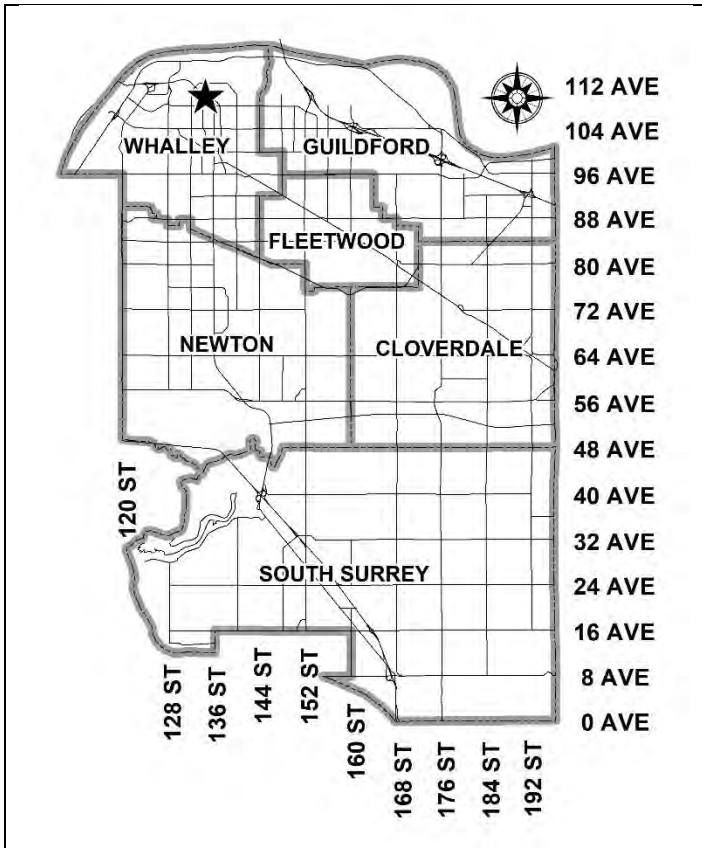


City of Surrey
PLANNING & DEVELOPMENT REPORT

Application No.: 7918-0388-00

Planning Report Date: July 11, 2022



PROPOSAL:

- **Rezoning** from CD (Bylaw No. 10464) to CD (based on RM-135)
- **Development Permit**

to permit the development of two residential high-rise buildings with ground floor retail and a child care centre in City Centre.

LOCATION: 13433 - Gateway Drive

ZONING: CD Bylaw No. 10464

OCP DESIGNATION: Central Business District

City Centre Plan DESIGNATION: High Rise 5.5 FAR



RECOMMENDATION SUMMARY

- Bylaw Introduction and set date for Public Hearing for Rezoning
- Approval to draft Development Permit for Form and Character.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- The proposal complies with the Central Business District designation in the Official Community Plan (OCP).
- The proposal complies with the High Rise 5.5 FAR designation in the Surrey City Centre Plan.
- The proposed density and building form are appropriate for this part of City Centre (Gateway District) and the proposal complies with the Development Permit (Form and Character) requirements in the OCP and design guidelines for City Centre Plan.
- The proposed buildings are expected to achieve an attractive architectural built form utilizing high quality, natural materials, and contemporary lines. The street interface has been designed to a high quality to achieve a positive urban experience between the proposed building and the public realm.
- The proposed development is close to the Gateway SkyTrain Station, and conforms to the goal of achieving high-rise, high density development near one of the SkyTrain stations in City Centre.

RECOMMENDATION

The Planning & Development Department recommends that:

1. A Bylaw be introduced to rezone the subject site from "Comprehensive Development Zone (CD)" (Bylaw No. 10464) to "Comprehensive Development Zone (CD)" and a date be set for Public Hearing.
2. Council authorize staff to draft Development Permit No. 7918-0388-00 generally in accordance with the attached drawings (Appendix I).
3. Council instruct staff to resolve the following issues prior to final adoption:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a road dedication plan to the satisfaction of the Approving Officer;
 - (c) final approval from TransLink;
 - (d) resolution of all urban design issues identified by City staff and Advisory Design Panel to the satisfaction of the Planning and Development Department;
 - (e) submission of a finalized landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department;
 - (f) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (g) the applicant provide a density bonus amenity contribution consistent with the Tier 2 Capital Projects CACs in support of the requested increased density, if applicable, to the satisfaction of the General Manager, Planning and Development Department;
 - (h) registration of a right-of-way for public rights-of-passage for the area between the building face and the street edges;
 - (i) registration of access easements to ensure access to the proposed shared parking and amenity facilities within the development;
 - (j) submission of an acoustical report for the units adjacent to the SkyTrain guideway and registration of a Section 219 Restrictive Covenant to ensure implementation of noise mitigation measures; and
 - (k) Registration of a Section 219 Restrictive Covenant to adequately address the City's needs with respect to public art, to the satisfaction of the General Manager Parks, Recreation and Culture and with respect to the City's Affordable Housing Strategy and Tier 1 Capital Project CACs, to the satisfaction of the General Manager, Planning & Development Services.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	CCP Designation	Existing Zone
Subject Site	Vacant lot, traversed by the SkyTrain guideway along the east corner of the site.	High Rise 5.5 FAR	CD (By-law No. 10464)
Northwest:	Vacant lot. Development Application No. 7921-0343-00 to permit three residential high-rise buildings is at Third Reading.	High Rise 5.5 FAR	CD (By-law No. 16679)
Northeast (Across City Parkway):	4-storey apartment building.	High Rise 5.5 FAR	CD (By-law No. 16334)
Southeast (Across Gateway Drive):	Vacant lot.	Mixed-Use 5.5 FAR	CD (By-law No. 10464)
Southwest (Across University Drive):	Vacant lot under Development Application No. 7919-0095-00 to permit a residential high-rise building, pre-Council.	High Rise 5.5 FAR	CD (By-law No. 10464)

Context & Background

- The subject site is located just north of the Gateway SkyTrain station and is comprised of one property at 13433 Gateway Drive, which is approximately 6,000 square metres in size.
- The property is designated Central Business District in the Official Community Plan (OCP) and High Rise 5.5 FAR in the City Centre Plan (CCP). The property is zoned Comprehensive Development (CD) Zone (CD Bylaw No. 10464) and is located in the Gateway District neighbourhood of the CCP.
- The site slopes gently down towards the northwest with an approximately 3.0 metre grade difference.

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant is proposing the following in order to permit two high-rise residential buildings on the site, along with a child care centre, and limited ground floor commercial uses:
 - Rezoning from CD Bylaw No. 10464 to a CD Zone based on the RM-135 Zone; and
 - Detailed Development Permit for Form and Character.

- The proposed gross density is 7.44 FAR (8.36 net FAR). The proposed development consists of 665 market residential units in two high-rise buildings of 36 and 40 storeys in height, along with a child care centre in one building and limited commercial uses in the other.
- Development details are provided in the following table:

Proposed	
Lot Area	
Gross Site Area:	6,007 square metres
Road Dedication:	655 square metres
Net Site Area:	5,352 square metres
Number of Lots:	1
Building Height:	West Tower: 197 metres (40 storeys) East Tower: 186 metres (36 storeys)
Floor Area Ratio (FAR):	7.44 gross (8.36 net)
Floor Area	
Residential:	44,524 square metres
Commercial:	194 square metres
Total:	44,718 square metres
Residential Units:	
1-Bedroom:	357
2-Bedroom:	286
3-Bedroom:	22
Total:	665

Referrals

Engineering:

The Engineering Department has no objection to the project subject to the completion of Engineering servicing requirements as outlined in Appendix II.

School District:

The School District has advised that there will be approximately 101 school-age children generated by this development, of which the School District has provided the following expected student enrollment.

46 Elementary students at K.B. Woodward Elementary School
33 Secondary students at Kwantlen Park Secondary School

(Appendix III)

Note that the number of school-age children is greater than the expected enrollment due to students attending private schools, home school or different school districts.

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by 2027.

Parks, Recreation & Culture:	<p>Parks accepts the removal of 17 City trees as recommended in the Arborist Report with compensation to be collected by Trees & Landscaping into the Green City Program.</p> <p>The closest active parks are Whalley Athletic Park and Tom Binnie Park and are 350 metres away, and the closest natural area is a greenbelt and is 75 metres away. Future parkland is proposed within 50 metres of the subject site as part of the Surrey City Centre Plan.</p>
Surrey Fire Department:	No concerns.
TransLink:	No concerns, however, TransLink has requested further clarification on some items as the project design is advanced.
Advisory Design Panel:	The proposal was considered at the ADP meeting on April 28, 2022 and was supported. The applicant has resolved most of the outstanding items from the ADP review as outlined in the Development Permit section of this report. Any additional revisions will be completed prior to Council's consideration of Final Adoption of the rezoning bylaw, to the satisfaction of the Planning and Development Department.

Transportation Considerations

- There is existing transit service on 108 Avenue, approximately 200 metres south of the subject site, serviced by Routes 335, 371, and 373, as well as on King George Boulevard, approximately 500 metres from the subject site, serviced by Routes 321 and N19.
- The site is located approximately 200 metres north of the Gateway SkyTrain station.
- The applicant submitted a Traffic Impact Assessment (TIA) for the site, which was reviewed by Transportation. Based on the increased traffic volumes on City Parkway generated by the subject site and the neighbouring site at 10955 City Parkway (under Development Application No. 7921-0343-00), the following improvements are required, which are to be cost-shared between the two developments:
 - 108 Avenue and City Parkway: construct left turn storage bays for north-south directions along City Parkway; and
 - Construction of a round-about at City Parkway and Gateway Drive.
- As part of the proposed rezoning, the applicant will provide the following road dedication:
 - 1.5 metres along University Drive to achieve ultimate 30.0 metre road allowance and 5.0 metre by 5.0 metre corner cut at Gateway Drive.

- 6.0 metres along the north property line for an ultimate 12-metre wide east/west green lane and 3.0 metre by 3.0 metre corner cut at University Drive. The remaining 6.0 metres for the green lane will be provided by the property to the north (10955 City Parkway) under development application No. 7921-0343-00, which is currently at Third Reading. If this subject development proceeds in advance of the project to the north, the applicant may be required to redesign or modify the interface with the lane in order to accommodate the required 6.0 metres of pavement.
- 3.0 metre by 3.0 metre corner cut at Gateway Drive and City Parkway.
- The proposed development will include one vehicle access to the underground parking, located off the new east-west lane at the north of the site.
- The proposed vehicle and bicycle parking comply with the Zoning Bylaw. See the CD Bylaw section of this report.

Sustainability Considerations

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.
- In addition, the applicant has highlighted the following additional sustainable features:
 - Heating and cooling to suites provided by 4 pipe fan coil system;
 - Buildings to be connected to City District Energy system for space and hot water heating;
 - High efficiency air cooled chiller to provide cooling;
 - High performance envelope, exterior insulated steel framed wall, and double-glazed residential windows provided;
 - Heat recovery ventilator is installed in each suite to reduce the ventilation load;
 - Improved airtightness to reduce the infiltration heat loss; and
 - LED lighting fixtures utilized to reduce lighting energy consumption.

POLICY & BYLAW CONSIDERATIONS

Regional Growth Strategy

- The proposed development complies with the General Urban designation and the Urban Centres (Surrey Metro Centre) area overlay within the Metro Vancouver Regional Growth Strategy (RGS).

Official Community Plan

Land Use Designation

- The subject site is designated Central Business District in the Official Community Plan, as noted in Figure 16 in the OCP.

- The proposed density of the subject site is 7.44 gross FAR, which is higher than the permitted density of 5.5 gross FAR. The applicant will provide Tier 2 Capital Project CACs in support of the requested increased density. Therefore, an OCP Amendment is not required.

Themes/Policies

- The proposed development is consistent with the following OCP Themes and Policies:
 - Growth Management
 - Accommodating Higher Density: Direct residential development into Surrey's City Centre at densities sufficient to encourage commercial development and transit services expansion.
 - Centres, Corridors and Neighbourhoods:
 - Dynamic City Centre: Concentrate the highest density of residential and mixed-use development within Surrey's City Centre in areas near existing and planned rapid transit stations.
 - Dynamic City Centre: Create an interconnected, short-block, finer-grained network of public streets and green lanes in Surrey's City Centre to support direct, pleasing, and safe pedestrian and cycle movements and to distribute traffic efficiently.
 - Healthy Neighbourhood: Plan and design urban neighbourhoods with sufficient densities to support a higher-quality transit system that is accessible to most residents.
 - Urban Design: Ensure a new development responds to the existing architectural character and scale of its surroundings, creating compatibility between adjacent sites and within neighbourhoods.

City Centre Plan

Land Use Designation

- The subject site is designated High Rise 5.5 FAR in the City Centre Plan (CCP).
- The proposed density of the subject development site is 7.44 gross FAR. Although the proposed density is higher than that prescribed in the City Centre Plan, it is consistent with the plan with provision of amenities (density bonus) and the proposed high-rise development will support and complement this area of the City Centre.
- The site is within a short walking distance to Gateway SkyTrain station. The proposed development conforms to the goal of achieving higher density development near public transit, particularly SkyTrain Stations.
- The proposed development will be subject to the Tier 2 Capital Plan Project CACs for proposed density greater than the Secondary Plan designation, as described in the Community Amenity Contribution section of this report.

Themes/Objectives

- The proposed development is consistent with the following guiding principles in the City Centre Plan:
 - Build Density & Mixed Use: by providing higher residential densities and a diverse mix of land uses close to transit;
 - Encourage Housing Diversity: by providing a variety of housing forms and a range of unit sizes and types;
 - Break Up the Block Size: through interconnected streets with small, urban-sized blocks; and
 - Create Vibrant Urban Spaces: with high quality architectural aesthetics and amenities such as plazas and street furniture to encourage people to interact with the public realm.

CD Bylaw

- The applicant proposes to rezone the subject site from Comprehensive Development (CD) Zone (CD Bylaw No. 10464) to Comprehensive Development (CD) Zone.
- The applicant is proposing a "Comprehensive Development Zone (CD)" to accommodate the proposed high-rise development on the subject site. The proposed CD Bylaw for the proposed development site identifies the uses, densities and setbacks proposed. The CD Bylaw will have provisions based on the "Multiple Residential 135 Zone (RM-135)" and the "Community Commercial Zone (C-8)" to accommodate the proposed commercial retail units in the podium of the West Tower.
- A comparison of the density, lot coverage, setbacks, building height and permitted uses in the RM-135 Zone, C-8 Zone, and the proposed CD Bylaw is illustrated in the following table:

Zoning	RM-135 Zone (Part 25)	C-8 Zone (Part 36)	Proposed CD Zone
Floor Area Ratio:	2.5	0.8	8.4
Lot Coverage:	33%	50%	45%
Yards and Setbacks	50% of the height of the building	7.5 metres	North: 4.5 metres South: 4.5 metres East: 4.5 metres West: 4.5 metres
Principal Building Height:	N/A	12 metres	197 metres (40 storeys)
Permitted Uses:	<ul style="list-style-type: none"> • Multiple unit residential buildings and ground-oriented multiple unit residential buildings • Accessory Uses: <ul style="list-style-type: none"> ○ Child care centres 	<ul style="list-style-type: none"> • Retail stores • Personal service uses • General service uses • Beverage container return centres • Eating establishments • Neighbourhood pubs • Liquor store • Office uses • Parking facilities • Automotive service uses • Indoor recreational facilities • Entertainment uses • Assembly halls • Community services • Child care centres • Cultural uses • Accessory Uses: <ul style="list-style-type: none"> ○ Caretaker unit 	<ul style="list-style-type: none"> • Multiple unit residential buildings and ground-oriented multiple unit residential buildings • Child care centres • Accessory Uses: <ul style="list-style-type: none"> ○ Retail stores ○ Personal service uses ○ General service uses ○ Eating establishments ○ Neighbourhood pubs ○ Liquor store ○ Office uses ○ Indoor recreational facilities ○ Community services ○ Cultural uses
Amenity Space			
Indoor Amenity:	1,407 square metres		The proposed 1,989 m ² meets the Zoning Bylaw requirement.
Outdoor Amenity:	1,995 square metres		The proposed 2,480 m ² meets the Zoning Bylaw requirement.

Parking (Part 5)	Required	Proposed
Number of Stalls		
Commercial:	6	6
Residential:	599	604
Residential Visitor:	67	67
Child Care Centre:	20	20
Total:	692	697
Bicycle Spaces		
Residential Secure Parking:	798	844
Residential Visitor:	12	20

- The proposed CD Bylaw will incorporate similar uses as the RM-135 Zone, along with selected commercial uses from the C-8 Zone.
- The proposed net floor area ratio (FAR) of the development will be 8.4 (7.44 FAR gross), and lot coverage is proposed to be 45%, which exceeds the maximum 2.5 FAR and 33% lot coverage permitted under the RM-135 Zone. The proposed density complies with the High Rise 5.5 FAR designation in the Surrey City Centre Plan with Tier 2 density bonus. The proposed lot coverage is appropriate for a high-rise development with 4- to 5-storey podium.
- The RM-135 Zone requires the setbacks to be 7.5 metres from all lot lines or a minimum of 50% of the building height, whichever is greater. The applicant is proposing reductions for all setbacks in the CD Bylaw. The reduction in building setbacks is supportable as they allow for more active engagement of the streets, which is desirable for the City Centre area and consistent with the City Centre Plan design guidelines.

Capital Projects Community Amenity Contributions (CACs)

- On December 16, 2019, Council approved the City's Community Amenity Contribution and Density Bonus Program Update (Corporate Report No. R224; 2019). The intent of that report was to introduce a new City-wide Community Amenity Contribution (CAC) and updated Density Bonus Policy to offset the impacts of growth from development and to provide additional funding for community capital projects identified in the City's Annual Five-Year Capital Financial Plan.
- The proposed development will be subject to the Tier 1 Capital Plan Project CACs. The contribution will be payable at the rate applicable at the time of Building Permit issuance. The current rate is \$2,000 per unit.
- The proposed development will be subject to the Tier 2 Capital Plan Project CACs for proposed density greater than the City Centre Plan designation. The contribution will be payable at the rate applicable at the time of Rezoning Final Adoption. The current rate is \$40 per square foot.

Affordable Housing Strategy

- On April 9, 2018, Council approved the City's Affordable Housing Strategy (Corporate Report No. Ro66; 2018) requiring that all new rezoning applications for residential development contribute \$1,000 per unit to support the development of new affordable housing. The funds collected through the Affordable Housing Contribution will be used to purchase land for new affordable rental housing projects.
- The applicant will be required to register a Section 219 Restrictive Covenant to address the City's needs with respect to the City's Affordable Housing Strategy.

Public Art Policy

- The applicant will be required to provide public art, or register a Restrictive Covenant agreeing to provide cash-in-lieu, at a rate of 0.5% of construction value, to adequately address the City's needs with respect to public art, in accordance with the City's Public Art Policy requirements. The applicant will be required to resolve this requirement prior to consideration of Final Adoption.

PUBLIC ENGAGEMENT

- Pre-notification letters were sent on September 22, 2021, and the Development Proposal Signs were installed on October 5, 2021. Staff received five responses from neighbouring residents (*staff comments in italics*):
 - One respondent asked to be put in contact with the developer to discuss opportunities relating to the proposed Child Care Centre on site.
(Staff provided the contact information for the agent on file and advised he would be the best person to contact in this regard.)
 - One resident had no concerns about the proposed development and was looking for more information about the proposal and developments in City Centre in general, while another resident contacted staff wishing for further information about the proposed development as they were interested in moving to the Gateway area.
(Staff provided the requested information and no further follow-up was required.)
 - A resident inquired about whether the proposed development would include any affordable, subsidized, or market rentals, or rent-to-own units. They expressed concerns about a lack of affordable and rental housing in the neighbourhood.
(Staff confirmed that the proposal contained only market condominiums and no rental component. As the site is currently vacant, there is currently no policy within the City to require the applicant to construct rental units. The applicant will be required to pay a per unit contribution into the City's Affordable Housing Fund, which will help the City to pay for future affordable housing projects.)
 - Opposition to the proposal was raised by one resident who lives adjacent to the subject site due to concerns that the proposed high-rise development would block sunlight to their unit. This resident was also concerned about the high density proposed and stated they would prefer to see a low-rise development on the site.

(The subject property is designated Central Business District in the OCP and High Rise 5.5 FAR in the City Centre Plan. The proposed high-rise form and density is in line with the OCP policy to concentrate the highest density of residential and mixed-use development within Surrey's City Centre in areas near existing and planned rapid transit stations.)

DEVELOPMENT PERMITS

Form and Character Development Permit Requirement

- The proposed development is subject to a Development Permit for Form and Character and is also subject to the urban design guidelines in the Surrey City Centre Plan
- The proposed development generally complies with the Form and Character Development Permit guidelines in the OCP and the design guidelines in the Surrey City Centre Plan.
- The proposed development is comprised of two high-rise residential towers situated on a 4- to 5-storey podium, consisting of 665 residential units, a child care centre, and ground-floor retail in the West Tower.
- The towers and podium are designed to respond to the requirements for appropriate form and expression, tower separation, SkyTrain track proximity, solar access, livability, and street walls.
- The tower facades facing the interior courtyard will step to maximize views and privacy and create an engaging architecture. The black and white stepping ribbons on the balconies will complement the tower design and assist the towers in fitting with the emerging context of the neighbouring buildings in the city centre.
- The podium provides a consistent street wall with good scale on the frontages along University Drive and the new green lane, with 2-storey townhouses provided at the base of the west tower, and commercial-retail units further south at the corner of University Drive and Gateway Drive.
- The proposed child care centre will occupy three levels within the podium at the base of the east tower, with entry from the City Parkway cul-de-sac, and open to multiple sides for natural light, access, and views with outdoor amenity space fronting onto the interior courtyard.
- There are multiple indoor amenity spaces at grade and above grade with direct connection to the outdoor amenities. In addition to the generous outdoor amenity space at grade, additional amenity space is provided on the rooftop of the podium at Levels 4 and 5.

Landscaping

- The proposed landscaping concept for the site includes four main focal areas: an at grade courtyard between the two towers, a corner feature plaza next to the commercial unit, the Level 4 amenity area, and the Level 5 amenity area.
- The landscaping is proposed to consist of a variety of trees, shrubs, grasses, groundcovers, ferns, annuals, and perennials, as well as hardscaping, site furnishings, lighting, and fencing.

Indoor Amenity

- The required indoor amenity is 1,407 square metres. The applicant is proposing to provide 1,989 square metres of indoor amenity on site, which exceeds the Zoning Bylaw requirement.
- The indoor amenity calculation included 998 square metres of child care space as permitted under the Zoning Bylaw. The child care centre has an additional 348 square metres of semi-outdoor space on Level 2 of the podium. At ground level, the child care centre also has an outdoor play area as is required by Fraser Health.
- The remaining indoor amenity space is primarily located on the ground floor, with several lounge spaces opening up onto the adjacent outdoor amenity courtyard. In addition, a library is provided on Level 3, and additional indoor amenity spaces on Levels 4 and 5, which open out onto the adjacent rooftop amenity areas.

Outdoor Amenity

- The required outdoor amenity is 1,995 square metres. The applicant is proposing to provide 2,480 square metres of outdoor amenity, which exceeds the Zoning Bylaw requirement.
- At grade, a large courtyard is provided between the two towers, which will offer two outdoor kitchen and dining areas, a children's play area, and many areas with benches or amphitheater seating.
- At the southeast corner of the site, a corner feature plaza with seating will be provided that will extend up to the courtyard area, providing additional seating opportunities for residents or passersby.
- The Level 4 rooftop amenity will consist of a dining area with barbeque, tables and chairs, and lounge seating, as well as a small lawn area, and other areas with seating adjacent to the indoor amenity space.
- The Level 5 rooftop amenity will contain many of the same elements at the Level 4 rooftop amenity, although will be somewhat larger, allowing for several distinct seating areas.

Outstanding Items

- The applicant is required to resolve all outstanding urban design and landscaping issues and Advisory Design Panel comments, as follows:
 - Design development to improve public realm interfaces and landscape concept, including the courtyard, pavement patterns, fences, walkways, under guideway, and the public plaza.
 - Further design development of the daycare entry and canopy.
 - Design development and refinement of the architectural features and materials, particularly the white ribbon patterns.

TREES

- Jeff Ross, ISA Certified Arborist of Mike Fadum and Associates Ltd., prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Cappadocian Maple	3	3	0
Caucasian Lime Linden	8	4	4
Cherry	1	1	0
Norway Maple	7	3	4
Red Maple	1	1	0
Sweet Gum	4	3	1
Tulip Tree	7	4	3
Coniferous Trees			
Douglas Fir	1	1	0
Western Red Cedar	1	1	0
Total (excluding Alder and Cottonwood Trees)	33	21	12
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		64	
Total Retained and Replacement Trees		76	
Contribution to the Green City Program		N/A	

- The Arborist Assessment states that there are a total of 33 mature trees on the site, excluding Alder and Cottonwood trees. No trees on the site are Alder and Cottonwood trees. It was determined that 12 trees can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, road dedication and proposed lot grading.

- For those trees that cannot be retained, the applicant will be required to plant trees on a 2 to 1 replacement ratio. This will require a total of 42 replacement trees on the site. The applicant is proposing 64 replacement trees, exceeding City requirements.
- In addition to the replacement trees, boulevard street trees will be planted on University Drive and Gateway Drive. This will be determined by the Engineering Department during the servicing design review process.
- The new trees on the site will consist of a variety of trees including Bloodgood Japanese Maple, Kobus Magnolia, Vanderwolf's Pyramid Pine, Oregon White Oak, Red Kousa Dogwood, Shore Pine, and Japanese Pink Snowbell Dwarf.
- In summary, a total of 76 trees are proposed to be retained or replaced on the site with no contribution required to the Green City Program.

CITY ENERGY

- The subject site is located within Service Area A, as defined in the "City Centre District Energy System By-law" (see Appendix VIII for location). The District Energy System consists of three primary components:
 - community energy centres, City-operated facilities that generate thermal energy for distribution through a piped hot water network;
 - distribution piping that links the community energy centres with buildings connected to the system; and
 - City-owned energy transfer stations (ETS) located within the building connected to the system. The ETS transfers heat energy from the distribution system to the building's mechanical system and is used to meter the amount of energy used.
- All new developments within Service Area A with a build-out density equal to or greater than a floor area ratio (FAR) of 1.0 will be required to provide hydronic thermal energy systems in support of the City's District Energy (DE) system including domestic hot water, make-up air units and in-suite hydronic space heating. The City is committed to having the DE system operational within the timeframe of this project. Therefore, the subject application will be required to connect to the City's DE system prior to occupancy.
- In order to avoid conflicts between the District Energy System and other utilities, the location of the ETS and related service connections are confirmed by Engineering and the applicant at the servicing agreement stage. The Engineering Department also requires the applicant to register a statutory right-of-way and Section 219 Restrictive Covenant over the subject site for the following purposes:
 - City access to, and maintenance and operation of, the ETS within the building and any infrastructure between the building and the property line; and
 - to prevent conflicts with other utilities.

- Prior to the issuance of a building permit, the Engineering Department will confirm that the applicant has met the requirements of the "City Centre District Energy System By-law".

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Site Plan, Building Elevations, Landscape Plans and Perspective
Appendix II.	Engineering Summary
Appendix III.	School District Comments
Appendix IV.	Summary of Tree Survey and Tree Preservation
Appendix V.	City Centre Plan
Appendix VI.	Aerial Photo
Appendix VII.	ADP Comments and Response
Appendix VIII.	District Energy Map

approved by Ron Gill

Jeff Arason
Acting General Manager
Planning and Development

CB/cm

13433 GATEWAY DRIVE
SURREY, BC

June 06 , 2022

City of Surrey File Number :18-0388



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THORSON CONSULTING | CERTIFIED
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V7G 1P4
604.929.8520
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SITE CONTEXT



Site :
13433 Gateway

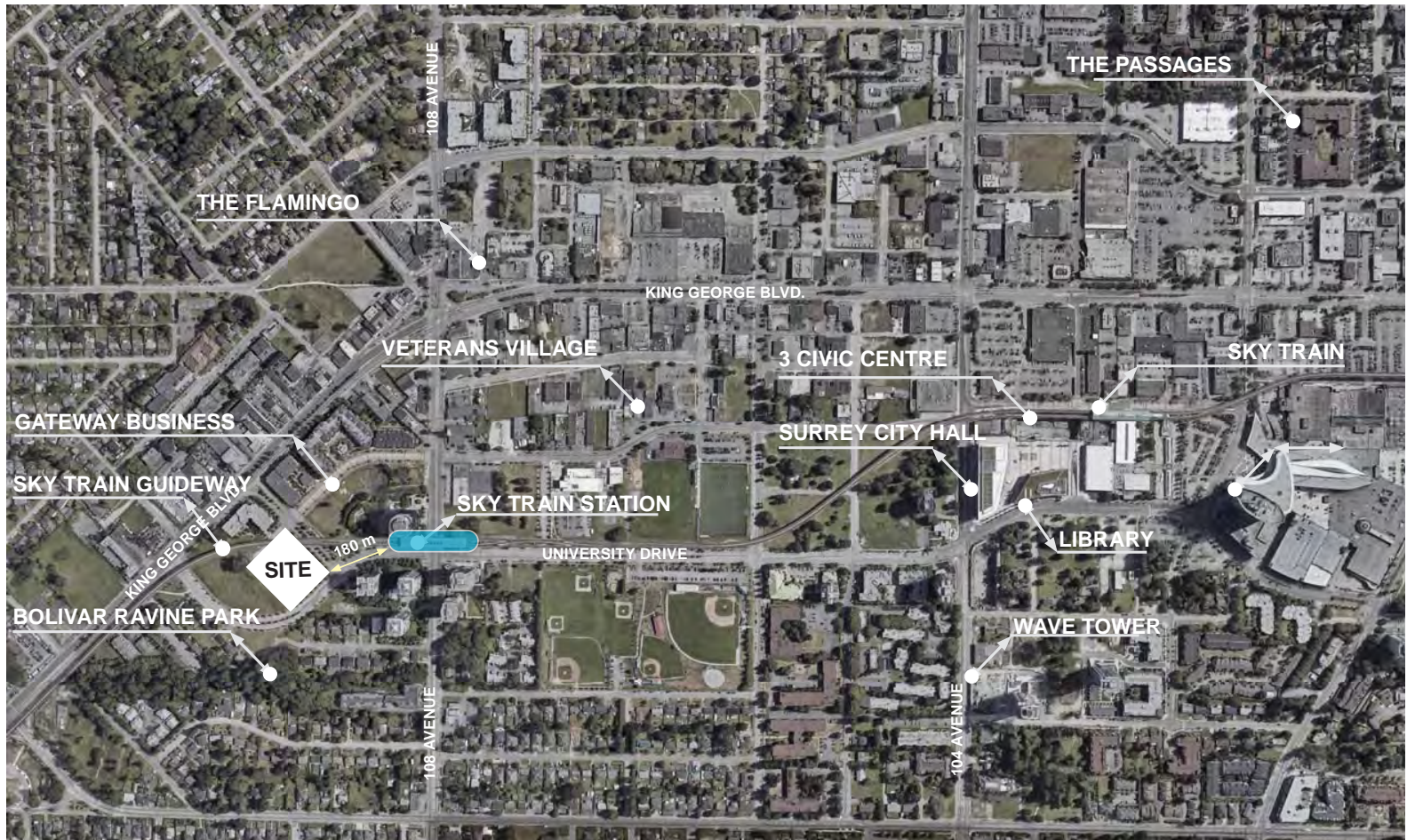
Site Area : (before dedication)
6006.98 sqm
(64658.6 sqf)

Site Area :
4702.16 sqm
(50613.6 sqf)

Zone :
CD

District :
Surrey City Centre

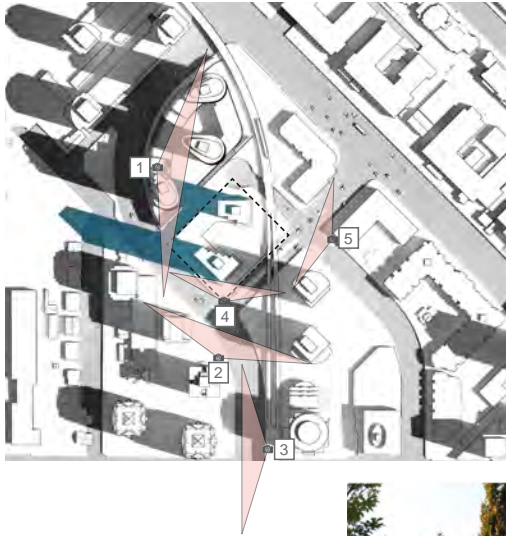
Current Use:
Empty Lot



OVERALL VIEW CONTEXT



SITE PANORAMA



STREETSCAPES



GATEWAY DRIVE - LOOKING NORTH



GATEWAY DRIVE - LOOKING NORTH (CONTINUED)



GATEWAY DRIVE - LOOKING SOUTH



UNIVERSITY DRIVE - LOOKING WEST



CITY PARKWAY - LOOKING EAST

APPLICABLE GUIDELINES



SURREY CITY CENTRE PLAN (2017)

The Surrey City Centre Plan which was adopted by Council in January 2017, provides the framework for guiding a development pattern and growth in Surrey's City Centre, which is generally bounded by 112 Avenue to the North, 140 Avenue to east, Surrey Memorial Hospital to the South and 132 Avenue to the west.

PERMITTED USES:

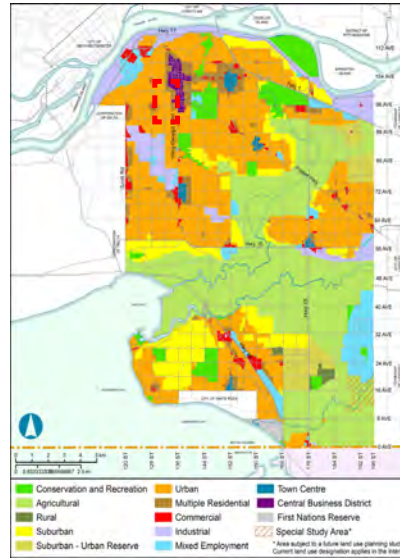
The proposed development is looking to continue the higher density development of the Gateway District leading to the Bolivar Ravine Park and the surrounding residential on the other side of the creek.

The property is currently zoned RM-135, intended to accommodate and regulate development of medium to high density, high rise, multiple unit residential buildings and related amenity spaces. Permitted use is residential, however Child Care uses are also encouraged. According to zoning by-law, half of the FAR required for indoor amenity space can be devoted to a child care centre.

Requirements for specific ground floor uses are:

- Developments should provide a 2 or 3 storey townhouse base at podium of a high rise building
- Developments should provide publicly accessible outdoor amenity space such as mini plazas as part of the amenity space requirement of zoning by-law.

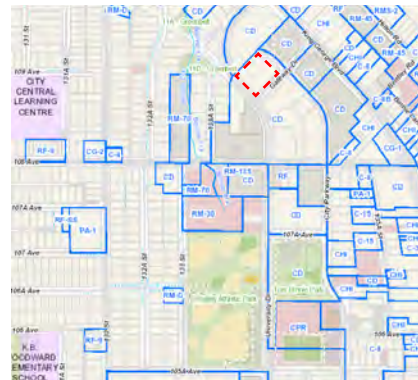
OFFICIAL COMMUNITY PLAN



CITY CENTRE PLAN



ZONING MAP



The proposal considers the following Statutory Guidelines, and other information kindly provided by Surrey City:

- Surrey City Centre - Part A + B - Jan 2017
- Surrey Zoning By-law 12000
- Corporate report 2017 R176: CCSD-5A/8A/9A
- Sketch-Up Model, with updated Building Gradient

The design team also acknowledges advice offered via email and through meetings with the Surrey City Planners.

Information regarding plot setbacks, vehicular access and supporting documents required have been considered within our proposal.

CONTEXT OVERVIEW

GATEWAY DISTRICT

The Surrey City Centre Plan (the Plan) divides the City Centre Area into 11 Districts and Neighbourhoods, with mixed use districts centered from North to South along King George Boulevard, and residential neighbourhoods located along the east and west edges of the City Centre Area.

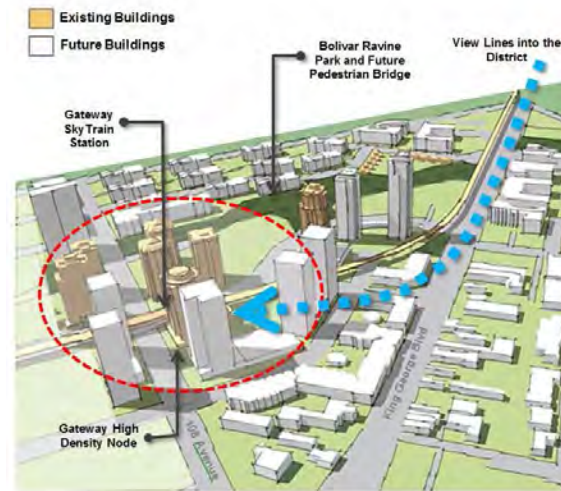
The project site is located in the Gateway District Area, whose centre is formed by Bolivar Ravine Park which runs north-south through the western portion of the district providing a unique natural amenity for the residential development straddling each side of the river bank. The eastern corridor of residential will be connected to the mixed use node through a large pedestrian bridge that runs over the creek. Pocket parks, on either side of the bridge, will include viewing areas, seating, public art and other amenities.

Views into, and out from, the district are a key feature of this district. Its location and higher elevation will provide opportunities high rise developments to have mountain and river vistas looking northward from the district.

Largely a single family residential neighbourhood in the past, this area started seeing higher density redevelopment with the introduction of the skytrain in 1994 and the construction of the Gateway Station Tower project.

VIEW LINES INTO THE PLAN

Four to six storey apartments along King George will create open views to towers at top of the hill, and emphasize the office node. This will create an open and clear view-scape toward the high density node at Gateway Skytrain station and the landmark tower on the south east corner of King George Boulevard and 108 Avenue.



- Gateway Parks and Open Spaces
- Park
 - Park - Natural Area
 - Plaza
 - Creek
 - Multi-use Pathway
 - Separated Cycle-Track
1. Bolivar Ravine Park
 2. Bolivar Creek & Ravine
 3. Station Plaza
 4. Surrey (BC) Parkway
 5. Port Mann Greenway

BOLIVAR RAVINE PARK

One of the most interesting features of Surrey City Centre is the existence of fish bearing streams, including Bolivar and Quibble Creeks. Bolivar Ravine Park is located in the Northwest corner of City Centre. The park supports a significant tree canopy which provides both a pleasant setting for surrounding residents, as well as a distinctive view from King George Boulevard and the SkyTrain. Opportunities for pathways, centered on a new pedestrian bridge over the ravine, will provide linkages between the surrounding neighbourhood and the Gateway SkyTrain Station, as well as opportunities for natural area viewing. The bridge will also incorporate opportunities for public art, as well as natural creek viewing areas.

SURREY (BC) PARKWAY

The Surrey (BC) Parkway is a 26-kilometre, multi-use path that connects Surrey City Centre with New Westminster, Burnaby and Vancouver. The Parkway also provides important local pedestrian and bicycle connections within City Centre and adjacent neighbourhoods. The BC Parkway will be a fully illuminated multi-use pathway.

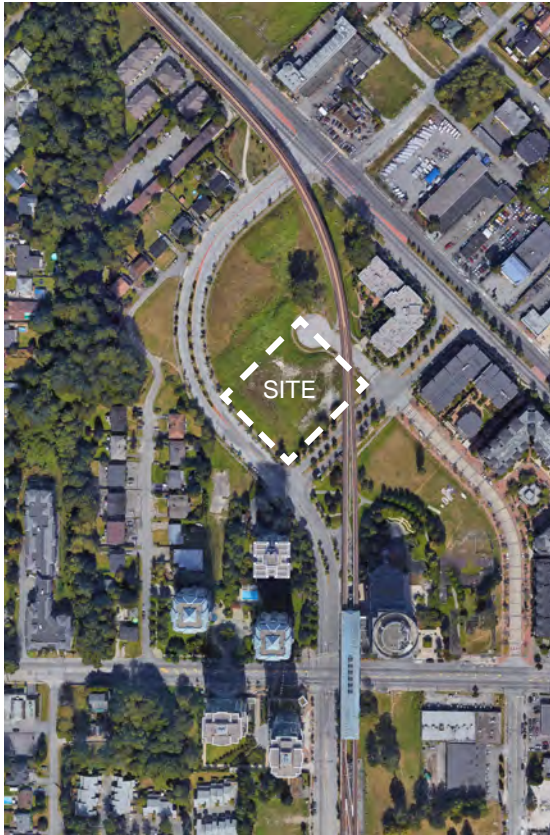
STATION PLAZA

The Station Plaza is a large publically accessible open space that was developed with the Gateway Tower, adjacent to the SkyTrain station. The Plaza features a range of seating areas, greenspaces and water features ideal for enjoying lunch or taking a quick break from the office. Station Plaza, which is now a key component of the local open space network, is an excellent example of a publically accessible open space provided through private development.



SITE OVERVIEW

SITE LOCATION



EXISTING CONTEXT

The project site is located in the middle of the mixed-use Gateway District of Surrey City Centre.

It is bounded by University Drive to the East, Gateway Drive to the South, City Parkway to the West, and 10955 University Drive to the North, with a SkyTrain guideway that cuts the site diagonally at the South-East corner.

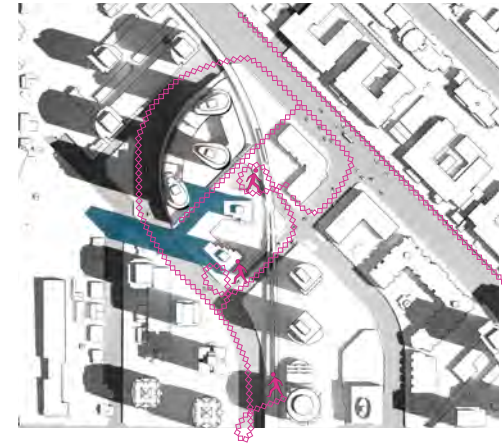
The site is currently an under-utilized, vacant lot.

MOBILITY AND ACCESS

The site has excellent access by way of bike routes; including a cycle track along City Parkway which is physically separated from moving traffic and pedestrians, and a bike route along Gateway Drive, all of which connect to the City of Surrey's greater cycling network.

The site is also highly accessible by transit with Expo Line Stations, Surrey Gateway within 200m (2 min walking distance) of the site. In addition, the proposed development is located ~1.0 km from the SkyTrain Surrey Central Station where LRT service will run to both Newton Exchange and Guildford Exchange

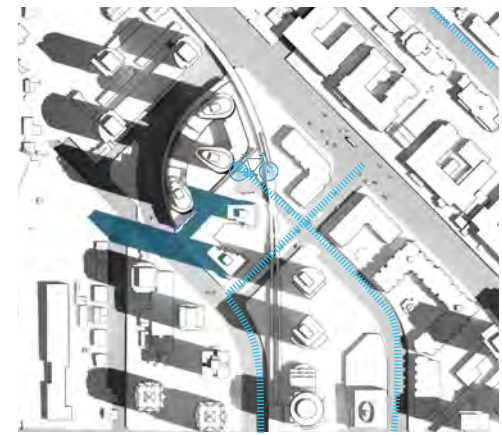
Access to transit is further enhanced with bus routes 335, C71 and C73 providing frequent services to Surrey Central Station along University Drive.



PEDESTRIAN FLOW



CAR ACCESS



BIKE ROUTE

FIREFIGHTER ACCESS SYMBOLS LEGEND

- CLASS 1 STANDPIPE 60mm HOSE CONNECTION
- SPRINKLER STRAK
- ENCLOSURE IN 2nd SHAFT
- NON-EXPOSED STRAK
- EXPOSED WITHIN EXIT STAIR
- FIRE DEPARTMENT CONNECTION
- CENTRAL ALARM CONTROL FACILITY
- CITY FIRE HYDRANT
- FIREFIGHTER ACCESS POINT
- FIREFIGHTER'S ELEVATOR
- EXTERIOR STROBE LIGHT CONNECTED TO IN-SUITE SMOKE ALARM

SHADING LEGEND

- FIREFIGHTER ACCESS WALKWAY TO PRINCIPAL ENTRANCE
- FIRE TRUCK ACCESS ROUTE



This project will be constructed in 2 phases

PHASE 1	PHASE 2
East Tower	West Tower
East Podium	West Podium
Daycare	West Townhouses
Entire Parkade	West CRU

There will be 3 firefighter response points, 4 fire department connections, 3 monitoring signal addresses, 2 CACFs (East Tower & West Tower) Exterior strobe lights at each West & North Townhouse entry door which are actuated by in-suite smoke alarms.

The East Tower CACF will have fan controls and voice controls for the East Tower, East Podium, Daycare and the entire parkade.

The West Tower CACF will have fan controls and voice controls for the West Tower, West Podium and West Townhouses.

Each CACF will have 2 all-call buttons:
 One for the portion of the project associated with the firefighter response point, and
 One for the entire project.

CLIENT: 1127073 BC LTD.

COPYRIGHT:

NO.	DATE	APPR.	DESCRIPTION
01	2021-06-28		REVISION SUBMISSION
02	2021-12-03		PRIOR TO RESPONSE
03			
04			
05			

PROJECTS:

NO.	DATE	APPR.	DESCRIPTION

PROJECT TITLE: 13433 Gateway Drive

PROJECT NO.: 113999

DRAWN BY: JC

CHECKED BY: JC

SCALE: 1:16

DATE: 2020-05-13

SHEET TITLE: LEVEL 01 PL

FIRE ACCESS PLAN

SHEET NUMBER: 107

A1.05

THORSON CONSULTING CERTIFIED PROFESSIONALS

769 Roslyn Boulevard
 North Vancouver, BC V70 1Y4
 Barry Thorson - 604.530.8933
 1000-68

IBI GROUP ARCHITECTS (CANADA) INC.
 700 - 1201 West Parlier Street
 Vancouver, BC V6E 0E1 Canada
 Tel: 604 683 8787 Fax: 604 683 9412
 ibigroup.com

DESIGN RATIONALE

PUBLIC REALM

The proposed development will include two tall slender towers as well as a podium, in a park setting, which will provide spaces for living, moving, community interaction and play.

CYCLING AND PEDESTRIAN PATH

Cutting diagonally at the corner of the project site, a public walkway is existing. The proposed development intends to respond and formalize this path, and create landscaping and pedestrian path beneath the SkyTrain guideway.

Drawing inspiration from the Semiahmoo Trail Mosaic art installations, the landscaping elements will include a rock garden. With little to no maintenance required as well as its suitability for shaded areas, a rock garden is an ideal means of enhancing the pedestrian experience in this area.

The overall landscape approach will be responsive to the neighbourhood context, where mature trees and prominent landscape elements will be retained wherever possible. Landscaping features will be used to highlight entry ways, pedestrian circulation and define private outdoor spaces for dwellings at grade.

Lighting along the path, high visibility design elements, ground oriented units and the strategic location of amenity areas will be used to enhance pedestrian and cyclist comfort along the path.

CHILD PLAY

As the proposed development will include a range of unit typologies, including family-oriented units and a daycare, spaces for both unstructured and more formal grounds for child play have been incorporated in to the proposed development.

PRIVATE OUTDOOR SPACES

Balconies have been strategically incorporated into the design to reinforce the architectural and urban design objectives of the project while ensuring private open space are provided to all residents.

Landscaping that identifies public, private and semi-private spaces without erecting high walls, fences or hedges will be used.

BUILDING HEIGHT AND FORM

The proposed development is comprised of a 40-storey tower with a 4-storey podium (West Tower), 35-storey tower with a 4-storey podium and a Day care/ Amenity (East Tower). The heights proposed for this site are greater than the recommended heights set out in the Surrey City Centre Plan, which anticipates heights of 20 storeys (or 60m) on this site.

The Building Heights Concept Map (Map 21 of Surrey City Centre Plan, 2017), supports the City of Surrey's skyline vision by clustering the tallest buildings in the City Centre around Surrey Central, King George and Gateway SkyTrain Stations.

As the City of Surrey continues to develop, it is anticipated that the Surrey Central and King George Stations will read as one node on the skyline. This concept is intended to result in a skyline with two peaks linked by valleys of lower buildings.

With the recently proposed 46 storey (140 m) Flamingo Block exceeding the anticipated height of 110 m, the anticipated peaks and valleys of the skyline have shifted. In order to maintain the existing skyline vision, albeit in a taller form, a review of the existing heights (peaks and valleys) was undertaken. The height variation line of the City Centre Plan, was projected to reflect the new peak of the City of Surrey's Skyline, the Flamingo Block-Phase 3. The Interpolated Height Variation Line illustrates that the heights proposed for this site are well suited to align with the City of Surrey's Skyline vision.

Further to this, the SkyTrain guideway that cuts the site makes development on this site challenging. Creating open spaces and ensuring the space below the guideway does not become an alley or dark space has been carefully considered in the design development for this site. Taller, slender towers minimize congestion on the ground floor, creating safe spaces for child play, community interaction, public art and greater pedestrian and cycling connectivity to surrounding local areas.

BUILDING SETBACKS

Generous setbacks have been proposed on all sides of proposed development to sensitively transition from adjacent recreational uses as well as existing and potential future residential uses, and provide adequate building separation and privacy.

A 10 m SRW will be provided for the SkyTrain Guideway.

6 m dedication from north property line will provide half of the future 12 m lane between this development and future development to the north.

1.5 m dedication along University Drive has been provided for bike access.

ORIENTATION

The principle entrance for each of the buildings will face the street, oriented to reflect the existing and predominant pattern of the street. Secondary entrances to townhouse units at grade as well as amenity spaces including day care will be facing the streets to interact with pedestrian and cycling paths. This will encourage interaction between neighbours.

ENTRANCES

The buildings' entrances will be used to establish a desirable and strong residential identity for the proposed development, contributing positively to the local streetscapes and integrating well into the overall building facade design.

Individual access will be provided to ground floor townhouse units to animate the street edge and create a rhythm of openings along the street. While this will create more than one entrance at the street level, the main entrance into each of the buildings will be clearly distinguishable through its architectural design and treatment. Access to the main entrance for each of the buildings will be provided by slope to grade on University Drive & Gateway Drive for the West Tower and on City Parkway for the East Tower.

PARKING

Underground parking will be shared for both buildings, and accessible from future north lane between existing cul-de-saq and University Drive.

Access to parking will be provided off the newly proposed lane connecting University Drive and cul-de-saq to reduce the load on Gateway drive and City Parway

ARCHITECTURE

A unified architectural concept ties the two tower forms together while creating a variety in the massing and articulation. Sun shading, screening devices and vertical panels/slates will be strategically positioned to serve both functional and aesthetic purposes. The building materials will be comprised mainly of clear, low-e, double glazed IGU and light-toned rain screen cladding material (e.g. metal panel or similar).

HEIGHT RATIONALE

The highest mixed-use densities are planned near the three Skytrain Station nodes providing a mix of residential, employment and retail uses in a highly walkable environment that is transit-oriented. Surrey Central forms the highest density and largest mixed use node in the plan. A secondary high density mixed-use area surrounds the King George Skytrain Station at the south end of the plan, and a smaller third, high density mixed-use node is located at the north end around the Gateway Skytrain Station.

