

# Lonsdale&15th

114-132 West 15th Street, North Vancouver, BC

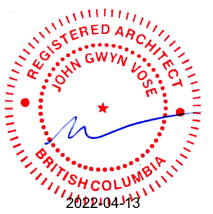
Issued for Rezoning Application  
April 08, 2022



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Submitted to City of North Vancouver  
By IBI Group Architects (Canada) Inc. on behalf of Polygon 359 Ltd.



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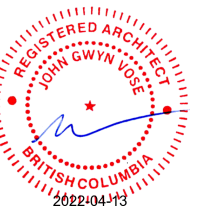




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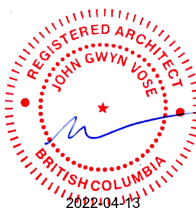
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# STATISTICS

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# Statistics

## Project Development Data

### A. Project Description:

22 storey tower with 2 storey commercial and office podium

### B. Civic Address:

114-132 W 15th Street

### Legal Address:

LOTS E AND F

BLOCK 38 DISTRICT LOT 548 PLAN 18002

### C. Zoning

From: C-1B  
 To: CD  
 Land Use Designation: Mixed-use Level 4B (High Density)  
 Development Permit Area: CL (Central Lonsdale)

### F Site Dimensions

	Width		Depth	
	Metric	Imperial	Metric	Imperial
Site	54.9	180.0	42.7	140.0

### D.

#### Site Area:

Site Component	Area	
	Metric	Imperial
Gross Site Area:		
114-132 West 15th Street	2,341.7	25,206
Dedications	-	-
Final Site Area	2,341.7	25,206
Minimum Lot Area	7,315	24,000

\* Dedication to be confirmed with City

### G

#### Site Coverage Calculations

	Metric	Imperial
Gross Site Area	2,341.7	25,206
Foot Print	1,604.6	17,271
Site Coverage %		68.5%
Max. Permitted Lot Coverage %		90%

\* Max permitted Lot Coverage to be confirmed

#### Floor Area Ratio (FSR)

FSR	GFA	
	Metric	Imperial
7.05	16,520	177,817

Bylaw 6700: "Floor Space Ratio/FSR" means a figure obtained by dividing the Gross Floor Area of the Buildings by the Site area

#### Site Elevations

	Natural Grade		Finished Grade	
	Metric	Imperial	Metric	Imperial
Point 1 - SW	92.18	302.43	92.66	304.00
Point 2 - SE	93.72	307.48	93.57	307.00
Point 3 - NE	93.70	307.41	93.97	308.30
Point 4 - NW	92.44	303.28	92.66	304.00

\* Finished grade to be confirmed

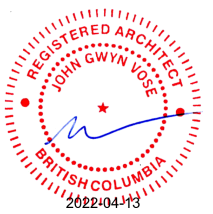
#### Avg. Grade

Highest Point	94.00	308.40
Lowest Point	92.33	302.92
Avg. Grade	93.17	305.66

### K. Gross Floor Area & Permitted GFA exclusion

LEVEL	TOTAL GFA (SF)	EXCLUSION (SF)							NET GFA PER USE			NET GFA TOTAL (SF)
		Exterior Wall thickness more than 6.5 inch (SF)	Bicycle Parking	Recycling and Garbage	Amenity/ Lobby	Penthouse Machine Room	20 SF / Level 2 Adaptable unit (residential only)	SUB TOTAL (SF)	Residential (NET GFA)	Office (NET GFA)	Retail (NET GFA)	
Mechanical	1,481	-	-	-	-	1,481	-	1,481	239	-	-	-
22	6,798	38	-	-	-	-	38	38	6,760	-	-	6,760
21	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
20	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
19	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
18	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
17	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
16	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
15	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
14	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
13	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
12	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
11	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
10	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
9	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
8	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
7	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
6	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
5	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
4	7,752	41	-	-	-	-	40	81	7,671	-	-	7,671
3	8,220	41	-	-	1,155	-	40	1,236	6,639	437	-	6,984
2	15,189	60	-	-	-	-	60	60	-	15,189	-	15,129
1	14,639	71	1,353	1,196	1,145	-	3,765	1,808	1,359	7,452	-	10,874
<b>TOTAL (SF)</b>	<b>185,863</b>	<b>956</b>	<b>1,353</b>	<b>1,196</b>	<b>2,300</b>	<b>1,481</b>	<b>760</b>	<b>8,046</b>	<b>153,524</b>	<b>16,985</b>	<b>7,452</b>	<b>177,817</b>
TOTAL (METRIC)	17,267		126	111	214	138	71	747	14,263	1,578	692	16,520

\*Notes on exterior wall exclusion: Assume 50% window-to-wall ratio. 4 1/2" window wall. 4 1/2" furring sill.



# Statistics

## I. Building Height

Permitted	68.0	223.0	* Per OCP Schedule A Land Use
<b>Proposed (from Average Grade to the highest point of the Building)</b>			
top of slab of the last habitable level	68.0	223.1	
top of elevator overrun	74.4	244.1	

\*Building Height definition to be confirmed with City

## J. Building Setback

	Required		Proposed	
	Metric	Imperial	Metric	Imperial
North (Lane)	TBD		6.1	20
South (Front)			1.5	5
East (Lane)			2.1	7
West			0.0	0

\*Required setback to be confirmed with City

## L Residential Unit Mix

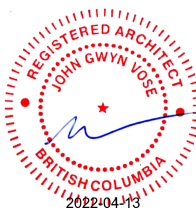
Type	1B	2B	3B	Total
Mechanical	-	-	-	-
22	-	2	2	4
21	2	4	1	7
20	2	4	1	7
19	2	4	1	7
18	2	4	1	7
17	2	4	1	7
16	2	4	1	7
15	2	4	1	7
14	2	4	1	7
13	2	4	1	7
12	2	4	1	7
11	2	4	1	7
10	2	4	1	7
9	2	4	1	7
8	2	4	1	7
7	2	4	1	7
6	2	4	1	7
5	2	4	1	7
4	2	4	1	7
3	2	3	1	6
2	-	-	-	-
1	-	-	-	-
Standard	21	60	21	102
Adaptable	17	17	-	34
Total	38	77	21	136

Distribution	28%	57%	15%	100%
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Type	Standard	Level 2 Adaptable	Total
Mechanical			
22	4	-	4
21	5	2	7
20	5	2	7
19	5	2	7
18	5	2	7
17	5	2	7
16	5	2	7
15	5	2	7
14	5	2	7
13	5	2	7
12	5	2	7
11	5	2	7
10	5	2	7
9	5	2	7
8	5	2	7
7	5	2	7
6	5	2	7
5	5	2	7
4	5	2	7
3	4	2	6
2	-	-	-
1	-	-	-
Required	/	34	/
Provided	98	38	136

\*25% units must be Level Two Adaptable Units





# Statistics

## M. Vehicle Parking

**Required** ByLaw 6700 - Fig 9.3

	Residential	Residential Visitor	Office	Commercial	Total
	1.05 spaces per Dwelling Unit	0.1 spaces per dwelling unit	Per C-1B , 1 space per 75 square metres (807.3 square feet) of Gross Floor Area	Per C-1B , 1 space per 75 square metres (807.3 square feet) of Gross Floor Area	
Required	143	14	22	10	189

\* Install Level II energized outlets at every residential stall, including visitors.

**Provided**

	Residential	Residential Visitor	Office	Commercial	Total
L1	-		-	5	5
P1	-		9	3	12
P2	30	10	13	-	53
P3	57		-	-	57
UPPER P4	59	-		-	59
LOWER P4	12				12
Provided	158	10	22	8	198

\* All parking spaces provided with a labelled, energized outlet capable of providing Level 2 charging for an electric vehicle.

**Required** ByLaw 6700 - 906 (3) (a) (ii)

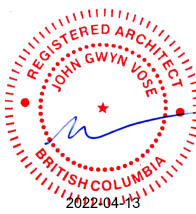
ByLaw 6700 - 908 (11)

	Standard	Small	Disability Parking	
			Residential	Non-residential
	a maximum of 35% of the required Parking Spaces may be provided as small car parking spaces		be calculated at a ratio of 0.038 Disability Parking Spaces for each Dwelling Unit	be calculated at a ratio of one Disability Parking Space for each 25 required Parking Spaces up to 50
Min.			6	2

**Provided**

	Standard	Small	Disability Parking		Total
			Residential	Non-residential	
L1	4	-	-	1	5
P1	7	5	-	-	12
P2	38	13	1	1	53
P3	42	12	3	-	57
UPPER P4	43	14	2	-	59
LOWER P4	9	3			12
	143	47	6	2	198

23.74%



# Statistics

## N. Bicycle Parking

Required Bylaw 6700 - Fig 10A-02 1 EV bike per 4 spaces (as per bylaw)

	Residential		Office		Commercial		Total
Short Term	60 or more units: 6 spaces per every 60 units or part thereof	14	6 spaces per 1,000 m2 Gross Floor Area	10	6 spaces per 1,000 m2 Gross Floor Area	5	29
Secure	1.5 spaces per unit	204	1 space per 250 m2 of Gross Floor Area	7	1 space per 250 m2 of Gross Floor Area	3	214
<b>Required</b>		<b>218</b>		<b>17</b>		<b>8</b>	<b>243</b>

\*required end of trip Facility Stalls = 10

Provided

	Residential		Office		Commercial		Total
	Short Term	Secure	Short Term	Secure	Short Term	Secure	
L1	14	64	10	7	5	3	103
P1		140					140
P2							-
P3							-
UPPER P4							-
LOWER P4							-
<b>Total</b>	<b>14</b>	<b>204</b>	<b>10</b>	<b>7</b>	<b>5</b>	<b>3</b>	<b>243</b>

Required ByLaw 6700 - 10A02 (2)

	Short Term		Secure	
	Horizontal	Vertical	Horizontal	Vertical
	"Vertical bicycle parking not be counted towards required Short-Term Bicycle Parking Spaces"		vertical bicycle parking space not be counted towards more than 35% of required Secure Bicycle Parking Spaces	
Min.	29	-	140	-

### Summary

Short Term Required =29  
Short Term Provided =29

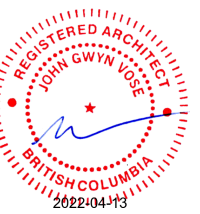
Secured Required = 214  
Secured Provided = 214  
(@level1 & @P1)

End of Trip Facility Stalls Required = 10  
End of Trip Facility Stalls Provided = 10  
(included in total secured bike count provided)

Provided

	Short Term		Secure			Total
	Horizontal	Vertical	Horizontal	Vertical	Oversized	
L1	29	-	53	21	-	103
P1	-	-	90	39	11	140
P2	-	-	-	-	-	-
P3	-	-	-	-	-	-
UPPER P4	-	-	-	-	-	-
LOWER P4	-	-	-	-	-	-
<b>Total</b>	<b>29</b>	<b>-</b>	<b>143</b>	<b>60</b>	<b>11</b>	<b>243</b>
			67%	28%	5%	
Total Secured Bikes Provided at L1 and P1						
214						

At level 1- subtotal short term=29 / subtotal secured=64



## Statistics

### O Loading

Bylaw 6700 - 1001

	"The minimum number of Loading Space required shall be one Loading Space per Building, or one Loading Space per 1393.5 square metres (15,000 square feet) of the Gross Floor Area, whichever is the greater"
Required	2
Provided	2

### P Accessory End Destination Facility

Bylaw 6700 - 10A08

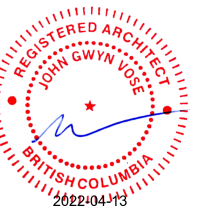
	Clothing Lockers	Water Closets	Wash Basins	Showers	Grooming Station
	2 times the number of required Secure Bicycle Parking Spaces - residential use exempted	Bylaw 6700 - Figure 10A-03			equal the number of required showers
Required	20	-	1	1	1
Provided	20	2	2	2	2

### Q Recycling and Garbage Storage Facility Requirements

ByLaw 6700 - Figure 4-3

	Residential	Office	Retail
# of Units/ Area (SF)	136	16,985	7,452
Space requirement (SF)	5.23 sf per unit	0.010 sf per sf	0.026 sf per sf
Min. Required Floor Area (SF)	711.3	169.9	193.8
Provided	1,196.0		

\* potential floor area reduction with increased collection frequency



# SITE

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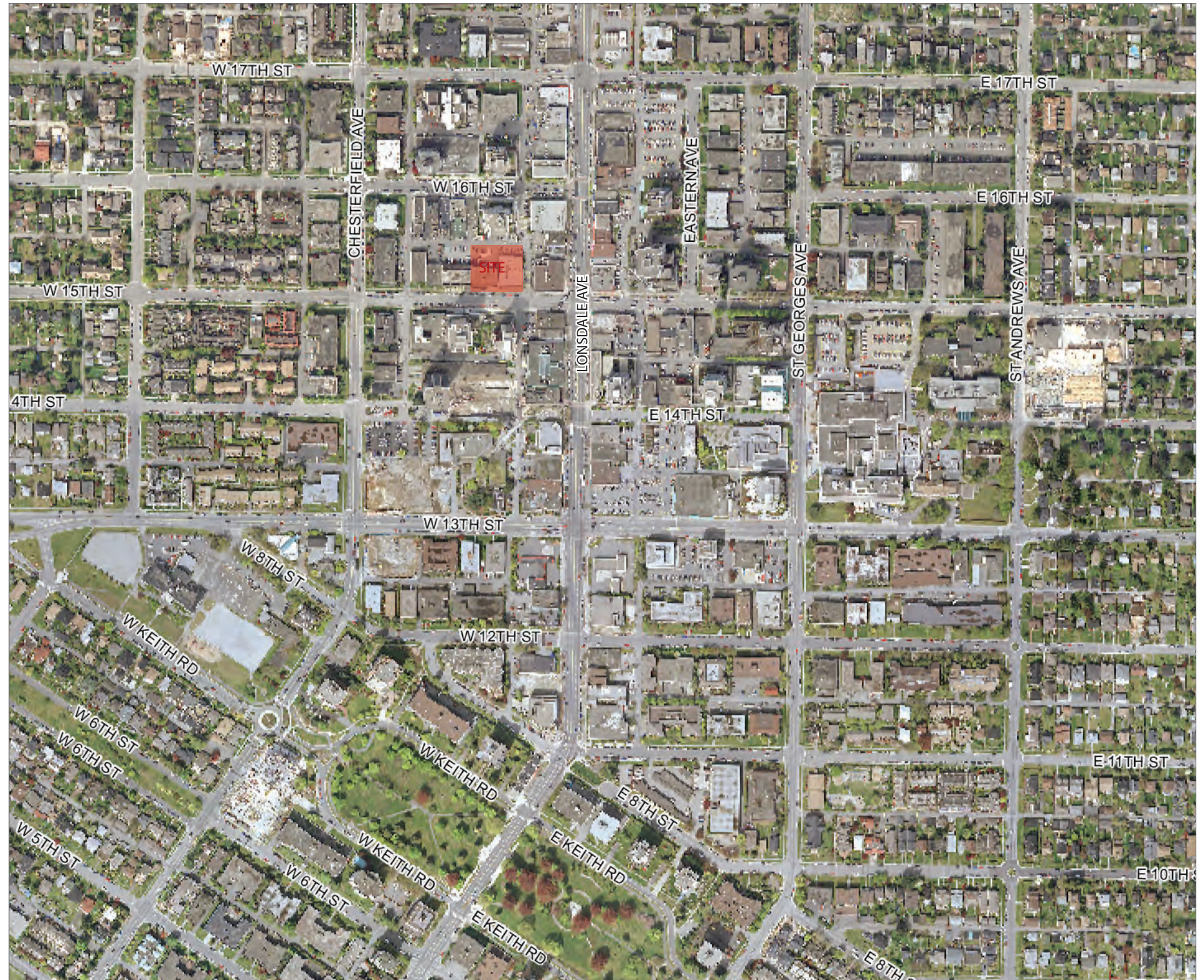


## Site Context

The redevelopment of the site is an exciting opportunity to contribute to the creation of a vibrant City of North Vancouver. The site is located in proximity to existing businesses, services and institutions, contributing to the area's liveability while minimizing negative impacts on the environment. The proposed development is very close to public transit and promotes walking and cycling as active and healthy modes of transportation.

Central Lonsdale is increasingly becoming more dense and high-rise towers are a prominent feature of the area. Medium density apartments and townhouses provide buffers between single-family neighborhoods and the dense, mixed-use core centred on Lonsdale Avenue.

114-132 West 15th Street has the potential to offer spectacular views of Vancouver and its surrounding mountains, shorelines and water.

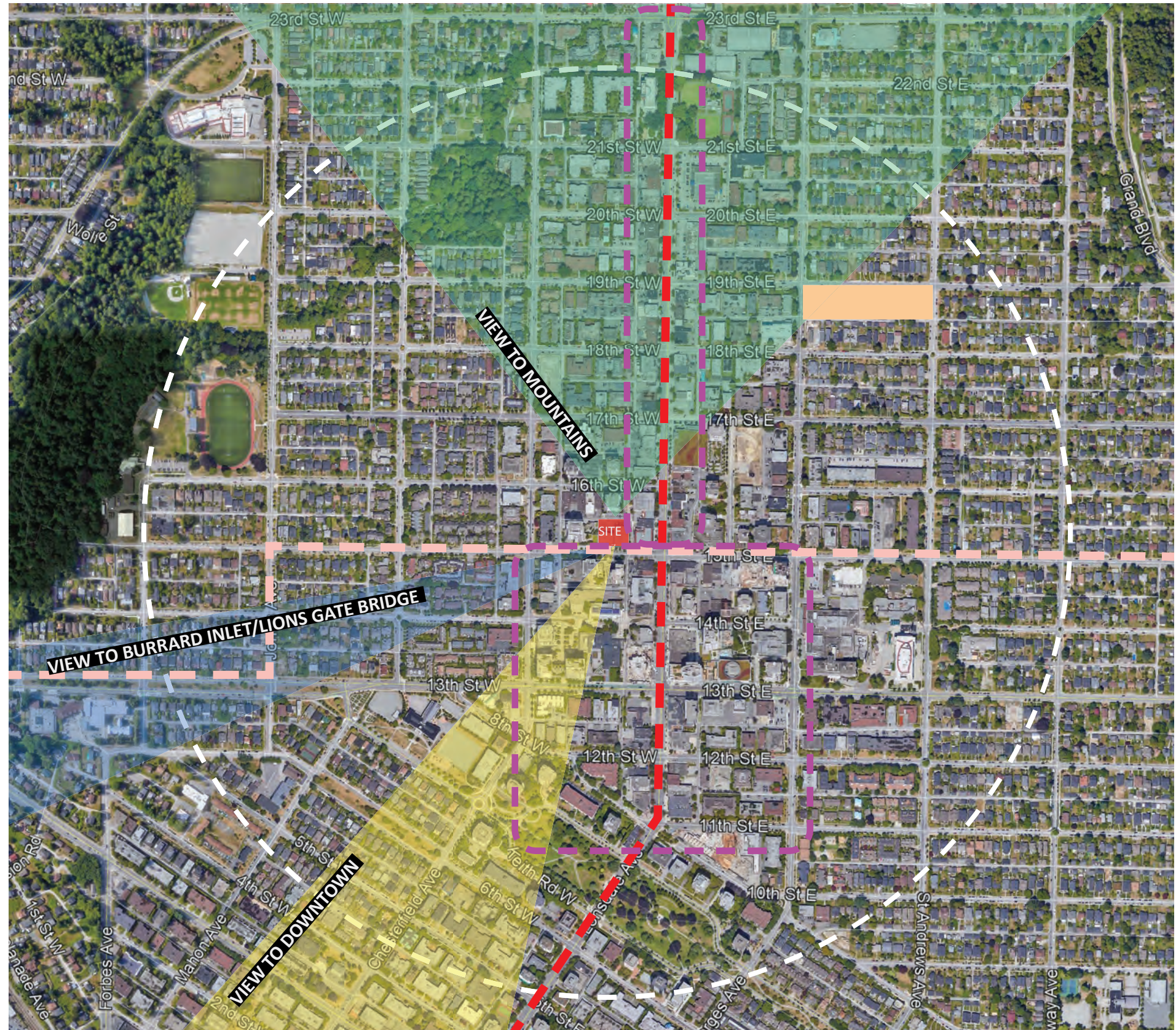
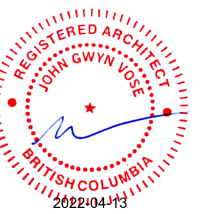


District of North Vancouver Geographic Information Systems, 2008



# Context Map

800m Radius

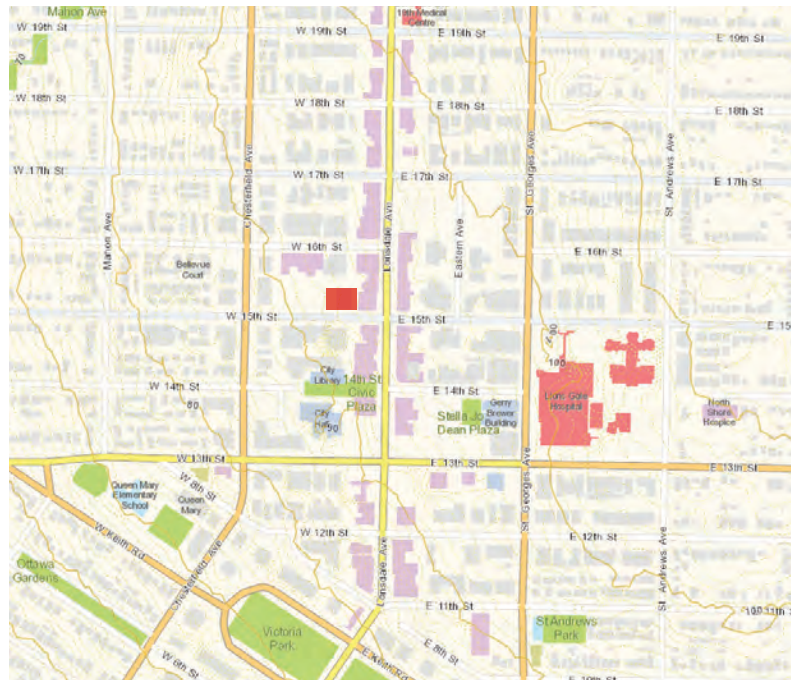
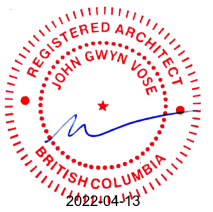


- Future Rapid Transit Corridor
- Current and Future Frequent Transit Corridor
- Major Focal Node
- Heritage Character Area
- View to Downtown
- View to Burrard Inlet and Lions Gate Bridge
- View to Mountains

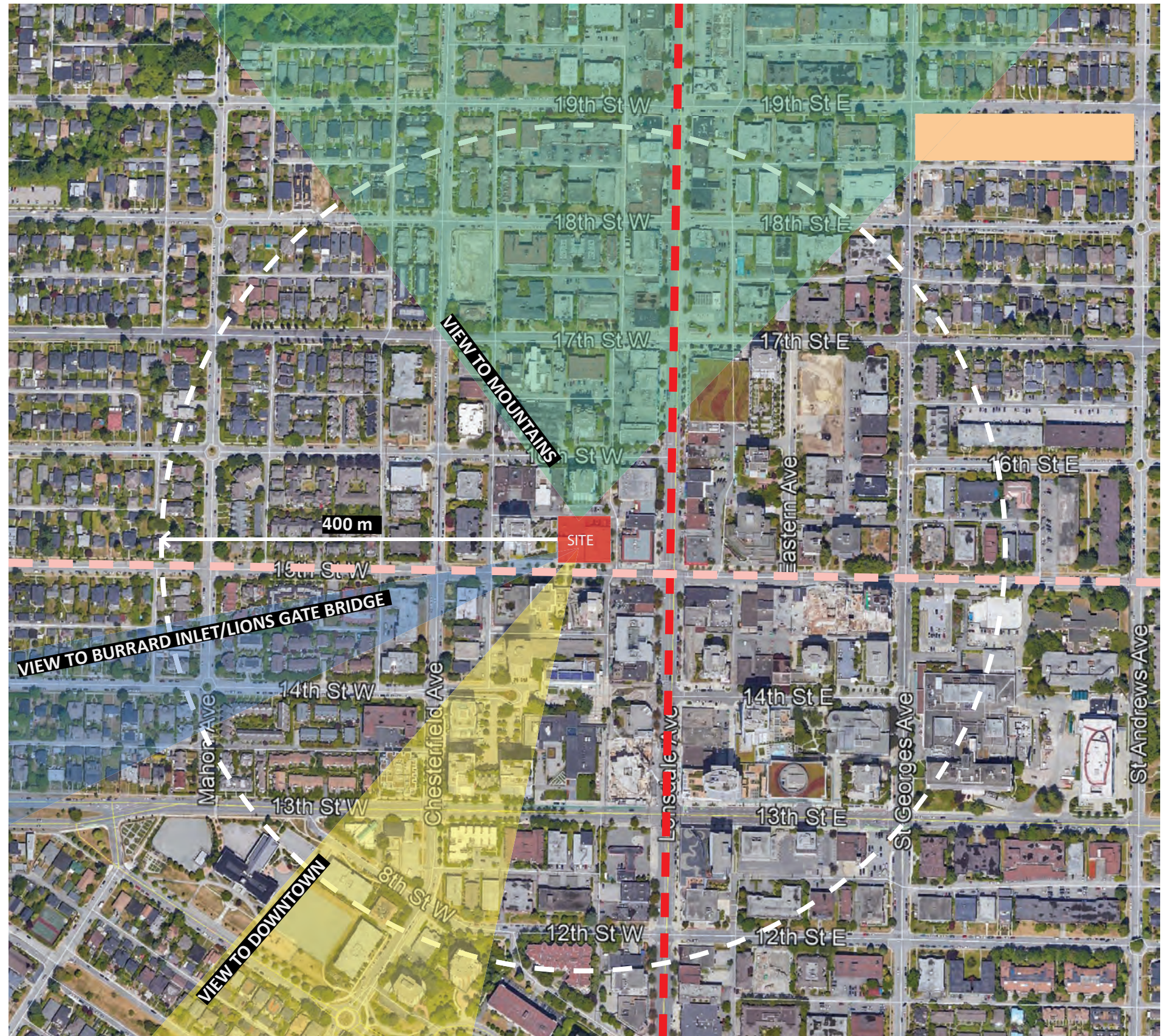









# Context Map

400m Radius



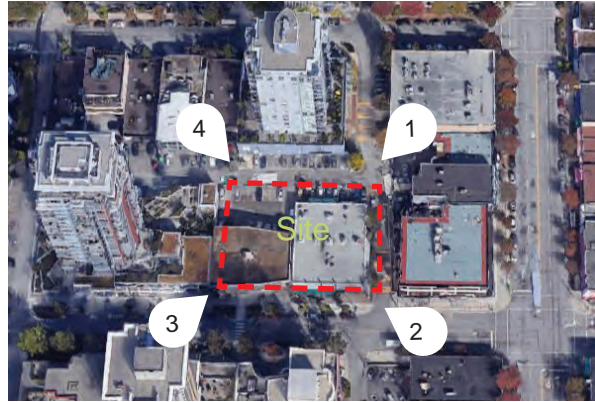
\*Topography information from City Website



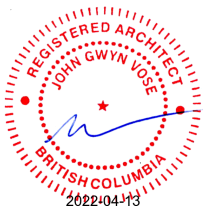
-  Future Rapid Transit Corridor
-  Current and Future Frequent Transit Corridor
-  Major Focal Node
-  Heritage Character Area
-  View to Downtown
-  View to Burrard Inlet and Lions Gate Bridge
-  View to Mountains



# Site Photos







# Zoning

## Official Community Plan

The City of North Vancouver Official Community Plan (OCP) designates the subject lands as Town Centre which permits mixed-use development at a Floor Space Ratio (FSR) of 3.0 with provisions for bonusing of an additional 1.0 to a total of 4.0 density. Section 2.3 of the OCP permits density transfers from one parcel of land to another. City Council has authorized a density transfer for this site, which will facilitate a density above 4.0 FSR. The OCP also permits a maximum building height of 68 metres (223.09 feet) at this location.

