

WESGROUP

YAMAMOTO ARCHITECTURE

Groundswell
LANDSCAPE ARCHITECTURE

7525 CAMBIE STREET

MIXED-USE DEVELOPMENT

VIRTUAL OPEN HOUSE

FEBRUARY 1 - 21, 2021

PROJECT TEAM OVERVIEW



WESGROUP

Wesgroup Properties is a family owned and operated real estate development company with a proven history of innovation and award-winning design. Wesgroup has been recognized for their good social conscience, entrepreneurial spirit and long-sightedness.



YAMAMOTO ARCHITECTURE

YAMAMOTO ARCHITECTURE was founded in 1991 by Tomizo Yamamoto and has practiced extensively throughout the lower mainland for over twenty-five years. Yamamoto Architecture is recognized for its multi-family residential work and specialization in wood frame construction. In addition to multi-family residential work, Yamamoto Architecture has experience in a wide range of projects including commercial, mixed use, and single family residential.

Yamamoto Architecture works closely with clients to realize buildings that are well-built, efficient, and aesthetically distinctive.



Groundswell
LANDSCAPE ARCHITECTURE

Based in Vancouver, Groundswell Landscape Architecture is a small design studio that explores big ideas. Our work focuses on the design of spaces that creative positive change at both the neighbourhood and regional scales. We work collaboratively with our clients to create spaces that embody the spirit of the place and address broader societal issues such as climate mitigation, health, equality and livability. Each design response is distinct to its place and is the result of client, stakeholder and public engagement, as well as understanding of the program, knowledge and creativity.

PROJECT TEAM

APPLICANT

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LANDSCAPE

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GEOTECHNICAL

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TRAFFIC

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Phone: 604.936.6190

REZONING RATIONALE

We are proposing to rezone 7525 Cambie Street from C-1 to CD-1 under the Cambie Corridor Plan to permit the development of a six-storey mixed-use building with 76 apartment units and commercial at grade.

The 19,758 sq.ft. site is a single corner lot on the west side of Cambie Street and south of West 59th Avenue, with a frontage of approximately 126.7 ft. along West 59th Avenue and 129.8 ft. along Cambie Street.

A 2M dedication is provided along the length of the West 59th Avenue Frontage to allow for road widening and frontage improvements. Widened sidewalks in the form of SRWs are proposed along the commercial frontages on both West 59th Avenue and Cambie Street.

The proposal includes a total gross floor area of 74,309 sq.ft. of which 7,895 sq.ft. is commercial space.

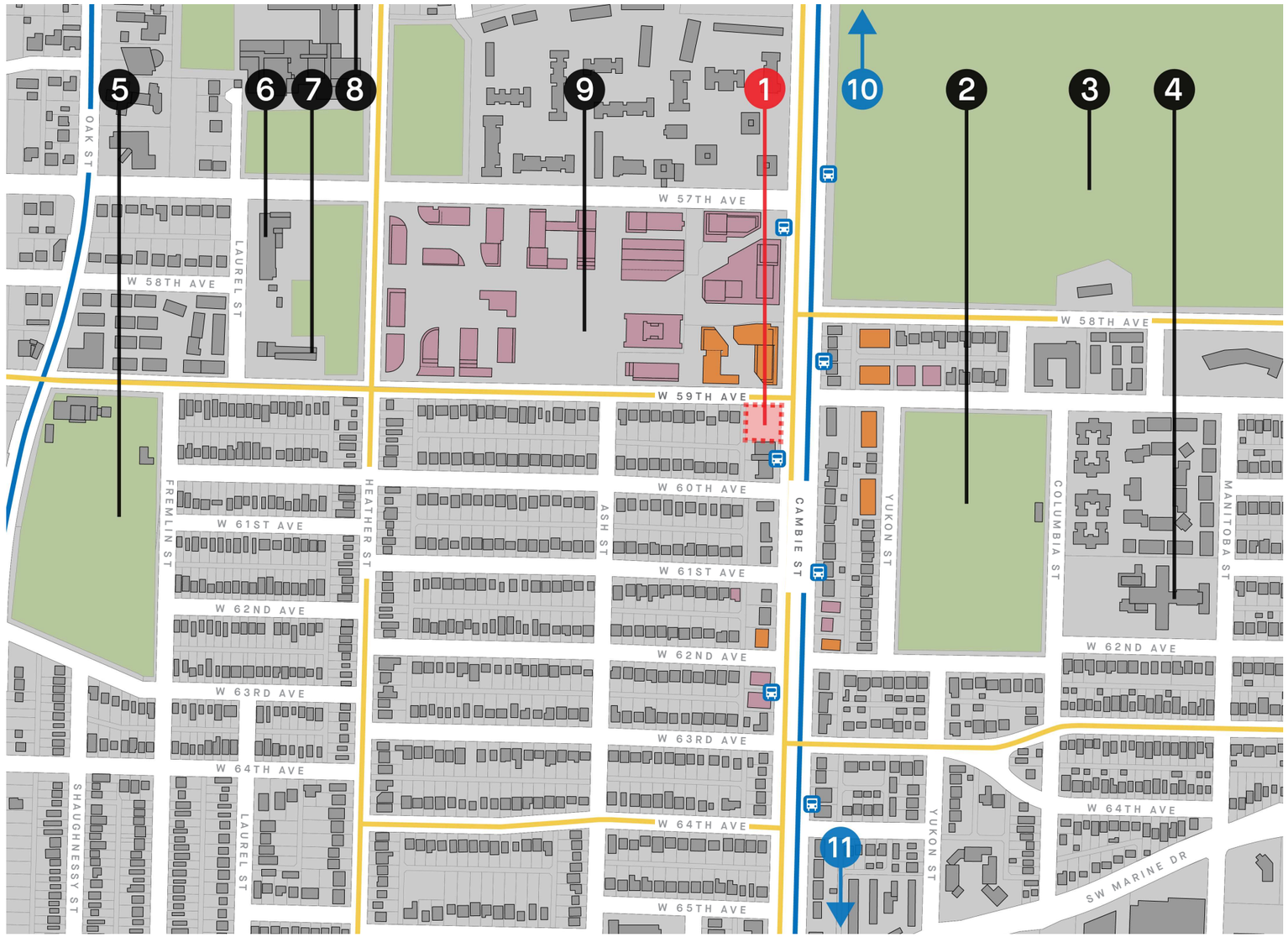
A total of 76 market residential units are proposed, including five ground-oriented townhouse units, three of which are two-level, three-bedroom rental units along 59th Avenue suitable for families.

A density of 3.54 FSR and a height of 80.60’ ft. is proposed. Three levels of underground parking accessed from the rear lane are proposed, with two Class B loading spaces at the lane.

APPLICABLE POLICY AND GUIDELINES

- Cambie Corridor Plan
- High-Density Housing for Families with Children Guidelines
- Green Buildings Policy for Rezonings
- Community Amenity Contributions
- Development Cost Levy By-Law

NEIGHBOURHOOD CONTEXT



1 SUBJECT SITE

2 WINONA PARK

3 LANGARA GOLF COURSE

4 ST. VINCENT'S HOSPITAL LANGARA

5 OAK PARK

6 SIR WILFRID LAURIER ELEMENTARY SCHOOL

7 IDEAL MINI SCHOOL

8 SIR WINSTON CHURCHILL SECONDARY SCHOOL

9 PEARSON DOGWOOD

10 LANGARA + 49TH SKYTRAIN STATION (1KM)

11 MARINE GATEWAY SKYTRAIN STATION (800M)

BUS STOPS

FTN BUS ROUTES

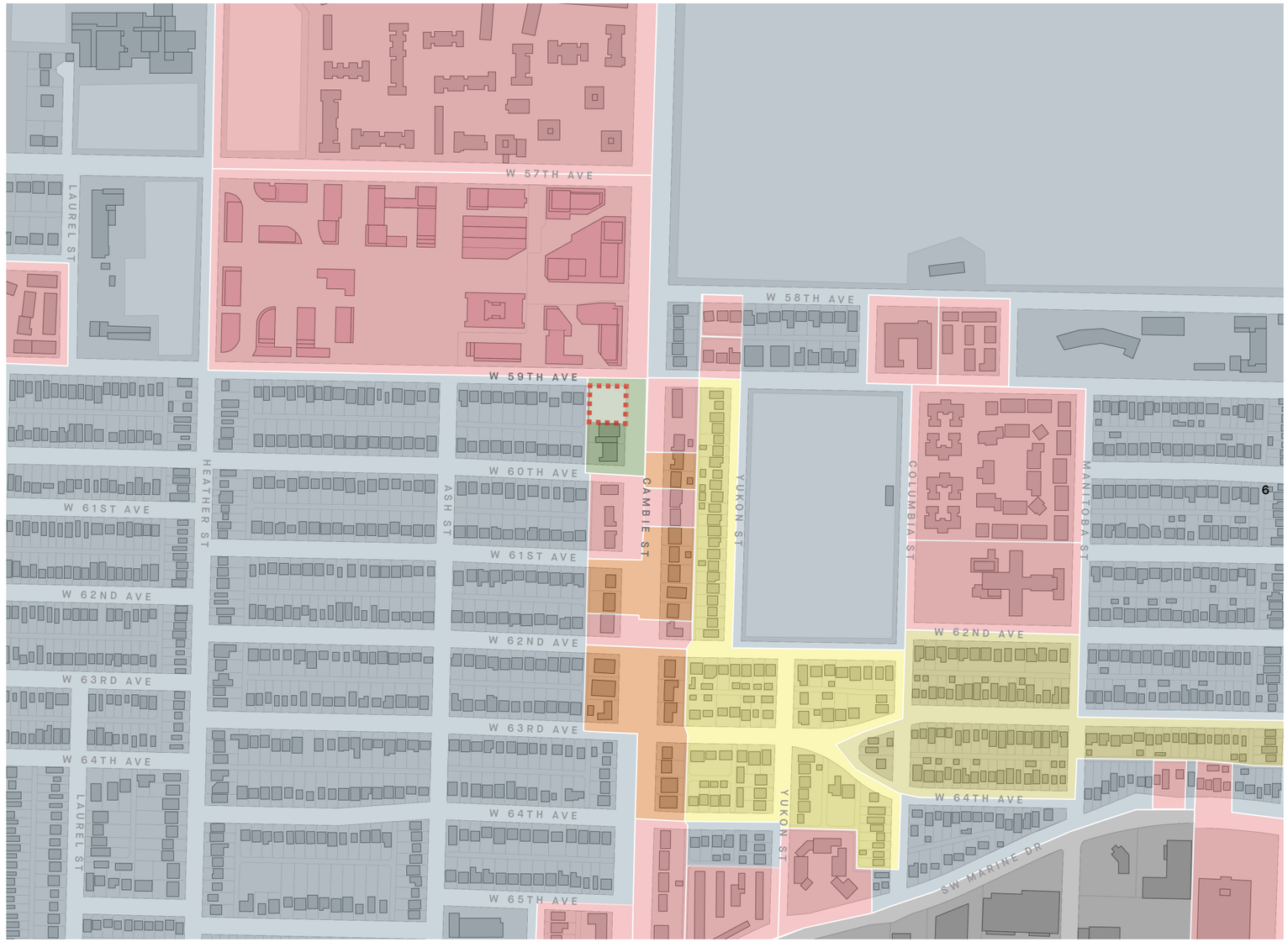
BIKE ROUTES

UNDER CONSTRUCTION

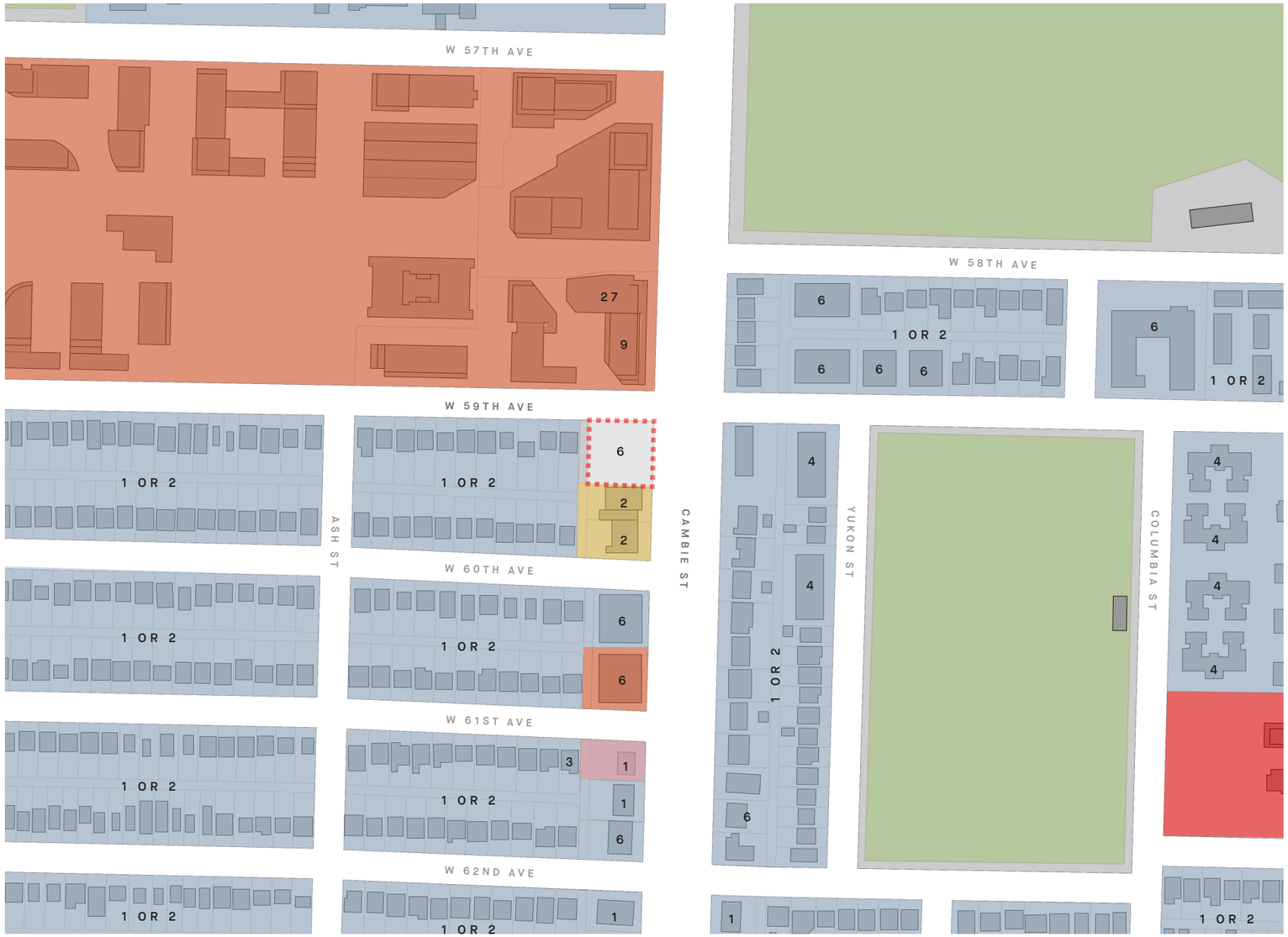
DESIGN IN PROCESS

PARKS OR GREEN SPACES

ZONING


W 57TH AVE
W 58TH AVE
W 59TH AVE
W 60TH AVE
W 61ST AVE
W 62ND AVE
W 63RD AVE
W 64TH AVE
W 65TH AVE
LAUREL ST
HEATHER ST
ASH ST
CAMBIE ST
YUKON ST
COLUMBIA ST
MANITOBA ST
SW MARINE DR
6
CD - 1
(PROPOSED)
CD - 1
C - 1
RT - 1
RM - 8
RM - 9
RS - 1
I - 2

BUILDING HEIGHT + USAGE



B

SITE PHOTOS



1 - VIEW ALONG W 59TH AVE AND CAMBIE ST LOOKING EAST



2 - VIEW ALONG W 59TH AVE AND CAMBIE ST LOOKING WEST



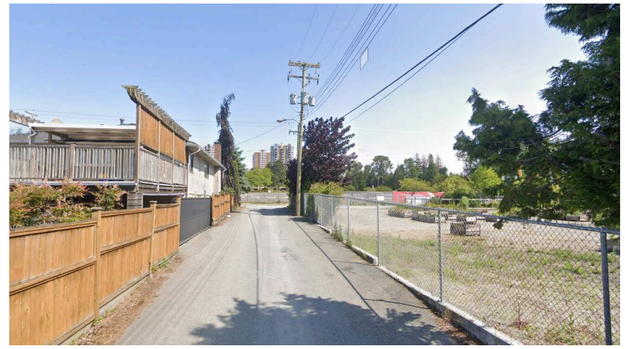
3 - VIEW ALONG W 59TH AVE AND LANE LOOKING WEST



4 - VIEW ALONG W 59TH AVE AND LANE LOOKING EAST



5 - VIEW ALONG LANE LOOKING SOUTH



6 - VIEW ALONG LANE LOOKING NORTH



7 - VIEW ALONG CAMBIE ST LOOKING SOUTH

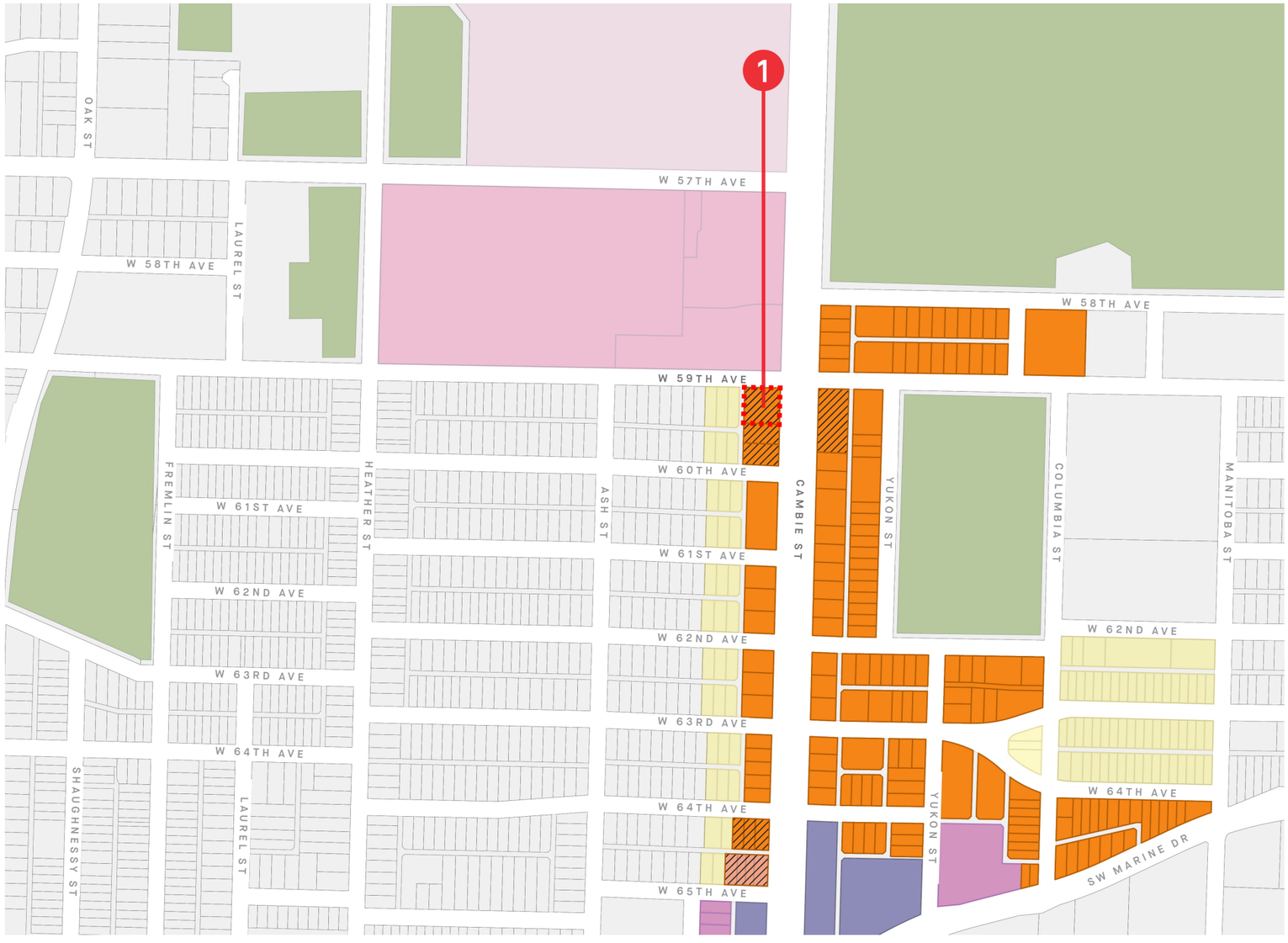


8 - VIEW ALONG CAMBIE ST LOOKING NORTH



KEY PLAN

CAMBIE CORRIDOR PLAN



The Cambie Corridor Plan outlines the development potential of the sites to the south and east of the site. The plan envisions up to six story mixed - use and residential development to the south of the site, and buildings that would follow similar massing to what has been already been constructed along Cambie Street further north. This map illustrates the possible height and building typology envisioned by the Cambie Corridor Plan.

- 6 STOREYS (PROPOSED)
- MIXED-USE (UP TO 6 STOREYS)
- APARTMENT (UP TO 6 STOREYS)
- PEARSON DOGWOOD (UP TO 28)
- TOWER (13+ STOREYS)
- APARTMENT (UP TO 12 STOREYS)
- MIXED-USE (UP TO 8 STOREYS)
- TOWNHOUSE (UP TO 3 STOREYS)
- PARKS OR GREEN SPACES

CAMBIE CORRIDOR TYPOLOGY

Six storey buildings within the Cambie Corridor are characterized by an emphasized step back from levels 4 to levels 5 and 6 behind.

In many cases a continuous slab edge or frame element defines the transition between levels 4 and 5. Materials and colours are varied between the base and upper levels creating a strong datum between the base and recessed upper floors. While some projects introduce a partial 5-storey street wall, the recessed upper floor is generally treated as a secondary volume.



HAWTHORNE
3373 CAMBIE STREET



CONTESSA ON CAMBIE
5355 CAMBIE STREET



HENRY
5393 CAMBIE STREET



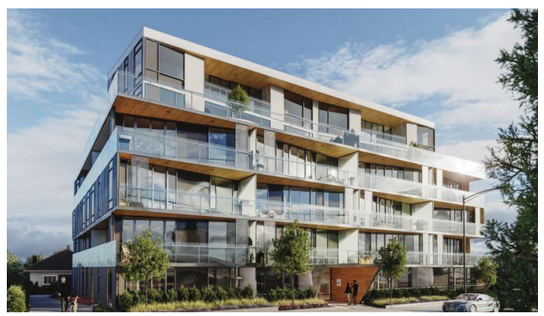
THE PARKER
305 WEST 41ST AVENUE



PARK HOUSE
477 WEST 59TH AVENUE



BELPARK
375 WEST 59TH AVENUE



WINONA
7638 CAMBIE STREET

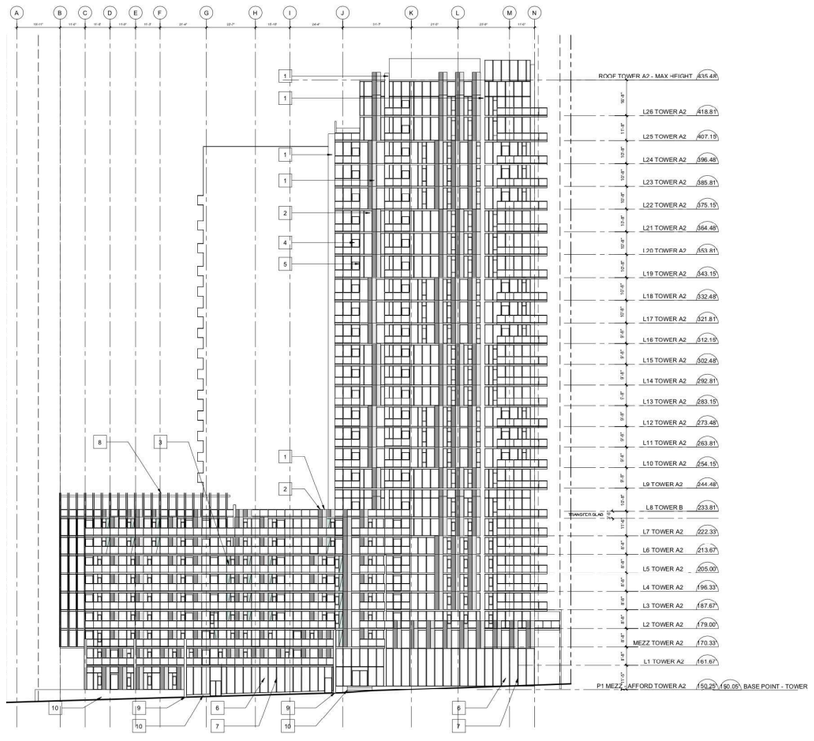


CAMBIE SIXTY TWO
7790 CAMBIE STREET

PEARSON DOGWOOD SITE



VIEW FROM WEST 59TH AVENUE



CAMBIE STREET ELEVATION

Directly to the north of our site is Parcel A of the Pearson Dogwood Site. This is a large-scale development under the Langara Gardens Policy, and as such does not comply with the 4 + 2 massing outlined for our site and much of the Cambie Corridor.