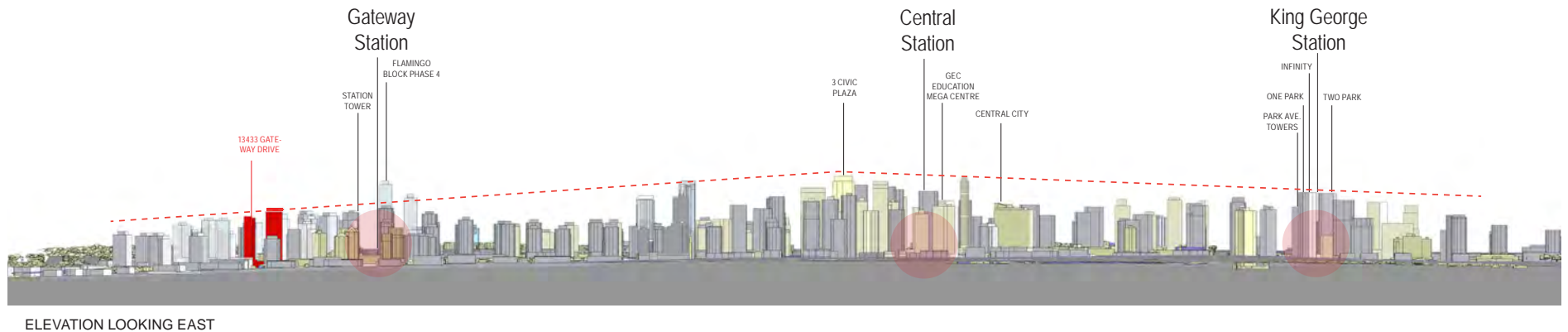
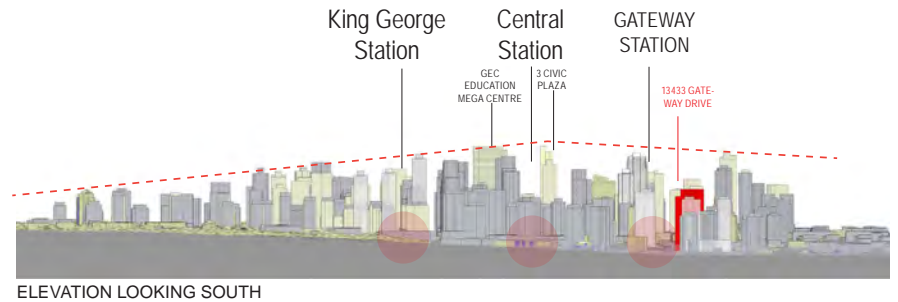
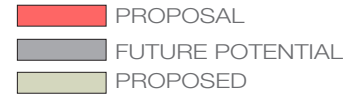
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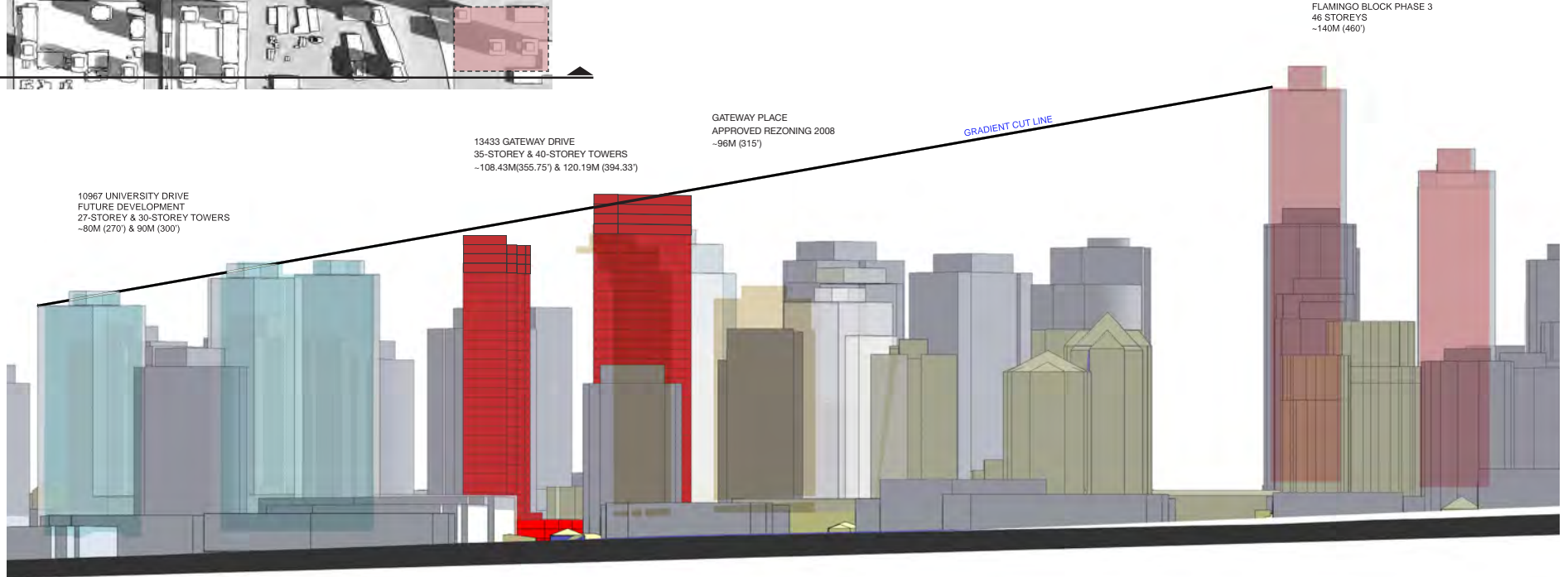
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RECOMMENDED HEIGHT STUDY | EAST - WEST



MASSING STUDY

SITE COVERAGE

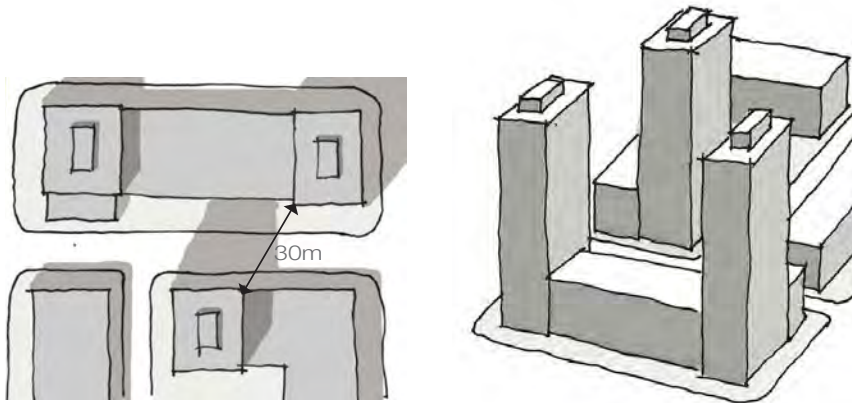
Factors affecting site coverage are:

- Integrating high density where the site is located near Gateway skytrain station
- Allowing sun to enter the ground outdoor amenity with lower podiums on South
- Locating the daycare at ground level for easy and secure access
- Creating a high quality and attractive architectural built form
- Respecting the height gradient identified for this City Centre node

TOWER SEPARATION

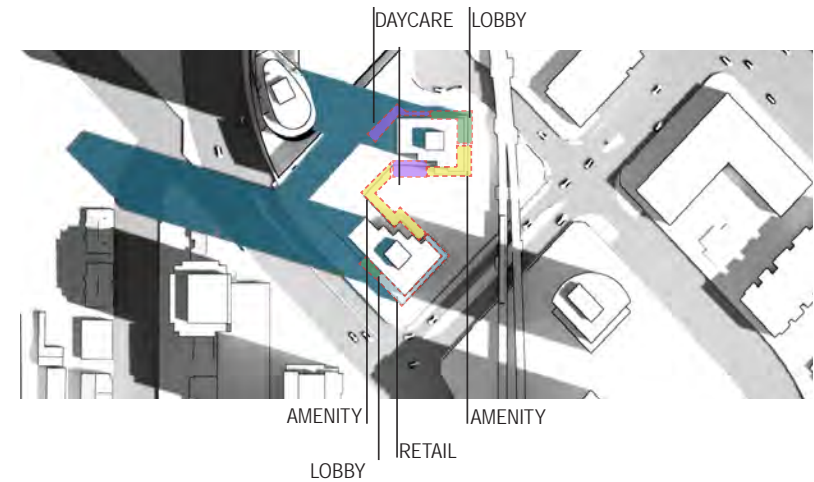
Located towers to allow views through from surrounding sites and from within the site for multi-tower sites.

Tower forms have been sculpted to reduce shadowing and maximize privacy and views. Towers spaced to increase privacy between residential towers, be slim in profile to allow views through and be oriented to minimize shadow impacts.



UNDESIRABLE LOCATION FOR UNITS

The design intent is to minimize the number of units which are less desirable to live because of their close proximity to the sky train guideways. Amenities and lobbies of both buildings are located on the first floor facing the sky train and are extended to the second floor. Townhouses are on the West and North side of the building to have more privacy and quietness from Skytrain. Day Care is also located in the East podium in order to keep the residential uses away from the tracks.



PRECEDENT PROJECTS

WALL PROJECTION OF ROOF



TREASURE GARDEN
ANTONIO CITTERIO PATRICIA VEIL
TAIWAN

STEPPED FLOOR PLAN



LORENTZ LEIDEN RESIDENTIAL COMPLEX
NEUTELINGS RIEDIJK ARCHITECTS
THE NETHERLAND

PODIUM



PRESNYA CITY RESIDENTIAL COMPLEX
SERGEI TCHOBAN+SPEECH
MOSCOW ,RUSSIA.

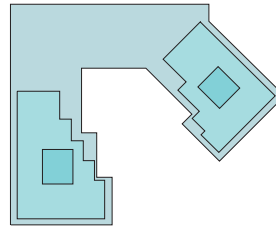


THIND TOWERS
IBI GROUP
SURREY

FLOOR AREA COMPARISON

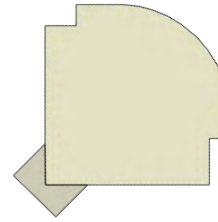


1. 13433 GATEWAY



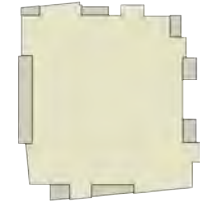
LOCATION: 13433 Gateway Dr.
ZONING: CD
 OCP: Central Business District CITY CENTRE PLAN
 DESIGNATION: Residential Mid to High Rise 5.5 FAR
 Floor plate area East: 8425 SF
 Floor plate area West: 12558 SF

2. GATEWAY BUSINESS PARK



LOCATION: City Parkway & Gateway Drive
ZONING: CD
 OCP DESIGNATION: Central Business District CITY CENTRE PLAN
 DESIGNATION: Residential Mid to High Rise 5.5 FAR
 Floor plate area: 7000 SF

3. THE FLAMINGO BLOCK



LOCATION: 13665 107A Ave-10740&10768 King George Boulevard
ZONING: C-8, C-8A and C-15
 OCP DESIGNATION: Central Business District CITY CENTRE PLAN
 DESIGNATION: Mixed-Use High Rise 5.5 FAR
 Floor plate area: 8000 SF

4. VETERANS VILLAGE



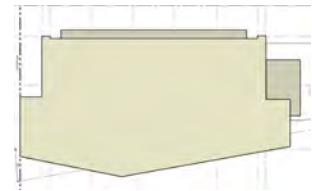
LOCATION: 10630 City Parkway-10637&10647 135A St-13525 106 Ave.
ZONING: C-8
 OCP DESIGNATION: Central Business District CITY CENTRE PLAN
 DESIGNATION: Residential Mid to High Rise 3.5 FAR
 Floor plate area: 8573 SF

5. WAVE TOWER



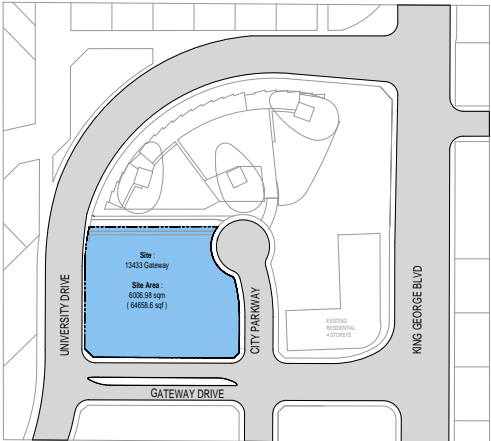
LOCATION: 13286 and 13300 - 104 Avenue
ZONING: from RF to CD (based on RMC-150)
 OCP DESIGNATION: Multiple Residential
 DESIGNATION: 5.28 FAR
 Floor plate area: 6446 SF

6. 3 CIVIC PLAZA

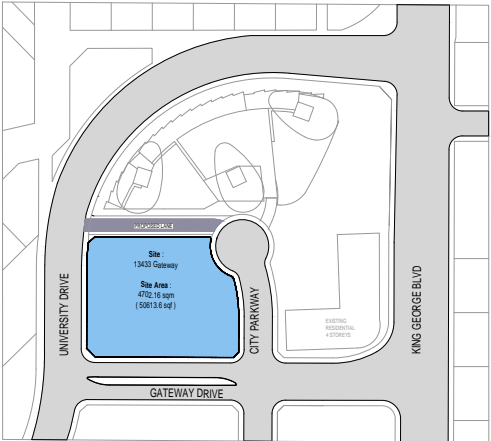


LOCATION: 10347 & 10341 City Parkway & 13450 104th Avenue
ZONING: CD
 OCP DESIGNATION: Revisions to a Proposed Mixed-Use Project
 DESIGNATION: Mixed-Use High Rise 5.5 FAR
 Floor plate area: 6950 SF

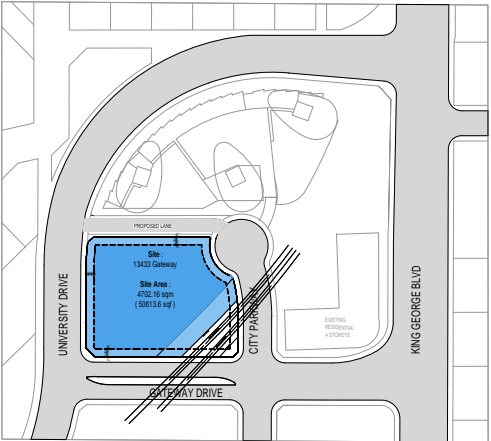
SITE DIAGRAM



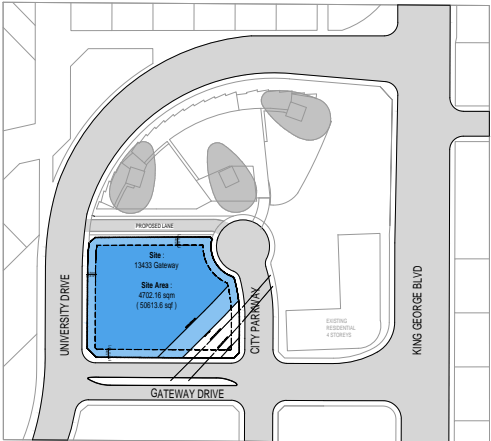
1 Old PL



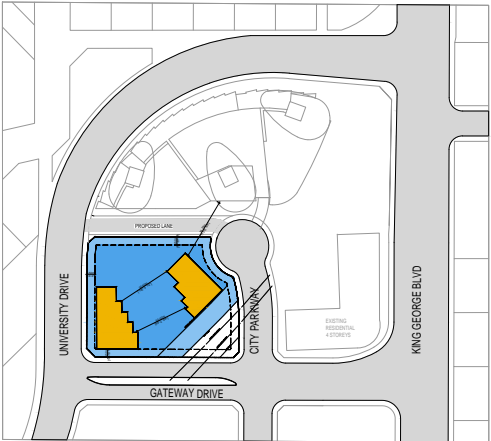
2 New Proposed Lane



3 Skytrain Guideway, setback, NewPL



4 Neighbor development

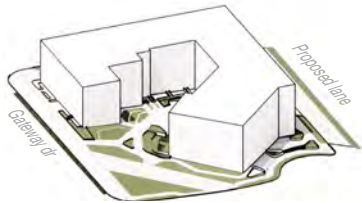


5 Tower Placement

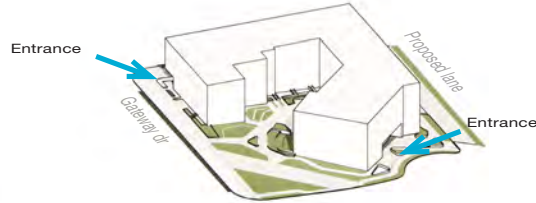


6 Access

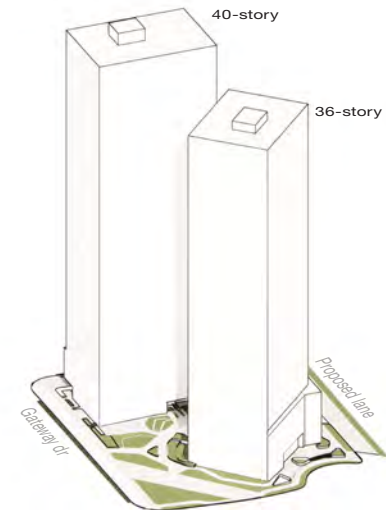
MASSING + DESIGN



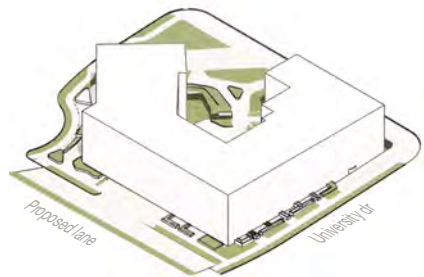
PODIUM FORMATION



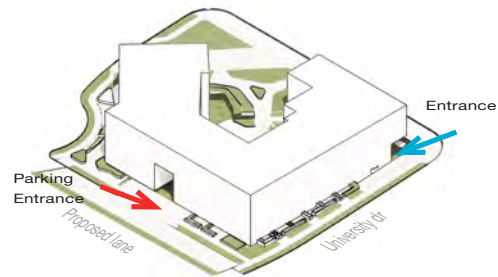
PODIUM FORMATION



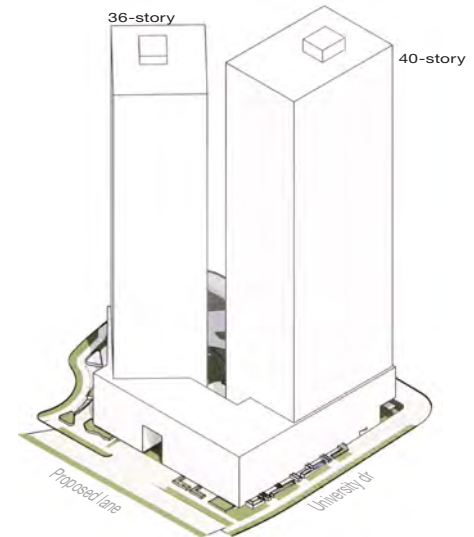
TOWERS LOCATION



PODIUM FORMATION



PODIUM FORMATION



TOWERS LOCATION

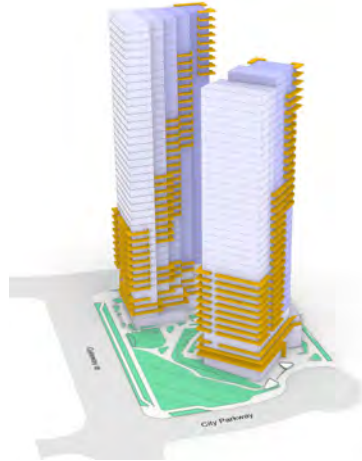
MASSING + DESIGN



1 Tower placement 30m



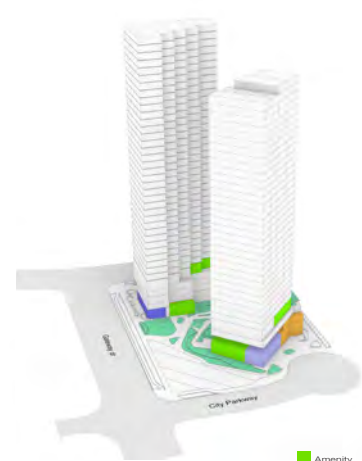
2 Animating ribbon



3 Emphasizing by materiality and detail

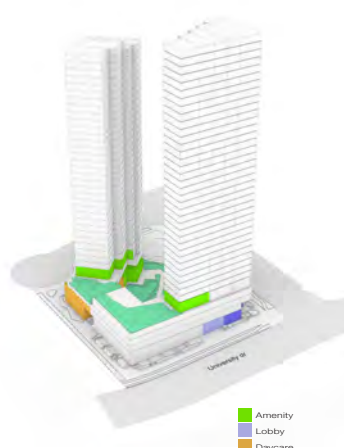
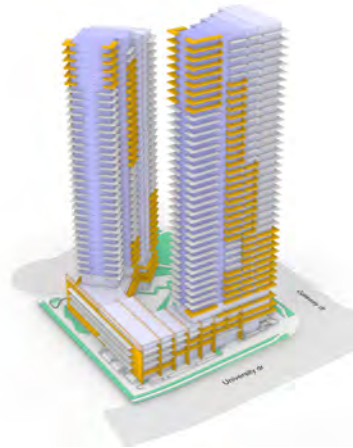
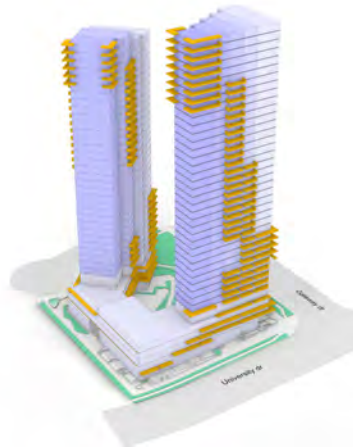
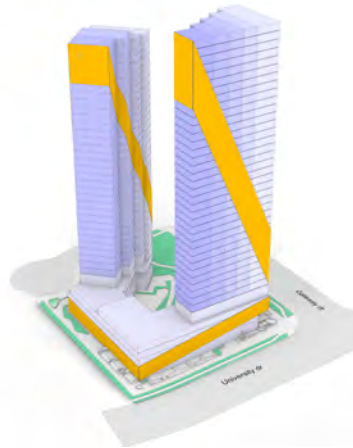
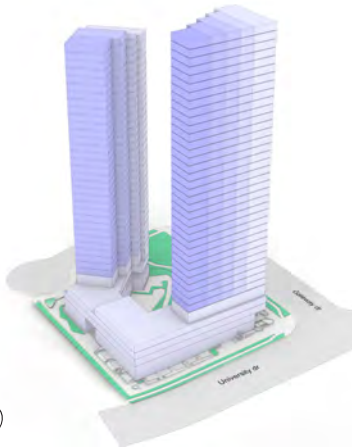


4 East west podium orientation



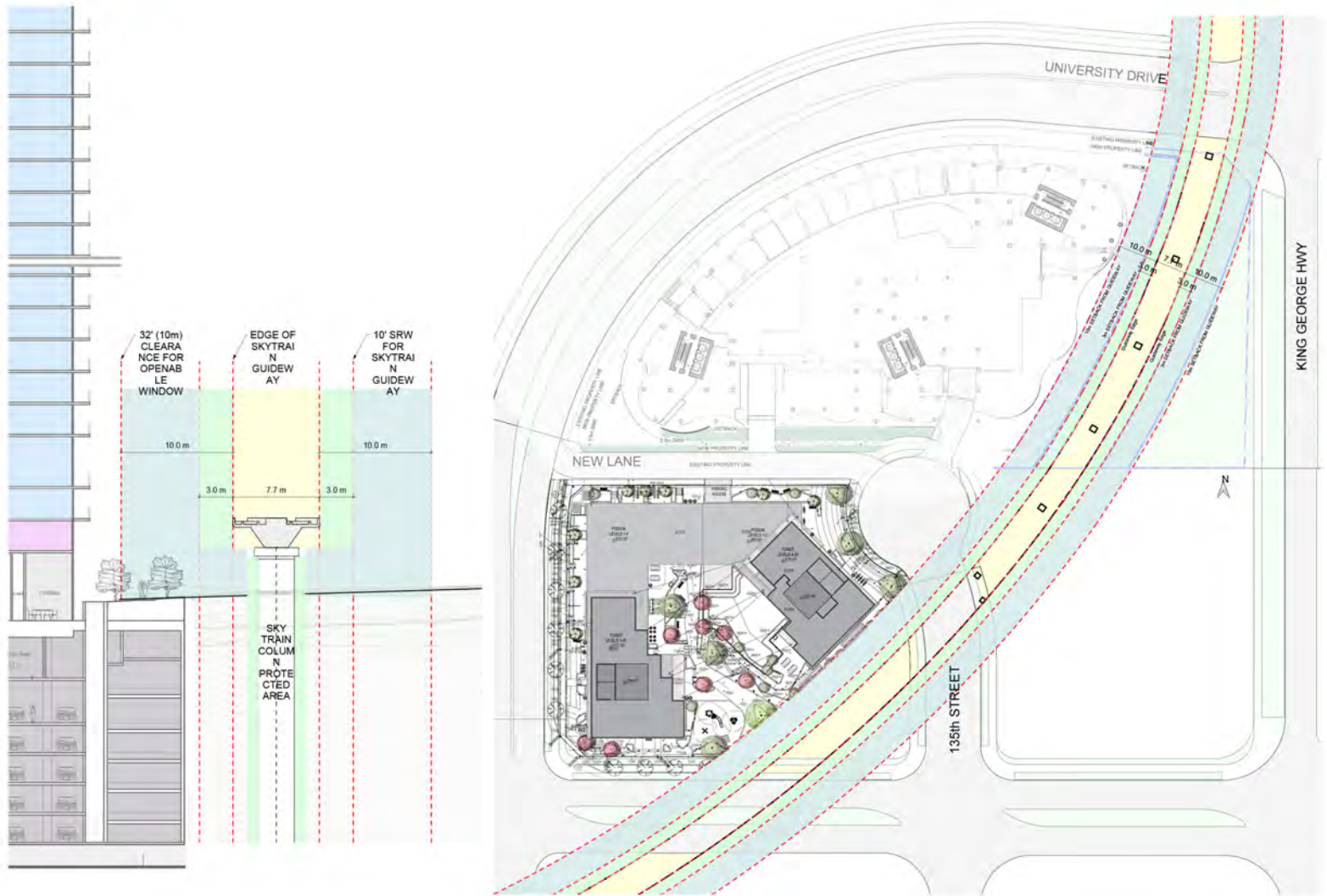
5 Public Spaces

- Amenity
- Lobby
- Daycare
- Retail



- Amenity
- Lobby
- Daycare
- Retail

GUIDEWAY SETBACK DIAGRAM



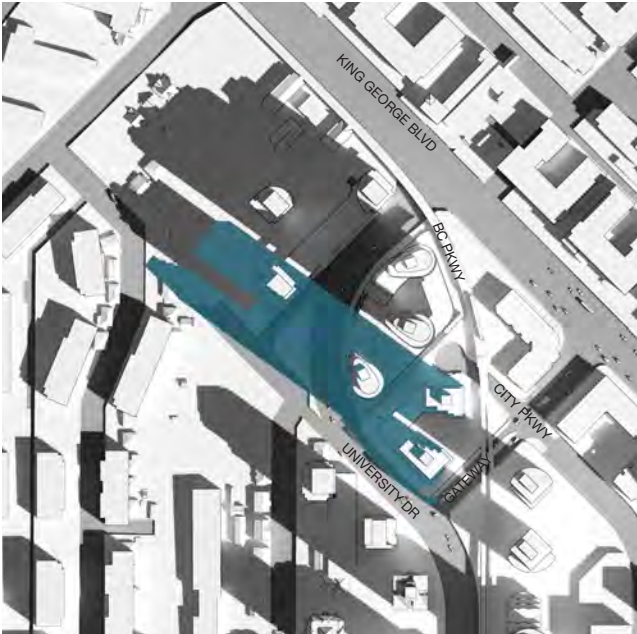
SUSTAINABILITY & RESILIENCE

The design team adopted multiple energy conservation measures (ECMs) in the proposed design, in order to strengthen the potential of this project to exceed the Step Code Step 2 targets. Below are descriptions of the major ECMs.

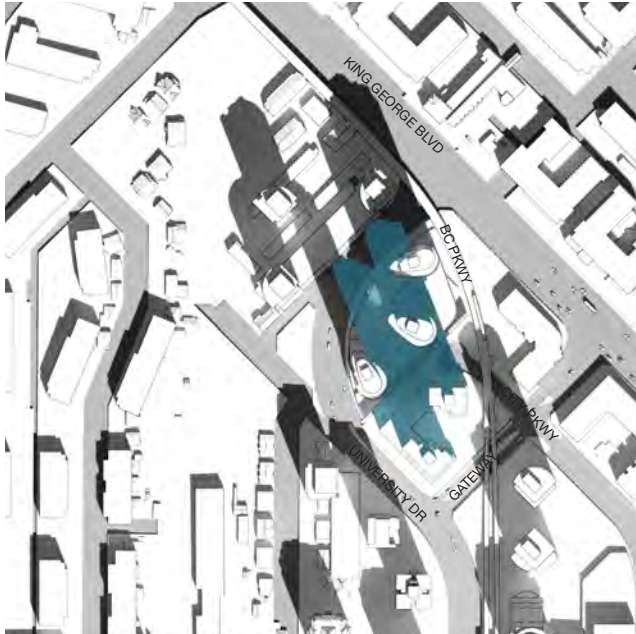
1. The project use 4 pipe fan coil system providing heating and cooling to the suites. The building is connected to City owned district energy system (DEU) for space and DHW heating. The district energy is an essential component of the City of Surrey's plan to reduce GHG emissions in new in buildings in support of the City's 2019 Climate Emergency. Connection to DEU is the most important strategy for this project to reduce the green house gas emissions.
2. High efficiency air cooled chiller is used to provide cooling.
3. High performance envelope, exterior insulated steel framed wall and double-glazed residential windows.
4. Heat recovery ventilator is installed in each suite to reduce the ventilation load.
5. Improved airtightness to reduce the infiltration heat loss.
6. The project uses LED lighting fixtures to reduce lighting energy consumption.



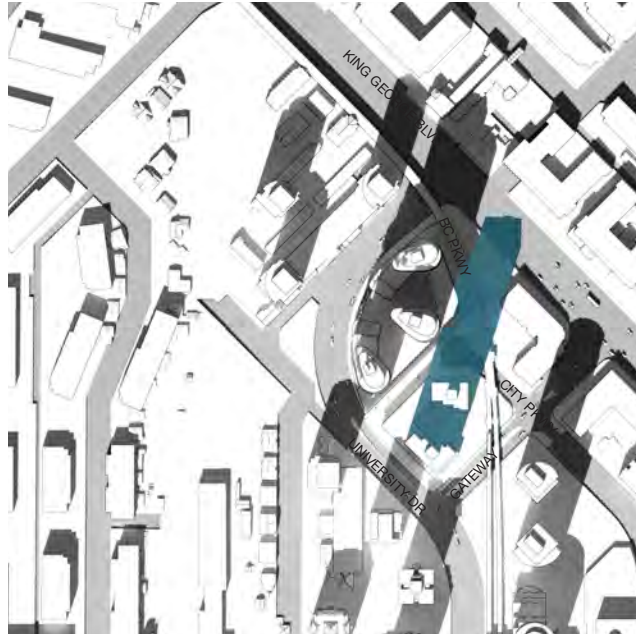
SHADOW STUDY



SEPTEMBER 21 - 10:00 AM

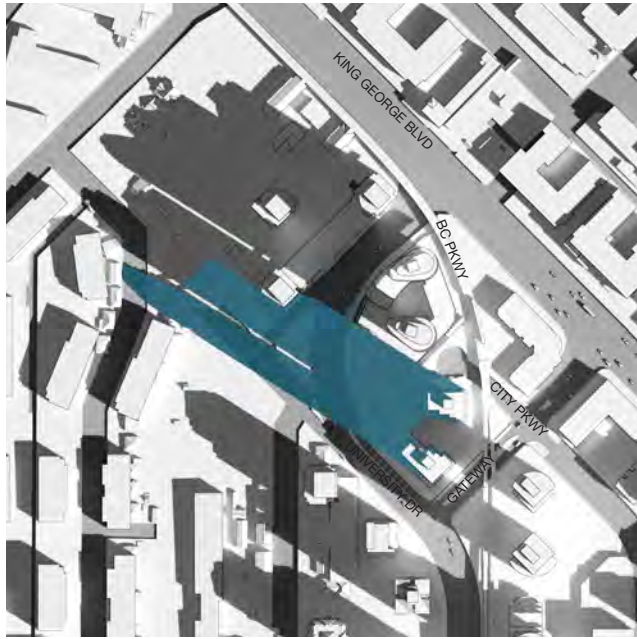


SEPTEMBER 21 - 12:00 PM

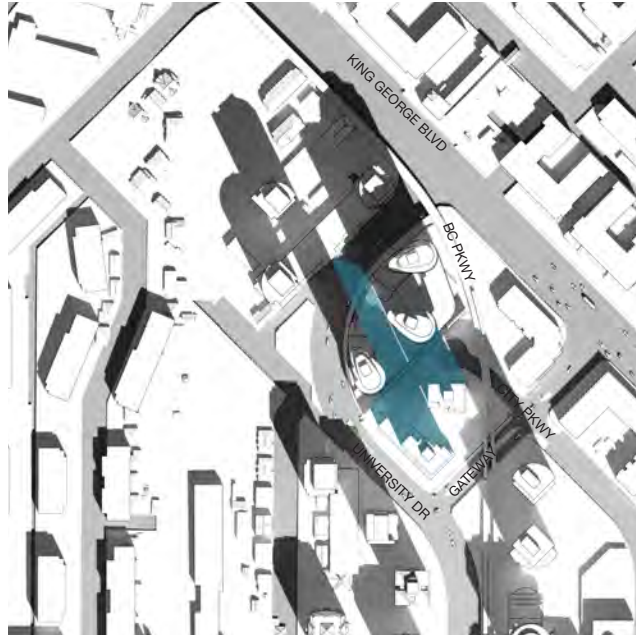


SEPTEMBER 21 - 02:00 PM

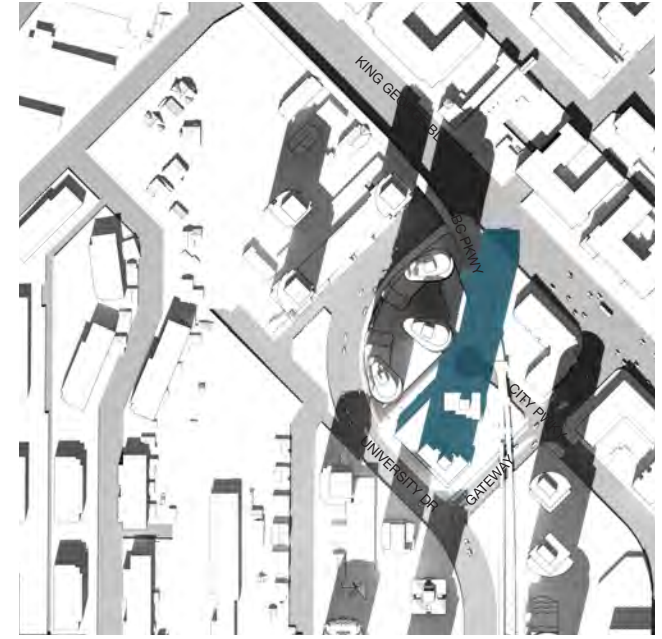
SHADOW STUDY



MARCH 21 - 10:00 AM

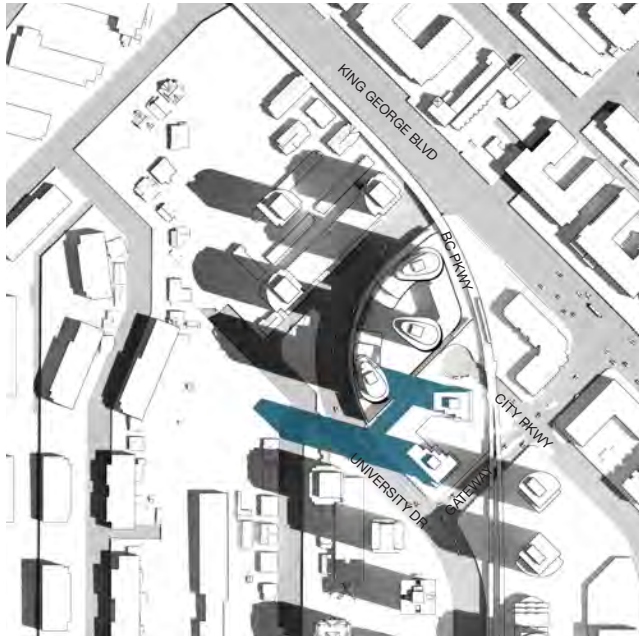


MARCH 21 - 12:00 PM



MARCH 21 - 02:00 PM

SHADOW STUDY



JUNE 21 - 10:00 AM



JUNE 21 - 12:00 PM



JUNE 21 - 02:00 PM

PERSPECTIVE



PERSPECTIVE



PERSPECTIVE



PERSPECTIVE



PERSPECTIVE





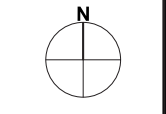




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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113995

DRAWN BY: JC

CHECKED BY: 194

DATE: 2022-04-28

SHEET TITLE
CONTEXT PLAN

SHEET NUMBER
A0.01

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REQUIRED INDOOR AMENITY						REQUIRED OUTDOOR AMENITY		PROVIDED INDOOR AMENITY				PROVIDED OUTDOOR AMENITY					
MIN. REQUIRED (WEST TOWER)		MIN. REQUIRED (EAST TOWER)		TOTAL		MIN. REQUIRED (WEST TOWER)	MIN. REQUIRED	PROVIDED (WEST TOWER)		PROVIDED (EAST TOWER)		TOTAL		Residential		Day care	
imperial	metric	imperial	metric	imperial	metric	metric	metric	imperial	metric	imperial	metric	imperial	metric	imperial	metric	imperial	metric
8,374	778	3,993	371	12,368	1,149	1,221	774	6,148	571	4,529	421	10,677	26,692	2,480			
Total outdoor amenity						1,995		0		0		11,000		3,748		348	
Total outdoor amenity						1,995		6,148		571		15,529		1,443		21,677	

*Required amenity's area provided via combined areas of amenities in both buildings and daycare area
 *Based on the unit counts, 61% of daycare area could be counted as amenity space for the west tower, and 39% for the east tower

PERMITTED DENSITY UNDER CD		SF	M2
FSR	5.5	355,622.5	33,038.4
Proposed FSR	7.44	481,334.1	FSR (Gross)
EFFICIENCY	TOWER WEST: 83.2%		
	TOWER EAST: 83.3%		

*Based on overall calculation, with 5.5 FSR, 492 units could be provided.

BIKE COUNT
Part 5-D-5 Residential Uses
Residential: 1.2 bicycle spaces in a secure bicycle parking area per dwelling unit.
Visitor: 6 visitor bicycle spaces per multiple unit residential building.
Horizontal and Vertical Bicycle Spaces
 c A minimum of 50 percent of the required Class A bicycle spaces shall provide for the bicycles to be placed horizontally on the floor or ground. Vertical bicycle space racks shall support the bicycle without the bicycle being suspended on the wheels. No more than 30% of the required Class A bicycle spaces may be vertical. At least 20% of the Class A bicycle spaces must be bicycle lockers.
Electrical outlets
 Each two Class A bicycle spaces must have an electrical outlet.

BUILDING HEIGHT (BASED ON EACH TOWER BASE POINT)			
	REQUIRED	PROVIDED	
		ft	m
WEST TOWER	NA	646.00	196.90
EAST TOWER	NA	610.33	186.03

PARKING COUNT
Part 5-C-3 Residential uses Non-Ground-Oriented: 0.9 parking spaces per dwelling unit; plus 0.1 parking space per dwelling unit for visitors.
Part 5-C-3 Required Disability Parking Stalls
 Residential uses: minimum of 2% of the required parking spaces and 50% of them must be provided as van-accessible.
Part 5-B-1 (c) Maximum Small Car Parking Stalls
 The number of small cars parking spaces on site may not exceed 35% of the total parking spaces required for the site.
 Retail: 2.75 parking spaces per 100 m² [1,075 ft²] of gross floor area where the gross floor area is less than 372 m² [4,000 ft²]

USE	Area (SF & m2)		City Required			
	Residential	Retail	Visitor	Daycare		
RESIDENTIAL	44717.4	4154.4	599	6	14.0	20
TOTAL			639			

type	Max SML Permitted	HC required
Residential	224	13

RESIDENTIAL	City Required	Provided
WEST TOWER	488	508
EAST TOWER	0	317
TOTAL	488	825

VISITOR	City Required	Provided
WEST TOWER	6	8
EAST TOWER	6	12
TOTAL	12	20

BICYCLE PARKING PROVIDED BREAKDOWN	City Required	Provided
HORIZONTAL (70% Min)	342	727
VERTICAL (30% Max)	147	98

LEVEL	TYPE			USE				TOTAL
	REG	SML	HC	RESIDENTIAL	Retail	VISITOR	Day care	
LEVEL P1	54	19	2	27	6	22	20	75
LEVEL P2	87	33	2	122				122
LEVEL P3	86	36	3	125				125
LEVEL P4	86	36	3	125				125
LEVEL P5	86	36	3	125				125
LEVEL P6	88	36	1	125				125
TOTAL	487	196	14	649	6	22	20	697

LOADING COUNT
Part 5-E-1 Loading Required (Residential)
 RESIDENTIAL - No requirement
 INDUSTRIAL - width must be at least 4.0 m [13 ft.]; length must be at least 9.2 m [30 ft.]

USE	City Required	Provided
RESIDENTIAL	-	2

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1			
2			

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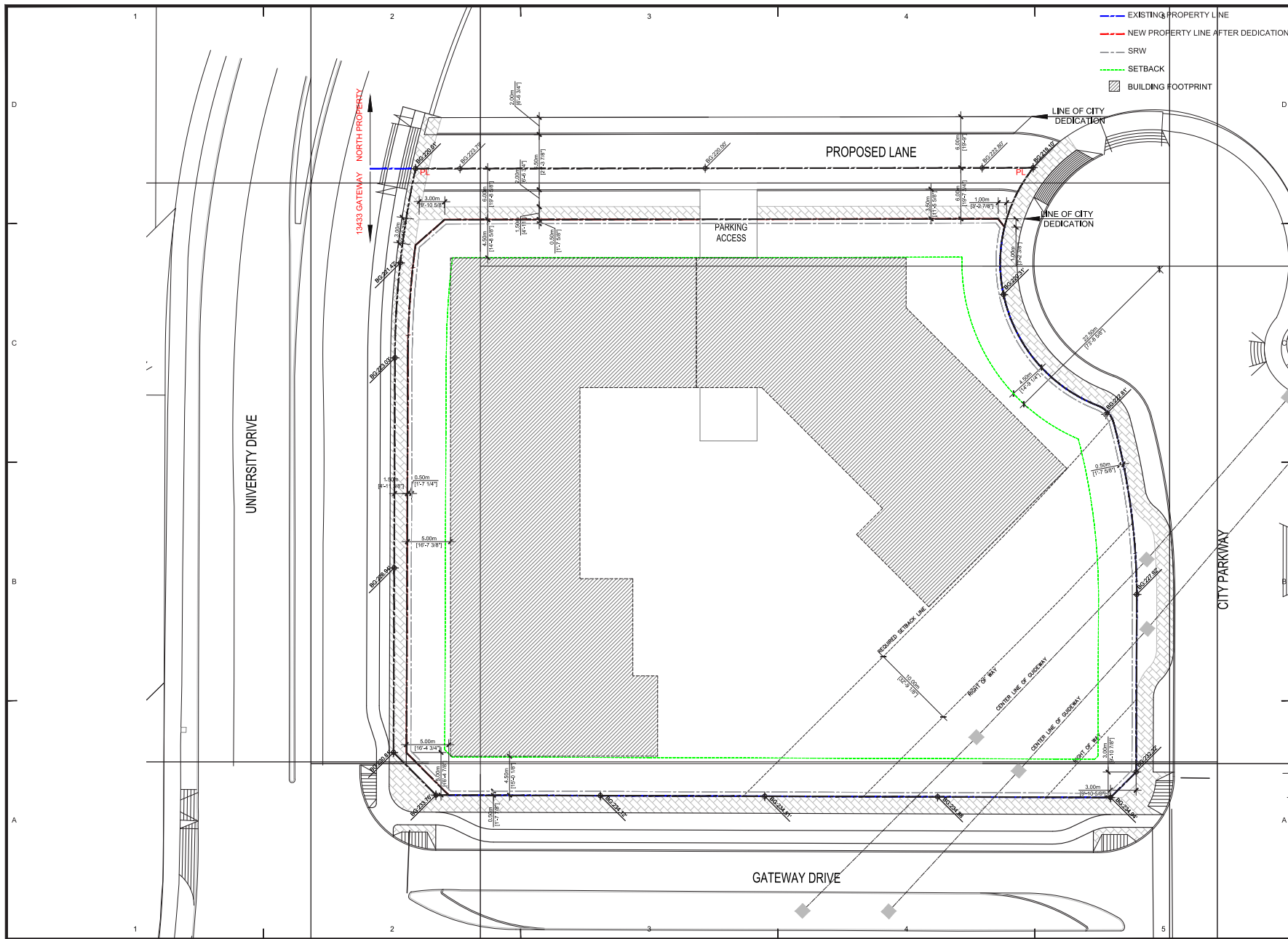
PROJECT TITLE
13433 Gateway Drive

PROJECT NO.: 113999
 DRAWN BY: XX
 SCALE: 1:16
 DATE: 2022-04-28

SHEET TITLE
PROJECT DATA

SHEET NUMBER
A0.02

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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113895

DRAWN BY: XX

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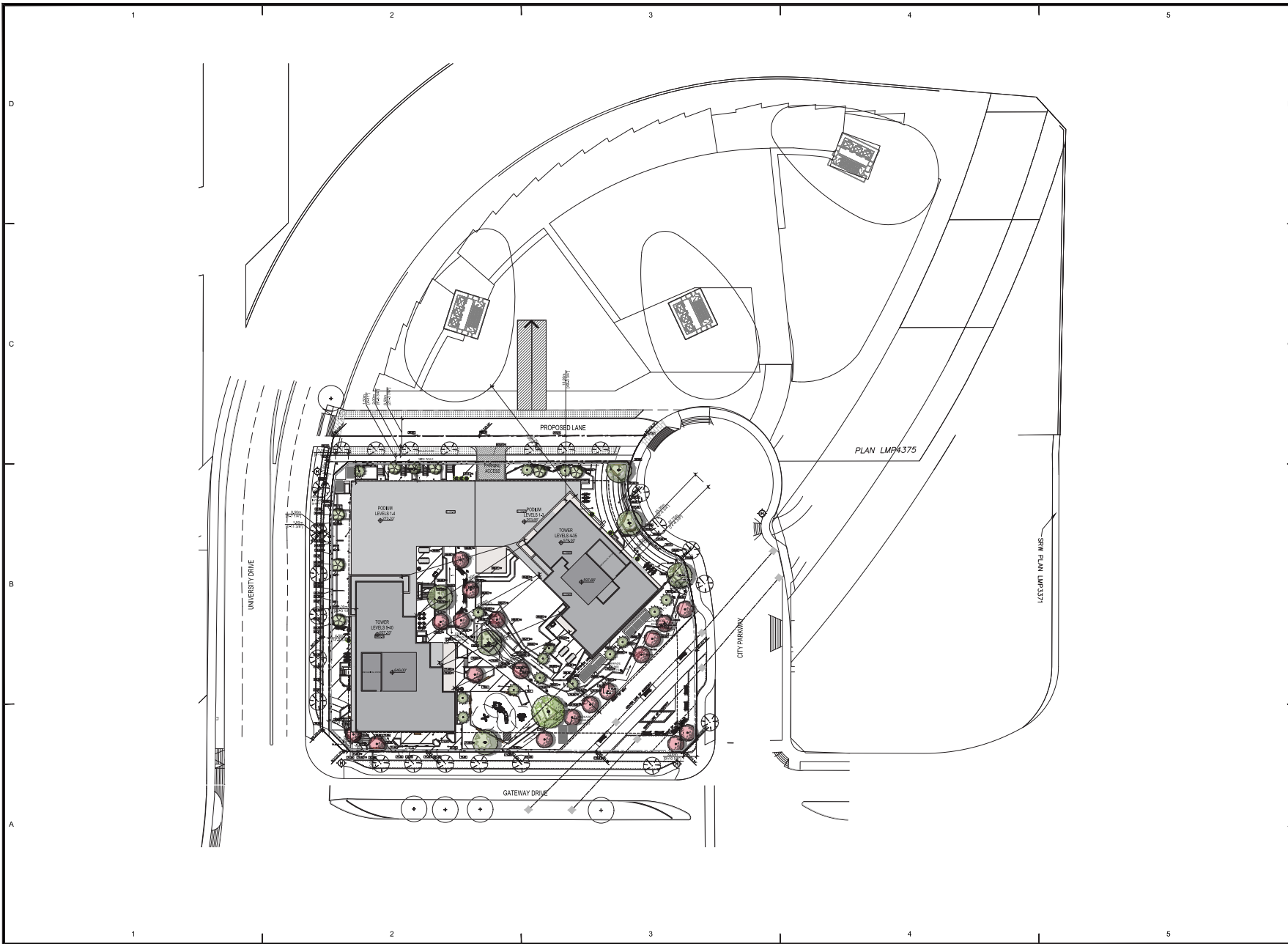
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SHEET TITLE
BASE PLAN

