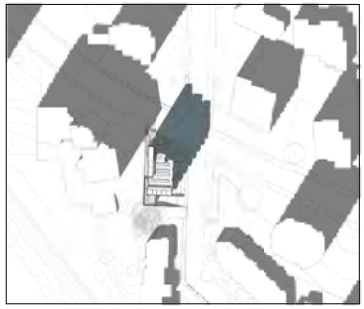
June 21st - 6 pm

Shadows are shown between 10am and 3pm on the Spring/Fall Equinox, Summer Solstice, and Winter Solstice.

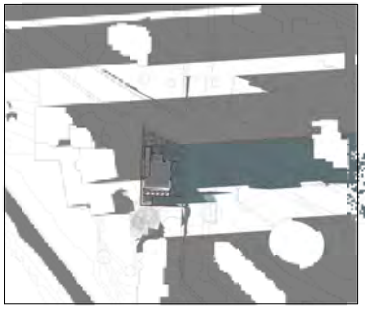
September 21st - 10 am



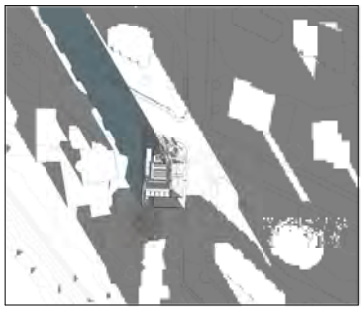
September 21st - 12 pm



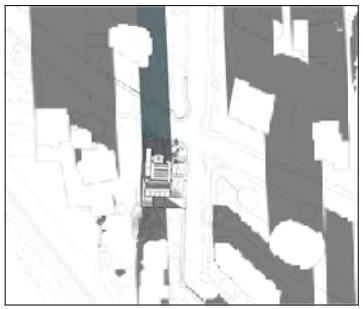
September 21st - 2 pm



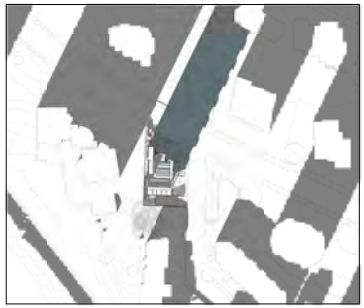
September 21st - 6 pm



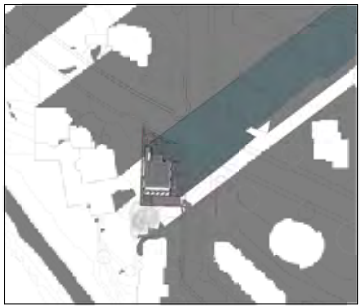
December 21st - 10 am



December 21st - 12 pm



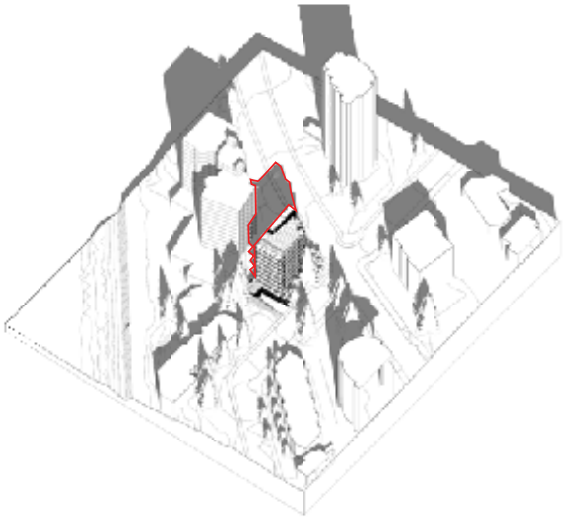
December 21st - 2 pm



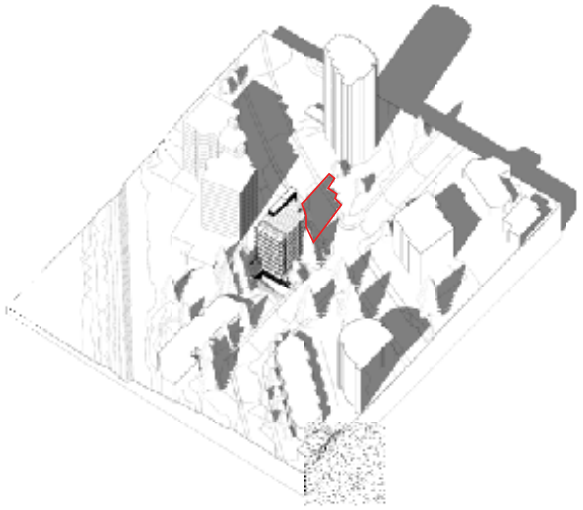
December 21st - 6 pm

7.6 SHADOW ANALYSIS - 3D

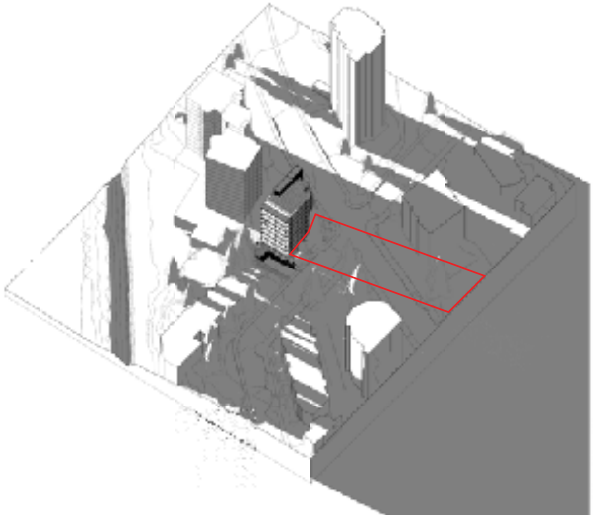
Shadows are shown between 10am and 6pm on March 21st



March 21st - 10 am

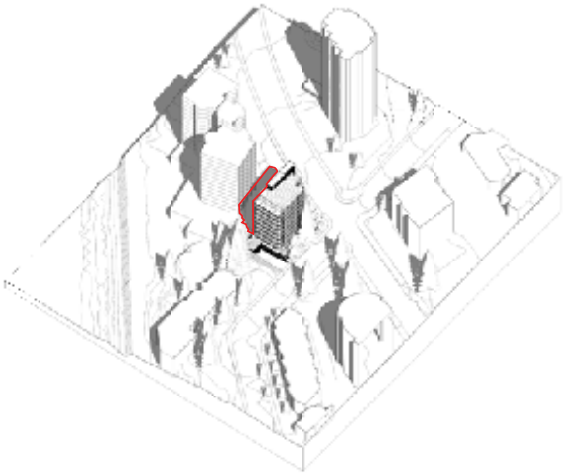


March 21st - 12 pm

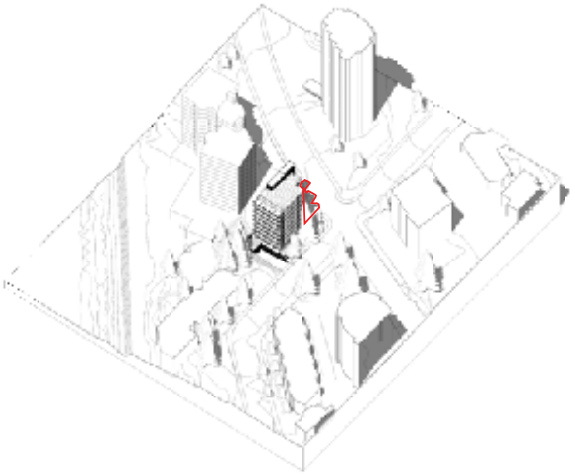


March 21st - 6 pm

Shadows are shown between 10am and 6pm on June 21st



June 21st - 10 am



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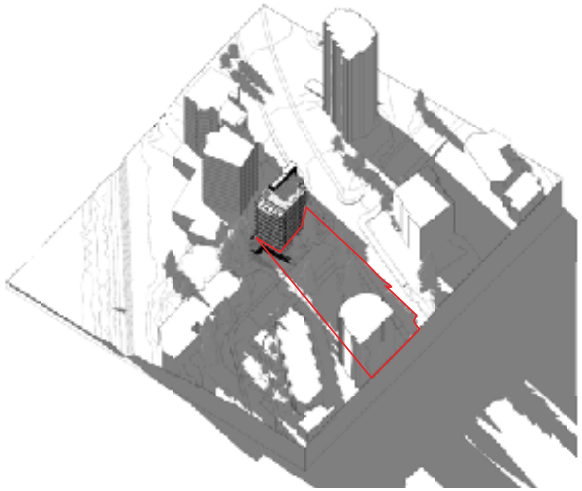
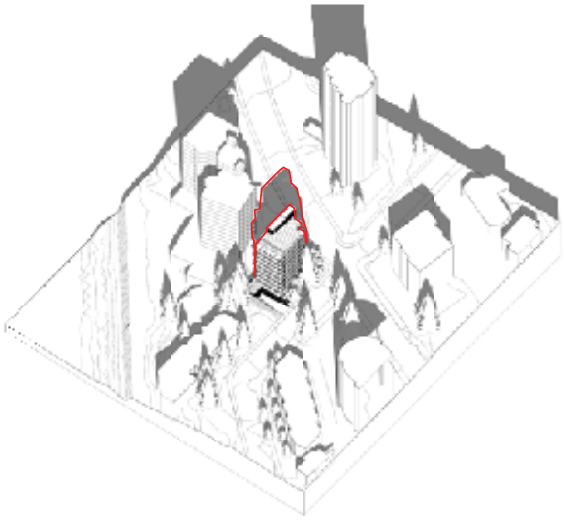


