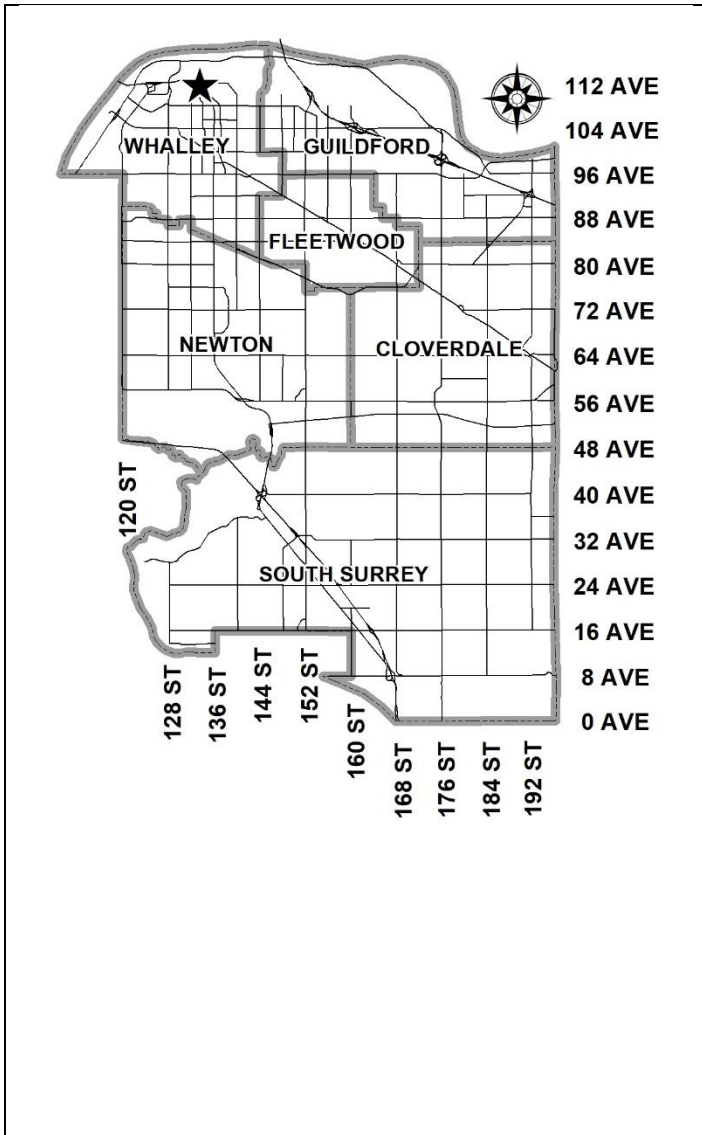


City of Surrey
PLANNING & DEVELOPMENT REPORT

Application No.: 7923-0234-00

Planning Report Date: January 29, 2024



PROPOSAL:

- **OCP Amendment** to Figures 3 and 16 from Multiple Residential to Downtown 3.5 FAR
- **City Centre Plan Amendment** of a portion from Low to Mid Rise Residential to Mid to High Residential and Mid to High Rise Mixed Use
- **Rezoning** from CHI to CD
- **Development Permits for Form and Character, Sensitive Ecosystems, and Hazard Lands**
- **Development Variance Permit** for reduced streamside setbacks

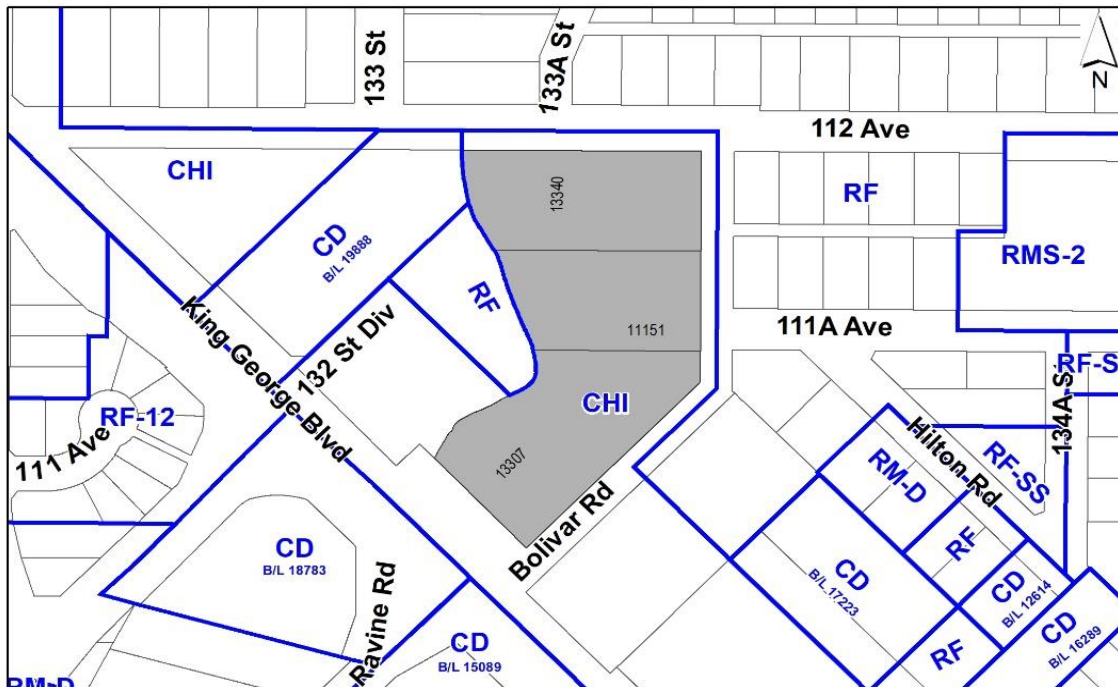
to allow for a phased development consisting of one 21-storey mixed-use tower and two residential towers of 24 and 37-storeys, with a total of 967 residential units and 240 sq.m of ground floor commercial space in City Centre.

LOCATION: 13340 112 Avenue
 11151 Bolivar Road
 13307 King George Boulevard

ZONING: CHI

OCP DESIGNATION: Multiple Residential

CITY CENTRE PLAN DESIGNATION: Low to Mid Rise Residential and Creek/Top of Bank Buffer



RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for:
 - OCP Amendment; and
 - Rezoning.
- Approval to draft Development Permit for Form and Character, Sensitive Ecosystems (Streamside), and Hazard Lands (Steep Slopes).
- Approval for Development Variance Permit to proceed to Public Notification.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Proposing an amendment to the Official Community Plan from Multiple Residential to Downtown 3.5 FAR to permit a higher density on the site.
- Proposing an amendment to the City Centre Plan from Low to Mid-Rise Residential to Mid to High Rise Residential and Mid to High Rise Mixed Use for a portion of the site.
- Proposing to reduce the streamside setback requirements outlined in Part 7A, Streamside Protection, of the Zoning Bylaw.

RATIONALE OF RECOMMENDATION

- The current proposal does not comply with the Multiple Residential designation in the Official Community Plan (OCP) or the Low to Mid-Rise Residential designation in the Surrey City Centre Plan. Amendments are proposed to accommodate a higher density.
- The proposed development conforms to the goal of achieving high-rise, high density, and mixed-use development around the three SkyTrain Stations. The Gateway Skytrain Station is less than 700 metres, as the crow flies, from the subject site.
- The provincial legislation introduced in December 2023, designates the site within a Skytrain Station Transit Oriented Area (TOA), Tier 3, which allows for a minimum FAR of 3.0 and a minimum height of 8-storeys.
- The proposed height and density of the subject site is reflective of an evolving urban context in the City Centre and in consideration of the objective to increase housing supply within TOA's.
- The proposed setbacks and built form achieve a more urban, pedestrian streetscape in compliance with the Surrey City Centre Plan and in accordance with the Development Permit (Form and Character) design guidelines in the OCP.

- The proposed building achieves an attractive and unique architectural built form, which utilizes high quality materials and contemporary massing. The street interface has been designed to a high quality to achieve a positive urban experience between the proposed building, Bolivar Creek and the public realm.
- The applicant will provide a density bonus amenity contribution consistent with the Tier 2 Capital Projects Community Amenity Contributions (CACs), in support of the requested increased residential density.
- The applicant is proposing a reduced setback along the east side of Bolivar Creek. This reduced setback will establish a development site that can accommodate building envelopes and densities that are reflective of the goals of an emerging City Centre.
- The watercourse and associated riparian protection area will be conveyed to the City for riparian protection purposes (Lot 3) and contains an area of approximately 5,990 m². The proposed watercourse protection, restoration, and proposed setbacks balance both riparian protection and development potential on the site while protecting and enhancing an important natural asset in City Centre.

RECOMMENDATION

The Planning & Development Department recommends that:

1. A By-law be introduced to amend the OCP Figure 3: General Land Use Designations for the subject site from Multiple Residential to Downtown 3.5 FAR and to Figure 16: Downtown Densities to include the site and a date for Public Hearing be set.
2. Council determine the opportunities for consultation with persons, organizations and authorities that are considered to be affected by the proposed amendment to the Official Community Plan, as described in the Report, to be appropriate to meet the requirement of Section 475 of the Local Government Act.
3. A By-law be introduced to rezone the subject site from "Highway Commercial Industrial Zone (CHI)" to "Comprehensive Development Zone (CD)" and a date be set for Public Hearing.
4. Council authorize staff to draft Development Permit No.7923-0234-00 generally in accordance with the attached drawings (Appendix I) and the finalized Ecosystem Development Plan and Geotechnical Report.
5. Council approve Development Variance Permit No. 7923-0234-00 (Appendix V) varying the following, to proceed to Public Notification:
 - (a) In Section B.1 in Part 7A, Stream Protection, the minimum streamside setback distance for a Class A (red-coded) Natural Stream is reduced from 30 metres to a minimum of 19.2 metres, measured from top of bank.
6. 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 subdivision layout to the satisfaction of the Approving Officer;
 - (c) approval from the Ministry of Forests, Lands and Natural Resource Operations under the Water Sustainability Act for Class C ditch watercourse classification confirmation;
 - (d) resolution of all urban design issues 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;

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- (g) submission of a finalized Ecosystem Development Plan and Impact Mitigation Plan to the satisfaction of City staff;
 - (h) the applicant satisfy the requirements for a P-15 agreement, including the construction of the public pathway;
 - (i) conveyance of riparian protection area, proposed Lot 3, at no cost to the City;
 - (j) submission of a finalized Geotechnical Report, including a peer review, to the satisfaction of City staff;
 - (k) the applicant provide a density bonus amenity contribution consistent with the Tier 2 Capital Projects CACs in support of the requested increased density, to the satisfaction of the General Manager, Planning and Development Department;
 - (l) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;
 - (m) submission of a landscape design and financial securities to accommodate design improvements and public accessibility for the City-owned King George Boulevard area adjacent to the site;
 - (n) registration of access easements to ensure access to the proposed shared parking and amenity facilities within the development and between phases;
 - (o) submission of an acoustical report for the units adjacent to King George Boulevard registration of a Section 219 Restrictive Covenant to ensure implementation of noise mitigation measures.
 - (p) 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; and
 - (q) registration of a statutory right-of-way for public rights of passage through site to the future public pathway.
7. Council pass a resolution to amend the Surrey City Centre Plan to redesignate the land from Low to Mid-Rise Residential to Mid to High Rise Residential and Mid to High Rise Mixed-Use for a portion of the site when the project is considered for final adoption.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP/City Centre Plan Designation	Existing Zone
Subject Site	Automotive dealership	Low to Mid Rise Residential and Creek/Top of Bank Buffer	CHI
North (Across 112 Avenue):	Single family residential homes	Urban in the OCP	RF
East (Across Bolivar Road):	Development Application No. 17-0397-00, at Third Reading, proposing 3 high rise buildings (26, 31, and 37 storeys), and single family homes.	Low to Mid Rise Residential and Townhouse	RF (CD Bylaw No. 20013 at Third Reading) and CD (Bylaw No.15089)
South (Across King George Boulevard):	Skytrain guideway and townhouses with riparian protection area.	High Rise Residential Type 1	CD (Bylaw No. 15089)
West:	Automotive accessory store, Bolivar Creek and creek buffer area.	Low to Mid Rise Residential and Creek Buffer	CHI and RF

Context & Background

- The subject site is located at 13340 - 112 Avenue, 1151 Bolivar Road and 13307 King George Boulevard in the City Centre Plan. The subject site is approximately 15,854 square metres in size, is currently operating as an automotive dealership, and has Bolivar Creek running along the western portion of the site.
- The subject site is zoned "Highway Commercial Industrial Zone (CHI)" and is designated "Low to Mid Rise Residential" and "Creek/Top of Bank Buffer" in the City Centre Plan and "Multiple Residential" in the Official Community Plan (OCP).
- The applicant has submitted an application for an OCP Amendment, a rezoning from CHI to "Comprehensive Development Zone (CD)", a Development Permit Form and Character, along with a Development Permit for Sensitive Ecosystems and Hazard Lands, and a subdivision, in order to allow for a phased, mixed-use development consisting of three buildings.
- Bolivar Creek, a Class A red-coded watercourse is located along the west portion the subject site. The riparian protection area of approximately 5,900 square metres is proposed to be conveyed to the City for maximum safeguarding.

- A Development Variance Permit is proposed to reduce the setback requirements for Bolivar Creek from 30 metres to a minimum of 19.2 metres from top of bank. The proposed streamside setbacks range between 19.2 metres 34.3 metres across the site.
- Final Water Sustainability Act (WSA) approval is required for the Class C ditch located along Bolivar Road. There are no setbacks anticipated to be required for this ditch.
- Should WSA require streamside setbacks, the applicant will be required to amend the development proposal to reflect these requirements.

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant is proposing:
 - to amend the Official Community Plan (Figures 3 and 16) from Multiple Residential to Downtown and to allow for higher density of 3.5 FAR;
 - to amend the City Centre Plan from Low to Mid-Rise Residential to Mid to High Rise Residential and Mid to High Rise Mixed-Use for the development portion of the site;
 - a Development Variance Permit to reduce the streamside setback requirements outlined in Part 7A, Streamside Protection, of the Zoning Bylaw, from 30 metres to a minimum of 19.2 metres from top of bank along the south portion of the watercourse;
 - a Development Permit for the 3 buildings, consisting of one, 21-storey mixed-use building and two residential buildings at 37 and 24-storeys, respectively;
 - a Development Permit Sensitive Ecosystems (Streamside) and Hazard Lands; and
 - Subdivision to create 2 development parcels and one parcel to be conveyed to the City for riparian area conservation.

	Proposed
Lot Area	
Gross Site Area:	15,854 sq. metres
Road Dedication:	540 sq. metres
Undevelopable Area:	2,578 sq. metres
Riparian Protection Area:	5,948 sq. metres
Net Site Area:	9,366 sq. metres
Number of Lots:	Existing: 3 Proposed 3
Building Height:	21, 24 and 37-storeys
Floor Area Ratio (FAR):	Overall gross: 5.0 FAR Overall net: 7.1 FAR
Floor Area	
Residential:	66,641 sq.m
Commercial:	240 sq.m
Total:	66,904 sq. m
Residential Units:	
Studio:	51
1-Bedroom:	289
1-Bedroom plus den:	308

	Proposed
2-Bedroom:	173
2-Bedroom plus den:	132
3-Bedroom:	7
3-Bedroom plus den:	7
Total:	967

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 35 school-age children generated by this development, of which the School District has provided the following expected student enrollment.

19 Elementary students at James Ardiel Elementary School
10 Secondary students at Kwantlen Park Secondary School

(Appendix III)

Parks, Recreation & Culture: Parks will accept the voluntary conveyance of the riparian area, at no cost to the City, subject to a P-15.

The closest active park is planned less than 200 metres away, as part of the City Centre Plan, and natural area is proposed to be conveyed to the City as part of the subject development application.

Surrey Fire Department: No concerns

Advisory Design Panel: The proposal was considered at the ADP meeting on December 14, 2023 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 by-law, to the satisfaction of the Planning and Development Department.

Transportation Considerations

Traffic Impacts

- The applicant was required to submit a transportation impact analysis (“TIA”) to evaluate site-generated traffic impacts. According to the TIA, the proposal is anticipated to generate approximately three vehicles every minute in the peak hour.
- The TIA confirmed the need for signalization of the intersection of Bolivar Road and King George Boulevard, which is planned to be constructed as part of adjacent development. With this improvement, the road network and study intersections were projected to operate at acceptable levels.

Road Network & Infrastructure

- The applicant will be required to provide the following improvements to support the subject proposal:
 - Construction of the north side of King George Boulevard to the City Centre arterial road standard;
 - Dedication and construction of the west side of Bolivar Road with pedestrian and cycling infrastructure and pavement widening; and
 - Dedication and construction of the south side of 112 Avenue to the City Centre collector road standard.

Access and Parking

- The subject site is proposed to be accessed via 112 Avenue and Bolivar Road.
- The Zoning Bylaw requires a total of 974 parking spaces to be provided on site.
- The applicant is proposing to provide a total of 984 parking spaces on site, exceeding the Zoning Bylaw requirements.

Parkland and/or Natural Area Considerations

- Development Permits for Sensitive Ecosystems (Streamside Protection) and Hazard Lands (Steep Slopes) are required.
- Bolivar Creek, a Class A watercourse, runs along the west portion of the site and continues north, across 112 Avenue, and south, across King George Boulevard.
- A Class C ditch is located along the Bolivar Road frontage and is proposed to be infilled. Final approval from Province under the Water Sustainability Act (WSA) is required.
- The required streamside setback, as outlined in Part 7A of the Zoning Bylaw, is 30 metres from top of bank for Bolivar Creek (Class A Stream). The setback proposed as part of the subject development project is reduced to a minimum of 19.2 metres ranging up to 34.3 metres.

- The rationale for the proposed reduction includes the following:
 - the proposed variable setbacks exceed the minimum setback requirements under the provincial Riparian Areas Protection Regulation (RAPR);
 - a reduced setback to the watercourse is proposed in order to allow for a development site that can accommodate building envelopes and densities that are reflective of the goals of the City Centre Plan;
 - the associated riparian protection area will be conveyed to the City for riparian protection purposes (Lot 3) and contains an area of approximately 5,990 m²; and
 - the proposed setbacks balance both riparian protection (through habitat restoration and conveyance) and development potential of the site.
- Staff support the requested variances to proceed for consideration.
- The site has a gross site area of 15,854 square metres with approximately 5,990 square metres of environmentally sensitive area being conveyed, (proposed Lot 3) at no cost, to the City, for riparian area protection purposes.
- A P-15 will be required in order to secure the proposed riparian habitat restoration and enhancement in advance of conveyance to the City.
- In accordance with the required City processes with respect to Sensitive Ecosystem Development Permit Areas (Streamside Protection) the applicant engaged Dillon Consulting Ltd. and appropriate Qualified Environmental Professionals (QEP), to prepare the required environmental assessments and reports.
- A 5 metre publicly accessible path will be located between the development site and the riparian area being conveyed to the City. This path will serve as both a public walkway and as drainage access to Bolivar Creek. The applicant is responsible for the design and installation as part of a P-15 agreement in consultation with staff.

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:
 - The buildings are designed to maximize natural daylighting and solar efficiency. The design specifies efficient systems such as Energy Star appliances, Intelligent lighting systems and LED lighting throughout. The project will be designed to Step Code 2 Standards.
 - The project is close to transit systems, as well as planned outdoor park spaces. The result is an eco-efficient urban lifestyle which brings diversity, energy and renewed vitality to this neighborhood while respecting the sensitive eco-environment of Bolivar Creek.
 - Construction emphasizes the use of materials that are certified to be from renewable sources and are manufactured or assembled locally to save on transportation energy and emissions.

- The design specifies the use of healthy materials, adhesives, sealants, paints and coatings to minimize the emission of harmful chemicals. All of which reduces our impact on outside ecosystems while helping create the healthiest indoor environment for homeowners and office workers.
- The multiple terraced roof areas are designed to incorporate living space, landscape and technology to create a positive environmental effect. Where possible, areas will be dedicated to 'green roof', reducing waste heat generation and creating beneficial urban eco-habitats.
- A stormwater collection system is being designed which will filter runoff and reduce pressure on the public storm water system. This extensive perimeter stormwater management system will be assisted by the water-retaining capacity of the landscaped open space, roof decks and permeable surfaces.

POLICY & BY-LAW CONSIDERATIONS

Regional Growth Strategy

- The subject site is located within, and complies with, the Urban Centres (Surrey Metro Centre) Land Use Designation of Metro Vancouver's Regional Growth Strategy.

Official Community Plan

Land Use Designation

- The subject site is designated Multiple Residential in the Official Community Plan, with a permitted maximum density of 2.5 FAR, as noted in Figure 3 of the OCP.
- The applicant is proposing to amend Figures 3 and 16 from Multiple Residential to Downtown 3.5 FAR.

Amendment Rationale

- The proposed density and building form are appropriate for this part of Surrey City Centre, and forms part of an emerging higher-density City Centre area.
- The proposed development conforms to the goal of achieving high-rise, high density, and mixed-use development around the three SkyTrain Stations. The Gateway Skytrain Station is less than 700 metres, as the crow flies, from the subject site.
- The proposed tower forms are consistent with the neighbouring development application to the east (Application No. 7917-0397-00 – Third Reading), which features towers of 26, 31 and 37 storeys.
- The application will be subject to the Community Amenity Contribution (Capital Projects) and Density Bonus Program, which received final adoption from Council at the December 16, 2019, Regular Council - Land Use Meeting.

Public Consultation for Proposed OCP Amendment

- Pursuant to Section 475 of the Local Government Act, it was determined that it was not necessary to consult with any persons, organizations, or authorities with respect to the proposed OCP amendment, other than those contacted as part of the pre-notification process.

Themes/Policies

- The proposed development is consistent with the following OCP Themes and Policies:
 - Growth Management
 - Accommodating Higher Density: Direct higher-density development into Surrey's City Centre.
 - Centres, Corridors and Neighbourhoods:
 - Dynamic City Centre: Strengthen Surrey's City Centre as a dynamic, attractive, and complete Metropolitan Core.
 - Transit Corridors: Support Transit Oriented Development along major corridors linking urban centres and employment areas.
 - Healthy Neighbourhood: Build complete, walkable, and green neighbourhoods.
 - Urban Design: Encourage beautiful and sustainable urban design.
 - Ecosystems
 - Energy, Emissions and Climate Resiliency: Design a community that is energy-efficient, reduces carbon emissions and adapts to a changing environment.
 - Economy
 - Employment Lands: Ensure sufficient supply and efficient use of employment lands.
 - Employment, Investment and Innovation: Ensure high-quality, business innovation and diversified employment and investment opportunities.

Secondary Plans

Land Use Designation

- The subject site is designated Low to Mid Rise Residential and Creek/Top of Bank Buffer in the City Centre Plan.
- The application proposes to amend the City Centre Plan from Low to Mid Rise Residential to Mid to High Rise Mixed-Use and Residential for the development portion of the site.

Amendment Rationale

- The proposed density and building form are appropriate for this part of Surrey City Centre and will complement higher density developments nearby to the south and east.
- The applicant will be subject to the Community Amenity Contribution (Capital Projects) and Density Bonus Program, which received final adoption from Council at the December 16, 2019, Regular Council – Land Use Meeting.
- The "Creek/Top of Bank Buffer" designation is proposed to remain.

Themes/Objectives

- The proposed development is consistent with the following guiding principles of the City Centre Plan:
 - Build Density and Mixed Use, by providing a mix of commercial, office and residential space.
 - Encourage Housing Diversity, with a mix of rental and condominium units and a variety of unit types and sizes.
 - Encourage Office and Employment, by providing approximately 6,268 square metres of office space and ground floor commercial retail units.
 - Promote Identity and Sense of Place, with a unique blend of interconnected commercial, amenity and residential spaces.

CD By-law

- The applicant proposes to rezone the subject site from "Highway Commercial Industrial Zone (CHI)" to "Comprehensive Development Zone (CD)".
- The applicant is proposing a "Comprehensive Development Zone (CD)" to accommodate the proposed development on the subject site. The proposed CD By-law for the proposed development site identifies the uses, densities and setbacks proposed. The CD By-law will have provisions based on the "Multiple Residential 135 Zone (RM-135)" and the "Community Commercial Zone (C-8)".
- The CD Bylaw contains Blocks A, B, and C. Block A contains the southern two buildings on the development site (proposed Lot 1). Block B contains the north building on the development site (proposed Lot 2) and Block C contains the riparian protection/open space area (proposed Lot 3).
- 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 By-law is illustrated in the following table:

	RM-135 and C-8 Zones	Proposed CD By-law
Land Use	<p>The RM-135 Zone permits multiple unit residential buildings and ground-oriented multiple residential buildings.</p> <p>The C-8 Zone permits commercial uses including:</p> <ul style="list-style-type: none"> • Retail stores; • Personal service uses; • General service uses; • Beverage container return centres; • Eating establishments; • Neighbourhood pubs; • Liquor stores; • Office uses; • Parking facilities; • Automotive service uses; • Indoor recreational facilities; • Entertainment uses; • Assembly Halls; • Community services; • Child care facilities; and • One dwelling unit. 	<p>Residential will comply with the RM-135 Zone in all Blocks A and B.</p> <p>Commercial uses will include the following:</p> <p>Block A</p> <ul style="list-style-type: none"> • Retail stores; • Personal service uses; • General service uses; • Eating establishments; • Neighbourhood pubs; • Liquor stores; • Office uses; • Indoor recreational facilities; • Entertainment uses; • Community services; and • Child care facilities.
FAR (Net Density)	2.5	<p>Overall net site density:</p> <p>7.1 Block A: 7.5 Block B: 6.6 Block C: N/A</p>
Lot Coverage	33 ⁰ %	<p>Block A: 42% Block B: 48% Block C: N/A</p>

	RM-135 and C-8 Zones		Proposed CD By-law
Building Setbacks	50% of the height of the building from all lot lines		<p>Block A</p> <p>North: 4.5 metres South: 1 metres East: 4.5 metres West: 1 metres</p> <p>Block B</p> <p>North: 4.5 metre South: 0 metre East: 4.5 metres West: 0 metres</p> <p>Block C N/A</p>
Building Height	Not Applicable		Block A: 124 metres Block B: 83 metres
Amenity Space			
Indoor Amenity:	2,233 sq. metres	2,946 metres	The proposed 2,946m ² exceeds the Bylaw requirement.
Outdoor Amenity:	2,952 sq. metres	3,900 sq. metres	The proposed 3,900 m ² exceeds the Bylaw requirement.
Parking (Part 5)		Required	Proposed
Number of Stalls			
Commercial/Office:		7	7
Residential:		870	880
Residential Visitor:		97	97
Total:		974	984
Bicycle Spaces			
Residential Secure Parking:		1161	1161
Residential Visitor:		18	18
Total:		1,179	1,179

- The proposed net floor area ratio (FAR) of 7.5 (Block A) and 6.6 (Block B) and the lot coverage of 42% and 45% will exceed the maximum 2.5 FAR and 33% lot coverage permitted under the RM-135 Zone.
- While the proposed density exceeds that permitted in the Low to Mid Rise Residential designation (2.5 FAR) calculated on the gross site area, the proposed use and density complies with the intent of the proposed Mid to High Rise Residential and Mixed-Use (3.5 FAR) designations in the Surrey City Centre Plan. The overall gross FAR of the project is 5.0.

- The proposed lot coverage is appropriate for the proposed development including significant podiums and is contextually consistent with proposed surrounding developments to the south and east.
- The RM-135 Zone requires the setbacks to be 7.5 metres or a minimum of 50% of the building height, whichever is greater. The applicant is proposing reductions for all setbacks in the CD By-law. 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.

Streamside Variance

- The applicant is requesting the following streamside variance:
 - to reduce the minimum setback distance for a Class A (red-coded) stream from 30 metres to a minimum of 19.2 metres (ranges up to 34.3 metres).

Applicant's rationale:

- Conveyance to the City and restoration of the riparian protection area is proposed for the site.
- The restoration will include the removal of refuse, structures and invasive species. It will also include the planting of native trees and shrubs.
- The result will be a conversion of a historically polluted, compromised and poorly functioning riparian setback area to a healthy forested ecosystem with improved habitat for plants and animals.

Staff Comments:

- A reduced setback to the red-coded watercourse, Bolivar Creek, is proposed in order to allow for a development site that can accommodate building envelopes and densities that are reflective of the goals for an emerging City Centre.
- The riparian protection area will be conveyed to the City for riparian protection purposes (Lot 3) and contains an area of approximately 5,990 square metres.
- The proposed streamside setback ranges between 19.2 metres and 34.3 metres from top of bank, in response to the site geometry and with the goal of balancing riparian area setbacks and development site potential.
- The proposed setbacks exceed the Riparian Areas Protection Regulation (RAPR) of 10.5 metres from high water mark.
- Staff believe that the proposed setbacks, along with significant habitat restoration from the existing compromised site condition, along with conveyance, balance both riparian protection and development potential of the site. Staff support the requested variances to proceed for consideration.

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. A fee update has been approved in April 2023, under Corporate Report No.R037;2023.
- 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 \$2,136 on a per unit basis.
- The proposed development will be subject to the Tier 2 Capital Plan Project CACs for proposed density greater than the City Centre Plan designation, payable at the time of Final Adoption. The current rate for the Whalley Community Area is \$459.85 per sq.m of additional residential floor area above the current plan designation.

Affordable Housing Strategy

- On April 9, 2018, Council approved the City's Affordable Housing Strategy (Corporate Report No. R066; 2018) requiring that all new rezoning applications for residential development contribute \$1,068 per new 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 January 17, 2024, and the Development Proposal Signs were installed on January 15, 2024. Staff have not received any comments.

DEVELOPMENT PERMITS

Sensitive Ecosystems (Streamside Areas) Development Permit Requirement

- The subject property falls within the Sensitive Ecosystems Development Permit Area (DPA) for Streamside Areas in the OCP, given the location of an existing Class A (red-coded) watercourse which flows north. The Sensitive Ecosystems (Streamside Areas) Development Permit is required to protect aquatic and terrestrial ecosystems associated with streams from the impacts of development.
- In accordance with Part 7A Streamside Protection setbacks of the Zoning By-law, a Class A (red-coded) watercourse requires a minimum streamside setback of 30 metres, as measured from the top of bank. The proposed minimum setback of 19.2 metres is less than the requirements outlined in the Zoning By-law.
- The riparian area, of approximately 5,990 square metres is proposed to be conveyed to the City as a lot for conservation purposes as a condition of rezoning approval in compliance with the OCP.
- An Ecosystem Development Plan, prepared by Remi Masson, *R.P. Bio.*, of Red Cedar Environmental Consulting and dated December 21, 2023 was reviewed by staff and found to be generally acceptable, with some modifications to content and format of the report still required. The finalized report and recommendations will be incorporated into the Development Permit.

Hazard Lands (Steep Slope) Development Permit Requirement

- The subject property falls within the Hazard Lands (Steep Slope) Development Permit Area (DPA) in the OCP, given that the site contains steep slopes in excess of 20% gradient. The Hazard Land (Steep Slope) Development Permit is required to protect developments from hazardous conditions.
- The subject site is adjacent to Bolivar Creek with portions of its western banks within the subject site.
- The overall site slopes down gently to the north with the steepest portions along the creek banks at a gradient of 1 horizontal to 1 vertical (1:1 slope).
- A geotechnical report, prepared by Stuart Hysio, *P. Eng.*, of Braun Geotechnical Ltd. and dated November 28, 2023. This report will be peer reviewed in advance of final adoption. The report was reviewed by staff and found to conform to the OCP Development Permit guidelines for Hazard Lands, with some modifications to content of the report still required, including a hydrogeological assessment report. The finalized geotechnical report will be incorporated into the Development Permit.
- The geotechnical report investigated issues related to slope stability and natural storm water drainage, from a geotechnical perspective, to determine the feasibility of development the site and proposing recommendations to ensure the ongoing stability of the slope.

- The consultant has determined that the development is feasible provided that the recommendations in their report are incorporated into the overall design of the site to be outlined as part of the finalized report.
- Registration of a Section 219 Restrictive Covenant that requires the owner to develop the site in accordance with the conditions in the geotechnical report is required as a condition of final adoption.
- At Building Permit stage, the Building Division will require Letters of Assurance from a geotechnical engineer to ensure that the building plans comply with the recommendations in the approved geotechnical report.

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 applicant has worked with staff to:
 - Develop an attractive mixed-use project that leverages the features of Bolivar Creek, integrating a diverse range of open spaces and uses.
 - Create distinctive tower and podium structures that featuring organic, terraced massing and architectural expression.
 - Design the three-tower concept around Bolivar Creek with appropriate setbacks and landscaping and habitat restoration.
 - Adopt an approach to tower height that considers the proposed adjacent development and existing single-family and low-rise buildings to the east.
 - Enhance the pedestrian and public realm experience along King George Boulevard, Bolivar Road, and 112 Avenue, with a focus on desired pedestrian pathways and placemaking plazas.
- The site plan and buildings have been oriented in response to the site's irregular geometry and riparian protection area. Bolivar Creek and the associated riparian protection area is a significant environmental feature of the City, and it is an important plan and form generator for this project.
- The characteristic of this site is the curving, meandering and organic nature of the creek and its bordering open space and the site planning of the built forms have been organized to embrace this character.
- Taking into account the required environmental setbacks required from the Bolivar Creek top of bank, the remaining development site for the project becomes fairly long, linear and angled in the center area of the site forming what is a boomerang shape overall.
- The project has three significant tower forms along Bolivar Road at 21 storeys closest to King George Boulevard, 37 storeys in the center of the plan and 24 storeys for the third tower closest to 112 Avenue.

- The towers have been positioned for maximum separation distances between them on the site as well as the separations to the towers proposed in the planned development across Bolivar Road to the southwest. Additionally, the towers have been positioned to maximize the view corridors for each of the towers to surrounding mountains and views of Surrey City Centre.
- On-site amenity areas at grade are primarily adjacent to the Bolivar Creek riparian protection area, to be conveyed to the City.
- A statutory right-of-way will be secured for public rights of passage from Bolivar Road through the central open space area within the site to provide public access to the path along the outer edge of the riparian protected area.
- The building forms are terraced with decks which take advantage of both short range views of the creek area and long-range views to the north shore mountains.
- The rooftop amenities on each tower also take advantage of immediate views to Bolivar Creek as well as long range views to the North Shore Mountains, Downtown Vancouver, and Mount Baker.
- The space between Tower 2 and Tower 3 will be open green space thereby connecting the green space of the Bolivar Creek to Bolivar Road and providing a major public access and view corridor through to the site from 112th Avenue.
- There are amenity spaces at each of the ground levels of the towers as well as located adjacent to various rooftops of the podiums thereby allowing both indoor and outdoor amenity spaces the opportunity to easily interact with one another.
- Towers 1 and 2 (adjacent to King George Boulevard and central to the site) are joined at the podium levels and highlighted with a swooped curving articulation of the predominantly glass façade that is horizontal at the podium and then rises vertically on each tower to form a visually interesting composition between the two towers.
- This dynamic curve creates a unique architectural expression on the skyline that takes its visual clues from the organic curved nature of Bolivar Creek. The podium connection between the two towers steps up in either tower direction with landscaped terraces that have been designed to visually relate to the Bolivar Creek green space and further emphasize the organic nature of the site.
- The copper-finish horizontal aluminum panels add a warmer visual interest to the towers.
- The project aligns with the sustainability criteria of the City of Surrey, meeting at least Step 2 of the BC Step Code.
- Tower 3 and its podiums are distinct from Towers 1 and 2, while sharing a common concept and materials, and is separated by a green pedestrian and landscaped area that physically connects to the Bolivar Creek Greenway. This tower completes the ensemble facing Bolivar Creek by creating an L-shaped form with two separate stepping podiums that run along both 112 Avenue and Bolivar Road thereby defining the corner.

- This tower has some similar vertical and horizontal banding and stepping elements to Towers 1 and 2 but at the same time provides differentiation which does not mimic, and instead offering complementary elements to the curving design of the first two towers.
- Exterior Building materials will reflect both the urban setting and natural amenity of Bolivar Creek. Pre-finished metal panels in copper finish material and white vertical design elements along with alternating widow panels will provide a refreshing and dynamic sense of movement.

Landscaping

- The landscaping design concept is to reduce the overall scale of the development to create a human-scale experience.
- The open space central to the site and between Bolivar Road and the riparian area helps to create a livable community on and off-site.
- The landscape spaces promote strong physiological well-being for the residents, including outdoor gathering places, picnic tables, and urban agriculture areas.
- Ground level units include patios and buffer planting with direct access to the adjacent courtyard or public sidewalks.
- The creation of natural habitat is a key focus for the site, including the provision of pollinator gardens and the reintroduction of naturalized rain gardens to attract native fauna, and the introduction of ethnobotanic edible planting for both human enjoyment and ecosystem function.
- The planting selection supports a diversity of insects, plants, animals, and other organisms, many of which are beneficial to local food production.
- It also supports the urban habitat allowing plants and animals to move between different urban green zones, overcoming the effects of habitat fragmentation and helping to diversify the gene pool.
- The garden space within the primary courtyard central to the site between phases 1 and 2 creates the opportunity for people to experience nature and our ecosystem.
- There are a limited number of Urban Design items that remain outstanding, and which do not affect the overall character or quality of the project.
 - Design development of the publicly accessible pathway from Bolivar Road to the riparian walkway. Coordinate and further develop the public realm interfaces, including riparian frontages, public plazas, ground-level unit interface, grading, servicing, and parking ramp/loading.