This site incorporates two towers with a 9-storey street wall immediately to the north of our site. The project is characterized by vertical planes of brick, linear balconies along Cambie Street, and off-set vertical panels. The scale of this development provides a unique context for the subject site.

OUR OPPORTUNITY

With this project our goal is to differentiate from the other Cambie Corridor projects and overcome the prescriptive nature of the Guidelines while acknowledging their intent.

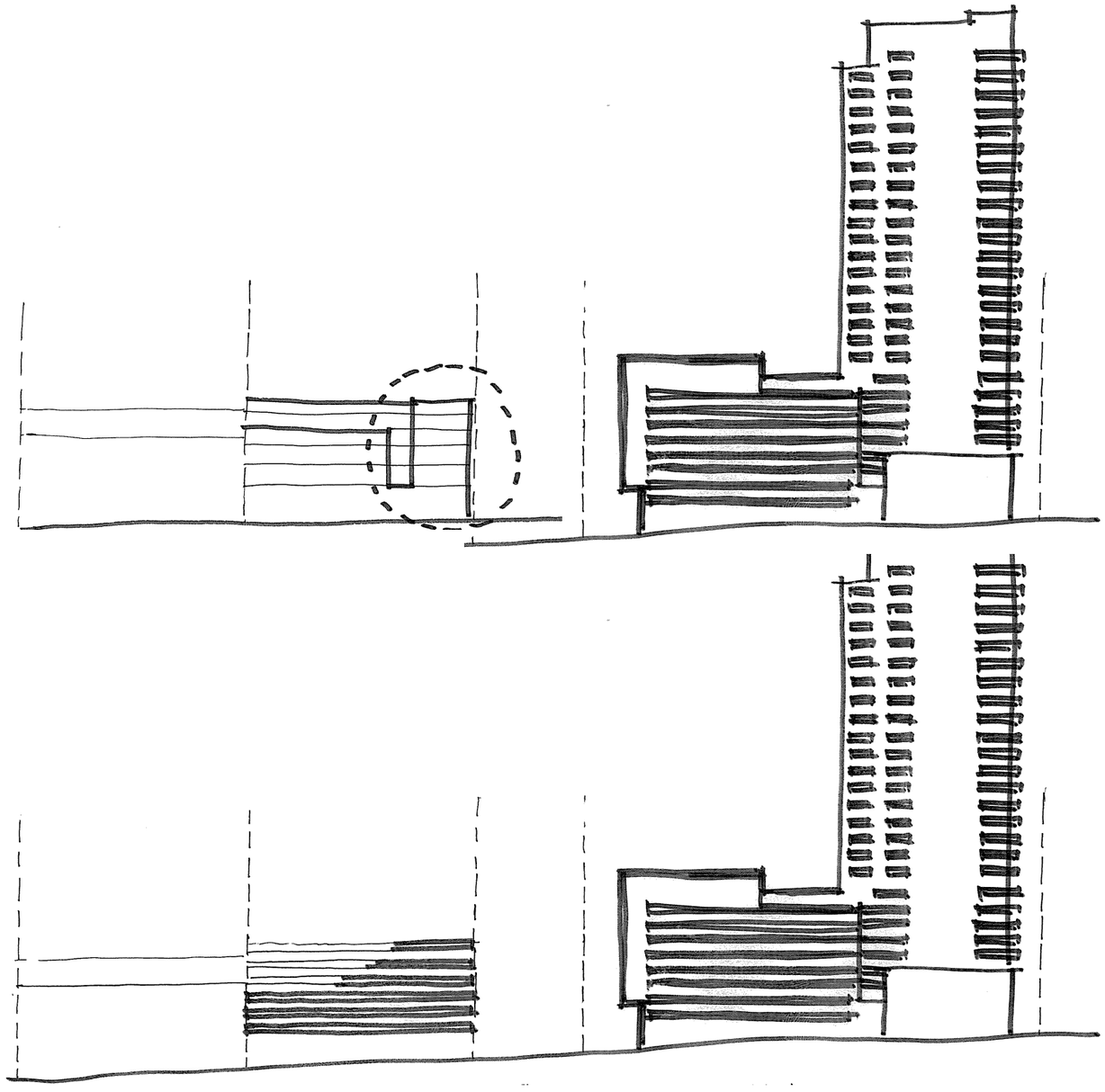
Given the scale and form of the Pearson Dogwood Site adjacent to ours, we have an opportunity to respond to the context, rather than simply execute the Guideline massing. The Pearson Dogwood development incorporates a 9-storey street wall to the north of our side, and provides us with a rationale to transition from a 6-storey street wall to a 4-storey street wall.

The proposed approach is slightly different than a small, 6-storey corner “tower” element, as was proposed on Main and 49th where the surrounding built context was not anticipated to exceed 6 storeys, and the street wall not anticipated to exceed 4 storeys. On Main and 49th, the corner tower element was thought of as a landmark marking the entrance to the Punjabi Market.

On this site, the conditions are markedly different. A small corner tower element will be dwarfed by the adjacent 9-storey street wall and will not function as a feature as the scale would be dwarfed by the adjacent development. We feel that a singular form is an appropriate way to transition from the large scale building to the north to the more typical 6-storey scale to the south.



MAIN STREET AND EAST 49TH AVENUE

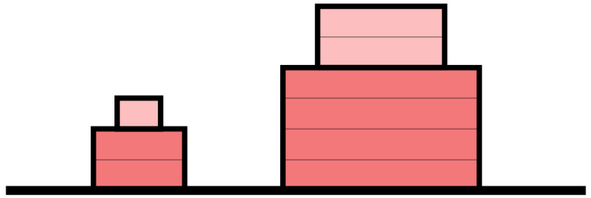


CONCEPT MASSING

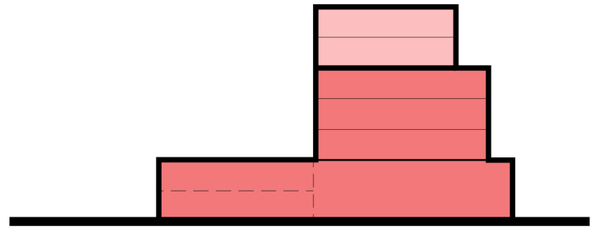
Our proposal attempts to overcome the ubiquitous building form that has been constructed to date in accordance with the Cambie Corridor guidelines. Rather than emphasize the two stacked boxes (4+2) of the guidelines, our approach is to create a singular form. The form responds to the scale of the Pearson Dogwood site to the north, while recognizing the scale of future development in line with the Guidelines to the south.

To respond to the adjacent nine-storey street wall, our proposal is six storeys straight up at the corner, but steps back per the Guidelines towards the south and west. In this way the proposed massing of the building is faithful to the step backs outlined in the Guidelines.

Linear balconies wrap the building, creating a single outer volume for the building outside of the stepped back massing of the building's thermal envelope. The balconies respond to the linear balconies on the Pearson Dogwood project, but in this case are used to simplify the overall building expression rather than as a compositional element.



