INTER-OFFICE MEMO
Regular Council - Land Use
B. 4 7921-0313-00

Monday November 28, 2022
Supplemental Information

## TO: City Clerk, Legislative Services Division

FROM: General Manager, Planning \& Development Department
DATE: November 28, 2022 FILE: 7921-0313-00

## RE: Agenda Item B.4, November 28, 2022 Regular Council - Land Use Meeting Development Application No. 7921-0313-00 <br> Amendment to the Planning Report and Appendix II

Development Application No. 7921-0313-oo is on the agenda for consideration by Council at the November 28, 2022 Regular Council - Land Use Meeting under Item B.4.

After finalizing the Planning Report for the November 28, 2022 Regular Council - Land Use Agenda, it was identified that:

1. Item 5. (k) of the Recommendation summary references the dedicated bike elevator as part of the proposed transportation demand management measures. Although a dedicated bike elevator is proposed as part of the development, it is not part of the transportation demand management measures. Page 5 of the Planning Report has been updated to reflect this change.
2. Appendix II, Engineering Summary, was attached as the complete Engineering Review requirements and should have been the Engineering Summary of requirements. The replacement page for Appendix II is attached to this memo.


Jeff Arason
NCTINA General Manager
Planning \& Development Department
Attachment 7921-0313-00- Page 5 Replacement Page
7921-0313-00- Appendix II Replacement Page
c.c. - City Manager
(h) registration of a volumetric statutory right-of-way for public rights-of-passage for the proposed linear plaza located along King George Boulevard and the northeast portion of 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) final submission and approval of the Transportation Impact Assessment;
(k) provision of cash-in-lieu or other transportation demand management measures, including adedicated bike elevator, to address the shortfall in residential parking spaces to the satisfaction of the General Manager, Engineering;
(l) the applicant address the density bonus amenity contribution consistent with the Tier 2 Capital Projects CACs in support of the requested increased density, to the satisfaction of the General Manager, Planning and Development Department; and
(m) the applicant adequately address the impact of the reduced on-site indoor amenity space requirement of the CD Bylaw (based on RM-135 Zone), at the rate in effect at the time of Final Adoption.
6. Council pass a resolution to amend the Surrey City Centre Plan to allow for an FAR of 10.9 within the 'Central Business District - Area 2 ( 7.5 FAR)' designation, when a minimum of 3.1 FAR of office/commercial space is provided, when the project is considered for final adoption.

## SITE CONTEXT \& BACKGROUND

| Direction | Existing Use | City Centre <br> Designation | Existing Zone |
| :--- | :--- | :--- | :--- |
| Subject Site | Three (3) single- <br> storey commercial <br> buildings | Central Business <br> District - Area 2 | C-8 |
| North (Across future 102A <br> Avenue): | Single-storey <br> commercial <br> building | Central Business <br> District - Area 2 | C-8 |

INTER-OFFICE MEMO

| TO: | Manager, Area Planning \& Development - North Surrey Division Planning and Development Department |
| :---: | :---: |
| FROM: | Development Services Manager, Engineering Department |
| DATE: | November 21, 2022 PROJECT FILE: 7821-0313-00 |
| RE: | Engineering Requirements (Commercial/Multi-Family) Location: 10227 King George Boulevard |

## OCP AMENDMENT/NCP AMENDMENT

Complete sanitary and drainage catchment analysis to determine existing capacities. Resolve downstream constraints, as identified.

## REZONE

## Property and Right-of-Way Requirements

- Dedicate varying width along King George Boulevard, 5.856 m along 102 Avenue, 12.0 m for new 102A Avenue and 12.0m for the new green lane.
- Dedicate required corner cuts.
- Provide o.5m wide statutory rights-of-way along all site frontages.


## Works and Services

- Construct road works along King George Boulevard, 102 Avenue, 102 A Avenue and the new green lane.
- Construct/upgrade signal at the intersection of King George Boulevard and 102 Avenue and at the intersection of King George Boulevard and 102A Avenue.
- Implement the recommendations of the Traffic Impact Study and geotechnical reports.
- Construct storm main along the new green lane and 102 A Avenue, as applicable.
- Complete fire flow analysis to determine the ultimate water main size, extent and velocity.
- Construct sanitary main along the new green lane and off-site mains if applicable.
- Provide water, storm and sanitary service connections to service the development, and abandon all existing connections.
- Register applicable legal documents as determined through detailed design.
- Pay amenity charge for undergrounding the existing third party utilities.

A Servicing Agreement is required prior to Rezone.