Indoor Amenity

- Per the Indoor Amenity Space requirements of the Zoning By-law No. 12000, high-rise towers that are 25 storeys or higher must provide 3 square metres of indoor amenity space per unit up to 557 square metres per tower, which equates to 186 units, plus 1 square metre per unit above 557 square metres, plus 4 square metre per micro unit and 1 square metre per lock-off unit for each building.
- Based upon the City's Zoning Bylaw requirement, the proposed development must provide a total of 2,233 square metres of indoor amenity space for the proposed 967 residential units, (there are 51 micro units proposed). Of that 2,233 square metres of indoor amenity space, a total of 897 square metres must be provided on site (186 square metres for buildings between 13-24-storeys and 372 square metres per building for 25-storeys and above), and the remainder can be provided through a cash-in-lieu contribution.
- The applicant is proposing 2,946 square metres of indoor amenity space located throughout the development, which exceeds the minimum requirement as outlined in the Bylaw.
- Indoor amenity areas are provided in each of the residential buildings on the ground floor and on podium and rooftops levels and are connected to the outdoor amenity areas.
- Phase 1, the southern two towers, are incorporating indoor amenity areas on the ground floor and in the podiums and towers on levels 6, 22, and on level 38 for a total of 2,183 square metres.
- Phase 2, the north tower, is incorporating indoor amenity areas on the ground floor and in the podium and tower on levels 11 and 25 for a total of 939 square metres.
- The indoor spaces vary in scale and are designed to provide for a wide range of activities and programming.
- The spaces will include games areas, fitness centres, gym and yoga spaces, children's activity areas, working and meeting rooms, and multi-purpose spaces and event areas.
- Indoor spaces are connected to outdoor amenity spaces with their complimentary programs and functions.

Outdoor Amenity

- Based upon the City's Zoning Bylaw requirement of 3 square metres per dwelling unit of outdoor amenity space, a total of 2,952 square metres of outdoor amenity space is required for the proposed development.
- The applicant is proposing 3,900 square metres of outdoor amenity space across the site, which exceeds the total outdoor amenity space required under the Zone.
- The outdoor amenity spaces on this site are unique, as they respond to and connect with the riparian area. A central courtyard is proposed in the central portion of the site that provides for a wide range of active and passive spaces for residents and a connection to the riparian pathway for the community. This plaza includes a mix of hard surface areas and trees and greenery.
- Large areas of green roof are proposed that will provide valuable habitat and food sources for nesting birds. In addition to habitat, the soft landscape areas will provide storm water benefits.
- Outdoor amenity spaces are proposed on podium and rooftop levels of all three residential towers, adjoining the indoor amenity areas. The spaces include an entertaining area off the amenity room, outdoor living rooms, sun deck, central lawn and an urban agriculture garden.

TREES

- D.Glyn Romaine, ISA Certified Arborist of VDZ+A prepared an Arborist Assessment for the subject property. The table below provides a summary of the proposed tree retention and removal by tree species:

Table 1: Summary of Proposed Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Cottonwood	5	5	0
Deciduous Trees			
Big Leaf Maple	2	2	0
Coniferous Trees			
Douglas Fir	1	1	0
Western Red Cedar	1	1	0
Total (excluding Alder and Cottonwood Trees)	4	4	0
Additional Trees in the proposed Riparian Area	4¹	4	37
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		7²	

Total Retained and Replacement Trees Proposed	109
Estimated Contribution to the Green City Program	N/A

- The Arborist Assessment states that there are a total of 4 mature trees on the site, excluding Alder and Cottonwood trees. Five (5) existing trees, approximately 60% of the total trees on the site, are Cottonwood trees. The applicant proposes to retain no trees on the development site 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.
- Table 1 includes an additional 41 protected trees that are located within the proposed riparian protection area. The trees within the proposed riparian area will be retained, except where removal is required due to hazardous conditions. 4 trees are currently proposed for removal and will be confirmed at a later time, in consultation with the Parks, Recreation and Culture Department.
- A detailed planting plan prepared by a Registered Professional Biologist (R.P. Bio.) and an associated P-15 agreement are required for the monitoring and maintenance of the proposed trees to be planted in the conveyed riparian area.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees that are outside the streamside protection area, and a 2 to 1 replacement ratio for all other trees, including Alder and Cottonwood that are within a streamside protection area. This will require a proposed total of 13 replacement trees on the site. The applicant is proposing 72 replacement trees, exceeding City requirements.
- In addition to the replacement trees, boulevard street trees will be planted on Bolivar Road and 112 Avenue. 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 Paperbark Maple, Japanese Maple, Red Maple, Katsura Tree, Pink Star Magnolia, and Shore Pine.
- In summary, a total of 109 trees are proposed to be retained or replaced on the site with no contribution to the Green City Program.
- The proposed tree retention and replacement strategy will be refined as the applicant works through the detailed design process.

CITY ENERGY

- The subject site is located within Service Area B, 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 B 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. Proposed Subdivision Layout, Site Plan, Building Elevations, Landscape Plans and Perspective
- Appendix II. Engineering Summary
- Appendix III. School District Comments
- Appendix IV. Summary of Tree Survey, Tree Preservation and Tree Plans
- Appendix V. Development Variance Permit No. 7923-0234-00
- Appendix VI. OCP Redesignation Map
- Appendix VII. ADP Comments and Response
- Appendix VIII. District Energy Map

approved by Ron Gill

Don Luymes
General Manager
Planning and Development

IM/ar

Bolivar Mixed-Use Development

11151 Bolivar Road, 13340 112th Ave.
& 13307 King George Boulevard,
Surrey, BC

SUBMISSION TO COUNCIL

APPLICATION No. 7923.0234.00

January 29, 2024

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170,204 SITE
SQUARE FEET

4.19 FAR
RATIO

713,682 GROSS AREA
GROSS SQUARE FEET

967	TOTAL UNITS PHASE 1&2
984	TOTAL STALLS PHASE 1&2
2,557	RETAIL GROSS SQUARE FEET
7,543-7,655	TYPICAL FLOOR FLATE SIZE
±84-85%	EFFICIENCY

RESIDENTIAL

PHASE 1

TOWER 1

3,360 GROUND LEVEL
SQUARE FEET (FAR)

+161,547 TOWER+PODIUM
7,543 PER FLOOR

164,907 TOTAL FAR AREA
SQUARE FEET

+13,797 AMENITY T1
GROSS SQUARE FEET

178,704 TOTAL GROSS AREA
SQUARE FEET

11 LEVELS
GROUND & PODIUM FLOORS

10 LEVELS - TOWER 1
TOWER ABOVE PODIUM

21 STOREY TOTAL
BUILDING

214 UNITS T1
TOTAL

144 PARKADE T1
STALLS

6 PARKING LEVELS

TOWER 2

9,643 GROUND LEVEL
SQUARE FEET (FAR)

298,460 TOWER+PODIUM
7,455 PER FLOOR

308,103 TOTAL FAR AREA
SQUARE FEET

9,853 AMENITY T2
GROSS SQUARE FEET

317,956 TOTAL GROSS AREA
SQUARE FEET

11 LEVELS
GROUND & PODIUM FLOORS

26 LEVELS - TOWER 2
TOWER ABOVE PODIUM

37 STOREY TOTAL
BUILDING

437 UNITS T2
TOTAL

411 PARKADE T2
STALLS

5 PARKING LEVELS

PHASE 2

TOWER 3

13,156 GROUND LEVEL
SQUARE FEET (FAR)

224,959 TOWER+PODIUM
7,393 PER FLOOR

238,115 TOTAL FAR AREA
SQUARE FEET

9,490 AMENITY T3
GROSS SQUARE FEET

247,605 TOTAL GROSS AREA
SQUARE FEET

11 LEVELS
GROUND & PODIUM FLOORS

13 LEVELS - TOWER 3
TOWER ABOVE PODIUM

24 STOREY TOTAL
BUILDING

316 UNITS T3
TOTAL

429 PARKADE T3
STALLS

4 PARKING LEVELS



Project Development Data

1151 Bolivar Road, 13340 112 Avenue & 13307 King George Boulevard, Surrey

Project	Building Heights
Tower 1 - 21 Storey Residential Tower & 5 Storey Mixed Use Podium	74.45 m
Tower 2 - 37 Storey Residential Tower & 6 Storey Residential Podium	122.5 m
Tower 3 - 24 Storey Mixed Use Tower & 10 Storey Residential Podium	81.75 m (Phase 2)

B. Legal Description:
Civic Address

Existing Legal

Existing Lot 1	65,003 sq ft	6038.8 sq m
Existing Lot 2	48,864 sq ft	4539.5 sq m
Existing Lot 3	56,794 sq ft	5276.2 sq m

C. Zoning:

Current Zoning: CH1
Proposed Zoning: CD

D. Proposed Setbacks:

D1 - King George Blvd	0 m	1 m
D2 - Bolivar Road (King George Blvd. to 111A Ave)	1 m	4.5 m
D3 - Bolivar Road (111A Ave to 112 Ave.)	2.9 m	4.5 m
D4 - 112 Ave	1.5 m	4.5 m
D5 - Bolivar Creek	Flex dedication from Top of Bank minimum 20 m	1 m

Dedication from Property Line

Setback From Dedication Line

E. Total Site Coverage Calculations:

Existing 3 Lots Site Area	170,661 sq ft	15,854.4 sq m
Gross Site Area (Excl. Undevelopable Area)	142,910 sq ft	13,236.3 sq m
Dedications	42,092 sq ft	3,910.3 sq m
Net Site Area	100,818 sq ft	9,366.0 sq m
Phase 1 Net Site Area	63,371 sq ft	5,887.2 sq m
Phase 2 Net Site Area	37,447 sq ft	3,478.8 sq m
Total Gross FAR	5.04	
Total FAR Area	720,146 sq ft	66,903.7 sq m
Total Net FAR	7.14	

Undevelopable Area

27,751 sq ft

Phase 1	Tower 1 Building Footprint (King George Blvd)	13,384 sq ft	1243.4 sq m
	Tower 2 Building Footprint (Bolivar Rd)	13,240 sq ft	1230.0 sq m
Phase 2	Tower 3 Building Footprint (112 Ave)	16,364 sq ft	1706.0 sq m
	Lot Coverage (Phase 1)	42.0%	
	Lot Coverage (Phase 2)	49.0%	
	Total Lot Coverage	44,988 sq ft	4179.4 sq m
	Total Percentage of Lot Coverage (Net)	44.6%	

(Including Loading Bays-Excluding Ramps, Architectural Elements & Projected Structures)

F. Total Floor Area Ratio (F.A.R.) Calculation:

	Commercial Area	Commercial FAR	Residential Area	Residential FAR	Total GFA	Total Gross FAR (Per Phase)	Total Net FAR Full Site	Total Net FAR Per Lot	
Tower 1	239.6 sq m 2,579 sq ft	0.018	15243.2 sq m 164,077 sq ft	1.148	15482.8 sq m 166,656 sq ft				
Tower 2	0.0 sq m 0 sq ft	0.00	28627.7 sq m 308,146 sq ft	2.16	28627.7 sq m 308,146 sq ft	3.32	4.71	7.49	Phase 1
Tower 3	0.0 sq m 0 sq ft	0.00	22733.2 sq m 245,344 sq ft	1.72	22733.2 sq m 245,344 sq ft	1.72	2.43	6.65	Phase 2
Total	239.6 sq m 2,579 sq ft	0.018	66664.1 sq m 717,567 sq ft	5.021	66903.7 sq m 720,146 sq ft	5.04	7.14		TOTAL

G. Floor Areas

NOTE: All floor areas are "Gross Floor Area" as defined by the Surrey Zoning Bylaws (all the area of the floor enclosed by the outside edge of the exterior walls of a building, including without limitation stairways, elevator shafts, storage rooms and mechanical rooms. For the purpose of Part 5 Off-Street Parking and Loading/Unloading only, gross floor area shall exclude vehicle parking and loading areas and bicycle storage areas within the building, stairways and mechanical rooms.

G1 Commercial - Tower 1 (Phase 1)

Level	Number of	Area per Floor	Total Area	Common Area per Floor	Total Common Area	FAR Area per Floor	Total Gross Area (all Floors)	Total FAR Area (all Floors)
L1	1	239.6 sq m 2,579 sq ft	239.6 sq m 2,579 sq ft	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	239.6 sq m 2,579 sq ft	239.6 sq m 2,579 sq ft	239.6 sq m 2,579 sq ft
TOTAL	1	239.6 sq m 2,579 sq ft	239.6 sq m 2,579 sq ft	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	239.6 sq m 2,579 sq ft	239.6 sq m 2,579 sq ft	239.6 sq m 2,579 sq ft

G2 Tower 1 (Phase 1)

Level	Number of Floors	Unit Area per Floor	Total Unit Area	Common Area per Floor	Total Common Area	Amenity	Gross Area per Floor	FAR Area per Floor	Total Gross Area (all Floors)	Total FAR Area (all Floors)
L1	1	0.0 sq m 0 sq ft	0.0 sq m	312.2 sq m 3,360 sq ft	312.2 sq m 3,360 sq ft	480.4 sq m 5,225 sq ft	722.5 sq m 7,855 sq ft	312.2 sq m 3,360 sq ft	722.5 sq m 7,855 sq ft	312.2 sq m 3,360 sq ft
L2	1	0.0 sq m 0 sq ft	0.0 sq m	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft
L3-5	3	941.1 sq m 10,194 sq ft	2841.2 sq m 30,582 sq ft	180.0 sq m 1,937 sq ft	539.0 sq m 5,811 sq ft	0.0 sq m 0 sq ft	1127.0 sq m 12,131 sq ft	3381.0 sq m 36,393 sq ft	3381.0 sq m 36,393 sq ft	3381.0 sq m 36,393 sq ft
L6	1	554.7 sq m 5,971 sq ft	554.7 sq m 5,971 sq ft	171.9 sq m 1,850 sq ft	171.9 sq m 1,850 sq ft	314.4 sq m 3,384 sq ft	1041.0 sq m 11,205 sq ft	726.6 sq m 7,821 sq ft	1041.0 sq m 11,205 sq ft	726.6 sq m 7,821 sq ft
L7	1	736.9 sq m 7,932 sq ft	736.9 sq m 7,932 sq ft	139.5 sq m 1,502 sq ft	139.5 sq m 1,502 sq ft	0.0 sq m 0 sq ft	876.4 sq m 9,434 sq ft	876.4 sq m 9,434 sq ft	876.4 sq m 9,434 sq ft	876.4 sq m 9,434 sq ft
L8	1	693.3 sq m 7,194 sq ft	693.3 sq m 7,194 sq ft	136.8 sq m 1,472 sq ft	136.8 sq m 1,472 sq ft	0.0 sq m 0 sq ft	805.1 sq m 8,666 sq ft	805.1 sq m 8,666 sq ft	805.1 sq m 8,666 sq ft	805.1 sq m 8,666 sq ft
L9	1	644.9 sq m 6,942 sq ft	644.9 sq m 6,942 sq ft	107.2 sq m 1,154 sq ft	107.2 sq m 1,154 sq ft	0.0 sq m 0 sq ft	752.1 sq m 8,096 sq ft	752.1 sq m 8,096 sq ft	752.1 sq m 8,096 sq ft	752.1 sq m 8,096 sq ft
L10	1	618.1 sq m 6,653 sq ft	618.1 sq m 6,653 sq ft	107.2 sq m 1,154 sq ft	107.2 sq m 1,154 sq ft	0.0 sq m 0 sq ft	725.3 sq m 7,807 sq ft	725.3 sq m 7,807 sq ft	725.3 sq m 7,807 sq ft	725.3 sq m 7,807 sq ft
L11	1	589.6 sq m 6,346 sq ft	589.6 sq m 6,346 sq ft	107.2 sq m 1,154 sq ft	107.2 sq m 1,154 sq ft	0.0 sq m 0 sq ft	690.8 sq m 7,400 sq ft	690.8 sq m 7,400 sq ft	690.8 sq m 7,400 sq ft	690.8 sq m 7,400 sq ft
L12-21	10	589.6 sq m 6,346 sq ft	5896.0 sq m 63,460 sq ft	107.2 sq m 1,154 sq ft	1072.1 sq m 11,540 sq ft	0.0 sq m 0 sq ft	690.8 sq m 7,400 sq ft	6908.0 sq m 74,000 sq ft	6908.0 sq m 74,000 sq ft	6908.0 sq m 74,000 sq ft
L22 Amenity	1	0.0 sq m 0 sq ft	0.0 sq m	0.0 sq m 0 sq ft	0.0 sq m	533.2 sq m 5,739 sq ft	533.2 sq m 5,739 sq ft	0.0 sq m 0 sq ft	533.2 sq m 5,739 sq ft	0.0 sq m 0 sq ft
TOTAL	21	1264.9 sq m 136,980 sq ft	12649.0 sq m 136,980 sq ft	2693.9 sq m 28,997 sq ft	2693.9 sq m 28,997 sq ft	1267.9 sq m 13,648 sq ft	16511.2 sq m 177,228 sq ft	16511.2 sq m 177,228 sq ft	16511.2 sq m 177,228 sq ft	16511.2 sq m 177,228 sq ft

G3 Tower 2 (Phase 1)

Level	Number of	Unit Area per Floor	Total Unit Area	Common Area per Floor	Total Common Area	Amenity	Gross Area per Floor	FAR Area per Floor	Total Gross Area (all Floors)	Total FAR Area (all Floors)
L1	1	529.5 sq m 5,700 sq ft	529.5 sq m 5,700 sq ft	366.3 sq m 3,943 sq ft	366.3 sq m 3,943 sq ft	221.9 sq m 2,388 sq ft	1117.7 sq m 12,031 sq ft	856.9 sq m 9,243 sq ft	1117.7 sq m 12,031 sq ft	856.9 sq m 9,243 sq ft
L2	1	258.4 sq m 2,781 sq ft	258.4 sq m 2,781 sq ft	90.3 sq m 972 sq ft	90.3 sq m 972 sq ft	0.0 sq m 0.0 sq ft	348.7 sq m 3,753 sq ft	348.7 sq m 3,753 sq ft	348.7 sq m 3,753 sq ft	348.7 sq m 3,753 sq ft
L3	1	1000.9 sq m 10,806 sq ft	1000.9 sq m 10,806 sq ft	188.4 sq m 2,006 sq ft	188.4 sq m 2,006 sq ft	0.0 sq m 0.0 sq ft	1190.3 sq m 12,812 sq ft	1190.3 sq m 12,812 sq ft	1190.3 sq m 12,812 sq ft	1190.3 sq m 12,812 sq ft
L4-6	3	1004.9 sq m 10,817 sq ft	3014.8 sq m 32,451 sq ft	186.1 sq m 2,003 sq ft	558.3 sq m 6,009 sq ft	0.0 sq m 0.0 sq ft	1191.0 sq m 12,820 sq ft	1191.0 sq m 12,820 sq ft	3573.0 sq m 38,460 sq ft	3573.0 sq m 38,460 sq ft
L7	1	705.2 sq m 7,591 sq ft	705.2 sq m 7,591 sq ft	175.7 sq m 1,891 sq ft	175.7 sq m 1,891 sq ft	210.2 sq m 2,263 sq ft	1091.1 sq m 11,745 sq ft	880.9 sq m 9,482 sq ft	1091.1 sq m 11,745 sq ft	880.9 sq m 9,482 sq ft
L8	1	745.8 sq m 8,028 sq ft	745.8 sq m 8,028 sq ft	159.0 sq m 1,712 sq ft	159.0 sq m 1,712 sq ft	0.0 sq m 0.0 sq ft	904.8 sq m 9,740 sq ft	904.8 sq m 9,740 sq ft	904.8 sq m 9,740 sq ft	904.8 sq m 9,740 sq ft
L9	1	706.4 sq m 7,604 sq ft	706.4 sq m 7,604 sq ft	154.5 sq m 1,663 sq ft	154.5 sq m 1,663 sq ft	0.0 sq m 0.0 sq ft	860.9 sq m 9,267 sq ft	860.9 sq m 9,267 sq ft	860.9 sq m 9,267 sq ft	860.9 sq m 9,267 sq ft
L10	1	654.8 sq m 7,048 sq ft	654.8 sq m 7,048 sq ft	116.7 sq m 1,256 sq ft	116.7 sq m 1,256 sq ft	0.0 sq m 0.0 sq ft	771.5 sq m 8,304 sq ft	771.5 sq m 8,304 sq ft	771.5 sq m 8,304 sq ft	771.5 sq m 8,304 sq ft
L11	1	604.7 sq m 6,509 sq ft	604.7 sq m 6,509 sq ft	106.5 sq m 1,146 sq ft	106.5 sq m 1,146 sq ft	0.0 sq m 0.0 sq ft	711.2 sq m 7,655 sq ft	711.2 sq m 7,655 sq ft	711.2 sq m 7,655 sq ft	711.2 sq m 7,655 sq ft
L12-37	26	604.7 sq m 6,509 sq ft	15722.3 sq m 169,234 sq ft	106.5 sq m 1,146 sq ft	2768.1 sq m 29,796 sq ft	0.0 sq m 0.0 sq ft	711.2 sq m 7,655 sq ft	711.2 sq m 7,655 sq ft	18490.5 sq m 199,030 sq ft	18490.5 sq m 199,030 sq ft
L38 Amenity	1	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	483.2 sq m 5,201 sq ft	483.2 sq m 5,201 sq ft	0.0 sq m 0.0 sq ft	483.2 sq m 5,201 sq ft	0.0 sq m 0.0 sq ft
TOTAL	37		23945.9 sq m 257,752 sq ft		4681.8 sq m 50,384 sq ft		915.3 sq m 9,852 sq ft		29543.0 sq m 317,998 sq ft	28627.7 sq m 308,146 sq ft

G4 Tower 3 (Phase 2)

Level	Number of	Unit Area per Floor	Total Unit Area	Common Area per Floor	Total Common Area	Amenity	Gross Area per Floor	FAR Area per Floor	Total Gross Area (all Floors)	Total FAR Area (all Floors)
L1	1	949.4 sq m 10,219 sq ft	949.4 sq m 10,219 sq ft	426.0 sq m 4,585 sq ft	426.0 sq m 4,585 sq ft	208.8 sq m 2,248 sq ft	1584.2 sq m 17,052 sq ft	1376.3 sq m 14,804 sq ft	1584.2 sq m 17,052 sq ft	1376.3 sq m 14,804 sq ft
L2	1	940.1 sq m 10,119 sq ft	940.1 sq m 10,119 sq ft	189.3 sq m 2,038 sq ft	189.3 sq m 2,038 sq ft	0.0 sq m 0.0 sq ft	1129.4 sq m 12,157 sq ft	1129.4 sq m 12,157 sq ft	1129.4 sq m 12,157 sq ft	1129.4 sq m 12,157 sq ft
L3-4	2	1474.6 sq m 15,873 sq ft	2949.3 sq m 31,746 sq ft	250.3 sq m 2,694 sq ft	500.6 sq m 5,388 sq ft	0.0 sq m 0.0 sq ft	1724.9 sq m 18,567 sq ft	1724.9 sq m 18,567 sq ft	3449.9 sq m 37,134 sq ft	3449.9 sq m 37,134 sq ft
L5-6	2	1214.7 sq m 13,075 sq ft	2429.4 sq m 26,150 sq ft	214.1 sq m 2,305 sq ft	428.3 sq m 4,610 sq ft	0.0 sq m 0.0 sq ft	1428.8 sq m 15,380 sq ft	1428.8 sq m 15,380 sq ft	2857.7 sq m 30,760 sq ft	2857.7 sq m 30,760 sq ft
L7-8	2	969.7 sq m 10,427 sq ft	1939.4 sq m 20,854 sq ft	196.5 sq m 2,115 sq ft	393.0 sq m 4,232 sq ft	0.0 sq m 0.0 sq ft	1165.2 sq m 12,542 sq ft	1165.2 sq m 12,542 sq ft	2330.4 sq m 25,084 sq ft	2330.4 sq m 25,084 sq ft
L9-10	2	765.2 sq m 8,237 sq ft	1530.5 sq m 16,474 sq ft	145.7 sq m 1,568 sq ft	291.3 sq m 3,136 sq ft	0.0 sq m 0.0 sq ft	910.9 sq m 9,805 sq ft	910.9 sq m 9,805 sq ft	1821.8 sq m 19,610 sq ft	1821.8 sq m 19,610 sq ft
L11	1	544.4 sq m 5,860 sq ft	544.4 sq m 5,860 sq ft	112.7 sq m 1,213 sq ft	112.7 sq m 1,213 sq ft	48.2 sq m 521 sq ft	705.5 sq m 7,604 sq ft	657.1 sq m 7,094 sq ft	705.5 sq m 7,604 sq ft	657.1 sq m 7,094 sq ft
L12-24	13	582.5 sq m 6,378 sq ft	7703.0 sq m 82,914 sq ft	113.0 sq m 1,216 sq ft	1468.6 sq m 15,808 sq ft	0.0 sq m 0.0 sq ft	705.5 sq m 7,594 sq ft	705.5 sq m 7,594 sq ft	9171.6 sq m 98,722 sq ft	9171.6 sq m 98,722 sq ft
L25 Amenity	1	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft	0.0 sq m 0.0 sq ft
TOTAL	24		9592.4 sq m 104,336 sq ft		2083.9 sq m 22,418 sq ft		257.2 sq m 2,764 sq ft		11885.2 sq m 127,932 sq ft	245,344 sq ft

H. Residential Unit Counts

Tower 1 (Phase 1)	Number of floors	Studio	Residential Unit Counts					Total	
			1 Bed	1 Bed + Den	2 Bed	2 Bed + Den	3 Bed		3 Bed + Den
L1	1	-	(442,548 sq ft)	(663,681 sq ft)	(742,829 sq ft)	(814,940 sq ft)	(993,101 sq ft)	0	
L2	1	-						0	
L3-5	3		8	5	3	1		51	
L6	1		5	2	2	1		10	
L7	1		5	2	3	2		12	
L8	1		4	2	3	2		11	
L9	1		3	2	3	0	2	10	
L10	1		3	3	2	2		10	
L11	1		3	3	3	1		10	
L12-21	10		3	3	3	3		100	
L22 Amenity	1							0	
Total	21	0	77	59	55	21	0	214	
Distribution		0.0%	36.0%	27.6%	25.7%	9.8%	0.0%	0.9%	100.0%
Adaptable Unit #	11								

Tower 2 (Phase 1)		Number of floors	Studio (317 sq ft)	1 Bed (459-549 sq ft)	1 Bed + Den (505-789 sq ft)	2 Bed (682-781 sq ft)	2 Bed + Den (756-913 sq ft)	3 Bed (1016 sq ft)	3 Bed + Den (1000 sq ft)	Total
L1	1	1	2	1	1	2	1			10
L2	1	1	4	1	1	1	1			5
L3	1	2	9	6	1	1				19
L4-6	3	1	10	6	1	1				57
L7	1	1	4	6	1	1				13
L8	1	1	3	5	1	3				13
L9	1	1	2	4	1	4				12
L10	1	1	2	4	1	2		1	1	11
L11	1	1	3	3	2	2				11
L12-37	26	1	3	3	2	2				286
L38 Amenity	1									0
Total	37		39	136	126	65	69	1	1	437
Distribution			8.9%	31.1%	28.8%	14.9%	15.8%	0.2%	0.2%	100.0%
Adaptable Unit #	27		8.9%	60.0%	28.8%	14.9%	30.7%	15.8%	0.2%	0.5%

Tower 3 (Phase 2)		Number of floors	Studio (0 sq ft)	1 Bed (424-649 sq ft)	1 Bed + Den (533-681 sq ft)	2 Bed (600-774 sq ft)	2 Bed + Den (806-859 sq ft)	3 Bed (945-853 sq ft)	3 Bed + Den	Total
L1	1	1	1	3	9			2	1	16
L2	1	1	1	2	10	1			1	15
L3-4	2	2	2	2	15	2	1	2	1	48
L5-6	2	1	2	2	10	5				40
L7-8	2	1	2	2	8	3	2	2		32
L9-10	2	1	2	2	6	3	2	2		26
L11	1	1	2	3	2	2	2			9
L12-24	13	1	4	2	2	2	2			130
L25 Amenity	1									0
Total	24		12	76	123	53	42	6	4	318
Distribution			3.8%	24.1%	38.9%	16.8%	13.3%	1.9%	1.3%	100.0%
Adaptable Unit #	11		3.8%	63.0%	38.9%	16.8%	30.1%	13.3%	1.3%	3.2%

Grand Total		51	289	308	373	132	7	7		
		51		997		305		14		967
Total of 49 adaptable units provided on phase 1 and 2										

J. Amenity Calculations

OUTDOOR: 3.0 Sq. m [32 sq. ft.] per dwelling unit and shall not be located within the required setbacks;

INDOOR: High-rise: 13.24 sq. m - 138 sq. m + 4 sq. m per micro Units High-rise: 25 sq. m - 372 sq. m + 4 sq. m per micro Units

	Indoor Required	Indoor Provided	Outdoor Required	Outdoor Provided
Tower 1	2,002 sq. ft.	13,648 sq. ft.	6,848 sq. ft.	4,312 sq. ft.
Tower 2	5,683 sq. ft.	9,892 sq. ft.	13,984 sq. ft.	19,792 sq. ft.
Tower 3	2,518 sq. ft.	8,219 sq. ft.	10,112 sq. ft.	18,063 sq. ft.
Total	10,204 sq. ft.	31,719 sq. ft.	30,944 sq. ft.	42,127 sq. ft.
	948.8 sq. m	2946.8 sq. m	2874.8 sq. m	3913.7 sq. m

K. Parking Statistics

NOTE: Service Areas are not included in parking space calculations

Commercial: Category 1: < 372 square metres [4,000 sq. ft.] gross floor area + 2.75 parking spaces for every 100 square metres [1,075 sq. ft.] of gross floor area; Category 2: 373 sq. m - 4,645 sq. m [4,001 sq. ft. - 50,000 sq. ft.] gross floor area - 3 parking spaces for every 100 square metres [1,075 sq. ft.] of gross floor area; Restaurant in Commercial Areas: 10 parking space for every 100 square metres [1,075 sq. ft.] of gross floor area, which is greater than or equal to 150 square metres [1,615 sq. ft.] but less than 950 square metres [10,225 sq. ft.]

Residential: Non-Ground-Oriented Multiple Unit Residential Buildings (Apartments): 0.9 parking spaces per dwelling unit; plus 0.1 parking space per dwelling unit for visitors

** Where the number of required parking spaces is greater than 12, a minimum of 2% of the required parking spaces, must be accessible parking spaces; Where accessible parking spaces are required, 50% of accessible parking spaces must be provided as van-accessible parking spaces; ** Visitor Shared: 2/3 of parking spaces shared with office parking due to alternate hours of use. ** 10M Reduction: Maximum 20% is allowed in city center

In accordance with the transitional provisions set out in Schedule 1, every owner of a new building or building containing a new use:

(a) Must construct and install an energized electrical outlet for 100% of residential parking spaces, 50% of visitor parking spaces, and 20% of commercial parking spaces.

Phase 1 - Tower 1 - Required Parking - Residential & Retail

Commercial				Res. Visitor				Res.				Res. Subtotal	Total Required
Gross	H/C	Small		Gross	H/C	Small		Gross	H/C	Small			
Total	7				21	1		193	4		67	214	221

Phase 1 - Tower 2 - Required Parking - Residential

Commercial				Res. Visitor				Res.				Res. Subtotal	Total Required	
Gross	H/C	Small		Gross	H/C	Small		Gross	H/C	Small				
Total	0			44	1			393	8		138	437	437	
													658	Phase 1

Phase 2 - Tower 3 - Required Parking - Residential

Commercial				Res. Visitor				Res.				Res. Subtotal	Total Required	
Gross	H/C	Small		Gross	H/C	Small		Gross	H/C	Small				
Total	0			32				284	6		100	316	316	
													305	Phase 2

Tower 1 + Tower 2 + Tower 3 Total Required

														974
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Phase 1 - Tower 1 - Provided Parking - Residential & Retail

Commercial				Commercial subtotal			Res. Visitor			Res.			Res. Subtotal	Total Provided
Gross	H/C	Small		Gross	H/C	Small	Gross	H/C	Small	Gross	H/C	Small		
	7			7			21		1	108		4	129	136
Total														

Phase 1 - Tower 2 - Provided Parking - Residential

Commercial				Commercial subtotal			Res. Visitor			Res.			Res. Subtotal	Total Provided
Gross	H/C	Small		Gross	H/C	Small	Gross	H/C	Small	Gross	H/C	Small		
	0			0			44		1	2	464	8	12	508
Total														508

Phase 2 - Tower 3 - Provided Parking - Residential

Commercial				Commercial subtotal			Res. Visitor			Res.			Res. Subtotal	Total Provided
Gross	H/C	Small		Gross	H/C	Small	Gross	H/C	Small	Gross	H/C	Small		
	0			0			32		0	310		6	24	342
Total														342

Tower 1 + Tower 2 + Tower 3 Total Provided

986

L. Bike Statistics

Phase 1 - Tower 1 - Required Bike Parking

	Retail (0.1 per 100 sq.m. Area)	Res Visitor (6 per each Building)	Res Resident (1.2 per Unit)	Total
Bike Lockers	1	6.0	257	264

Phase 1 - Tower 2 - Required Bike Parking

	Retail (0.1 per 100 sq.m. Area)	Res Visitor (6 per each Building)	Res Resident (1.2 per Unit)	Total
Bike Lockers	0	6.0	524	530

794 Phase 1

Phase 2 - Tower 3 - Required Bike Parking

	Retail (0.1 per 100 sq.m. Area)	Res Visitor (6 per each Building)	Res Resident (1.2 per Unit)	Total
Bike Lockers	0	6.0	379	385

385 Phase 2

Tower 1 + Tower 2 + Tower 3 Total Required

1179

Phase 1 - Tower 1 - Provided Bike Parking

	Retail (0.1 per 100 sq.m. Area)	Res Visitor (6 per each Building)	Res Resident (1.2 per Unit)	Total
Bike Lockers	1	6.0	257	264

Phase 1 - Tower 2 - Provided Bike Parking

	Retail (0.1 per 100 sq.m. Area)	Res Visitor (6 per each Building)	Res Resident (1.2 per Unit)	Total
Bike Lockers	0	6.0	524	530

794 Phase 1

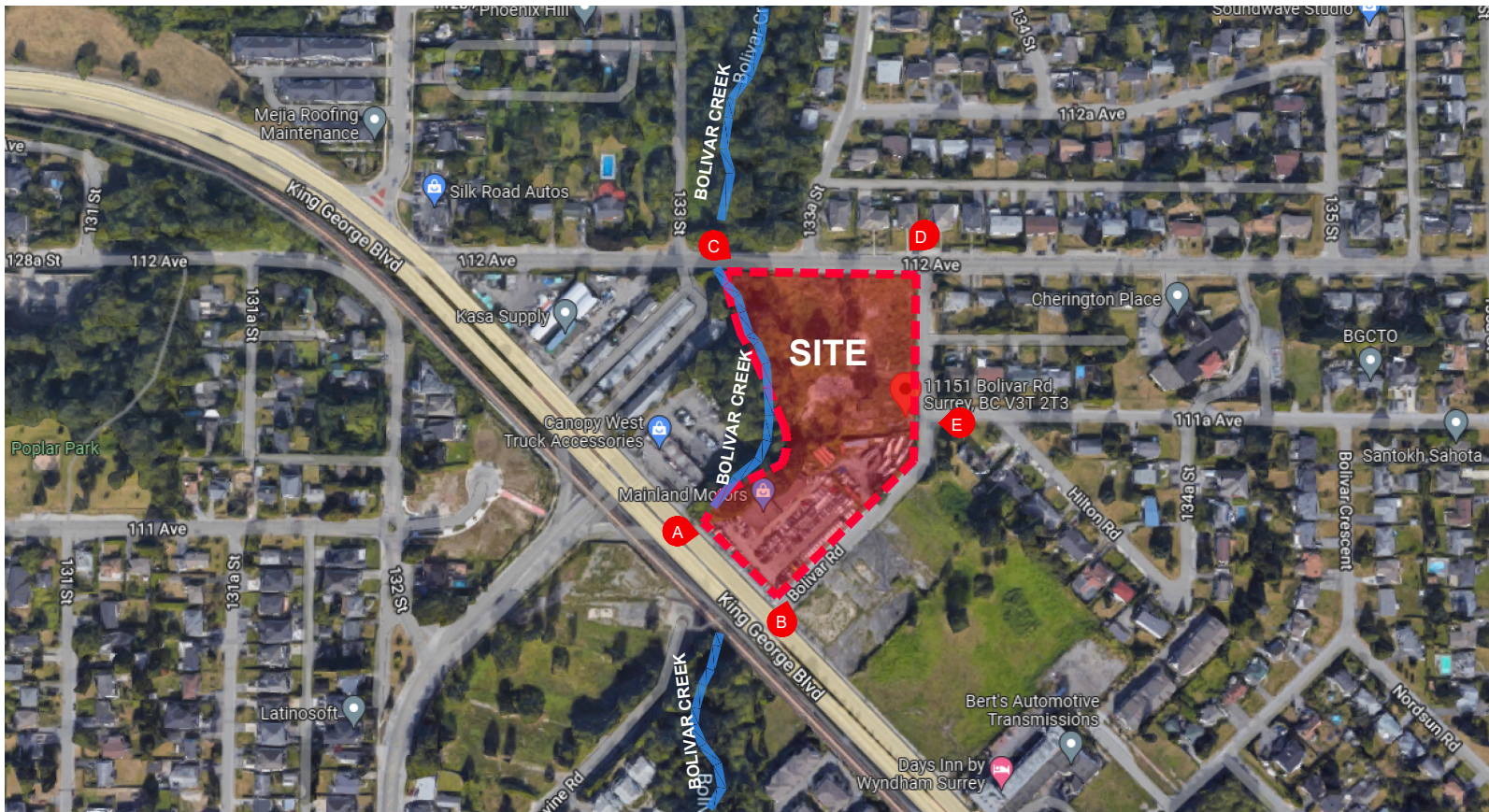
Phase 2 - Tower 3 - Provided Bike Parking

