## STATISTICS

**Legal Description** 

**Legal Address** 187 & 195 West 41st Avenue, Vancouver

Amended Lot 3, Except Part in Ex. Plan 5870 & Amended Lot 1 Except Part in Ex. Plan 5849, PID: 011-572-540, 011-572-523

Both of Lot 2 Block 1003A Group 1 District Lot 526 New Westminster District Plan 4381

**Existing Zoning** RS-1 **Proposed Zoning** CD-1

Site Area 10,820 sf Dimensions: 96.3'x112.6'

**Total FSR Proposed\*** 19,530 sf \*FSR does not include in-suite storage, Amenity Rooms, mechanical shaft areas FSR: 1.80

**Height Proposed** 4 Storeys

Unit Mix																	
t Include in-s	suite storage	areas														Area of	Area of
Floor	Totals	1 Bed< 538sf			1 E	Bed, 1 Bed + D	)en			2 E	Bed, 2 Bed + D	en		3/4 Bed	Area (Net)	Units	Units
Level	Units/Flr	Unit sf	Unit sf	Sub-Total	Unit sf	Unit sf	Unit sf	Sub-Total	Unit sf	Unit sf	Unit sf	Unit sf	Sub-Total	Unit sf	Total	>538 sf	> 1938 sf
L1	5			0	545	540		1,085	865	727			1,592	860	3,537	3,537	
L2	7	500	512	1,012	545			545	746	701	763	905	3,115		4,672	3,660	
L3	7	500	512	1,012	545			545	746	701	763	905	3,115		4,672	3,660	
L4	4			0				0	716	712	920		2,348	1022	3,370	3,370	
otal Area (Ne	et)			2,024				2,175					10,170		16,251	14,227	0

<b>In-suite Stor</b>	age Area	Bulk Storage	and In-suite	storage - Mul	tiple Family F	Residential De	evelopments	, January 10, 2	018						
Floor		1 Bed< 538sf	•		1 E	Bed, 1 Bed + D	Den							3/4 Bed	Area
Level	Unit sf	Unit sf	Unit sf	Sub-Total	Unit sf	Unit sf	Unit sf	Sub-Total	Unit sf	Unit sf	Unit sf	Unit sf	Sub-Total	Unit sf	Total
L1				0.0	36.7	40.0		76.7	40.0	40.0			80.0	40.0	196.7
L2		30.4	37.0	67.4	36.7			36.7	40.0	26.3	0.0	40.0	106.3		210.4
L3		30.4	37.0	67.4	36.7			36.7	40.0	26.3	0.0	40.0	106.3		210.4
L4				0.0				0.0	24.0	40.0	40.0		104.0	40.0	144.0
tal Storage Ai	rea			134.8				150.1					396.6		761.5

**Unit Mix: Vechicle Parking** VPBL 4.2.1.13, Family Room: Housing Mix Policy for Rezoning Projects, July 13, 2016

POLICY 1: Rezoning applications that include any residential strata housing are required to include a minimum of 35 percent family units (units having two or more bedrooms),

including a minimum of 10 percent three-bedroom units and a minimum of 25 percent two-bedroom units.

Unit Area	Units	Units	Sub-Total	Units	Units	Units	Sub-Total	Units	Units	Units	Units	Sub-Total	Units	Sub-Total	Total	Unit Mix
1 Bed< 538sf	2	2	4				0					0		0	4	17%
1 Bed> 538sf			0	3	1	0	4					0		0	4	17%
2 Bed>538 sf			0				0	4	4	3	2	13		0	13	57%
3/4 Bed>538 sf			0				0					0	2	2	2	9%
Unit >1938 sf			0				0					0		0	0	0%
Total															23	100%

<b>Unit Mix: Bicylce Parking</b>		2019 Parkin	ng By-law Upda	te Summary,	Off-Street B	icycle Space	Regulations (14	4)								
	Quantity															
Unit Area	Units	Units	Sub-Total	Units	Units	Units	Sub-Total	Units	Units	Units	Units	Sub-Total	Units	Sub-Total	Total	<b>Unit Mix</b>
<700 sf	2	2	4	3	1	0	4					0		0	8	35%
>700 <1130 sf			0	0	0		0	4	4	3	2	13	2	2	15	65%
>1130 sf			0				0					0	0	0	0	0%
Total															23	

#### **Amenity Area**

Planning Bylaw Amenity Areas excluded from FSR

425 sf Amenity Room Area

<b>Area Calculation</b>										
	Mechanical	Amenity	Net	In-Suite	Gross	Gross	Open	Enclosed	Residential	
	Shaft (sf)	Room (sf)	Residential (sf)	Storage (sf)	Residential (sf)	Floor Area (sf)	Balcony (sf)	Balcony(sf)	Area (%)	
L1			3,537	197	3,734	4,969				
L2			4,672	210	4,882	5,396	458.3	110.8	2%	
L3			4,672	210	4,882	5,396	370.3	110.8	2%	
L4			3,370	144	3,514	4030	607		3%	
Roof		425				500				
Total	0	425	16,251	762	17,013	20,291	1435.6	221.6	8%	

Vehicle Parking VPBL 4.2.1.13								
				Provided				
VPBL 4.2.1.13		Required	Disabled	Reg. Size	Small Size	Total		% of Total
0.5 Spaces/Unit < 538 ft <sup>2</sup> (50m <sup>2</sup> )	4 Units	2.0						
0.6 Spaces/Unit > 538 ft <sup>2</sup> (50m <sup>2</sup> )	19 Units	11.4		14		14	Regular	54%
1 space/2135 ft <sup>2</sup> (200m <sup>2</sup> )	19,530 sf	9.1			6	6	Small	23%
Excess Spaces								
Disability Parking (Included in required spaces)								
1 space/ 7 Units + 0.034/Additional Units	VPBL 4.8.4	1.5	2			2	Disabled	8%
1 space counted as 2 regular parking spaces	VPBL 4.1.15		2			2	Disabled	8%
Vistor Parking (Parking and Loading Design Supplement I	V. D. Visitor Parking, Residential)							
0.05 min-0.1 max spaces/unit		1.2		2		2	Visitor	8%
Total		25	4	16	6	26		100%

**Note:** Small Car Spaces allowance is less than 25%

2 Disability parking spaces are noted on the Parking Level Plan. 2 Disability spaces count as 4 spaces in the total.

#### **Calculation of Disability Parking Spaces** VPBL 4.1.15

2 spaces for any development with at least 20 dwelling units

with and additional one space for each 20 additional dwelling units

Despite anything to the contrary in this By-law or in any other by-law mentioned herein, each disability parking space provided to satisfy

the minimum required number of such spaces will count as two parking spaces for the purpose of satisfying the minimum required number of parking spaces. Use of this section will not affect any maximum parking permitted calculations.

Bicycle Par	king VPBL Section 6					
Class A	2019 Parking By-law Update Summary (14)		Dwellings	Required	Provided	
	1.5 spaces for each dwelling unit under 65sm (700 sf)	_	8	12		_
	2.5 spaces for each dwelling over 65sm and under 105sm (700-1130 sf)		15	38		
	3 spaces for each dwelling unit over 105sm (1130 sf)		0	0		
	Note: All bicycle parking at Underground P1 level	Class A Total	23	50	50	
	2019 Parking By-law Update Summary (20)					
	A minimum of 5% of the spaces must be oversized spaces of 2.4 m in length and 0.9 m in width*			3	3	Oversize
	and may not be vertical or stacked spaces. An access aisle of 1.5 m is required.					
	2019 Parking By-law Update Summary (22)					
	Stacking/vertical bicycle parking is permitted for up to 60% of the minimum requirement.*			30	30	Stacked lower level
	Stacked bicycle spaces shall be designed to provide access without the need to lift the bicycle entirely off of the ground,					Stacked upper level
	and must provide convenient access. Total combined stacked and vertical bicycle parking not to exceed 60%.					
	2019 Parking By-law Update Summary (23)					
	At least 10% of the Class A bicycle spaces must be bicycle lockers.*			5	6	Lockers
Class B	2019 Parking By-law Update Summary (15)		Dwellings	Required	Provided	_

Loading Re	quirements Off-Street Loading Space Regulations 5.2.1			
Residential		Dwellings	Required	Provided
Class A	No requirement.	23	0	0
Class B	No requirement for less than 100 dwelling units.		0	0
Class C	No Requirement.		0	0

23

3

**Class B Total** 

<b>Storage Calculation</b>	Bulk Storage and In-suite storage - Multi	ple Family Residential	Developments, January 10, 2018			
1. Bulk Stor	rage Below Base Surface			Dwellings	Required	Provided
Minimun	n of 5.7sm (201sf) of storage area is required	for each dwelling uni	t	2	2	7
2. In-Suite S	Storage At or Above Base Surface			21	21	21
Maximur	m of 3.7sm (40sf) of insuite storage space per	dwelling unit may be	excluded			
Maximur	m In Suite Storage Provided each unit:	370 cuft	(40 sf x 9.25' high)			

## DESIGN RATIONAL

#### Intent

This submission proposes to change the zoning of the site from RS-1 to Comprehensive Development CD-1 District in accordance with the Cambie Corridor Plan. The proposed development will have 23 market residential units varying in size from 1-bedroom to 3-bedroom, with a total proposed area of 19,530 sq.ft. and an F.S.R. of 1.80. Parking spaces proposed total 26 including visitor spaces, (with 2 Disability spaces counted as 4 spaces), and which will comply with the requirements of the Vancouver Parking By-Law.