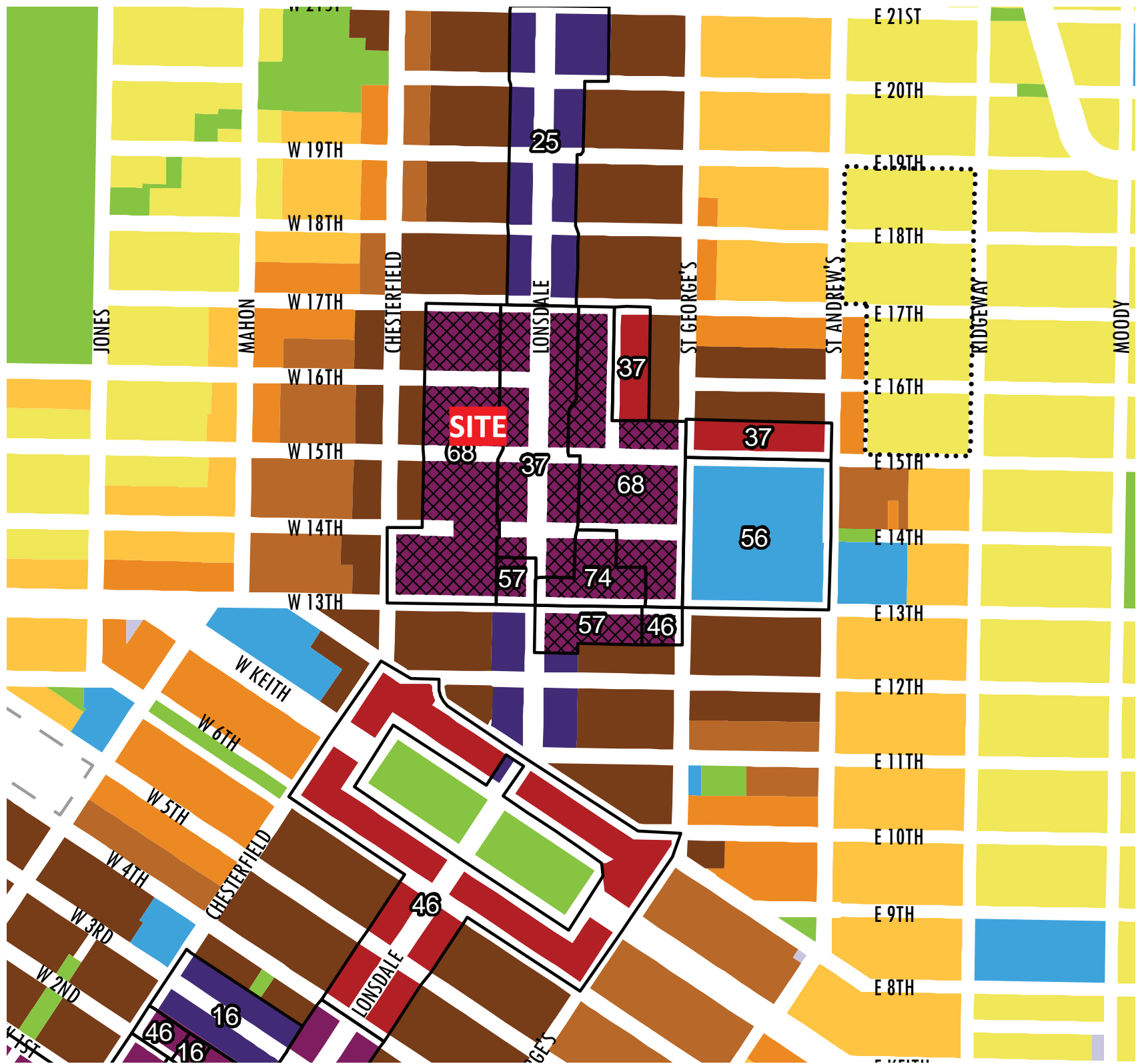
**Land Use Designation**  
This map should be viewed in conjunction with the provisions of Sections 2.1 and 2.2 of Chapter 1

Land Use Designation	OCP Density (FSR)	Maximum Bonus (FSR)
Residential Level 1 (Low Density)	0.5	-
Residential Level 2 (Low Density)	0.5	-
Residential Level 3 (Low Density)	0.75	-
Residential Level 4A (Medium Density)	1.0	-
Residential Level 4B (Medium Density)	1.25	-
Residential Level 5 (Medium Density)	1.6	up to 1.0
Residential Level 6 (High Density)	2.3	up to 1.0
Mixed Use Level 1 (Low Density)	1.0	-
Mixed Use Level 2 (Medium Density)	2.0	up to 0.5
Mixed Use Level 3 (Medium Density)	2.3	up to 0.5
Mixed Use Level 4A (High Density)	2.6	up to 1.0
Mixed Use Level 4B (High Density)	3.0	up to 1.0
Harbourside Waterfront (Mixed Use)	2.05	up to 0.15

**Example Height Equivalencies**

Metres	Approx. Storeys
12-13	4
18-19	6
23-25	8
37	12
46	15
55-56	18
68	22
74	24
88	30

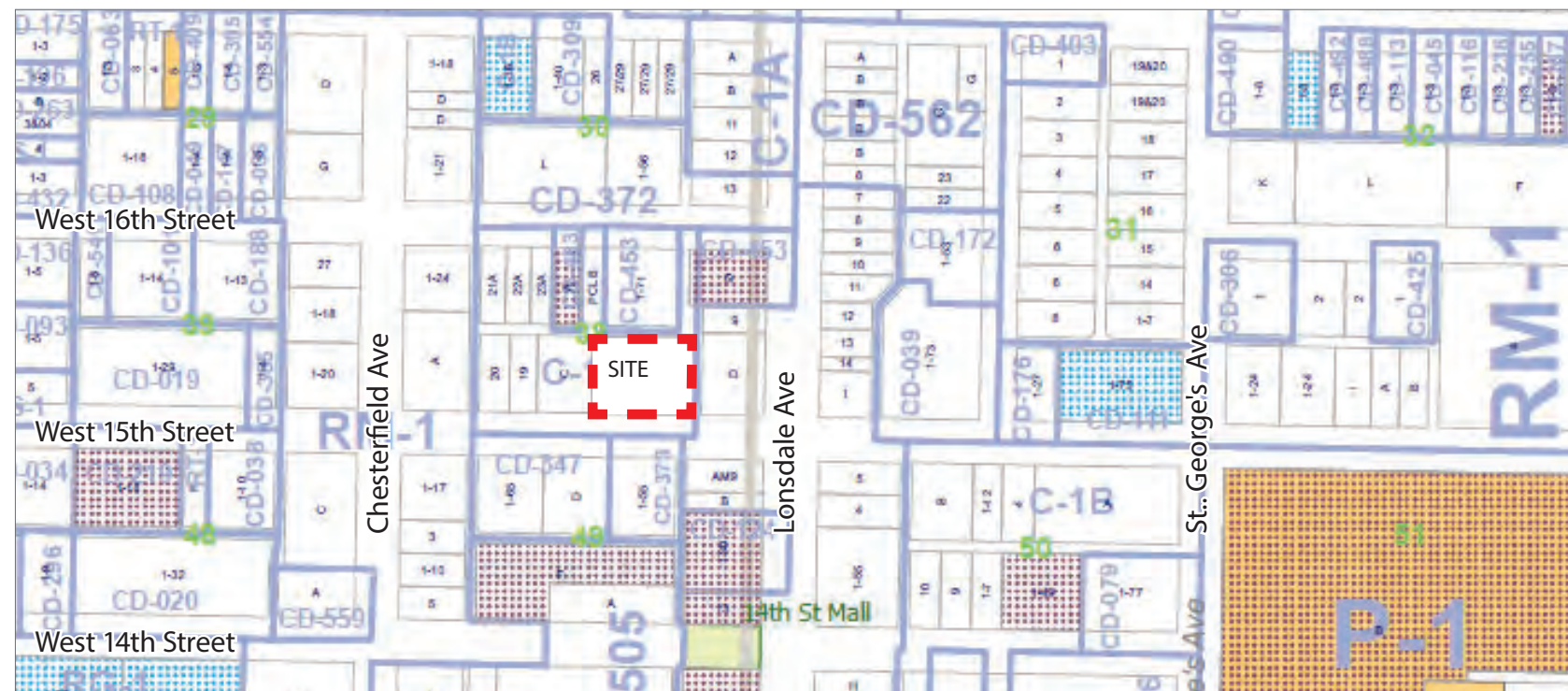
City of North Vancouver Official Community Plan Schedule A, 2019



## Zoning

The site is currently zoned Central Lonsdale Mixed Use 4B Zone (C-1B) which is a commercial zoning with a maximum allowable Floor Space Ratio (FSR) of 2.6 and building height of 120 feet, or approximately 12-storeys.

The purpose of this application is to rezone the site from C-1B to CD to permit the proposed development. The proposed CD rezoning will bring this site into conformance with the current in-force Official Community Plan.



City of North Vancouver Generalized Zoning Map, 2019

		<p><b>MIXED-USE LEVEL 4A</b> (High Density)</p>	<p><b>Purpose</b> To allow for a mix of higher-density multi-family and commercial uses in Lower Lonsdale. Buildings in this designation typically include a mix of retail and/or office space on lower floors and residential apartments on upper floors.</p> <p><b>Form</b> Mid-rise or high-rise buildings. Heights are limited as indicated in the <b>Land Use map</b> (Schedule A, Appendix 1.0).</p> <p><b>Max Density</b> <b>2.6 FSR</b></p> <p><b>Max Bonus</b> A maximum increase of <b>1.0 FSR</b> may be considered when public benefits are provided as per Section 2.2.</p>
		<p><b>MIXED-USE LEVEL 4B</b> (High Density)</p>	<p><b>Purpose</b> To allow for a mix of higher-density multi-family and commercial uses to strengthen the core of the city and generate employment opportunities. Buildings in this designation typically include a mix of retail and/or office space on lower floors and residential apartments on upper floors.</p> <p><b>Form</b> High-rise buildings greater than six storeys. Heights are limited as indicated in the <b>Land Use map</b> (Schedule A in Appendix 1.0).</p> <p><b>Max Density</b> <b>3.0 FSR</b></p> <p><b>Max Bonus</b> A maximum increase of <b>1.0 FSR</b> may be considered when public benefits are provided as per Section 2.2.</p>



# Site Survey Plan

## TOPOGRAPHIC PLAN OF LOTS E AND F BOTH OF BLOCK 38 DISTRICT LOT 548 PLAN 18002

0 5 10 15  
SCALE 1:200 DISTANCES ARE IN METRES

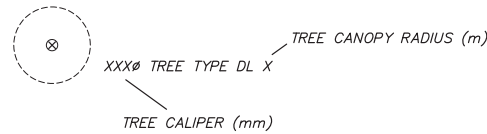
### ELEVATION DERIVATION

ELEVATIONS ARE DERIVED FROM CITY OF NORTH VANCOUVER CONTROL MONUMENT No. 73H1020 ELEVATION=87.129m (CVD28GVRD2018)



### LEGEND:

- PP ☒ DENOTES POWER POLE
- GW ✕ DENOTES GUY WIRE
- BO ⊙ DENOTES BOLLARD
- CB ☒ DENOTES CATCH BASIN
- LB ⊙ DENOTES LAWN BASIN
- EB ☒ DENOTES ELECTRICAL BOX
- MH ⊕ DENOTES MANHOLE
- LS ✨ DENOTES LAMP STANDARD
- WV ✕ DENOTES WATER VALVE
- GV ✕ DENOTES GAS VALVE
- SN ✕ DENOTES SIGN
- DR ☒ DENOTES DRAIN
- SB ☒ DENOTES SERVICE BOX
- TW ✕ DENOTES TOP OF WALL
- BT ✕ DENOTES BOTTOM OF TRANSFORMER
- DEC ✕ DENOTES DECIDUOUS



### NOTES:

PROPERTY LINES ARE DERIVED FROM FIELD SURVEY

OFFSETS TO PROPERTY LINES ARE NOT TO BE USED TO DEFINE BOUNDARIES

THIS PLAN SHOULD BE READ IN CONJUNCTION WITH TITLE No.s GD2228 AND GD2229 TO CONFIRM ANY CHARGES THAT MAY AFFECT THIS PLAN

THIS PLAN SHOWS THE LOCATION OF VISIBLE FEATURES ONLY AND DOES NOT INDICATE BURIED SERVICES THAT MAY EXIST ON OR AROUND THE SUBJECT SITE

### DISCLAIMER:

THIS PLAN HAS BEEN PREPARED FOR MORTGAGE AND/OR MUNICIPAL PURPOSES ONLY AND IS FOR THE EXCLUSIVE USE OF OUR CLIENT

ALL RIGHTS RESERVED. NO PERSON MAY COPY, REPRODUCE, TRANSMIT, OR ALTER THIS DOCUMENT IN WHOLE OR IN PART WITHOUT THE CONSENT OF BUTLER SUNDVICK.

BUTLER SUNDVICK ACCEPTS NO RESPONSIBILITY OR LIABILITY FOR ANY DAMAGES THAT MAY BE SUFFERED BY A THIRD PARTY AS A RESULT OF ANY DECISIONS MADE, OR ACTIONS TAKEN BASED ON THIS DOCUMENT.

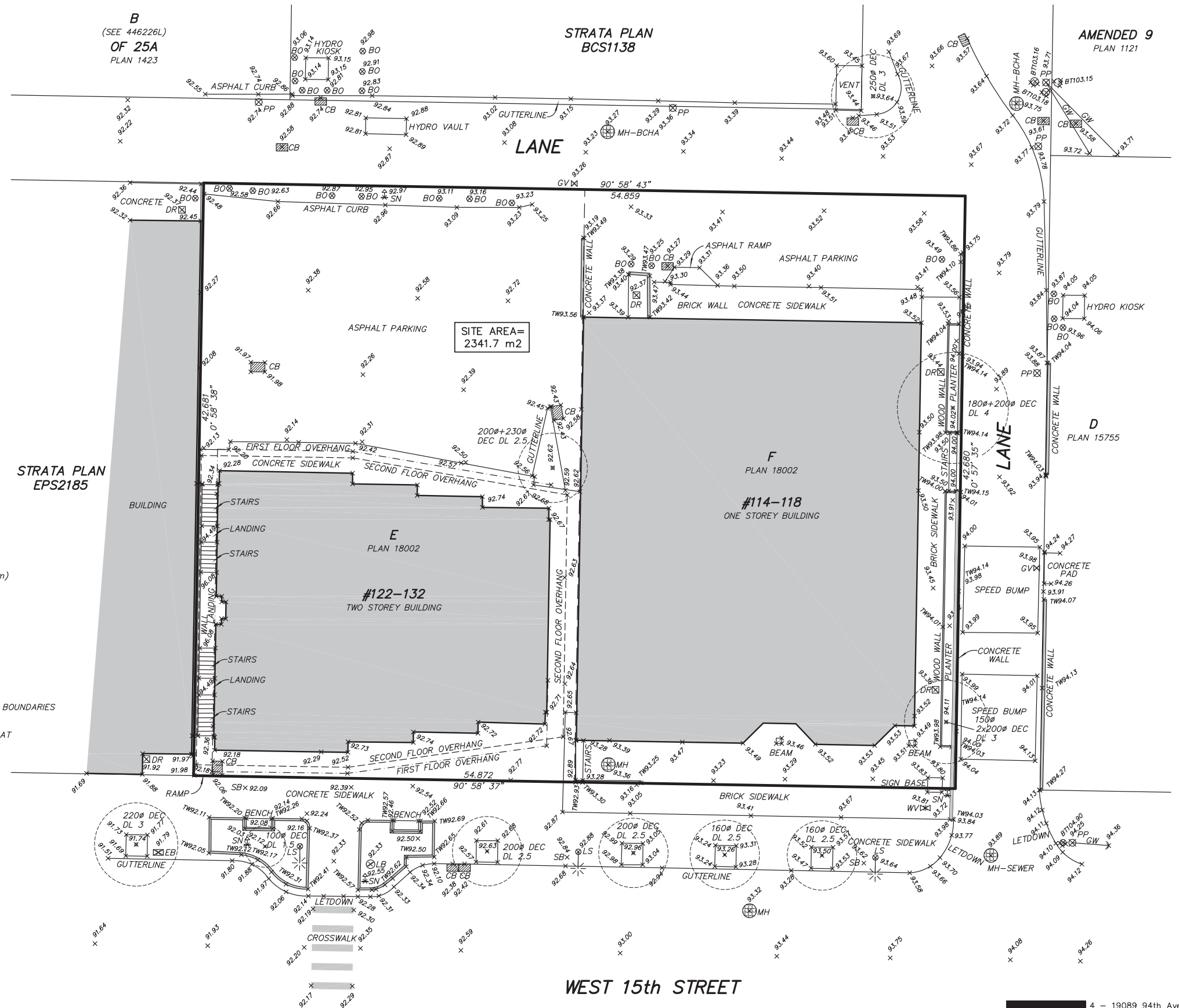
CERTIFIED CORRECT  
THIS 25th DAY OF MAY, 2021

Jesse Morin  
8CKUFR

c=CA, cn=Jesse Morin  
8CKUFR, o=BC Land  
Surveyor, ou=Verify ID  
at www.juricert.com/  
LKUP.cfm?id=8CKUFR

B.C.L.S.

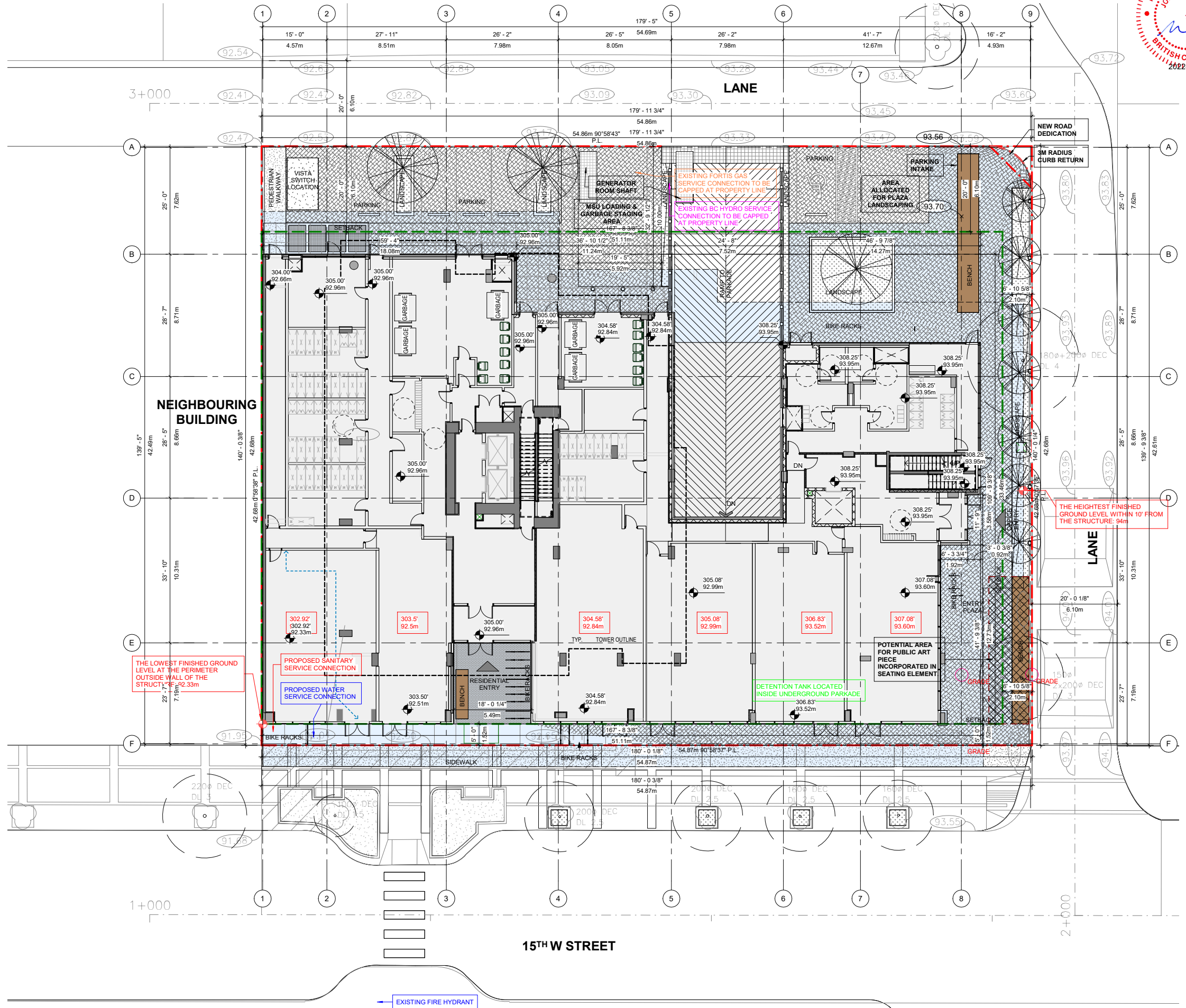
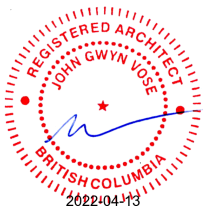
JESSE MORIN



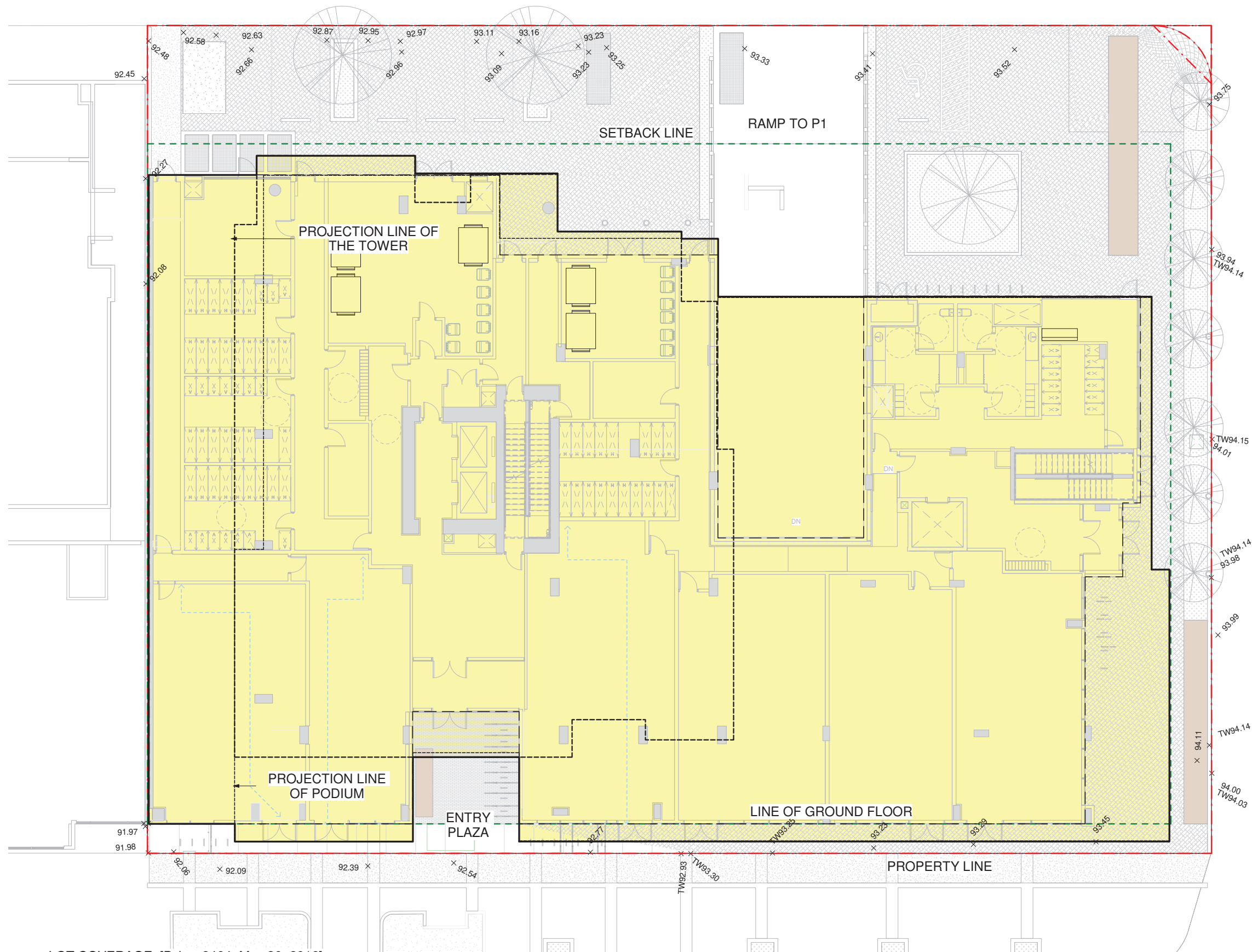
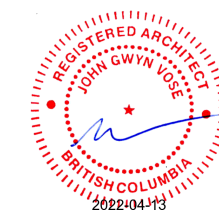




# Site Plan



# Lot Coverage Plan



LOT COVERAGE [Bylaw 8464, May 30, 2016]

“Lot Coverage” means the horizontal area within the vertical projection of the outermost walls of Principal, Accessory Buildings and Accessory Coach House Buildings on a Lot, expressed as a percentage of the Lot Area. It shall not exceed a Lot Coverage of 90%, reduced to 35% above the second Storey.

LOT AREA: 2,341.7 sqm (25,206 sf)

LOT COVERAGE AREA: 17,272 sf

LOT COVERAGE: 68.5%

LOT COVERAGE ABOVE SECOND STOREY AREA: 7,740 sf

LOT COVERAGE ABOVE SECOND STOREY: 30.7%



# Shadow Study



AUTUMN EQUINOX - 10AM



AUTUMN EQUINOX - 12PM



AUTUMN EQUINOX - 2PM



WINTER SOLSTICE - 10AM



WINTER SOLSTICE - 12PM



WINTER SOLSTICE - 2PM

# Shadow Study



SPRING EQUINOX - 10AM



SPRING EQUINOX - 12PM



SPRING EQUINOX - 2PM



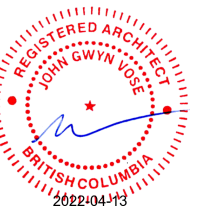
SUMMER SOLSTICE - 10AM



SUMMER SOLSTICE - 12PM



SUMMER SOLSTICE - 2PM



# DESIGN RATIONALE

---



## Design Rationale - Introduction

### PROJECT DESCRIPTION

Polygon and IBI Group are pleased to submit this rezoning application for a significant site in Central Lonsdale, North Vancouver.

#### Project Description:

- 22 storey tower with 2 storey commercial and office podium

#### This application proposes:

- 16, 093 SQM = 173, 225 SQ FT of floor area
- 6.87 of FAR
- 136 of new homes

### SITE CONTEXT

The redevelopment of the site is an exciting opportunity to contribute to the vibrant urban fabric of Central Lonsdale. The site is located in proximity to existing businesses, services and institutions, contributing to the area’s liveability while minimizing negative impacts on the environment. The proposed development is very close to a frequent transit corridor and promotes walking and cycling as active and healthy modes of transportation. Central Lonsdale is increasingly becoming more dense and high-rise towers are a prominent feature of the area. Medium density apartments and townhouses provide buffers between single-family neighborhoods and the dense, mixed-use core centred on Lonsdale Avenue. 114-132 West 15th Street has the potential to offer spectacular views of Vancouver and its surrounding mountains, shorelines and water.





## Design Rationale - Introduction

### DESIGN ORIGIN

The site is located in the heart of Central Lonsdale, which has been designated by Metro Vancouver, as a Regional City Centre. The Lonsdale Corridor is the only Regional City Centre located on the North Shore, and serves as the North Shore’s downtown. It offers shops, services, civic institutions, and high-density multi-family housing in an increasingly amenable, pedestrian-friendly, transit- oriented environment.

Polygon and IBI have collaborated to propose the development of a sustainable, mixed-use residential-commercial building for an assembly on 114-132 West 15th Street in the heart of Central Lonsdale between Chesterfield and Lonsdale Avenue. The site is within one block of Lonsdale Avenue, which is the cultural, commercial and institutional hub of the community, and it is within a ten-minute walk to an array of other essential services and amenities including the Lions Gate Regional Hospital, City Hall, the newly built public library, and RCMP headquarters.

The types of housing units proposed will cater to a range of needs. The proximity to services and amenities in the Town Centre makes the site ideal for empty-nesters, first time home buyers, retirees, seniors, singles and young couples. It will also provide housing choices for those who wish to stay in North Vancouver while attracting others who wish to call the North Shore home. The developer has made special efforts to meet the needs of people facing mobility challenges and have incorporated Level Two Unit Plans in line with City of North Vancouver’s Adaptable Design Guidelines.

At grade level, the building features attractive, vibrant and pedestrian-friendly street front retail uses and a greatly improved public realm which will revitalize the aging commercial streetscape on West 15th Street and contribute to the overall amenity and economic vitality of Central Lonsdale. The addition of residential uses will generate spin-off benefits and increase the consumer base for local shops and services in the Town Centre.

### TARGET MARKET

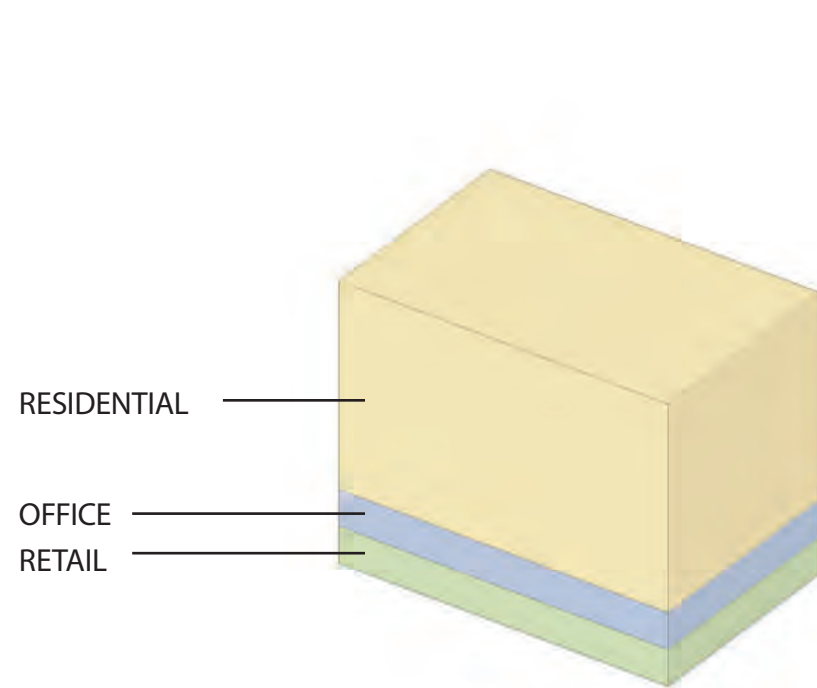
To address housing affordability, we have designed a wide range of unit sizes which allow for a variety of price points. Approximately 28% of units will be sized between 600 to 700 sq.ft., and another 57% of the units will be sized between 900 to 1,000 sq.ft. This creates diversity in housing choices that will appeal to a variety of residents including empty-nesters, first time home buyers, retirees, singles and young couples. North shore residents will be provided with an opportunity to continue living in their community, particularly within the vibrant neighborhood of Central Lonsdale.



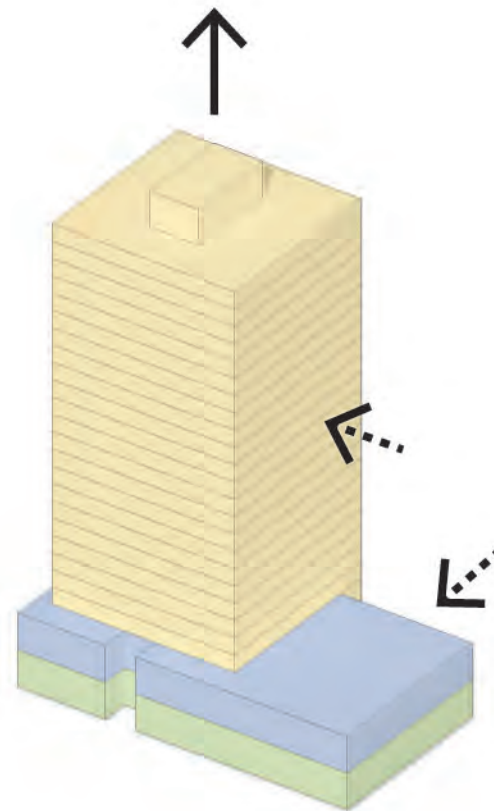


## Design Rationale - Building Massing

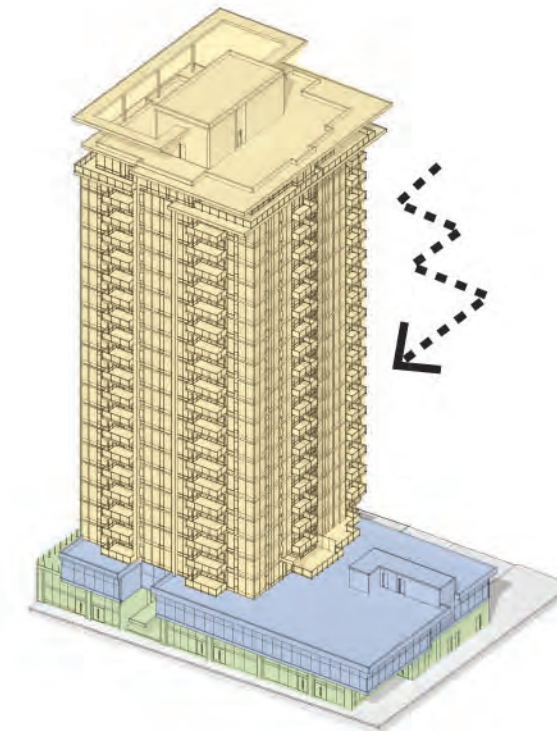
The building's form has been designed to respond to the existing built form context. Below is an illustration on how the building has evolved from a simple box, to its massing formation - showing how the building conforms with the OCP guidelines, until its transition to a desired character. Further articulation has been done to the shape of the building to further define entry points, mitigate potential view impacts to surrounding buildings, and to carve out well designed areas in the public realm.