	Retail (0.1 per 100 sq.m. Area)	Res Visitor (6 per each Building)	Res Resident (1.2 per Unit)	Total
Bike Lockers	0	6.0	379	385

385 Phase 2

Tower 1 + Tower 2 + Tower 3 Total Provided

1179



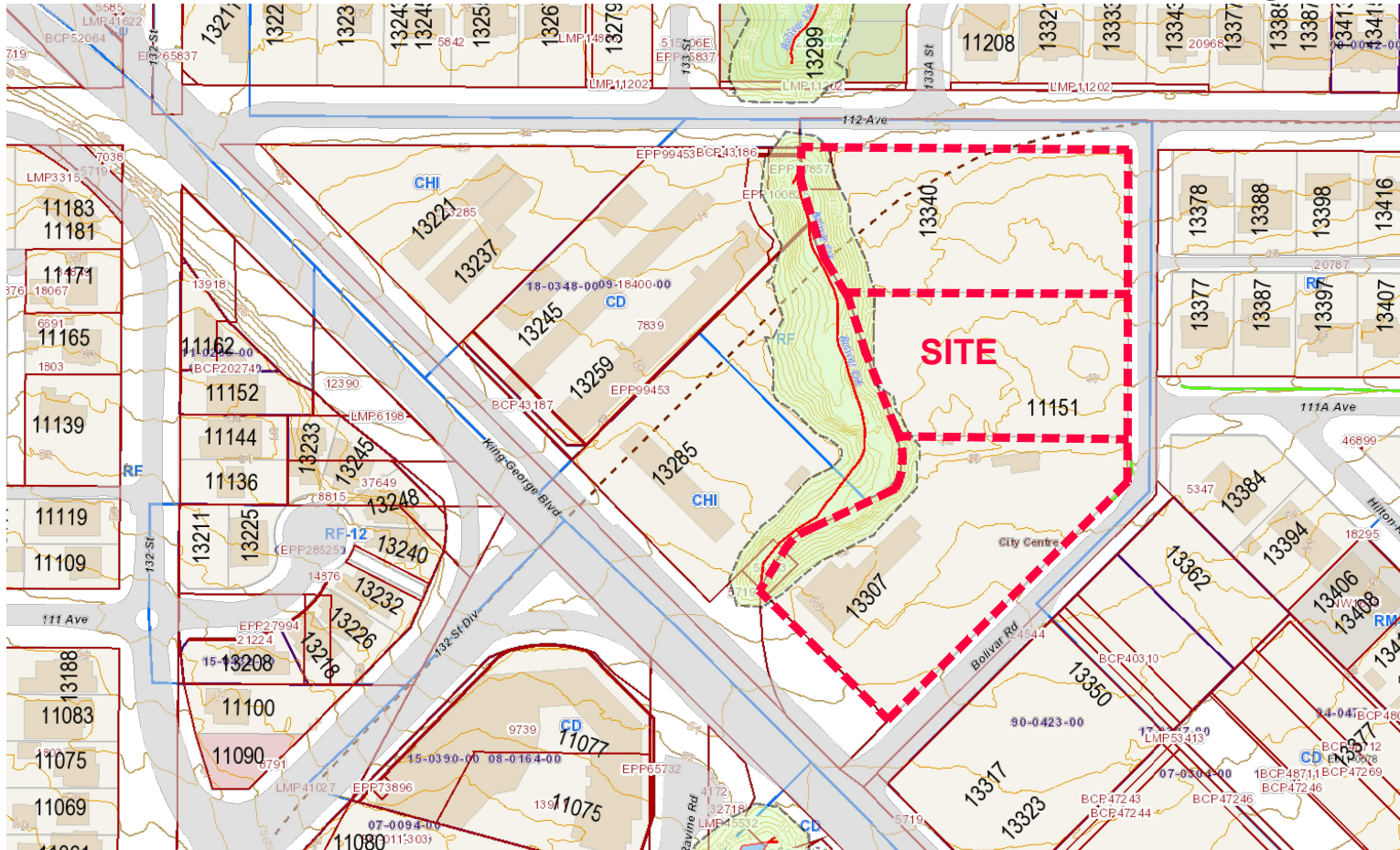
SITE PLAN

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



NTS A006



SITE MAP

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



SURVEY PLAN TO ACCOMPANY CITY OF SURREY BYLAW NO. _____ OVER LOT 1, LOT 2 AND LOT 3 EXCEPT: PART ON STATUTORY RIGHT OF WAY PLAN 5719, ALL OF SECTION 15 BLOCK 5 NORTH RANGE 2 WEST NEW WESTMINSTER DISTRICT PLAN 5347

FOR THE PURPOSE OF REZONING
THIS PLAN LIES WITHIN INTEGRATED SURVEY AREA NO. 1
CITY OF SURREY, NADB3(CSRS) 4.0.0.BC.1.MVRD

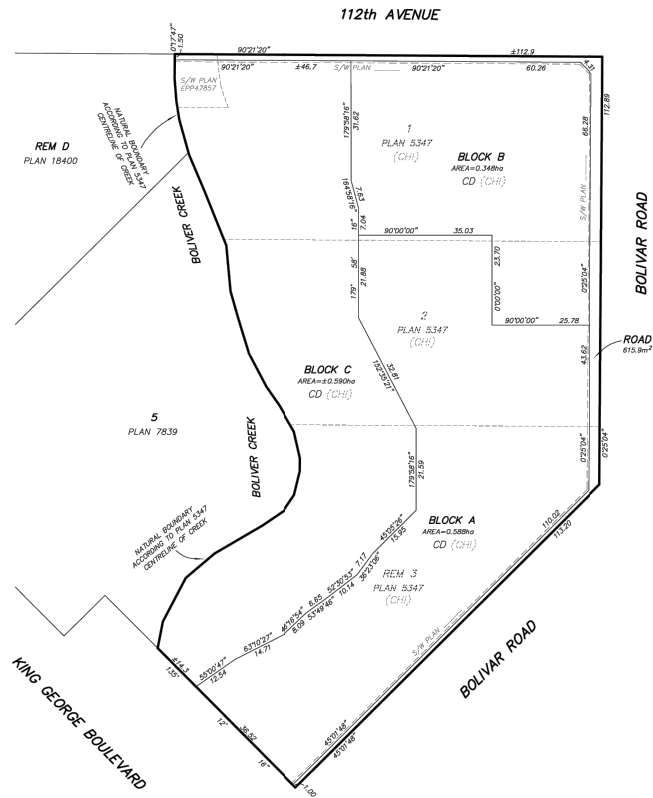
0 20 40
SCALE 1:600 DISTANCES ARE IN METRES
THE INTENDED PLOT SIZE OF THIS PLAN IS 5600m BY 800m BY 4.25m BY 4.25m BY 4.25m BY 4.25m WHEN PLOTTED AT A SCALE OF 1:600



THIS PLAN SHOWS HORIZONTAL GROUND-LEVEL DISTANCES UNLESS OTHERWISE SPECIFIED.
GRID BEARINGS ARE DERIVED FROM FIELD SURVEY.

LEGEND
m² DENOTES SQUARE METRES
ha DENOTES HECTARES

Lakhjot Grewal Digitally signed by Lakhjot Grewal 64QJG9
Date: 2024.01.23 09:24:54 -08'00'
CERTIFIED CORRECT THIS 4th DAY OF JANUARY, 2024.
LAKHJOT S. GREWAL B.C.L.S. #909



THIS PLAN LIES WITHIN THE METRO VANCOUVER REGIONAL DISTRICT

GREWAL & ASSOCIATES
PROFESSIONAL LAND SURVEYORS
UNIT 204, 12299-58th AVENUE
SURREY, B.C. V3Z 2T1
TEL: 604-597-8867
EMAIL: info@grewal-surveys.com
FILE: 2105-029 SK-NZ-RV2

DESIGN RATIONALE

SITE ORGANIZATION

- Bolivar Creek and its surrounding open green space is a significant Creek System in the City of Surrey and it is an important plan and form generator for this project.
- The characteristic of this site is the curving, meandering and organic nature of the creek and its bordering open space and the site planning of the built forms have been organized to embrace this character.
- Taking into account the required environmental setbacks required from the Bolivar Creek top of bank, the remaining development site for the project becomes fairly long, linear and angled in the center area of the site forming what is a boomerang shape overall.

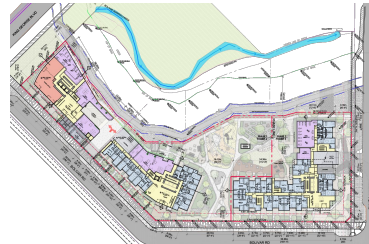


BOLIVAR CREEK PATTERN

- The project has a three significant tower forms along Bolivar Road at 21 storeys closest to King George Blvd.; 37 storeys in the center of the plan and 24 storeys for the third tower closest to 112th Avenue.
- The towers have been positioned for maximum separation distances between them on the site as well as the separations to the towers proposed in the planned development across Bolivar road to the southwest. Additionally the towers have been positioned to also maximize the view corridors for each of the towers to surrounding mountains and views of Surrey City Centre.

FLOOR PLAN ORGANIZATION & FEATURES

- The ground floor plan of the tower closest to King George Blvd. (Tower 1) will have the only commercial retail unit in the project fronting King George and wrapping around slightly to the Bolivar Road frontage. The remainder of the floor of this tower will have the principal lobby access on Bolivar, an amenity space facing the Bolivar Creek green space that is connected to the lobby as well as below grade parking access ramp and loading bays connected by a driveway from Bolivar Road that will ultimately service both this tower and the tower in the centre of the overall plan.
- The ground floor of the central tower (Tower 2) will have a series of ground floor units along Bolivar Road on either side of the main lobby for this tower which also fronts Bolivar Creek. A large amenity space is featured connected to the lobby and also facing the Bolivar Creek green space. Additional loading bays are provided also accessed by the driveway between Tower 1 and Tower 2.
- Amenity areas at grade are principally fronting on Bolivar Creek and amenity green space.

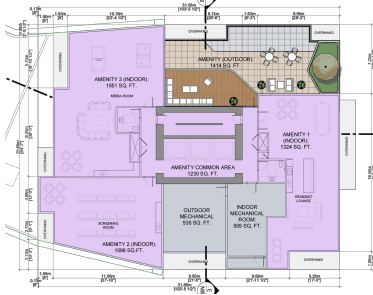
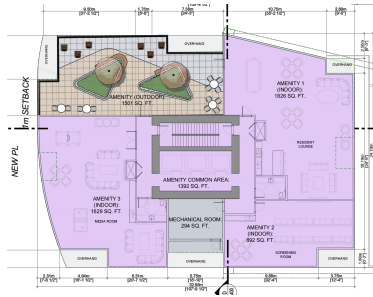


- Building forms are terraced with decks which face advantage of both, short range views of creek area & long range views to north shore mountains.
- The rooftop amenities on each tower also take advantage of immediate views to Bolivar Creek as well as long range views to the North Shore Mountains, Downtown Vancouver and Mt. Baker.
- The space between Tower 2 and Tower 3 will be open green space thereby connecting the green space of the Bolivar Creek to Bolivar Road and providing a major public access and view corridor through to the site from 112th Avenue.



AMENITY FEATURES

- There are amenity spaces at each of the ground levels of the towers as well as located adjacent to various rooftops of the podiums thereby allowing both indoor and outdoor amenity spaces the opportunity to easily interact with one another.



BUILDING ORGANIZATION/MASSING

Tower 1 & 2

- Towers 1 & 2 are joined at the podium levels and highlighted with a swooped curving articulation of the predominantly glass façade that is horizontal at the podium and then rises vertically on each tower to form a visually interesting composition between the two towers. This dynamic curve creates a unique architectural expression on the skyline that takes its visual clues from the organic curved nature of Bolivar Creek. The podium connection between the two towers steps up in either tower direction with landscaped terraces that have been designed to visually relate to the Bolivar Creek green space and further emphasize the organic nature of the site.

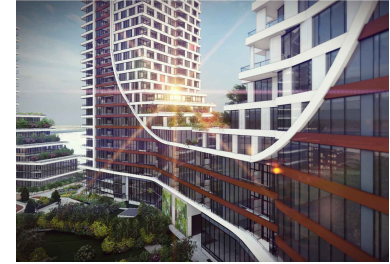


Tower 3

- Tower 3 and its podiums are distinct from Towers 1 and 2 and is separated by a green pedestrian and landscaped area that physically connects to the Bolivar Creek Greenway. This tower completes the ensemble facing Bolivar Creek by creative an L-shaped form with two separate stepping podiums that run along both 112th Avenue and Bolivar Road thereby completing a right angle turn to define this corner. This tower has some similar vertical and horizontal banding and stepping elements to Towers 1 & 2 but at the same time provides differentiation which does not mimic or complete with the curving elements on the first two towers.



- Due to the site shape which is long and linear, a more rectangular tower floor plate had been adopted which is longer in the east-west direction than it is in the north-south orientation.



MATERIALS & SUSTAINABILITY

- Exterior Building materials will reflect both the urban setting and natural amenity of Bolivar Creek. Pre-finished metal panels in bronze material and white vertical design elements along with alternating widow panels will provide a refreshing and a dynamic sense of movement.
- The material and exterior wall assemblies are selected to align with sustainability criteria and to satisfy step code requirements. The goal is to minimize the loss of heating energy and minimize mechanical and electrical energy loads. The material and assembly will minimizing the thermal bridging and air leakage through the assemblies. The wall assemblies will retard water ingress by using standard materials like rainscreen walls, insulated glass units and waterproofing coating on concrete.



CPTED

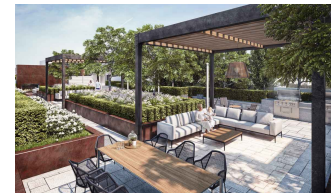
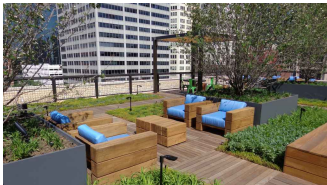
CPTED will be addressed by selecting vegetation at recommended levels to maintain site lines adjacent to public areas and circulation routes. Safety levels of lighting will be provided through-out the site. Architectural security systems such as secured access, CCTV and alarm systems will be incorporated throughout the development. On site management/security will also be provided. Large resident and office amenity and outdoor open spaces are elevated above street level in a controlled environment.

Landscape: Lighting will be provided throughout the public realm and site lines will be maintained by ensuring that plant material is specified at recommended heights adjacent to circulations routes and gathering areas.

CONCLUSION

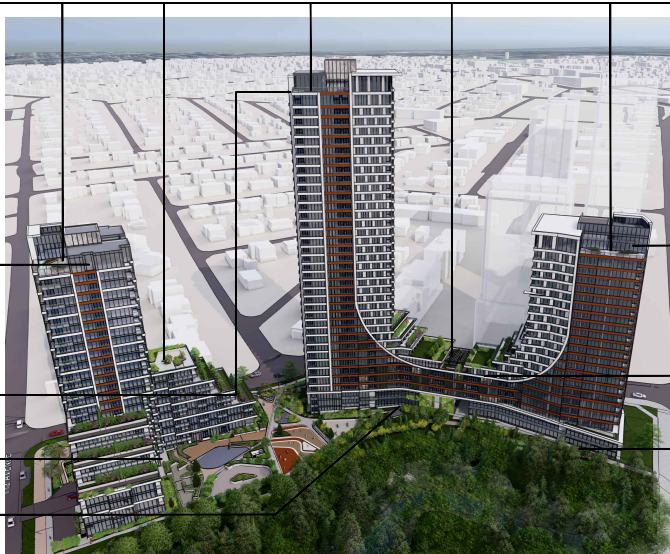
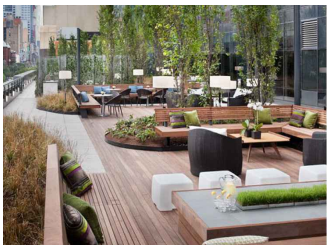
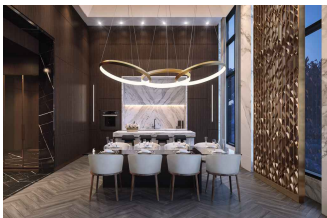
We are pleased to have this opportunity to formally submit the design drawings for this three-Tower and podium multi-family residential project at Bolivar Road and King George Blvd. in the heart of Surrey. We look forward to receiving feedback from the Planning Department on this submission as well as to the next steps in the City's review process.



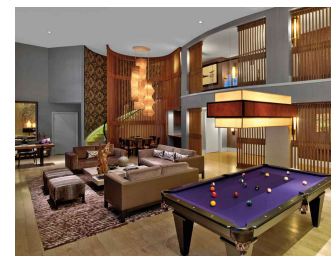
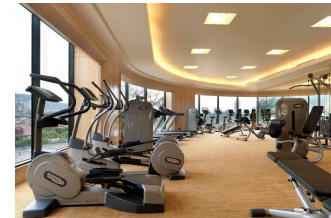


LEVELS 22, 25 & 38 ROOF DECK/COURTYARD OUTDOOR AMENITIES

LEVELS 1 & 10,(T3) INDOOR AMENITIES & OUTDOOR COURTYARD AMENITIES



LEVELS 1,6 , 7, 22 & 38 (T1&2) INDOOR AMENITIES





PUBLIC TRANSIT

The Bolivar Project is within 700 meters walking distance to the Gateway Skytrain Station. Additionally it is well serviced by major bus lines which run along King George Blvd.



ALTERNATIVE TRANSPORTATION

A multi-use pathway runs along Bolivar Road connecting the BC Parkway along King George Blvd. Additionally, provisions for dedicated bike parking will be located throughout the project.



WALKABILITY

The project is within walking distance of green spaces, transit centres and outdoor fitness areas. Enhanced sidewalk widths and landscaping along Bolivar Road and public plaza will encourage pedestrian activity for residents.



ENERGY MANAGEMENT

The buildings in the Bolivar project are designed to maximize natural daylighting and solar efficiency. The design specifies efficient systems such as Energy Star appliances, intelligent lighting systems and LED lighting throughout. The project will be designed to Step Code 2 Standards.



URBAN DESIGN PRINCIPLES

The Bolivar project utilizes a pre-developed site and increases the densification of this existing very low-density site. The project is close to transit systems, as well as outdoor green spaces. The result is an eco-efficient urban lifestyle which brings diversity, energy and renewed vitality to this neighborhood while respecting the sensitive eco- environment of Bolivar Creek.



Construction of Bolivar Residence Development emphasize the use of materials that are certified to be from renewable sources and are manufactured or assembled locally to save on transportation energy and emissions.

The design also specifies the use of healthy materials, adhesives, sealants, paints and coatings to minimize the emission of harmful chemicals. All of which reduces our impact on outside ecosystems while helping create the healthiest indoor environment for homeowners and office workers.

Traditionally, rooftops have been wasted areas of the urban landscape. By contrast, the multiple terraced roof areas of the Bolivar Residence Development are designed to incorporate living space, landscape and technology to create a positive environmental effect. Where possible, areas will be dedicated to 'green roof', reducing waste heat generation and creating beneficial urban eco-habitats.

Stormwater collection system is being designed which will filter runoff and reduce pressure on the public storm water system. This extensive perimeter stormwater management system will be assisted by the water-retaining capacity of the landscaped open space, roof decks and permeable surfaces.



BUILDING MATERIALS



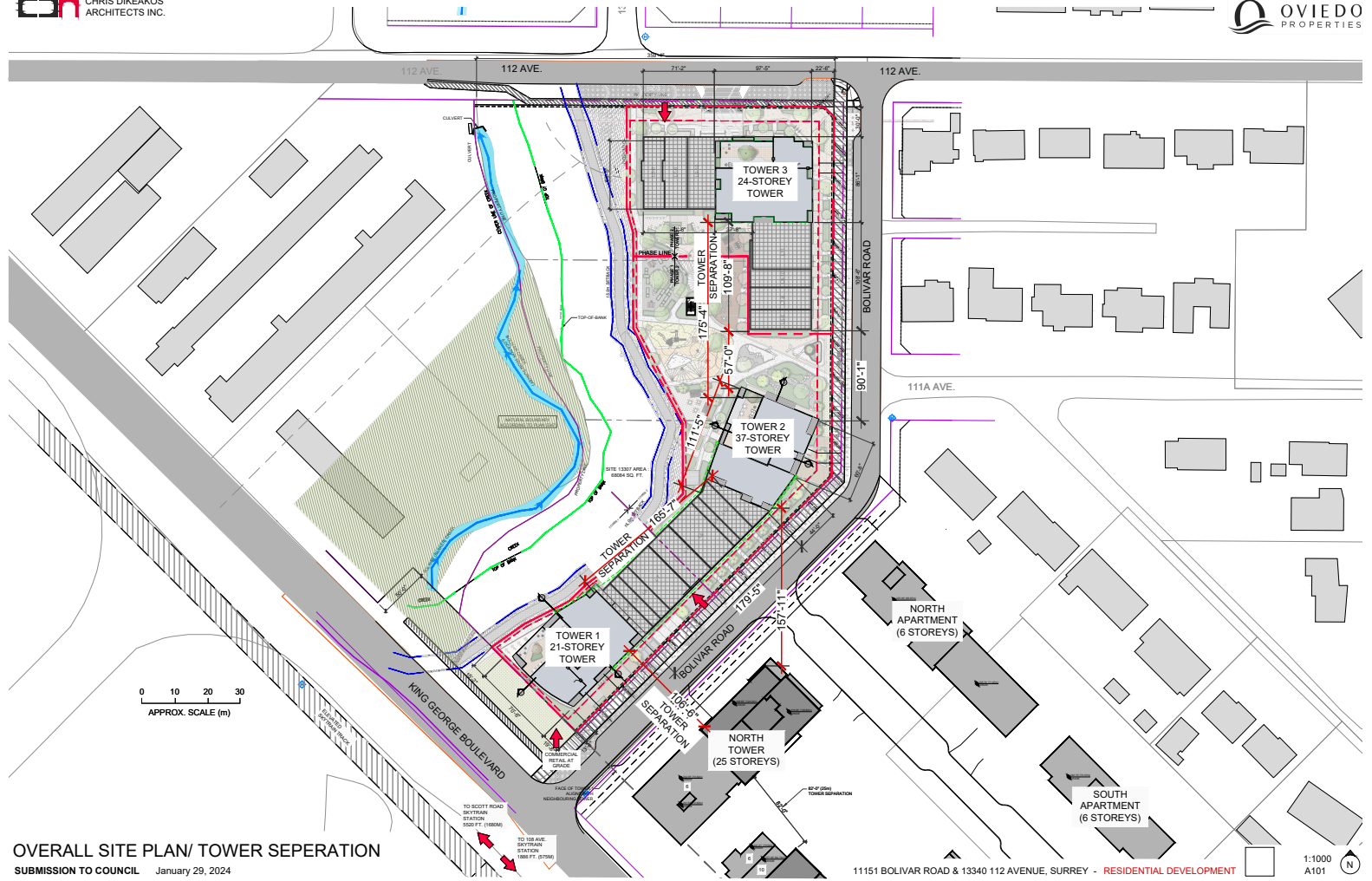
ROOF DESIGN



STORMWATER MANAGEMENT

SUSTAINABILITY STRATEGIES



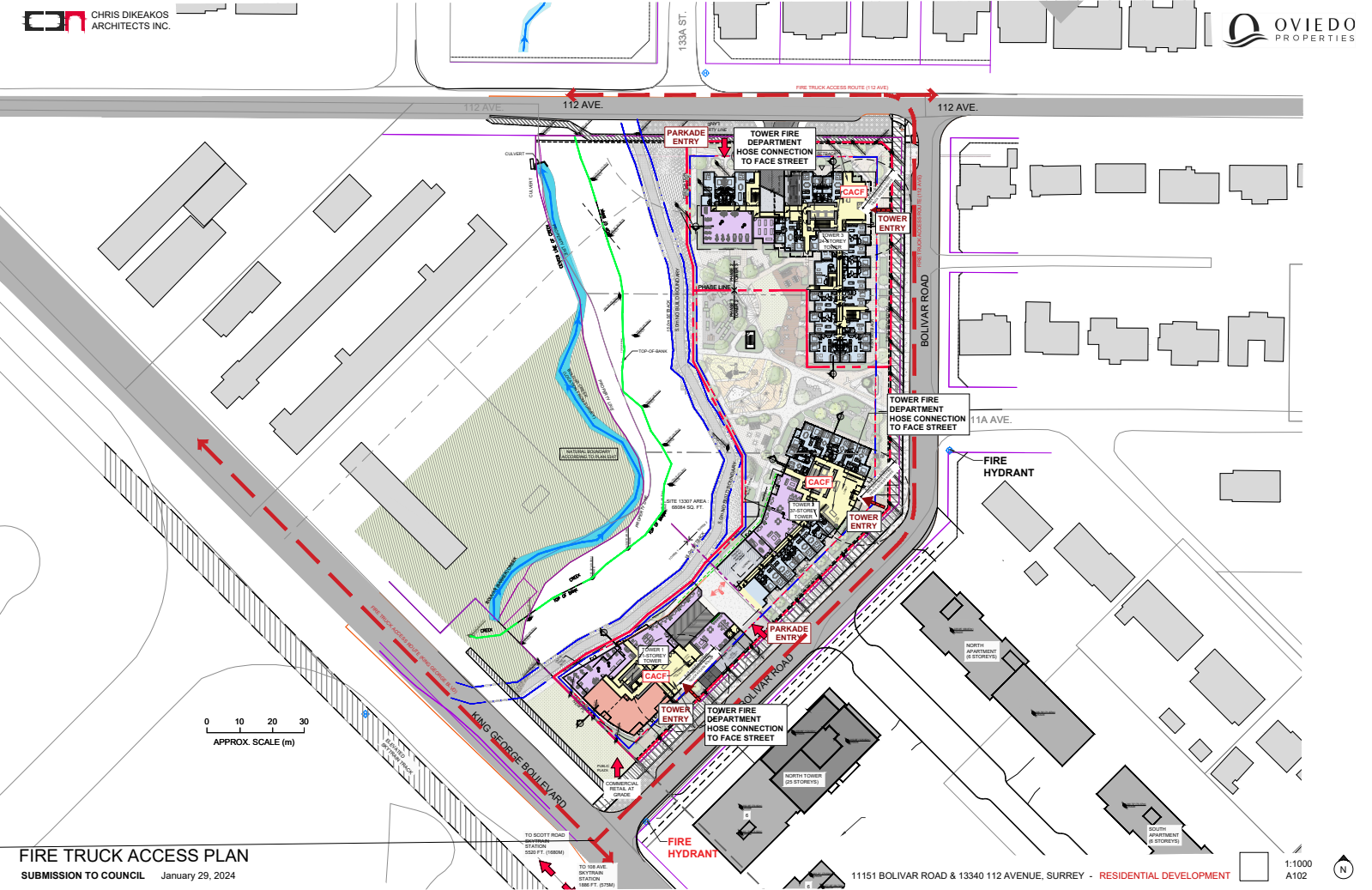


OVERALL SITE PLAN/ TOWER SEPARATION

SUBMISSION TO COUNCIL January 29, 2024

1151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT

1:1000
A101



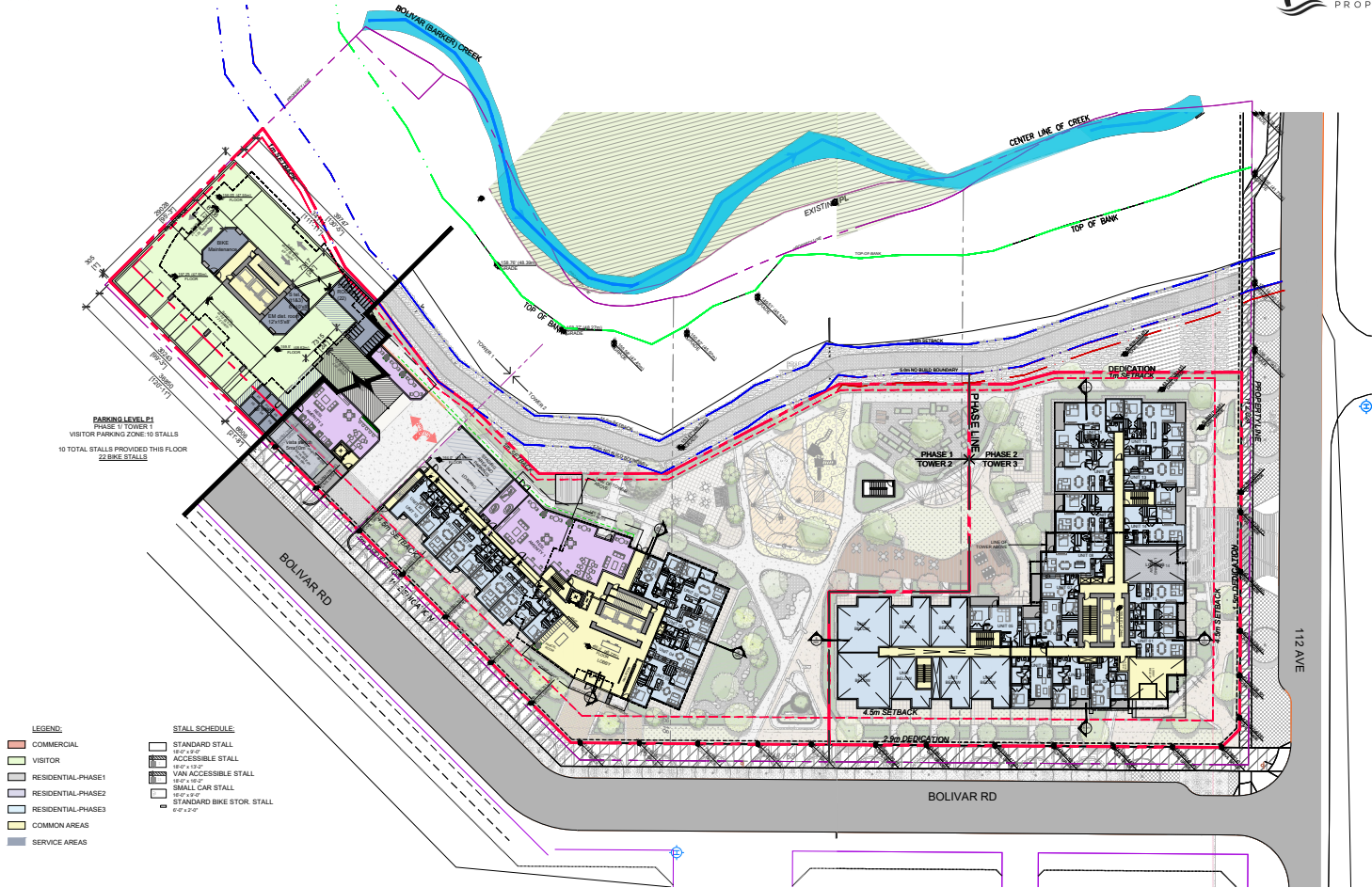
FIRE TRUCK ACCESS PLAN

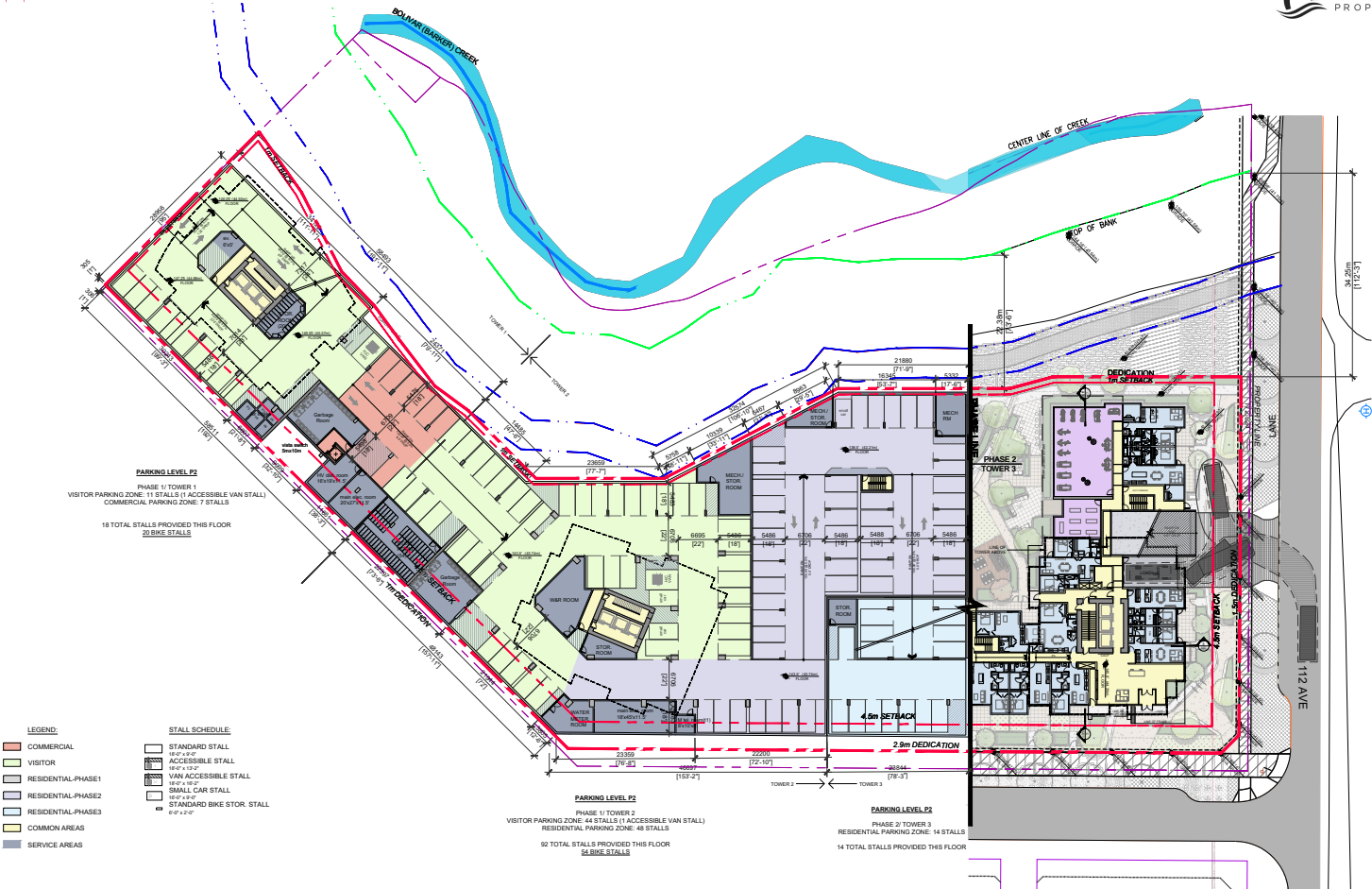
SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT

1:1000
A102







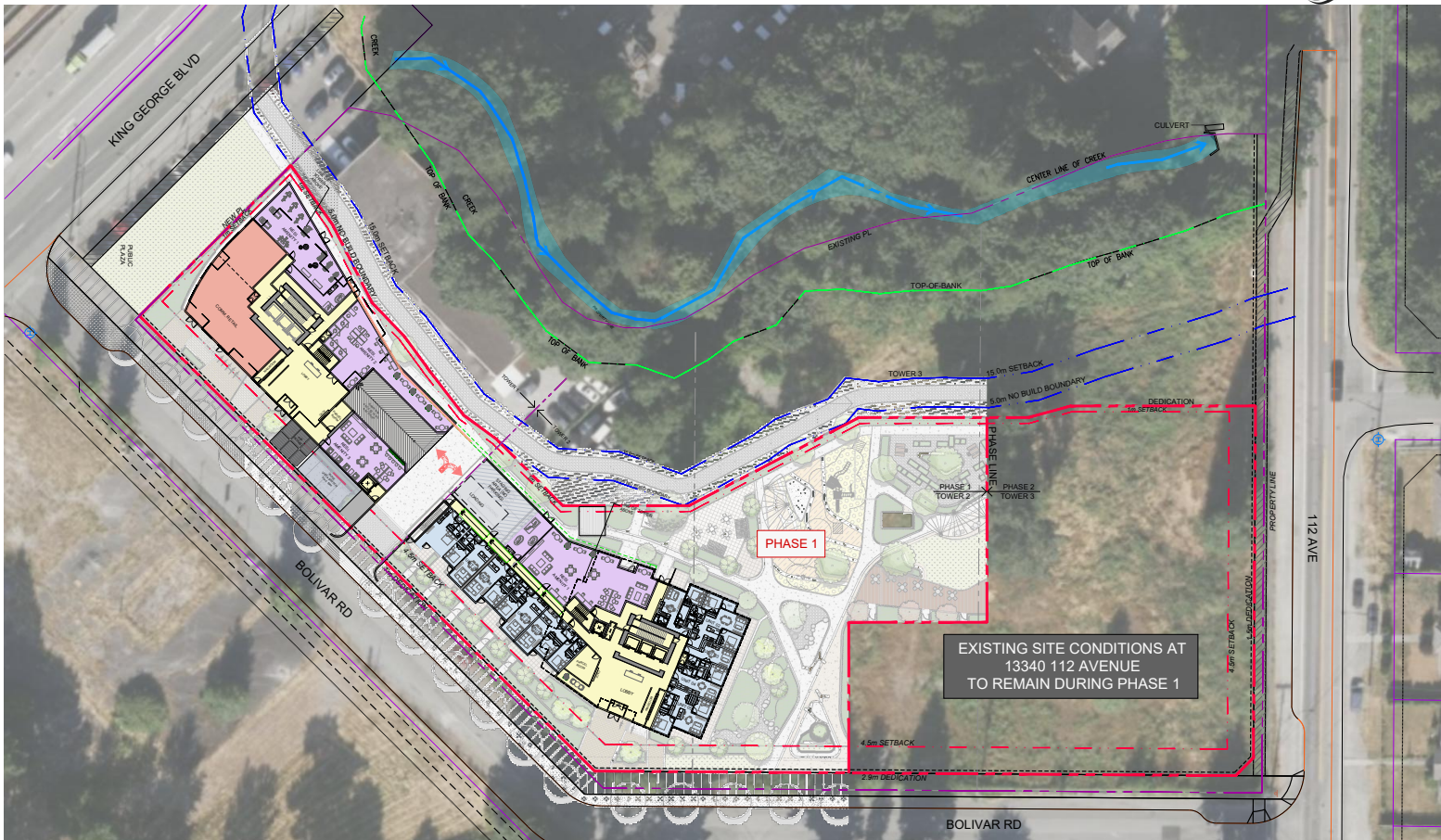
PARKING LEVEL P2
 PHASE 1/ TOWER 1
 VISITOR PARKING ZONE: 11 STALLS (1 ACCESSIBLE VAN STALL)
 COMMERCIAL PARKING ZONE: 7 STALLS
 18 TOTAL STALLS PROVIDED THIS FLOOR
 20 BIKE STALLS