## DEVELOPMENT PERMIT

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

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Aptly Log-
Jeff Pang, P.Eng.
Development Services Manager
HB4
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NOTE: Detailed Land Development Engineering Review available on file


## PROPOSAL:

- OCP Text Amendment to allow for a FAR of 10.9 within the Downtown designation
- City Centre Plan Amendment to allow for a FAR of 10.9 within the Central Business District- Area 2 (7.5 FAR) designation
- Rezoning from C-8 to CD
- Development Permit
to permit the development of a 67 -storey mixed-use building consisting of a 7 -storey commercial and office podium including 19,422 square metres of commercial and office floor space, an 8 -storey residential podium and residential tower consisting of 746 residential dwelling units.

| LOCATION: | 10201,10207 to 10219, 10221 to <br> 10227,10229 <br> George Blo 10239 - King |
| :--- | :--- |
| ZONING: | $\mathrm{C}-8$ |
| OCP DESIGNATION: | Downtown |
| CITY CENTRE PLAN | Central Business District- Area 2 |
| DESIGNATION: |  |



## RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for:
- OCP Text Amendment; and
- Rezoning.
- Approval to draft Development Permit for Form and Character.


## DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- Requires a text amendment to the Official Community Plan (OCP) to "Table 7A: Land Use Designation Exceptions", to allow for an increased density of 10.9 Floor Area Ratio (FAR) within Figure 16 "Downtown Densities" of the "Downtown" designation.
- Requires an amendment to the City Centre Plan to allow for a density of 10.9 FAR within the "Central Business District - Area 2 (7.5 FAR)" designation.


## RATIONALE OF RECOMMENDATION

- Although the proposed density on the subject site is higher than that prescribed in the OCP and City Centre Plan, the proposed mixed-use tower with commercial/office podium and residential podium will support and complement the Central Business District Area 2 ( 7.5 FAR) of the City Centre.
- The proposed density and building form are appropriate for this part of Surrey City Centre, and form part of an emerging high-density mixed-use and residential hub around Surrey Central SkyTrain Station, Centre Block and Civic Centre.
- The proposed development conforms to the goal of achieving high-rise, high-density development around the three SkyTrain Stations in City Centre. The Surrey Central Skytrain Station is located within walking distance of less than 200 metres (less than 5 minutes) from the subject site.
- The proposed height and density of the development is consistent with an evolving urban context in the City Centre, and as it relates to adjacent proposed tower developments in City Centre. The proposed development is anticipated to be an anchor to the Central Business District Area 2 ( 7.5 FAR) in City Centre.
- The proposal is seeking to provide a significant office component, with approximately 19,422 square metres of office and commercial floor space proposed. This equates to 3.1 FAR of commercial and office floor space or approximately $28 \%$ of the total floor space proposed.
- The proposed setbacks achieve a more urban, pedestrian streetscape in compliance with the Surrey City Centre Plan and in accordance with the Development Permit (Form and Character) design guidelines in the OCP.
- The 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 proposed building achieves an attractive architectural built form, which utilizes high quality materials, contemporary lines, and unique form.
- 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 multiple publicly accessible plaza spaces.


## RECOMMENDATION

The Planning \& Development Department recommends that:

1. An OCP By-law be introduced to amend the OCP, 'Table 7A: Land Use Designation Exceptions", by adding the following site specific notation:

| "Bylaw <br> No. | Land Use Designation | Site Specific Property | Site Specific <br> Permission |
| :---: | :---: | :---: | :---: |
| Bylaw \# <br> xxxxx | Downtown | 10227 King George Boulevard | Density permitted up <br> to 10.9 FAR (gross <br> density calculation)" |

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 the subject site from "Community Commercial Zone (C8)" to "Comprehensive Development Zone (CD)" and a date be set for Public Hearing.
4. Council authorize staff to draft Development Permit No. 7921-0313-oo 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;
(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 the proposed linear plaza located along King George Boulevard and the northeast portion of 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) final submission and approval of the Transportation Impact Assessment;
(k) provision of cash-in-lieu or other transportation demand management measures, including a dedicated bike elevator, to address the shortfall in residential parking spaces to the satisfaction of the General Manager, Engineering;
(1) the applicant address the density bonus amenity contribution consistent with the Tier 2 Capital Projects CACs in support of the requested increased density, to the satisfaction of the General Manager, Planning and Development Department; and
(m) the applicant adequately address the impact of the reduced on-site indoor amenity space requirement of the CD Bylaw (based on RM-135 Zone), at the rate in effect at the time of Final Adoption.
6. Council pass a resolution to amend the Surrey City Centre Plan to allow for an FAR of 10.9 within the 'Central Business District - Area 2 ( 7.5 FAR)' designation, when a minimum of 3.1 FAR of office/commercial space is provided, when the project is considered for final adoption.