SHEET NUMBER

A0.03

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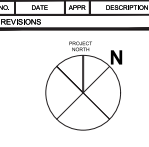
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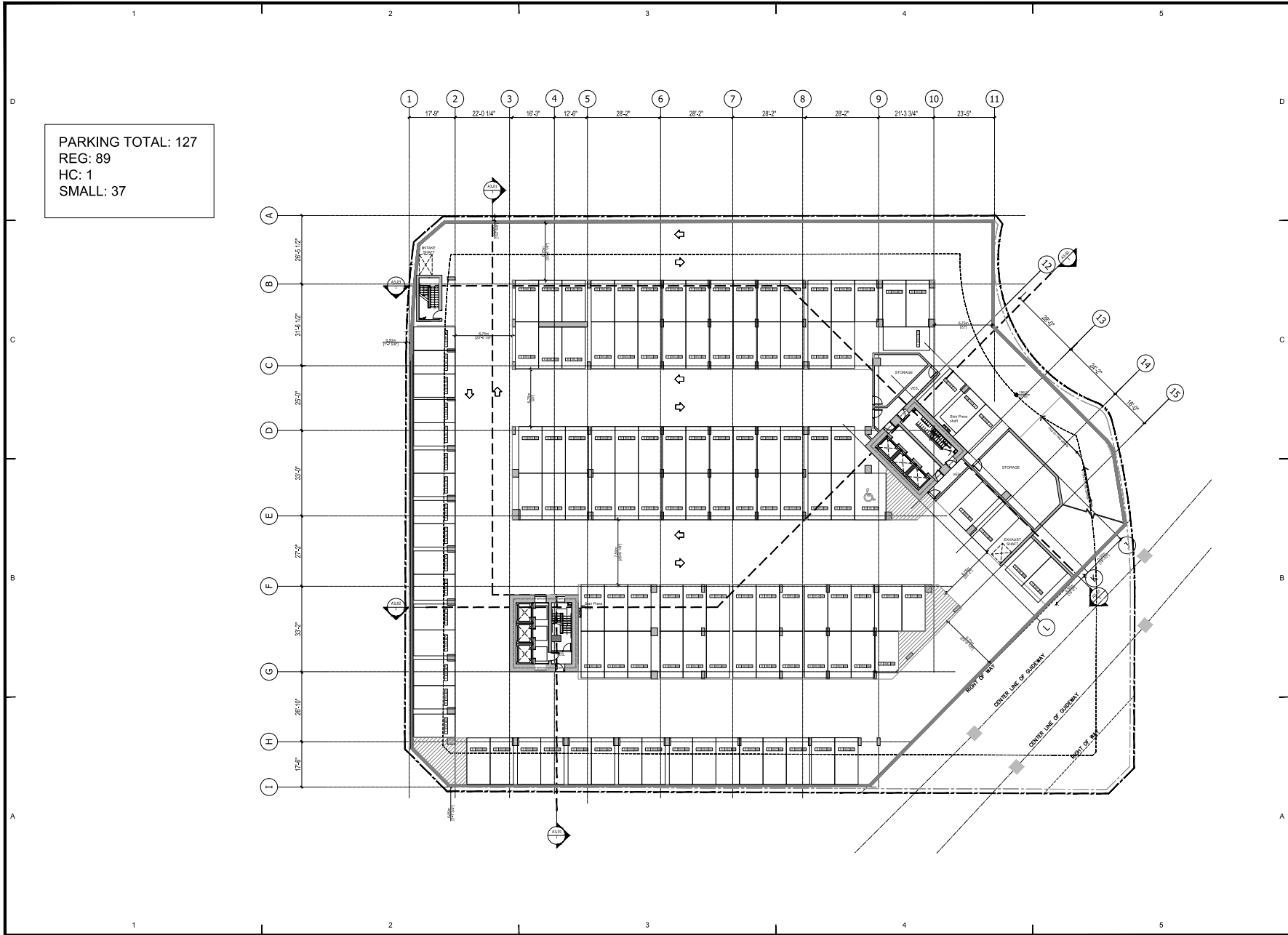
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13433 Gateway Drive

PROJECT NO: 113898
DRAWN BY: JC
CHECKED BY: JC
SCALE: 1:32
DATE: 2022-04-28

SHEET TITLE
SITE PLAN

SHEET NUMBER	REV.
A1.00	----

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PARKING TOTAL: 127
 REG: 89
 HC: 1
 SMALL: 37

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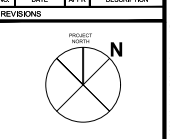


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PROJECT TITLE
13433 Gateway Drive

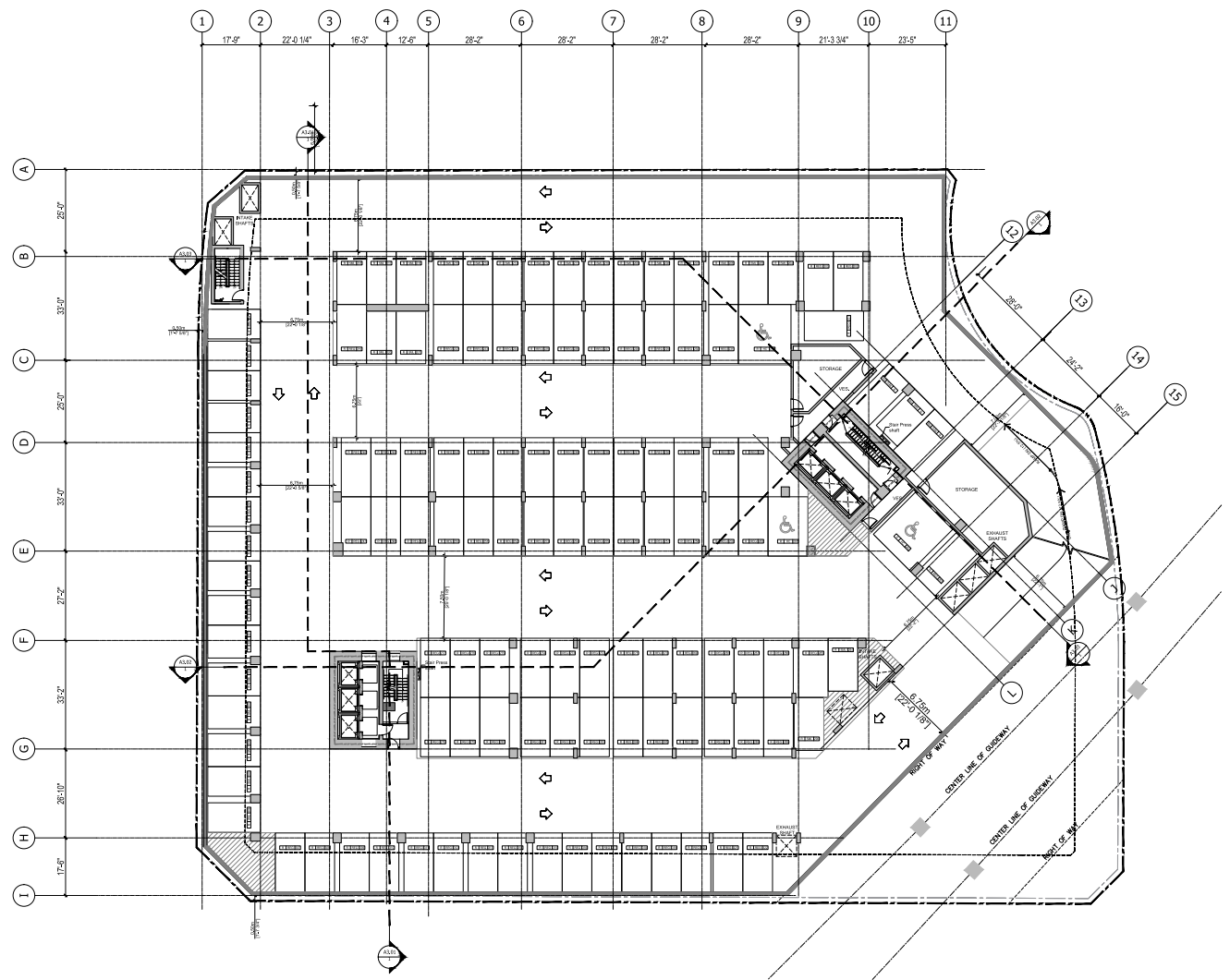
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 CHECKED BY: 1:16
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 DATE: 2022-04-28

SHEET TITLE
LEVEL P6 PLAN

SHEET NUMBER: **A1.01** REV: ---

NOT FOR CONSTRUCTION

P3-5 TOTAL: 125
 REG: 86
 HC: 3
 SMALL: 36



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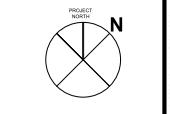
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PROJECT TITLE
 13433 Gateway Drive

PROJECT NO: 113995

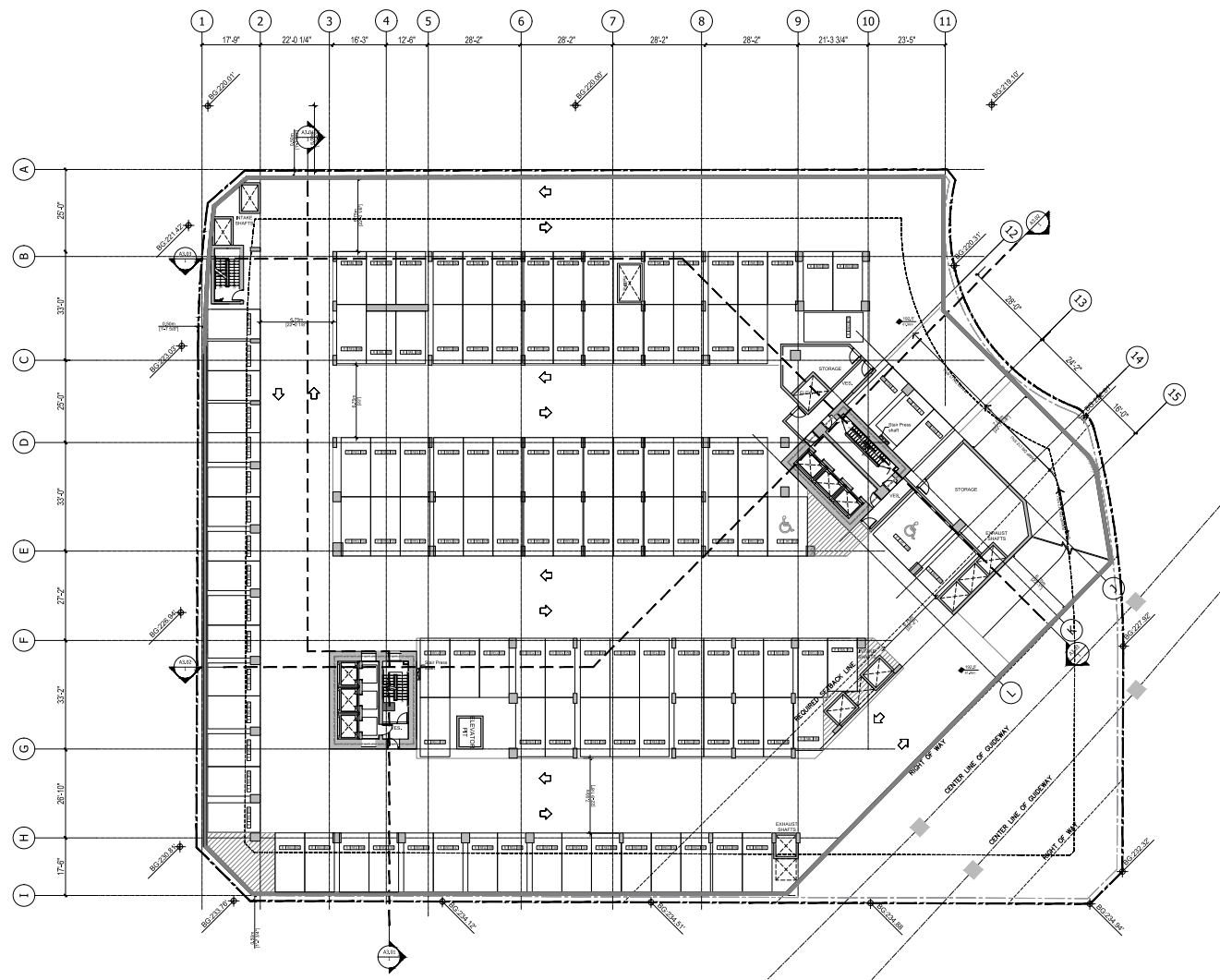
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SHEET TITLE
 LEVEL P3-P5 PLAN

SHEET NUMBER	REV.
A1.02	---

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P2 TOTAL: 124
 REG: 87
 HC: 2
 SMALL: 35



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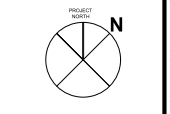
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PROJECT TITLE
 13433 Gateway Drive

PROJECT NO: 113995

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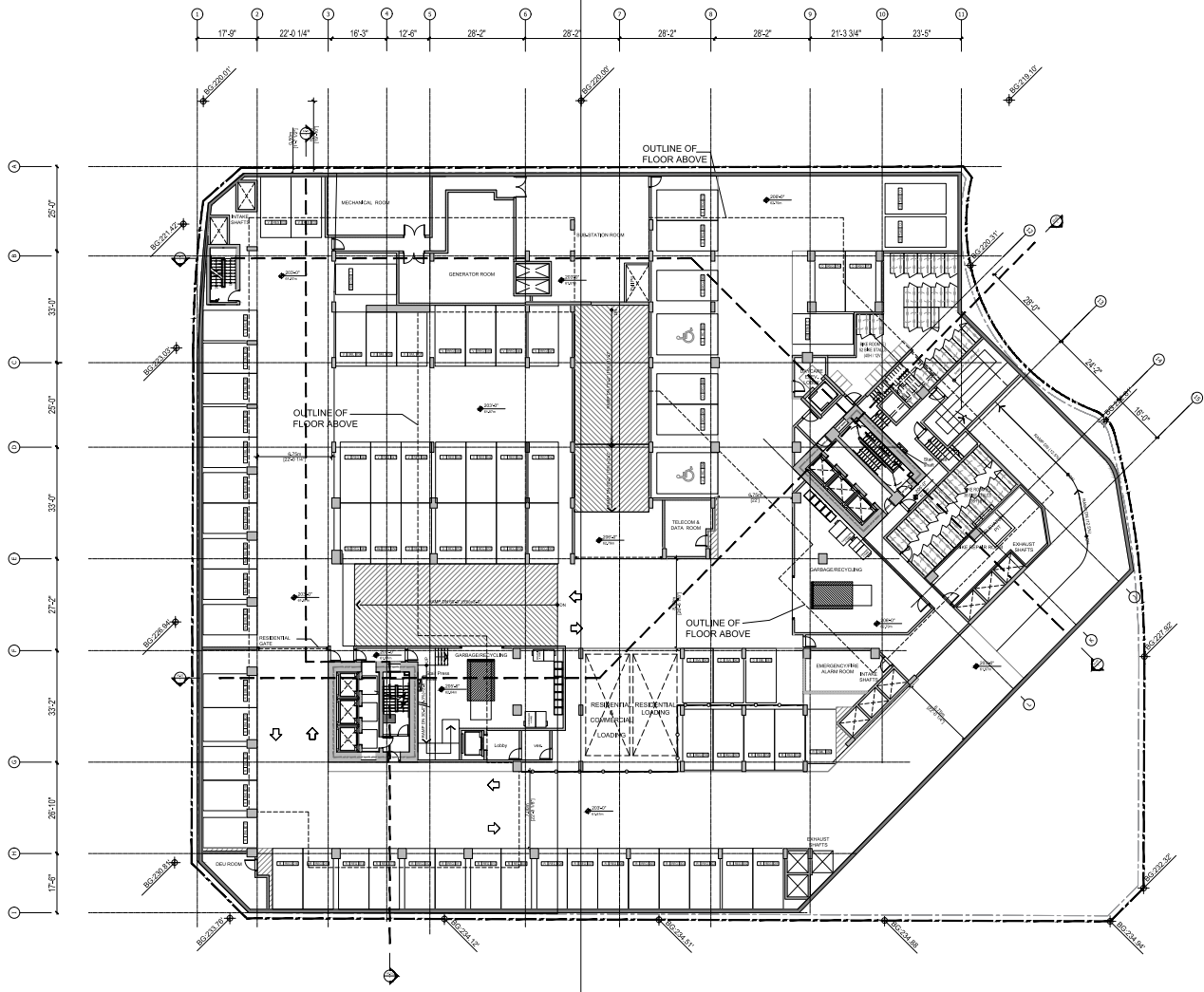
DATE: 2022-04-28

SHEET TITLE
 LEVEL P2 PLAN

SHEET NUMBER	REV.
A1.03	---

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PARKING TOTAL: 74
 REG: 54
 HC: 2
 SMALL: 18



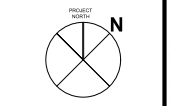
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 13433 Gateway Drive

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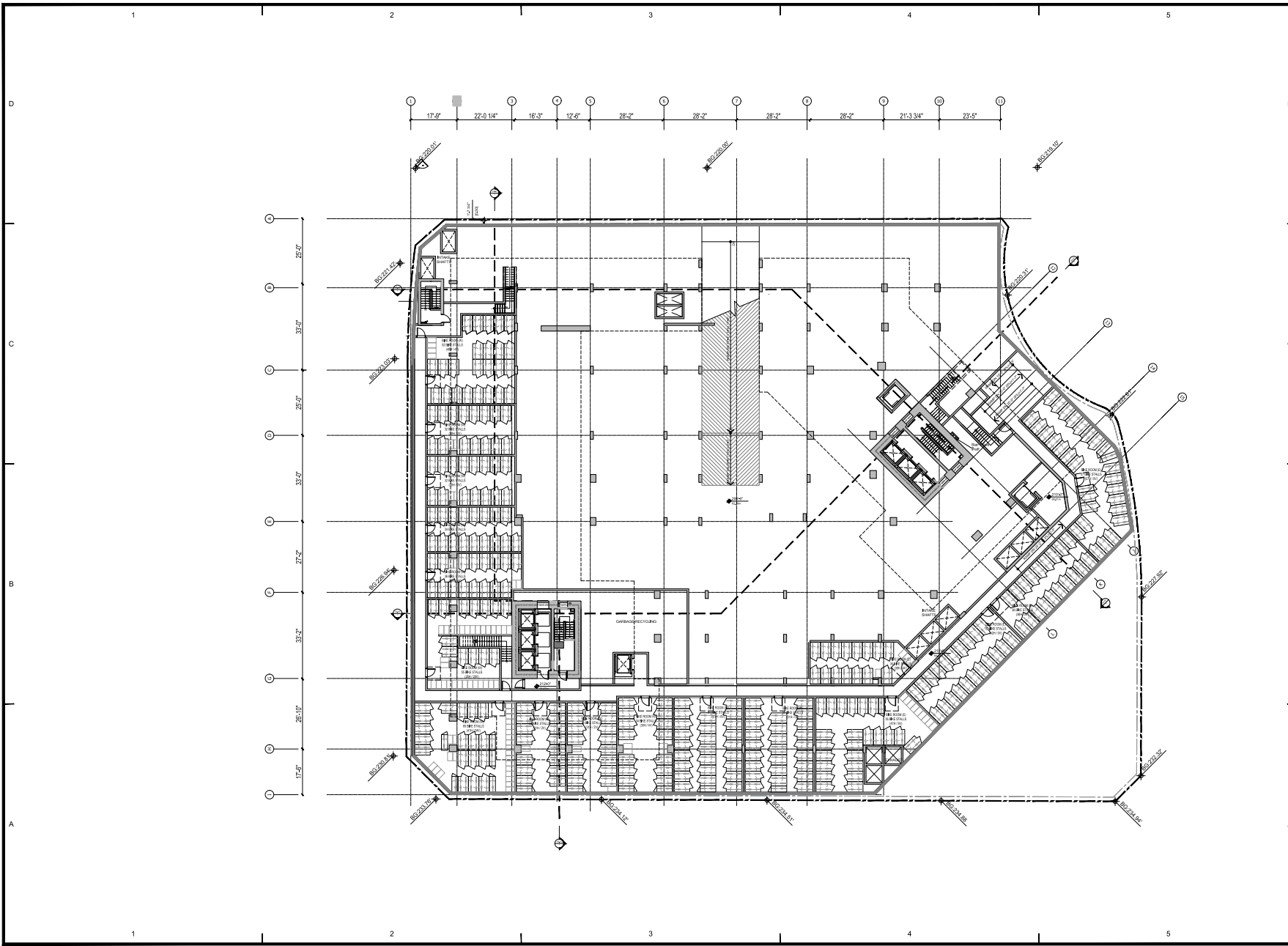
DATE: 2022-04-28

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 LEVEL P1 PLAN

SHEET NUMBER

A1.04

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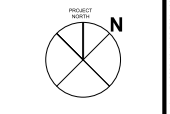


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13433 Gateway Drive

PROJECT NO: 113999

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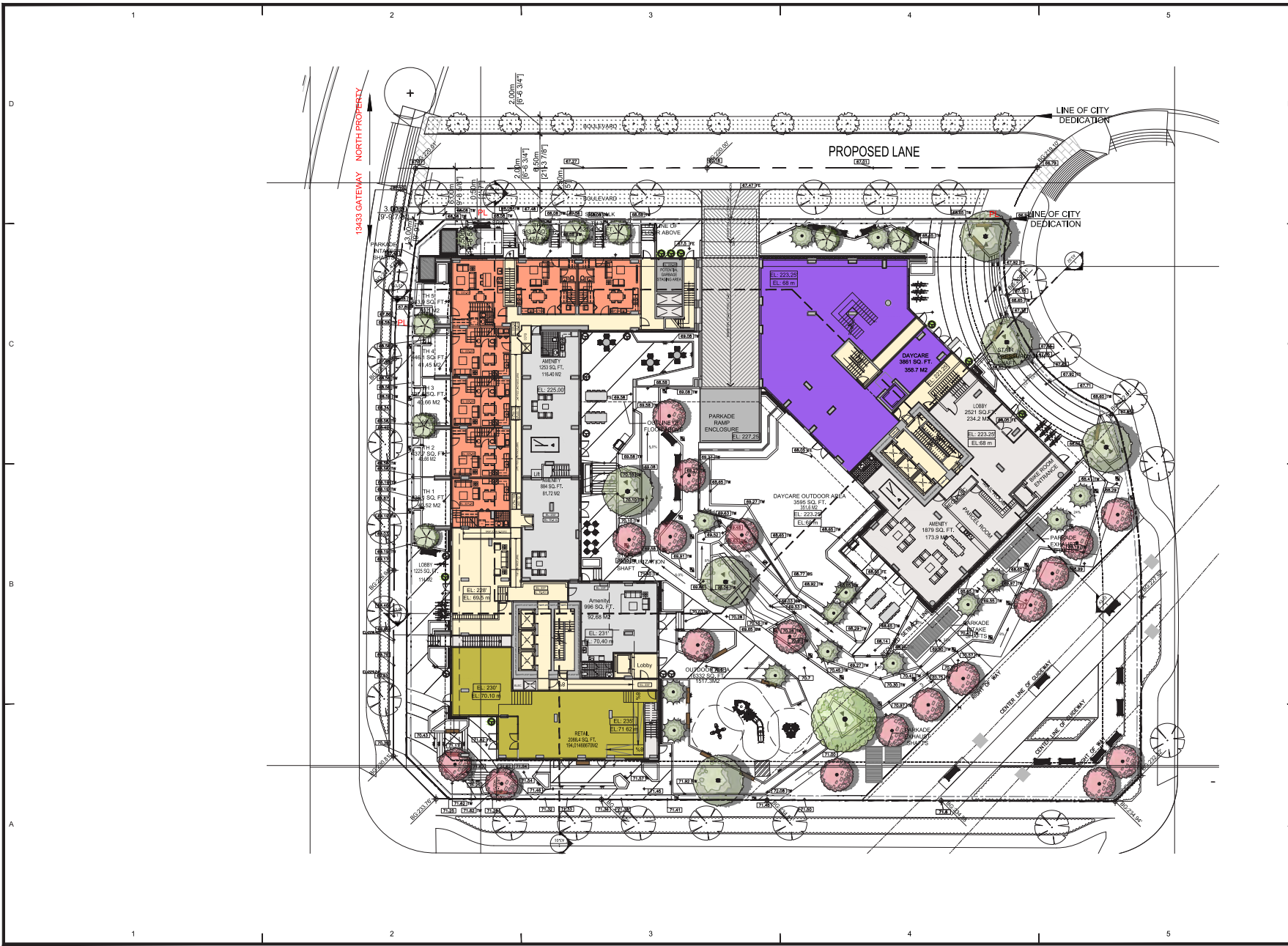
SCALE: 1/16

DATE: 2022-04-28

SHEET TITLE
**LEVEL P1
 MEZZANINE PLAN**

SHEET NUMBER	REV.
A1.04a	---

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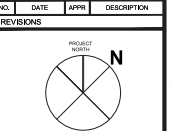
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1	2022-04-28		RDP SUBMISSION
2	2022-05-26		REZONING SUBMISSION

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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113995

DRAWN BY: JC

SCALE: 1:16

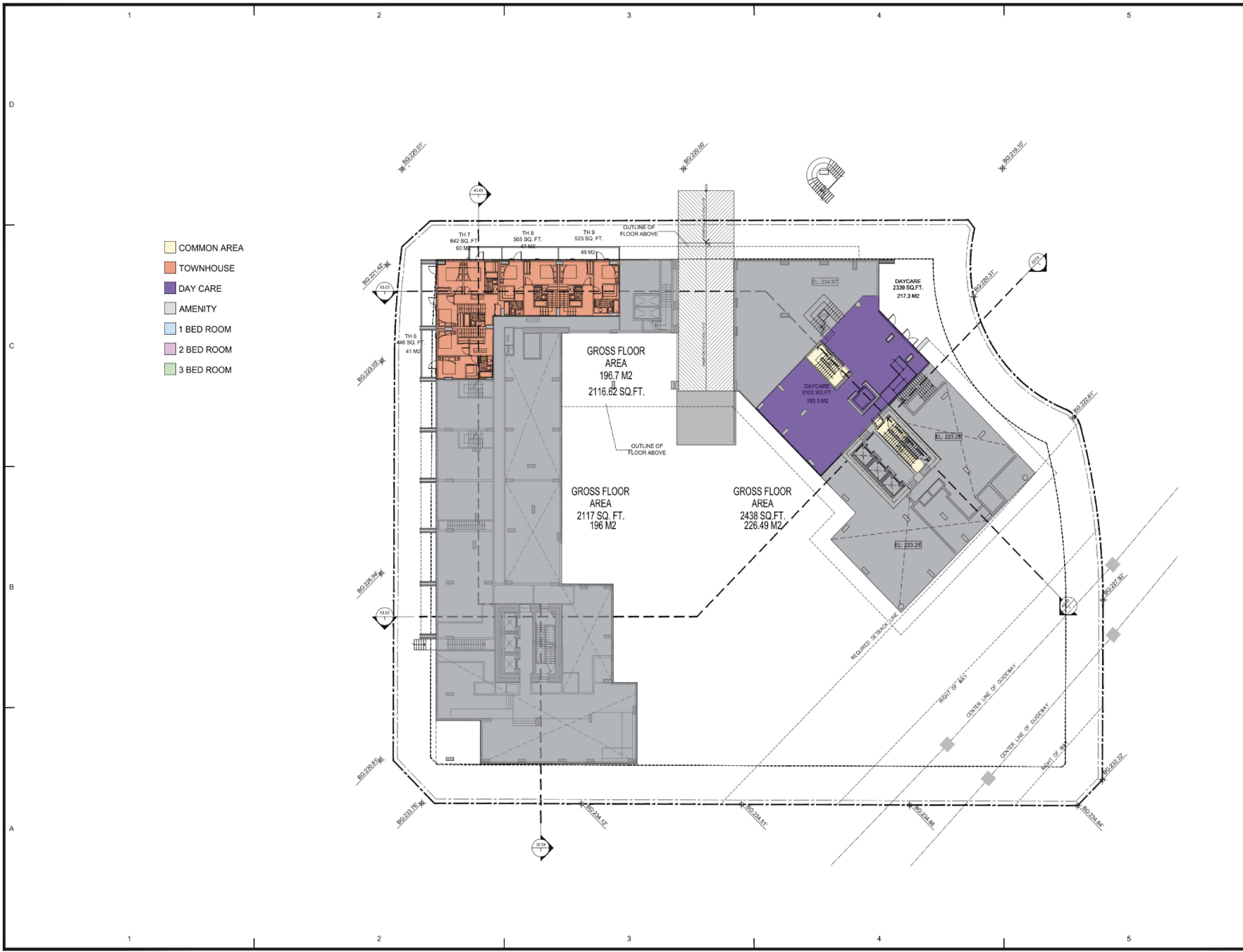
DATE: 2022-04-28

SHEET TITLE
LEVEL 01 PLAN

SHEET NUMBER

A1.05

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PROJECT NORTH

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IBI BB GROUP ARCHITECTS (CANADA) INC.
700 - 1295 West Pender Street
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tel 604 683 8717 fax 604 683 0432
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PROJECT TITLE
13433 Gateway Drive

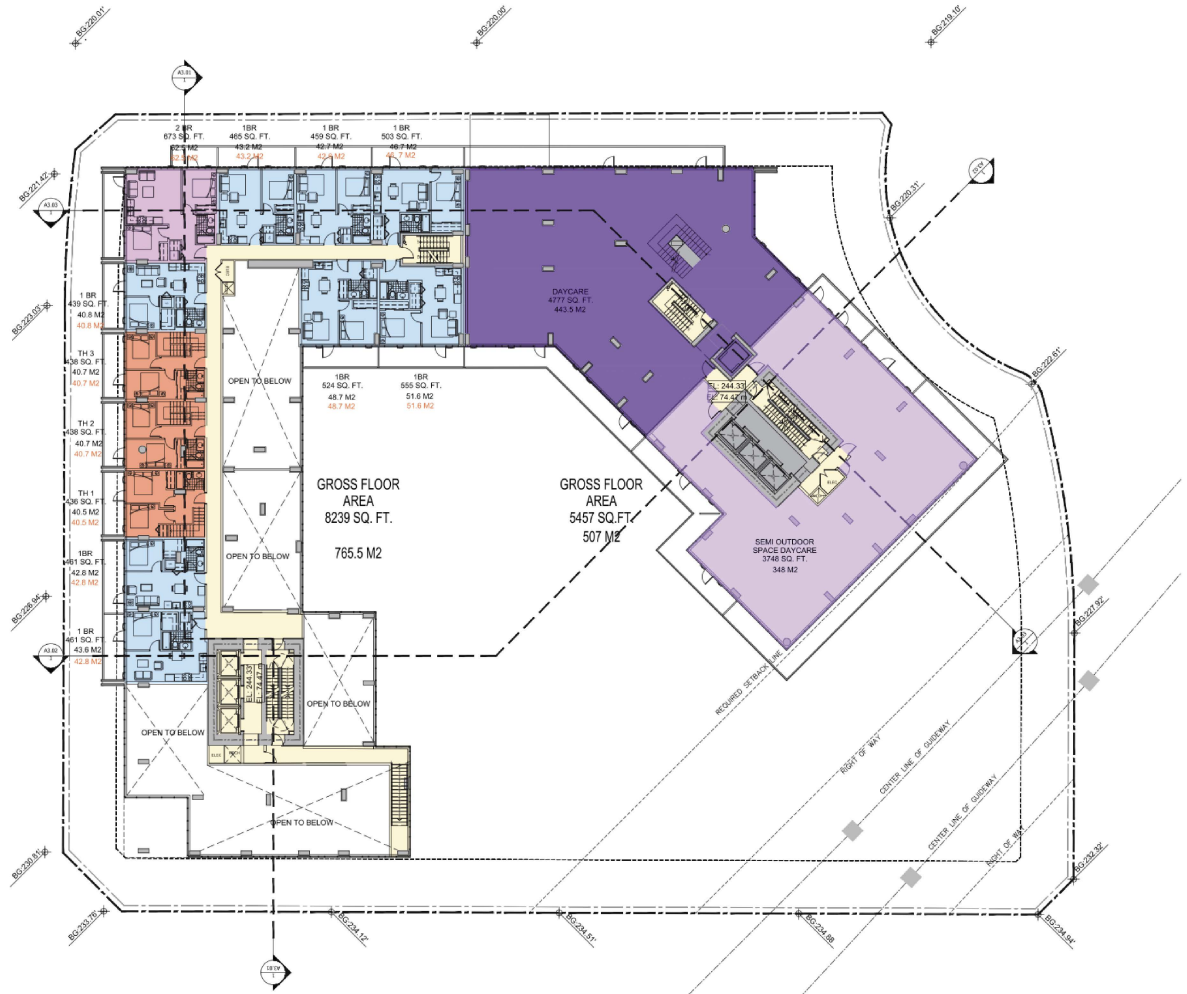
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CHKD BY: XX
SCALE: 1:16
DATE: 2022-04-28

SHEET TITLE
LEVEL 01 MEZZANINE

SHEET NUMBER	REV.
A1.05a

NOT FOR CONSTRUCTION

- COMMON AREA
- TOWNHOUSE
- DAY CARE
- AMENITY
- 1 BED ROOM
- 2 BED ROOM
- 3 BED ROOM



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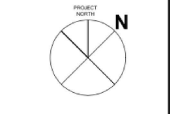


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02	2022-04-28	REVISIONING SUBMISSION
03	2022-04-28	REVISIONING SUBMISSION
04	2022-04-28	REVISIONING SUBMISSION
05	2022-04-28	REVISIONING SUBMISSION

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PROJECT TITLE
13433 Gateway Drive

PROJECT NO.: 113999

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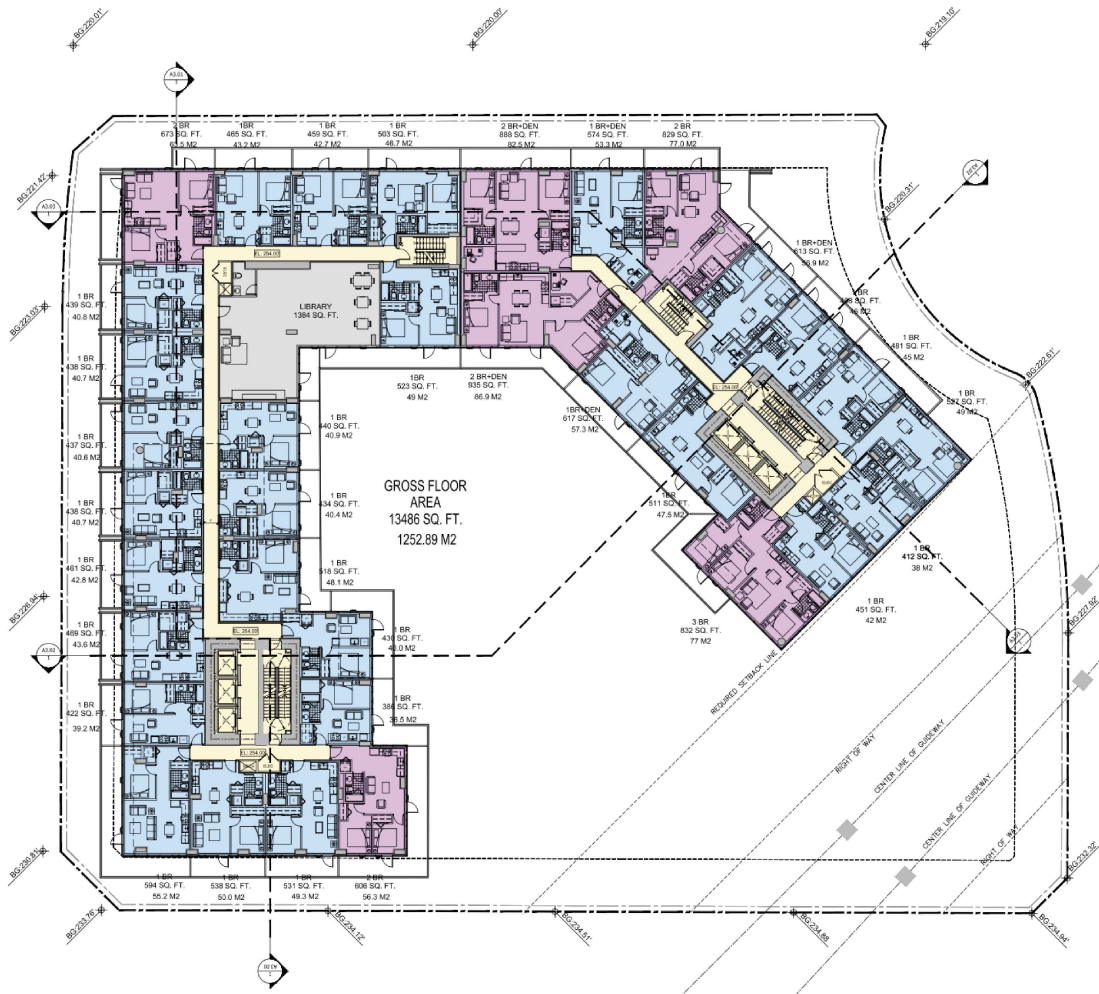
DATE: 2022-04-28

SHEET TITLE
LEVEL 02 PLAN

SHEET NUMBER
A1.06

NOT FOR CONSTRUCTION

- COMMON AREA
- TOWNHOUSE
- DAY CARE
- AMENITY
- 1 BED ROOM
- 2 BED ROOM
- 3 BED ROOM



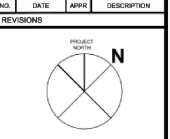
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03	2022-04-28	ADP SUBMISSION
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ISSUES		

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REVISIONS			



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PROJECT TITLE
13433 Gateway Drive

PROJECT NO.: 113999

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 DATE: 2022-04-28

SHEET TITLE
LEVEL 03 PLAN

SHEET NUMBER
A1.07

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NO.	DATE		DESCRIPTION

ISSUES

NO.	DATE	APPR.	DESCRIPTION
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700 - 1005 West Parke Street
Vancouver BC, V6E 4B1 Canada
tel 604.683.8777 fax 604.683.0882
ibigroup.com

PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999

DRAWN BY: JC

CHECK BY: JC

SCALE: 1/16"

DATE: 2022-04-28

SHEET TITLE
LEVEL 04 PLAN

SHEET NUMBER
A1.08

REV: -



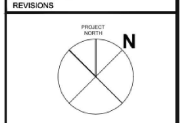
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01	2021-05-28	REZONING SUBMISSION
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NO.	DATE	APPR.	DESCRIPTION
REVISIONS			



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TRIVE CONSULTANT



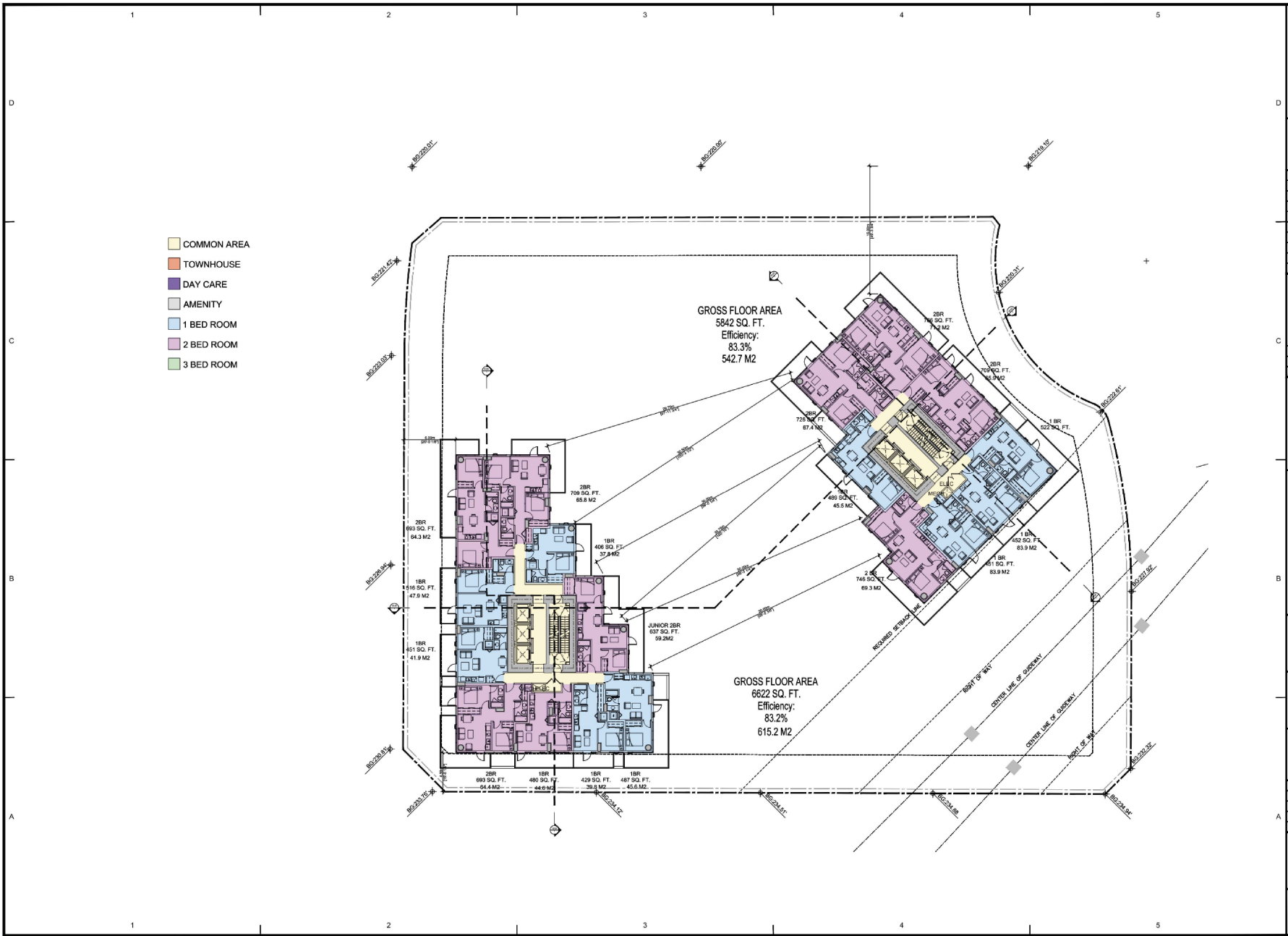
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13433 Gateway Drive

PROJECT NO: 113999
DRAWN BY:
CHKD BY: JC
SCALE: 1/16
DATE: 2022-04-28

SHEET TITLE
LEVEL 05 PLAN

SHEET NUMBER
A1.09

NOT FOR CONSTRUCTION



- COMMON AREA
- TOWNHOUSE
- DAY CARE
- AMENITY
- 1 BED ROOM
- 2 BED ROOM
- 3 BED ROOM

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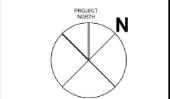


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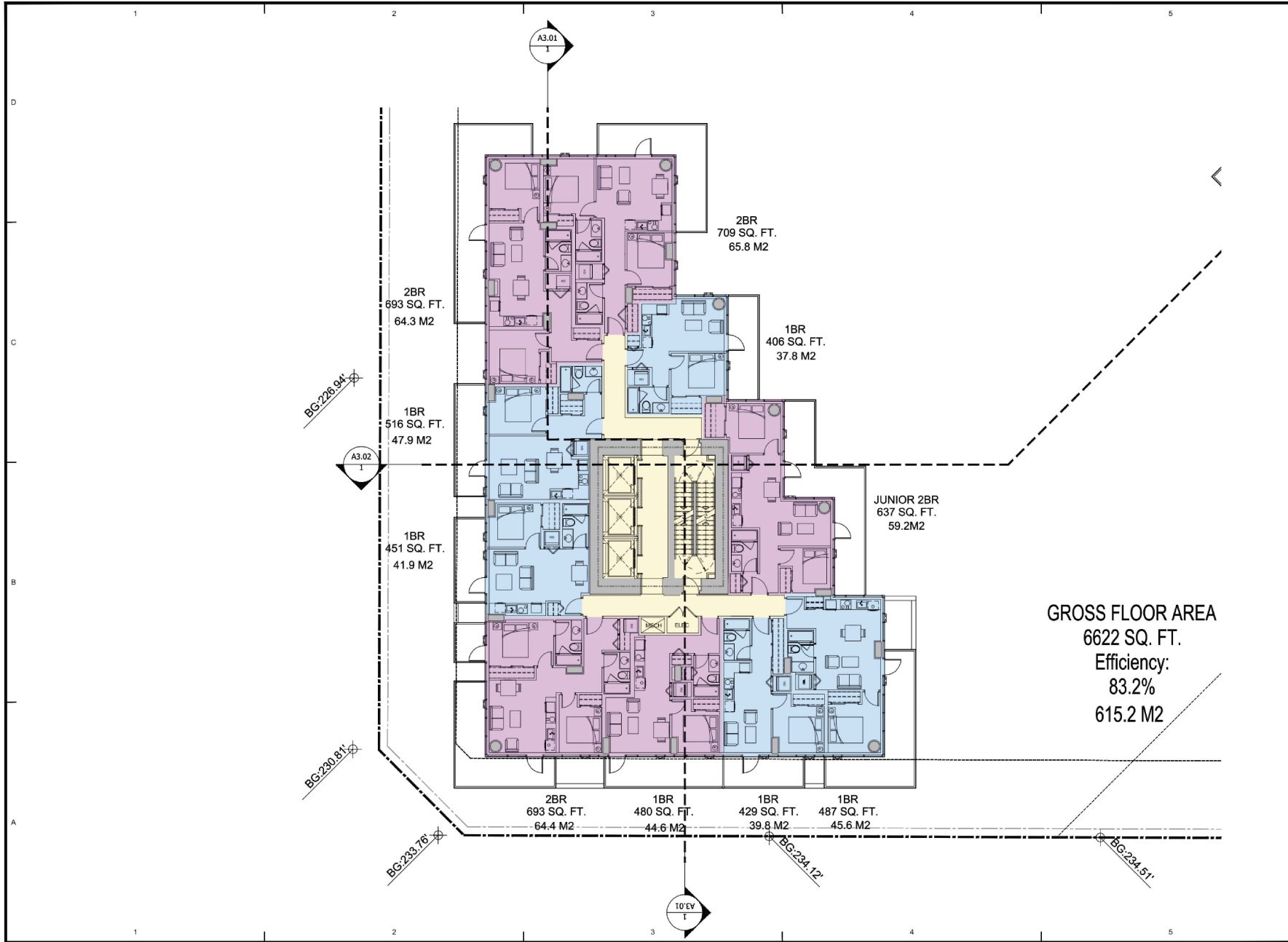
PRIME CONSULTANT
 IBI GROUP ARCHITECTS (CANADA) INC.
 700 - 1200 West Pender Street
 Vancouver BC, V6E 4B1 Canada
 Tel: 604 683 8787 Fax: 604 683 9422
 ibigroup.com

PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999
 DRAWN BY: JC
 SCALE: 1:18
 DATE: 2022-04-28

SHEET TITLE
TOWER LEVELS
06-25 EAST 06-30
WEST

SHEET NUMBER
A1.10
NOT FOR CONSTRUCTION



GROSS FLOOR AREA
 6622 SQ. FT.
 Efficiency:
 83.2%
 615.2 M2

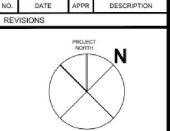
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PROJECT TITLE
 13433 Gateway Drive

PROJECT NO.: 113999
 DRAWN BY: JC

SCALE: 1/8"
 DATE: 2022-04-28

SHEET TITLE
 West Tower Level
 06-30 - FLOOR PLAN

SHEET NUMBER
 A1.10A

NOT FOR CONSTRUCTION

GROSS FLOOR AREA
5842 SQ. FT.
Efficiency:
83.3%
542.7 M2

JUNIOR 2BR
637 SQ. FT.
59.2M2

2BR
726 SQ. FT.
67.4 M2

1BR
489 SQ. FT.
45.5 M2

2 BR
746 SQ. FT.
69.3 M2

2BR
766 SQ. FT.
71.2 M2

2BR
709 SQ. FT.
65.9 M2

1 BR
522 SQ. FT.

1 BR
452 SQ. FT.
83.9 M2

1 BR
451 SQ. FT.
83.9 M2



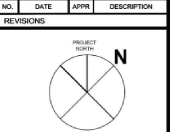
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01	2021-05-28	REZONING SUBMISSION
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Tel: 604 683 8787 Fax: 604 683 0422
ibigroup.com

PROJECT TITLE
13433 Gateway Drive

PROJECT NO.: 113999

DRAWN BY: JC

CHKD BY: JC

SCALE: 1/8"

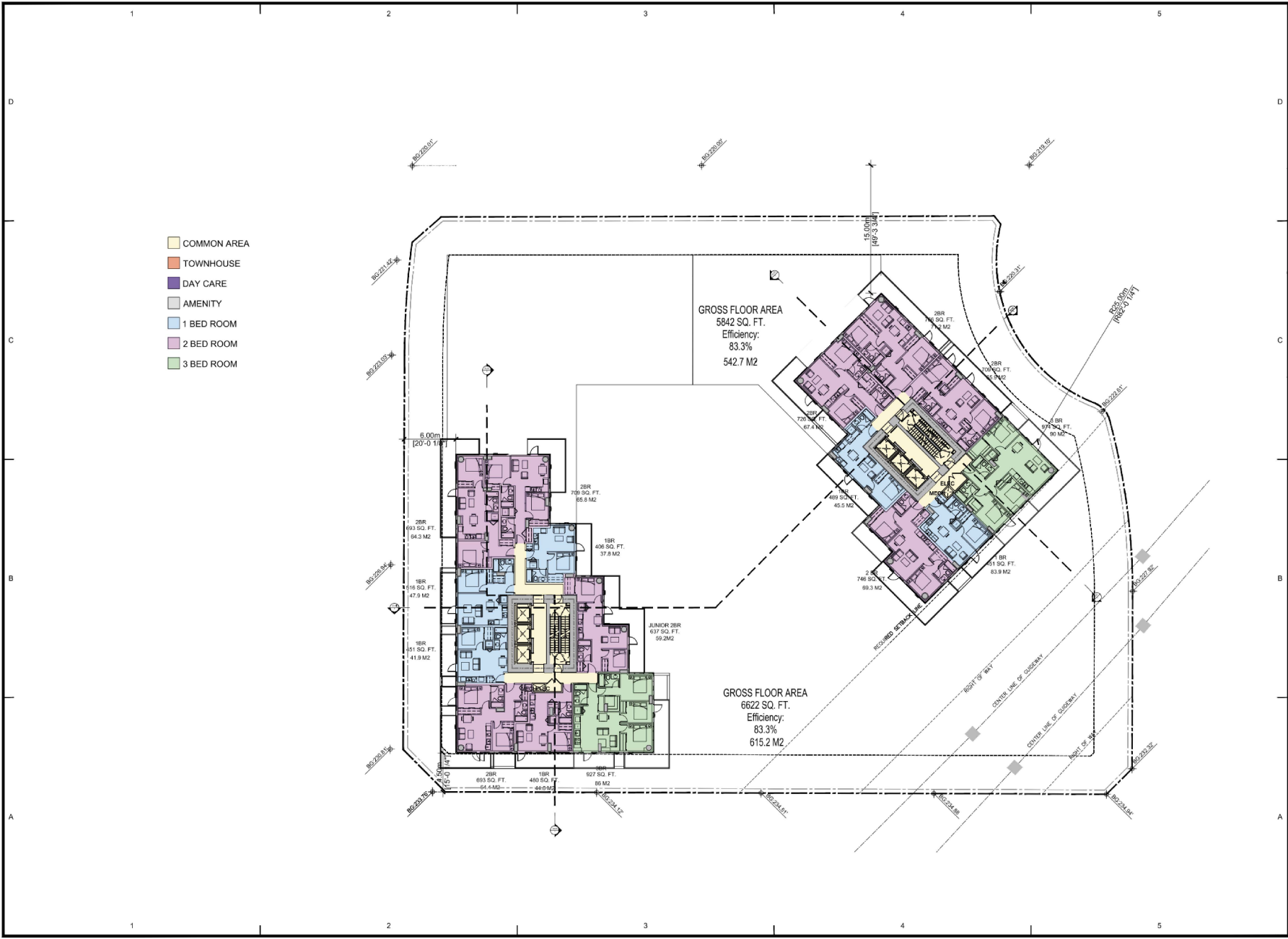
DATE: 2022-04-28

SHEET TITLE
East Tower Level 06-25
-FLOOR PLAN

SHEET NUMBER
A1.10B

REV.
.....