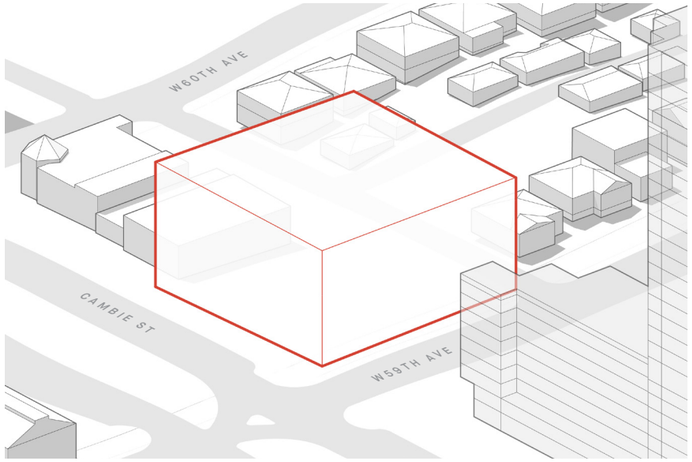
CAMBIE TYPOLOGY



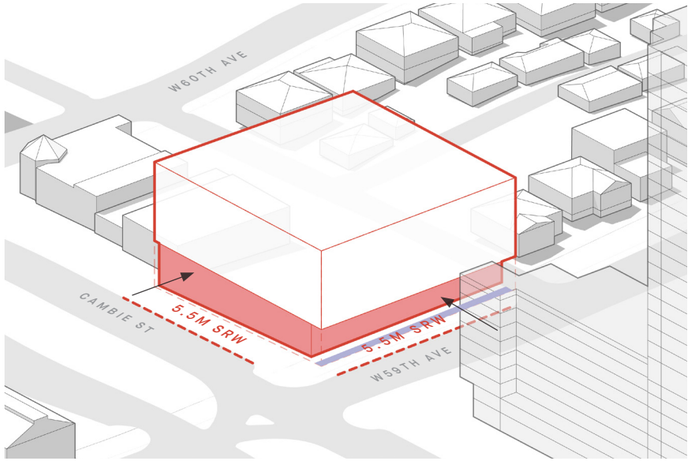
PROPOSED

SINGULAR FORM WITH PROPOSED BALCONIES

CONCEPT MASSING

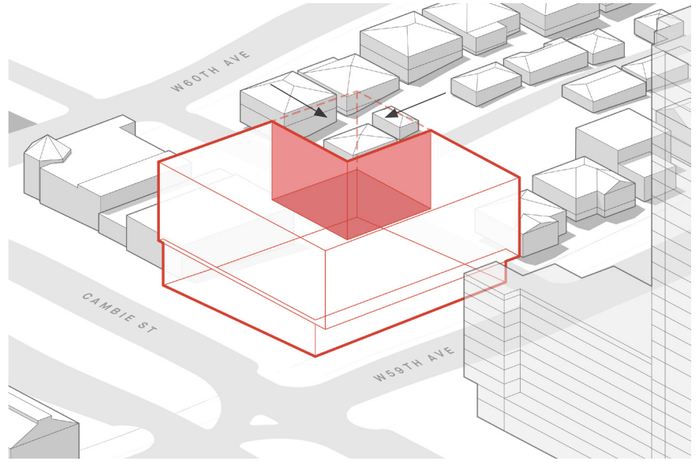


1. BASIC VOLUME

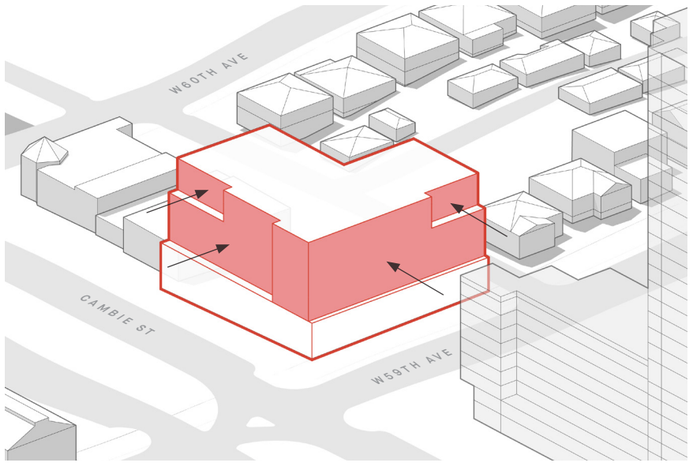


2. GROUND LEVEL STEPPED BACK TO ACCOMODATE 5.5M SRW IN FRONT OF COMMERCIAL FRONTAGES

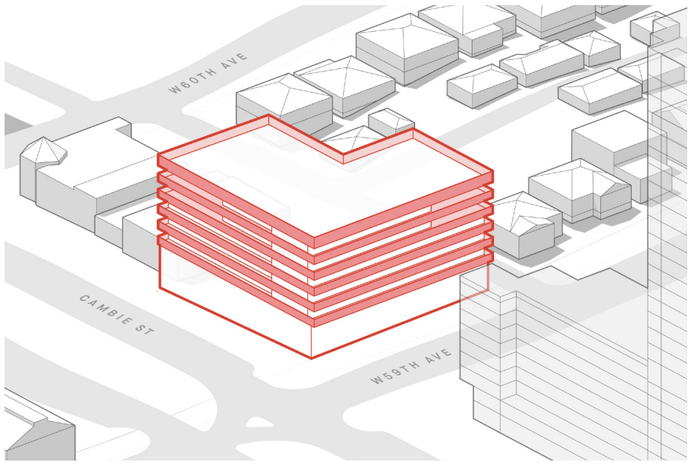
2M DEDICATION



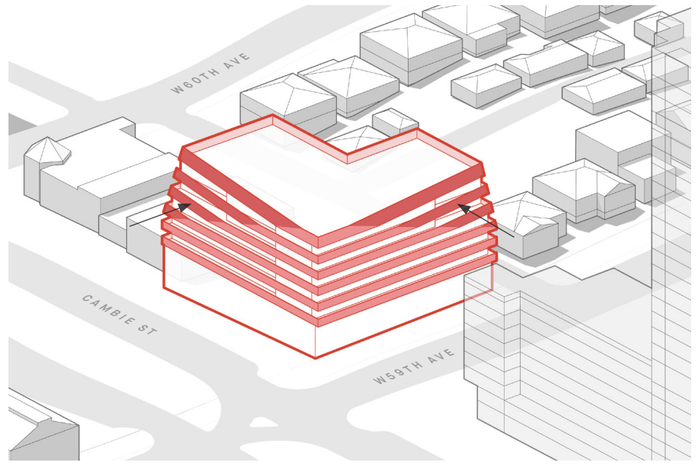
3. REAR YARD SETBACK PROPOSED BEHIND BOTH CAMBIE AND WEST 59TH VOLUMES



4. UPPER VOLUME STEPPED BACK PER CAMBIE CORRIDOR GUIDELINES

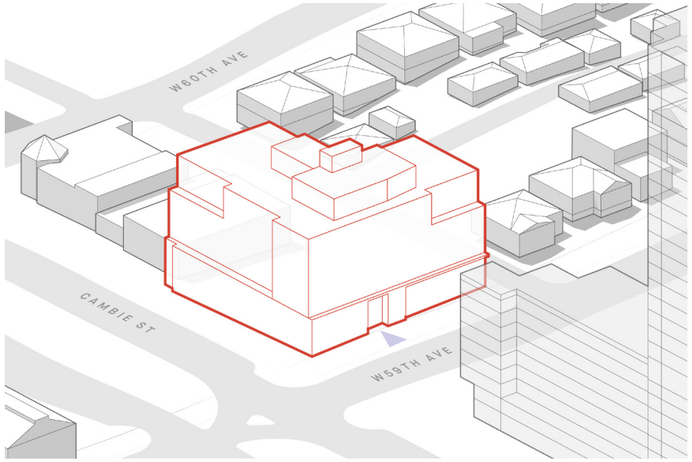


5. SINGLE, UNIFYING VOLUME CREATED BY BALCONIES



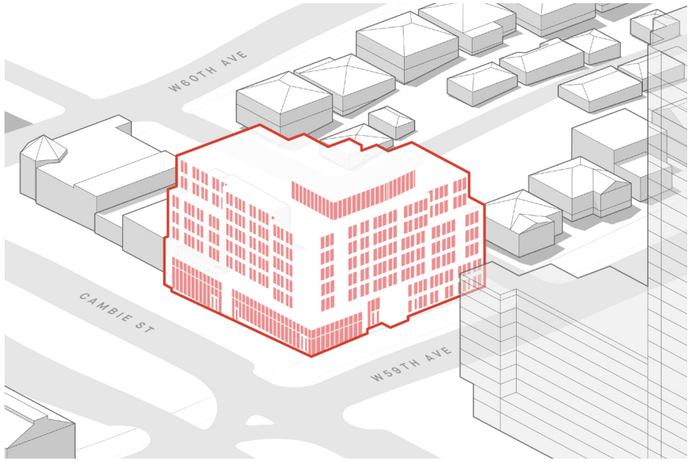
6. BALCONY VOLUME PUSHED BACK TO FOLLOW STEPPED MASSING BEHIND

CONCEPT MASSING

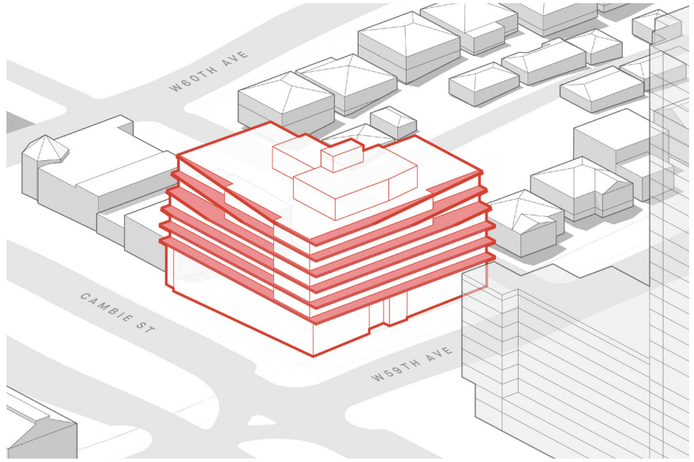


1. BUILDING MASSING

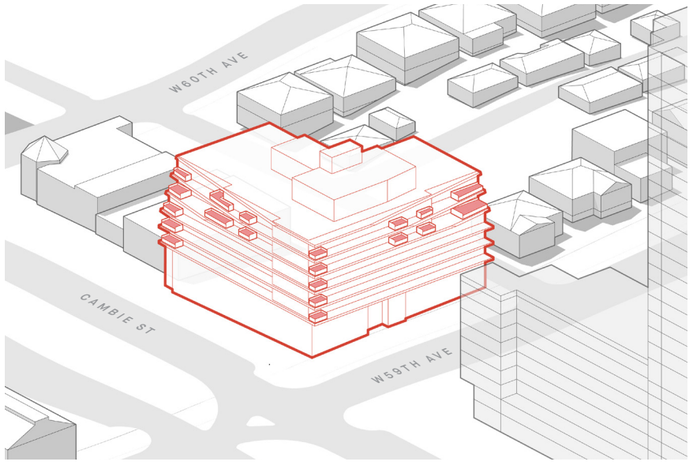
RESIDENTIAL ENTRY



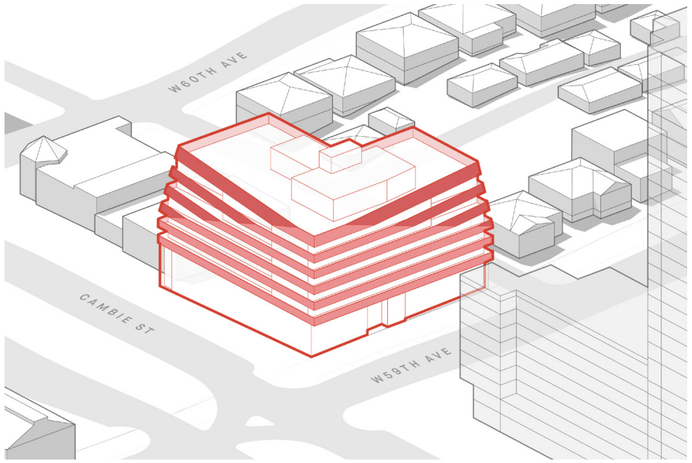
2. WINDOWS



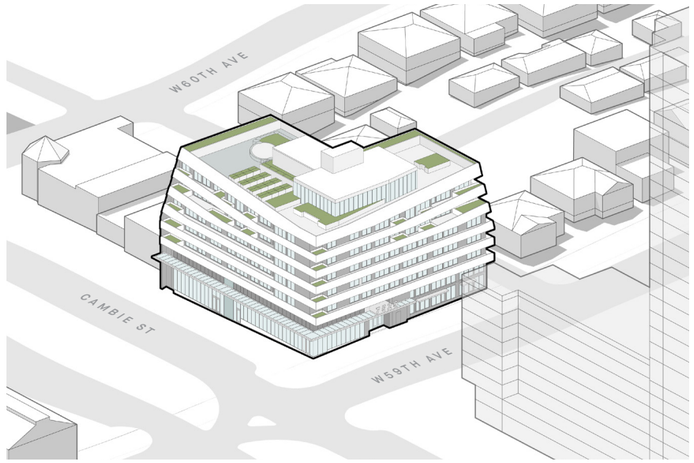
3. BALCONY SLABS



4. PLANTERS

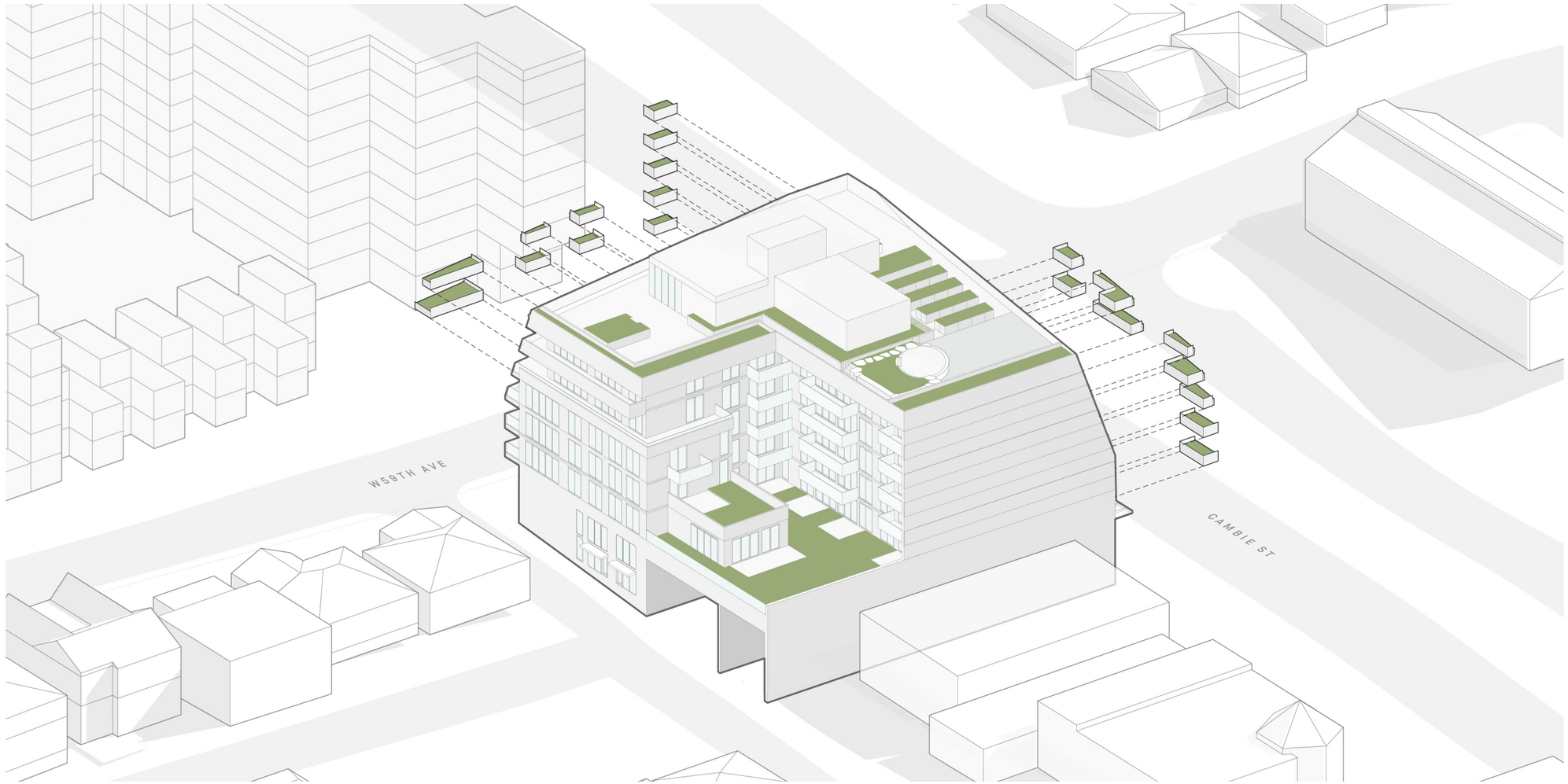


5. GUARDRAILS



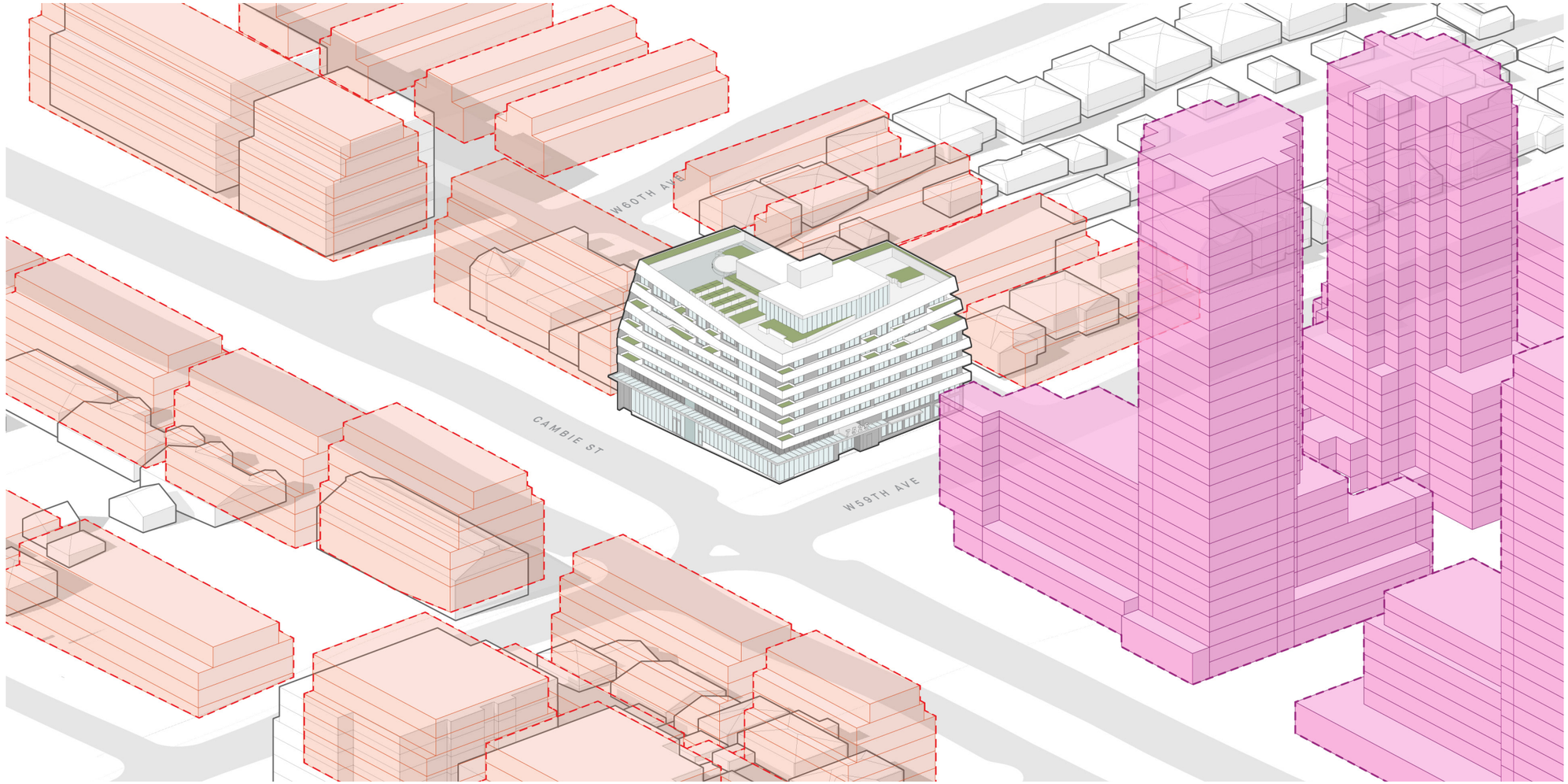
6. COMBINATION

CONCEPT MASSING



PROPOSED PLANTERS AT THE PERIMETER AND ROOF OF BUILDING + OUTDOOR GREEN SPACE

CAMBIE DEVELOPMENT MASSING



PROPOSED BUILDING RELATIVE TO PLANNED BUILD-OUT OF CAMBIE CORRIDOR

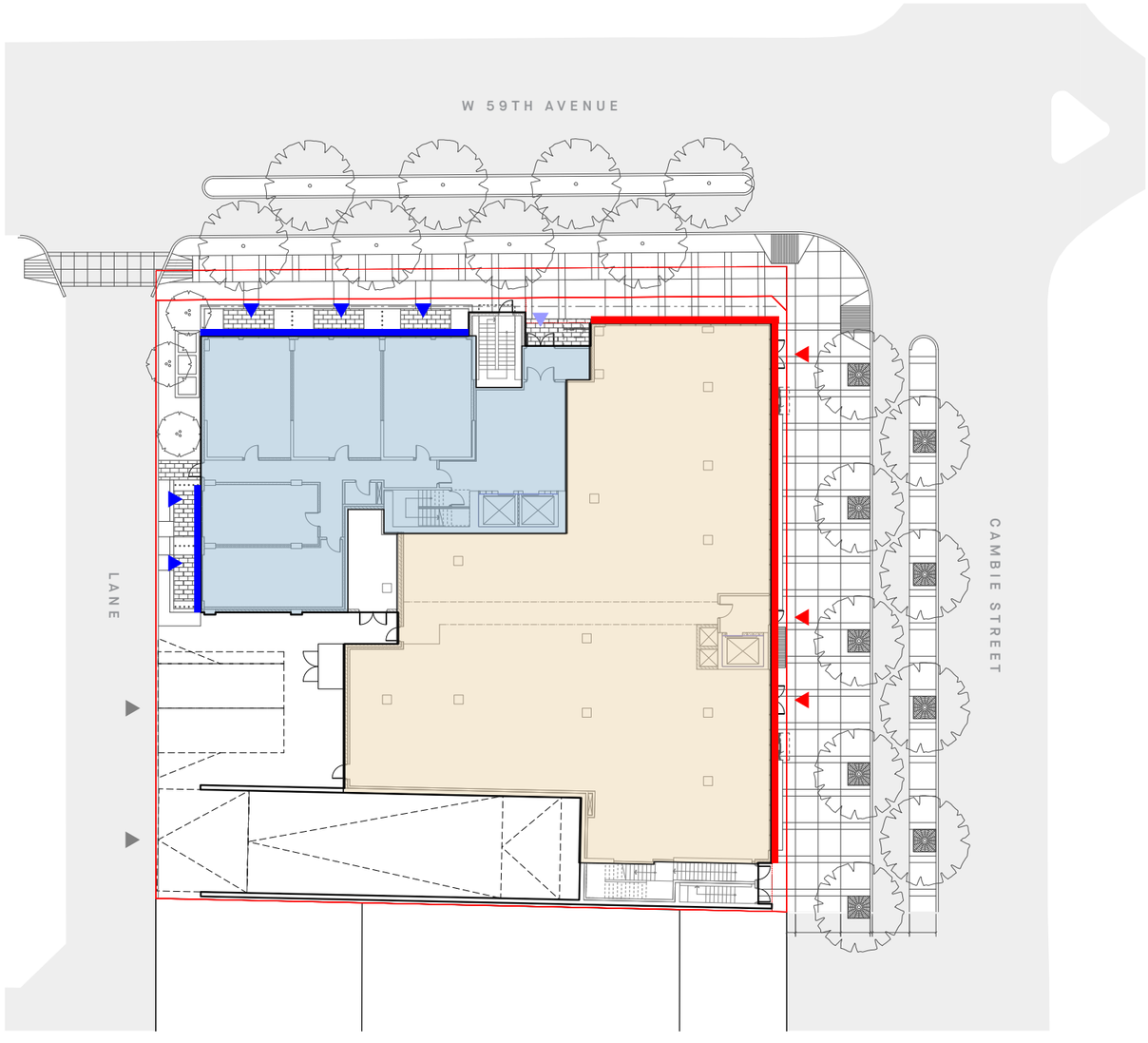
SITE ORGANIZATION

The proposed design informed by Cambie Corridor Plan as well as the proposed development for the Pearson Dogwood site to the north. As Per the Cambie Corridor Plan, the building steps back on upper floors, along both Cambie and West 59th. Six storey massing anchors the corner of the site and to respond to the nine storey massing of the building to the north.

Commercial space proposed along the entire Cambie Street frontage, as well as the eastern portion of the West 59th frontage. The commercial frontages are set back to provide a 5.5m SRW from back of curb along both streets, in addition to the 2m dedication provided along West 59th Avenue.

The residential lobby is located on West 59th, where it is located on the less busy frontage and marks a transition towards single family homes to the west. Townhouse units are proposed at grade on the West 59th and lane frontages, to animate the street and lane, and to provide passive surveillance at grade.

The site slopes down towards the south, providing desirable retail heights for all commercial spaces. Parking and loading access is provided at the southwestern corner of the site at the lowest possible elevation of the adjacent lane.



PRECEDENTS



FOLKART BLU | DILEKCI ARCHITECTS



SOHO | NP2F



AARHUS PORT CENTRE | C.F. MOLLER

These projects demonstrate how the balcony volumes can create a singular volume and define the overall form for a building independent of the building massing behind.

The proposed massing is simple and stacked while incorporating the step backs defined by the Cambie Corridor Guidelines. While most of the Cambie Corridor buildings are split into a four storey base and set back upper floors, emphasizing the hard step back line, our proposal aims to create a singular volume and identity for the entire building.

MATERIAL PALETTE

The building is characterized by the continuous balconies that create an overall singular form for the building. The balconies create a textural and colour contrast with the cladding materials behind, and present an image of the building that is not defined by the pattern of windows.

The balconies are white powder-coated metal with more textured, warmer cladding materials behind. Areas of planting on decks create moments of greenery on the facade and softens the horizontal balcony stripes. The colour palette is restrained to emphasize the building massing, texture and details, and to highlight the shadows created by the continuous balconies.





GUARDRAILS
WESTFORM METALS
POWDER-COATED AND PERFORATED
POLAR WHITE



CLADDING
FIBRE CEMENT PANEL
EQUITONE LINEA
GREY



SOFFIT
EQUITONE PICTURA
FIBRE CEMENT PANEL
MATTE FINISH GREY



PLANTERS



RESIDENTIAL WINDOWS
STARLINE WINDOWS
SILVER



GUARDRAILS
CLEAR GLASS



STOREFRONT WINDOWS
STARLINE WINDOWS
SILVER

SUSTAINABLE MEASURES

Performance Limits:

TEDI: 37.1 kWh/y/m2 - complies
TEUI: 81.8 kWh/y/m2 - complies
GHGI: 0.9 kgCO2/y/m2 - complies

This project will comply with the requirements of the City of Vancouver Green Building Policy for Rezoning (COV-GBPR)

BC Building Science

611 Bent Court, New Westminster
BC, Canada V3M 1V3
bcbuildingscience.com

Date: October 27, 2020

To: Wesgroup – Graham Brewster / Michelle Young
Cc: Yamamoto Architecture Inc. – Taizo Yamamoto

Project: Wesgroup – 59th & Cambie
7525 Cambie Street, Vancouver, BC

ENERGY REPORT
ER01

Subject: **ENERGY SIMULATION – REZONING**

BC Building Science (BCBS) has been retained as the Building Envelope and Energy Consultant for this project. The building has been modeled for compliance with the energy targets outlined in the City of Vancouver Green Building Policy for Rezoning (CoV-GBPR) and specifically, to the path B) Low Emissions Green Buildings – Section B.1.2. Requirements for the Performance Limits.

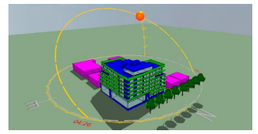
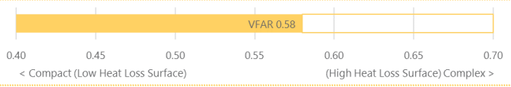
It is assumed that the building will be connected to a Low Carbon Energy System (LCES) in accordance with the City of Vancouver Low Carbon Energy Systems Policy. As the project is at a preliminary design stage and the detailed designs of building envelope, mechanical, and electrical systems are not available yet, the basis of design of such systems is established to comply with the applicable energy performance targets.

The energy modeling has been executed in accordance with the *City of Vancouver Energy Modeling Guideline Version 2.0 (CoV-EMG)*. Thermal bridging calculations have been performed based on the *Building Envelope Thermal Bridging Guide Version 1.4* (BETBG). The building was modeled using IES-VE 2019 and the energy compliance results follow:

Energy Simulation – Results			**BCBS**
Metric	**Requirement[1]**	**Proposed Design**	**Result**
Thermal Energy Demand Intensity (TEDI) [kWh/m²/y]	38.0	37.1	✓ Complies
Total Energy Use Intensity (TEUI) [kWh/m²/y]	134.3	81.8	✓ Complies
Greenhouse Gas Intensity (GHGI) [kgCO₂/m²/y]	3.8	0.9	✓ Complies

Notes (*):
1. Area-averaged based on building occupancies assuming connection to Type 3 LCES System (user-owned, on-site LCES).

The following table summarizes the preliminary requirements of the contributing systems of the building to comply with the applicable energy performance limits. Some of the assumptions in this energy submittal may change at later stages of the project when detailed designs of the contributing systems are developed.

Energy Simulation – Inputs		**BCBS**
1. Project Data		
Drawing Submittal	Architectural drawings provided by Yamamoto Architecture Inc., dated October 16, 2020.	
Address	7525 Cambie Street, Vancouver, BC	
Description	Type of Building / Construction: ▪ Non-combustible, Concrete Maximum Levels of Buildings: 7	
2. Building and Location		
Location	Vancouver, BC	
Weather File	CAN_BC_VANCOUVER-INTL-A_1108395_CWEC.epw	
Modeling Software	IES-VE 2019	
Modeled Floor Area	Residential: ▪ 6,240 [m²] Retail: ▪ 743 [m²]	
Window to Wall Ratio	40%	
Vertical Surface Area to Floor Area Ratio		
3. Building Envelope		
Exterior Walls	Window Wall: ▪ Thermally Enhanced Aluminum System (Starline 9600 series or equivalent) ▪ Spandrel: 4.5" Mineral Wool in Backpan + 1" Mineral Wool Inboard ▪ Spandrel Bypass: 2.5" Mineral Wool Over Slab Edge Concrete / Steel Framing Walls: ▪ Brick / Cladding: R14 Batt in 3 5/8" Steel Studs + 4" Mineral Wool Exterior with Thermally Enhanced Attachments ▪ Fire Separation (south elevation): 2.5" SPF in Studs + 2" SPF ci between Studs and Concrete (alternatively 4" XPS ci total, or equivalent) Exposed Concrete Projections: ▪ Balconies / Slab at Fire Wall: Thermally Broken with High Performance Isokorb K10-V6 (or equivalent) ▪ Parapets: Wrapped with 4" Mineral Wool Insulation OR Thermally Broken with Isokorb AXT1 Below-grade Concrete Walls (heated spaces): ▪ 2" XPS Continuous (or equivalent) Overall Wall Effective (BETBG): R7.2	
Roofs	Roofs: ▪ 8" XPS Continuous (or equivalent) Decks: ▪ 4" XPS Continuous (or equivalent) Overall Roof Effective (BETBG): R25.0	
Floors	Soffits: ▪ 6" Mineral Wool Continuous Over Parkade: ▪ 5" Spray Fibreglass Continuous Overall Floor Effective (BETBG): R16.4	
Glazing & Doors	Windows and Glazed Doors: ▪ High Efficiency Double-glazed Aluminum (Starline 9600 series or equivalent) ▪ $U_{OVERALL}$ 0.30, $SHGC_{OVERALL}$ 0.32 Opaque Doors: ▪ Swinging, U0.37	
Airtightness	Standard: 0.2 [L/s/m² facade]	
4. Mechanical Systems		
Heating / Cooling	Suites / Amenity / Retail / Lobby: ▪ Air Source VRF Heat Pump System (COPH: 3 & EER: 11) Corridors: ▪ Air Source Heat Pump Make-up Air Unit (COP_H: 3 & EER: 11)	
Ventilation	Suites: ▪ Direct Ventilation by Unitized HRV/ERV 82% SRE at 32°F ▪ 15 [cfm/person], Not Less Than 0.35 ACH, Not Overventilated Amenity / Retail / Lobby: ▪ Direct Ventilation by Unitized HRV/ERV 86% SRE at 32°F ▪ ASHRAE 62 Ventilation Rates, Not Overventilated Corridors: ▪ Pressurized at Maximum 20 cfm per Suite Door ▪ Maximum Supply Leaving Air Temperature: 65°F Parking Areas: ▪ Exhaust Fans at 0.75 [cfm/ft²]	
Service Water Heating	Hot Water Demand and Schedule: ▪ Suites: 0.0016 L/s/person, NECB 2011 Table A-8.4.3.2.(1)G ▪ Other: NECB 2011 Table A-8.4.3.3.(1)B Service Water Heating System: ▪ Central Air Source Heat Pump Water Heater (COP: 3)	
5. Lighting Systems		
Interior Lighting	Interior Lighting Power Density [W/m²], Schedule: ▪ Suites: 5.0, NECB 2011 Table A-8.4.3.2.(1)G ▪ Amenity: 4.0, NECB 2011 Table A-8.4.3.2.(1)C ▪ Retail: 15.5, NECB 2011 Table A-8.4.3.2.(1)C ▪ Corridor / Lobby: 4.0, 24/7 ▪ Stairway: 5.0, 24/7 ▪ Elec/Mech: 4.5, Appendix B of BC Hydro's Energy Modeling Guideline ▪ Parking: 1.4, 24/7	
Exterior Lighting	2 kW, Astronomical Clock	
6. Other		
Indoor Design Temperature	Suites: NECB 2011 Table A-8.4.3.2.(1)G ▪ Heating: 18-22°C ▪ Cooling: 24°C Other: ▪ NECB 2011 Table A-8.4.3.3.(1)B	
Occupancy	Suites: ▪ Studio / 1-Bedroom: 2 People ▪ 1+ Bedroom: 1 Person per Additional Bedroom ▪ Schedule: NECB 2011 Table A-8.4.3.2.(1)G Other: ▪ NECB 2011 Table A-8.4.3.3.(1)B	
Plug Loads (Receptacle)	Suites: ▪ 5.0 [W/m²], NECB 2011 Table A-8.4.3.2.(1)G Elevator: ▪ 2 x 3 kW, NECB 2011 Table A-8.4.3.2.(1)G ▪ 1 x 3 kW, NECB 2011 Table A-8.4.3.2.(1)C Other: ▪ NECB 2011 Table A-8.4.3.3.(1)B	

Further energy modeling is required to ensure compliance with the performance limits at the building permit stage of the project when detailed designs of envelope, mechanical, and electrical systems are available. If any of the assumptions in the above table require alterations, other assumptions will be affected. It is crucial that any updates on the architectural, mechanical, or electrical designs of the building be confirmed with the energy modeling team to ensure preserving the energy compliance throughout the design and construction phases.

Note that the results of this energy simulation are for the purpose of energy compliance with the applicable energy performance targets and are not representatives of the actual energy consumption of the proposed buildings. The real energy consumption of the building may differ from these results as the assumptions are based on the typical operating conditions applicable from the standards and guidelines which may or may not represent the real occupant behavior and usage of the building.

We look forward to the successful completion of this project. If there are any questions, please contact our office.

Respectfully Submitted,
BC Building Science

Prepared by:



Farshid Bagheri
P.Eng., Ph.D., CEA, CBCP

Enclosed: ZEBP Energy Checklist (+2 pages)

SUSTAINABLE MEASURES

CITY OF VANCOUVER

Zero Emissions Building Plan Energy Checklist

Please complete all fields that apply to the project, using information that represents the current stage of design. For fields that do not apply or for which there is no information yet, please enter "N/A".

Project Information (enter all that apply)

Project Address	7525 Cambie Street, Vancouver, BC
Secondary Address	
Project Working Title	7525 Cambie Street
POSSE File Name (City use only)	
Gross Floor Area indicated on Arch. Drawings (m²)	6,864
Parkade Area (m²)	4,863

Building Information and Performance Limits

For building types with Performance Limits, enter this information in this section

Building Type(s)	Modelled Floor Area (m²)	Rezoning?	City-Recognized Low Carbon Energy System?	Limits TEUI	Limits TEDI	Limits GHGI
Residential, 7+ storeys (Group C except Hotel)	6,240	Yes	Yes	130	40	6
Retail (Group D & E except Office)	743	Yes	Yes	170	21	3
				0	0	0
Total	6,983	**TEDI limit for this portion of building**			**38.0**	

For other building types, create a baseline energy model to establish limits, and enter this information in this section

Building Type	Modelled Floor Area (m²)	Rezoning?		Limits TEUI	Limits TEDI	Limits GHGI
Enter Other Building Type Baseline Model Performance	Energy (kWh)	Em. Factor	Emissions (kgCO2e)			
Total Annual Electricity Use		0.011	-	Baseline: 0	0	0
Total Annual Natural Gas Use		0.185	-	Target: 0	0	0
Total Annual District Energy Use		0.070	-			
Total	-		-			
Total Annual Heat Demand - for TEDI						

			TEUI	TEDI	GHGI
Total Modelled Floor Area (m²)	6,983	**Whole-Building Performance Limits**	**134.3**	**38.0**	**5.7**
Modelled Floor Area within 5% of Gross Floor Area?	Yes				

Modelled Building Performance

	Energy (kWh)	Fuel Type	Em. Factor	Emissions (kgCO2e)	TEUI	GHGI
Interior Lighting	152,146	Electricity	0.011	1673.606	21.8	0.2
Exterior Lighting	8,505	Electricity	0.011	93.555	1.2	0.0
Heating	120,368	Electricity	0.011	1324.048	17.2	0.2
Cooling	25,773	Electricity	0.011	283.503	3.7	0.0
Pumps	6,169	Electricity	0.011	67.859	0.9	0.0
Fans	72,871	Electricity	0.011	801.581	10.4	0.1
Domestic Hot Water	70,764	Electricity	0.011	778.404	10.1	0.1
Plug Loads	147,670	Electricity	0.011	1624.37	21.1	0.2
Enter other end use here						
Enter other end use here						
Enter other end use here						
Total Annual Electricity Use	604,266		0.011	6,647		
Total Annual Natural Gas Use	-		0.185	-		
Total Annual District Energy Use	-			-		
Total	604,266			6,647		
Total Electricity Generated On-Site (kWh)			% of Use	0.0%		
Total Purchased Renewable Electricity (kWh)			% of Use	0.0%		
Total Purchased Renewable Natural Gas (kWh)			% of Use	0.0%		

Note: purchaes renewables used to demonstrate compliance must be secured to satisfaction of AHJ

Adjusted Electricity Emissions Factor (kgCO2e/kWh)	0.011
Adjusted Natural Gas Emissions Factor (kgCO2e/kWh)	0.185

Annual Heat Demand of portions with Perf. Limits (kWh)	310,046				**44.4**	
Total Annual Heat Demand - for TEDI (kWh)	310,046					
Total Annual Cooling Demand - *for info only* (kWh)	128,373	18.4 kWh/m²				
			TEUI	TEDI	GHGI
		Modelled Whole-Building Performance	**86.5**	**44.4**	**1.0**

Corridor Pressurization Adjustment

			TEUI	TEDI	GHGI
Heating Degree Days	2925				
Number of Suite Doors Pressurized	76				
Airflow for Pressurization per Door (L/s/door)	9.44				
Area of Corridors Pressurized (m²)	450				
Make-Up Air Fuel Type	Electricity				
Make-Up Air Emissions Factor	0.011	Adjustments for Corridor Pressurization	7.3	7.3	0.1
Suite-level Metering for Space Heating	No	Adjustments for Suite Submetering of Heating	2.6		

Note: select yes if the energy used for heating is metered at the suite level

Adjusted TEDI Performance of Portions with Limits			**37.1**
Adjusted Whole-Building Performance for Compliance	**81.8**	**37.1**	**0.9**

Modelled Inputs

Modelled Above-Ground Wall Area (m²)	4,023		Vertical facade-to-Floor Area Ratio (VFAR)	0.58
Window-to-Wall Area Ratio (WWR)	40%		Window-to-Floor Area Ratio	0.23
Infiltration Rate (L/s/m²$_{fac}$)	0.2			
Wall Effective R-Value - incl. thermal bridging (m²K/W)	1.3	7.20 (ft²hr°F/Btu)	Average Floor Edge Psi-Value (W/m°K)	0.49
Roof Effective R-Value - incl. thermal bridging (m²K/W)	4.4	25.01 (ft²hr°F/Btu)	Avg. Window Transition Psi-Value (W/m°K)	0.23
Average Window Effective U-Value (W/m²°K)	1.70	0.30 (Btu/ft²hr°F)	Window Solar Heat Gain Coefficient	0.32
Average Suite Occupant Density (m²/pers)	26.4		Average Lighting W/m²	5.3
Average Suite Ventilation Rate (L/s/m²)	0.3		DHW Low-Flow Savings (%)	0
Average HRV Effectiveness	83%		DHW Drain Heat Recovery Effectiveness	0%
Heating System Type (fuel, plant, distribution, etc.)	Air Source VRF Heat Pumps (or equivalent)			
Cooling System Type (fuel, plant, distribution, etc.)	Air Source VRF Heat Pumps (or equivalent)			
DHW System Type (fuel, plant, distribution, etc.)	Central Air Source Heat Pump Water Heater			

Modeller Information

Modeller Name	Farshid Bagheri, P.Eng
☑	*These results have been created using the COV Energy Modelling Guidelines version:* 2
Company	BC Building Science Ltd.
Phone Number	604 520 6456 Ext 133
Email	farshid@bcbuildingscience.com

ZEBP Energy Checklist v1.5 - 2018-07-27

RENDERINGS



PROPOSED BUILDING | VIEW FROM THE CORNER OF CAMBIE ST AND W 59TH AVE

RENDERINGS



PROPOSED BUILDING | AERIAL VIEW FROM THE CORNER OF CAMBIE ST AND W 59TH AVE

PROJECT STATISTICS

Statistics

7525 CAMBIE STREET

Site Address:	7525 CAMBIE STREET, VANCOUVER, BC
Legal Description:	LOT 12 BLOCK K PLAN VAP9322 DISTRICT LOT 323 NEW WESTMINSTER SS 1570.