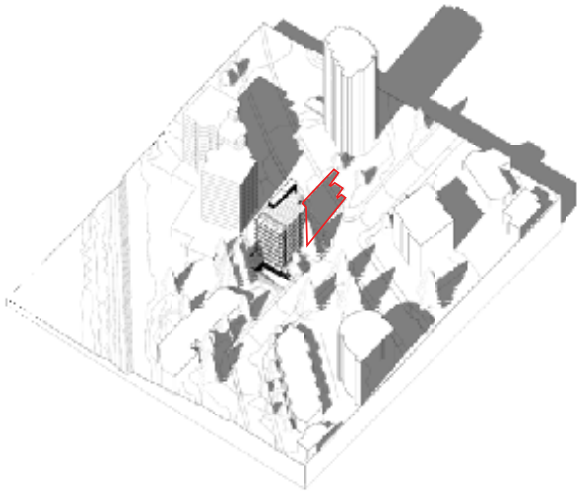
June 21st - 6 pm

7.6 SHADOW ANALYSIS - 3D

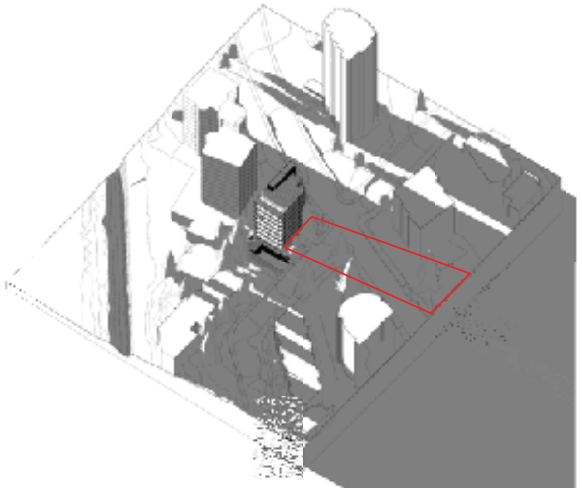
Shadows are shown between 10am and 6pm on September 21st



September 21st - 10 am

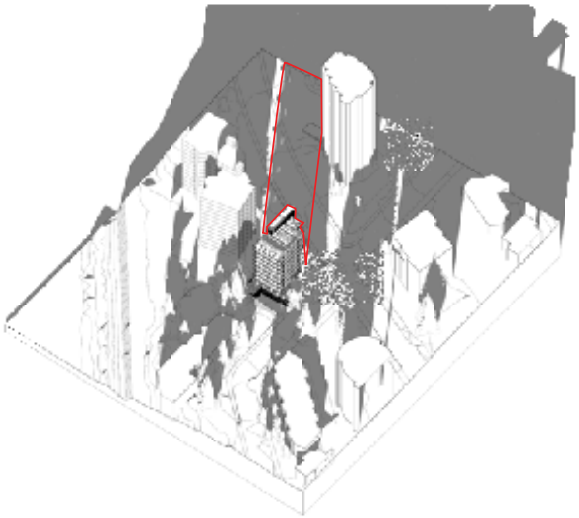


September 21st - 12 pm

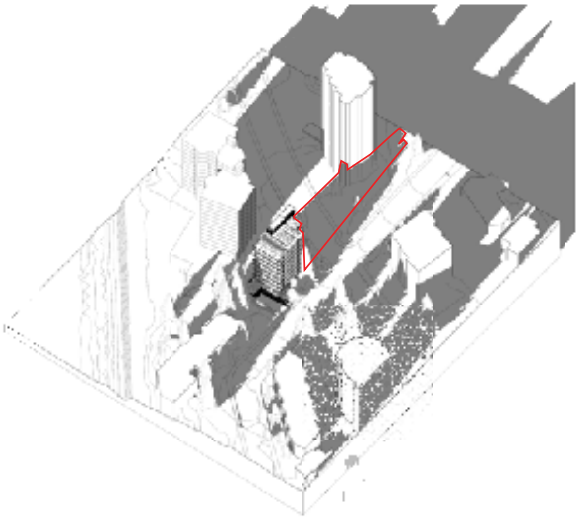


September 21st - 6 pm

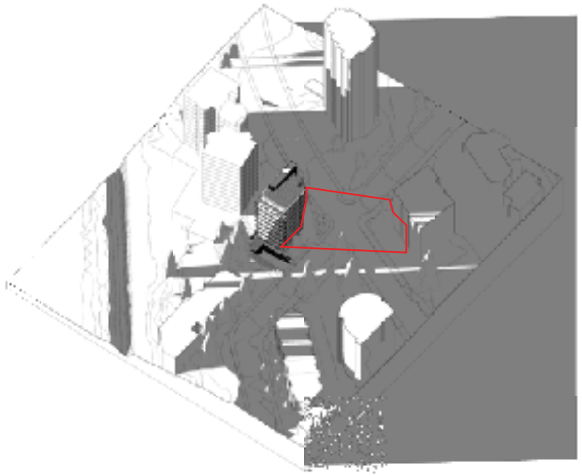
Shadows are shown between 10am and 6pm on December 21st



December 21st - 10 am



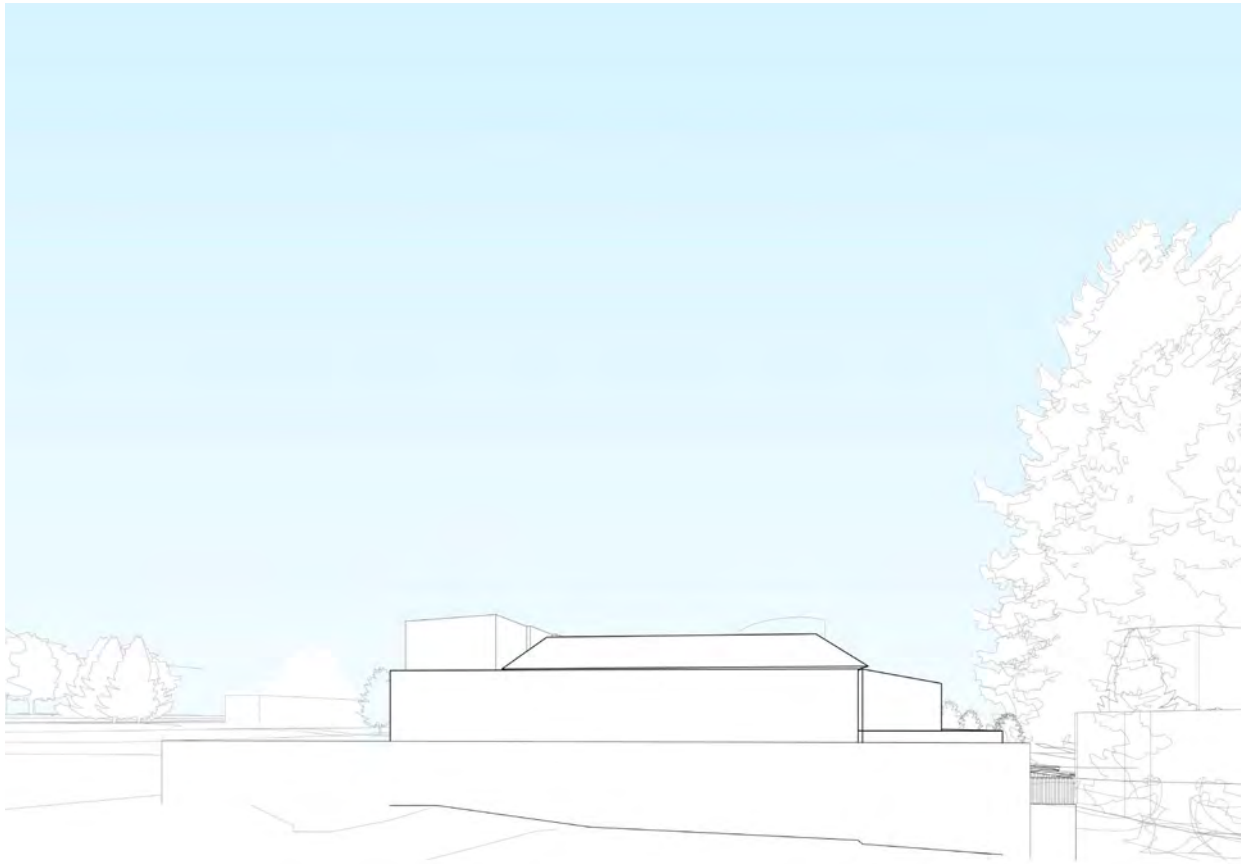
December 21st - 12 pm



December 21st - 6 pm

7.7 VIEW STUDIES

View looking east from level 02 of the Villas Maris.