## SITE CONTEXT \& BACKGROUND

| Direction | Existing Use | City Centre <br> Designation | Existing Zone |
| :--- | :--- | :--- | :--- |
| Subject Site | Three (3) single- <br> storey commercial <br> buildings | Central Business <br> District - Area 2 | C-8 |
| North (Across future 102A <br> Avenue): | Single-storey <br> commercial <br> building | Central Business <br> District - Area 2 | C-8 |


| Direction | Existing Use | City Centre <br> Designation | Existing Zone |
| :--- | :--- | :--- | :--- |
| East (Across King George <br> Boulevard): | Drive-thru <br> restaurant and gas <br> station | Mid to High Rise <br> Mixed Use | CHI \& CG-1 |
| South (Across 102 Avenue): | Single-storey <br> commercial <br> buildings | Central Business <br> District - Area 1 | C-8 |
| West (Future Lane): | Development <br> Application No. <br> 20-oo71 proposing <br> a mixed-use tower <br> and currently at <br> Third Reading and <br> single-storey <br> commercial <br> building | Central Business <br> District - Area 2 | C-8 |

## Context \& Background

- The subject site consists of one, strata-titled, property located southeast of Civic Centre and Centre Block, and north of 102 Avenue in the Central Downtown neighbourhood of City Centre.
- The subject site is currently operating with three (3) single-storey commercial buildings on the property.
- The subject site is designated Downtown in the Official Community Plan (OCP), Central Business District - Area 2 ( 7.5 FAR)" in the City Centre Plan (CCP), and is zoned Community Commercial (C-8) Zone.
- The current application is generally consistent with the Downtown District designation in the Official Community Plan (OCP) and the Central Business District - Area 2 (7.5 FAR) designation in the CCP, with the exception of the proposed density of 10.9 FAR.
- The proposed density and building form are appropriate for this part of Surrey City Centre, which will form part of the future high-density mixed-use area within the provisional Central Business District of the City Centre Plan (CCP), concentrating office, commercial and institutional space near Surrey Central Skytrain Station. The intent for this area is to maximize the amount of commercial office floor area that will contribute to a successful Central Business District.
- The proposed development conforms to the goal of achieving high-rise, high density, mixed use development around the three City Centre SkyTrain Stations. Surrey Central SkyTrain Station is located approximately 200 metres from the subject site.
- The proposed height and density of the development is consistent with an evolving urban context in the City Centre, initiated by nearby tower developments within City Centre, including 3 Civic Plaza and Centre Block which are located west of site.
- The development is proposing a total of 746 residential units with diversity in unit types from studios to three-bedroom units.
- The proposed development includes 19,442 square metres of commercial and office space, which equates to approximately $28 \%$ of the total floor area and 3.1 FAR of commercial and office floor space.
- Staff have worked with the applicant to maximize the amount of commercial and office space, given the size of the subject site. The 7 -storey commercial and office podium has been maximized and will be significant in scale at one urban block in length.
- Staff support the proposed 3.1 FAR of commercial and office uses and contend that additional commercial and office floorspace would be difficult to design and program within a mixed-use building on this site.


## DEVELOPMENT PROPOSAL

## Planning Considerations

- The subject development application includes the following:
o OCP amendments, and City Centre Plan amendment;
o Rezoning;
o a Detailed Development Permit for a 67 -storey residential tower, including a 7 -storey podium, with commercial and office space; and
o a total 746 residential units are proposed.
- Development details are provided in the following table:

|  |  |
| :--- | :--- |
| Pot Area |  |
| Gross Site Area: | 6,289 square metres |
| Road Dedication: | 1,898 square metres |
| Undevelopable Area: | NA |
| Net Site Area: | 4,391 square metres |
| Number of Lots: | 1 |
| Building Height: | 67 -storeys (207 metres) |
| Floor Area Ratio (FAR): | 10.9 (gross) |
| Floor Area |  |
| Residential: | 49,189 square metres |
| Commercial/Office: | 19,422 square metres |
| Total: | 70,146 square metres |
| Residential Units: |  |
| Studio: | 226 |
| 1-Bedroom: | 16 |
| 1-Bedroom + den: | 283 |
| 2-Bedroom: | 122 |
| 2-Bedroom + den: | 57 |


|  | Proposed |
| :--- | :--- |
| 3-Bedroom: | 42 |
| Total: | 746 |
|  |  |

## Referrals

| Engineering: | The Engineering Department has no objection to the project <br> subject to the completion of Engineering servicing requirements as <br> outlined in Appendix II. |
| :--- | :--- |
| School District: | The School District has advised that there will be approximately 141 <br> school-age children generated by this development, of which the <br> School District has provided the following expected student <br> enrollment. |
| 72 students at Old Yale Road Elementary School <br> 69 students at Kwantlen Park Secondary School |  |

Parks, Recreation \&
Culture:

Surrey Fire Department: The Fire Department has no concerns with the proposed development application. However, there are some items which will be required to be addressed as part of the Building Permit application.

