PROJECT OVERVIEW

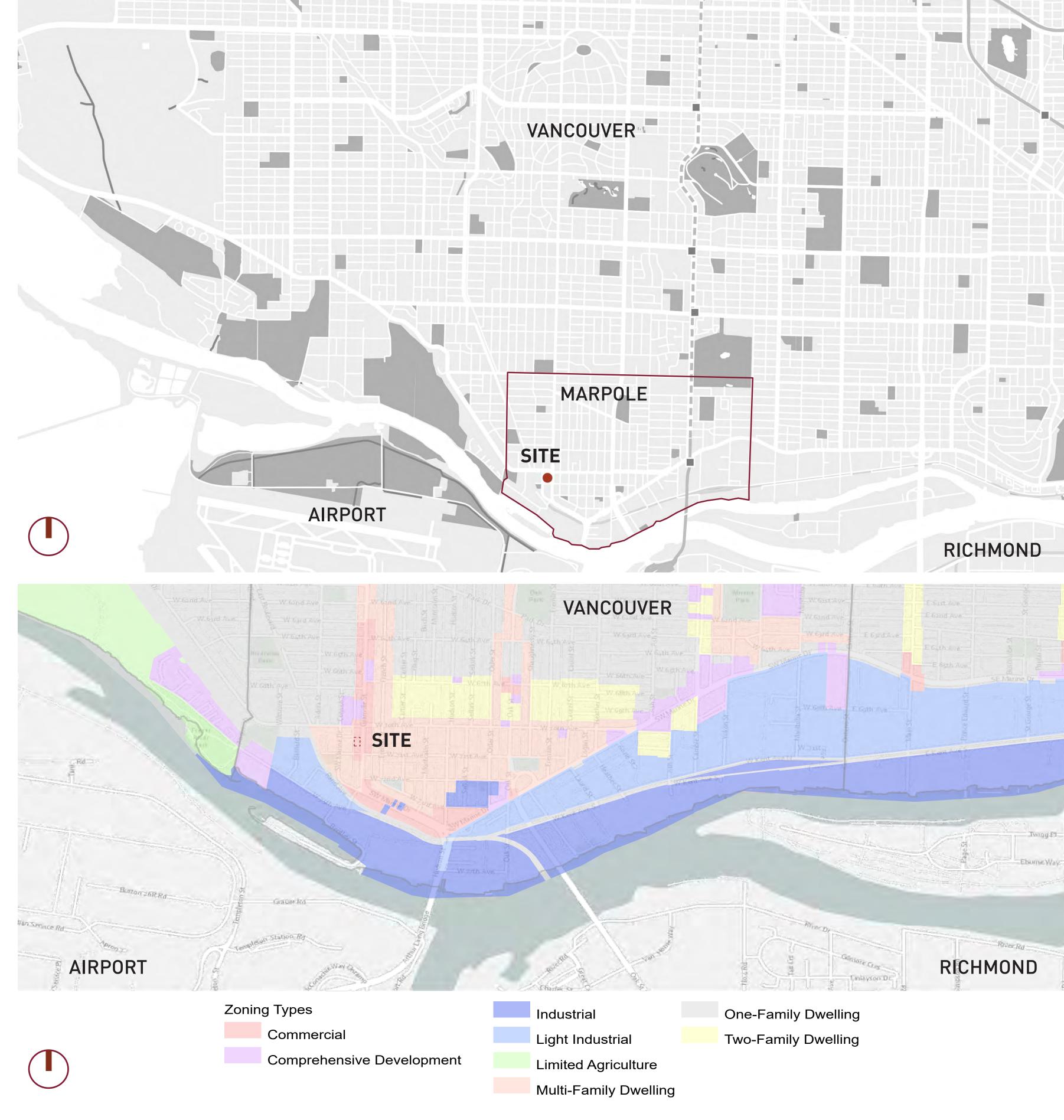
The submission proposes to change the zoning of this site from C-2 to CD-1 under the Marpole Community Plan.

The proposal seeks to redevelop the site for an 11-storey mixed-use building, which includes ground level retail space, second level office space, and a total of 55 market residential units on floors 3 to 11. The total proposed floor area is 63,365 sf, achieving an FSR of 4.10.

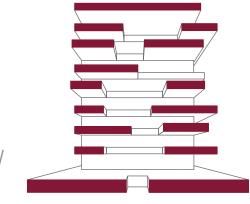
The site is located within the "Granville" sub-area of the Marpole Community Plan. It is currently a vacant lot along Granville Street with a gross site area of 15,076 sq. ft.

The proposal with its future commercial, office space and housing will become part of the neighbourhood centre, and help strengthen the character of Granville as the "high street" for Marpole. The existing context to the south, east and west of the site is typified by existing low-rise apartment buildings.

Our proposed development is consistent with the Marpole Community Plan where the existing developments along Granville Street, between 64th and 71th Avenues, will be developed to provide a 2 to 3 storey street wall with a sawtooth pattern of higher forms above.

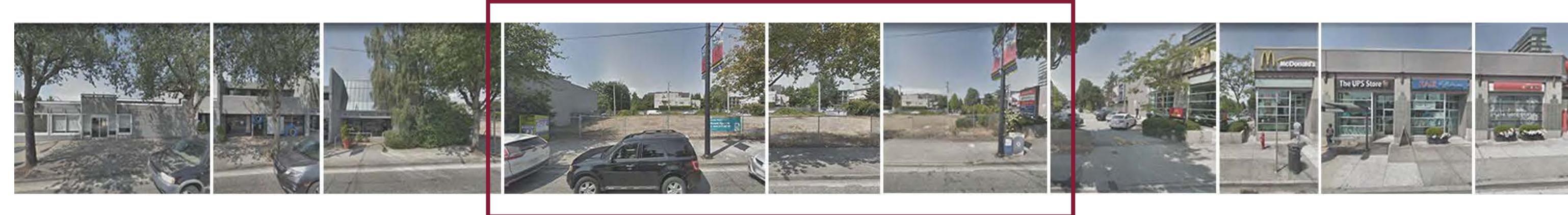








SITE

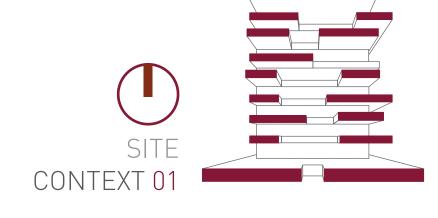


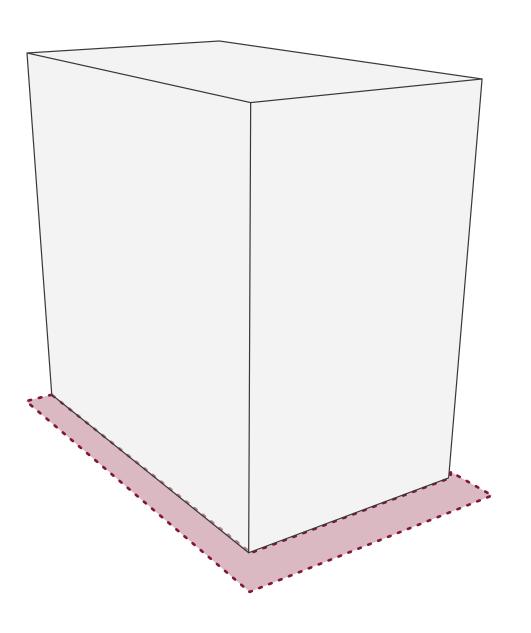
SITE

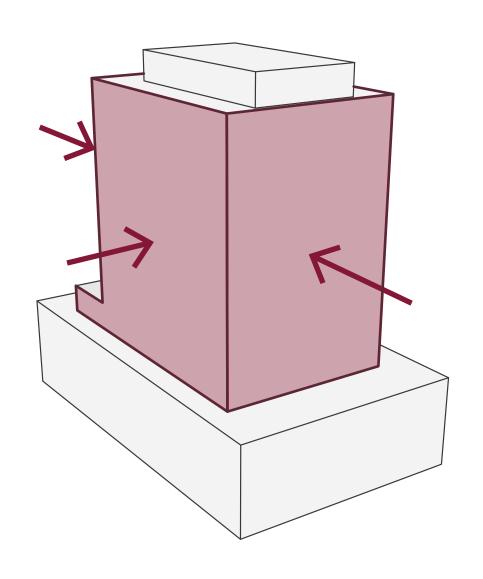
GRANVILLE STREETVIEW

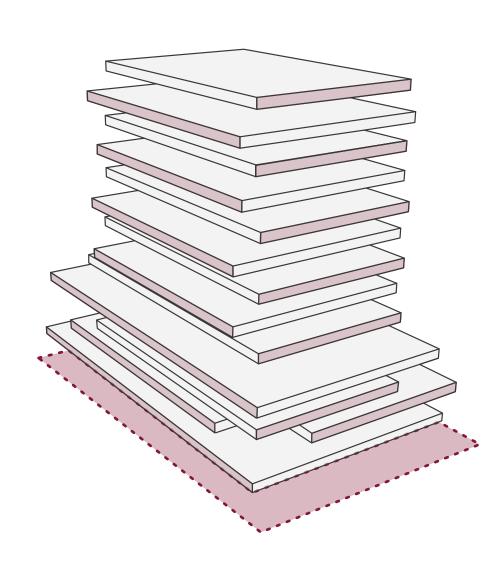
The site presents 158 ft of frontage along Granville Street and 95 ft of depth. The size and shape of the site yields a conventional tower and podium configuration with a predominant North/South orientation.







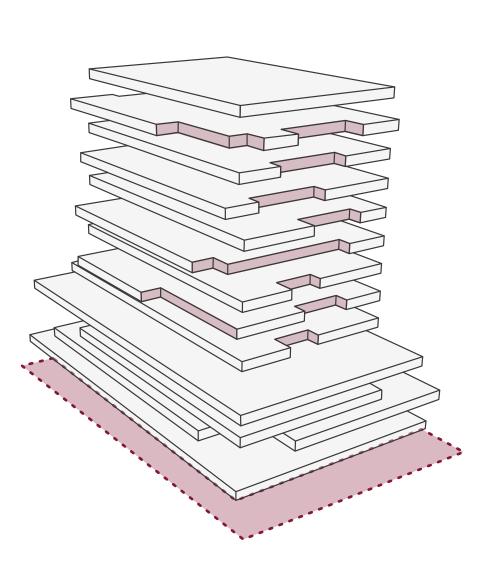


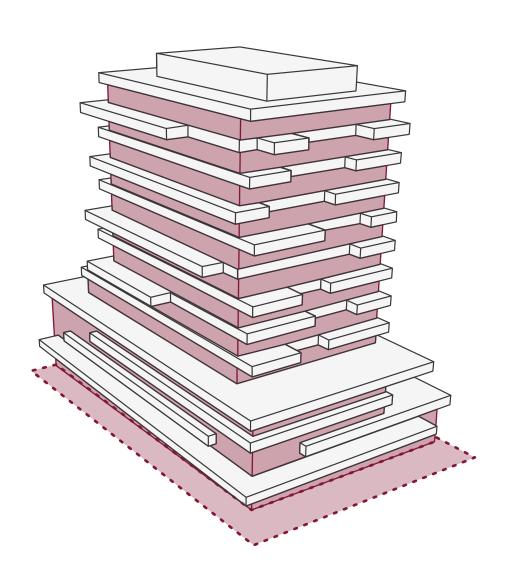


1 158 FT BY 95 FT SITE - SETBACKS & ROW'S









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5 FINAL MASSING



The rigorous regulatory parameters generated a built form consisting of three distinct elements:

1-A two storey commercial podium

2-An 11 storey residential tower with a 5,035 sf footprint limited by a 15ft setback at the lane, an additional 8ft step-back from the Granville Street podium and a maximum tower width of 82 ft.

3-A one storey shoulder above level 2 which maximizes residential floor area, taking advantage of setback relaxations for lower levels.

In addition to these parameters, a notable / consistent step-back above the Granville Street podium frontage had to be maintained and rear facing balconies had to be avoided.

The prominent slab edge expression was chosen as an architectural element that ties these three rather disjointed components together. Shifting and pulling these slab edges generates movement as well a wider range of spatial conditions at the residential balconies while maintaining a mostly consistent tower plate throughout.









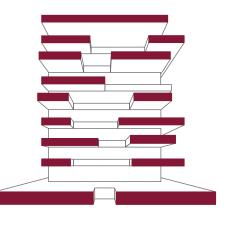
FORM OF DEVELOPMENT

The proposed building form is generally consistent with the Marpole Community Plan. The 11-storey tower will provide a proper transition from the development of the Safeway site at West 70th Avenue to the existing context to the south and west of the proposal.

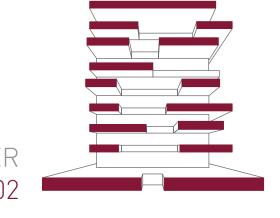
Along the north property line, the existing 4 meter-wide Right-of-Way was preserved for public utility purposes. A 3 foot setback was provided in addition to the ROW to ensure pedestrian access and enhance public realm opportunities. Floor to ceiling glazing was designed for the ground floor retail spaces along the north, which contributes to pedestrian interest and casual surveillance.

Along Granville Street, a 22 foot setback was provided from the curb at ground floor. We have also proposed a 2 foot setback along the Lane to allow for a landscape buffer. The design eliminated west-facing balconies to not only reduce the apparent massing, but also minimize overlook impacts onto residential buildings across the lane. Along Granville Street, the residential tower has a notable step-back of 8 feet from the 2 storey commercial podium with a few calculated balcony projections which are consistent with the overall architectural expression of the building.

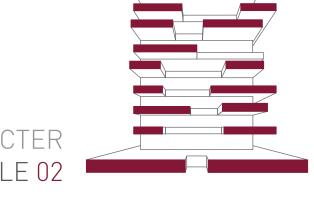
The Amenity space is located at Level 3 with a south facing outdoor patio of over 1000 sq. ft.. Except for Level 3, the tower has a consistent floorplate which results in an efficient and economically responsible design.











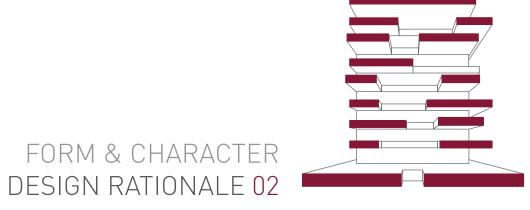


ORIENTATION AND PASSIVE DESIGN STRATEGIES

Deep balconies control solar heat gain for dwelling units along the east and south elevations. Units along the west elevations have been designed as corner suits which create opportunities for cross ventilation. The amount of openings along this faced have been reduced considerably compared to the east elevation to reduce excessive heat gain.

A low overall window to wall ratio targeted at 40%, with continuous thermal insulation, will not only reduce energy use for heating and cooling, but will also significantly reduce peak heating/cooling demands and the need for larger HVAC systems. Effective thermal performance of the building's opaque elements will be properly modelled.

Thermal bridging of balconies slabs can be reduced either through thermal breaks such as Isokorb or by wrapping the balconies with insulation. The proposed cladding surrounding these balcony projections, in addition to the soffits, will allow for the second option to work.



ENVIRONMENTAL SUSTAINABILITY

• 1. SITE PLANNING

- This urban infill development will add a vibrant mix of residental, retail and office to fill a current gap in the streetscape over the past 10 years.
- The Marpole neighbourhood has a high level of walkability to retail, schools and other community services.
- The development encourages alternative transportation uses by providing bike lockers and electric vehicle charging stations. It is within close proximity to the arbutus corridor bike route and bus stops connecting to UBC, Richmond and Canada line.

• 2. INTEGRATED RAINWATER MANAGEMENT PLAN (IRMP)

- Bioswale in a current statutory right of way along the north edge of the site
- Green roofs on exposed podiums at levels 2,3,4 and rooftop
- A water treatment system for capturing high pollutants from the parking entrance ramp prior to discharge to the city sewer network.