Existing

Overlay

Proposal

8.0 Statistics and Policy

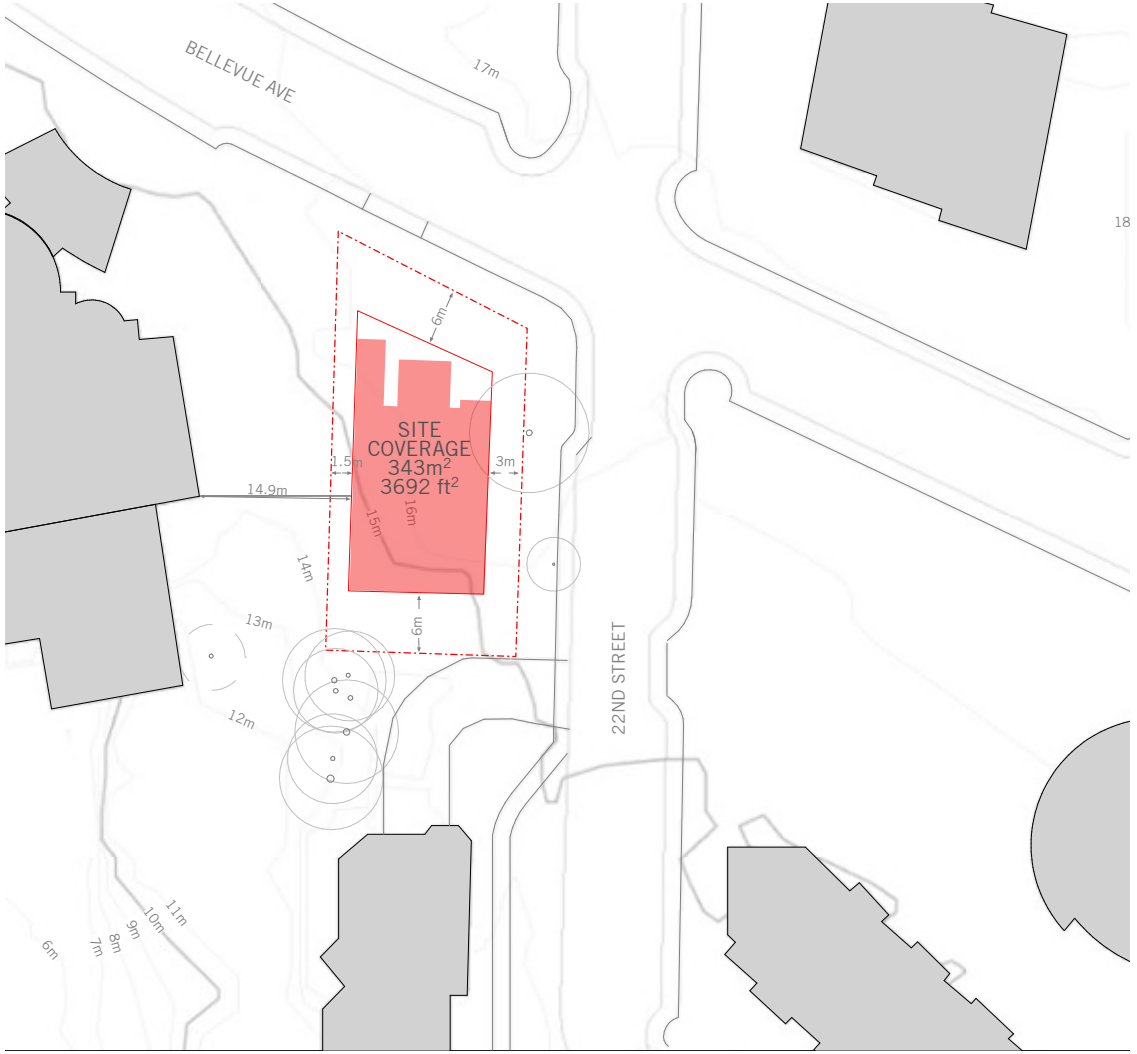
8.1 SITE STATISTICS

PROJECT NAME	Bellevue and 22nd.
CIVIC ADDRESS	177 22nd St, 2204 Bellevue Ave.
LEGAL DESCRIPTION	Plan VAS450 District Lot 554 Lot 1
ZONING BY-LAW	4662, 2010
SITE DIMENSIONS	± 21.7m X 42.7m
SITE AREA	743.3m²
EXISTING ZONING	RD-1
PROPOSED USE	Multi-family Residential

8.2 SETBACKS/ SITE COVERAGE

BUILDING FOOTPRINT	343m² (includes balconies and exterior stair)
SITE COVERAGE	46%

PROPOSED SETBACKS	
FRONT	6m
BACK	6m
SIDE (EAST)	3m
SIDE (WEST)	1.5m
TOWER SEPARATION	14.9m



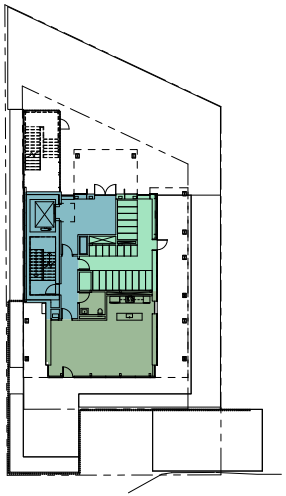
8.3 PROJECT AREA

BUILDING STOREYS 8

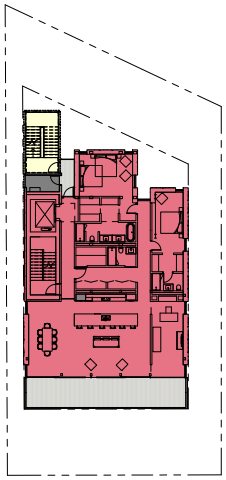
RESIDENTIAL UNITS 7

UNIT TYPE 2 Bed + flex

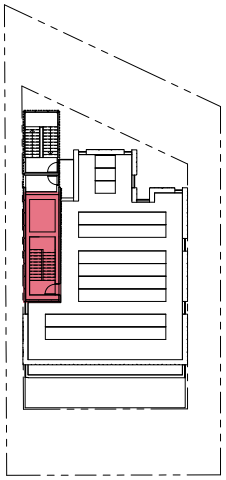
AREA/ FSR CALCULATIONS															
LEVEL	GROSS AREA		UNITS			FLOOR AREA RATIO EXCLUSIONS (M2)									FSR
	AREA M2	AREA FT 2	COUNT	AREA M2	AREA FT2	PARKING	STORAGE	MECH/ ELEC/ MAINTENANCE / GARBAGE	ELEV/ STAIR/ HALLWAY	LOBBY	AMENITY	BIKE ROOM	BALCONIES/ EXTERIOR STEPS	**HIGH PERFORMANCE BUILDING	AREA M2 (GROSS AREA - EXCLUSIONS)
LEVEL P2	262	2818	0	0	0	0	82	102	78	0	0	0	0	0	0
LEVEL P1	604	6502	0	0	0	461	0	91	52	0	0	0	0	0	0
LEVEL 01	189	2034	0	0	0	0	0	0	0	69	71	48	0	0	0
LEVEL 02	343	3694	1	272	2930	0	0	0	0	0	0	0	70	22	251
LEVEL 03	343	3694	1	272	2930	0	0	0	0	0	0	0	70	22	251
LEVEL 04	343	3694	1	272	2930	0	0	0	0	0	0	0	70	22	251
LEVEL 05	343	3694	1	272	2930	0	0	0	0	0	0	0	70	22	251
LEVEL 06	343	3694	1	272	2930	0	0	0	0	0	0	0	70	22	251
LEVEL 07	343	3694	1	272	2930	0	0	0	0	0	0	0	70	22	251
LEVEL 08	343	3694	1	272	2930	0	0	0	0	0	0	0	70	22	251
LEVEL ROOF	32	344	0	0	0	0	0	0	0	0	0	0	0	3	29
TOTAL	3489	37553	7	1906	20513	461	82	193	130	69	71	48	492	155	1787
TOTAL FSR															2.40



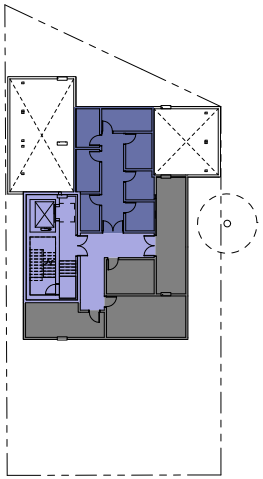
LEVEL 01



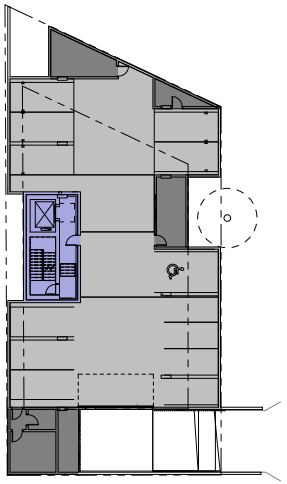
LEVEL 02-08



LEVEL ROOF



LEVEL P2



LEVEL P1

FSR AREAS

- AMENITY
- BALCONIES / EXTERIOR STEPS
- BIKE ROOM
- ELEVATOR / STAIR / HALLWAY
- LOBBY
- MECH / ELEC / MAINTENANCE / GARBAGE
- PARKING
- RESIDENTIAL
- STORAGE

8.4 PARKING COUNTS

TYPICAL STALL 2.7m x 5.8m

ACCESSIBLE STALL 3.7m x 5.8m

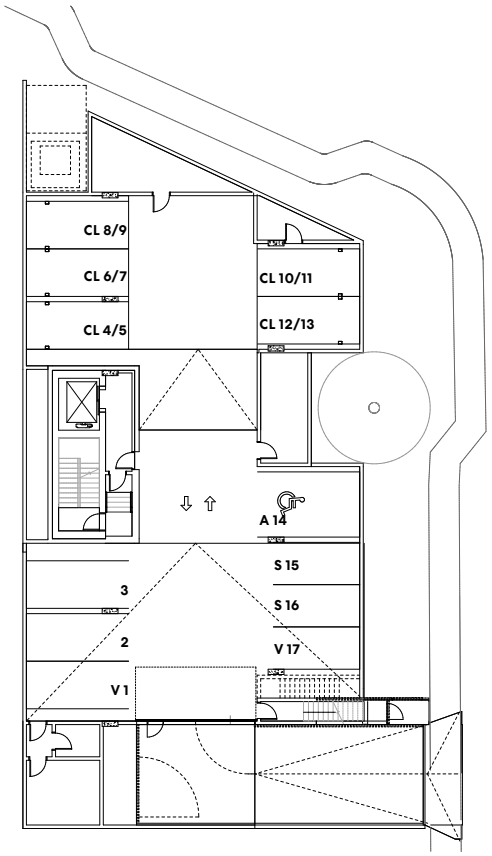
SMALL CAR STALL 2.4m x 4.9m (30% of stalls allowed)