NOT FOR CONSTRUCTION



- COMMON AREA
- TOWNHOUSE
- DAY CARE
- AMENITY
- 1 BED ROOM
- 2 BED ROOM
- 3 BED ROOM

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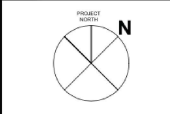


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SUB-CONSULTANT:

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770 - 1288 West Pender Street
Vancouver BC, V6E 4E1 Canada
Tel: 604 683 8787 Fax: 604 683 0482
ibi@ibi.com

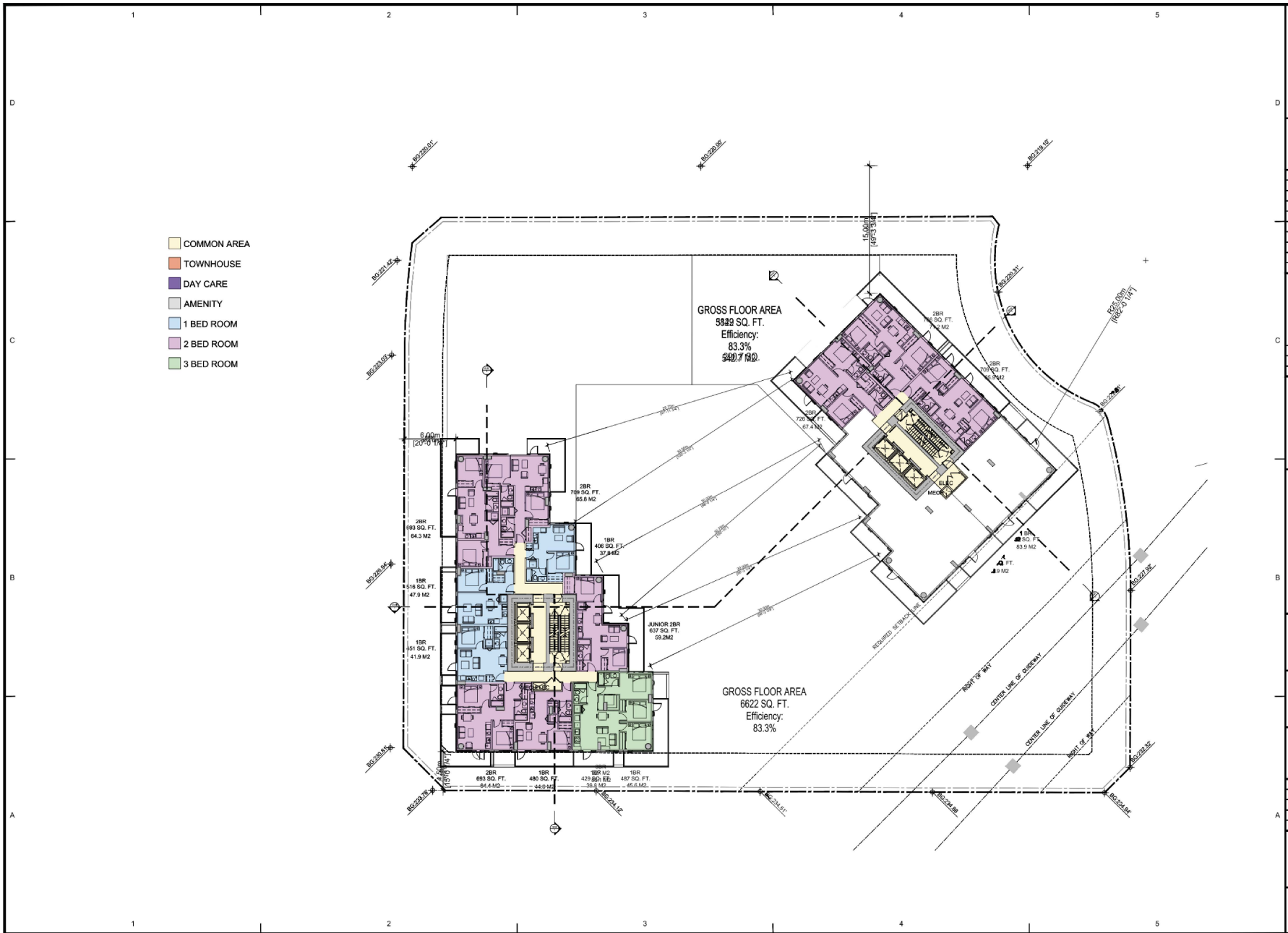
PROJECT TITLE
13433 Gateway Drive

PROJECT NO.: 112999
DRAWN BY:
CHKD BY: JC
SCALE: 1:16
DATE: 2023-04-28

SHEET TITLE
**TOWER LEVELS
26-35 EAST
31-40 WEST**

SHEET NUMBER A1.11	REV: -
------------------------------	--------

NOT FOR CONSTRUCTION



- COMMON AREA
- TOWNHOUSE
- DAY CARE
- AMENITY
- 1 BED ROOM
- 2 BED ROOM
- 3 BED ROOM

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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113569
DRAWN BY: JC
CHKD BY: JC

SCALE: 1/16
DATE: 2022-04-28

DWSET TITLE
Tower Level 36 - Tower Level 36 FLOOR PLAN

PROJECT NUMBER
A1.11A

NOT FOR CONSTRUCTION

KEY PLAN
Section 02

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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999

DRAWN BY: JC

CHK'D BY: 1:16

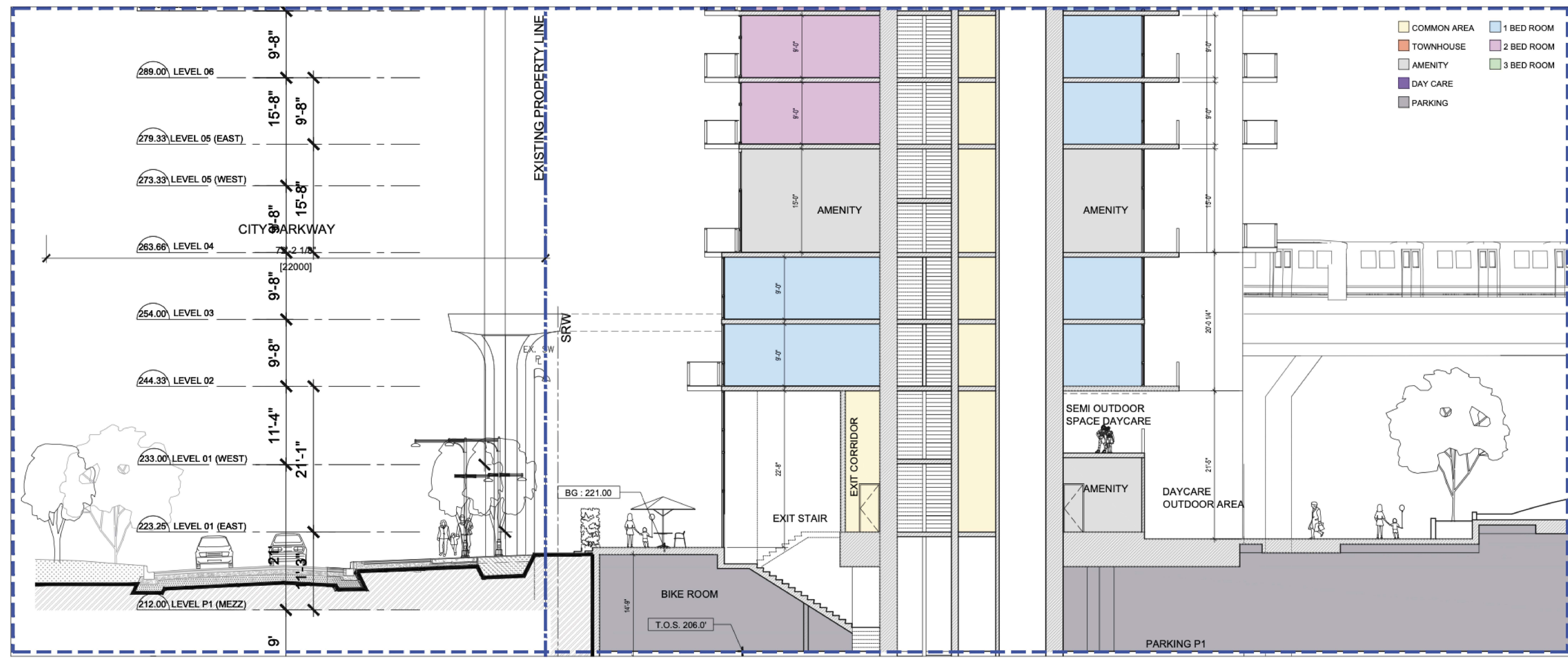
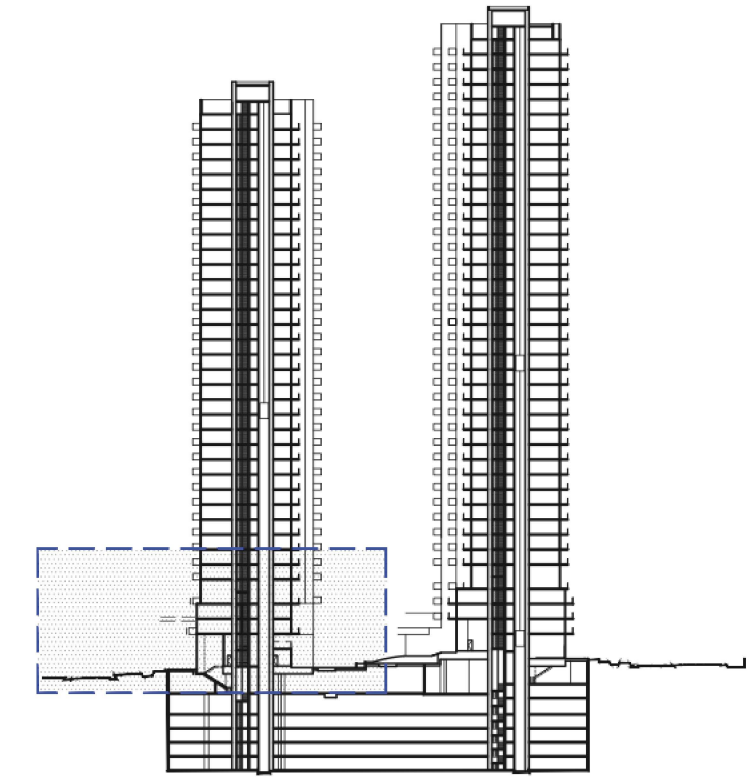
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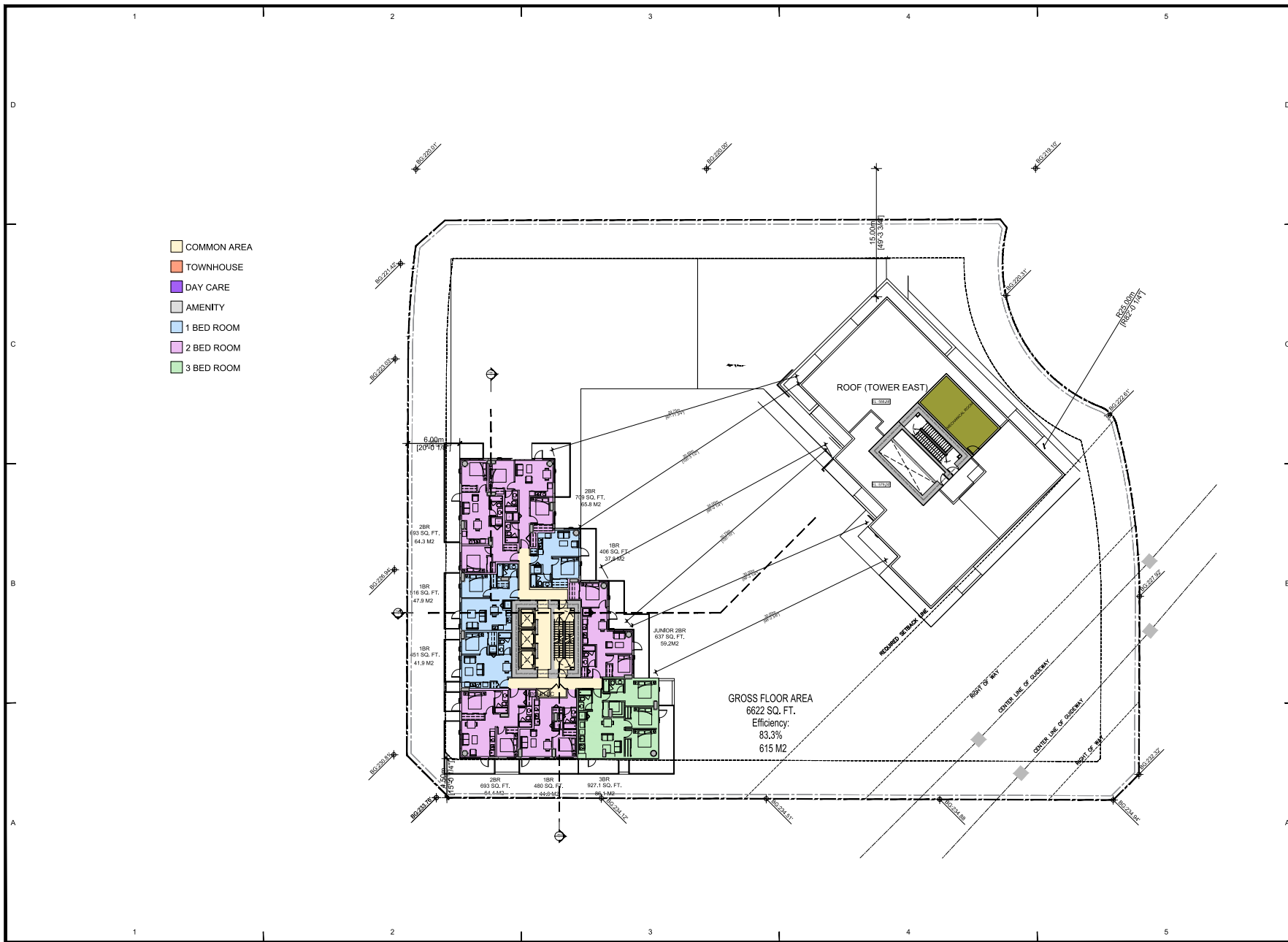
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Detailed section (Detail 2)

SHEET NUMBER
A3.06

REV: .----

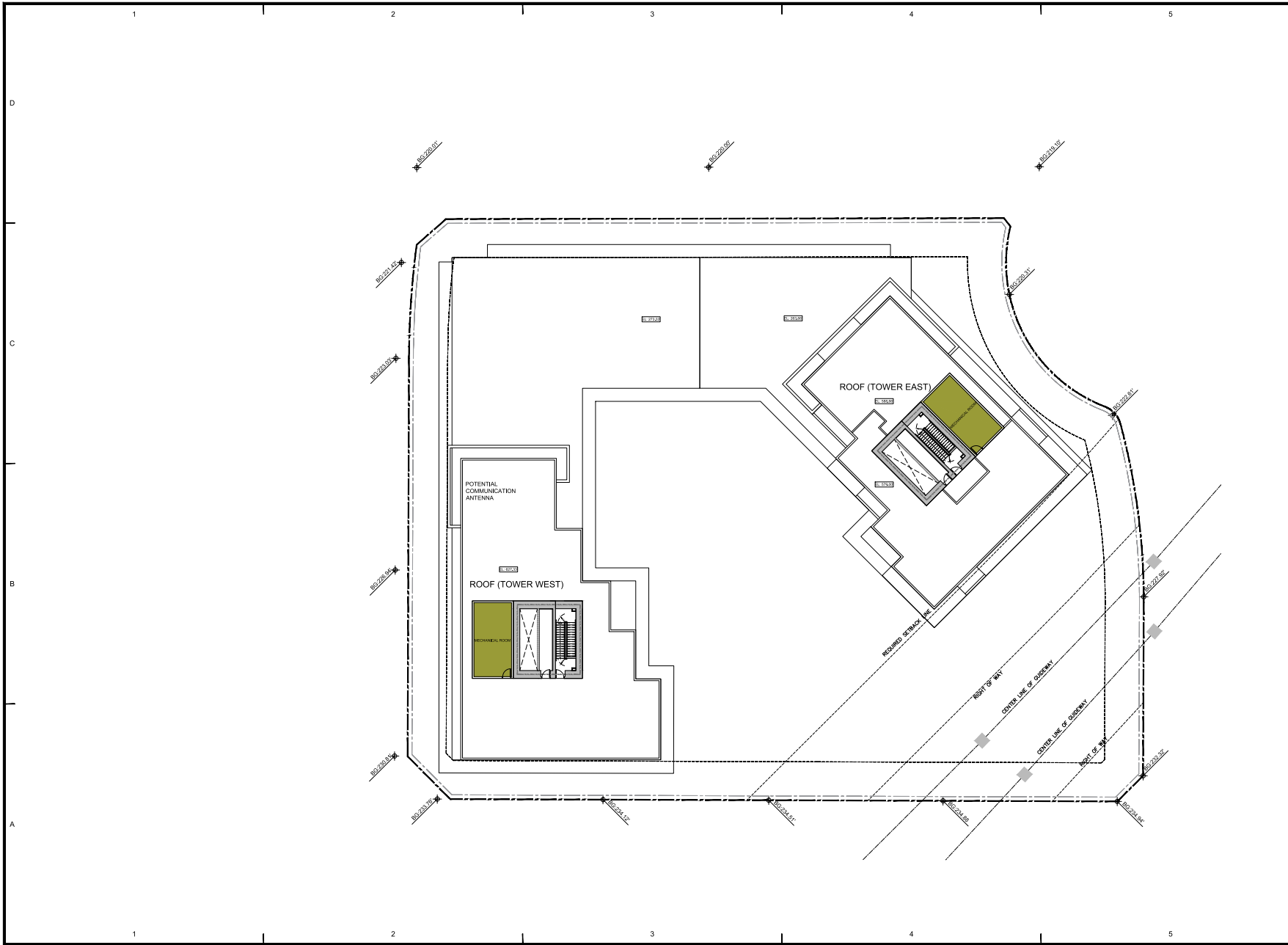
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PROJECT TITLE 13433 Gateway Drive	
PROJECT NO. 113899	
DRAWN BY: JC	
SCALE: 1:16	
DATE: 2022-04-28	
SHEET TITLE Tower Level 37-40 - Tower Level 37-40 -	
SHEET NUMBER A1.11B	REV: ---

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Comments:

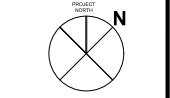
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NO.	DATE	DESCRIPTION
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700 - 1280 West Pender Street
Vancouver, BC, V6E 8B1, Canada
41 004 883 8797 Fax 604 883 0432
Ibi-group.com

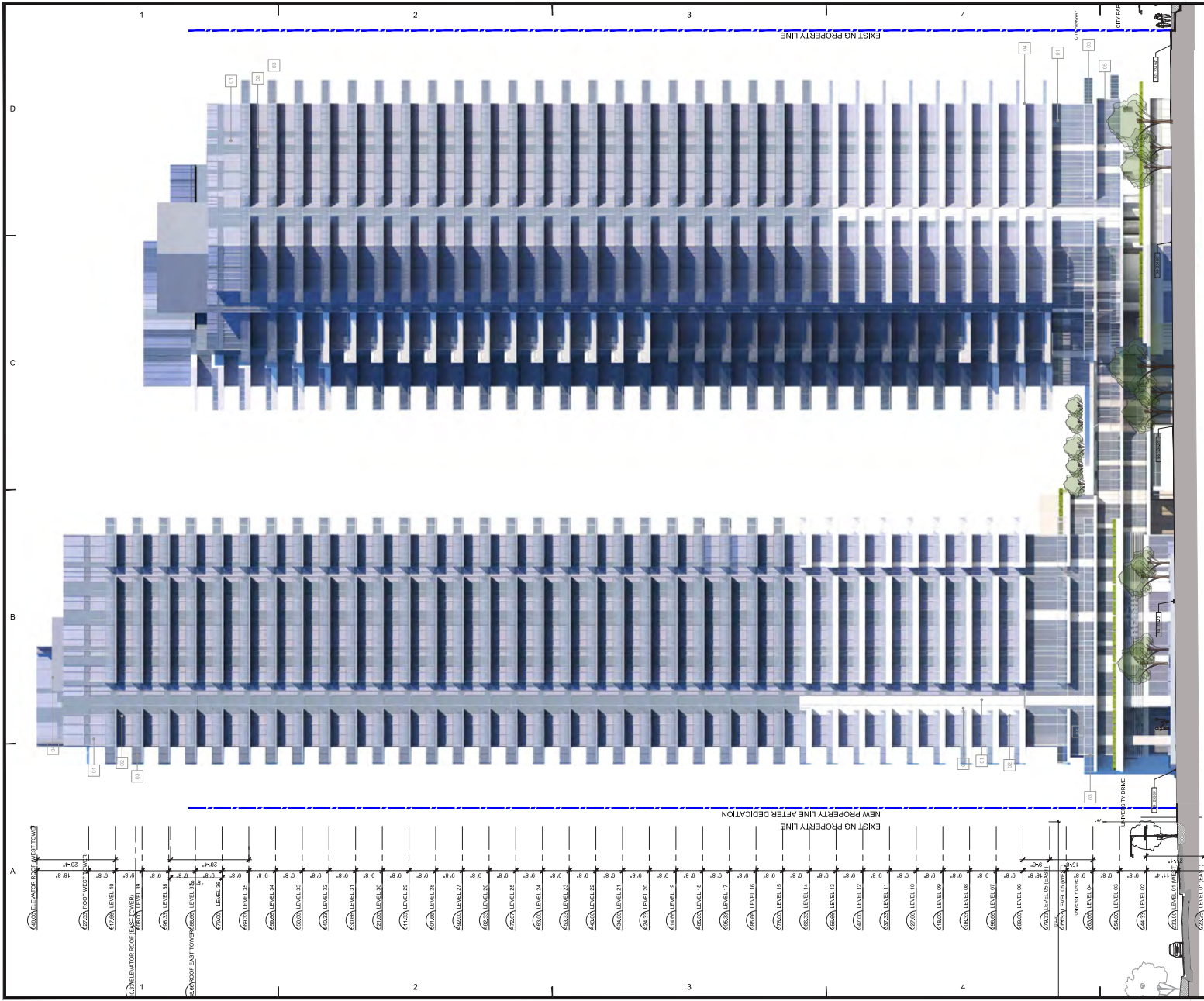
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13433 Gateway Drive

PROJECT NO.: 113989
DRAWN BY: XX
SCALE: 1:16
DATE: 2022-04-28

SHEET TITLE
ROOF PLAN

SHEET NUMBER	REV:
A1.12	---

NOT FOR CONSTRUCTION



MATERIAL KEY		
NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion/Claret Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion/Claret Blue Glass
03	Balcony Railing	Anodized silver Railing/Claret Glass
04	Painted Concrete	Stonewhite
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	White
07	Louwer	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange

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01	2024-04-26		REZONING SUBMISSION

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IBI IBI GROUP ARCHITECTS (CANADA) INC.
704-7288 River Front Street
Vancouver BC V6E 4B1 Canada
604.683.3737 fax 604.683.3463
ibi-group.com

PROJECT TITLE
13433 Gateway Drive

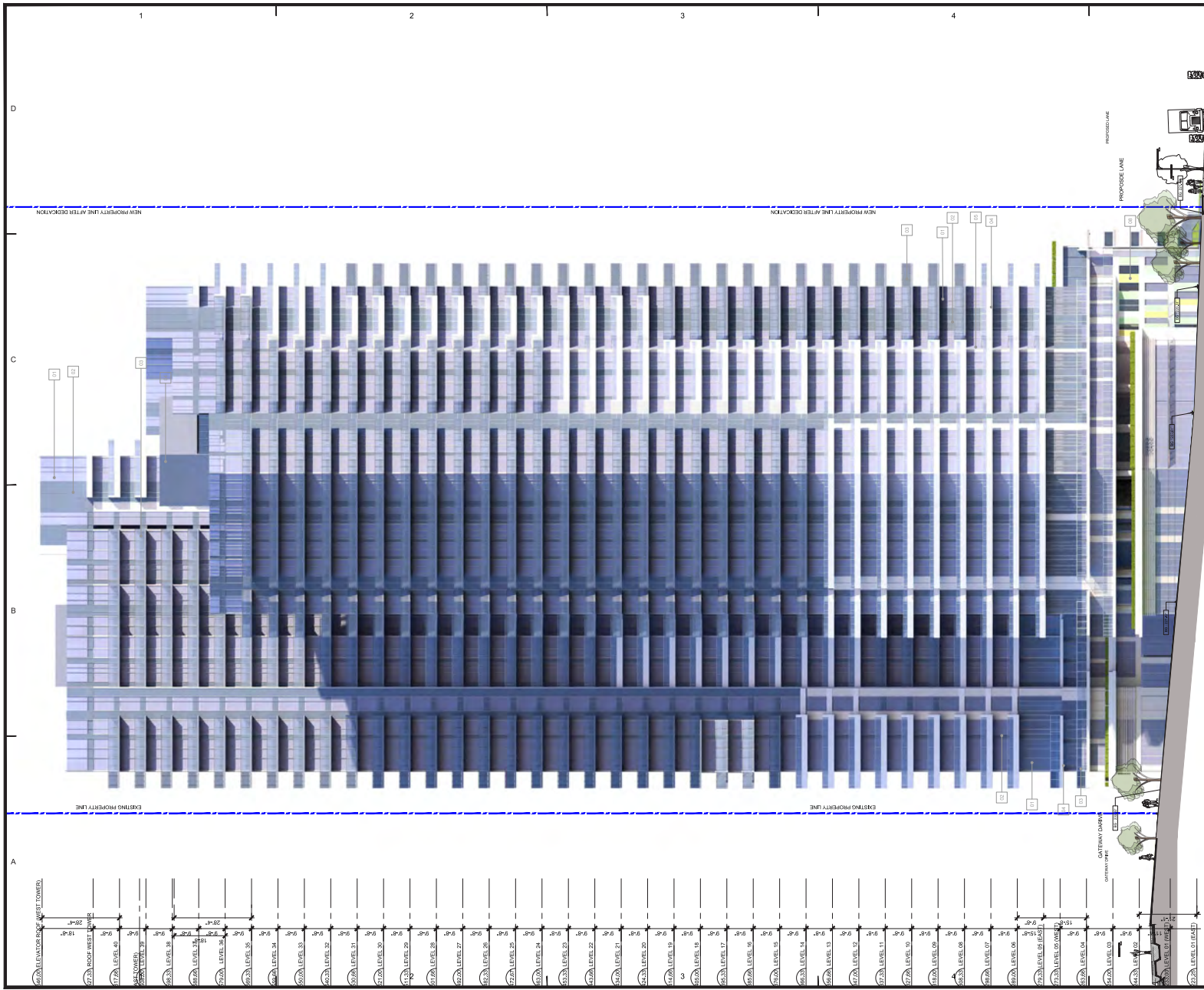
PROJECT NO: 113999
DRAWN BY: JC
SCALE: 1:16
DATE: 2022-04-28

SHEET TITLE
SOUTH ELEVATION

SHEET NUMBER
A2.01

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SI	2023-01-20	REZONING SUBMISSION

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170 - 102 West Pender Street
Vancouver BC, V6E 0E1 Canada
tel: 604.683.8737 fax: 604.683.0491
bigroup.com

PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113899

DRAWN BY: JC

CHECKED BY: 136

SCALE: 1:16

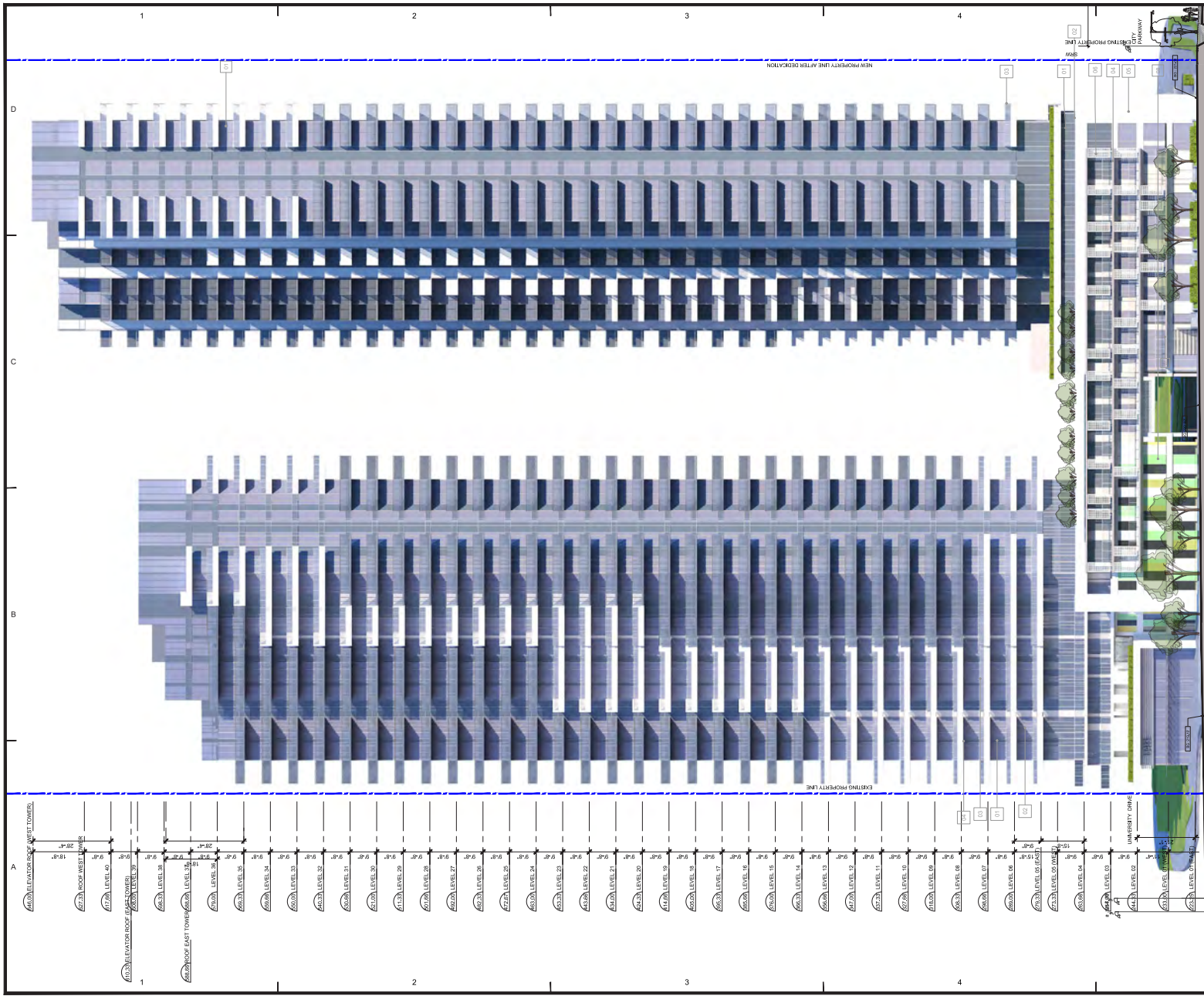
DATE: 2022-04-28

SHEET TITLE
EAST ELEVATION

SHEET NUMBER
A2.02

REV: ---

NOT FOR CONSTRUCTION



MATERIAL KEY

NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion/Clear Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion/Clear Blue Glazing
03	Balcony Railing	Anodized silver Railing/Clear Glass
04	Painted Concrete	Stoneville
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	White
07	Louwer	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange

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170 - 100 West Pender Street
Vancouver BC V6E 4B1 Canada
tel: 604 683 8777 fax: 604 683 0862
ibigroup.com

PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999

DRAWN BY: JC

SCALE: 1:16

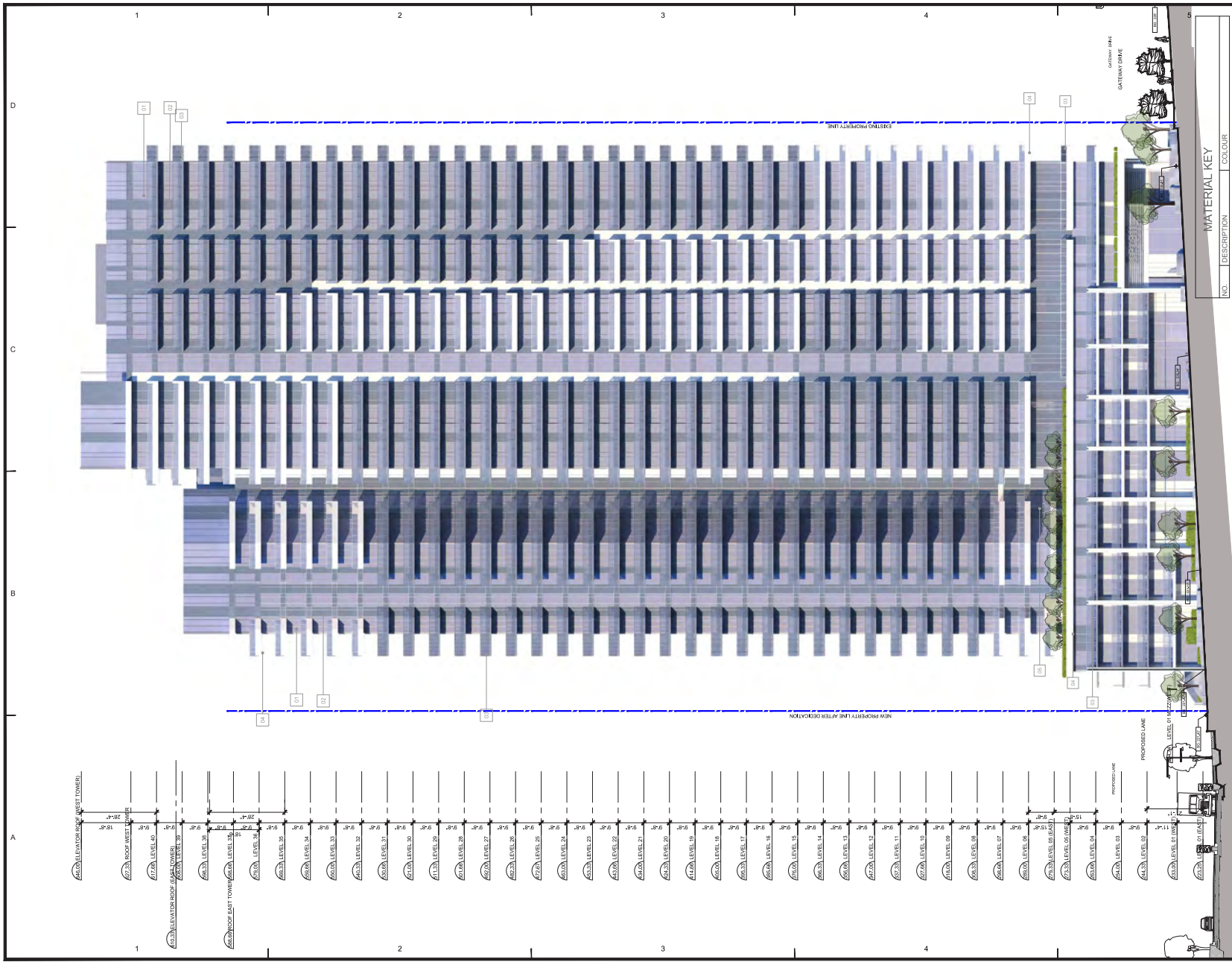
DATE: 2022-04-28

SHEET TITLE
NORTH ELEVATION

SHEET NUMBER
A2.03

REV: ----

NOT FOR CONSTRUCTION



NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized Silver Mullion/Clear Light Blue Glass
02	Standard Glazing	Anodized Silver Mullion/Gray Blue Glazing
03	Balcony Railing	Anodized Silver Railing/Clear Glass
04	Primary Concrete	Showerwhite
05	Secondary Concrete	White
06	Pre-cast Metal Cladding	White
07	Louvers	Charcoal Gray
08	Standard Metal Panel	Light Green - Light Orange

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02	2023-05-28		REZONING SUBMISSION

NO.	DATE	APPR.	DESCRIPTION

NO.	DATE	APPR.	DESCRIPTION

NO.	DATE	APPR.	DESCRIPTION

NO.	DATE	APPR.	DESCRIPTION

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170 - 102 West Pender Street
Vancouver BC V6E 0T1 Canada
tel: 604.683.8797 fax: 604.683.0860
ibigroup.com

PROJECT TITLE
13433 Gateway Drive

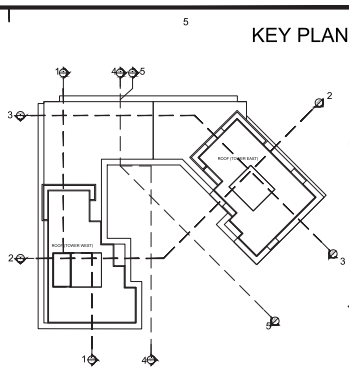
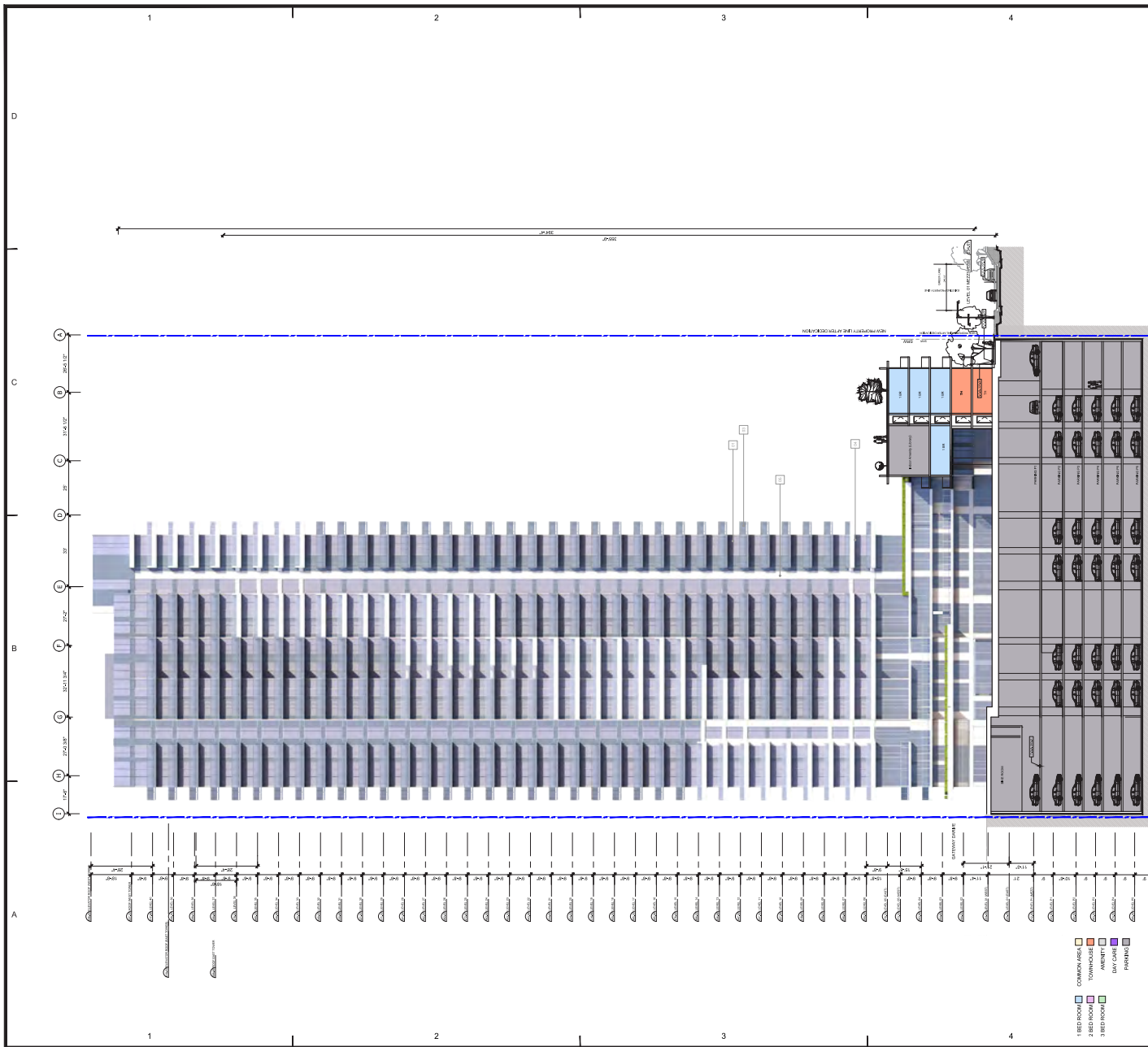
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DRAWN BY: XX
SCALE: 1:16
DATE: 2022-04-28

SHEET TITLE
WEST ELEVATION

SHEET NUMBER
A2.04

REV: ---

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NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion Clear Light Blue Glazs
02	Standard Glazing	Anodized silver Mullion Gray Blue Glazing
03	Screening	Anodized silver Mullion Clear Glass
04	Painted Concrete	Scraperwhite
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	Charcoal grey
07	Lower	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange

KEY PLAN

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01	2022-04-28		AOP SUBMISSION
01	2024-02-08		REZONING SUBMISSION

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ARCHITECTS (CANADA) INC.
170 - 305 West Pender Street
Vancouver, BC V6E 0B1 Canada
Tel: (604) 683-9797 Fax: (604) 683-0482
ibigroup.com

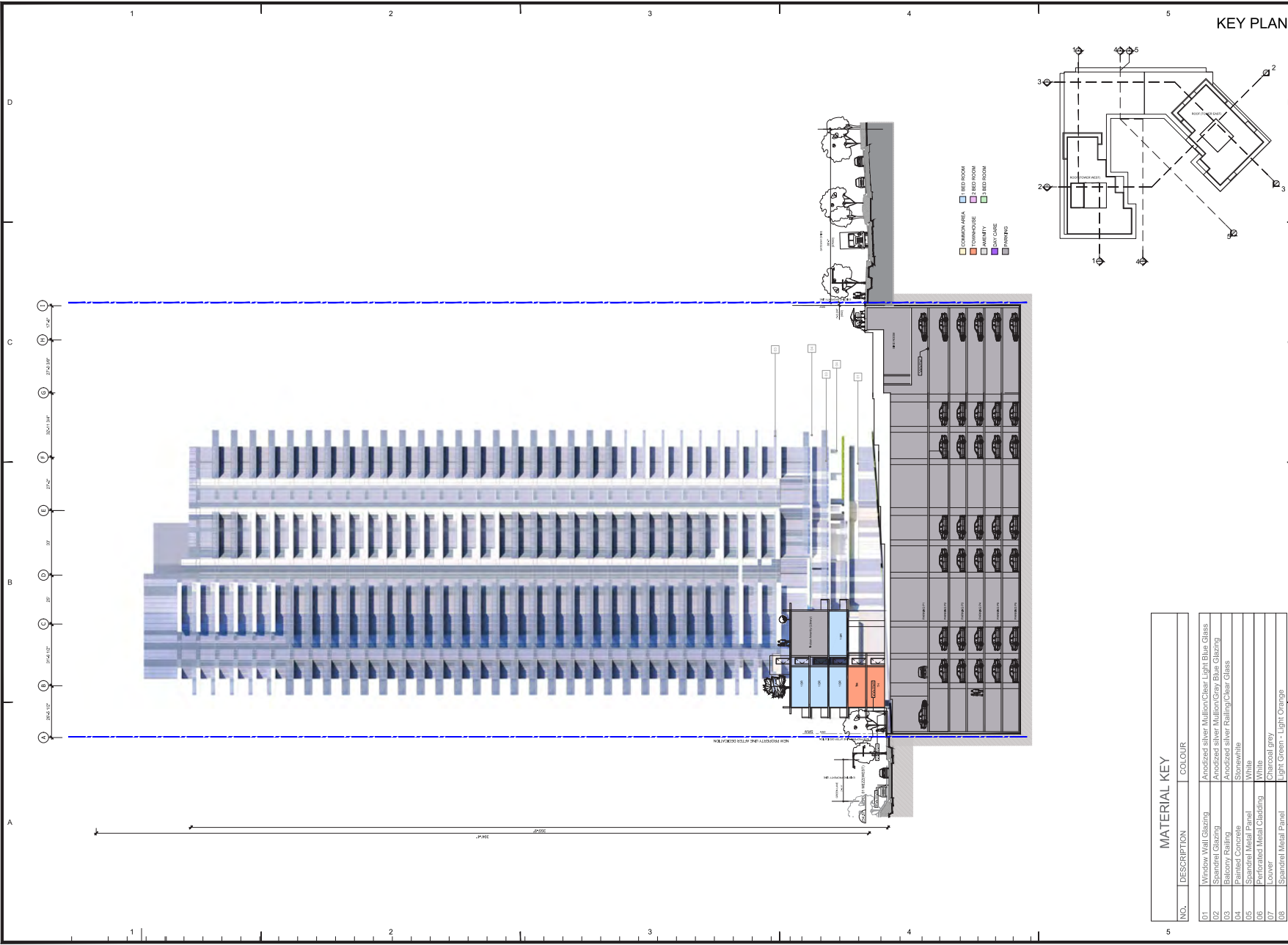
PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999
DRAWN BY: JC
CHKD BY: JC
SCALE: 3/4
DATE: 2022-04-28

SHEET TITLE
West elevation (From courtyard)

SHEET NUMBER
A2.05

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ISSUES

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REVISIONS

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IBI GROUP
ARCHITECTS (CANADA) INC.
170 - 1305 West Pender Street
Vancouver BC V6E 4B1 Canada
tel 604 683 8777 fax 604 683 0402
ibigroup.com

PROJECT TITLE

13433 Gateway Drive

PROJECT NO: 113899

DRAWN BY: JC

CHECKED BY: JC

SCALE: 3/64

DATE: 2022-04-28

SHEET TITLE

East elevation(From Courtyard)

SHEET NUMBER

A2.06

MATERIAL KEY

NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion Clear Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion Gray Blue Glazing
03	Window Wall Glazing	Anodized silver Mullion Clear Glass
04	Painted Concrete	Stonematrix
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	Charcoal grey
07	Lower	Light Green - Light Orange
08	Spandrel Metal Panel	Light Green - Light Orange

NOT FOR CONSTRUCTION



D
C
B
A

1 2 3 4 5

1 2 3 4 5

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NO.	DATE	DESCRIPTION

ISSUES	

NO.	DATE	APPR.	DESCRIPTION
REVISIONS			

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170 - 1205 West Pender Street
Vancouver BC V6E 4B1 Canada
tel 604 683 8737 fax 604 683 0482
bigroup.com

PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113995
DRAWN BY: XX
SCALE: 3/32
DATE: 2022-04-28

SHEET TITLE
PODIUM WEST
ELEVATION (University
Dr)

SHEET NUMBER
A2.07
REV: ---

MATERIAL KEY		
NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion/Clear Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion/Gray Blue Glazing
03	Balcony Railing	Anodized silver Railing/Clear Glass
04	Painted Concrete	Stonewhite
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	White
07	Louwer	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange

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01	2022-04-28	AOP SUBMISSION
02	2023-05-26	REZONING SUBMISSION
NO.	DATE	DESCRIPTION

ISSUES	

NO.	DATE	APPR.	DESCRIPTION
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REVISIONS			

SEAL

SUB-CONSULTANT

PRIME CONSULTANT

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Tel: (604) 683-8727 Fax: (604) 683-0482
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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113995

DRAWN BY: XX

SCALE: 3/32

DATE: 2022-04-28

SHEET TITLE
PODIUM NORTH ELEVATION (Proposed)
(Jane)

SHEET NUMBER
A2.08

REV: ---

MATERIAL KEY		
NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion/Clear Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion/Gray Blue Glazing
03	Balcony Railing	Anodized silver Railing/Clear Glass
04	Painted Concrete	Stonewhite
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	White
07	Louwer	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange

NOT FOR CONSTRUCTION



MATERIAL KEY		
NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion/Clear Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion/Gray Blue Glazing
03	Balcony Railing	Anodized silver Railing/Clear Glass
04	Painted Concrete	Stonewhite
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	White
07	Louver	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange

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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999

DRAWN BY: XX

SCALE: 3:32

DATE: 2022-04-28

SHEET TITLE
PODIUM EAST
ELEVATION (City
PKWY)

SHEET NUMBER
A2.09

REV: ---

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02	2024-02-26		REZONING SUBMISSION

ISSUES

NO.	DATE	APPR.	DESCRIPTION
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REVISIONS

NO.	DATE	APPR.	DESCRIPTION
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100-1035 West Pender Street
Vancouver BC V6E 4B1 Canada
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ibigroup.com

PROJECT TITLE
13433 Gateway Drive

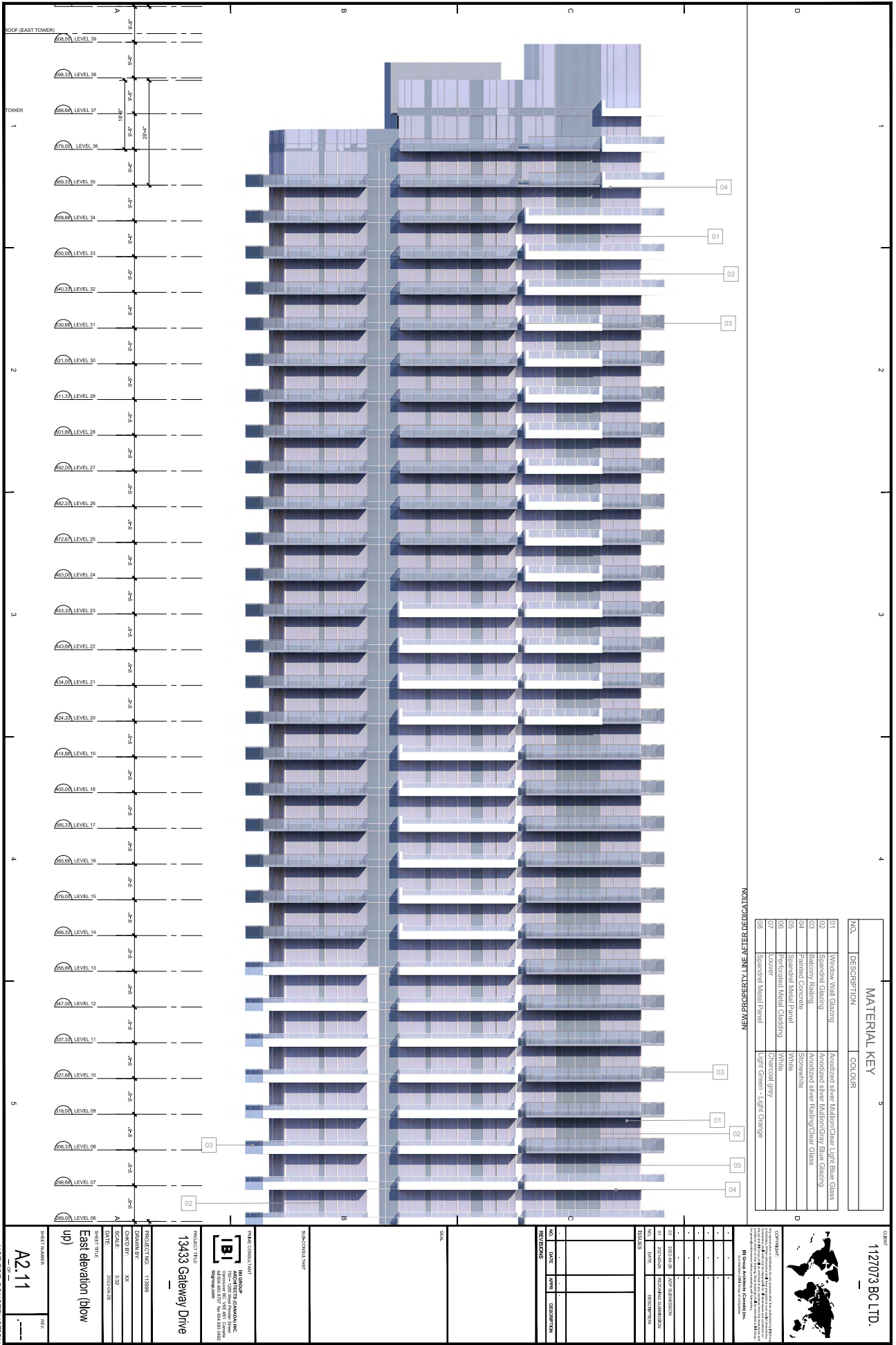
PROJECT NO: 113995
DRAWN BY: XX
SCALE: 3/32
DATE: 2022-04-28