Site Dimensions:	139.89' x 136.46'
Site Area (SF):	19,759.00
Site Coverage:	16,019.00

Current Zoning:	C - 1
Proposed Zoning:	CD - 1

Proposed Height:	80.60'

Setbacks	North	6'
	East	3.25'
	South	0'
	West	9.91'

	Residential		Commercial		Total	
	FSR	Area (SF)	FSR	Area (SF)	FSR	Area (SF)
Proposed Density:	3.14	62,140	0.40	7,895	3.54	70,035

Unit Mix- Summary	Studio	1 Bed	2 Bed	3 Bed		Total
Apartment	5	42	21	8		76
TOTAL	5	42	21	8		76
Mix	7%	55%	28%	11%		100%
Family Unit %			38%			
Unit Mix - Apartment	Studio	1 Bed	2 Bed	3 Bed		Total
L1 and LM	0	2	0	3		5
L2	1	8	5	1		15
L3	1	9	5	0		15
L4	1	9	5	0		15
L5	1	7	3	2		13
L6	1	7	3	2		13
TOTAL	5	42	21	8		76
Mix	7%	55%	28%	11%		100%
Family Unit %			38%			

Apartment	**Gross Floor Area**						**Deductions**					**FSR**	**Efficiency**
Level	A	B	C	D	E	F (B+C+D)	G	H	I	J	K (G+H+I+J)	L (F-K)	B/F
	# Units	Saleable/Leasable Unit Area	Circulation/Service	Amenity	Balcony	Gross Buildable	Storage	Services	Amenity	Wall	Total Deductions	Net FSR	
L1	5	2,544	1,933	0		4,477	40		0	0	40	4,437	57%
LM	0	2,355		0		2,355	120		0	0	120	2,235	100%
L2	15	11,012	1,436	0	1,072	12,448	577	27	0	0	604	11,844	88%
L3	15	10,343	1,436	0	1,448	11,779	550	27	0	0	577	11,202	88%
L4	15	10,343	1,436	0	1,520	11,779	550	27	0	0	577	11,202	88%
L5	13	9,282	1,411	0	1,040	10,693	392	27	0	0	419	10,274	87%
L6	13	9,282	1,411	0	1,370	10,693	392	27	0	0	419	10,274	87%
L7	0		699	1,491	0	2,190	0	27	1,491	0	1,518	672	0%
Apartment Total	76	55,161	9,762	1,491	6,450	66,414	2,621	162	1,491	0	4,274	62,140	
Retail	**Gross Floor Area**						**Deductions**					**FSR**	**Efficiency**
Level	A	B	C	D	E	F (B+C+D)	G	H	I	J	K (G+H+I+J)	L (F-K)	
	# Units	Saleable/Leasable Unit Area	Circulation/Service	Amenity	Balcony	Gross Buildable	Storage	Services	Amenity	Wall	Total Deductions	Net FSR	
L1	2	7,895		0		7,895					0	7,895	
Use Total	2	7,895	0	0	0	7,895	0	0	0	0	0	7,895	
	Gross Floor Area						**Deductions**					**FSR**	**Efficiency**
Project Total	78					74,309	2,621		1,491		4,274	70,035	

Parking Calculation		**Required**	**Provided**
Res. Stalls Required (Min.)			
Units less than 538 sf → 0.5 stall per units under 538 sf [0.5 * 8]		4	
Units more than 538 sf → 0.6 stall per units over 538 sf [0.6 * 68]		41	
one space for each 200 m2 of gross floor area→6077/200	6077/200	**30**	
Standard Space			85
Small Car			6
Disability			3
Electric Vehicle			
TOTAL RESIDENTIAL		**75**	**94**
TOTAL RESIDENTIAL - RATIO			**1.24**
VISITOR			
Car share spaces			
TOTAL VISITOR			**0**
RETAIL			
Standard Spaces		12	14
Disability			1
Small Car			3
Electric Vehicle			
TOTAL RETAIL		12	
TOTAL RETAIL		**12**	**18**
Car Wash			0
TOTAL PARKING			**112**

Bicycle Space Calculation	**Required**	**Provided**
RESIDENTIAL		
Class A:1.5 spaces for units < 65 m2	71	
Class A:65 m2 < 2.5 spaces for units < 105 m2	70	
Class A:3 spaces for units over 105 m2	3	
Class B:min. 2 spaces for 20 units, 1 additional for every additional 20 ur	5	5
min. 5% of spaces should be oversized	6	8
Vertical (max. 30% × 144 = 43)		
Horizontal (min. 50% × 144 = 72)		124
Locker (min. 10% × 144 = 14)		21
RETAIL		
1 per 3,660 sf [7,895 / 3,660]	2	2
Class B	0	0
Total	**157**	**160**

Loading Calculation	**Required**	**Provided**
RESIDENTIAL		
Class A	0	0
Class B	0	0
RETAIL		
Class A	0	0
Class B	2	2
Class C	0	0
Total	**2**	**2**
*Class B spaces to be shared between uses		

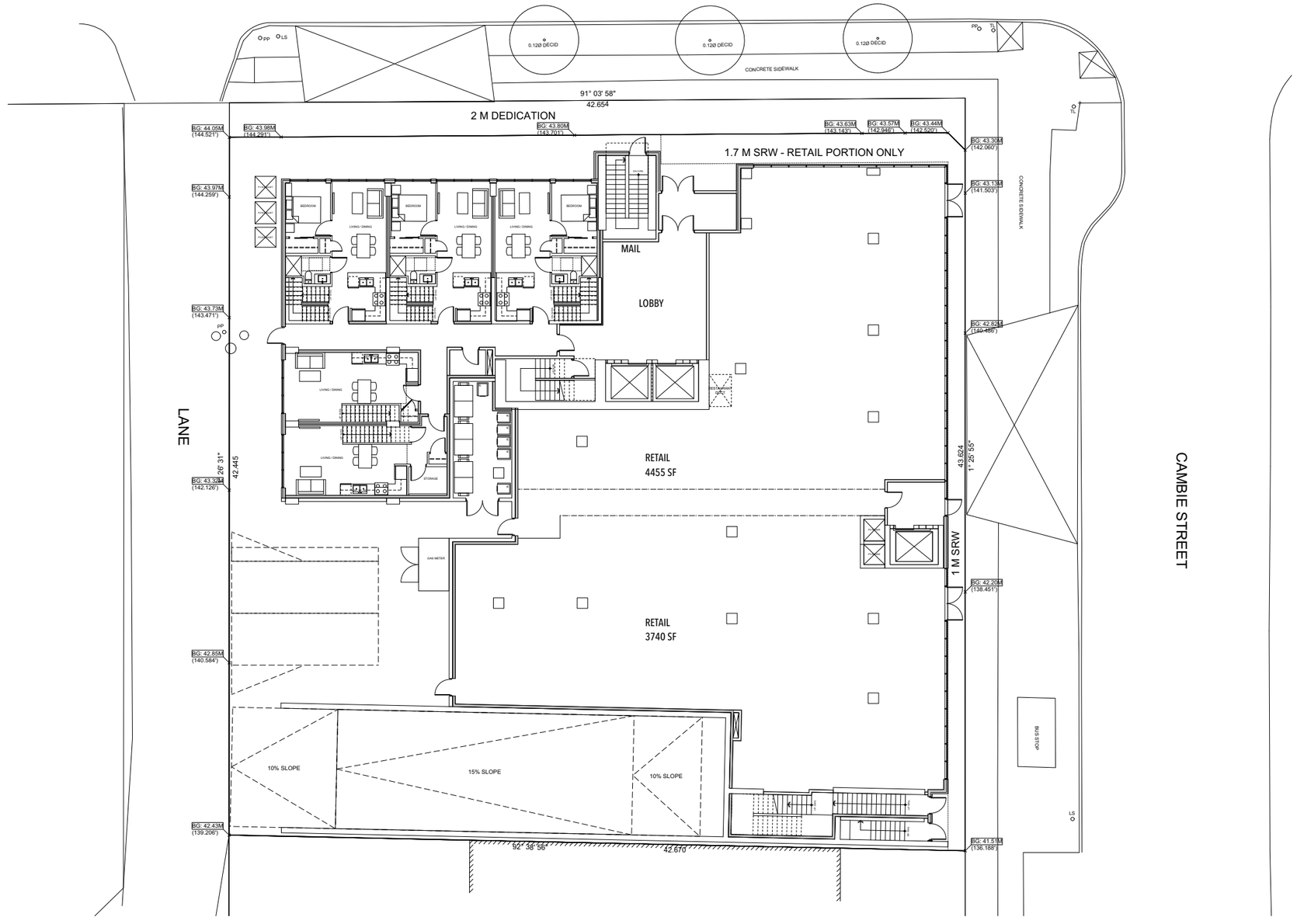
Balcony Calculation	**Allowed**	**Provided**
Allowable 12% of residential area (12% x 62140 SF)	12%	10.40%
Total	7457 sf	6450 sf

Storage Lockers	**Allowed**	**Provided**
Total	min. 76	
Provided		93
Total	76	93

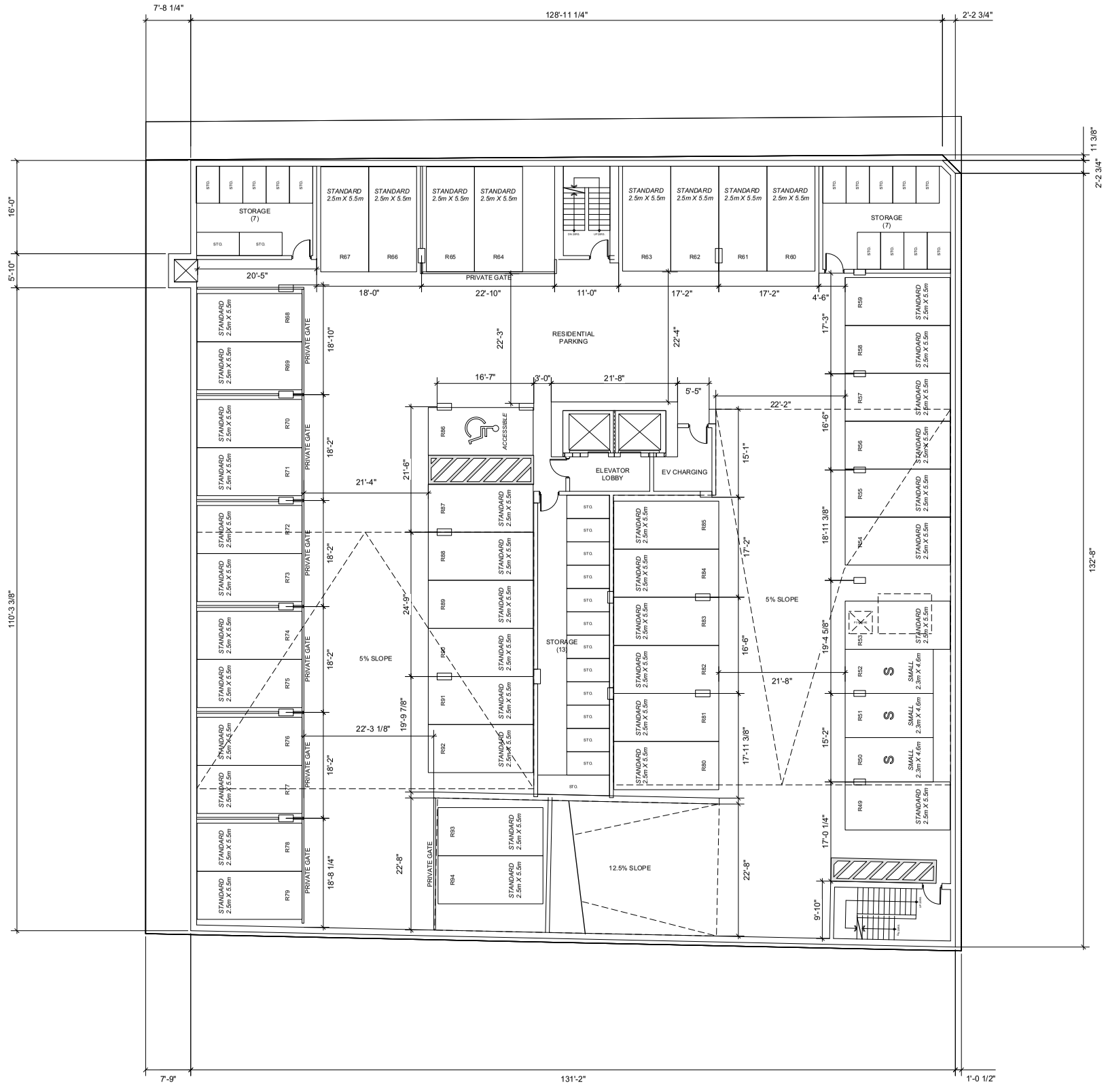
7525 CAMBIE STREET: FLOOR AREA SUMMARY

NAME	GROUND FLOOR	MEZZANINE FLOOR	2ND FLOOR	3RD FLOOR	4TH FLOOR	5TH FLOOR	6TH FLOOR	7TH FLOOR	TOTAL
Commercial Area sq ft	7,895.0 sq ft	0.0 sq ft	0 sq ft	0 sq ft	0 sq ft	0 sq ft	0 sq ft	0 sq ft	7,895.0 sq ft
Residential Area	4,477.0 sq ft	2,355.0 sq ft	12,448.0 sq ft	11,779.0 sq ft	11,779.0 sq ft	10,693.0 sq ft	10,693.0 sq ft	2,190.0 sq ft	66,414.0 sq ft
Amenity area exclusion	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	0.0 sq ft	1491.0 sq ft	1,491.0 sq ft
Storage area exclusion	40.0 sq ft	120.0 sq ft	577.0 sq ft	550.0 sq ft	550.0 sq ft	392.0 sq ft	392.0 sq ft	0.0 sq ft	2,621.0 sq ft
Restaurant shaft exclusion	0.0 sq ft	0.0 sq ft	27.0 sq ft	27.0 sq ft	27.0 sq ft	27.0 sq ft	27.0 sq ft	27.0 sq ft	162.0 sq ft
Net area	12,332.0 sq ft	2,235.0 sq ft	11,844.0 sq ft	11,202.0 sq ft	11,202.0 sq ft	10,274.0 sq ft	10,274.0 sq ft	672.0 sq ft	70,035.0 sq ft
Balcony area exclusion	0.0 sq ft	0.0 sq ft	1,010.0 sq ft	1,448.0 sq ft	1,520.0 sq ft	1,040.0 sq ft	1,370.0 sq ft	0.0 sq ft	6,388.0 sq ft

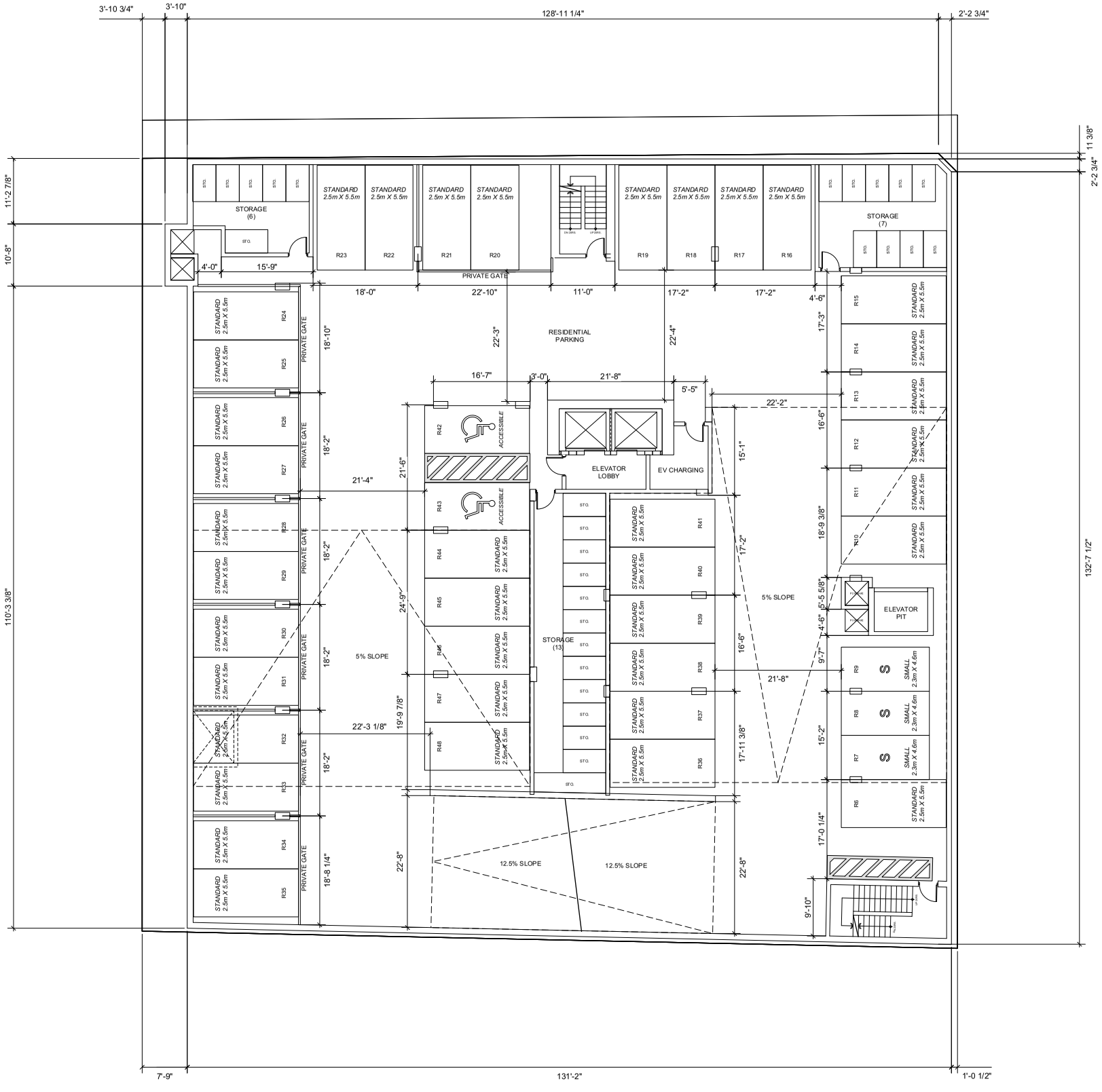
SITE PLAN


2 M DEDICATION
1.7 M SRW - RETAIL PORTION ONLY
CONCRETE SIDEWALK
91° 03' 58"
42.654
BG: 44.05M (144.521')
BG: 43.98M (144.291')
BG: 43.80M (143.701')
BG: 43.63M (143.143')
BG: 43.57M (142.946')
BG: 43.44M (142.520')
BG: 43.30M (142.060')
BG: 43.13M (141.503')
BG: 43.97M (144.259')
BG: 43.73M (143.471')
BG: 42.82M (140.486')
BG: 43.32M (142.126')
BG: 42.85M (140.584')
BG: 42.43M (139.206')
BG: 42.20M (138.451')
BG: 41.51M (136.188')
MAIL
LOBBY
RETAIL
4455 SF
RETAIL
3740 SF
LANE
CAMBIE STREET
1 M SRW
26' 31"
42.445
1° 26' 55"
43.624
92° 38' 56"
42.670
10% SLOPE
15% SLOPE
10% SLOPE
BUS STOP
BEDROOM
LIVING / DINING
STORAGE
GAS METER
RESTAURANT
0.12Ø DECID
PP
LS
TL