CAR PARKING	Bylaw 4662, 2010	UNITS	GFA m2	MIN REQ UNITS	MIN REQ GFA m2	STALLS PROVIDED SINGLE	STALLS PROVIDED CAR LIFTS (X2)	STALLS PROVIDED TOTAL
MARKET RESIDENTIAL	**Section 300**							
A minimum of the lesser of:	1 parking space per dwelling OR	7		7				
	1 space per every 84m2 of GFA		2,127		25			
						4	5	
	TOTAL	**7**	**2,127**	**7**	**25**	**4**	**10**	**14**
MRKT RESID. VISITOR PARKING	**Section 142.01**							
30% of req stalls	1 parking space per dwelling OR	7		2				
Each unit	1 space per every 84m2 of GFA		2,127	0	8			**2**
ACCESSIBLE PARKING	**Section 142.09**							
	Min 1 space req for between 10-75 parking spaces.			1	1			**1**
	TOTAL			**10**	**34**			**17**

*All parking stalls to have EV charging capabilities as per the requirements in Policy 02-80-386

BIKE PARKING	Policy 02-80-386, 2018	UNITS	BED ROOMS	MIN REQ	STALL PROVIDED HORZ.	STALL PROVIDED VERTICAL	STALL PROVIDED TOTAL
	Policy Zoning Amendment Application						
	3.3 - Provide 1 secure bicycle parking space per bedroom	7	2	14	14	7	
	TOTAL	**7**	**2**	**14**	**14**	**7**	**21**
SHORT TERM BIKE PARKING	**Section 143.02**						
	0.2 per dwelling	**7**		**1.4**			**2**

*The project will provide 3 stalls per home, as it is recognized that the flex room could be used as a 3rd bedroom.



LEVEL P1

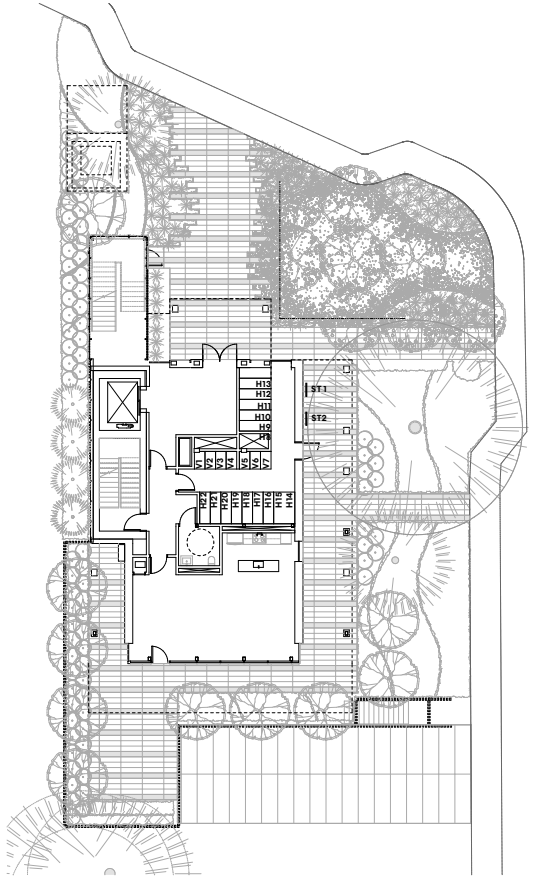
PARKING LEGEND

V VISITOR

CL CAR LIFT

S SMALL STALL

00 STALL COUNT



LEVEL 01

BIKE PARKING LEGEND

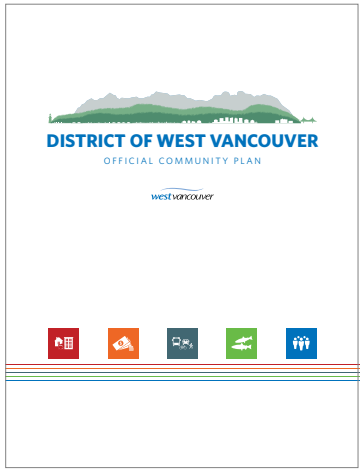
V VERTICAL

H HORIZONTAL

ST SHORT TERM

8.5 OFFICIAL COMMUNITY PLAN COMPLIANCE - POLICIES

The project adheres to the community goals outlined in the West Vancouver Official Community Plan and the Regional Growth Strategy "Metro Vancouver 2040 - Shaping Our Future.



Strengthen our centres and corridors through local area plans

2.1.13 - Create capacity for an estimated 1,700–2,100 net new housing units through local area plans (see Map 3) for the following areas, subject to provision 2.1.14 of this plan:

a. Ambleside Municipal Town Centre (1,000–1,200 estimated net new units)

Our site is located within the Ambleside Municipal Town Centre as defined on Map 16 - OCP Schedule i) pg 3. The project acts as an urban infill, creating density close to transit, amenities, and services.

2.1.14 Prepare local area plans by:

b. Determining densities, heights and building forms that respond to neighbourhood context and character (e.g., topography, natural features, site area, transportation and amenities); and

c. Prioritizing mixed-use and apartment forms in core areas and ground-oriented multifamily forms (e.g., townhouses, duplexes) to transition to adjacent single-family neighbourhoods.

The building proposal matches the height, form and density of the surrounding neighbourhood. The site is identified in the OCP as within the Ambleside Apartment Area boundary and responds with a similar typology fitting the surrounding neighbourhood.

2.1.15 Prior to the adoption of a local area plan, consider proposals within the local area plan boundary by:

a. Applying relevant District-wide policies contained in this plan and any existing area specific policies and guidelines; and

b. Requiring the proposal's contribution to rental, non-market or supportive housing, or its ability to advance the public interest or provide other community benefits as determined by Council.

While the proposal is being submitted ahead of the Ambleside Town Centre Plan, the proposal seeks to align to the guidelines and principals set out in the OCP and district wide policies, while providing numerous community benefits such as: Providing universal adaptable suites, enhancing the public realm, and going above and beyond the standards set for energy use reduction, GHG emission reduction (operational and embodied), and on site energy production.

Advancing housing affordability, accessibility and sustainability

2.1.20 Ensure that new multi-family and mixed-use housing development meets the community's needs by:

b. Supporting a variety of housing forms, including lock-off units, that allow housing to adapt to suit different life stages of residents;

d. Establishing the minimum provision of accessible and adaptable units and associated facilities (e.g., dedicated parking, barrier-free common areas); and

e. Reviewing zoning regulations to remove potential barriers to providing accessible and adaptable housing.

The suites have been designed to be barrier free and adaptable to allow residents to age in place, and to suit the needs of ever changing family circumstances. Our expectation is that this addition to the community will allow some current residents who may live in other housing types to remain in the area as their lives change, providing additional housing choice.

2.1.23 Advance community energy efficiency and reduce GHG emissions by:

a. Supporting transportation alternatives through housing location, design and facility provisions, and parking requirements;

b. Increasing the percentage of efficient building forms;

c. Requiring leading energy efficiency standards and considering site design and orientation;

d. Encouraging renewable energy.

The site is located close to transit. All parking stalls will be equipped with electric charging stations. A bike room amenity is located for residents on the ground floor.

The building form has been designed to be compact, with minimal stepping or unnecessary articulation in order to

improve efficiency. The building form and orientation allows for optimal solar exposure for on site solar energy generation.

Supporting tourism and visitors

2.3.13 Support placemaking through an attractive public realm and experience by:

a. Incorporating inviting public spaces in village and town centres;

The site is located between the West Vancouver Community Centre to the North, and the Weston Park to the south which provides public access to the Centennial Seawalk Trail. As such, a corner pocket garden with integrated seating will be provided to serve as a link between these two areas. This will provide a welcome moment of pause and rest for people traversing the slope from the waterfront.

The building form lifts at the ground floor to create a more generous landscaping areas, add articulation at the ground level, and to provide covered barrier free access between the resident open spaces and the public realm.

Enhancing network accessibility, safety and efficiency

2.4.14 Incorporate universal access and age-friendly design principles in sidewalk, pathways, transit, and road improvement projects for pedestrians and cyclists of all ages and abilities (e.g., accessible pedestrian signals, tactile walking surface indicators, appropriate curbcuts and letdowns).

All site improvements will follow best practices for accessibility, safety and efficiency.

Promoting sustainability and innovation

2.4.24 Provide infrastructure for electric, alternative-fuel, and low-emission vehicles, including charging stations as a requirement of new development and preferential parking options.

All parking stalls will be equipped with electric charging stations.

Applying best practices for municipal utilities -

i) Water conservation

2.5.7 Encourage use of development practices, landscape designs and built systems that reduce water demand and consumption.