**Step 1**  
Provide the massing density for the site, based on the project program requirements, which includes retail, office and residential.



**Step 2**  
Distinguish the residential tower massing from the podium, and push the tower massing to the west of the site.






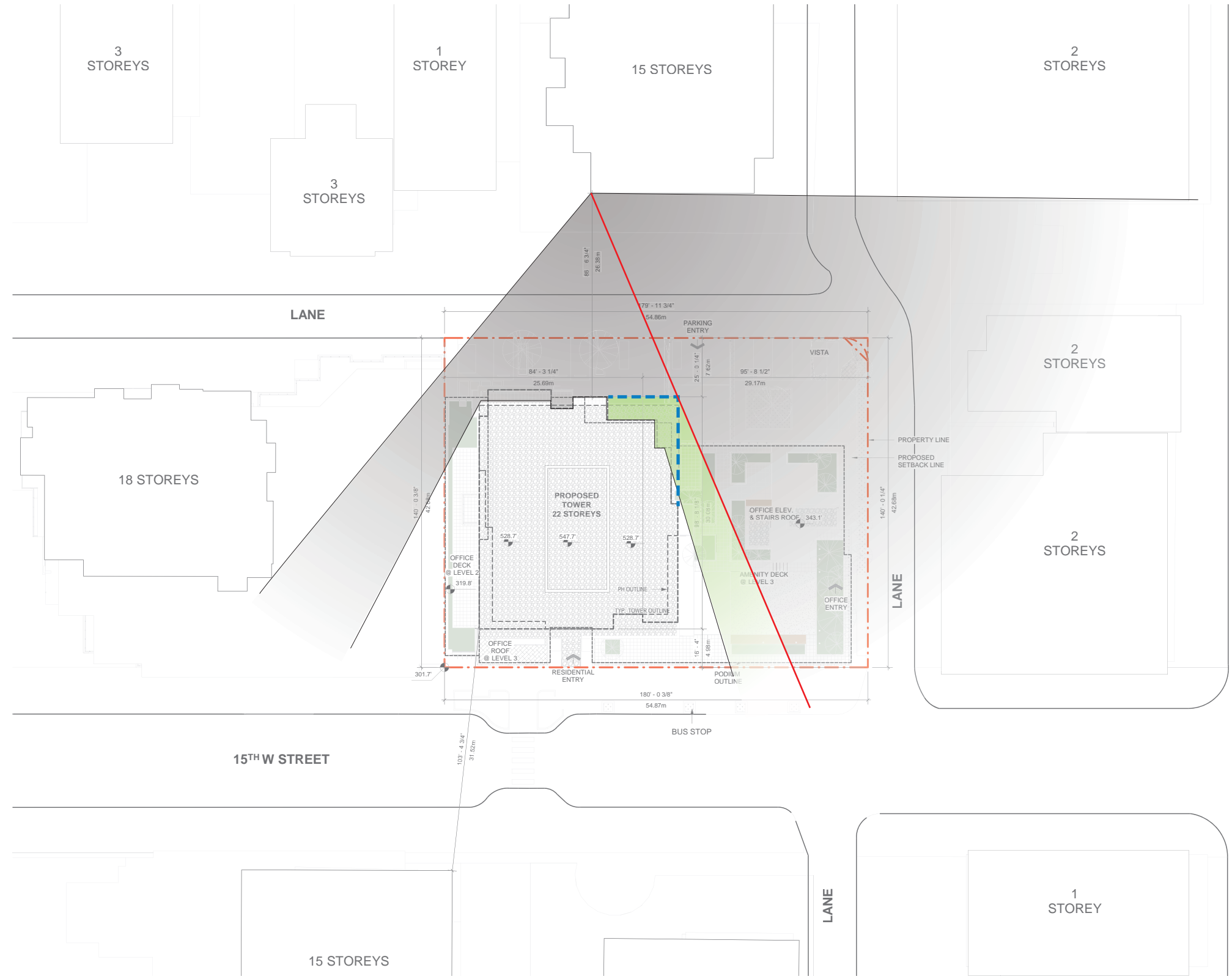
**Step 3**  
Create an angle at the North-East portion to increase view corridor for neighboring building across the lane. Provide the design details and pocket lobby plazas to activate the street edge, and open amenity space at the top of the podium.

## View Analysis

As part of the design process, IBI team have explored the possibility of aligning the proposed tower with the building to North and to the South. A case study, showing two (2) scenarios (building at west and building in the middle) has also been presented to the City Staff during the Pre-App Meeting last April 8, 2021 via webex virtual platform. Based on the metrics illustrated in the View Analysis, shown in the following pages, there is less impact on views if the proposed building were to remain at West.

### LEGEND

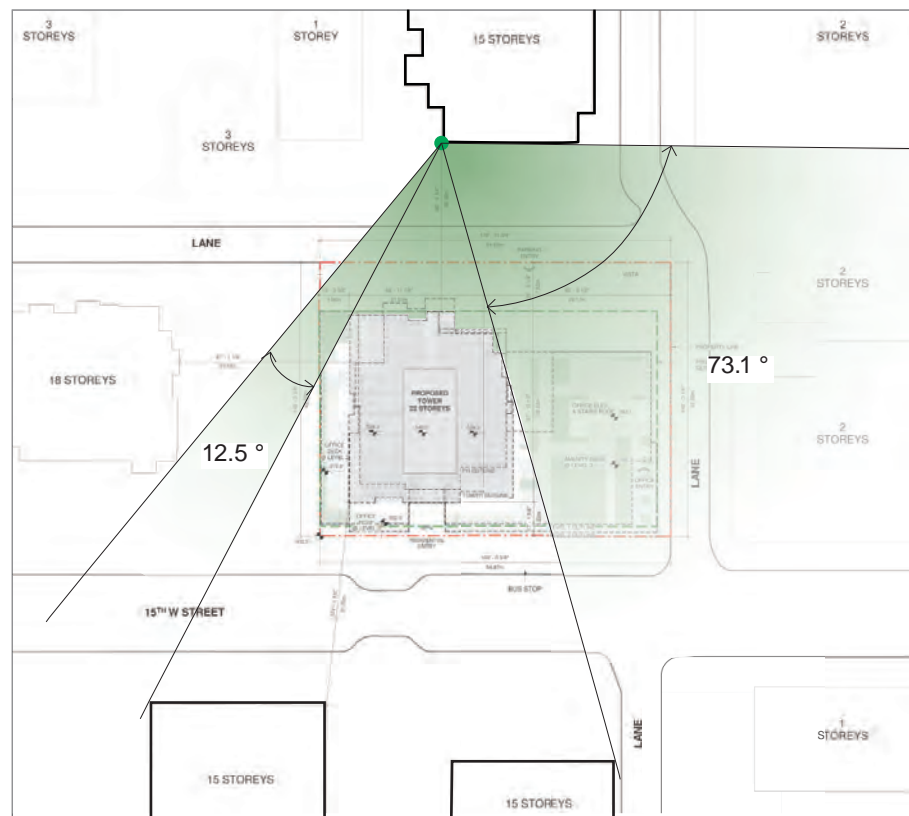
-  VIEW IMPACT FOR RECTANGULAR FLOOR PLATE
-  ADDITIONAL VIEW BY RESHAPING THE FLOOR PLATE
-  SCENARIO IF BUILDING IS IN RECTANGULAR FORM





# View Analysis\_Building Positioning Study View Impact to Building at North

## SCENARIO 1\_BUILDING AT WEST (PROPOSED BUILDING LOCATION)



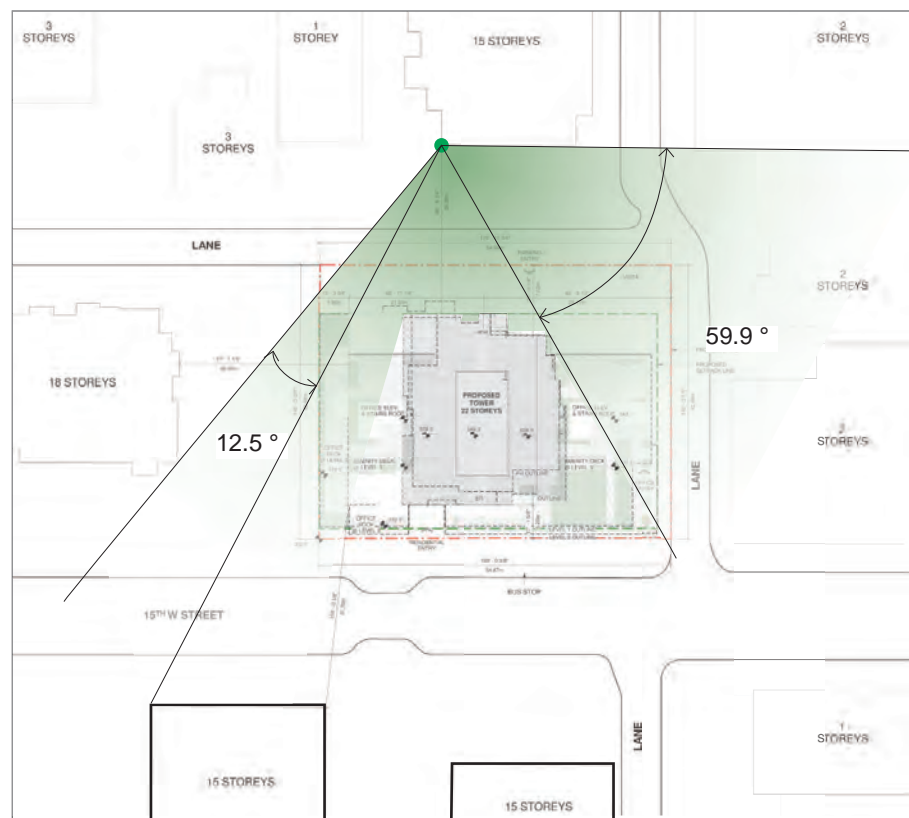
View 01 85.6° (12.5 °+73.1°)



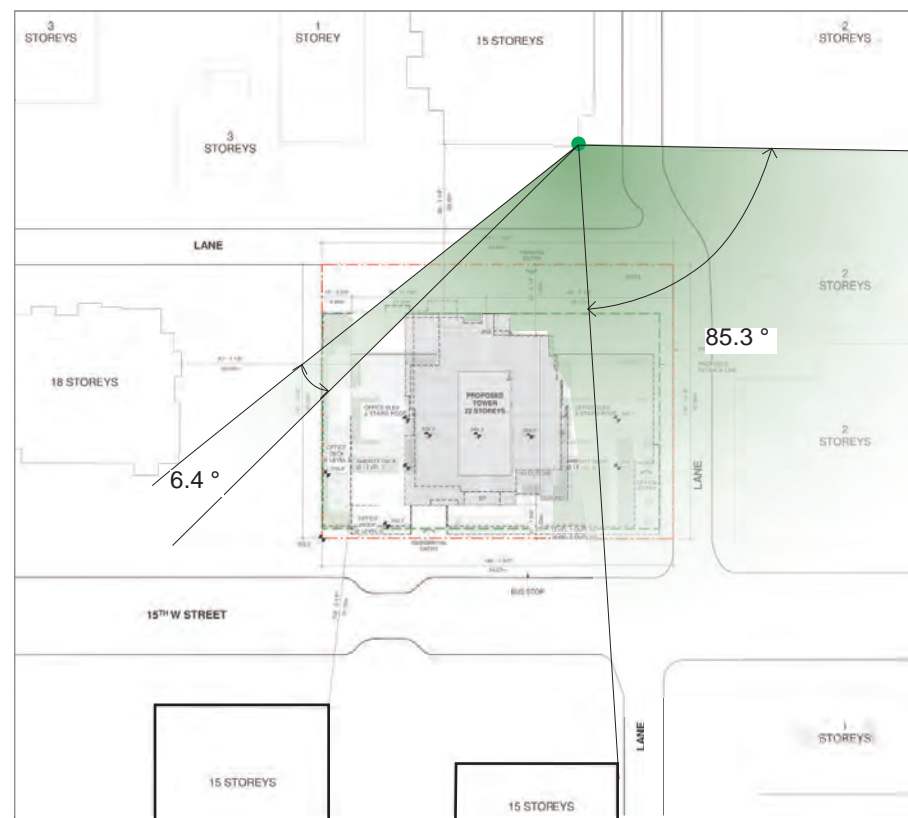
View 02 85.3°



## SCENARIO 2\_BUILDING IN THE MIDDLE



View 01 72.4° (12.5 °+59.9°)

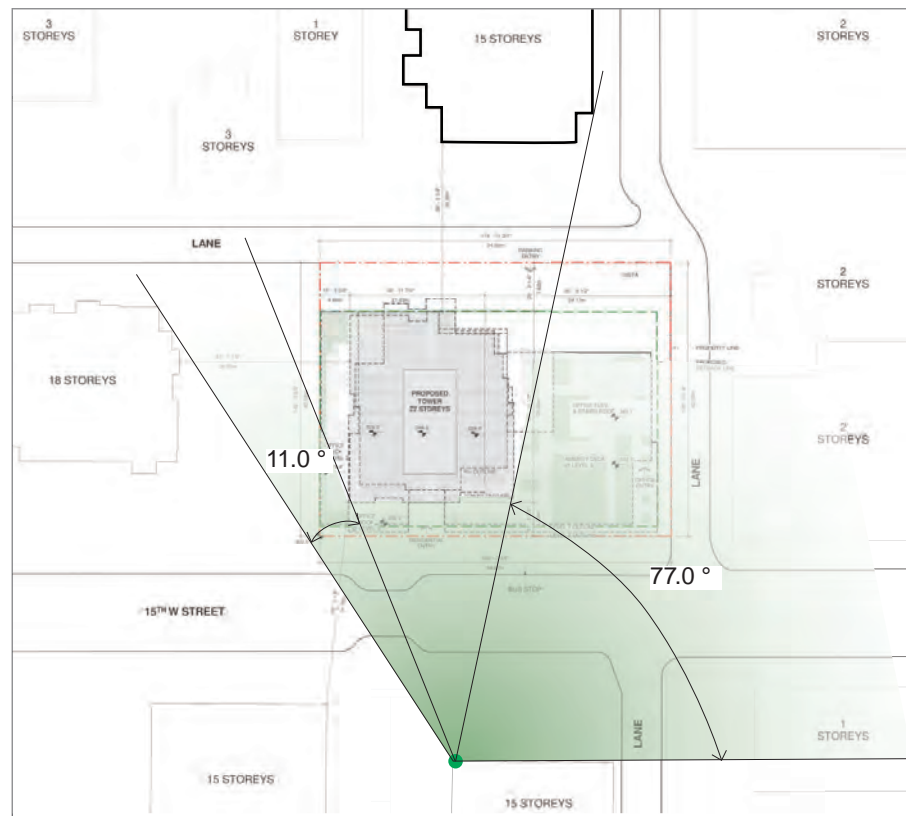


View 02 91.7° (6.4 °+85.3°)

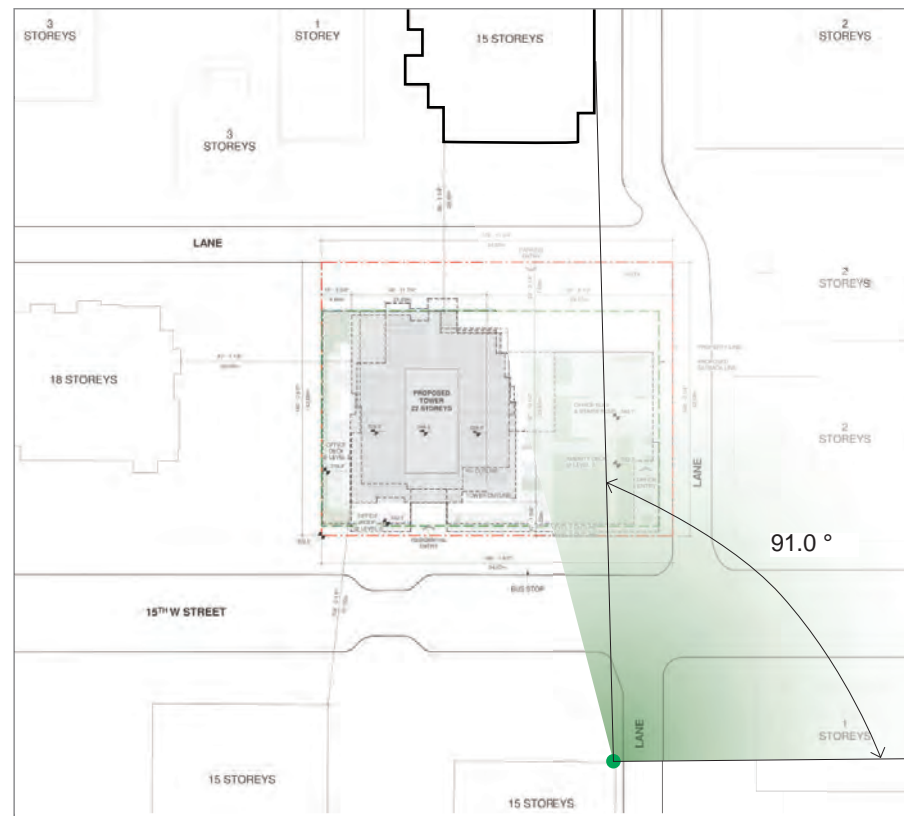


# View Analysis\_Building Positioning Study View Impact to Building at South

## SCENARIO 1\_BUILDING AT WEST (PROPOSED BUILDING LOCATION)



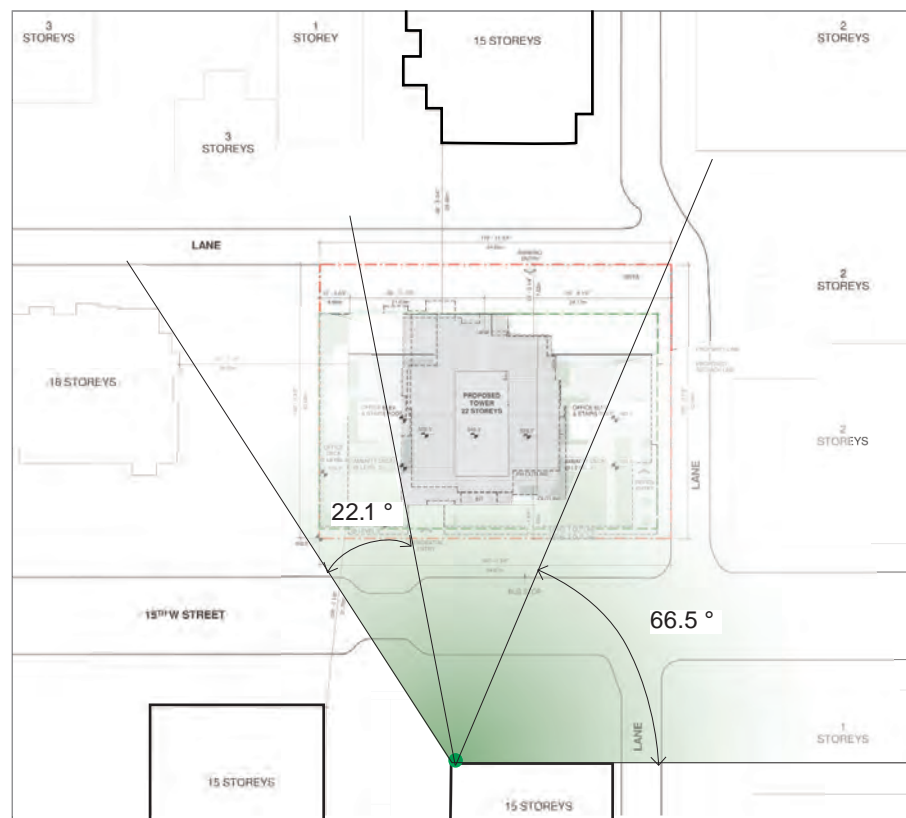
View 03 88.0° (11.0°+77.0°)



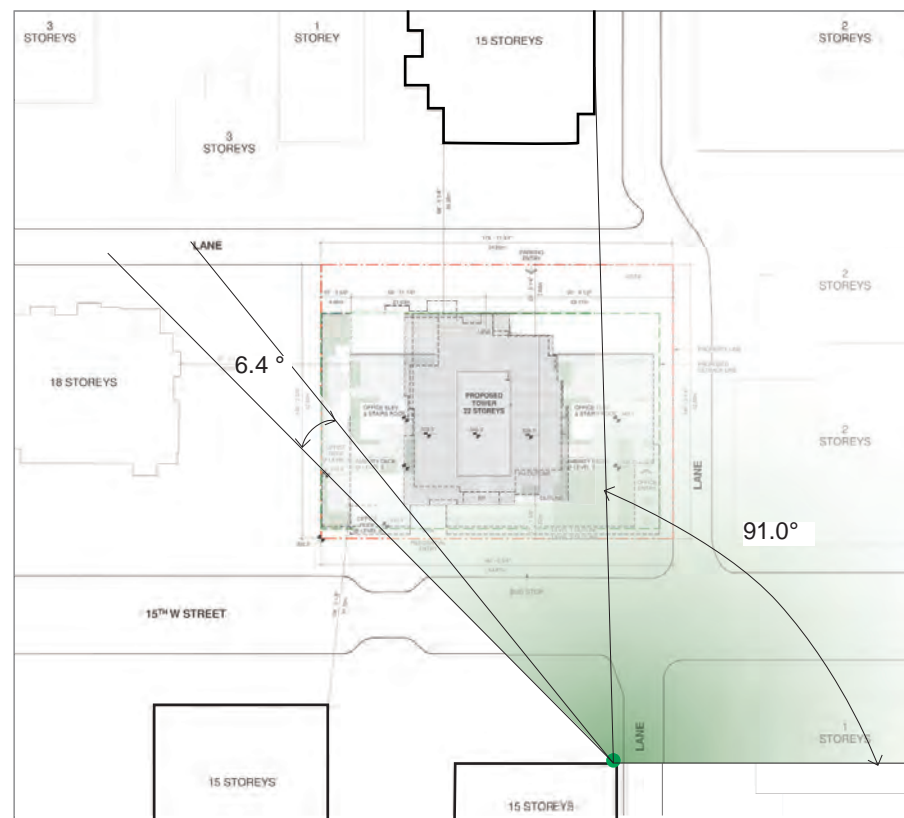
View 04 91.0°



## SCENARIO 2\_BUILDING IN THE MIDDLE



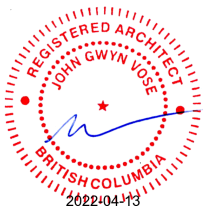
View 03 88.6° (22.1°+66.5°)



View 04 97.4° (6.4°+91.0°)



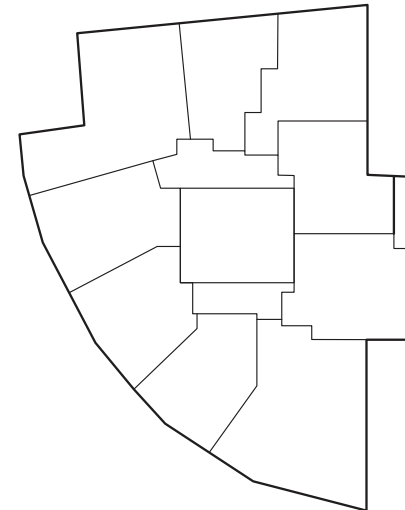
# Floor Plate Size Analysis



The Floor Plate Size Analysis is in response to Planning’s request to confirm if the building’s floorplate is consistent with similar high-rise developments in the City of North Vancouver. In comparison with the select eleven (11) buildings’ used in this analysis, the project demonstrates that the proposed floor plate is within reasonable size.

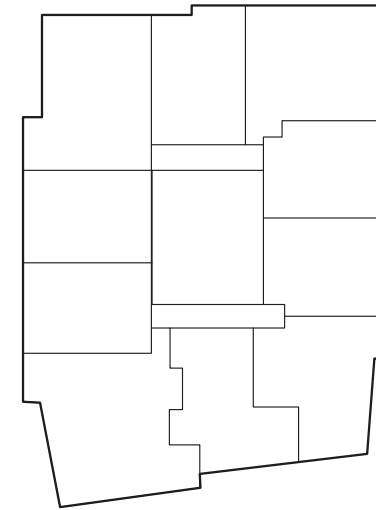


AERIAL MAP FROM GOOGLE EARTH



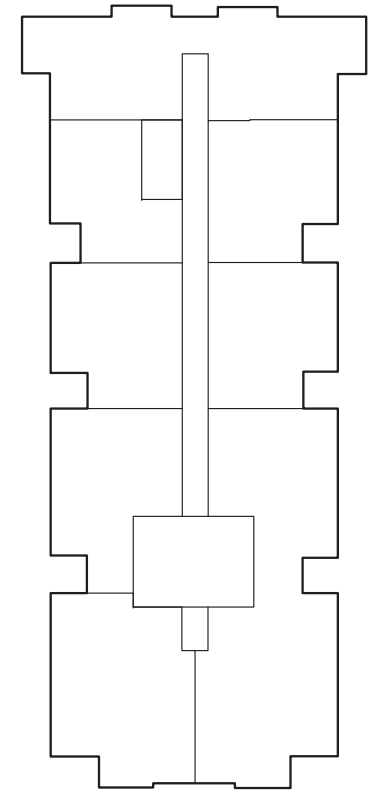
No.1 108 WEST 13TH

Floor Plate Size :  
7,000 sf (Estimated)



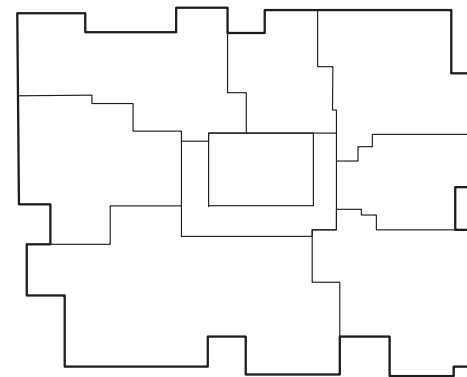
No.2 125 EAST 14TH

Floor Plate Size :  
8,300 sf (Estimated)



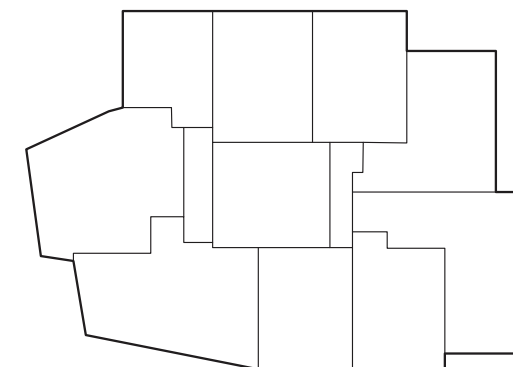
No.5 118 CARRIE CATES CT

Floor Plate Size :  
10,800 sf (Estimated)



No.3 158 WEST 13TH

Floor Plate Size :  
7,600 sf (Estimated)

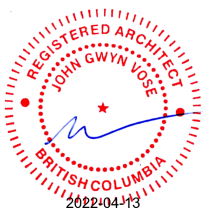


No.4 112 EAST 13TH

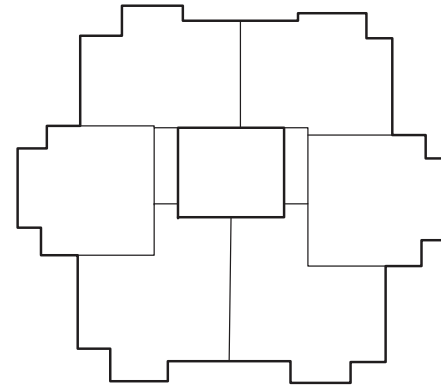
Floor Plate Size :  
7,500 sf (Estimated)



# Floor Plate Size Analysis

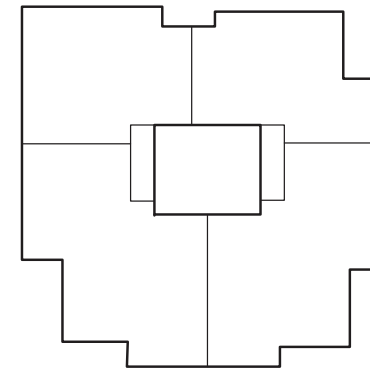


AERIAL MAP FROM GOOGLE EARTH



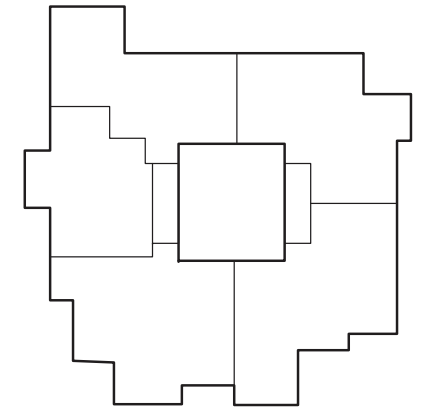
No.1 148 WEST 16TH

Floor Plate Size :  
5500 sf (Estimated)



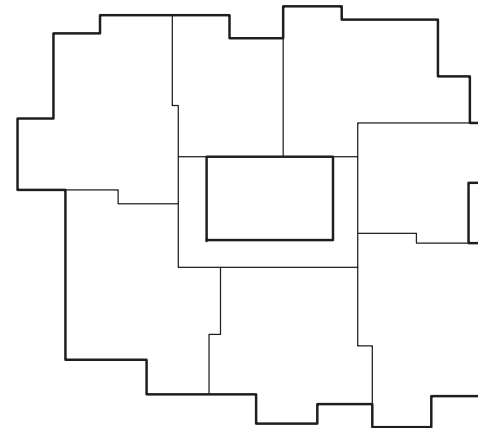
No.2 120 WEST 16TH

Floor Plate Size :  
5100 sf (Estimated)



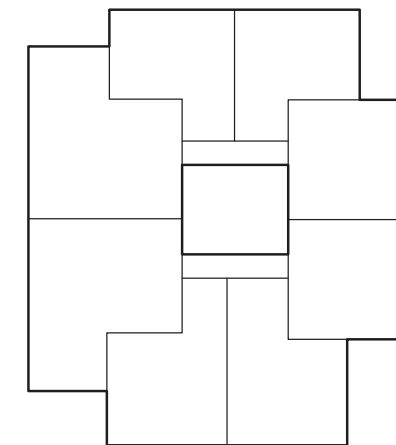
No.3 121 WEST 16TH

Floor Plate Size :  
5100 sf (Estimated)



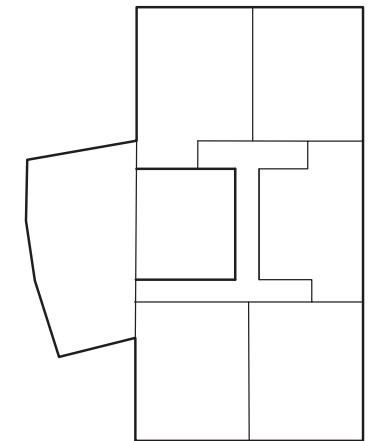
No.4 150 WEST 15TH

Floor Plate Size :  
7000 sf



No.5 135 WEST 15TH

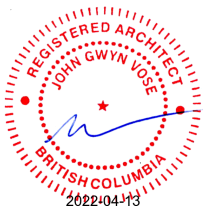
Floor Plate Size :  
6500 sf (Estimated)