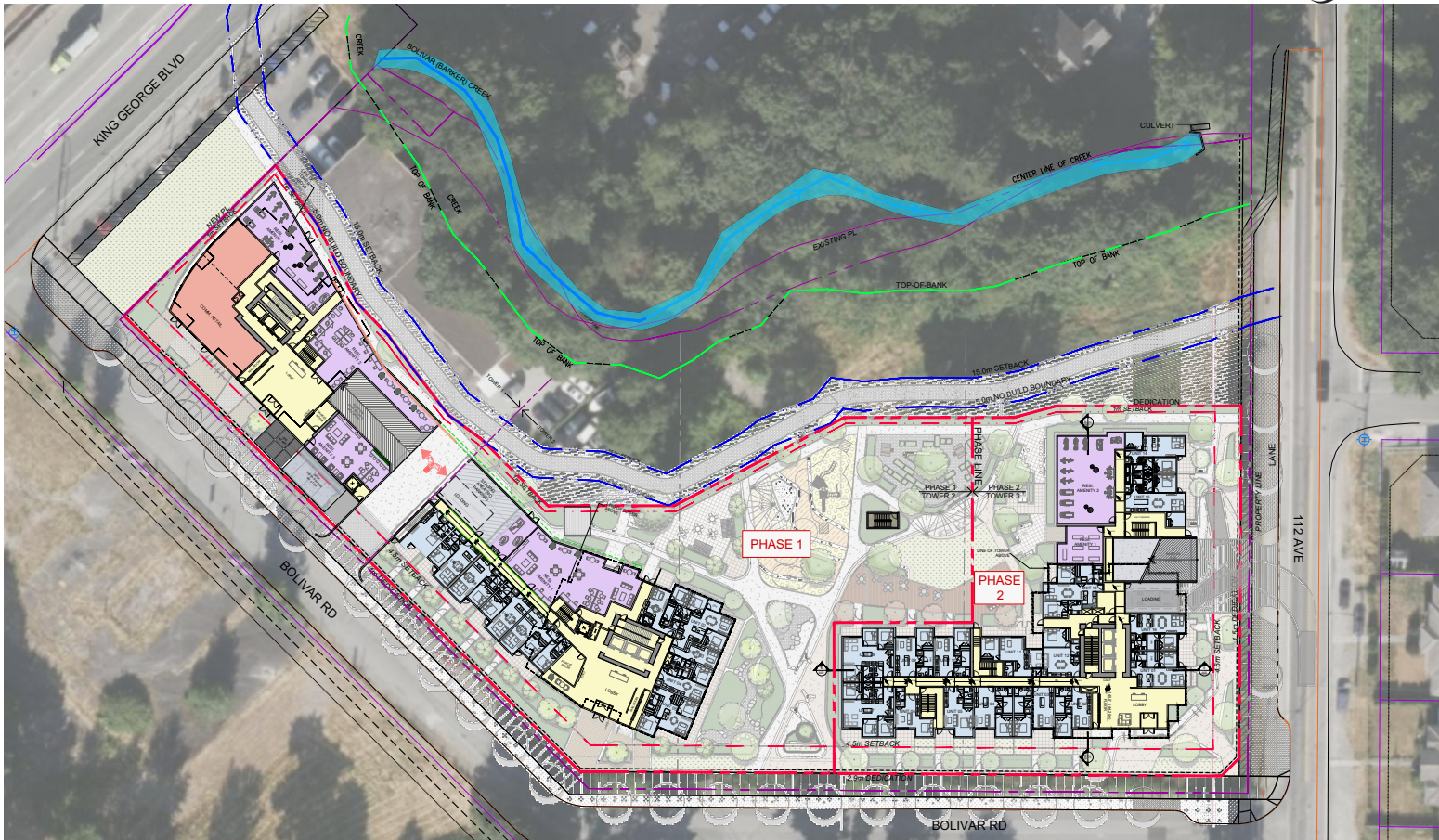
PARKING LEVEL P2
 PHASE 1/ TOWER 2
 VISITOR PARKING ZONE: 44 STALLS (1 ACCESSIBLE VAN STALL)
 RESIDENTIAL PARKING ZONE: 48 STALLS
 92 TOTAL STALLS PROVIDED THIS FLOOR
 54 BIKE STALLS

PARKING LEVEL P2
 PHASE 2/ TOWER 3
 RESIDENTIAL PARKING ZONE: 14 STALLS
 14 TOTAL STALLS PROVIDED THIS FLOOR

- LEGEND:**
- COMMERCIAL
 - VISITOR
 - RESIDENTIAL-PHASE1
 - RESIDENTIAL-PHASE2
 - RESIDENTIAL-PHASE3
 - COMMON AREAS
 - SERVICE AREAS

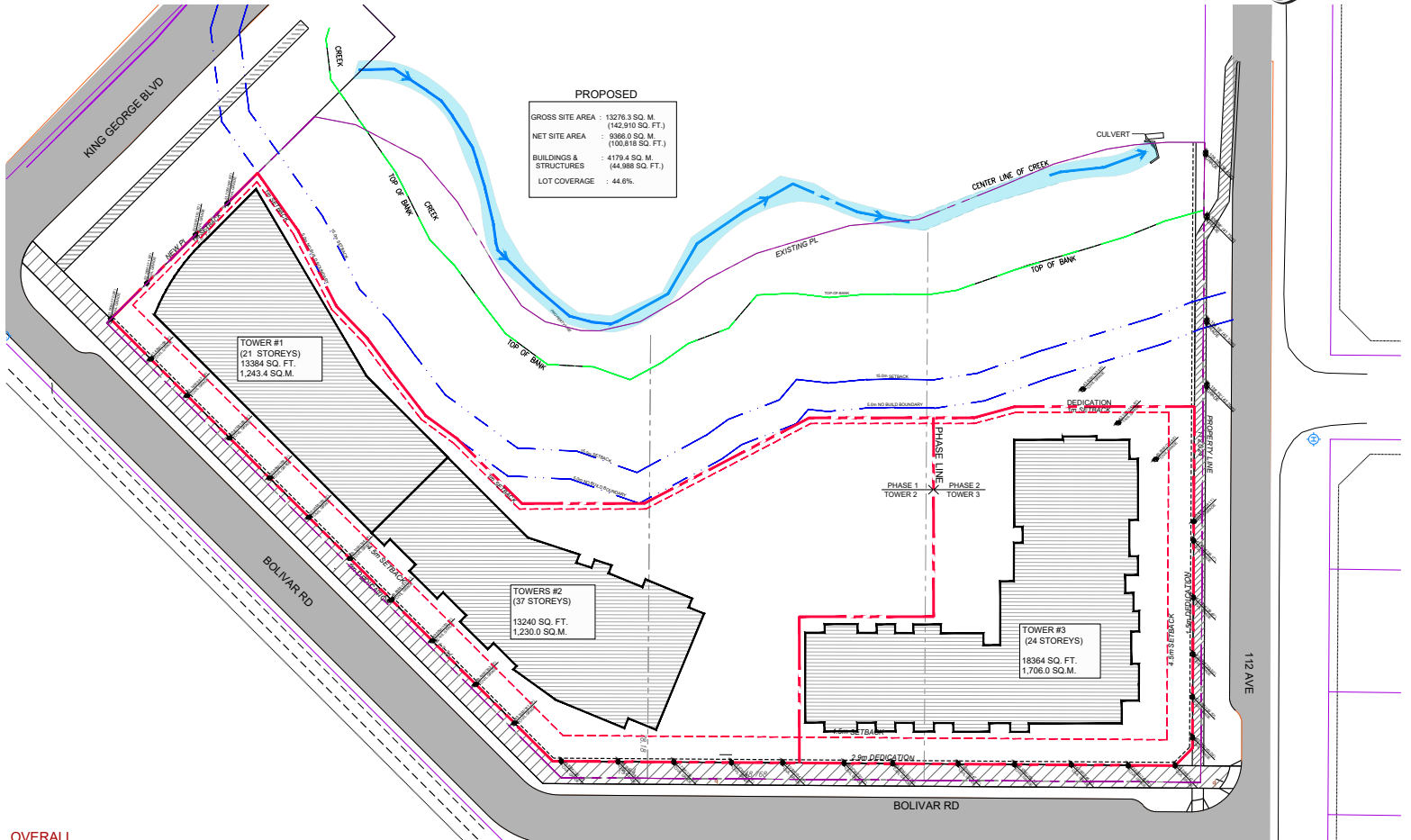
- STALL SCHEDULE:**
- STANDARD STALL 30' x 60'
 - ACCESSIBLE STALL 30' x 60'
 - VAN ACCESSIBLE STALL 30' x 120'
 - SMALL CAR STALL 30' x 120'
 - STANDARD BIKE STOR. STALL 60' x 20'





OVERALL
PHASING PLAN - PHASE 1 & 2
SUBMISSION TO COUNCIL January 29, 2024





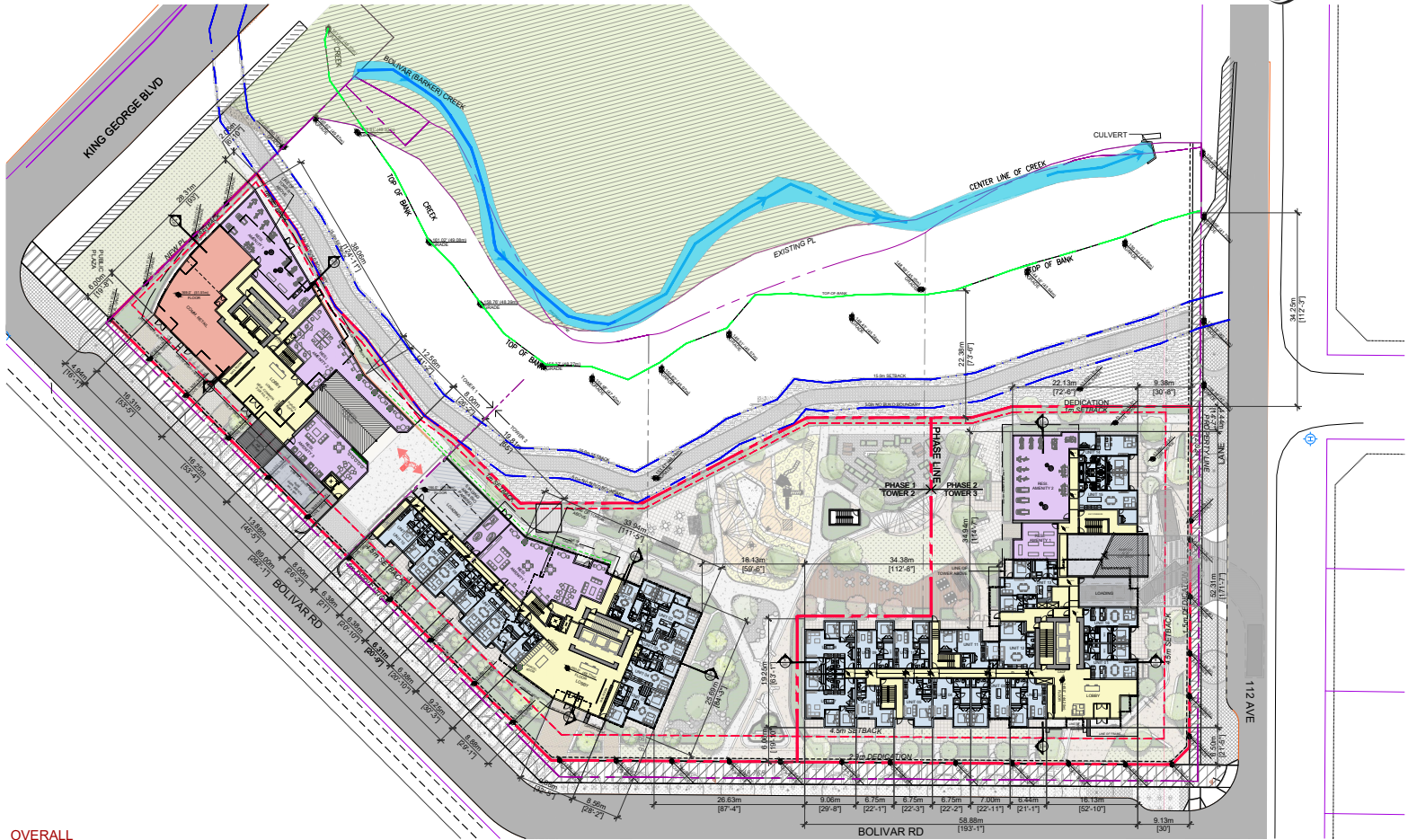
PROPOSED

GROSS SITE AREA :	13276.3 SQ. M. (142,910 SQ. FT.)
NET SITE AREA :	9066.0 SQ. M. (100,818 SQ. FT.)
BUILDINGS & STRUCTURES :	4179.4 SQ. M. (44,988 SQ. FT.)
LOT COVERAGE :	44.6%

TOWER #1
(21 STOREYS)
13384 SQ. FT.
1,243.4 SQ.M.

TOWERS #2
(37 STOREYS)
13240 SQ. FT.
1,230.0 SQ.M.

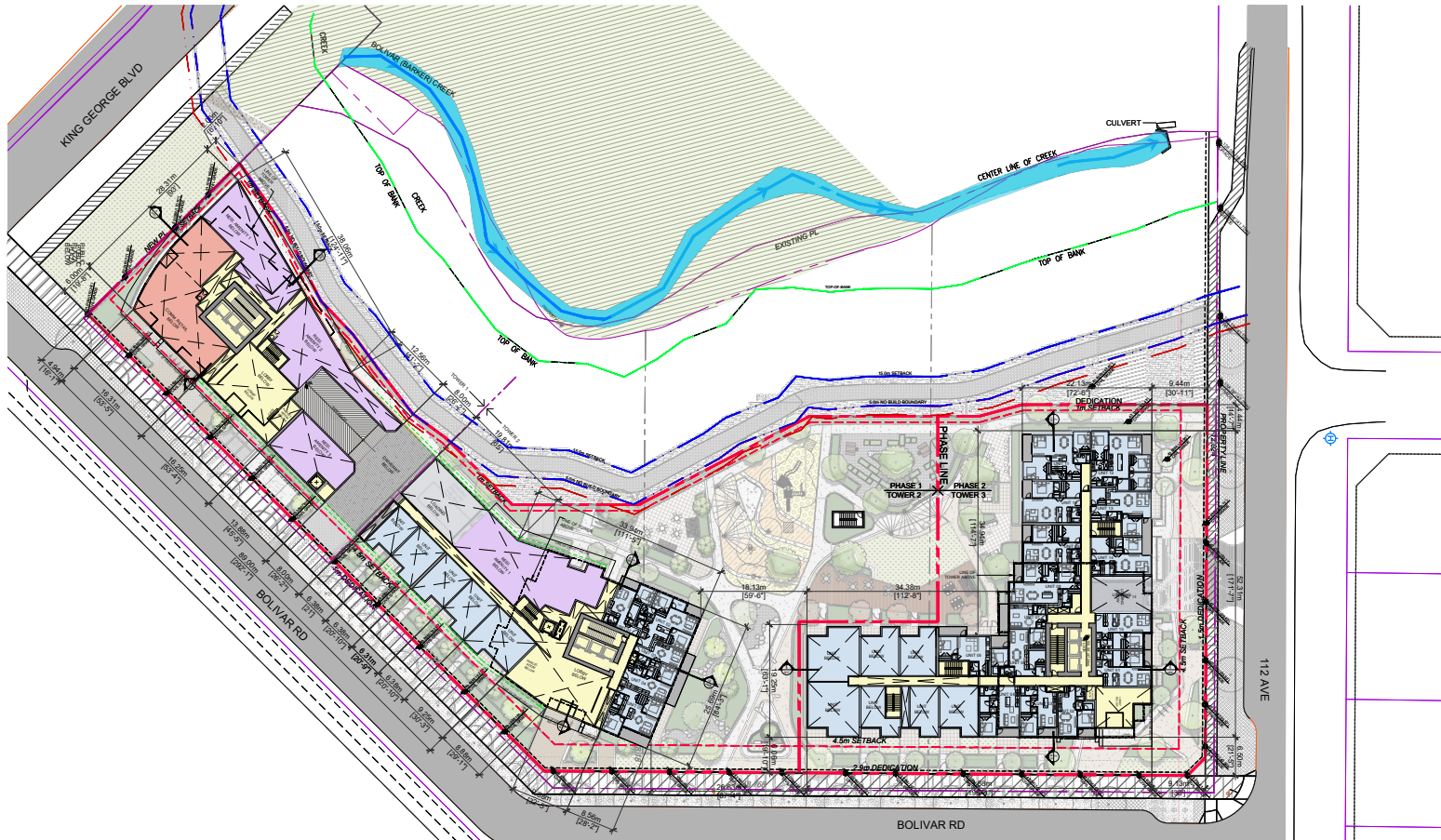
TOWER #3
(24 STOREYS)
18364 SQ. FT.
1,706.0 SQ.M.



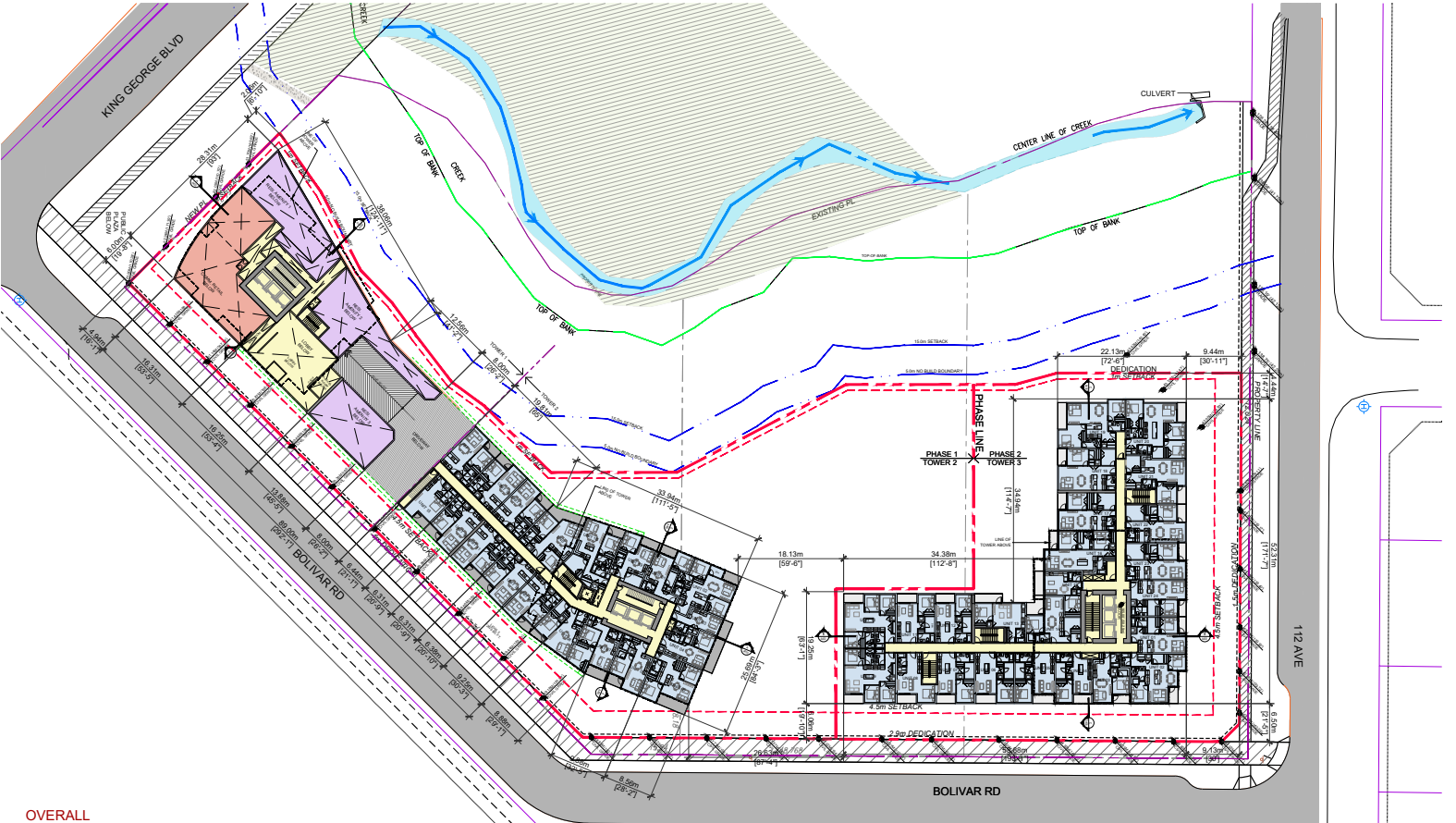
OVERALL
LEVEL 1 PLAN

SUBMISSION TO COUNCIL January 29, 2024

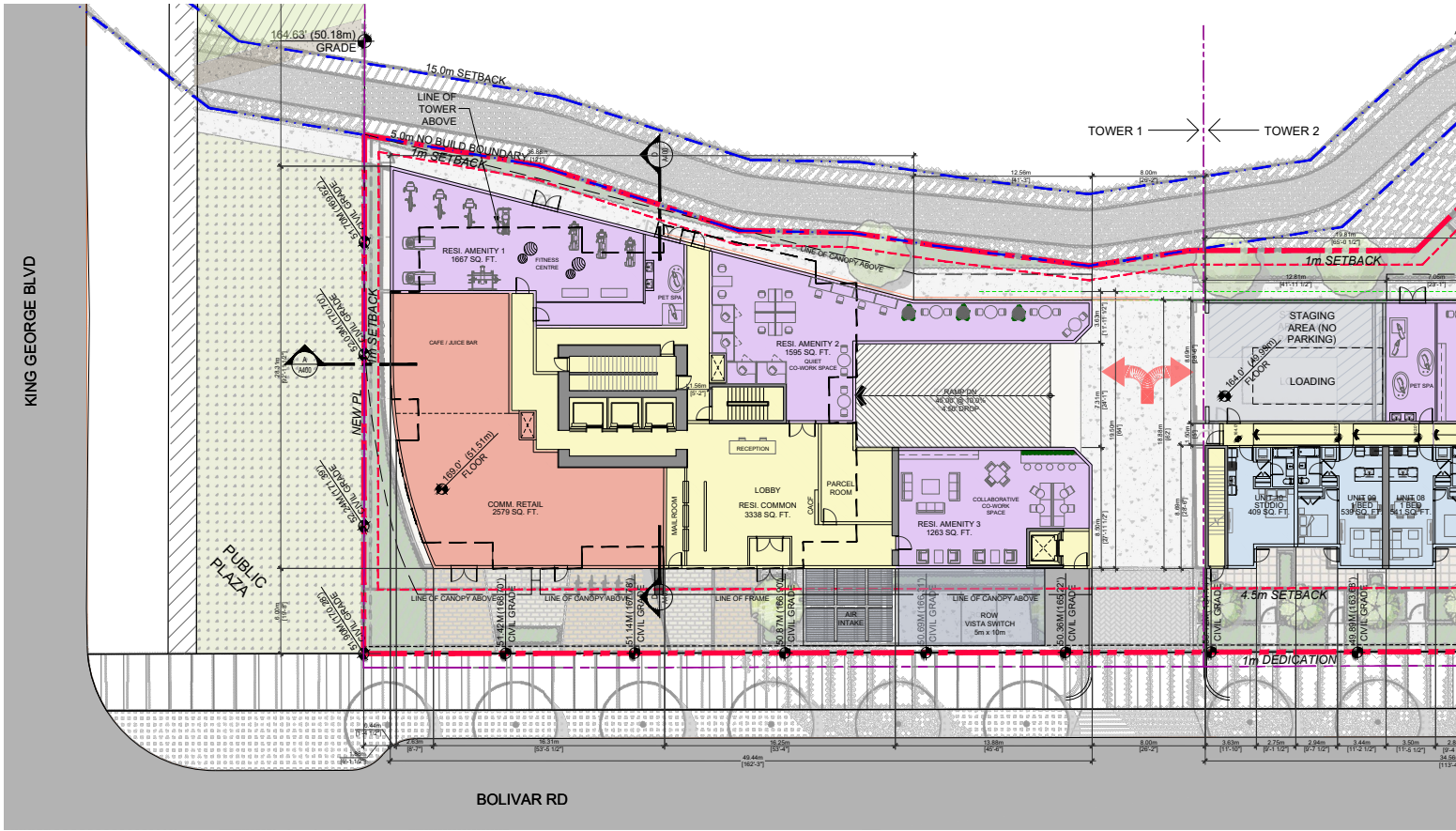
1151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



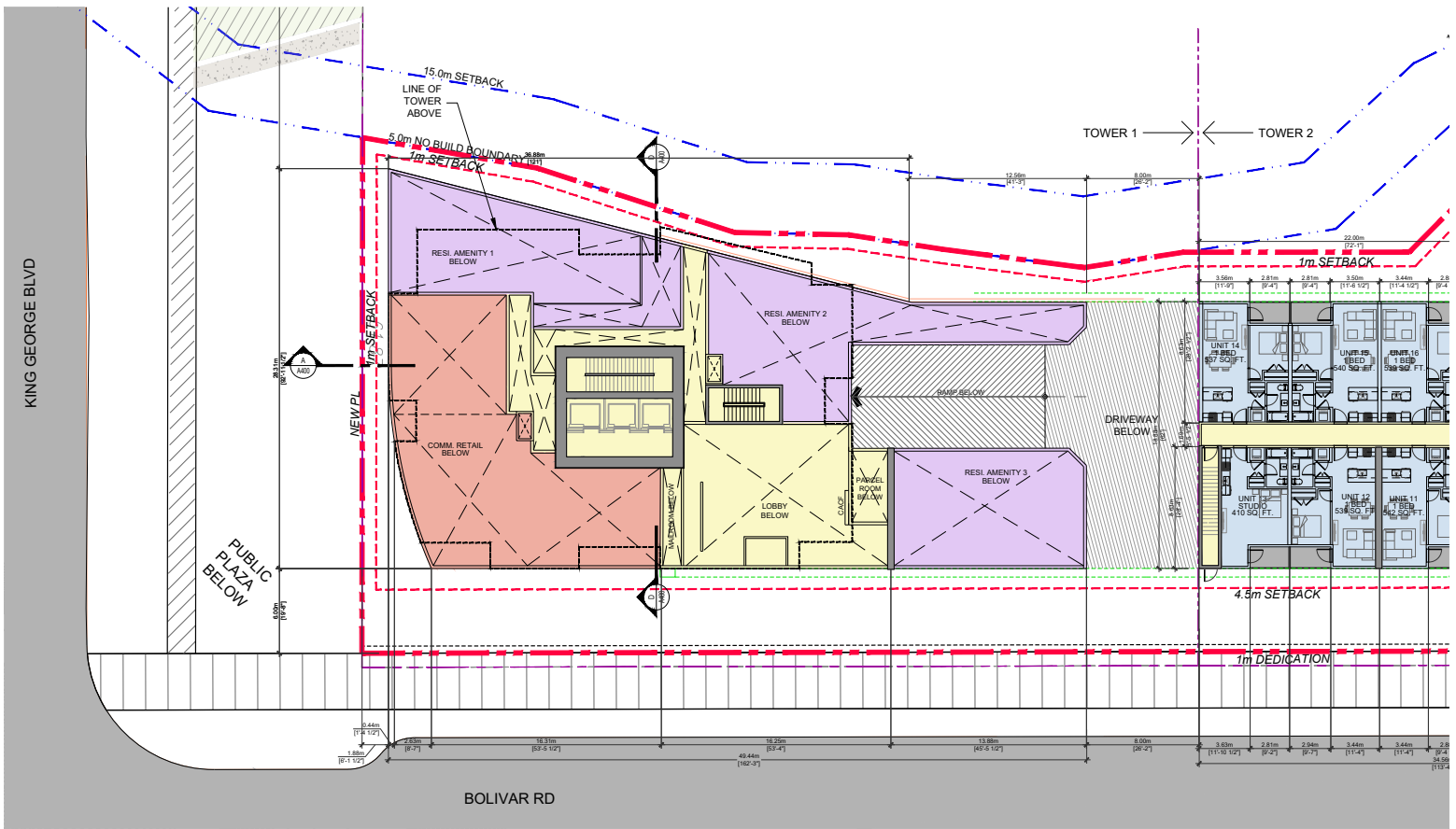
OVERALL
GROUND LEVEL PLAN - T1(L1 OVER RUN), T2(L2) & T3(L2)
 SUBMISSION TO COUNCIL January 29, 2024



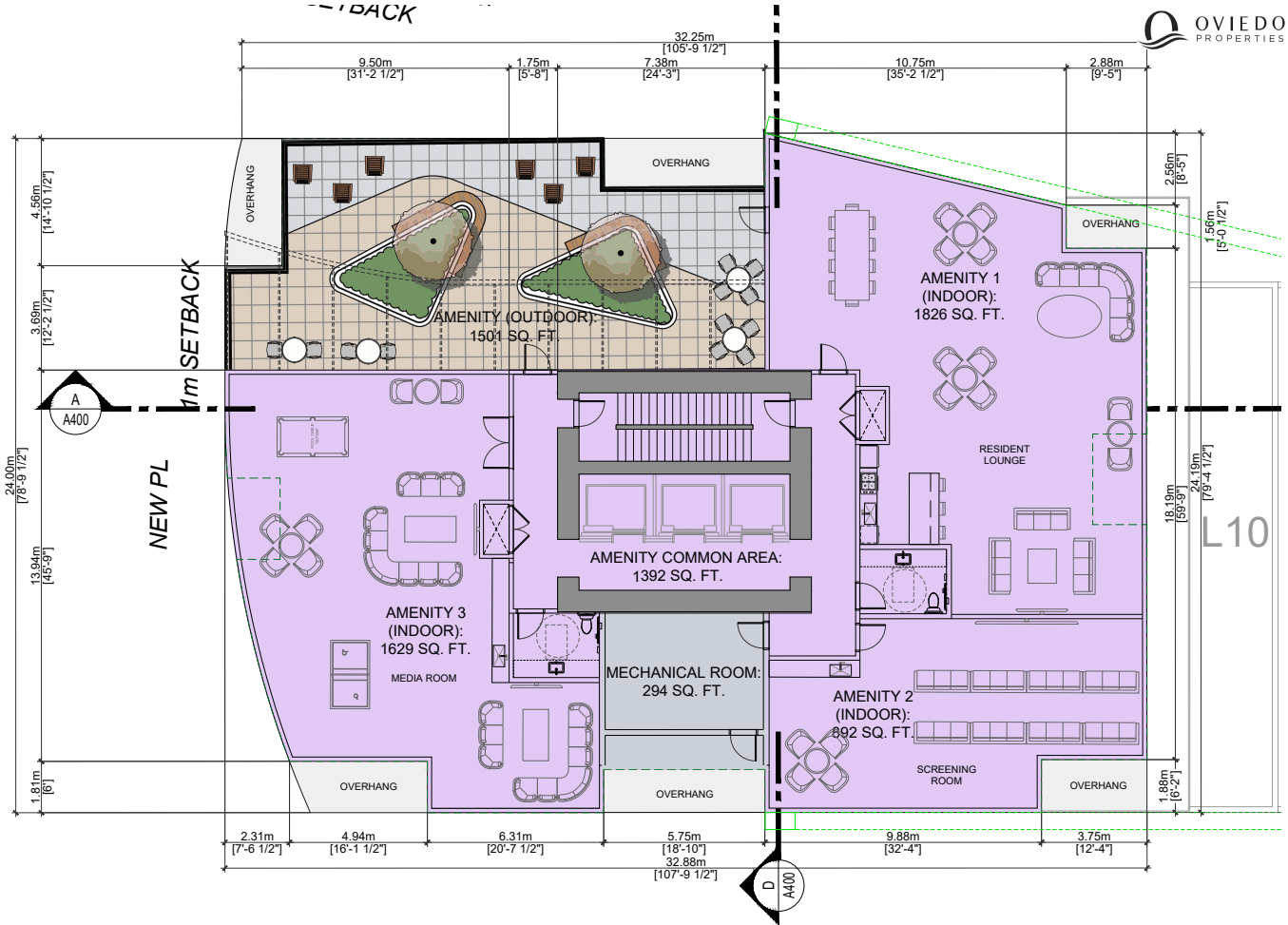
OVERALL PODIUM PLAN - T1(L2), T2(L3) & T3(L3-4)
 SUBMISSION TO COUNCIL January 29, 2024



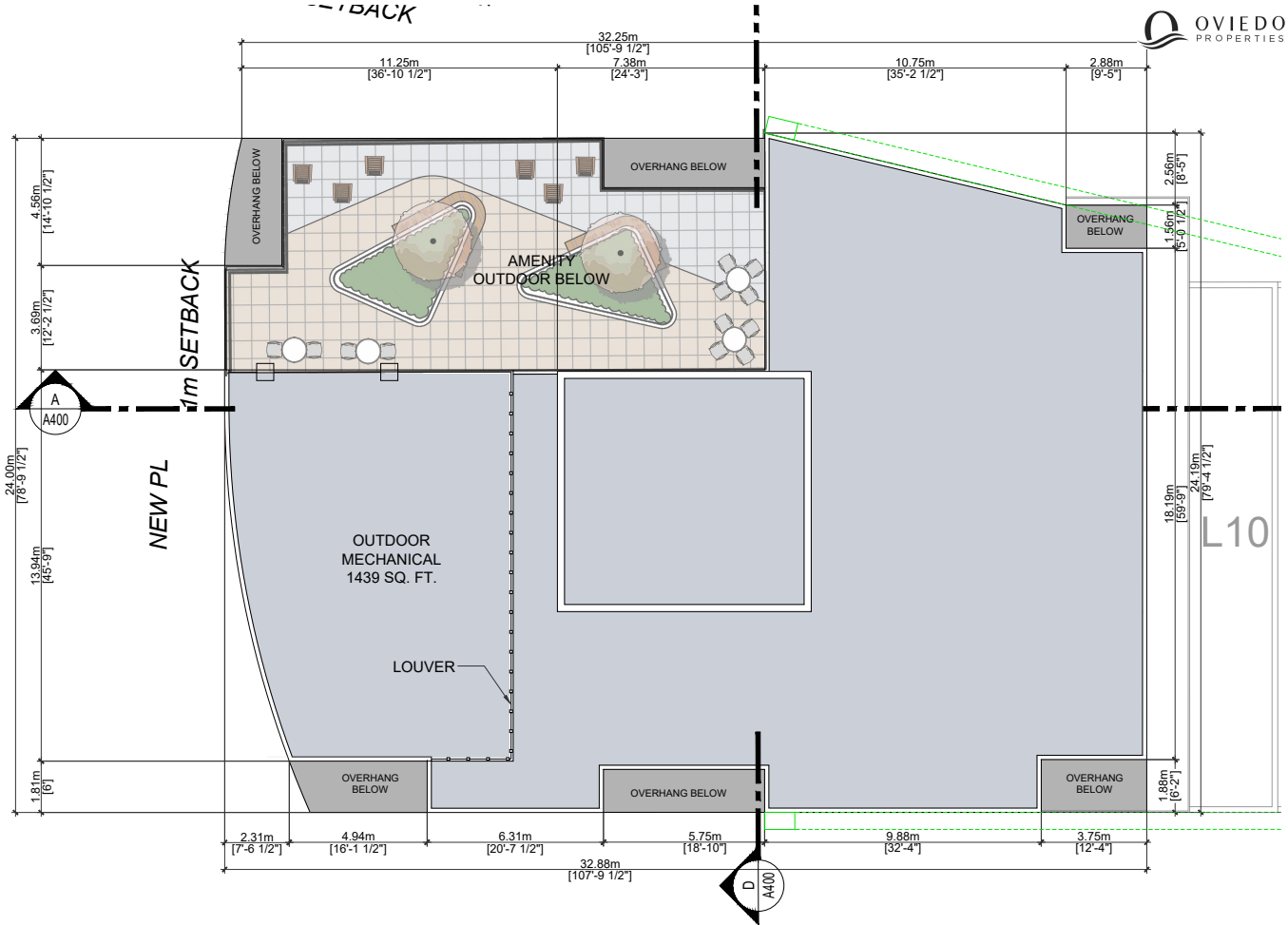
TOWER 1
LEVEL 1 FLOOR PLAN
 SUBMISSION TO COUNCIL January 29, 2024