### **Neighborhood Context**

Positioned at the North East corner of West 41st Avenue and Columbia Street with north facing frontage on West Woodstock Avenue, the lot has a site area of 10,820 sq.ft. It currently contains two single family houses. The surrounding existing neighbourhood is comprised of single family residential buildings, however the character of the neighbourhood changes to the West with a commercial strip on Cambie Street and Oakridge Centre on 41st Ave. This area is rapidly changing with new developments in accordance with the Corridor Plan.

### **Site Plan Concept**

As proposed, the development is consistent with the Cambie Corridor Plan including Section 4.4.4 where the existing developments along 41st Avenue will be replaced with allowable 4-storey buildings.

The site presents 96.3' feet of frontage on West 41st Avenue, 112.5' feet of depth fronting Columbia Street and 96.1' feet of frontage on West Woodstock Avenue. The West 41st Avenue frontage has a 2.33ft land dedication and 4.6ft setback from the existing property line.

The size and shape of the site yields a conventional double loaded corridor building footprint with a predominant north/south orientation. Setbacks to Woodstock and Columbia streets are 12 ft., West 41st Avenue, 14.4 ft. The east property line setback is 10 ft. increasing to 16 ft. on the northern half to acknowledge setbacks, and privacy to the neighbouring property. Resident's entrance is located on Columbia Street to take best advantage of the North/South grade change, relatively quiet, accessible street parking and yet be visible from 41st Avenue.

Access to underground parking is taken from Woodstock via an access ramp partially hidden under a trellis, parallel and adjacent to the east property line. The ramp is located to allow possible shared access to the easterly property.

### Parking Level:

Parking spaces proposed total 24, with a net of 26 spaces with Disability spaces, which will comply with the requirements of the Vancouver Parking By-Law. Vehicle parking is located on two levels with the upper parking level having two Disabled spaces.

#### **Bulk and Bicycle Storage:**

Bulk storage has been allocated to the underground parking level the Guidelines for Multi-Family Developments. Bicycle Storage has been provided at P1 Parking Level as required in the Vancouver Parking By-Law.

#### **Design and Materiality**

Per the Plan Section 4.4.4, the proposed maximum building height is four storeys, 43.0 ft. to the main roof level with a one storey setback to the 4th floor. These setbacks model the building to reduce scale and relate the building to neighbouring context. At the West Woodstock yard varies from a minimum of 10ft to 16ft. At 4th floor an 8ft setback provides a transitional scale to the single family residential neighbourhood across the streets.



An asymmetrical composition to the building volumes and indented balconies further reduce the apparent scale. At the 4th floor level terraces provide useable open space. On the roof, an outdoor common amenity space provides unobstructed sunshine and views to the north and south. Edges of the space are defined by guardrails set back from the roof perimeter thus limiting overlook to neighbouring properties and increasing privacy for the amenity.

On the 41st Avenue frontage an overhang above the ground level entry defines the entrance to the building and breaks down the building scale at pedestrian level. Five ground floor street facing units, will have pedestrian access from the sidewalk, private patios and gardens, all of which will enhance and animate the pedestrian realm. These patios are elevated from the sidewalk and surrounding streets with plantings that gently transition from existing grade to the newly created ground floor level.

#### Rooftop:

At roof level an outdoor common amenity space, connected to an indoor amenity space, will provide residents an environment planted with intensive and extensive green roof technologies. These technologies include planters for urban agriculture, bird friendly trees and "green roof" landscaping. Edges of the space are defined by translucent guardrails to reduce overlook to neighbouring properties and increasing privacy for the amenity. Full accessibility to the amenity will be by elevator. Two private roof decks accessible by private stairs from 4th floor level occupy available space at roof level.

#### **Streetscape and Public Realm:**

On the 41st Avenue frontage the interior of residential units extend down one half stair flight to an outdoor patio overlooking the street. The patios are separated from street level by landscaped planters and another half flight of access stairs leading to the patio and entry door.

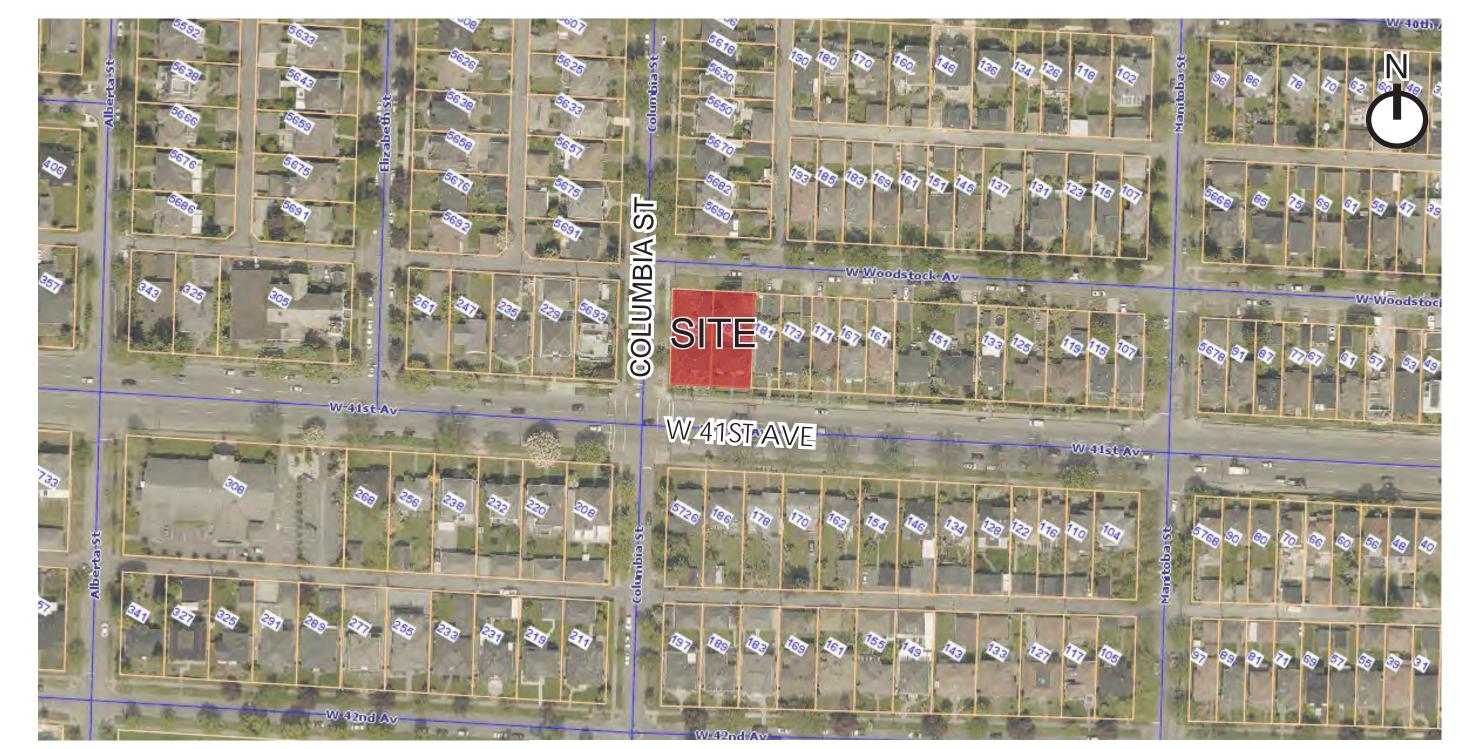
An overhang above the ground level entry defines the main entrance and provides scale at pedestrian level. A grade level residential unit faces Woodstock with pedestrian access from the Columbia sidewalk, a private patio and gardens, all of which enhance and animate the pedestrian realm.