No.6 121 WEST 15TH

Floor Plate Size :  
5200 sf (Estimated)





# Design Rationale - Building Height

## Definition

“Average Grade” means the average of:

- (1) The highest finished ground level on the Lot within 3.048 metres (10 feet) of the Structure; and
- (2) The lowest finished ground level at the perimeter outside wall of the Structure (excluding sunken patios to a combined maximum 9.29 square metres (100 square feet) and window wells). [Bylaw 7135, July 23, 2012]

“Height” with reference to a Structure other than an Accessory Structure or a Landscape Screen means: [Bylaw 8346, July 21, 2014]

- (1) The vertical distance in metres between the highest point of the Structure and the greater of the Average Grade or the Flood Construction Level; or,
- (2) The total number of Storeys in the Structure;

## Calculation

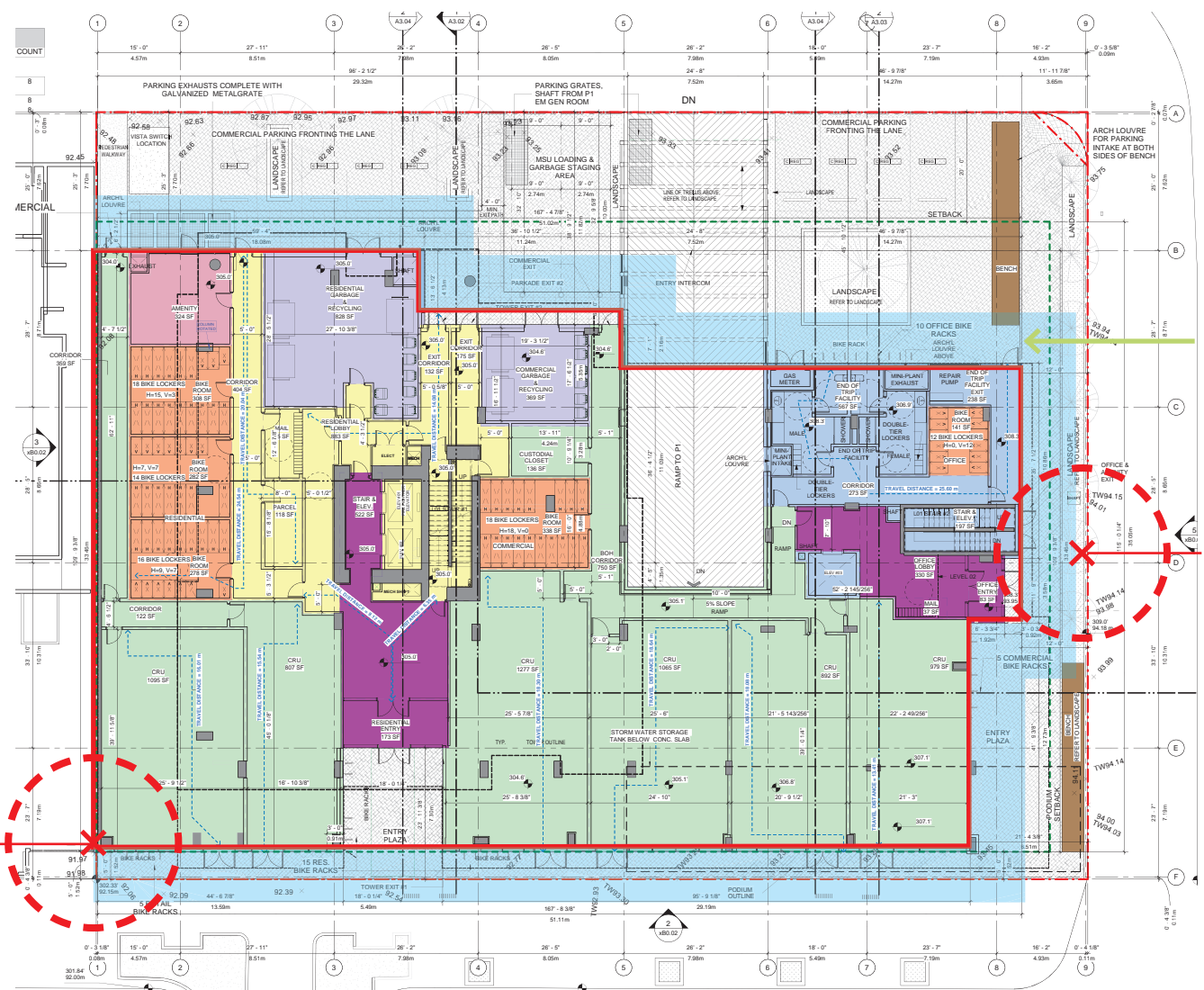
HIGHEST POINT: 94 m=308.39’  
 LOWEST POINT: 92.33 m=302.92’  
 AVERAGE GRADE:  
 (94 m + 92.33 m)/2 = 93.17 m=305.66’

**Land Use Designation**  
 This map should be viewed in conjunction with the provisions of Sections 2.1 and 2.2 of Chapter 1

Land Use Designation	OCP Density (FSR)	Maximum Bonus (FSR)
Residential Level 1 (Low Density)	0.5	
Residential Level 2 (Low Density)	0.5	
Residential Level 3 (Low Density)	0.75	
Residential Level 4A (Medium Density)	1.0	
Residential Level 4B (Medium Density)	1.25	
Residential Level 5 (Medium Density)	1.6	up to 1.0
Residential Level 6 (High Density)	2.3	up to 1.0
Mixed Use Level 1 (Low Density)	1.0	
Mixed Use Level 2 (Medium Density)	2.0	up to 0.5
Mixed Use Level 3 (Medium Density)	2.3	up to 0.5
Mixed Use Level 4A (High Density)	2.6	up to 1.0
Mixed Use Level 4B (High Density)	3.0	up to 1.0
Harbourside Waterfront 2.05 (Mixed Use)	2.05	up to 0.15

## Example Height Equivalencies

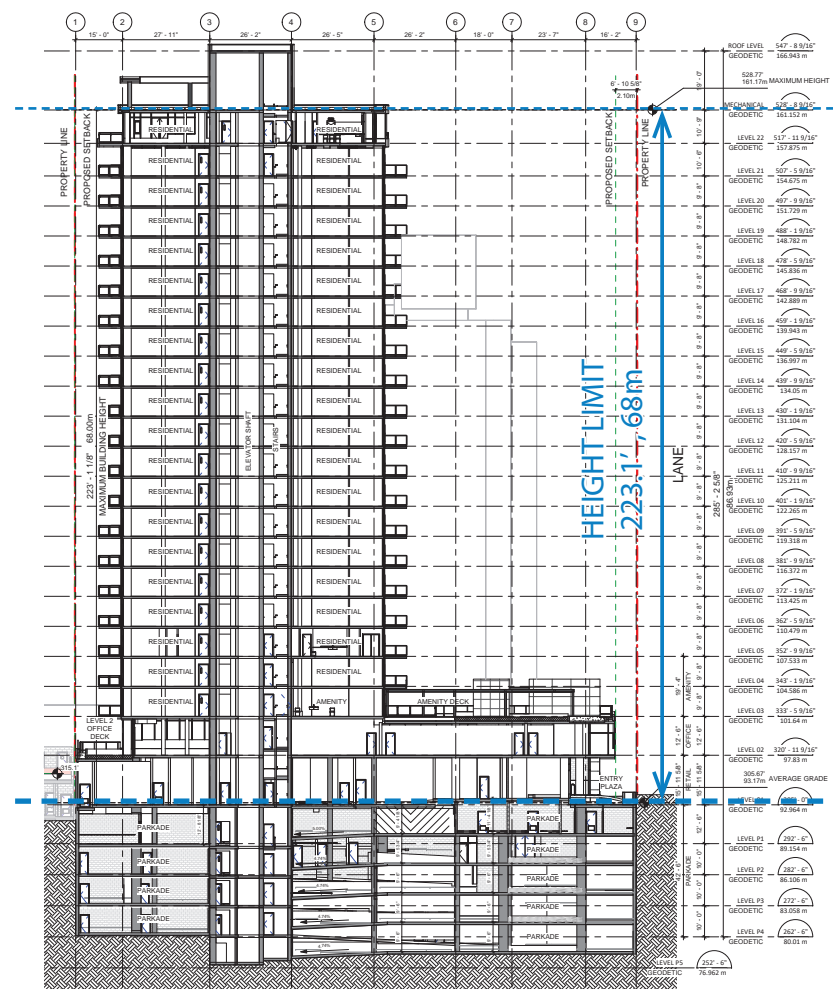
Metres	Approx. Storeys
12-13	4
18-19	6
23-25	8
37	12
46	15
55-56	18
68	22
74	24
88	30



THE LOWEST FINISHED GROUND LEVEL AT THE PERIMETER OUTSIDE WALL OF THE STRUCTURE  
**92.33 m**

10' SETBACK AREA FROM THE STRUCTURE (BLUE HATCH)

**94 m**  
 THE HIGHEST FINISHED GROUND LEVEL WITHIN 10' FROM THE STRUCTURE



**MAXIMUM HEIGHT**  
 528.77', 161.17m

Measured to the highest point of the Structure (top of slab of the last habitable level)

**AVERAGE GRADE:**  
 305.67', 93.17m



## Design Rationale - Amenities and Public Spaces

### AMENITY AND PUBLIC SPACES

Lonsdale project provides an indoor amenity space for residents at level 3 and outdoor spaces at levels 2 and 3.

The design of the amenity responds to the need of the residents. Abundant sunlight is brought into the interior space, which includes fitness, functional pantry, lounge and games area. The major functional spaces in the amenity building are tailored to meet the target market needs, promoting health, wellness, and collaborative community.

Level 2 is designed with a landscaped deck at west, providing office establishments a place to relax and have short breaks. The outdoor space on level 3 includes a fire pit, seating, yoga space, turf area, and a balanced integration of landscaped components to foster social interaction.

Double-height expression entry lobby has been designed to provide residents and visitors with a more welcoming and luxurious entry feel. As the building is faced south, sunlight could pour into the lobby space and create a warm feeling together with the modern cladding, which not only helps aesthetically but from a functional standpoint as well.

@ENTRY LOBBY



@RESIDENTIAL AMENITY



@OUTDOOR YOGA



@OUTDOOR SEATING





## Design Rationale - Building Colour and Materials

The Lonsdale project features an architectural character that is in keeping with the neighborhood context that has been developing over the last few years.

The exterior components of the building comprise of a mix of non-combustible materials including copper panel, glazing, stone and painted concrete. Strategic application of each material has been carefully considered to provide a cohesive design and unified architectural language. Copper panels accents are featured through out the tower to add natural reflection to the facade; while the wood looking soffits provide a warm feeling to the residents and public. The stone cladding provides a robust and durable touch to the lower portion of the building. And to make the facade look more interesting, a mix of dark window wall and light spandrel glass are applied to break-up the monotony and enhance the verticality of the towers.



# Design Rationale - Crime Prevention Through Environmental Design

## CPTED

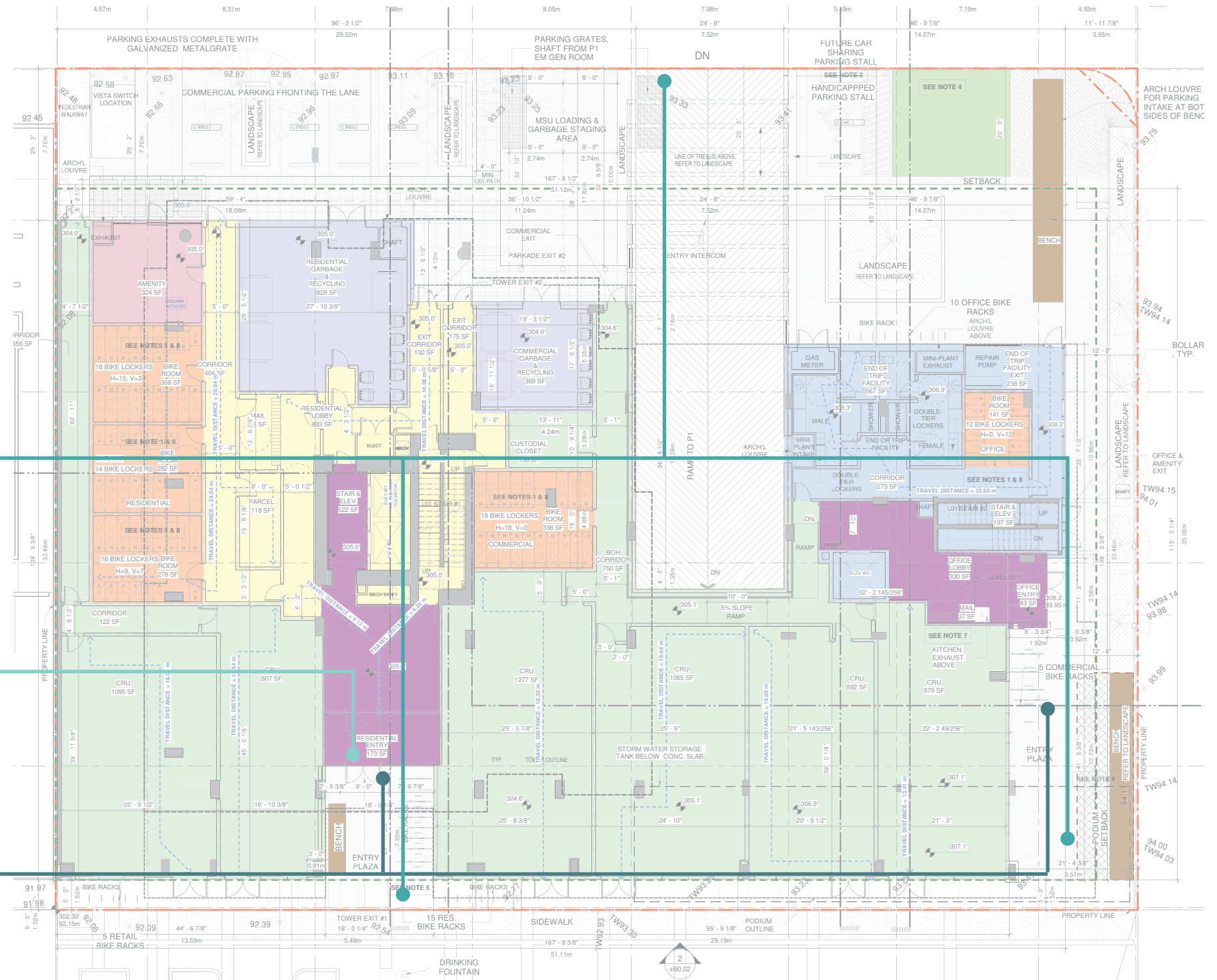
Per OCP, CPTED is planned by applying natural access control, natural surveillance, territoriality (defense space), and maintenance. Residential and non-residential circulation is suggested by landscape barriers. The two entry plazas on the south and east side of the site are carefully designed without view obstruction so that natural surveillance could be applied.

**Maintenance**  
 Maintenance is related to territorial reinforcement. A well-maintained area sends the message that people notice and care about what happens in an area. This, in turn, discourages vandalism and other crimes.

**Natural Access Control**  
 Curbing and landscaping are used to direct automobile and foot traffic into a controlled, visible area.

**Territorial Reinforcement**  
 The purpose of this principle is to create a clear distinction between public and private property. In this project residential and non-residential circulation is delineated by landscape barriers.

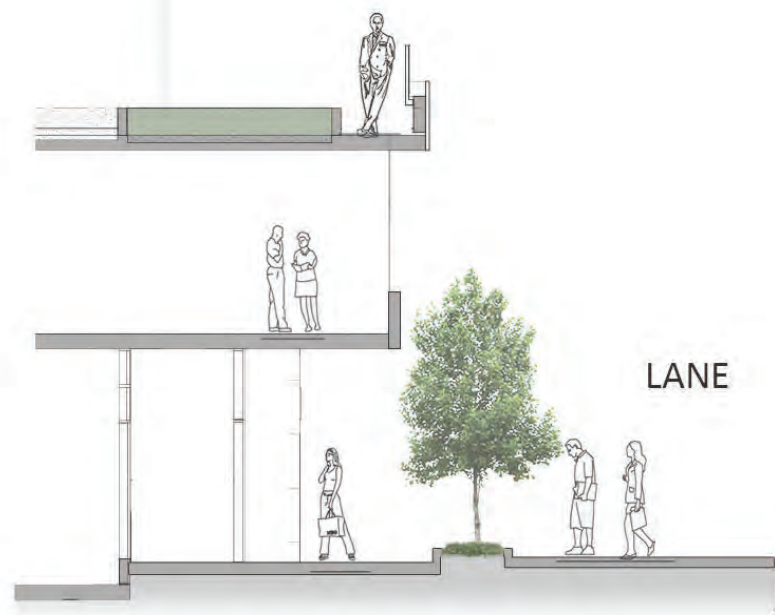
**Natural Surveillance**  
 Criminals do not like to be seen or recognized. The two entry plazas on the south and east side of the site are carefully designed without view obstruction so that natural surveillance could be applied.







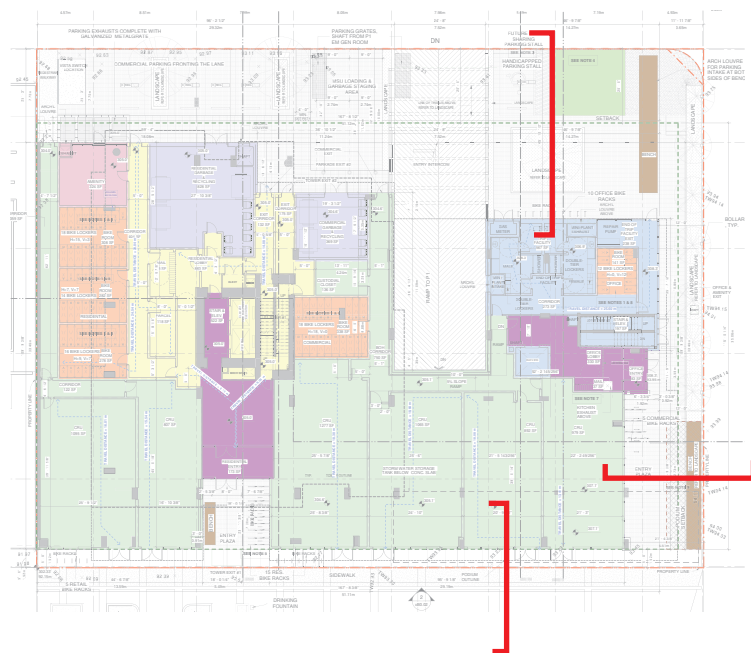
# Design Rationale - Public Realm Sections



EAST SECTION



NORTH SECTION



SOUTH SECTION



## Design Rationale - Affordability

### Affordability by Design (Unit Size/ Target Market Price)

To address housing affordability, we have designed a wide range of unit sizes which allow for a variety of price points. Approximately 28% of units will be sized between 600 to 700 sq.ft., and another 57% of the units will be sized between 900 to 1,000 sq.ft. This creates diversity in housing choices that will appeal to a variety of residents including empty-nesters, first time home buyers, retirees, singles and young couples. North shore residents will be provided with an opportunity to continue living in their community, particularly within the vibrant neighborhood of Central Lonsdale.



Typcal Floor Plan

- Units between 600 to 700sq.ft.
- Units between 900 to 1,000 sq.ft.





## Design Rationale - Adaptable Design Statistics

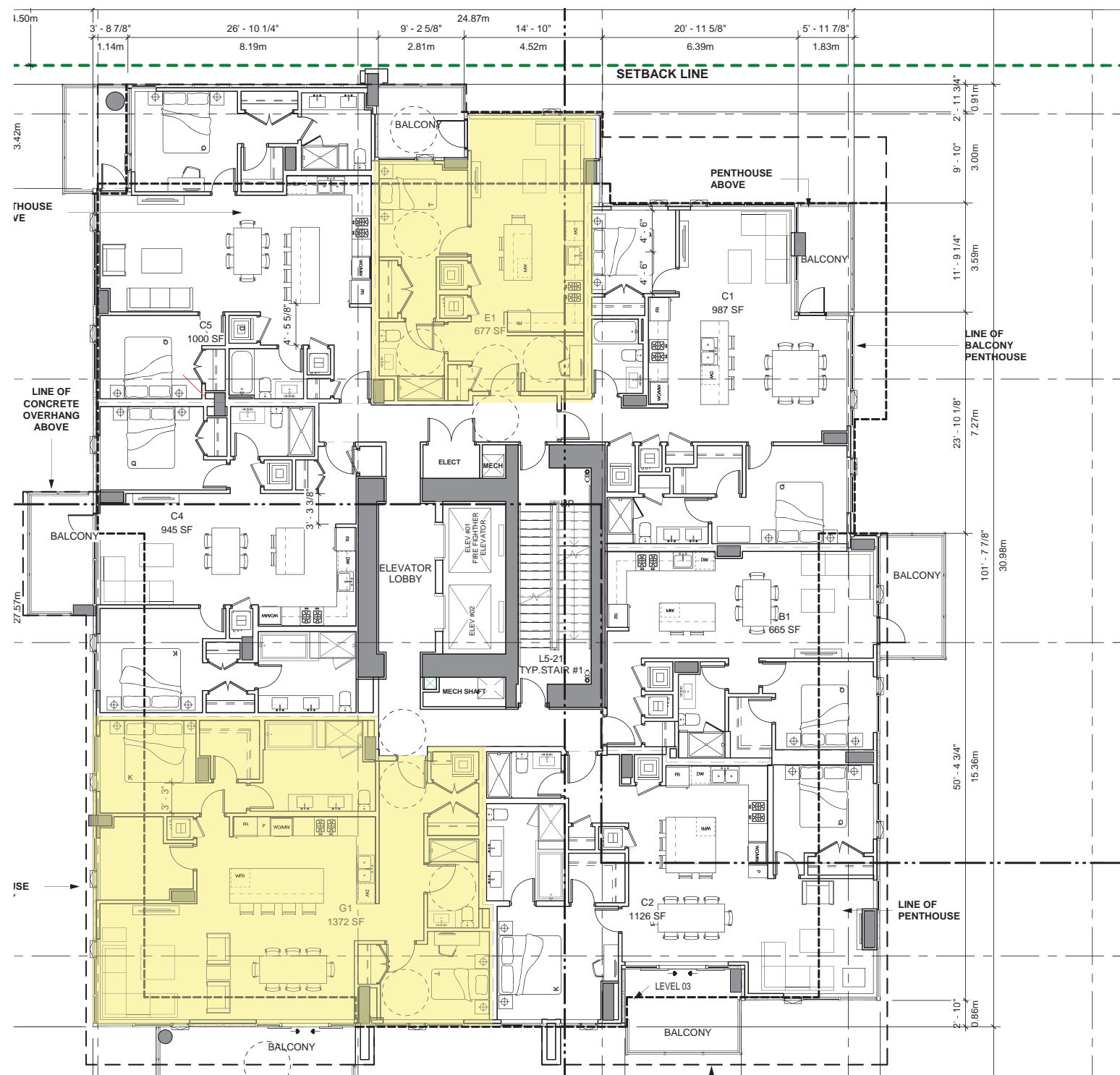
The Project complies with the City of North Vancouver's Adaptable Design Guidelines Level Two, which provides for a greater range of adaptability in addition to the Barrier-Free requirements of the current Building Code. The intention is to provide persons who require a mobility aid with the ability to move easily in and out of the building, common areas, and individual units.

Required = 34 Units (25%)

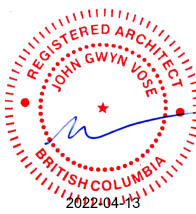
Provided = 38 Units (28%)

Type	Standard	Level 2 Adaptable	Total
<b>Mechanical</b>			
22	4	-	4
21	5	2	7
20	5	2	7
19	5	2	7
18	5	2	7
17	5	2	7
16	5	2	7
15	5	2	7
14	5	2	7
13	5	2	7
12	5	2	7
11	5	2	7
10	5	2	7
9	5	2	7
8	5	2	7
7	5	2	7
6	5	2	7
5	5	2	7
4	5	2	7
3	4	2	6
2	-	-	-
1	-	-	-
<b>Required</b>	/	34	/
<b>Provided</b>	98	38	136

\*25% units must be Level Two Adaptable Units



Typical Floor Plan



# Design Rationale - Sustainable Strategies

## STEP CODE LEVEL - STEP 3



203-33386 South Fraser Way, Abbotsford, BC, V2S 2B5

**Date:** February 19, 2021 Polygon Homes  
**Attention:** Lorne Wolinsky 900 – 1333 West Broadway  
Vancouver, BC V6H 4C2  
**Subject:** 15th & Lonsdale  
 Preliminary Energy Modelling Report

This report outlines the building parameters used in the latest iteration of the energy model for 15<sup>th</sup> & Lonsdale. Based on the simulation results, it is expected that if these parameters are incorporated in the building's design and construction, it would achieve the TEDI and TEUI requirements of the Energy Step Code, as required by the City of North Vancouver.

Table 1 - Energy Model Input Parameters

General													
Floor Area	Residential: 13,834 m <sup>2</sup> Office: 1,546 m <sup>2</sup> Retail: 714 m <sup>2</sup> <b>Total Conditioned: 16,094 m<sup>2</sup></b> Parkade: 9,088 m <sup>2</sup>												
Location	North Vancouver, BC												
Climate Zone	Climate Zone 4 < 3000 HDD 18°C												
Energy Target	<table border="0"> <tr> <td><b>Residential Spaces: BCBC Step 3</b></td> <td><b>Retail Spaces: BCBC Step 2</b></td> </tr> <tr> <td>TEUI: 120 kWh/m<sup>2</sup>/yr</td> <td>TEUI: 170 kWh/m<sup>2</sup>/yr</td> </tr> <tr> <td>TEDI: 30 kWh/m<sup>2</sup>/yr</td> <td>TEDI: 30 kWh/m<sup>2</sup>/yr</td> </tr> <tr> <td><b>Office Spaces: BCBC Step 2</b></td> <td><b>Overall Building</b></td> </tr> <tr> <td>TEUI: 130 kWh/m<sup>2</sup>/yr</td> <td>TEUI: 123.2 kWh/m<sup>2</sup>/yr</td> </tr> <tr> <td>TEDI: 30 kWh/m<sup>2</sup>/yr</td> <td>TEDI: 30.0 kWh/m<sup>2</sup>/yr</td> </tr> </table>	<b>Residential Spaces: BCBC Step 3</b>	<b>Retail Spaces: BCBC Step 2</b>	TEUI: 120 kWh/m <sup>2</sup> /yr	TEUI: 170 kWh/m <sup>2</sup> /yr	TEDI: 30 kWh/m <sup>2</sup> /yr	TEDI: 30 kWh/m <sup>2</sup> /yr	<b>Office Spaces: BCBC Step 2</b>	<b>Overall Building</b>	TEUI: 130 kWh/m <sup>2</sup> /yr	TEUI: 123.2 kWh/m <sup>2</sup> /yr	TEDI: 30 kWh/m <sup>2</sup> /yr	TEDI: 30.0 kWh/m <sup>2</sup> /yr
<b>Residential Spaces: BCBC Step 3</b>	<b>Retail Spaces: BCBC Step 2</b>												
TEUI: 120 kWh/m <sup>2</sup> /yr	TEUI: 170 kWh/m <sup>2</sup> /yr												
TEDI: 30 kWh/m <sup>2</sup> /yr	TEDI: 30 kWh/m <sup>2</sup> /yr												
<b>Office Spaces: BCBC Step 2</b>	<b>Overall Building</b>												
TEUI: 130 kWh/m <sup>2</sup> /yr	TEUI: 123.2 kWh/m <sup>2</sup> /yr												
TEDI: 30 kWh/m <sup>2</sup> /yr	TEDI: 30.0 kWh/m <sup>2</sup> /yr												
Envelope													
Window Performance	Double-glazed window-wall system with low-e coating, argon-fill, and warm-edge spacers Effective U <sub>SI</sub> -1.87 SHGC-0.30												
Spandrel Performance	Window wall spandrel panel or metal panel with 3" integral mineral wool insulation Effective U <sub>SI</sub> -0.68												
Slab Bypass Performance	Bypass spandrel panel with 2" mineral wool insulation Effective U <sub>SI</sub> -1.36												
Exterior Wall Performance	Concrete walls with 3.5" sprayed polyurethane foam insulation in steel stud space Clear Wall Effective U <sub>SI</sub> -0.71												



20073

15th & Lonsdale  
20073  
2021-02-19

Window-to-Wall Ratio	50%
Roof Performance	R-30 rigid insulation above concrete roof deck Effective U <sub>SI</sub> -0.19
Suspended Floor Performance	R-18 spray insulation below structural concrete slab Effective U <sub>SI</sub> -0.32
Linear & Point Thermal Bridging Performance	Details to be determined as the envelope design progresses Current model assumes Opaque Clear Wall performance will be de-rated to 50%
Infiltration Rate	1.5 L/s/m <sup>2</sup> @ 75 Pa
Internal Loads	
Lighting Power Density	Residential Suites: 5.0 W/m <sup>2</sup> (1) Retail & Offices: Minimal for shell space (2) Circulation & Parkade: As per ASHRAE 90.1-2016
Lighting Controls	Occupancy sensors in all common spaces
Receptacle Loads	Residential Suites: 5.0 W/m <sup>2</sup> (1) Other areas: As per NECB 2011 (1)
Mechanical Systems	
Heating & Cooling System	In-suite hybrid heat pumps Heat exchanger connected to LEC Closed-circuit fluid cooler
Zone Ventilation	Individual HRVs
Heat Recovery Efficiency	70% SRE
Domestic Water System	Heat exchanger connected to LEC Central DHW storage tanks

(1) Fixed value as required by modelling guidelines. May not reflect building design.

(2) Shell spaces are modelled as fitted-out and occupied as per modelling guidelines.

The current energy model is based on preliminary information provided by the design team and will be subject to design and construction revisions as the project progresses.

We trust this information meets the needs of the design team. Please advise us if any of these parameters are incorrect or unachievable and we will revise the energy model accordingly.

Sincerely,

**John Buxton, P.Eng., CPHD, LEED® AP**  
 Principal

**Straiton Engineering Ltd.**  
 203 – 33386 South Fraser Way  
 Abbotsford, BC | V2S 2B5  
 D: 778-752-5836 | M: 604-308-8055

### POLICY

#### A. Applicability 75% NATIVE, ADAPTIVE, OR EDIBLE SPECIES LANDSCAPING

This policy applies to residential buildings or portions of buildings constructed under Part 3 of the British Columbia Building Code, specifically conforming to sentences 10.2.3.1 (1) (a) (i) (ii) or (iii) of the BC Building Code. These buildings are by definition four storeys and above and greater than 600 square metres (approximately 6,500 square feet) in building area. This policy will also apply to Part 3 commercial buildings and Part 3 mixed-use residential commercial buildings.

#### B. Energy Performance Requirement

Energy performance requirements are outlined below for Part 3 buildings.