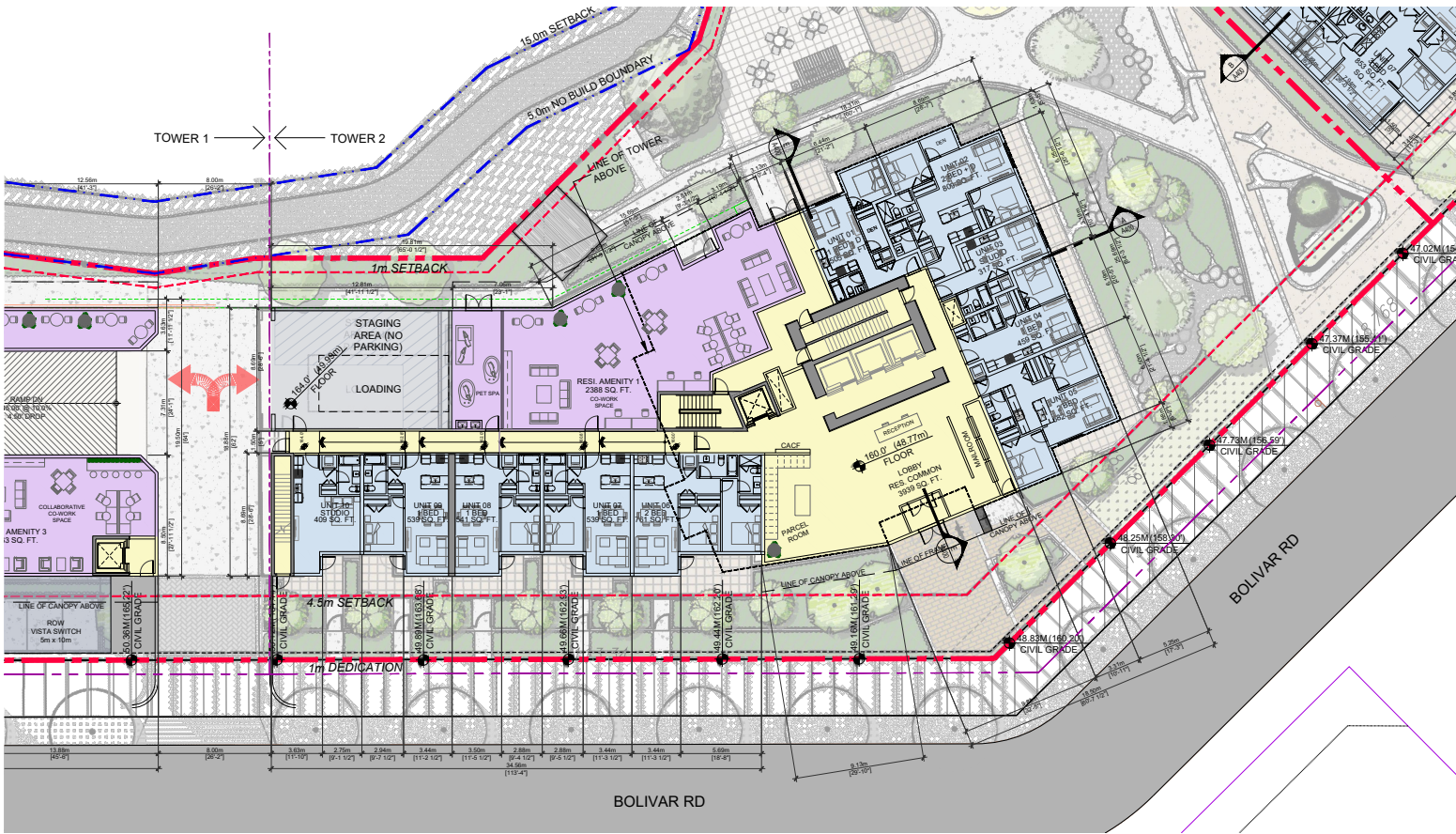


TOWER 1
LEVEL 2 FLOOR PLAN
 SUBMISSION TO COUNCIL January 29, 2024

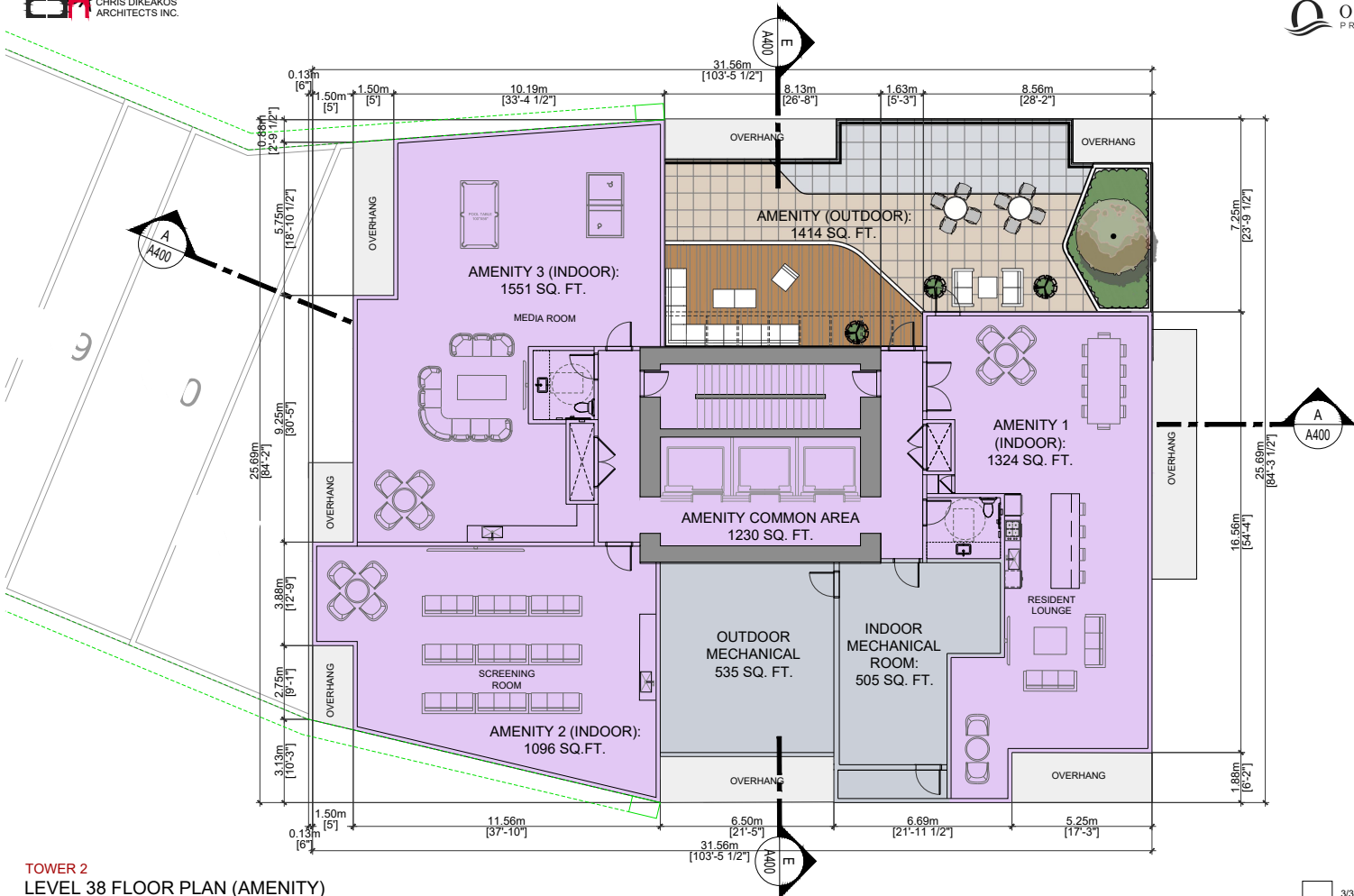


TOWER 1
LEVEL 22 FLOOR PLAN (AMENITY)
 SUBMISSION TO COUNCIL January 29, 2024



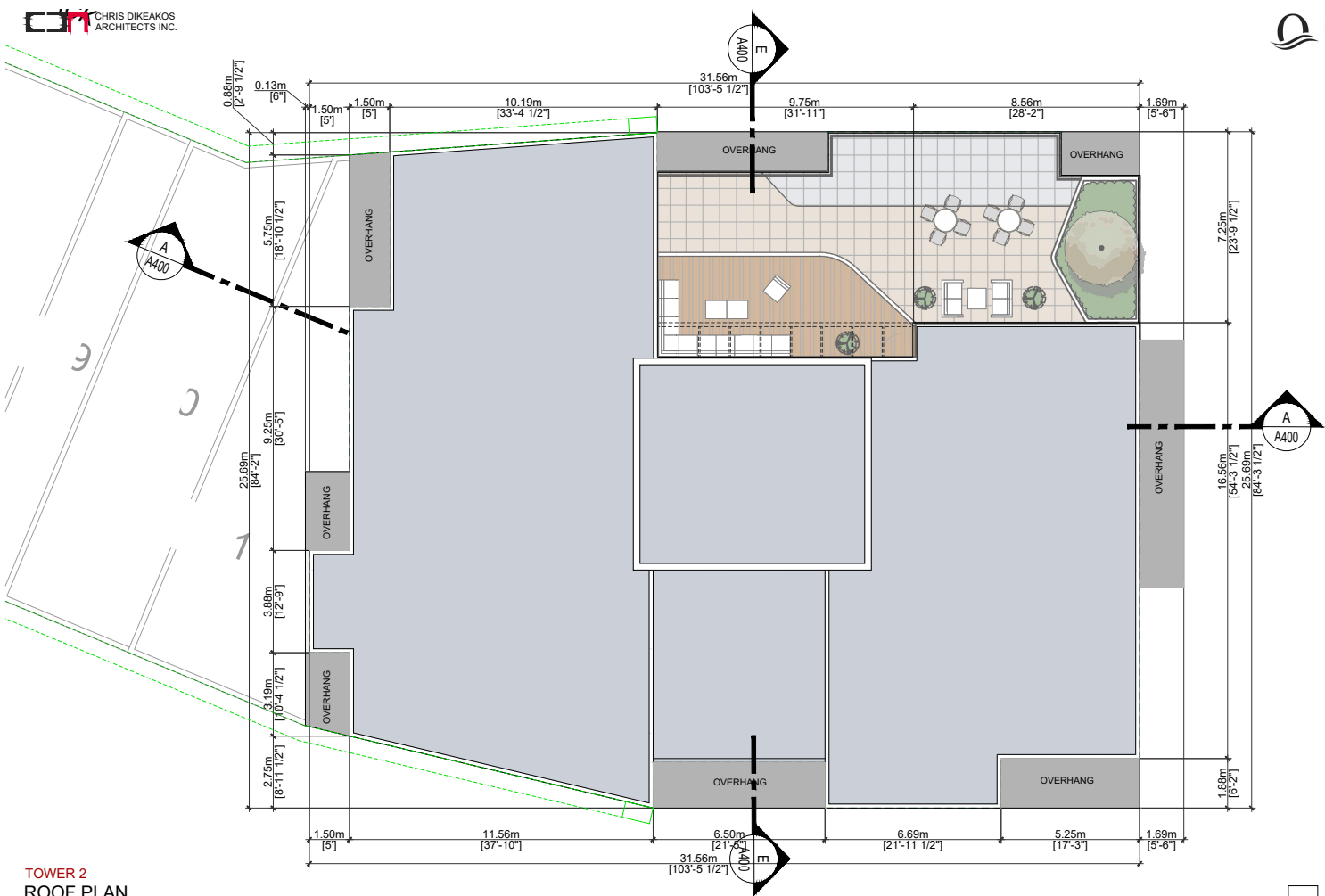


TOWER 2
LEVEL 1 FLOOR PLAN
 SUBMISSION TO COUNCIL January 29, 2024



TOWER 2
LEVEL 38 FLOOR PLAN (AMENITY)

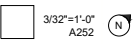
SUBMISSION TO COUNCIL January 29, 2024

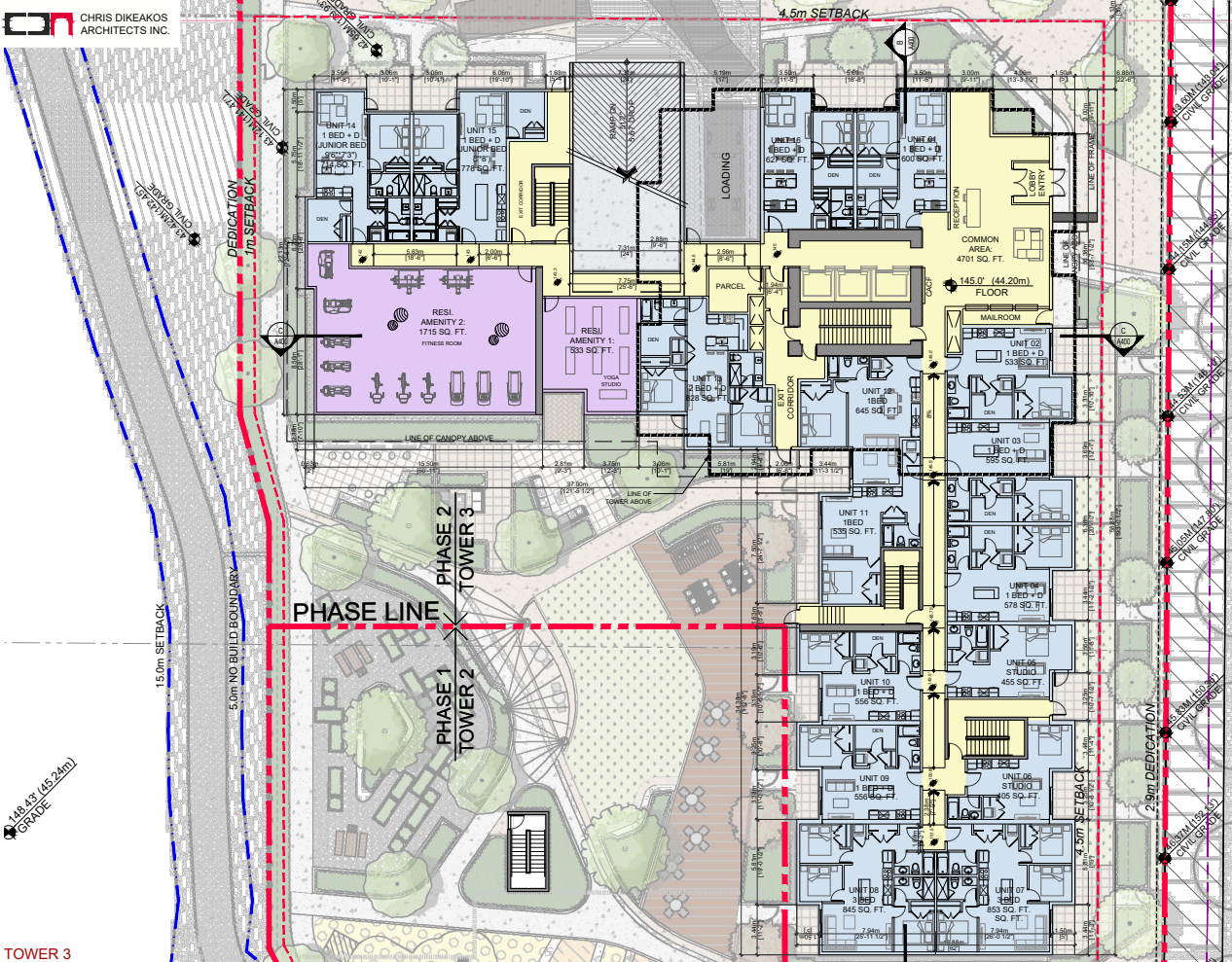


TOWER 2
ROOF PLAN

SUBMISSION TO COUNCIL January 29, 2024

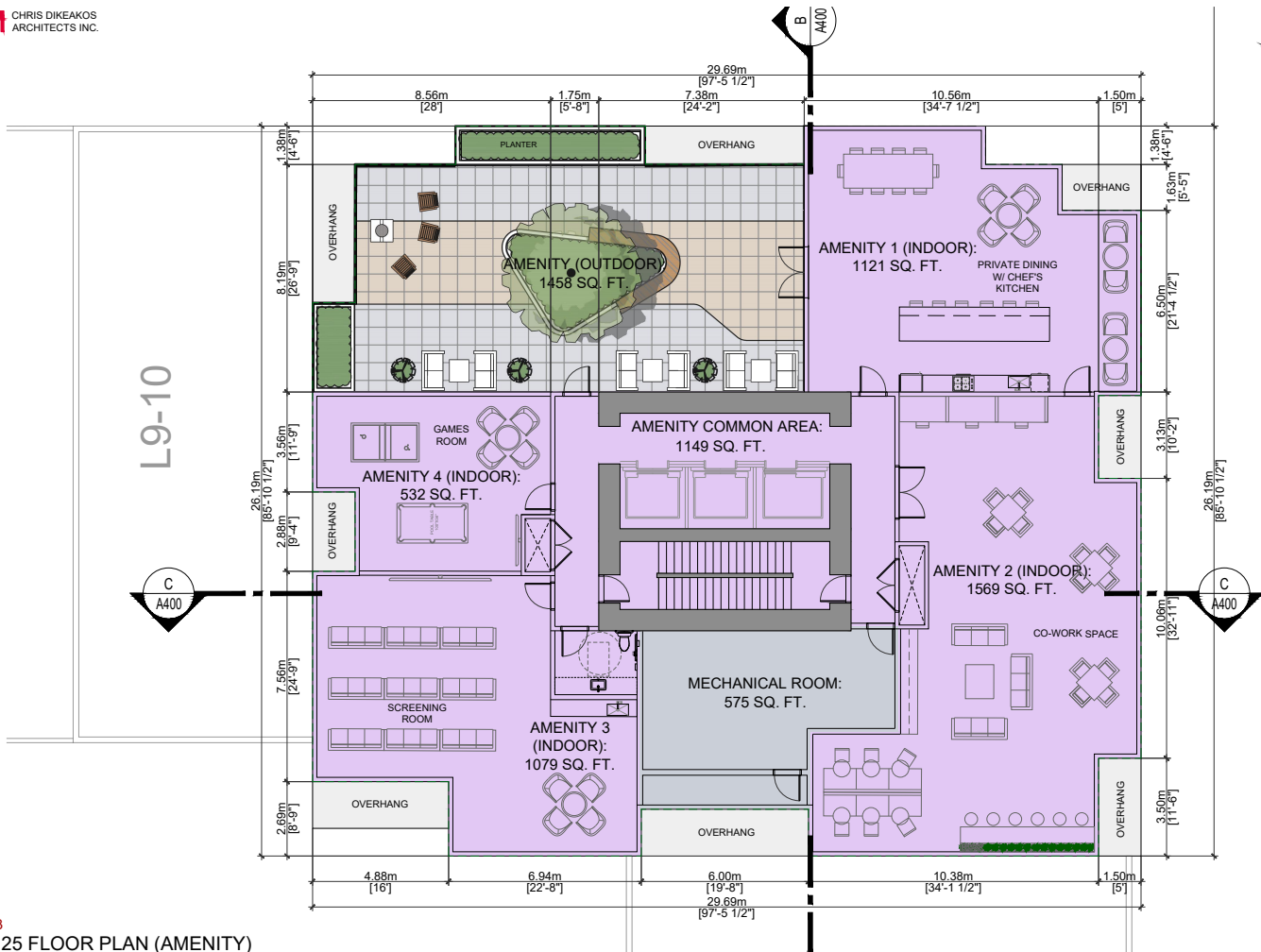
11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



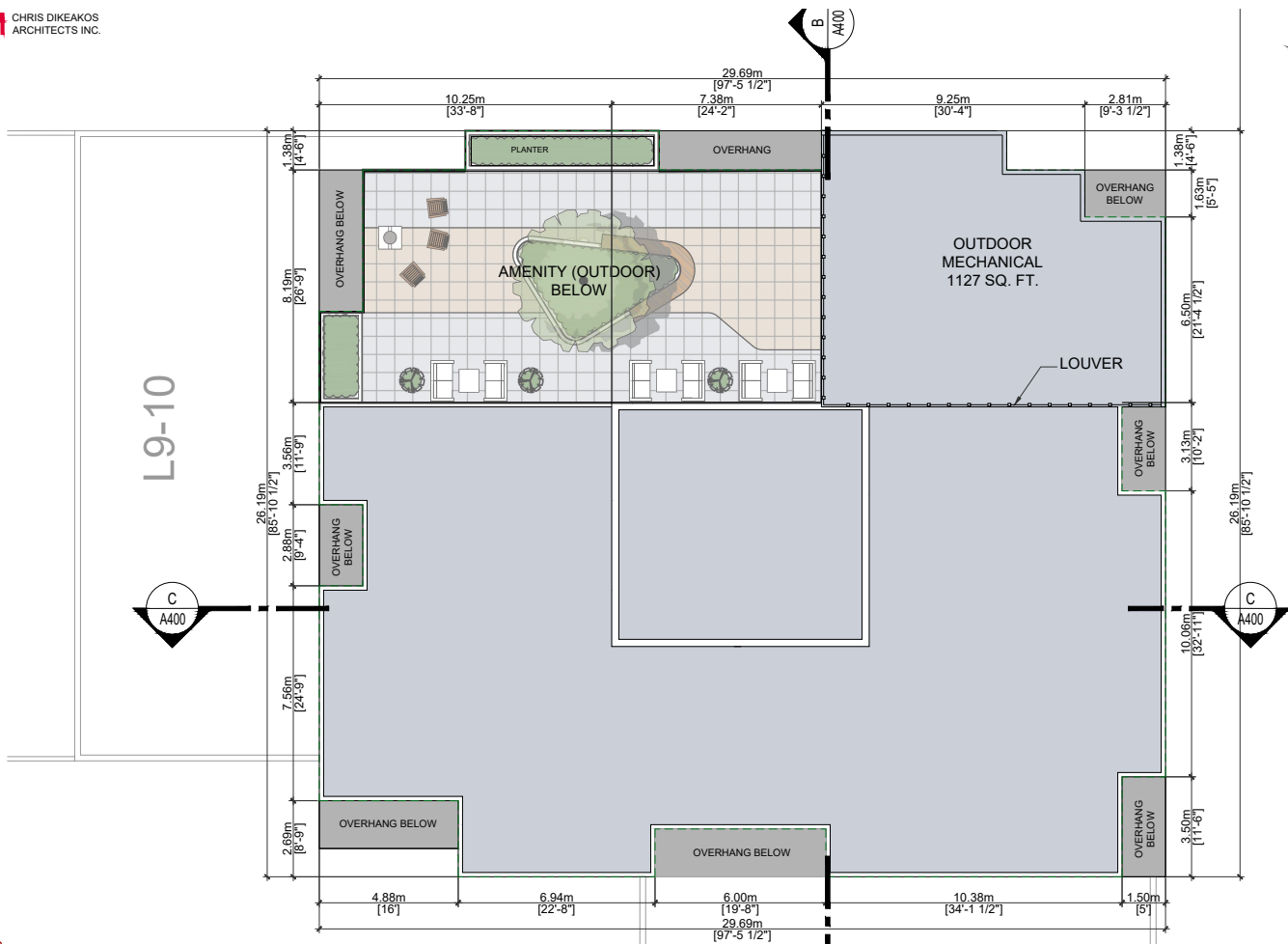


TOWER 3
LEVEL 1 FLOOR PLAN
 SUBMISSION TO COUNCIL January 29, 2024





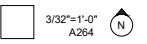
L9-10



**TOWER 3
ROOF PLAN**

SUBMISSION TO COUNCIL January 29, 2024

11515 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT





MATERIAL LEGEND

- 1 ALUMINUM WINDOW WALL FRAME: GUARDRAIL
Profile: Color:to ANSA 2005, Insulation: Youn Mountain Grey
- 2 ALUMINUM CURTAIN WALL FRAME
Profile: Color:to ANSA 2005, Insulation: Youn Mountain Grey
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit
Application: 30" Clear Glass Argon-Clear Glass with Guardrail (R)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit
Application: 30" Clear Glass Argon-Clear Glass with AGSG Guardrail (R)
- 5 SPANDREL GLASS
Color: Clear ANSA 2005, Insulation: Grey - 1/2" Clear (R)
None
- 6 NATURAL STONE
RANDOM COURSED ASPHAL LIME/STONE
- 7 ARCHITECTURAL FINISH PAINT
Color:to Match Temporary Scheme 210-41 White (White)
- 8 ALUMINUM PANEL
Finish: Matte-Galvalume, Fluoropolymer Coating, Color: BR0210
- 9 CONCRETE
WHITE/GRAY CONCRETE
- 10 ALUMINUM METAL PANEL & SOFFIT
Aluminum Metal Panel - Silver White - 1430000
- 11 CANOPY SUPPORTS
Material: Matte-Galvalume, Fluoropolymer Coating, Color: ANSA 2005, Insulation: Youn Mountain Grey, Temperature Class
- 12 ALUMINUM METAL FINIS
Material: Matte-Galvalume, Fluoropolymer Coating, Color: ANSA 2005, Insulation: Youn Mountain Grey
- 13 ALUMINUM SUNSHADE
Color:to Match Temporary Scheme 210-41 White (White), Insulation: Youn Mountain Grey

EAST ELEVATION
OVERALL BUILDING ELEVATIONS
 SUBMISSION TO COUNCIL January 29, 2024

MATERIAL LEGEND

- 1 ALUMINUM WINDOW WALL FRAME, GUARDRAIL:
Powder Coated to ANAMA 2005, Integrate 'Van Mourik Grey'
- 2 ALUMINUM CURTAIN WALL FRAME:
Powder Coated to ANAMA 2005, Integrate 'Van Mourik Grey'
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit:
Integrated IGU - Clear - Clear Argon Gas Core with Guardrail (IG)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit:
IGU - Clear Coated IGU - Clear Argon Gas Core with Guardrail (IG)
- 5 SPANDREL GLASS:
Clear - Clear IGU - Clear Argon Gas Core - Vetro Clear (IG)
- 6 NATURAL STONE:
RANDOM CHUNKED REGULAR LIMESTONE
- 7 ARCHITECTURAL FINISH PAINT:
Color 6 - Marsh Design's Signature 212-RS-R16-White Ceramic
- 8 ALUMINUM PANEL:
Aqua Nickel Coating, Fluoropolymer Coating Code MW010
- 9 CONCRETE:
NATURAL FINISH
- 10 ALUMINUM METAL PANEL & SOFFIT:
Aqua Coating - Stone #936 - 13A2000
- 11 CANOPY SUPPORTS:
Color to Marsh Design's Color to ANAMA 2005, Integrate 'Van Mourik Grey' - Anodized Clear
- 12 ALUMINUM METAL FIN:
Aqua Coating - Stone #936 - 13A2000
- 13 ALUMINUM SUNSHADE:
Color to Marsh Design's Color to ANAMA 2005, Integrate 'Van Mourik Grey'



WEST ELEVATION

OVERALL BUILDING ELEVATIONS

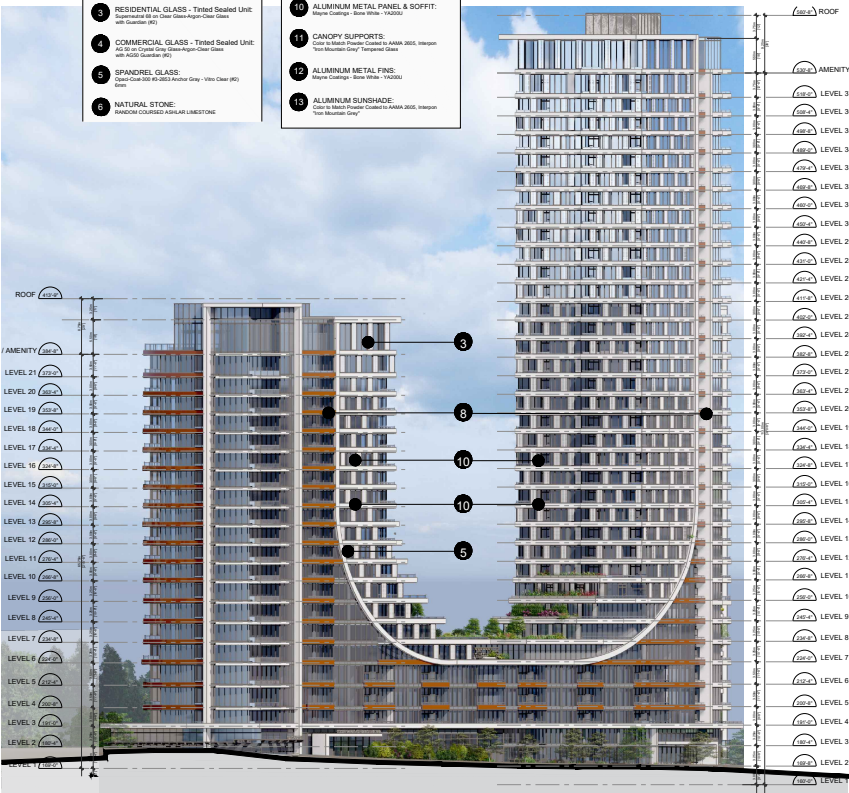
SUBMISSION TO COUNCIL January 29, 2024

MATERIAL LEGEND

- | | | | |
|----------|---|-----------|---|
| 1 | ALUMINUM WINDOW WALL FRAME, GLAZERIAL
Powder Coated to ANNA 2005, Integrip "Tom Mountain Grey" | 7 | ARCHITECTURAL FINISH PAINT:
Color to Match Surrounding Material (2000) White (Standard) |
| 2 | ALUMINUM CURTAIN WALL FRAME:
Powder Coated to ANNA 2005, Integrip "Tom Mountain Grey" | 8 | ALUMINUM PANEL:
Black Nickel (Ceruzzi), Electrolux Copper, Code 860210 |
| 3 | RESIDENTIAL GLASS - Tinted Sealed Unit:
Equivalent to 60 Series Clear Argon Clear Glass with Gasfiller (90) | 9 | CONCRETE:
S10000 (Ceruzzi) |
| 4 | COMMERCIAL GLASS - Tinted Sealed Unit:
60 Series Clear Argon Clear Glass with AGSS Gasfiller (90) | 10 | ALUMINUM METAL PANEL & SOFFIT:
S10000 (Ceruzzi) |
| 5 | SPANDREL GLASS:
Clear/Color 200 (2005) Anodized Gray - Ultra Clear (90) Glass | 11 | CANOPY SUPPORTS:
Color to Match Surrounding Material (2000) White (Standard) |
| 6 | NATURAL STONE:
PANDORO COLOURED GRANITE LUMBERSTONE | 12 | ALUMINUM METAL FINIS:
Black Nickel (Ceruzzi), Electrolux Copper, Code 860210 |
| | | 13 | ALUMINUM SUNSHADE:
Color to Match Surrounding Material (2000) White (Standard) |



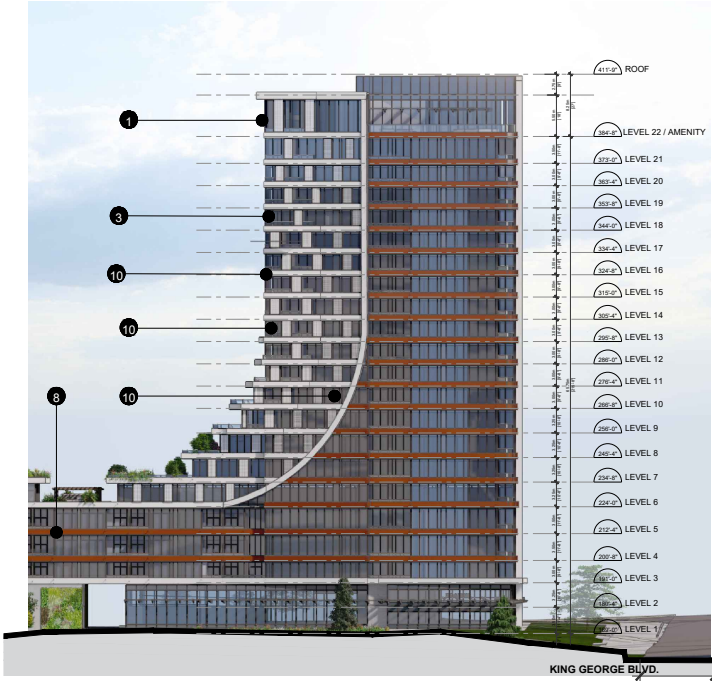
NORTH ELEVATION



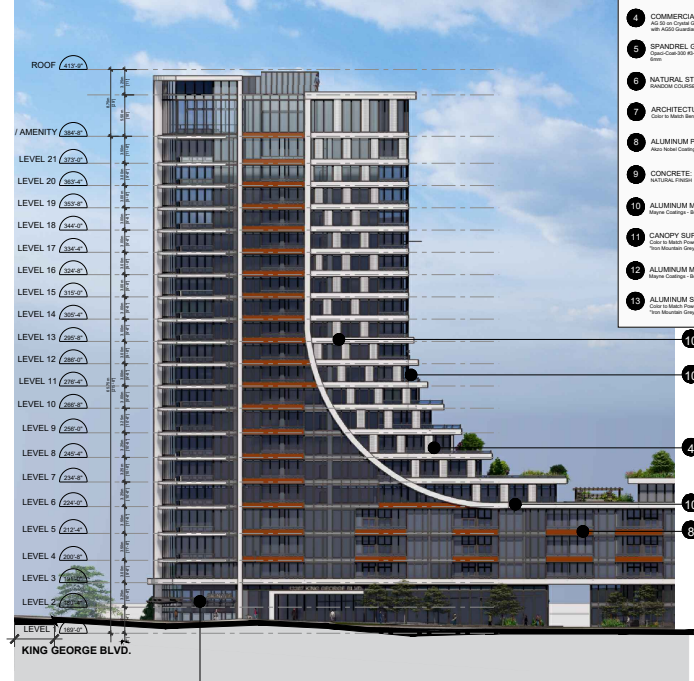
SOUTH ELEVATION

OVERALL BUILDING ELEVATIONS

SUBMISSION TO COUNCIL January 29, 2024



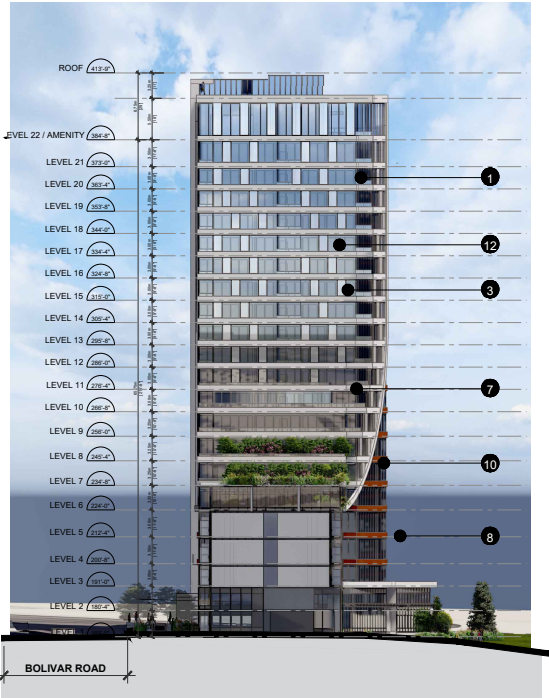
EAST ELEVATION



WEST ELEVATION

MATERIAL LEGEND

- 1 ALUMINUM WINDOW WALL FRAME: GUARDRAIL: Powder Coated to ANAMA 2005, Integrate 'Van Mourik Grey'
- 2 ALUMINUM CURTAIN WALL FRAME: Powder Coated to ANAMA 2005, Integrate 'Van Mourik Grey'
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit: Argon/Fill Gas, Clear Glass, Silver Argon/Clear Glass with Guardrail (IG)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit: Argon/Fill Gas, Clear Glass, Silver Argon/Clear Glass with AIG20 Guardrail (IG)
- 5 SPANDREL GLASS: Clear, Clear Coat (CC) 1000 Exterior Grey - 100 Clear (CC)
- 6 NATURAL STONE: WINDOW COORDING: BURLINGTON LIMESTONE
- 7 ARCHITECTURAL FINISH PAINT: Color to Match Benjamin Moore 212-65 White Diamond
- 8 ALUMINUM PANEL: Axiom Nickel Coating, Fluoropolymer Coating Code 80010
- 9 CONCRETE: NATURAL FINISH
- 10 ALUMINUM METAL PANEL & SOFFIT: Marine Coating - Black R186 - 142000
- 11 CANOPY SUPPORTS: Color to Match Powder Coated to ANAMA 2005, Integrate 'Van Mourik Grey', Integrate Clear Glass
- 12 ALUMINUM METAL FIN: Marine Coating - Black R186 - 142000
- 13 ALUMINUM SUNSHADE: Color to Match Powder Coated to ANAMA 2005, Integrate 'Van Mourik Grey'



