

City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

Application No.: 7923-0297-00

Planning Report Date: January 29, 2024

**PROPOSAL:**

- **OCP Amendment** to Figure 16: Downtown Densities from 3.5 FAR to 5.5 FAR
- **City Centre Plan Amendment** from Mid to High Rise Residential 3.5 FAR to High Rise Residential Type 1 5.5 FAR, for a portion of the site, and High Rise Mixed-Use Type I 5.5 FAR for a portion of the site
- **Rezoning** from RF and RM-D to CD
- **Development Permit**

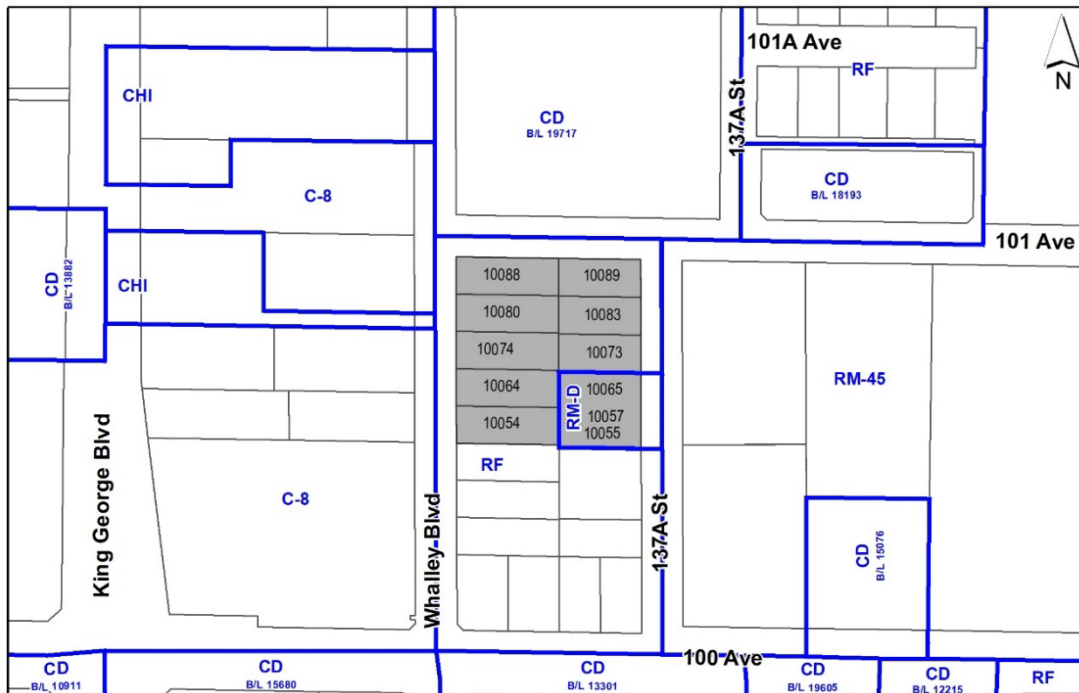
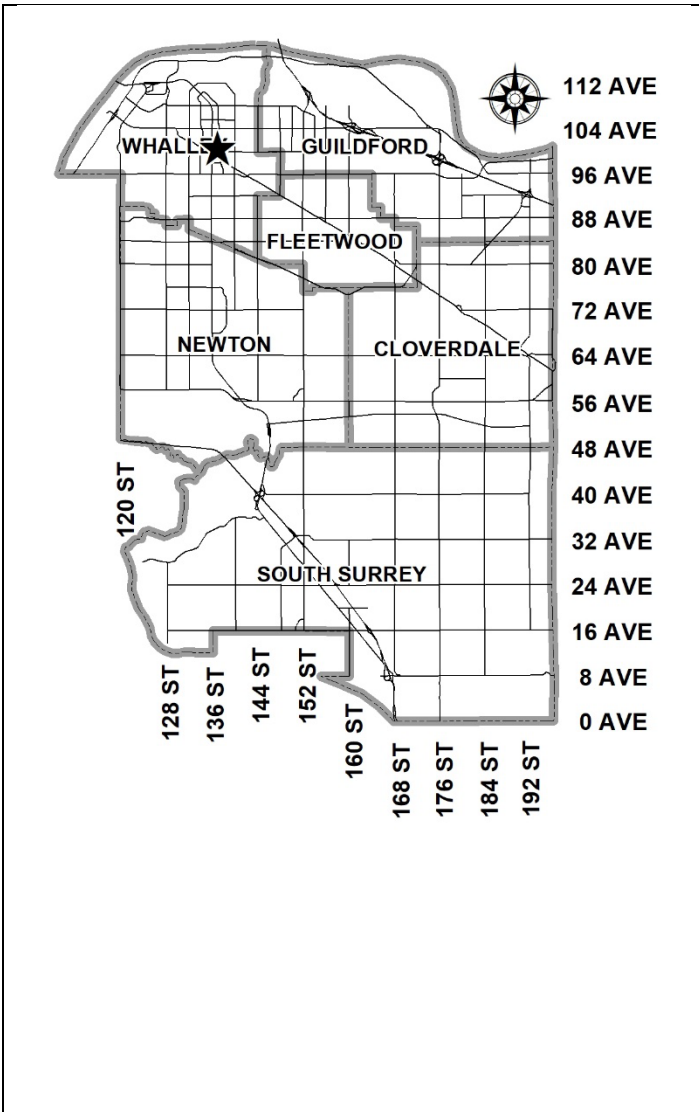
to allow for one 38-storey mixed-used building and one 33-storey residential building consisting of 747 square metres of ground floor commercial and 822 residential units in City Centre.

**LOCATION:** 10073, 10083, 10089, 10055 – 137A Street (10057, 10065 -137A Street)  
 10054, 10064, 10074, 10080, 10088-Whalley Boulevard

**ZONING:** RF and RM-D

**OCP DESIGNATION:** Downtown

**CITY CENTRE DESIGNATION:** Mid to High Rise Residential 3.5 FAR



## 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.

## DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Proposing an amendment to the Official Community Plan to Figure 16: Downtown Densities from 3.5 FAR to 5.5 FAR to permit a higher density on the site.
- Proposing an amendment to the City Centre Plan from Mid to High Rise Residential 3.5 FAR to High Rise Residential Type 1 5.5 FAR, on the east portion of the site, and High Rise Mixed-Use Type I 5.5 FAR on the west portion of the site.

## RATIONALE OF RECOMMENDATION

- The current proposal does not comply with the Downtown 3.5 FAR designation in the Official Community Plan (OCP) or the Mid to High Rise Residential 3.5 FAR designation in the Surrey City Centre Plan. Amendments are proposed to accommodate a higher density.
- Although the proposed density on the subject site is higher than that prescribed in the OCP and City Centre Plan, the proposed towers, including ground floor commercial along Whalley Boulevard, will support and complement this area of Surrey City Centre.
- The proposed density and building forms are appropriate for this part of Surrey City Centre, and form part of an emerging high-density mixed-use, office and residential hub around King George SkyTrain Station, Central Downtown and the surrounding area.
- The proposed development conforms to the goal of achieving high-rise, high-density development around the three SkyTrain Stations in City Centre. The King George Skytrain Station is located within walking distance of approximately 350 metres (a 5 minute walk) from the subject site.
- The provincial legislation introduced in December 2023, designates the site within a Skytrain Station Transit Oriented Area (TOA), Tier 2, which allows for a minimum FAR of 4.0 and a minimum height of 12-storeys.
- The proposed setbacks achieve a more urban, pedestrian streetscape in compliance with the Surrey City Centre Plan, adjacent developments, and in accordance with the Development Permit (Form and Character) design guidelines in the OCP.
- 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 street interface has been designed to a high quality to achieve a positive urban experience between the proposed building and the public realm, with public plaza spaces proposed along the north and south of the site.
- The proposed buildings achieve an attractive architectural built form, which utilizes high quality materials, contemporary lines, and unique form.

**RECOMMENDATION**

1. An OCP Amendment By-law be introduced to amend the OCP Figure 16: Downtown Densities for the subject site from 3.5 FAR to 5.5 FAR and a date be set for Public Hearing.
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 Bylaw be introduced to rezone from “Single Family Residential Zone (RF)” and “Duplex Residential Zone (RM-D)” to "Comprehensive Development Zone (CD)" and a date be set for Public Hearing.
4. Council authorize staff to draft Detailed Development Permit No. 7923-0297-00 generally in accordance with the attached drawings (Appendix I).
5. 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) resolution of all urban design issues to the satisfaction of the Planning and Development Department;
  - (d) submission of a finalized landscaping plan and landscaping cost estimate to the specifications and satisfaction of the Planning and Development Department, including the provision of sufficient soil volumes to allow for tree planting within the public plaza;
  - (e) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
  - (f) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;
  - (g) submission of an acoustical report and registration of a Section 219 Restrictive Covenant to ensure implementation of noise mitigation measures;
  - (h) registration of a volumetric statutory right-of-way for public rights-of-passage for on the north and south portions the site;
  - (i) 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;

- (j) Submission and approval of a finalized Transportation Impact Assessment, prepared by Bunt and Associates, transportation demand management plan (TDM) and cash-in-lieu to the satisfaction of staff; and
- (k) registration of access easements to secure for future shared vehicle parking and shared outdoor amenity space at grade between the two (2) developments.
6. Council pass a resolution to amend the Surrey City Centre Plan to redesignate a portion of the land from 'Mid to High Rise Residential 3.5 FAR' to High Rise Residential Type 1 5.5 FAR and a portion of the site to High Rise Mixed-Use Type I 5.5 FAR.

### SITE CONTEXT & BACKGROUND

Direction	Existing Use	City Centre Plan Designation	Existing Zone
Subject Site	Single family homes	Mid to High Rise Residential 3.5 FAR	RF and RM-D
North (Across 101 Avenue):	3-storey rental buildings, with finalized Development Application No. 7918-0289-00, allowing for multiple high-rise, mid and low rise buildings	High Rise Mixed-Use Type I, 5.5 FAR	CD (By No. 19717)
East (Across 137A Street):	2-storey townhouse units	Low to Mid Rise Residential 2.5 FAR	RM-45
South:	Single family homes	Mid to High Rise Residential 3.5 FAR	RF
West (Across Whalley Boulevard):	2-storey commercial buildings	Mid to High Rise Residential 3.5 FAR	C-8

### Context & Background

- The 8,106 square metre subject site consists of 9 properties, located in City Centre, south of 101 Avenue, and between Whalley Boulevard and 137A Street.
- The subject site is designated Downtown 3.5 FAR, in the Official Community Plan (OCP), Mid to High Rise Residential (3.5 FAR) in the City Centre Plan and is zoned Single Family Residential (RF) Zone and Duplex Residential (RM-D) Zone.

- The subject application is generally consistent with the Downtown District designation in the Official Community Plan (OCP) and Mid to High Rise Residential designation in the CCP, while being higher in density. The west portion of the site, along Whalley Boulevard, is proposing an amendment to the City Centre Plan to allow for ground floor commercial.
- Staff are supportive of the increase in density given the site's location in City Centre and proximity to King George Skytrain Station and the Central Downtown area.

## DEVELOPMENT PROPOSAL

### Planning Considerations

- The applicant is proposing the following:
  - OCP Amendment to Figure 16: Downtown Densities from 3.5 FAR to 5.5 FAR.
  - City Centre Amendment from Mid to High Rise Residential (3.5 FAR) to High Rise Residential Type I 5.5 FAR on the east portion of the site and High Rise Mixed-Use Type I 5.5 FAR on the west portion of the site.
  - Rezoning from RF and RM-D to CD.
  - Development Permit.
  - Subdivision.

to allow for one 38-storey mixed-used building and one 33-storey residential building consisting of 747 square metres of ground floor commercial and 822 residential units in City Centre.

- The project is proposed as a 2-phased mixed-use and residential development with two towers in total.
- Phase 1 includes a 33-storey residential tower, with 6-storey podium, located on the east portion of the site along 137A Street.
- Phase 2 includes a 38-storey mixed-use tower, with 10-storey podium, and is located on the west portion of the site along Whalley Boulevard. Ground floor commercial is proposed along Whalley Boulevard and wrapping to 101 Avenue and the future green lane.
- Publicly accessible plazas are proposed along the south and north portions of the site adjacent to the internal courtyard.
- Development data is included in the following table:

	Proposed
<b>Lot Area</b>	
Gross Site Area:	8,106 square metres
Road Dedication:	1,109 square metres
Undevelopable Area:	N/A
Net Site Area:	6,997 square metres
<b>Number of Lots:</b>	9
<b>Building Heights:</b>	33 and 38-storeys
<b>Floor Area Ratio (FAR):</b>	Gross FAR: 7.4/ Net FAR: 8.6
<b>Floor Area</b>	
Residential:	59,091 square metres
Commercial:	747 square metres
Total:	59,839 square metres
<b>Residential Units:</b>	
Studio:	16
1-Bedroom:	262
1-Bedroom and den:	113
2-Bedroom:	360
2-Bedroom plus den:	44
3-Bedroom:	17
Townhouses:	10
Total:	822

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

16 Elementary students at Lena Shaw School  
8 Secondary students at Guildford Park Secondary School

(Appendix III)

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

Parks, Recreation & Culture: The closest active park is Holland Park and is 350 metres away, and the closest natural area is Green Timbers Park and is 800 metres away. Future parkland is proposed within 175 metres of the development as proposed in the City Centre Plan.

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

- A transportation impact analysis ("TIA") was required to be submitted to evaluate site-generated traffic impacts and identify required improvements to service the subject proposal.
- Based on the TIA, the subject proposal is anticipated to generate approximately three to four vehicles per minute in the peak hour.
- The TIA indicated that the road network and study intersections were projected to operate at acceptable levels of service with the additional traffic as a result of the subject proposal, with signal timing improvements to the existing signals on Whalley Boulevard.

### Road Network and Infrastructure

- The applicant will be providing the following improvements along the subject site road frontages:
  - Dedication and construction of the east side of Whalley Boulevard to the City Centre arterial road standard;
  - Construction of the north side of 101 Avenue to the City Centre local road standard;
  - Construction of the west side of 137A Street to the City Centre local road standard; and
  - Dedication and construction of a green lane along the north side of the subject site.

### Access and Parking

- The subject site is proposed to be accessed via 101 Avenue and the green lane.
- A total of 722 parking spaces are proposed to be provided on site, along with provision of transportation demand management (“TDM”) measures, exceeding the Zoning Bylaw rates.

### **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:
  - 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 also specifies the use of healthy materials, adhesives, sealants, paints and coatings to minimize the emission of harmful chemicals; all of which reduces impacts on outside ecosystems while helping create the healthiest indoor environment for homeowners and office workers.
  - 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 multiple terraced roof areas of the Tangerine Residence Development are designed to incorporate living spaces, landscape, and technology to create a positive environmental effect. Areas will be dedicated to 'green roof', reducing waste heat generation, and creating beneficial urban eco-habitats.

## **POLICY & BY-LAW CONSIDERATIONS**

### **Regional Growth Strategy**

- The subject site is designated General Urban in Metro Vancouver’s Regional Growth Strategy (RGS). The proposed development complies with the RGS.

### **Official Community Plan**

#### Land Use Designation

- The subject site is designated Downtown in the Official Community Plan, with a permitted maximum density of 3.5 FAR as noted in Figure 16 of the OCP.
- The applicant is proposing to amend Figure 16 to accommodate the proposed development by increasing the allowable density from 3.5 FAR to 5.5 FAR.



- The proposed development will be subject to both Tier 1 and Tier 2 Capital Plan Project CACs.

### Amendment Rationale

- The proposed density and building form are appropriate for this part of Surrey City Centre, and forms part of an emerging high-density mixed-use hub that will be complementary to the City Centre, Central Downtown and King George Hub area.
- The proposed development will be subject to the Tier 2 Capital Plan Project CACs for proposed density greater than the OCP designation, as described in the Community Amenity Contribution section of this report.

### 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 residential development into Surrey's City Centre at densities sufficient to encourage commercial development and transit services expansion.
  - Centres, Corridors and Neighbourhoods:
    - Dynamic City Centre: Strengthen Surrey's City Centre as a dynamic, attractive and complete Metropolitan Core, by providing a mix of commercial and residential space in a comprehensively-designed development.
    - Transit Corridors: Support Transit Oriented Development along major corridors linking urban centres and employment areas, through the development of a high density development within walking distance to the SkyTrain and other transit infrastructure.
    - Healthy Neighbourhood: Plan and design urban neighbourhoods with sufficient densities to support a higher-quality transit system that is accessible to most residents.
    - Urban Design: Implement high architectural and urban design standards to create both socially and environmentally sustainable high-density development, with a unique blend of safe, beautiful, active, and vibrant interconnected and publicly-accessible spaces.

### **Secondary Plans**

#### Land Use Designation

- The subject site is designated Mid to High Rise Mixed Use in the City Centre Plan (CCP).

- The applicant is proposing to amend the City Centre Plan from Mid to High Rise Mixed Use (3.5 FAR) to High Rise Residential and Mixed-Use – Type I (5.5 FAR) to accommodate the proposed development.

### Amendment Rationale

- The proposed density and building form are appropriate for this part of Surrey City Centre, and forms part of an emerging high-density mixed-use hub that will be complementary to Central Downtown area.
- The proposed development conforms to the goal of achieving high-rise, high-density development around the three SkyTrain Stations. The King George Skytrain Station is located within a walking distance of 350 metres from the subject site.
- The proposed development includes ground floor commercial space that will continue the pattern of commercial frontage established north of the site along Whalley Boulevard.
- The proposed development will be subject to the Tier 2 Capital Plan Project CACs for proposed residential density greater than the Secondary Plan designation, as described in the Community Amenity Contribution section of this report.

### Themes/Objectives

- The proposed development is consistent with the following guiding principles:
  - Build Density, through the development of a high-density development close to the SkyTrain stations.
  - Encourage Housing Diversity, with a variety of unit types and sizes.
  - Create Vibrant Urban Space, with high quality architectural aesthetics, individual units oriented towards public streets to animate the street, and amenities such as plazas.
  - Green the Downtown, with appropriate new tree planting and landscaping treatments.
  - Promote Identity and Sense of Place, with a blend of open landscaped spaces and enclosed residential spaces.

### **CD By-law**

- The applicant proposes to rezone the subject site from "Single Family Residential Zone (RF) and 'Duplex Residential Zone (RM-D) 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 is divided into Blocks A and B. Block A contains the proposed 33-storey residential development on the east portion of the site. Block B contains the proposed 38-storey mixed-use development on the west portion of the site.
- 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:

	<b>RM-135 and C-8 Zones</b>	<b>Proposed CD By-law</b>
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"> <li>• Retail stores;</li> <li>• Personal service uses;</li> <li>• General service uses;</li> <li>• Beverage container return centres;</li> <li>• Eating establishments;</li> <li>• Neighbourhood pubs;</li> <li>• Liquor stores;</li> <li>• Office uses;</li> <li>• Parking facilities;</li> <li>• Automotive service uses;</li> <li>• Indoor recreational facilities;</li> <li>• Entertainment uses;</li> <li>• Assembly Halls;</li> <li>• Community services;</li> <li>• Child care facilities; and</li> <li>• One dwelling unit.</li> </ul>	<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><b>Block B</b></p> <ul style="list-style-type: none"> <li>• Retail stores;</li> <li>• Personal service uses;</li> <li>• General service uses;</li> <li>• Eating establishments;</li> <li>• Neighbourhood pubs;</li> <li>• Liquor stores;</li> <li>• Office uses;</li> <li>• Indoor recreational facilities;</li> <li>• Entertainment uses;</li> <li>• Community services; and</li> <li>• Child care facilities.</li> </ul>
<b>FAR (Net Density)</b>	2.5	<p><b>Overall net site density:</b> 8.6</p> <p><b>Block A:</b> 7.9</p> <p><b>Block B:</b> 9.2</p>
<b>Lot Coverage</b>	33%	<b>Block A: 50%</b>

	RM-135 and C-8 Zones	Proposed CD By-law	
		<b>Block B: 50%</b>	
<b>Building Setbacks</b>	50% of the height of the building from all lot lines	<b>Block A</b> <i>North: 4.5 metres</i> <i>South: 4.5 metres</i> <i>East: 4.5 metres</i> <i>West: 7.5 metres</i>	<b>Block B</b> <i>North: 3.0 metres</i> <i>South: 3.0 metres</i> <i>East: 7.5 metres</i> <i>West: 3.0 metres</i>
<b>Building Height</b>	Not Applicable	Block A: 115 metres Block B: 129 metres	
<b>Amenity Space</b>			
Indoor Amenity:	1,565 sq. metres	<b>Block A</b> 750 sq. m Sq.metres <b>Block B</b> 814 sq.metres	The 1,66m <sup>2</sup> meets the minimum Bylaw requirement and the remaining m2 will be paid by cash-in-lieu.
Outdoor Amenity:	2,466 sq. metres	sq. metres 2,444 sq.m	The proposed 3,787 m <sup>2</sup> exceeds the Bylaw requirement.
<b>Parking (Part 5)</b>		<b>Required</b>	<b>Proposed</b>
<b>Number of Stalls</b>			
Commercial:		18	
Residential:		740	
Residential Visitor:		82	
Total:		840	722
<b>Bicycle Spaces</b>			
Residential Secure Parking:		986	990
Residential Visitor:		12	12
Total:		998	1,002

- The proposed net floor area ratio (FAR) of 7.9 (Block A) and 9.2 (Block B) and the lot coverage of 50% 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, with density bonus. The overall gross density is 7.4 FAR.
- The proposed lot coverage is appropriate for the proposed development including significant podiums and is in context with proposed neighbouring high rise developments to the north along Whalley Boulevard.
- 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.

### **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 Final Subdivision Approval. 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. The current rate for the Whalley Community Area is \$459.85 per sq.m of residential floor area above the current City Centre 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 16, 2023. Staff received no comments.

## DEVELOPMENT PERMITS

### Form and Character Development Permit Requirement

- The proposed development is subject to a Development Permit for Form and Character and is also subject to the urban design guidelines in the Surrey City Centre Plan.
- The proposed development complies with the Form and Character Development Permit guidelines in the OCP and the design guidelines in the Surrey City Centre Plan.
- The project is proposed as a 2-phased mixed-use and residential development with two towers in total.
- Phase 1 includes a 33-storey residential tower, with 6-storey podium, and is located on the east portion of the site along 137A Street.
- Phase 2 includes a 38-storey mixed-use tower, with 10-storey podium, and is located on the west portion of the site along Whalley Boulevard. Ground floor commercial is proposed along Whalley Boulevard.
- The two towers have been positioned on site to maximize tower separation and view corridors. The podium forms are tiered with rooftop landscaping providing elevated areas of open space amenity for the residents of each tower.
- A significant courtyard internal to the site stretches from north to south between the buildings and provides ground level connections between the two phases. This design offers opportunities for residents to have green open space within their own development. This courtyard will be complemented with amenities spaces, providing both visual appeals, and gathering spots for the residents.
- Public plaza spaces will be secured along the north portion of the site, 101 Avenue, and south portion of the site, the future green lane. Detailed design and volumetric statutory rights-of-ways will be registered in advance of final approval.

- Phase 2 (Whalley Boulevard) is connected to a 10-storey podium that gradually steps down every 3 floors, and is thoughtfully sculpted, featuring articulated angled balconies facing north.
- Phase 1 (137A Street) is anchored by a 6-story podium with stepped articulation on the 5th floor. The angled podium steps create view corridors from each of the towers.
- The podium roof decks offer outdoor amenity areas spacious gathering area situated adjacent to the indoor social amenity space. Their southern orientation optimizes sunlight exposure throughout the day, creating an ideal setting for social gatherings and resident relaxation. We have varied the height between the two podiums to create more variety and dynamic expression.
- The design of the buildings incorporates horizontal bands that seamlessly integrate with the façade's window system and balcony guardrails, resulting in an elegant and dynamic expression. This design language includes clearly articulated podiums and tower forms, allowing the buildings to talk to each other while retaining their distinctive characteristics.
- On the western façade of Phase 2 and the eastern façade of Phase 1, two structural elements extend vertically from the ground to the top of tower. These architectural "spines" contribute to the building's vertical expression and introduce a unifying and visually captivating element, featuring prefinished metal panel in terracotta color that ties the entire structure together.
- The applicant has agreed to continue to work with staff to address the following items:
  - Development and refinement of the public realm interfaces, detailing of urban plaza concept along the north and south. and the interim conditions on the green lane.
  - Further refinement of the proposed materials and finishings.

### Landscaping

- The streetscape has been designed to meet City Centre standards with enhanced public realm treatment.
- The commercial frontage will provide animation and extend onto the public realm.
- The residential frontages will include soft landscaping and hardscaping with usable patio depths.
- Direct access from the ground floor residential units will be provided to the sidewalks and interim walkway along the south.
- An internal courtyard is proposed between the two phases that will connect to the public realm and also create a hub of semi-private activity.
- Green edges will frame the pedestrian experience and separate the vehicular areas of the site.



- At the north end of the courtyard, a raised wood deck will create a gathering space and meeting point for the neighbourhood. A grove of trees will provide a green entry experience for the lobby, which will lead into an amenity space opening up on to the breezeway. Central to the breezeway, a children's play area will serve both phases of the project, with direct access from an amenity room in each phase.
- As the buildings step back, landscaping opportunities will be created at top levels of each of the steps. Shrub planting and trees will be used to accent the architectural expression and soften the edges of the terraces. The program will include spill out spaces off the amenity rooms, co-working spaces, pods, outdoor living rooms, BBQ areas, outdoor dining, dog off leash areas and central lawn areas for flexible use.
- The design tries to maximize the ability for several people to use the courtyard independently, with opportunities to come together as a community or host large family events. In addition to the hard surfaces, intensive green roofs will provide valuable habitat and food sources for nesting birds. In addition to habitat, the soft landscape areas will provide storm water benefits, reducing peak flows by absorbing water from rainfall events. Trees and trellises will float over the terrace, providing human scale spaces with dappled shade. Raised planters will be used on the upper levels to define spaces, to integrate pathway lighting into the design provide the required soil volumes for the trees.
- A mix of native and adaptive, drought tolerant plant material is proposed for the landscape areas on the podium. Site safety will be addressed throughout the site by selecting vegetation at recommended levels to maintain site lines adjacent to public areas and circulation routes. Evergreen shrubs, perennials and grasses, will comprise the majority of the plant palette, providing seasonal interest and a variety of habitat.

### 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 1,564 square metres of indoor amenity space for the proposed 822 residential units, (there are no micro or lock-off units proposed). Of that 1,564 square metres of indoor amenity space, a total of 744 square metres must be provided on site (372 square metres per building), and the remainder can be provided through a cash-in-lieu contribution.
- The applicant is proposing 1,663 square metres of indoor amenity space located throughout the development, which exceeds the minimum requirement as outlined in the Bylaw.
- Phase 1 (east tower site) is proposing indoor amenity areas on the ground floor and in the podium on levels 7 and 34 for a total of 854 square metres.
- Phase 2 (west tower site) is proposing indoor amenity areas on the ground floor in the podium on levels 8, 11 and 39 for a total of 809 square metres.