• 3. CONSTRUCTION PRACTICES

- All ductwork and HVAC units will be covered with poly until start-up.
- Construction materials will be sourced for low VOC content providing nontoxic indoor environments for occupants.
- Any carpets, hard surface flooring will comply with FloorScore or Green Label, as applicable. All interior applied adhesives, sealants, paints and coatings will apply to policy applicable referenced VOC standard maximums.

4. ENERGY EFFICIENCY

- The preliminary design and energy model results align with meething the performance limits as stated in the Green Building Policy for TEDI, TEUI and GHGI.

• 5. EMBODIED EMISSIONS

- LCA Model with Total lifecycle embodied emissions 3,860,000 KgCO2e, Intensity 810 KgCO2e/m2 and annual embodied emissions intensity 13.50 KgCO2e/m2/year.



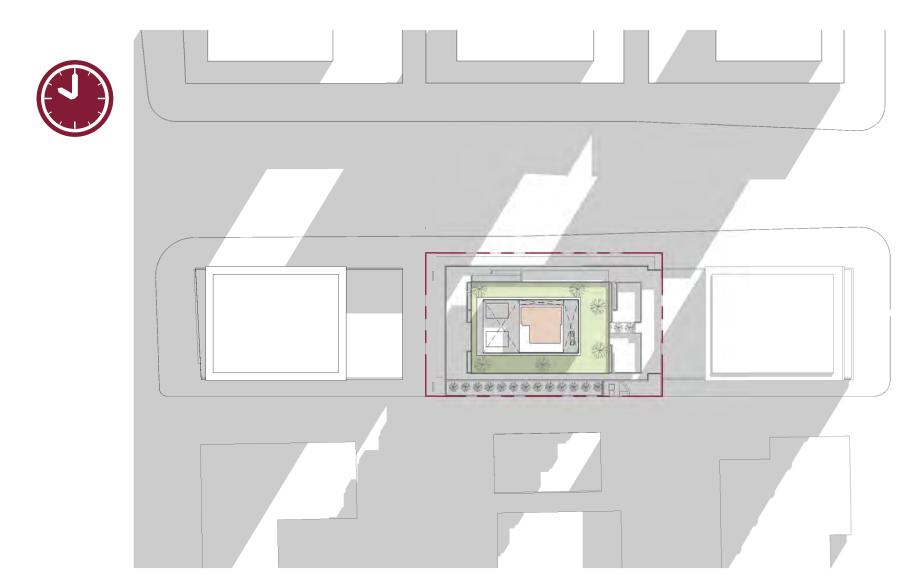
ECONOMIC SUSTAINABILITY

• The intensification of residents in this area will increase the Cov's tax base, and stimulate economic development. The influx of permanent residents will increase existing business activity, and encourage new business development. With the addition of office and retail space, this project will add to the streetscape, encouraging continual economic development and vibrancy to the neighbourhood. In the short term, the project will generate hundreds of jobs during its construction, increasing the use of local services along the existing commercial corridor.

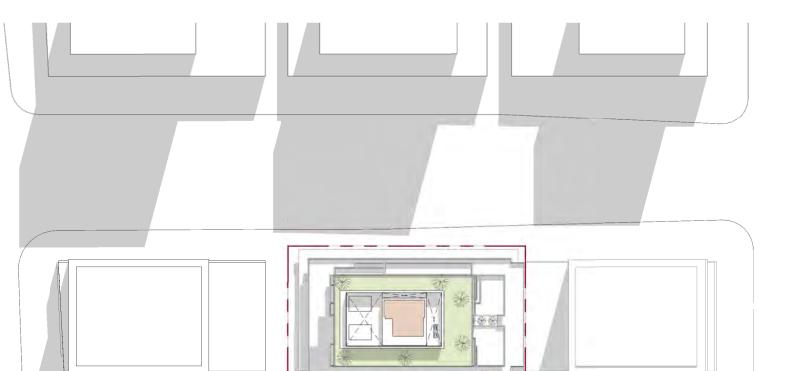
SOCIAL SUSTAINABILITY

- Mixed used projects benefit local neighbourhoods as they attract people from a diverse socio-economic background: professionals, couples with small children and retirees. Diverse urban neighbourhoods in close proximity to public transit, commercial retail, and bike routes encourage healthier lifestyles, and maintain their attractiveness to residents and business over the long term.
 - The project also provides amenity space for use by residential occupants; accessible common space offers opportunities for interaction among residents and building a sense of community.

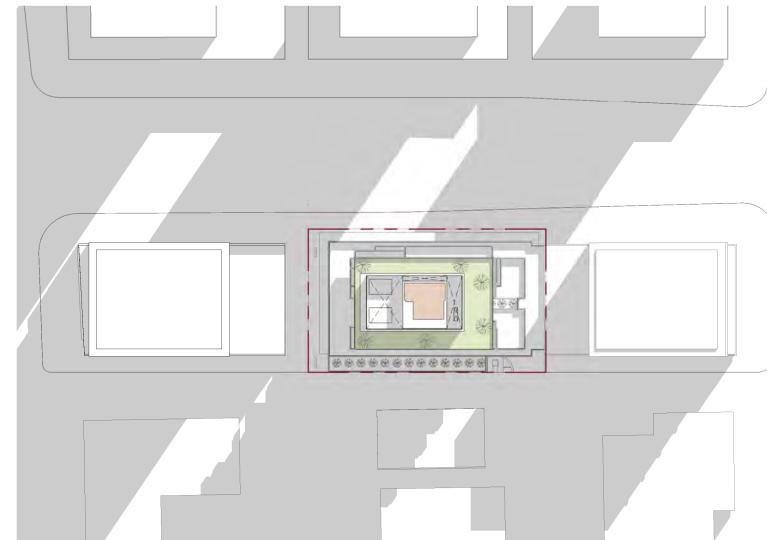


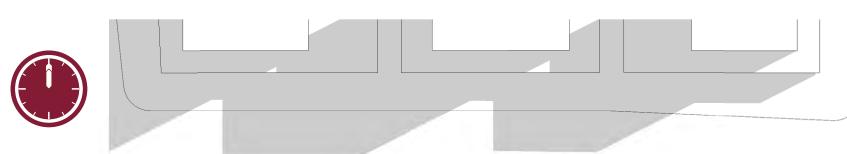




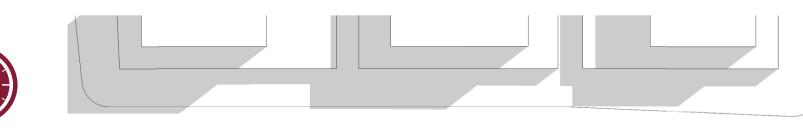




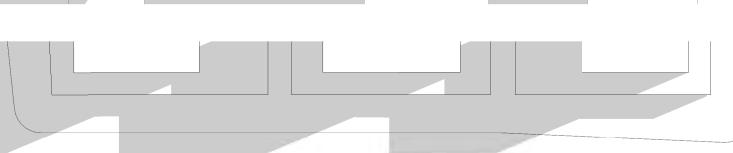


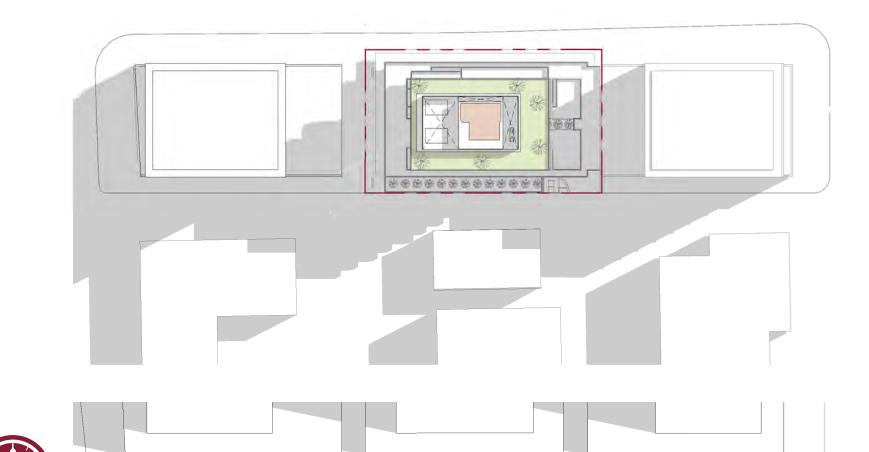


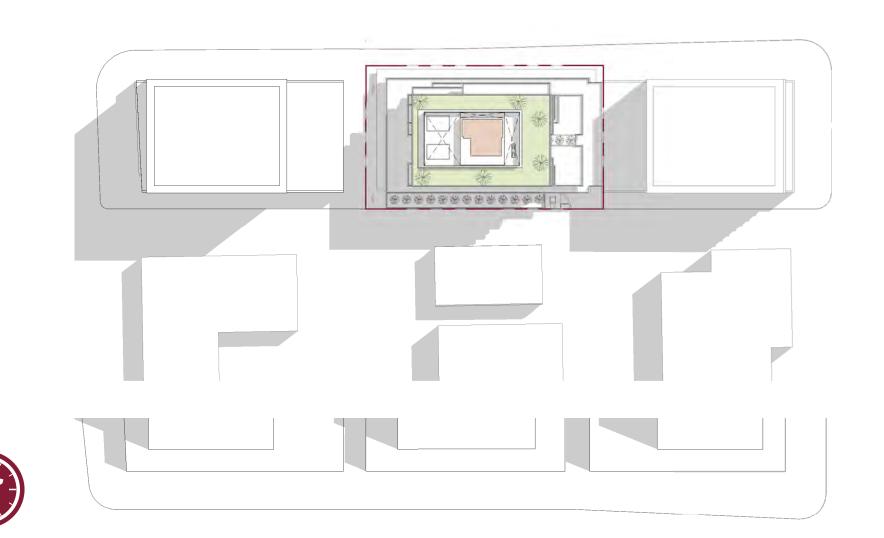


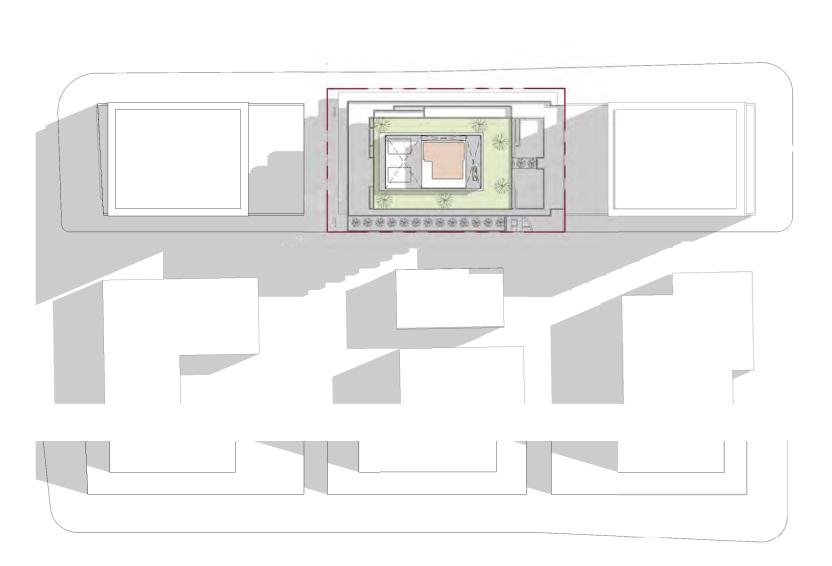


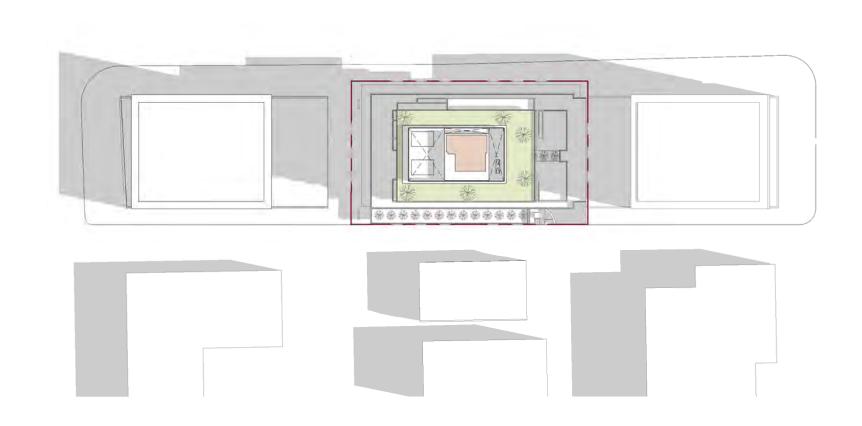


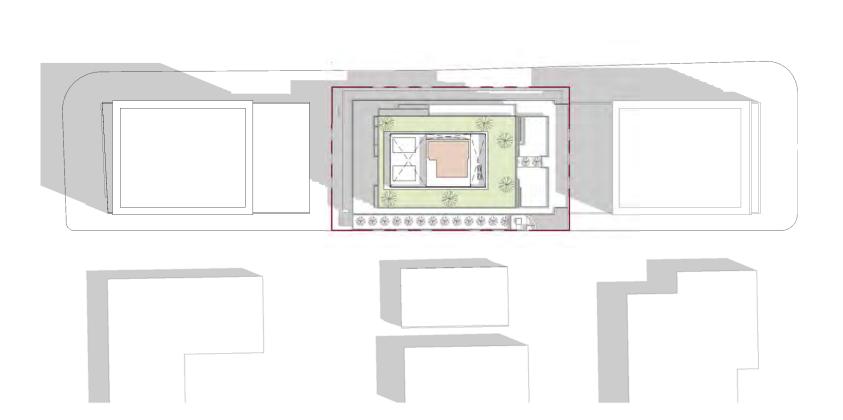


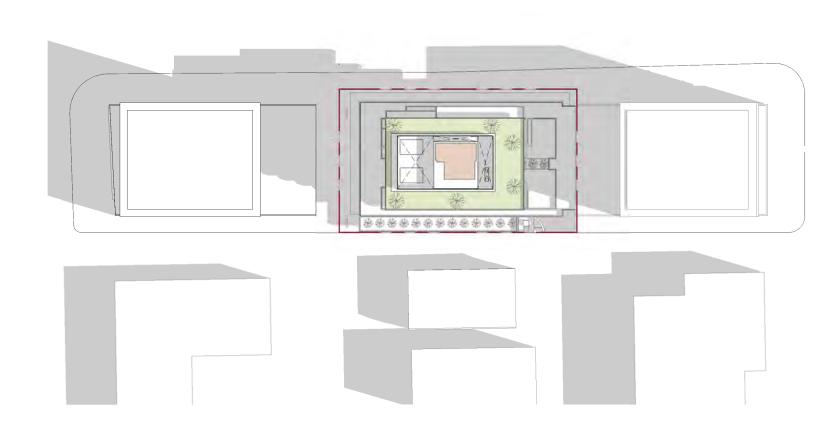




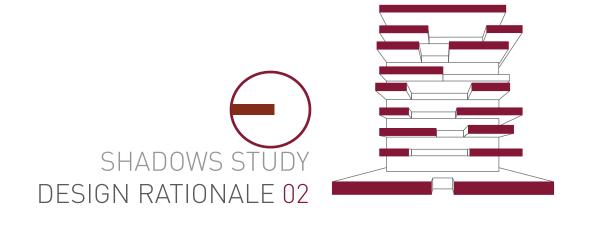












8655 Granville Street

LEGAL ADDRESS: 8655 Granville Street

LEGAL DESCRIPTION: LOT 14 BL M PLAN VAP9322 DL 323 NWD

SITE AREA: 15,076 SF

EXISTING ZONING: C-2 CD-1 PROPOSED ZONING: HEIGHT PROPOSED: 11 STOREYS

FSR PROPOSED:

4.10 11.19% MAX. 12% OPEN PROPOSED OPEN BALCONY AREA:

SETBACKS

NORTH: 4m ROW+3ft

SOUTH: Attached to existing building

EAST: 22ft from curb

WEST (LANE): 2ft on ground, min. 15ft above podium

AREA CALCULATION

Floor	Total Gross Area	Residentail Gross	Deduction (Storage)	Residentail FSR Area	Retail Gross	Office Gross	Amenity	Total FSR Area	Salable Area	Balcony Area
	A	В	C	D	E	F	G	Н	J	К
L1	8605	1170		1170	7050	385		8605	6615	
L2	8090					8090		8090	7500	
L3	6390	6390	80	6310 554	3		767	5543	4720	
L4	5035	5035	80	4955		3		4955	4180	309
L5	5035	5035	80	4955	+			4955	4180	760
L6	5035	5035	80	4955				4955	4180	635
L7	5035	5035	80	4955				4955	4180	890
L8	5035	5035	80	4955				4955	4180	550
L9	5035	5035	80	4955				4955	4180	775
L10	5035	5035	80	4955				4955	4180	515
L11	5035	5035	80	4955				4955	4180	840

				46,353						
Sum	63365	47840	720	47120	7050	8475	767	61878	52275	5274
FSR				3.13 3.07	0.47	0.56		4.10	244	

11.19% (K/D) **Open Balcony Ratio Total Commercial Area** 15,525 **Total Commercial FSR** 1.03 **FSR Total**

NOTE: FLOOR PLATES ABOVE PODIUM LEVEL DON'T EXCEED 6,300 SF.