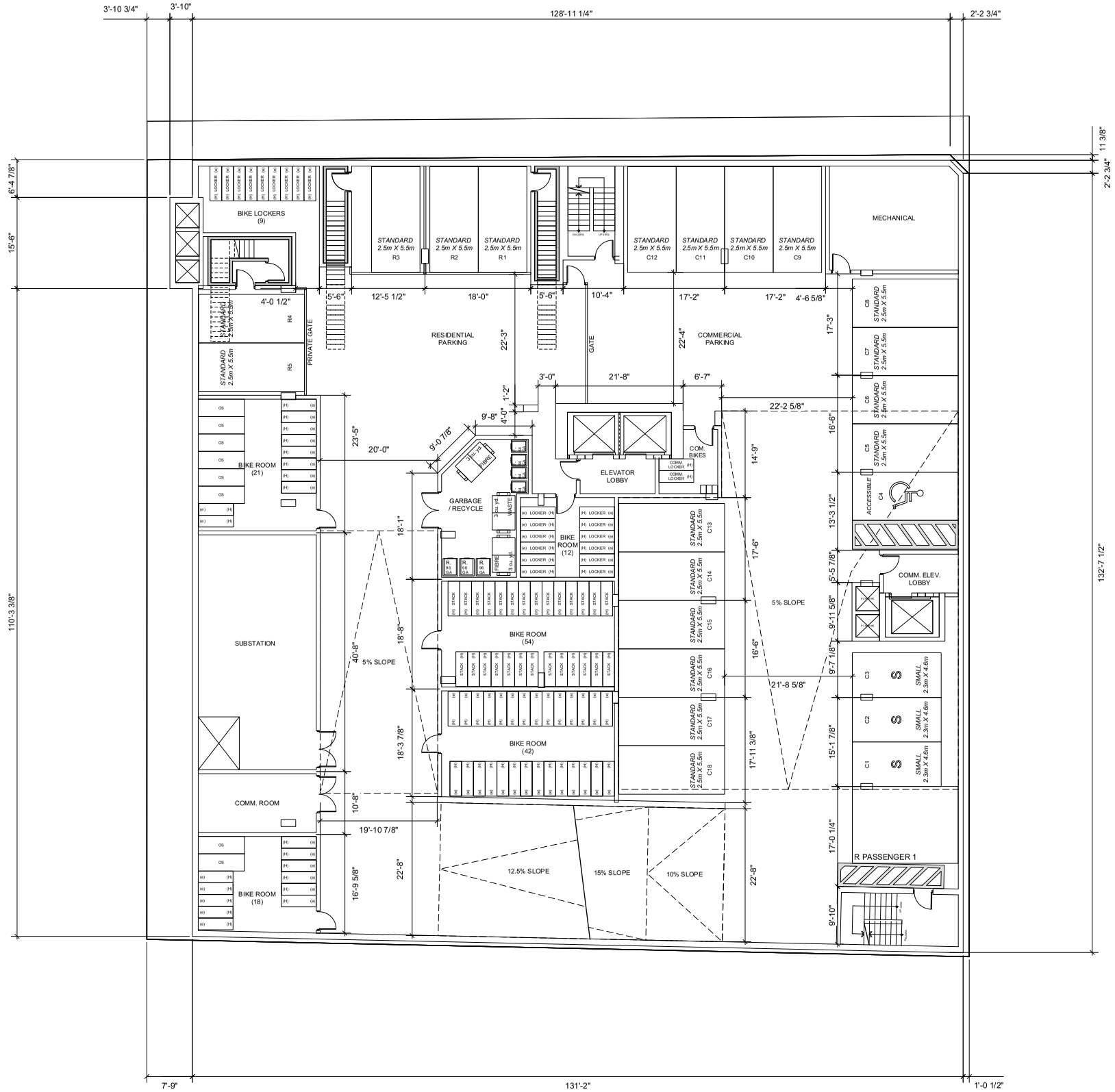
P3 PARKING PLAN



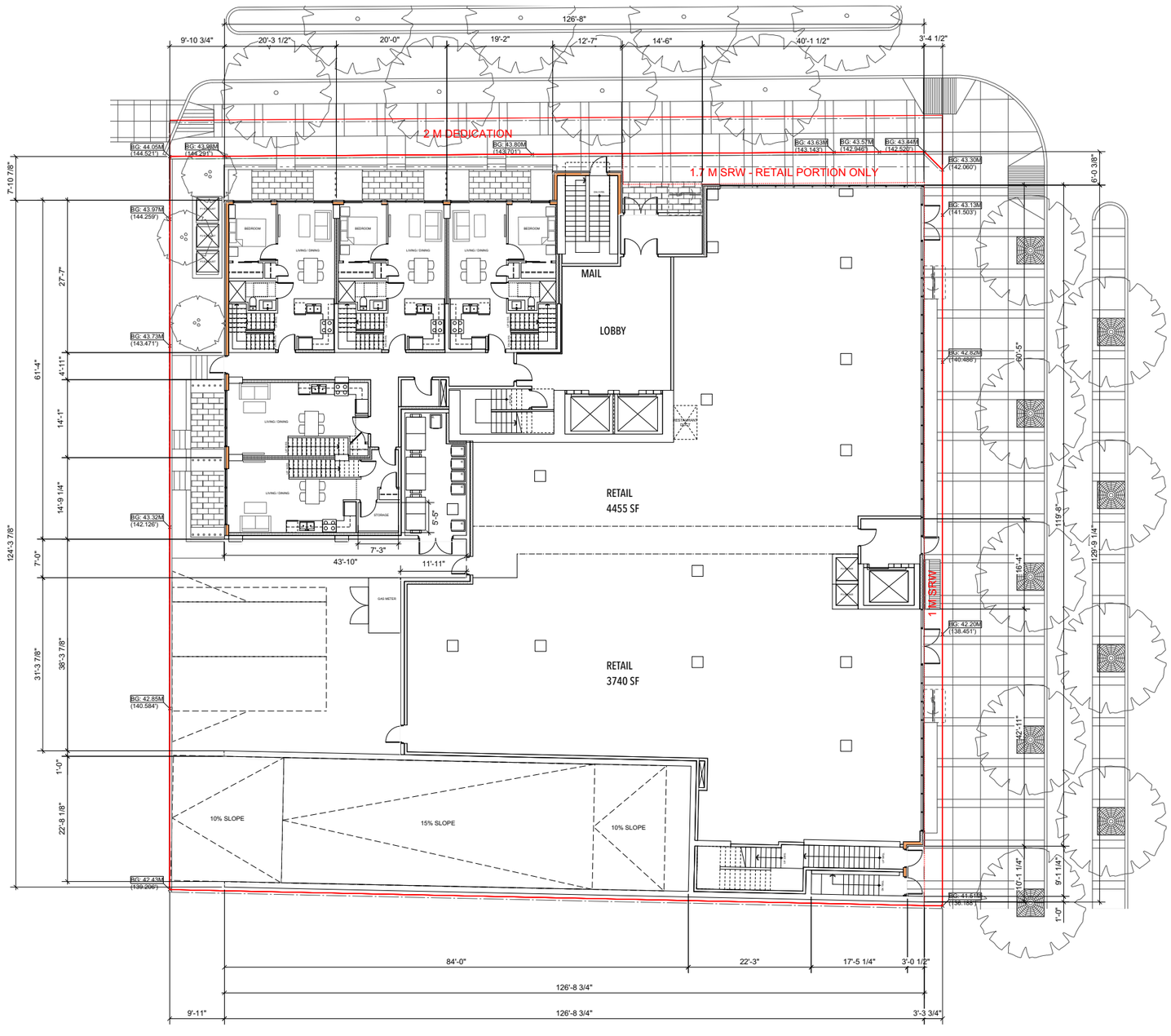
P2 PARKING PLAN



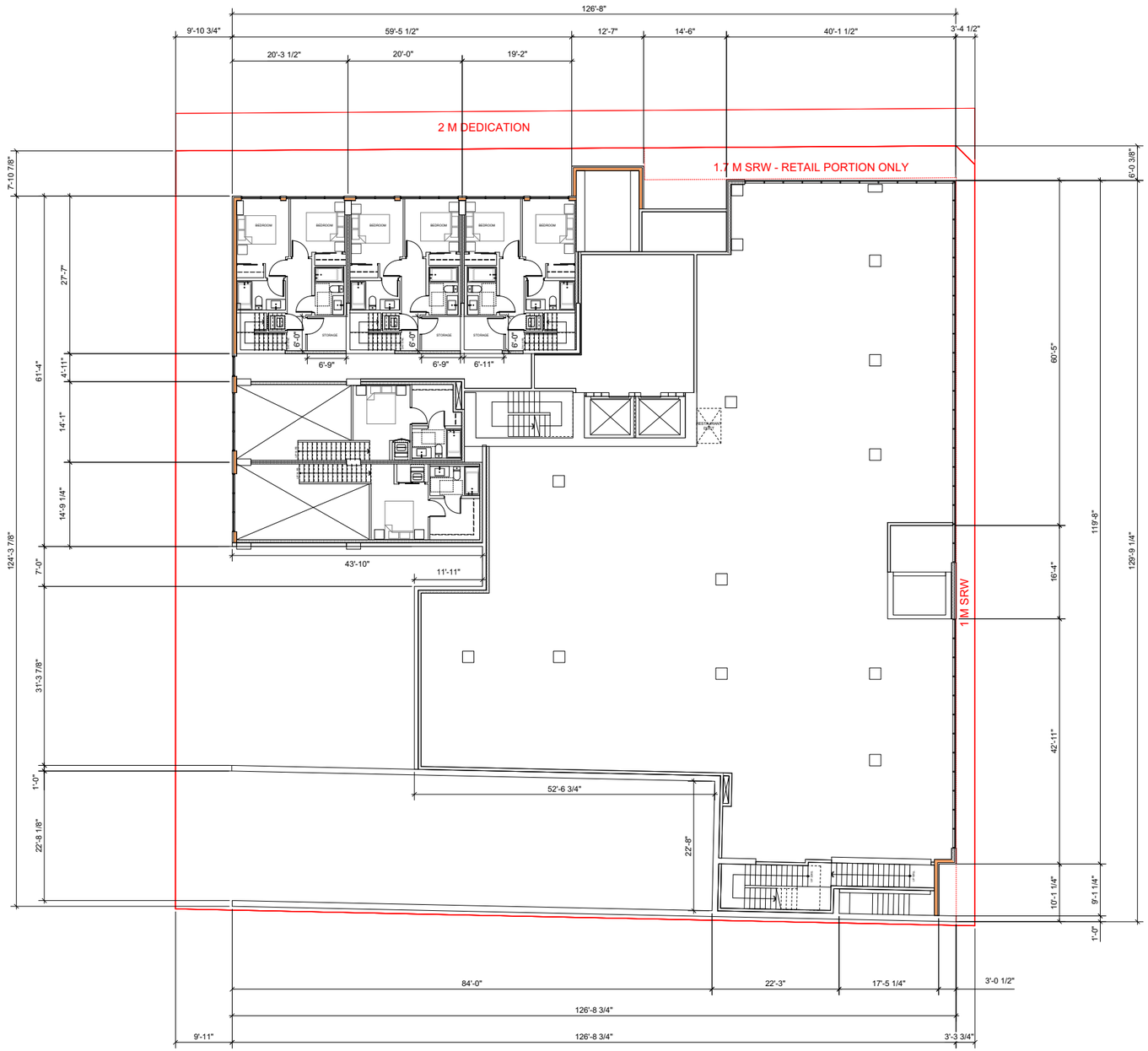
P1 PARKING PLAN



GROUND LEVEL PLAN



MEZZANINE PLAN



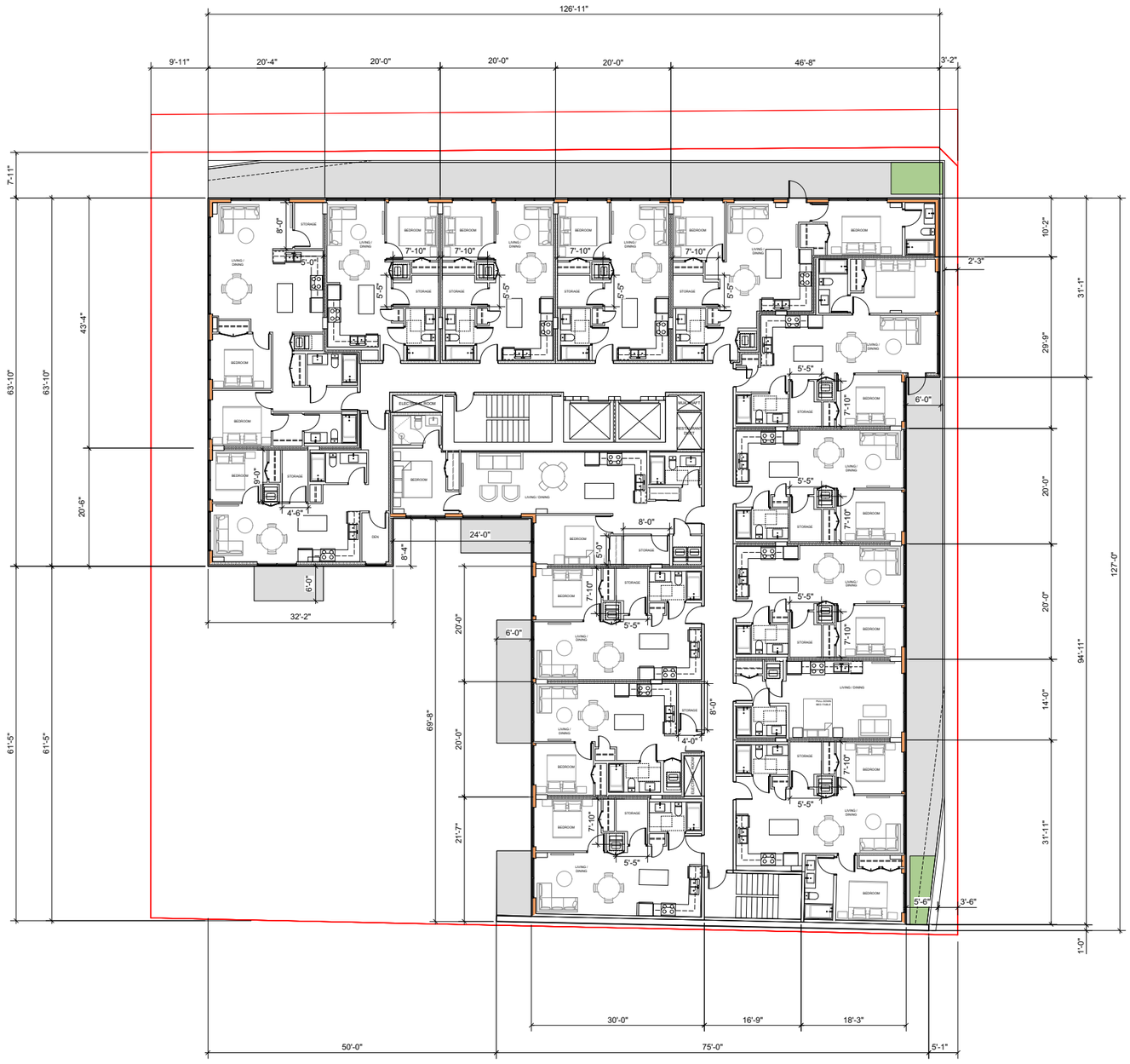
2ND LEVEL PLAN



3RD LEVEL PLAN



4TH LEVEL PLAN



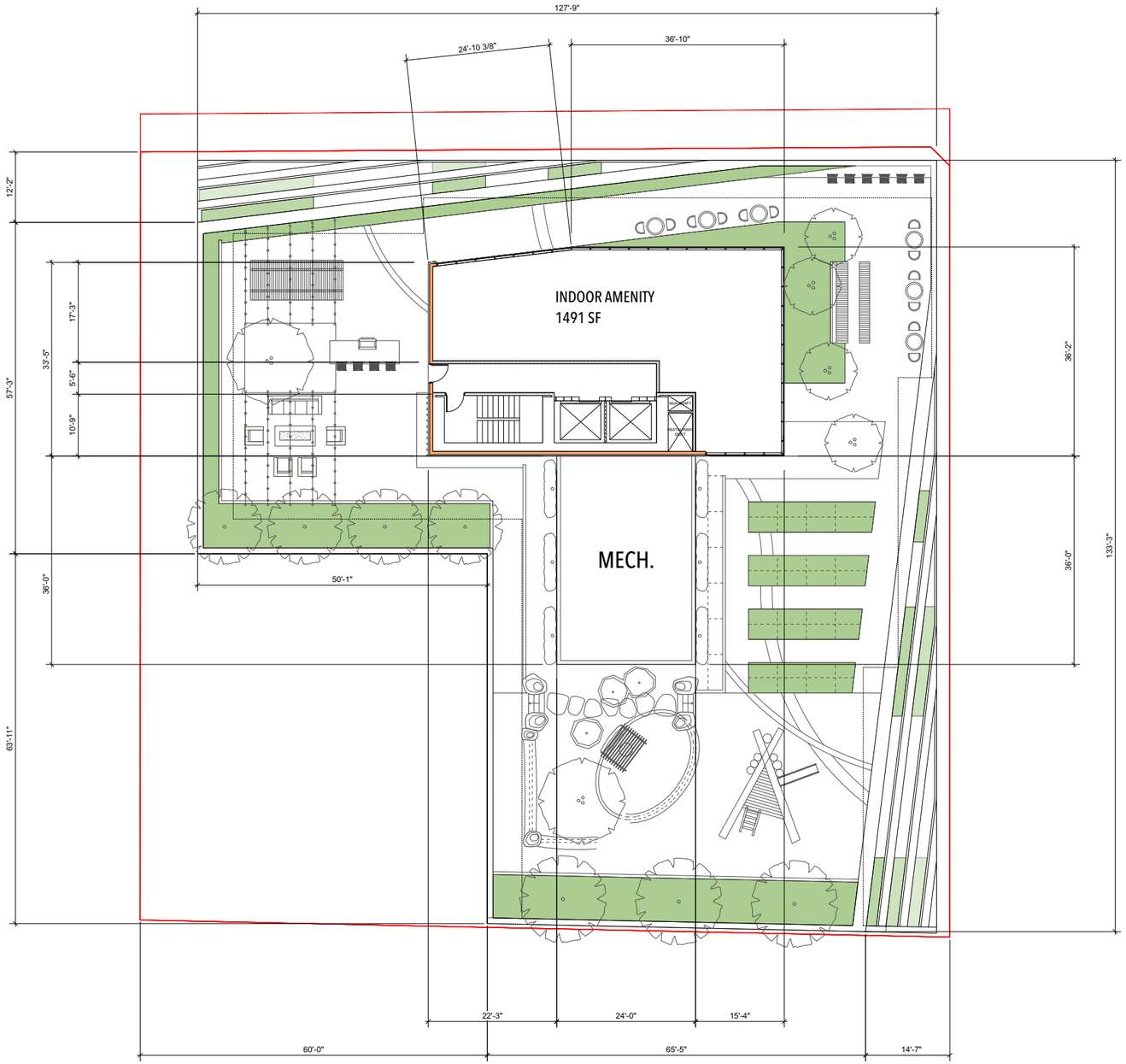
5TH LEVEL PLAN



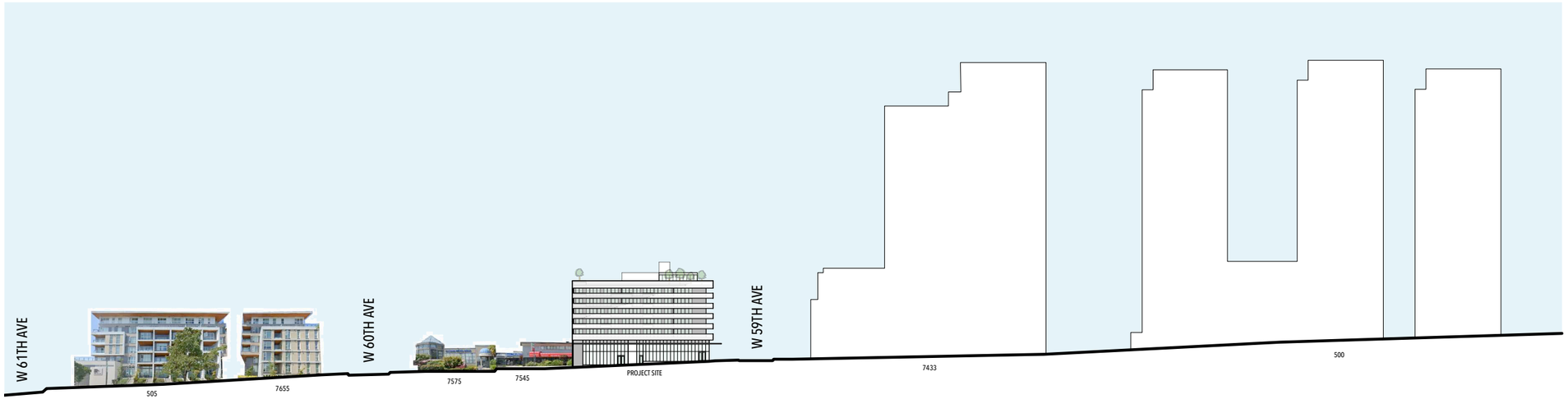
6TH LEVEL PLAN



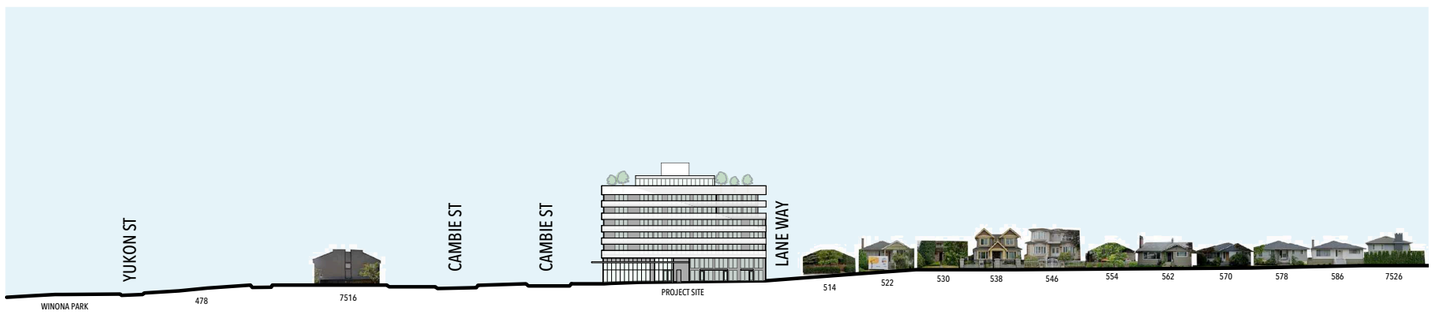
ROOF PLAN


127'-9"
24'-10 3/8"
36'-10"
INDOOR AMENITY
1491 SF
MECH.
12'-2"
57'-3"
33'-5"
17'-3"
5'-6"
10'-9"
36'-0"
63'-11"
50'-1"
36'-2"
36'-0"
133'-3"
22'-3"
24'-0"
15'-4"
60'-0"
65'-5"
14'-7"

STREETSCAPE ELEVATIONS

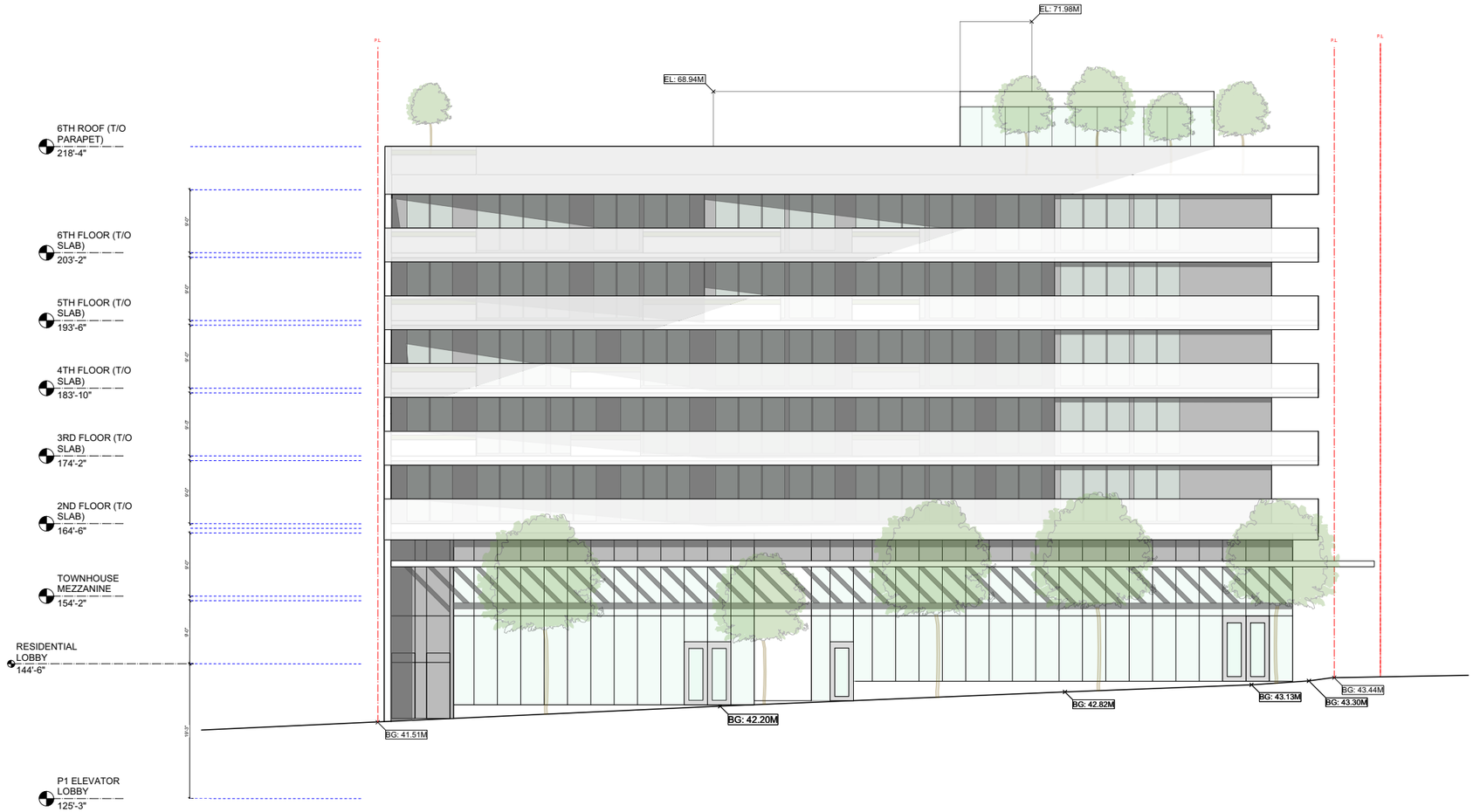


CAMBIE STREET STREETSCAPE



W 59TH AVENUE STREETSCAPE

ELEVATIONS | EAST (CAMBIE STREET)