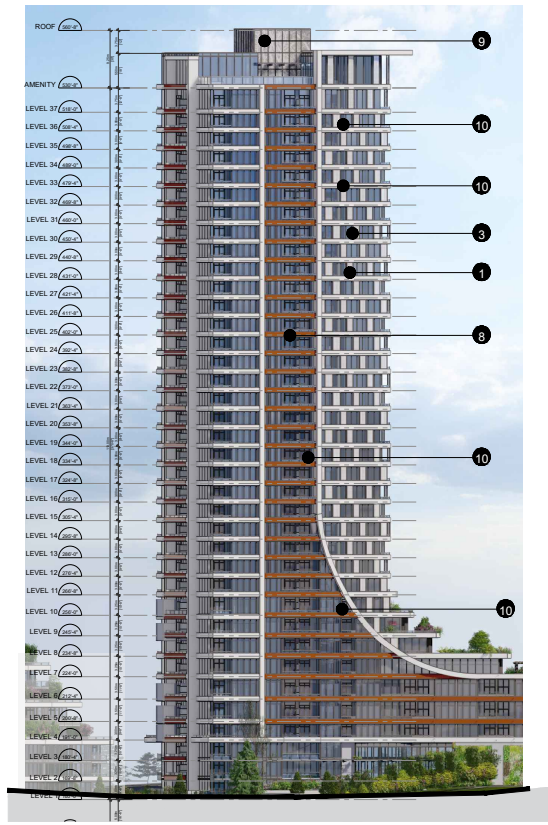
NORTH EAST ELEVATION



SOUTH WEST ELEVATION

MATERIAL LEGEND

- 1 ALUMINUM WINDOW WALL FRAME
GUARDRAIL:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray
- 2 ALUMINUM CURTAIN WALL FRAME:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit
Commercial, 80% U-Value, Insepan, True Mountain Gray
- 4 COMMERCIAL GLASS - Tinted Sealed Unit
Commercial, 80% U-Value, Insepan, True Mountain Gray
- 5 SPANDREL GLASS:
Color: Color to ANA3 J05, Insepan, True Mountain Gray
- 6 NATURAL STONE:
FINISH: COLOR TO ANA3 J05, Insepan, True Mountain Gray
- 7 ARCHITECTURAL FINISH PAINT:
Color to ANA3 J05, Insepan, True Mountain Gray
- 8 ALUMINUM PANEL:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray
- 9 CONCRETE:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray
- 10 ALUMINUM METAL PANEL & SOFFIT:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray
- 11 CANOPY SUPPORTS:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray
- 12 ALUMINUM METAL FINS:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray
- 13 ALUMINUM SUNSHADE:
Finish: Color to ANA3 J05, Insepan, True Mountain Gray



EAST ELEVATION



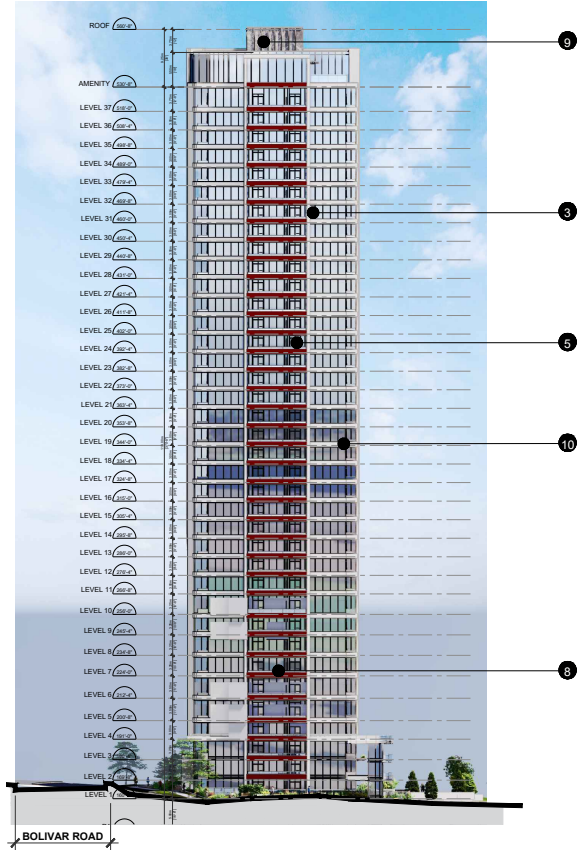
WEST ELEVATION

MATERIAL LEGEND

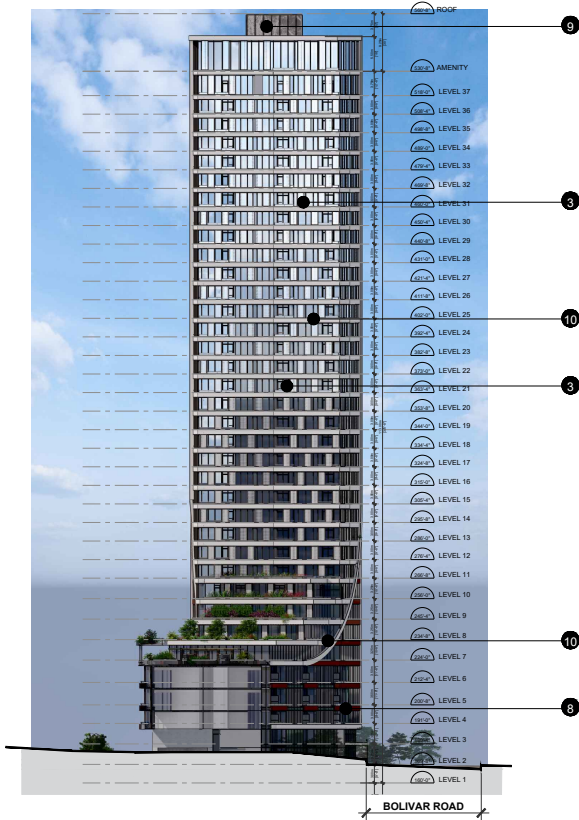
- 1 ALUMINUM WINDOW WALL FRAME: GLAZERCAAL - Powder Coated in ANNA 2005, Interpol 'Van Mountain Gray'
- 2 ALUMINUM CURTAIN WALL FRAME: Powder Coated in ANNA 2005, Interpol 'Van Mountain Gray'
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit: Supermax 68 at Clear Silver Argon-Clear Glass with Sunscreen (S)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit: AIG 50 at Clear Silver Argon-Clear Glass with Sunscreen (S)
- 5 SPANDREL GLASS: Clear Coat 300 #9-2803 Anchor Gray - Very Clear (K) (S)
- 6 NATURAL STONE: RANDOM COURSED ADLARS Limestone
- 7 ARCHITECTURAL FINISH PAINT: Color to Match Benjamin Moore 2121-601 White Diamond
- 8 ALUMINUM PANEL: Anco Panel Coatings, Fluorinac Coating Code M901G
- 9 CONCRETE: NATURAL FINISH
- 10 ALUMINUM METAL PANEL & SOFFIT: Mayne Coatings - Stone White - 'VAG000'
- 11 CANOPY SUPPORTS: Color to Match Powder Coated in ANNA 2005, Interpol 'Van Mountain Gray' Temporal Glass
- 12 ALUMINUM METAL FINIS: Mayne Coatings - Stone White - 'VAG000'
- 13 ALUMINUM SUNSHADE: Color to Match Powder Coated in ANNA 2005, Interpol 'Van Mountain Gray'

TOWER 2 - TRUE ELEVATIONS

SUBMISSION TO COUNCIL January 29, 2024



NORTH EAST ELEVATION



SOUTH WEST ELEVATION

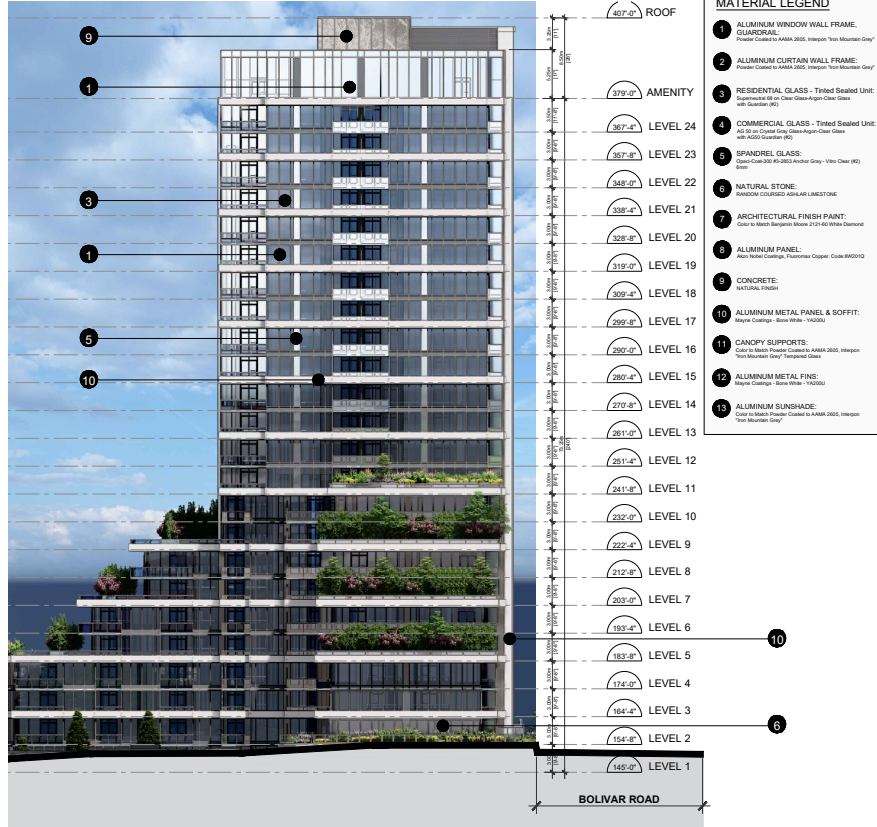
MATERIAL LEGEND	
1	ALUMINUM WINDOW WALL FRAME, GUARDRAIL: Powder Coated to ANA-305, Integrate 'Van-Monument Grey'
2	ALUMINUM CURTAIN WALL FRAME: Powder Coated to ANA-305, Integrate 'Van-Monument Grey'
3	RESIDENTIAL GLASS - Tinted Sealed Unit: Integrated IGU - Clear, Silver Mirror Clear Glass with Gas-Fill (IG) with Gas-Fill (IG)
4	COMMERCIAL GLASS - Tinted Sealed Unit: IGU - Silver Mirror Clear Glass, Silver Mirror Clear Glass with Gas-Fill (IG)
5	SPANDREL GLASS: Clear, Clear IGU - Silver Mirror Clear Glass - Silver Mirror Clear (IG) Clear
6	NATURAL STONE: RANDOM COLOURED BLENDED LIMESTONE
7	ARCHITECTURAL FINISH PAINT: Color to Match Benjamin Moore 212-65 White Diamond
8	ALUMINUM PANEL: Aqua Nickel Coating, Fluoropolymer Coating Code 80010
9	CONCRETE: NATURAL FINISH
10	ALUMINUM METAL PANEL & SOFFIT: Mayra Coating - Black R186 - 132000
11	CANOPY SUPPORTS: Color to Match Powder Coated to ANA-305, Integrate 'Van-Monument Grey' - Integrated Glass
12	ALUMINUM METAL FIN: Mayra Coating - Black R186 - 132000
13	ALUMINUM SUNSHADE: Color to Match Powder Coated to ANA-305, Integrate 'Van-Monument Grey'

TOWER 2 - TRUE ELEVATIONS

SUBMISSION TO COUNCIL January 29, 2024



WEST ELEVATION



SOUTH ELEVATION

TOWER 3 - TRUE ELEVATIONS

SUBMISSION TO COUNCIL January 29, 2024



EAST ELEVATION

112 AVENUE



NORTH ELEVATION

BOLIVAR ROAD

MATERIAL LEGEND

- 1 ALUMINUM WINDOW WALL FRAME: GUARDRAIL: Powder Coated to Anodized 2002, Integrate "Van-Monmouth Grey"
- 2 ALUMINUM CURTAIN WALL FRAME: Powder Coated to Anodized 2002, Integrate "Van-Monmouth Grey"
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit: Integrated 3.0" IGU - Clear, Clear Argon Gas, Clear with Clearcoat (SC)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit: IGU - 3.0" Clear IGU - Clear, Clear Argon Gas, Clear with Clearcoat (SC)
- 5 SPANDREL GLASS: Clear, Clear IGU - 3.0" Clear IGU - Clear Argon Gas
- 6 NATURAL STONE: SPANDREL COORDINATED: BELLARINI LESTONE
- 7 ARCHITECTURAL FINISH PAINT: Color to Match Samples Below 221-65 White Denavon
- 8 ALUMINUM PANEL: Alexx Nickel Cladding, Fluoropolymer Coating Code M0010
- 9 CONCRETE: NATURAL FINISH
- 10 ALUMINUM METAL PANEL: SETOFF: Mayne Coatings - Base #336 - 1A2020
- 11 CANOPY SUPPORTS: Color to Match Samples Below to Anodized 2002, Integrate "Van-Monmouth Grey", Integrate "Clear"
- 12 ALUMINUM METAL FINS: Mayne Coatings - Base #336 - 1A2020
- 13 ALUMINUM SUNSHADE: Color to Match Samples Below to Anodized 2002, Integrate "Van-Monmouth Grey"

TOWER 3 - TRUE ELEVATIONS

SUBMISSION TO COUNCIL January 29, 2024



AERIAL VIEW FACING WEST

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



A500



VIEW FACING WEST FROM BOLIVAR ROAD

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



A501



VIEW FACING SOUTH EAST FROM 112 AVE.





AERIAL VIEW FACING EAST

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



A503



VIEW FACING NORTH EAST FROM KING GEORGE BLVD.
SUBMISSION TO COUNCIL January 29, 2024





VIEW FACING NORTH FROM KING GEORGE BLVD.





AERIAL VIEW FFACING NORTH WEST

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



A506



VIEW FACING NORTH FROM CORNER OF KING GEORGE BLVD. AND BOLIVAR RD.





VIEW FACING WEST

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



A508



VIEW FACING SOUTH EAST FROM 112 AVE.





VIEW FACING SOUTH EAST

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT



A510



VIEW FROM KING GEORGE BLVD. FACING EAST

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT





VIEW FROM CORNER OF KING GEORGE BLVD. & BOLIVAR STREET FACING NORTH WEST





VIEW FACING WEST FROM THE CORNER JUNCTION OF BOLIVAR ROAD AND 111 AVE.





VIEW FACING SOUTH WEST FROM THE CORNER OF BOLIVAR ROAD & 112 AVENUE





VIEW FROM CREEKSIDE OUTDOOR PLAZA

SUBMISSION TO COUNCIL January 29, 2024

11151 BOLIVAR ROAD & 13340 112 AVENUE, SURREY - RESIDENTIAL DEVELOPMENT





VIEW FACING SOUTH WEST FROM THE CORNER JUNCTION OF BOLIVAR ROAD AND 111 AVE.





VIEW FACING NORTH WEST FROM THE CORNER JUNCTION AT KING GEORGE BLVD. AND BOLIVAR RD.





VIEW FACING SOUTH WEST FROM THE CORNER JUNCTION OF BOLIVAR ROAD AND 112 AVE.





VIEW FACING SOUTH WEST FROM BOLIVAR ROAD





VIEW FACING WEST FROM BOLIVAR ROAD





VIEW FACING EAST FROM BOLIVAR CREEK



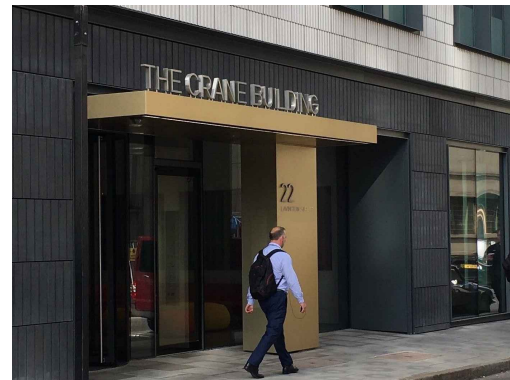


VIEW FACING SOUTH EAST FROM 112 AVENUE





16" MAX LETTER HEIGHT ← [SIGNAGE] → 1/2" - 2" THICK CHANNEL LETTERS WITHOUT BACKLIGHTING



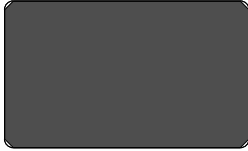
SIGNAGE CONCEPT

SUBMISSION TO COUNCIL January 29, 2024

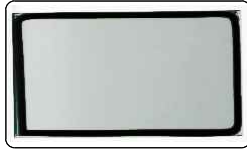


MATERIAL LEGEND

- 1 ALUMINUM WINDOW WALL FRAME:
Guardrail - Powder Coated to AAMA 3005, Integron 'Text Mountain Gray'
- 2 ALUMINUM CURTAIN WALL FRAME:
Powder Coated to AAMA 3005, Integron 'Text Mountain Gray'
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit:
Superwhite 66 In Clear Glass Argon-Clear Glass
(60 Squares ft)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit:
XG 30 In Clear Glass Argon-Clear Glass
(60 Squares ft)
- 5 SPANDREL GLASS:
Clear Clear 300 F0-263 Anchor Gray - Vero Clear (60)
Glass
- 6 PERFORATED METAL:
SINKING COASTINGS - Light Gray
- 7 ARCHITECTURAL FINISH PAINT:
Color is Match Bergamo Misure 2121-60 White Diamond
- 8 ALUMINUM PANEL:
Alcoa Millad Coatings, Fluorocure Copper - Code RW201Q
- 9 ALUMINUM PANEL:
Color is Match Powder Coated to AAMA 3005, Integron
Black - Clearcoat
- 10 ALUMINUM METAL PANEL & SOFFIT:
Wayne Coatings - Bone White - YK2001
- 11 CANOPY SUPPORTS:
Color is Match Design Coated to AAMA 3005, Integron
Text Mountain Gray - Tinted Clear Glass
- 12 ALUMINUM METAL FINS:
Wayne Coatings - Bone White - YK2001



1 2 11



3



8



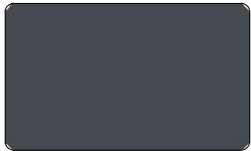
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6



7



9



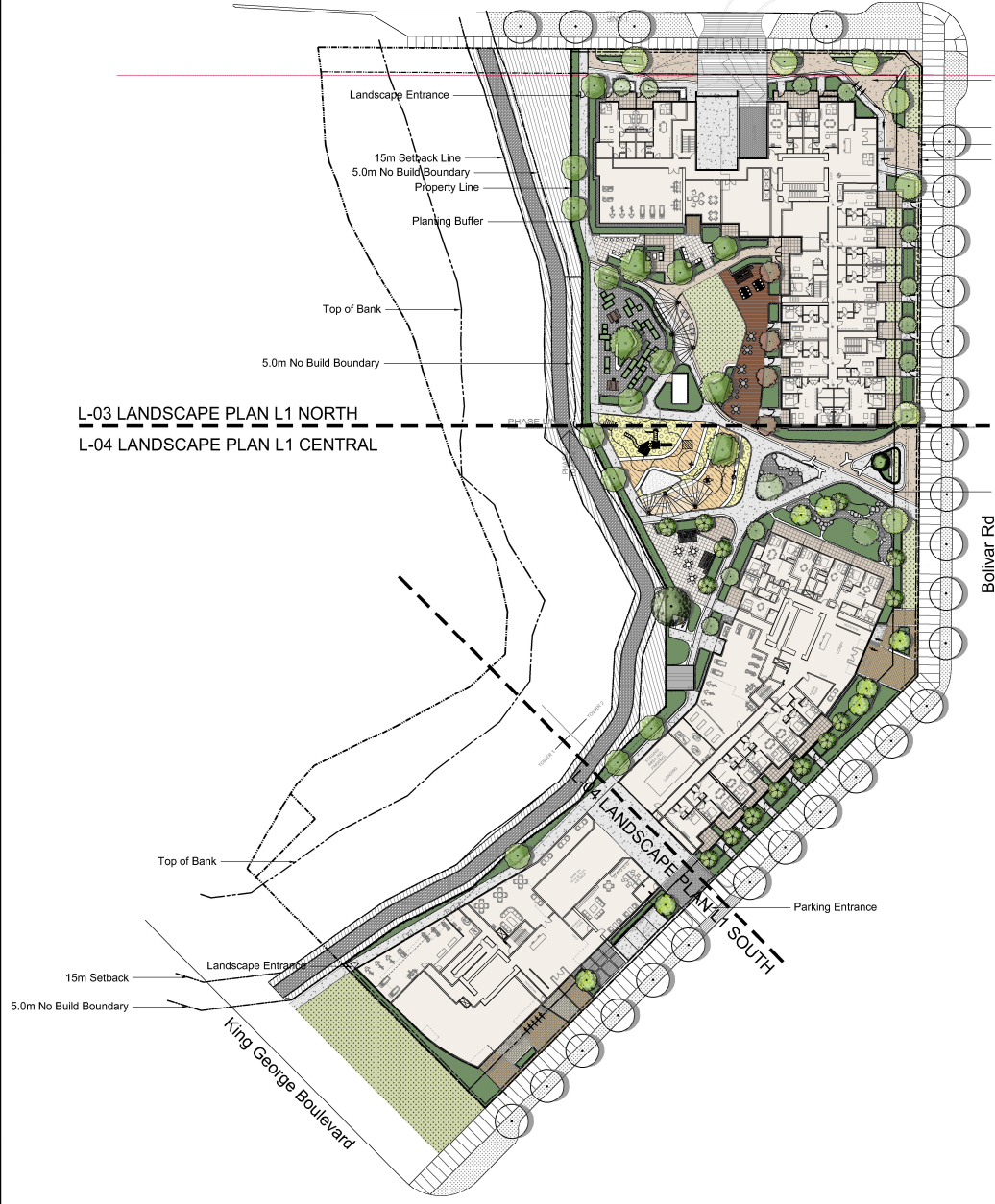
10 12



MATERIAL BOARD



112 Ave



LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	5.6,7 LD-01	CONCRETE SIDEWALK
	6 LD-02	DRIP STRIP
	4 LD-04	HYDRAPRESSED SLAB Size: 610mm x 610mm x 50mm Pattern: Stone Stone Colour: Natural, Charcoal Manufacturer: Belgard paver
	1,2 LD-02	CONCRETE UNIT PAVING Type: Classic Cobble Size: 304mm x 151mm x 80mm Colour: Tan, Charcoal Manufacturer: Belgard paver
	5 LD-01	CONCRETE PAVING
	3 LD-05	PLANTING POT
	6 LD-04	BENCH Model #: 870 Backed Bench Side Arm Colour: Powder Coated Silver 14 with Top Wood Manufacturer: Magin
	5 LD-04	FEATURE SEATING Model: Fiberglass Pebble - F30, F40 Colour: White, Granite Manufacturer: EIS Product
	3,4 LD-01	SHRUB PLANTING
		GROUND COVER PLANTING
	5 LD-02	SEAT WALL
	2 LD-04	TABLE AND CHAIRS Model: 800 Cluster Seating Material: powder coated silver 14 with PE Supplier: Magin
	1 LD-04	LOUNGING SEATING Manufacturer: Tuscadero Model: Nexus M7103/M77004 M770382

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 www.vdz.ca 604-882-0024

L-03 LANDSCAPE PLAN L1 NORTH
 L-04 LANDSCAPE PLAN L1 CENTRAL

Precedent images:



No.	By:	Description	Date
3	PC	Reissued for Council	2024-01-29
2	PC	Reissued for Reasoning / DP	2023-11-29
1	PC	Issued for Reasoning / DP	2023-07-19

REVISIONS TABLE FOR DRAWINGS
 * Changes required, not already on sheets in the project of VDZ+A and may not be reproduced or used on other projects without permission.

No.	By:	Description	Date
REVISIONS TABLE FOR SHEET			

Project:
 Bolivar Mixed-Use Development

Location:
 11151 Bolivar Road, 13340 112th Ave &
 13307 King George Boulevard,
 Surrey, BC

Drawn: X	Stamp:
Checked: PC	
Approved: MVDZ	
Scale: 1:150	Original Sheet Size: 24"x36"



Z:\PROJECTS\DEVELOPMENT PERMIT\ACTIVITY\DP\2023-24\BOLIVAR MIXED-USE TOWER01_02\BOLIVAR MIXED-USE TOWER01_02\LANDSCAPE PLAN L1_2403

Drawing Title: OVERALL SITE PLAN
 Drawing #: L-02
 DP2023-24

Drawing Title: OVERALL SITE PLAN



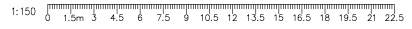
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LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	5.6.7 LD-01	CONCRETE SIDEWALK
	6 LD-02	DRIP STRIP
	4 LD-04	HYDRAPRESSED SLAB Size: 40mm x 40mm x 200mm Pattern: Black Block Colour: Natural, Charcoal Manufacturer: Belgard paver
	1.2 LD-02	CONCRETE UNIT PAVING Type: Classic Cobble Size: 30mm X 15mm X 80mm Colour: Tan, Charcoal Manufacturer: Belgard paver
	5 LD-01	CONCRETE PAVING
	3 LD-05	PLANTING POT
	6 LD-04	BENCH Model: 870 Backed Birch Side Arm Colour: Powder Coated Silver 14 with Top Wood Manufacturer: Magin
	5 LD-04	FEATURE SEATING Model: Fiberglass Puddle F30, F40 Colour: White, Granite Manufacturer: EIS Product
	3.4 LD-01	SHRUB PLANTING
		GROUND COVER PLANTING
	5 LD-02	SEAT WALL
	2 LD-04	TABLE AND CHAIRS Model: 600 Cluster Seating Material: powder coated silver 14 with PPE Supplier: Magin
	1 LD-04	LOUNGING SEATING Manufacturer: Tuscotti Model: Nexus M77003 M77004 M7700502



L-04 LANDSCAPE PLAN L1 CENTRAL



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www.vdz.ca 604-882-0024

No.	By:	Description	Date
3	PC	Revised for Council	2024-01-29
2	PC	Revised for Reasoning / DP	2023-11-29
1	PC	Issued for Reasoning / DP	2023-07-19

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No.	By:	Description	Date
REVISIONS TABLE FOR SHEET			

Project:
Bolivar Mixed-Use Development

Location:
11151 Bolivar Road, 13340 112th Ave &
13307 King George Boulevard,
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Drawn:
X

Checked:
PC

Approved:
MVDZ

Stamp:
Original Sheet Size:
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Scale:
1:150

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Drawing Title: LANDSCAPE PLAN L1 NORTH
 Drawing #: L-03A
 DP2023-24

Z:\PROJECTS\DEVELOPMENT PERMIT\ACTIVITY\DP2023-24\BOLIVAR MIXED-USE TOWER, DWG\DWG\LANDSCAPE PLAN L1 2403

L-03 LANDSCAPE PLAN L1 NORTH



LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	5,6,7 LD-01	CONCRETE SIDEWALK
	8 LD-02	DRIP STRIP
	1 LD-04	HYDRAPRESSED SLAB Size: 4'0" x 6'0" x 4'0" x 12" x 12" Pattern: Black Stone Colour: Natural, Charcoal Manufacturer: Belgard paver
	1,2 LD-02	CONCRETE UNIT PAVING Type: Classic California Size: 300mm x 150mm x 10mm Colour: Tan, Charcoal Manufacturer: Belgard paver
	5 LD-01	CONCRETE PAVING
	3 LD-03	PLANTING POT
	6 LD-04	BENCH Model #: 810 Backed Bench Side Arm Colour: Powder Coated Silver 14 with top Wood Manufacturer: Magi
	5 LD-04	FEATURE SEATING Model: Fiberglass Puddle - F30, F40 Colour: White, Granite Manufacturer: ESE Product
	3,4 LD-01	SHRUB PLANTING
		GROUND COVER PLANTING
	5 LD-02	SEAT WALL
	2 LD-04	TABLE AND CHAIRS Model: 400 Cluster Seating Material: powder-coated silver 14 with PPE Supplier: Magi
	1 LD-04	LOUNGING SEATING Manufacturer: Trosscraft Model: Nexus M77003 M77004 M770335Q

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No.	By:	Description	Date
3	PC	Revised for Council	2024-01-29
2	PC	Revised for Reasoning / DP	2023-11-29
1	PC	Issued for Reasoning / DP	2023-07-19

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No.	By:	Description	Date
REVISIONS TABLE FOR SHEET			

Project:
Bolivar Mixed-Use Development

Location:
11151 Bolivar Road, 13340 112th Ave &
13307 King George Boulevard,
Surrey, BC

Drawn: GZ	Stamp:
Checked: PC	
Approved: MVLZ	Original Sheet Size: 24"x36"
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Z:\PROJECTS\DEVELOPMENT PERMIT\ACTIVITY\DP\2023-24\BOLIVAR MIXED-USE TOWER1, DWS\BUILTS\L03 LANDSCAPE PLAN L1.DWG

Drawing Title: LANDSCAPE PLAN L1 CENTRAL
 DP2023-24
 L-03B



LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	5, 6, 7 LD-01	CONCRETE SIDEWALK
	6 LD-02	DRIP STRIP
	4 LD-04	HYDRAPRESSED SLAB Size: 600mm x 600mm x 50mm Pattern: Slack Bond Colour: Natural, Charcoal Manufacturer: Belgard paver
	1, 2 LD-02	CONCRETE UNIT PAVING Type: Classic California Size: 300mm x 150mm x 80mm Colour: Tan, Charcoal Manufacturer: Belgard paver
	5 LD-01	CONCRETE PAVING
	3 LD-05	PLANTING POT
	6 LD-04	BENCH Model: 610 Size: 610mm x 610mm x 100mm Colour: Powder Coated Silver 14 with top flood Manufacturer: Magis
	6 LD-04	FEATURE SEATING Model: Energized People - F30, F40 Colour: White, Granite Manufacturer: ESS Product
	3, 4 LD-01	SHRUB PLANTING
		GROUND COVER PLANTING
	5 LD-02	SEAT WALL
	2 LD-04	TABLE AND CHAIRS Model: 600 Cluster Seating Material: powder coated silver 14 with iPE Supplier: Magis
	1 LD-04	LOUNGING SEATING Manufacturer: Teacup Model: Nexus M77003 M77004 M77005Q

No.	By:	Description	Date
3	PC	Revised for Council	2024-01-29
2	PC	Revised for Reasoning / DP	2023-11-29
1	PC	Issued for Reasoning / DP	2023-07-19

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No.	By:	Description	Date
REVISIONS TABLE FOR SHEET			

Project:
Bolivar Mixed-Use Development

Location:
11151 Bolivar Road, 13340 112th Ave & 13307 King George Boulevard, Surrey, BC

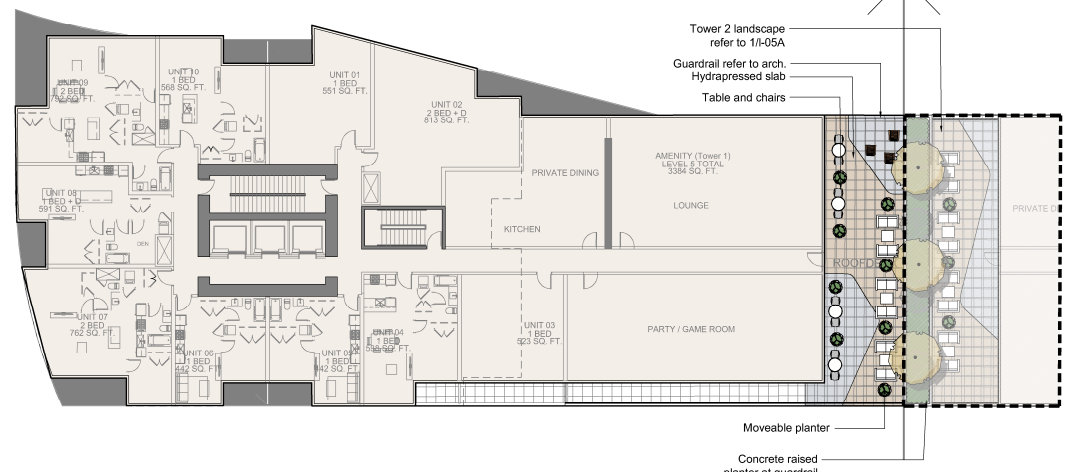
Drawn: GZ	Stamp:
Checked: PC	
Approved: MVLZ	Original Sheet Size: 24"x36"
Scale: 1:150	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT AND INDICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND NOT BE RETURNED AT THE CONVEYANCE OF THE WORK. ALL DIMENSIONS SHALL BE CONSTRUCTION UNLESS LABELLED OTHERWISE FOR FINISH CONSTRUCTION.