- The primary indoor amenity spaces in both buildings are located on the ground floor and rooftops and are designed to provide for a wide range of activities and programming.
- The spaces will include games areas, fitness 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 2,466 square metres of outdoor amenity space is required for the proposed development.
- The applicant is proposing 3,787 square metres of outdoor amenity space across the site, which exceeds the total outdoor amenity space required under the Zone.
- A central courtyard is proposed between the two sites and provides for a wide range of programmable space, including seating, tree groves and play and gathering areas. This plaza includes a mix of hard surface areas and trees and greenery.
- Phase 1 (east tower site) is proposing outdoor amenity areas on the ground floor and in the podium on levels 7 and 34, that are all connected to indoor amenity areas.
- Phase 2 (west tower site) is proposing outdoor amenity areas on the ground floor in the podium on levels 8, 11 and 39, that are all connected to indoor amenity areas.
- The program will include spill out spaces off the amenity rooms, co-working spaces, pods, outdoor living rooms, BBQ areas, outdoor dining, dog off leash areas and central lawn areas for flexible use.

**TREES**

- Francis Klimo, ISA Certified Arborist of Klimo and Associates 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:**

<b>Tree Species</b>	<b>Existing</b>	<b>Remove</b>	<b>Retain</b>
<b>Alder and Cottonwood Trees</b>			
Alder	2	2	0
Cottonwood	2	2	0
<b>Deciduous Trees (excluding Alder and Cottonwood Trees)</b>			
Bigleaf magnolia	1	1	0
Common holly	3	3	0
Black cherry	4	4	0
Common cherry	7	7	0
Mountain ash	2	2	0
Butternut	2	2	0
<b>Coniferous Trees</b>			
Leyland cypress	2	2	0
Douglas fir	19	19	0
Emerald cedar	1	1	0
Norway spruce	1	1	0
Western redcedar	3	3	0
Colorado spruce	1	1	0
Lodgepole pine	3	3	0
Scots pine	1	1	0
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>50</b>	<b>50</b>	<b>0</b>
<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>		<b>105</b>	
<b>Total Retained and Replacement Trees Proposed</b>		<b>105</b>	
<b>Estimated Contribution to the Green City Program</b>		<b>N/A</b>	

- The Arborist Assessment states that there are a total of 50 mature trees on the site, excluding Alder and Cottonwood trees. Of the 54 existing trees, approximately 7 % of the total trees on the site, are Alder and Cottonwood trees. The applicant proposes to retain no trees as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, road dedication and proposed lot grading.

- For those trees that cannot be retained, the applicant will be required to plant trees on a 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 104 replacement trees on the site. The applicant is proposing 105 replacement trees, exceeding City requirements.
- In addition to the replacement trees, boulevard street trees will be planted along all road frontages. 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 Armstrong Maple, Coral Bark Japanese Maple, Eastern Redbud and Butterflies Magnolia.
- In summary, a total of 105 trees are proposed to be retained or replaced on the site with no estimated 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 A, as defined in the "City Centre District Energy System By-law" (see Appendix VII for location). The District Energy System consists of three primary components:
  - community energy centres, City-operated facilities that generate thermal energy for distribution through a piped hot water network;
  - distribution piping that links the community energy centres with buildings connected to the system; and
  - City-owned energy transfer stations (ETS) located within the building connected to the system. The ETS transfers heat energy from the distribution system to the building's mechanical system, and is used to meter the amount of energy used.
- All new developments within Service Area A with a build-out density equal to or greater than a floor area ratio (FAR) of 1.0 will be required to provide hydronic thermal energy systems in support of the City's District Energy (DE) system including domestic hot water, make-up air units and in-suite hydronic space heating. The City is committed to having the DE system operational within the timeframe of this project. Therefore, the subject application will be required to connect to the City's DE system prior to occupancy.

- In order to avoid conflicts between the District Energy System and other utilities, the location of the ETS and related service connections are confirmed by Engineering and the applicant at the servicing agreement stage. The Engineering Department also requires the applicant to register a statutory right-of-way and Section 219 Restrictive Covenant over the subject site for the following purposes:
  - City access to, and maintenance and operation of, the ETS within the building and any infrastructure between the building and the property line; and
  - to prevent conflicts with other utilities.
- Prior to the issuance of a building permit, the Engineering Department will confirm that the applicant has met the requirements of the "City Centre District Energy System By-law".

### INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	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.	OCP Redesignation Map
Appendix VI.	ADP Comments and Response
Appendix VII.	District Energy

*approved by Ron Gill*

Don Luymes  
General Manager  
Planning and Development

IM/ar

Information for City Clerk

Legal Description and Owners of all lots that form part of the application:

1. Properties involved in the Application

- (a) Civic Address: 10073 137A Street  
10083 137A Street  
10089 137A Street  
10057/55/65 137A Street  
10054 Whalley Boulevard  
10064 Whalley Boulevard  
10074 Whalley Boulevard  
10080 Whalley Boulevard  
10088 Whalley Boulevard

- (b) Civic Address: 10073 137A Street  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhese  
Amandeep Dhillon  
Charnjeev Makkar

No Officer Information Filed as at October 24, 2023.

PID: 005-561-060  
Lot 7 Section 26 Block 5 North Range 2 West New Westminster District Plan 16017

- (c) Civic Address: 10083 137A Street  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhese  
Amandeep Dhillon  
Charnjeev Makkar

No Officer Information Filed as at October 24, 2023.

PID: 011-523-573  
Lot 8 Section 26 Block 5 North Range 2 West New Westminster District Plan 16017

- (d) Civic Address: 10089 137A Street  
Owner: Fang Chen  
PID: 010-176-161  
Lot 9 Section 26 Block 5 North Range 2 West New Westminster District Plan 16017

- (e) Civic Address: 10057/55/65 137A Street  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhesi  
Amandeep Dhillon  
Charnjeev Makkar  
  
No Officer Information Filed as at October 24, 2023.
- PID: 010-535-853  
Lot 10 Section 26 Block 5 North Range 2 West New Westminster District Plan 19693
- (f) Civic Address: 10054 Whalley Blvd  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhesi  
Amandeep Dhillon  
Charnjeev Makkar  
  
No Officer Information Filed as at October 24, 2023.
- PID: 010-142-860  
Lot F Section 26 Block 5 North Range 2 West New Westminster District Plan 15940
- (g) Civic Address: 10064 Whalley Blvd  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhesi  
Amandeep Dhillon  
Charnjeev Makkar  
  
No Officer Information Filed as at October 24, 2023.
- PID: 004-780-469  
Lot "G" Section 26 Block 5 North Range 2 West New Westminster District Plan 15940
- (h) Civic Address: 10074 Whalley Blvd  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhesi  
Amandeep Dhillon  
Charnjeev Makkar  
  
No Officer Information Filed as at October 24, 2023.
- PID: 004-780-477  
Lot "H" Section 26 Block 5 North Range 2 West New Westminster District Plan 15940



(i) Civic Address: 10080 Whalley Blvd  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhesi  
Amandeep Dhillon  
Charnjeev Makkar

No Officer Information Filed as at October 24, 2023.

PID: 003-987-035  
Block "I" Section 26 Block 5 North Range 2 West New Westminster District Plan 15940

(j) Civic Address: 10088 Whalley Blvd  
Owner: Surrey Central Tower I Holdings Inc  
Director Information:  
Kulwant Dhesi  
Amandeep Dhillon  
Charnjeev Makkar

No Officer Information Filed as at October 24, 2023.

PID: 004-027-540  
Lot "J" Section 26 Block 5 North Range 2 West New Westminster District Plan 15940

2. (a) Agent: Name: Richard Bernstein  
Chris Dikeakos Architects Inc.  
Address: 1635 West Broadway  
Vancouver, BC V6J 1W9

3. Summary of Actions for City Clerk's Office

- (a) Introduce a By-law to amend the Official Community Plan to redesignate the site.
- (b) Introduce a By-law to rezone the site.

# PROPOSED MIXED-USE DEVELOPMENT

10054-88 WHALLEY BLVD. 10055-89 137A ST. SURREY, BC

## SUBMISSION to COUNCIL

January 29, 2024

PROJECT NUMBER: 7923-0297-00

### OWNER:

**TANGERINE DEVELOPMENTS**  
#203-15350 CROYDON DRIVE,  
SURREY, BC V3Z 0Z5  
TEL: 604.506.2535  
CONTACT: AMAN DHESI  
EMAIL: AMAN.DHESI@TANGERINEDEVELOPMENTS.COM

### ARCHITECT:

**CHRIS DIKEAKOS ARCHITECTS INC.**  
1635 W BROADWAY  
VANCOUVER BC, V6J 1W9  
TEL: (604) 291-2660  
FAX: (604) 291-2667  
CONTACT: RICHARD BERNSTEIN  
EMAIL: RICHARD.B@DIKEAKOS.COM

### LANDSCAPE ARCHITECT:

**DKL – DURANTE KREUK LTD.**  
UNIT 102 – 1637 WEST 5TH AVENUE,  
VANCOUVER, BC, V6J 1N5  
TELEPHONE 604-880-1721  
CONTACT: DYLAN CHERNOFF  
E-MAIL: DYLAN@DKL.BC.CA

### CIVIL:

**COASTLAND ENGINEERING & SURVEYING LTD.**  
#101- 19292 60TH AVENUE, SURREY, BC V3S 3M2  
TELEPHONE 604-532-9700 EXT 203  
CONTACT: MIKE HELLE  
E-MAIL: HELL@COASTLAND.BC.CA

### GEOTECHNICAL:

**GEOPACIFIC CONSULTANTS**  
1779 WEST 75TH AVENUE,  
VANCOUVER BC, V6P 6O2,  
TEL: 778 994 7474  
CONTACT: ALEX GOSSEN  
EMAIL: GOSSEN@GEOPACIFIC.COM

### ELEVATOR:

**GUNN CONSULTANTS**  
SUITE 166 1020 MAINLAND STREET, VANCOUVER, BC  
TEL: 604-630-2276  
CONTACT: THEDA KHUU  
EMAIL: CONTACT@GUNNCONSULTANTS.COM

### TRAFFIC:

**BUNT & ASSOCIATES ENGINEERING LTD.**  
SUITE 1550 – 1050 WEST PENDER STREET, VANCOUVER, BC  
V6E 3S7  
TEL: 604-685-6427 EXT 227  
CONTACT: DANIEL FUNG  
E-MAIL: DFUNG@BUNTENG.COM

### STRUCTURAL:

**KOR STRUCTURAL**  
502-510 BURRAND STREET,  
VANCOUVER BC, V6C 3A8,  
TEL: 604 685 9533  
CONTACT: JOHN MARKULIN  
EMAIL: JMARKULIN@KORSTRUCTURAL.COM

### MECHANICAL/ENERGY MODEL:

**EMEC**  
SUITE 209, 5460 152 STREET,  
SURREY BC, V3S 5J9,  
TEL: 604 999 2069  
CONTACT: ZEESHAN WAHLA  
EMAIL: ZEE@EMEC.CA

### ELECTRICAL:

**EMEC**  
SUITE 209, 5460 152 STREET,  
SURREY BC, V3S 5J9,  
TEL: 604 999 2069  
CONTACT: DAVE HANS  
EMAIL: DAVE@EMEC.CA

### SPRINKLER ENGINEERING:

**CARDINAL ENGINEERING LTD.**  
SUITE 709, 610 GRANVILLE STREET,  
VANCOUVER, BC, V6C 3T3  
TEL: 604.605.0606  
CONTACT: RYAN PAVEY  
E-MAIL: PAVEY@CARDINALFIRE.CA

### CODE:

**P SQUARE**  
UNIT 208 314 WEST CORDOVA STREET,  
VANCOUVER, BC  
TEL: 778-882-7720  
CONTACT: PETER HOSSEINI  
E-MAIL: PETER@PSQUARE.CA

### ENVELOPE:

**BC BUILDING SCIENCE**  
611 BENT COURT, NEW WESTMINSTER, BC V3M 1V3  
TEL: 604-520-6456  
CONTACT: ARNOLD LIMANTONO  
E-MAIL: ARNOLD@BCBUILDINGSCIENCE.COM



**TWO PHASE - MIXED-USE + 2 TOWERS**

**87,254** SITE  
SQUARE FEET

**7.38** FAR  
RATIO

**644,097** GROSS AREA  
GROSS SQUARE FEET

<b>822</b>	TOTAL UNITS PHASE 1&2
<b>722</b>	TOTAL STALLS PHASE 1&2
<b>8,046</b>	RETAIL GROSS SQUARE FEET
<b>7,495</b>	TYPICAL FLOOR PLATE SIZE
<b>82.6%</b>	EFFICIENCY

**PHASE 1**

**16,126** GROUND LEVEL  
GROSS SQUARE FEET

**84,010** PODIUM  
GROSS SQUARE FEET  
16,283-14,784 PER FLOOR

**6** LEVELS  
BUILDING PODIUM

**201,645** TOWER 2  
GROSS SQUARE FEET  
7,495 PER FLOOR

**27** LEVELS  
TOWER ABOVE PODIUM

**9,928** AMENITY T2  
GROSS SQUARE FEET

**PHASE 2**

**15,060** GROUND LEVEL  
GROSS SQUARE FEET

**126,774** PODIUM  
GROSS SQUARE FEET  
16,565-15,428-10,265 PER FLOOR

**10** LEVELS  
BUILDING PODIUM

**209,140** TOWER 1  
GROSS SQUARE FEET  
7,495 PER FLOOR

**28** LEVELS  
TOWER ABOVE PODIUM

**8,708** AMENITY T1  
GROSS SQUARE FEET

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**33** STOREY TOTAL  
BUILDING

**±379** UNITS T2  
TOTAL

**±334** PARKADE T2  
STALLS

**4** PARKING LEVELS

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**38** STOREY TOTAL  
BUILDING

**±443** UNITS T1  
TOTAL

**±388** PARKADE T1  
STALLS

**4** PARKING LEVELS



**Project Development Data - Mixed-use Development**  
10054-88 Whalley Blvd. & 10055-89 137A Street, Surrey BC

**A. Project:**  
Tower 1: 38 Storey Mixed Use Tower & 10 Storey Residential Podium  
Tower 2: 33 Storey Residential Tower & 6 Storey Residential Podium

**B. Legal Description:**

**C. Zoning:**  
Existing: RF  
Proposed: CD (based on Surrey City Plan)

	Dedication from Street Centerline	Phase 1		Phase 2	
		Residential	Commercial	Residential	
101 Avenue	0.0 m	4.5 m	3.0 m	4.5 m	
137A Street	0.0 m	4.5 m	-	-	
Green Lane	7.3 m (East) 6.0 m (West)	4.5 m	3.0 m	4.5 m	
Whalley Boulevard	5.9 m	-	3.0 m	4.5 m	
Phasing Line		0 m		0 m	

**E. Building Height:**

Max. Proposed Building Height - Tower 1: 128.25 m  
Max. Proposed Building Height - Tower 2: 114.25 m

**F. Site Coverage Calculations:**

Gross Site Area	8106 sq m	87,254 sq ft
Dedication	0 sq m	0 sq ft
Road Dedication	1109 sq m	11,941 sq ft
Net Site Area	6997 sq m	75,313 sq ft
FAR		7.38
<b>Total Allowable GFA</b>	<b>59839 sq m</b>	<b>644,097 sq ft</b>

**G. Floor Area Ratio (F.A.R.) Calculation:**

	Residential FAR Area	Commercial FAR Area	Proposed Total FAR Area	Gross F.A.R. (by Phase)	Net F.A.R. (by Phase)	Site Coverage Per Phase	Net Lot Area Per Phase	Buildings and Structures
(Phase 2)	31556.8 sq m 339,675 sq ft	747.5 sq m 8,046 sq ft	32304.3 sq m 347,721 sq ft	3.99	9.22	49.9%	3504.2 sq m 37,719 sq ft	1748.4 sq m (18,820 sq ft)
(Phase 1)	27534.2 sq m 296,376 sq ft		27534.2 sq m 296,376 sq ft	3.40	7.88	50.0%	3492.6 sq m 37,594 sq ft	1746.4 sq m (18,798 sq ft)
<b>Total</b>	<b>59091.0 sq m 636,051 sq ft</b>	<b>747.5 sq m 8,046 sq ft</b>	<b>59838.5 sq m 644,097 sq ft</b>	<b>7.38</b>	<b>8.55</b>	<b>49.9%</b>	<b>6996.8 sq m 75,313 sq ft</b>	<b>3494.8 sq m (37,618 sq ft)</b>

**H. Residential Statistics - Floor Areas**

*NOTE: All floor areas are "Gross Floor Area" as defined by the Surrey Zoning Bylaw: 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.*

**(PHASE 2)**

Level	Number of Floors	Unit Area per Floor	Total Unit Area	Common Area per Floor	Total Common Area	Indoor Amenity Area	Gross Area per Floor	Total Gross Area (all Floors)	FAR Exclusion
L1 (0 Unit)	1			421.5 sq m (4,537 sq ft)	421.5 sq m (4,537 sq ft)	230.1 sq m (2,477 sq ft)	651.6 sq m (7,014 sq ft)	651.6 sq m (7,014 sq ft)	230.1 sq m (2,477 sq ft)
L2-4 (21 Unit)	3	1281.8 sq m (13,797 sq ft)	3845.3 sq m (41,391 sq ft)	257.2 sq m (2,788 sq ft)	771.5 sq m (8,304 sq ft)		1538.9 sq m (16,565 sq ft)	4616.8 sq m (49,695 sq ft)	
L5-7 (19 Unit)	3	1178.6 sq m (12,686 sq ft)	3535.7 sq m (38,058 sq ft)	254.7 sq m (2,742 sq ft)	764.2 sq m (8,226 sq ft)		1433.3 sq m (15,428 sq ft)	4299.9 sq m (46,284 sq ft)	
L8-10 (15 Unit)	3	758.1 sq m (8,160 sq ft)	2274.3 sq m (24,480 sq ft)	195.6 sq m (2,105 sq ft)	586.7 sq m (6,315 sq ft)		953.6 sq m (10,265 sq ft)	2860.9 sq m (30,795 sq ft)	
L11 (9 Unit)	1	495.7 sq m (5,336 sq ft)	495.7 sq m (5,336 sq ft)	130.8 sq m (1,408 sq ft)	130.8 sq m (1,408 sq ft)	72.1 sq m (776 sq ft)	698.6 sq m (7,520 sq ft)	698.6 sq m (7,520 sq ft)	72.1 sq m (776 sq ft)
L12 (9 Unit)	1	506.1 sq m (5,448 sq ft)	506.1 sq m (5,448 sq ft)	121.0 sq m (1,302 sq ft)	121.0 sq m (1,302 sq ft)		627.1 sq m (6,750 sq ft)	627.1 sq m (6,750 sq ft)	0.0 sq m (0 sq ft)
L13-38 (10 Unit)	26	575.3 sq m (6,193 sq ft)	14959.1 sq m (161,018 sq ft)	3145.0 sq m (33,852 sq ft)	3145.0 sq m (33,852 sq ft)		696.3 sq m (7,495 sq ft)	18104.0 sq m (194,870 sq ft)	
L39 - Amenity (0 Unit)	1					506.8 sq m (5,455 sq ft)	506.8 sq m (5,455 sq ft)	506.8 sq m (5,455 sq ft)	506.8 sq m (5,455 sq ft)
<b>TOTAL</b>	<b>39</b>		<b>25616.2 sq m (275,731 sq ft)</b>		<b>6940.6 sq m (62,944 sq ft)</b>		<b>809.0 sq m (8,708 sq ft)</b>	<b>32365.8 sq m (348,383 sq ft)</b>	<b>809.0 sq m (8,708 sq ft)</b>

**(PHASE 1)**

Level	Number of Floors	Unit Area per Floor	Total Unit Area	Common Area per Floor	Total Common Area	Total Amenity Area	Area per Floor	Total Area (all Floors)	FAR Exclusion
L1 (10 Unit)	1	519.8 sq m (5,595 sq ft)	519.8 sq m (5,595 sq ft)	548.3 sq m (5,902 sq ft)	548.3 sq m (5,902 sq ft)	274.7 sq m (2,957 sq ft)	1342.8 sq m (14,454 sq ft)	1342.8 sq m (14,454 sq ft)	274.7 sq m (2,957 sq ft)
TH Mezzanine (0 Unit)	1	519.6 sq m (5,593 sq ft)	519.6 sq m (5,593 sq ft)				519.6 sq m (5,593 sq ft)	519.6 sq m (5,593 sq ft)	
L2-4 (21 Unit)	3	1292.5 sq m (13,912 sq ft)	3877.4 sq m (41,736 sq ft)	220.3 sq m (2,371 sq ft)	660.9 sq m (7,113 sq ft)		1512.2 sq m (16,283 sq ft)	4538.2 sq m (48,849 sq ft)	
L5-6 (19 Unit)	2	1165.2 sq m (12,542 sq ft)	2330.4 sq m (25,084 sq ft)	208.3 sq m (2,242 sq ft)	416.6 sq m (4,484 sq ft)		1373.5 sq m (14,784 sq ft)	2747.0 sq m (29,568 sq ft)	
L7 (9 Unit)	1	495.7 sq m (5,336 sq ft)	495.7 sq m (5,336 sq ft)	130.8 sq m (1,408 sq ft)	130.8 sq m (1,408 sq ft)	72.1 sq m (776 sq ft)	698.6 sq m (7,520 sq ft)	698.6 sq m (7,520 sq ft)	72.1 sq m (776 sq ft)
L8 (9 Unit)	1	506.1 sq m (5,448 sq ft)	506.1 sq m (5,448 sq ft)	121.0 sq m (1,302 sq ft)	121.0 sq m (1,302 sq ft)		627.1 sq m (6,750 sq ft)	627.1 sq m (6,750 sq ft)	0.0 sq m (0 sq ft)
L9-33 (10 Unit)	25	575.3 sq m (6,193 sq ft)	14383.7 sq m (154,825 sq ft)	3024.0 sq m (32,550 sq ft)	3024.0 sq m (32,550 sq ft)		696.3 sq m (7,495 sq ft)	17407.7 sq m (187,375 sq ft)	
L34 - Amenity (0 Unit)	1					506.8 sq m (5,455 sq ft)	506.8 sq m (5,455 sq ft)	506.8 sq m (5,455 sq ft)	506.8 sq m (5,455 sq ft)
<b>TOTAL</b>	<b>35</b>		<b>22832.8 sq m (243,617 sq ft)</b>		<b>4901.5 sq m (52,759 sq ft)</b>		<b>853.6 sq m (9,188 sq ft)</b>	<b>28387.8 sq m (305,564 sq ft)</b>	<b>853.6 sq m (9,188 sq ft)</b>

<b>Phase 2 - Residential Floor Area</b>		32365.8 sq m	348,383 sq ft
Deduct Amenity Space		-809.0 sq m	-8,708 sq ft
<b>Tower 1 - Net Residential Floor Area</b>		31556.8 sq m	339,675 sq ft
<b>Phase 1 - Residential Floor Area</b>		28387.9 sq m	305,564 sq ft
Deduct Amenity Space		-853.6 sq m	-9,188 sq ft
<b>Tower 2 - Net Residential Floor Area</b>		27534.2 sq m	296,376 sq ft
<b>Total Residential Floor Area</b>		60753.6 sq m	653,947 sq ft
Deduct Amenity Space		-1662.6 sq m	-17,896 sq ft
<b>Net Residential Floor Area</b>		59091.0 sq m	636,051 sq ft

**J. Commercial Statistics - Areas**

(PHASE 2)	Commercial / Retail	Community Amenity	Large Retail	Restaurant	Service / Circulation	Total
Level						
L1	747.5 sq m 8,046 sq ft	-	-	0.0 sq m 0 sq ft	0.0 sq m 0 sq ft	747.5 sq m 8,046 sq ft
<b>Total</b>	747.5 sq m 8,046 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	747.5 sq m 8,046 sq ft

**K. Residential Statistics - Unit Counts**

(PHASE 2)	Level	# of Floors	Studio (459-460 sq ft)	1Bed (443-514 sq ft)	1Bed+Den (504-588 sq ft)	2Bed (Junior) (625-761 sq ft)	2Bed (625-815 sq ft)	2Bed+Den (761-976 sq ft)	3Bed (n/a)	TH (n/a)	Total (per Floor)	Total (all Floors)
L1	1	0	0	0	0	0	0	0	0	0	0	0
L2-4	3	1	3	3	4	3	3	3	0	10	21	63
L5-7	3	1	3	3	3	3	4	3	0	19	57	171
L8-10	3	1	3	3	3	0	5	2	1	15	45	135
L11	1	1	3	3	2	0	3	0	0	9	9	9
L12	1	0	4	4	1	1	3	0	0	9	9	9
L13-38	26	0	4	1	1	1	4	0	0	10	260	6760
L39 - Amenity	1	0	0	0	0	0	0	0	0	0	0	0
<b>Total (all Floors)</b>	<b>39</b>	<b>10</b>	<b>138</b>	<b>59</b>	<b>45</b>	<b>155</b>	<b>24</b>	<b>12</b>	<b>0</b>	<b>443</b>	<b>100.0%</b>	<b>443</b>
Distribution		2.3%	31.2%	13.3%	10.2%	35.0%	5.4%	2.7%	0.0%			100.0%
NOTE: 5% Adaptable units		22			54.6%		40.4%	5.4%		2.7%		

(PHASE 1)	Level	# of Floors	Studio (459-460 sq ft)	1Bed (443-514 sq ft)	1Bed+Den (511-588 sq ft)	2Bed (Junior) (673 sq ft)	2Bed (681-862 sq ft)	2Bed+Den (769-979 sq ft)	3Bed (n/a)	TH (517-666 sq ft)	Total (per Floor)	Total (all Floors)
L1	1	0	0	0	0	0	0	0	0	10	10	10
TH Mezzanine	1	0	0	0	0	0	0	0	0	0	0	0
L2-4	3	1	3	3	6	6	4	1	0	21	63	189
L5-6	2	1	4	4	0	5	4	1	0	19	38	76
L7	1	1	3	2	0	3	0	0	0	9	9	9
L8	1	0	4	1	1	1	0	0	0	9	9	9
L8-33	25	0	4	1	1	4	0	0	0	10	250	6250
L34 - Amenity	1	0	0	0	0	0	0	0	0	0	0	0
<b>Total (all Floors)</b>	<b>35</b>	<b>6</b>	<b>124</b>	<b>54</b>	<b>26</b>	<b>134</b>	<b>20</b>	<b>5</b>	<b>10</b>	<b>379</b>	<b>100.0%</b>	<b>379</b>
Distribution		1.6%	32.7%	14.2%	6.9%	35.4%	5.3%	1.3%	2.6%			100.0%
NOTE: 5% Adaptable units		19			53.8%		40.6%	5.3%		4.0%		
TOWER 1 & 2										4.0%		
TOTAL Building 1 & Building 2										3.3%		822

**N. Amenity**

INDOOR: 3.0 sq. m [32 sq.ft.] per dwelling unit up to 557 sq. m [6000 sq.ft.] of amenity space (equivalent to 186 dwelling units); and 1.0 sq.m [10.76 sq.ft.] per dwelling unit for that portion greater than 557 sq.m [6000 sq.ft.] of amenity space  
 OUTDOOR: 3.0 sq.m [32 sq.ft.] per dwelling unit and shall not be located within the required setbacks;