Water will be collected from both the site and rooftop through landscape and pervious paving strategies. Planting will be native to the area and drought resistant. Aggressive potable water reduction strategies will be employed to limit consumption.

ii) Waste management and recycling

2.5.10 Expand organics and food waste reduction through education and on-site composting and reuse.

2.5.11 Facilitate reductions in demolition waste through source separation and diversion, including whole-building demolition or deconstruction.

The existing building will be dismantled and recycled as much as possible. The parkade will contain an on site composting and recycling room.

iii) Sewage and Drainage Systems

2.5.15 Employ low-impact storm and rain water management techniques such as infiltration, absorbent landscaping and natural environment conservation to mimic natural conditions and preserve pre-development conditions.

2.5.17 Employ green infrastructure or naturalized engineering strategies where possible to help manage anticipated increases in frequent storm events and associated flood risks.

Green roofs will be used on both the building rooftop and parkade roof to implement on site water infiltration and storage.

Mitigating climate change and building resiliency

2.6.22 Expand the use of green infrastructure through public and private development to enhance long-term ecosystem services that support multiple benefits (e.g., storm water management, air quality, carbon sequestration, water quality, and biodiversity).

The primary building material will be mass timber to store carbon in the structure. Storm water management will be implemented through pervious paving and green roofs to store and use water on site. A commitment to use zero fossil fuels on site will lead to dramatic GHG reductions over baseline targets. The air tight and high thermal performance of the Passive House envelope will make the building more resilient to extreme weather conditions.

2.6.23 Seek to incorporate renewable energy in public and private projects, and support the development of renewable energy systems as opportunities arise.

The project will implement solar photo-voltaic panels on the roof top for energy generation. A geoexchange system is being explored for passive heating and cooling.

Promoting trails and access to nature

2.7.16 Provide access to beaches and stream corridors where environmentally appropriate.

2.7.17 Improve safety, universal accessibility, and signage/wayfinding to parks, open spaces, and trails for community members of all ages and abilities.

The project proposes to add a seating area at the corner, enhancing the public realm on the pedestrian link between the community centre and the Seawalk Trail.

Enabling an active community

2.9.3 Encourage the on-site inclusion of active open space and play opportunities and provision of privately owned public spaces with new multi-family and mixed-use development as appropriate.

The project will contain indoor and outdoor amenity and garden spaces for residents at the ground floor. Active transportation will be encouraged through the provision of convenient, secure, street level bicycle storage.

Embracing arts, creativity and lifelong education

2.9.6 Incorporate public art into both public and private sector projects to enhance public spaces and the walking and cycling environment.

The core wall to the west has been identified as a possible area for public art as it can been seen from both Bellevue Ave and from The Centennial Seawalk Trail.

The provision of a shared multi purpose room at the ground level will provide an important flexible space that may be used by residents in a variety of ways including fitness, performance and art.

8.6 OFFICIAL COMMUNITY PLAN COMPLIANCE - BUILT FORM GUIDELINES

The site falls within the boundaries of the Ambleside Apartment Area as defined under the Built Form Guidelines for Development Permit Area Designations. Guidelines BF-B 4.

Site

I. Context and Site Design

a. Encourage renovation and conservation of buildings and features of heritage character;

Not applicable to this project.

b. Situate buildings to maximize views while minimizing impacts to surrounding buildings' views.

Building massing and glazing deployment has been considered to maximize views towards the south. The massing respects the 45˚ Building Height Grade line.

c. Minimize obstruction of views from public pedestrian areas, common living areas of other developments, and from existing residential units.

See view impact studies for further information.

d. Enhance the quality of streetscapes through the overall design of development.

The current development is enclosed behind a solid wood fence. The new development will improve the surrounding streetscapes by providing a well designed and garden-like public realm.

e. Encourage pedestrian amenities, such as courtyards, within and adjacent to apartment developments.

The building incorporates an entry courtyard as well as a corner pocket garden to link it to the larger pedestrian thoroughfare between the community centre and Weston Park which provides public access to the Centennial Seawalk Trail.

f. Link ground level open spaces to adjacent streets, sidewalks and pathways.

The building features a stepping massing along Bellevue Ave and is lifted at the ground floor in order to maximize the public realm and link resident open spaces to public access areas.

g. Encourage the use of integrated public art compatible with adjacent development and street patterns to enhance the pedestrian experience.

The pedestrian experience is being enhanced with a generous corner garden at the north west corner of Bellevue and 22nd.

h. Bury utility wires underground where economically feasible.

To be considered alongside rezoning application.

II) Building Design

a. Vary building mass to minimize its scale.

The building steps along Bellevue, following the property line to both provide more open space at the public realm and to minimize the building scale. Along 22nd St, the composition of the facade likewise breaks the massing down into smaller elements.

b. Address the compatibility of scale between new buildings and existing adjacent buildings.

The height, scale and separation between the adjacent building to the west is comparable to other projects in the immediate surrounding blocks. The proposed massing was sensitively scaled to create a gradient from the lower building to the south to the larger buildings to the west and north.

c. Encourage the use of high quality materials.

The project is committed to using high end healthy materials on both the exterior and interior of the building, including elements of the mass timber structure being exposed.

d. Detailing should be designed in keeping with the character of the building and landscape.

Vertical divisions have been added to the facade to follow the structural rhythm of the building. Horizontal elements are implemented to add shadow and texture, while reducing the scale of the massing. Elements such as wood soffits and screening have been added to highlight the fact that the building is built of mass timber, as well as tie into the west coast aesthetic of West Vancouver.

e. Use building mass to emphasize the entrance to buildings.

The building has been lifted at the ground floor to create a generous porte cochere and entry area.

f. Entries should be visible, clearly articulated, and accessible.

The main entry is located off of Bellevue Ave. The entry is articulated by the stepping facade on either side. Entry off of Bellevue

Ave was chosen to work with the site topography to keep the entry accessible.

g. Encourage terraced buildings adjacent to the shoreline.

Due to tall trees to the south, the massing has not been stepped in favor of maximizing views and optimizing the roof top for solar Photovoltaic arrays. Furthermore, as the project is pursuing Passive House certification, simplified forms perform better for energy use reduction.

h. Avoid blank or undifferentiated facades at the ground level.

The ground level is articulated by soffit covered pedestrian access connecting the resident outdoor amenity to the main entry. The ground floor contains both a resident multipurpose room and bike amenities. The public realm with contain generous landscaping.

i. Screen roof top mechanical equipment from neighbouring properties

Mechanical equipment on the building will be minimal as the project is Passive House and is implementing individual heat recovery units within each home. They are located in a screened room next to the exterior exit stair. The rooftop will have solar panels which are arranged to be an asset, highlighting the buildings sustainable qualities rather than an eyesore.

j. Encourage private outdoor living space for each unit.

Each home has an outdoor deck to the south to maximize access to daylight and water views.

k. Design buildings and landscape elements to minimize shading, and intrusion on privacy of adjacent buildings.

See shadow studies page 43. The core has been situated so that minimal glazing is deployed on the west side of the building to eliminate overlook to the adjacent building.

l. Provide detailing and articulation, especially at eye level.

The building mass is lifted and articulated at the ground floor to provide covered pedestrian walkway and drop off areas. Furthermore, landscaping will be deployed throughout the public realm to add visual interest and layering to create a sense of generosity.

m. Site and screen garage entrances, mechanical equipment and garbage bins, to minimize visual and acoustical impacts on adjacent properties and the streetscape.

The parkade uses the natural grading of the site to minimize appearance from the public realm. The parkade is screened. All mechanical equipment and garbage bins are located within the parkade and not visible from the street.

III) Landscape

a. Integrate landscape features and elements with the adjacent streetscape, use established vegetation where feasible, and provide a mature and varied appearance upon construction completion.

A landscaped entry garden as well as a corner pocket garden with integrated seating have been planned for the development.

b. Avoid landscaping elements that inhibit pedestrian or barrier free access along sidewalks or towards buildings.

All site improvements will provide barrier free access to the common areas.

c. Maximize the use of roof spaces for roof gardens and common areas.

The rooftop is currently planned for solar panels and energy generation. In lieu of a rooftop garden, each home has a generous outdoor deck. Furthermore, resident indoor and outdoor amenity space has been provided on the ground floor to the south.

d. Minimize the scale of apartment buildings at ground level with the use of trelliswork and other landscape features.

The ground floor has been lifted to minimize the scale at grade, provide covered pedestrian access and expanded landscape areas. Using a layered approach, a variety of scale in planting, combined with a range of species, will create a sense of invitation to the landscape.

e. Minimize glare and light spill to surrounding properties through design and siting of exterior lighting.

The service core was purposefully placed to reduce glazing along the west side of the building to reduce overlook and glare to the neighbouring property. Exterior lighting will be designed to reflect these parameters as well.

IV) Circulation/Parking

a. Locate parking underground to maximize ground level open spaces for landscape elements and treatments.

The parkade is situated underground with the entrance to the south of the site.

b. Encourage underground garage entries to provide an appealing entrance from the streetscape with the use of planters and/or trellis structures.

The parkade entry is underground and integrated with the landscape design.

c. Discourage large expanses of ground level paved parking, particularly when visible from or directly adjacent to a street. Where ground level parking is needed, provide landscape elements such as fencing or planting to visually break up and screen parking from public streets and neighbouring properties, improve natural drainage, and highlight pedestrian routes.

There is no ground level parking included in the project.

d. Design underground residential parking to be readily accessible and easily used by residents.

All parking is located on one level. The core is centrally located so as not to be far from any of the parking stalls. Parking stalls are a mixture of regular stalls and car lifts to provide options for residents. An unreserved accessible stall has been located next to the core.

e. Ensure that site circulation is accessible to persons with disabilities.