SHEET TITLE
PODIUM SOUTH ELEVATION (Gateway Dr)

SHEET NUMBER: **A2.10**
REV: ---

MATERIAL KEY		
NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion/Clear Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion/Gray Blue Glazing
03	Balcony Railing	Anodized silver Railing/Clear Glass
04	Painted Concrete	Stonewhite
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	White
07	Louver	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange

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MATERIAL KEY

NO.	DESCRIPTION	COLOR
01	Window Wall Glazing	Anodized Silver Medium/Clear Light Blue Glass
02	Standard Glazing	Anodized Silver Medium/Gray Blue Glazing
03	Brickery Railing	Anodized Silver Railing/Clear Glass
04	Formed Concrete	Stormwite
05	Standard Wall Panel	White
06	Standard Metal Cladding	Charcoal grey
07	Couler	Light Green - Light Orange
08	Standard Metal Panel	

NEW PROPERTY LINE AFTER REDUCTION



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CONTRACT
117073 BC LTD. AND 117073 BC LTD. PARTNERSHIP
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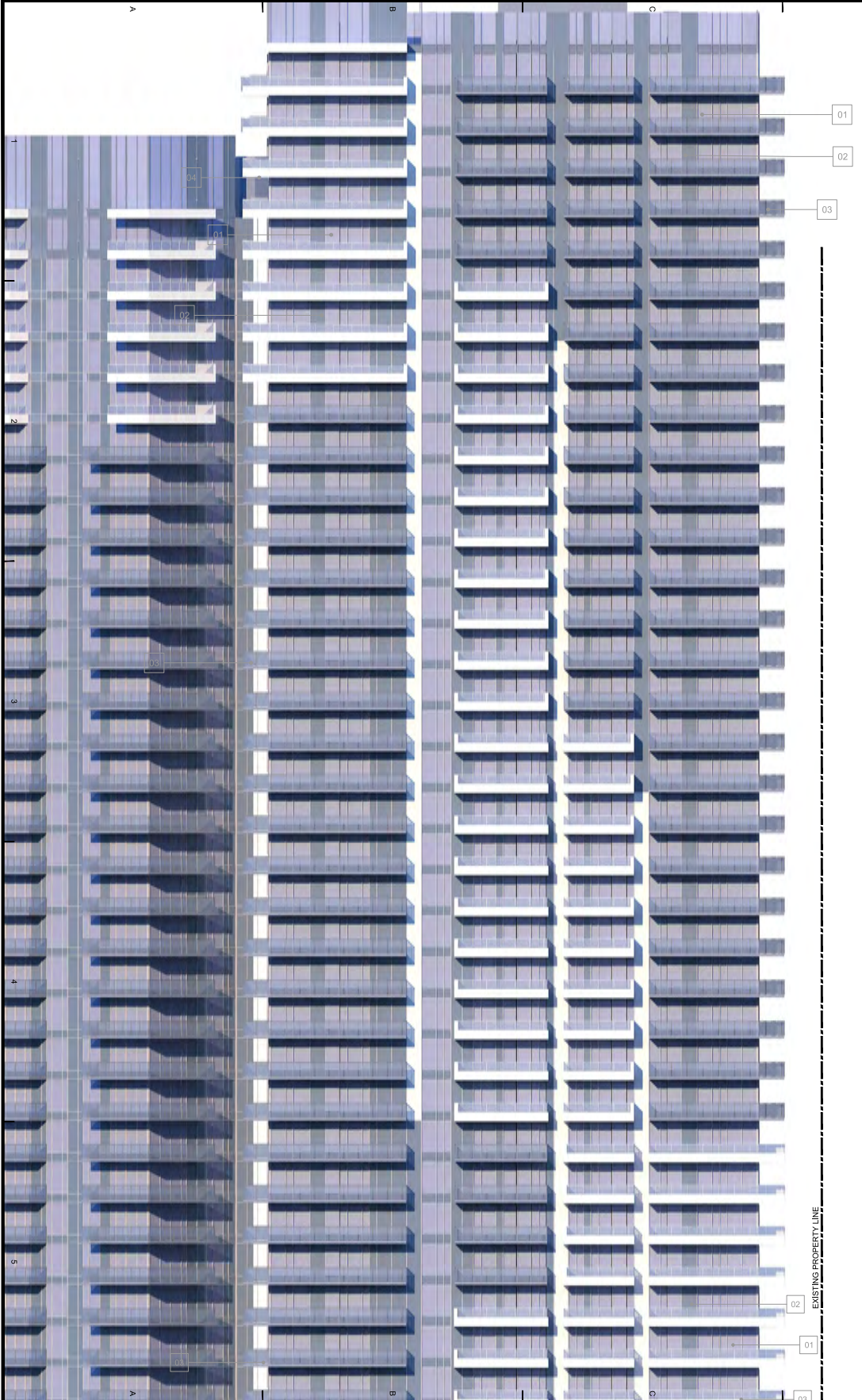
117073 BC LTD. PARTNERSHIP

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1 2 3 4

MATERIAL KEY

NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized Silver Midton/Clear Light Blue Glass
02	Standard Glazing	Anodized Silver Midton/Gray Blue Glazing
03	Balcony Railing	Anodized Silver Railing/Clear Glass
04	Concrete	Stormline
05	Standard Wall Panel	White
06	Standard Metal Cladding	Charcoal grey
07	Lower Metal Cladding	Charcoal grey
08	Standard Metal Panel	Light Green - Light Gauge



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ARCHITECTS IN CANADA INC.
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NO.	DATE	TYPE	DESCRIPTION

NO.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION

NO.	DATE	DESCRIPTION

PROJECT TITLE
13433 Gateway Drive

PROJECT NO.
113989

DRAWN BY
MS

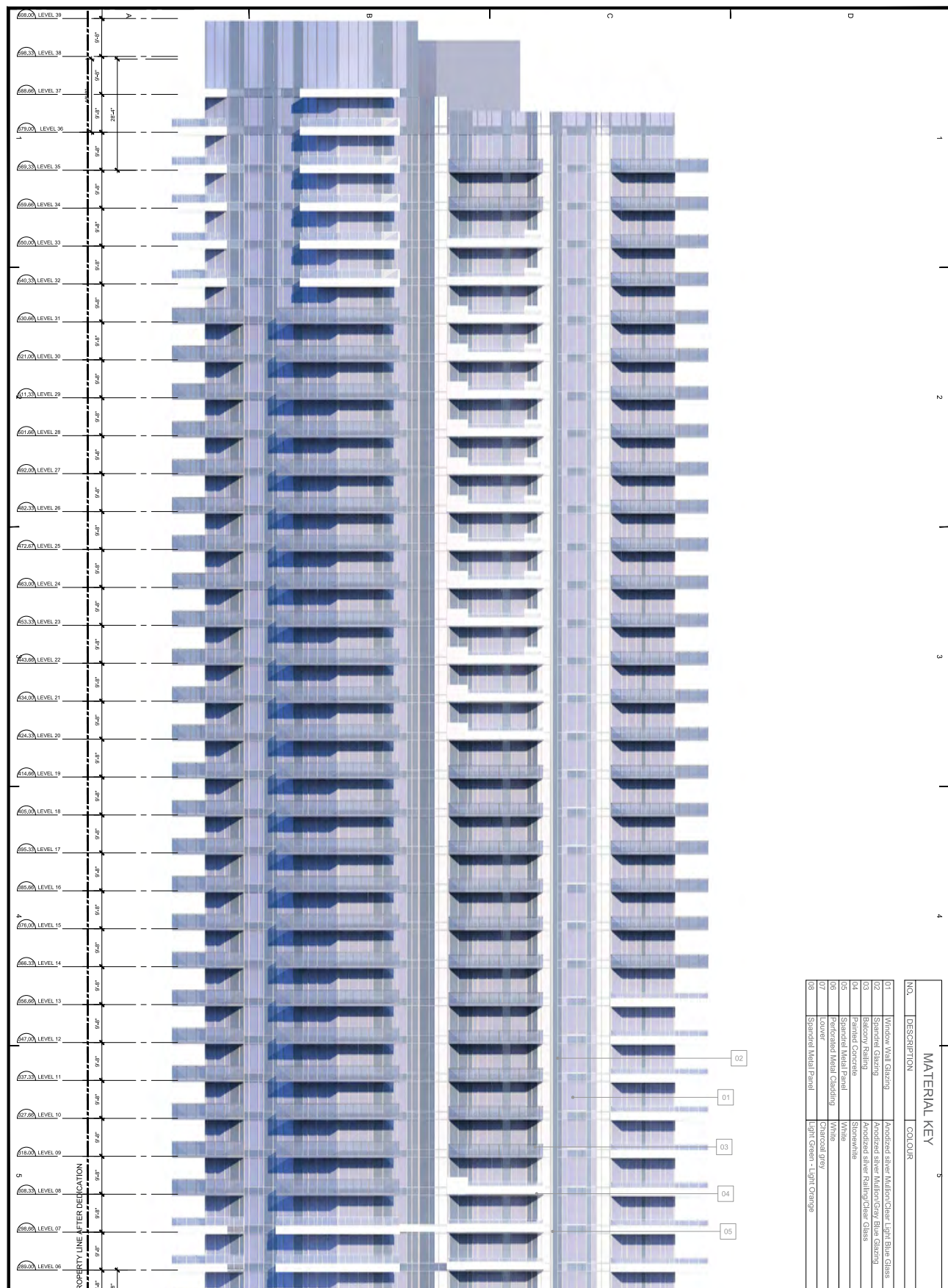
CHECKED BY
SJS

DATE
2022/01/28

SHEET TITLE
West elevation (blow up)

SHEET NUMBER
A2.12

NOT FOR CONSTRUCTION



MATERIAL KEY

NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized Silver Mullion/Chair Light Blue Glass
02	Standard Glazing	Anodized Silver Mullion/Gray Blue Glazing
03	Brickery Railing	Anodized Silver Railing/Clear Glass
04	Standard Concrete	Stormwhite
05	Standard Wall Panel	White
06	Standard Metal Cladding	Charcoal grey
07	Lower	Charcoal grey
08	Standard Metal Panel	Light Green - Light Orange



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NO.	DATE	TYPE	DESCRIPTION

NO.	DATE	TYPE	DESCRIPTION

PROJECT TITLE
13433 Gateway Drive

PROJECT NO.
113989

DRAWN BY
SJS

CHECKED BY
SJS

DATE
2022/04/26

SHEET NUMBER
A2.13

OF
1

NOT FOR CONSTRUCTION

1

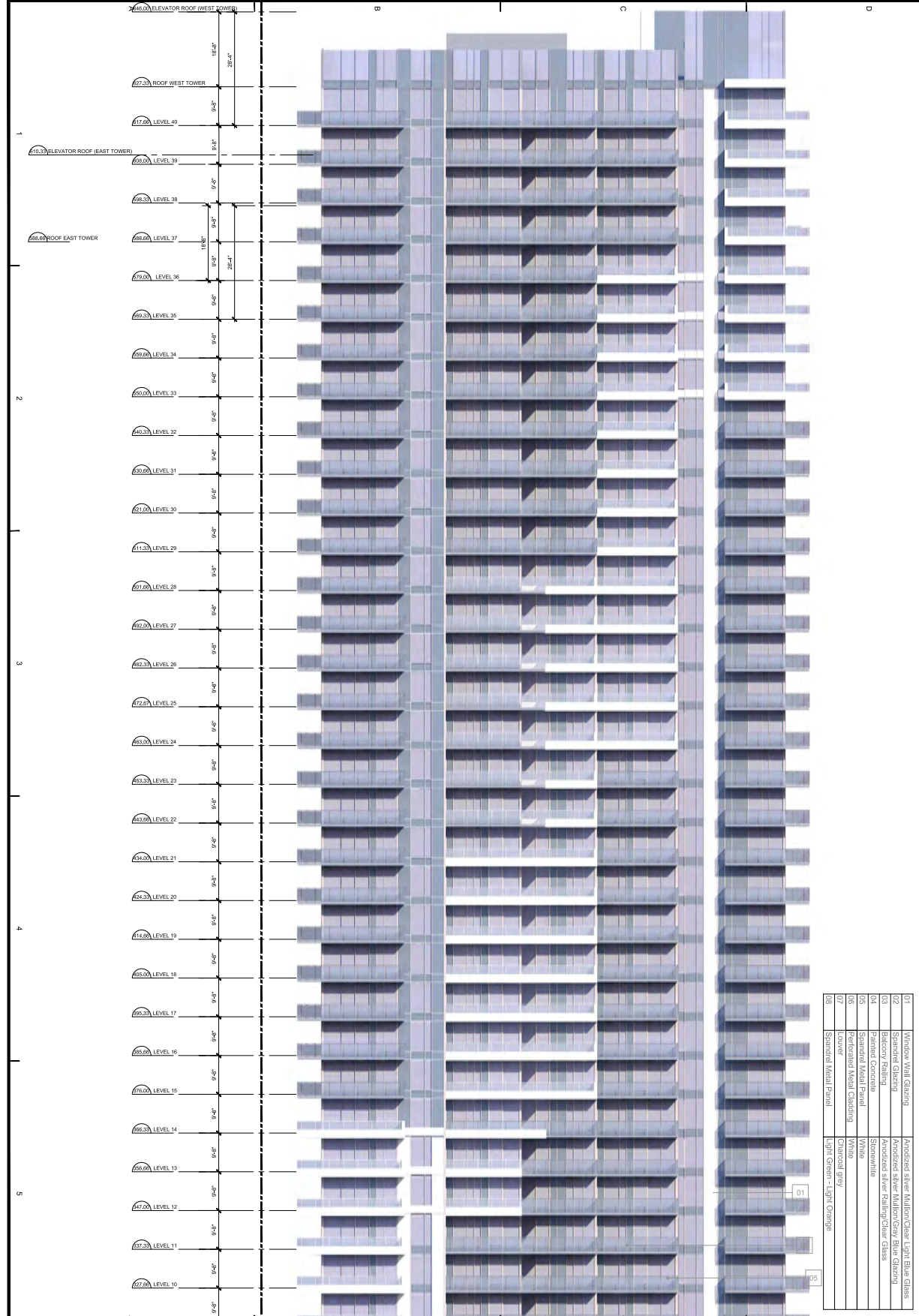
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4

5

MATERIAL KEY		NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing		Anodized Silver Midton/Char Light Blue Glass	
02	Standard Glazing		Anodized Silver Midton/Gray Blue Glazing	
03	Balcony Railing		Anodized Silver Railing/Char Glass	
04	Concrete		Semi-matte	
05	Standard Wall Panel		White	
06	Standard Metal Cladding		Charcoal Grey	
07	Cladding Metal Cladding		Light Green - Light Orange	
08	Standard Metal Panel		Light Green - Light Orange	



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NO.	DATE	ISSUE	DESCRIPTION

PROJECT NO.	113993
DRAWING NO.	EX2
SCALE	1:200
DATE	2023/05/16

PROJECT TITLE
13433 Gairway Drive

DRAWN BY
KZ

CHECKED BY
KS

DATE
2023/05/16

PROJECT TITLE
13433 Gairway Drive

DRAWN BY
KZ


CHECKED BY
KS

DATE
2023/05/16


SHEET NUMBER
A2.14

NOT FOR CONSTRUCTION


MATERIAL KEY		
NO.	DESCRIPTION	COLOUR
01	Window Wall Glazing	Anodized silver Mullion/Clear Light Blue Glass
02	Spandrel Glazing	Anodized silver Mullion/Gray Blue Glazing
03	Balcony Railing	Anodized silver Railing/Clear Glass
04	Painted Concrete	Stonewhite
05	Spandrel Metal Panel	White
06	Perforated Metal Cladding	White
07	Louver	Charcoal grey
08	Spandrel Metal Panel	Light Green - Light Orange



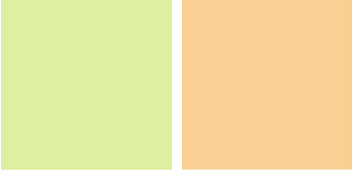
1-Vision glass- Low E glazing unit-Light Blue




2-Spandrel Glazing (Dark blue)



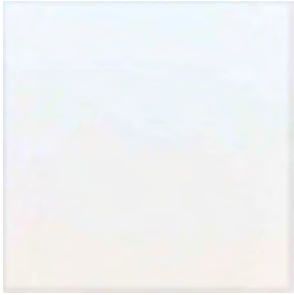
1,2,3- Anodized Silver Aluminum Frame
(Window frames, Balcony guardrails)



8-Spandrel Metal Panel - Light Green, Light Orange

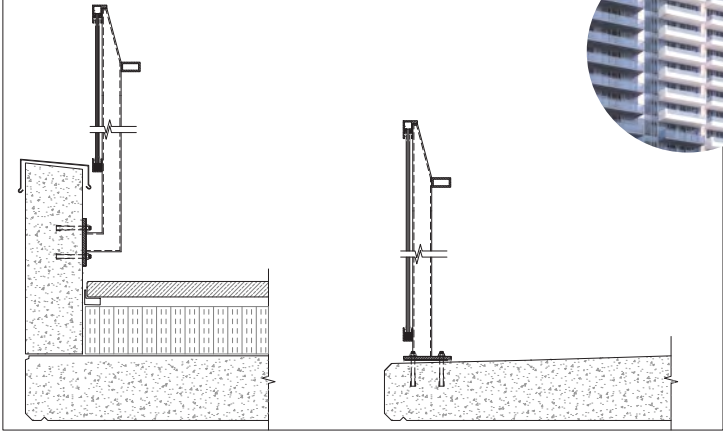


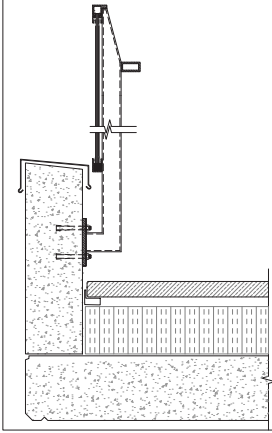
4-Painted Concrete
(Balcony slabs, Parapets and eyebrows)



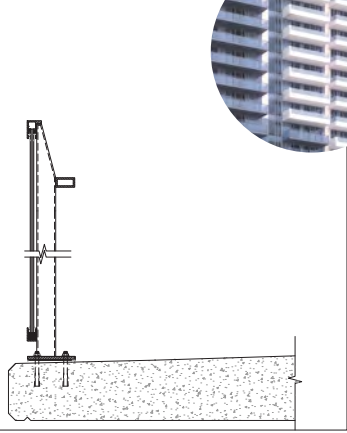
5-Spandrel Metal White Panel

DETAIL- TYPICAL BALCONY GUARDRAIL







Side mounted guardrail



Top mounted guardrail



6-Perforated Metal Cladding-White
(North balconies)



7-Architectural louvers-Charcoal grey

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NO.	DATE	APPR.	DESCRIPTION

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702-1100 West Pender Street
Vancouver BC V6E 4R1 Canada
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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113896

DRAWN BY: XX

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SCALE: 1:16

DATE: 2022-04-28

SHEET TITLE
MATERIAL BOARD

SHEET NUMBER	REV.
A2.15	---

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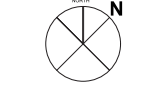
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REV	2022-04-28	RFP SUBMISSION
01	2023-02-28	RFP SUBMISSION
NO.	DATE	DESCRIPTION

ISSUES

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REVISIONS



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PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999

DRAWN BY: XX

SCALE: 3/32

DATE: 2022-04-28

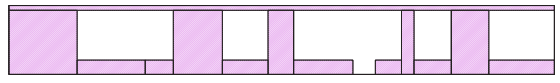
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**Solid Surface Calc.
TYP. Levels Elevation**

SHEET NUMBER	REV.
A2.16	----

WEST TOWER - TYP LEVELS ELEVATION - OPAQUE SURFACE CALCULATION

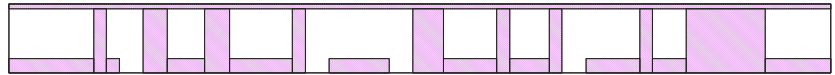
NORTH Elevation. Typ.06-30

Glazing Area: 353 SF
Opaque Area: 387 SF
Total Area: 740 SF
Opaque/Total: 52.3%



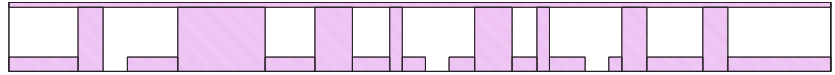
EAST Elevation. Typ.06-30

Glazing Area: 616 SF
Opaque Area: 499 SF
Total Area: 1115 SF
Opaque/Total: 44.8%



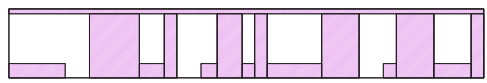
WEST Elevation. Typ.06-30

Glazing Area: 570 SF
Opaque Area: 545 SF
Total Area: 1115 SF
Opaque/Total: 48.9%



SOUTH Elevation. Typ.06-30

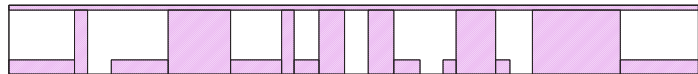
Glazing Area: 303 SF
Opaque Area: 341 SF
Total Area: 644 SF
Opaque/Total: 53%



EAST TOWER - TYP LEVELS ELEVATION - OPAQUE SURFACE CALCULATION

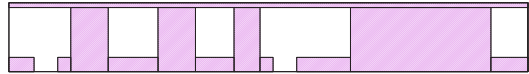
NORTH-EAST Elevation. Typ.06-30

Glazing Area: 442 SF
Opaque Area: 494 SF
Total Area: 936 SF
Opaque/Total: 52.8%



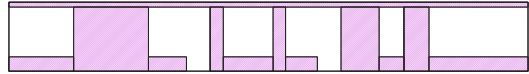
NORTH-WEST Elevation. Typ.06-30

Glazing Area: 286 SF
Opaque Area: 418 SF
Total Area: 704 SF
Opaque/Total: 59.4%



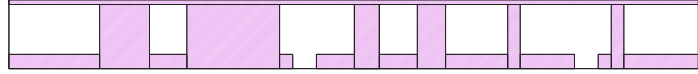
SOUTH-EAST Elevation. Typ.06-30

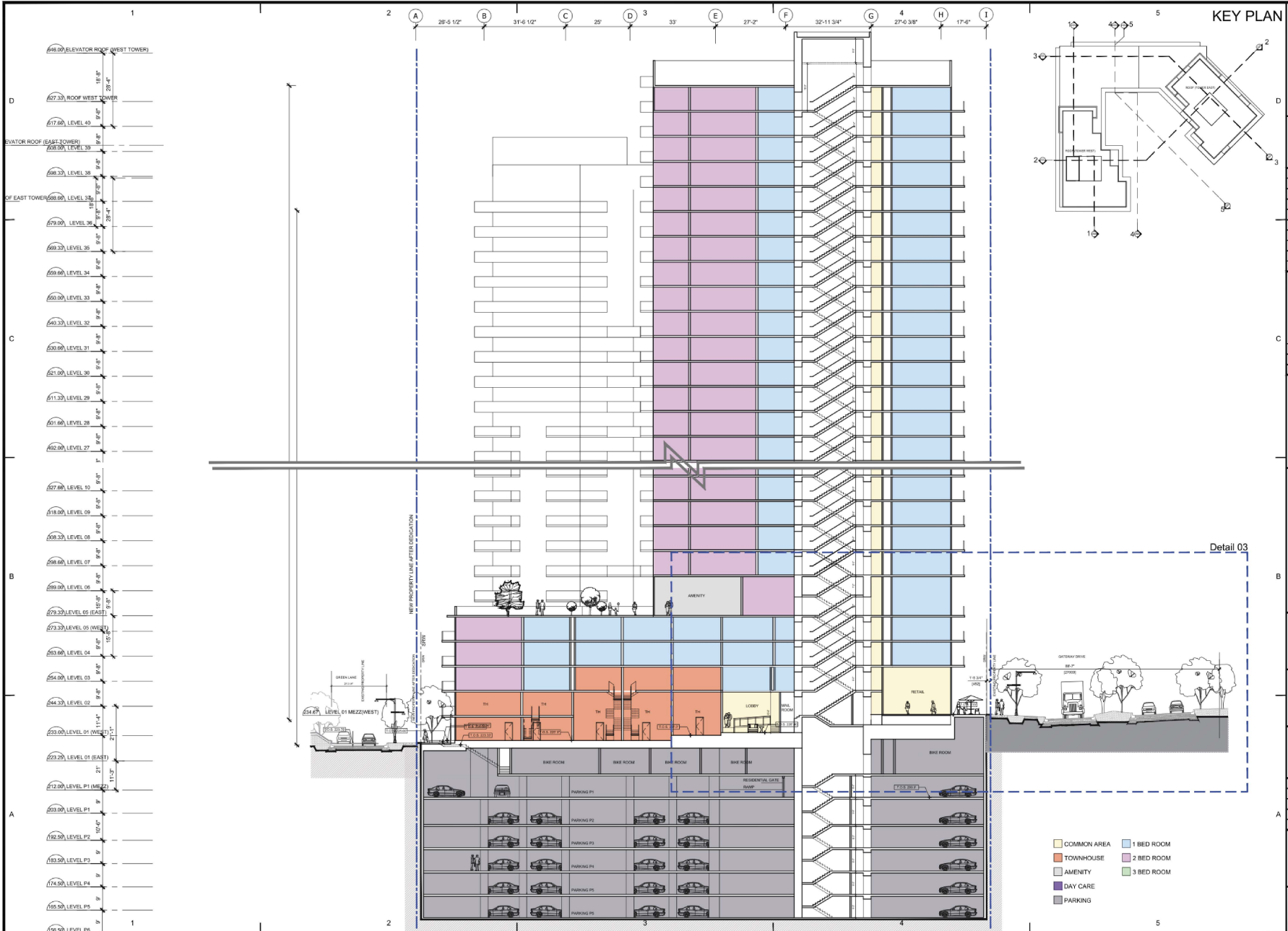
Glazing Area: 383 SF
Opaque Area: 341 SF
Total Area: 704 SF
Opaque/Total: 48.4%



SOUTH-WEST Elevation. Typ.06-30

Glazing Area: 474 SF
Opaque Area: 462 SF
Total Area: 936 SF
Opaque/Total: 49.4%





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02	2022-04-28	ADP SUBMISSION
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ISSUES

NO.	DATE	APPR.	DESCRIPTION
REVISIONS			

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SUB-CONSULTANT

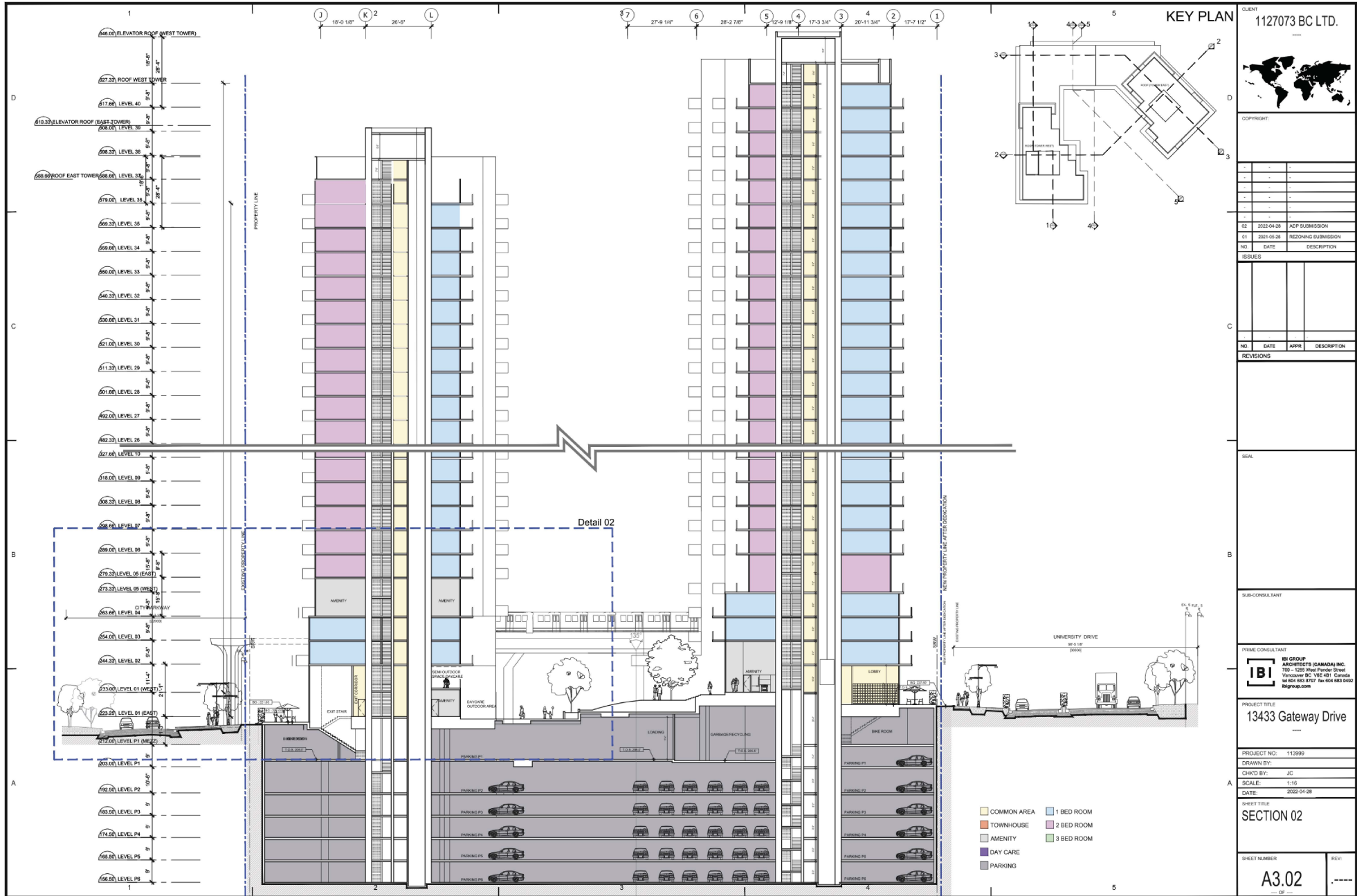
PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999
DRAWN BY: JC
CHKD BY: JC
SCALE: 1/16
DATE: 2022-04-28

PROJECT TITLE
SECTION 01

SHEET NUMBER
A3.01

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ibi@ibi.com

PROJECT TITLE

13433 Gateway Drive

PROJECT NO. 113999

DRAWN BY: JG

SCALE: 1/16"

DATE: 2022-04-28

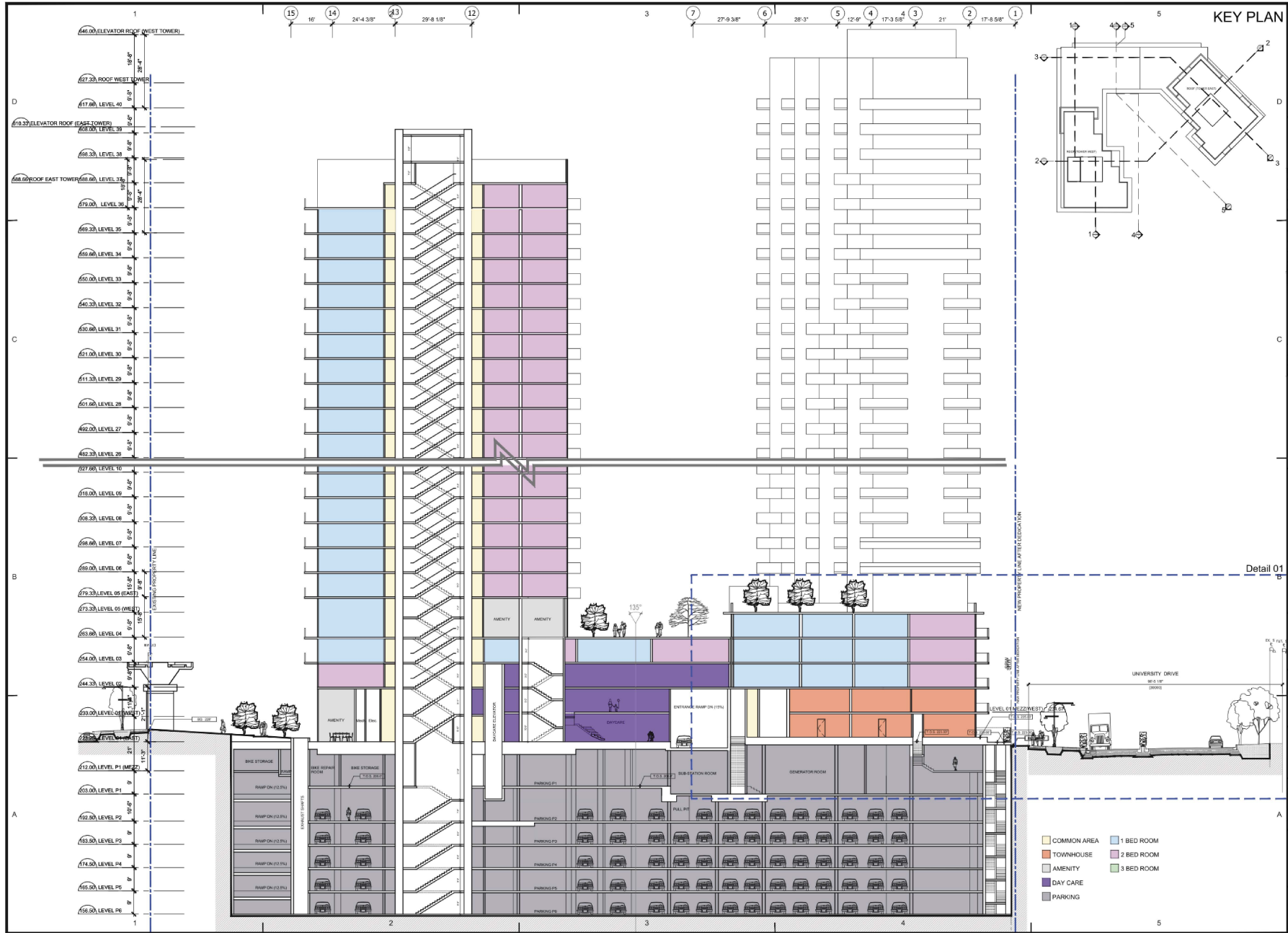
SHEET TITLE

SECTION 02

SHEET NUMBER

A3.02

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KEY PLAN

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S2	2022-04-29	ADP SUBMISSION
S1	2021-05-20	REZONING SUBMISSION

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REVISIONS

NO.	DATE	APPR	DESCRIPTION

SEAL

Detail 01

SUB-CONSULTANT

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ibi@ibi.com

PROJECT TITLE
13433 Gateway Drive

PROJECT NUMBER
113999

DRAWN BY:
JC

CHECKED BY:
JC

SCALE:
1:16

DATE:
2022-04-28

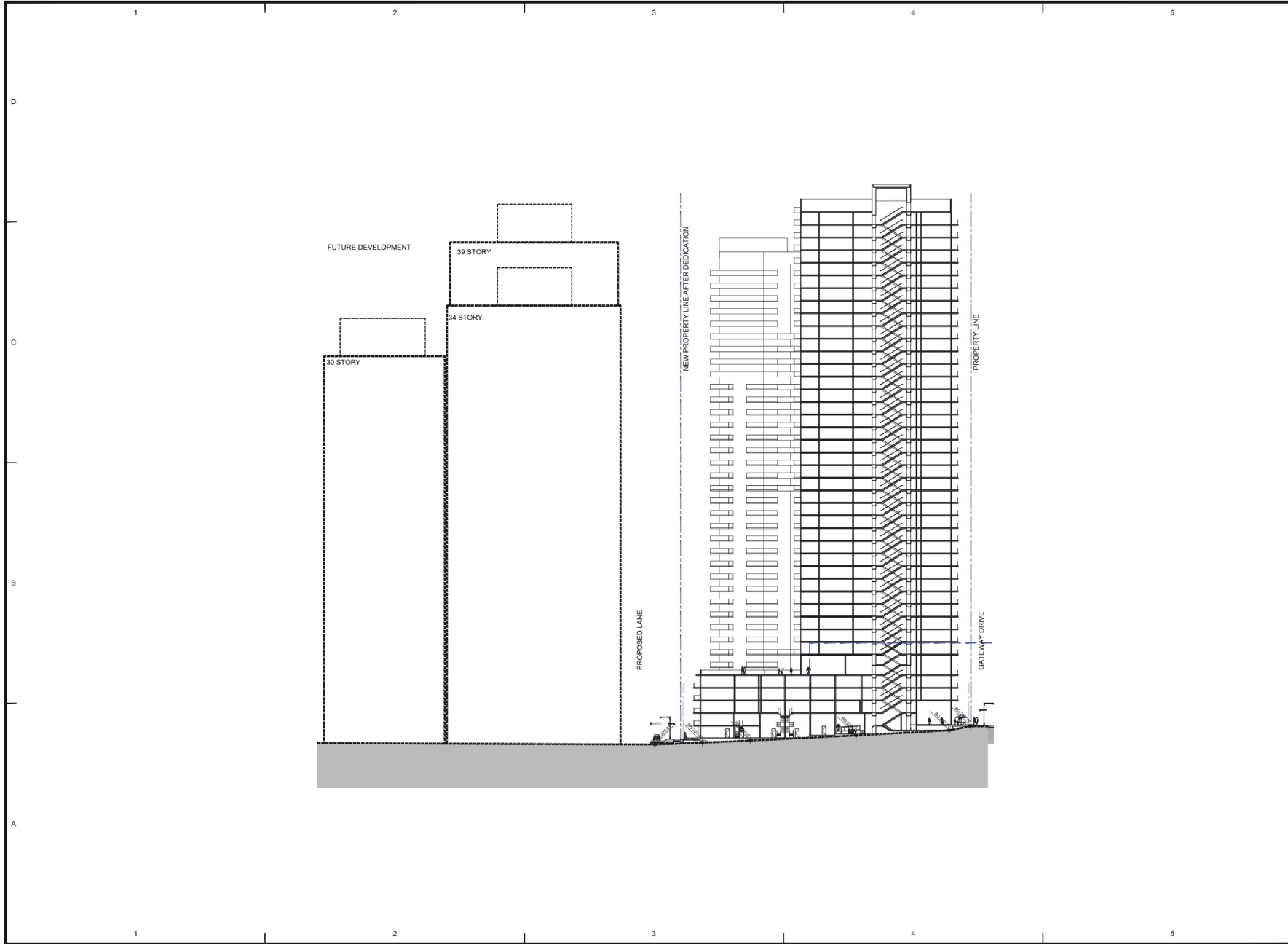
SHEET TITLE
SECTION 03

SHEET NUMBER
A3.03

OF

- COMMON AREA
- TOWNHOUSE
- AMENITY
- DAY CARE
- PARKING
- 1 BED ROOM
- 2 BED ROOM
- 3 BED ROOM

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02	2023-04-28	ADP SUBMISSION
01	2021-05-26	REZONING SUBMISSION

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REVISIONS			

NO.	DATE	APPR	DESCRIPTION
REVISIONS			

NO.	DATE	APPR	DESCRIPTION
REVISIONS			

SEAL

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PROJECT TITLE
13433 Gateway Drive

PROJECT NO. 113989

DRAWN BY: JC
CHKD BY: JC

SCALE: 1:32
DATE: 2023-04-28

SHEET TITLE
SITE SECTION

SHEET NUMBER
A3.04

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1 2 3 4 5

KEY PLAN
Section 01

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02	2022-04-28	ADP SUBMISSION

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REVISIONS

NO.	DATE	APPR	DESCRIPTION

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PRIME CONSULTANT
IBI GROUP ARCHITECTS (CANADA) INC.
702 - 1160 West Pender Street
Vancouver BC V6E 4B1 Canada
Tel: 604 683 3707 Fax: 604 683 3452
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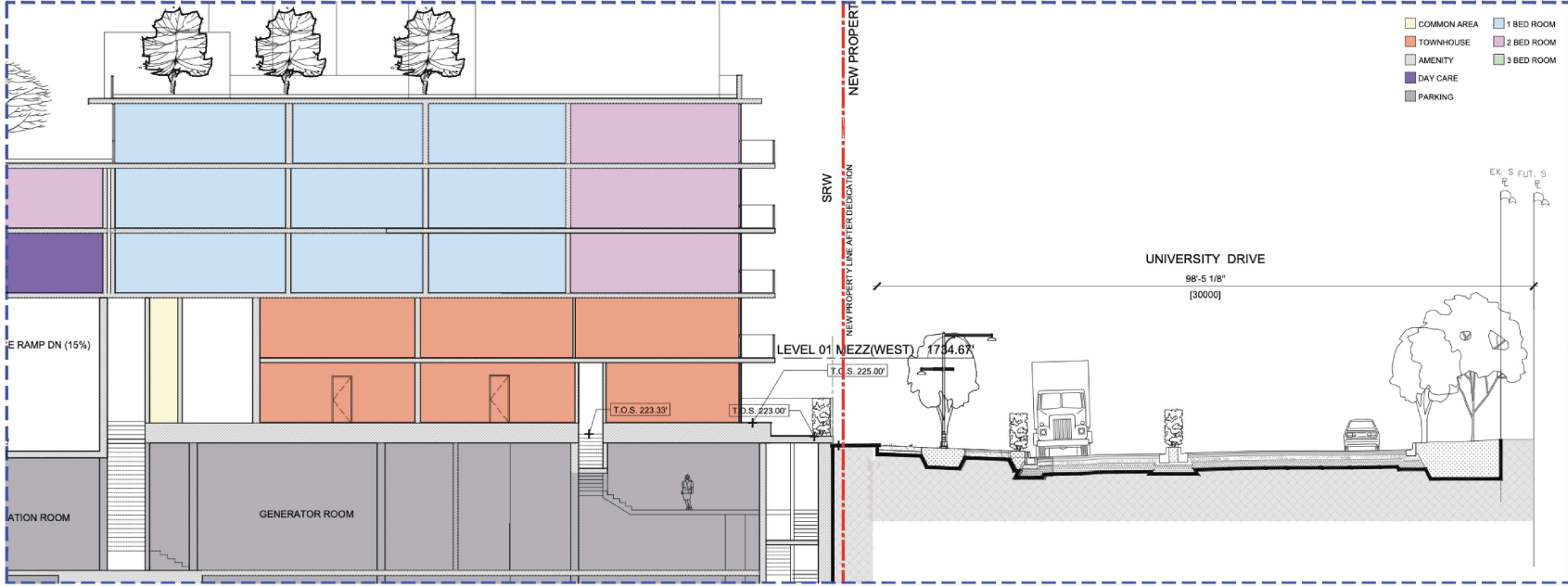
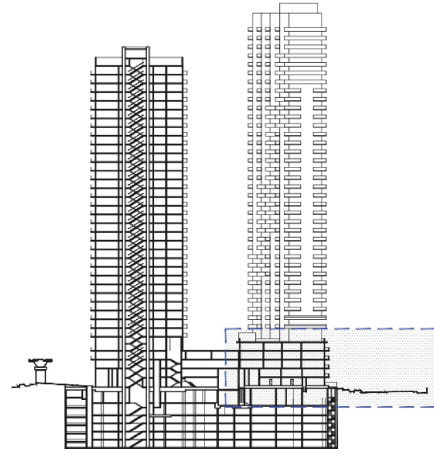
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13433 Gateway Drive

PROJECT NO. 113999
DRAWN BY: JC
CHK'D BY: JC
SCALE: 1:16
DATE: 2022-04-28

SHEET TITLE
Detailed section (Detail 1)

SHEET NUMBER
A3.05

NOT FOR CONSTRUCTION



1 2 3 4 5

KEY PLAN
Section 03

CLIENT
1127073 BC LTD.



COPYRIGHT:

03 2022-04-28 ADP SUBMISSION

01 2021-05-20 REZONING SUBMISSION

NO. DATE DESCRIPTION

ISSUES

NO. DATE APPR DESCRIPTION

REVISIONS

SEAL

SUB-CONSULTANT

PRIME CONSULTANT



PROJECT TITLE
13433 Gateway Drive

PROJECT NO: 113999

DRAWN BY: JC

SCHD BY: JC

SCALE: 1:16

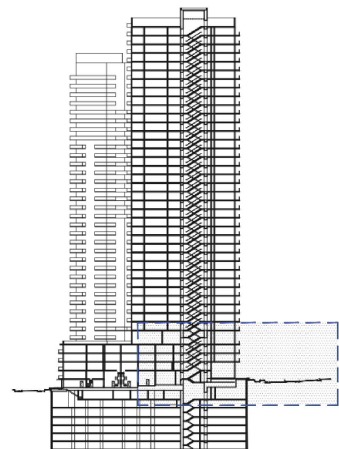
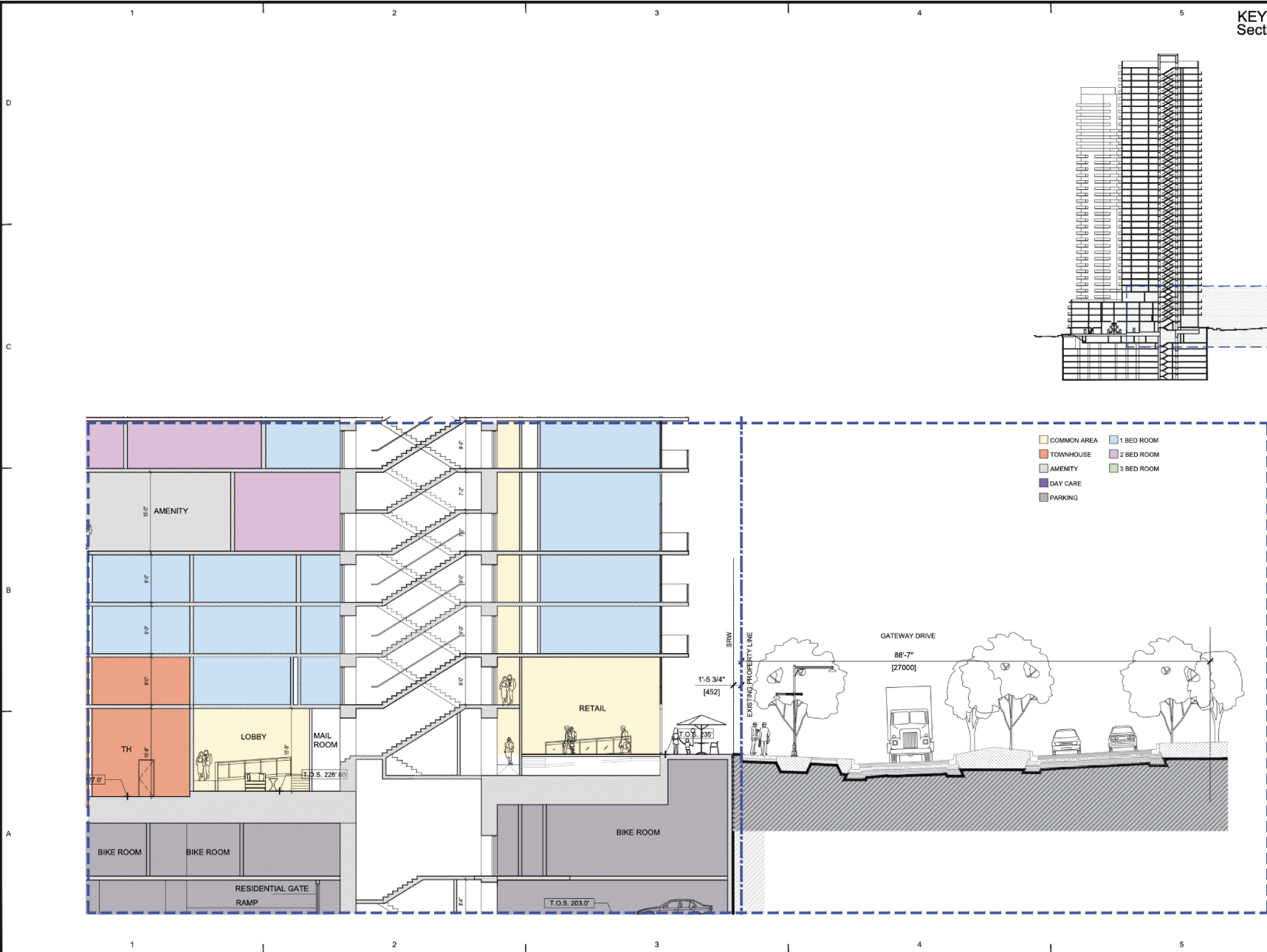
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SHEET TITLE
Detailed section (Detail 3)

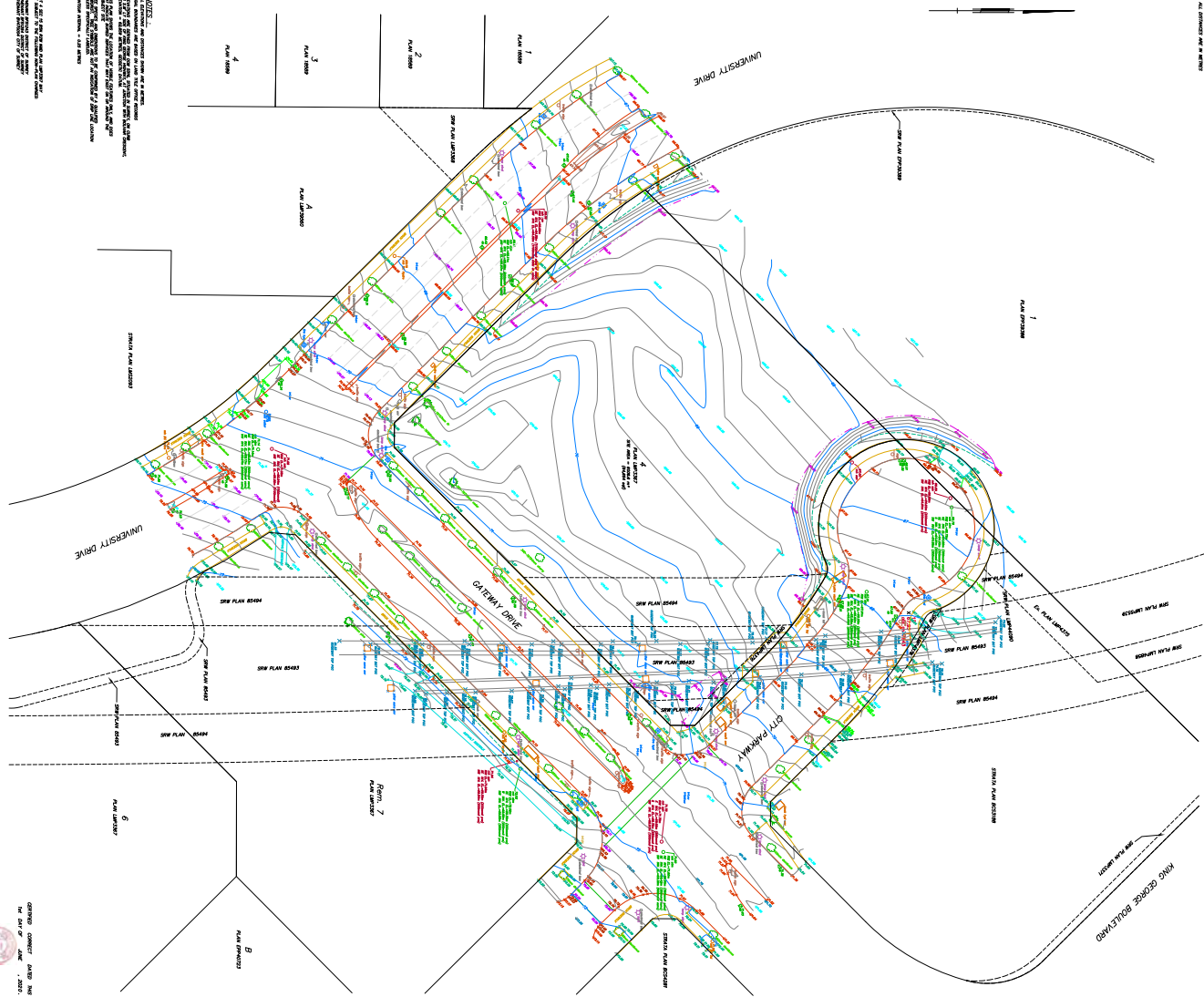
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A3.07

NOT FOR CONSTRUCTION



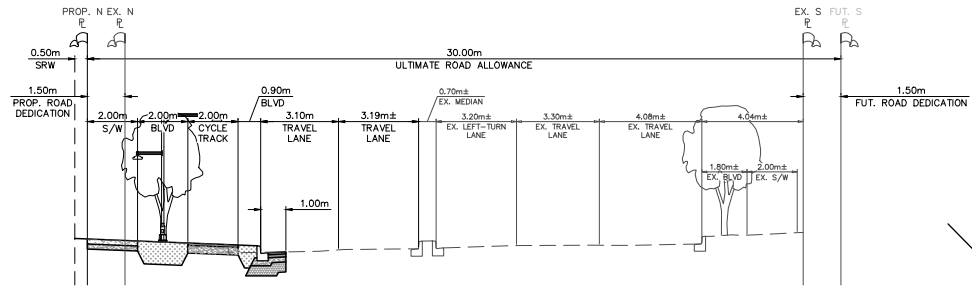
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SECTION 15, BLOCK 5 NORTH, RANGE 2 WEST,
NEW WESTMINSTER DISTRICT, PLAN LMP2387



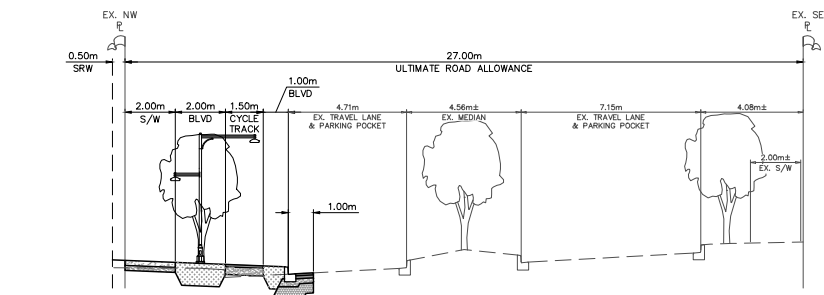
NOTES:
1. THE INFORMATION ON THIS PLAN WAS OBTAINED FROM THE SURVEY AND FIELD DATA OF THE SURVEYOR AND IS NOT TO BE USED FOR ANY OTHER PURPOSE.
2. THE SURVEYOR HAS NOT CONDUCTED A VISUAL INSPECTION OF THE SITE AND IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT.
3. THE SURVEYOR HAS NOT CONDUCTED A VISUAL INSPECTION OF THE SITE AND IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT.
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7. THE SURVEYOR HAS NOT CONDUCTED A VISUAL INSPECTION OF THE SITE AND IS NOT RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT.