Building	Building Code Reference	Step Code Level Required under Rezoning Policy
Part 3 Residential	Conforming with sentence 10.2.3.1 (1) (a) (i) of the Building Code	Step 3*
Part 3 Commercial	Conforming with sentence 10.2.3.1 (1) (a) (ii) or (iii) of the Building Code	Step 2*

\* = as defined by Sentence 10.2.3.3. (1) of the Building Code

Source: City of North Vancouver, Council Policy, Step Code Rezoning Policy for Part 3 Buildings

Table 10.2.3.3-H  
 Energy Performance Requirements for Other Residential Occupancies  
 Forming part of Sentences 10.2.3.3.(1) and (2)

Degree-Days Below 18°C	Step	Equipment and Systems - Maximum Total Energy Use Intensity kWh/(m <sup>2</sup> -year)	Building Envelope - Maximum Thermal Energy Demand Intensity kWh/(m <sup>2</sup> -year)
Less than 3000	1	Conform to Part 8 of the NECB	45
	2	130	30
	3	120	20
	4	100	15

Source: BC Building Code



# Design Rationale - Sustainable Strategies

VIEW FROM NORTHEAST

VIEW FROM SOUTHEAST

**NATURAL SYSTEMS**

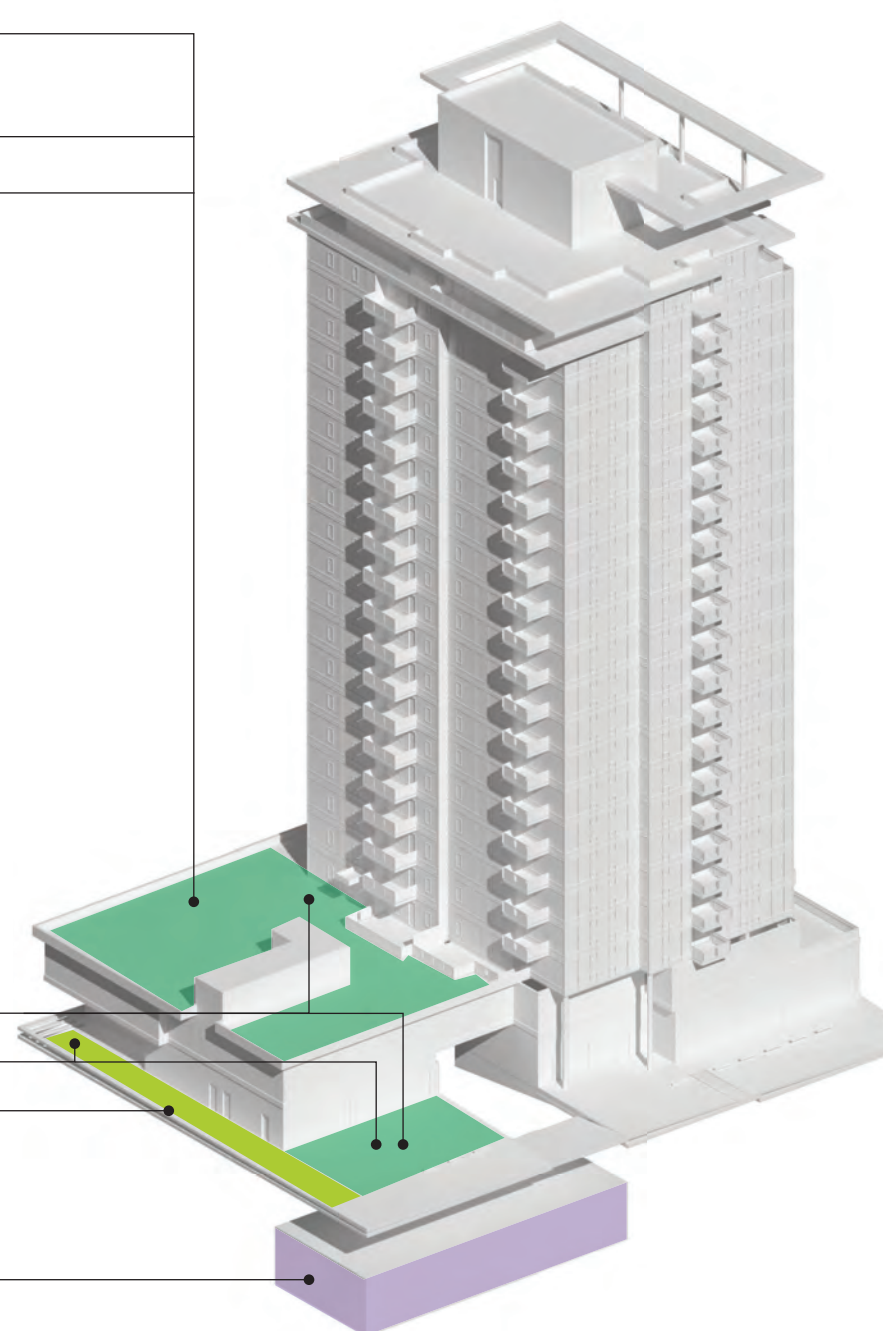
- 75% NATIVE, ADAPTIVE, OR EDIBLE SPECIES LANDSCAPING
- WATER EFFICIENT IRRIGATION SYSTEM
- PERMEABLE PAVERS ON ROOF LEVELS

**PHYSICAL STRUCTURES/INFRASTRUCTURE**

- ENERGY EFFICIENT BUILDING
- LED LIGHTING (WHOLE BUILDING)
- WATER EFFICIENT FIXTURES (WHOLE BUILDING)
- ELECTRIC VEHICLE SUPPLY COVER 25%
- LEC MINI-PLANT PROVIDED

**CULTURAL DIVERSITY**

- FORMAL AND INFORMAL GATHERING SPACES
- PUBLIC ARTS PROVIDED
- STREETScape IMPROVEMENTS (BENCHES, PLANTERS, LIGHTING)
- LEC MINI-PLANT



**HUMAN POTENTIAL**

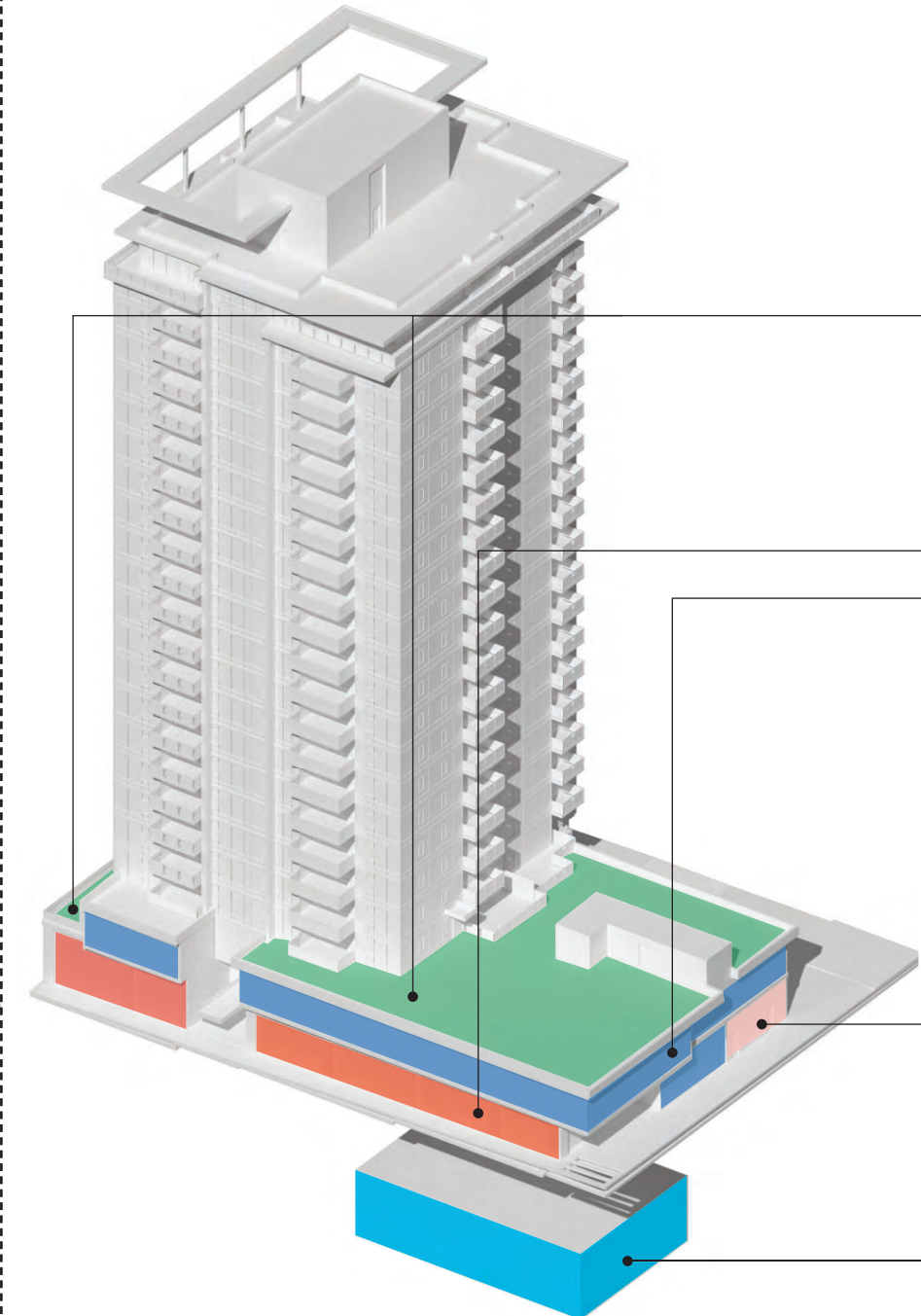
- PROVIDE UNITS MOUNTAIN & WATER VIEWS
- CLOSE TO TRANSIT, SHOPPING AND OTHER AMENITIES
- OUTDOOR CIRCULATION ON LEVEL 2 AND 3

**LOCAL ECONOMY**

- 7,000+ SF OF RETAIL SPACE
- 15,000+ SF OF OFFICE SPACE

**SOCIAL CONNECTIONS**

- INDOOR AMENITY
- OUTDOOR RECREATION
- CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN
- END OF TRIP FACILITY



- STORMWATER DETENTION TANK



## Design Rationale - Sustainable Strategies

the Stormwater Management Plan for more information.

The development mix, location, and density all contribute to the City of North Vancouver's vision to create a great city of communities that cares about its people, its environment, and which promotes opportunities to live, work, and prosper. The proposed combination of residential and office/retail will help to contribute to the overall Lonsdale Avenue urban design objective of mixed development and community connectivity. This development is part of the overall solution to reduce the City's carbon footprint by having housing diversity within walking distance of shops and services, and accessible to many transit options via the various bus routes along Lonsdale Avenue and West 15th Street.

To promote car-free transportation, ample secured bicycle storage is considered. Short-term bike parking and end-of-trip bicycle infrastructure will be provided to the residents and occupants of the office/retail space. In addition, 25% of all residential parking spaces will include an electrical outlet, which exceeds the city's suggested percentage of 20%. The remaining 75% of residential parking spaces will receive future provision for electric vehicle charging.

### 3. LOCAL ECONOMY

The Project will provide approx. 7,000+ SF of retail space and approx. 15,000+ SF of office space to the Central Lonsdale area in close proximity to Lions Gate Hospital and the North Vancouver City Library, which will generate new job opportunities and provide convenience to the neighborhood. The Developer's vision is to have the office space mainly used for medical/ dental clinics and has a strong incentive to bring back the existing Persian grocery store.

### 4. HUMAN POTENTIAL

The Project is situated in the Central Lonsdale area and provides proximity to transit, shopping, medical services, and library for the residents. The location and the views from the units will promote health and wellness to the residents, with the mountain view towards the north, water view towards the south, landscaped podium view towards the east and the west.

There is a broad range of unit sizes across all levels, providing a good selection for the nester/downsizers, the restart/move-up, and various other future residents. Among the 136 units, there are about 28% one-bedroom units that are designed to be at an affordable size. On the typical Levels 3-21, there are one-bedroom, two-





## Design Rationale - Sustainable Strategies

bedroom, and three-bedroom units provided. There are 2 two-bedroom and 2 three-bedroom penthouse units on the top level. Adaptable units (Level Two) are available on Levels 3-21, with the selection of one-bedroom unit facing the stunning north mountain view, and the three-bedroom unit facing the well-lit south side. Ample storage lockers are provided in the underground parking levels for the residents' convenience.

### 5. SOCIAL CONNECTIONS

The Project follows the City of North Vancouver's Adaptable Design Guidelines Level Two, which provides for a greater range of adaptability in addition to the Barrier-Free requirements of the current Building Code. The intention is to provide persons who require a mobility aid with the ability to move easily in and out of the building, common areas, and individual units.

The residential levels are delivered with indoor amenity space and an outdoor recreation podium on Level 3. The potential programs include fitness and lounge for the indoor amenity, and lounge seating, fire pit, and yoga area for the outdoor recreation podium. The office space on Level 2 is also provided with private patios with landscape facing the west.

Crime Prevention Through Environmental Design is planned by applying natural access control, natural surveillance, territoriality (defense space), and maintenance. Residential and non-residential circulation is suggested by landscape barriers. The two entry plazas on the south and east side of the site are carefully designed without view obstruction so that natural surveillance could be applied.

### 6. CULTURE DIVERSITY

The Project provides various formal and informal gathering spaces - streetscape improvement with benches and landscape on the ground level, private office deck on Level 2, and residential podium space and indoor amenity on Level 3. Public art will be proposed to celebrate the local culture and reflect the community rationale.

The Developer and project team are experienced in building projects of this scale and complexity in the City of North Vancouver. The Project is moving forward following an integrated design process to optimize opportunities for overall building performance and efficiency. It will contribute to the City of North Vancouver's goal to become a vibrant, diverse, and highly livable community that is resilient to climate changes, and sustainable in its ability to prosper without sacrifice to future generations in 2031.





## Precedent Images - Tower Design



### Tower Shape

To emphasize the slender profile of the tower, the volume is broken down into smaller volumes that follow the shape of the unit layouts.

This move accentuates the verticality of the tower.

The balconies are elements integrated in the architecture of the building to minimize the thermal bridge and maximize comfort





# Precedent Images - Retail Design

## Retail Experience

The retail units on the ground are meant to activate the street and provide seating areas with patios.

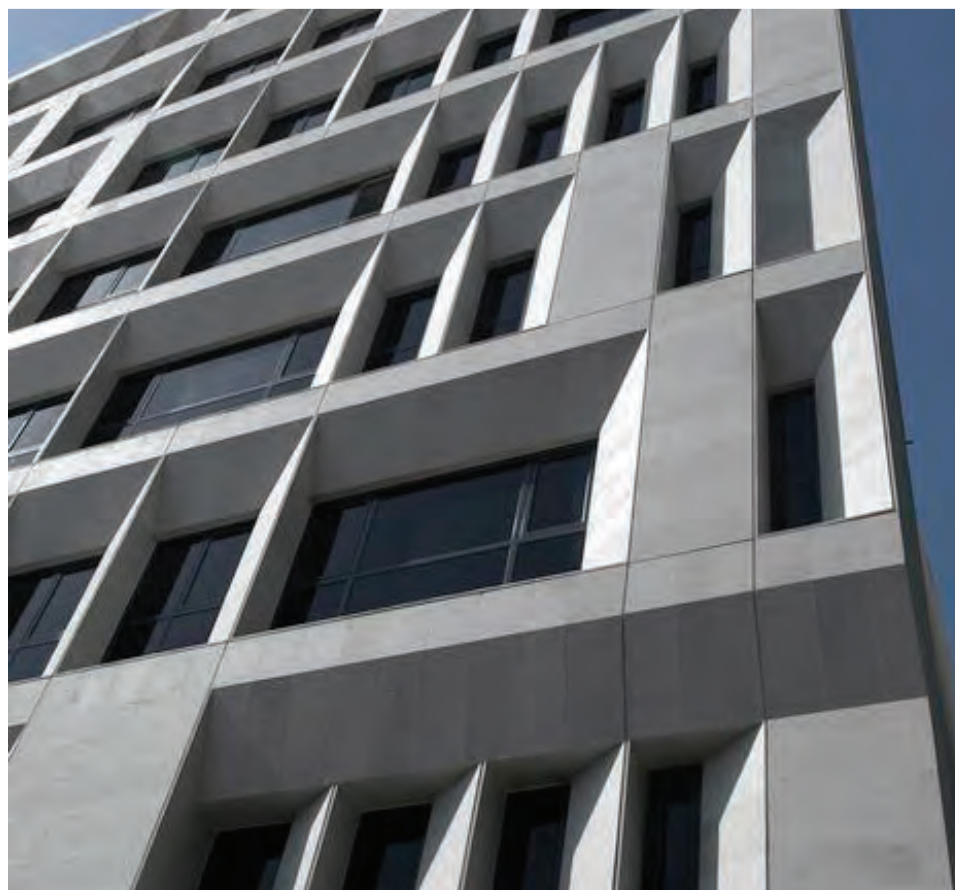
The focus for the retail is to provide a solution that allows for flexibility.

At the same time, it has to provide opportunities to each tenant to express their brand while not disrupting the overall architecture of the building





# Precedent Images - Office Podium Design



## Office Floor

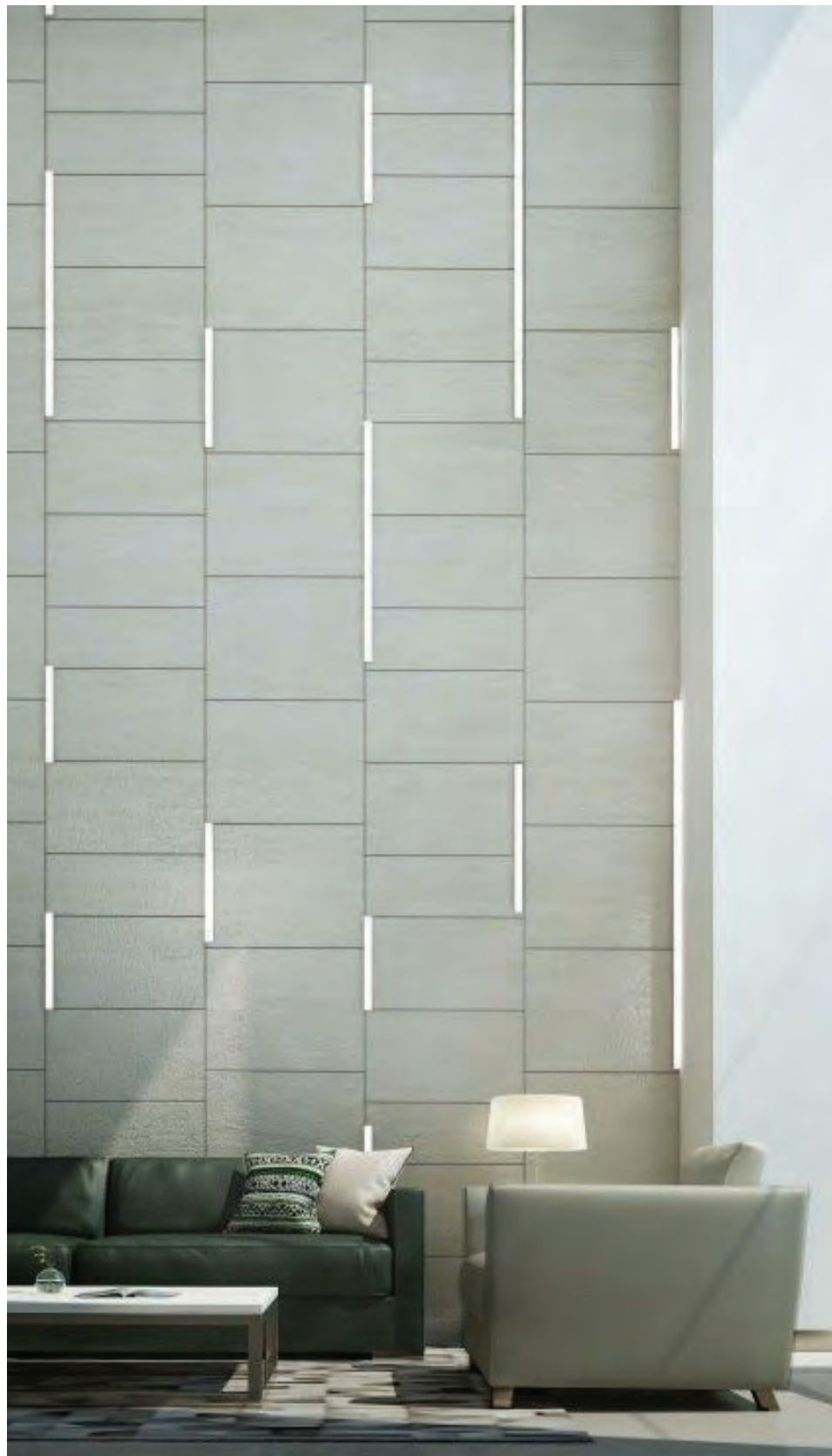
The development has one floor of office which risks to feel meaningless compared to the presence of the retail in the ground and the residential towers above.

Exploring solutions were the office reads as a single volume, by offsetting it and providing a textured skin to it, will create opportunities for planted edges and terraces with a unique shape and experience



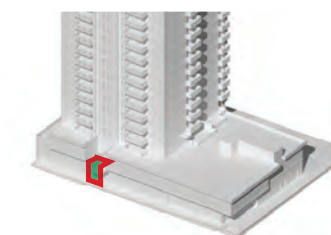


## Precedent Images - Lobby Experience



### Retail Experience

The lobby is the entrance to the building and will define the experience of the residents and visitors upon arrival. The proposed lobby builds upon the concepts of elegance and simplicity playing. The light coming from the exterior will play a big part on how the lobby is perceived. Elements like feature walls and seating elements along the path will activate the lobby and allow residents to enjoy the experience.

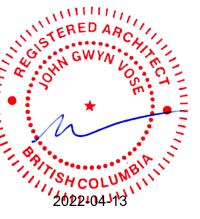




# Precedent Images - Lobby Experience







# PERSPECTIVE DRAWINGS

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## Aerial View of Project Site





# Overall View from West (15th Street)





## Overall View from East (15th Street)





# Public Realm - View from 15th Street

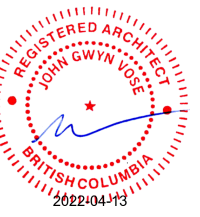




# Public Realm - View from Southeast



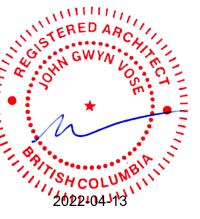




# ARCHITECTURAL DRAWINGS

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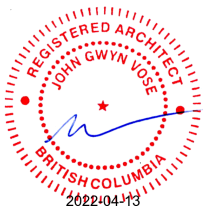


# PLANS

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# FLOOR PLAN LOWER P4



PARKING SCHEDULE		
DESCRIPTION	COMMENT	COUNT

LEVEL 01		
HC	COMMERCIAL - HC	1
REG	COMMERCIAL - REGULAR STALL	4
		5

LEVEL P1		
REG	COMMERCIAL - REGULAR STALL	3
REG	OFFICE - REGULAR STALL	4
SML	OFFICE - SMALL STALL	5
		12

LEVEL P2		
HC	OFFICE - HANDICAP STALL	1
REG	OFFICE - REGULAR STALL	9
SML	OFFICE - SMALL STALL	3
SML	RESIDENTIAL - SMALL STALL	4
HC	RESIDENTIAL - HC	1
REG	RESIDENTIAL - REGULAR STALL	25
REG	VISITOR - REGULAR	4
SML	VISITOR - SMALL	6
		53

LEVEL P3		
SML	RESIDENTIAL - SMALL STALL	12
HC	RESIDENTIAL - HC	3
REG	RESIDENTIAL - REGULAR STALL	42
		57

UPPER LEVEL P4		
SML	RESIDENTIAL - SMALL STALL	14
HC	RESIDENTIAL - HC	2
REG	RESIDENTIAL - REGULAR STALL	43
		59

LEVEL LOWER P4		
SML	RESIDENTIAL - SMALL STALL	3
REG	RESIDENTIAL - REGULAR STALL	9
		12
		198

PARKING SCHEDULE - TYPE		
DESCRIPTION	COMMENT	COUNT

VISITOR - SMALL		
SML	VISITOR - SMALL	6
		6

VISITOR - REGULAR		
REG	VISITOR - REGULAR	4
		4

RESIDENTIAL - REGULAR STALL		
REG	RESIDENTIAL - REGULAR STALL	119
		119

RESIDENTIAL - HC		
HC	RESIDENTIAL - HC	6
		6

RESIDENTIAL - SMALL STALL		
SML	RESIDENTIAL - SMALL STALL	33
		33

OFFICE - SMALL STALL		
SML	OFFICE - SMALL STALL	8
		8

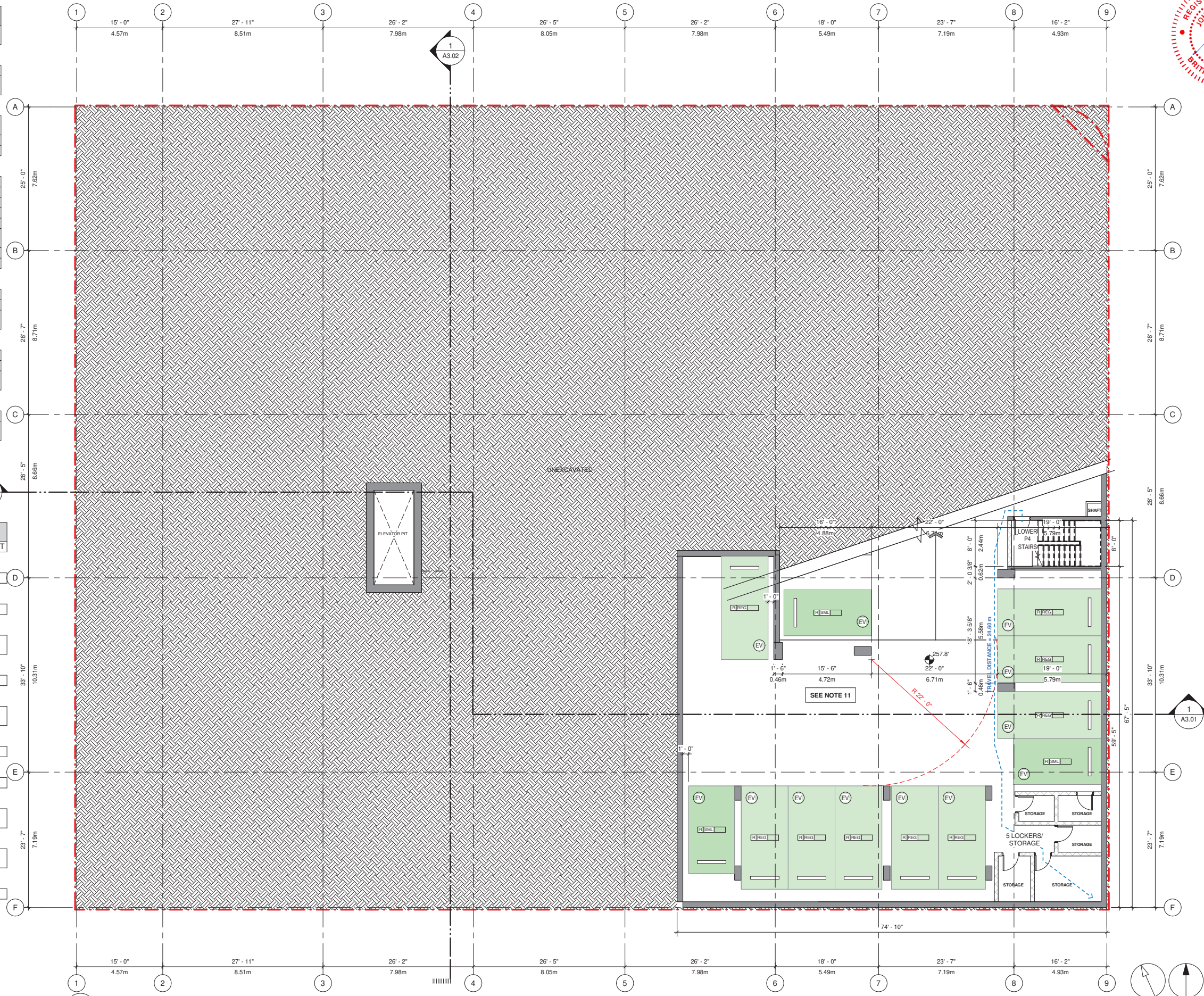
OFFICE - REGULAR STALL		
REG	OFFICE - REGULAR STALL	13
		13

OFFICE - HANDICAP STALL		
HC	OFFICE - HANDICAP STALL	1
		1

COMMERCIAL - REGULAR STALL		
REG	COMMERCIAL - REGULAR STALL	7
		7

COMMERCIAL - HC		
HC	COMMERCIAL - HC	1
		1

COMMERCIAL - HC		
HC	COMMERCIAL - HC	1
		1





# FLOOR PLAN UPPER P4

PARKING SCHEDULE		
DESCRIPTION	COMMENT	COUNT

EVEL 01		
HC	COMMERCIAL - HC	1
REG	COMMERCIAL - REGULAR STALL	4
5		

EVEL P1		
REG	COMMERCIAL - REGULAR STALL	3
REG	OFFICE - REGULAR STALL	4
SML	OFFICE - SMALL STALL	5
12		

EVEL P2		
HC	OFFICE - HANDICAP STALL	1
REG	OFFICE - REGULAR STALL	9
SML	OFFICE - SMALL STALL	3
SML	RESIDENTIAL - SMALL STALL	4
HC	RESIDENTIAL - HC	1
REG	RESIDENTIAL - REGULAR STALL	25
REG	VISITOR - REGULAR	4
SML	VISITOR - SMALL	6
53		