Amenity (Indoor)	Number of Units	Required Indoor Amenity per Unit	Total Required Indoor Amenity	Provide Indoor Amenity				Total Provided Indoor Amenity	Amenity (Outdoor)		
				Level 1	Level 11	Level 12	Level 39		Required Outdoor Amenity	Total Required Outdoor Amenity	Total Provided Outdoor Amenity
(Phase 2)	443	3.0 sq m (32 sq ft)	814.4 sq m (8,766 sq ft)	230.1 sq m (2,477 sq ft)	72.1 sq m (776 sq ft)	0.0 sq m (0 sq ft)	506.8 sq m (5,455 sq ft)	809.0 sq m (8,708 sq ft)	3.0 sq m (32 sq ft)	1317.0 sq m (14,176 sq ft)	1824.1 sq m (19,634 sq ft)
(Phase 1)	379	3.0 sq m (32 sq ft)	750.4 sq m (8,077 sq ft)	274.7 sq m (2,957 sq ft)	72.1 sq m (776 sq ft)	0.0 sq m (0 sq ft)	506.8 sq m (5,455 sq ft)	853.6 sq m (9,188 sq ft)	3.0 sq m (32 sq ft)	1126.7 sq m (12,129 sq ft)	1962.9 sq m (21,129 sq ft)
<b>TOTAL</b>	<b>822</b>		<b>1564.8 sq m (16,844 sq ft)</b>					<b>1662.6 sq m (17,896 sq ft)</b>		<b>2443.7 sq m (26,304 sq ft)</b>	<b>3787.0 sq m (40,763 sq ft)</b>

Outdoor Amenity			
Tower 1		Tower 2	
L1	(9,001 sq ft)	L1	(7,980 sq ft)
L2-4	(1,123 sq ft)	L2-4	(3,122 sq ft)
L5-7	(1,228 sq ft)	L5	(2,449 sq ft)
L8-10	(3,733 sq ft)	L7	(7,578 sq ft)
L11	(4,549 sq ft)		
<b>TOTAL</b>	<b>(19,634 sq ft)</b>	<b>TOTAL</b>	<b>(21,129 sq ft)</b>

**PROJECT DATA**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT

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**L. 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.] **2.4 stalls/100sm (includes 20% reduction to base rate for City Centre)**

**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.

\*\* TDM Reduction: Maximum 20% is allowed in city center

**INTERIM ( PHASE 1 )**

Phase 1	Ratio	Required / Allowable			Required after TDM Reduction**	Total Provided	Provided within Total		
		Gross	H/C	Small			Gross	H/C	Small
		Residential	0.90 stall / unit	341			7	119	296
Visitor*	0.1 stall / unit	38	0	13	38	38	0	13	
<b>Total Parking Stalls</b>		<b>379</b>	<b>7</b>	<b>133</b>	<b>334</b>	<b>334</b>	<b>6</b>	<b>13</b>	

**Available Parking stalls on each phase**

	(Phase 2)	(Phase 1)	TOTAL
P1	77	81	158
P2	96	94	190
P3	98	96	194
P4	84	96	180
<b>TOTAL</b>	<b>355</b>	<b>367</b>	<b>722</b>

**ULTIMATE ( PHASE 1&2 )**

Phase 2	Ratio	Required / Allowable			Required after TDM Reduction**	Total Provided	Provided within Total		
		Gross	H/C	Small			Gross	H/C	Small
		Retail	2.4 stalls / 100 m2	18			0.4	6	15
<b>Commercial Subtotal</b>		<b>18</b>	<b>0.4</b>	<b>6</b>	<b>15</b>	<b>15</b>	<b>1</b>	<b>0</b>	
Residential	0.90 stall / unit	399	8	140	321	321	6	0	
Visitor*	0.1 stall / unit	44	0	16	44	44	0	0	
On-Site Car Share Vehicles		0	0	0	8	8	0	0	
<b>Residential Subtotal</b>		<b>443</b>	<b>8</b>	<b>155</b>	<b>373</b>	<b>373</b>	<b>6</b>	<b>0</b>	
<b>Total Parking Stalls</b>		<b>461</b>	<b>8</b>	<b>161</b>	<b>388</b>	<b>388</b>	<b>7</b>	<b>0</b>	

**Available Bike stalls on each phase**

	(Phase 2)	(Phase 1)	TOTAL
P1	30	18	48
P2	150	154	304
P3	171	154	325
P4	171	154	325
P5	0	0	0
<b>TOTAL</b>	<b>522</b>	<b>480</b>	<b>1002</b>

**33 required stalls for this tower will be in Phase 1 parking**

3-stall reduction supported by shared parking assessment between residential visitor and retail land use.  
2.4 stalls/100sm (includes 20% reduction to base rate for City Centre)

Phase 1	Ratio	Required / Allowable			Required after TDM Reduction**	Total Provided	Provided within Total		
		Gross	H/C	Small			Gross	H/C	Small
		Residential	0.90 stall / unit	341			7	119	296
Visitor*	0.1 stall / unit	38	0	13	38	38	0	13	
<b>Total Parking Stalls</b>		<b>379</b>	<b>7</b>	<b>133</b>	<b>334</b>	<b>334</b>	<b>6</b>	<b>13</b>	

<b>Total</b>	840		722	<b>722</b>	<b>Total stalls for both phases</b>
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In accordance with the transitional provisions set out in Schedule J, 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.

**M. Required Bike Storage** (1.2 Stalls per unit, 6 visitor bicycle spaces)

	Retail	Restaurant	Res. Visitor	Residential	Total Required
<b>Total</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>986</b>	<b>998</b>

	Retail	Restaurant	Res. Visitor	Residential	Total Provided
<b>Total</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>990</b>	<b>1002</b>

**DESIGN RATIONALE**

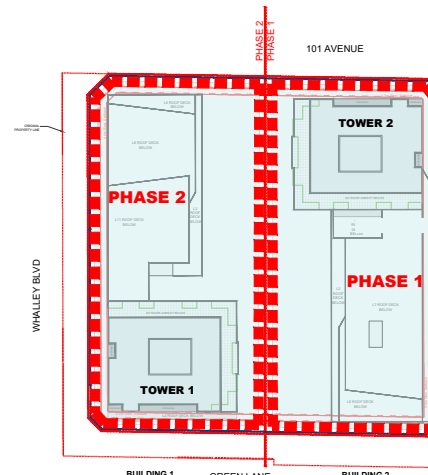
**SITE DESCRIPTION**

- The site is located between Whalley Boulevard to the west, 101 Avenue to the north, a newly created green lane to the south and 137A Street to the east, with frontage on all four sides, covering an area of approximately 87,250 square feet. Several community facilities exist in the adjacent neighborhood, including Holland Park, Green Timbers Urban Forest Park, and Hawthorne Rotary Park. The site is within a few minutes' walking distance of large-format grocery stores, food outlets, and medical services at Central City Shopping Mall.
- Additionally, the site offers multiple public transit options along King George Boulevard, including the King George Skytrain Station, and a major bike route runs adjacent to the site on Whalley Boulevard.



**SITE ORGANIZATION**

- The project calls for an anticipated 2-phased mixed-use multifamily residential development with two towers and a component of commercial retail units principally along Whalley Blvd. Tower 1 (Phase 2) is at 38 storeys and is situated at the corner of Whalley boulevard and the future green lane with commercial retail space at ground level. Tower 2 (Phase 1) will be 33 storeys and is located at the corner of 101 Avenue and 137A street.
- The towers have also been positioned on site to maximize view corridors from each tower with offsetting positions and the podium forms all have landscaped roof treatments providing an elevated area of open space amenity for the residents of each tower.
- A significant courtyard stretches from North to South between the building forms and provides ground level connections between the two phases. This design offers opportunities for residents to have green open space within their own development. The plaza/open space will extend towards the proposed project to the North, creating a welcoming open area and enhancing the site's inviting atmosphere. This visual and physical connection further elevates the walkability aspect of this area of Surrey City Central. The North-South courtyard axis will be lined with amenities spaces, providing both visual appeal, and gathering spots for the residents.



ROOF SITE PLAN



VIEW THROUGH THE PODIUM PLAZA

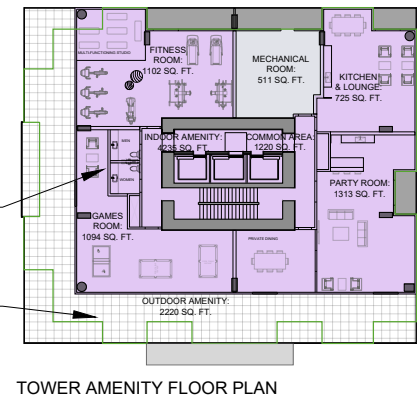
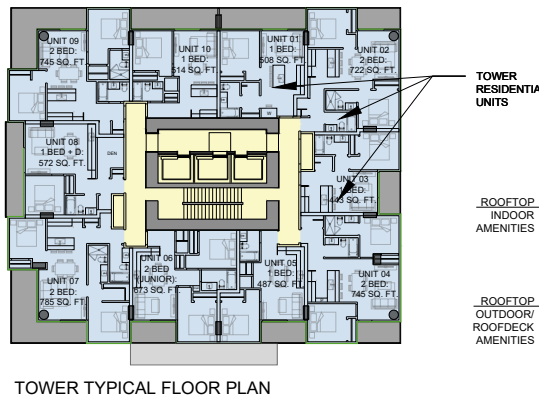
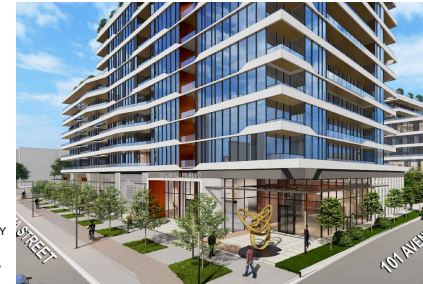
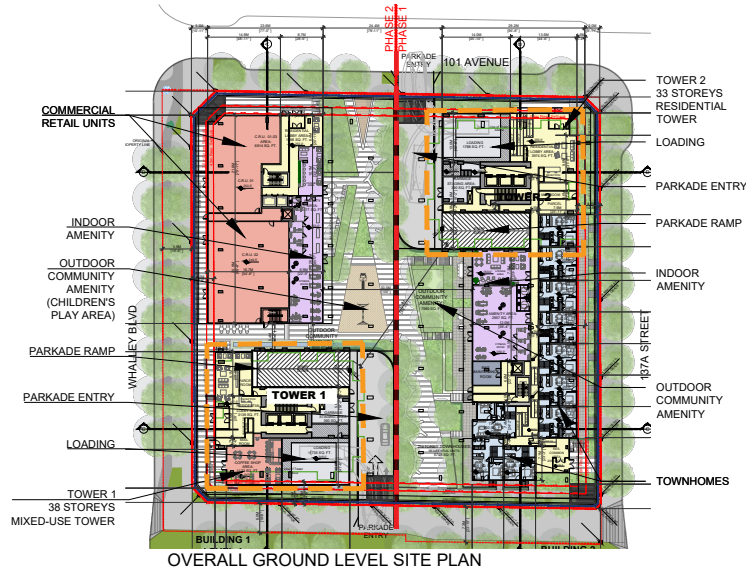
**DESIGN RATIONALE - SITE & FLOOR ORGANIZATION**





**FLOOR PLAN ORGANIZATION & FEATURES**

- The primary lobby access to the first residential tower is located at the corner of Whalley Blvd and the future green lane. Adjacent to the lobby on the southern side is a retail space reserved for CRU or a possible café.
- Ground-oriented indoor amenities are positioned back-to-back with the CRUs, facing the courtyard. This layout creates a seamless indoor/outdoor connection. The courtyard includes a kids' play area, seating area, and landscaped area.
- The main lobby for the second residential tower is situated at the corner of 101 Avenue and 137A Street. Adjacent to the lobby on the south side, there are seven two-story townhouses that face along 137A Street and extend to the secondary residential access located at the southeast corner. Additionally, there are four townhomes wrapping around the southwest corner of the building.
- This design animates the lane and treats it more like a street, providing 'eyes on the street.' Access to each townhouse at grade is available via the sidewalk through patios as well as through the primary and secondary lobbies, allowing residents to go directly from the below-grade parkade to their units without having to go outside.
- On the west side of building and facing the courtyard, there are ground oriented indoor amenities.
- Loading bays, garbage staging areas, and the ramp to access below-grade parking levels for Tower 1 is accessible from the Green Lane and for Tower 2 from 101 Avenue
- Terraced podium levels in both towers create opportunities for rooftop outdoor amenities and private patios, offering commanding views of the surrounding Surrey City Central neighborhood, as well as panoramic views of Downtown Vancouver, Mt. Baker, and the North Shore mountains.



**DESIGN RATIONALE - SITE & FLOOR ORGANIZATION**

**BUILDING ORGANIZATION/MASSING**

- Tower 1 is connected to a 10-storey podium that gradually steps down every 3 floors, and is thoughtfully sculpted, featuring articulated angled balconies facing north.
- Tower 2 is anchored by a 6-story podium with stepped articulation at the 5th floor.
- The angled podium steps opens up view corridors from the towers of each of the adjacent phases.
- The podium roof decks on the 11th floor of Tower 1 and 7th floor of Tower 2 will feature a green rooftop accessible to residential units. This outdoor amenity offers a spacious gathering area situated adjacent to the indoor social amenity space. Its southern orientation optimizes sunlight exposure throughout the day, creating an ideal setting for social gatherings and resident relaxation. We have varied the height between the two podiums to create more variety and a more dynamic look in the building forms as per our discussions with the Surrey Planning Department.

- RESIDENTIAL
- AMENITY
- OUTDOOR AMENITY
- COMMERCIAL/RETAIL



MASSING & BUILDING ORGANIZATION



PODIUM OUTDOOR AMENITY SPACES

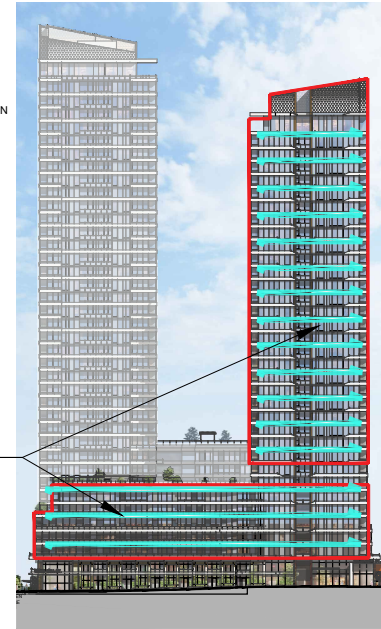


**ARCHITECTURAL EXPRESSION/  
FORM & CHARACTER**

- The design of the buildings incorporates horizontal bands that seamlessly integrates with the window system and balcony guardrails, resulting in a simple and elegant expression. This design language includes clearly articulated podiums and tower forms, allowing the buildings to talk to each other while retaining their distinctive characteristics.
- The orderly arrangement of horizontal lines creates a visually pleasing effect that not only gives an elegant and dynamic visual impact, but also contributes significantly to the city's skyline.
- The podium levels feature angled facades that face North and South, and they are stepped to add visual interest to the form and reduce its visual mass, creating corridor views for the units and allowing more sunlight to reach the courtyard area.
- On the western façade of Tower 1 and the eastern façade of Tower 2, two structural elements extend vertically from the ground to the top of tower. These architectural "spines" contribute to the building's structural integrity and introduce a unifying and visually captivating element, featuring prefinished metal panel in terracotta color that ties the entire structure together.
- To conceal mechanical equipment on the tower tops and service areas on the ground floor of each tower, perforated metal panels have been introduced, which gradually taper toward the corners, echoing the tapered roof decks on the podium levels.



TOWER 1



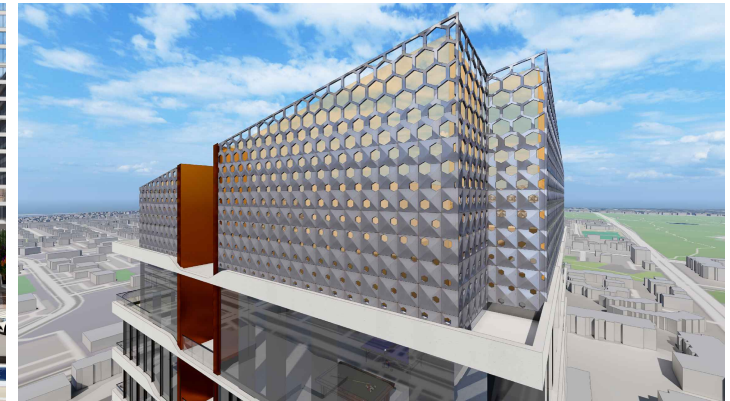
TOWER 2



PERSPECTIVE VIEW - TOWER 1



101 AVENUE



**DESIGN RATIONALE - SITE & FLOOR ORGANIZATION**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT

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SHENZHEN METRO CHANGZHEN DEPOT COMPLEX by BLVD INTERNATIONAL



PINNACLE ONE YONGE by HARIRI PONTARINI ARCHITECTS



SCARBOROUGH TWIN TOWERS by HILLAM ARCHITECTS

**PRECEDENT IMAGES**

SUBMISSION TO COUNCIL JANUARY 29, 2024

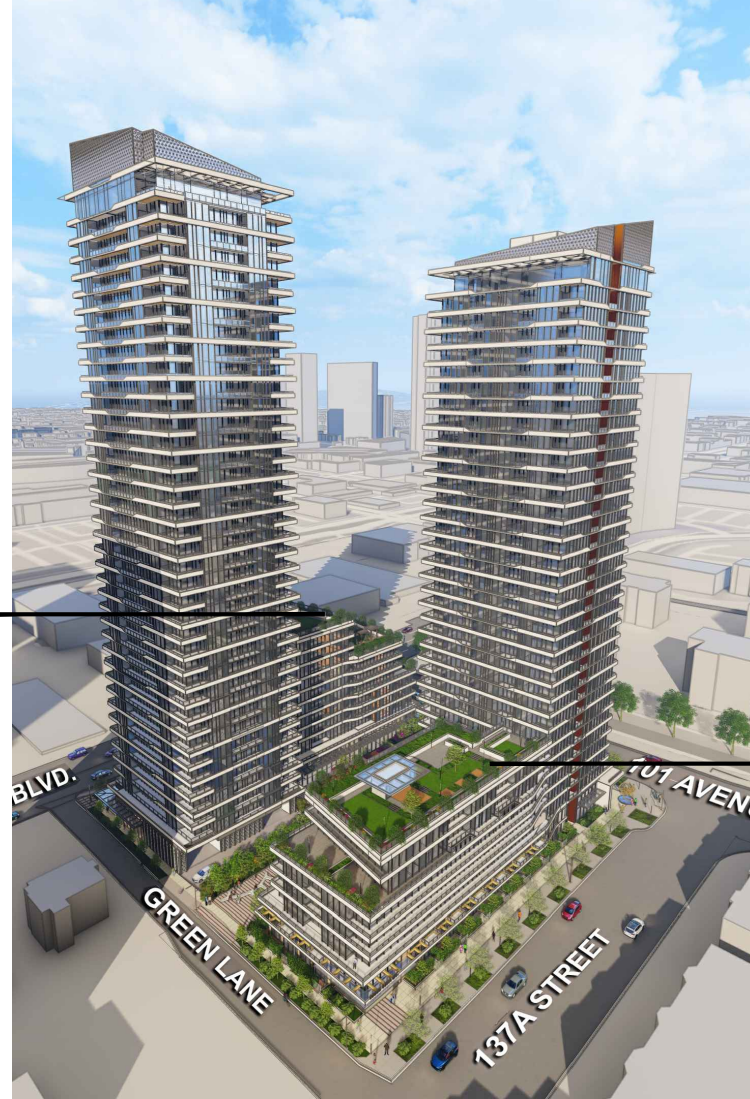
10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



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**TOWER 1**  
LEVEL 11 FLOOR INDOOR/OUTDOOR AMENITIES

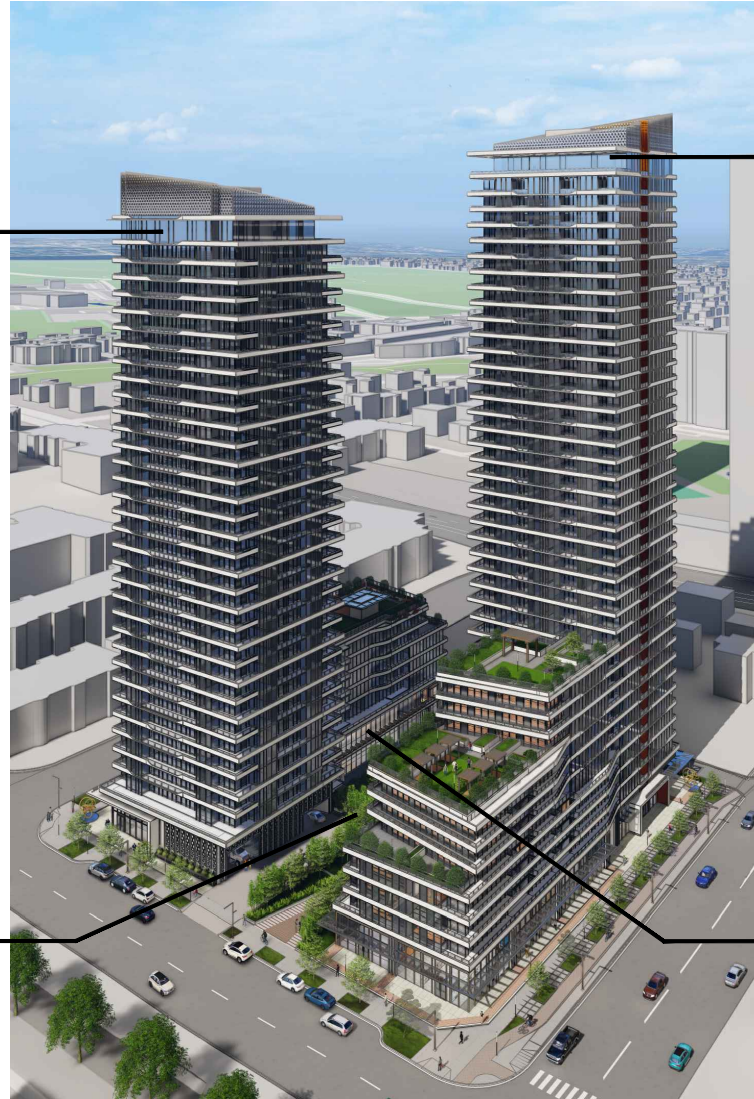
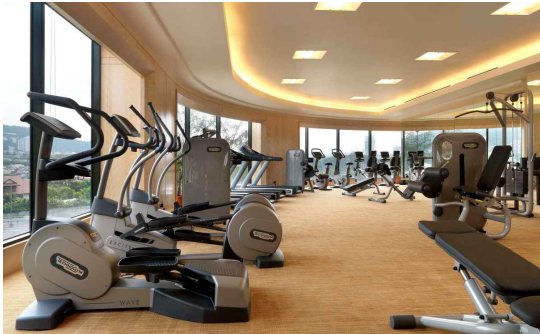


**TOWER 2**  
LEVEL 7 FLOOR INDOOR/OUTDOOR AMENITIES





**TOWER 1**  
LEVEL 39 FLOOR INDOOR AMENITIES



**TOWER 2**  
LEVEL 34 FLOOR INDOOR AMENITIES





TOWER 1 & 2  
LEVEL 1 FLOOR INDOOR/OUTDOOR AMENITIES





**PUBLIC TRANSIT**

The Tangerine Project is 400 meters walking distance to the King George Skytrain Station. Additionally it is well serviced by major bus lines which run along King George Blvd.



**ALTERNATIVE TRANSPORTATION**

A major bike route runs adjacent to the site on Whalley Boulevard. Additionally, provisions for dedicated bike parking will be located throughout the project.



**WALKABILITY**

The project is within walking distance of community facilities including green spaces, grocery stores, food outlets and medical services. Enhanced sidewalk widths and landscaping along Whalley Boulevard and the Plaza will encourage pedestrian activity for residents.



**ENERGY MANAGEMENT**

The buildings in the Tangerine 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 Tangerine 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.



**BUILDING MATERIALS**

Construction of the Tangerine Residence Development 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 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.



**ROOF DESIGN**

Traditionally, rooftops have been wasted areas of the urban landscape. By contrast, the multiple terraced roof areas of the Tangerine Residence Development are designed to incorporate living spaces, 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 MANAGEMENT**

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.