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Drawing #: L-03C
 DP2023-24
 Drawing Title: LANDSCAPE PLAN L1 SOUTH

TOWER 1



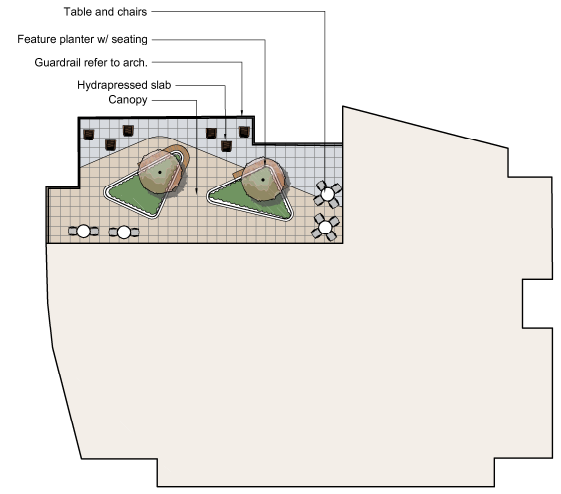
LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	7,8 LD-02	HYDRAPRESSED SLABS
		SHRUB PLANTING
		MOVEABLE PLANTER
		LOUNGE SEATING

PLANT SCHEDULE T2

TREES	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	Fagus sylvatica 'Dawycyk Gold' / European Beech	B&B, 6cm cal	2.5m ht	3

1 LANDSCAPE PLAN TOWER1- L6
Scale 1:150



2 LANDSCAPE PLAN TOWER1- L22
Scale 1:150

LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	7,8 LD-02	HYDRAPRESSED SLABS
		SHRUB PLANTING
		MOVEABLE PLANTER
		LOUNGE SEATING

PLANT SCHEDULE T1

TREES	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	Acer palmatum 'Seiryu' / Seiryu Japanese Maple	B&B, 6cm cal	2.5m ht	2

No.	By:	Description	Date
3	PC	Reissued for Council	2024-01-29
2	PC	Reissued for Reasoning / DP	2023-11-29
1	PC	Issued for Reasoning / DP	2023-07-19

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No.	By:	Description	Date

REVISIONS TABLE FOR SHEET

Project:
Boliver Mixed-Use Development

Location:
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Drawn: DZ	Stamp:
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Approved: MVLZ	
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2:\PROJECT\DEVELOPMENT\PERMIT\ACT\DP\2023-24\BOLIVER MIXED-USE TOWER1-04\LANDSCAPE PLAN\ASPECT\LEVEL 1\LANDSCAPE PLAN TOWER1- L6.DWG

Drawing Title: L-04 LANDSCAPE PLAN T1- L6&L22
 Drawing #: L-04
 DP2023-24

LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	7.8 LD-02	HYDRAPRESSED SLABS
		SHRUB PLANTING
		MOVEABLE PLANTER
		LOUNGE SEATINGS

PLANT SCHEDULE T2

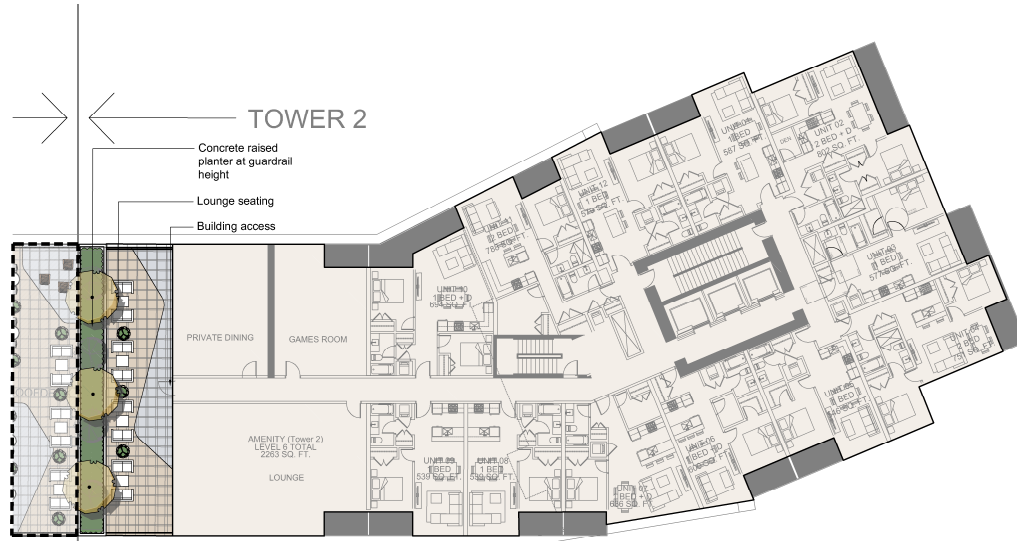
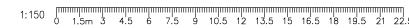
TREES	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	Fagus sylvatica 'Dawyck Gold' / European Beech	B&B, 6cm cal	2.5m H	3

LANDSCAPE LEGEND

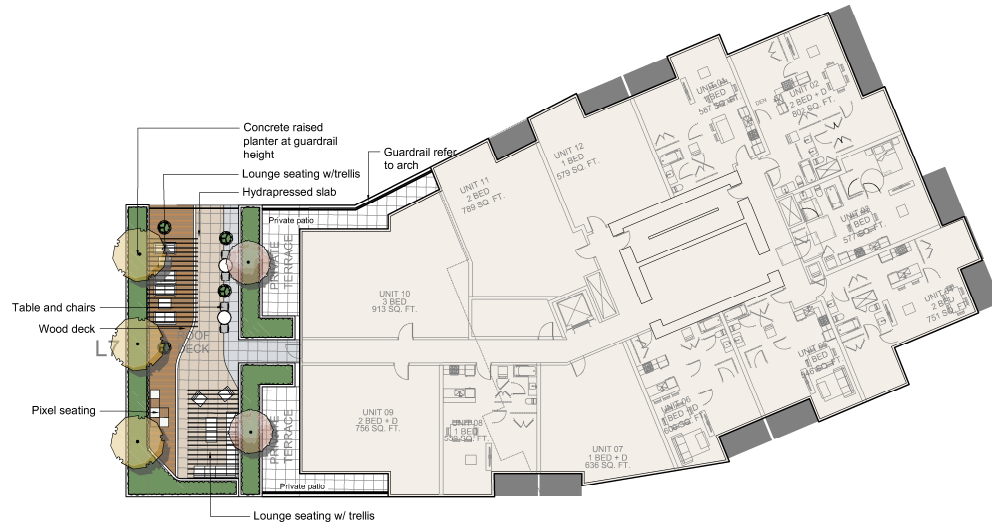
KEY	REF.	DESCRIPTION
	7.8 LD-02	HYDRAPRESSED SLABS
		SHRUB PLANTING
		MOVEABLE PLANTER
		LOUNGE SEATING

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	Acer palmatum 'Seiryu' / Seiryu Japanese Maple	B&B, 6cm cal	2.5m H	2
	Fagus sylvatica 'Dawyck Gold' / European Beech	B&B, 6cm cal	2.5m H	3



1 LANDSCAPE PLAN TOWER2- L6
 Scale 1:150



2 LANDSCAPE PLAN TOWER2- L7
 Scale 1:150

No.	By:	Description	Date
3	PC	Revised for Council	2024-01-29
2	PC	Issued for Reasoning / DP	2023-11-29
1	PC	Issued for Reasoning / DP	2023-07-19

REVISIONS TABLE FOR DRAWINGS

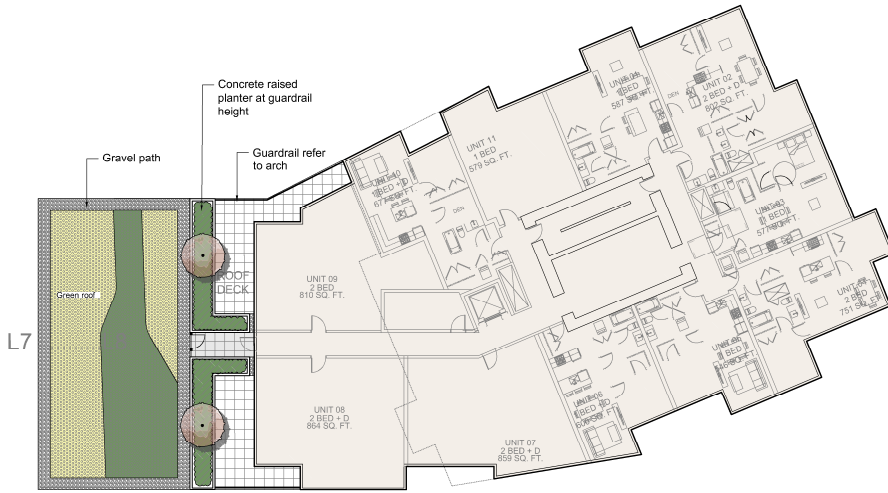
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Project:
 Bolivar Mixed-Use Development

Location:
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Approved: MVLZ	Original Sheet Size: 24"x36"
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Z:\PROJECTS\DEVELOPMENT PERMIT\ACT\DP2023-24\BOLIVAR MIXED-USE TOWER2_DWG\SHETS\L-05 LANDSCAPE PLAN UPPER LEVEL ALL TOWER2.DWG



LANDSCAPE LEGEND

KEY	REF.	DESCRIPTION
	7.8 LD-02	HYDRAPRESSED SLABS
		SHRUB PLANTING
		MOVEABLE PLANTER
		LOUNGE SEATING

PLANT SCHEDULE T2

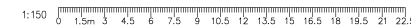
TREES	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	<i>Acer palmatum</i> 'Seiryu' / Seiryu Japanese Maple	B&B, 6cm cal	2.5m ht	2

LANDSCAPE LEGEND

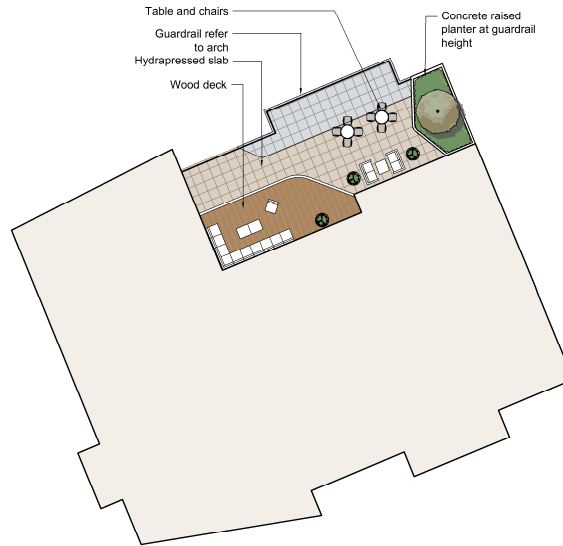
KEY	REF.	DESCRIPTION
	7.8 LD-02	HYDRAPRESSED SLABS
		SHRUB PLANTING
		MOVEABLE PLANTER
		LOUNGE SEATING

PLANT SCHEDULE T2

TREES	BOTANICAL / COMMON NAME	CONT	SIZE	QTY
	<i>Acer palmatum</i> 'Seiryu' / Seiryu Japanese Maple	B&B, 6cm cal	2.5m ht	1



1 LANDSCAPE PLAN TOWER2- L8
Scale 1:150



2 LANDSCAPE PLAN TOWER2- L37
Scale 1:150

NO.	BY:	DESCRIPTION	DATE
3	PC	Reissued for Council	2024-01-29
2	PC	Reissued for Rezoning / DP	2023-11-29
1	PC	Issued for Rezoning / DP	2023-07-19

REVISIONS TABLE FOR DRAWINGS
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NO.	BY:	DESCRIPTION	DATE

REVISIONS TABLE FOR SHEET

Project:
Bolivar Mixed-Use Development

Location:
11151 Bolivar Road, 13340 112th Ave & 13307 King George Boulevard, Surrey, BC

Drawn: DZ	Stamp:
Checked: PC	
Approved: MVLZ	
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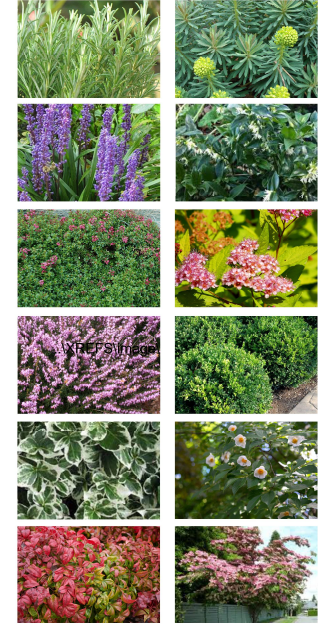
CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL RECORDS AND DRAWINGS MUST BE RETURNED TO THE CONSULTANT IMMEDIATELY UPON COMPLETION UNLESS OTHERWISE SPECIFIED FOR FUTURE CONSTRUCTION.



PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	GAL	SIZE	QTY
	Acer giseum / Paperbark Maple	8A8	6cm		9
	Acer palmatum / Japanese Maple	8A8	6cm cal		14
	Acer rubrum / Red Maple	8A8	6cm		4
	Cercidiphyllum japonicum / Katsura Tree	8A8	6cm		1
	Cornus kousa 'Autumn Rose' / Kousa Dogwood	8A8	6cm		13
	Fraxinus pennsylvanica 'Summit' / Summit Ash	8A8	6cm		7
	Magnolia kobus stellata 'Pink Star' / Pink Star Magnolia	8A8	6cm		1
	Parrotia persica 'JL Columnar' / Pencil Pine™ Parrotia	8A8	6cm		15
	Pinus contorta / Shore Pine	8A8		3.0m Ht.	2
	Styrax japonicus 'Pink Chimes' / Japanese Pink Snowbell Dwarf	8A8	6cm		6
STREET TREE	BOTANICAL / COMMON NAME	CONT	GAL	SIZE	QTY
	Street Tree	8A8	6cm cal		28

COLOUR PALETTE
Chartreuse | Pinks | Yellows



PLANT SCHEDULE

SHRUBS	BOTANICAL / COMMON NAME	CONT	#2
Ab	Abelia x grandiflora / Glossy Abelia		#2
Bu	Buxus microphylla 'Winter Gem' / Globe Winter Gem Boxwood		#2
Eg	Euonymus fortunei 'Emerald Gaiety' TM / Emerald Gaiety Euonymus		#2
B	Imperata cylindrica 'Rubra' / Japanese Blood Grass		#1
V	Lavandula angustifolia 'Hidcote' / Hidcote Lavender		#2
L	Liriope muscari 'Big Blue' / Big Blue Lilyturf		#1
N	Nandina domestica 'Fire Power' / Firepower Nandina		#2
K	Pennisetum orientale 'Karley Rose' / Karley Rose Fountain Grass		#1
P	Pinus mugo pumilio / Dwarf Mugo Pine		#2
Ro	Rosmarinus officinalis / Rosemary		#3
J	Skimmia japonica 'Rubella' / Skimmia		#3
S	Spiraea japonica 'Magic Carpet' / Magic Carpet Spirea		#2
Th	Taxus x media 'Hickii' / Hicok Yew		1.2m Ht.



Bird Friendly Tree Species

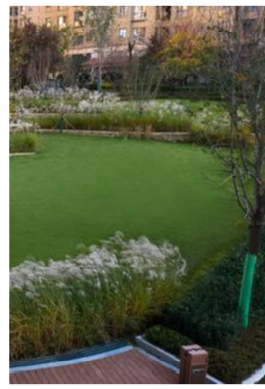
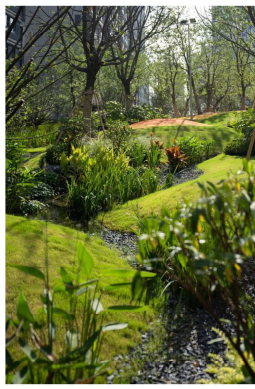


Low Maintenance



Seasonal color

PRECEDENT IMAGES



NO.	BY:	DESCRIPTION	DATE
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NO.	BY:	DESCRIPTION	DATE

REVISIONS TABLE FOR SHEET

NO.	BY:	DESCRIPTION	DATE

Project:
Bolivar Mixed-Use Development

Location:
11151 Rolivar Road, 13340 112th Ave & 13307 King George Boulevard, Surrey, BC

Drawn: DRAWN1
DRAWING

Stamp:

Checked: CHECKED

Approved: APPROVED

Original Sheet Size: 24"x36"

Scale: 1: _____

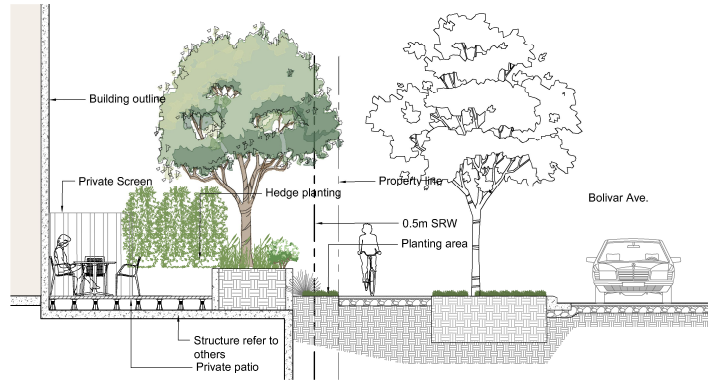
CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS MUST BE RETURNED TO THE CONSULTANT IMMEDIATELY FOR CONSTRUCTION UNLESS LABELLED USED FOR TRADE CONSTRUCTION.

Drawing Title:
PLANTING PALETTE

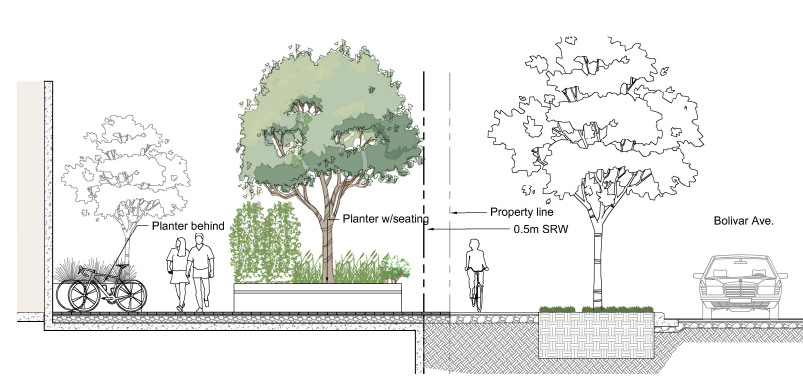


VDZ Project #:
DP2023-24

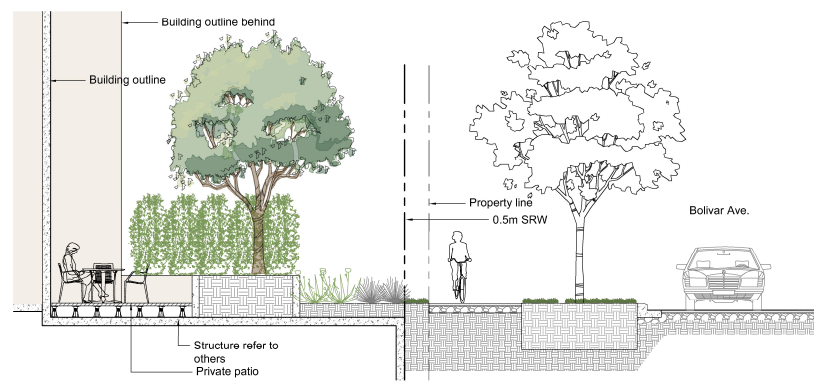
Drawing #:
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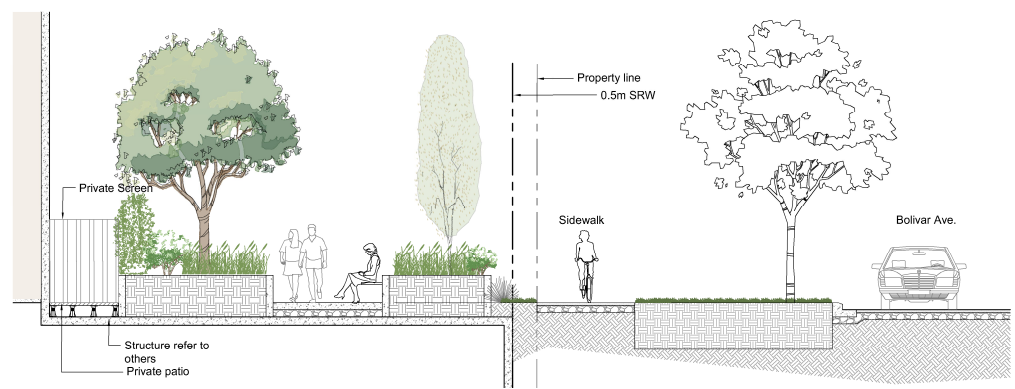
1 SECTION A - THROUGH BOLIVAR AVE.
 Scale 1:50



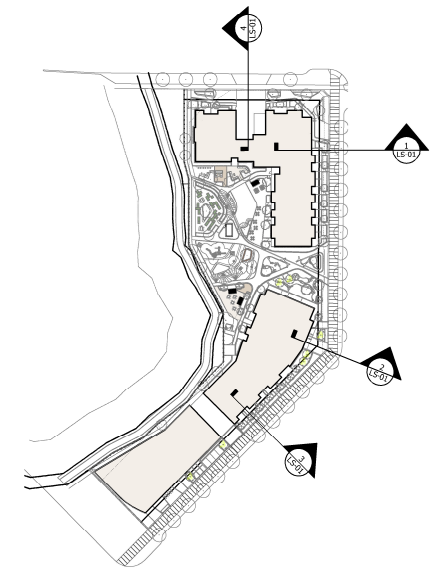
2 SECTION B - THROUGH BOLIVAR AVE.
 Scale 1:50



3 SECTION C - THROUGH BOLIVAR AVE.
 Scale 1:50



4 SECTION D - THROUGH 112 AVE.
 Scale 1:50



KEY MAP
 1:1000

No.	By:	Description	Date
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1	PC	Issued for Reasoning / DP	2023-07-19

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No.	By:	Description	Date
REVISIONS TABLE FOR SHEET			

Project:
 Bolivar Mixed-Use Development

Location:
 11151 Bolivar Road, 13340 112th Ave & 13307 King George Boulevard, Surrey, BC

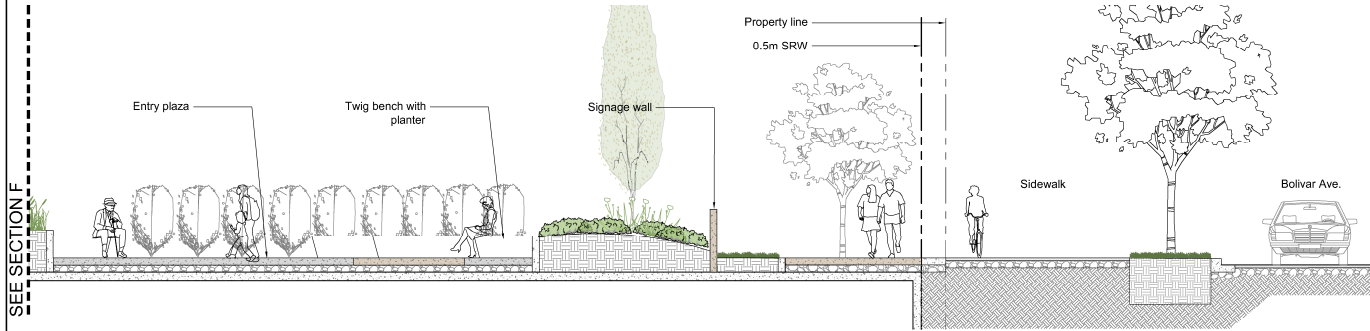
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Checked: PC	
Approved: MVLZ	
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SECTIONS

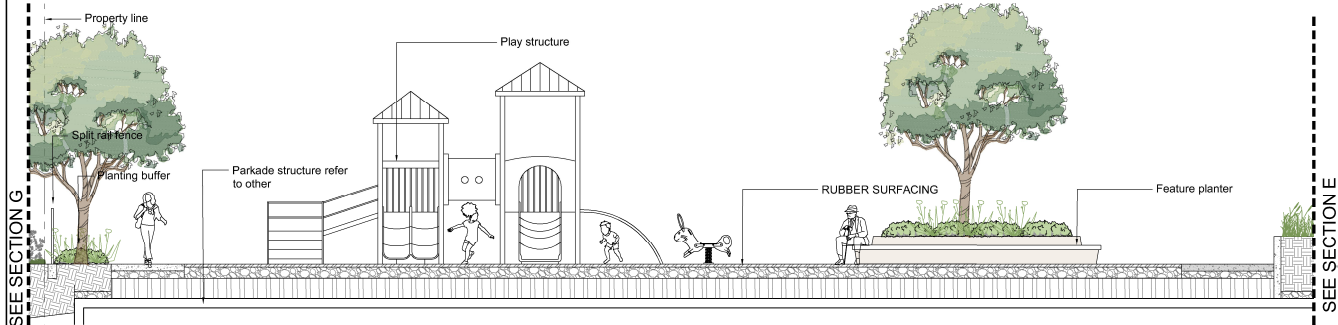


VDZ Project #:
DP2023-24

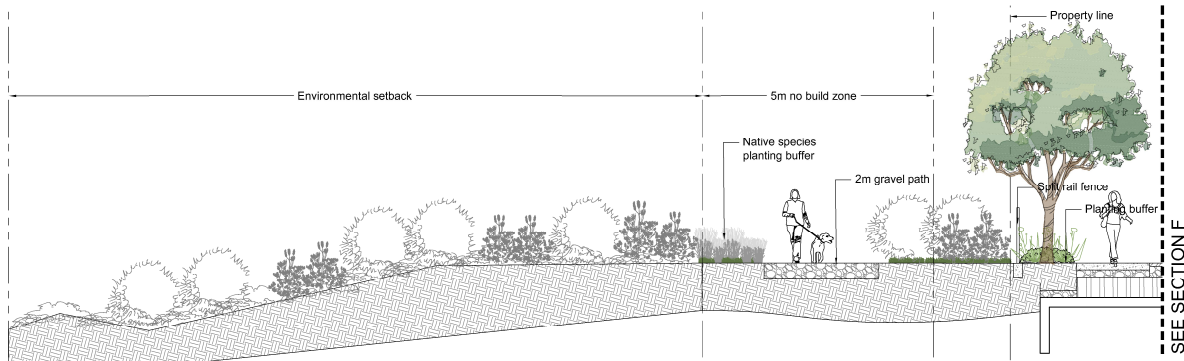
Drawing #:
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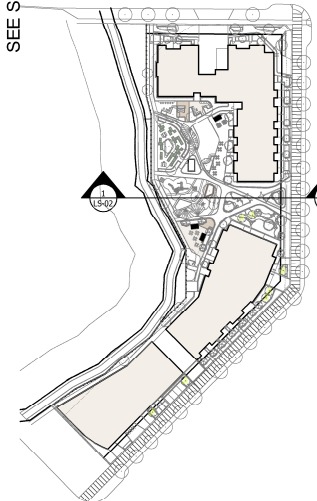
1 SECTION E
Scale 1:50



1 SECTION - F
Scale 1:50



1 SECTION G
Scale 1:50



KEY MAP
1:1000

No.	By:	Description	Date
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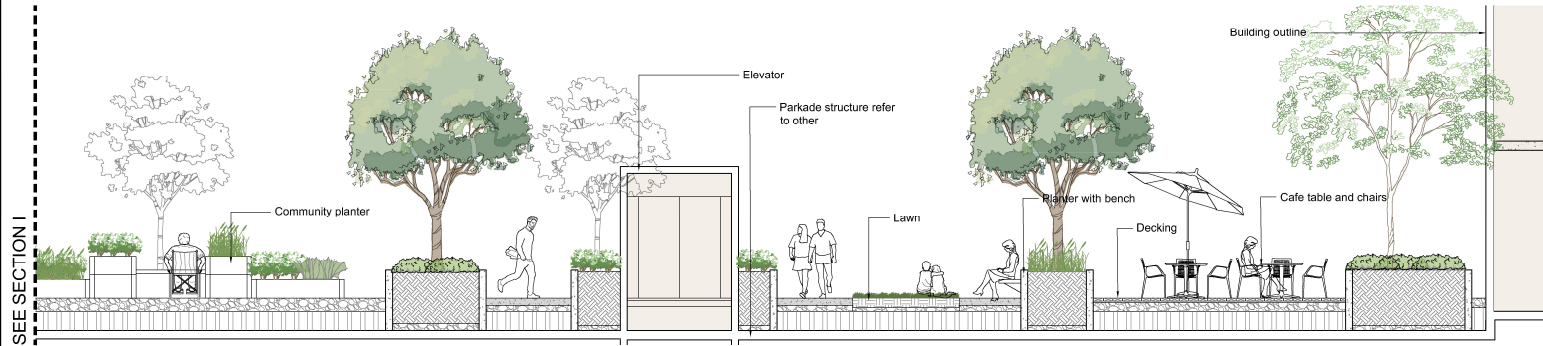
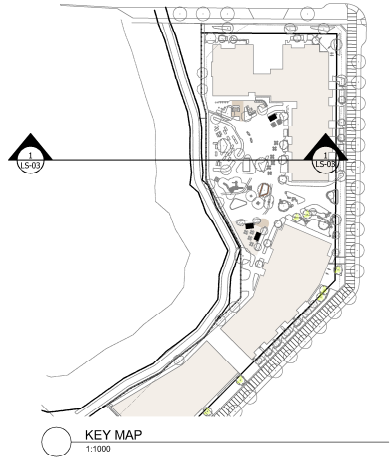
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Location:
11151 Bolivar Road, 13340 112th Ave &
13307 King George Boulevard,
Surrey, BC

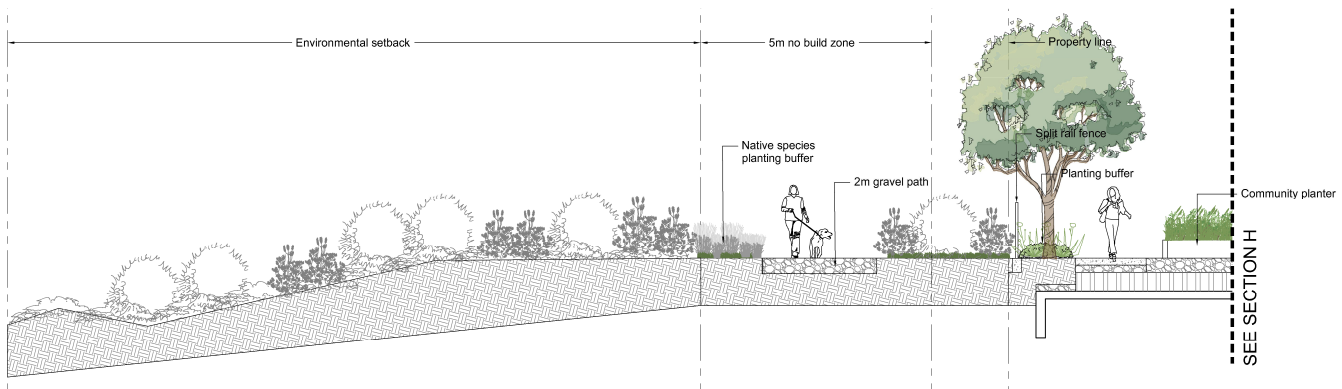
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Checked: PC	
Approved: MVLZ	
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Z:\PROJECTS\DEVELOPMENT PERMIT\ACT\DP2023-24\BOLIVAR MIXED-USE TOWER\DWG\SECTION\LS-02 SECTIONS.DWG



1 SECTION H
Scale 1:50



1 SECTION I
Scale 1:50

No.	By:	Description	Date
3	PC	Revised for Council	2024-01-29
2	PC	Revised for Reasoning / DP	2023-11-29
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REVISIONS TABLE FOR SHEET			

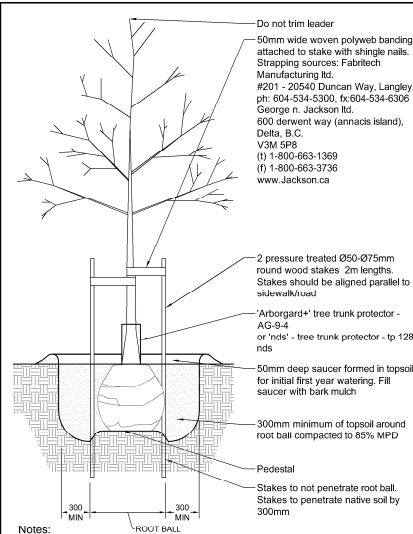
Project:
Bolivar Mixed-Use Development

Location:
11151 Bolivar Road, 13340 112th Ave &
13307 King George Boulevard,
Surrey, BC

Drawn: LD	Stamp:
Checked: PC	
Approved: MVLZ	
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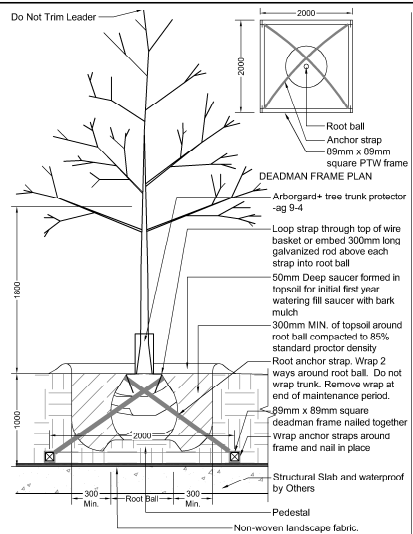
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 Drawing #: LS-03
 DP2023-24

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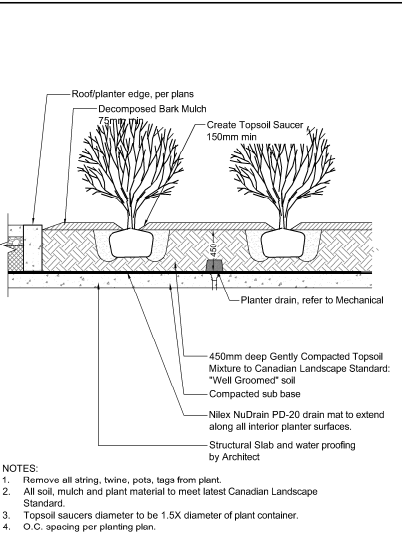
- NOTES:**
- Sacking/burlap to be loosened and dropped to the bottom of the planting hole. all string, twine, etc to be removed.
 - All wire baskets shall have the top 1/3 of the wire removed prior to planting.
 - All trees shall be single stem

1 TREE PLANTING
Scale 1:25



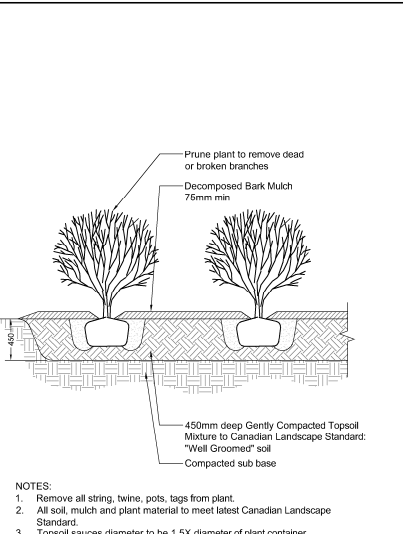
- NOTES:**
- Sacking/burlap to be loosened and dropped to the bottom of the planting hole. all string, twine, etc to be removed.
 - All wire baskets shall have the top 1/3 of the wire removed prior to planting.
 - All trees shall be single stem unless specified otherwise.
 - Refer to Mechanical for planter drain locations.

2 TREE PLANTING ON SLAB
Scale 1:25



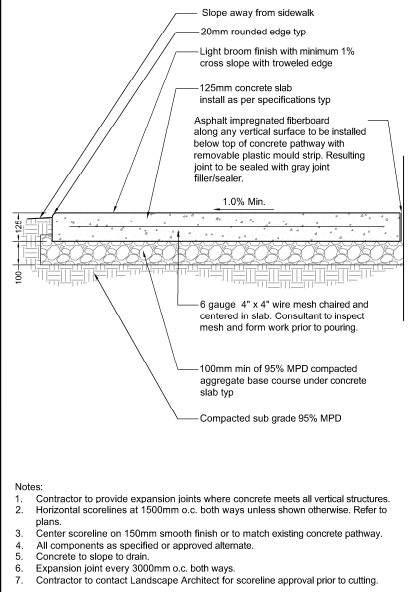
- NOTES:**
- Remove all string, twine, pots, tags from plant.
 - All soil, mulch and plant material to meet latest Canadian Landscape Standard.
 - Topsoil saucers diameter to be 1.5X diameter of plant container.
 - O.C. spacing per planter plan.

3 SHRUB ON SLAB
Scale 1:25

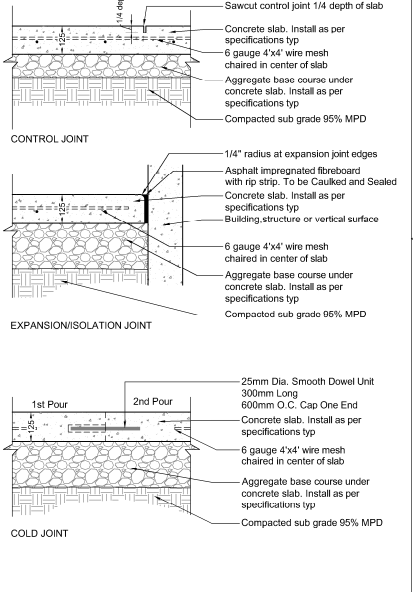


- NOTES:**
- Remove all string, twine, pots, tags from plant.
 - All soil, mulch and plant material to meet latest Canadian Landscape Standard.
 - Topsoil saucers diameter to be 1.5X diameter of plant container.
 - O.C. spacing per planter plan.

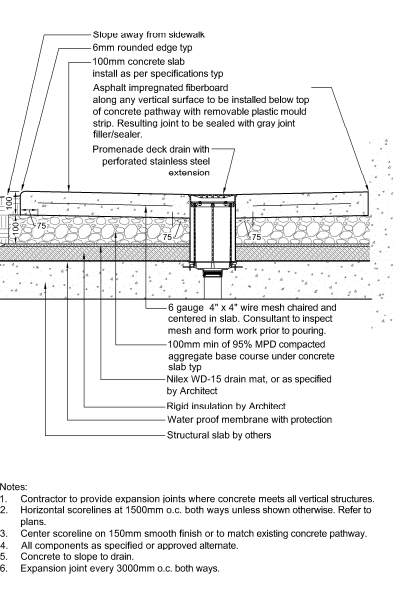
4 SHRUB PLANTING
Scale 1:25



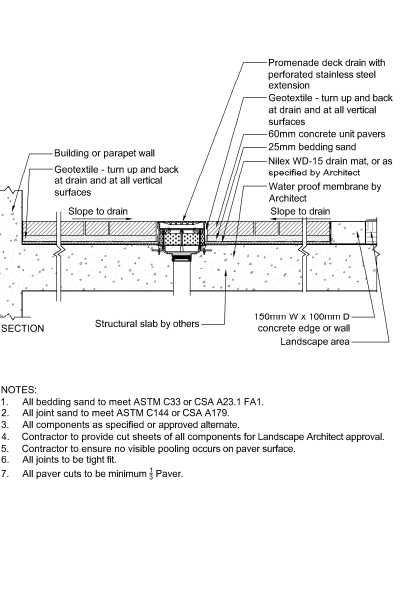
5 CONCRETE PAVING
Scale 1:10



6 CONCRETE JOINTS
Scale 1:10



7 CONCRETE ON SLAB
Scale 1:10



8 UNIT PAVER ON SLAB
Scale 1:10

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No.	By:	Description	Date
REVISIONS TABLE FOR SHEET			

Project:
Boliver Mixed-Use Development

Location:
11515 Rolivar Road, 13340 112th Ave & 13307 King George Boulevard, Surrey, BC

Drawn: DRAWN1 DRAWING	Stamp:
CHECKED	
Approved: APP/REV/ELU	Original Sheet Size: 24"x36"
AS SHOWN	CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL DIMENSIONS AND SPECIFICATIONS ON THESE DRAWINGS ARE UNLESS OTHERWISE SPECIFIED OR UNLESS OTHERWISE INDICATED BY THE CONTRACTOR'S NOTES.



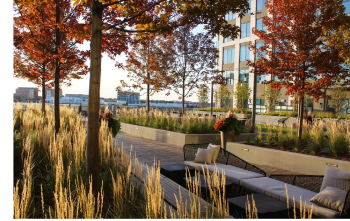
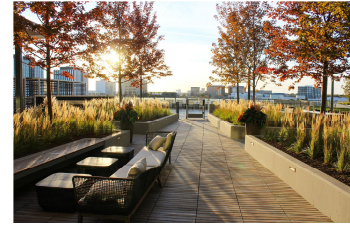
1 ENTRY PLAZA / TWIG BENCH WITH PLANTING BED
Scale NTS



2 OPEN LAWN
Scale NTS



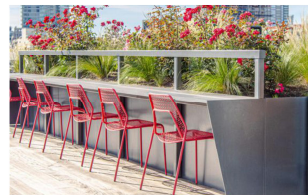
3 SEATING AREA
Scale NTS



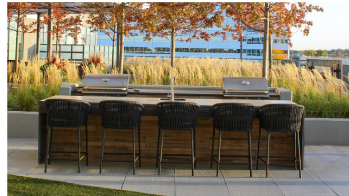
4 LOUNGE SEATING
Scale NTS



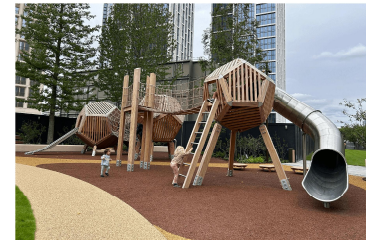
5 TRELLIS
Scale NTS



6 STATIONARY
Scale NTS



7 OUTDOOR KITCHEN
Scale NTS



8 PLAY GROUND WITH PLANY TOWER
Scale NTS

No.	By:	Description	Date
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2	PC	Revised for Rezoning / DP	2023-11-29
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Project:
Bolivar Mixed-Use Development

Location:
11151 Rolivar Road, 13340 112th Ave &
13307 King George Boulevard,
Surrey, BC

Drawn:
DRAWN1
DRAWN2



Checked:
CHECKED

Approved:
APPROVEU

Original Sheet Size:
24"x36"

Scale:
AS SHOWN

CONTRACTOR SHALL CHECK ALL DIMENSIONS ON THE WORK AND REPORT ANY DISCREPANCIES TO THE CONSULTANT IMMEDIATELY. ALL DIMENSIONS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF THE OWNER AND MUST BE RETURNED AT THE COMPLETION OF THE WORK. ALL REVISIONS MUST BE APPROVED BY THE CONSULTANT BEFORE CONSTRUCTION UNLESS LABELLED USED FOR TRADE CONSTRUCTION.