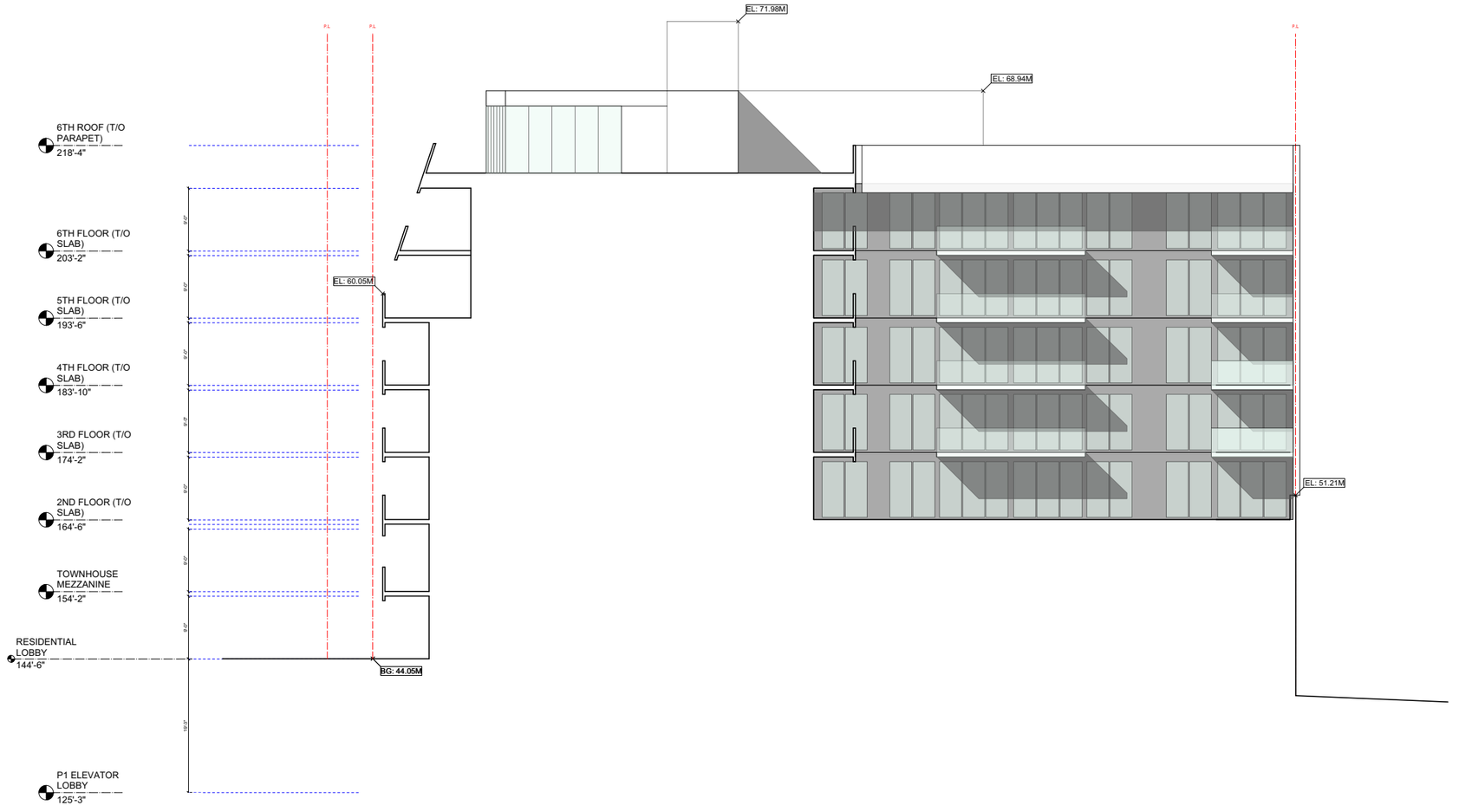
ELEVATIONS | NORTH (W59TH AVENUE)



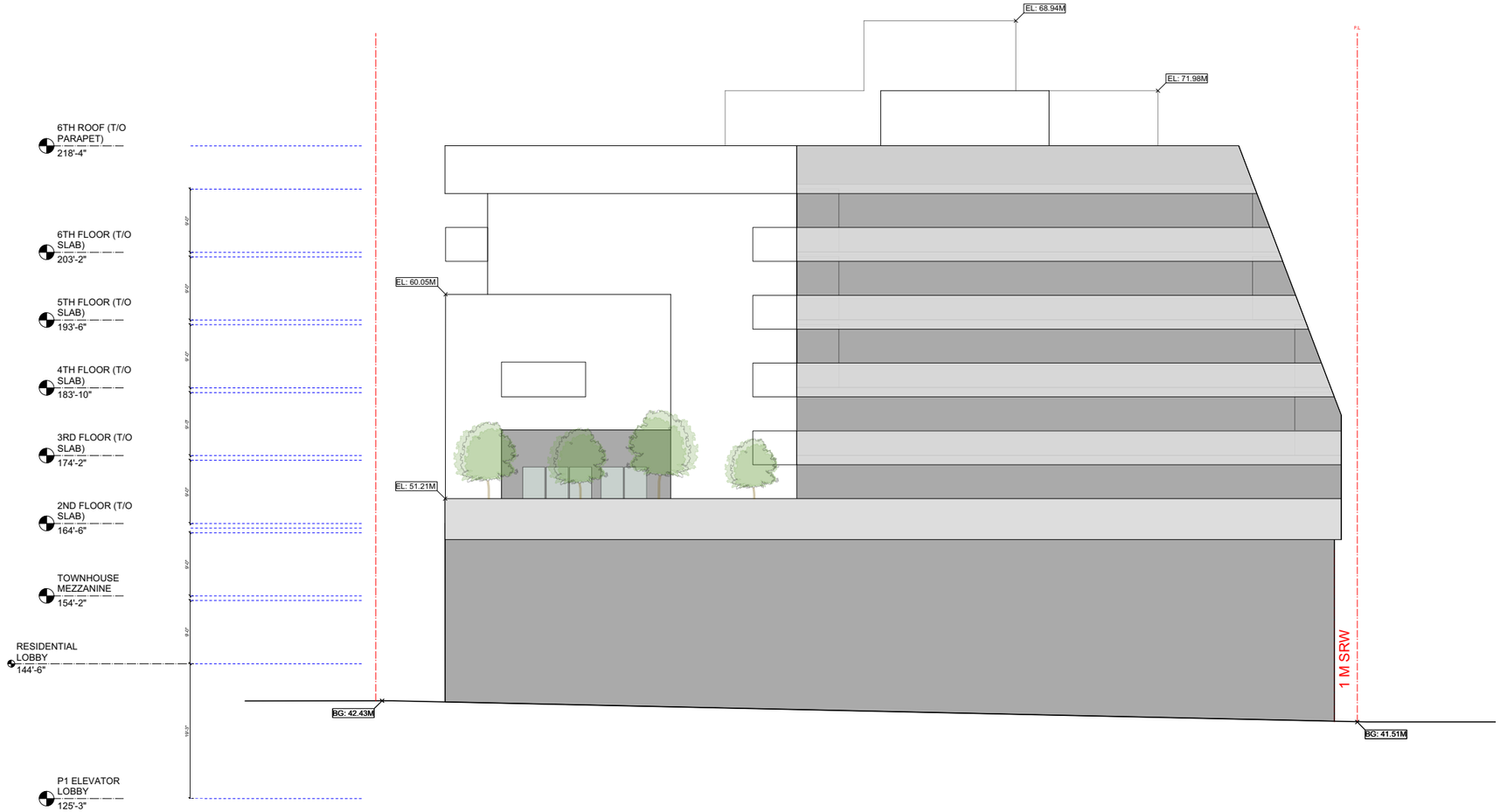
ELEVATIONS | WEST (LANE)



ELEVATIONS | WEST (LANE)



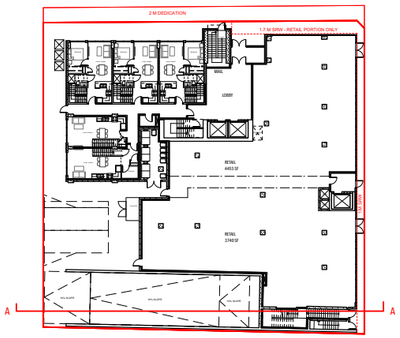
ELEVATIONS | SOUTH

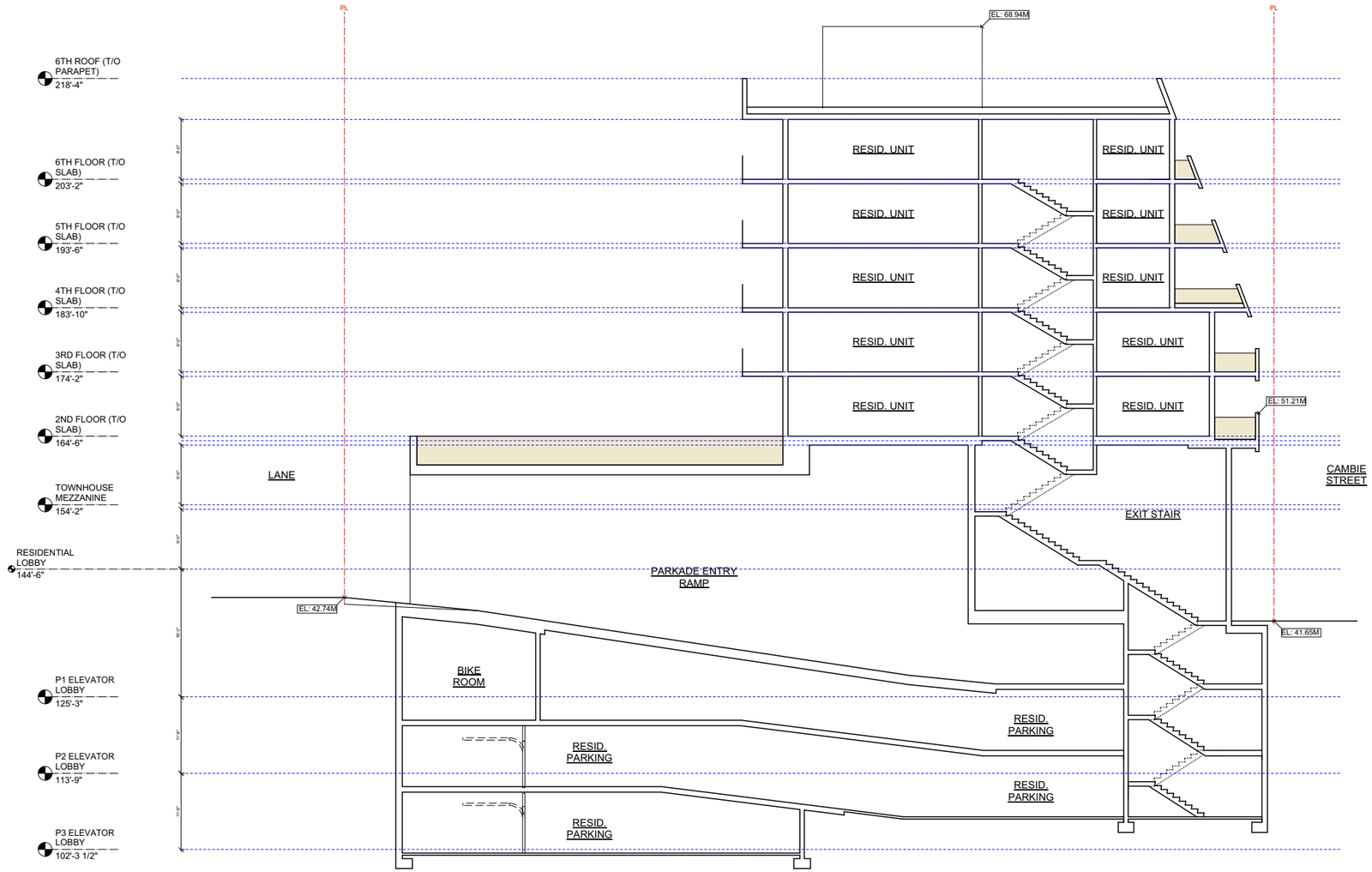


ELEVATIONS | SOUTH

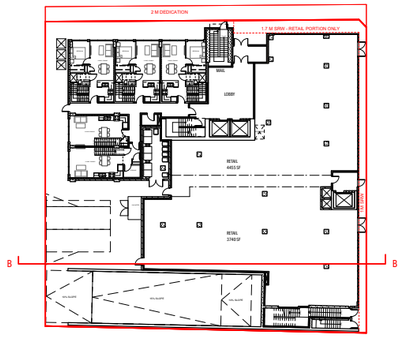


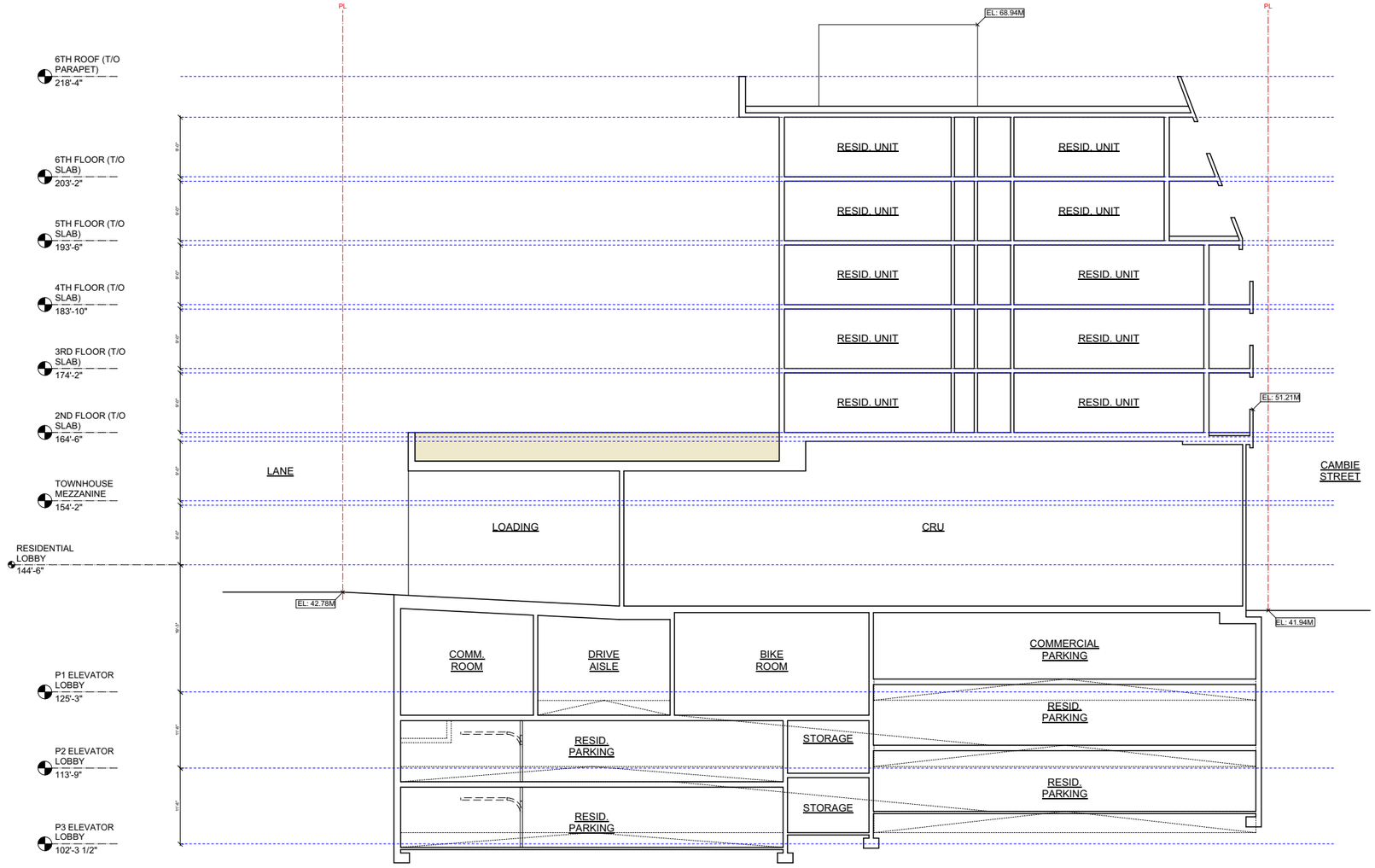
SECTIONS | A-A


2 M DEDICATION
1.5 M SRW - RETAIL PORTION ONLY
LOBBY
RETAIL
4453 SF
RETAIL
3740 SF
A
A

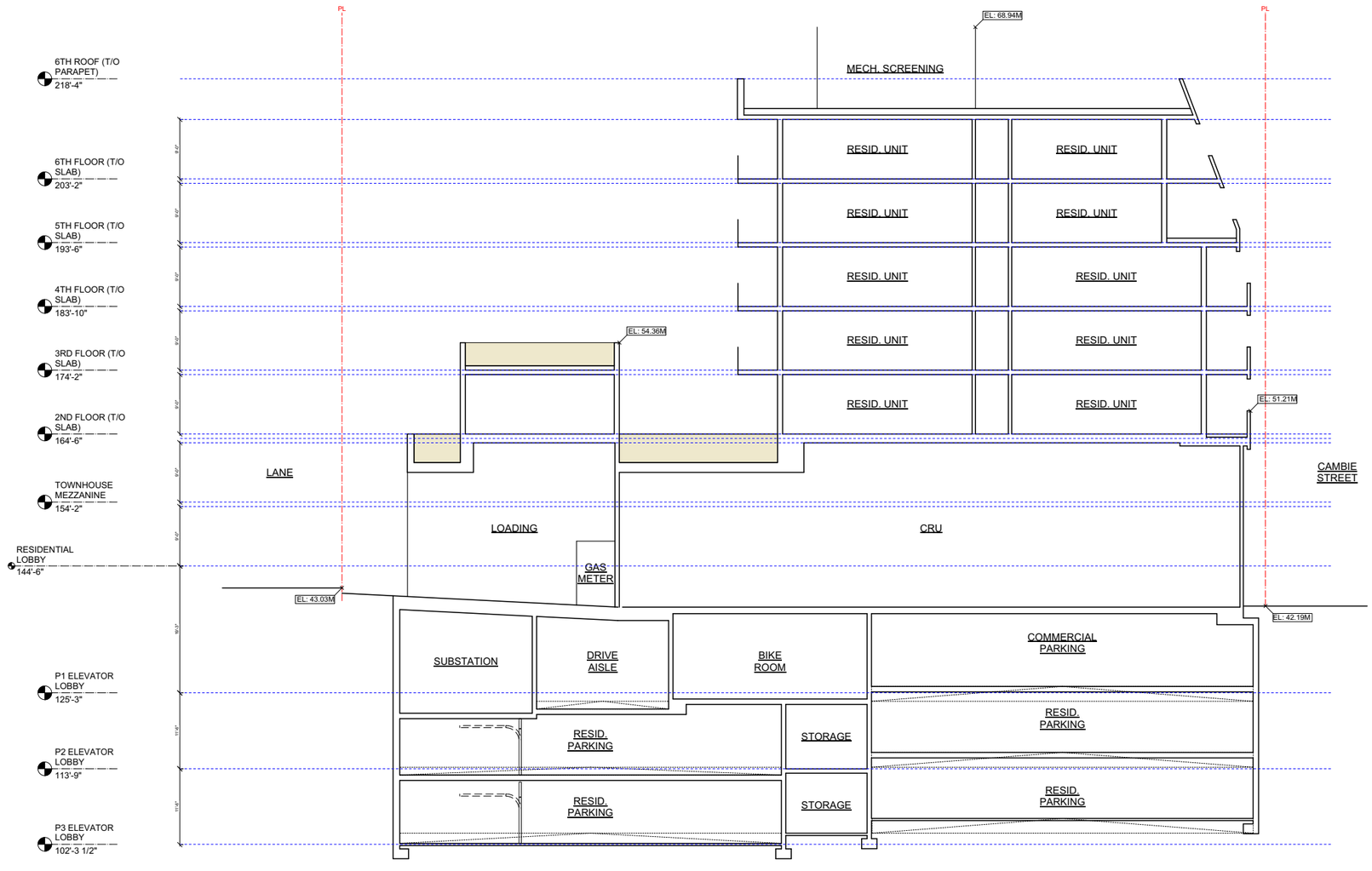

PL
PL
EL: 68.94M
6TH ROOF (T/O PARAPET)
218'-4"
6TH FLOOR (T/O SLAB)
203'-2"
5TH FLOOR (T/O SLAB)
193'-6"
4TH FLOOR (T/O SLAB)
183'-10"
3RD FLOOR (T/O SLAB)
174'-2"
2ND FLOOR (T/O SLAB)
164'-6"
TOWNHOUSE MEZZANINE
154'-2"
RESIDENTIAL LOBBY
144'-6"
P1 ELEVATOR LOBBY
125'-3"
P2 ELEVATOR LOBBY
113'-9"
P3 ELEVATOR LOBBY
102'-3 1/2"
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
EL: 51.21M
LANE
CAMBIE STREET
EXIT STAIR
PARKADE ENTRY RAMP
EL: 42.74M
EL: 41.65M
BIKE ROOM
RESID. PARKING
RESID. PARKING
RESID. PARKING
RESID. PARKING

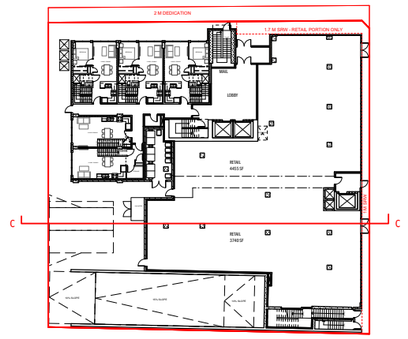
SECTIONS | B-B


2 M DEDICATION
1.5 M SRW - RETAIL PORTION ONLY
LOBBY
RETAIL
4453 SF
RETAIL
3740 SF
B
B


PL
PL
EL: 68.94M
6TH ROOF (T/O PARAPET)
218'-4"
6TH FLOOR (T/O SLAB)
203'-2"
5TH FLOOR (T/O SLAB)
193'-6"
4TH FLOOR (T/O SLAB)
183'-10"
3RD FLOOR (T/O SLAB)
174'-2"
2ND FLOOR (T/O SLAB)
164'-6"
TOWNHOUSE MEZZANINE
154'-2"
RESIDENTIAL LOBBY
144'-6"
P1 ELEVATOR LOBBY
125'-3"
P2 ELEVATOR LOBBY
113'-9"
P3 ELEVATOR LOBBY
102'-3 1/2"
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
RESID. UNIT
EL: 51.21M
LANE
CAMBIE STREET
LOADING
CRU
EL: 42.78M
EL: 41.94M
COMM. ROOM
DRIVE AISLE
BIKE ROOM
COMMERCIAL PARKING
RESID. PARKING
RESID. PARKING
RESID. PARKING
STORAGE
STORAGE