Advisory Design Panel: The proposal was considered at the ADP meeting on August 25, 2022, and was supported. The applicant has resolved most of the outstanding items from the ADP review as outlined in the Development Permit section of this report. Any additional revisions will be completed prior to Council's consideration of Final Adoption of the rezoning by-law, to the satisfaction of the Planning and Development Department.

## Transportation Considerations

## Traffic Impacts:

- The applicant was required to submit a Traffic Impact Analysis ("TIA") in order to assess site-generated traffic impacts and provide mitigation recommendations. As per the TIA, the subject proposal is anticipated to generate approximately 333 vehicle trips in the peak hour, equating to $5-6$ vehicles per minute.
- The TIA evaluated traffic impacts of the subject site to the surrounding road network up to the year 2035 ( 10 years from the anticipated opening day for the proposal of 2025) and it was found that the majority of the roads and intersections near the subject site would be able to adequately accommodate the anticipated growth at acceptable levels for an urban core context, particularly with the planned new connections and infrastructure improvements around the subject site, as identified in the City Centre Plan. The TIA identified some movements near capacity in the 2035 horizon year; these are planned to be mitigated as much as possible through left-turn bay extensions, redistribution of traffic patterns via new connections, and anticipated modal shifts with planned improvements to transit, pedestrian, and cycling infrastructure in the area.


## Road Network \& Infrastructure:

- The applicant is required to provide the following improvements as part of the subject proposal:
o Dedication and construction of the west side of King George Boulevard with a sidewalk, a cycle track, and a boulevard with trees and lighting, and provide contributions towards future pavement widening;
o Dedication and construction of the north side of 102 Avenue with a sidewalk, a cycle track, and a boulevard with trees and lighting, and provide contributions towards future pavement widening;
o Dedication and construction of the south side of a new 102A Avenue (which will ultimately be a continuous connection from 133 Street to Whalley Boulevard) with a sidewalk, a cycle track, a boulevard with trees and lighting, and pavement for two-way travel;
o Dedication and construction of a new green lane with a sidewalk, a boulevard with trees and lighting, pavement for two-way travel, and on-street parking where possible; and
o Construction of a new, full-movement traffic signal at the intersection of 102 A Avenue and King George Boulevard.


## Access:

- Access is proposed to be provided to the subject site via the new green lane only, which will help to minimize interruptions to vehicular traffic and to pedestrian and cycling connections on the surrounding roads along the site frontages.


## Parking:

- The Zoning Bylaw requires the following minimum number of parking spaces to be provided on-site for the proposed uses:
o Retail: 46 parking spaces;
o Office: 233 parking spaces;
o Residential: 671 parking spaces; and
o Residential visitors: 75 parking spaces.
- As per the Zoning Bylaw, the total required number of parking spaces may be reduced by 20\% for proposals within the City Centre, with provision of Transportation Demand Management ("TDM") measures and/or payment-in-lieu in accordance with the Off-Street Parking Reserve Fund By-law and/or the Alternative Transportation Infrastructure Reserve Fund By-law. With this provision, the total requirements for the subject proposal can be reduced to 820 parking spaces, with provision of TDM measures and/or payment-in-lieu.
- The subject site is proposing to provide a total of 785 parking spaces on-site, which equates to a proposed 35 -stall ( $4 \%$ ) reduction. The applicant is proposing to share $25 \%$ of the parking spaces provided for the office use component and the residential visitor use component, based on differing temporal demand for parking (primarily daytime demand for office uses and evening demand for residential visitor uses). This proposed reduction would equate to 75 stalls (which is more than the proposed 35 -stall reduction). Similar shared parking arrangements for office uses and residential visitor uses have been previously supported for proposals elsewhere within City Centre.


## Transit

- Surrey Central SkyTrain Station and surrounding transit hub are approximately 200 metres from the subject site (less than a 5 -minute walk), which is serviced by rapid transit and standard bus routes that connect to every adjacent municipality and community within Surrey.