The site will provides barrier free access at all shared areas such as the front entry, the resident amenities at ground level and common amenities in the parkade such as storage rooms and garbage/ recycling sorting.

f. Share access/curb cuts between buildings where possible.

Existing curb cuts have been maintained where possible, shared access is not contemplated.

g. Minimize the width of curb cuts where possible.

Curb cuts will follow city engineering guidelines.

h. Design and situate garage doors so that they are not a dominant feature of the streetscape.

Garage doors are located underground in the parkade.

i. Encourage the use of bicycles and the provision of bicycle storage areas.

Bike storage for residents has been provided at street level.

8.7 WEST VANCOUVER FOUNDATION - VITAL SIGNS COMPLIANCE

Vital Signs is a community check-up led by community foundations and coordinated by Community Foundations of Canada that leverages community knowledge to measure the vitality of our communities, identify significant trends, and support action towards improving our quality of life.

West Vancouver Community Foundation
Vital Signs Report 2016 (page 4)

Since 1979, the **West Vancouver Community Foundation** has worked to leverage the generosity, talent, and commitment of our residents to build a stronger, more caring and inclusive community. Our vision is a healthy and vibrant West Vancouver, where everyone is valued, contributes, and feels they belong.

West Vancouver Community Foundation

Vital Signs Report 2016 (page 4)

VitalSigns®

WEST VANCOUVER COMMUNITY FOUNDATION

Vital Signs Report 2016

The Vital Signs Report 2016 identified 10 key issue areas that serve as indicators of the community. The goals of the report are to:

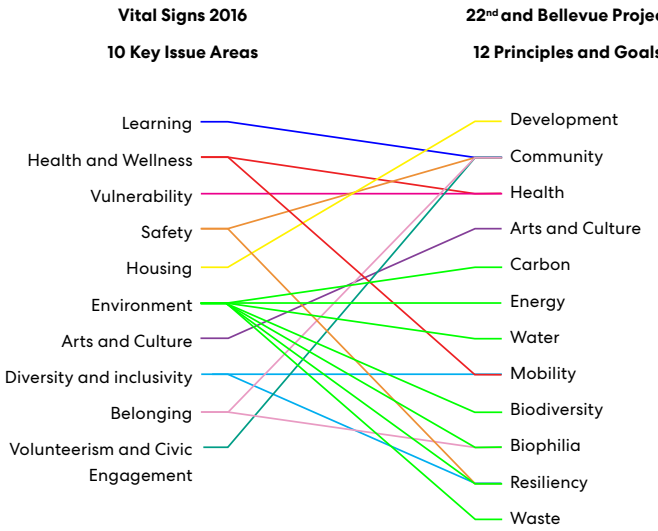
- Highlight areas to encourage further dialogue and response from institutions, public leaders, charitable organization and citizens.
- Encourage cross-sector, holistic thinking on the overall vitality of our community and provide impetus from cross sector initiatives
- Build community capacity through shared knowledge for good decision making.

Project Overarching Principles and Goals

At the onset of the project, Delta Group and Perkins and Will held a design charrette to establish a holistic set of principles and goals that would establish the foundation of the project and influence every decision. The intent of setting these principles and goals was to:

- Ensure alignment of values within the project team
- Show leadership to change the local development industry and the way we build.
- Create bold and inspiring architecture with an urgent environmental imperative.

Many of the key issue areas identified in the Vital Signs Report 2016 have a direct relationship and alignment with the principles and goals set out for the project.



Vital Signs Report 2017

The Vital Signs Report 2017 took a deep dive into one of the 10 Key issues identified in 2016's report - Belonging. The report focused on the topic of belonging by delving into 3 main topics: Belonging and Contribution, Diversity and Inclusion, and Housing Diversity and Attainability. The project adheres to the goals outlined in the report in the following ways.

I. Belonging and Contribution

Belonging and contributing could be more intentional and supported through designing public spaces for more formal and informal connections. Our library, community centres, schools and the Harmony Arts Festival do this well.

The project proposes to strengthen the public realm by providing a corner pocket garden with integrated seating, serving as a link and moment of pause between the community centre to the north and the Centennial Seawalk trail to the south.

West Vancouver has a high concentration of seniors in a community a with low walkability score (43 out of a scale of 100), as well as low transit accessibility. In addition, 26% of our seniors 65 and older live alone. These are some of the factors that limit the ability to maintain independence and social contacts and supports, and increase the risk of social isolation and its negative effects on health and well-being.

The site is located close to amenities, transit, and the West Vancouver Community and Seniors Centres. Each suite is one level and barrier free which would allow seniors to age in place

II. Diversity and Inclusion

More generational and socio-economic diversity is needed in our community – many of us can't afford to "age in place" or continue living near our family.

The 2017 Vital Signs Housing Survey highlighted that 29% of respondents considering moving to West Vancouver and 59% of current residents who would consider relocating within West Vancouver would be looking at an apartment condominium as the housing type they would be the most interested in.

Each suite of this project has been designed to be barrier free and adaptable to suit all kinds of changing family circumstances. The net size of each home falls within the size range listed in the survey as being desirable.

Indoor and outdoor public spaces, as well as neighbourhoods, can be designed to encourage connecting and help make people feel included. Libraries, schools, community centres and even shopping centres are valuable venues, and arts, festivals, sports, food, stories, and dialogue are important activities for creating awareness, building bridges and fostering inclusion.

The outdoor public spaces are intended to provide community connectivity to the larger neighbourhood. The ground level incorporates a multipurpose room and garden areas for social gatherings of residents.

III. Housing Diversity and Attainability

Increasing density and diversity of housing stock needs to be a priority. More secondary suites, infill or coach houses, multi-family dwellings, purpose-built rentals, and smaller homes should be encouraged through zoning and incentives.

The suites add to housing diversity as they are atypical for apartment buildings with only one home per level. They will appeal to those looking to age in place and downsize, while still keeping the feeling of a single family home.

Development and re-development needs to aim for "20 minute neighbourhoods", where amenities are within a 20 minute walk or bicycle ride from home. Increased density, mixed use developments, public spaces designed for connecting, car sharing, better cycling infrastructure, improved transit, and increasing walkability with more sidewalks would be features of these "community nodes".

The project proposes to add gentle density to a neighbourhood already zoned for multifamily development. As an infill site, the building will be consistent with the form and density of surrounding buildings.

The site's proximity to amenities, community services, and transit make it an ideal spot to add increased density. The project promotes connectivity by providing a ground floor integrated into the larger public realm. The corner pocket garden will strengthen the pedestrian path between the Seawalk and the West Vancouver Community Centre. Resident bike parking will be provided at grade to encourage multiple modes of transportation.

Housing and neighbourhoods need to be designed for better accessibility and mobility, including railings, ramps, more sitting areas, safer street crossings, and other features that make it easier for not just those with walkers, wheelchairs, and baby strollers, but for everyone to get around.

Both the homes and site will be designed to be barrier free and accessible. Different modes of mobility will be encouraged by providing residents bike storage at grade.

33% of West Vancouver residents surveyed expect to move from their home in the next five years, with the key driver being financial and economic reasons (primarily stated by those under 65 years of age). Those anticipating a move in more than five years primarily cite downsizing and health reasons.

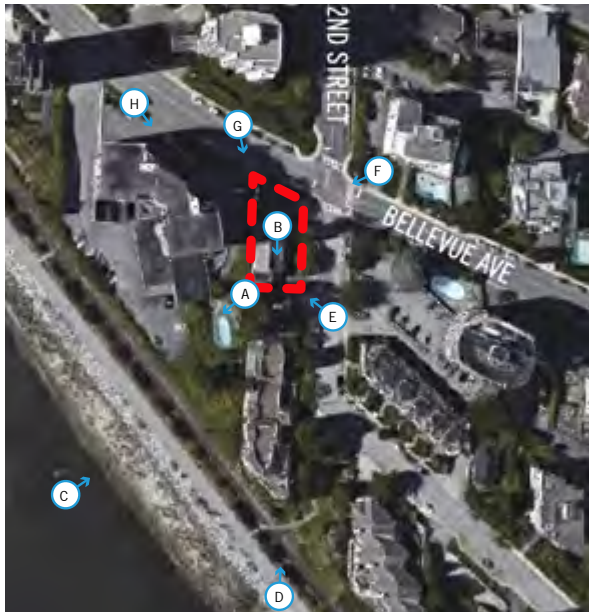
The net size of the units falls within the size range listed on the survey as being desirable.

The 2017 Vital Signs Housing Survey highlighted that when considering a move, current residents most considered proximity to: shops and restaurants (43%), recreation and fitness facilities (43%), parks and trails(43%), and access to transit (20%) as the most important factors when considering a new neighbourhood.

The project is situated close to all of the listed desirable amenities.

8.8 EXISTING SITE PHOTOS

The Site is located at the corner of 22nd St and Bellevue Ave in Ambleside, West Vancouver.



PROPERTY LINE

A) View looking south from south west corner of site.

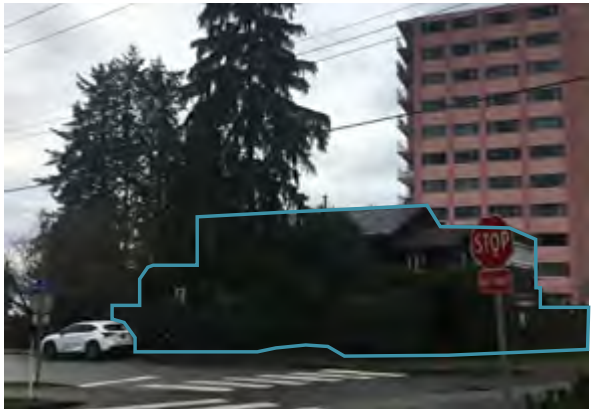
B) View looking south from middle of site.