ASPLIN & MARTIN
REGISTERED PROFESSIONAL ENGINEERS
REGISTERED PROFESSIONAL SURVEYORS
1000 WEST 10TH AVENUE, SUITE 100
VANCOUVER, BC V6H 2G6
TEL: 604-271-1111
WWW.ASMARTIN.COM

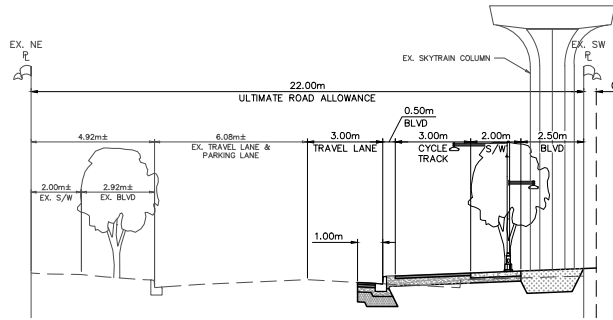
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DATE OF PLAN: 27th April 2016
SCALE: 1:1000
A.C.L.S.
REGISTERED PROFESSIONAL ENGINEER
REGISTERED PROFESSIONAL SURVEYOR
DATE OF SURVEY: 27th April 2016
DATE OF PLAN: 27th April 2016



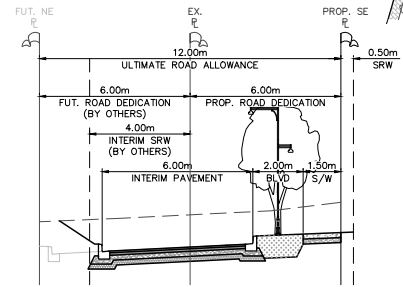
**TYPICAL SECTION
UNIVERSITY DRIVE
ARTERIAL ROAD (CCSD-6A)**
N.T.S



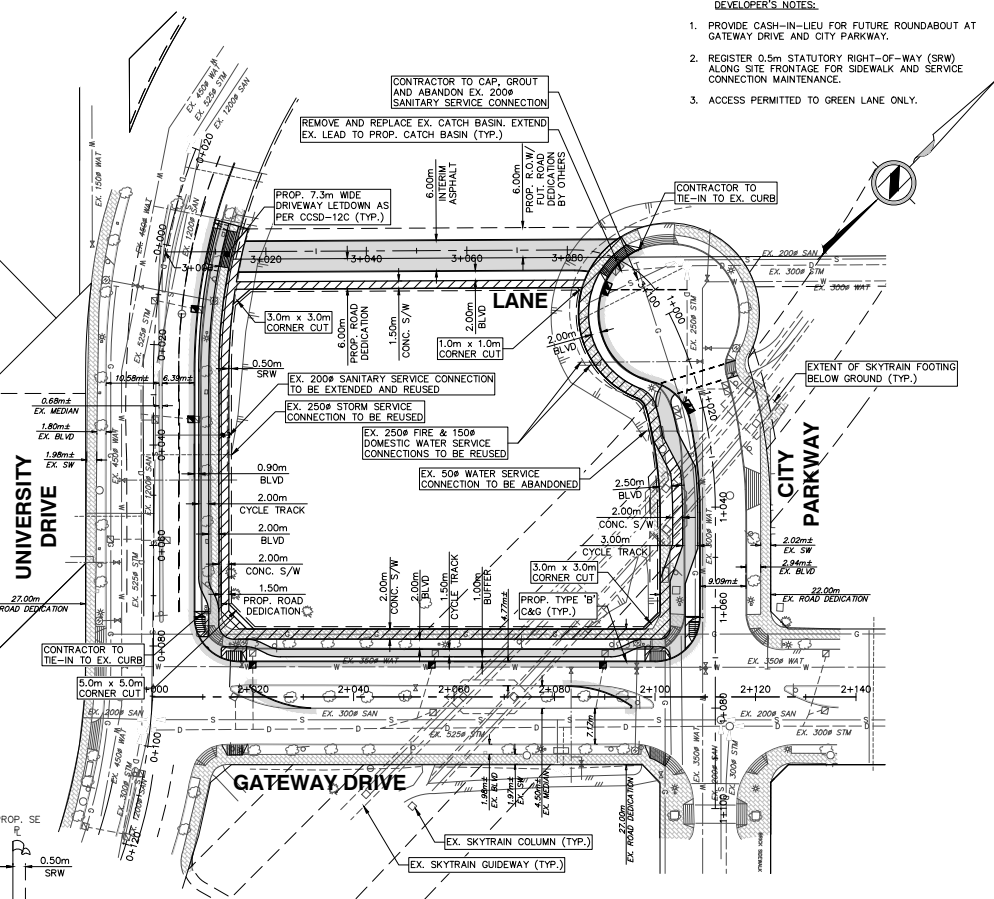
**TYPICAL SECTION
GATEWAY DRIVE
COLLECTOR ROAD (CCSD-7A)**
N.T.S



**TYPICAL SECTION
CITY PARKWAY
LOCAL ROAD & BC PARKWAY**
N.T.S



**TYPICAL SECTION
GREEN LANE (CCSD-9B)**
N.T.S



- DEVELOPER'S NOTES:**
1. PROVIDE CASH-IN-LIEU FOR FUTURE ROUNDABOUT AT GATEWAY DRIVE AND CITY PARKWAY.
 2. REGISTER 0.5m STATUTORY RIGHT-OF-WAY (SRW) ALONG SITE FRONTAGE FOR SIDEWALK AND SERVICE CONNECTION MAINTENANCE.
 3. ACCESS PERMITTED TO GREEN LANE ONLY.

LEGEND:

STORM SEWER	---	D
SANITARY SEWER	---	S
WATERMAIN	---	W
MANHOLE	●	
CLEANOUT	○	
ROUND CATCH BASIN	●	
CATCH BASIN	■	
ASPHALT	▨	
MILL & OVERLAY	▨	
CURB & GUTTER	---	

LEGAL DESCRIPTION: LOT 4 SEC 15 B5N R2W NWD PLAN LMP3367 MAY BE SUBJECT TO FOLLOWING NON-PLAN CHARGES: COVENANTS Bf51243, Bf51254, DISTRICT OF SURREY AND COVENANT BV470004 CITY OF SURREY
 B.M. MONUMENT NO. OCM 5516 ELEVATION: 62.859m
 LOCATED AT JUNCTION OF KING GEORGE HIGHWAY WITH BOLIVAR CRESCENT

REV. NO.	DESCRIPTION	DR	CH	DATE	APP

APLIN MARTIN
 ENGINEERING ARCHITECTURE PLANNING SURVEYING

Aplin & Martin Consultants Ltd.
 201 - 12448 82 Avenue, Surrey, B.C. Canada V3W 3E9
 Tel: (604) 597-9068, Fax: (604) 597-9061, Email: general@aplinmartin.com

CLIENT: **IBI GROUP**
 700-1285 WEST PENDER STREET, VANCOUVER, BC, V6E4B1
 PH: 604-683-8797

PROJECT: **MIXED-USE RESIDENTIAL DEVELOPMENT**
 13433 GATEWAY DRIVE, SURREY, BC

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the Engineer or his representative. The Contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and protect any and all underground utilities.

TITLE: **PRELIMINARY SERVICING PLAN**

PROJECT NO. _____
 DRAWING NO. _____

SCALE:
 HORZ.: 1:500
 VERT.: N/A

A & M DRAWING NO. **18-108-01**

DESIGN: KO CHECK: RUB
 DRAWN: KO APPR: RUB

A & M FILE: **18-108**

DRAWING DATE: **JUNE, 2018**

SHEET NO. **01 OF 02** REV. _____

0 5 1:500 25m

GENERAL NOTES:

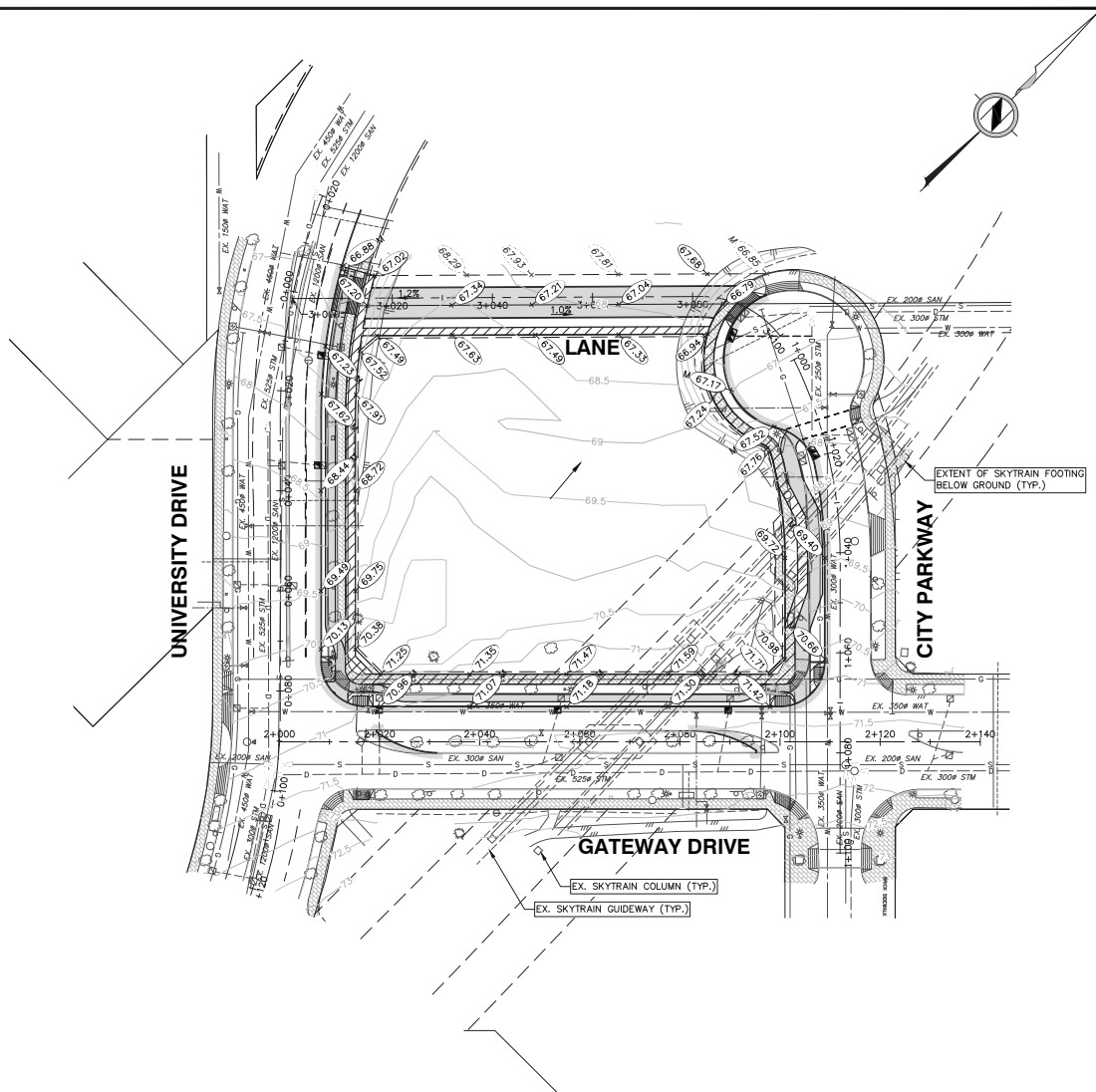
1. CONTRACTOR TO VERIFY THE LOCATION AND INVERTS OF EXISTING WATER, STORM AND SANITARY CONNECTIONS TO THE SITE. REPORT TO THE ENGINEER ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
2. ALL BUILDINGS & ROADS ARE TO BE LOCATED BY CO-ORDINATES AS CALCULATED BY A B.C. LAND SURVEYOR.
3. THE CONTRACTOR MUST CONTACT THE ENGINEER PRIOR TO CONSTRUCTION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING DURING WHICH CONSTRUCTION METHODS, TIMING, AND INSPECTION WILL BE DISCUSSED.
4. CONSULT GAS DRAWINGS FOR GAS DISTRIBUTION WITHIN THIS SITE.
5. CONSULT ELECTRICAL DRAWINGS FOR AREA LIGHTING AND POWER DISTRIBUTION WITHIN THIS SITE.
6. CONSULT TELUS/ SHAW DRAWINGS FOR TELUS/ SHAW DISTRIBUTION WITHIN THIS SITE.

GRADING NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METERS AND DECIMALS, UNLESS OTHERWISE NOTED.
2. ALL ELEVATIONS ARE TO GEODETIC DATUM.
3. ALL CONSTRUCTION IS TO BE IN ACCORDANCE WITH B.C. BUILDING AND PLUMBING CODES AND IS TO BE ACCEPTABLE TO THE CITY OF SURREY BUILDING AND PERMITS DEPARTMENT.
4. DEVELOPER TO EMPLOY GEOTECHNICAL CONSULTANT FOR PERFORMANCE OF IN PLACE TESTING DURING THE PREPARATION OF THE SUBGRADE AND CONSTRUCTION OF THE ROAD STRUCTURE TO VERIFY THE ADEQUACY OF PROPOSED ROAD STRUCTURE AND SUBGRADE.
5. CHANGES TO GRADE SHALL BE FORMED BY SMOOTH CURVES.
6. ALL SUBGRADES AND GRANULAR BASE MATERIALS TO BE COMPACTED AT 95% MODIFIED PROCTOR, AT OPTIMUM MOISTURE CONTENT.
7. ALL LOOSE OR ORGANIC MATERIAL TO BE EXCAVATED FROM ROADWAY.
8. THE CONTRACTOR SHALL INFORM THE ENGINEER AND CITY OF SURREY A MINIMUM OF 24 HOURS PRIOR TO REQUIRED INSPECTIONS.
9. CIVIL CONTRACTOR IS RESPONSIBLE FOR PROPERTY LINE GRADES AND TIE-BACKS TO EXISTING GRADES AS PER ROAD CROSS SECTIONS.

GRADING PLAN LEGEND

- ORIGINAL CONTOUR
- EXISTING ELEVATION
- EXISTING ELEVATION TO BE MATCHED
- PROPOSED ELEVATION
- MFE - MIN. FLOOR ELEVATION (m)
- CATCH BASIN
- ROUND CATCH BASIN
- SWALE
- OVERLAND FLOW
- CURB & GUTTER



LEGAL DESCRIPTION: LOT 4 SEC 15 B5N R2W NWD PLAN LMP3367 MAY BE SUBJECT TO FOLLOWING NON-PLAN CHARGES: COVENANTS Bf51243, Bf51254, DISTRICT OF SURREY AND COVENANT BV470004 CITY OF SURREY
 B.M. MONUMENT NO. OCM 5516 ELEVATION: 62.859m
 LOCATED AT JUNCTION OF KING GEORGE HIGHWAY WITH BOLIVAR CRESCENT

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PROJECT: **MIXED-USE RESIDENTIAL DEVELOPMENT**
 13433 GATEWAY DRIVE, SURREY, BC

The location of existing underground utilities are shown in an approximate way only & have not been independently verified by the owner or its representative. The contractor shall determine the exact location of all existing utilities before commencing work, and agree to be fully responsible for any and all damage which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

TITLE: **PRELIMINARY GRADING PLAN**

PROJECT NO. _____
 DRAWING NO. _____

SCALE:
 HORZ. 1:500
 VERT. N/A
 A & M DRAWING NO. **18-108 -02**

DESIGN: KO CHECK: RUB
 DRAWN: KO APPR: RUB

A & M FILE: **18-108**

DRAWING DATE: **JUNE, 2018**

SHEET NO. **02 OF 02** REV. _____



**Tree Evaluation Report for:
13433 Gateway Drive
Surrey, BC**

Surrey Project Number: 18-0388-00

Prepared by:

**Mike Fadum and Associates Ltd.
#105, 8277-129 Street
Surrey, BC
Phone 778-593-0300
Fax 778-593-0302**

**Date: August 24, 2018
Revised: May 30, 2020
Revised: December 22, 2020
Revised: May 28, 2021**



Date: May 28, 2021

Tree Evaluation Report: 13433 Gateway Drive Surrey, BC

Page 1 of 3

1.0 INTRODUCTION

We attended the site on May 9, 2018, May 28, 2020 and March 31, 2021 to evaluate the tree resource and to make recommendations for removal and preservation of the development application proposed for 13433 Gateway Drive, Surrey, BC. The property is located north-east of University Drive and north-west of Gateway Drive. The application proposes rezoning from CD B/L 10464 to CD (based on RM-135) and a Development Permit for the construction of 2 residential towers and underground parking. A plan showing the proposed building footprints, lot lines, underground parking and topographical survey was provided for our use and used as a resource for making recommendations pertaining to tree removal and retention. *The May 30, 2020 revision reflects the current site conditions and plans. The December 22, 2020 revision reflects the current plans.*



Figure 1. Aerial photograph of 13433 Gateway Drive (COSMOS, 2017).



Mike Fadum and Associates Ltd.



The May 28, 2021 revision reflects the current plans including civil plans and additional trees within the Gateway Drive median and southeast side of the street.

2.0 FINDINGS

The onsite tree resource consists of a red maple (*Acer rubrum*), a western redcedar (*Thuja plicata*), a cherry (*Prunus sp.*), and a Douglas-fir (*Pseudotsuga menziesii*). A number of well conditioned broadleaf boulevard trees are located along Gateway Drive and University Boulevard. Photographs are provided in Appendix A.

Table 1 provides individual tree data. Specific information includes tree type, diameter at breast height (DBH), structure and health rating (poor (P), moderate (M), good (G) or a combination of two), live crown ratio (LCR) and structural observations. Health refers to the tree's overall health and vigor, while structure is a qualitative rating of a tree's shape and structure when compared to ideal trees of the same species and age class. Trees were evaluated for their preservation potential based on health, structure, location and species factors. Trees expected to be unsafe, conflicting with the proposed building plans, of poor health or of little long-term retentive value are recommended for removal and are shown on the attached Tree Preservation and Removal Plan.

3.0 TREE PROTECTION

Tree protection fencing is to be installed as per municipal standards prior to construction with no excavation, grade alterations or materials storage within the tree protection zone. The consulting Arborist should be contacted prior to and be onsite for any construction within the recommended root protection zone which is approximately 6x the tree diameter. Grade alterations and other construction works required to provide drainage are not to occur within the root protection zone. Failure to comply with these recommendations may result in delays, stop work orders or fines imposed by the municipality.

4.0 TREE PRESERVATION SUMMARY

Our plans have been provided to the design team and it is expected that all consultants and contractors adhere to the recommendations in this report and ensure there is no conflict with Tree Protection Zones. No ground disturbance or grade alterations are permitted within the Tree Protection Zones unless preapproved by the project arborist. Mechanical injuries caused to trees below or above ground cannot be repaired. All parties must be aware that long-term success in tree preservation efforts depends greatly on minimizing the impact



caused during and post construction. Best efforts must be made to ensure that soils remain undisturbed within the tree protection zones. Ongoing monitoring and implementation of mitigating works, such as watering, mulching, etc., is essential for success.

5.0 LIMITATIONS

This Arboricultural field review report is based on site observations on the dates noted. Best efforts have been made to ensure that the opinions expressed are a reasonable and accurate representation of the condition of the trees reviewed. All trees or groups of trees have the potential to fail. No guarantees are offered or implied by Mike Fadum and Associates Ltd. or its employees that the trees are safe given all conditions. The inspection is limited to visual examination of accessible items without dissection, excavation, probing, coring or climbing. Trees can be managed, but they cannot be controlled. To live, work or play near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

The findings and opinions expressed in this report are representative of the conditions found on the day of the review only. Any trees retained should be reviewed on a regular basis. The root crowns, and overall structure, of all the trees to be retained must be reviewed immediately following land clearing, grade disturbance, significant weather events and prior to site usage changes.

Please contact the undersigned if you have any questions or concerns regarding this report.

On behalf of Mike Fadum and Associates Ltd.

Jeff Ross BA
ISA Certified Arborist #PN-7991A
TRAQ

Peter Mennel BSc
ISA Certified Arborist #PN-5611A
TRAQ



Date: May 28, 2021

Table 1 - Tree Evaluation: 13433 Gateway Drive, Surrey, BC

Page 1 of 9

Tree #	Sur Y/N	On, Off, Shared, City	Common Name (Botanical Name)	DBH (cm)	Canopy (m)	LCR (%)	Condition (Structure, Health)	Comments	Retention Suitability	Retain/Remove	TPZ (m)
478	N	On	Red Maple (<i>Acer rubrum</i>)	29/14/11	4.5	N/A	M, M	Tree not surveyed. Main stem has been girdled with metal wire. Tree conflicts with parkade construction.	Suitable	Remove	4.0
5724	Y	On	Cherry (<i>Prunus sp.</i>)	~16/30/22	5.0	N/A	M, M	Multiple stems at ~1.0m with narrow angle of attachment. Limited dieback throughout the canopy. Asymmetrical crown to the north, west and south. Tree conflicts with parkade construction.	Suitable	Remove	4.0
5725	Y	On	Western Redcedar (<i>Thuja plicata</i>)	45	3.0	100	G, MG	Full symmetrical crown. Tree conflicts with parkade construction.	Suitable	Remove	3.0
5727	Y	On	Douglas-fir (<i>Pseudotsuga menziesii</i>)	43	3.5	75	MG, M	Growing on a soil mound. Crown raised to ~4.0m above ground level. Limited dieback. Tree conflicts with parkade construction.	Suitable	Remove	3.0



Mike Fadum and Associates Ltd.



Date: May 28, 2021

Table 1 - Tree Evaluation: 13433 Gateway Drive, Surrey, BC

Page 2 of 9

Tree #	Sur Y/N	On, Off, Shared, City	Common Name (Botanical Name)	DBH (cm)	Canopy (m)	LCR (%)	Condition (Structure, Health)	Comments	Retention Suitability	Retain/Remove	TPZ (m)
C1	Y	City	Tulip Tree (<i>Liriodendron tulipifera</i>)	19	2.0	N/A	G, G	Crown raised to ~3.0m. No observed defects. Tree conflicts with construction - boulevard improvements.	Suitable	Remove.	2.0
C2	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	21	2.5	N/A	MG, MG	Full symmetrical crown. Crown raised to ~3.0m. Expected to be significantly impacted by construction - boulevard improvements.	Suitable	Remove.	2.0
C3	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	26	2.0	N/A	G, G	Full symmetrical crown. Crown raised to ~3.0m. Suckers below. Expected to be significantly impacted by construction - boulevard improvements.	Suitable	Remove.	2.5



Mike Fadum and Associates Ltd.



Date: May 28, 2021

Table 1 - Tree Evaluation: 13433 Gateway Drive, Surrey, BC

Page 3 of 9

Tree #	Sur Y/N	On, Off, Shared, City	Common Name (Botanical Name)	DBH (cm)	Canopy (m)	LCR (%)	Condition (Structure, Health)	Comments	Retention Suitability	Retain/Remove	TPZ (m)
C4	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	22	2.5	N/A	MG, MG	Slight kink within top third. Crown raised -3.0m with suckers below. Expected to be significantly impacted by construction - boulevard improvements.	Suitable	Remove.	2.0
C5	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	23	2.5	N/A	G, G	Crown raised -3.0m with suckers below. Symmetrical crown. Expected to be significantly impacted by construction - boulevard improvements.	Suitable	Remove.	2.0
C6	Y	City	Tulip Tree (<i>Liriodendron tulipifera</i>)	17	1.0	N/A	G, MG	Crown raised -4.0m. Symmetrical crown. Expected to be significantly impacted by construction - boulevard improvements.	Suitable	Remove.	2.0



Mike Fadum and Associates Ltd.



Date: May 28, 2021

Table 1 - Tree Evaluation: 13433 Gateway Drive, Surrey, BC

Page 4 of 9

Tree #	Sur Y/N	On, Off, Shared, City	Common Name (Botanical Name)	DBH (cm)	Canopy (m)	LCR (%)	Condition (Structure, Health)	Comments	Retention Suitability	Retain/Remove	TPZ (m)
C7	Y	City	Tulip Tree (<i>Liriodendron tulipifera</i>)	21	2.0	N/A	G, G	Crown raised -3.0m. Symmetrical crown. Tree conflicts with construction - boulevard improvements.	Suitable	Remove.	2.0
C8	Y	City	Sweet Gum (<i>Liquidambar styraciflua</i>)	18	2.0	N/A	G, G	Crown raised to -2.5m. Symmetrical crown. Tree conflicts with construction.	Suitable	Remove to accommodate construction.	2.0
C9	Y	City	Cappadocian Maple (<i>Acer cappadocicum</i>)	17	1.5	N/A	G, G	Crown raised to -3.0m. Symmetrical crown. Tree conflicts with construction.	Suitable	Remove to accommodate construction.	2.0
C10	Y	City	Sweet Gum (<i>Liquidambar styraciflua</i>)	20	2.0	N/A	M, G	Cavity 30.0cm length at the base. Crown raised to -2.0m. Symmetrical crown. Tree conflicts with construction.	Suitable	Remove to accommodate construction.	2.0
C11	Y	City	Cappadocian Maple (<i>Acer cappadocicum</i>)	18	2.0	N/A	G, G	Crown raised to -2.5m. Symmetrical crown. Tree conflicts with construction.	Suitable	Remove to accommodate construction.	2.0



Mike Fadum and Associates Ltd.



Date: May 28, 2021

Table 1 - Tree Evaluation: 13433 Gateway Drive, Surrey, BC

Page 5 of 9

Tree #	Sur Y/N	On, Off, Shared, City	Common Name (Botanical Name)	DBH (cm)	Canopy (m)	LCR (%)	Condition (Structure, Health)	Comments	Retention Suitability	Retain/Remove	TPZ (m)
C12	Y	City	Sweet Gum (<i>Liquidambar styraciflua</i>)	17	2.0	N/A	G, G	Crown raised to -2.5m. Self-correcting sweeping base. Cavity at 30cm. Tree conflicts with construction.	Suitable	Remove to accommodate construction.	2.0
C13	Y	City	Cappadocian Maple (<i>Acer cappadocicum</i>)	17	2.0	N/A	G, G	Crown raised to -2.5m. Symmetrical crown. Tree conflicts with proposed lane construction.	Suitable	Remove	2.0
C14	Y	City	Sweet Gum (<i>Liquidambar styraciflua</i>)	21	2.0	N/A	G, G	Crown raised to -2.5m. Symmetrical crown.	Suitable	Retain. Shorten bike lane if necessary to avoid excavation inside the TPZ.	2.0
C15	Y	City	Norway Maple (<i>Acer platanoides</i>)	19	3.0	N/A	MG, MG	Open grown symmetrical canopy. Expected to be significantly impacted by road improvements.	Suitable	Remove.	2.0
C16	Y	City	Norway Maple (<i>Acer platanoides</i>)	18	2.5	N/A	M, MG	Cracks on south side at 1.5m.	Suitable	Retain.	2.0
C17	Y	City	Norway Maple (<i>Acer platanoides</i>)	17	2.75	N/A	MG, MG	Typical.	Suitable	Retain.	2.0

Date: May 28, 2021

Table 1 - Tree Evaluation: 13433 Gateway Drive, Surrey, BC

Page 6 of 9

Tree #	Sur Y/N	On, Off, Shared, City	Common Name (Botanical Name)	DBH (cm)	Canopy (m)	LCR (%)	Condition (Structure, Health)	Comments	Retention Suitability	Retain/Remove	TPZ (m)
C18	Y	City	Norway Maple (<i>Acer platanoides</i>)	17	3.0	N/A	MG, MG	Typical.	Suitable	Retain.	2.0
C19	Y	City	Norway Maple (<i>Acer platanoides</i>)	18	2.5	N/A	MG, MG	Typical.	Suitable	Retain.	2.0
C20	Y	City	Norway Maple (<i>Acer platanoides</i>)	17	2.75	N/A	MG, MG	Typical. Expected to be significantly impacted by road improvements.	Suitable	Remove.	2.0
C21	Y	City	Norway Maple (<i>Acer platanoides</i>)	17	2.5	N/A	MG, MG	Typical. Tree conflicts with construction- road improvements.	Suitable	Remove.	2.0
C22	Y	City	Tulip Tree (<i>Liriodendron tulipifera</i>)	25	3.0	N/A	MG, MG	Tagged 0084. Typical.	Suitable	Retain.	2.5
C23	Y	City	Tulip Tree (<i>Liriodendron tulipifera</i>)	32	4.0	N/A	MG, MG	Tagged 0085. Typical.	Suitable	Retain.	2.5
C24	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	20	2.5	N/A	MG, MG	Tagged 0086. Typical.	Suitable	Retain.	2.0
C25	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	21	2.5	N/A	MG, MG	Tagged 0087. Typical.	Suitable	Retain.	2.0
C26	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	16	2.5	N/A	MG, MG	Typical.	Suitable	Retain.	2.0
C27	Y	City	Caucasian Lime (<i>Tilia euchlora</i>)	13	2.0	N/A	MG, MG	Sucker growth.	Suitable	Retain.	2.0



Mike Fadum and Associates Ltd.



Mike Fadum and Associates Ltd.



Date: May 28, 2021

Page 7 of 9

Table 1 - Tree Evaluation: 13433 Gateway Drive, Surrey, BC

Tree #	Sur Y/N	On, Off, Shared, City	Common Name (Botanical Name)	DBH (cm)	Canopy (m)	LCR (%)	Condition (Structure, Health)	Comments	Retention Suitability	Retain/Remove	TPZ (m)
C28	Y	City	Tulip Tree (<i>Liriodendron tulipifera</i>)	12	2.0	N/A	MG,M	Tagged 0090.	Suitable	Retain.	2.0
C29	Y	City	Tulip Tree (<i>Liriodendron tulipifera</i>)	29	4.5	N/A	M,MG	Typical. Asymmetrical canopy weighted to the North. Tagged 0091. Expected to be significantly impacted by lamp standard base removal and road improvements.	Suitable	Remove.	2.5

ADDITIONAL RECOMMENDATIONS

- To prevent root damage, which may adversely affect the health and or stability of the retained trees, any ground disturbance or grade alteration within the recommended Tree Protection Zone provided in the table above shall be under the direction of the project arborist.
- Permission from the registered owner(s)/city is required prior to the removal of all city, offsite, and shared trees regardless of their size.
- SEE PLANS FOR ADDITIONAL RECOMMENDATIONS

Note: Location is approximate for all non-surveyed trees. Shared trees/hedges have been assessed as onsite trees in the summary. 'C' refers to trees on City property.



Figure 1. (left to right) Trees #5424 & 478.





Figure 2. Tree # 5727.



Figure 3. 5725.





Figure 4. Typical well conditioned boulevard trees flanking Gateway Drive.



Figure 5. Typical well conditioned boulevard trees flanking University Drive





Figure 6. City trees within Gateway Drive median.



Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder/Cottonwood	0	0	0
Deciduous Trees			
Maple, Cappadocian	3	3	0
Linden, Caucasian lime	8	4	4
Cherry	1	1	0
Maple, Norway	7	3	4
Maple, Red	1	1	0
Sweet Gum	4	3	1
Tulip Tree	7	4	3
Coniferous Trees			
Douglas-fir	1	1	0
Cedar, Western Redcedar	1	1	0
Total (Not including Alder and Cottonwood)	33	21	12
Additional Trees in the proposed Open Space / Riparian Area	NA	NA	NA
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		64	
Total Retained and Replacement Trees		76	

***TOTALS DO NOT INCLUDE OFFSITE TREES**



Tree Preservation Summary

Surrey Project No: 18-0388-00
Address: 13433-Gateway Drive
Registered Arborist: Jeff Ross-ISA #PN-7991A

On-Site Trees	Number of Trees
Protected Trees Identified (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	33
Protected Trees to be Removed	21
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	12
Total Replacement Trees Required: - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0 - All other Trees Requiring 2 to 1 Replacement Ratio 21 X two (2) = 42	42
Replacement Trees Proposed	64
Replacement Trees in Deficit	0
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	NA

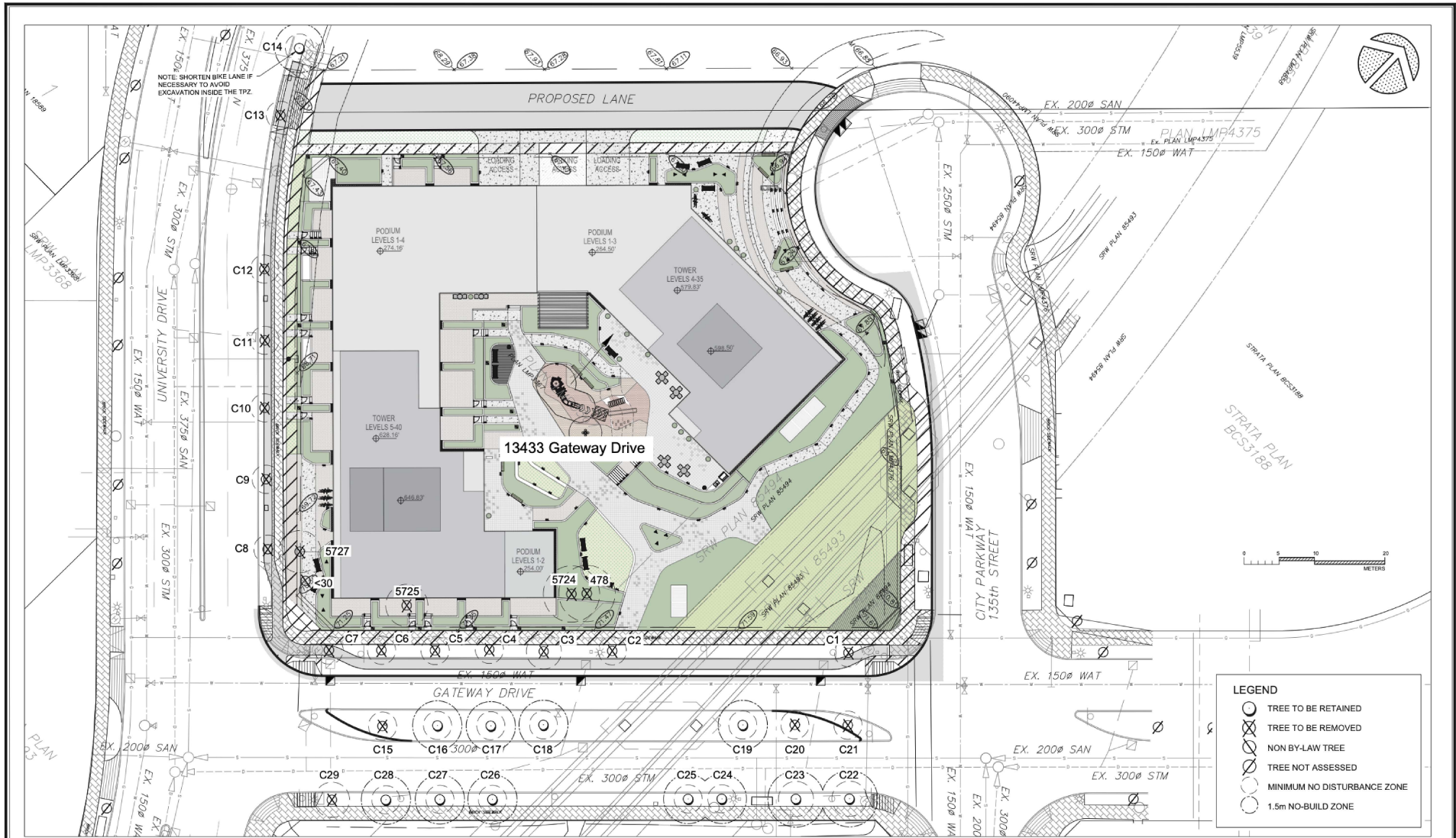
Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	0
Total Replacement Trees Required: - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0 - All other Trees Requiring 2 to 1 Replacement Ratio 0 X two (2) = 0	0
Replacement Trees Proposed	NA
Replacement Trees in Deficit	NA

Summary report and plan prepared and submitted by: Mike Fadum and Associates Ltd.

Signature of Arborist:

Date: May 28, 2021





NO.	DATE	BY	REVISION
1	AUG22/18	MK	SITE PLAN
2	MAY28/20	MK	SITE PLAN
3	DEC21/20	MK	SITE PLAN
4	APR08/21	MK	CIVIL PLAN
5	MAY28/21	MK	CIVIL PLAN

NO.	DATE	BY	REVISION
1	AUG22/18	MK	SITE PLAN
2	MAY28/20	MK	SITE PLAN
3	DEC21/20	MK	SITE PLAN
4	APR08/21	MK	CIVIL PLAN
5	MAY28/21	MK	CIVIL PLAN

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VEGETATION CONSULTANTS

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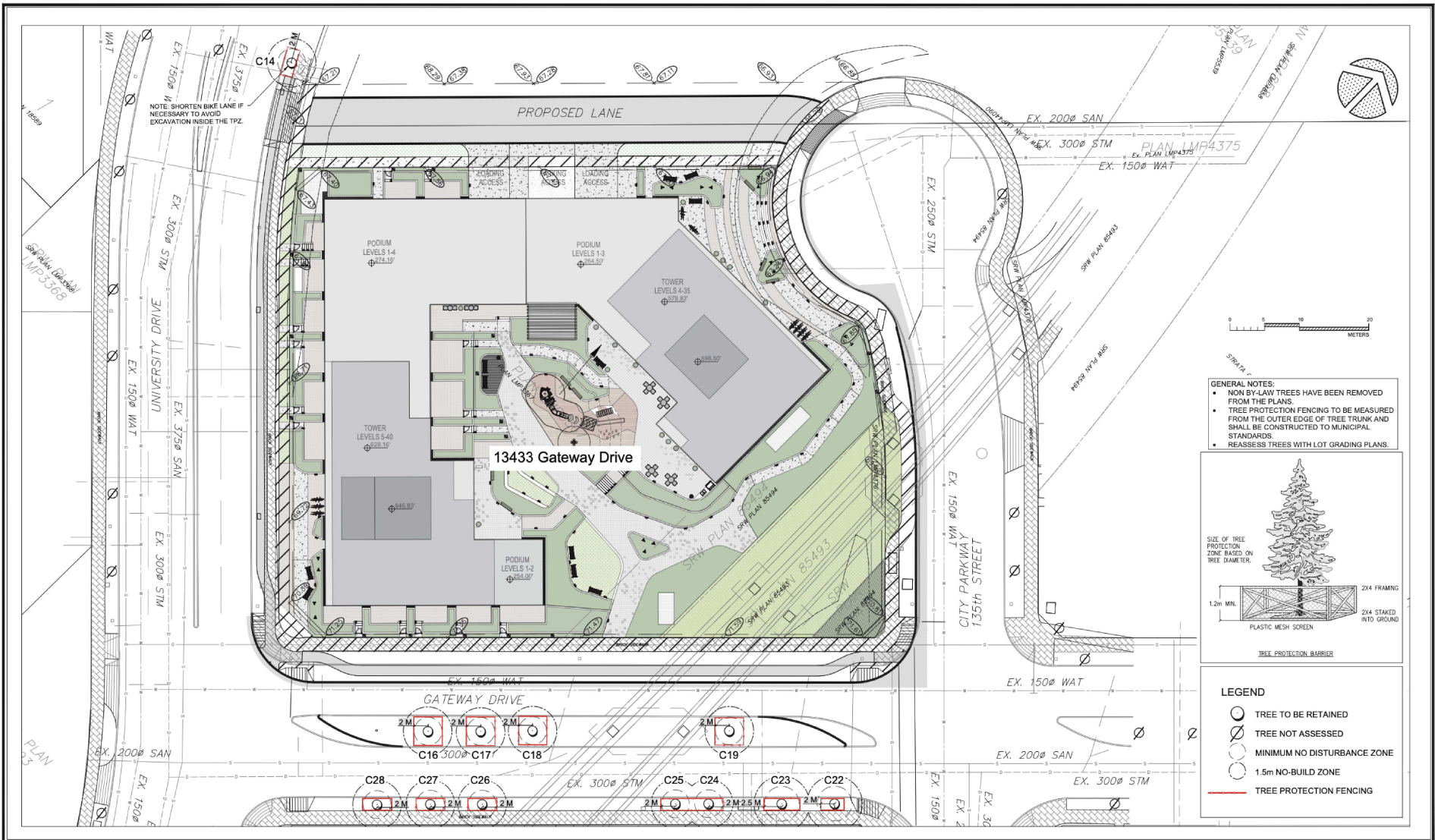
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PROJECT TITLE
13433 GATEWAY DRIVE
 SURREY, B.C.

SHEET TITLE
T1 - TREE REMOVAL AND PRESERVATION PLAN

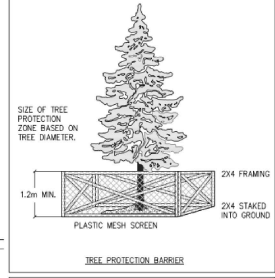
DRAWN MK
 SCALE AS SHOWN
 DATE MAY 28, 2018

T-1
 SHEET 1 OF 2



GENERAL NOTES:

- NON BY-LAW TREES HAVE BEEN REMOVED FROM THE PLANS.
- TREE PROTECTION FENCING TO BE MEASURED FROM THE OUTER EDGE OF TREE TRUNK AND SHALL BE CONSTRUCTED TO MUNICIPAL STANDARDS.
- REASSESS TREES WITH LOT GRADING PLANS.



LEGEND

- TREE TO BE RETAINED
- TREE NOT ASSESSED
- MINIMUM NO DISTURBANCE ZONE
- 1.5m NO-BUILD ZONE
- TREE PROTECTION FENCING

NO.	DATE	BY	REVISION
1	AUG22/18	MK	SITE PLAN
2	MAY28/20	MK	SITE PLAN
3	DEC21/20	MK	SITE PLAN
4	APR29/21	MK	CIVIL PLAN
5	MAY28/21	MK	CIVIL PLAN

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PROJECT TITLE
13433 GATEWAY DRIVE
 SURREY, B.C.

SHEET TITLE
T2 - TREE PROTECTION PLAN

CLIENT

DRAWN MK
 SCALE AS SHOWN
 DATE MAY 28, 2018

T-2
 SHEET 2 OF 2

Engage. Innovate. Inspire.

Project Name
13433 Gateway Drive
Surrey, BC
Preliminary NECB Energy Modelling Report

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Date Prepared
02/22/2022

WE File No. 00044151.00

1.0 Introduction

1.1 Background

The proposed 13433 Gateway Drive development in Surrey, BC has two residential towers: 40 and 36 storeys respectively. The development has a total gross floor area of 46,726.8 m² with 665 dwelling units, as well as retail, daycare, amenity, and library areas and a 6 level underground parkade.

1.2 Purpose

The daycare and amenity portions of the project need to meet City of Surrey energy requirements. As the building blocks belong to building group A and have no step code energy target, they need to be compliant with NECB 2015.

2.0 Modelling Inputs

2.1 Summary of Modelling Parameters and ECMs

The following table provides a breakdown of the modelling input parameters as well as a quantitative summary of the energy conservation measures (ECMs).

Table 1 – Summary of Modelling Parameters for Daycare & Amenity

	Proposed Building	NECB Reference
	Envelope	
Modelled Floor Area	FLA 2,013.12 m ² MFA 2,114 m ² Difference <5%	
No. of Storeys	Daycare on level 1/mezz/2 Amenity/Library on level 1-5	
Roof Construction	Residential Roof – R30 effective; Insulation entirely above deck	NECB2015 Zn4 Usi-0.227 W/(m2K) (0.04 Btu/(h °F ft2); R25)
Wall Construction	Assume: <ul style="list-style-type: none"> o Metal panel steel frame wall: R5 exterior rigid insulation with R20 batt SF @24 OC; effective R15 o Spandrel panel: R10 back pan insulation (in cavity insulation is optional); effective R7 	NECB2015 Zn4 Usi-0.315 W/(m2K) (0.055 Btu/(h °F ft2); R18)
	Overall R10.3	

	Proposed Building	NECB Reference
Exposed floor insulation	Exposed floor R20 L1/P1 internal floor R15	NECB2015 Zn4 0.227 W/(m2K) (0.04 Btu/(h °F ft2); R25)
Glazing Properties	Double-glazed residential windows: U0.37 SHGC 0.32	NECB2015 Zn4 U _{sr} 2.4 W/(m2K) SHGC-0.25
Window/Wall Ratio	50%	40%
Internal Loads		
Interior Lighting Power Density	Same as reference	Daycare 8.2 W/m2 Amenity 9.3 W/m2
Lighting Controls	NA	NA
Peak Occupancy	Daycare 50 occ Amenity 169 occ	
Receptacle	Daycare 7.5 W/m ² Amenity 1.0 W/m2	
Elevator	NA	
Operating Conditions		
Indoor Design Temperatures	Heating Setpoint: NECB Sch A heating Cooling Setpoint: NECB Sch A cooling	
DHW Requirements	Daycare 0.84 gpm@140F NECB Sch A DHW	Same as proposed
Infiltration Rate	NECB 0.25 L/s/m ²	
Mechanical Systems		
System Description	Daycare & Amenity: 4FC + HRV unit	Baseline: 'Daycare & Amenity: system 3: Single-zone packaged rooftop unit with baseboard heating
Ventilation Rate	Daycare 0.25 cfm/ft2 2704 cfm Amenity 545 cfm 0.06 cfm/ft2	Same as proposed
Fan Energy	FC units: 0.2 w/cfm 3 speed. Daycare/Amenity/retail HRV Units: 1.0 w/cfm	Same as proposed
Heat Recovery Effectiveness	HRV SRE 65%	No HRV
Heating efficiency	DEU 100%	Same as proposed
Cooling efficiency	Chiller: COP 4.5	COP3.3
DHW System	DEU 100%	Same as proposed

Table 2 – Energy Model Results for Daycare

End Use	Resource	Proposed	Baseline
Cooling	Elec	18,118.0	18,957.1
DHW	DEU	26,019.9	26,020.0
Fans	Elec	17,858.0	17,967.1
Heating	Elec	5,366.5	4,046.7
Heating	DEU	112,080.9	138,106.6
Int Ltg	Elec	96,401.8	96,401.8
Plug Load	Elec	32,858.1	32,858.1
Pumps	Elec	225.2	248.2
Ext Ltg	Elec	13,063.5	13,063.5
Total		321,991.9	347,669.2
Savings		7.4%	

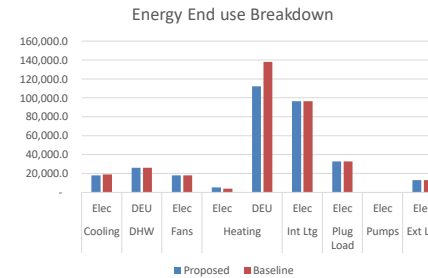


Figure 1 – Daycare Annual Energy Consumption by End Use

3.0 Conclusion

The proposed design of the Project meets NECB 2015 requirements. The above performance is achievable through many energy conservation measures.