## 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:
o The building features solar panels that have been designed as part of the signature tower top;
o The building incorporates high performance windows;
o The building incorporates the energy recovery ventilators to preheat incoming outdoor air for all residential units and retail spaces/amenity spaces;
o The building incorporates energy efficient envelope and mechanical systems, which can also provide mechanical cooling to improve thermal comfort for occupants; and
o The building is connected to the Surrey District Energy.


## Regional Growth Strategy

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


## Official Community Plan

## Land Use Designation

- The subject site is designated Downtown in the Official Community Plan, with a permitted maximum density of 7.5 FAR as noted in Figure 16 of the OCP.
- The applicant is proposing to amend the OCP for a site specific permission to allow up to 10.9 FAR within the 7.5 FAR designation on the subject site.
- 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 located east of the Central Civic and downtown business core.
- The proposed development will be subject to Tier 2 Capital Plan Project CACs for the residential floor space that exceeds the permissible floor space under the 7.5 FAR designation.


## 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:
o Growth Management:
- Accommodating Higher Density: Direct higher-density development into Surrey's City Centre, through the development of a high-density, mixed-use development.
o 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 highdensity development within walking distance to the SkyTrain and other transit infrastructure.
- Healthy Neighbourhood: Build complete, walkable, and green neighbourhoods, with a high-density development connected to open space, local greenways and multi-modal transportation infrastructure.
- 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.
o Ecosystems
- Energy, Emissions and Climate Resiliency: Design a community that is energy-efficient, reduces carbon emissions and adapts to a changing environment through a design that meets typical sustainable development criteria and conveys additional open space to the City.
o Economy
- Employment Lands: Ensure sufficient supply and efficient use of employment lands, with the development of commercial space close to the core of City Centre.
- Employment, Investment, and Innovation: Ensure high-quality, business innovation and diversified employment and investment opportunities, through the development of commercial space.


## Secondary Plans

## Land Use Designation

- The subject site is designated Central Business District - Area 2 (7.5 FAR) in the City Centre Plan.
- The applicant is seeking a gross density of 10.9 FAR, including 19,422 square metres of commercial/office floor space. Staff are requesting that Council pass a resolution to amend the Surrey City Centre Plan to allow for an FAR of 10.9 within the 'Central Business District - Area 2 (7.5 FAR)' designation City Centre Plan, provided a minimum of 3.0 FAR of commercial and office space is provided.


## 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 located east of the central civic and downtown business core.
- The proposed development includes 19,442 square metres of commercial and office space, which equates to approximately $28 \%$ of the total floor area and $41 \%$ of the base density. Staff support the proposed mix of uses and amount of office space currently proposed.
- Staff have worked with the applicant to maximize the amount of commercial and office space, given the size of the subject site. The 7 -storey commercial and office podium has been maximized and will be significant in scale and one urban block in length.
- Staff support the proposed 3.1 FAR of commercial and office uses and contend that additional commercial and office floorspace be difficult to design and program within a mixed-use building on the subject site.
- The proposed development will be subject to both Tier 1 and Tier 2 Capital Plan Project CACs.


## Themes/Objectives

- The proposed development is consistent with the following guiding principles of the City Centre Plan:
o Build Density and Mixed-Use, by providing a mix of commercial and residential space.
o Encourage Housing Diversity, with a mix of condominium units and a variety of unit types and sizes.
o Create Vibrant Urban Space, with a strong public realm along 102A Avenue.
o Encourage Office and Employment, by providing approximately $19,442 \mathrm{~m}^{2}$ of commercial and office space.


## CD Bylaw

- The applicant proposes to rezone the subject site from "Community Commercial Zone (C-8)" to "Comprehensive Development Zone (CD)".
- The applicant is proposing a "Comprehensive Development Zone (CD)" to accommodate a proposed mixed-use tower. The proposed CD Bylaw identifies the uses, densities and setbacks proposed. The CD Bylaw will have provisions based on the "Multiple Residential 135 Zone (RM-135)" and the "Community Commercial Zone (C-8)".
- A comparison of the density, lot coverage, setbacks, building height and permitted uses in the RM-135 Zone and C-8 Zone and the proposed CD Bylaw is illustrated in the following table.