EVEL P3		
SML	RESIDENTIAL - SMALL STALL	12
HC	RESIDENTIAL - HC	3
REG	RESIDENTIAL - REGULAR STALL	42
57		

UPPER LEVEL P4		
SML	RESIDENTIAL - SMALL STALL	14
HC	RESIDENTIAL - HC	2
REG	RESIDENTIAL - REGULAR STALL	43
59		

EVEL LOWER P4		
SML	RESIDENTIAL - SMALL STALL	3
REG	RESIDENTIAL - REGULAR STALL	9
12		
198		

**LEGEND:**  
CITY PARKING - NORTH VANCOUVER, BC, CANADA

**PARKING TAG**

- Occupancy
- Stall Type
- Stall Number

**PARKING COLOR CODE LEGEND**

- Small Stall
- Regular Stall
- Handicap Stall

**OCCUPANCY LEGEND:**

- C COMMERCIAL/RETAIL
- O OFFICE
- R RESIDENTIAL
- V VISITOR

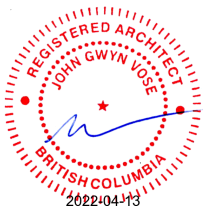
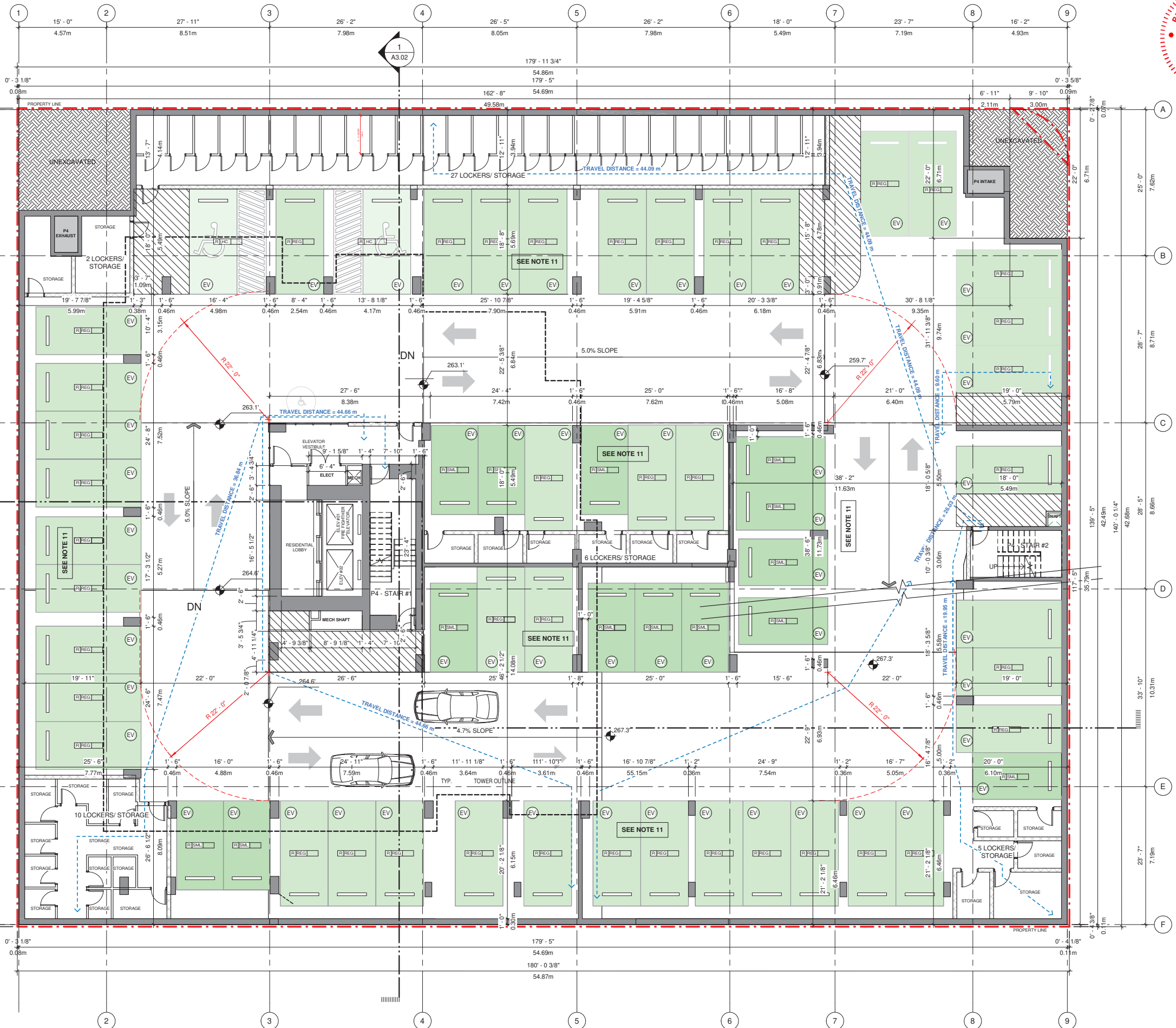
**STYLE TYPE:**

- STC STANDARD
- SML SMALL
- HC HANDICAP

**SMALL STALL** (7'-6" x 12'-0")

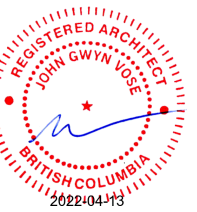
**REGULAR STALL** (8'-2" x 12'-0")

**HANDICAP STALL** (8'-2" x 13'-0")





# FLOOR PLAN LEVEL P3



PARKING SCHEDULE P3		
DESCRIPTION	COMMENT	COUNT
<b>LEVEL P3</b>		
SML	RESIDENTIAL - SMALL STALL	12
HC	RESIDENTIAL - HC	3
REG	RESIDENTIAL - REGULAR STALL	42

**PARKING LEGEND:**  
CITY PARKING - NORTH VANCOUVER, BC, CANADA

**PARKING TAG**

	OCCUPANCY
	STALL TYPE
	STALL NUMBER

**OCCUPANCY LEGEND:**

C	COMMERCIAL/ RETAIL
O	OFFICE
R	RESIDENTIAL
V	VISITOR

**STYLE TYPE:**

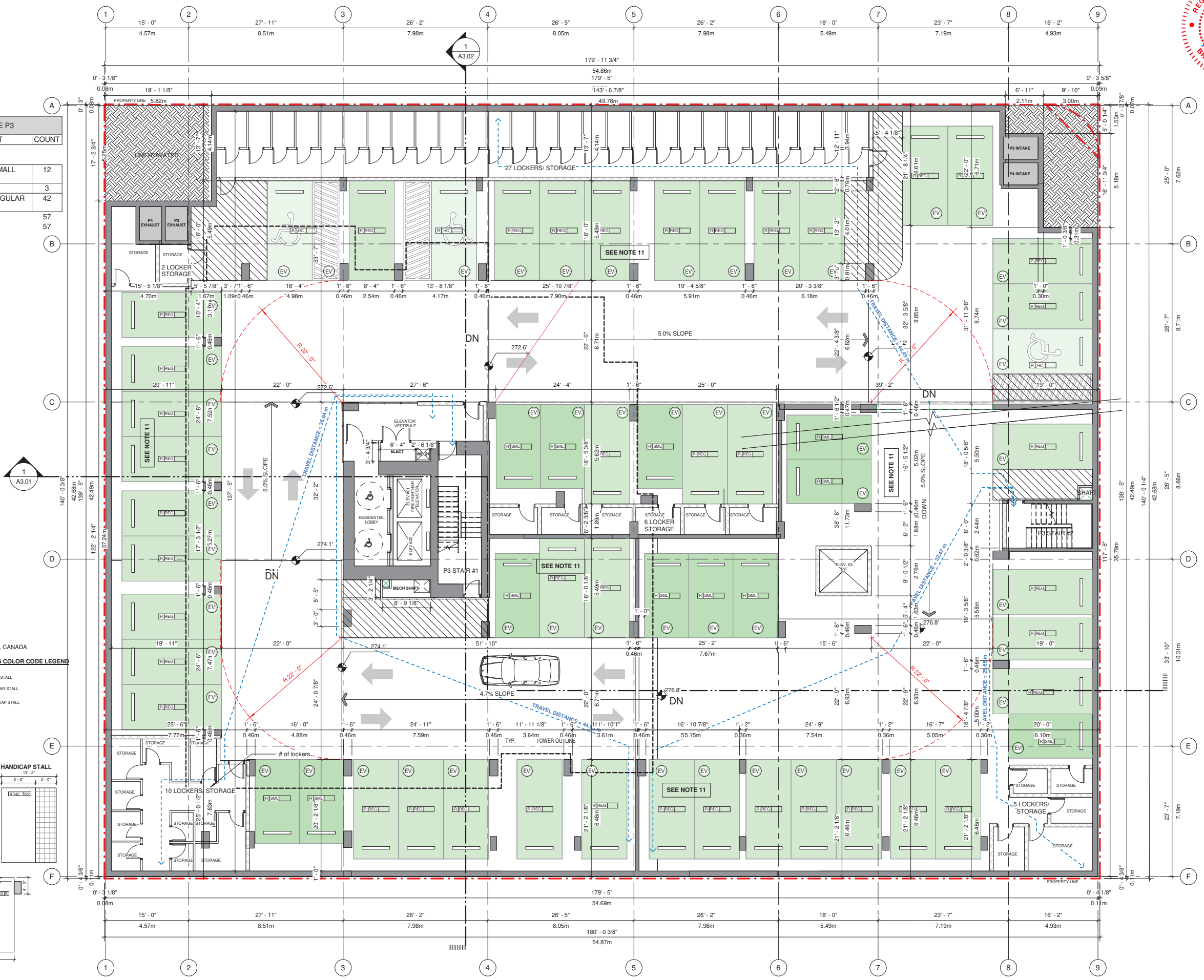
STC	STANDARD
SML	SMALL
HC	HANDICAP

**PARKING COLOR CODE LEGEND**

	SMALL STALL
	REGULAR STALL
	HANDICAP STALL

**SMALL STALL** 8'-6" x 5'-6"  
**REGULAR STALL** 9'-2" x 5'-2"  
**HANDICAP STALL** 13'-2" x 9'-9"

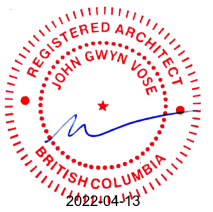
ADDITIONAL WIDTH NEEDED TO WALL OR COLUMN





# FLOOR PLAN LEVEL P2

PARKING SCHEDULE P2		
DESCRIPTION	COMMENT	COUNT
<b>LEVEL P2</b>		
HC	OFFICE - HANDICAP STALL	1
REG	OFFICE - REGULAR STALL	9
SML	OFFICE - SMALL STALL	3
SML	RESIDENTIAL - SMALL STALL	4
HC	RESIDENTIAL - HC	1
REG	RESIDENTIAL - REGULAR STALL	25
REG	VISITOR - REGULAR	4
SML	VISITOR - SMALL	6
		53
		53



**LEGEND:**  
1: NORTH VANCOUVER, BC, CANADA

**AG** OCCUPANCY STALL TYPE  
 C COMMERCIAL/ RETAIL  
 O OFFICE  
 R RESIDENTIAL  
 V VISITOR

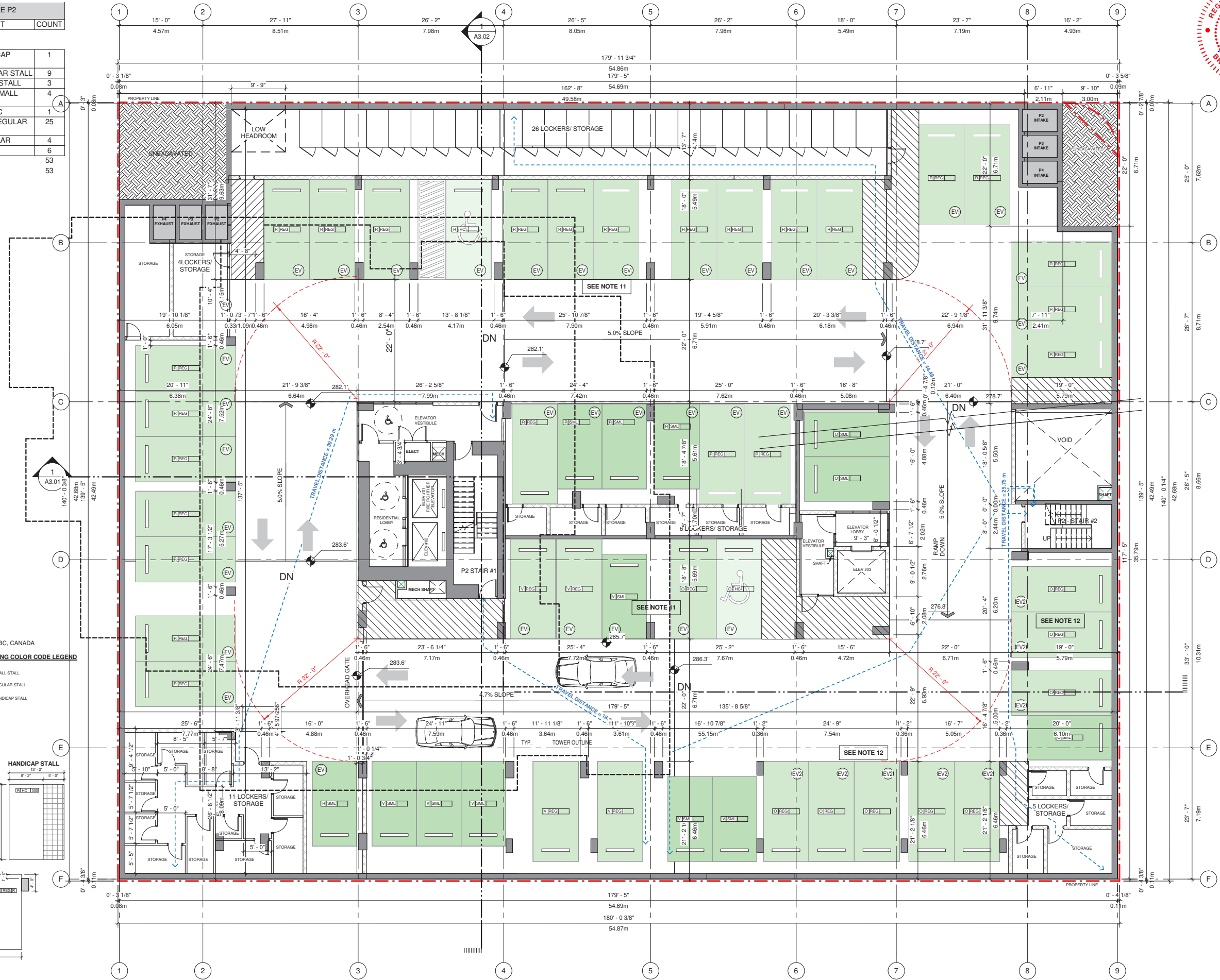
**STYLE TYPE:**  
 STC STANDARD  
 SML SMALL  
 HC HANDICAP

**PARKING COLOR CODE LEGEND**

**SMALL STALL**  
 7'-6" x 12'-0" (STANDARD)  
 7'-6" x 12'-0" (SMALL)  
 7'-6" x 12'-0" (HANDICAP)

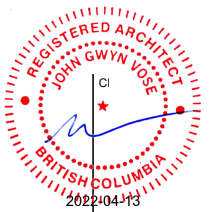
**REGULAR STALL**  
 9'-0" x 18'-0" (STANDARD)  
 9'-0" x 18'-0" (SMALL)  
 9'-0" x 18'-0" (HANDICAP)

**HANDICAP STALL**  
 13'-2" x 20'-0" (STANDARD)  
 13'-2" x 20'-0" (SMALL)  
 13'-2" x 20'-0" (HANDICAP)





# FLOOR PLAN LEVEL P1



PARKING SCHEDULE P1		
DESCRIPTION	COMMENT	COUNT
REG	COMMERCIAL - REGULAR STALL	3
REG	OFFICE - REGULAR STALL	4
SML	OFFICE - SMALL STALL	5
		12
		12

- NOTES:**
1. BYCICLE PARKING: POWER OUTLET PER 4 STALLS TO BE PROVIDED
  2. 5-TURNING RADIUS OUTSIDE THE FRONT ENTRANCE OF G1 ADAPTABLE UNIT - LEVEL 03
  3. COMMERCIAL HANDICAPPED PARKING PROVIDED. POTENTIAL CAR SHARE PARKING IN THE FUTURE
  4. AREA ALLOCATED TO PLAZA LANDSCAPING
  5. 15 SHORT-TERM RESIDENTIAL BICYCLE PARKING SPACES MOVED FROM EAST TO WEST SIDE OF RESIDENTIAL ENTRY TO CLEAR THE PEDESTRIAN ENTRY
  6. 11 OVERSIZED BIKE STORAGE
  7. KITCHEN EXHAUST FOR RESTAURANT CRU AND MAKE-UP AIR
  8. BICYCLE PARKING ROOM HAS A MINIMUM CLEARANCE OF 2.5M (8.20ft)
  9. CROSS-HATCHED AREA: POTENTIAL AREA FOR PUBLIC ART PIECE INCORPORATED IN SEATING ELEMENT. PLAN TO BE SUBMITTED TO THE CITY PUBLIC ART COORDINATOR.
  11. (EV) = PROVIDE 1 EV OUTLET, LEVEL 2 CHARGING.
  12. EV2 = PROVIDE 1 ENERGIZED OUTLET CAPABLE OF SUPPORTING OPPORTUNITY CHARGING
- EV-ELECTRIC VEHICLE

**PARKING LEGEND:**  
PARKING: NORTH VANCOUVER, BC, CANADA

**PARKING TAG**

OCUPANCY	STALL TYPE	PARKING COLOR CODE LEGEND
1	SMALL STALL	REGULAR STALL
2	REGULAR STALL	HANDICAP STALL
3	HANDICAP STALL	

**OCUPANCY LEGEND:**

- 1 COMMERCIAL/RETAIL
- 2 OFFICE
- 3 RESIDENTIAL
- 4 VISITOR

**STYLE TYPE:**

- 1TC STANDARD
- 2C SMALL
- 3C HANDICAP

**MALL STALL**

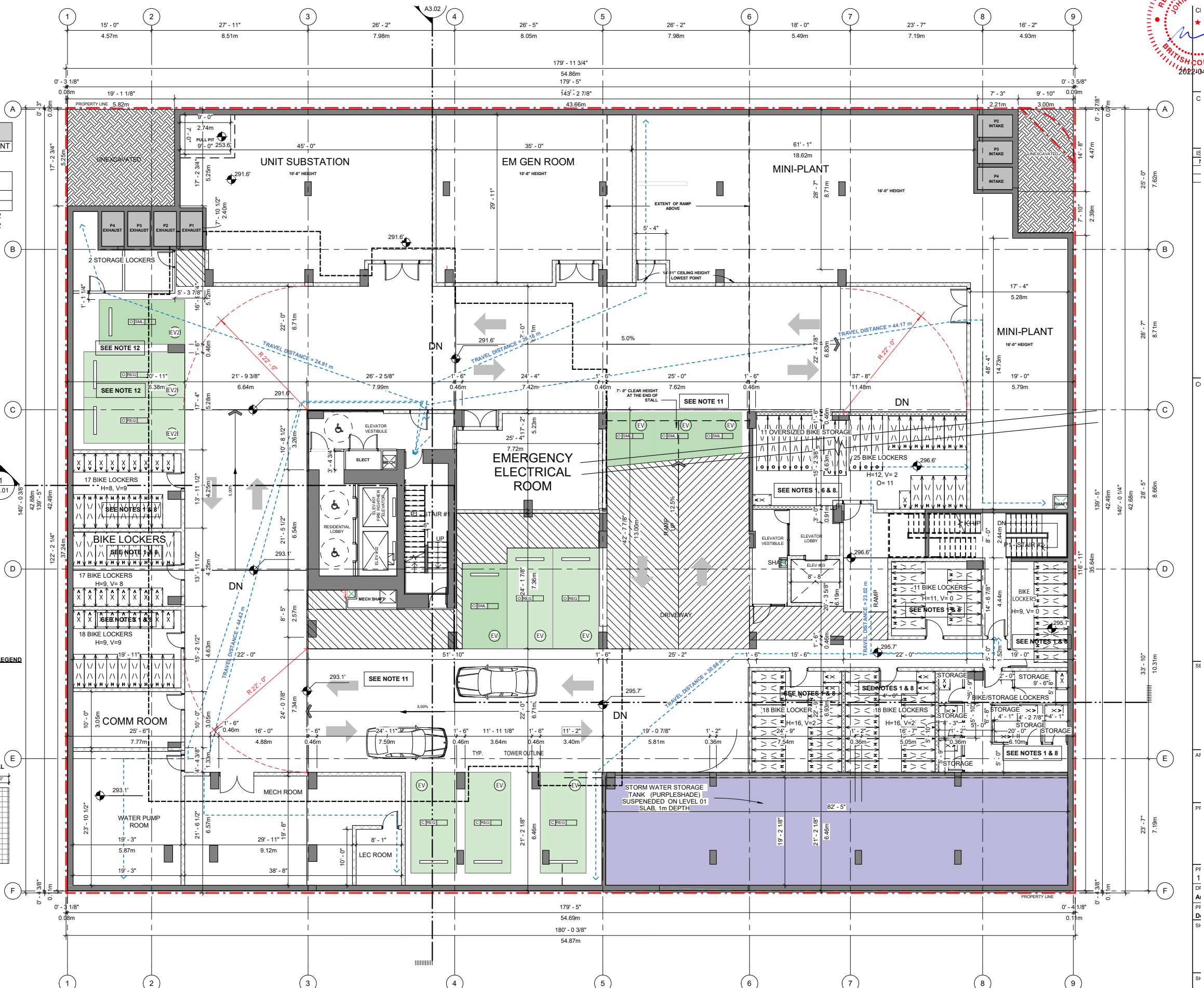
STANDARD	REGULAR	HANDICAP
8'-0" x 12'-0"	8'-0" x 12'-0"	8'-0" x 12'-0"

**REGULAR STALL**

STANDARD	REGULAR	HANDICAP
8'-0" x 12'-0"	8'-0" x 12'-0"	8'-0" x 12'-0"

**HANDICAP STALL**

STANDARD	REGULAR	HANDICAP
8'-0" x 12'-0"	8'-0" x 12'-0"	8'-0" x 12'-0"

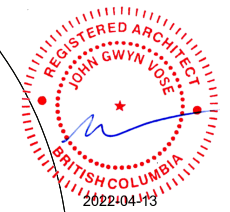




# FLOOR PLAN LEVEL 01

PARKING SCHEDULE L1		
DESCRIPTION	COMMENT	COUNT
LEVEL 01		
HC	COMMERCIAL - HC	1
REG	COMMERCIAL - REGULAR STALL	4

- NOTES:**
1. BICYCLE PARKING: POWER OUTLET PER 4 STALLS TO BE PROVIDED
  2. 5-TURNING RADIUS OUTSIDE THE FRONT ENTRANCE OF G1 ADAPTABLE UNIT - LEVEL 03
  3. COMMERCIAL HANDICAPPED PARKING PROVIDED. POTENTIAL CAR SHARE PARKING IN THE FUTURE
  4. AREA ALLOCATED TO PLAZA LANDSCAPING
  5. 15 SHORT-TERM RESIDENTIAL BICYCLE PARKING SPACES MOVED FROM EAST TO WEST SIDE OF RESIDENTIAL ENTRY TO CLEAR THE ENTRY WAY FOR RESIDENTIAL PEDESTRIAN ENTRY
  6. 11 OVERSIZED BIKE STORAGE
  7. KITCHEN EXHAUST FOR RESTAURANT CRU AND MAKE-UP AIR
  8. BICYCLE PARKING ROOM HAS A MINIMUM CLEARANCE OF 2.5M (8.20ft)
  9. CROSS-HATCHED AREA: POTENTIAL AREA FOR PUBLIC ART PIECE INCORPORATED IN SEATING ELEMENT. PLAN TO BE SUBMITTED TO THE CITY PUBLIC ART COORDINATOR.
  11. (EV1) = PROVIDE 1 EV OUTLET, LEVEL 2 CHARGING.
  12. (EV2) = PROVIDE 1 ENERGIZED OUTLET CAPABLE OF SUPPORTING OPPORTUNITY CHARGING
- EV=ELECTRIC VEHICLE

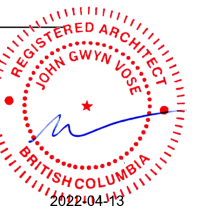




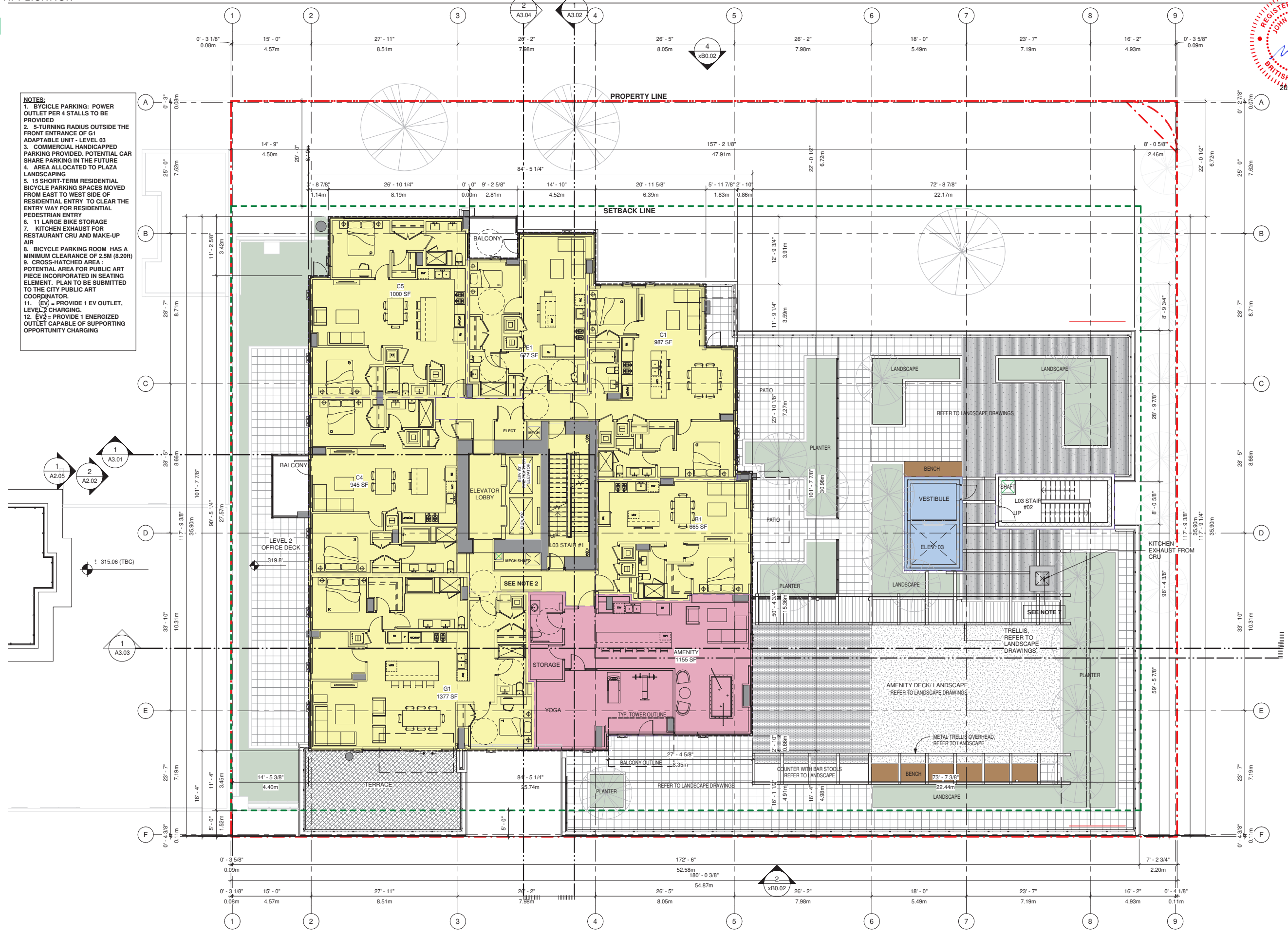




# FLOOR PLAN LEVEL 03

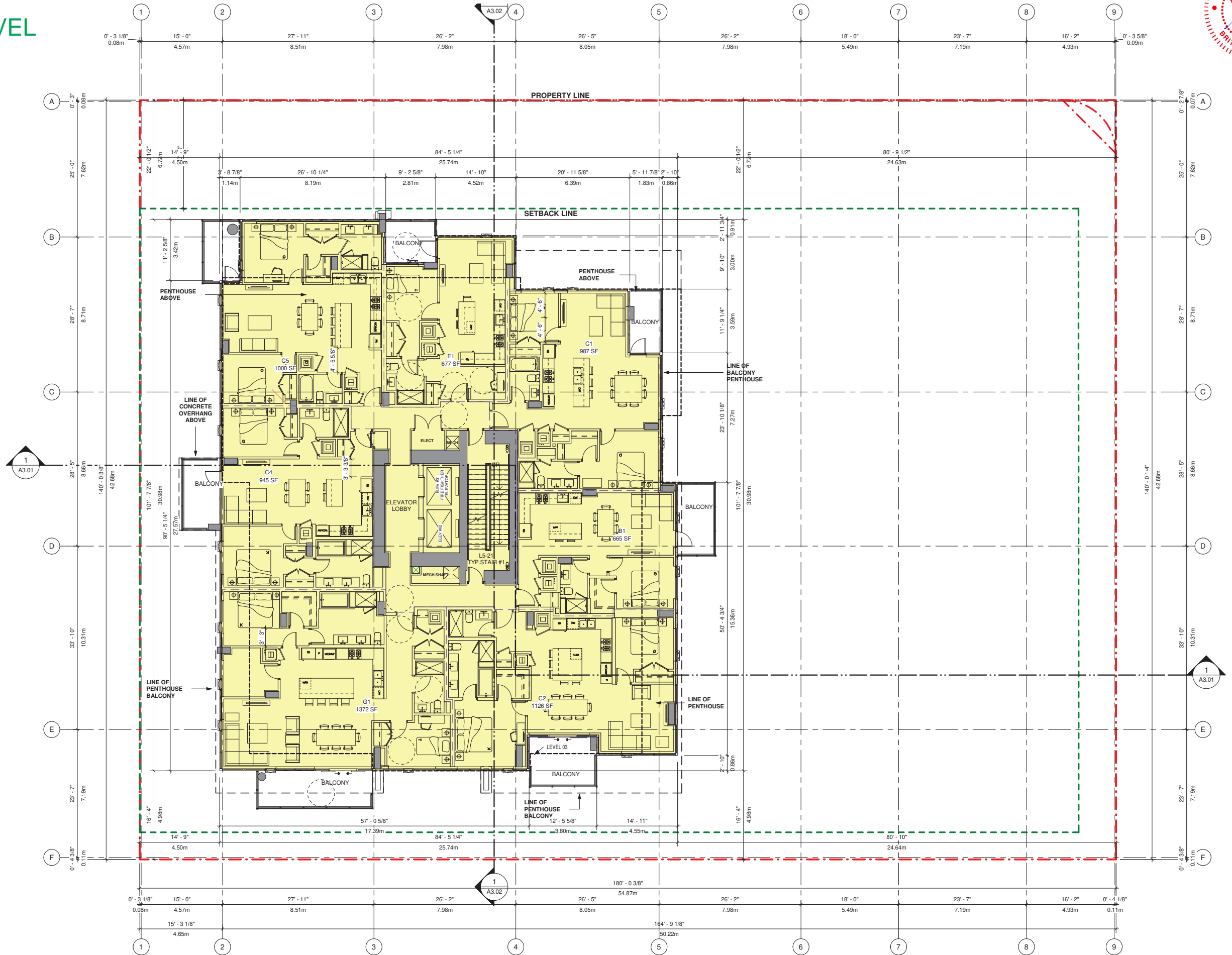
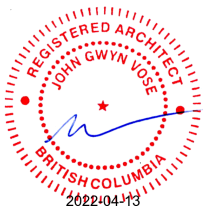