C) View looking north from south west of site

E) View from south east corner of site

G) View north west corner of site

D) View looking north from south of site.

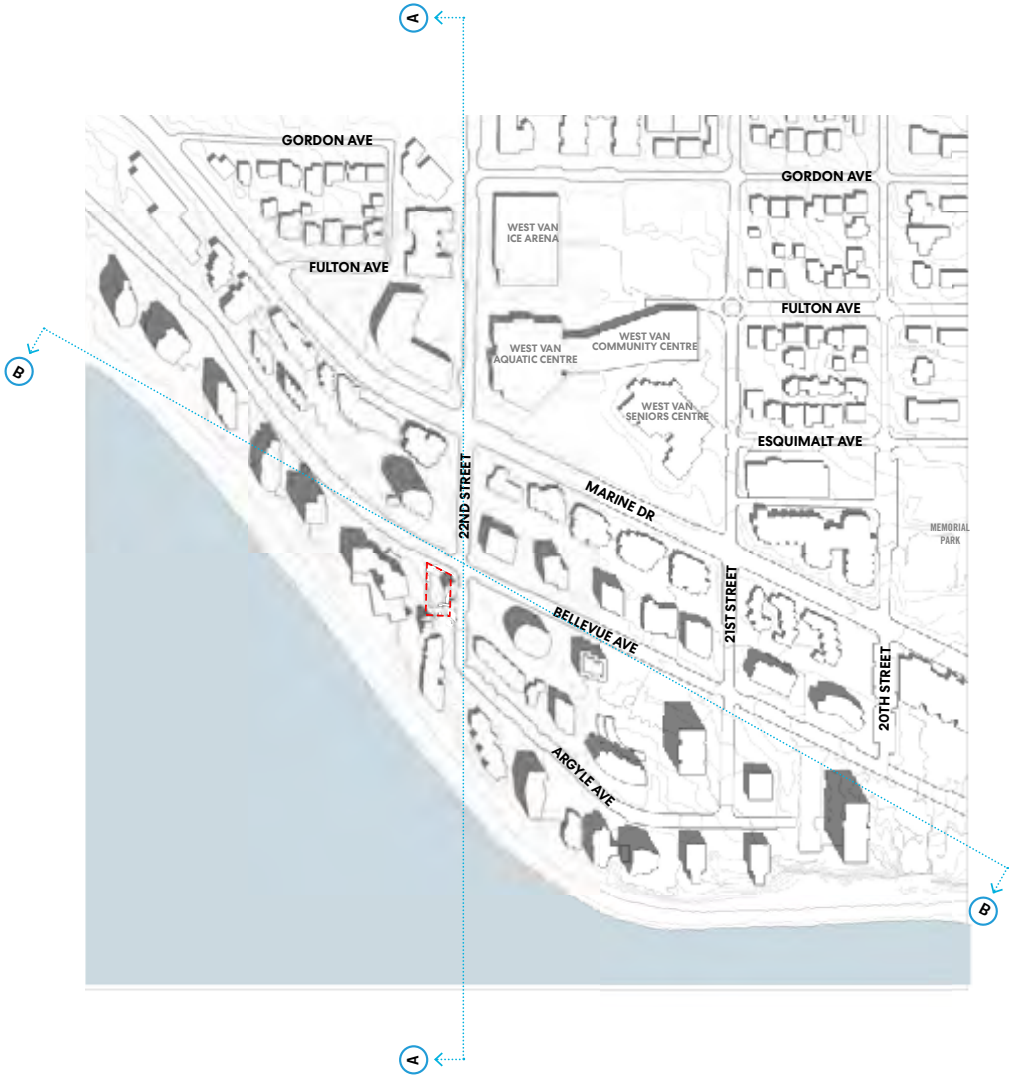


F) View from north east corner of site

H) View looking east from Bellevue Ave

8.9 SITE SECTIONS

- The site is located ± 15m above sea level and slopes down towards the water.
- There is a ± 2.7m grade change across the site down 22nd Ave in the north-south direction. This will be utilized to position the entry into the parkade.
- In the east-west direction, the site is relatively flat. The entry to the building will be situated along Bellevue to ensure an accessible barrier free entry.

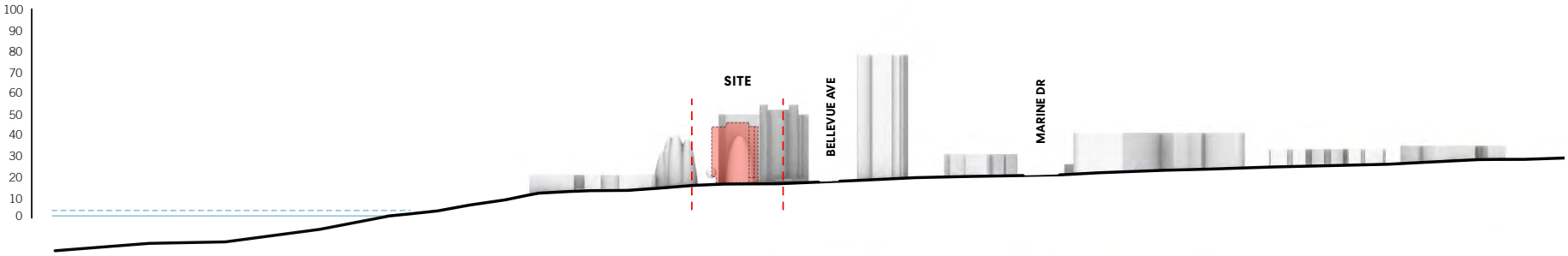


PROPERTY LINE

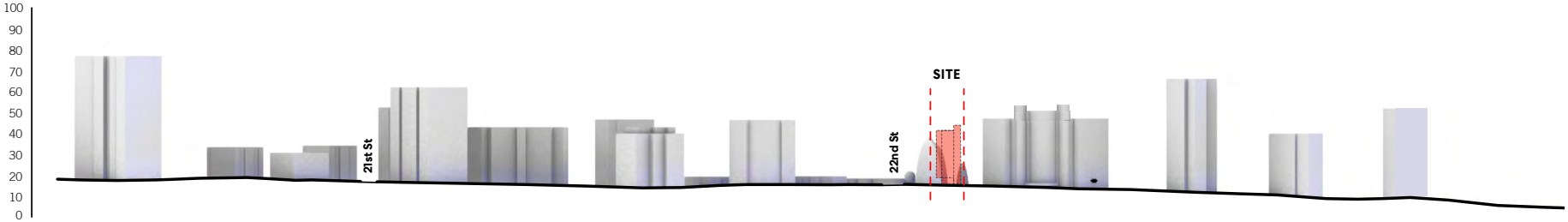
1:4000

10 25 50 100m

SECTION A



SECTION B



PROPERTY LINE
CURRENT HIDE TIDE
PROJECTED 1M SEA LEVEL RISE

1:2000
10m 25m 50m 100m

8.10 SITE PHOTO MONTAGE

22nd Street

Bellevue Ave

PROPERTY LINE

8.11 SURROUNDING BUILDING TYPES

2187 Bellevue Ave

2167 Bellevue Ave

2145 Bellevue Ave

2190 Bellevue Ave

2222 Bellevue Ave

2203 Bellevue Ave

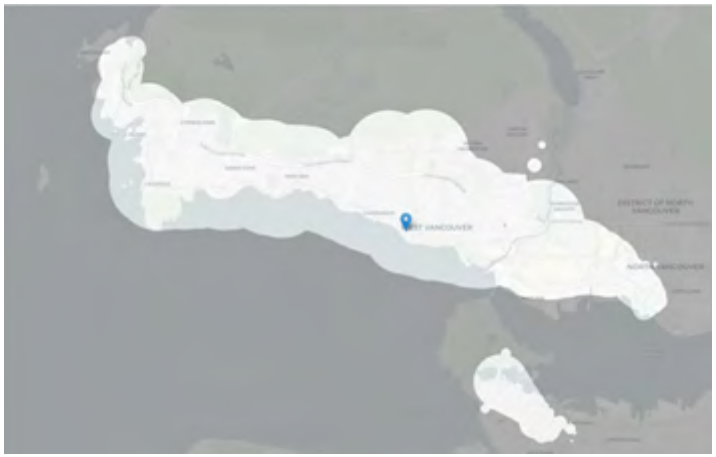
8.12 TRANSIT ACCESS

The site is centrally located, close to the West Vancouver Community Centre, the Centennial Seawalk trail and minutes away from Ambleside's commercial core to the east.