### Landscaping:

The tree canopy has been augmented with 32 proposed trees both on the property and surrounding City boulevards. One replacement pine tree takes a prominent position at the northwest corner of the property. Screening of the parking garage entry ramp is facilitated by 11 columnar trees. At roof level additional trees supplement the canopy and green roof palette.

# PROJECT OVERVIEW

## CONTEXT PLAN



## SITE LOCATION



STREETSCAPE









W 41ST AVE STREETSCAPE





WOODSTOCK AVE STREETSCAPE





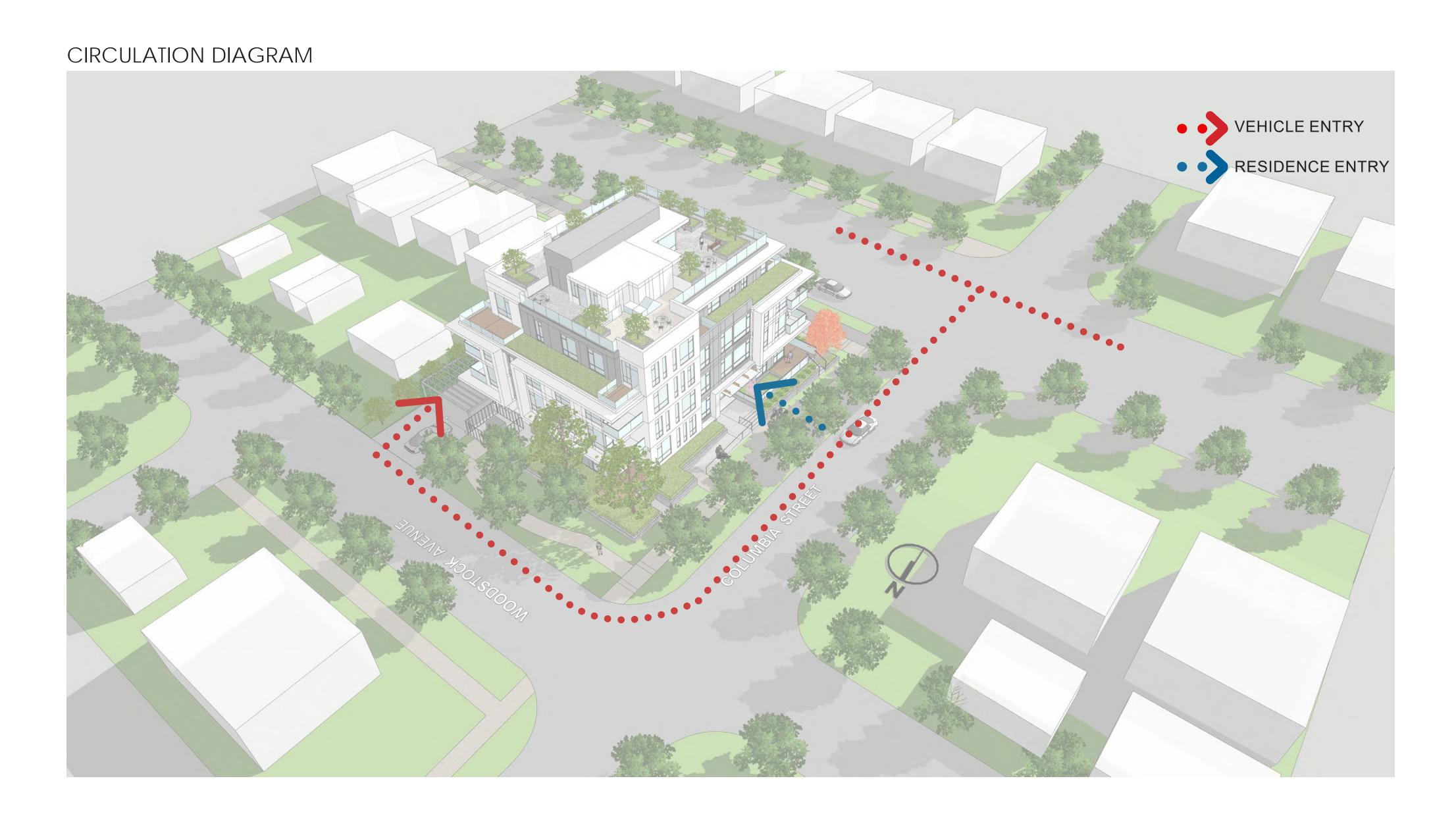




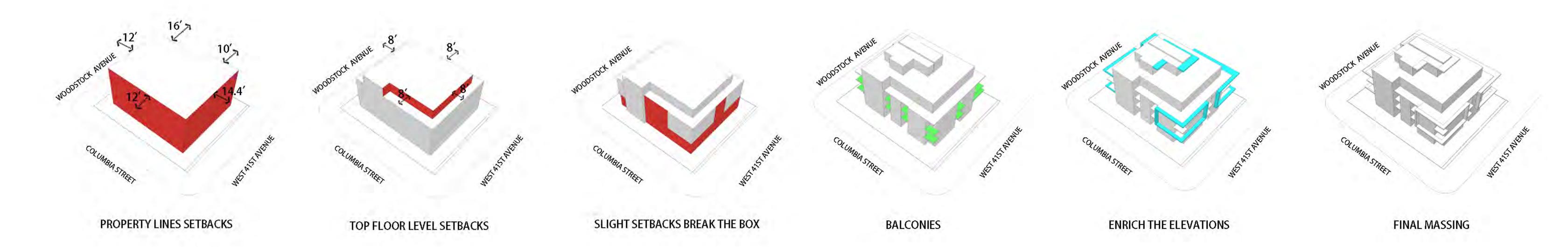


COLUMBIA ST STREETSCAPE

# DESIGN ANALYSIS



## BUILDING FORM & MASSING STUDY



## SHADOW STUDY

VERNAL EQUINOX | MARCH 20



10:00 AM



12:00 PM



2:00 PM

SUMMER SOLSTICE JUNE 21



10:00 AM

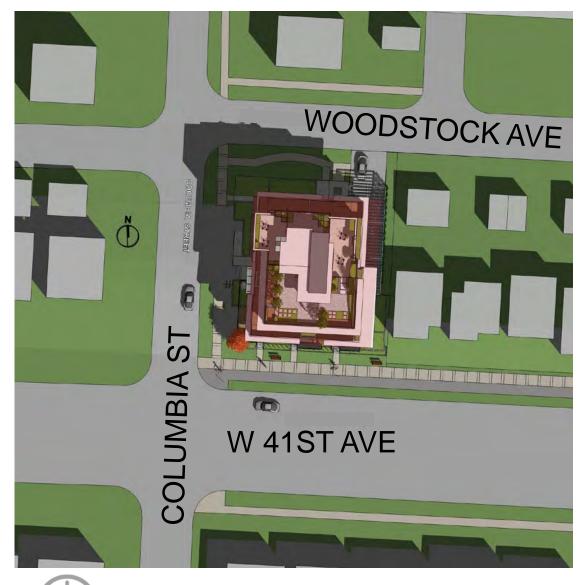


12:00 PM

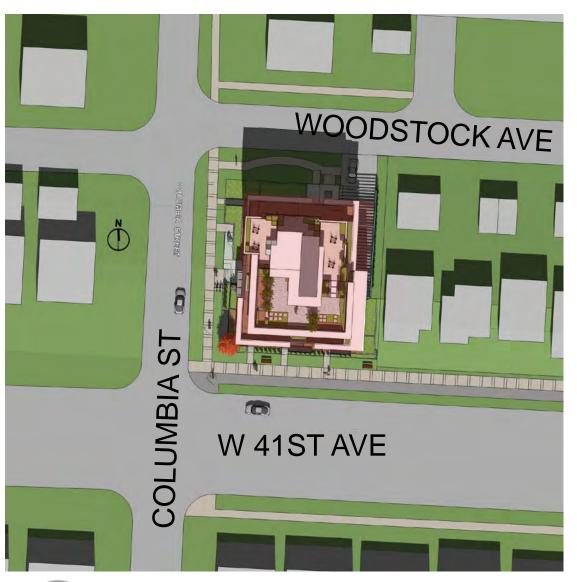


2:00 PM

AUTUMNAL EQUINOX | SEPTEMBER 23



10:00 AM



12:00 PM



2:00 PM

WINTER SOLSTICE DECEMBER 21



10:00 AM



12:00 PM



2:00 PM

**Shadow Studies:** 

The proposed design has been modeled with increased setbacks at the east property line and stepped massing at the 4th floor taking into consideration the Cambie Corridor Guidelines 5.1.20. The floors are stepped back and informed by the shadow studies that have been completed in support of the design. The shadow studies show that the East facing aspect setback and stepped at 4th floor has minimized the shadow impact on the neighbouring buildings. As the parking garage entry ramp occupies the neighbouring property eastern boundary shadows fall principally within the Woodstock boulevard and ramp area.