- NOTES:**
1. BICYCLE PARKING: POWER OUTLET PER 4 STALLS TO BE PROVIDED
  2. 5-TURNING RADIUS OUTSIDE THE FRONT ENTRANCE OF G1 ADAPTABLE UNIT - LEVEL 03
  3. COMMERCIAL HANDICAPPED PARKING PROVIDED, POTENTIAL CAR SHARE PARKING IN THE FUTURE
  4. AREA ALLOCATED TO PLAZA LANDSCAPING
  5. 15 SHORT-TERM RESIDENTIAL BICYCLE PARKING SPACES MOVED FROM EAST TO WEST SIDE OF RESIDENTIAL ENTRY TO CLEAR THE ENTRY WAY FOR RESIDENTIAL PEDESTRIAN ENTRY
  6. 11 LARGE BIKE STORAGE
  7. KITCHEN EXHAUST FOR RESTAURANT CRU AND MAKE-UP AIR
  8. BICYCLE PARKING ROOM HAS A MINIMUM CLEARANCE OF 2.5M (8.20ft)
  9. CROSS-HATCHED AREA: POTENTIAL AREA FOR PUBLIC ART PIECE INCORPORATED IN SEATING ELEMENT. PLAN TO BE SUBMITTED TO THE CITY PUBLIC ART COORDINATOR.
  11. (EV) = PROVIDE 1 EV OUTLET, LEVEL 2 CHARGING.
  12. (EV2) = PROVIDE 1 ENERGIZED OUTLET CAPABLE OF SUPPORTING OPPORTUNITY CHARGING



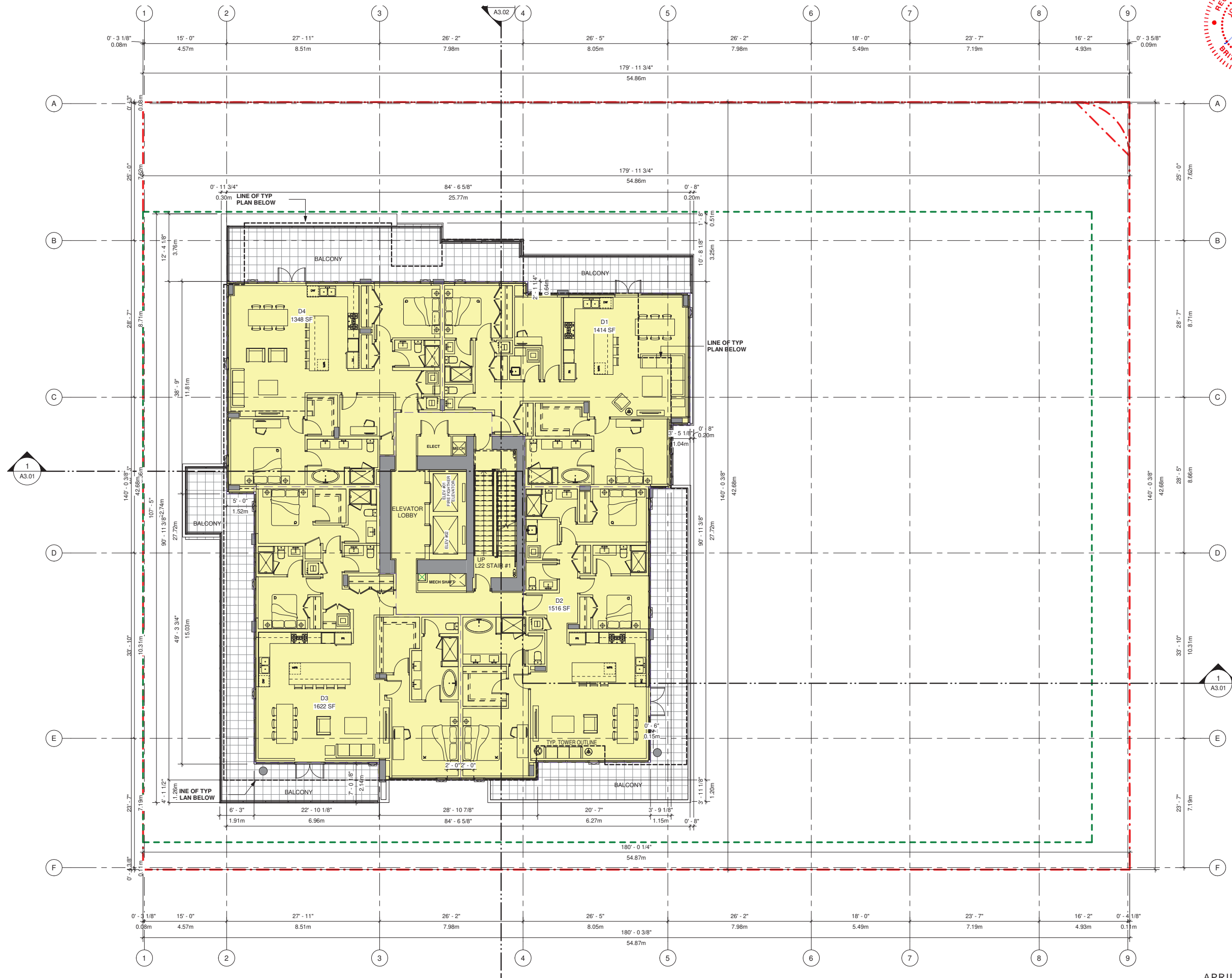
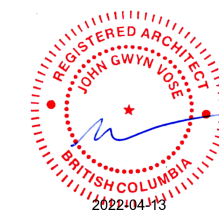


# FLOOR PLAN TYPICAL FLOOR LEVEL



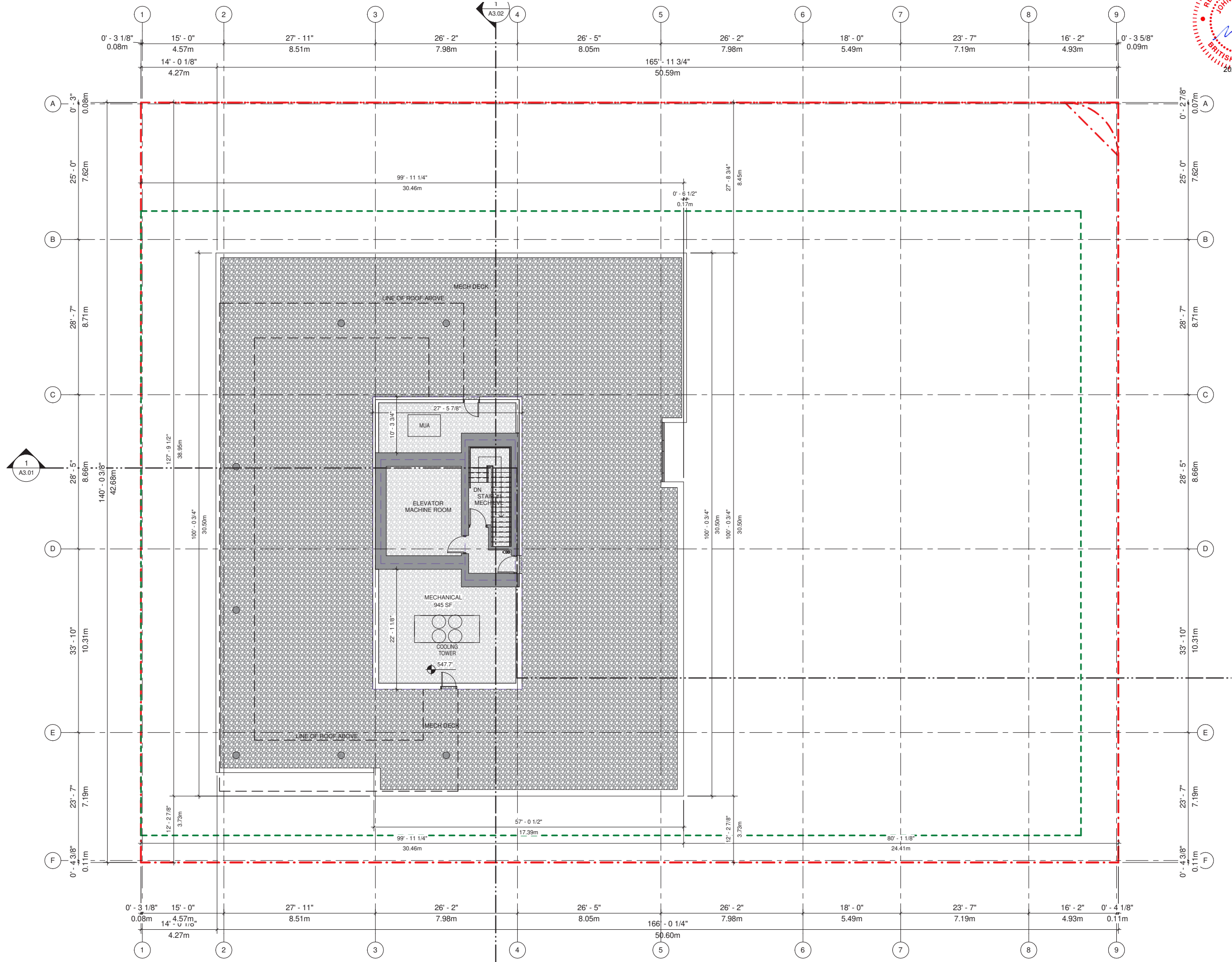
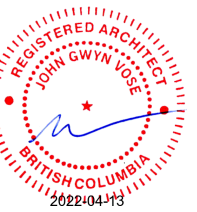


# FLOOR PLAN PENHOUSE LEVEL



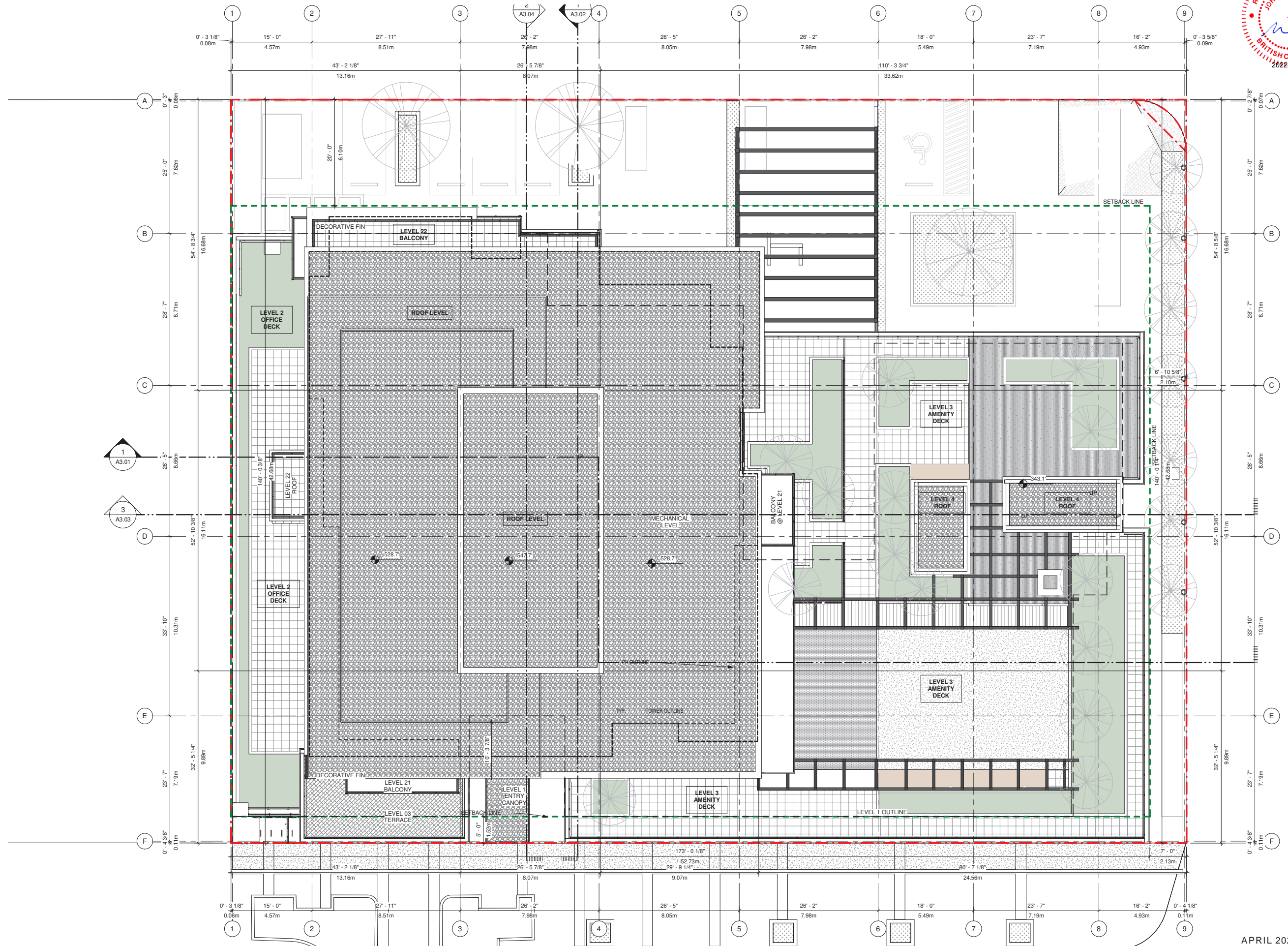
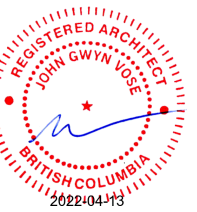


# FLOOR PLAN MECHANICAL LEVEL

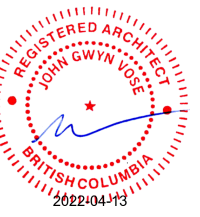




# FLOOR PLAN ROOF LEVEL





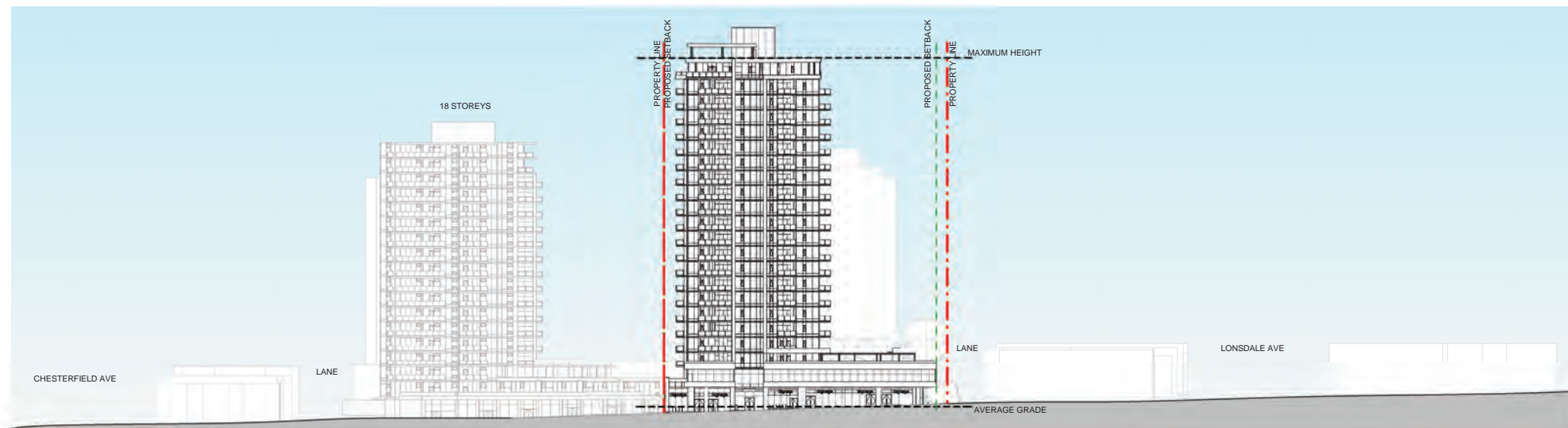
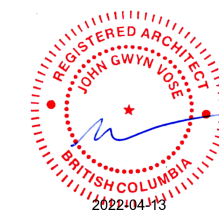


# ELEVATIONS AND SECTIONS

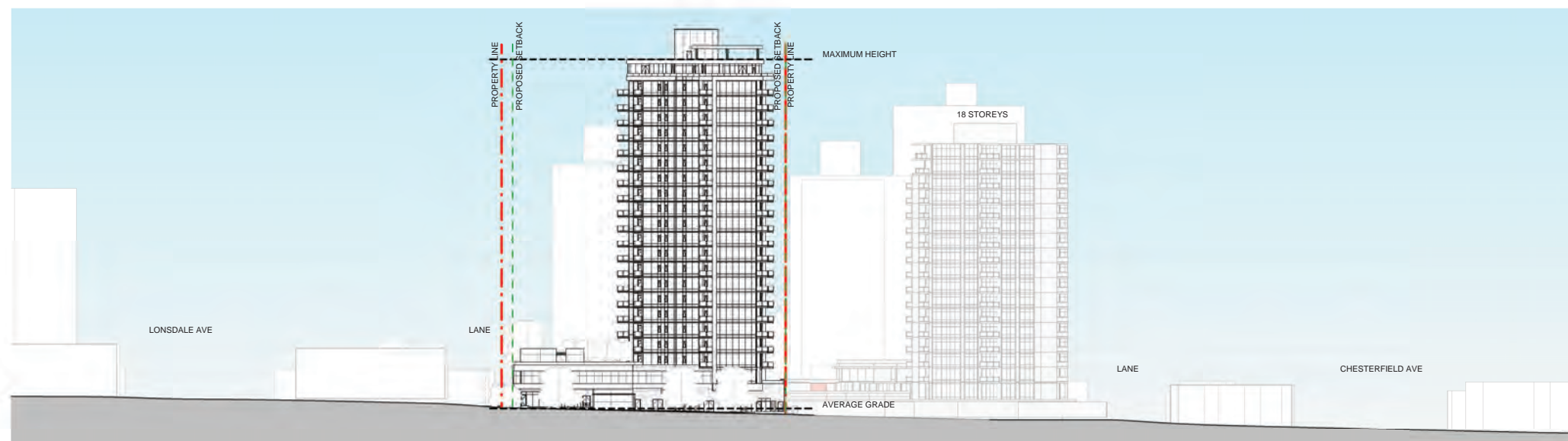
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# STREET ELEVATION SOUTH AND NORTH ELEVATION



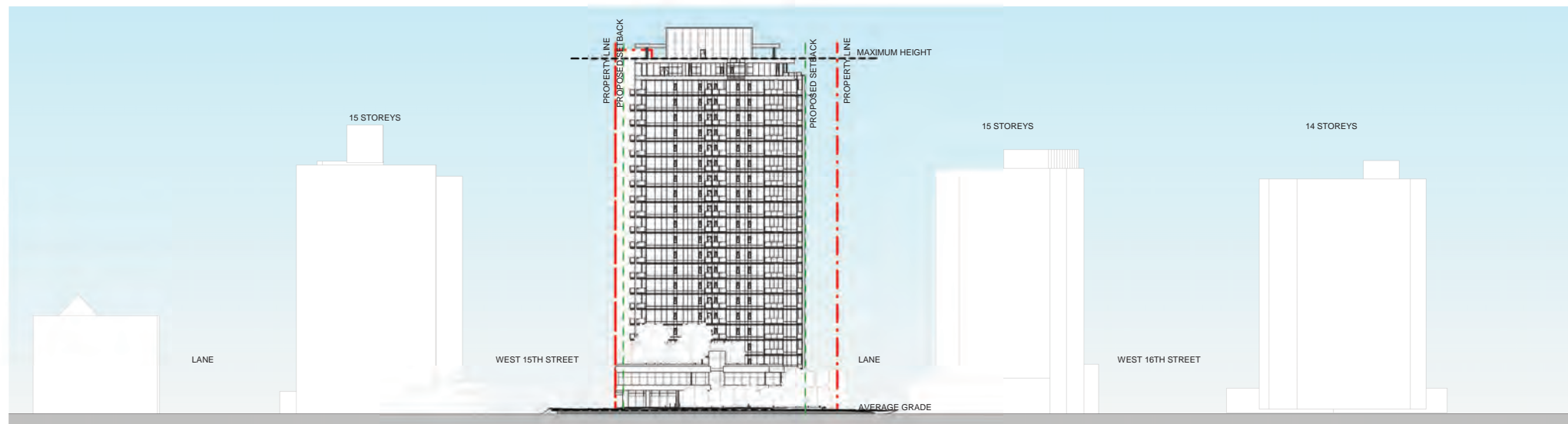
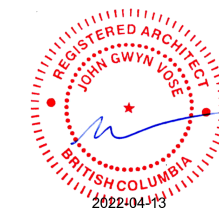
1 Street Elevation - South  
A2.01 Scale: 1" = 40'-0"



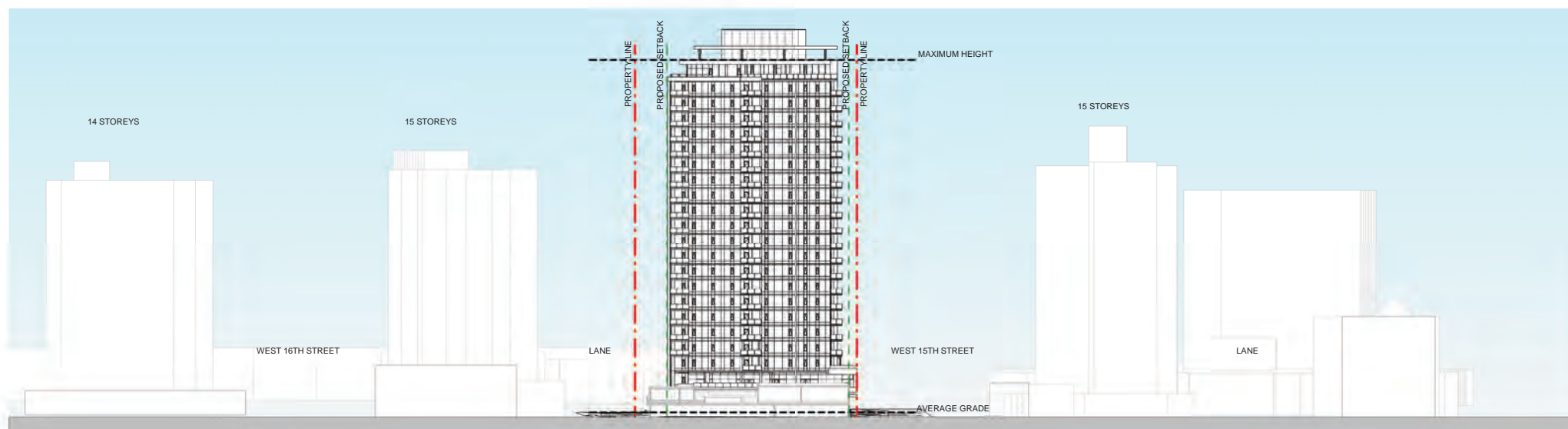
2 Street Elevation - North  
A2.01 Scale: 1" = 40'-0"



# STREET ELEVATION WEST AND EAST ELEVATION



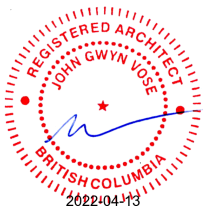
1 Street Elevation - East  
A2.02 Scale: 1" = 40'-0"



2 Street Elevation - West  
A2.02 Scale: 1" = 40'-0"



# BUILDING ELEVATION SOUTH ELEVATION



MATERIAL LEGEND	
NUMBER	MATERIAL
1	PAINTED CONCRETE - GREY
2	TYPICAL VISION GLASS
3	SPANDREL PANEL - GREY
4	SPANDREL PANEL - CHARCOAL GREY
6	METAL PANEL - COPPER
7	METAL PANEL - GREY
8	STONE - GREY
9	GLASS RAILING - CLEAR GLASS WITH SILVER RAILING
10	ARCHITECTURAL LOUVRE
11	CANOPY - METAL PANEL
12	SIGNAGE
13	TRELLIS - CHARCOAL GREY (REFER TO LANDSCAPE)



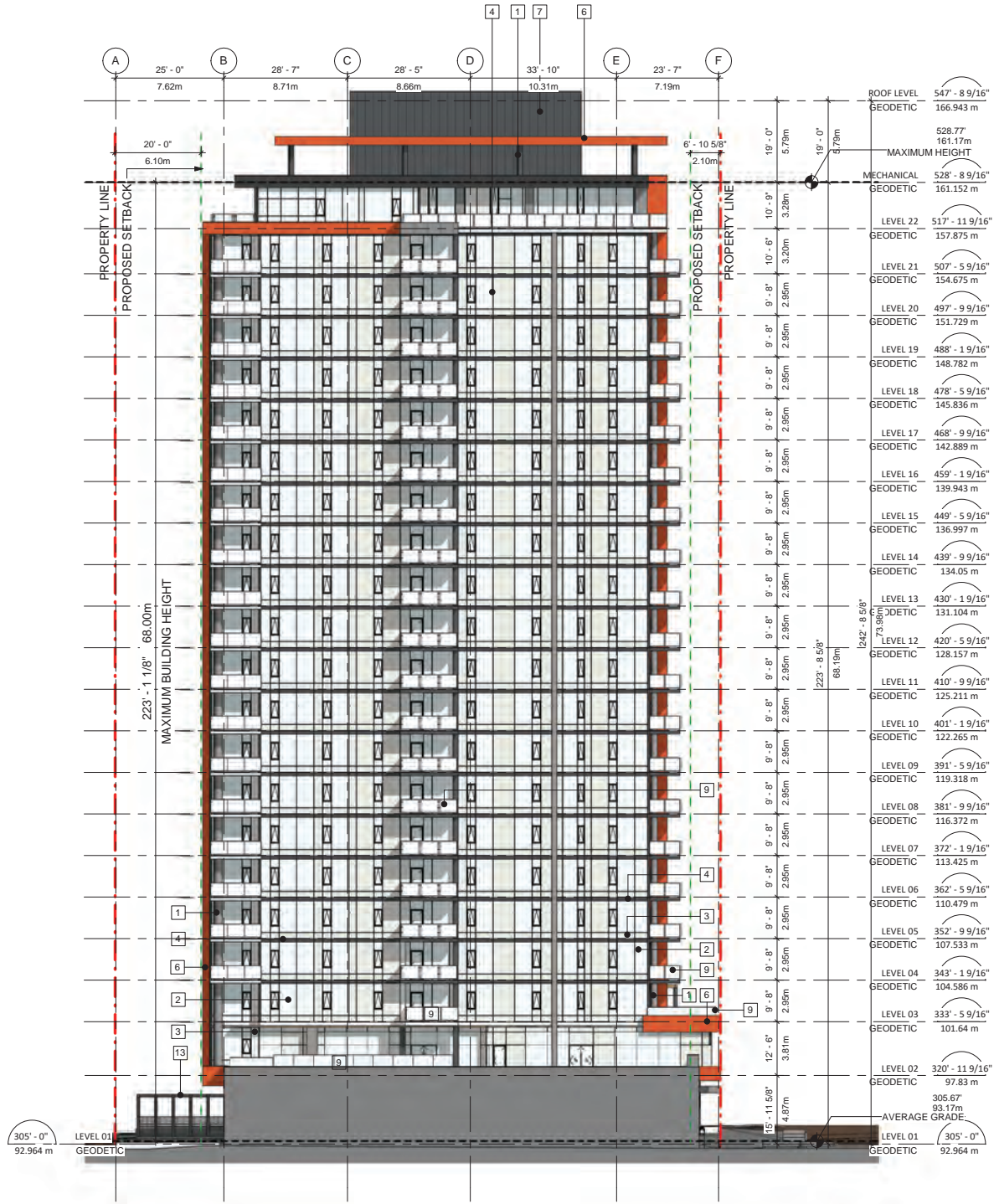
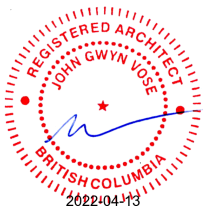
1 Building Elevation - South  
Scale: 1/16" = 1'-0"