| Zoning | $\begin{array}{c}\text { RM-135 Zone } \\ \text { (Part 25) }\end{array}$ | $\begin{array}{c}\text { C-8 Zone } \\ \text { (Part 36) }\end{array}$ | Proposed CD Zone |
| :--- | :---: | :---: | :--- |
| Floor Area Ratio: | 2.5 FAR | 0.8 FAR | 15.6 FAR (net) |
| Lot Coverage: | $33 \%$ | $50 \%$ |  |
| $\begin{array}{l}\text { Setbacks: } \\ \text { East: } \\ \text { West: }\end{array}$ |  |  | $75 \%$ |
| $\begin{array}{l}\text { South: } \\ \text { North: }\end{array}$ |  |  | 3.5 metres |
|  | $50 \%$ of the height |  |  |
| of the building |  |  |  |$)$


| Permitted Uses: | $\begin{array}{ll}\text { - } & \text { Multiple unit } \\ \text { residential } \\ \text { buildings } \\ \text { - } & \text { Ground-oriented } \\ \text { multiple } \\ \text { residential } \\ \text { buildings }\end{array}$ | - Retail stores; <br> - Personal service uses; <br> - General service uses; <br> - Beverage container return centres; <br> - Eating establishments; <br> - Neighbourhood pubs; <br> - Liquor stores; <br> - Office uses; <br> - Parking facilities; <br> - Automotive service uses; <br> - Indoor recreational facilities; <br> - Entertainment uses; <br> - Assembly Halls; <br> - Community services; <br> - Child care facilities; and <br> - One dwelling unit | - Multiple unit residential buildings; <br> - Ground-oriented multiple residential buildings; <br> - Retail stores; <br> - Personal service uses; <br> - General service uses; <br> - Eating establishments; <br> - Neighbourhood pubs; <br> - Liquor stores; <br> - Office uses; <br> - Indoor recreational facilities; <br> - Entertainment uses; <br> - Cultural' <br> - Community services; and <br> - Child care facilities. |
| :---: | :---: | :---: | :---: |
| Amenity Space |  |  |  |
| Indoor Amenity: |  | 2,238 square metres | The proposed $1,535 \mathrm{~m}^{2}$ exceeds the minimum requirement of $1,117 \mathrm{~m}^{2}$ The shortfall of $703 \mathrm{~m}^{2}$ under the Zoning Bylaw will be addressed. |
| Outdoor Amenity: |  | 2,238 square metres | The proposed $2,560 \mathrm{~m}^{2}$ exceeds the Zoning Bylaw requirement. |
| Parking (Part 5) |  | Required | Proposed |
| Number of Stalls |  |  |  |
| Commercial: Office: |  | $\begin{gathered} 44 \\ 219 \end{gathered}$ | $\begin{gathered} 43^{*} \\ 149^{*} \end{gathered}$ |
| Residential: <br> Residential Visitor: <br> Total: |  | $\begin{gathered} 671 \\ 75 \\ \mathbf{1 , 0 0 9} \end{gathered}$ | $\begin{aligned} & 545 \\ & 75^{*} \\ & 785 \end{aligned}$ |


| Bicycle Spaces |  |  |
| :--- | :---: | :---: |
| Residential Secure Parking: | 895 | 895 |
| Residential/Commercial Visitor: | 2 | 2 |
| Office: | 28 | 28 |
| Total: | 925 | 925 |
|  |  |  |
|  |  |  |

*shared

- The proposed CD By-law will incorporate similar uses as the RM-135 Zone for the residential component and the C-8 Zone for the commercial component.
- The proposed net floor area ratio (FAR) of 15.6 and the lot coverage of $55 \%$ 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 Central Business District - Area 2 (7.5 FAR) designation calculated on the gross site area, the proposed use complies with the intent of the proposed Central Business District - Area 2 (7.5 FAR) designation in the Surrey City Centre Plan.
- The proposed lot coverage is appropriate for the proposed high-rise development with podiums and is consistent with proposed surrounding developments and with the context of the future Centre Block to the east.
- The RM-135 Zone requires the setbacks to be 7.5 metres or a minimum of $50 \%$ of the building height, whichever is greater. The applicant is proposing reductions for all setbacks in the CD By-law. The reduction in building setbacks is supportable as they allow for more active engagement of the streets, which is desirable for the City Centre area and consistent with the City Centre Plan design guidelines.
- The proposed commercial and office uses are a reflection of the City's objective to concentrate office space within the Central Business District and are appropriate for a mixed-use development in the City Centre, providing opportunities for employment, entertainment and service uses.