## GREEN BUILDING POLICY FOR REZONING

This project will follow the Low Emissions Green Buildings path "B" within the Vancouver Green Buildings Policy for Rezoning.

Strategies for consideration in meeting or exceeding the requirements of the policy include:

- Energy saving electric lights, residential appliances.
- Air source V.R.F. heating & heat passivehaus assisted domestic hot water heating.
- Omission of all available natural gas and carbon energy mechanical and domestic appliances.
- Enhanced building envelope airtightness.
- Passivehaus level glazing 35% window-wall ratio.
- Enhanced insulation to roofs, walls and exposed underfloor areas including improved reduction of thermal bridging.
- EV charging stations to underground parking levels.
- On-site rainwater management in respect to the City Integrated Rainwater Management Plan policies.





HIGH PERFORMANCE ENVELOPE INCLUDING PASSIVEHAUS WINDOW SYSTEM AND EXTERIOR INSULATED WALLS.



ENHANCED VENTILATION AND EXHAUST WITH ENERGY RECOVERY (ERV)



ROOFTOP GARDENING PLOTS FOR RESIDENTS



ONSITE RAINWATER MANAGEMENT COLLECTION



LOW VOC'S MATERIAL SELECTION IMPROVED INDOOR AIR QUALITY

# PERSPECTIVES





BIRDS' EYE VIEW - FROM SOUTHWEST 01



BIRDS' EYE VIEW - FROM NORTHWEST



BIRDS' EYE VIEW - FROM SOUTHEAST



ALONG W41ST AVE LOOKING TO THE WEST

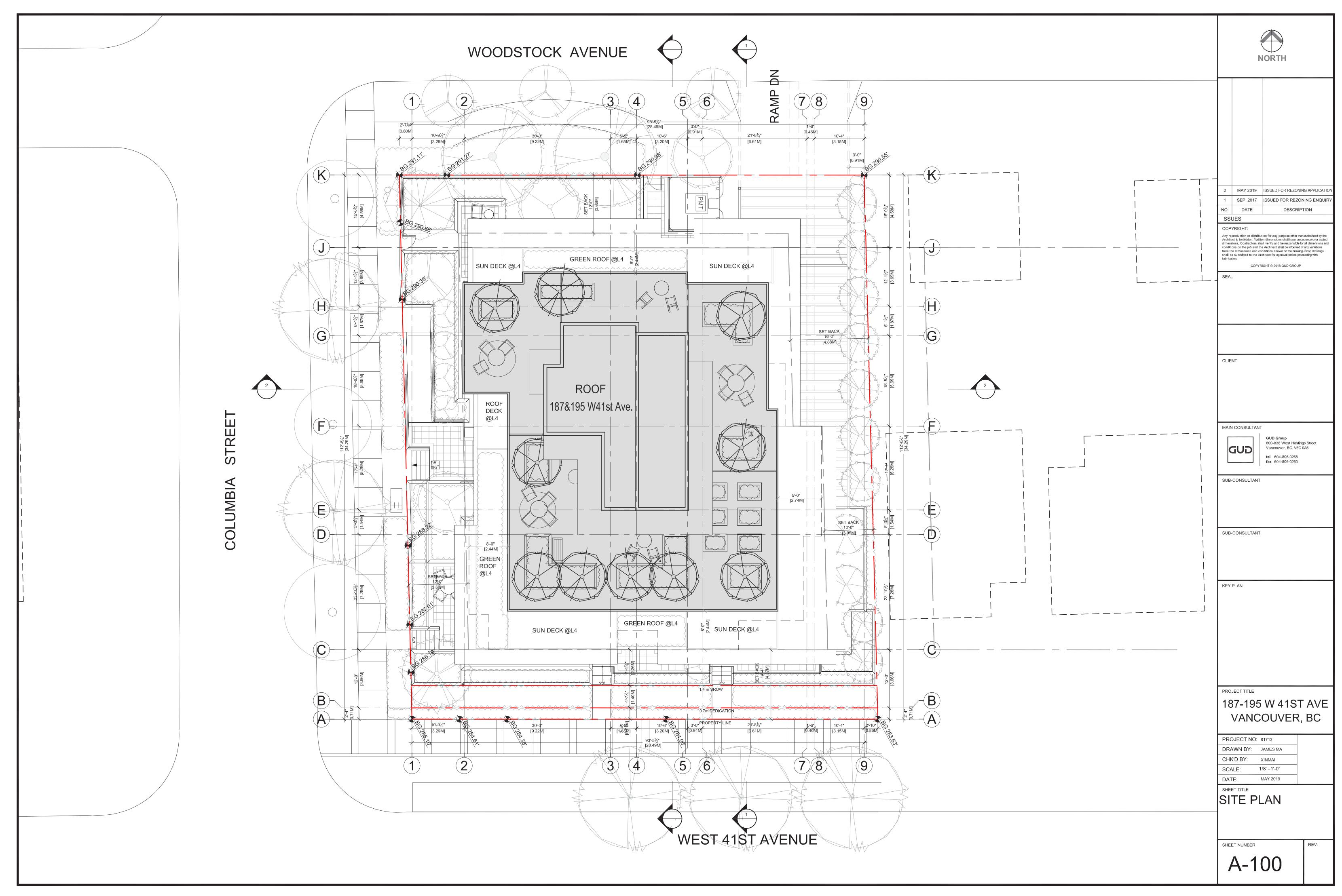
# STREETSCAPE

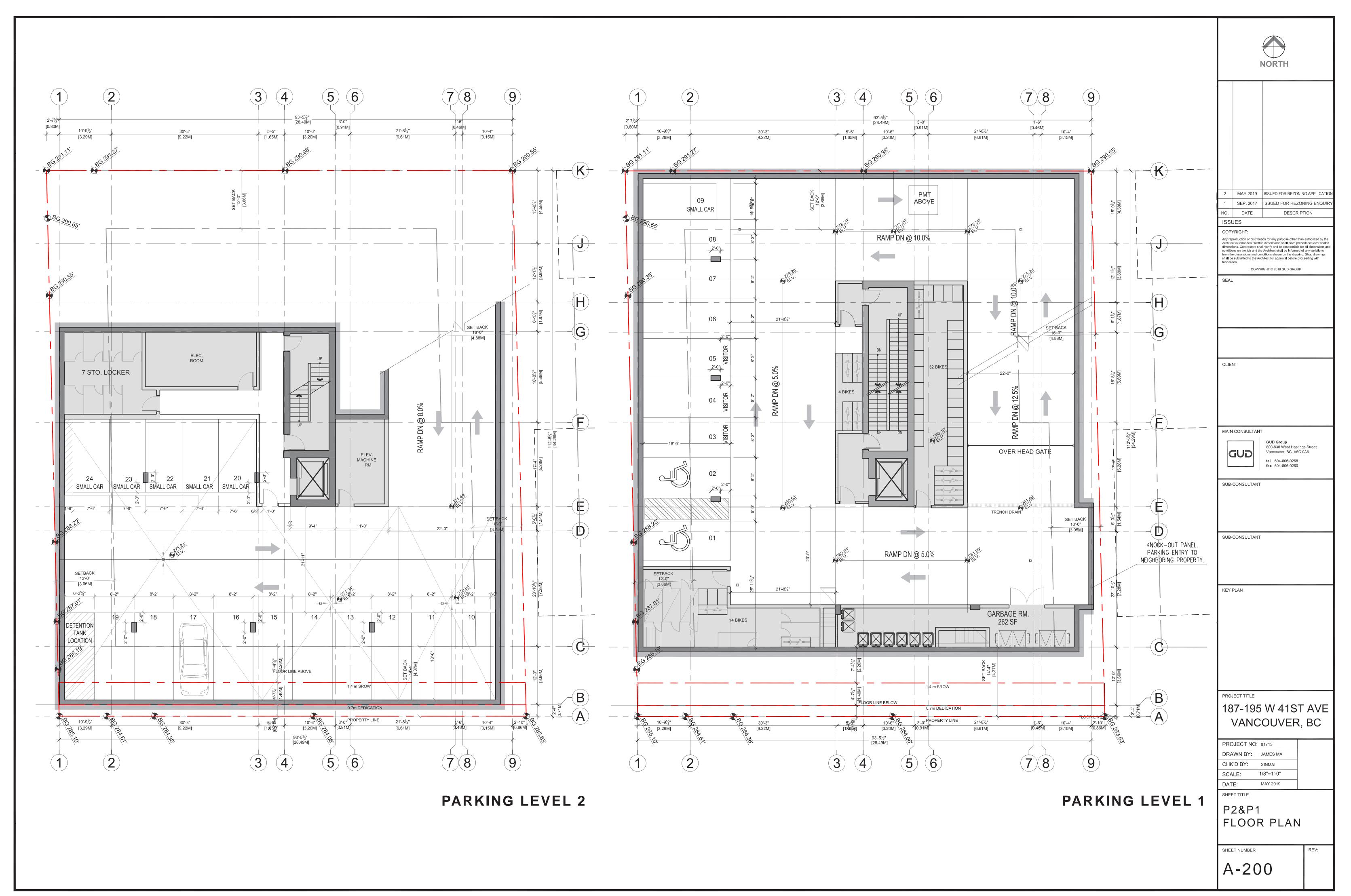