UNIT MIX

LEVEL	1B	2B	3B	sum	BR#	1B	1B	2В	2B	2B	2В	3В	Sum
					AREA	434	530	673	855	680	780	980	
1					L1								0
2					L2								0
3	3	3	1	7	L3	2	1	1		1	1	1	7
4	2	3	1	6	L4	2		2	1			1	6
5	2	3	1	6	L5	2		2	1			1	6
6	2	3	1	6	L6	2		2	1			1	6
7	2	3	1	6	L7	2		2	1			1	6
8	2	3	1	6	L8	2		2	1			1	6
9	2	3	1	6	L9	2		2	1			1	6
10	2	3	1	6	L10	2		2	1			1	6
11	2	3	1	6	L11	2		2	1			1	6

55 (was 54)

UNIT AREA (for Parking Cal.)	QUAT.	AREA SUM
UNIT < 538SF	19	
UNIT > 538SF	36	28561
UNIT < 700 SF	36	
UNIT >700 & <1130 SF	18	

		6					2	
1B 434	1B 530	2B 673	2B 855	2B 680	2B 780	3B 980	Sum	
							0	
							0	
2	1	1		1	1	1	7	
2		2	1			1	6	
2		2	1			1	6	
2		2	1			1	6	
2		2	1			1	6	
2		2	1			1	6	
2		2	1			1	6	
2		2	1			1	6	
			100			100		

	2	1			1	
1	17	8	1	1	9	-

PARKING / BIKE + END TRIP FACILITIES / LOADING / PASSENGER SPACES PARKING SPACE CALCULATION			REQUIRED	PROVIDED
RESIDENTIAL PARKING	VPBL 4.2.1.13		3,000000000	3,300,030,000
0.5 PER UNITS < 538 SF	101111111111111111111111111111111111111		9.5	
0.6 PER UNITS ≽ 538 SF			21.6	
PLUS 1 PER 2153 SF 0F TH0SE UNITS (≥ 538 SF)			13.3	-44
SUM			44.4	44
VISITOR PARKING	V. TARRE			
MIN. 0.05, MAX. 0.1 PER UNIT	VPBL 4.1.16	MIN.	2.8	3
COMMERCIAL PARKING (OFFCE AND RETAIL)	VPBL 4.2.5.1		A.2	
1 PER 1076 SF FOR UP TO 3228 SF. PLUS 1 PER ADDITIONAL 538 SF.			25.9	26
TOTAL			73.0	73
INCLUDING:				
RESIDENTAIL DISABILITY SPACES: 1 UP TO 7 UNITS + 0.034 X ADD. UNIT	VPBL 4.8.4		2.6	3
NON-RESI. DISABILITY SPACES: 1 FOR MIN. 5,382SF + 0.4 PER 10,764SF	VPBL 4.8.4		0.58	1
SMALL <25%	VPBL 4.1.8	MAX.	18.2	
BICYCLE SPACE CALCULATION	200000		REQUIRED	PROVIDED
RESIDENTIAL CLASS A	VPBL 6.2.1.2			
1.5 PER UNIT < 700 SF [65m2]			54.0	
2.5 PER UNIT > 700 SF & < 1130 SF			45.0	
3 PER UNIT > 1130 SF			200	
SUM			99.0	
RESIDENTIAL CLASS B	VPBL 6.2.1.2			

1.5 PER UNIT < 700 SF (65)	m2)		54.0	
2.5 PER UNIT > 700 SF & <	1130 SF		45.0	
3 PER UNIT > 1130 SF				
SUM			99.0	
RESIDENTIAL CLASS B		VPBL 6.2.1.2		
2 CLASS B FOR MIN. 20 UI	NITS		2.0	
PLUS 1 PER ADDITIONAL:	20 UNITS		1.8	
OFFICE CLASS A	1 PER 1830 SF	VPBL 6.2.4.1	4.6	
OFFICE CLASS B	6 FOR MIN. 2000 SQM.	VPBL 6.2.4.1	0.0	
RETAIL CLASS A	1 PER 3660 SF	VPBL 6.2.5.1	1.9	
RETAIL CLASS B	6 FOR MIN. 1000 SQM.	VPBL 6.2.5.1	0.0	

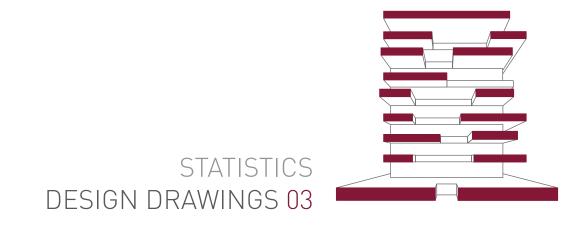
SUM CLASS A	105.6	106
INCLUDING:		
HORIZONTAL		
VERTICAL <30%		
STACKED TOGETHER W/ VERTICAL <60%		
OVERSIZED >5%		
LOCKER > 10%		
SUM CLASS B	3.8	4

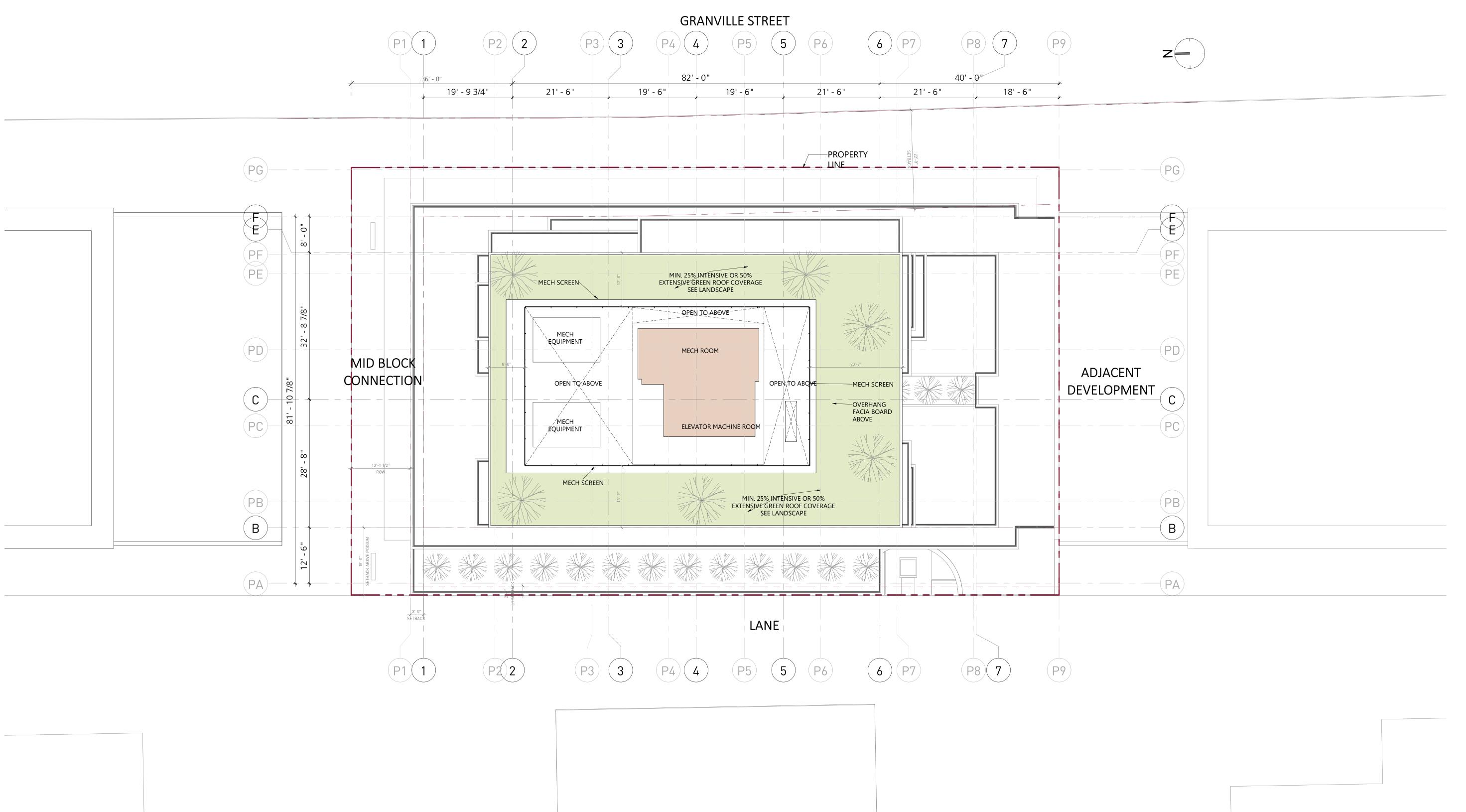
END TRIP FACILITIES (for Office and Retail)								
1.4 X Min. Class A Bike Spaces (Min. 50% full height 1.8m)	VPBL 6.5.1	9.2	10					
	VPBL 6.5.4	1.0	2					
	VPBL 6.5.4	1.0	2					
	VPBL 6.5.4	1.0	2					
	VPBL 6.5.5	1.0	2					
		1.4 X Min. Class A Bike Spaces (Min. 50% full height 1.8m) VPBL 6.5.4 VPBL 6.5.4 VPBL 6.5.4 VPBL 6.5.4	1.4 X Min. Class A Bike Spaces (Min. 50% full height 1.8m) VPBL 6.5.1 9.2 VPBL 6.5.4 1.0 VPBL 6.5.4 1.0 VPBL 6.5.4 1.0					

LOADING SPACE CALCULATION	VPBL 5.2.1	VPBL 5.2.5	VPBL 5.2.7	REQUIRED	PROVIDED
	RESIDENTIAL	RETAIL	OFFICE		
CLASS A	0	0	0	0.0	2
CLASS B	0	11	1	2.0	1
CLASS C	0	0	0	0.0	0

PASSENGER SPACE CALCULATION	VPBL 7.2.1	VPBL 7.2.5	VPBL 7.2,4	REQUIRED	PROVIDED
	RESIDENTIAL	RETAIL	OFFICE		
CLASS A	1	1	1	3.0	3
CLASS B	0	0	0	0.0	0
CLASS C	0	0	0	0.0	0