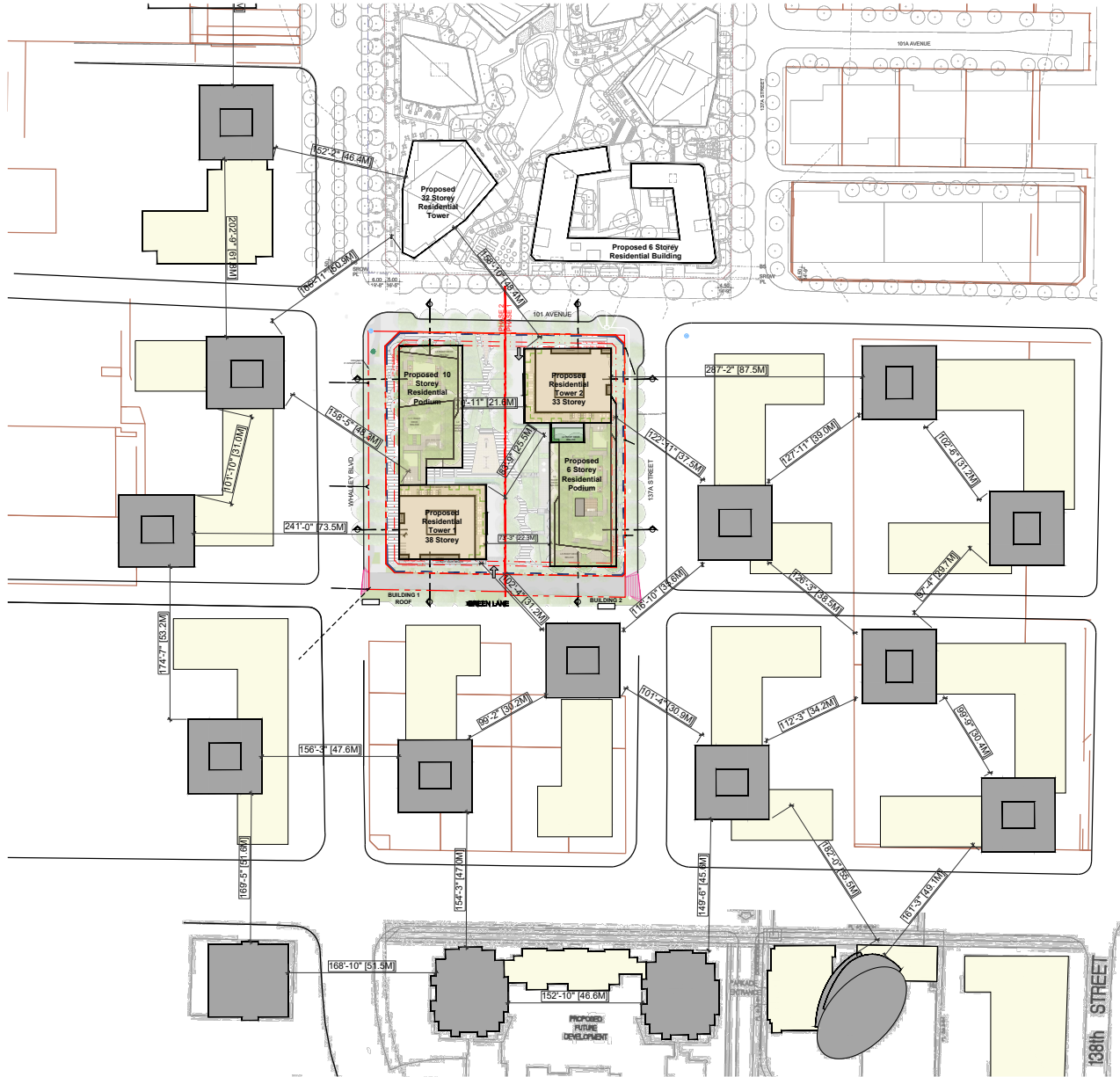
**SUSTAINABILITY STRATEGIES**

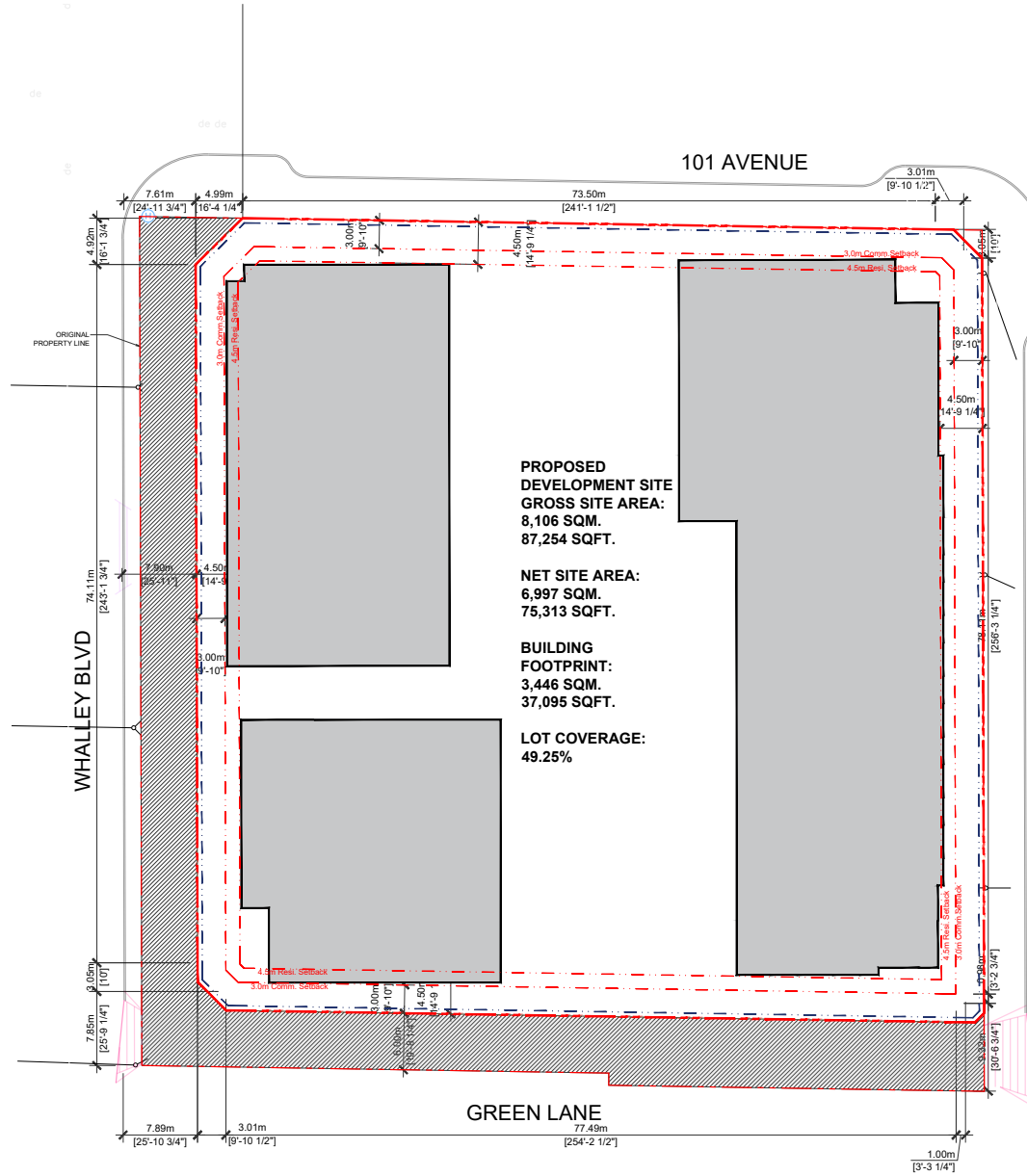
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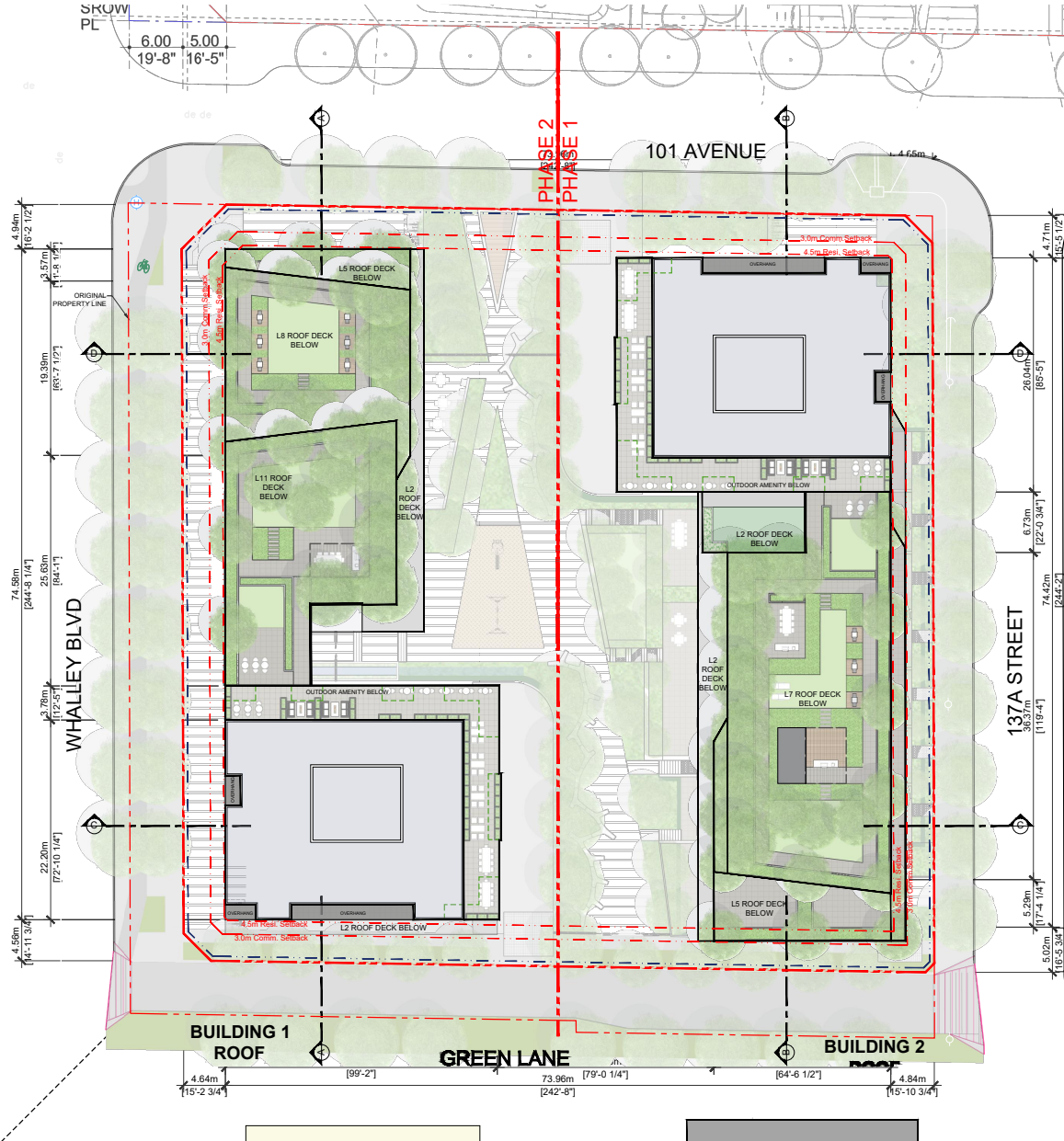
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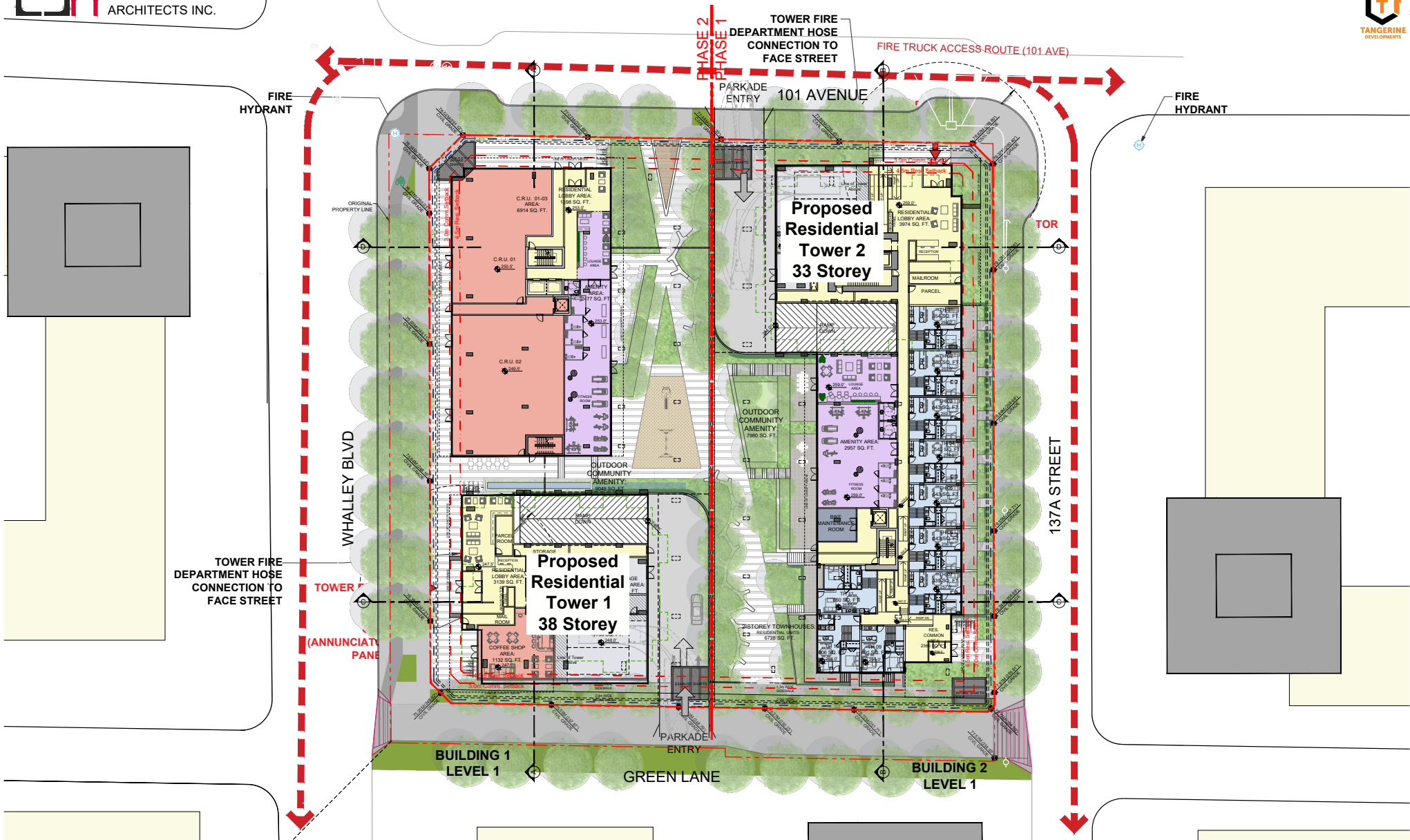




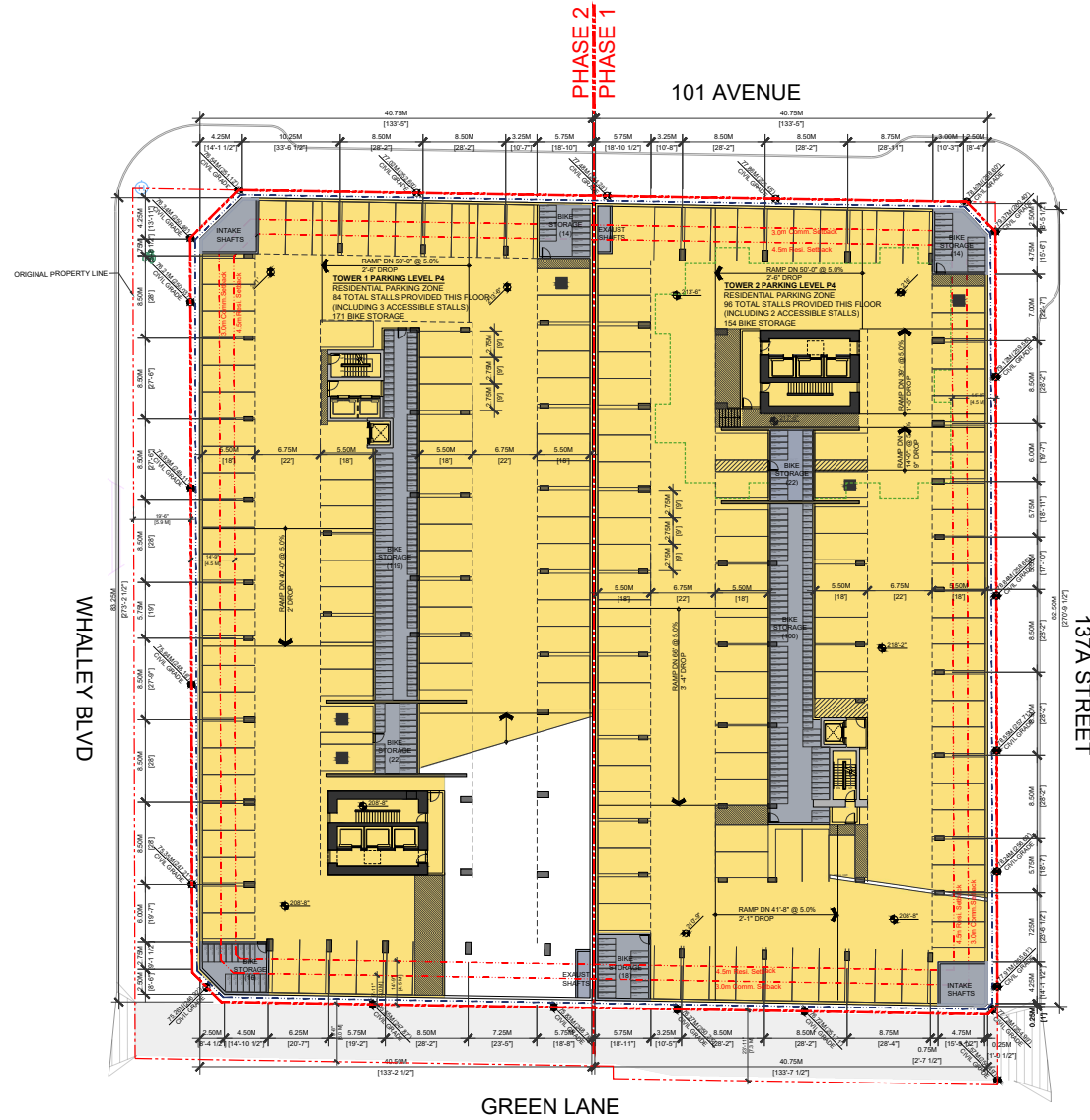


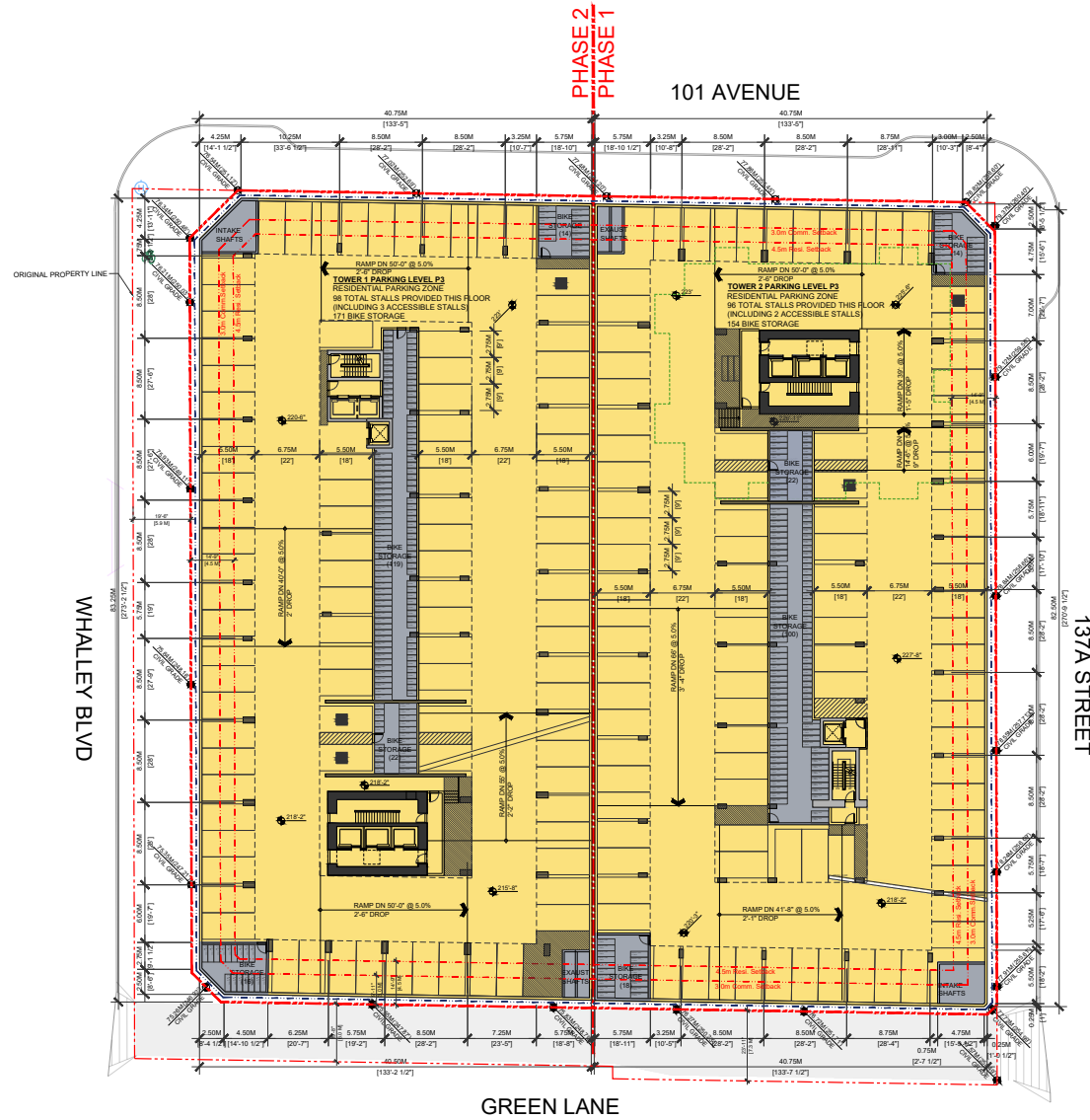










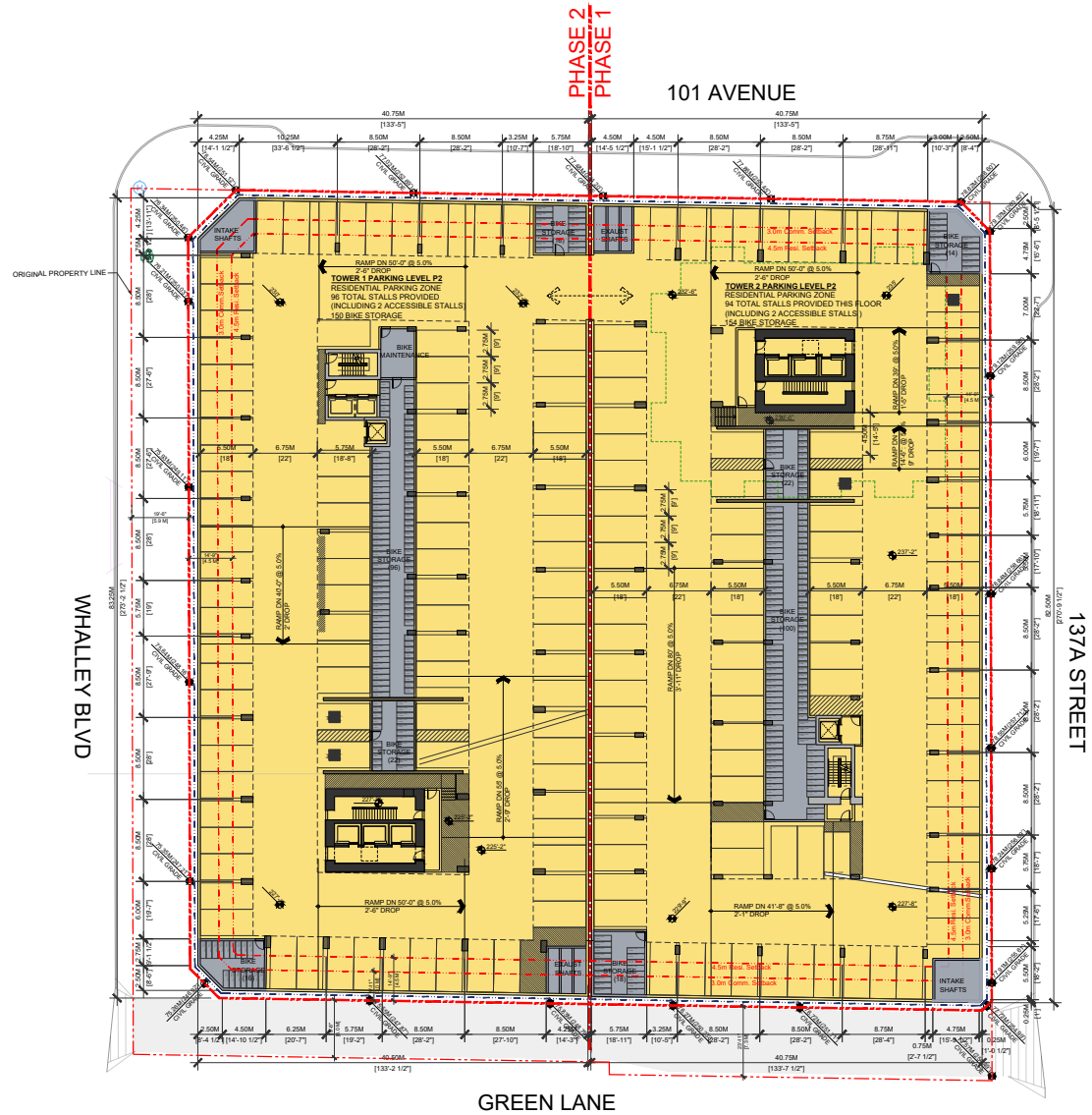


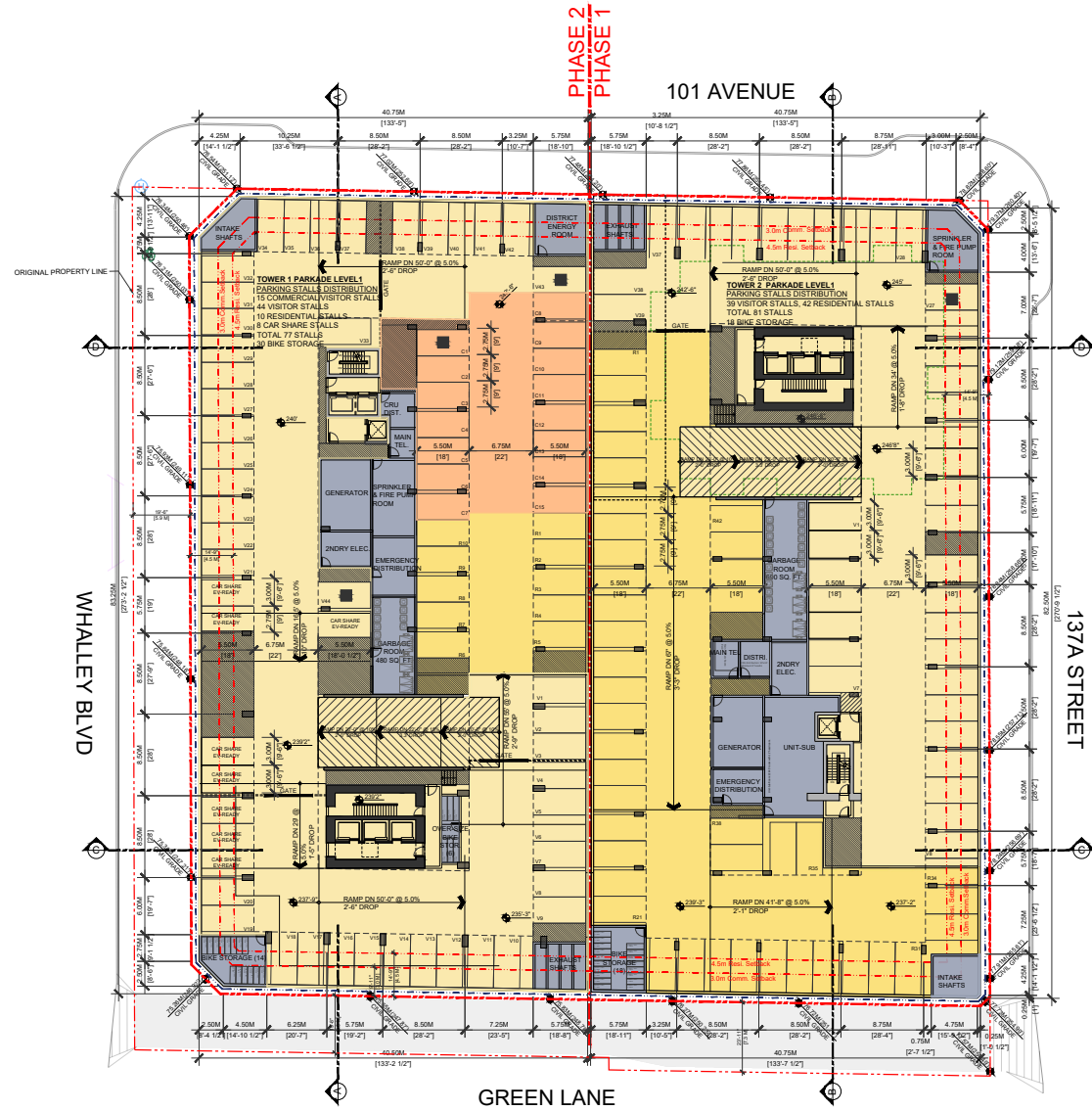
**LEVEL P3 PARKADE FLOOR PLAN**  
SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



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**LEVEL P1 PARKADE FLOOR PLAN**  
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10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



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 A203





**LEVEL 1 FLOOR PLAN**

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10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



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A204



**LEVEL 1 - MEZZANINE FLOOR PLAN**  
SUBMISSION TO COUNCIL JANUARY 29, 2024









**PODIUM AMENITY - L8(PHASE 1) & L12(PHASE 2)**

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10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