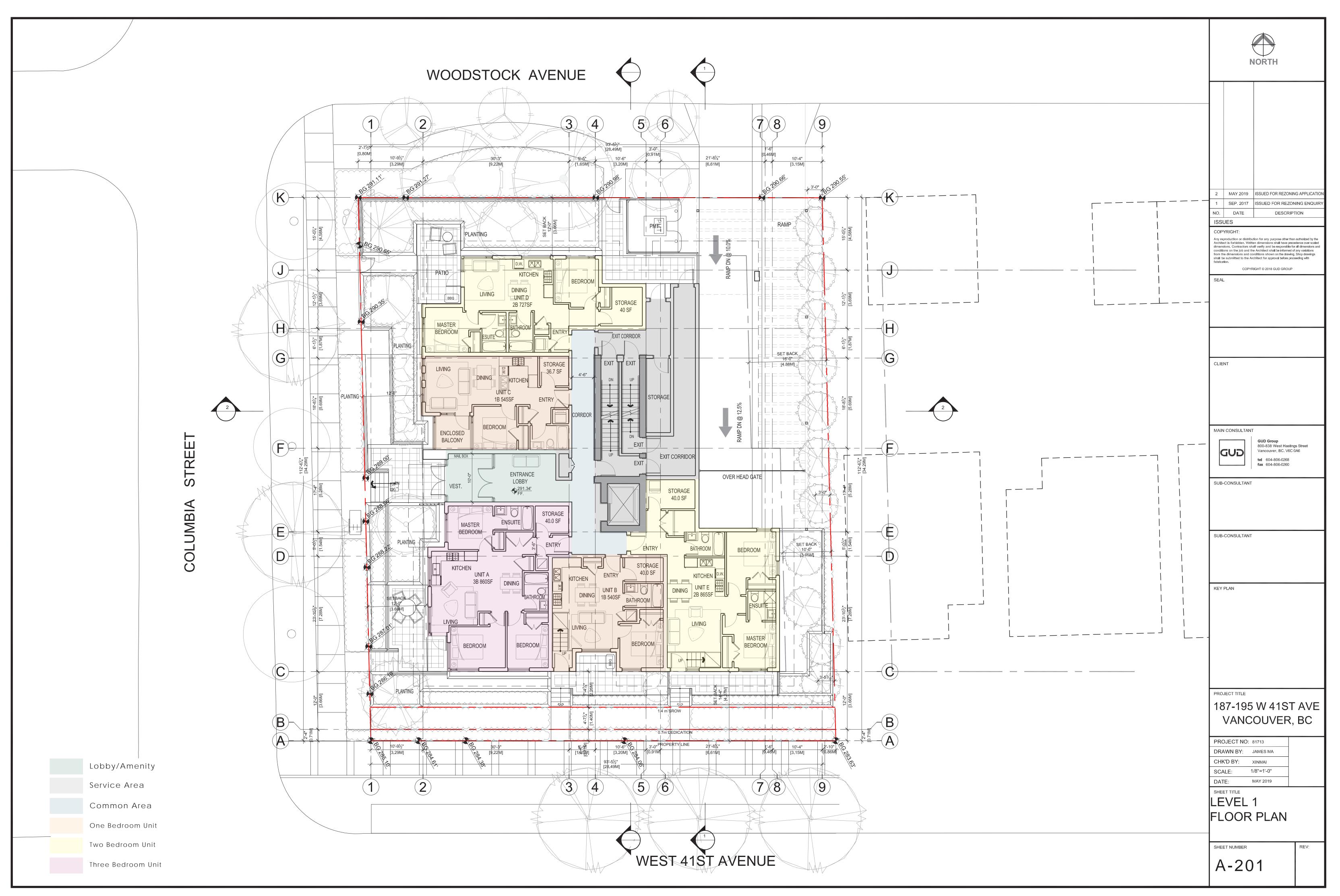


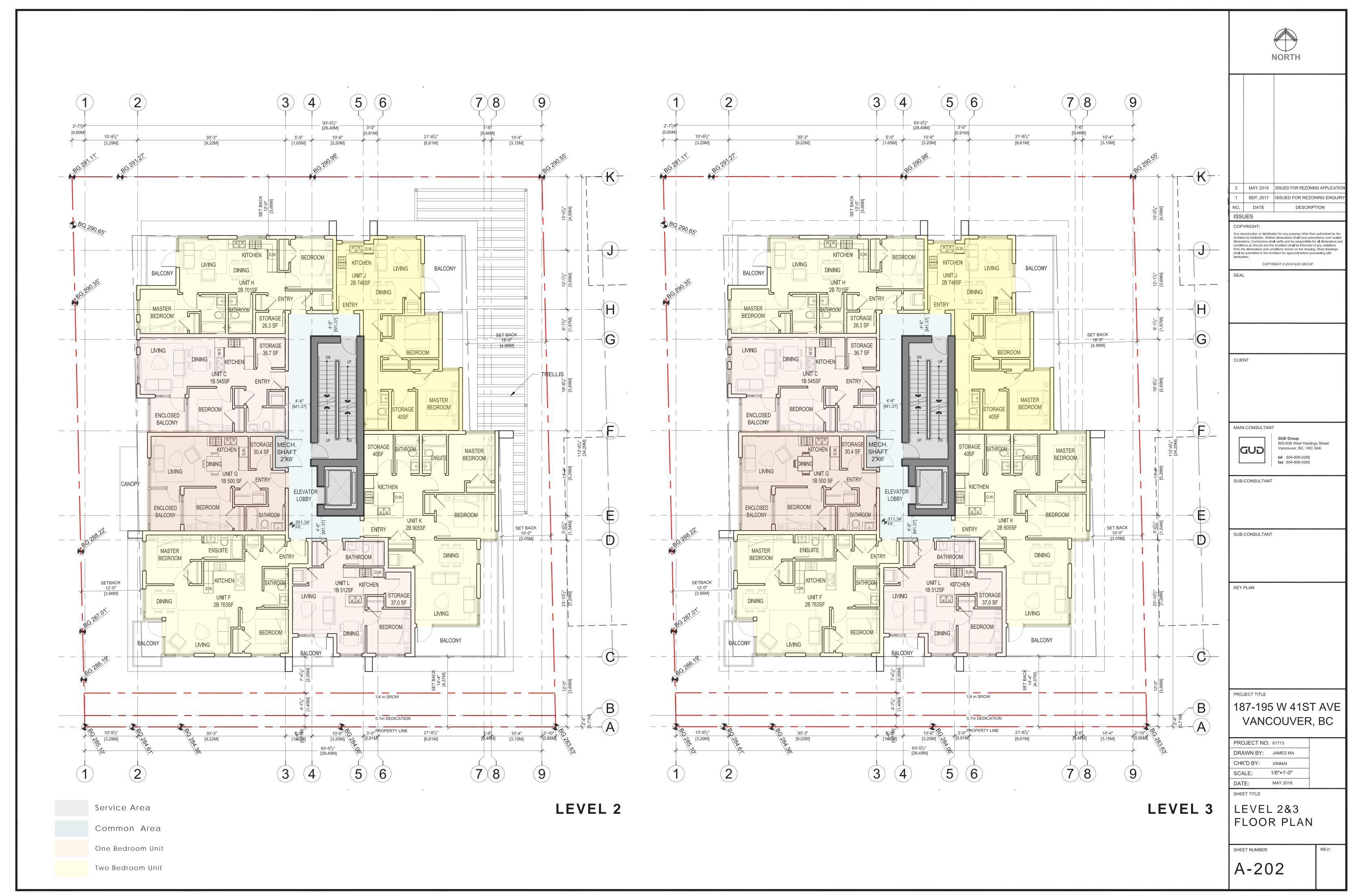


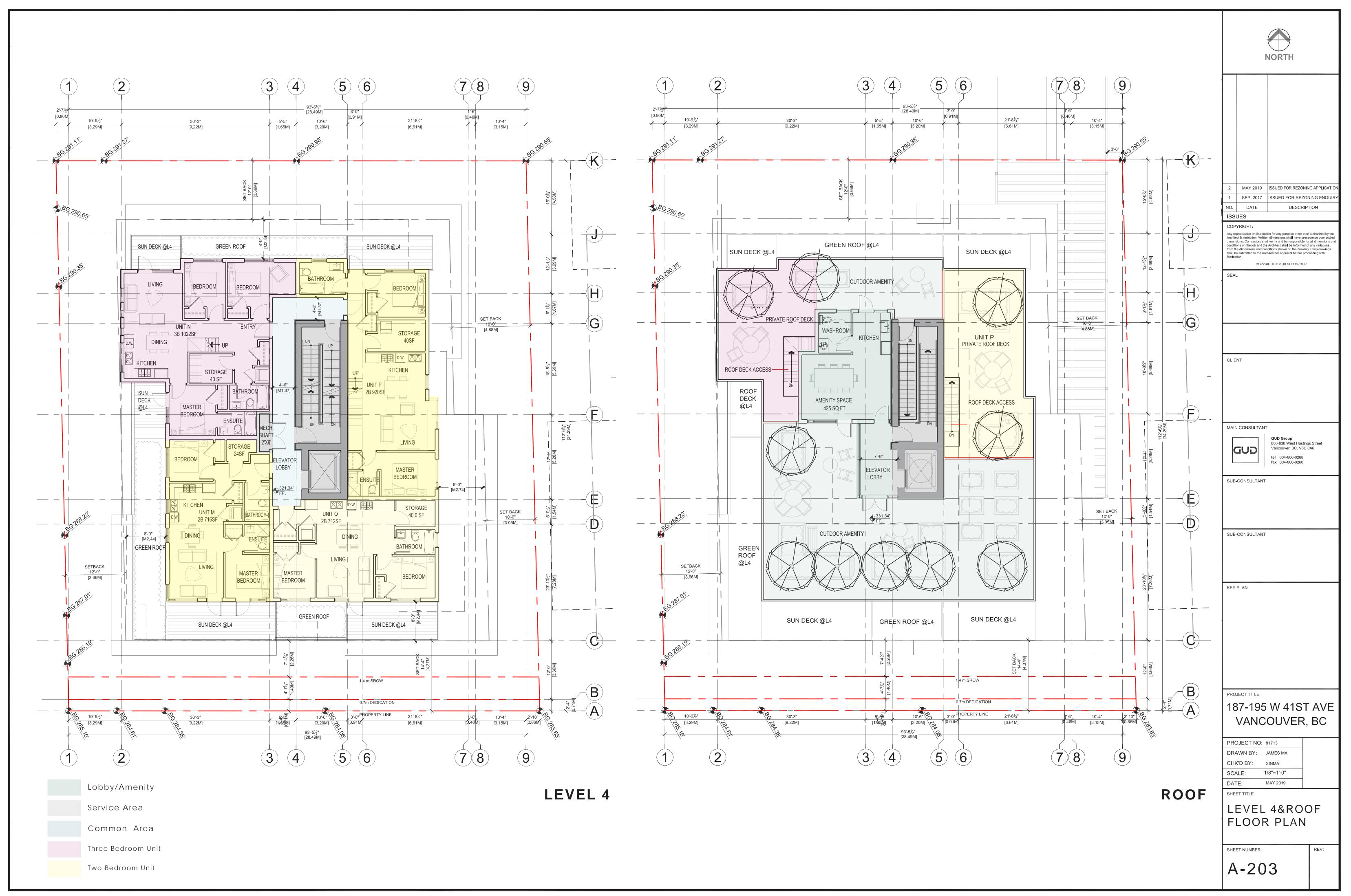
WOODSTOCK AVENUE STREETSCAPE





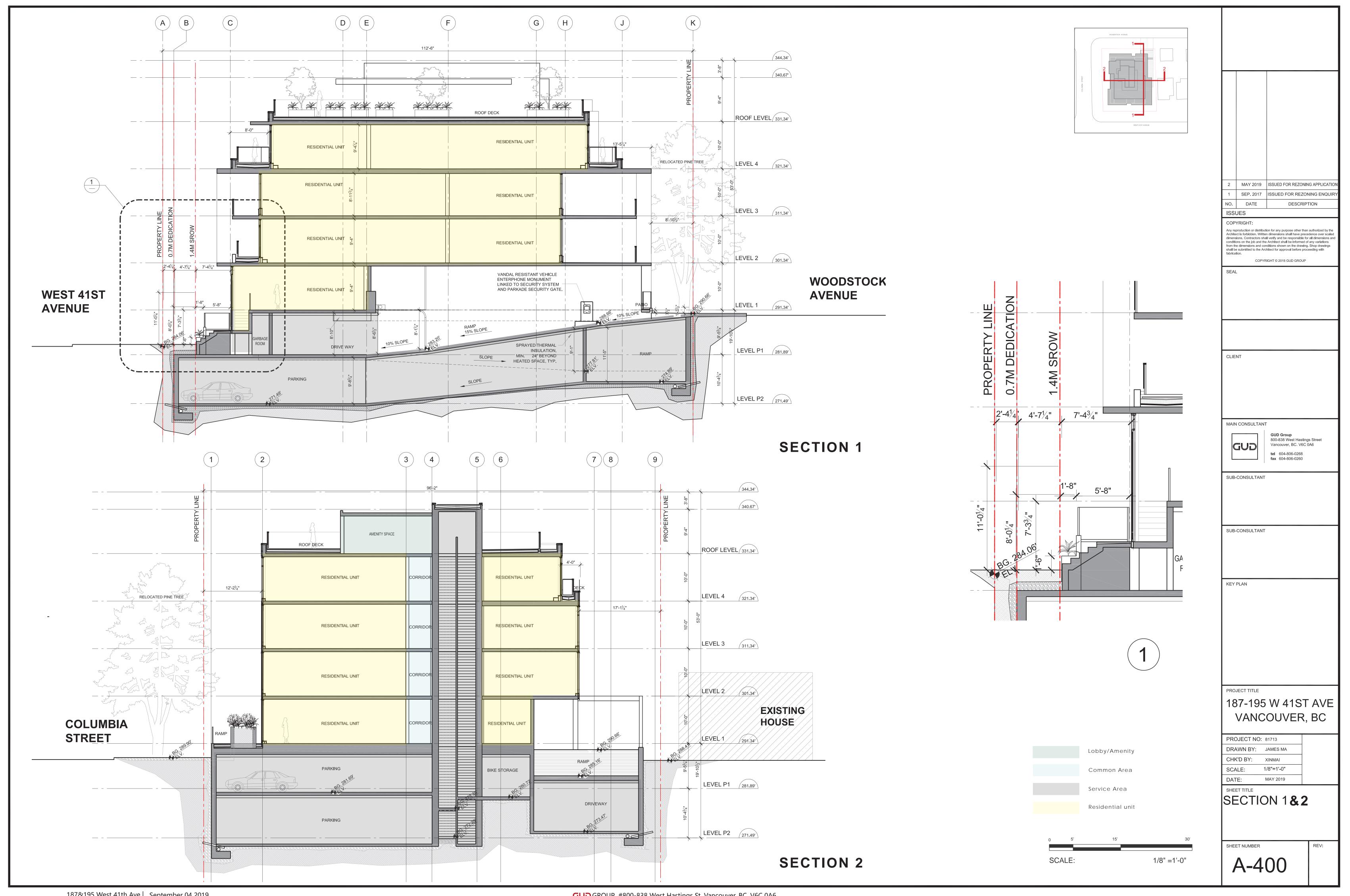


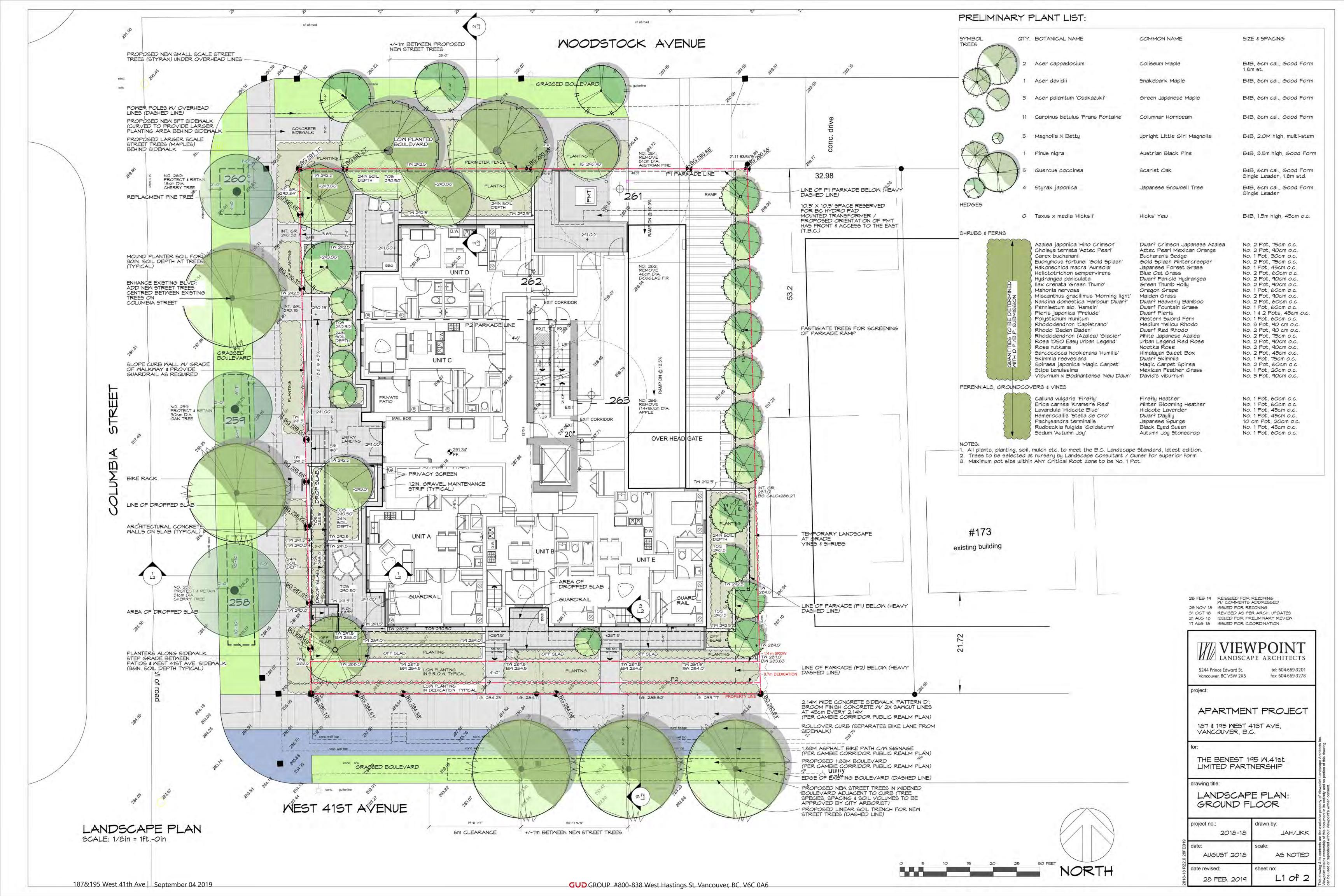


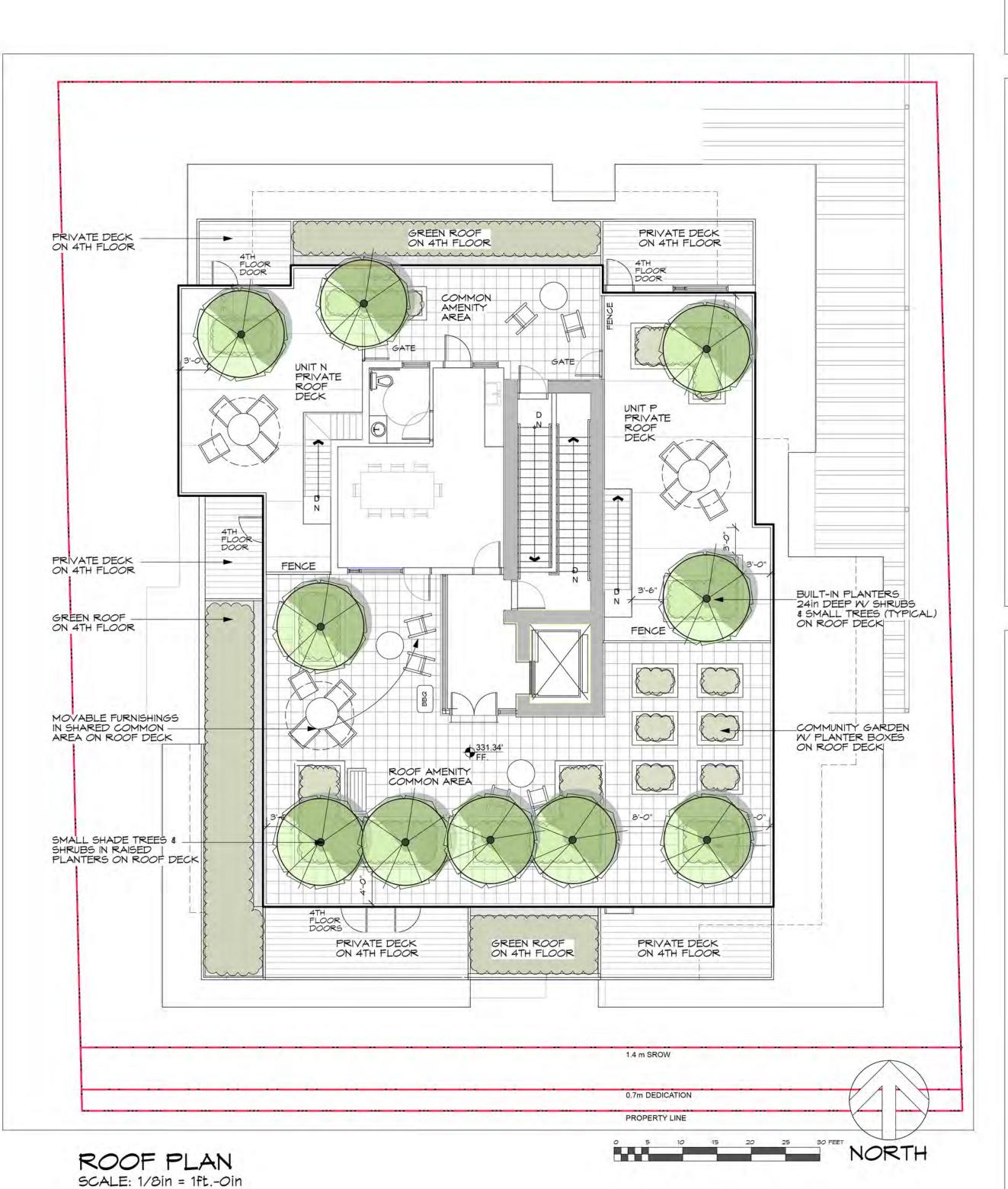




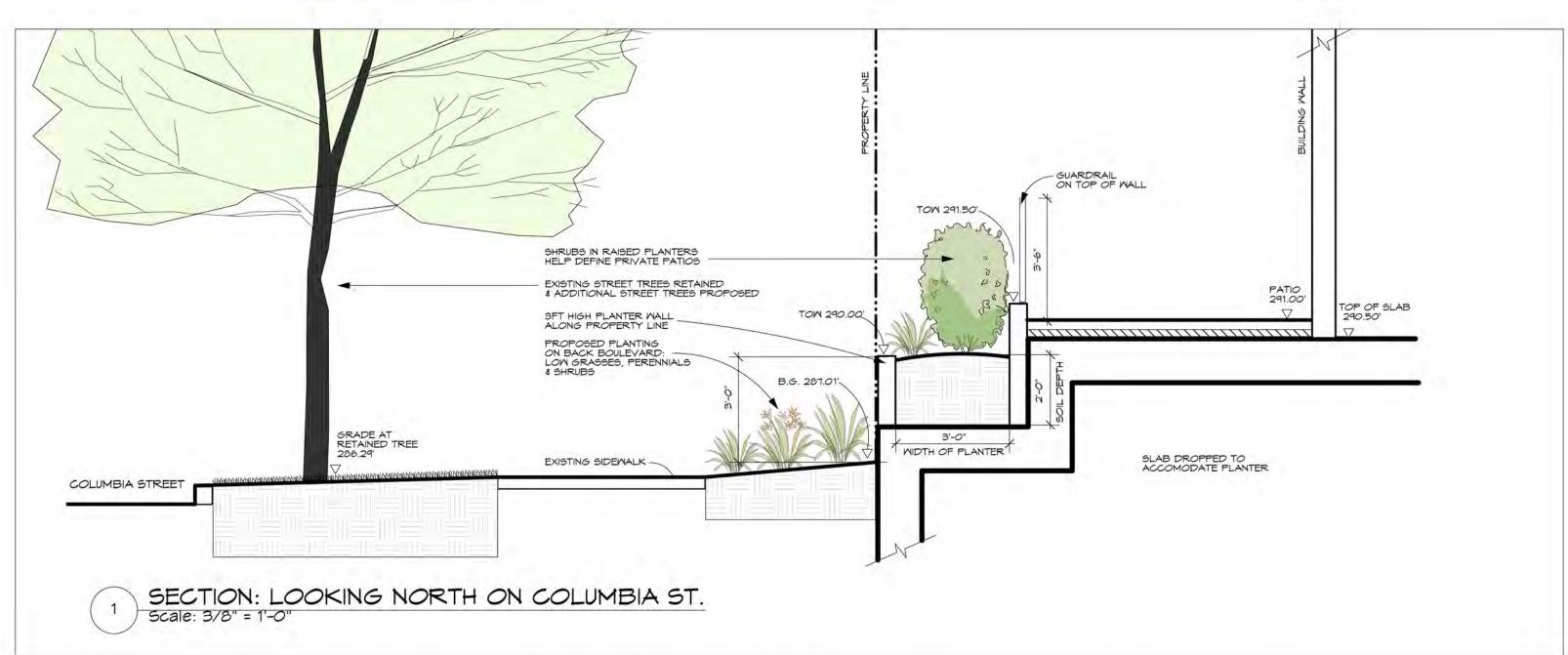




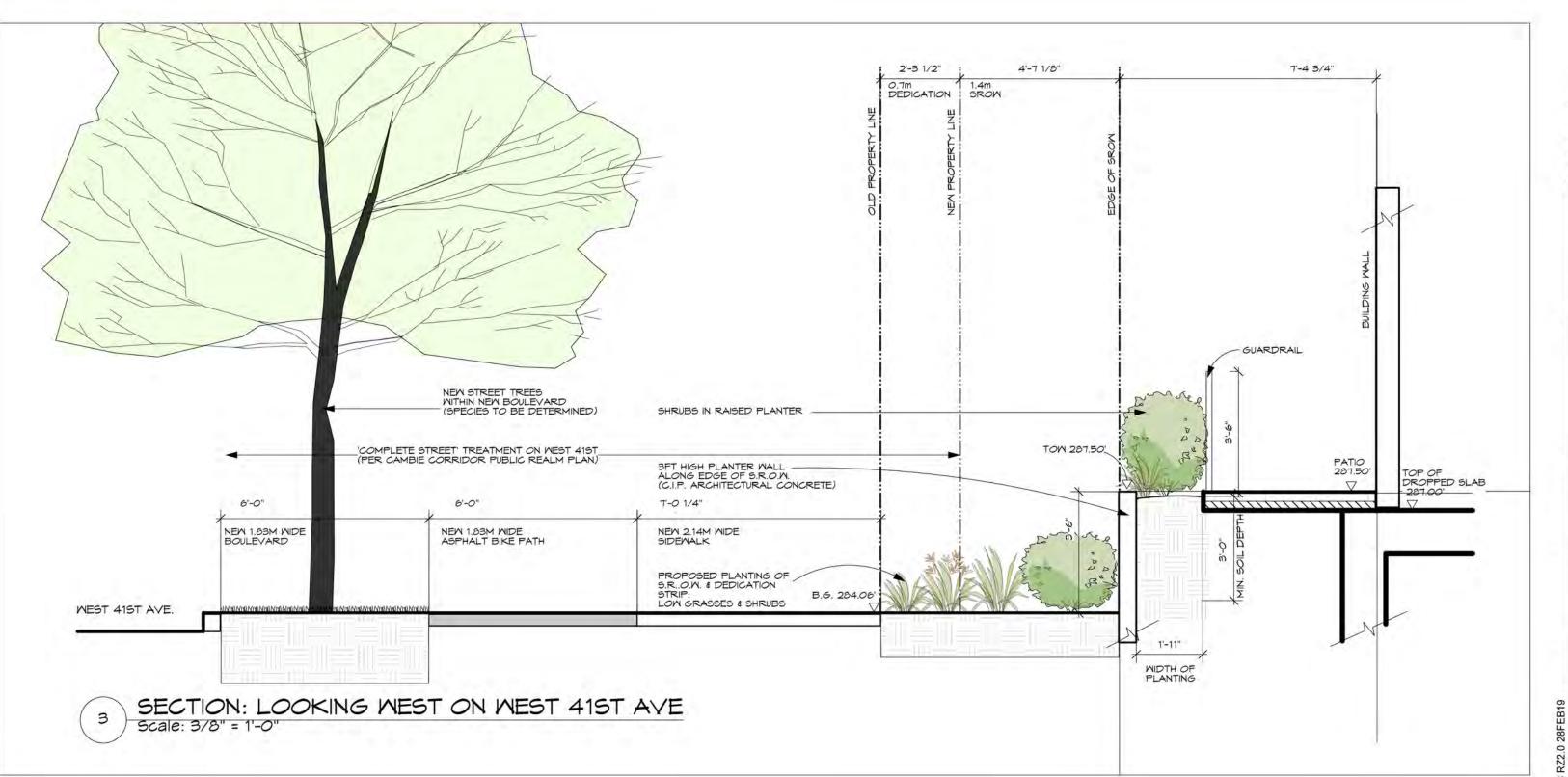




187&195 West 41th Ave | September 04 2019







28 FEB 19 REISSUED FOR REZONING W/ COMMENTS ADDRESSED 28 NOV 18 ISSUED FOR REZONING 31 OCT 18 REVISED AS PER ARCH. UPDATES 21 AUG 18 ISSUED FOR PRELIMINARY REVIEW 17 AUG 18 ISSUED FOR COORDINATION

W VIEWPOIN

5244 Prince Edward St. tel: 604-669-3201 Vancouver, BC V5W 2X5 fax: 604-669-3278

APARTMENT PROJECT

187 \$ 195 WEST 41ST AVE, VANCOUVER, B.C.

THE BENEST 195 W.41st LIMITED PARTNERSHIP

drawing title:

LANDSCAPE PLAN:

ROOF DECK

\$ SECTIONS

GUD GROUP #800-838 West Hastings St, Vancouver, BC. V6C 0A6