## Capital Projects Community Amenity Contributions (CACs)

- On December 16, 2019, Council approved the City's Community Amenity Contribution and Density Bonus Program Update (Corporate Report No. R224; 2019). The intent of that report was to introduce a new City-wide Community Amenity Contribution (CAC) and updated Density Bonus Policy to offset the impacts of growth from development and to provide additional funding for community capital projects identified in the City's Annual Five-Year Capital Financial Plan.
- The proposed development will be subject to the Tier 1 Capital Plan Project CACs. The contribution will be payable at the rate applicable at the time of Building Permit Issuance. The current rate is $\$ 2$, ooo per new unit.
- The proposed development is subject to the Tier 2 Capital Plan Project CACs for proposed density greater than the City Centre Plan designation, which will be calculated in accordance with the flat rates under Schedule G of the Zoning Bylaw and payable prior to Final Adoption. The amount of floor space subject to Tier 2 CACs will be determined in advance of Final Adoption.


## Affordable Housing Strategy

- On April 9, 2018, Council approved the City's Affordable Housing Strategy (Corporate Report No. Ro66; 2018) requiring that all new rezoning applications for residential development contribute $\$ 1$, ooo 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 September 8, 2022, and the Development Proposal Signs were installed on September 10, 2022. Staff did not receive responses from neighbouring residents.


## Form and Character Development Permit Requirement

- The proposed development is subject to a Development Permit for Form and Character and is also subject to the urban design guidelines in the Surrey City Centre Plan.
- The proposed development generally complies with the Form and Character Development Permit guidelines in the OCP and the design guidelines in the Surrey City Centre Plan.
- The proposed development is a 67 -storey mixed use building, including a significant podium comprised of 7 -storeys of commercial and office storeys, and 8storeys of residential topped by a residential tower.
- The building incorporates the commercial and office uses within the 7 storeys at the base of podium, and residential uses within the upper 8 storeys of podium and residential tower.
- The applicant has worked with staff to develop a design that incorporates City Centre urban design guidelines and principles through tower and podium refinement, public realm, and
street interface. The applicant has continued to work with staff on an ongoing basis to resolve specific design-related concerns.
- The commercial and office podium will create a 7 -storey block along King George Boulevard and between 102 Avenue and 102A Avenue, with the partial residential podium above creating a mid-rise scale.
- The tower is envisioned to establish an anchor to the Central Business District Area and is expected to be one of the most significant buildings in terms of massing and height.
- Accordingly, the proposed development uses bold geometries and a distinct architectural language while referencing the historical and architectural context of City Centre.
- The building incorporates unique curved and tapering corners with convex and concave curves as an integral part of the podiums and tower design. A distinctive "spine" expression visually connects the building components from ground to the tower top. The tower begins a curved taper at the top third of the building completing the architectural language of the podium.
- The robust podium base is treated with a variety of distinct architectural treatments to add visual interest and modulate the large scale. High quality materials including curtain wall, metal clad grid frames and stone cladding contribute significantly to the building form and character.
- Entrances for each component will be unique with lobbies strategically located along King George Boulevard. The office and residential lobbies are distinct and separate while both located below the notable "spine" of the building. The commercial retail units all have direct frontages along the streets.
- A north-south linear public plaza is provided along King George Boulevard and another public plaza is adjacent to Development Application No. 7920-0071-oo located directly west of the subject site. Further design detail and grading coordination of this space is required, and a volumetric statutory-right-of-way is required to be registered over these spaces to ensure public accessibility.
- The proposed building form adopts a modern and unique architectural vocabulary of the high-rise typology currently populating Surrey City Centre.
- The following urban design items are required to be addressed prior to final adoption:

1. Public realm interfaces: Further clarification and design refinement of the site edges, in particular the public plazas, and King George Boulevard frontage treatment.
2. Refinement to the materials, elevation details, and further design development to the office entry, tower top and podium parapet concepts.
3. Further refinement to the office entry to enhance its presence along King George Blvd. Provide an enlarged architectural elevation of the office and residential entries (with no landscape/ streetscape trees) for review.

## Landscape

- The landscape concept has been designed to respond to the urban nature of City Centre as an active, pedestrian-friendly space for commercial visitors, residents, and the work force. The overall design responds to the busy and active nature of King George Boulevard, considers site circulation, and incorporates active interfaces between the public and private realms.
- The focal point of the ground plane is the linear plaza along King George Boulevard that mimics the relief of the podium and draws on opportunities for interaction, with accessible public seating, hardscaping, raised planters and trees.
- The two entries have open hardscaped spaces, seating and raised planters as focal points that help to distinguish the entrances.
- The second floor deck provides outdoor space for the office use and consists of hardscaping and seating areas with raised planters and shade.
- Levels 8,16 and 66 are large indoor and outdoor amenity areas containing a variety of landscaping and programming.
- The site and landscaping have been designed to encourage pedestrian activity on the sidewalks and plaza spaces with opportunities for gathering and seating.
- The landscaping plan includes a variety of tree planting, including Flowering Dogwood, European Beech, Shore Pine, Armstrong Maple, and others.