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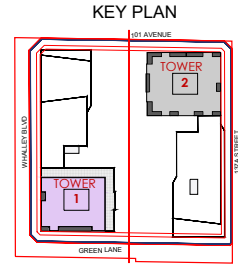
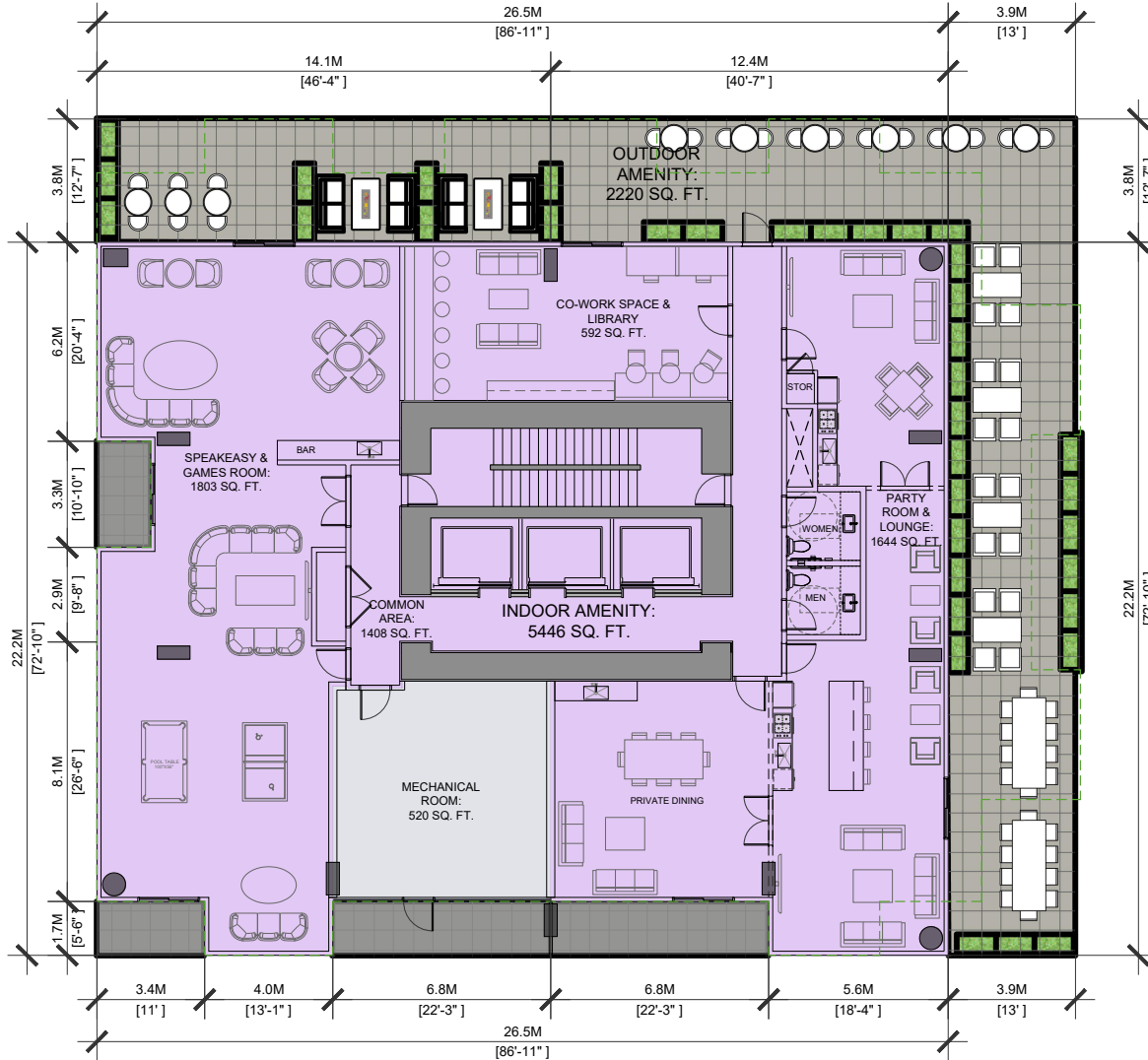
**ROOF PLAN**

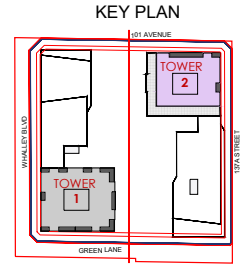
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10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



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A214





**AMENITY FLOOR PLAN - PHASE 1**

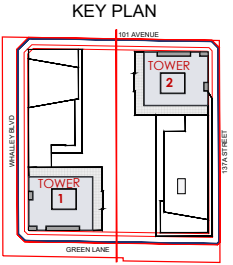
SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



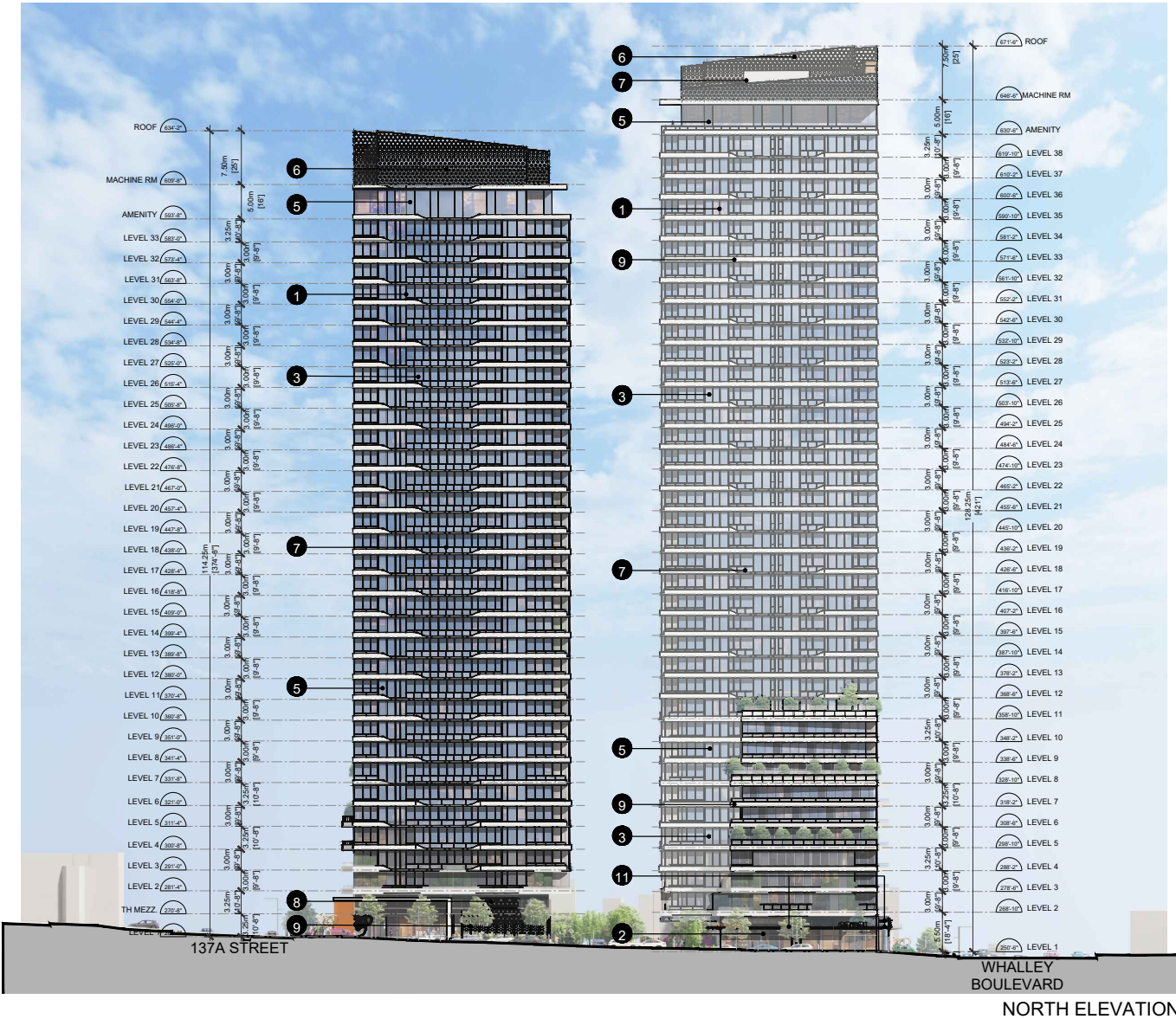
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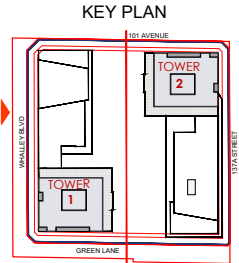
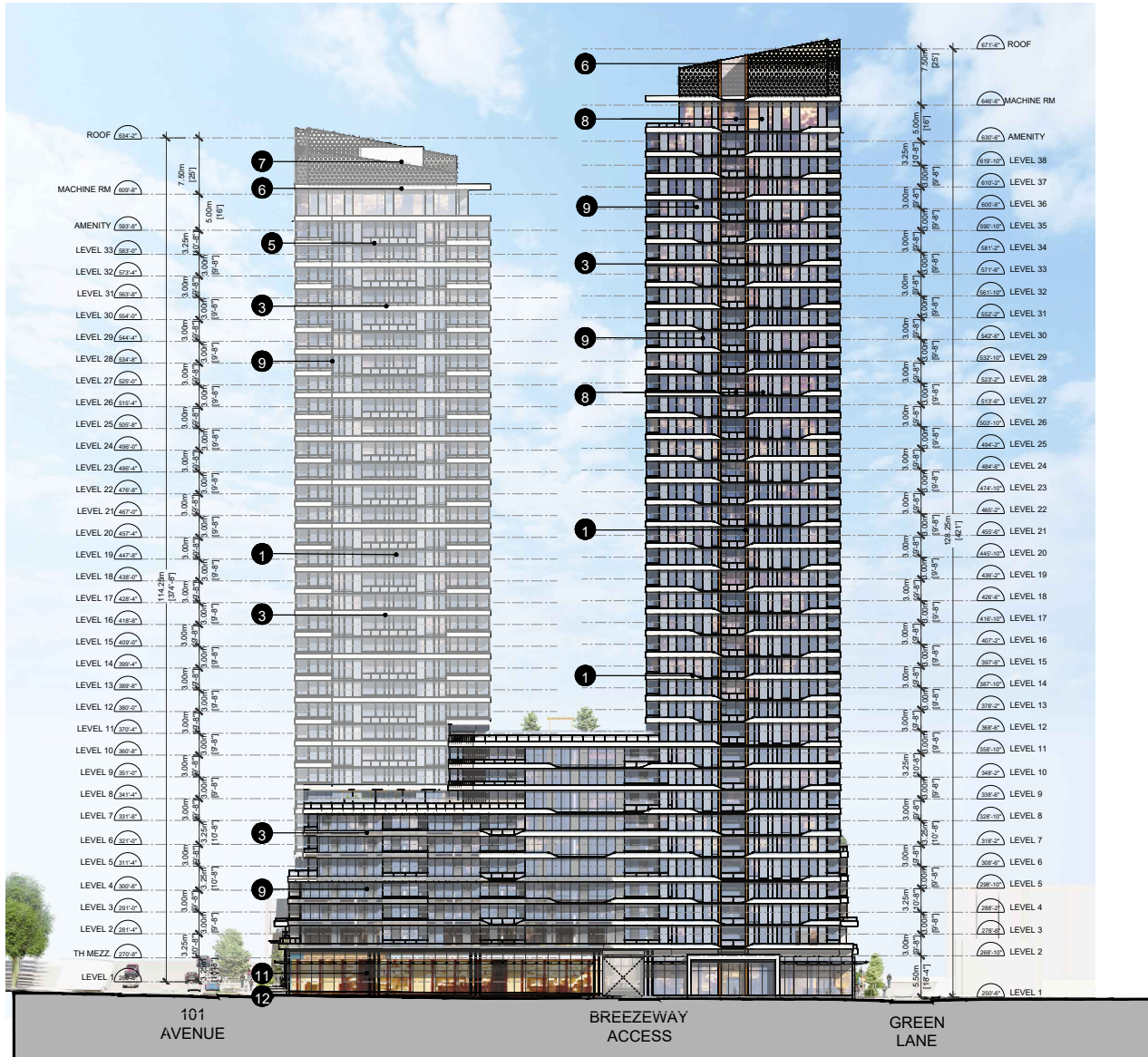




**MATERIAL LEGEND**

- 1 ALUMINUM WINDOW WALL FRAME GUARDRAIL:  
Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 2 ALUMINUM CURTAIN WALL FRAME:  
Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit:  
Superneutral IR on Clear Glass-Argon-Clear Glass with Guardian (#2)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit:  
AG 50 on Crystal Gray Glass-Argon-Clear Glass with AG30 Guardian (#2)
- 5 SPANDREL GLASS:  
Quest-Coat-300 65-2652 Anchor Gray - Vetro Clear (#2) 6mm
- 6 PERFORATED METAL:  
MAYNE COATINGS - BONE WHITE - YA200J
- 7 ARCHITECTURAL FINISH PAINT:  
MAYNE COATINGS - BONE WHITE - YA200J
- 8 PREFINISHED METAL PANEL:  
TERRACOTTA
- 9 ALUMINUM PANEL:  
MAYNE COATINGS - BONE WHITE - YA200J
- 10 ALUMINUM METAL PANEL & SOFFIT:  
MAYNE COATINGS - BONE WHITE - YA200J
- 11 CANOPY SUPPORTS:  
COLOR TO MATCH POWERS COATED TO AAMA 2605, INTERPON "BLACK CHARCOAL"
- 12 ALUMINUM METAL FINIS:  
Mayne Coatings - Bone White - YA200J
- 13 ALUMINUM SUNSHADE:  
Clear & Matte Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"





**MATERIAL LEGEND**

- 1 ALUMINUM WINDOW WALL FRAME:  
GUARDRAIL:  
Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 2 ALUMINUM CURTAIN WALL FRAME:  
Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit:  
Superneutral IR on Clear Glass-Argon-Clear Glass  
with Guardian (#2)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit:  
AG 50 on Crystal Gray Glass-Argon-Clear Glass  
with A550 Guardian (#2)
- 5 SPANDREL GLASS:  
Quest-Coat-300 65-2653 Anchor Gray - Viro Clear (#2)  
6mm
- 6 PERFORATED METAL:  
MAYNE COATINGS - BONE WHITE - YA200J
- 7 ARCHITECTURAL FINISH PAINT:  
MAYNE COATINGS - BONE WHITE - YA200J
- 8 PREFINISHED METAL PANEL:  
TERRACOTTA
- 9 ALUMINUM PANEL:  
MAYNE COATINGS - BONE WHITE - YA200J
- 10 ALUMINUM METAL PANEL & SOFFIT:  
MAYNE COATINGS - BONE WHITE - YA200J
- 11 CANOPY SUPPORTS:  
COLOR TO MATCH POWERS COATED TO AAMA  
2605, INTERPON "BLACK CHARCOAL"
- 12 ALUMINUM METAL FINS:  
Mayne Coatings - Bone White - YA200J
- 13 ALUMINUM SUNSHADE:  
Clear to Match Powder Coated to AAMA 2605, Interpon  
"Iron Mountain Grey"

WEST ELEVATION

**BUILDING ELEVATIONS**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT

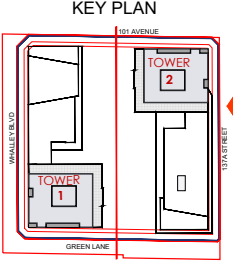


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A302



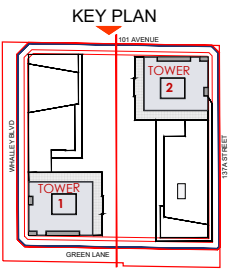


EAST ELEVATION



**MATERIAL LEGEND**

- 1 ALUMINUM WINDOW WALL FRAME: GUARDRAIL: Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 2 ALUMINUM CURTAIN WALL FRAME: Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit: Superneutral 66 on Clear Glass-Argon-Clear Glass with Guardian (H)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit: AG 50 on Crystal Gray Glass-Argon-Clear Glass with AG50 Guardian (H)
- 5 SPANDREL GLASS: Opus-Coat-300 63-263 Anchor Gray - Vetro Clear (H) 6mm
- 6 PERFORATED METAL: MAYNE COATINGS - BONE WHITE - YA200U
- 7 ARCHITECTURAL FINISH PAINT: MAYNE COATINGS - BONE WHITE - YA200U
- 8 PREFINISHED METAL PANEL: TERRACOTTA
- 9 ALUMINUM PANEL: MAYNE COATINGS - BONE WHITE - YA200U
- 10 ALUMINUM METAL PANEL & SOFFIT: MAYNE COATINGS - BONE WHITE - YA200U
- 11 CANOPY SUPPORTS: COLOR TO MATCH POWERS COATED TO AAMA 2605, INTERPON "BLACK CHARCOAL"
- 12 ALUMINUM METAL FINIS: Mayne Coatings - Bone White - YA200U
- 13 ALUMINUM SUNSHADE: Clear to Match Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"

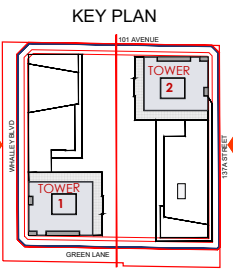


**MATERIAL LEGEND**

- 1 ALUMINUM WINDOW WALL FRAME, GUARDRAIL:  
Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 2 ALUMINUM CURTAIN WALL FRAME:  
Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit:  
Superneutral IR on Clear Glass-Argon-Clear Glass with Guardian (#2)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit:  
AG 50 on Crystal Gray Glass-Argon-Clear Glass with AG50 Guardian (#2)
- 5 SPANDREL GLASS:  
Opac-Coat-300 65-2653 Anchor Gray - Vetro Clear (#2) 6mm
- 6 PERFORATED METAL:  
MAYNE COATINGS - BONE WHITE - YA200U
- 7 ARCHITECTURAL FINISH PAINT:  
MAYNE COATINGS - BONE WHITE - YA000U
- 8 PREFINISHED METAL PANEL:  
TERRACOTTA
- 9 ALUMINUM PANEL:  
MAYNE COATINGS - BONE WHITE - YA200U
- 10 ALUMINUM METAL PANEL & SOFFIT:  
MAYNE COATINGS - BONE WHITE - YA200U
- 11 CANOPY SUPPORTS:  
COLOR TO MATCH POWERS COATED TO AAMA 2605, INTERPON "BLACK CHARCOAL"
- 12 ALUMINUM METAL FINIS:  
Mayne Coatings - Bone White - YA200U
- 13 ALUMINUM SUNSHADE:  
Clear to Match Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"







**MATERIAL LEGEND**

- ALUMINUM WINDOW WALL FRAME, GUARDRAIL: Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- ALUMINUM CURTAIN WALL FRAME: Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- RESIDENTIAL GLASS - Tinted Sealed Unit: Superneutral IR on Clear Glass-Argon-Clear Glass with Guardian (#2)
- COMMERCIAL GLASS - Tinted Sealed Unit: AG 50 on Crystal Gray Glass-Argon-Clear Glass with AG30 Guardian (#2)
- SPANDREL GLASS: Opus-Coat-300 #2-2653 Anchor Gray - Viro Clear (#2) 6mm
- PERFORATED METAL: MAYNE COATINGS - BONE WHITE - YA200U
- ARCHITECTURAL FINISH PAINT: MAYNE COATINGS - BONE WHITE - YA200U
- PREFINISHED METAL PANEL: TERRACOTTA
- ALUMINUM PANEL: MAYNE COATINGS - BONE WHITE - YA200U
- ALUMINUM METAL PANEL & SOFFIT: MAYNE COATINGS - BONE WHITE - YA200U
- CANOPY SUPPORTS: COLOR TO MATCH POWERS COATED TO AAMA 2605, INTERPON "BLACK CHARCOAL"
- ALUMINUM METAL FINS: Mayne Coatings - Bone White - YA200U
- ALUMINUM SUNSHADE: Clear to Match Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"

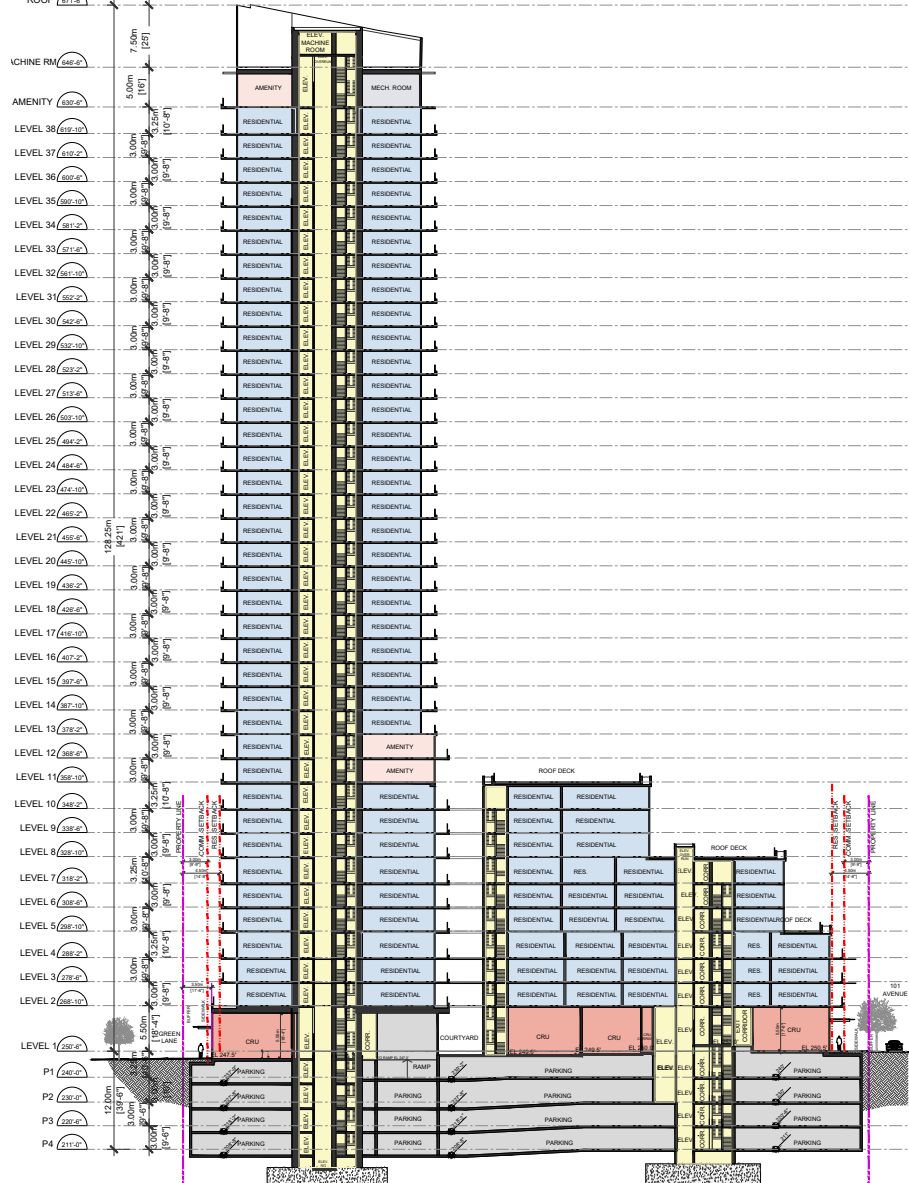


**PODIUM ELEVATIONS**

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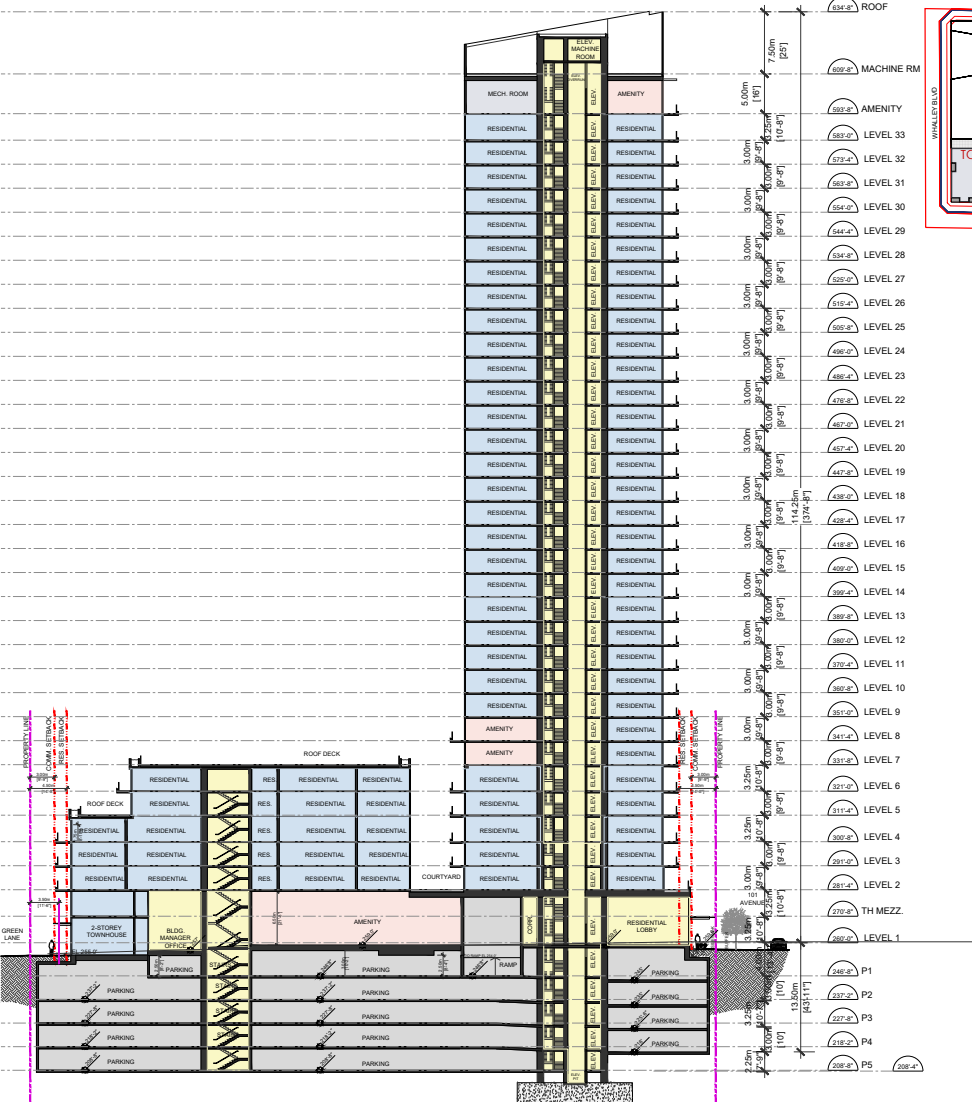
10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT