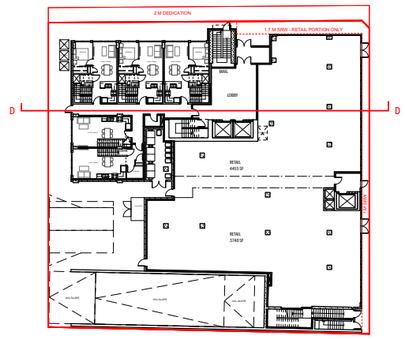
SECTIONS | C-C

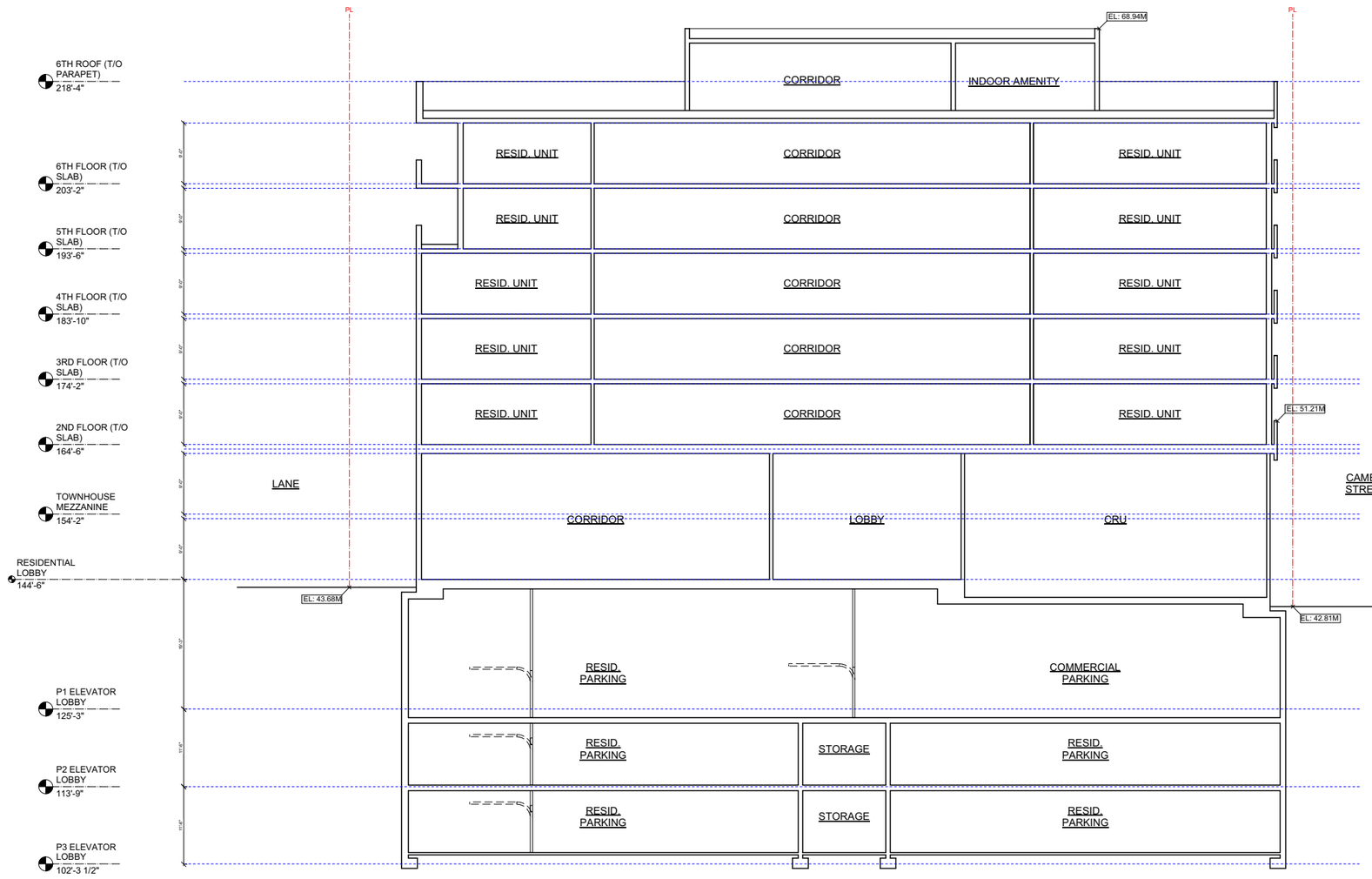




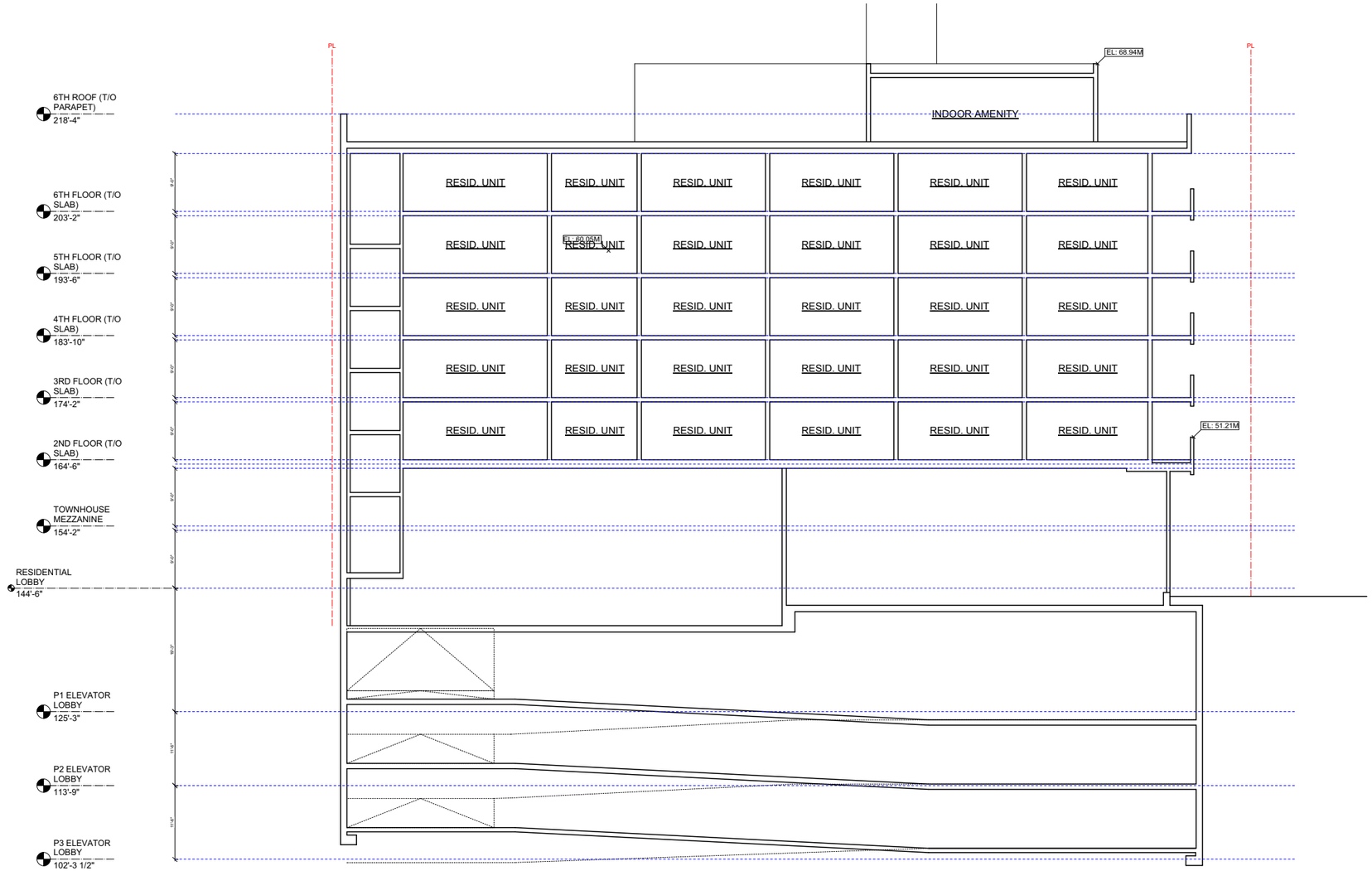
D

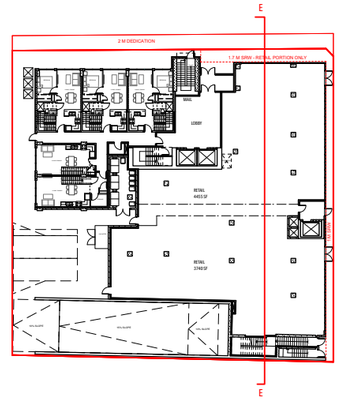
SECTIONS | D-D


2 M DEDICATION
1.5 M SRW - RETAIL PORTION ONLY
D
D
LOBBY
RETAIL
4453 SF
RETAIL
3740 SF


PL
PL
EL: 68.94M
6TH ROOF (T/O PARAPET)
218'-4"
6TH FLOOR (T/O SLAB)
203'-2"
5TH FLOOR (T/O SLAB)
193'-6"
4TH FLOOR (T/O SLAB)
183'-10"
3RD FLOOR (T/O SLAB)
174'-2"
2ND FLOOR (T/O SLAB)
164'-6"
TOWNHOUSE MEZZANINE
154'-2"
RESIDENTIAL LOBBY
144'-6"
P1 ELEVATOR LOBBY
125'-3"
P2 ELEVATOR LOBBY
113'-9"
P3 ELEVATOR LOBBY
102'-3 1/2"
9'-4"
9'-4"
9'-4"
9'-4"
9'-4"
9'-4"
18'-9"
11'-6"
11'-6"
CORRIDOR
INDOOR AMENITY
RESID. UNIT
CORRIDOR
RESID. UNIT
RESID. UNIT
CORRIDOR
RESID. UNIT
RESID. UNIT
CORRIDOR
RESID. UNIT
RESID. UNIT
CORRIDOR
RESID. UNIT
EL: 51.21M
LANE
CORRIDOR
LOBBY
CRU
CAMBIE STREET
EL: 43.68M
EL: 42.81M
RESID. PARKING
COMMERCIAL PARKING
RESID. PARKING
STORAGE
RESID. PARKING
RESID. PARKING
STORAGE
RESID. PARKING

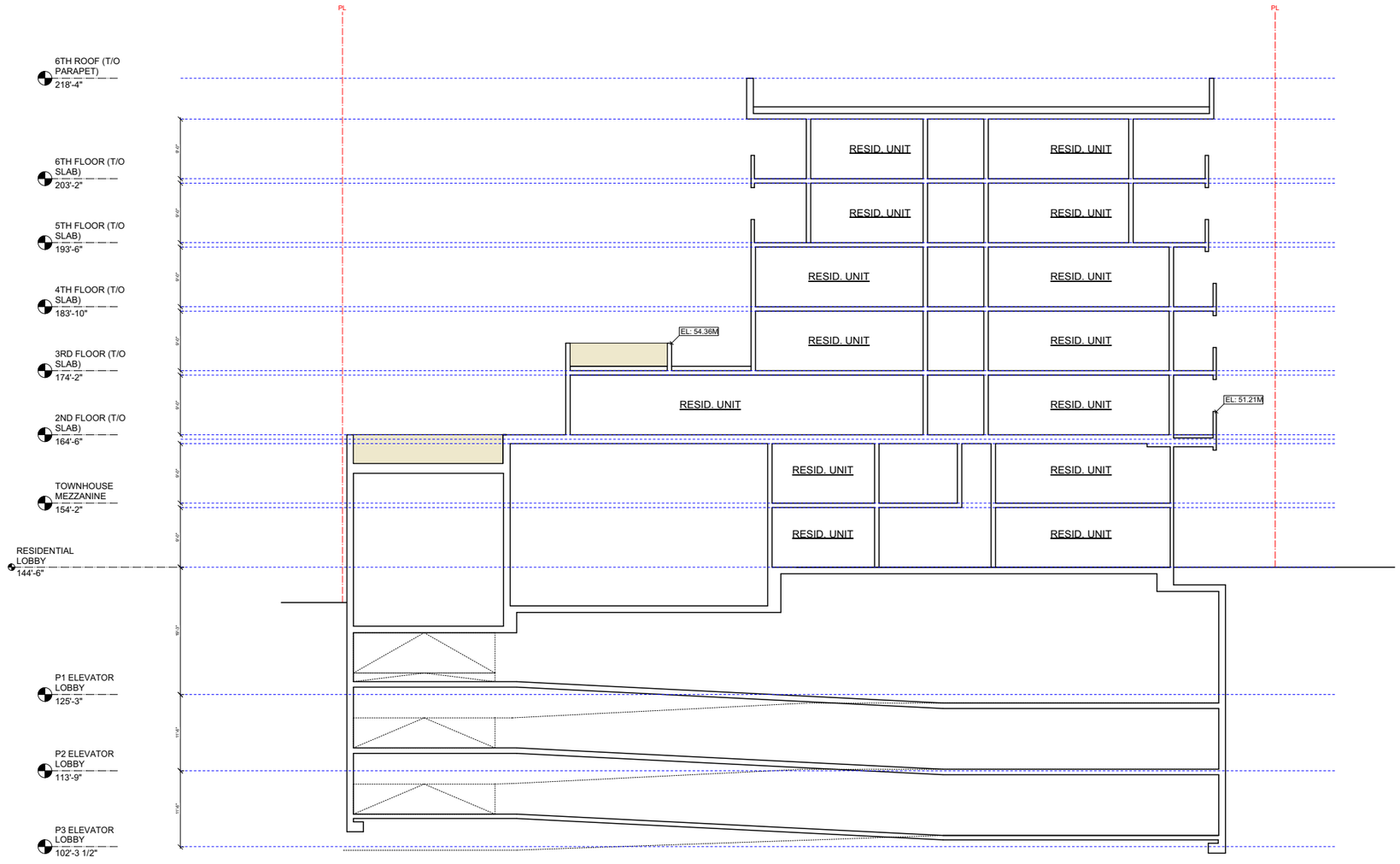
SECTIONS | E-E

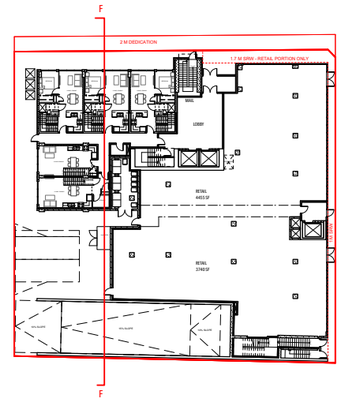




D

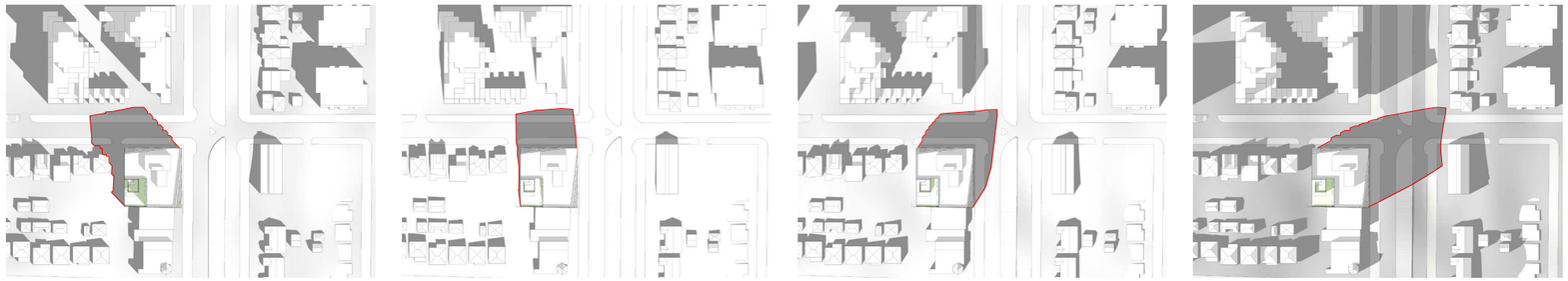
SECTIONS | F-F



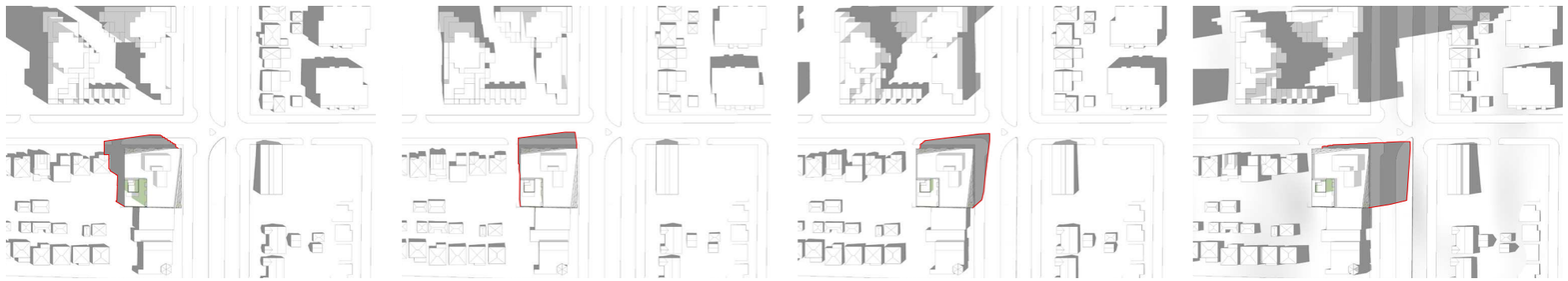


D

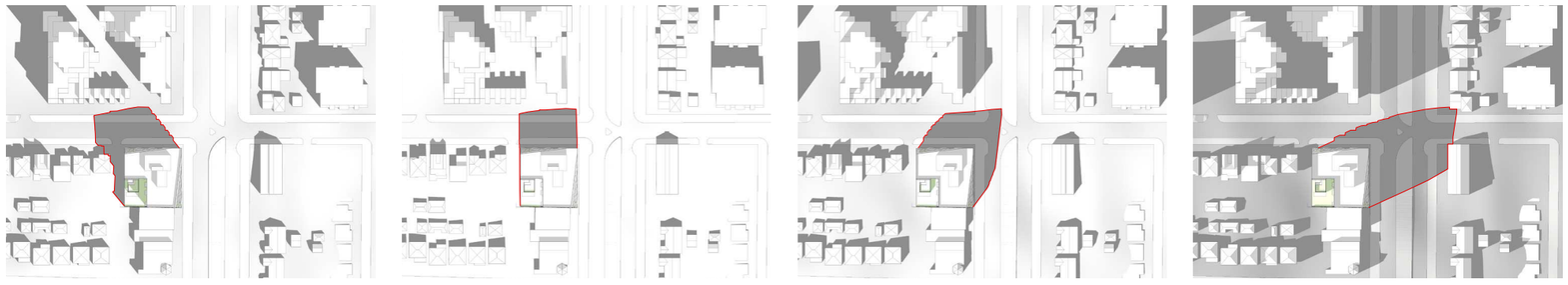
SHADOW STUDIES



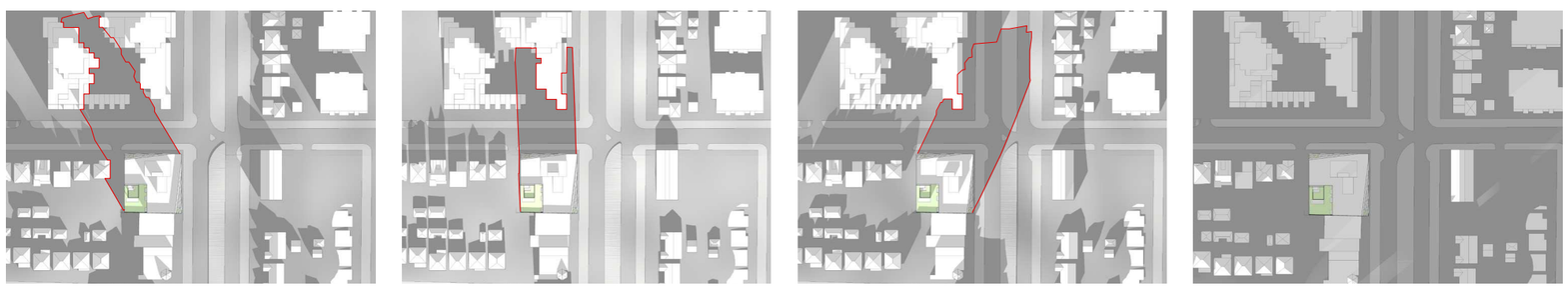
21 MARCH 10:00 | 21 MARCH 12:00 | 21 MARCH 14:00 | 21 MARCH 16:00



21 JUNE 10:00 | 21 JUNE 12:00 | 21 JUNE 14:00 | 21 JUNE 16:00



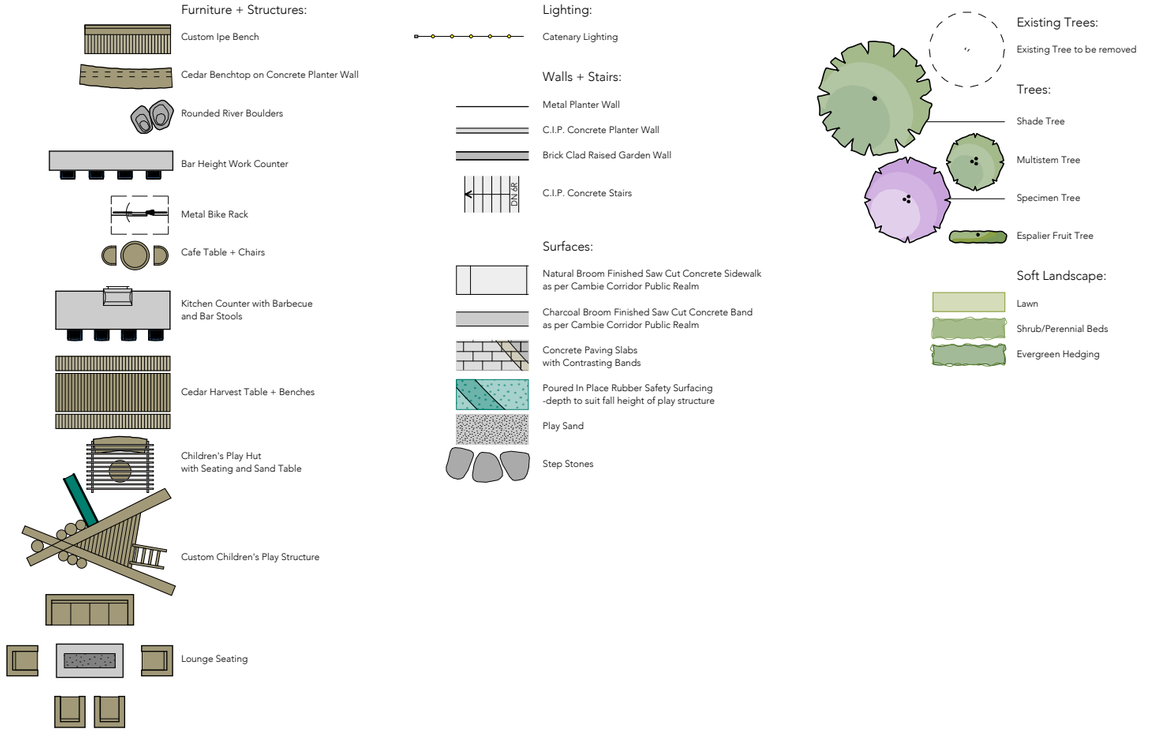
21 SEPTEMBER 10:00 | 21 SEPTEMBER 12:00 | 21 SEPTEMBER 14:00 | 21 SEPTEMBER 16:00



21 DECEMBER 10:00 | 21 DECEMBER 12:00 | 21 DECEMBER 14:00 | 21 DECEMBER 16:00

RATIONALE + LEGENDS

Legend



Landscape Bird Friendly Strategy

There are several landscape measures to ensure the proposed development is Bird Friendly. Double rows of new street tree along West 59th Avenue and Cambie Street will provide habitat opportunites and provide urban forest canopy for birds.

The proposed on site landscape planting incorporates canopy/habitat stratification with tree and shrub planting, utilizes plants that attract birds and insects, and includes native and non-native/non-invasive plants.

The proposed vegetated area on the site significantly exceeds the existing green coverage. The planting is distributed over the ground floor and several rooftop levels to include grasses, berry and seed producing species.

Landscape Bird Friendly Strategy

Groundplane

The landscape on the ground floor consists of two key elements – the retail along Cambie Street, and the residential units along West 59th Avenue and the lane. The residential lobby entry acts a transition between the harder more urban quality of Cambie and the more garden quality of the single family homes to the west of the site.

The Cambie Street public realm is prescribed by the City of Vancouver and generally consists of hardscape with a double row of street trees in tree grates. As a means to soften the public realm on Cambie and provide some level of greenery a linear metal planter along the building façade is proposed.