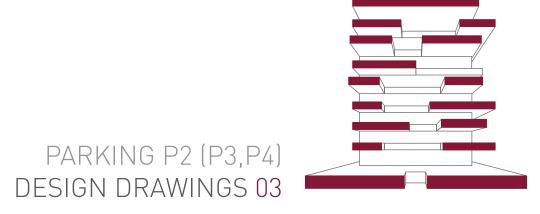


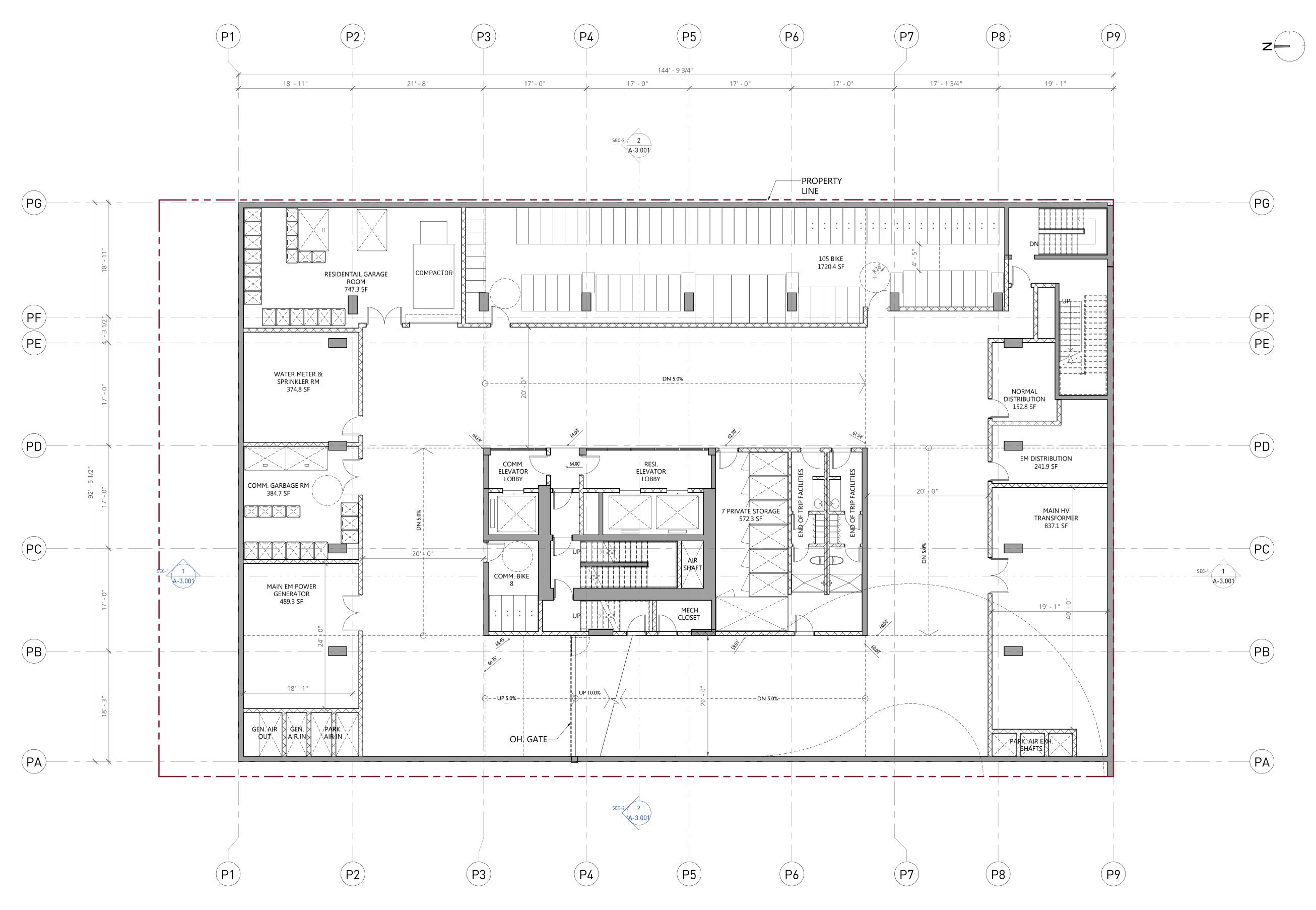




SITE PLAN
DESIGN DRAWINGS 03



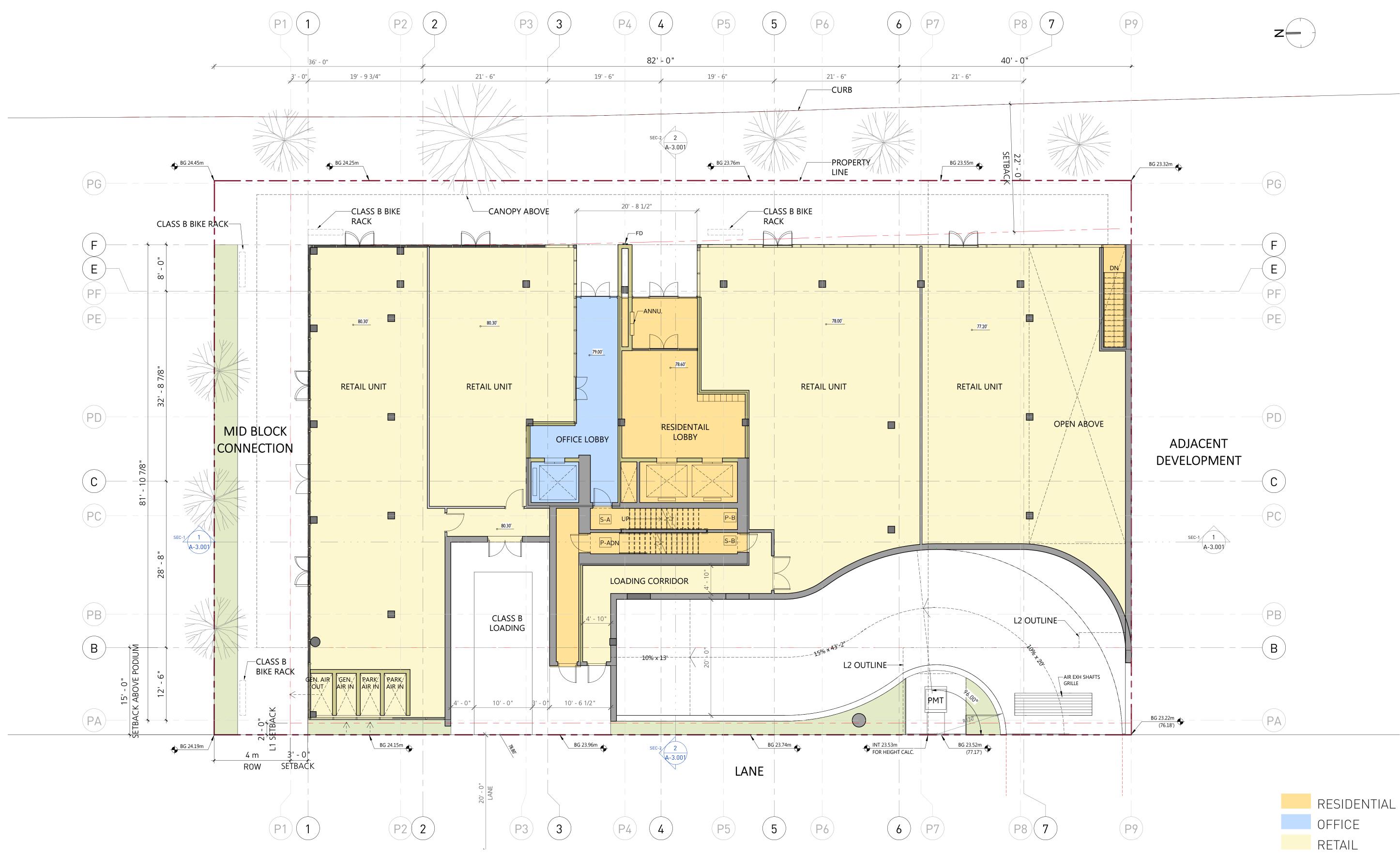


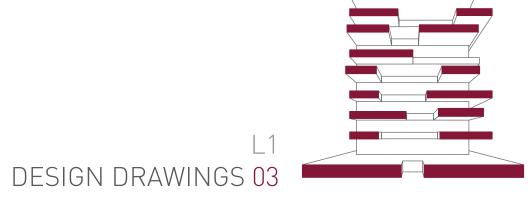


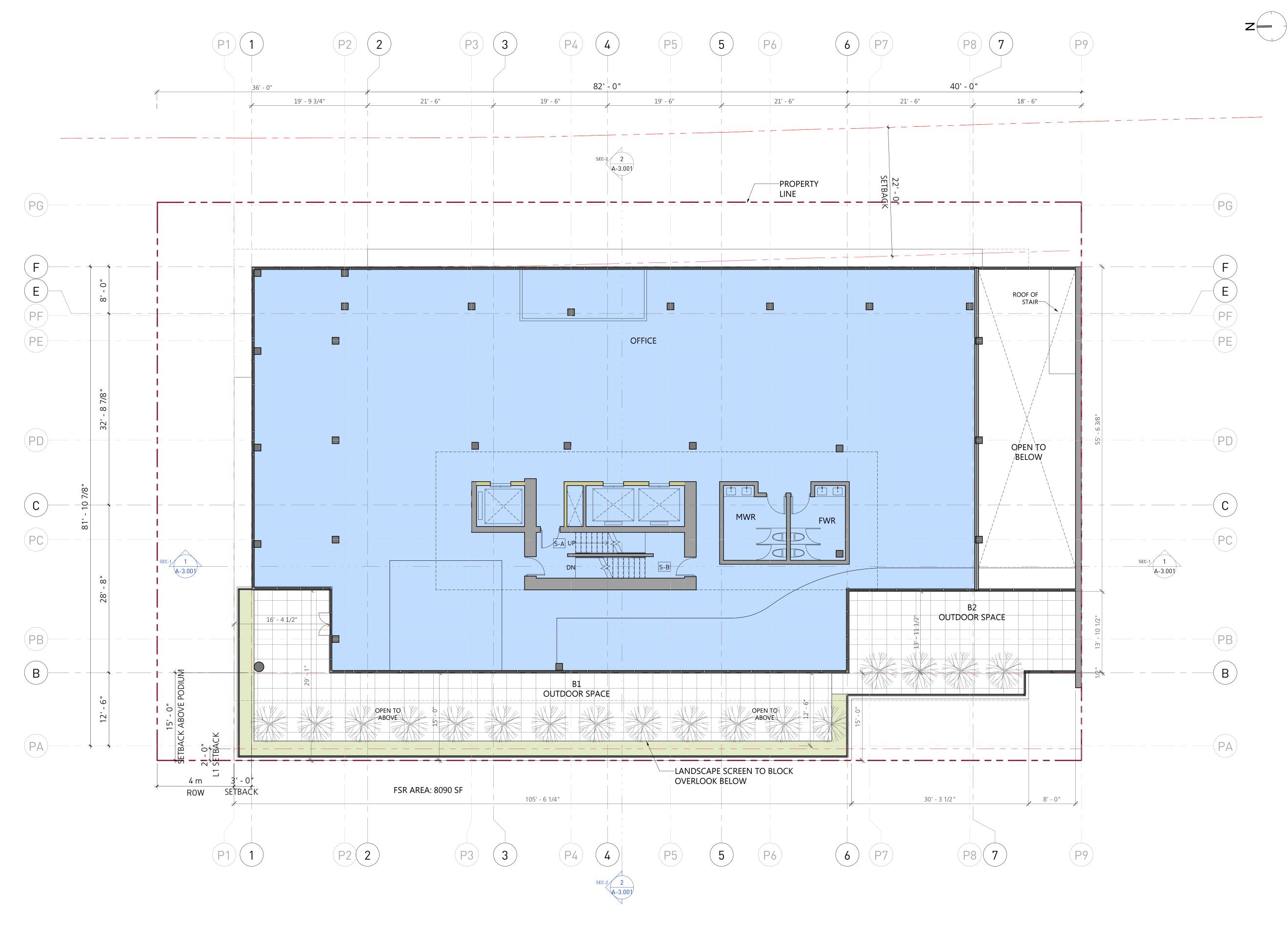


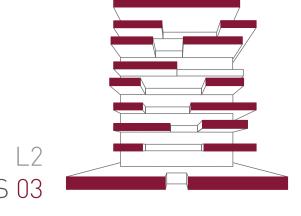


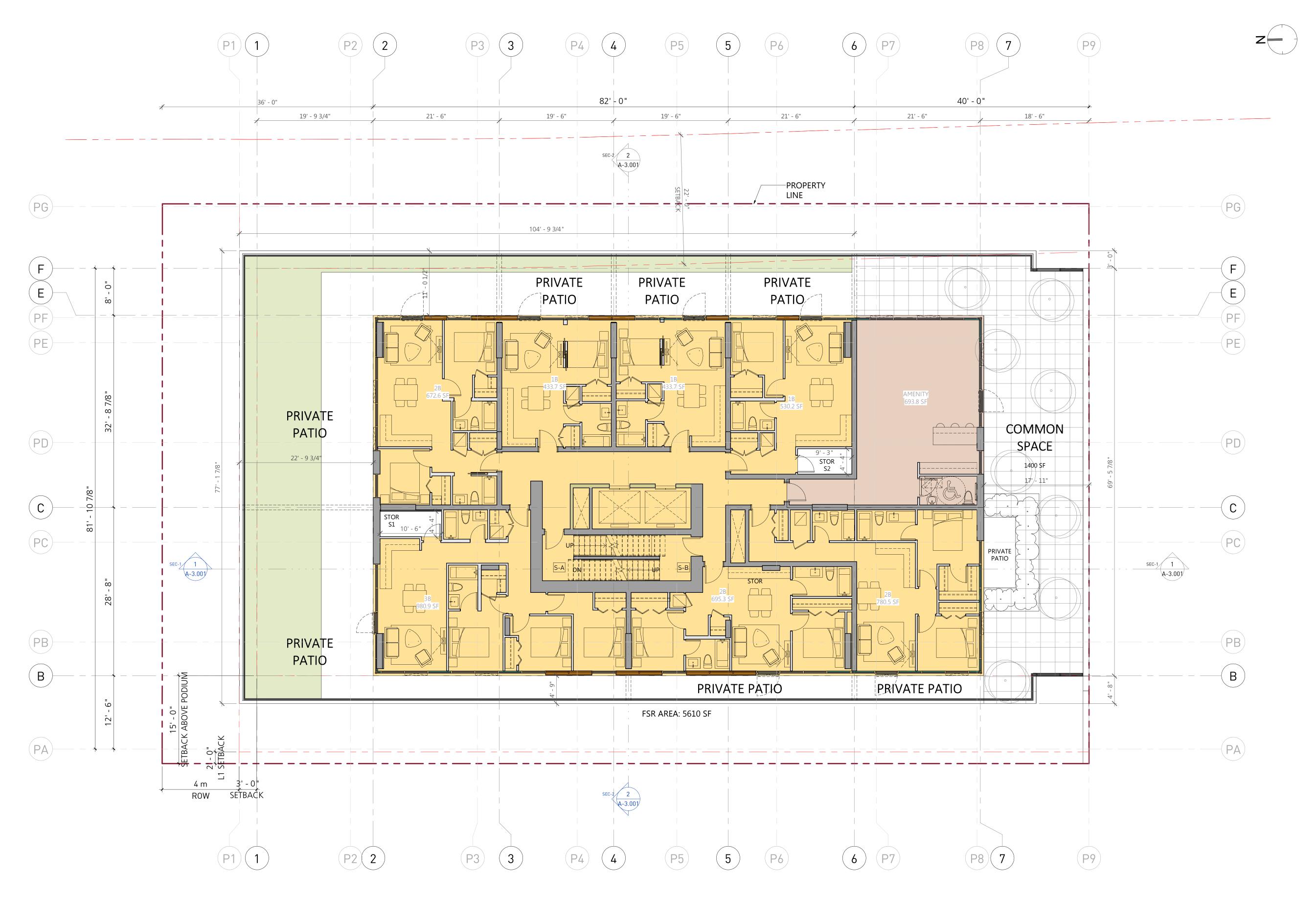
GRANVILLE STREET

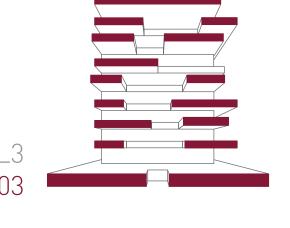


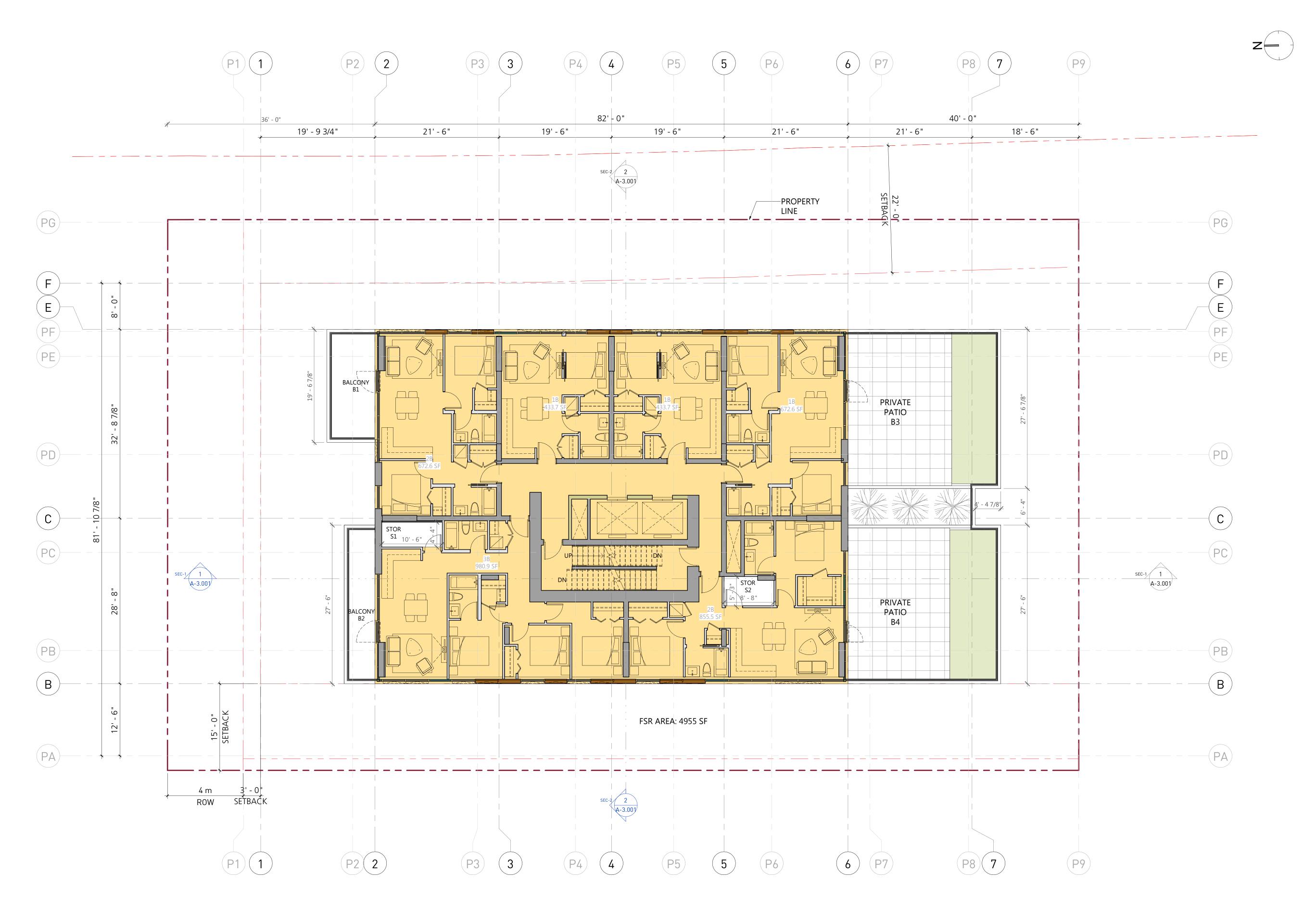


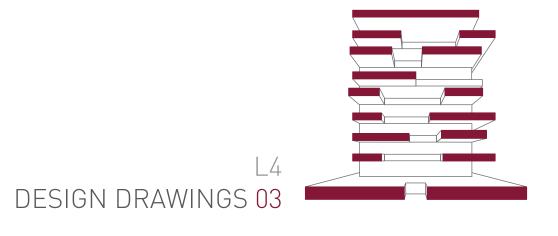


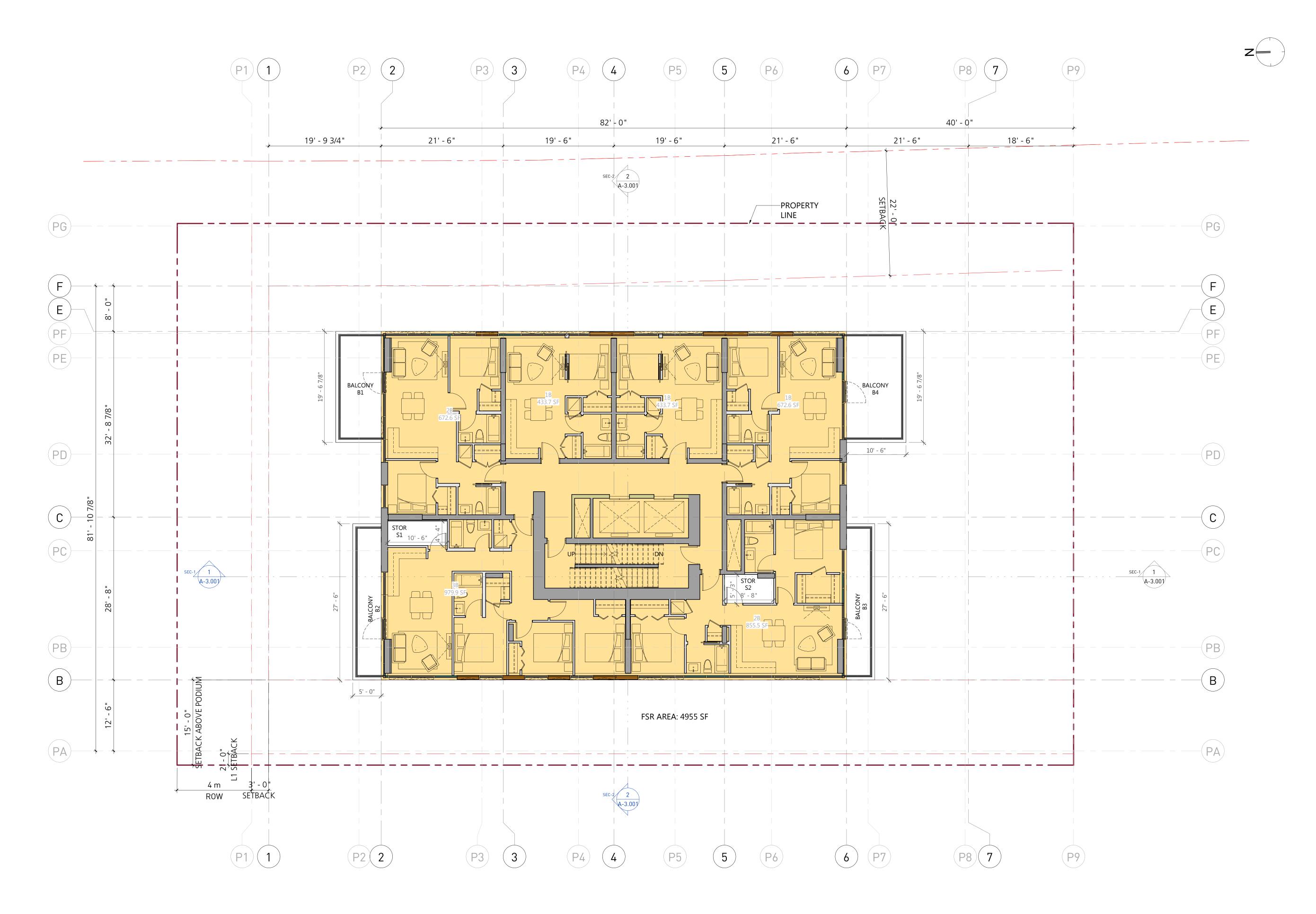


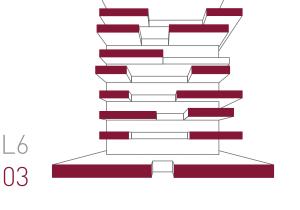