1:300  
A305



**LONGITUDINAL SECTION A - TOWER 1**  
**LONGITUDINAL SECTIONS**

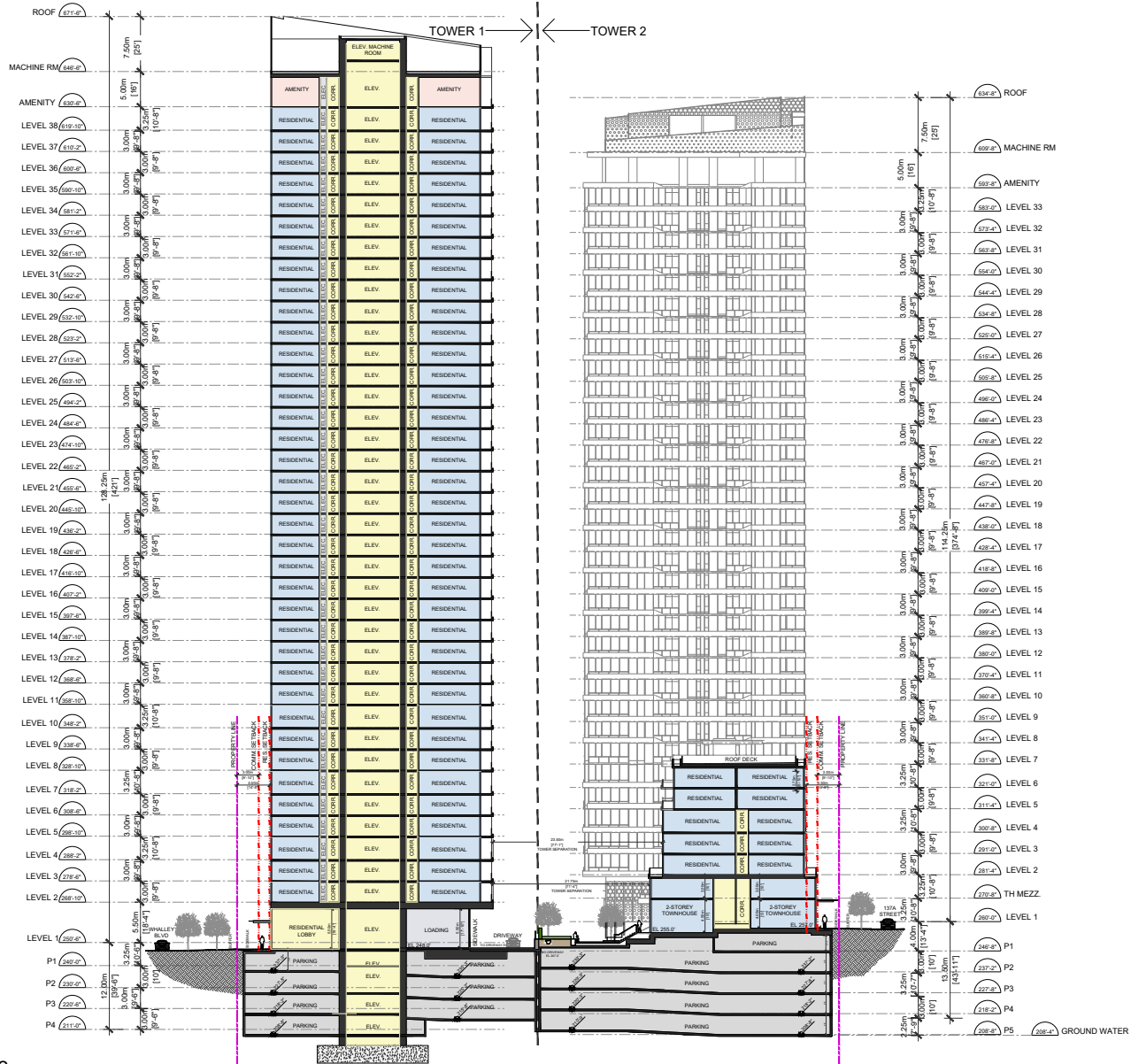
SUBMISSION TO COUNCIL JANUARY 29, 2024



**LONGITUDINAL SECTION B - TOWER 2**

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT

1:600  
A400



LATERAL SECTION C - TOWER 1 & 2

LATERAL SECTION - C

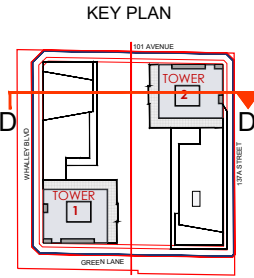
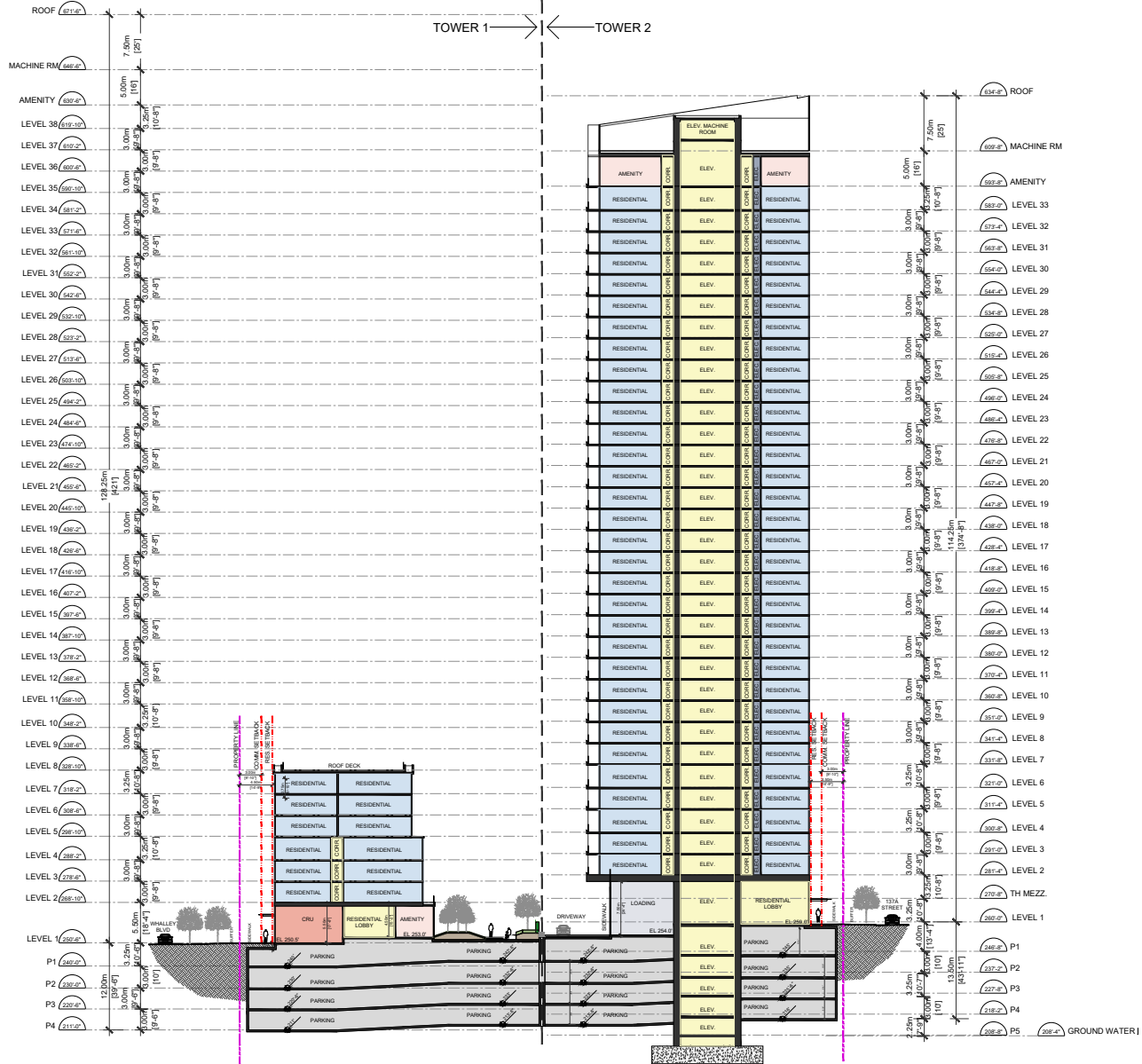
SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT

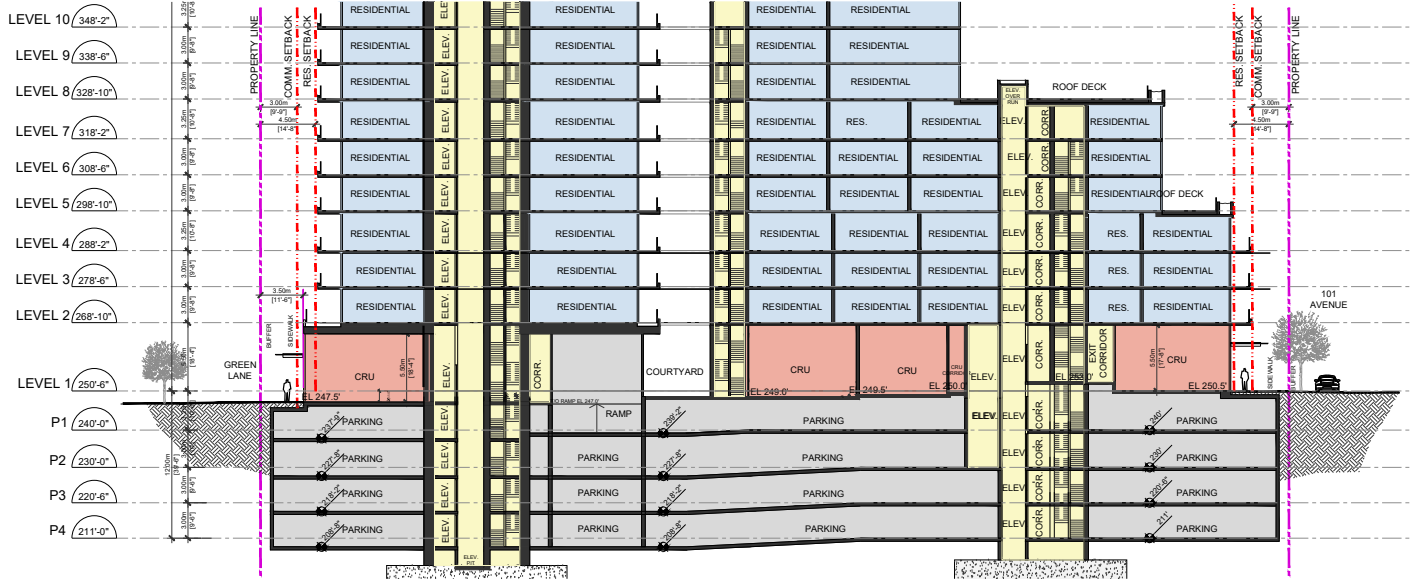


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A401

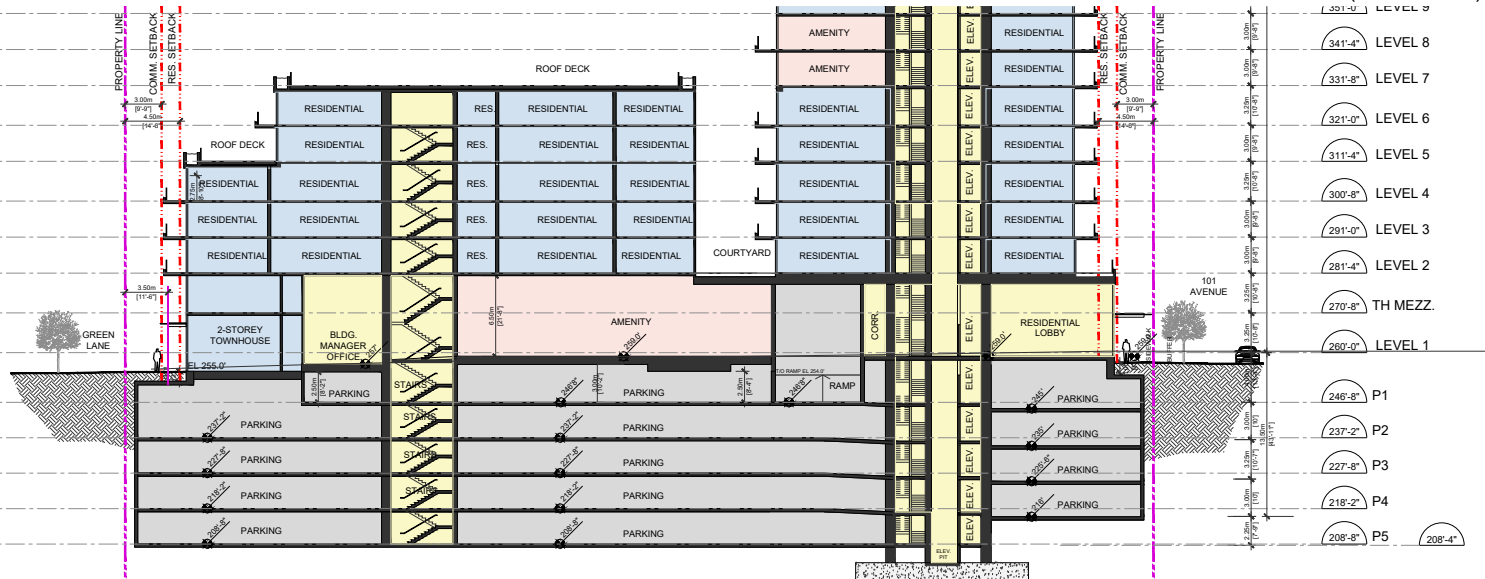




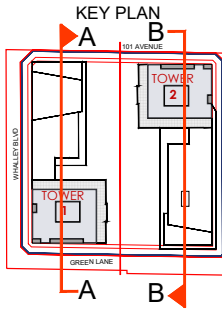
LATERAL SECTION D - TOWER 1 & 2  
LATERAL SECTION - D  
SUBMISSION TO COUNCIL JANUARY 29, 2024



LONGITUDINAL SECTION A - TOWER 1 (ENLARGED)



LONGITUDINAL SECTION B - TOWER 2 (ENLARGED)



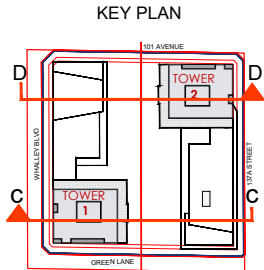
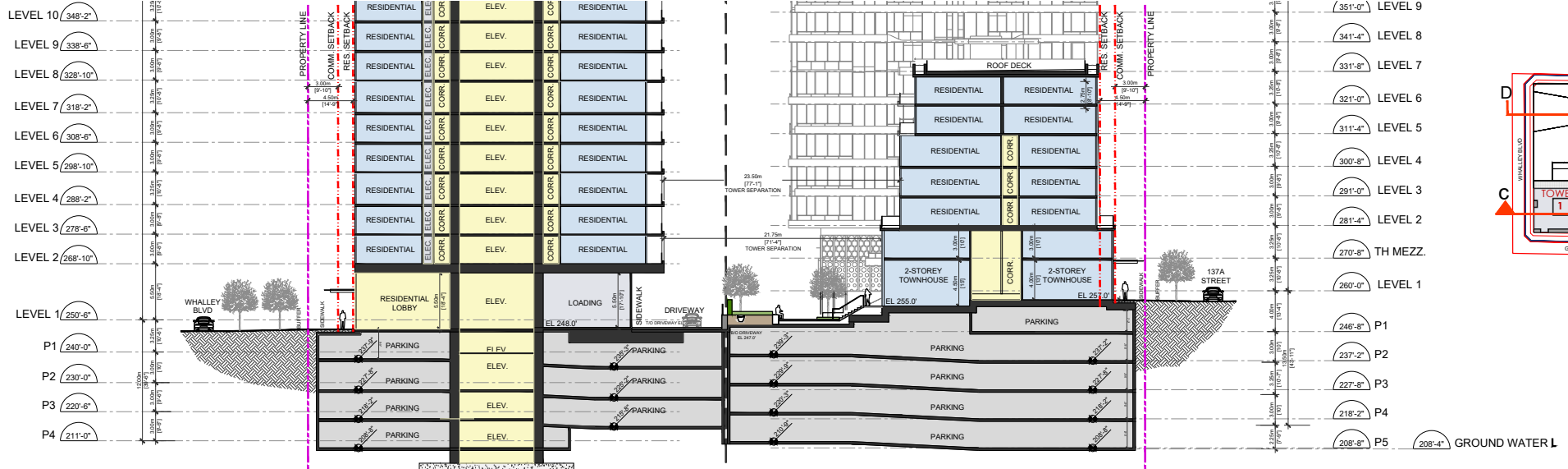
**LONGITUDINAL SECTIONS**

SUBMISSION TO COUNCIL JANUARY 29, 2024

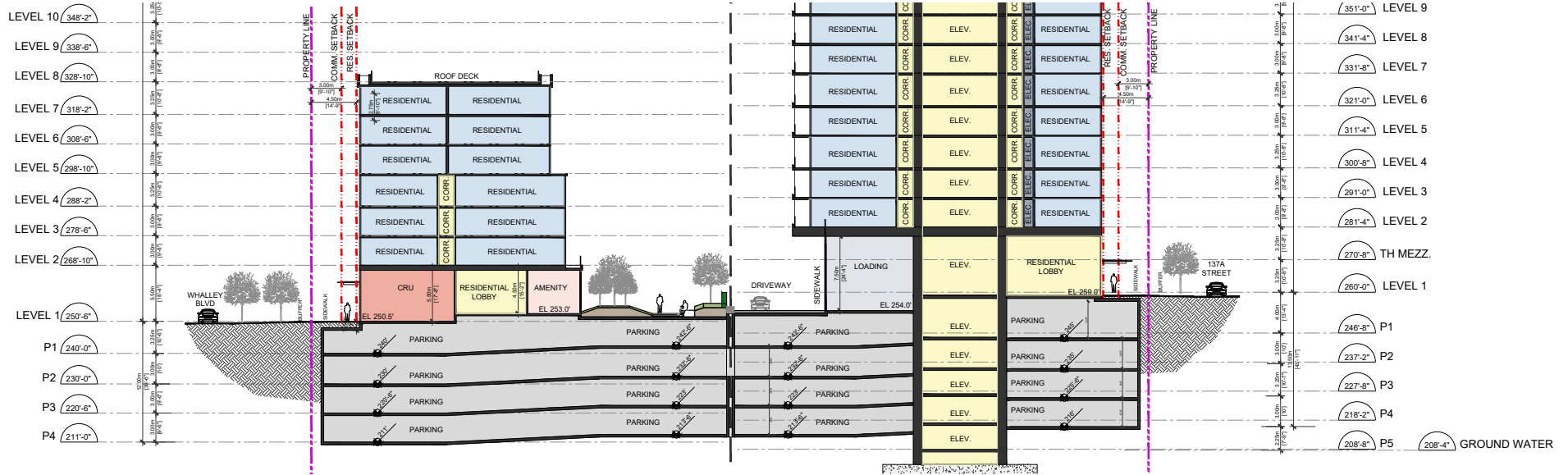
10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



1:400  
A403



LATERAL SECTION C - TOWER 1 & 2 (ENLARGED)



LATERAL SECTION D - TOWER 1 & 2 (ENLARGED)

**LATERAL SECTIONS**







CONTEXT VIEW FACING NORTHWEST & SURREY CITY CENTRE

**3D VIEW**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



NTS  
A500





CONTEXT VIEW FACING SOUTHWEST

**3D VIEW**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



NTS  
A501





CONTEXT VIEW FACING SOUTHEAST

**3D VIEW**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



NTS  
A502





VIEW LOOKING SOUTH EAST FROM 101 AVE/WHALLEY BLVD





VIEW LOOKING SOUTH EAST FROM 101 AVE/WHALLEY BLVD

**3D VIEW**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



NTS  
A504





VIEW LOOKING NORTH WEST FROM GREEN LANE

**3D VIEW**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



NTS  
A505



VIEW LOOKING NORTH WEST FROM GREEN LANE & 137A AVE







VIEW LOOKING NORTH WEST FROM GREEN LANE & 137A AVE







VIEW LOOKING NORTH WEST FROM GREEN LANE & 137A AVE











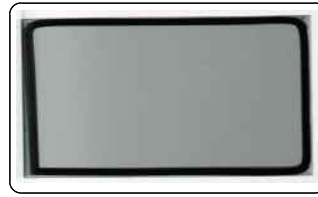


**MATERIAL LEGEND**

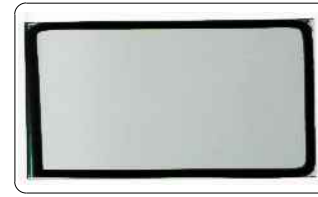
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Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 2 ALUMINUM CURTAIN WALL FRAME:  
Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"
- 3 RESIDENTIAL GLASS - Tinted Sealed Unit:  
Supersolar 10 on Clear Glass-Argon-Clear Glass with Guardian (#2)
- 4 COMMERCIAL GLASS - Tinted Sealed Unit:  
AG 30 on Crystal Gray Glass-Argon-Clear Glass with AG50 Guardian (#2)
- 5 SPANDREL GLASS:  
Opti-Coat-300 #3-285 Anchor Gray - Viro Clear (#2) Bronze
- 6 PERFORATED METAL:  
MAYNE COATINGS - BONE WHITE - YA200U
- 7 ARCHITECTURAL FINISH PAINT:  
MAYNE COATINGS - BONE WHITE - YA200U
- 8 PREFINISHED METAL PANEL:  
TERRACOTTA
- 9 ALUMINUM PANEL:  
MAYNE COATINGS - BONE WHITE - YA200U
- 10 ALUMINUM METAL PANEL & SOFFIT:  
MAYNE COATINGS - BONE WHITE - YA200U
- 11 CANOPY SUPPORTS:  
COLOR TO MATCH POWDER COATED TO AAMA 2605, INTERPON "BLACK CHARCOAL"
- 12 ALUMINUM METAL FINIS:  
Mayne Coatings - Bone White - YA200U
- 13 ALUMINUM SUNSHADE:  
Color to Match Powder Coated to AAMA 2605, Interpon "Iron Mountain Grey"



1 2



3



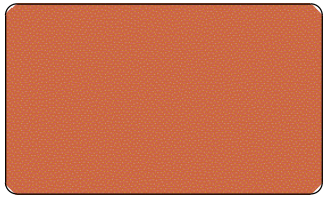
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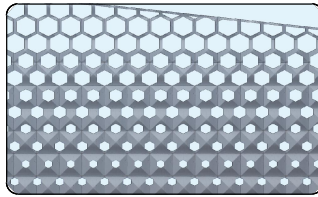
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7 9 10



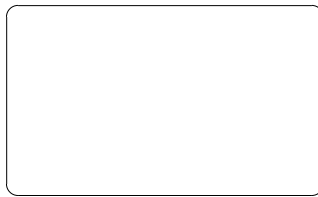
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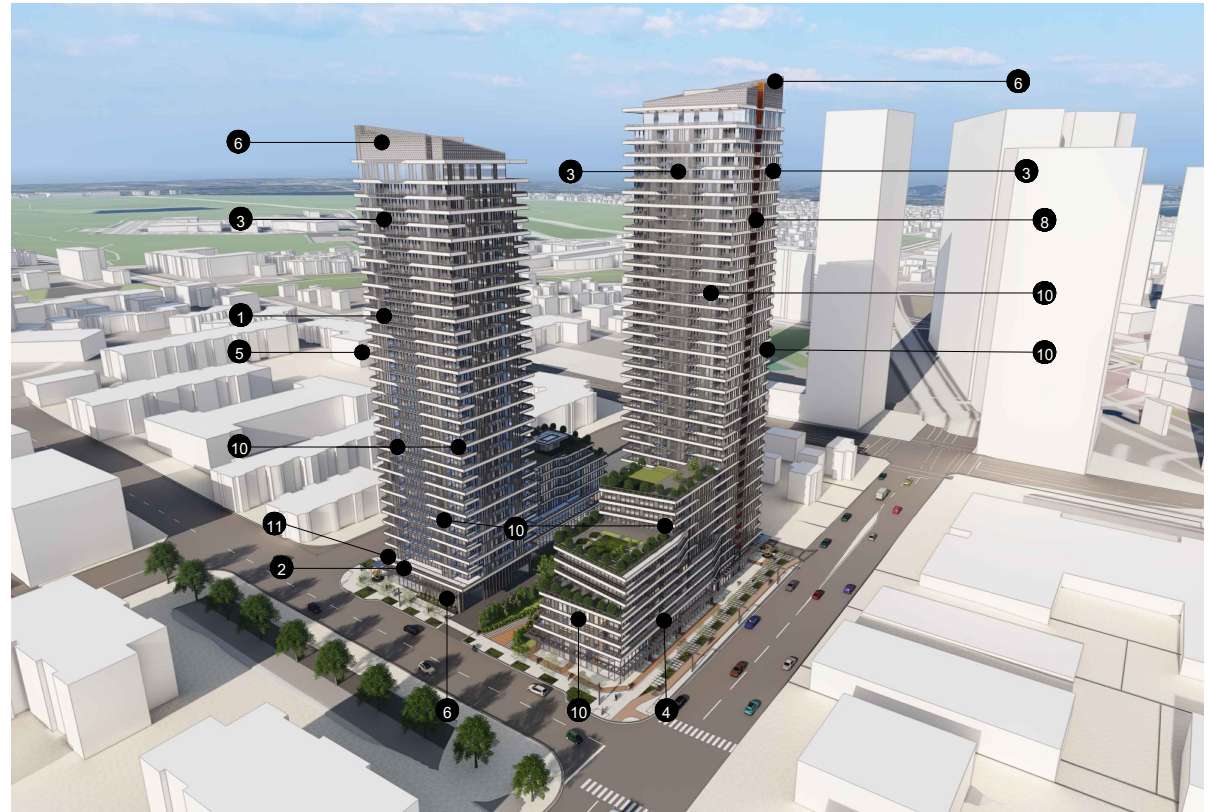
6



11



12



**MATERIAL BOARD**

SUBMISSION TO COUNCIL JANUARY 29, 2024

10054-88 WHALLEY BLVD. & 10055-89 137A ST. SURREY, BC MIXED-USE DEVELOPMENT



NTS  
A600

**DRAWING LIST**

#/REV	DRAWING TITLE	SCALE
L100	COVER SHEET	
L100.1	NOTES	
L101	LANDSCAPE PLAN - GROUND	1:500
L101.1	LANDSCAPE PLAN - GROUND (EAST)	1:250
L101.2	PLANTING PLAN - GROUND (EAST)	1:250
L101.3	LANDSCAPE PLAN - GROUND (WEST)	1:250
L101.4	PLANTING PLAN - GROUND (WEST)	1:250
L102	LANDSCAPE PLAN - ROOF LEVELS	1:500
L102.1	LANDSCAPE PLAN - ROOF (EAST)	1:250
L102.2	PLANTING PLAN - ROOF (EAST)	1:250
L102.3	LANDSCAPE PLAN - ROOF (WEST)	1:250
L102.4	PLANTING PLAN - ROOF (WEST)	1:250
L103	LANDSCAPE PLAN - TOP ROOF	1:500
L201	LANDSCAPE SECTIONS - GROUND	
L202	LANDSCAPE SECTIONS - GROUND	
L205	LANDSCAPE SECTIONS - GROUND	
L203	LANDSCAPE SECTIONS - ROOF (WEST)	
L204	LANDSCAPE SECTIONS - ROOF (EAST)	
L301	DETAILS	

**LEGEND**

- |                            |                         |
|----------------------------|-------------------------|
| <b>1</b> WOOD DECK SEATING | <b>6</b> THE BREEZEWAY  |
| <b>2</b> THE GROVE         | <b>7</b> AMENITY PATIOS |
| <b>3</b> THE MEWS          | <b>8</b> PAVILIONS      |
| <b>4</b> KIDS PLAY AREA    | <b>9</b> MOUNDED LAWN   |
| <b>5</b> SLOPED LAWN       | <b>10</b> LAWN AND PODS |

**MATERIALS LEGEND**

- UNIT PAVING - SPECIAL PATTERN  
WALKWAYS - PUBLIC REALM
- UNIT PAVERS  
PATHWAYS
- HYDROPRESSED SLABS  
PATIOS
- CIP CONCRETE  
PATHWAYS
- ASPHALT  
PARKING AREA
- WOOD SEATING DECK  
GROUND LEVEL
- RUBBER SURFACE  
GROUND LEVEL
- WATER  
GROUND LEVEL
- NEW PLANTING  
REFER TO PLANT LIST
- HEDGES  
REFER TO PLANT LIST
- LAWN  
REFER TO PLANT LIST

**LANDSCAPE RATIONALE**

The streetscape has been designed to City Centre standards with an enhanced public realm treatment around the building. This treatment includes a dedicated bike lane and a double row of trees that will cast dappled shade over the paved areas and buffer pedestrians from Whalley Boulevard. On the commercial frontages, the retail uses will be encouraged to spill out and animate the public realm. The residential frontages will include a green buffer, useable depth patio and a gated direct access to the adjacent walkway. A green lane will be incorporated into the final design at the south edge, with a walkway proposed for the north side to take advantage of the winter sunlight and collect the direct entries to the ground level units.