13433 Gateway Drive

Issued for ADP COMMENT

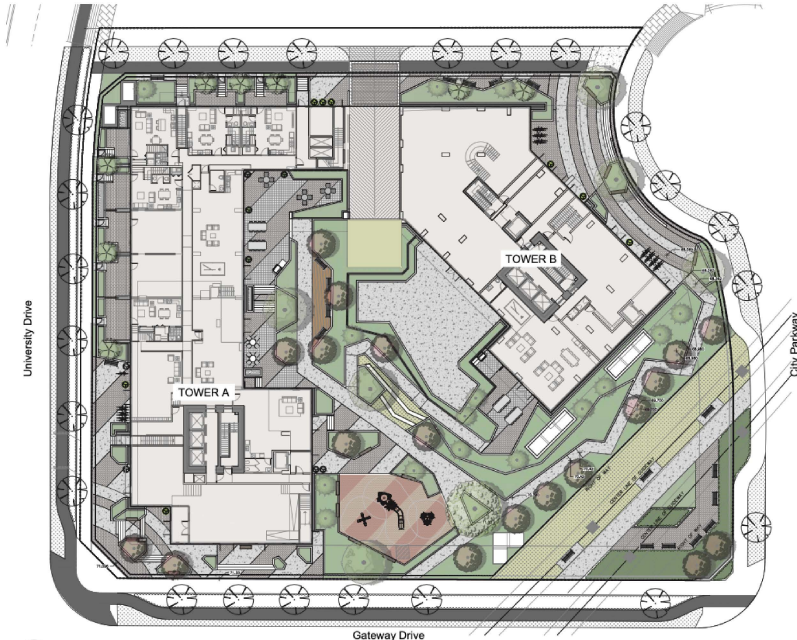
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Contact Information	Other Key Contacts:	
VDZ+A Project Landscape Architecture Fort Langley Studio 100-9181 Church Street Fort Langley, British Columbia, V1M 2R8 Mount Pleasant Studio 102-355 Kingsway Vancouver, British Columbia, V5T 3J7 Primary project contact: Nicole Wu Landscape Architect nicole@vdz.ca direct: 778-239-6087 Alternate contacts (in case away): Mark van der Zalm Principal Landscape Architect mark@vdz.ca o. 604 882 0024	1127073 BC Ltd. Project Owner 1820 - 200 Burrard Street Vancouver, BC V6C 3L6 t. 778-859-5986	IBI Group Project Building Architecture Suite 700 - 1285 West Pender Street Vancouver, BC V6E 4B1 t. 604-883-8797
Legal Address and Description: LOT 4, SECTION 15, BLOCK 5, NORTH RANGE 2 WEST, N.W.D., PLAN LMP 3367		

Sheet List Table

Sheet Number	Sheet Title
L-01	COVER SHEET
L-02	LEVEL 1 LANDSCAPE PLAN
L-03	LEVEL 4 & 5 LANDSCAPE PLAN
L-04	LEVEL 1 LIGHTING PLAN
L-05	LEVEL 4 & 5 LIGHTING PLAN
L-06	LEVEL 1 PLANTING PLAN
L-07	LEVEL 4 & 5 PLANTING PLAN
LS-01	SECTIONS
LS-02	SECTIONS
LS-03	SECTIONS
LD-01	DETAILS
LD-02	DETAILS
LD-03	DETAILS
LD-04	DETAILS



No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 02, 2022
8	MW	Issued for ADP	Apr 15, 2022
9	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 18, 2020
2	MW	Issued for Re-Zoning	May 04, 2020
1	DC	Issued for Re-Zoning	Oct 06, 2018

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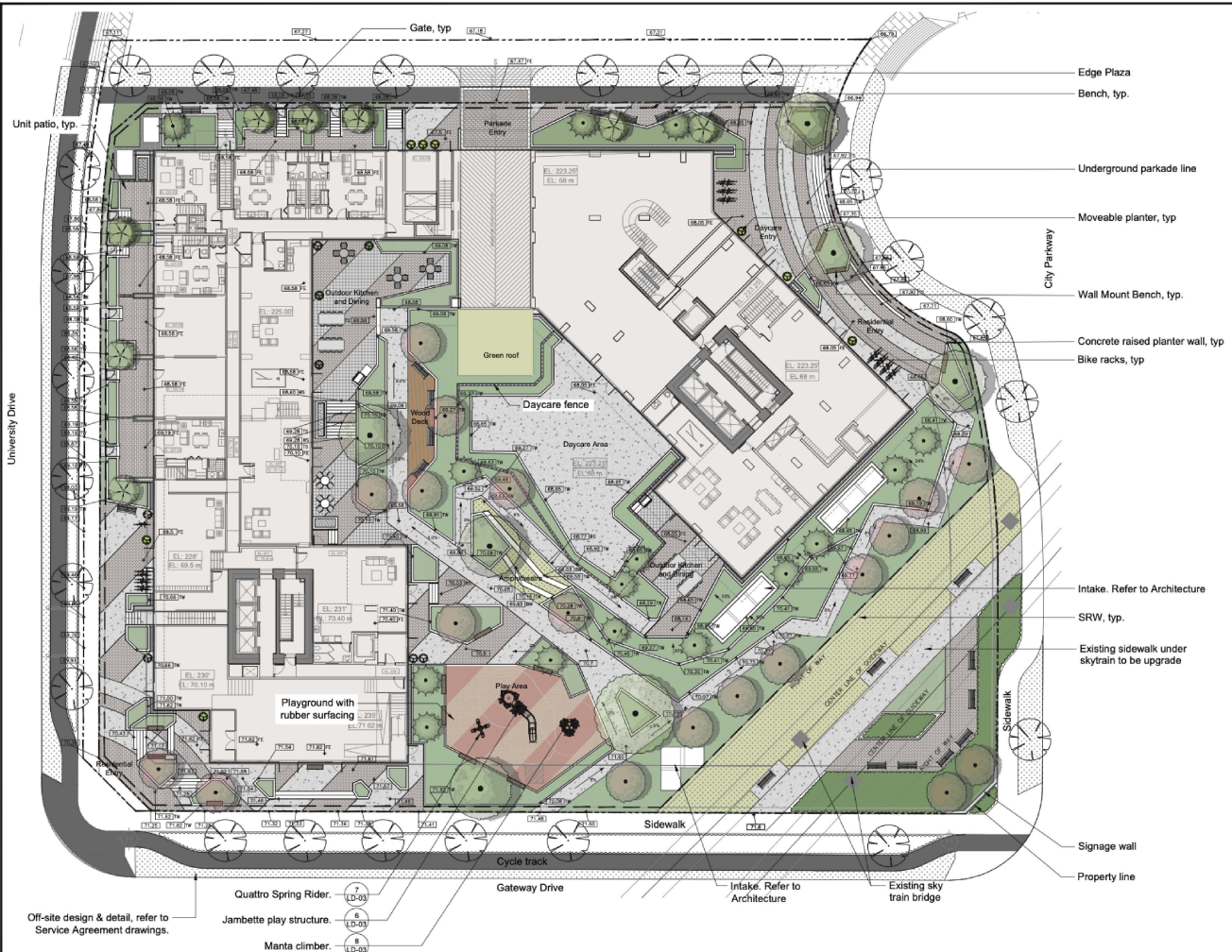
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 13433 Gateway Drive

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 13433 Gateway Drive
 Surrey, BC

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Drawing Title: **COVER SHEET**
 V&Z+A Project #: **DP2018-31**
 Drawing #: **L-01**



HARDSCAPE LEGEND

KEY	REF	DESCRIPTION
[Pattern]	7 LD-01	CONCRETE PAVER
[Pattern]	8 LD-01	CONCRETE PAVER Pattern: Running Bond Colour: Shadow Blend Block: Classic 28x12 (2.5x6) Manufacturer: Albion/For Concrete
[Pattern]	6 LD-01	CONCRETE PAVER Pattern: Blank Bond Colour: Classic Desert Sand and Charcoal Block: 40x40 (16x16) Manufacturer: Albion/For Concrete
[Pattern]	3 LD-02	RUBBER PLAYGROUND SURFACING Colour: Dark and Medium Blue Manufacturer: Softline
[Pattern]	2 LD-02	WOOD DECKING Colour: Teak Manufacturer: TimberTech
[Pattern]	1 LD-02	DRIP STRIP

SOFTSCAPE LEGEND

KEY	REF	DESCRIPTION
[Symbol]	4.5 LD-01	SHRUB PLANTING
[Symbol]		GRASS

FURNITURE LEGEND

KEY	REF	DESCRIPTION
[Symbol]	2 LD-04	BENCH
[Symbol]	1 LD-04	PICNIC TABLE
[Symbol]	3 LD-04	BIKE RACK
[Symbol]	4 LD-02	BIKE RACK
[Symbol]	1 LD-03	WASTE RECEPTACLE
[Symbol]	4 LD-04	PLANTING POT

FENCING

KEY	REF	DESCRIPTION
[Symbol]	5 LD-02	GATE
[Symbol]	6 LD-02	PRIVACY SCREEN By Arch
[Symbol]		DAYCARE FENCE

No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 02, 2022
6	MW	Issued for ADP	Apr 13, 2022
5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for ADP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 18, 2020
2	MW	Issued for Re-Zoning	May 04, 2020
1	DC	Issued for Re-Zoning	Oct 06, 2018

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TREE SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	CAL	QTY
[Symbol]	Acer palmatum 'Bloodgood' / Bloodgood Japanese Maple	B & B	6cm cal. 1.8m std.	8
[Symbol]	Magnolia kobus / Kobus Magnolia	B & B	6cm cal. 1.8m std.	6
[Symbol]	Pinus flexilis 'Vanderwolf's Pyramid' / Vanderwolf's Pyramid Pine	B & B	3.5m Ht	15
[Symbol]	Quercus garryana / Oregon White Oak	B & B	6cm cal. 1.8m std.	1
[Symbol]	Syrax japonicus 'Pink Chimes' / Japanese Pink Snowbell Dwarf	B & B	6cm cal. 1.8m std.	19

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LEVEL 4 & 5 LANDSCAPE PLAN

Drawing Title:



VDZ Project #:
DP2018-31

Drawing #:
L-03

HARDSCAPE LEGEND

KEY	REF	DESCRIPTION
	8 LD-01	HYDRAPRESSED SLABS Pattern: Brick Bond Colour: Natural and Charcoal Base: Tarsen 41041/0450 Manufacturer: AtlasBoard Concrete
	2 LD-02	WOOD DECKING Colour: Peain Manufacturer: TimberTech

SOFTSCAPE LEGEND

KEY	REF	DESCRIPTION
	4.5 LD-01	SHRUB PLANTING
		GRASS
		GRAVEL

FURNITURE LEGEND

KEY	REF	DESCRIPTION
	2 LD-04	BENCH
	1 LD-04	COFFEE TABLE
	1 LD-03	WASTE RECEPTACLE
	3 LD-04	DINING TABLE
	4 LD-04	PLANTING POT

No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 02, 2022
6	MW	Issued for ADP	Apr 13, 2022
5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for CP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 18, 2020
2	MW	Issued for Re-Zoning	May 04, 2020
1	DG	Issued for Re-Zoning	Oct 08, 2018

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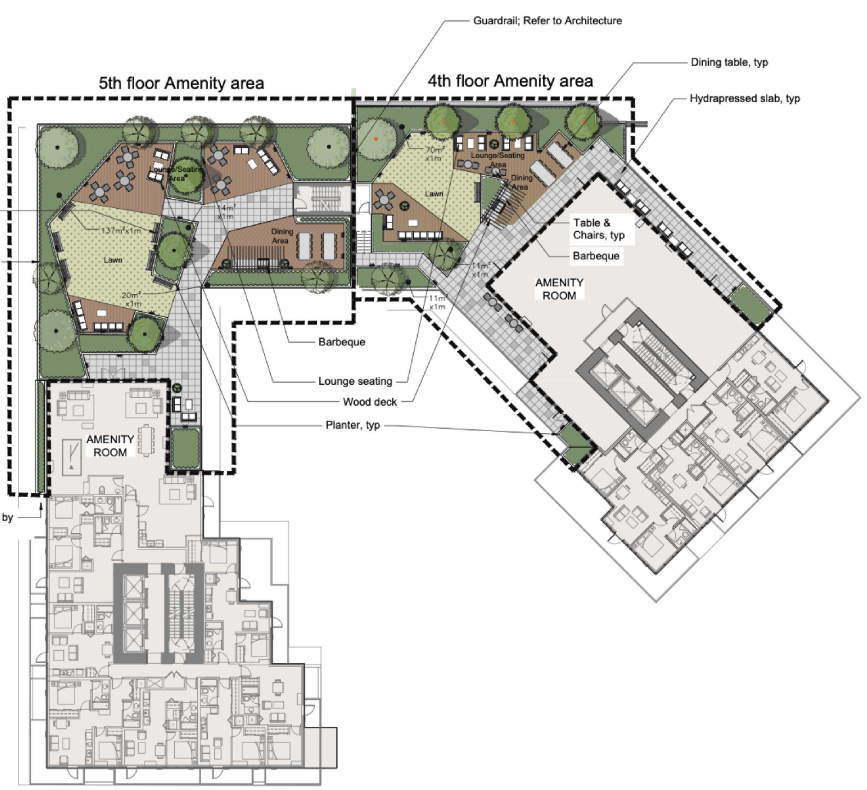
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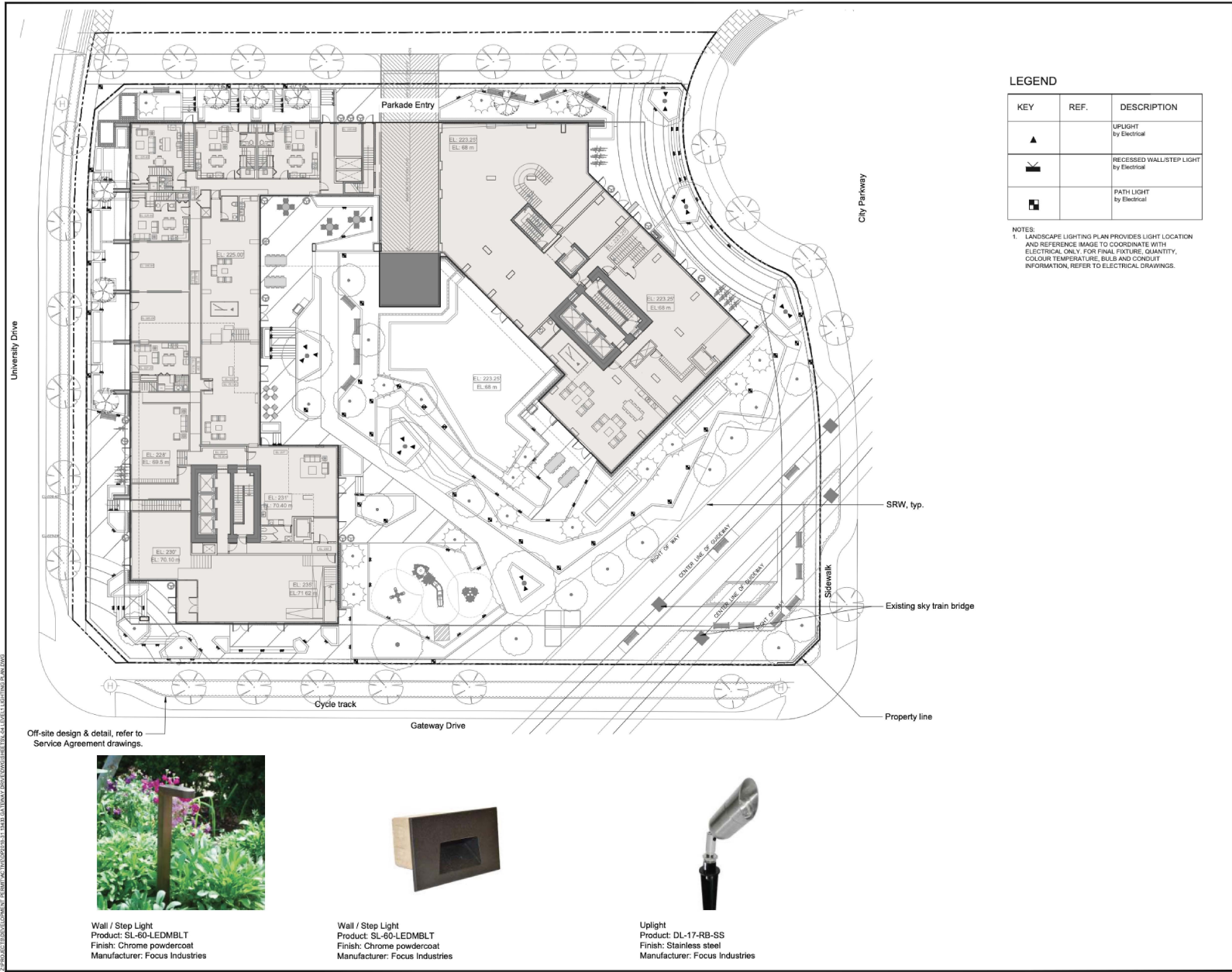
PLANT SCHEDULE - Level 5

TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	Acer palmatum 'Bloodgood' / Bloodgood Japanese Maple	B & B	6cm cal; 1.8m std.		5
	Cornus kousa 'Satomi' / Red Kousa Dogwood	B & B	6cm cal; 1.8m std.		3
	Pinus contorta 'Contorta' / Shore Pine	B & B		3m ht	2

PLANT SCHEDULE - Level 4

TREES	BOTANICAL / COMMON NAME	CONT	CAL	SIZE	QTY
	Acer palmatum 'Bloodgood' / Bloodgood Japanese Maple	B & B	6cm cal; 1.8m std.		2
	Cornus kousa 'Satomi' / Red Kousa Dogwood	B & B	6cm cal; 1.8m std.		1
	Pinus contorta 'Contorta' / Shore Pine	B & B		3m ht	3

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LEGEND

KEY	REF.	DESCRIPTION
▲		UPLIGHT by Electrical
◀		RECESSED WALL/STEP LIGHT by Electrical
■		PATH LIGHT by Electrical

NOTES:
 1. LANDSCAPE LIGHTING PLAN PROVIDES LIGHT LOCATION AND REFERENCE IMAGE TO COORDINATE WITH ELECTRICAL ONLY. FOR FINAL FIXTURE, QUANTITY, COLOUR TEMPERATURE, BULBS AND CONDUIT INFORMATION, REFER TO ELECTRICAL DRAWINGS.

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5	ET	Issued for ACP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 18, 2020
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Off-site design & detail, refer to Service Agreement drawings.



Wall / Step Light
 Product: SL-60-LEDMBLT
 Finish: Chrome powdercoat
 Manufacturer: Focus Industries



Wall / Step Light
 Product: SL-60-LEDMBLT
 Finish: Chrome powdercoat
 Manufacturer: Focus Industries



Uplight
 Product: DL-17-RB-SS
 Finish: Stainless steel
 Manufacturer: Focus Industries

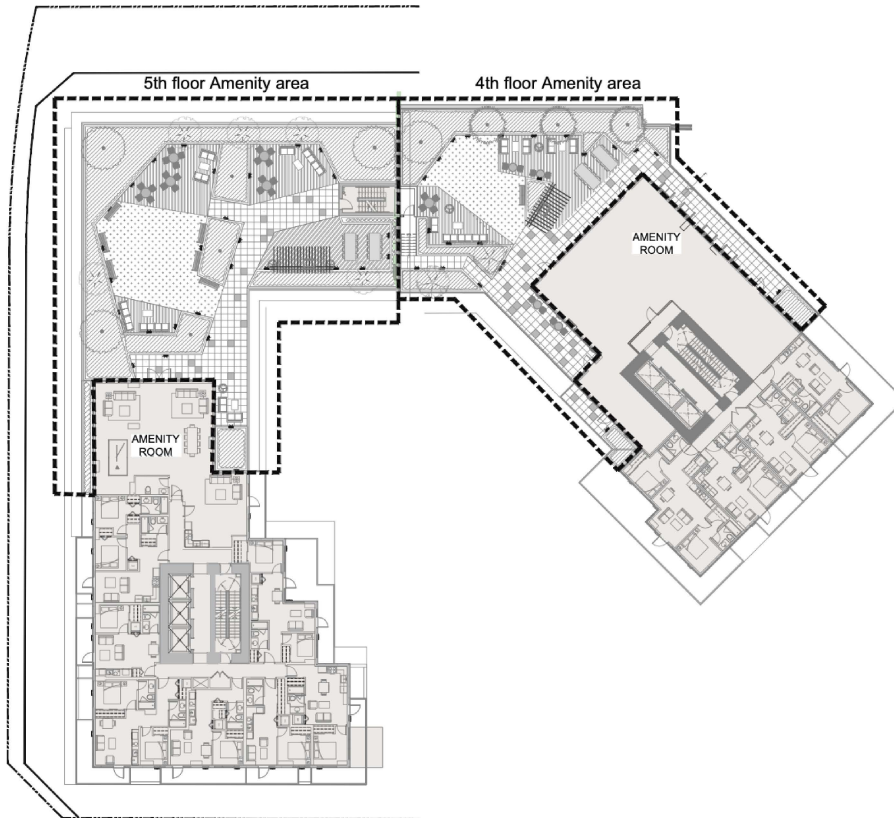
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LEVEL 1 LIGHTING PLAN



Vdz Project #:
DP2018-31

Drawing #:
L-04

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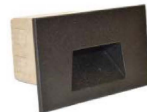
LEVEL 5 LEGEND

KEY	REF.	DESCRIPTION
		RECESSED WALLSTEP LIGHT by Electrical
		PATH LIGHT by Electrical
		POST LIGHT by Electrical

NOTES:
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Wall / Step Light
Product: SL-60-LEDMBLT
Finish: Chrome powdercoat
Manufacturer: Focus Industries



Wall / Step Light
Product: SL-60-LEDMBLT
Finish: Chrome powdercoat
Manufacturer: Focus Industries



Post Light
Product: DL-17-RB-SS
Finish: Stainless steel
Manufacturer: Focus Industries

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No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 02, 2022
6	MW	Issued for ADP	Apr 13, 2022
5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for DIP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 18, 2020
2	MW	Issued for Re-Zoning	May 04, 2020
1	DC	Issued for Re-Zoning	Oct 06, 2018

REVISIONS TABLE FOR SHEET

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Location:		13433 Gateway Drive Surrey, BC
Drawn:	Stamp:	
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Checked:	MW	
Approved:	Original Sheet Size:	24"x36"
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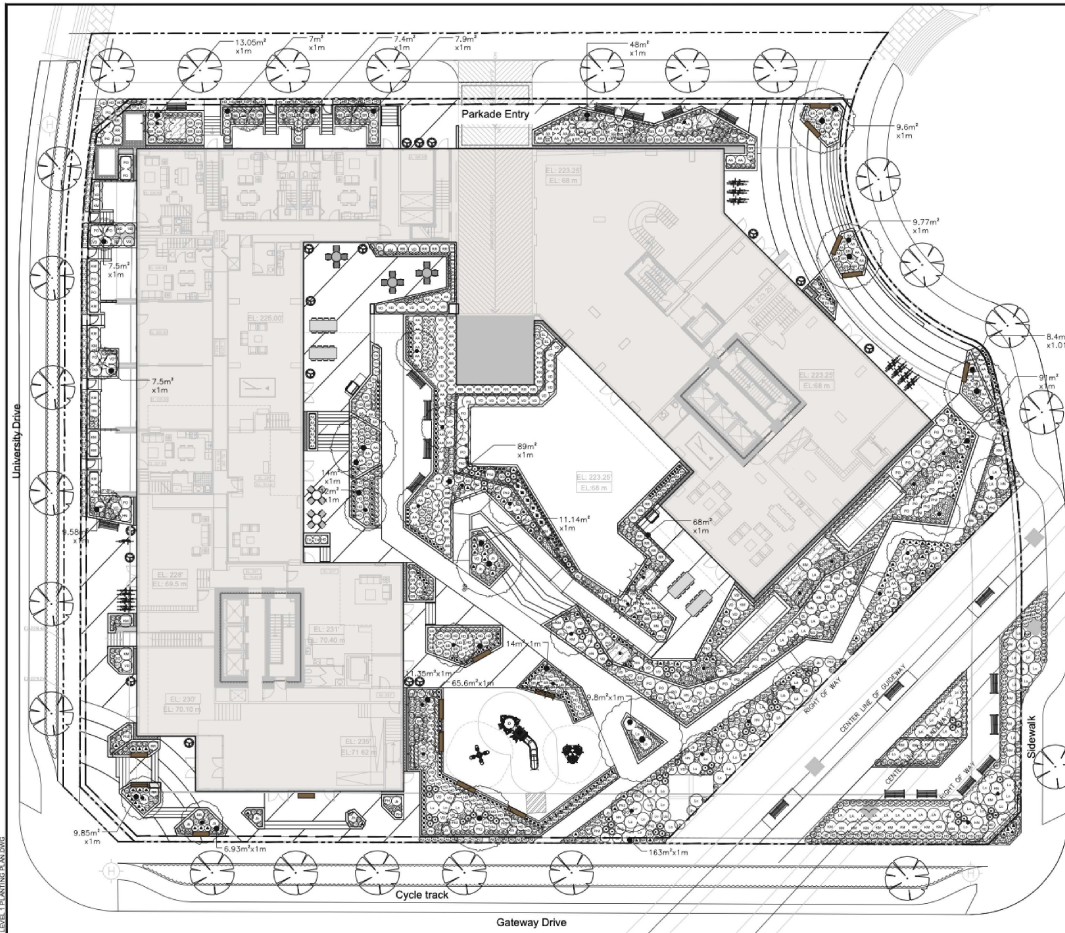
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Drawing Title:
LEVEL 4 & 5 LIGHTING PLAN



Project #:
DP2018-31

Drawing #:
L-05



PLANT SCHEDULE GROUND LEVEL				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY	
AB	Azalea japonica 'Hino Crimson' / Hino Crimson Japanese Azalea	#3	109	
AD	Azalea japonica 'Hino White Dwarf' / Dwarf White Japanese Azalea	#2	91	
BC	Berberis thunbergii 'Concord' / Concord Barberry	#2	97	
BD	Buxus x 'Green Mound' / Green Mound Boxwood	#2	82	
CS	Calluna vulgaris 'Silver Knight' / Silver Knight Heather	#1	96	
CF	Ceanothus thyrsiflorus 'Victoria' / Victoria Ceanothus	#3	43	
CK	Cornus sericea 'Kelsey' / Kelsey Dogwood	#2	17	
EC	Erica x darleyensis 'Candy Stripe' / Candy Stripe Winter Heather	#1	111	
GS	Gaultheria shallon / Salal	#1	58	
HE	Hydrangea arborescens 'Annabelle' / Annabelle Smooth Hydrangea	#3	19	
KL	Kalmia latifolia 'Mruel' / Mruel Mountain Laurel	#2	48	
LH	Lavandula angustifolia 'Hidcote' / Hidcote Lavender	#2	22	
LE	Leucothoe axillaris / Coastal Leucothoe	#1	46	
LI	Lonicera pileata / Privet Honeysuckle	#2	54	
LO	Prunus laurocerasus 'Otto Luyken' / Luykens Laurel	#2	42	
RD	Rhododendron x 'Ramapo' / Ramapo Rhododendron	#2	57	
SA	Sedum x 'Autumn Joy' / Autumn Joy Sedum	#2	41	
SK	Skimmia japonica 'Rubella' / Skimmia	#2	106	
SP	Spiraea japonica 'Goldmound' / Spirea	#2	22	
SL	Symphoricarpos albus / Common White Snowberry	#2	22	
TH	Taxus x media 'Hicksii' / Hicks Yew	1.2m ht.	24	
VB	Vaccinium corymbosum 'Bluecrop' / Bluecrop Highbush Blueberry	4" pot	6	
VI	Viburnum davidii / David Viburnum	#2	70	
DWARF CONIFERS				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY	
JL	Juniperus squamata 'Blue Star' / Blue Star Juniper	#2	31	
MP	Pinus mugo 'Mugus' / Mugo Pine	#2	33	
TO	Thuja orientalis 'Westmont' TM / Westmont Oriental Arborvitae	#2	64	
GRASSES				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY	
CS	Carex caryophylla 'Beaulemania' / Beaulemania Spring Sedge	#1	122	
MD	Carex morrowii 'Ice Dance' / Ice Dance Japanese Sedge	#1	217	
FB	Festuca glauca 'Beyond Blue' / Blue Fescue	#1	261	
HE	Helictotrichon sempervirens / Blue Oat Grass	#1	106	
OP	Ophiopogon japonicus / Mondo Grass	#1	141	
GROUNDCOVER				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY	
FR	Fragaria vesca / Woodland Strawberry	#1	42	
PERENNIALS				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY	
EC	Echinacea purpurea 'Magnus' / Magnus Purple Coneflower	#1	25	
ANNUALS/PERENNIALS				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY	
HD	Hosta x 'Abiqua Drinking Gourd' / Plantain Lily	#1	120	
NP	Nassella tenuissima 'Pony Tail' / Mexican Feathergrass	#1	207	
PH	Pennisetum alopecuroides 'Hamelin' / Hamelin Dwarf Fountain Grass	#1	17	
FERNS				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	QTY	
AP	Athyrium nipponicum 'Pictum' / Japanese Painted Fern	#1	210	
BS	Blechnum spicant / Deer Fern	#1	16	
GROUND COVERS				
SYMBOL	BOTANICAL / COMMON NAME	CONT.	SPACING	QTY
CO	Cornus canadensis / Bunchberry Dogwood	#1	300mm	296

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Drawing Title: **LEVEL 1 LIGHTING PLAN**

No.	By	Description	Date
7	MW	Issued for ACP Comment	Jun 02, 2022
6	MW	Issued for ACP	Apr 13, 2022
5	ET	Issued for ACP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 16, 2020
2	MW	Issued for Re-Zoning	May 04, 2020
1	DC	Issued for Re-Zoning	Oct 02, 2019

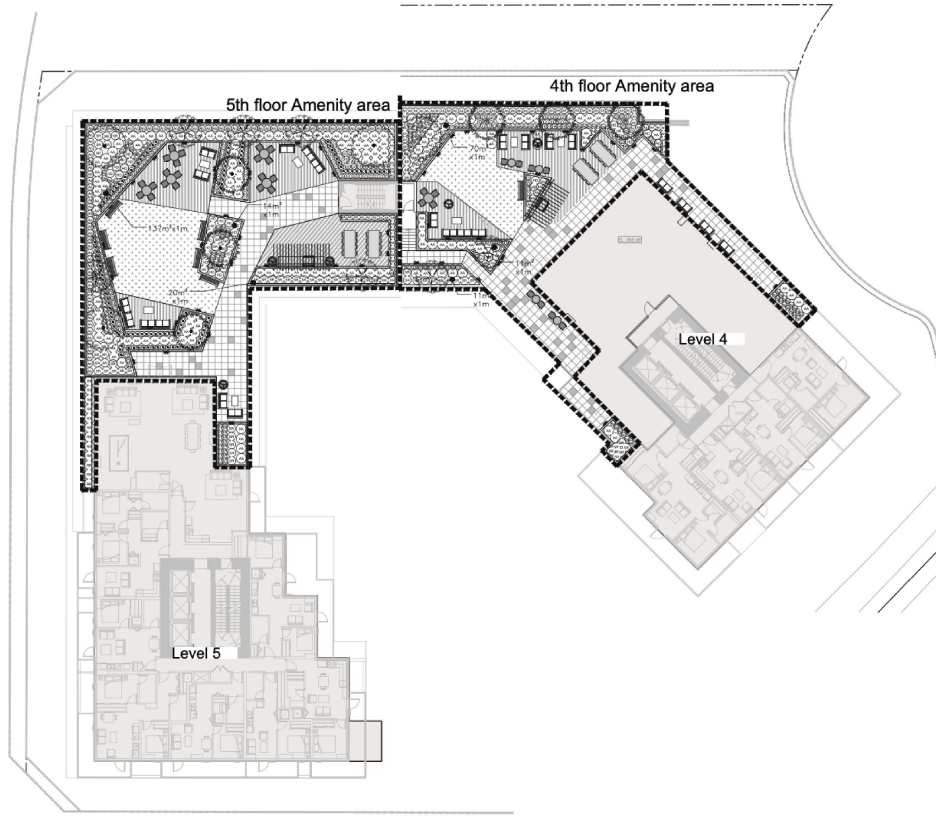
REVISIONS TABLE FOR DRAWINGS
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Project: 13433 Gateway Drive			
Location: 13433 Gateway Drive Surrey, BC			
Drawn: LJ	Stamp:		
Checked: MW			
Approved: MVDZ	Original Sheet Size: 24"x36"		
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Drawing #: **DP2018-31**
L-06

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PLANT SCHEDULE LEVEL 4

SHRUBS	BOTANICAL / COMMON NAME	CONT.	QTY
(A01)	Azalea japonica 'Hino Crimson' / Hino Crimson Japanese Azalea	#3	64
(A02)	Azalea japonica 'Hino White Dwarf' / Dwarf White Japanese Azalea	#2	50
(S01)	Skimmia japonica 'Rubella' / Skimmia	#2	20
GRASSES	BOTANICAL / COMMON NAME	CONT.	QTY
(D)	Ophiopogon japonicus / Mondo Grass	#1	76
ANNUALS/PERENNIALS	BOTANICAL / COMMON NAME	CONT.	QTY
(H01)	Hoechera x 'Berry Smoothie' / Berry Smoothie Coral Bells	#1	13
(H02)	Hosta x 'Abiqua Drinking Gourd' / Plantain Lily	#1	18
FERNS	BOTANICAL / COMMON NAME	CONT.	QTY
(B01)	Athyrium nipponicum 'Pictum' / Japanese Painted Fern	#1	55
(B02)	Blechnum spicant / Deer Fern	#1	22

PLANT SCHEDULE LEVEL 5

SHRUBS	BOTANICAL / COMMON NAME	CONT.	QTY
(A01)	Azalea japonica 'Hino Crimson' / Hino Crimson Japanese Azalea	#3	110
(A02)	Azalea japonica 'Hino White Dwarf' / Dwarf White Japanese Azalea	#2	106
(C01)	Crænonthus thyrsiflorus 'Victoria' / Victoria Crænonthus	#3	20
(R01)	Rhododendron x 'Ramapo' / Ramapo Rhododendron	#2	12
(S01)	Skimmia japonica 'Rubella' / Skimmia	#2	45
GRASSES	BOTANICAL / COMMON NAME	CONT.	QTY
(B)	Carex morrowii 'Ice Dance' / Ice Dance Japanese Sedge	#1	121
(D)	Ophiopogon japonicus / Mondo Grass	#1	85
ANNUALS/PERENNIALS	BOTANICAL / COMMON NAME	CONT.	QTY
(H01)	Hosta x 'Abiqua Drinking Gourd' / Plantain Lily	#1	26
FERNS	BOTANICAL / COMMON NAME	CONT.	QTY
(B01)	Athyrium nipponicum 'Pictum' / Japanese Painted Fern	#1	37
(B02)	Blechnum spicant / Deer Fern	#1	47

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5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 18, 2020
2	MW	Issued for Re-Zoning	May 04, 2020
1	DC	Issued for Re-Zoning	Oct 05, 2018

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 13433 Gateway Drive
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 MW
 Approved:
 MVDZ
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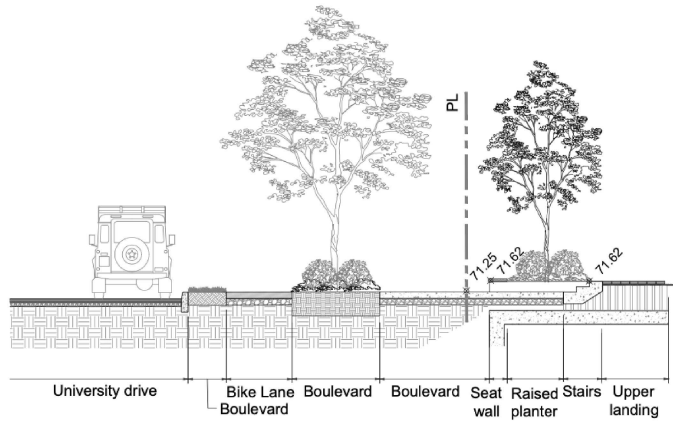
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LEVEL 1 LIGHTING PLAN

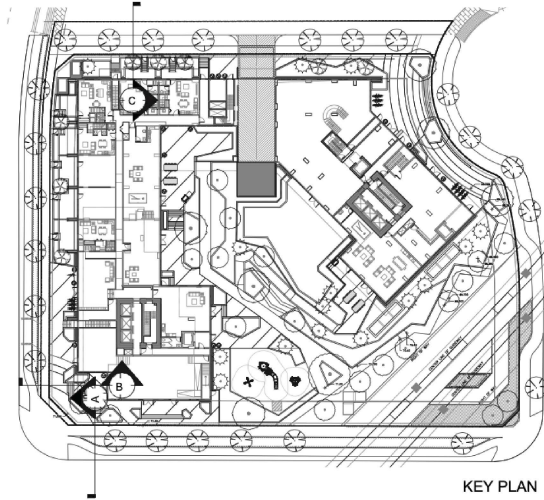


VDZ Project #: DP2018-31

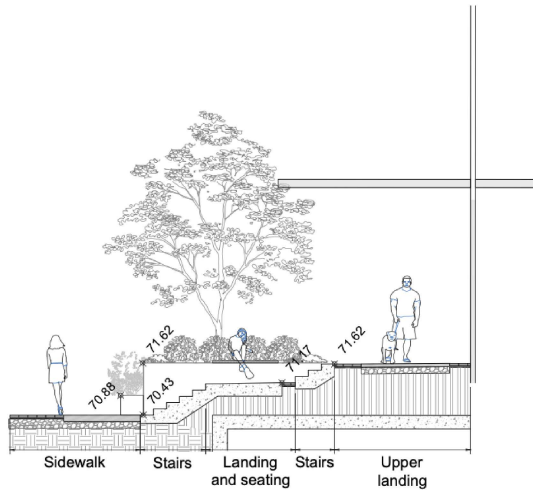
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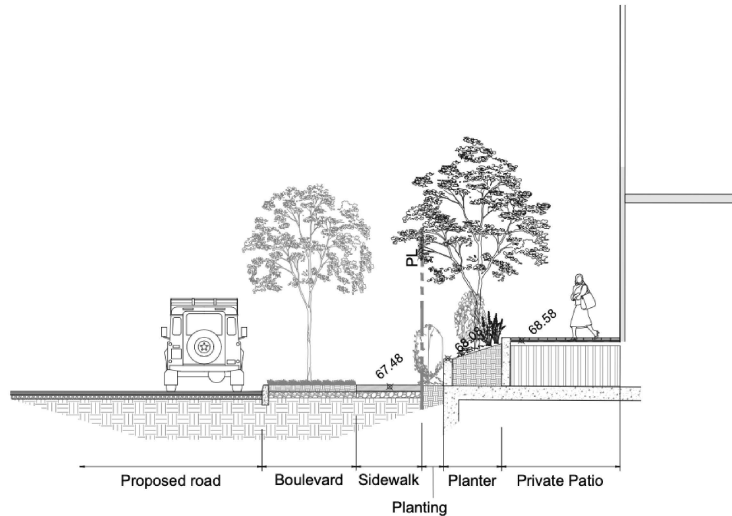
A SECTION - THROUGH ENTRY LANDING ON WEST TOWER (SOUTH SIDE)
Scale 1:50



KEY PLAN



B SECTION - THROUGH ENTRY LANDING AT WEST TOWER (WEST SIDE)
Scale 1:50



C SECTION - THROUGH PATIO ON WEST TOWER (NORTH SIDE)
Scale 1:50



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No.	By	Description	Date
7	MW	Issued for ADP Comments	Jun 02, 2022
6	MW	Issued for ADP	Apr 13, 2022
5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 16, 2020
2	MW	Issued for Re-Zoning	May 04, 2020
1	DC	Issued for Re-Zoning	Oct 26, 2018

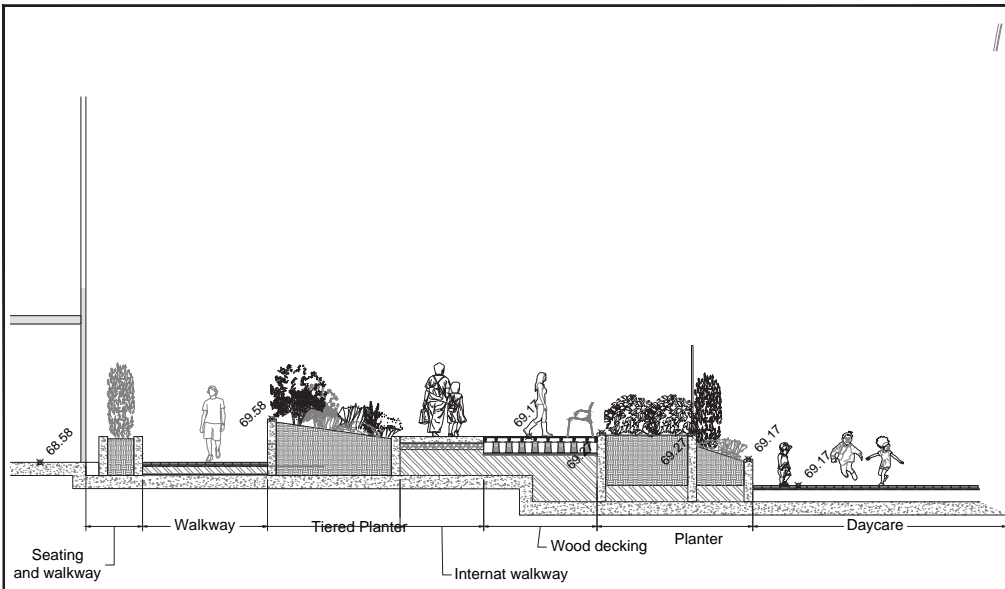
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No.	By	Description	Date
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Approved: DJ	Scale: 1:40		

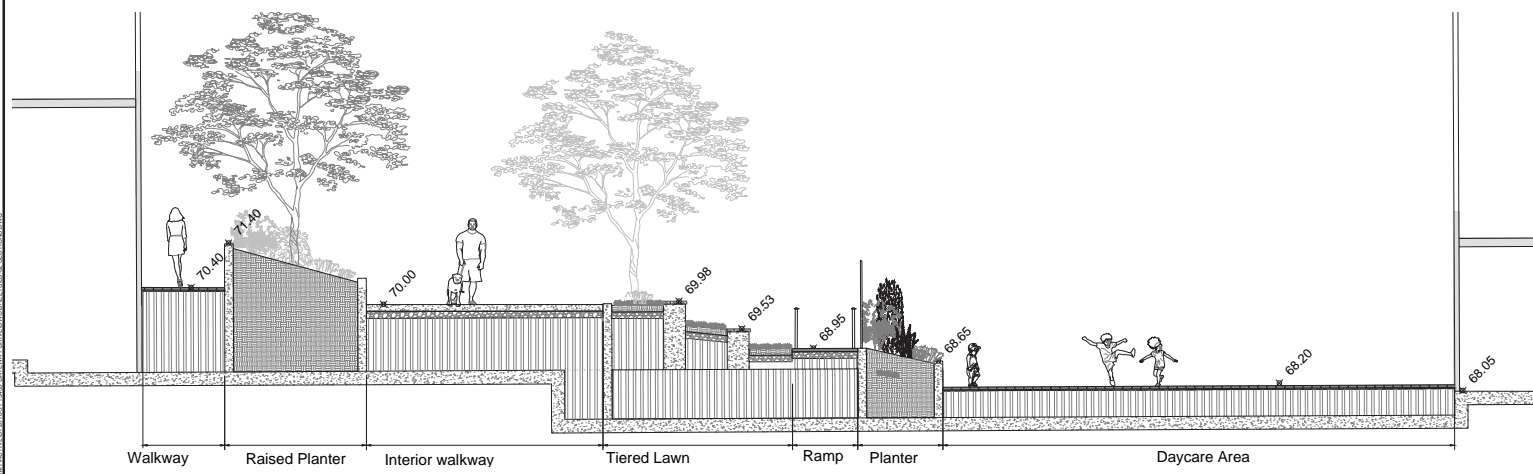
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SECTIONS

VDZ Project #:
DP2018-31

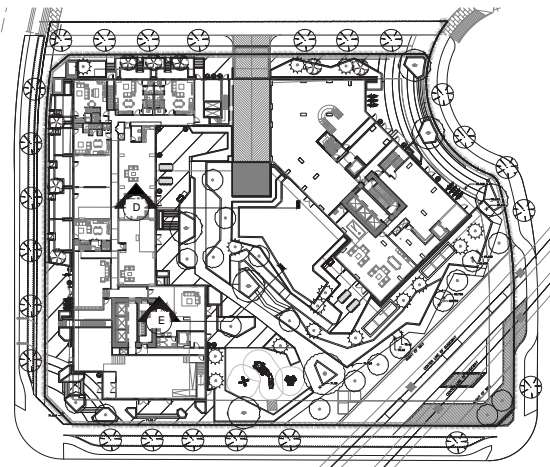
Drawing #:
LS-01



D SECTION - THROUGH NORTHERN COURTYARD
Scale 1:50



E SECTION - THROUGH TIERED LAWN
Scale 1:50



KEY PLAN

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No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 02, 2022
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5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 16, 2020
2	MW	Issued for Re-Zoning	May 06, 2020
1	DC	Issued for Re-Zoning	Oct 08, 2018

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REVISIONS TABLE FOR SHEET

Project:
13433 Gateway Drive

 Location:
13433 Gateway Drive
Surrey, BC

Drawn:
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Stamp:

Checked:
MW

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DJ

Original Sheet Size:
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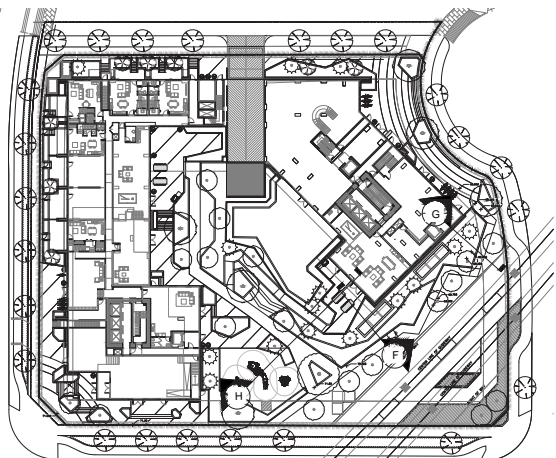
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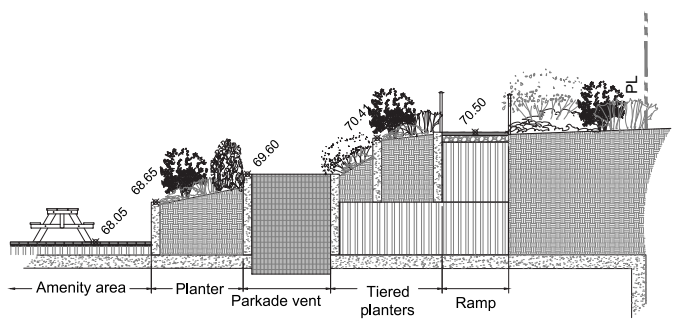
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VDZ Project #: DP2018-31

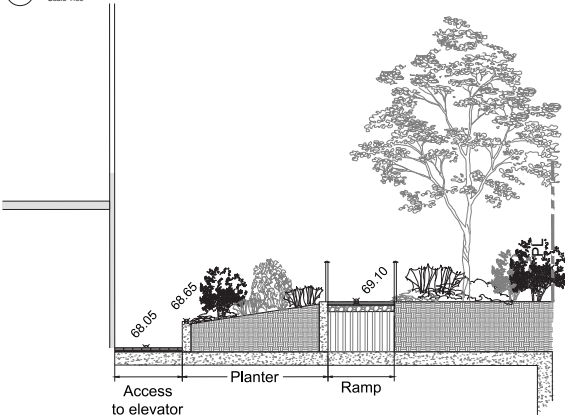
Drawing #: LS-02



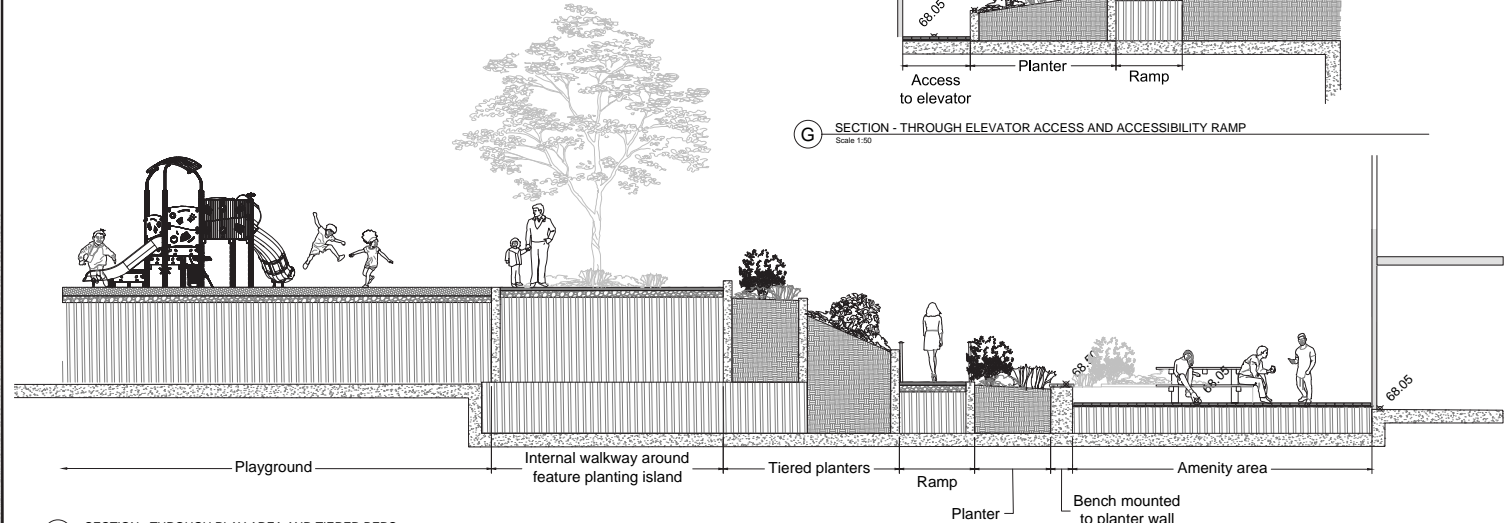
KEY PLAN



F SECTION - THROUGH AMENITY AREA AND PARKADE VENT



G SECTION - THROUGH ELEVATOR ACCESS AND ACCESSIBILITY RAMP



H SECTION - THROUGH PLAY AREA AND TIERED BEDS

1:50

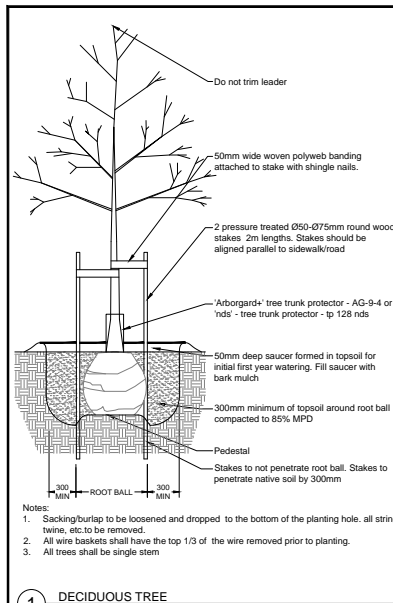
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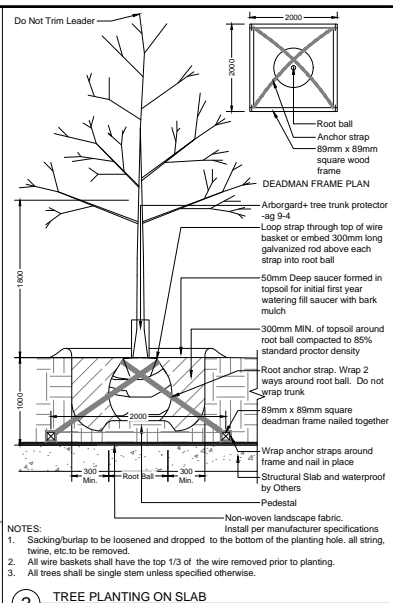
No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 02, 2022
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5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for File-Zoning	Dec 18, 2020
2	MW	Issued for File-Zoning	May 04, 2020
1	DC	Issued for File-Zoning	Oct 05, 2016