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

FROM: Development Services Manager, Engineering Department

DATE: January 23, 2024

PROJECT FILE: 7823-0234-00

**RE: Engineering Requirements
Location: 13307 King George Blvd., 11151 Bolivar Rd., and 13340 – 112 Ave**

OCP AMENDMENT & CCP AMENDMENT

The following issues are to be addressed as a condition of the OCP Amendment/NCP Amendment:

The applicant is required to complete a sanitary sewer capacity analysis downstream of the subject application due to the proposed Land use plan amendment which will result in increased population and subsequent sanitary demand. The applicant will be required to resolve any downstream pipe capacity constraints.

REZONE/SUBDIVISION

Property and Right-of-Way Requirements

- Dedicate 0.942 m on Bolivar Road;
- Dedicate 3 m x 3 m corner cut at Bolivar Road and 112 Avenue;
- Dedicate 1.942 m on 112 Avenue; and
- Register 0.5 m statutory right-of-way (SRW) along Bolivar Road and 112 Avenue road frontages for maintenance.

Works and Services

- Construct north side of King George Boulevard;
- Construct west side of Bolivar Road;
- Construct south side of 112 Avenue;
- Construct concrete letdowns to Bolivar Road and 112 Avenue;
- Construct adequately-sized service connections (drainage, water, and sanitary), complete with inspection chambers/water meter, to the lot; and
- Construct required servicing mains (drainage, water, and sanitary) along the site frontage in order to meet frontage requirements and to provide servicing to the development site.

DEVELOPMENT PERMIT

There are no engineering requirements relative to issuance of the Development Permit.



Jeff Pang, P.Eng.
Development Services Manager

Department: **Planning and Demographics**
Date: **January 16, 2024**
Report For: **City of Surrey**

Development Impact Analysis on Schools For:

Application #: **23 0234 00**

The proposed development of **967** High Rise Apartment units are estimated to have the following impact on elementary and secondary schools within the school regions.

School-aged children population projection	35
---	----

Projected Number of Students From This Development In:	
Elementary School =	19
Secondary School =	10
Total Students =	29

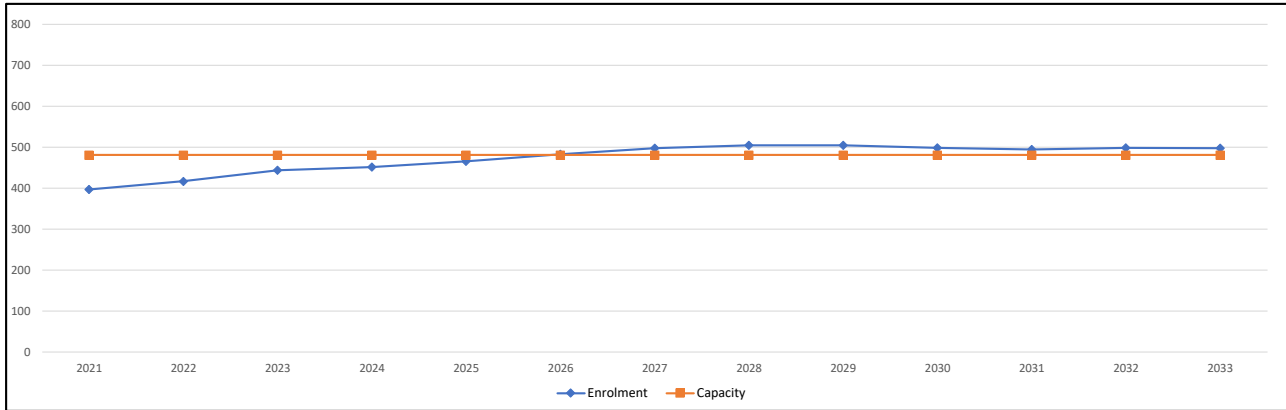
Current Enrolment and Capacities:	
James Ardiel Elementary	
Enrolment	444
Operating Capacity	481
# of Portables	0
Kwantlen Park Secondary	
Enrolment	1594
Operating Capacity	1200
# of Portables	16

Summary of Impact and Commentary
The following tables illustrate the historical, current and future enrolment projections including current/approved ministry operating capacity for the elementary and secondary schools serving the proposed development.

James Ardiel Elementary 10 year projections indicate enrolment is starting to trend upwards. A portion of the catchment runs along the northeast side of King George Boulevard. The City Center plan allows for higher densities along the boulevard's edge, transforming the area from commercial to mixed-residential. The timing of future high rise development, with good market conditions, could impact the enrolment growth upwards even more. The projections used in this report can be considered conservative. James Ardiel still has available student space to accommodate the early part of this growth.

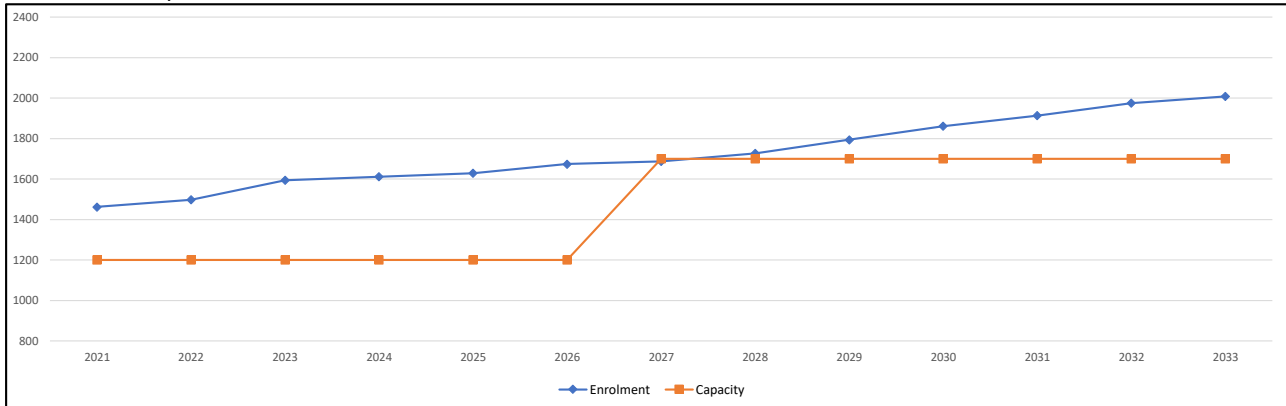
As of September 2023, Kwantlen Park Secondary is currently operating at 133% with 16 portables on site used for enrolling classes and is projected to grow by 450 students over the next 10 years. This school will also be impacted by timing of future high-rise development in the area. In February 2023, the District received capital funding approval from the Ministry to build a 500-capacity addition, targeted to open in the fall of 2027.

James Ardiel Elementary



Note: If this report is provided in the months of October, November and December, the 10-year projections are out of date and they will be updated in January of next year.

Kwantlen Park Secondary



Note: If this report is provided in the months of October, November and December, the 10-year projections are out of date and they will be updated in January of next year.

Population : The projected population of children aged 0-17 impacted by the development.
Enrolment: The number of students projected to attend the Surrey School District ONLY.

Table 3 : Tree Preservation Summary

Surrey Project No: TBD

Address: 11307 King George Blvd, 11151 Bolivar Rd, 13340 112 Ave, Surrey, BC.

Registered Arborist: D.Glyn Romaine - ISA Certified Arborist PN-7929A

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)	9
Protected Trees to be Removed	9
Protected Trees to be Retained (Excluding trees within proposed open space or riparian areas)	0
Total Replacement Trees Required: Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 5 x one (1) = 5 All other Trees Requiring 2 to 1 Replacement Ratio 4 x two (2) = 8	13
Replacement Trees Proposed	72
Replacement Trees in Deficit	0
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	37
<hr/>	
Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	1
Total Replacement Trees Required: Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0x one (1) = 0 All other Trees Requiring 2 to 1 Replacement Ratio 1 x two (2) = 2	2
Replacement Trees Proposed	0
Replacement Trees in Deficit	2

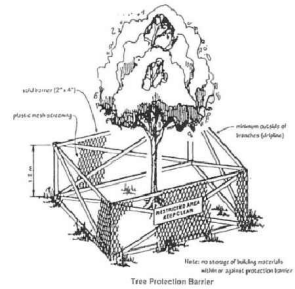
Summary, report, and plan prepared and submitted by: D.Glyn Romaine



(Signature of Arborist)

December 05, 2023

Date



Tree Protection Distance Table

Trunk Diameter (cm)	Minimum Protection Radius (distance from trunk in metres)
20	1.2
25	1.5
30	1.8
35	2.1
40	2.4
45	2.7
50	3
55	3.3
60	3.6
75	4.5
80	5.4
100	6.0

- Note:
- Contact VDZ+A Project Arborist (Glyn Romaine glyn@vdz.ca) for inspection 72 hrs prior to any grading or excavation within the tree protection zone. (Typ) If during excavation it is found that it cannot be completed without severing roots that are critical to the trees health or stability it may be necessary to remove additional trees.
 - Read this plan together with the arborist report prepared by VDZ+A.
 - An additional 1m setback is shown for all hand-planted trees to be retained
 - If Stump Grinding is to occur in close proximity to trees which are to be retained then it is requested stumps to be removed under Arborist supervision.
 - It is the responsibility of the client or his/her representative to contact the project arborist for the purpose of:
 - *Locating TPZ Fencing
 - *Locating Work Zone and Machine access corridors where required
 - *Reviewing the Report with the project foreman or site supervisor.

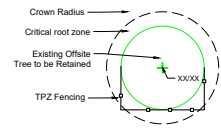
No.	By	Description	Date
2	AL	Issued for OP	2023-12-05
1	YY	Issued for Review	2023-02-24
No.	By	Description	Date

REVISIONS TABLE FOR DRAWINGS

• Critical notes: The drawing and design are property of VDZ+A and may not be reprinted or used for other projects without permission.

Existing Tree to be Retained	Existing Tree to be Removed	Existing Tree in poor condition to be Removed	Existing Dead Tree to be Removed	Undersize tree or Stump	Tree Protection Fencing

Tree Tag Legend
 XX - Tag number
 C-XX - Municipal tree
 GS-XX - Off-site tree
 S-XX - Stranding tree. Written permission required from owner to remove trees.
 XXNT - No Tag #
 WR2+ Western Red Cedar
 BL= Big Leaf Maple
 RA= Red Alder



Project	
Bolivar mixed use development	
Location:	
11151 Bolivar Road, 13340 112 Avenue & 13307 King George Boulevard, Surrey, B.C.	
Drawn:	Stamp:
YY	
Checked:	
DDR	
Approved:	Original Sheet Size:
-	24"x36"
Scale:	CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS ON SITE PRIOR TO COMMENCING WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AUTHORITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES AND AUTHORITIES.
1:500	

CITY OF SURREY

(the "City")

DEVELOPMENT VARIANCE PERMIT

NO.: 7923-0234-00

Issued To:

(the "Owner")

Address of Owner:

1. This development variance permit is issued subject to compliance by the Owner with all statutes, by-laws, orders, regulations or agreements, except as specifically varied by this development variance permit.

2. This development variance permit applies to that real property including land with or without improvements located within the City of Surrey, with the legal description and civic address as follows:

Parcel Identifier: 011-154-110

Lot 1 Section 15 Block 5 North Range 2 West New Westminster District Plan 5347

13340 112 Avenue

Parcel Identifier: 011-154-136

Lot 2 Section 15 Block 5 North Range 2 West New Westminster District Plan 5347

11151 Bolivar Road

Parcel Identifier: 011-154-462

Lot 3 Except: Part On Statutory Right Of Way Plan 5719, Section 15 Block 5 North Range 2 West New Westminster District Plan 5347

13307 King George Boulevard

(the "Land")

3. (a) As the legal description of the Land is to change, the City Clerk is directed to insert the new legal description for the Land once titles have been issued, as follows:

Parcel Identifier:

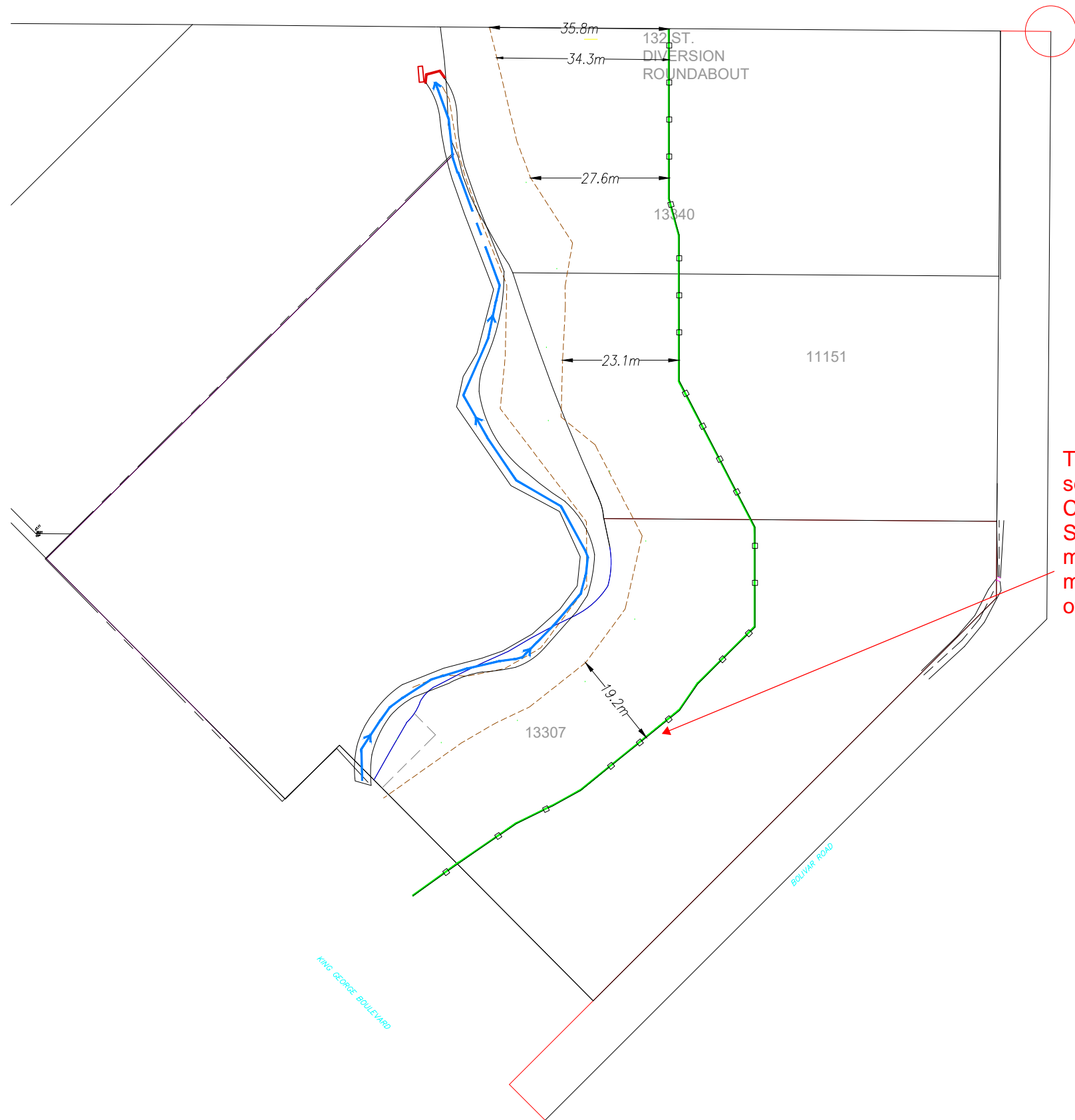
- (b) If the civic addresses change, the City Clerk is directed to insert the new civic address(es) for the Land, as follows:
-

4. Surrey Zoning By-law, 1993, No. 12000, as amended, is varied as follows and as shown in Schedule A:
- (a) In Section B.1 in Part 7A, Stream Protection, the minimum streamside setback distance for a Class A (red-coded) Natural Stream is reduced from 30 metres to a minimum of 19.2 metres, measured from top of bank.
5. The Land shall be developed strictly in accordance with the terms and conditions and provisions of this development variance permit.
6. This development variance permit shall lapse if the Owner does not substantially start any construction with respect to which this development variance permit is issued, within two (2) years after the date this development variance permit is issued.
7. The terms of this development variance permit or any amendment to it, are binding on all persons who acquire an interest in the Land.
8. This development variance permit is not a building permit.

AUTHORIZING RESOLUTION PASSED BY THE COUNCIL, THE DAY OF , 20 .
ISSUED THIS DAY OF , 20 .

Mayor – Brenda Locke

City Clerk – Jennifer Ficocelli



The minimum streamside setback distance for the Class A (red-coded) Natural Stream is reduced from 30 metres to a minimum of 19.2 metres, measured from top of bank

LEGEND:

- PROPOSED SPA
- - - TOB



REDCEDAR
Environmental Consulting

PROJECT LOCATION
13307 KING GEORGE BLVD., 11151 BOLIVAR ROAD, & 13340 112 AVENUE

PROJECT NUMBER
21-230R

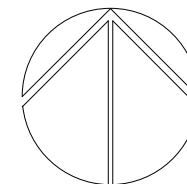
DRAWN BY:
BRITTANY FEAVER

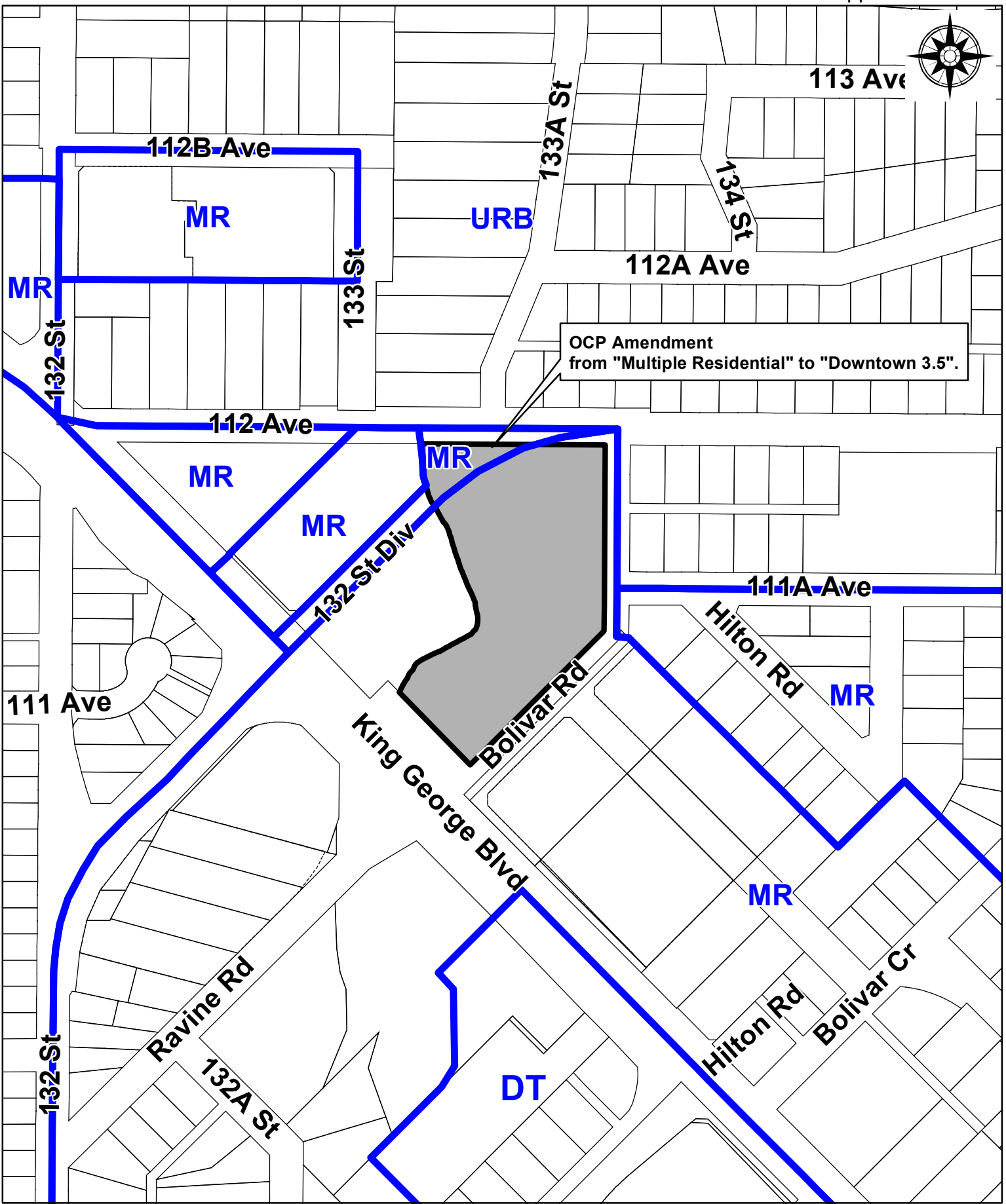
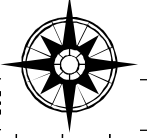
DATE:
JAN 24 2023

SCALE:
1:1000

SHEET:

1 of 3

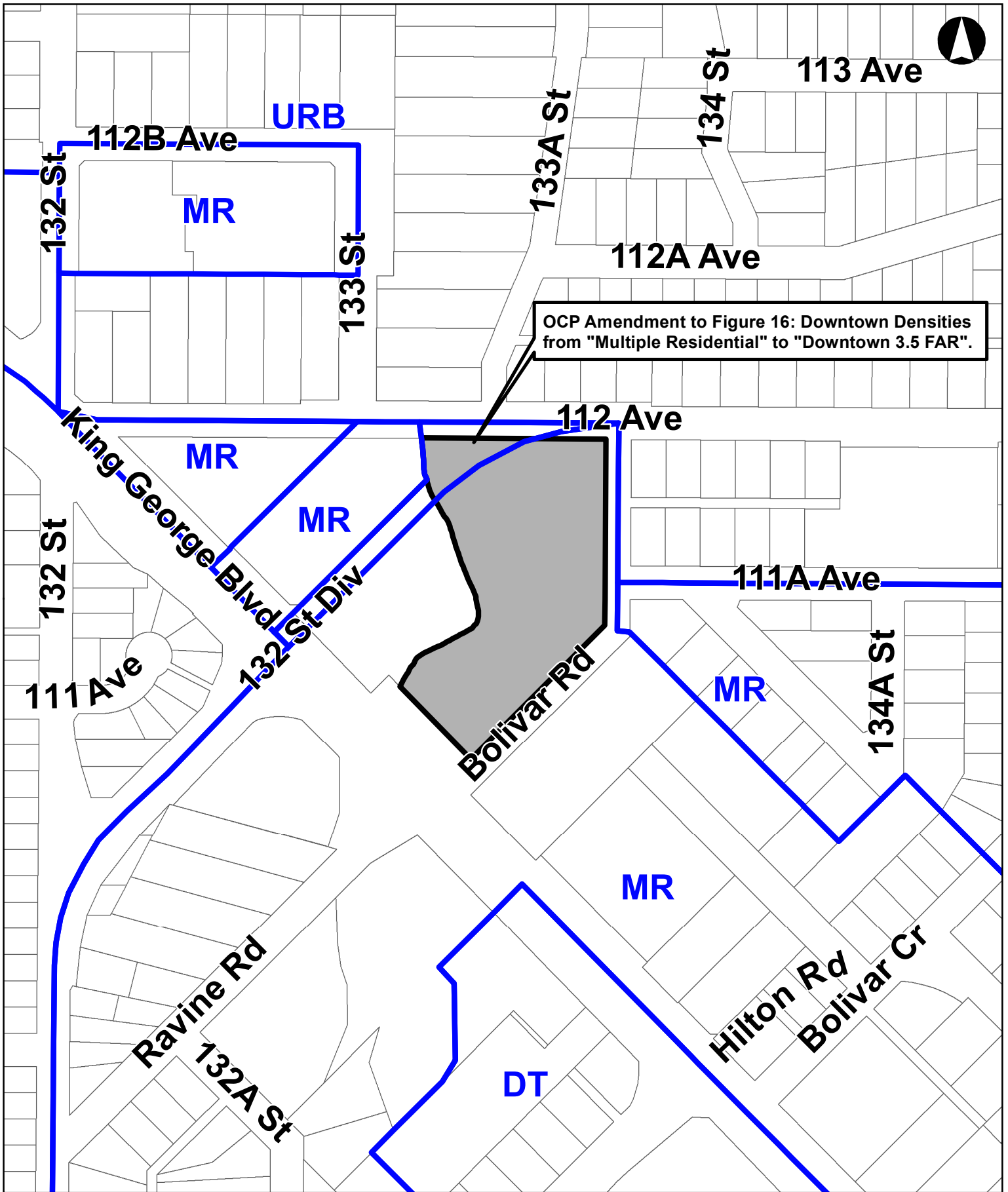




OCP Amendment 23-0234-00

Figure 3
from "Multiple Residential" to "Downtown 3.5".







Advisory Design Panel Minutes

Location: Virtual
THURSDAY, DECEMBER 14, 2023
Time: 4:00 p.m.

Present:

Panel Members:
N. Couttie, Chair
S. MacRae
M. Mitchell
J. Packer
R. Salcido

Guests:

Richard Bernstein, Chris Dikeakos Architects Inc
Mani Mahmoudian, Chris Dikeakos Architects Inc
Kanwar Dhamrait, Oviedo Group
Tom Gill, Tangerine Developments
Mark van der Zalm, Van Der Zalm & Associates
Dylan Chernoff, Durante Kreuk Ltd.

Staff Present:

A. McLean, City Architect
S. Maleknia, Senior Urban Design
Planner
A. Yahav, Clerk 3

A. RECEIPT OF MINUTES

It was

Moved by J. Packer
Seconded by R. Salcido

That the minutes of the Advisory Design Panel
meeting of November 23, 2023, be received.

Carried

B. NEW SUBMISSION**1. 4:05 p.m.**

File No.:	7923-0234-00
New or Resubmit:	New
Last Submission Date:	N/A
Description:	The application includes a Rezoning from CHI to CD (Based on RM-135 and C-8), OCP Amendment from "Multiple Residential" to "Downtown 3.5", City Centre Plan Amendment from "Low to Mid Rise" to "Mid to High Rise Mixed Use", and Development Permit for Sensitive Ecosystems & Hazard Lands in order to allow for 3 towers (21, 24 and 37-storeys), with a total of 967 residential dwelling units, and 237 sq. m. of commercial space. The overall gross FAR is 4.19.
Address:	13307 KGB, 1151 Bolivar Rd. & 13340 112 Avenue)
Developer:	BC1333828 Ltd
Architect:	Richard Bernstein, Chris Dikeakos Architects Inc
Landscape Architect:	Mark van der Zalm, Van Der Zalm & Associates
Planner:	Ingrid Matthews
Urban Design Planner:	Sam Maleknia

The Urban Design Planner gave an overview of the policy and area context, proposed FAR and the riparian interface, including dedications and rights of way. He advised that staff has worked with the applicant to enhance and conceptualize the overall site plan and massing, and generally supports the overall project.

The Panel was asked to comment on the form, architecture, programming, public realm interfaces, and landscape concept.

The Project Architect presented an overview of the site planning, 3D flythrough, 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 M. Mitchell
Seconded by S. MacRae
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.
Carried

Key Points

- Consider some covered amenity spaces and walkways.
Canopies around amenity spaces and walkways have been provided. Please refer to sheets A221, A240, A254, A400 set, A500 sheets and Landscape set.
- Consider further integration of the phase one and phase two styles to create a stronger relationship between them.
This has been discussed with Planner and decided to keep the styles different for the two phases to provide distinctive identities. We feel there are enough visual references through colour materials and overall building massing and expression to provide cohesiveness between the phases without giving the design too much of a “project” look through repetition.
- Consider further development of energy modelling.
Noted. We are in communication with our mechanical engineering consultant and will provide this as soon as the energy modelling is completed.
- Consider the addition of indoor and outdoor E-bike parking.
The architectural team will be providing indoor E-bike parking in the upcoming design development stages. The Landscape team has provided outdoor E-bike parking which is noted on plan. See drawing L-03A and Detail 7 on LD-04.

Site

- Recommend providing better demonstration of improvements to creek area and setback area being proposed by the development that will allow this project to request the variance to reduce the required setback from (30m) to (20m).
4377m² of low-value habitat will be converted to higher value forested habitat. Also,

refuse and structures from the stream and ravine top of back will be permanently removed from the riparian area.

Form and Character

- Attractive building with handsome material choices. Consider emphasizing the lobby entry to the Phase 2 building.
The entry to the Phase 2 building is emphasized with a metal frame surrounding it. Please refer to sheets A254 and A514.

Landscape

- Recommend providing additional buffer between gym areas and public walkways.
Additional buffering has been done where possible, however the environmental setbacks and property line location at this end of the project make it difficult and, in some cases, – impossible to add more buffering. Significant plantings, and fencing have been provided to create a reasonable and, in some cases, – expansive buffer zone to public multi-use pathways. See drawing L-02 & L-03A.
- Consider integrating some covered area along the creek side of the project to allow promenading and use in winter and rainy days.
Some covered area has been integrated into the amenity areas and additional overhang has been provided for by architecture. Pavilion added to the project between open lawn and community garden and on playground to cover the Twig Bench seating. See drawing L-03 A & L-03B and Detail 8 on LD-02.
- Ensure all trees have adequate soil volume and depth.
All trees will have adequate soil volume to meet city of Surrey expectations from “Trees and Landscape”.
- Ensure diversity in tree and shrub species for optimum wildlife habitat and four-season interest.
Care has been taken to provide diversity in planting palette to support pollinators and other wildlife. In addition, native and resilient plant communities have been considered and will be provided in a fully complete planting plan at finalized development permit drawings.
- Consider reviewing amenity areas to ensure weather protection.
Some covered spaces have been added for the outdoor amenity spaces – particularly near the play area and for seating/social spaces adjacent. Pavilion added to the project between open lawn and community garden and on playground to cover the Twig Bench seating. See drawing L-03 A & L-03B and Detail 8 on LD02.
- Consider providing dog relief stations for residents with pets.
Additional dog relief areas have been provided. Outdoor dog relief station added close to Tower 2 back side amenity entry. See drawing L-03B and Detail 6 on LD-04.
- Consider providing more diverse programming, including play spaces, active and passive zones, eating areas, and work or office zones.
The play offering in the outdoor amenity space is significantly diverse: play areas, passive social spaces, community gardening, outdoor kitchen and eating spaces, “work from home” spaces with plug ins for recharge of laptops and phones, walking loops, and stretching/exercise space – as well as ample space for outdoor performance or fitness programming.

CPTED

- No specific issues were identified.

Sustainability

- Consider energy modeling at earlier stages of the project to help inform the design process.
Noted. We are in communication with the mechanical consultant and will provide this as soon as the modelling is completed.
- Consider using future climate files for thermal comfort modeling to test resiliency and ensure livability in the future.
Noted. This will be provided in our upcoming design development stages.
- Consider the location of HRVs and heat pumps at the early stages of the design; for a little bit more space, significantly better units can be produced. This will render higher efficiency, lower noise, better filtration, and (critically) summer bypass.
Noted. This will be provided in our upcoming design development stages.
- Consider high-quality bike amenities including good wayfinding for bicyclists, automatic door operators to ease entry and exit, ample room for cargo bikes and trailers, and electric bike charging.
Noted. This will be considered in our upcoming design development stages.
- Consider the addition of indoor and outdoor E-bike parking.
The architectural team will be providing indoor E-bike parking in the upcoming design development stages. The Landscape team has provided outdoor E-bike parking which is noted on plan. See drawing L-03A and Detail 7 on LD-04.
- Consider incorporating a bike maintenance area that can also serve as a casual space for interaction.
Provided. Please see Plans A200.
- Consider how bicyclists interact with pedestrians and drivers both on the ground plane and within buildings to inform layout and design decisions.
A bike elevator shared with commercial has been provided in Phase 1 and will be opening onto the walkway facing Bolivar Road. This will allow for safe movement between loading trucks, cars and bicyclists. Please refer to sheets A200 to A203 and A210.
- Consider how best to encourage waste management with both a three-stream in-suite system and central recycling rooms that are well-lit, include sorting tables, and include pictograms to address language barriers.
Noted. This will be considered in our upcoming design development stages.
- Consider including a resilient water access point that residents can access in the event of a power outage so everyone can fill vessels when city water pressure will not reach the top of the towers. **Noted.** This will be included in our construction document stage of work.
- Consider opportunities to maximize operable window area and opportunities for cross ventilation for passive cooling and ventilation.
Residential units for all three towers and podium levels will have operable windows and/or patio doors facing their respective balconies. This is in addition to windows facing outwards from primary bedroom and living room areas. Also, corner larger units will have cross-ventilation in living rooms with exposures on two faces of the

- buildings. Please refer to the A500 sheets set.
Consider strategies for minimizing the potential for birds striking the building; this could include bird-friendly glazing, lighting design, and landscaping.
Noted. This will be considered during our design development and construction document stages.

Accessibility

- No specific issues were identified.

C. OTHER BUSINESS

1. Roundtable

A roundtable of discussion was held.

D. NEXT MEETING

The next Advisory Design Panel is scheduled for Thursday, January 11, 2024.

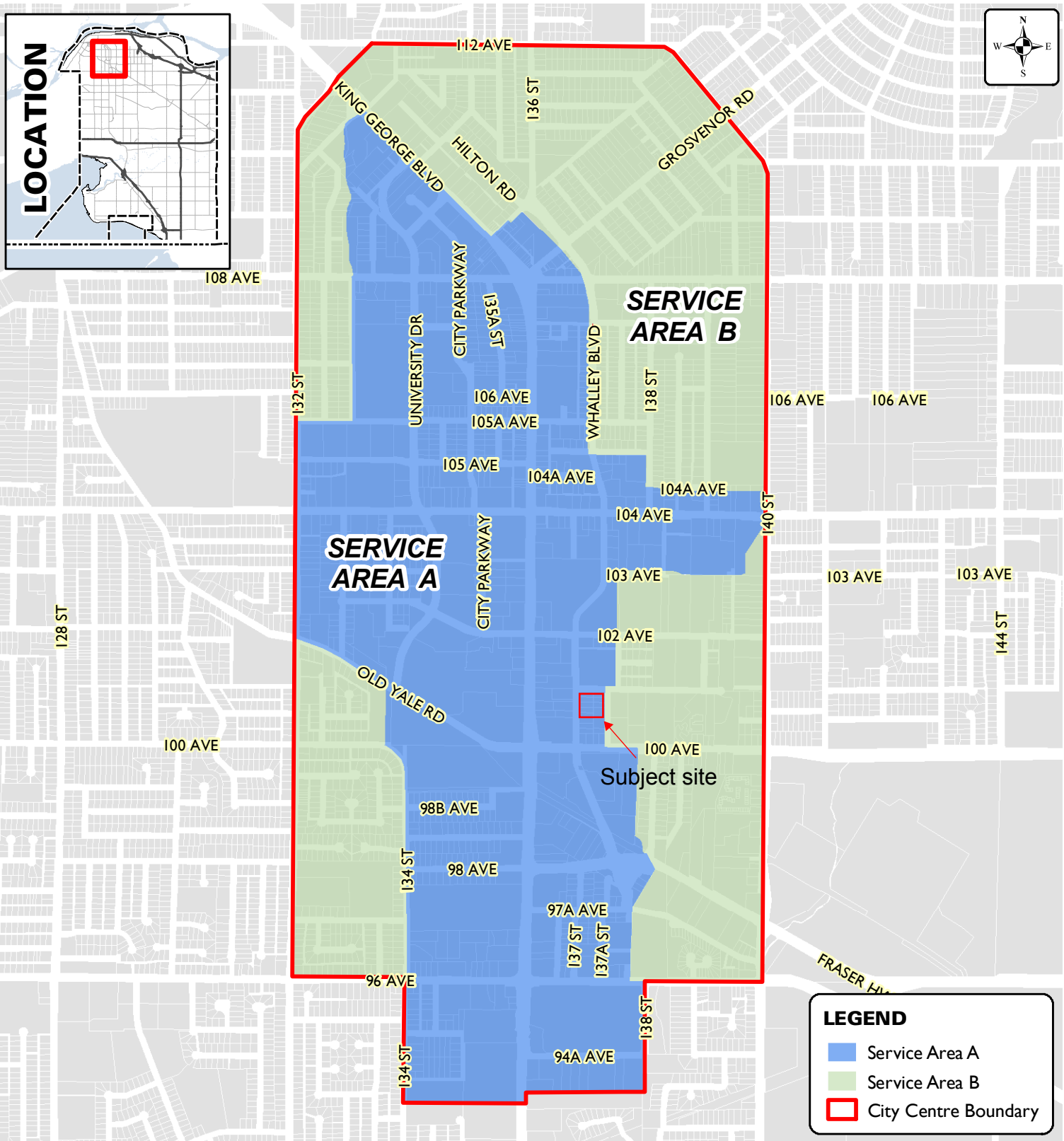
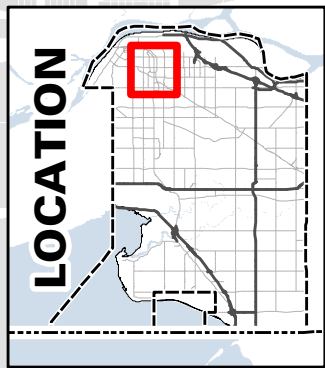
E. ADJOURNMENT

The Advisory Design Panel meeting adjourned at 6:47 p.m.

Jennifer Ficocelli, City Clerk

N. Couttie, Chairperson

FIGURE 1



LEGEND

- Service Area A
- Service Area B
- City Centre Boundary

Produced by GIS Section: May 31, 2012, CS/AW8



**DISTRICT ENERGY SERVICE AREA
(SERVICE AREA A & SERVICE AREA B)**

**ENGINEERING
DEPARTMENT**

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.