The Cambie Street public realm treatment wraps the retain corner onto West 59th Avenue. At the residential entry lobby, the public realm treatment shifts to a softer, greener character with grass boulevards and a double row of street trees. The townhouse units, located west of the lobby, are buffered from the public realm with 3 – 4' ht. garden wall/screens, and the patios sit slightly above the grade of the public realm. Views between the unit patios are buffered with planters and screens with vines. This treatment continues along the lane side townhouse units.

Level 2 Courtyard

This garden level consists of unit patios and planter over top of the suspended slab/roof of the retail and loading area. The slab at this level has been dropped so that the patios are flush with the planting. Soil depths are maximized to slow down storm water flows and provide good soil volume for tree growth. Hedges buffer views between patios, and trees provide shade, bird habitat, and softening of the courtyard acoustics.

As a means to transition to the single family homes to the west the patios are oriented towards the courtyard, and planting is located along the entire length of the west parapet wall.

Level 3 Roof Garden

Where the building steps back along the west a roof patio is proposed for the adjacent unit. Level 3 sits above the roof of the adjacent single family homes to the west. To prevent overlook the patio at this rooftop is pulled back from the parapet wall.

Levels 2 – 6 Patio Planters

Metal planters with screen and vines are proposed between the patios along the north and east roof decks. The intent is for the planting to spill over the parapet wall and soften the building façade.

Level 7 Amenity Garden

This rooftop garden is a common amenity for all building residents. A lounge area, dining area, work space, urban agriculture and a children's play area are proposed. Planters along the south, west and north parapet walls are intended to prevent overlook to the adjacent developments to the south and north, and the single family homes to the west.

Further refinement of this garden will occur when the programing of the interior amenity space is finalized at the time of development permit.

Sustainable Landscape Strategies

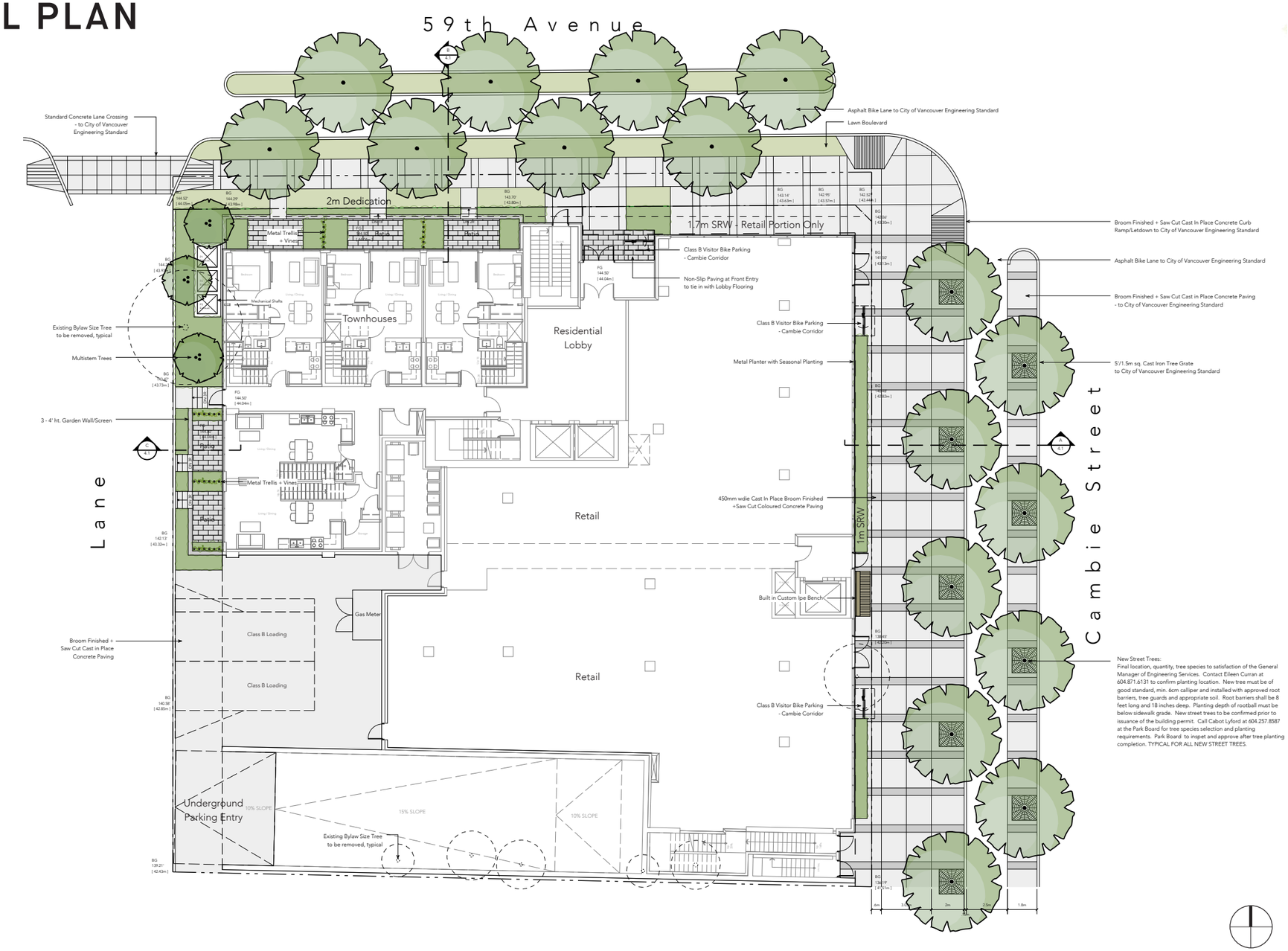
Planting Design
The proposed plant palette aims to reduce potable water consumption by using low water demand and/or drought tolerant species. The plant palette has also been developed to provide food sources and habitat to birds and bees.

Urban Agriculture
Urban agriculture is proposed on the roof. The design of this space also includes tool storage, a potting bench, and hose bibs.

Heat Island Effect
Many of the paved surfaces of the site will be shaded (over time) with the proposed tree planting strategy. The level 7 roof has a maximized vegetative surfaces and tree planting to reduce the heat island effect.

Stormwater Management
Stormwater will be mitigated through the use of deep soil volumes over the suspended slab at levels 2, 3 and 7.

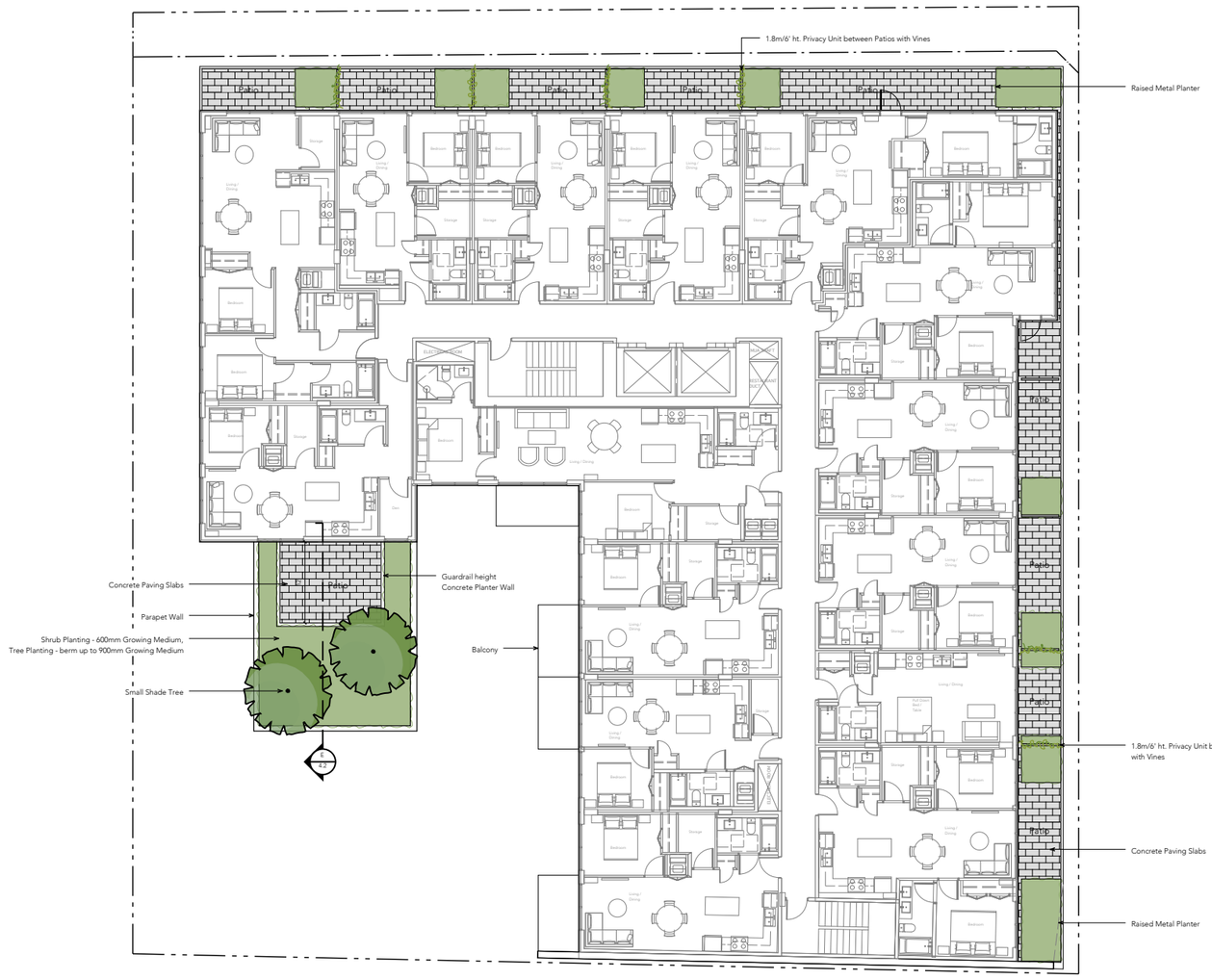
GROUND LEVEL PLAN



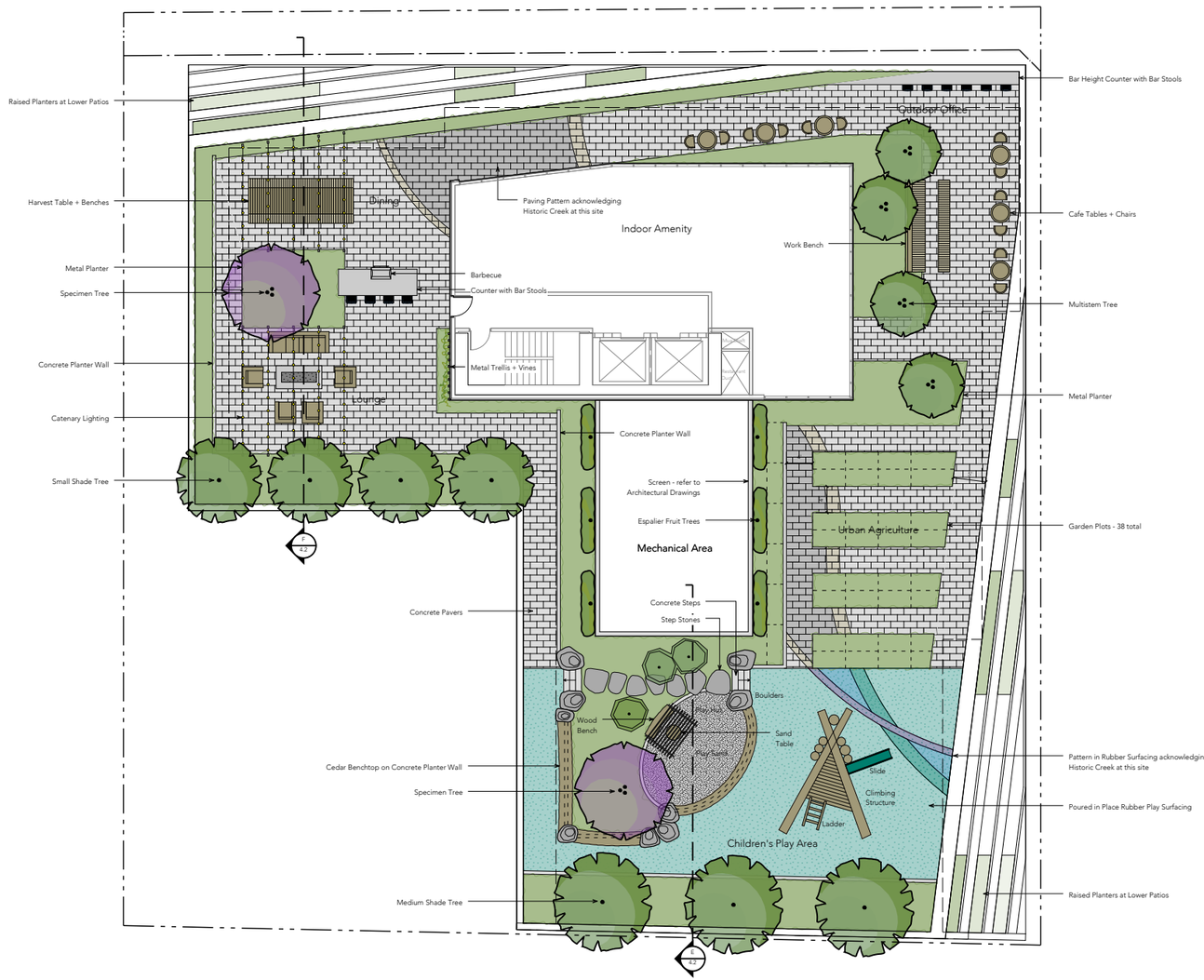
2ND LEVEL PLAN



2ND LEVEL PLAN



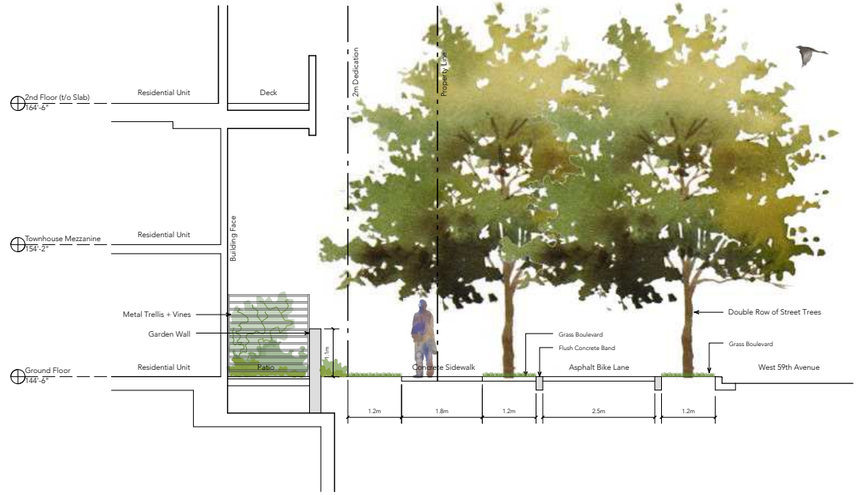
ROOF PLAN


Raised Planters at Lower Patios
Harvest Table + Benches
Metal Planter
Specimen Tree
Concrete Planter Wall
Catenary Lighting
Small Shade Tree
Concrete Pavers
Cedar Benchtop on Concrete Planter Wall
Specimen Tree
Medium Shade Tree
Dining
Lounge
Paving Pattern acknowledging Historic Creek at this site
Indoor Amenity
Barbecue
Counter with Bar Stools
Metal Trellis + Vines
Concrete Planter Wall
Screen - refer to Architectural Drawings
Espalier Fruit Trees
Mechanical Area
Concrete Steps
Step Stones
Boulders
Wood Bench
Playhut
Sand Table
Play Sand
Children's Play Area
Slide
Climbing Structure
Ladder
Outdoor Office
Work Bench
Urban Agriculture
Bar Height Counter with Bar Stools
Cafe Tables + Chairs
Multistem Tree
Metal Planter
Garden Plots - 38 total
Pattern in Rubber Surfacing acknowledging Historic Creek at this site
Poured in Place Rubber Play Surfacing
Raised Planters at Lower Patios

SECTIONS | GROUND LEVEL



A L - 1.1 Section A - Cambie Street
Scale 1/4" = 1'-0"

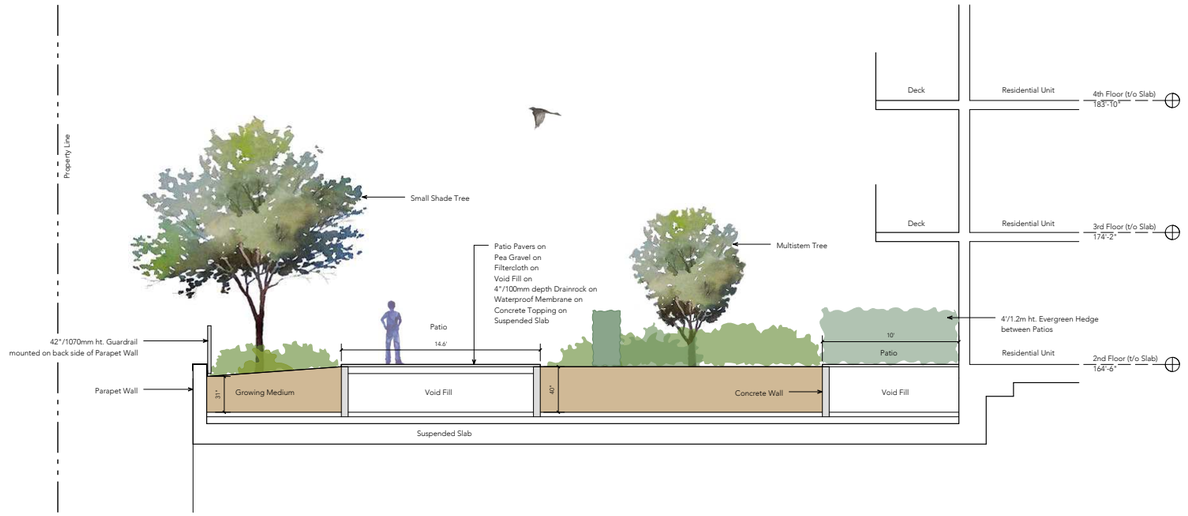


B L - 1.1 Section B - West 59th Avenue
Scale 1/4" = 1'-0"

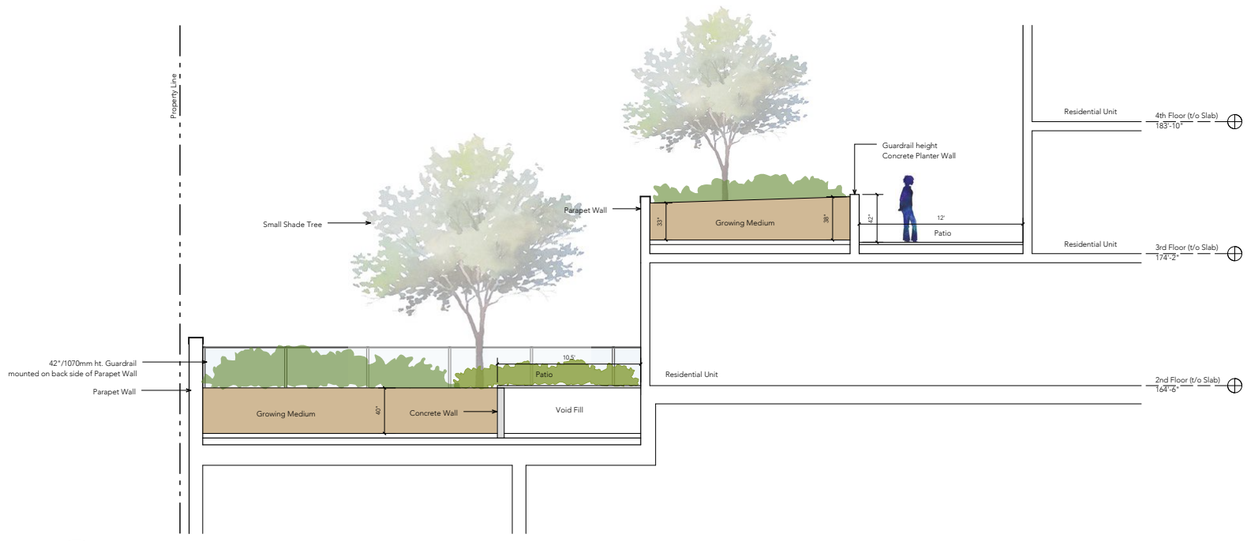


C L - 1.1 Section C - Lane
Scale 1/4" = 1'-0"

SECTIONS | 2ND + 3RD LEVEL

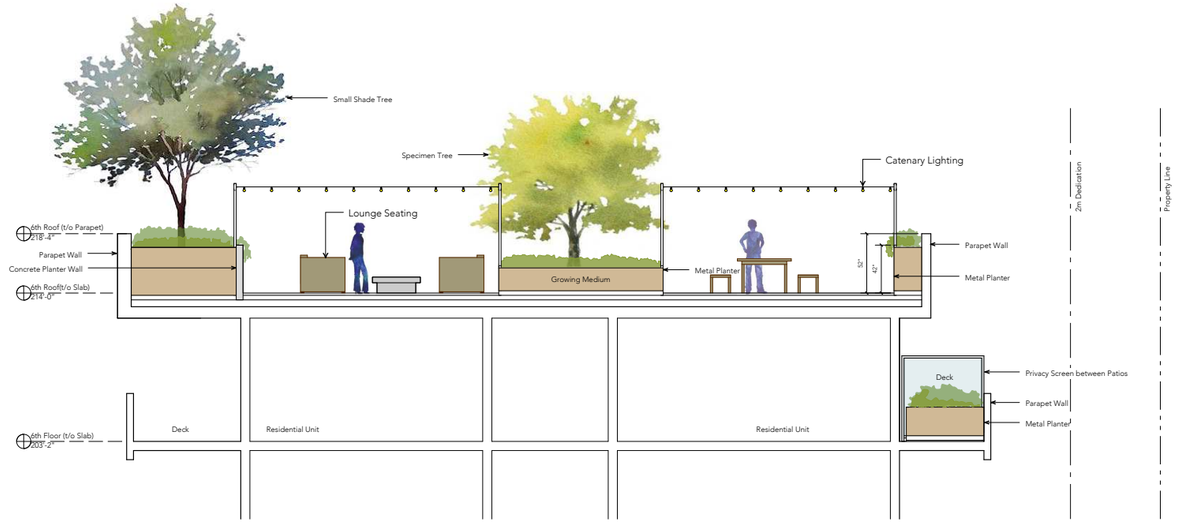


D
L - 1.2
Section D - Level 2 Courtyard
Scale 1/4" = 1'-0"

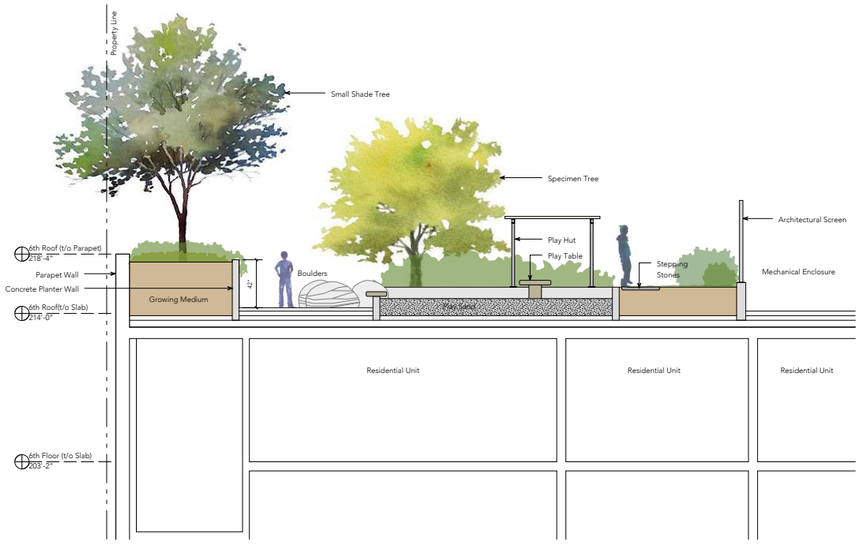


E
L - 1.3
Section E - Level 2 + 3 Patios
Scale 1/4" = 1'-0"

SECTIONS | ROOF AMENITY



F
L - 1.4
Section F - Level 7 Amenity Garden
Scale 1/4" = 1'-0"



G
L - 1.4
Section G - Level 7 Amenity Garden
Scale 1/4" = 1'-0"