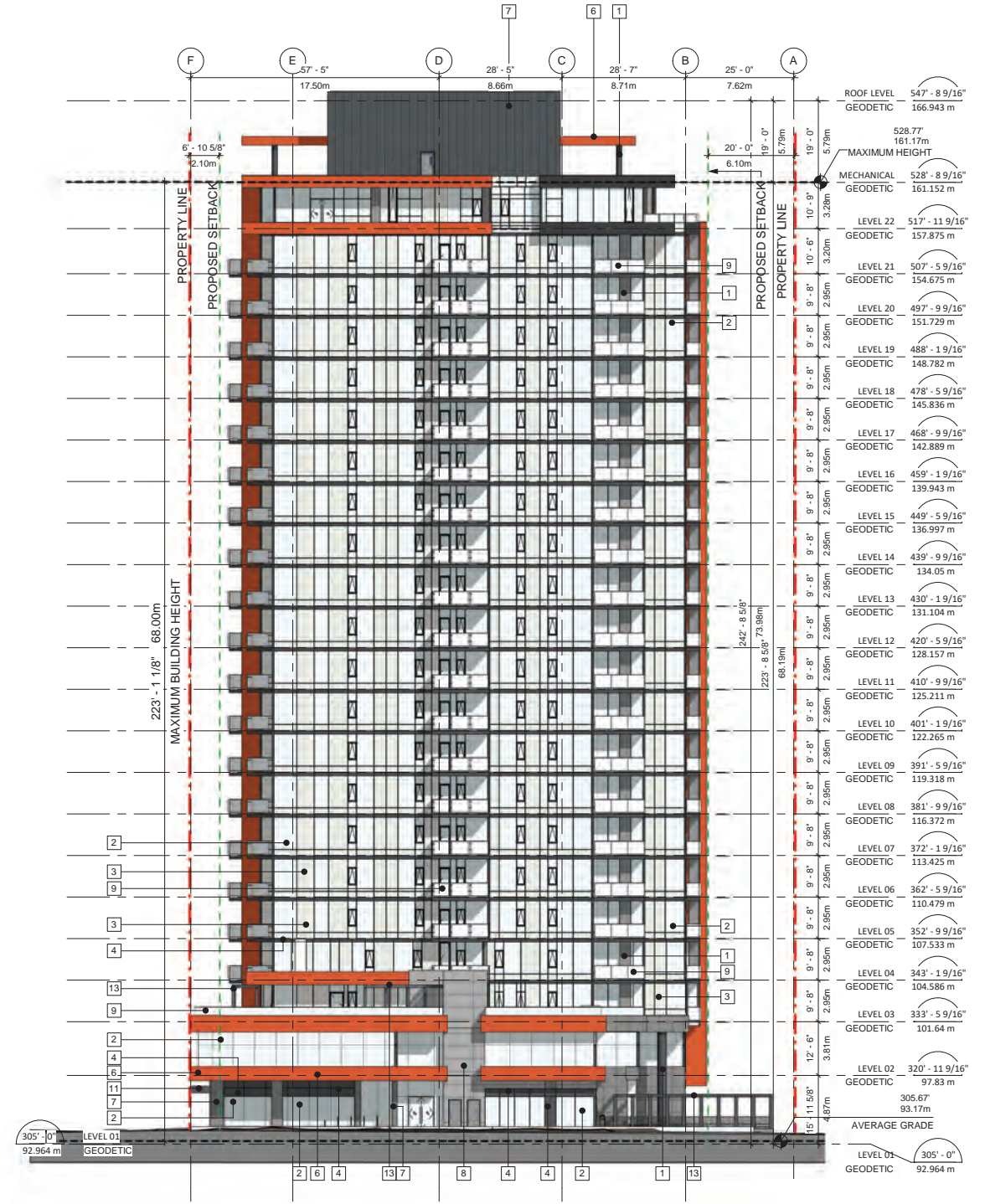




# BUILDING ELEVATION WEST AND EAST ELEVATION



1 Building Elevation - West  
Scale: 1/16" = 1'-0"

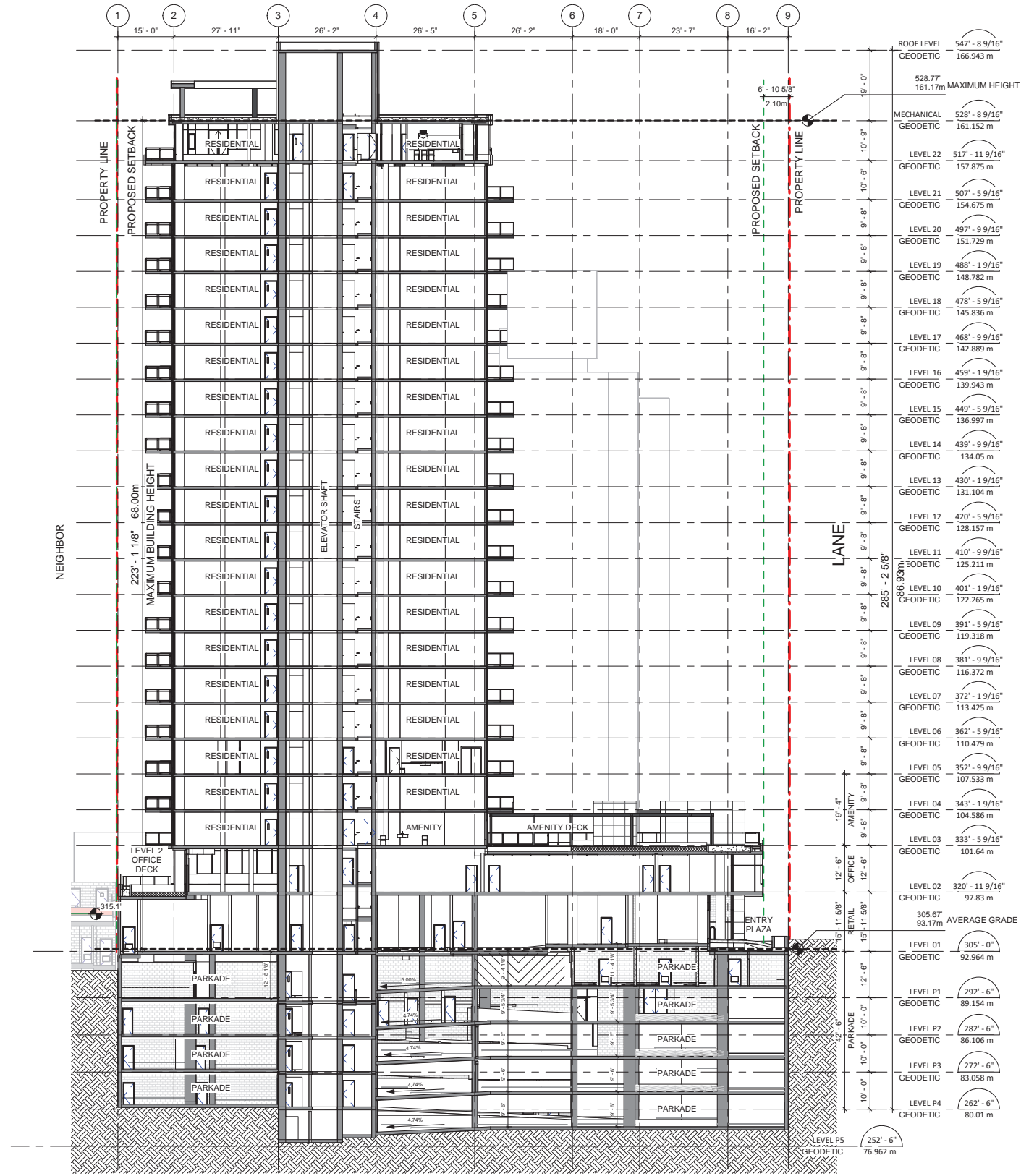


2 Building Elevation - East  
Scale: 1/16" = 1'-0"

MATERIAL LEGEND	
NUMBER	MATERIAL
1	PAINTED CONCRETE - GREY
2	TYPICAL VISION GLASS
3	SPANDREL PANEL - GREY
4	SPANDREL PANEL - CHARCOAL GREY
6	METAL PANEL - COPPER
7	METAL PANEL - GREY
8	STONE - GREY
9	GLASS RAILING - CLEAR GLASS WITH SILVER RAILING
10	ARCHITECTURAL LOUVRE
11	CANOPY - METAL PANEL
12	SIGNAGE
13	TRELLIS - CHARCOAL GREY (REFER TO LANDSCAPE)



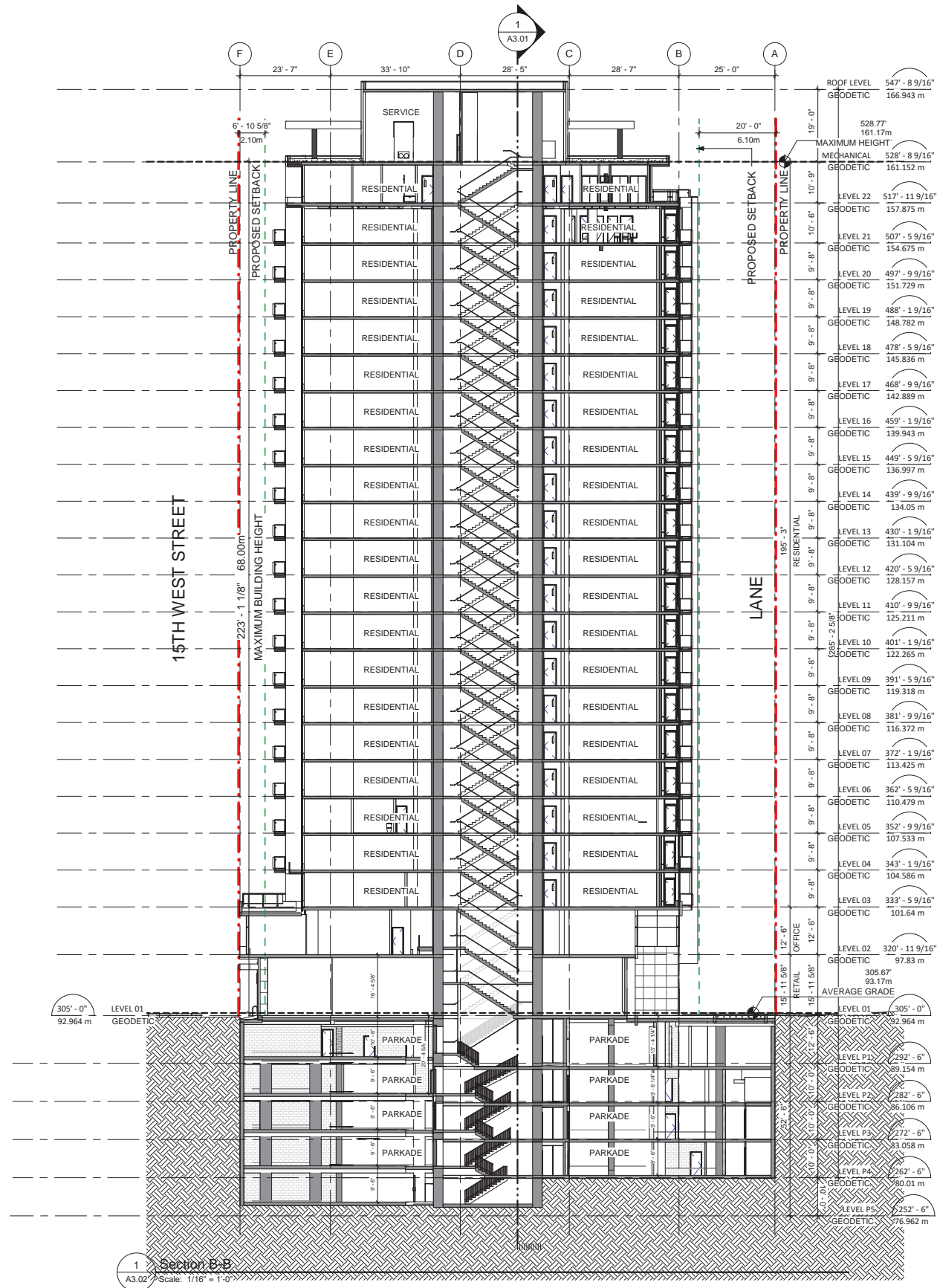
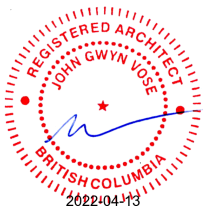
# BUILDING SECTION SECTION A-A



1 Section A-A  
A3.01 Scale: 1/16" = 1'-0"

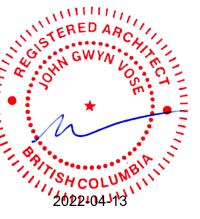


# BUILDING SECTION SECTION B-B



1 Section B-B  
A3.02 Scale: 1/16" = 1'-0"



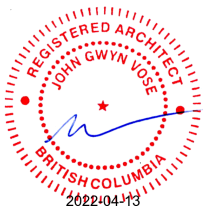


## GFA OVERLAY

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# GFA OVERLAY LEVEL 01

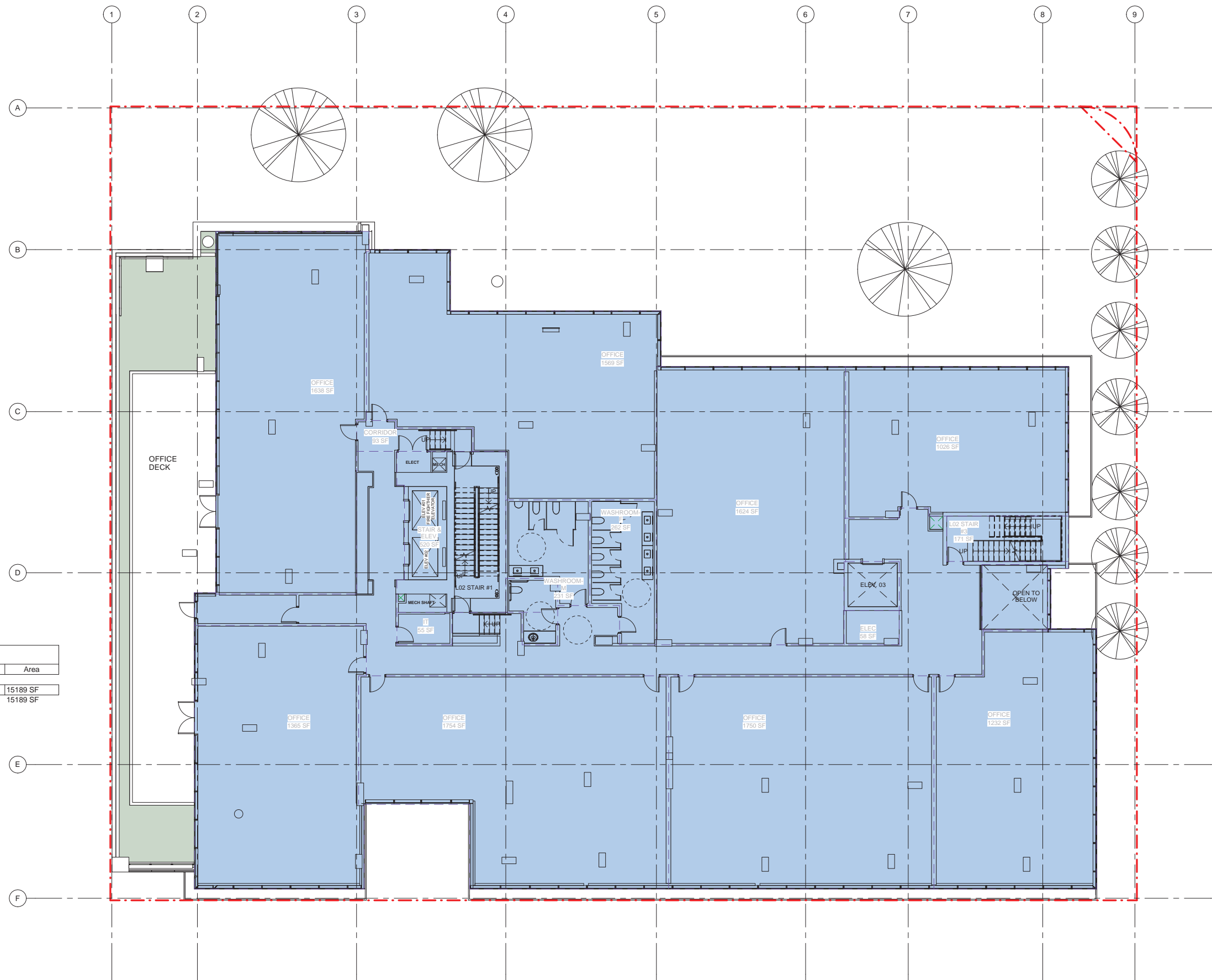
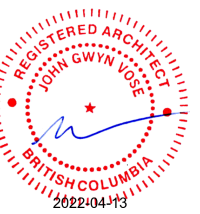


GFA OVERLAY - Level 01		
Comments	Usage Type	Area
	COMMERCIAL	7483 SF
	RESIDENTIAL	1809 SF
	OFFICE	1349 SF
EXCLUSION	AMENITY	318 SF
EXCLUSION	BIKE	1347 SF
EXCLUSION	GARBAGE	1183 SF
EXCLUSION	LOBBY	1151 SF
	<b>TOTAL</b>	<b>14639 SF</b>

- AMENITY
- BIKE
- COMMERCIAL
- GARBAGE
- LOBBY
- OFFICE
- RESIDENTIAL



# GFA OVERLAY LEVEL 02

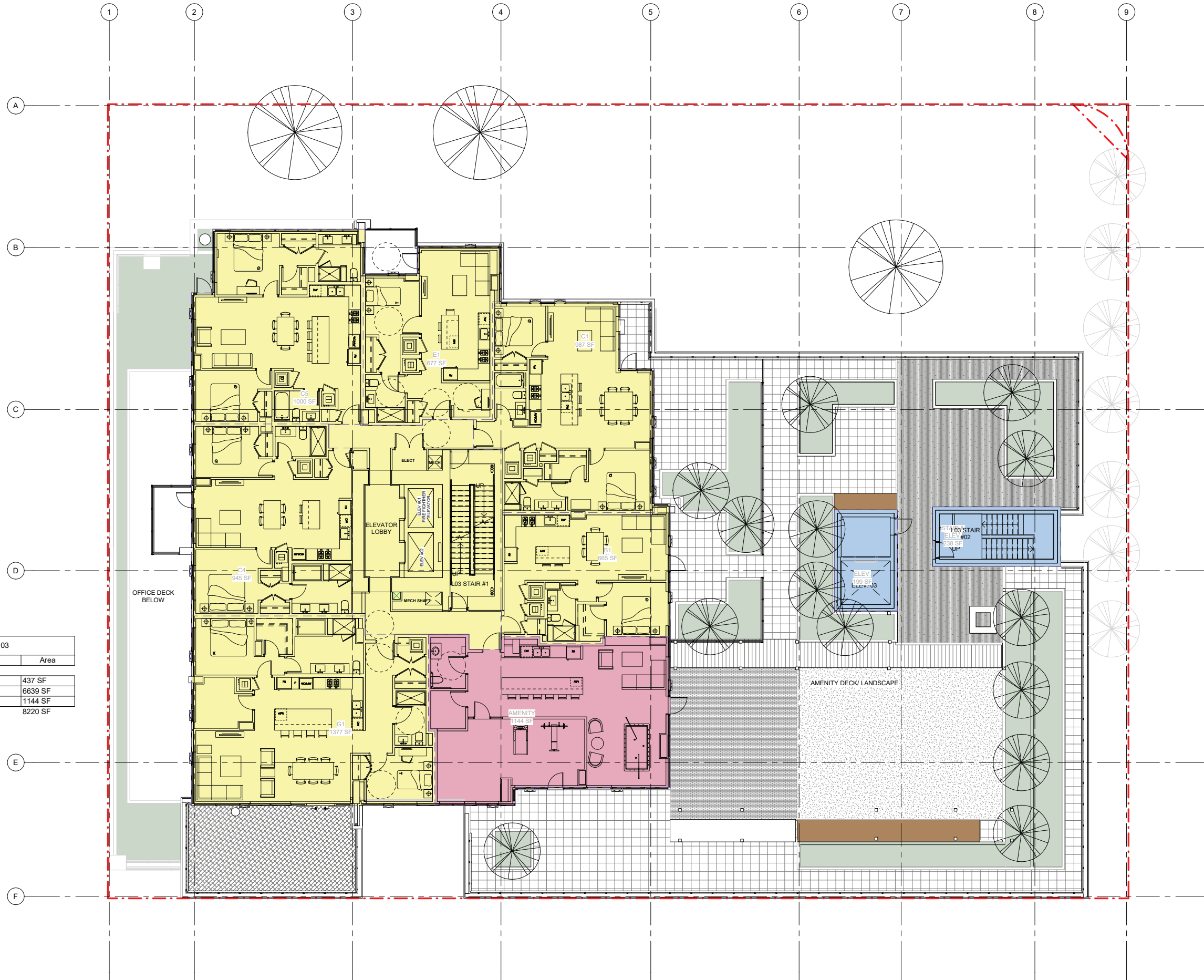
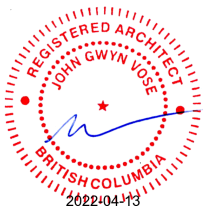


GFA OVERLAY - Level 02		
Comments	Usage Type	Area
	OFFICE	15189 SF
		15189 SF

- AMENITY
- BIKE
- COMMERCIAL
- GARBAGE
- LOBBY
- OFFICE
- RESIDENTIAL



# GFA OVERLAY LEVEL 03

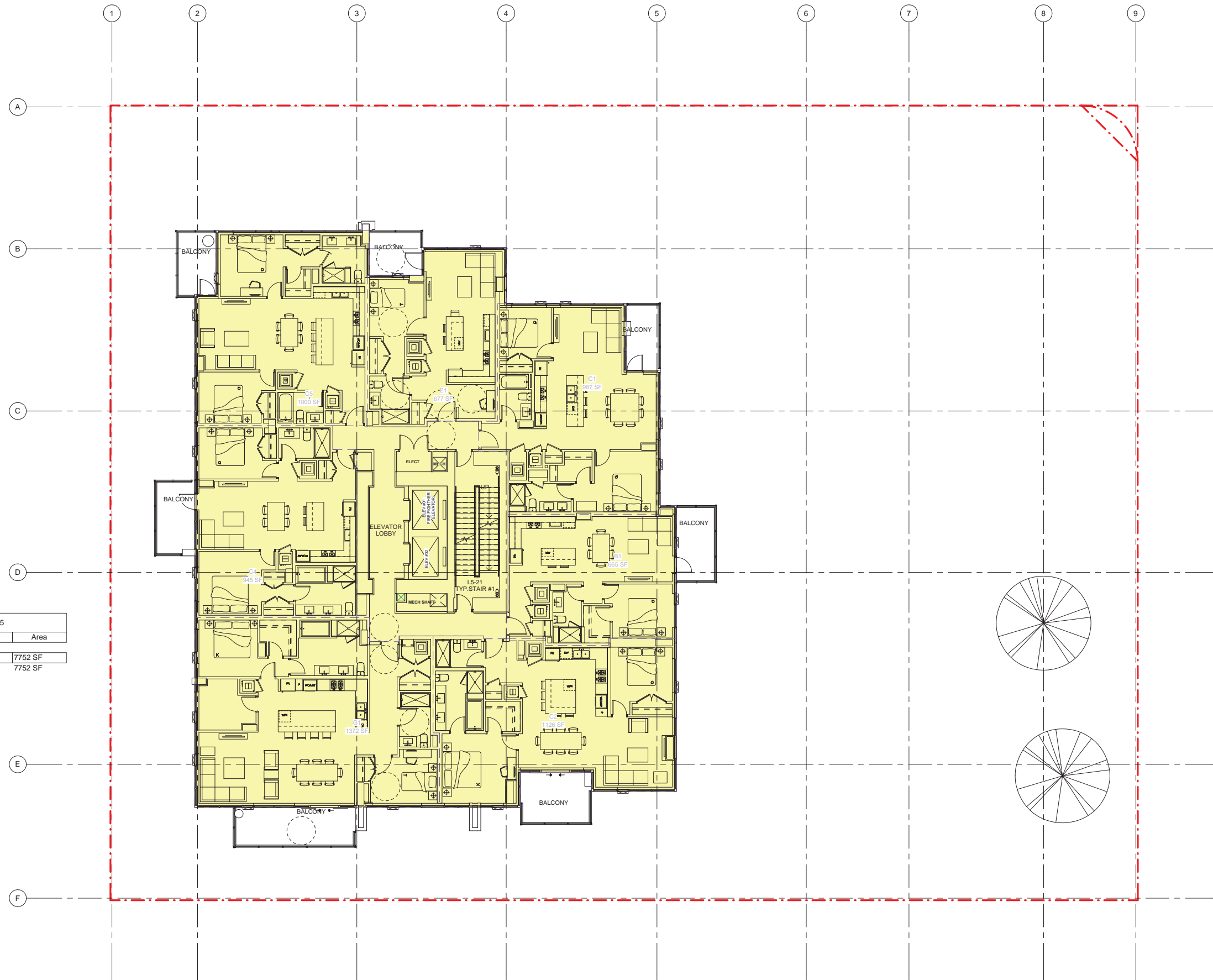
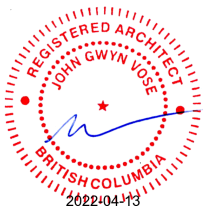


GFA OVERLAY - Level 03		
Comments	Usage Type	Area
	OFFICE	437 SF
	RESIDENTIAL	6639 SF
EXCLUSION	AMENITY	1144 SF
		8220 SF

- AMENITY
- BIKE
- COMMERCIAL
- GARBAGE
- LOBBY
- OFFICE
- RESIDENTIAL



# GFA OVERLAY LEVEL 05

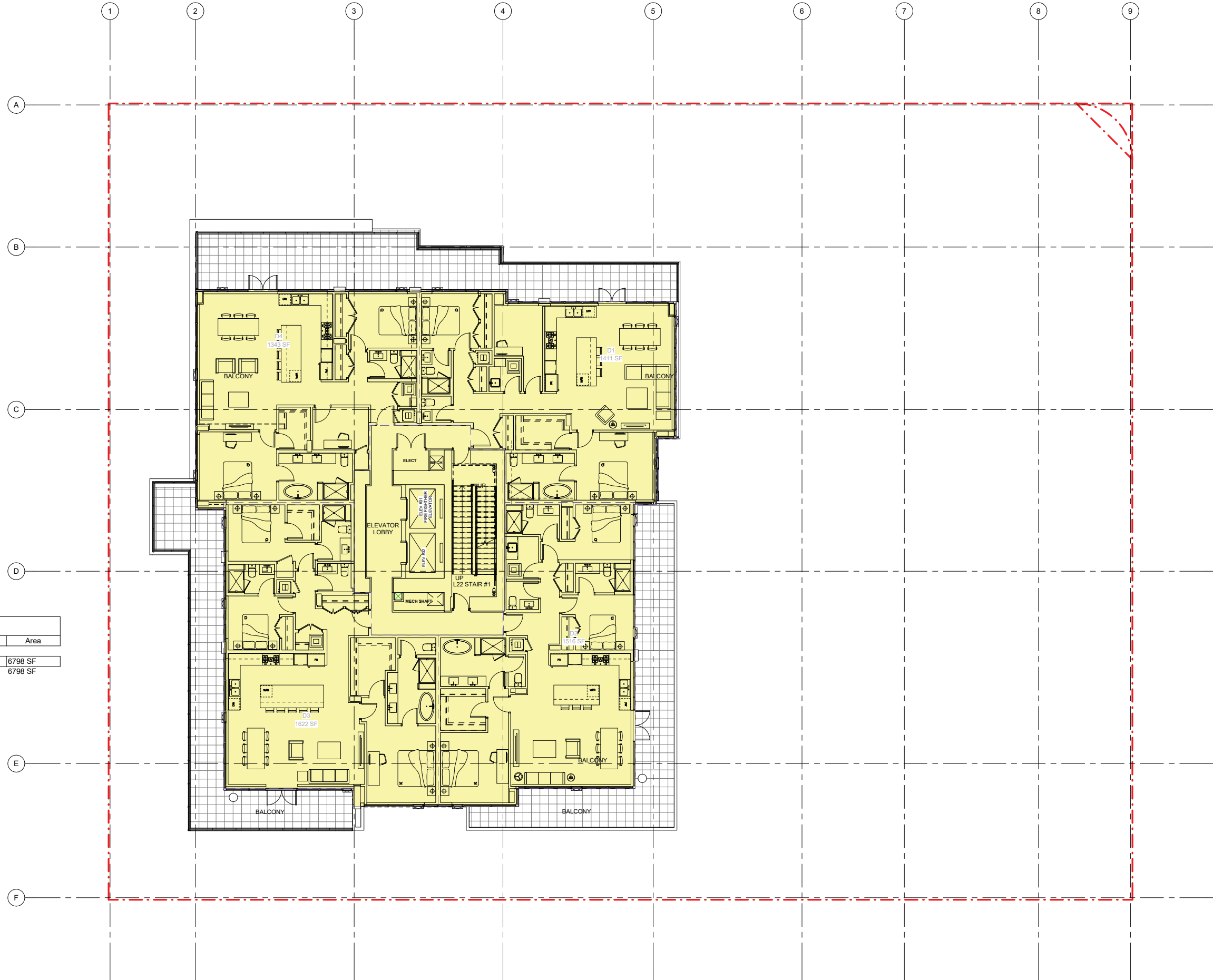
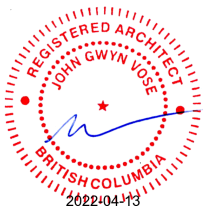


GFA OVERLAY - Level 05		
Comments	Usage Type	Area
	RESIDENTIAL	7752 SF
		7752 SF

- AMENITY
- BIKE
- COMMERCIAL
- GARBAGE
- LOBBY
- OFFICE
- RESIDENTIAL



# GFA OVERLAY LEVEL 22

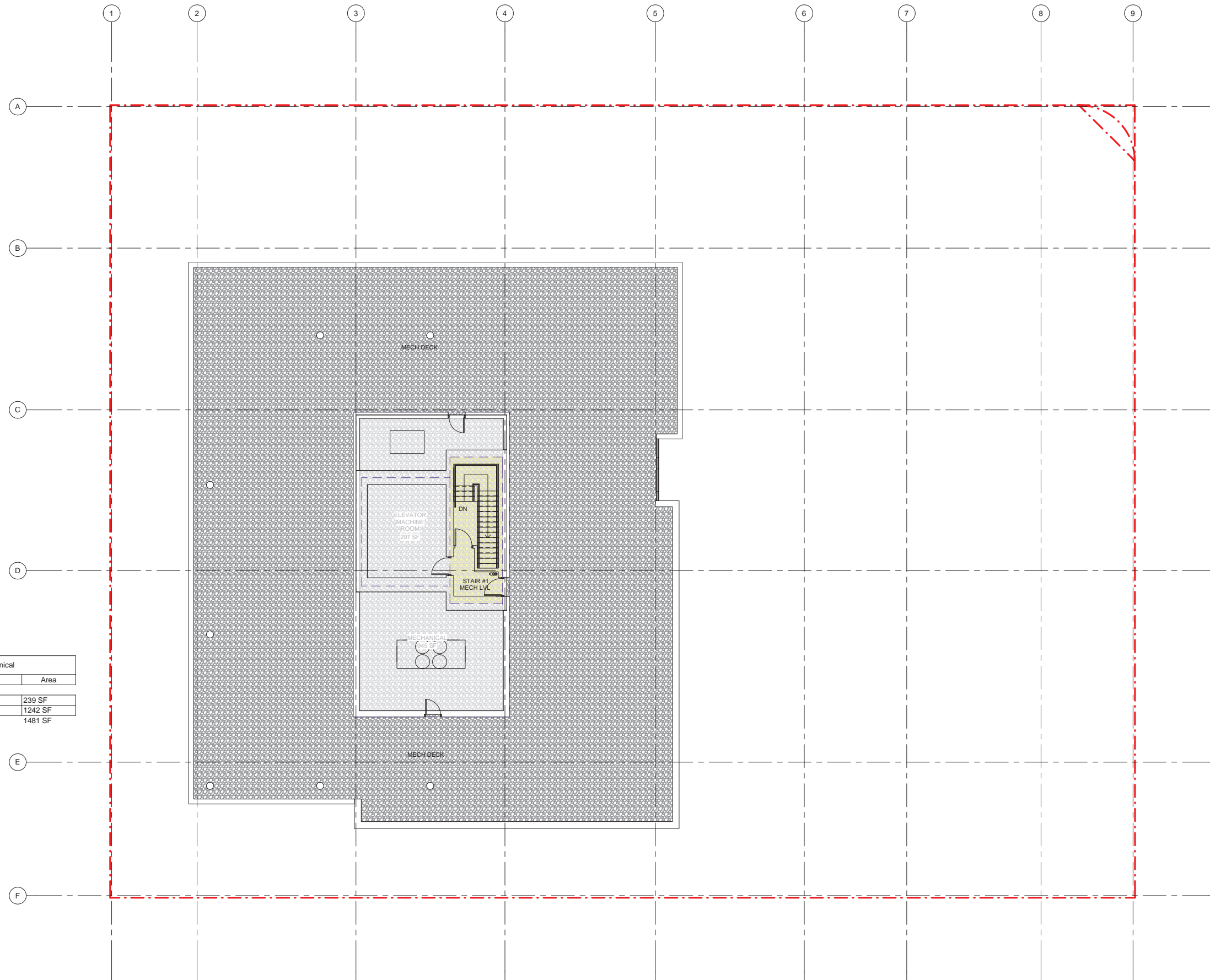
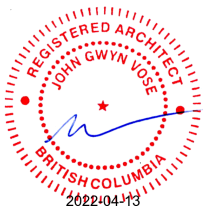


GFA OVERLAY - Level 22		
Comments	Usage Type	Area
	RESIDENTIAL	6798 SF
		6798 SF

- AMENITY
- BIKE
- COMMERCIAL
- GARBAGE
- LOBBY
- OFFICE
- RESIDENTIAL



# GFA OVERLAY MECHANICAL LEVEL



GFA OVERLAY - Mechanical		
Comments	Usage Type	Area
	RESIDENTIAL	239 SF
EXCLUSION	SERVICE	1242 SF
		1481 SF

- AMENITY
- BIKE
- COMMERCIAL
- GARBAGE
- LOBBY
- OFFICE
- RESIDENTIAL