5 minute transit shed

10 minute transit shed

15 minute transit shed



20 minute transit shed

Map source: Mapnificent (www.mapnificent.net)

8.13 WALKABILITY

Map source: Walkshed (www.github.com/atogle)

8.14 WIND AND SUN CHARACTERISTICS

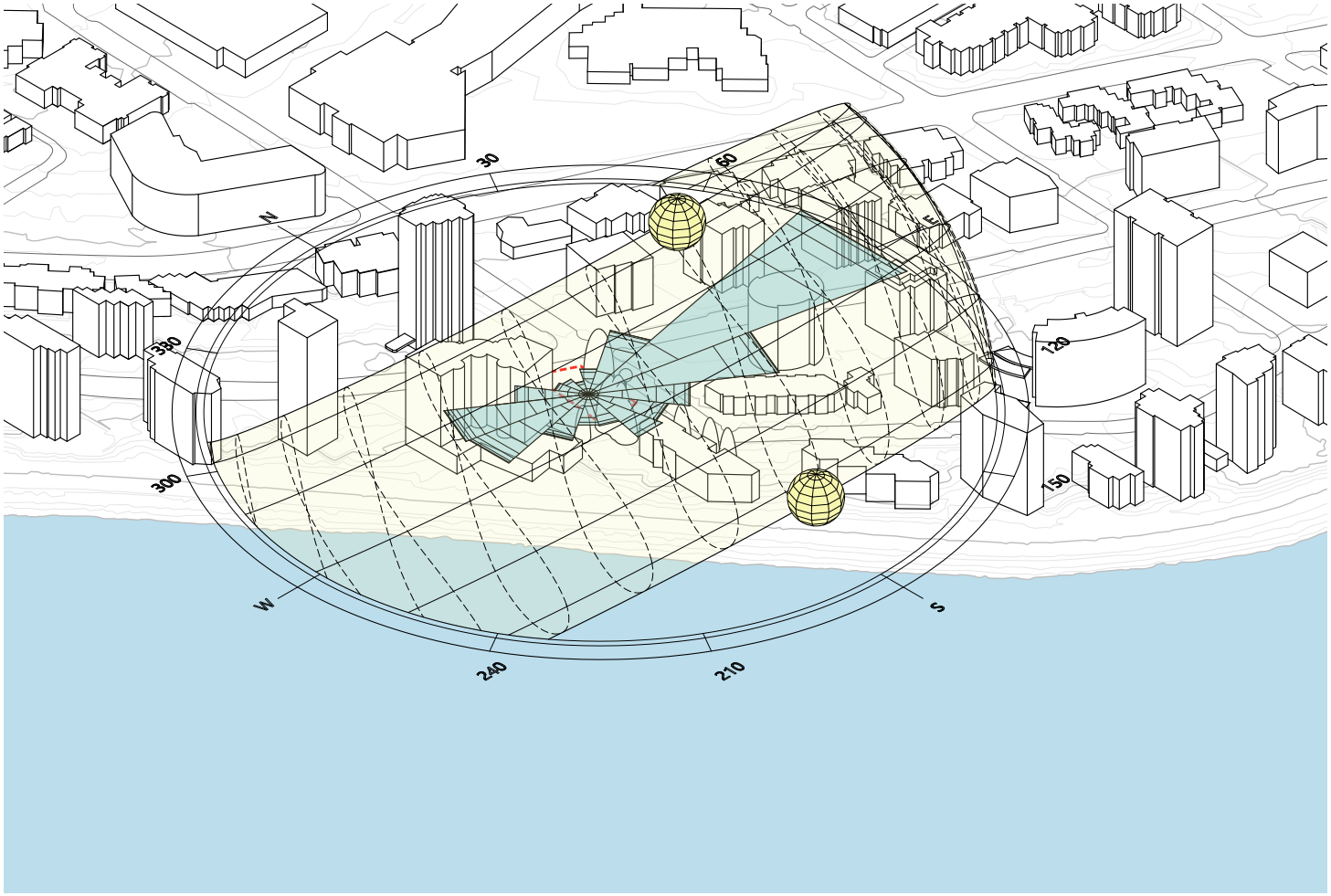
This diagram shows the relative position of the sun throughout the year at hourly intervals. Understanding the solar geometry of the site will allow optimization of the massing to have the greatest positive influence on the site and buildings.

The teal wind rose regions on the ground plane communicate the prevailing winds expected at the site.

Positioning the project in relation to seasonal variations in the sun's path as well as prevailing wind patterns can increase the energy efficiency and make the project more comfortable to live in and less costly to operate.

Winds are based on weather station data from Vancouver. Local effects are expected to differ slightly due to the proximity of the site to the open ocean.

In winter, particularly near the winter solstice, the sun will not rise significantly above the trees to the south. Detailed solar analysis will be required to determined the access to daylight and duration of sun expected.



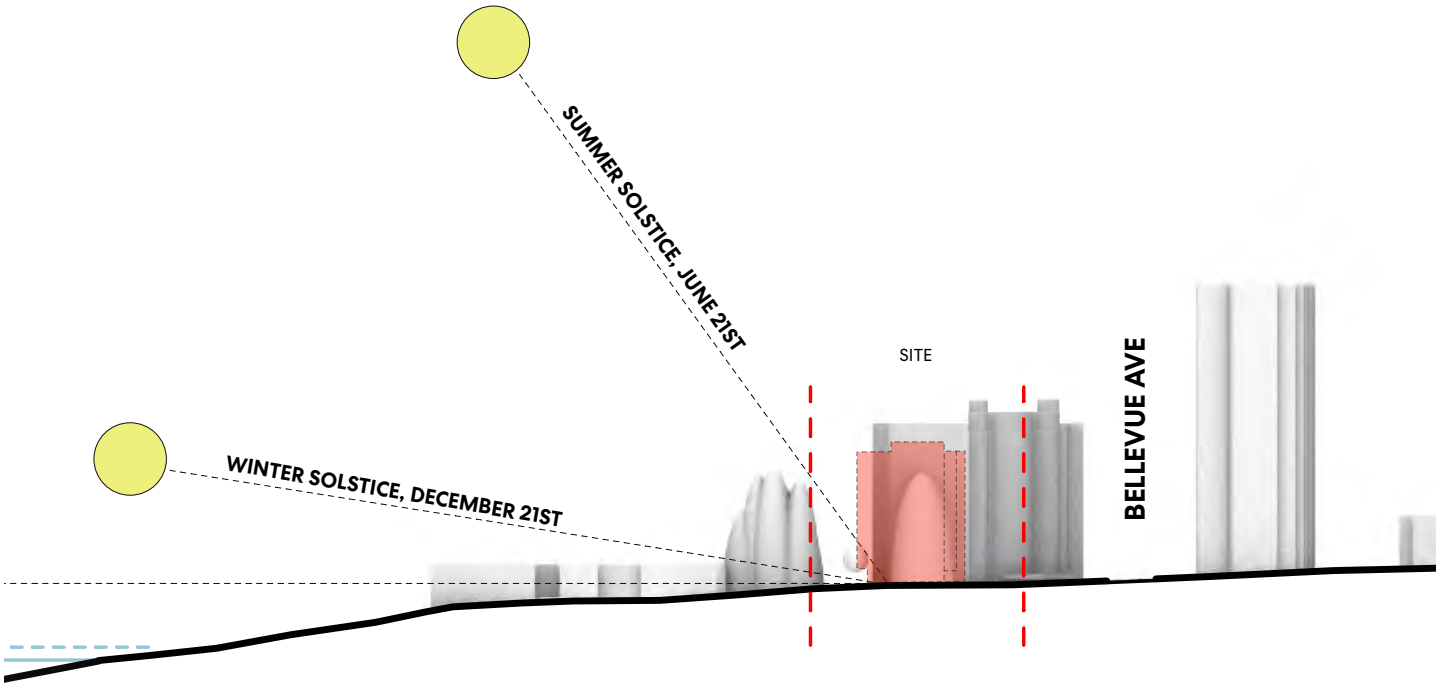
Sun Path

Wind Rose

8.15 SOLAR ACCESS

Due to the low angle of the sun in winter, PV placement on the building will have to be optimized to allow solar gain year round.

The grove of trees directly to the south of the site as well as shadowing from the building to the west will have the largest impact on where PV panels can be located



1:5000

5m 10m 25m 50m

Project Commitments for Bellevue and 22nd

2021/10/01

Passive House

The project will be designed to meet Passive House requirements and apply for certification with the Passive House Institute.

A Preliminary Passive House Review was included in the rezoning package that shows that the project is tracking for certification under the current design. Upon approval of the joint rezoning/DP a certifier will be appointed and a PHPP model suitable for certifier review will be performed prior to BP.

On Site Energy Generation

The project will reduce reliance on grid source energy by generating electricity on the rooftop with photovoltaic panels.

Reduce Emissions

The project will aim to reduce operational carbon and greenhouse gas intensity by not using fossil fuels for operations. The project is proposing no natural gas connection for the homes, a low carbon energy system, and a back up power generator alternative (subject to AHJ approval).

Mass Timber

The project will aim to reduce embodied carbon with a proposed mass timber hybrid structure and will participate in the Provincial Tall Wood Early Adoption Initiative.

Energy Performance

The project will exceed step 4 energy code performance which meets the provincial definition of being net zero energy ready.

Energy Targets are as per below.

	TEUI kWh/m^{2}a	**TEDI** kWh/m2a	**GHGI** kgCO2/m2	**GWP** kgCO2/m2
PH	50[1]	12[1]	0.5-1 (1 year)[2] 30-60 (60 years)[3]	Will perform LCA. Targeting >40% reduction
Step 4	100	15	No Target4	No Target
Step 2 w LCES	130	45	3 (1 year) 180 (60 years)	No Target

1. Passive House measures net area, BC step code uses gross area so this is an approximate translation of the TEDI and TEUI numbers from PH Space Heating Demand and PER numbers.
2. Assumes all electric using heat pumps. This could go lower depending on PV usage.
3. We multiply annual GHGI by 60 to see comparison to embodied GWP number
4. No GHGI target (yet) for BC step code. Without a target the GHGI number could be quite high even at Step 4 levels depending on gas usage.

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