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<p>Location: 13433 Gateway Drive Surrey, BC</p>	
Drawn: PC	Stamp:
Checked: MW	
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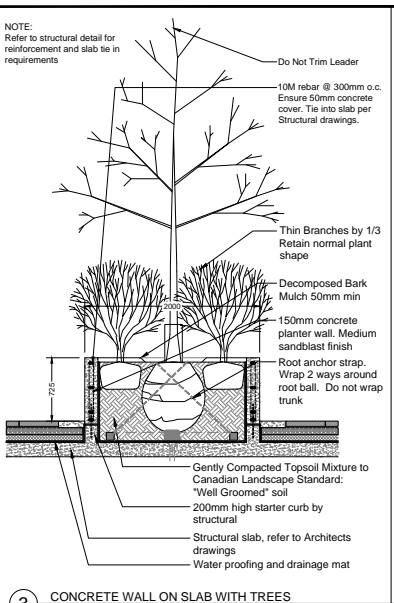
Drawing Title: SECTIONS
 Drawing #: LS-03
 V/DZ Project #: DP2018-31



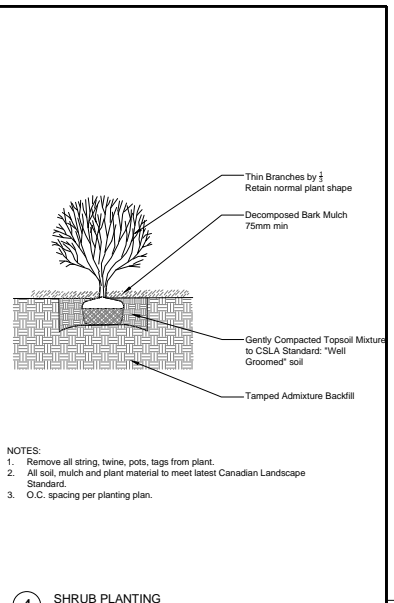
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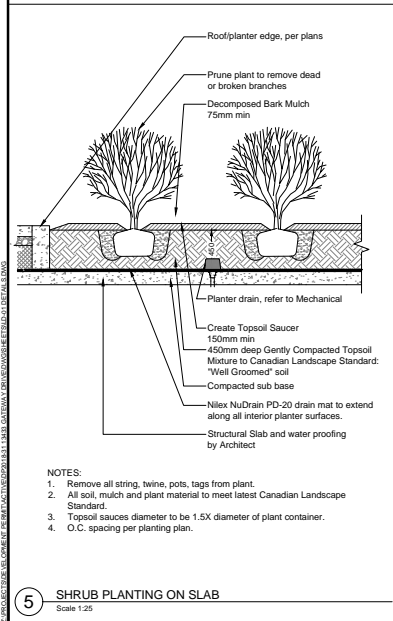
2 TREE PLANTING ON SLAB
Scale 1:25



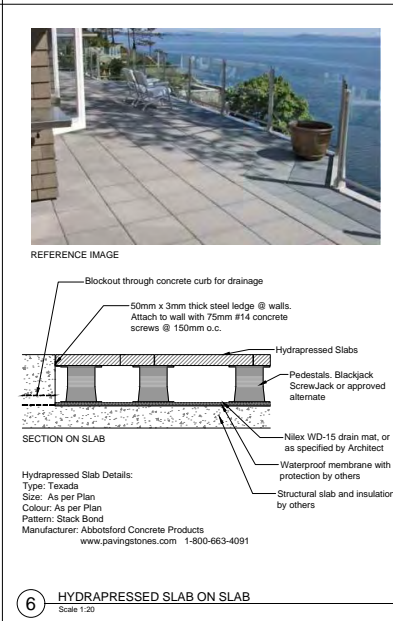
3 CONCRETE WALL ON SLAB WITH TREES
Scale 1:30



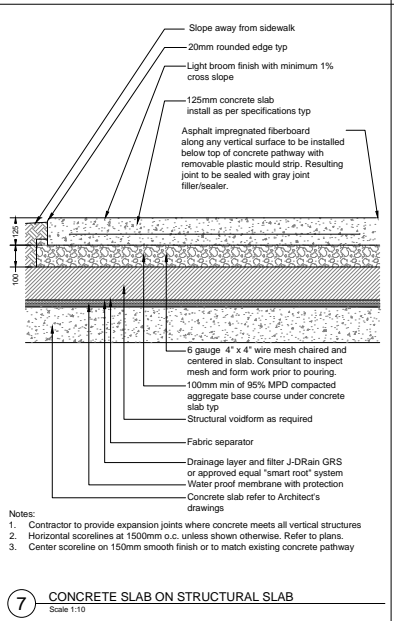
4 SHRUB PLANTING
Scale 1:25



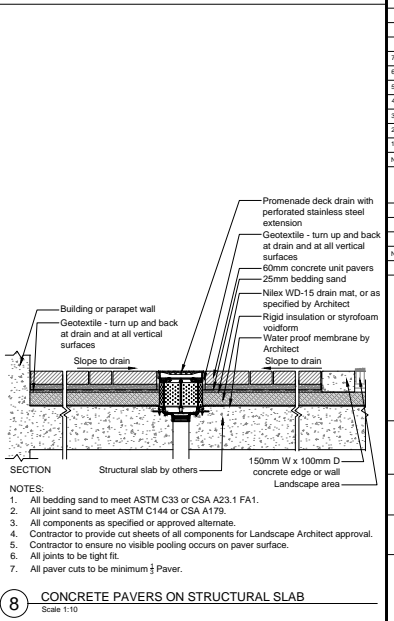
5 SHRUB PLANTING ON SLAB
Scale 1:25



6 HYDRAPRESSED SLAB ON SLAB
Scale 1:20



7 CONCRETE SLAB ON STRUCTURAL SLAB
Scale 1:10



8 CONCRETE PAVERS ON STRUCTURAL SLAB
Scale 1:10



No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 05, 2022
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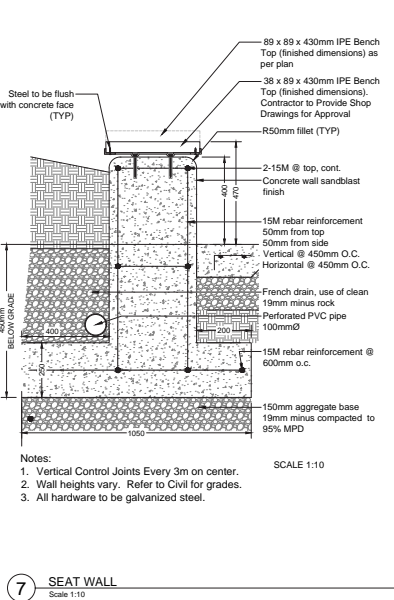
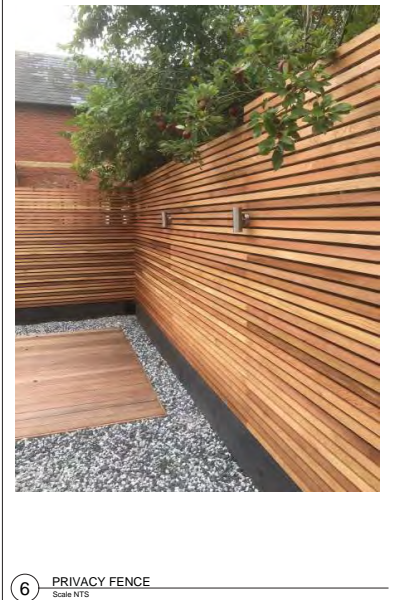
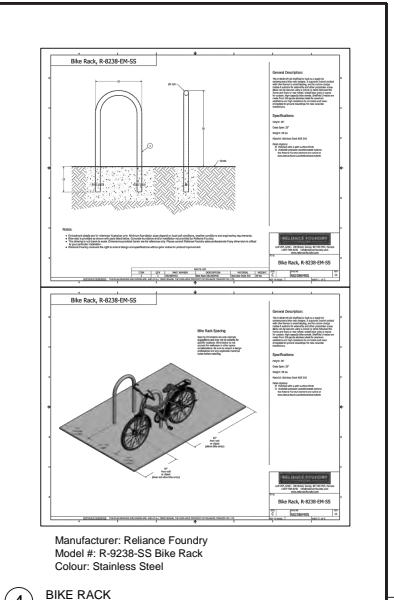
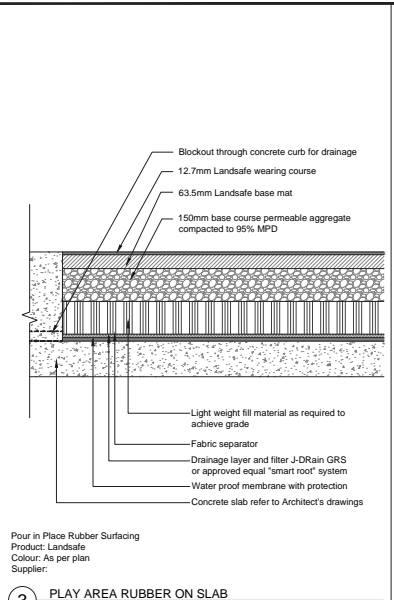
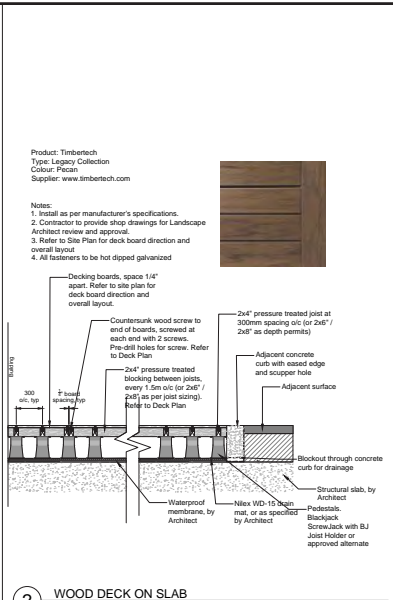
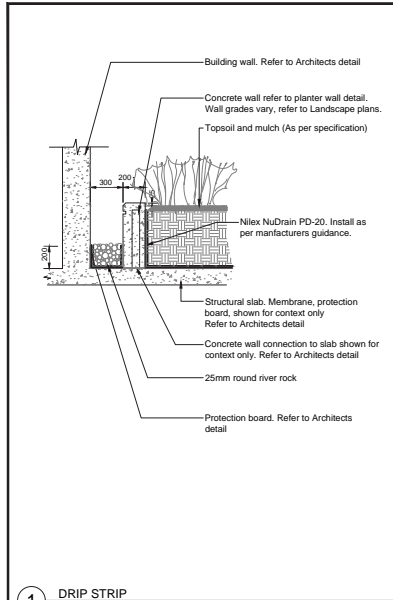
REVISIONS TABLE FOR SHEET

Project: 13433 Gateway Drive

Location: 13433 Gateway Drive Surrey, BC

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Drawing Title: DETAILS
VDZ Project #: DP2018-31
Drawing #: LD-01



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Fort Langley, BC | Vancouver, BC
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7	MW	Issued for ADP Comment	Jun 05, 2022
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2	MW	Issued for Re-Zoning	May 04, 2020
1	DC	Issued for Re-Zoning	Oct 05, 2016

No. By Description Date

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Approved: DJ	Original Sheet Size: 24"x36"		
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. THE CONSULTANT SHALL BE RESPONSIBLE FOR THE EXCLUSIVE RESPONSIBILITY OF THE CHANGE AND SHALL BE RESPONSIBLE AT THE CLIENT'S EXPENSE. THE WORK SHALL BE COMPLETED AND ALL DIMENSIONS SHALL BE CHECKED AT THE CLIENT'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STAKING/CONSTRUCTION.		

Drawing Title: **DETAILS**
Drawing #: **LD-02**
VDZ Project #: **DP2018-31**



Manufacturer: Equiparc or approved equals
Model: EP 3990
Colour: Silver & IPE

1 WASTE RECEPTACLE
Scale NTS



AMENITY LOUNGE FURNITURE:
Type: Coeur D'Alene
Colour: Oyster weave
Manufacturer: Sudden Fun, or approved equal

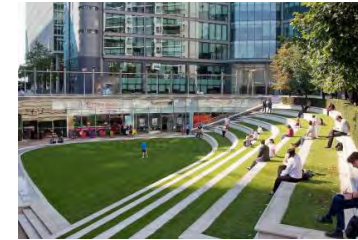
2 LOUNGE FURNITURE
Scale 1:10



4 OUTDOOR KITCHEN
Scale NTS



3 TRELLIS
Scale NTS



5 AMPHITHEATER SEATING CONCEPT
Scale NTS

Playstructure + JS-12115-A

BASIC FEATURES
Age Group: 3 to 12 years old
Full Height: 10' 0" (3.05m)
Overall Depth: 10' 0" (3.05m)
Overall Width: 10' 0" (3.05m)

DESCRIPTION
This structure is designed for children aged 3 to 12 years old. It features a variety of climbing and play elements, including slides, tunnels, and platforms. The structure is made of high-quality materials and is designed to be safe and durable.

ANCHORING
The structure is anchored to the ground by a system of ground anchors and bolts. The anchors are made of galvanized steel and are designed to provide a secure and stable base for the structure.

MATERIALS
METALS: Powder coated mild steel, galvanized steel, stainless steel.
PLASTIC MATERIALS: High-density polyethylene (HDPE), polypropylene (PP), polyethylene glycol (PEG).
COATINGS: Powder coating, electrocoat, epoxy resin.
WOOD MATERIALS: Hardwood, softwood, bamboo.
OTHER MATERIALS AND COMPONENTS: Safety surfacing, sand, rubber mulch, concrete, gravel.

COLOUR CHOICES
Playstructure: Blue, Red, Yellow, Green, Orange, Purple, Silver, Black, White, Grey, Brown, Tan, Gold, Silver, Bronze, Copper, Nickel, Chrome, Stainless Steel, Galvanized Steel, Powder Coated Steel, Electrocoat Steel, Epoxy Resin Steel, HDPE, PP, PEG, Hardwood, Softwood, Bamboo.

6 JAMBETTE PLAY STRUCTURE
Scale NTS

Quattro spring rider + JA-16004

BASIC FEATURES
Age Group: 3 to 12 years old
Full Height: 10' 0" (3.05m)
Overall Depth: 10' 0" (3.05m)
Overall Width: 10' 0" (3.05m)

DESCRIPTION
This structure is designed for children aged 3 to 12 years old. It features a variety of climbing and play elements, including slides, tunnels, and platforms. The structure is made of high-quality materials and is designed to be safe and durable.

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WOOD MATERIALS: Hardwood, softwood, bamboo.
OTHER MATERIALS AND COMPONENTS: Safety surfacing, sand, rubber mulch, concrete, gravel.

COLOUR CHOICES
Playstructure: Blue, Red, Yellow, Green, Orange, Purple, Silver, Black, White, Grey, Brown, Tan, Gold, Silver, Bronze, Copper, Nickel, Chrome, Stainless Steel, Galvanized Steel, Powder Coated Steel, Electrocoat Steel, Epoxy Resin Steel, HDPE, PP, PEG, Hardwood, Softwood, Bamboo.

7 QUATTRO SPRING RIDER
Scale NTS



Product: Manta climber
Product #: J6-17000-5B
Colour: TBD
Supplier: Jambette

https://www.jambette.com/products/en/products/manta%20climber-j6-17000-5b?taxon_id=51

8 MANTA CLIMBER
Scale NTS



Form and Character Image of fitness ground markings

9 FITNESS GROUND MARKINGS
Scale NTS

VDZ+A
FORT LANGLEY STUDIO MOUNT PLEASANT STUDIO
100-8181 Clough St. 100-303 Ardway
Fort Langley, BC Vancouver, BC
www.vdz.ca 604-882-0024

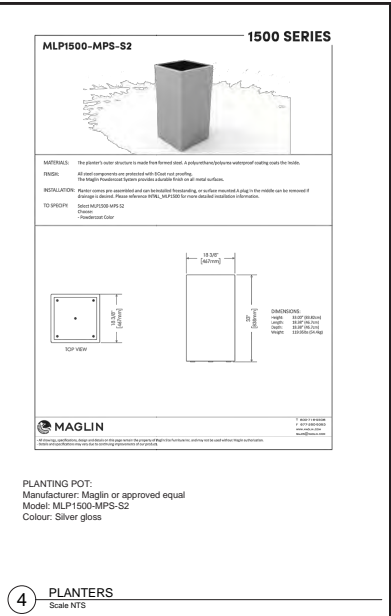
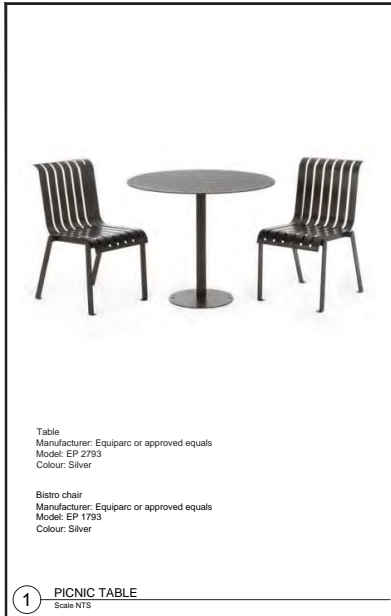


No.	By	Description	Date
17	MW	Issued for ADP Comment	Jun 02, 2022
16	MW	Issued for ADP	Apr 13, 2022
15	ET	Issued for ADP	Feb 28, 2022
14	ET	Issued for DP	May 27, 2021
13	MW	Issued for Re-Zoning	Dec 18, 2020
12	MW	Issued for Re-Zoning	May 04, 2020
11	DC	Issued for Re-Zoning	Oct 05, 2016

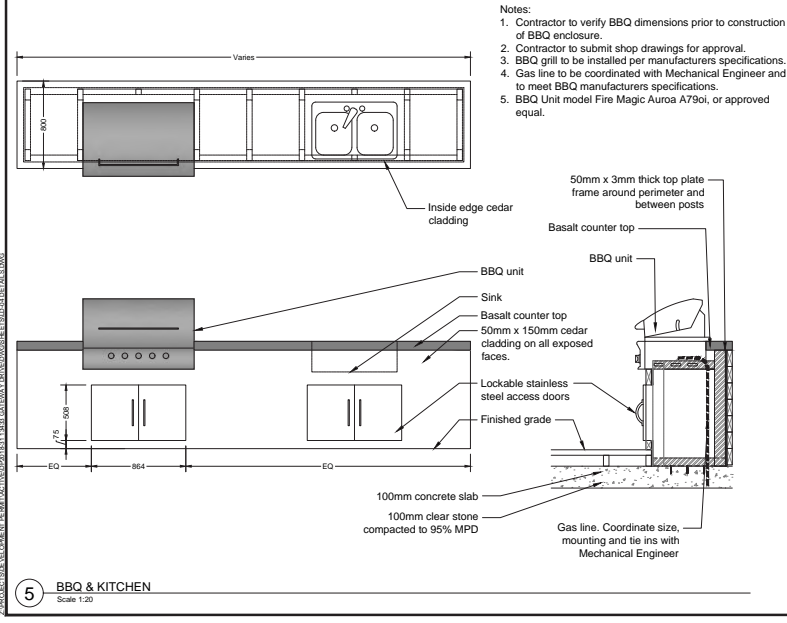
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No.	By	Description	Date
REVISIONS TABLE FOR SHEET			
Project: 13433 Gateway Drive			
Location: 13433 Gateway Drive Surrey, BC			
Drawn: YZ	Stamp:		
Checked: MW			
Approved: DJ	Original Sheet Size: 24"x36"		
Scale: AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCY TO THE CONSULTANT BEFORE PROCEEDING. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.		

Drawing Title: DETAILS
VDZ Project #: DP2018-31
Drawing #: LD-03



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 100-1015 Clough St | 102-103 Ardway
 Fort Langley, BC | Vancouver, BC
 www.vdz.ca 604-882-0524



No.	By	Description	Date
7	MW	Issued for ADP Comment	Jun 02, 2022
6	MW	Issued for ADP	Apr 13, 2022
5	ET	Issued for ADP	Feb 28, 2022
4	ET	Issued for DP	May 27, 2021
3	MW	Issued for Re-Zoning	Dec 18, 2020
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REVISIONS TABLE FOR DRAWINGS

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No.	By	Description	Date

REVISIONS TABLE FOR SHEET

Project:
 13433 Gateway Drive

Location:
 13433 Gateway Drive
 Surrey, BC

Drawn: YZ	Stamp:
Checked: MW	
Approved: DJ	
Scale: AS SHOWN	Original Sheet Size: 24"x36"

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Drawing Title: **DETAILS**
 Drawing #: **LD-04**
 VDP Project #: **DP2018-31**

INTER-OFFICE MEMO

TO: Manager, Area Planning & Development
- North Surrey Division
Planning and Development Department

FROM: Development Services Manager, Engineering Department

DATE: June 29, 2022 **PROJECT FILE:** 7818-0388-00

RE: Engineering Requirements
Location: 13433 Gateway Drive

REZONE***Property and Right-of-Way Requirements***

- Dedicate 1.5m along University Drive.
- Dedicate 6.0m for Green Lane.
- Dedicate required corner cuts.
- Provide 0.5m wide statutory rights-of-way (SRW) along all site frontages.

Works and Services

- Construct University Drive, Gateway Drive, City Parkway and Green Lane.
- Secure necessary approvals from TransLink.
- Implement the recommendations of the Traffic Impact Study and Geotechnical report.
- Construct 300mm water main along University Drive.
- Construct storm main along Green Lane.
- Complete drainage and sanitary catchment analysis to determine existing capacities. Resolve downstream constraints, as identified.
- Submit fire flow and water meter calculations to confirm system adequacy.
- Provide water, storm and sanitary service connections to service the development, and abandon all existing connections.
- Register applicable legal documents as determined through detailed design.
- Pay amenity charge for undergrounding the existing overhead electrical and telecommunication infrastructure and applicable latecomer charges.

A Servicing Agreement is required prior to Rezone.

DEVELOPMENT PERMIT

There are no engineering requirements relative to issuance of the Development Permit beyond those noted above.



Jeff Pang, P.Eng.
Development Services Manager
HB4

NOTE: Detailed Land Development Engineering Review available on file



June 21, 2022

Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 18 0388 00

SUMMARY

The proposed 7 townhouse units and 658 highrise units are estimated to have the following impact on the following schools:

Projected # of students for this development:

Elementary Students:	46
Secondary Students:	33

September 2021 Enrolment/School Capacity

K.B. Woodward Elementary	
Enrolment (K/1-7):	78 K + 544
Operating Capacity (K/1-7)	38 K + 419
Addition Operating Capacity (K/1-7) 2022	76 K + 605
Kwantlen Park Secondary	
Enrolment (8-12):	1462
Capacity (8-12):	1200

Projected population of school-age children for this development:	101
--	-----

Population : The projected population of children aged 0-19 Impacted by the development.
Enrolment: The number of students projected to attend the Surrey School District ONLY.

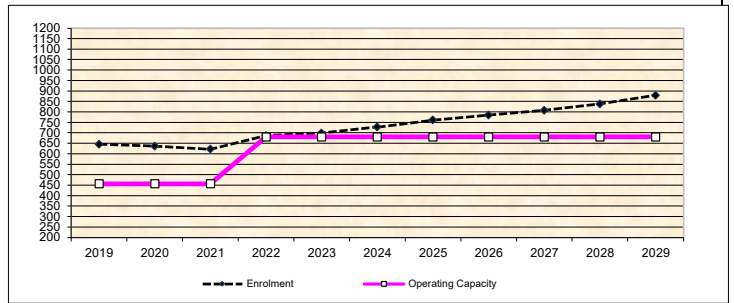
School Enrolment Projections and Planning Update:

KB Woodward Elementary is operating at 136% capacity. The 10 year enrolment projections indicate that the school will grow as City Centre continues to transform into the new business/commercial/residential center for Surrey. Construction of a 200-capacity addition has started and targeted to open Fall of 2022.

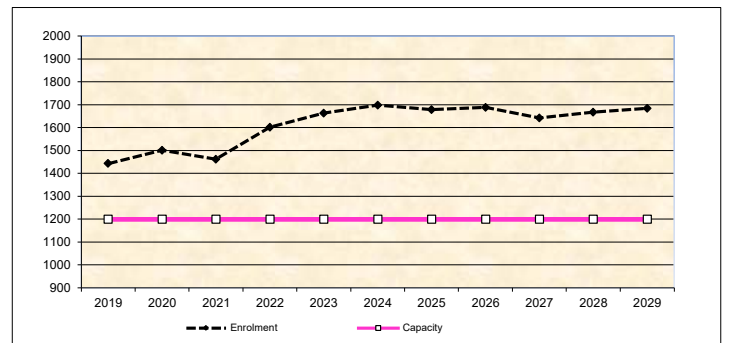
There is potential for significant redevelopment located along King George Boulevard with the current building form changing into high rise residential development and/or mixed use. The timing of these future high rise developments, with good market conditions, will impact the enrolment growth upwards. Along with this development, growth could be further compounded with the densification of 104th Ave between City Centre and Guildford Mall.

As of September 2021, Kwantlen Park Secondary is currently operating at 121% with 11 portables on site used for enrolling classes. In March 2020, the District started a feasibility report to build a 300-capacity addition, targeted to open 2025.

K.B. Woodward Elementary



Kwantlen Park Secondary



* Nominal Capacity is estimated by multiplying the number of enrolling spaces by 25 students.
 Maximum operating capacity is estimated by multiplying the number of enrolling spaces by 27 students.

MIKE FADUM AND ASSOCIATES LTD.
VEGETATION CONSULTANTS

Tree Preservation Summary

Surrey Project No: 18-0388-00

Address: 13433-Gateway Drive

Registered Arborist: Jeff Ross-ISA #PN-7991A

On-Site Trees	Number of Trees
Protected Trees Identified (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	33
Protected Trees to be Removed	21
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	12
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0 - All other Trees Requiring 2 to 1 Replacement Ratio 21 X two (2) = 42 	42
Replacement Trees Proposed	64
Replacement Trees in Deficit	0
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	NA

Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	0
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0 - All other Trees Requiring 2 to 1 Replacement Ratio 0 X two (2) = 0 	0
Replacement Trees Proposed	NA
Replacement Trees in Deficit	NA

Summary report and plan prepared and submitted by: Mike Fadum and Associates Ltd.

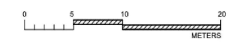
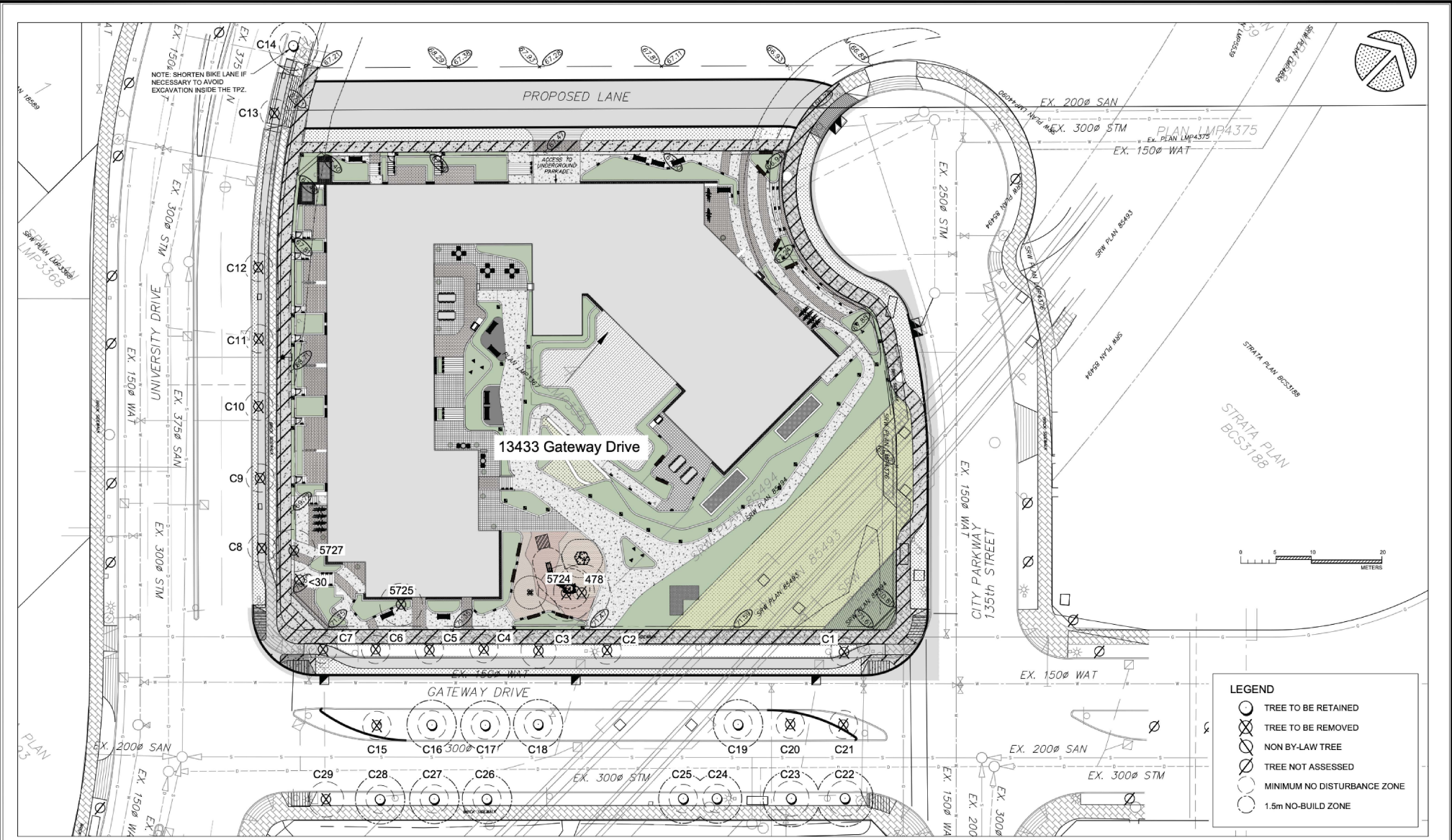
Signature of Arborist:

Date: May 28, 2021



Mike Fadum and Associates Ltd.
#105, 8277-129 Street, Surrey, BC, V3W 0A6
Phone 778-593-0300 Fax 778-593-0302





LEGEND

- TREE TO BE RETAINED
- TREE TO BE REMOVED
- NON BY-LAW TREE
- TREE NOT ASSESSED
- MINIMUM NO DISTURBANCE ZONE
- 1.5m NO-BUILD ZONE

NO.	DATE	BY	REVISION
1	AUG22/18	MK	SITE PLAN
2	MAY28/20	MK	SITE PLAN
3	DEC21/20	MK	SITE PLAN
4	APR09/21	MK	CIVIL PLAN
5	MAY28/21	MK	CIVIL PLAN

NO.	DATE	BY	REVISION
6	JUN03/21	MK	SITE PLAN

MIKE FADUM AND ASSOCIATES LTD.
VEGETATION CONSULTANTS

#105, 8277 129 St.
 Surrey, British Columbia
 V3W 0A6
 Ph: (778) 593-0300
 Fax: (778) 593-0302
 Email: mfadum@fadum.ca

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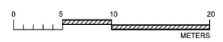
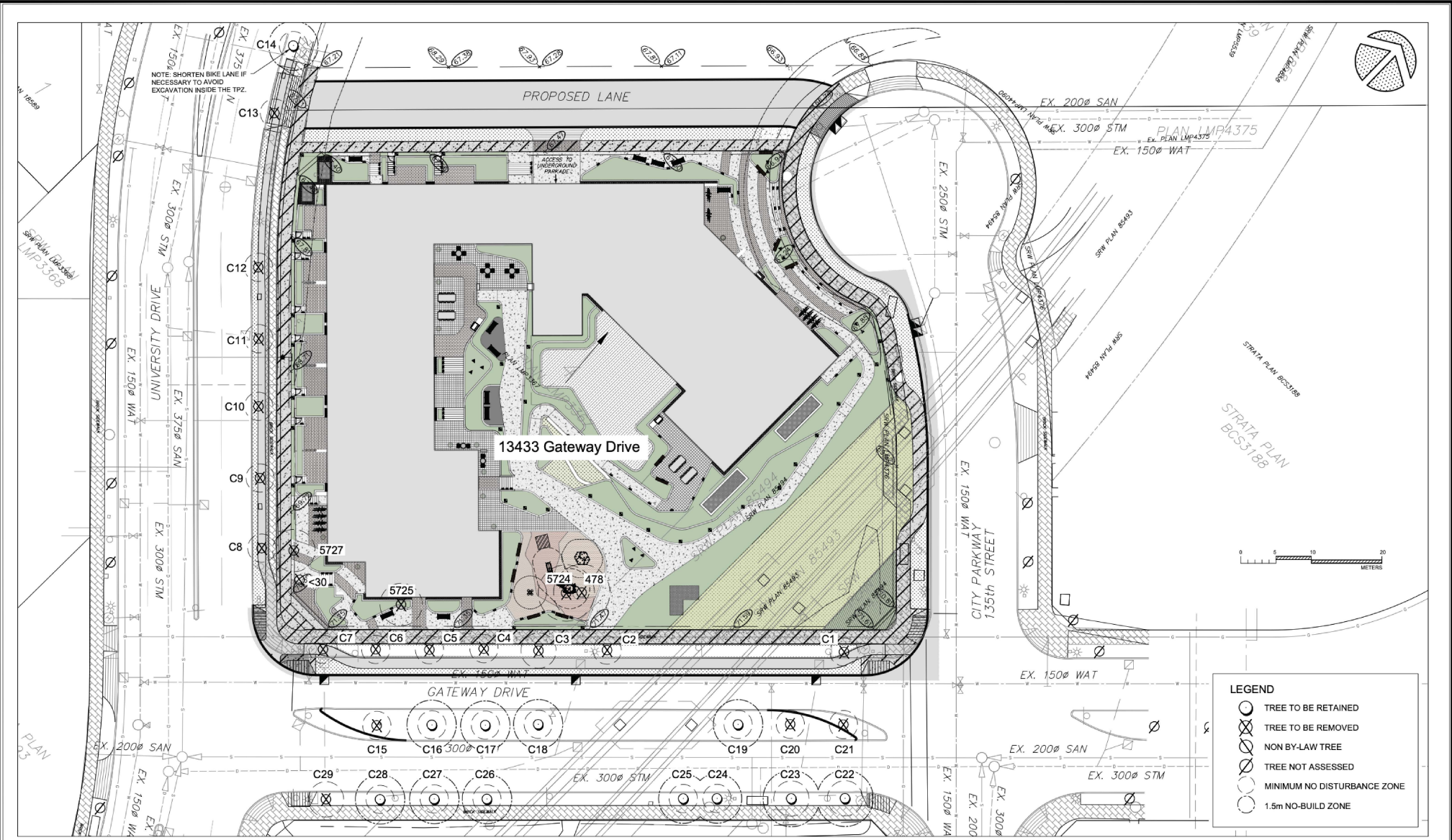
PROJECT TITLE
13433 GATEWAY DRIVE
 SURREY, B.C.

SHEET TITLE
T1 - TREE REMOVAL AND PRESERVATION PLAN

CLIENT _____

DRAWN MK
 SCALE AS SHOWN
 DATE MAY 28, 2018

T-1
 SHEET 1 OF 2



LEGEND	
	TREE TO BE RETAINED
	TREE TO BE REMOVED
	NON BY-LAW TREE
	TREE NOT ASSESSED
	MINIMUM NO DISTURBANCE ZONE
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NO.	DATE	BY	REVISION
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NO.	DATE	BY	REVISION
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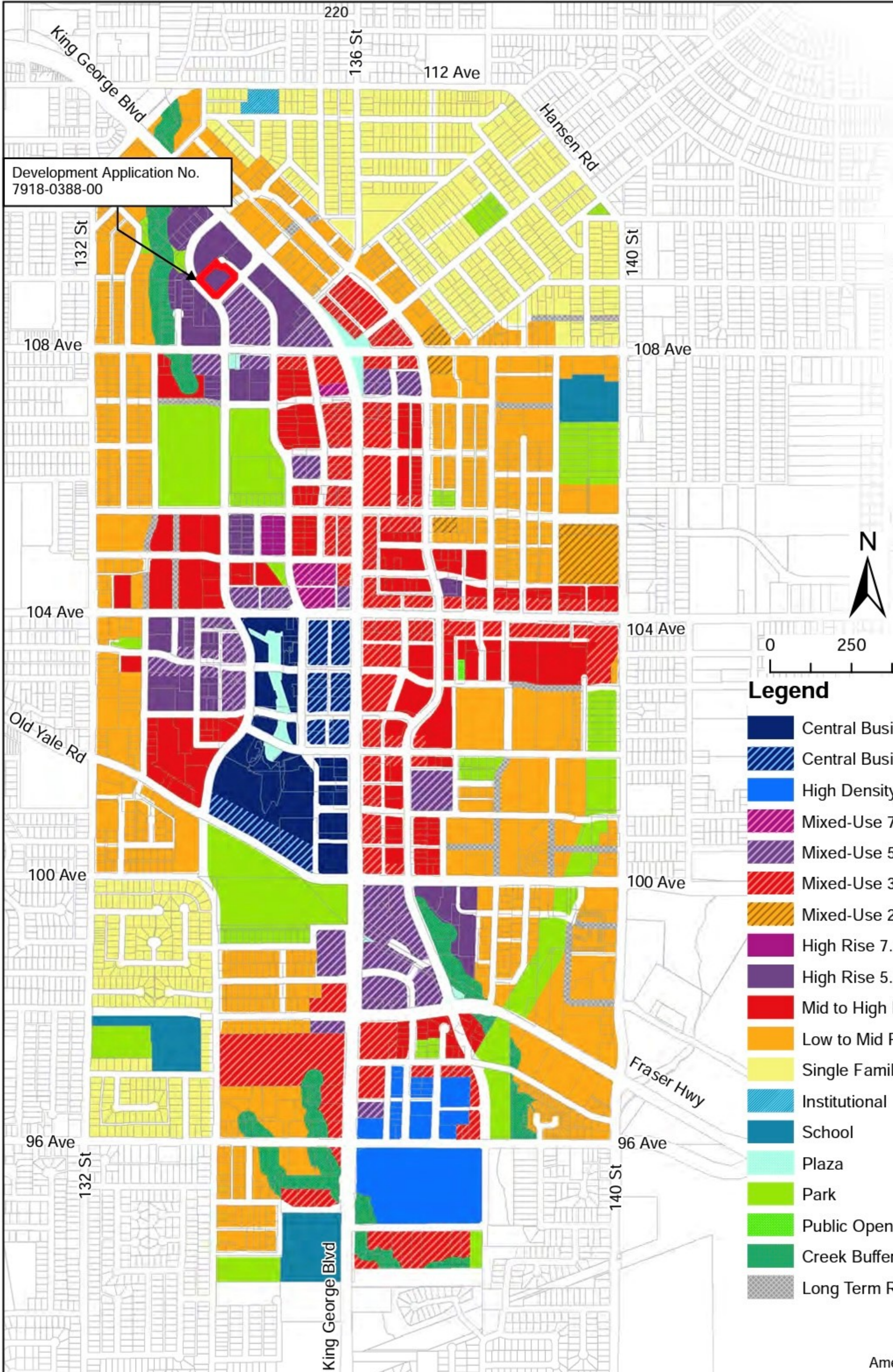
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PROJECT TITLE
13433 GATEWAY DRIVE
 SURREY, B.C.

SHEET TITLE
T1 - TREE REMOVAL AND PRESERVATION PLAN

DRAWN MK
 SCALE AS SHOWN
 DATE MAY 28, 2018

T-1
 SHEET 1 OF 2



Development Application No.
7918-0388-00



0 250 500 Meters

Legend

- Central Business District Area 1
- Central Business District Area 2
- High Density Employment
- Mixed-Use 7.5 FAR
- Mixed-Use 5.5 FAR
- Mixed-Use 3.5 FAR
- Mixed-Use 2.5 FAR
- High Rise 7.5 FAR
- High Rise 5.5 FAR
- Mid to High Rise 3.5 FAR
- Low to Mid Rise up to 2.5 FAR
- Single Family/Duplex 0.6 FAR
- Institutional
- School
- Plaza
- Park
- Public Open Space
- Creek Buffers
- Long Term Road



King George Blvd

City Parkway

Gateway Dr

University Dr
Haddon Rd

133A St

132A St



Advisory Design Panel Minutes

Location: Virtual
THURSDAY, APRIL 28, 2022
Time: 3:00 p.m.

Present:

Panel Members:

R. Drew, Chair
J. Azizi
G. Brumpton
T. Bunting
R. Jenkins
I. MacFadyen
B. Wiebe

Guests:

Brad Howard, PCI Developments
Vince Fernandez, MCM Architects
Sadaf Alerassool, MCM Architects
Mark Van Der Zalm, van der Zalm & Associates Inc.
David Tsoi, Fore Field Group
Jeff Christianson, IBI Group Architects
Orod Aris, IBI Group Architects
Micole Wu, van der Zalm & Associates Inc.
Feng Wu, van der Zalm & Associates Inc.
Frank Lin, Frank Lin Management
Binghang Li, Williams Engineering

Staff Present:

A. McLean, City Architect
S. Maleknia, Urban Design Planner
V. Goldgrub, Planner
L. Blake, Administrative Assistant

A. RECEIPT OF MINUTES

It was

Moved by R. Drew

Seconded by B. Wiebe

That the minutes of the Advisory Design

Panel meeting of April 14, 2022, be received.

Carried

2. 4:40 p.m.

File No.:	7918-0388-00
New or Resubmit:	New
Last Submission Date:	N/A
Description:	Proposed Rezoning from CD Bylaw No. 10464 to CD (based on RM-135) and Development Permit for the construction of two residential towers (36 & 40 storeys) with a total of 665 units. A child care centre and 194 square metres of ground floor retail is also proposed.
Address:	13433 Gateway Drive
Developer:	David Tsoi, Fore Field Group
Architect:	Jeff Christianson, Architect AIBC, IBI Group Architects
Landscape Architect:	Micole Wu, Van Der Zalm + Associates
Planner:	Donald Nip
Urban Design Planner:	Sam Maleknia

The Urban Design Planner advised that staff is supportive of the increased density due to the site's proximity to SkyTrain and generally supports the project.

The Panel was asked to comment on the overall site planning, pedestrian and vehicular movement, architectural expression, overall landscape concept, and public realm interfaces.

The Project Architect presented an overview of the site planning, streetscapes, building concept, and 3D Views.

The Landscape Architect presented an overview of the general concept for the Landscape design.

ADVISORY DESIGN PANEL STATEMENT OF REVIEW

It was Moved by J. Azizi
Seconded by I. MacFadyen
That the Advisory Design Panel (ADP)

SUPPORT the project and recommends that the applicant address the following issues to the satisfaction of the Planning & Development Department.

Recommend that the landscaping submission return to staff for further development.

Carried

The Panel generally supported the project and noted that it will be a great addition to the area.

Key Points

- Consider further the courtyard shape and programming.
VDZ+A: We have simplified the courtyard layout and programs so it's cleaner and more straightforward now.
- Consider shifting the east tower lobby northward.
IBI: Considering two tower development and the site constraints, proposed placements have been completely studied. By shifting the east tower northward, the acceptable tower separation cannot be achieved.
- Explore whether reorienting the northeast tower would bring greater value to the project. Consider reorienting the northeast tower 45 degrees as it may address some issues related to the courtyard.
IBI: Please refer to previous question
- Consider casting the white balconies with an upstand, in lieu of a metal panel, to maintain the monolithic quality of the concrete.
IBI: Noted and implemented. All white balconies are considered with upstands. For detail please refer to A2.15
- Give further consideration to increasing the contrast between the dark and white balcony glass railings.
IBI: To increase the contrast, the 16" upstand is proposed. Please refer to sheet A2.15 and perspective on page 30
- Increase the granularity of the architecture of the podium at-grade,

particularly facing the cul de sac.

IBI: Noted and implemented. The Childcare design was reevaluated, and colorful appearance has been incorporated into the exterior. Please refer to Page 28,31 and 32.

- Consider requirements for the childcare space early in the design process.
IBI: As mentioned in transportation report (Dated April 28, 2022) for 556 residential units, an 11,014 ft² (1,023 m²) daycare center, assuming 11 employees and 80 licensed Children are considered. The requirement for parking stalls is considered 0.7 per employee, and 0.15 per licensed child (a total of 20 stalls are required). Please refer to the transportation report (dated April 28, 2022)
- Consider providing a connection between the fourth and fifth-floor outdoor amenity areas.
IBI: Noted and implemented. This possibility is considered by using the existing staircase between two levels. The location of this stair is favorable for connecting two levels. Please refer to A1.08
VDZ+A: The new connection is added on level 4 and the landscape is revised to accommodate this connection.
- Consider increasing the amount of covered outdoor seating.
VDZ+A: There are lots of covered outdoor seating spaces on ground level in the outdoor kitchen and dining area.
- Consider working with TransLink to blend the under guideway landscape into the overall landscape of the project, and adding trees along the edge of the guideway right-of-way.
VDZ+A: We are proposing some upgrades, including signage, and a seating area under the guideway, the final design will be coordinated with CoS and TransLink.
- Consider further the paving geometries at the lobby entries.
VDZ+A: The paving pattern is improved and corresponds to the cul-de-sac, with the updated building interior layout we open up the landscaping a bit to have a bigger accessible landing area to the doors from the public sidewalk
- Consider compressing the play area to reduce the use of rubberized surfaces and provide additional planting space.
VDZ+A: Due to the number of features to serve the density in these two towers, and the fall zone requirements with the feature, we believe the proposed play area is appropriate to serve both towers.
- Consider breaking down the scale of the program at the rooftop amenity for smaller group gatherings.
VDZ+A: We have revised our roof plan to address this comment.
- Use future climate files to best understand the resiliency and shock impacts of the project.
IBI: Noted and will be added in the next phases

- Consider adding bicycle maintenance facilities to the bike rooms.
IBI: It is considered on P1 next to the east tower core. Please refer to A1.04
- Consider adding e-bike charging stations.
IBI: Noted and will be considered in the next phases

Site

- The public realm interface is well integrated around the site.
- Consider additional definition and design development for internal courtyard. Encourage design development on the corners towards the guideway and into the inner courtyard. Consider a finer grain for pedestrian feel, scale, detail and practicality.
VDZ+A: We have reduced the width of the central pathway and scaled some elements like decking or planter to refine the space and make the flow between the programs smoother. With respect to the design under the guideway, please refer to item #4.
- Provide additional consideration to the under guideway area, including a proposal on how the area can be used. This area is an opportunity to add some amenities and value.
VDZ+A: Please refer to the updated landscape drawings for the design under the guideway

Form and Character

- Support of the massing, siting and height of the towers, relationship to the surrounding area.
- The form responds well to the context, surrounding streets, siting and configuration.
- The design is responsive and thoughtful in terms of the building orientation.
- The building character has consistent and cohesive language.
- The podium scale is nice and will work well at the urban and pedestrian levels.
- Consider further pixelation to enhance the playfulness of the “ribbon” elevation design.
IBI: Noted. The design was reviewed, and the ribbon was enhanced. Please refer to pages 26 to 32.
- Consider removing the vertical fins as there is a strong language with exterior balconies that change colors.
IBI: Noted and implemented. By reviewing the design some vertical fins were removed and only those facing the courtyard or part of the ribbon have been sustained.
- Consider providing a recess at the door entry to the corridor connecting the west tower to the podium.
IBI: Noted and implemented. Please refer to A1.05
- Consider adding a vestibule at the entrance to the east tower from the cul-de-sac to enhance energy performance and provide a more

programmable entry lobby.

IBI: Noted and implemented- The vestibule was added to the east tower entrance. Please refer to A1.05

- Recommend engaging with the interior design team to closely review the proposed unit plans to ensure that the dimensions work for kitchens. They appear very tight.
IBI: The interior designer will be engaged in next phases
- Recommend adding enhanced parcel delivery systems in addition to standard mailboxes.
IBI: Noted and implemented. The parcel room was added to the east tower lobby. Please refer to A1-05

Landscape

- The landscape concept requires additional development. The architectural forms and abstract organic forms do not work together to create a cohesive site. The landscape concept should extend under the guideway to ingrate the complete site.
VDZ: Please refer to the updated landscape drawings, including both courtyard and under guideway design.
- Consider terracing off over the ramp and including that portion of the ramp to the courtyard to provide a solution to the organic form of the landscape compared to the strong geometry of the building.
VDZ+A: The area over the ramp and nearby is already terraced as stepped planters. We also propose a green roof on top of the ramp roof now.
- Recommend that the granularity of the exterior amenity spaces be increased by introducing some smaller-scaled spaces for more variety of eating areas.
VDZ+A: We have revised the upper amenity space to provide more intimate space for smaller group activities.
- Ensure the parapet is adequate to support soft landscaping soil requirement.
VDZ+A: We will work with the architect to ensure enough soil depth for trees on slab.
- Recommend real grass and planting materials are used long-term instead of artificial turf. Consider maintenance requirements.
VDZ+A: We will use real grass on ground level, for upper amenity space, we will discuss with client to see the strata's future need and decide the material
- Consider providing caregiver seating in the childcare area.
VDZ+A: We will work with the operator in the future to design the space and meet the caregiver and children's needs.
- Appreciate the consideration for pollinator plantings and green approaches to stormwater management.
IBI: Noted.

CPTED

- The publicly accessible amenity area (courtyard) on L1 requires additional consideration for practicality and CPTED, as it is currently designed as a dead-end. Consider strategies to increase the eyes on the area.
VZD+A: It's our intent to design the dead-end at the end of the pathway because we don't want the public who accidentally enters the space to feel this is a through the path and can walk to the other side of the lot. But with sufficient lighting and the appropriate type of plants/trees, we don't have a concern about the hidden corner and creating a CPTED issue.

Sustainability

- Appreciate the use of energy and thermal comfort modelling early on to inform design development.

Accessibility

- No specific issues were identified.

C. OTHER BUSINESS

This section had no items to consider.

D. NEXT MEETING

The next Advisory Design Panel is scheduled for Thursday, May 12, 2022.

E. ADJOURNMENT

The Advisory Design Panel meeting adjourned at 6:54p.m.

Jennifer Ficocelli, City Clerk

R. Drew, Chairperson