A generous breezeway has been provided between the two phases that will connect to Whalley Boulevard and create a hub of semi-public activity. The intent is to have a semi-public amenity, but three control points give the space the ability to be fenced off to limit public access if required for CPTED. Green edges will frame the pedestrian experience and separate the vehicular areas of the site. Activities from the building will be encouraged to spill out into the breezeway, where opportunities for people to come together will be sprinkled throughout.

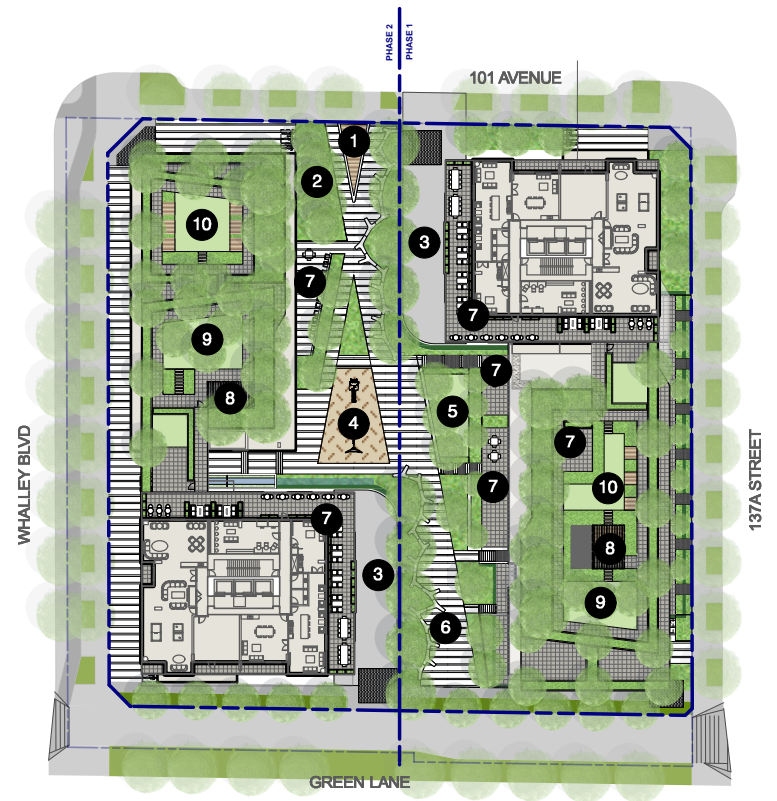
At the north end of the breezeway, a raised wood deck will create a gathering space and meeting point for the neighbourhood. A grove of trees will provide a green entry experience for the lobby, which will lead into an amenity space opening up on to the breezeway. Central to the breezeway, a children's play area will serve both phases of the project, with direct access from an amenity room in each phase. A storm water feature is being considered at the mid-point of the site to collect the runoff from the north half of the breezeway. This water will be used to water the plants under the building overhang and create a unique experience during storm events.

The driveway entries will be framed by a large green planting area with accent trees to punctuate the arrival experience and scale down the loading area wall. Alternating toned modular paving will be used to define the public realm with a consistent rhythm around the building and throughout the breezeway. Where possible, the pavers will be elevated to provide separation and eyes on the street, while hedging and planting will buffer the private spaces and punctuate the public realm.

As the building steps back, landscaping opportunities will be created top levels of each of the steps. Shrub planting and trees will be used to accent the architectural expression and soften the edges of the terraces. The common amenity terraces have been designed for the exclusive use of the lower residents and their guests. A network of pathways will connect the larger spaces with a range of program that can be found in smaller, more intimate spaces throughout. The program will include spill out spaces off the amenity rooms, co-working spaces, pods, outdoor living rooms, BBQ areas, outdoor dining, dog off leash areas and central lawn areas for flexible use.

The design tries to maximize the ability for several people to use the courtyard independently, with opportunities to come together as a community or host large family events. In addition to the hard surfaces, intensive green roof will provide valuable habitat and food sources for nesting birds. In addition to habitat, the soft landscape areas will provide storm water benefits, reducing peak flows by absorbing water from rainfall events. Trees and trellises will float over the terrace, providing human scale spaces with dappled shade. Raised planters will be used on the upper levels to define spaces, to integrate pathway lighting into the design provide the required soil volumes for the trees.

A mix of native and adaptive, drought tolerant plant material is proposed for the landscape areas on the podium. Site safety will be addressed throughout the site by selecting vegetation at recommended levels to maintain site lines adjacent to public areas and circulation routes. Evergreen shrubs, perennials and grasses, will comprise the majority of the plant palette, providing seasonal interest and a variety of habitat.



**COVER SHEET**

**LANDSCAPE NOTES**

- All work shall meet or exceed the requirements as outlined in the current Edition of the Canadian Landscape Standard.
- Plant sizes and related container classes are specified according to the Canadian Landscape Standard current Edition. For container classes #3 and smaller, plant sizes shall be as shown in the plant list and the Standard; for all other plants, both plant size and container class shall be as shown in the plant list. Specifically, when the plant list call for #5 class containers, these shall be as defined in the CNLA (ANSI) Standard.
- Area of search for specified plant material shall include the Lower Mainland of British Columbia, Vancouver Island, Washington and Oregon States.
- All plant material used on this project shall be hardy in this climate. Plant types have been selected with this as a primary criteria. This Contractor shall guarantee that plant material supplied has equal provenance, i.e. it is developed from cuttings or seeds collected in an area of similar climatic characteristics.
- Substitutions in plant material will not be considered unless written proof is submitted thirty (30) days prior to scheduled installation stating a specified plant cannot be obtained within the specified area of search.
- All trees to be staked in accordance with CNLA Standards.
- For all existing on site services and survey symbols refer to survey drawings.
- All landscaping and treatment of the open portions of the site shall be completed in accordance with the approved drawings within six (6) months of the date of issuance of any required occupancy permit, or any use or occupancy of the proposed development not requiring an occupancy permit, and thereafter permanently maintained in good conditions.






**IRRIGATION NOTES**

- All on-site 'Soft Landscape Areas' are to be irrigated with high-efficiency automatic irrigation systems, including rain sensors, to IIABC Standards.
- Irrigation stub-outs and hose bib locations will be provided to mechanical and electrical consultants for coordination.
- Irrigation system is a design-build. Landscape contractor to provide irrigation design/layout for review by Landscape Consultant for approval.
- No visible irrigation lines will be accepted.
- All irrigation boxes to be equipped with quick couplers.
- Irrigation controller to be located in mechanical room.

**NOTES**

**PLANT LIST**

**TREES**

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE / SPACING
	42	'Acer rubrum 'Armstrong'	Armstrong Maple	
	45	Acer palmatum 'Sangokaku'	Coral Bark Japanese Maple	
	10	Cercis canadensis	Eastern Redbud	
	2	Gleditsia triacanthos	Thornless Honeylocust	5cm cal.
	7	Magnolia x 'Butterflies'	Butterflies Magnolia	

**SHRUBS**

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE / SPACING
Ah	432	Azalea 'Hino-Crimson'	Hino-Crimson Azalea	#2 pot / 24" O.C.
Es	740	Erica carnea	Spring Heath	#1 pot / 18" O.C.
Ew	420	Erica carnea 'Springwood White'	Springwood White Heather	#1 pot / 18" O.C.
Hb	23	Hydrangea macrophylla 'Blushing Bride'	Endless Summer® Blushing Bride Hydr	#3 Pot / 36" O.C.
Lt	197	Lavandula angustifolia 'Thumbelina Leigh'	Thumbelina Leigh English Lavender	#1 pot / 18" O.C.
Lg	168	Lavandula x intermedia 'Grosso'	Fat Bud French Lavender	#2 pot / 24" O.C.
Lc	194	Lonicera caerulea	Haskap	#1 pot / 18" O.C.
Lp	337	Lonicera Pileata	Privet honeysuckle	#2 pot / 42" O.C.
Sg	127	Senecio greyi	Daisy bush	#2 pot / 30" O.C.
T	520	Taxus x media 'Hilli' (Male Plants Only)	Hill's Yew	4' ht, B&B, 18" O.C.

**GROUNDCOVERS, GRASSES, FERNS & VINES**

SYMBOL	QTY	BOTANICAL NAME	COMMON NAME	SIZE / SPACING
Au	182	Arctostaphylos uva-ursi	Bearberry	#1 pot / 12" O.C.
Cl	91	Calamagrostis x acutiflora 'Karl Foerster'	Foerster' S Feather Flood Grass	#2 pot / 10" O.C.
Pt	1170	Pachysandra terminalis	Japanese Spurge	#1 Pot / 12" O.C.





SLEEK SEATING



ACTIVE COMMERCIAL SPACE



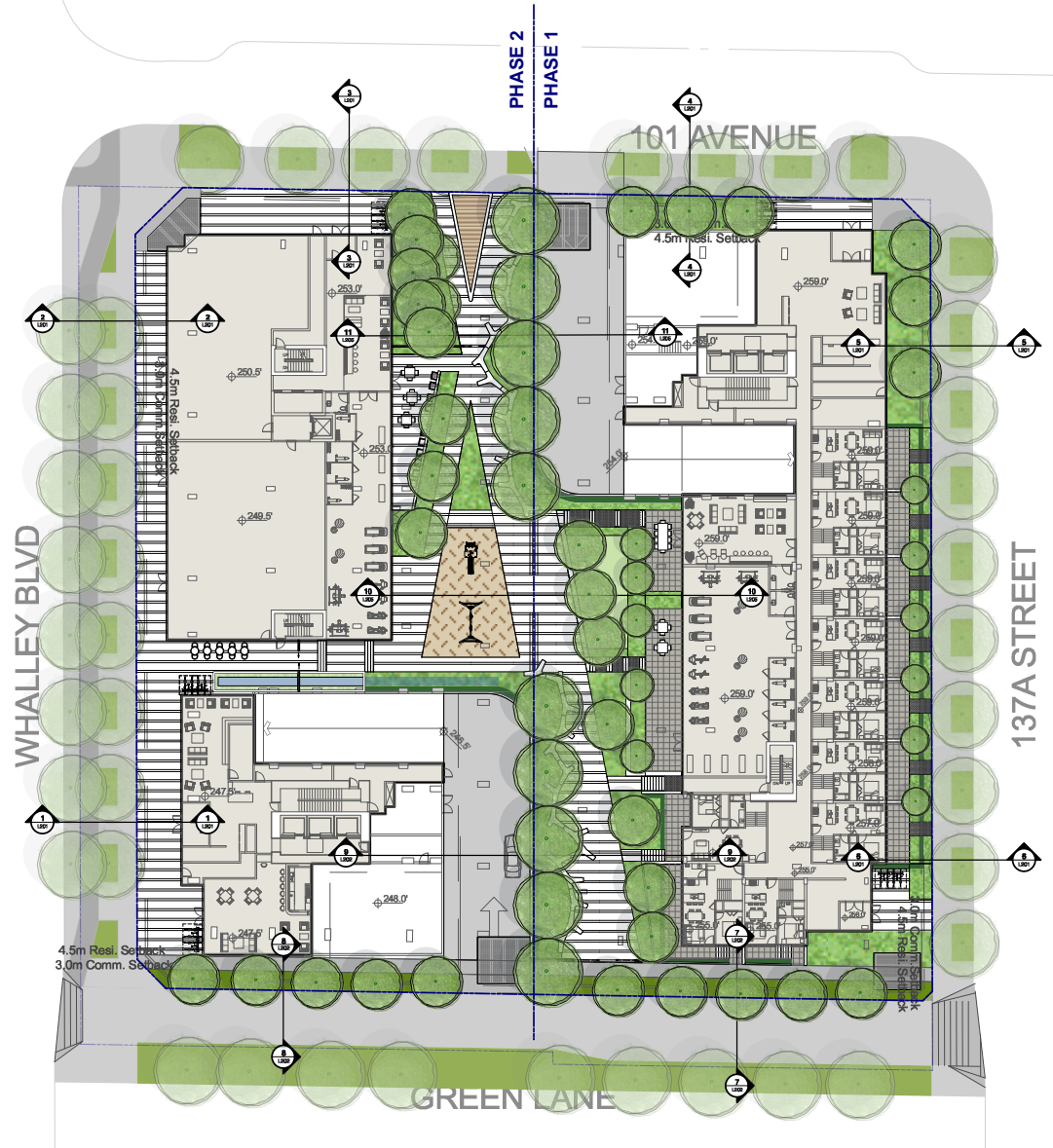
ACTIVE COMMERCIAL SPACE



ENGAGING PUBLIC SPACE



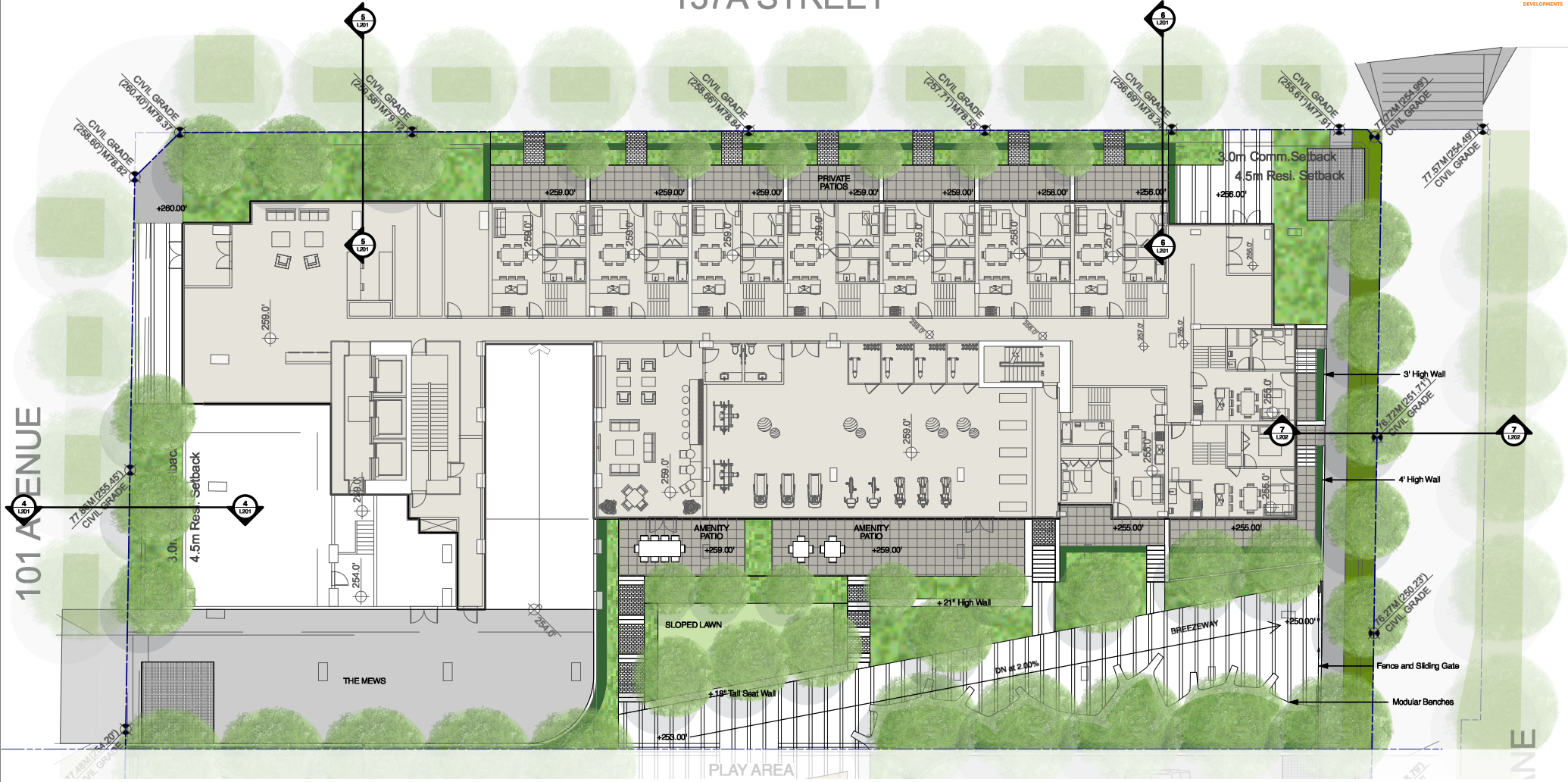
SLEEK FINISHES



**LANDSCAPE PLAN - GROUND**



137A STREET



LANDSCAPE PLAN - GROUND (EAST)

Submission to Council January 29, 2024

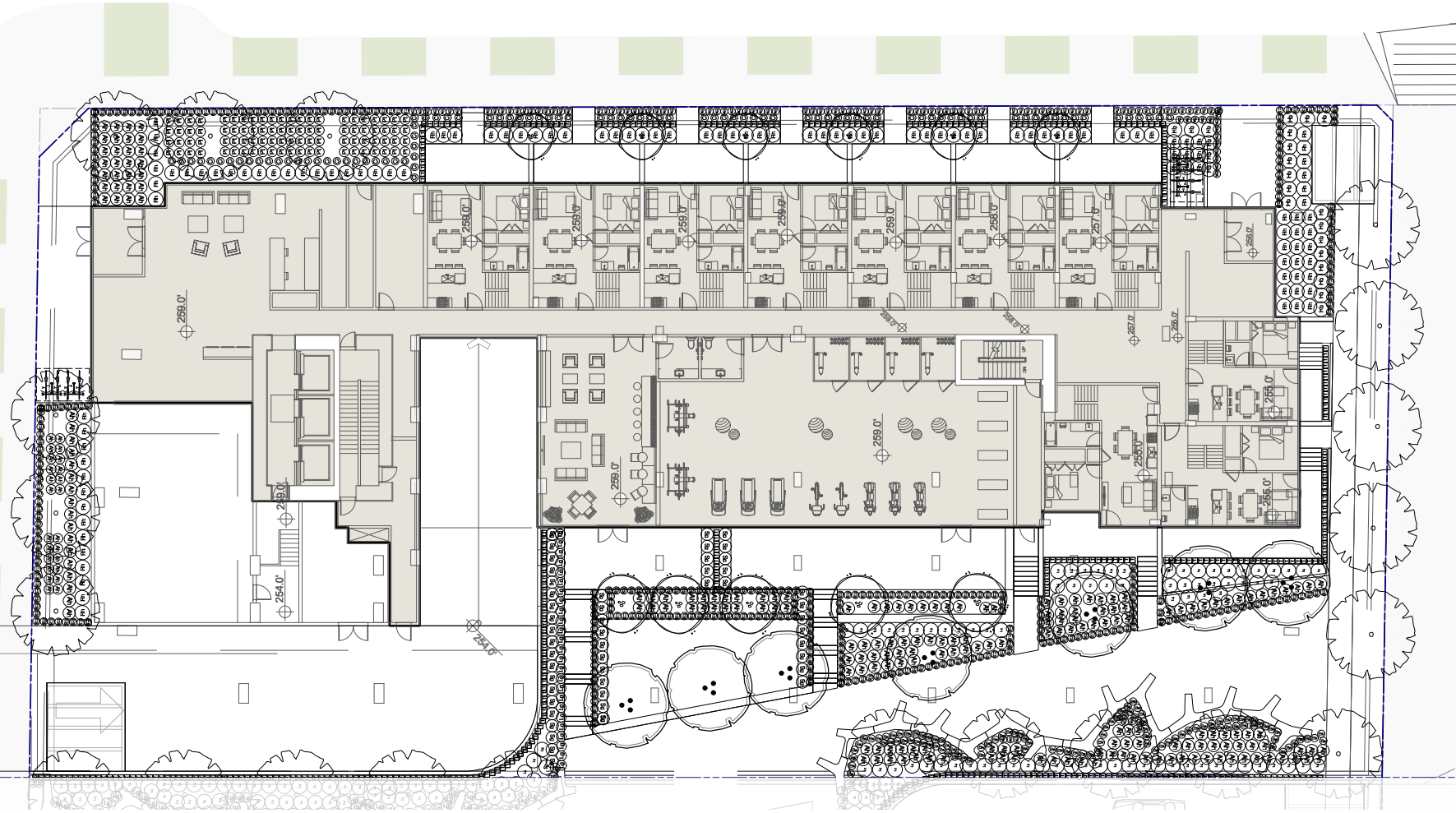
10054-88 WHALLEY BLVD. 1055-89 137A ST. SURREY, BC MIXED USE DEVELOPMENT

1:250 L101.1



137A STREET

101 AVENUE



PLANTING PLAN - GROUND (EAST)

Submission to Council

January 29, 2024

10054-88 WHALLEY BLVD. 1055-89 137A ST. SURREY, BC

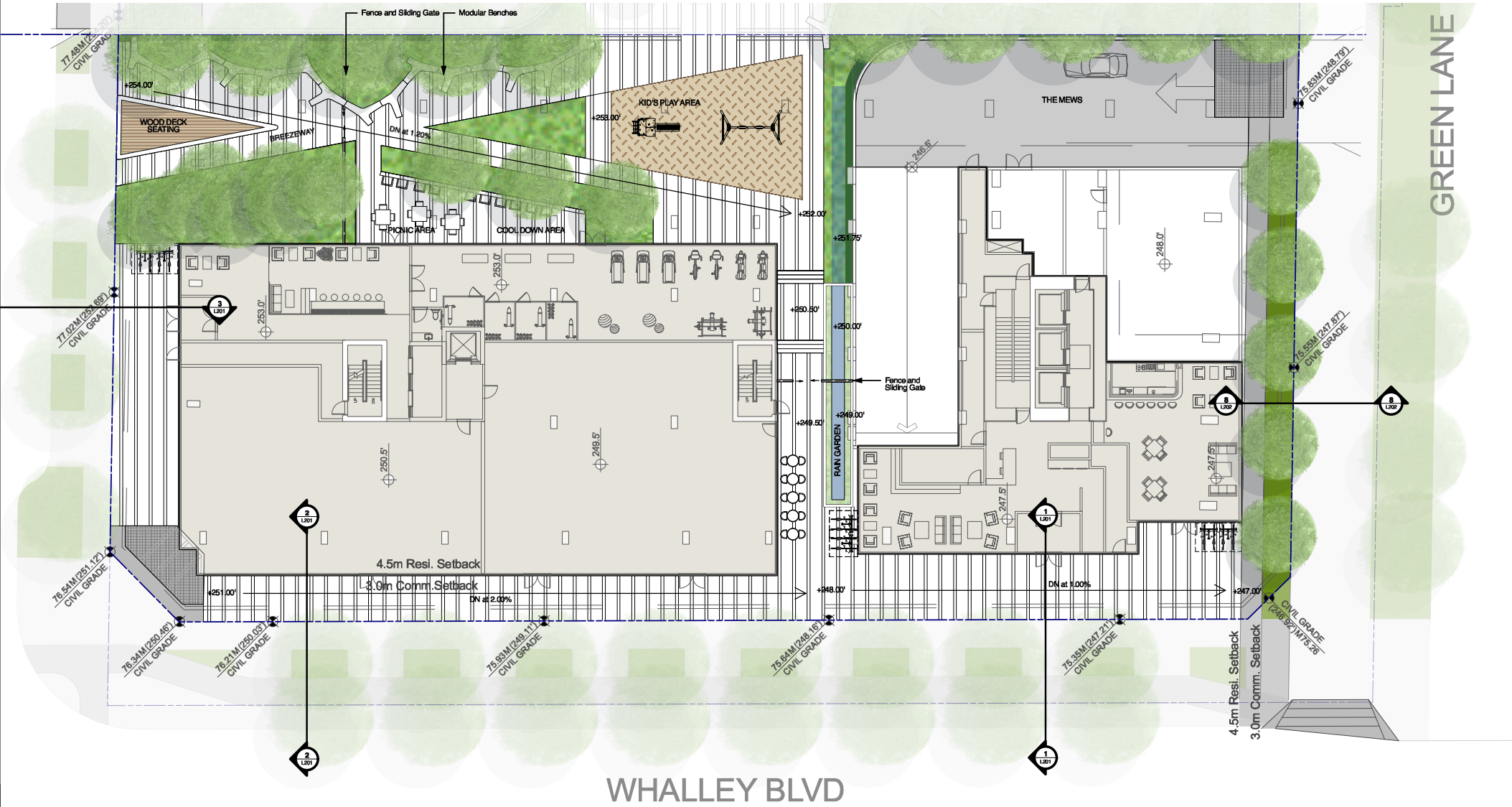
MIXED USE DEVELOPMENT

1:250

L101.2







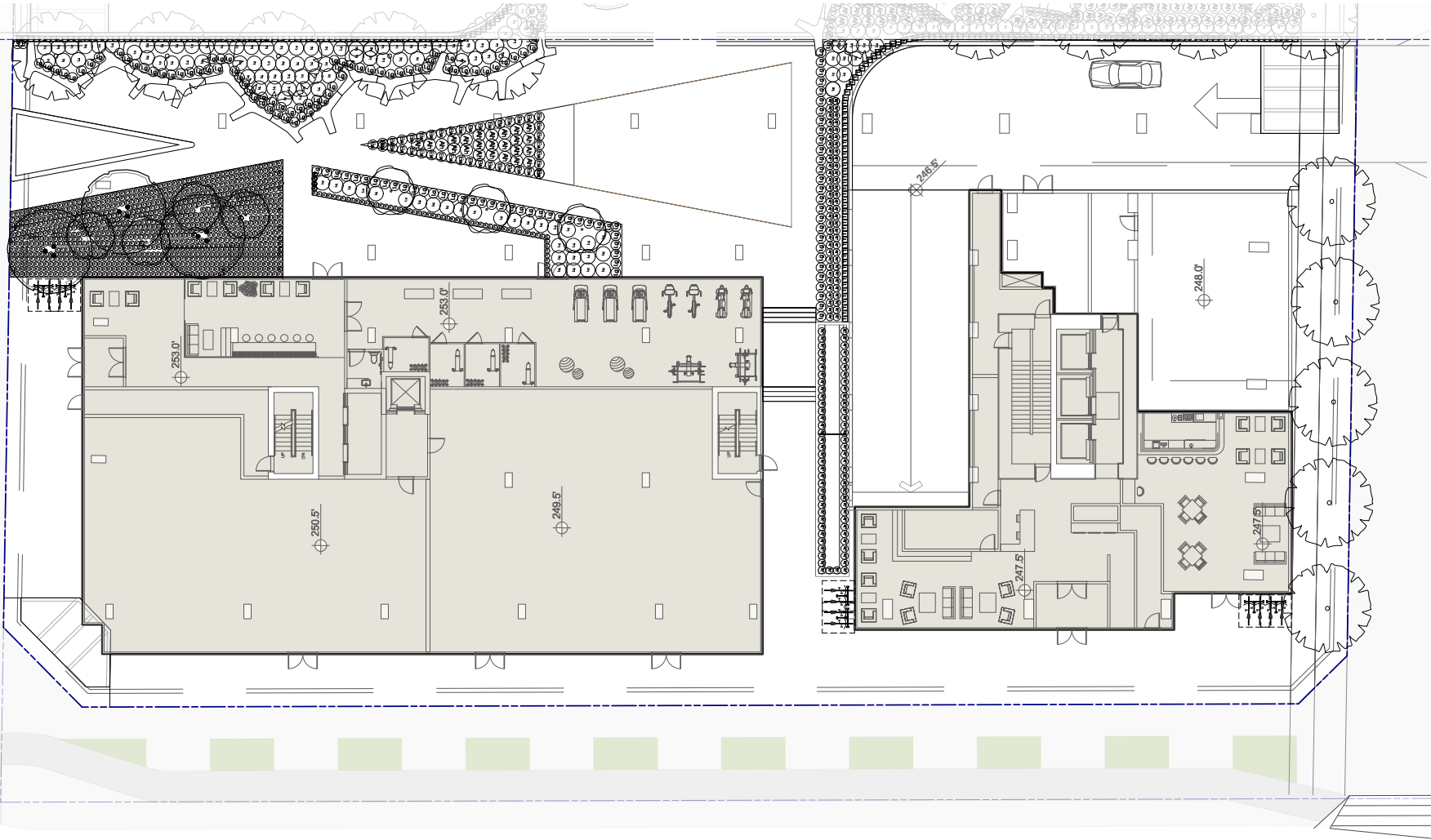
**LANDSCAPE PLAN - GROUND (WEST)**

Submission to Council January 29, 2024

**WHALLEY BLVD**

1:250  
L101.3

10054-88 WHALLEY BLVD. 1055-89 137A ST. SURREY, BC MIXED USE DEVELOPMENT



GREEN LANE

WHALLEY BLVD

PLANTING PLAN - GROUND (WEST)