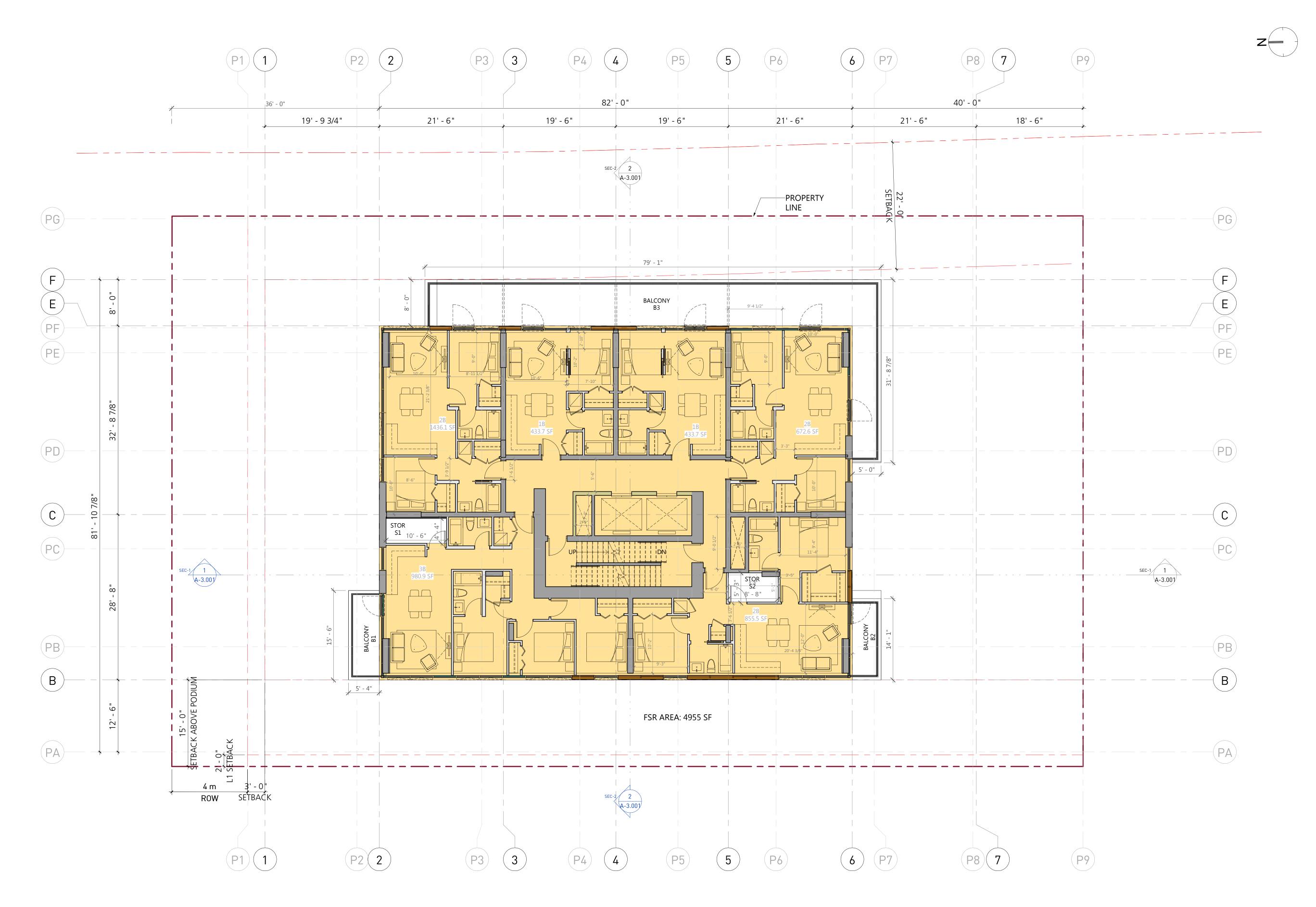


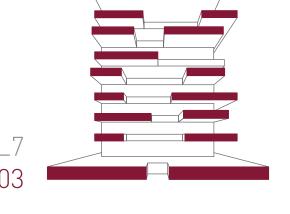


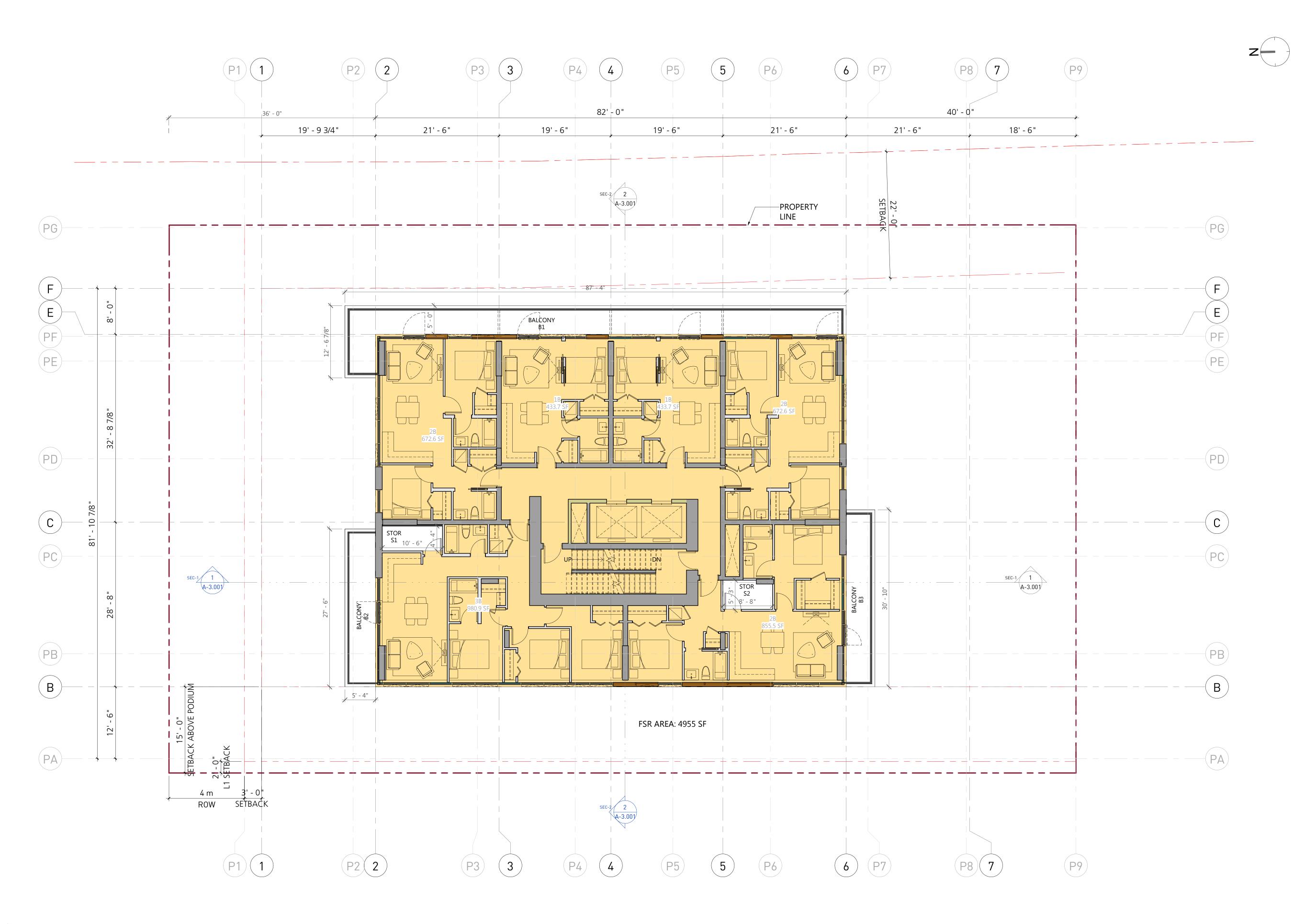


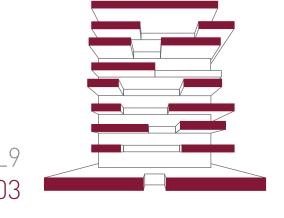


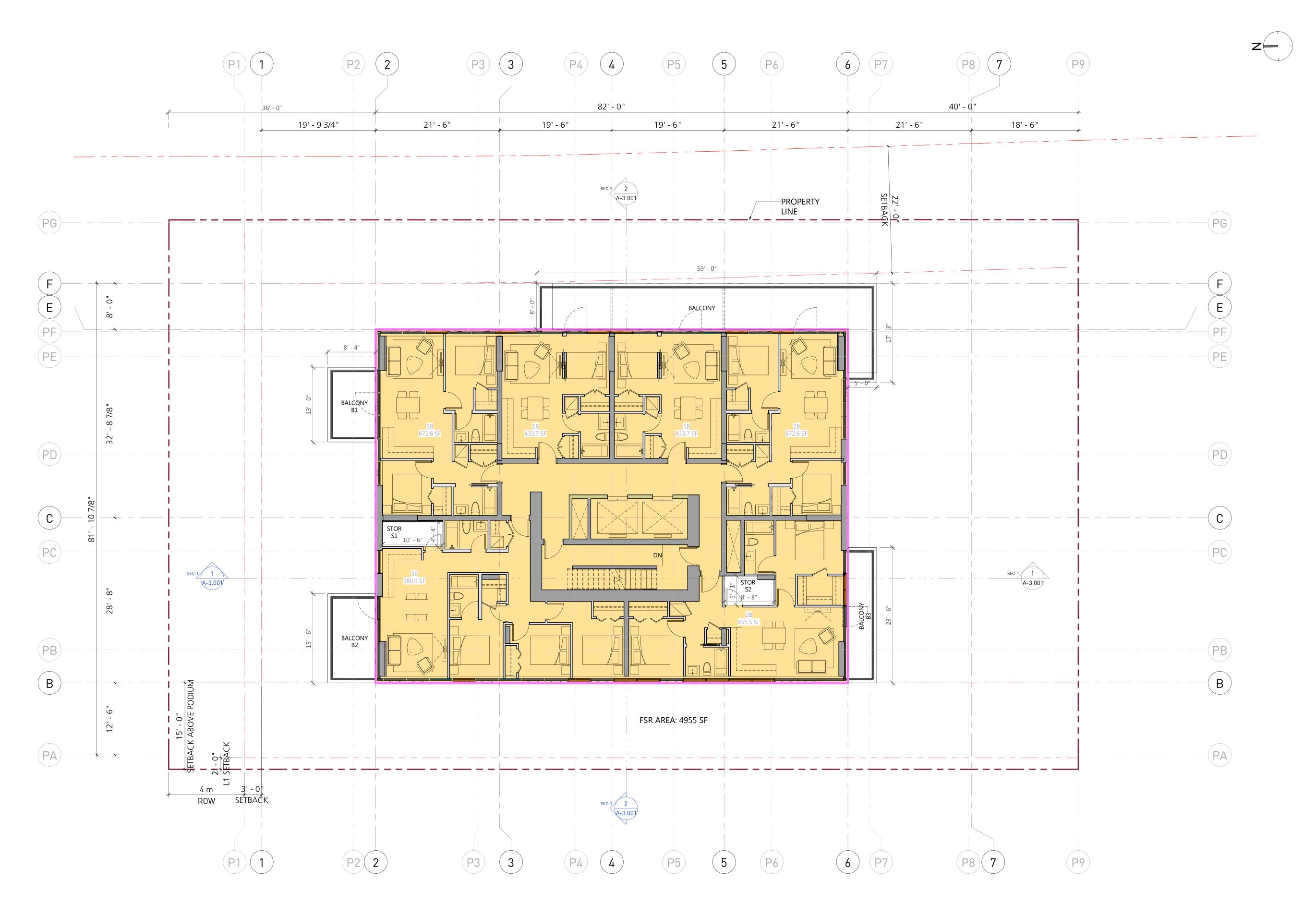


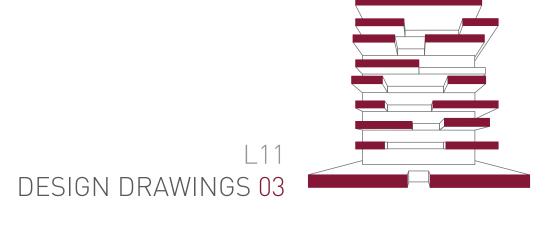


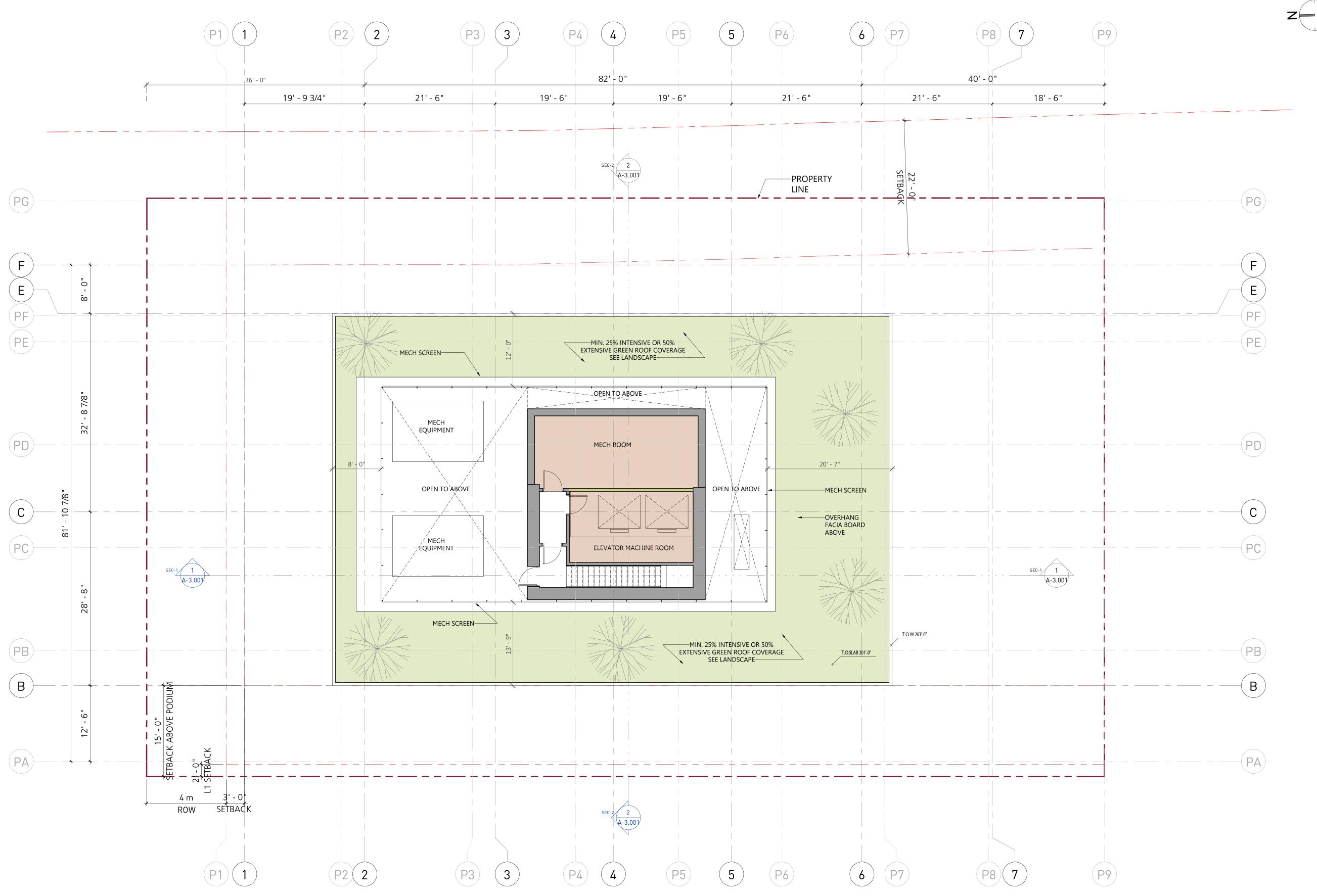






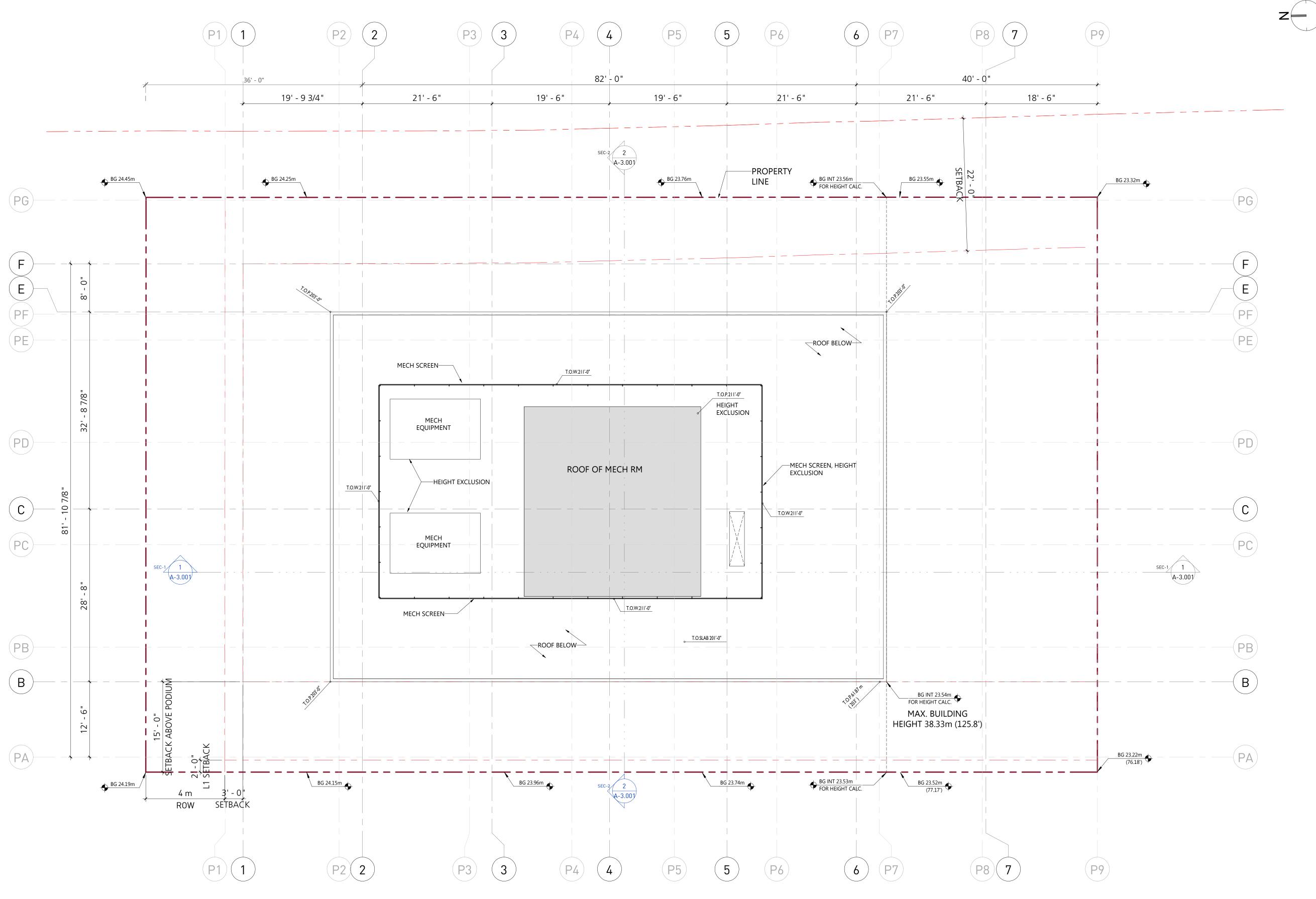




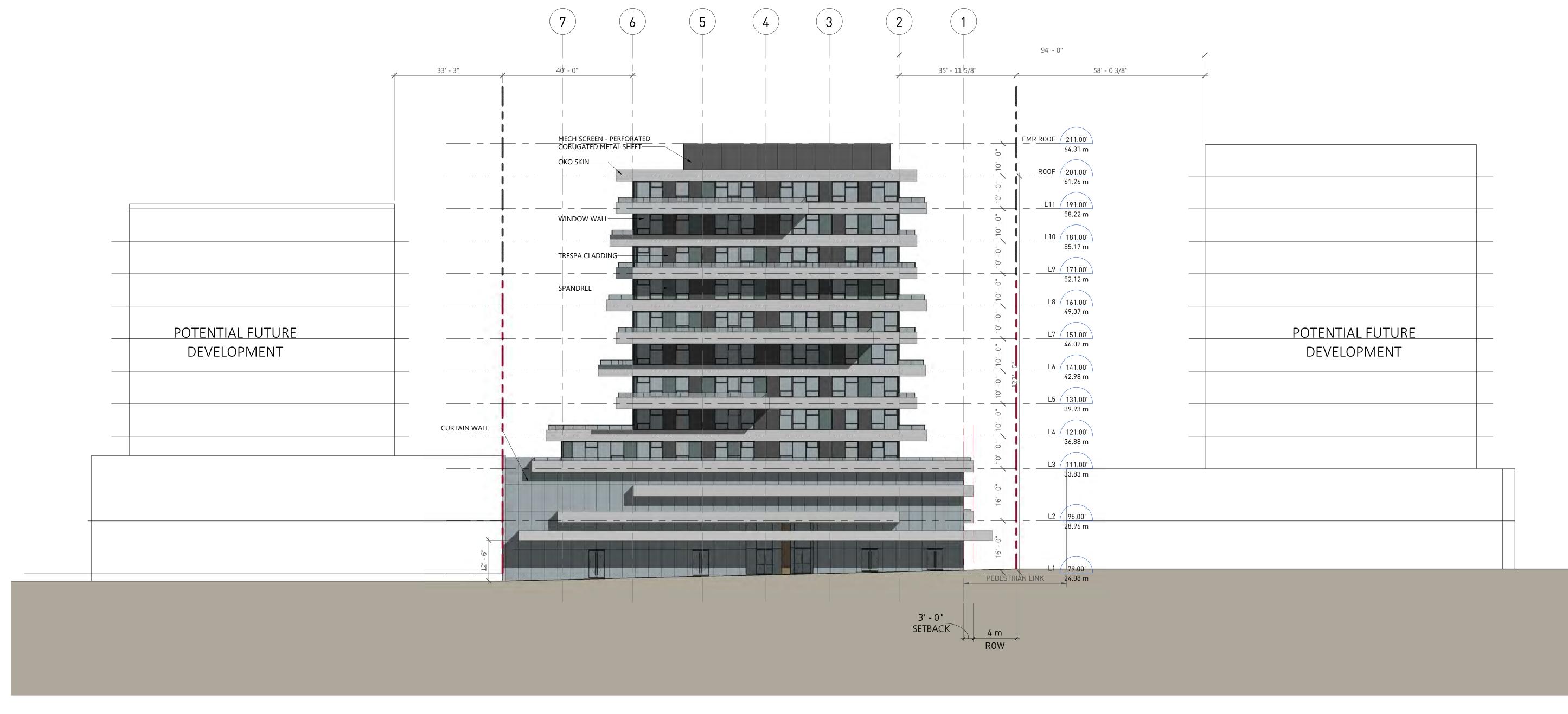








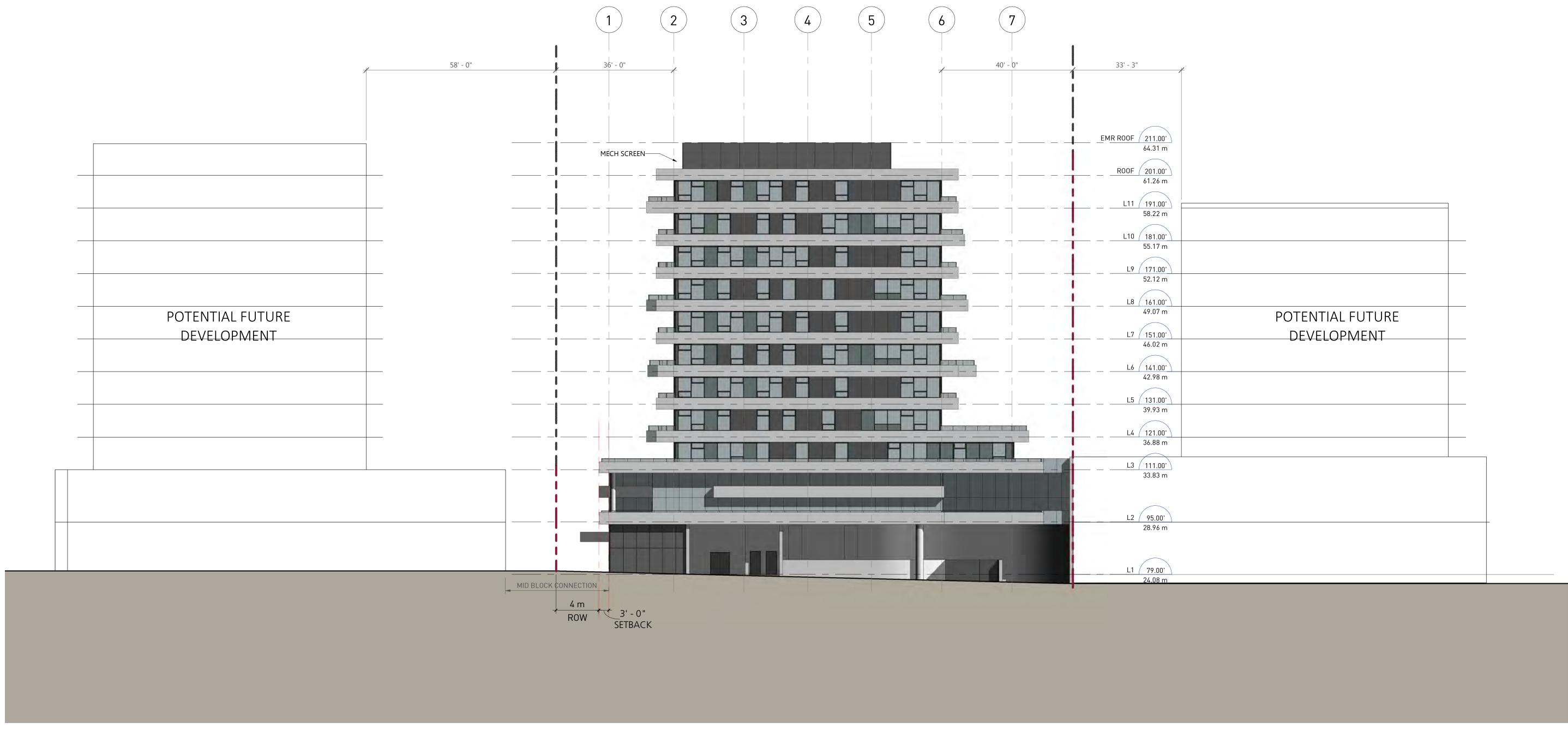




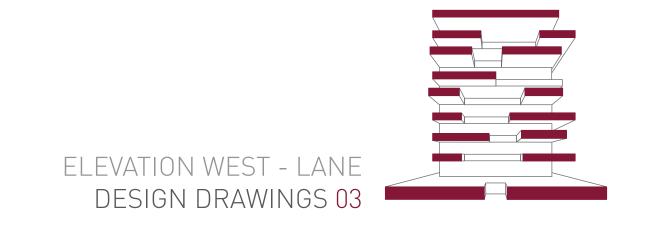
Elevation Granville