Submission to Council

January 29, 2024

10054-88 WHALLEY BLVD. 1055-89 137A ST. SURREY, BC

MIXED USE DEVELOPMENT

1:250

L101.4





OUTDOOR GYM AND DOG OFF LEASH



SEATING AREAS



COMFORTABLE PATIOS



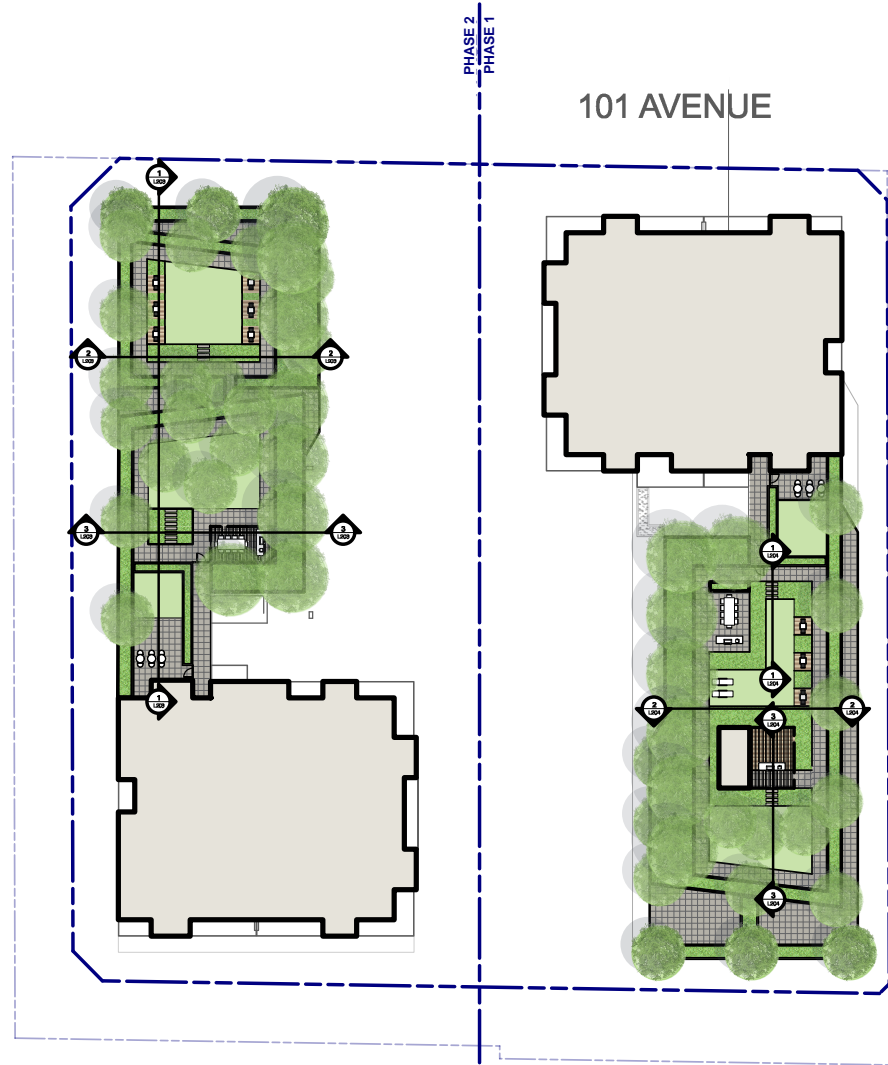
TRELLIS



TRELLIS AND FURNITURE



VIBRANT ROOFS AT NIGHT



**LANDSCAPE PLAN - ROOF LEVELS**





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

FROM: **Development Services Manager, Engineering Department**

DATE: **January 23, 2024** PROJECT FILE: **7823-0297-00**

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RE: **Engineering Requirements  
Location: 10054/64/74/80/88 - Whalley Blvd. & 10055/57/65/73/82/89 - 137A St.**

### OCP AMENDMENT/CCP AMENDMENT

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

The applicant is required to complete a downstream sanitary sewer capacity analysis due to the proposed Land use plan amendment and increased sanitary demand. The applicant will be required to resolve any downstream pipe capacity constraints.

### REZONE/SUBDIVISION

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

- Dedicate 5.942 m along Whalley Blvd;
- Dedicate 5 m x 5 m corner cut at 101 Ave. and Whalley Blvd;
- Dedicate 3 m x 3 m corner cut at green lane and 137A Street;
- Dedicate 3 m x 3 m corner cut at 101 Ave/137A St;
- Dedicate 1 m x 1 m corner cut at green lane/137A St;
- Dedicate varying widths between 6.0 m and 7.29 m at south property line for Green Lane;
- Register 0.5 m statutory right-of-way (SRW) along road frontages for maintenance.

#### ***Works and Services***

- Construct east side of Whalley Blvd;
- Construct west side of 137A Street;
- Construct south side of 101 Ave;
- Construct green lane;
- Construct adequately-sized service connections (drainage, water, and sanitary), complete with inspection chambers/water meter, to the lot.
- 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.

A Servicing Agreement is required prior to Rezone/Subdivision.

### DEVELOPMENT PERMIT

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



Jeff Pang, P.Eng.  
Development Services Manager  
M51



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

**Development Impact Analysis on Schools For:**

Application #: **23 0297 00**

The proposed development of **822** High Rise Apartment units are estimated to have the following impact on elementary and secondary schools within the school regions.

<b>School-aged children population projection</b>	29
---	----

<b>Projected Number of Students From This Development In:</b>	
Elementary School =	16
Secondary School =	8
Total Students =	24

<b>Current Enrolment and Capacities:</b>	
<b>Lena Shaw Elementary</b>	
Enrolment	664
Operating Capacity	569
# of Portables	5
<b>Guildford Park Secondary</b>	
Enrolment	1390
Operating Capacity	1050
# of Portables	11

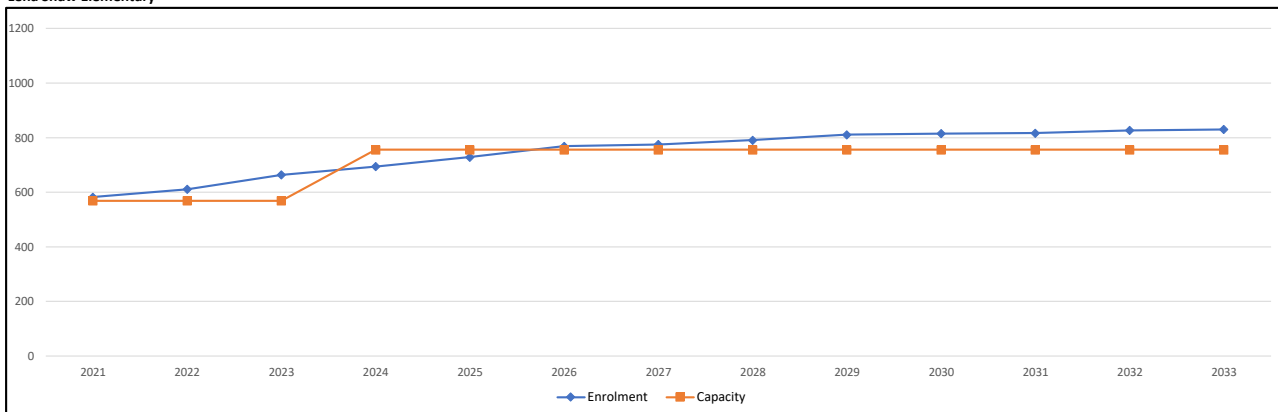
**Summary of Impact and Commentary**  
 The following tables illustrate the historical, current and future enrolment projections including current/approved ministry operating capacity for the elementary and secondary schools serving the proposed development.

The NCP for the area calls for significant redevelopment located along King George Boulevard and 104th Avenue with the current building form changing into mid to high-rise residential development and mixed use. The timing of these future high-rise developments, with good market conditions could impact the enrolment growth upwards even more from the projections below.

Lena Shaw operates at or slightly above the school's capacity. Post 2023, the projected growth trend begins to get stronger finishing at end of the decade to around 830 students. In anticipation of further growth associated with the proposed transit oriented housing mentioned above, the Ministry approved in November 2023 the installation of 8 modulars to open in September 2024 tentatively.

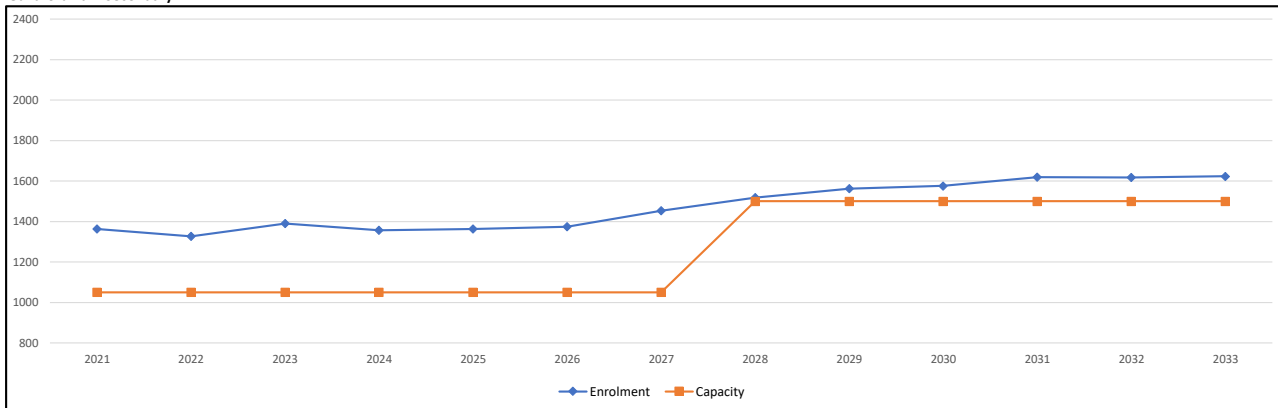
Guildford Park Secondary is currently operating at 132% and is projected to minimally grow. This school will be impacted by development along the Guildford 104th Ave Corridor when that NCP has been adopted. The impact of this plan will not be included in this projection until the plan has been approved. In May 2023, the District received capital funding approval from the Ministry to build a 450-capacity addition, targeted to open in the spring of 2028.

**Lena Shaw 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.

**Guildford 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.

**8.0 TREE PRESERVATION SUMMARY**

Surrey Project No: N/A

Address: 10054-88 Whalley Blvd & 10055-89 137A St, Surrey

Registered Arborist: Francis Klimo

On-Site Trees	Number of Trees
Protected Trees Identified <i>(on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas and non-bylaw protected trees)</i>	54
Protected Trees to be Removed	54
Protected Trees to be Retained <i>(Excluding trees within proposed open space or riparian areas)</i>	0
Total Replacement Trees Required:	
Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio  4 X one (1) = 4	4
All other Trees Requiring 2 to 1 Replacement Ratio  50 X two (2) = 100	100
<b>Replacement Trees Proposed</b>	<b>105</b>
<b>Replacement Trees in Deficit</b>	<b>0</b>
<b>Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]</b>	<b>N/A</b>

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

Summary, report and plan prepared and submitted by:



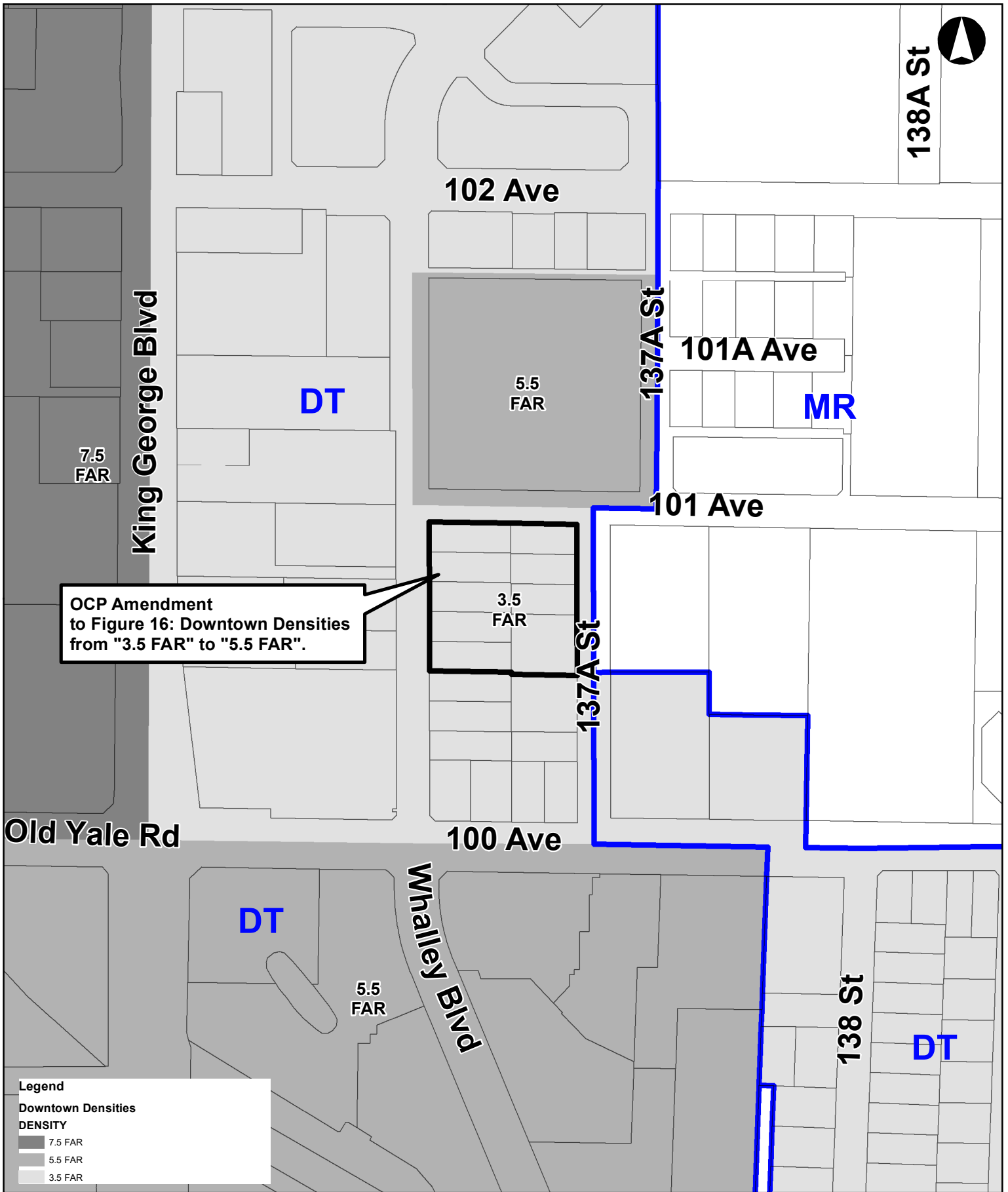
January 23, 2023

(Signature of Arborist)

Date









# 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**

**2. 5:45 p.m.**

File No.:	7923-0297-00
New or Resubmit:	New
Last Submission Date:	N/A
Description:	City Centre Plan and OCP amendments, Rezoning and Development Permit to allow for 2 towers (37 & 39-storeys) with a total of 822 residential units, 747 sq.m of commercial space and a gross FAR of 7.40.
Address:	10054-10088 Whalley Blvd. & 10055 to 100898 137A St.
Developer:	Surrey Central Tower Holdings Inc.
Architect:	Richard Bernstein, Chris Dikeakos Architects Inc.
Landscape Architect:	Dylan Chernoff, Durante Kreuk Ltd.
Planner:	Ingrid Matthews
Urban Design Planner:	Sam Maleknia

The Urban Design Planner gave an overview of the policy and area context, noting anticipated future context, and advised that staff generally support the project.

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



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

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

### ADVISORY DESIGN PANEL STATEMENT OF REVIEW

It was Moved by S. MacRae  
Seconded by R. Salcido  
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 adding more three-bedroom, family-oriented units.  
The larger 2B-D units with the Den against the exterior wall have been converted to 3 Bedroom units. Please refer to sheets A206 to A208
- Consider adding more emphasis to the building entries.  
A metal frame has been added to the exterior façade of the building entries to provide more emphasis. Please refer to A500 sheets set.
- Consider colour-fast materials. Review the longevity of the orange-coloured material, ensuring that it will not be impacted by sun conditions over time.  
A specific-coloured metal panel system material will be selected for durability and non-fading performance qualities.
- Consider further development of energy modelling.  
Noted. We are in communication with the mechanical engineering consultant and will provide this as soon as the energy modelling is completed.
- Consider relocating public art into the breezeway rather than the interior corner. Noted. This will be considered with communication with our public art consultant.
- Consider indoor and outdoor parking for E-bikes.  
Noted. The team will consider provisions for charging e-bikes at the short-term bike rack locations. Refer to sheets A200 to A203 and 'Landscape Plan – Ground' on sheet L101.

#### Site

- No specific issues were identified.

#### Form and Character

- Consider a detailed design strategy for the mews such that echo effects and noise reverberations from the public are limited.  
Canopies will be provided at various points along the building faces fronting the mews to deflect echo effects and noise reverberations to the higher storeys in the

- **podiums and towers.**  
Consider emphasizing the entries to lobbies through use of colour, trims, frames, and other materials.  
Coloured metal frames have been added to the exterior façade of the building entries to provide more emphasis. Please refer to A500 sheets set.

## Landscape

- **Ensure all trees have adequate soil volume and depth.**  
The initial design was coordinated with the architectural team to provide adequate soil volumes and depths. A couple locations included small trees to accommodate limited soil volumes and one location was planted as a stand of trees to share a collective volume of soil. A soil volume overlay will be provided as part of an upcoming submission and the architectural team is aware of the soil requirements. Refer to 'Planting Plan – Ground' on sheets L101.2 and L101.4, and 'Planting Plan – Roof' on sheets L102.2 and L102.4.
- **Ensure diversity in tree and shrub species for optimum wildlife habitat and four-season interest.**  
The planting plans will be refined to include a greater diversity of tree and shrub species. Refer to the 'Plant List' on sheet L100.1.
- **Consider providing conifer tree species.**  
Coniferous planting was considered in clusters during the early stages of the design. Coniferous hedges have been included throughout the development, but larger coniferous trees have been avoided to address CPTED concerns on the ground level and provide more useable landscapes on the upper levels of the building. Refer to 'Planting Plan – Ground' on sheets L101.2 and L101.4, and 'Planting Plan – Roof Levels' on sheets L102.2 and L102.4.
- **Consider providing community gardens.**  
Community gardens were initially considered as part of the program for the outdoor amenities. After a work session with the client, their marketing consultant and the architectural team, the program we included was determined to best align with the desires of the anticipated residents. Refer to 'Landscape Plan – Ground' on sheets L101.1 and L101.3, 'Landscape Plan – Roof' sheets L102.1 and L102.3, and 'Landscape Plan – Top Roof' on sheet L103.
- **Consider reviewing amenity areas for weather protection.**  
The architectural design includes weather protection for the roof decks, under the building overhangs and along the edges of some of the other outdoor amenity spaces. In addition to the building overhangs and canopies, the team is considering integrating some level of weather protection into the pavilion structures on the podium levels. Refer to 'Landscape Plan – Ground' on sheet L101, and 'Landscape Plan – Roof Levels' on sheet L102.
- **Consider providing dog relief stations for residents with pets.**  
Dog relief stations are very important to the team and will be provided on the podium of each building. Refer to 'Landscape Plan – Roof' on sheets L102.1 and L102.3.
- **Review private patios adjacent to amenity spaces and ensure there is a buffer.**  
Private patios will be buffered, where adjacent to the amenity spaces by using raised planters and gates with hedges and layered shrub planting to provide privacy. Refer to 'Landscape Plan – Ground (EAST)' on sheet L101.1, and 'Landscape Plan – Roof Levels' on sheet L102.
- **Consider providing more diverse programming, including play spaces, active**

and passive zones, eating areas, and work or office zones.

Since the early stages of the project, we worked carefully with the client, their marketing consultant and the architectural teams to develop a diverse range of outdoor program. The proposed program includes passive and active play spaces, active and passive zones, eating areas and co-working spaces. We will continue to work with the project team to refine the broad range of program already being proposed and look for opportunities to expand the offering to best align with the future residents. Refer to 'Landscape Plan – Ground' on sheets L101.1 and L101.3, 'Landscape Plan – Roof' sheets L102.1 and L102.3, and 'Landscape Plan – Top Roof' on sheet L103.

- 

#### 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 energy modelling is completed.*
- Consider using future climate files for thermal comfort modelling to test resiliency and ensure livability in the future.  
*Noted. This will be considered 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 included 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 included in our upcoming design development and construction document stages.*
- Consider indoor and outdoor parking for E-bikes.  
*Noted. The team will consider provisions for charging e-bikes at the short-term bike rack locations. Refer to sheets A200 to A203 and 'Landscape Plan – Ground' on sheet L101.*
- Consider incorporating a bike maintenance area that can also serve as a casual space for interaction.  
*This has been provided as is shown on Plan A204.*
- Consider how bicyclists interact with pedestrians and drivers both on the ground plane and within buildings to inform layout and design decisions.  
*Designated bike elevators are provided in both Phases. The Phase 1 elevator will open up to a corridor exiting out to the center courtyard, while the Phase 2 elevator will be shared with the commercial uses and exiting onto the walkway on Whalley Blvd. Please refer to sheets A200 to A204.*
- 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 both towers and their 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, larger corner units will have cross-ventilation in living rooms with exposures on two faces of the buildings. Please refer to A500 sheets set.**

- Review the depth of balconies to reduce unwanted solar gain, particularly on the south elevations.

**Noted. This will be considered in our upcoming design development 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.

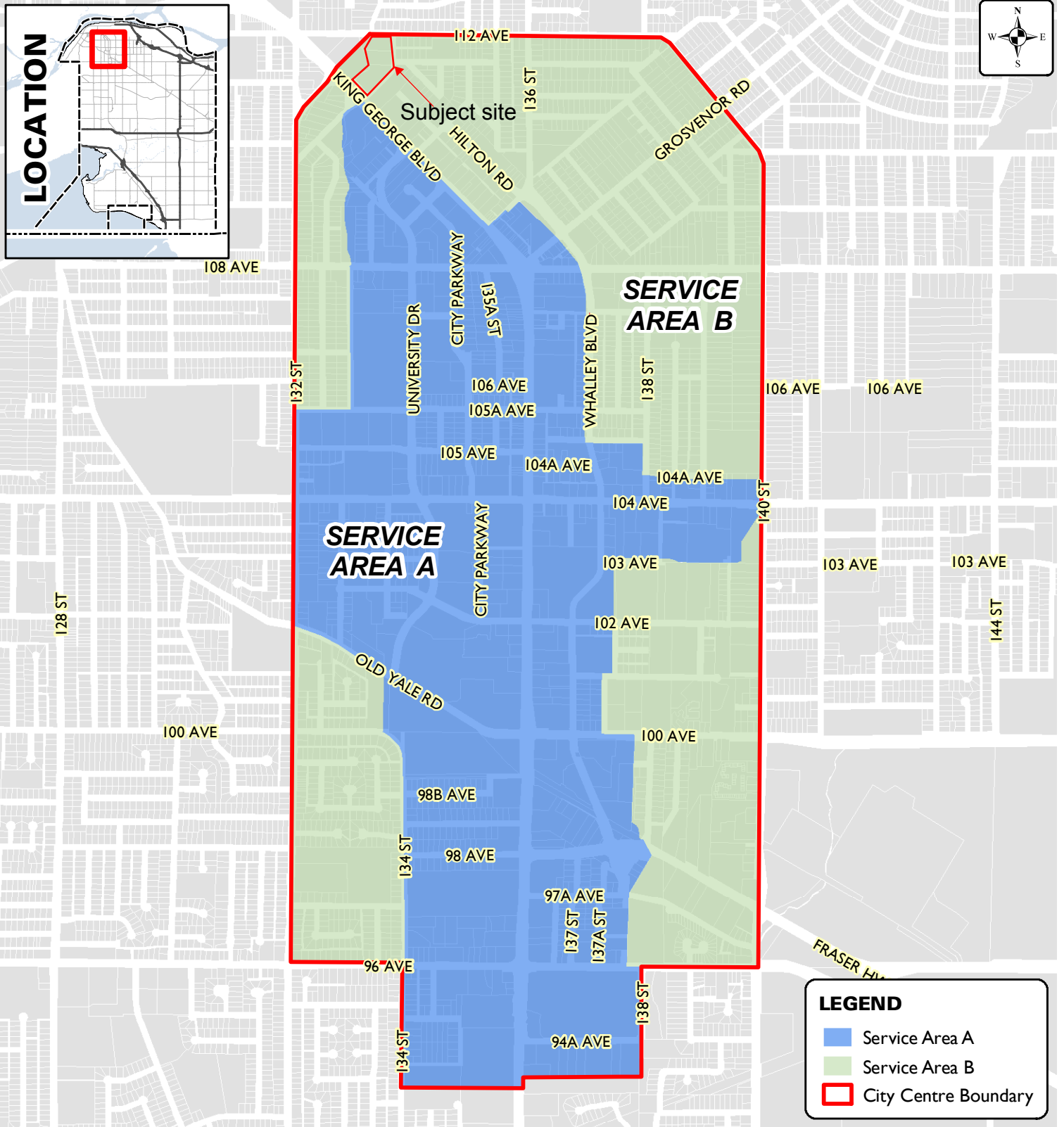
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Jennifer Ficocelli, City Clerk

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N. Couttie, Chairperson

FIGURE 1



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.