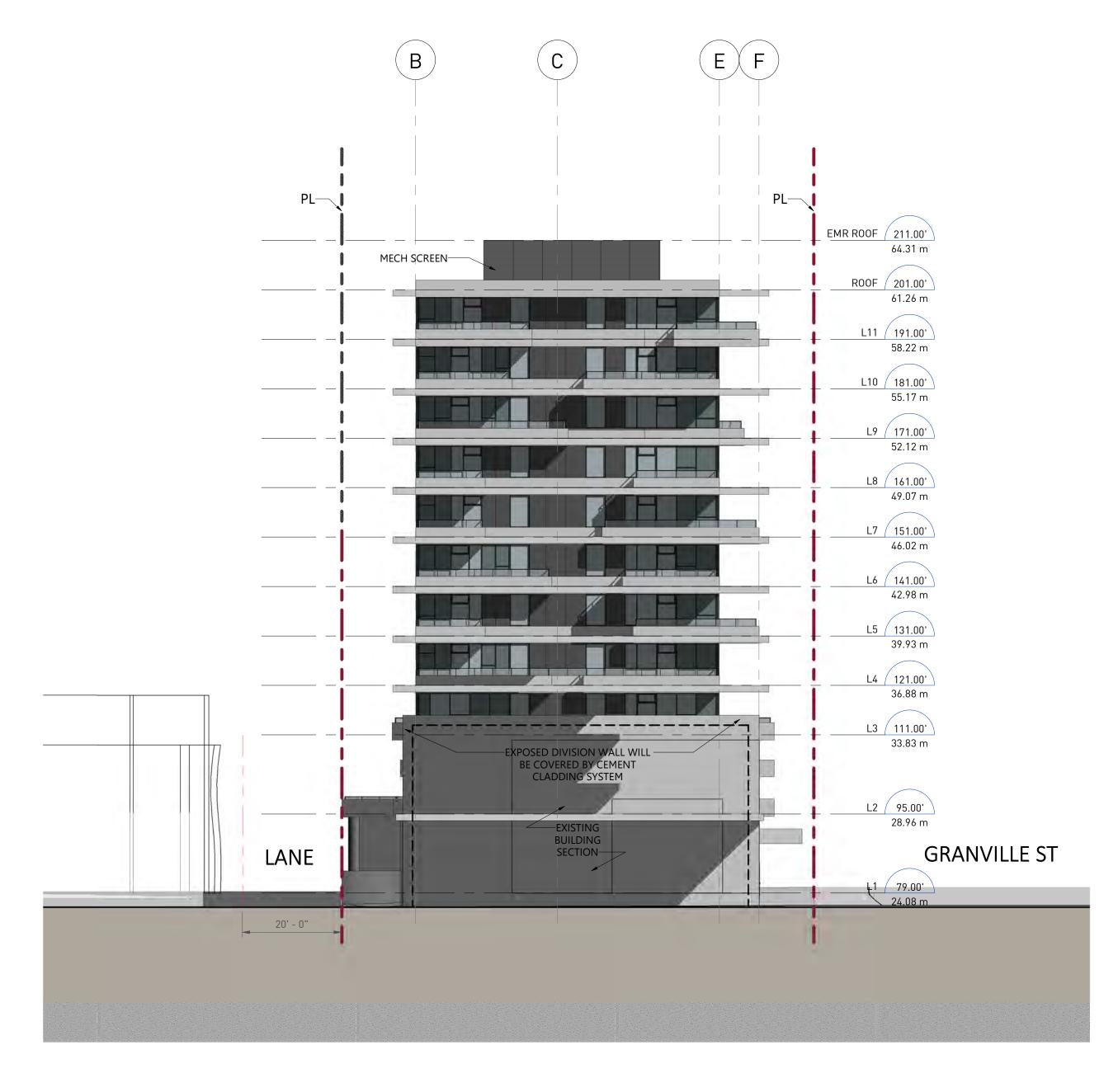


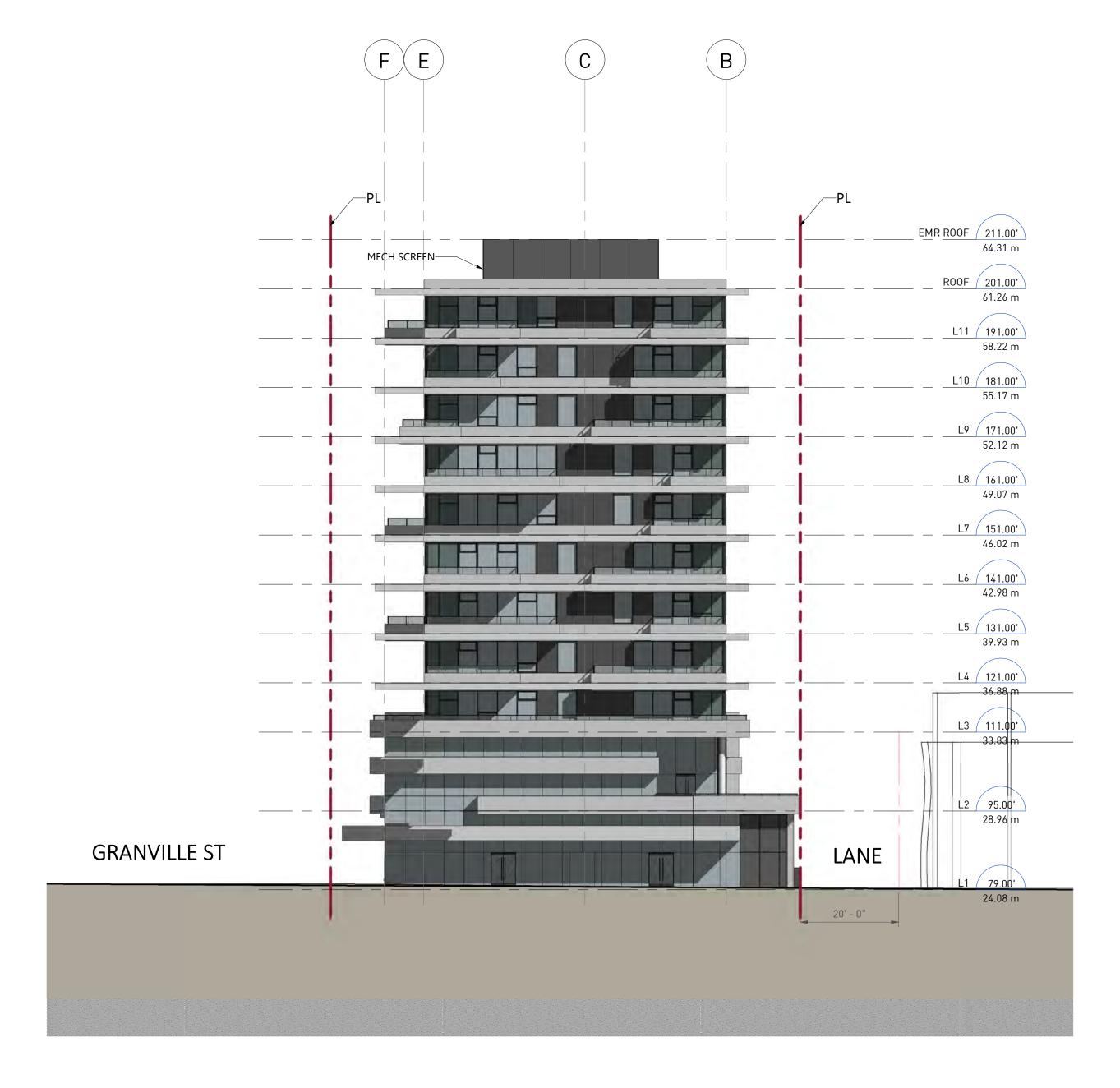










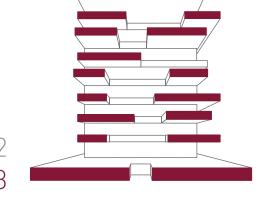


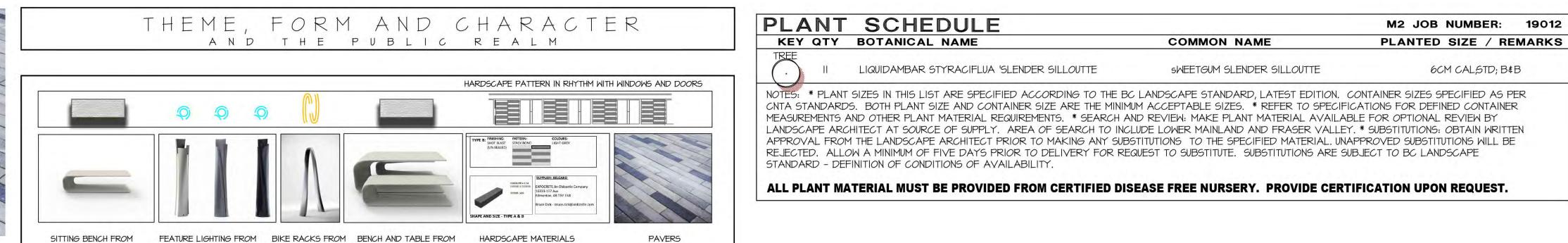
Elevation South Elevation North







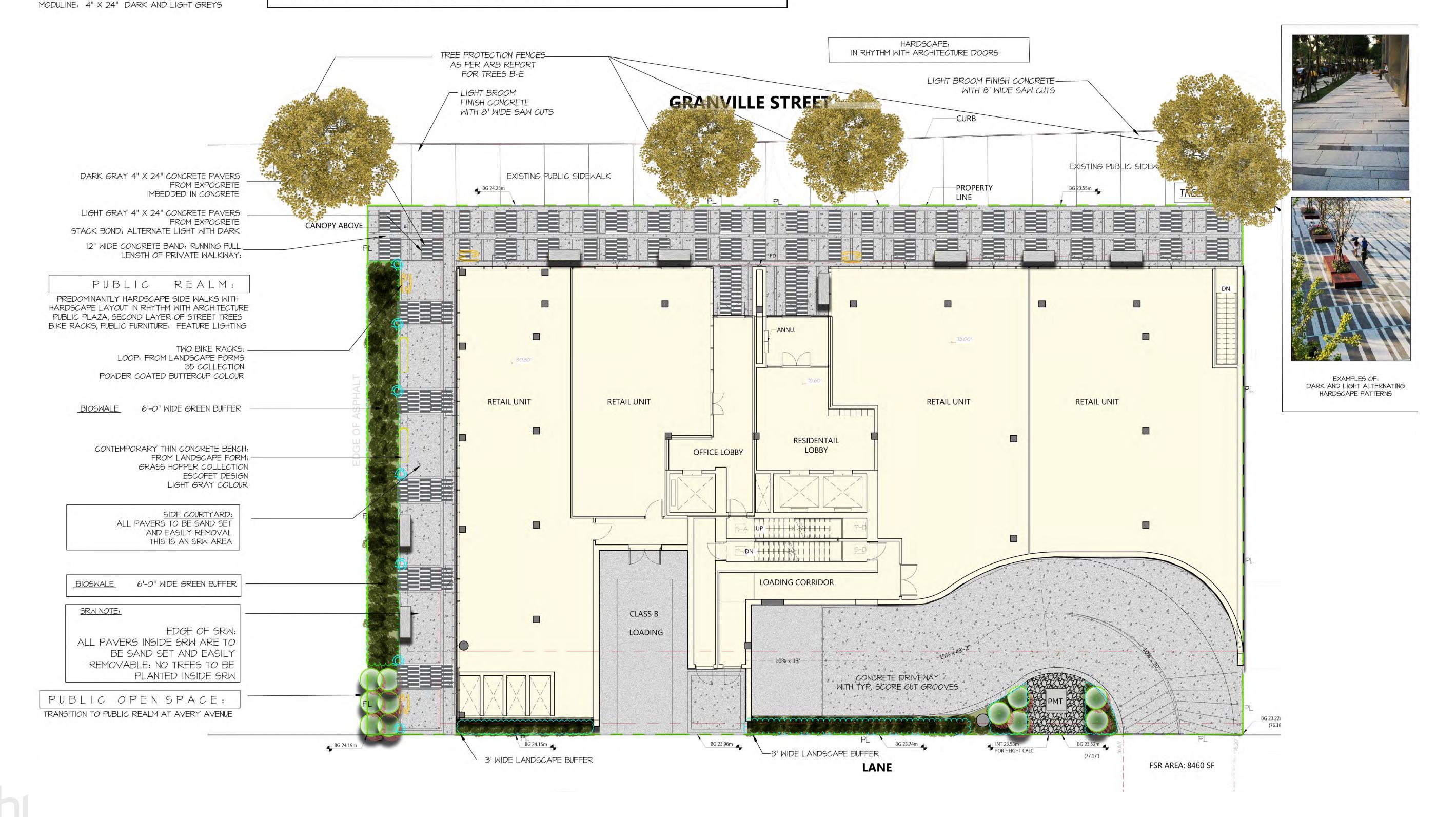


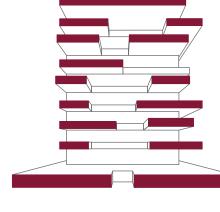


HARDSCAPE MATERIAL

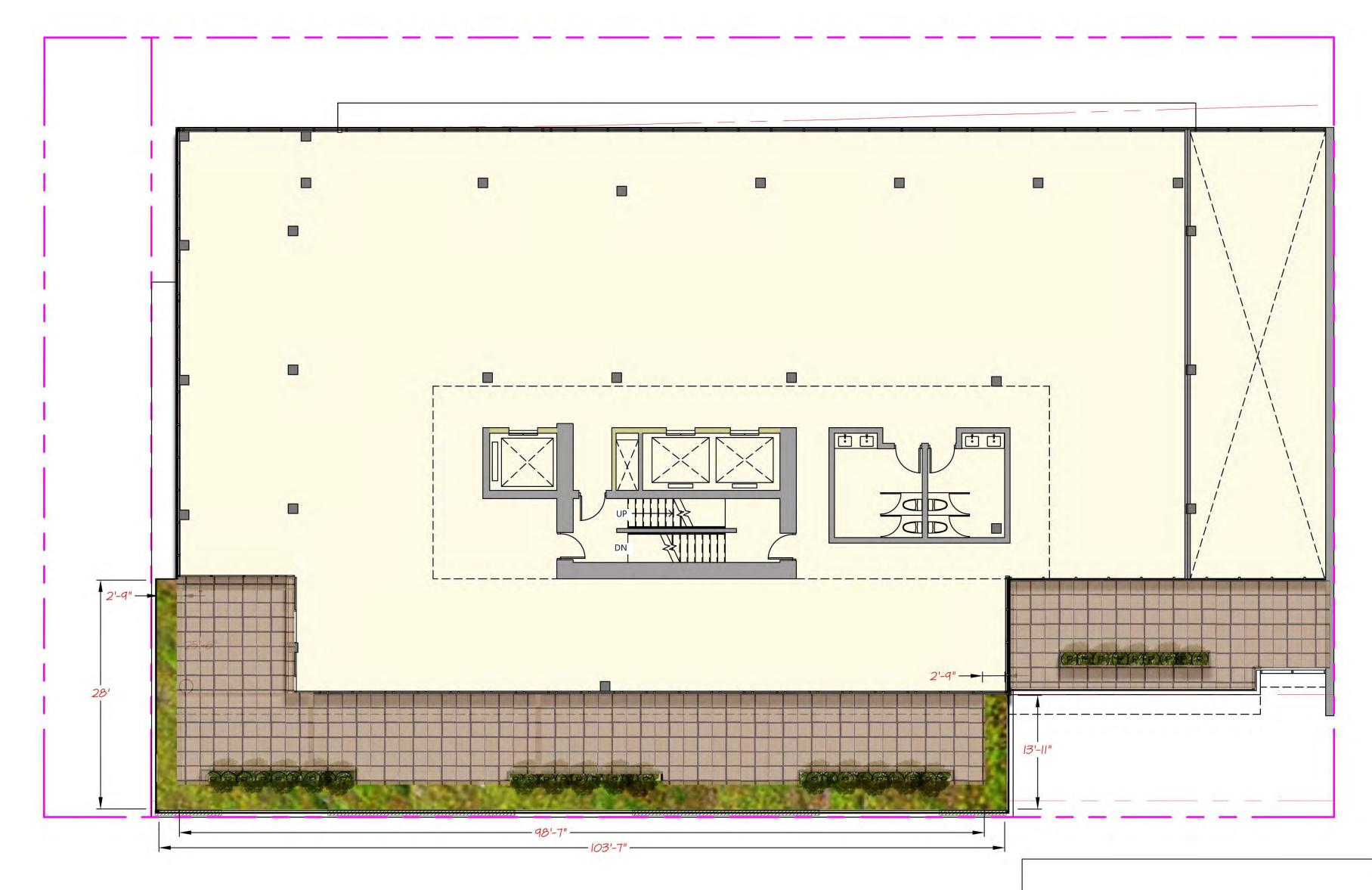
LANDSCAPE FORMS

LANDSCAPE FORMS LANDSCAPE FORMS LANDSCAPE FORMS





6CM CALSTD; B&B



PLANT	SCHEDULE		M2 JOB NUMBER: 19012
KEY QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
SHRUB P 36	PRUNUS LUSITANICA	PORTUGESE LAUREL	# 5 POT

NOTES: * PLANT SIZES IN THIS LIST ARE SPECIFIED ACCORDING TO THE BC LANDSCAPE STANDARD, LATEST EDITION. CONTAINER SIZES SPECIFIED AS PER CNTA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER TO SPECIFICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT PRIOR TO MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MATERIAL. UNAPPROVED SUBSTITUTIONS WILL BE REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIONS ARE SUBJECT TO BC LANDSCAPE STANDARD - DEFINITION OF CONDITIONS OF AVAILABILITY.

ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.

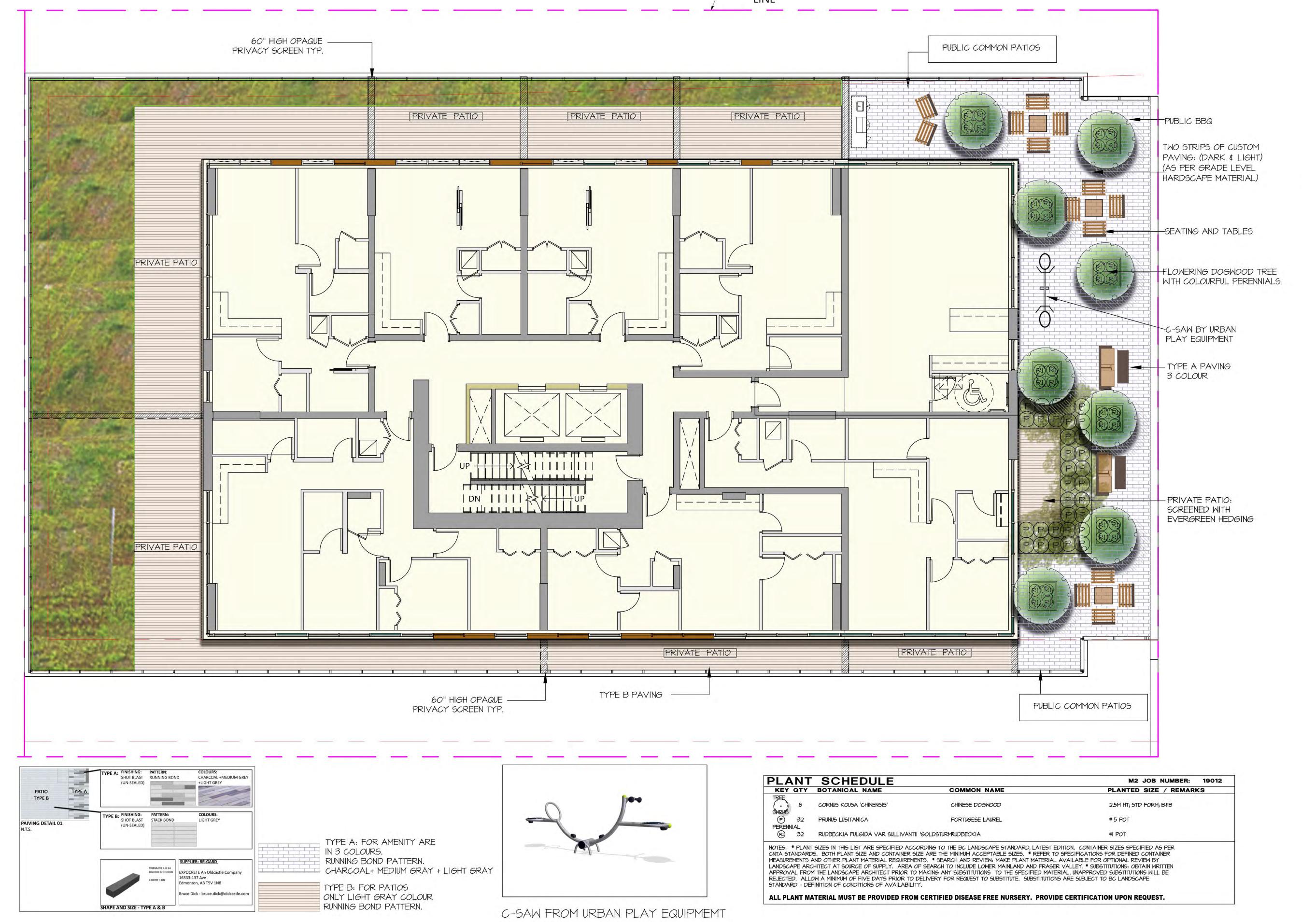


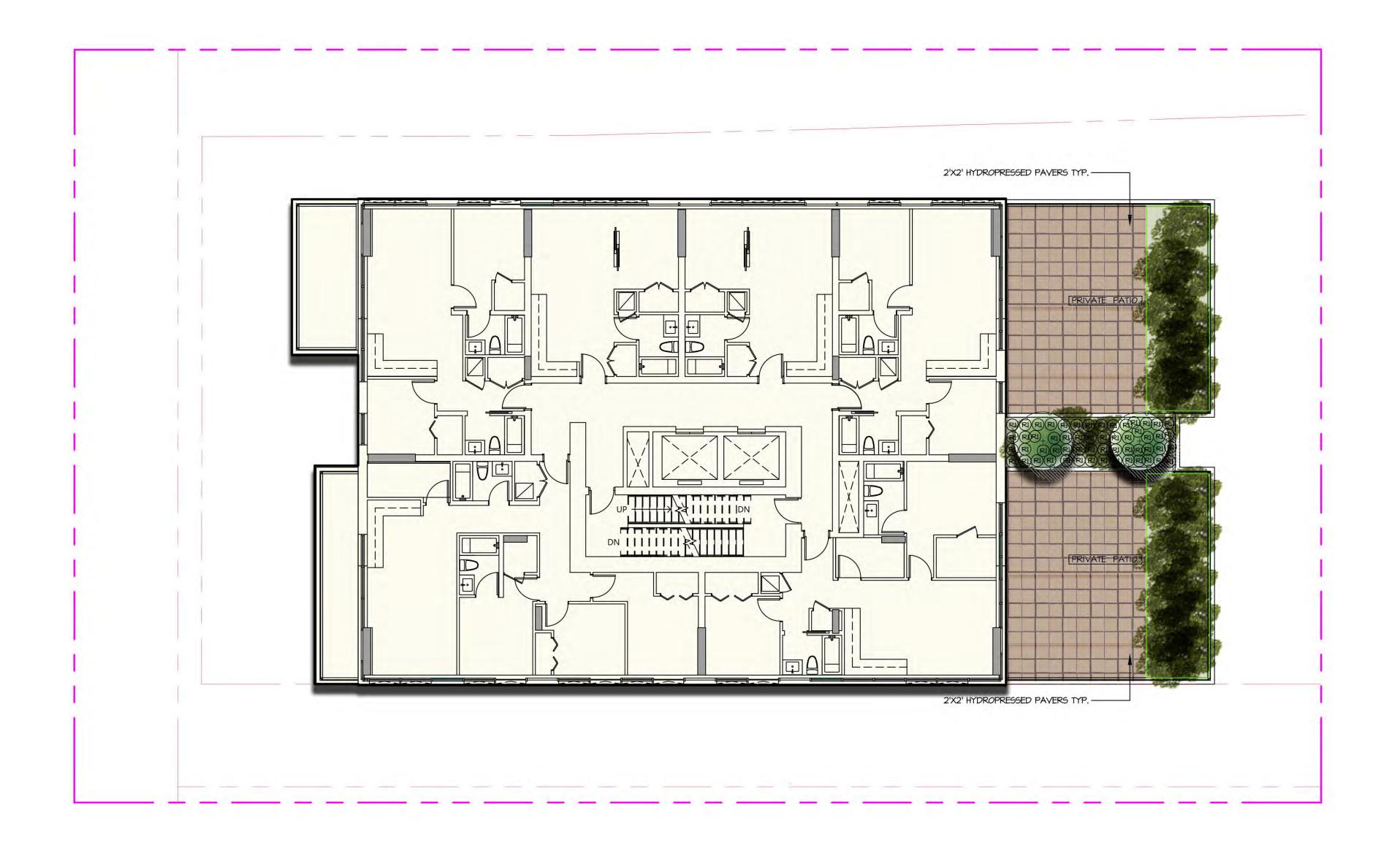
IRMP REQUIRED AREA = 360 SQ FT FOR LEVEL 2

TYPICAL EXTENSIVE HYDROLIGHT BUILD UP GREEN ROOF ASSEMBLY:

THIS EXAMPLE IS FROM XEROFLOR XF+MW WITH WATER RETENTION CAPACITY OF 1.9 GALLONS OR 77.1 L/SQ M.

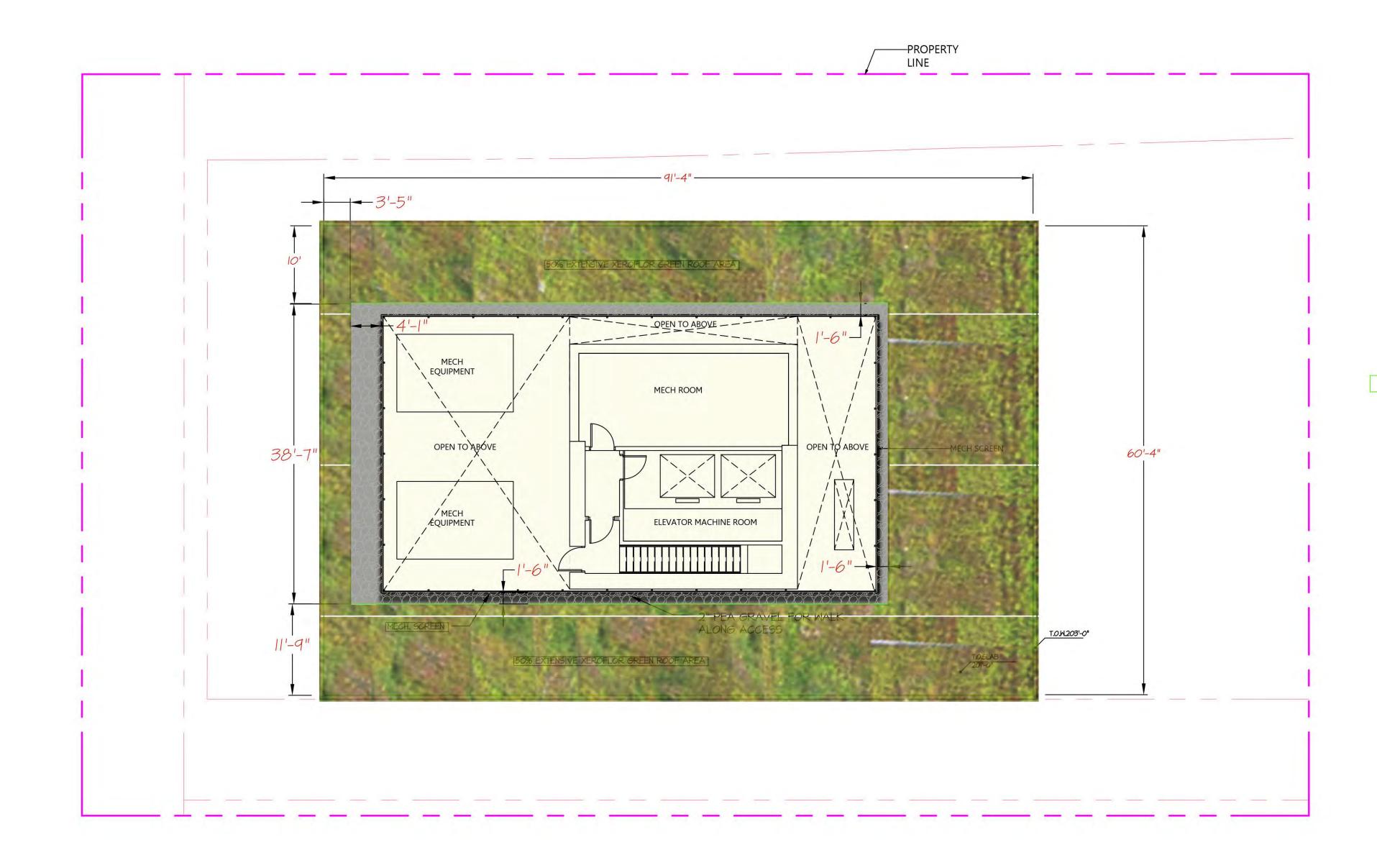






KEY QTY	BOTANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
REE 2 ERENNIAL	CORNUS KOUSA 'CHINENSIS'	CHINESE DOGWOOD	2.5M HT; STD FORM; B&B
(RI) 56	RUDBECKIA FULGIDA VAR SULLIVANTII	'GOLDSTURMRUDBECKIA	#I POT
ITA STANDARD ASUREMENTS A INDSCAPE ARC PPROVAL FROI	OS. BOTH PLANT SIZE AND CONTAINER SI AND OTHER PLANT MATERIAL REQUIREMEN CHITECT AT SOURCE OF SUPPLY. AREA O M THE LANDSCAPE ARCHITECT PRIOR TO	ORDING TO THE BC LANDSCAPE STANDARD, LATEST I ZE ARE THE MINIMUM ACCEPTABLE SIZES. * REFER T NTS. * SEARCH AND REVIEW: MAKE PLANT MATERIAL OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASE MAKING ANY SUBSTITUTIONS TO THE SPECIFIED MAT DELIVERY FOR REQUEST TO SUBSTITUTE. SUBSTITUTIO	O SPECIFICATIONS FOR DEFINED CONTAINER L AVAILABLE FOR OPTIONAL REVIEW BY ER VALLEY. * SUBSTITUTIONS: OBTAIN WRITTEN ERIAL. UNAPPROVED SUBSTITUTIONS WILL BE







TYPICAL EXTENSIVE HYDROLIGHT BUILD UP GREEN ROOF ASSEMBLY:

THIS EXAMPLE IS FROM XEROFLOR XF+MW WITH WATER RETENTION CAPACITY OF 1.9 GALLONS OR 77.1 L/SQ M.

IRMP REQUIRED AREA = 1766 SQ FT
FOR ROOFTOP
PROPOSED GREEN ROOF = 2837 SQ FT
AREA
50% EXTENSIVE (XEROFLOR) = 2837 SQ FT
GREEN ROOF AREA