## Indoor Amenity

- Per the required Indoor Amenity Space requirements, high-rise towers that are 25 storeys or higher must meet a base requirement of 3 square metres 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 1 additional square metres for each unit and 4 additional square metres for each micro unit.
- Based upon the City's Zoning Bylaw requirement, the proposed development must provide a minimum of 1,117 square metres of indoor amenity space, in total, to serve the residents of the proposed 746 units (no micro units are proposed).
- The applicant is proposing 1,535 square metres of indoor amenity space located throughout the development, which is below the total indoor amenity space requirement of 2,238 square metres required under the Zone and exceeds the minimum 1,117 square metres that must be provided on site as prescribed under the General Provisions of the Zoning Bylaw.
- The applicant will be required to pay cash-in-lieu for the shortfall of 703 square metres of indoor amenity space prior to final adoption.
- The indoor amenity spaces are proposed on levels 8,16 and 66 . The indoor spaces are intended to provide for a wide range of activities, including formal meeting spaces with table and chairs, workstations, multi-purpose rooms, games room, lounge areas, fitness areas, and function rooms. These spaces are all connected to the outdoor amenity areas.


## Outdoor Amenity

- Based upon the City's Zoning Bylaw requirement of 3 square metres per dwelling unit of outdoor amenity space, and 4 square metres per micro unit, a total of 2,238 square metres of outdoor amenity space is required for the proposed development.
- Overall, the proposed outdoor amenity space provided through private, programmed amenity is 2,560 square metres which exceeds the required amount. The outdoor amenity areas are significant and provide well-designed and functional spaces connected to the indoor amenity areas.
- The outdoor amenity spaces include open lawn space and dog-run with multiple smaller scale hardscaped areas centered around the open lawn areas and courtyard, shaded areas, urban agriculture areas, children's play areas, and outdoor fitness areas. The amenity space incorporates moveable tables and seating.


## TREES

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

Table 1: Summary of Tree Preservation by Tree Species:


| Total Replacement Trees Proposed <br> (excluding Boulevard Street Trees) | 44 |
| :--- | :---: |
| Total Retained and Replacement Trees | 57 |
| Contribution to the Green City Program | NA |

- The Arborist Assessment states that there are a total of 22 mature trees on the site, there are no Alder or Cottonwood trees. It was determined that 13 trees can be retained as part of this development proposal. The proposed tree retention was assessed taking into consideration the location of services, building footprints, road dedication and proposed lot grading.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of 18 replacement trees on the site. The applicant is proposing 44 replacement trees, exceeding City requirements.
- In addition to the replacement trees, boulevard street trees will be planted on 102 A and 102 Avenue. This will be determined by the Engineering Department during the servicing design review process.
- The new trees on the site will consist of a variety of trees including Fraser Fir, Armstrong Maple, Paperbark Maple, Daybreak Magnolia, Japanese Snowbell, Eastern Redbud, and others.
- In summary, a total of 57 trees are proposed to be retained or replaced on the site with no contribution to the Green City Program.


## CITY ENERGY

- The subject site is located within Service Area A, as defined in the "City Centre District Energy System By-law" (see Appendix IX for location). The District Energy System consists of three primary components:

0 community energy centres, City-operated facilities that generate thermal energy for distribution through a piped hot water network;
o distribution piping that links the community energy centres with buildings connected to the system; and
o 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:
o City access to, and maintenance and operation of, the ETS within the building and any infrastructure between the building and the property line; and
0 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 and Tree Preservation
Appendix V. ADP Comments and Response
Appendix VI. District Energy Map
approved by Ron Gill

Jeff Arason
Acting General Manager
Planning and Development
IM/ar

## 10201-10239 KING GEORGE BLVD, SURREY, B.C.

PROPOSED MIXED-USE DEVELOPMENT


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## PROJECT DATA

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WHEN PLOTTED AT SHEET SIZE 22"X34"



## 3D Perspective

N.T.S. WHEN PLOTTED AT SHEET SIZE 22"X34"

ISSUED FOR REZONING \& DP
NOVEMBER 4, 2022


## 3D Perspective

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WHEN PLOTTED AT SHEET SIZE 22"X34"

## ISSUED FOR REZONING \& DP <br> NOVEMBER 4, 2022



Mixed-Use Development
10201 - 10239 KING GEORGE BLVD SURREY, BC

## 3D Perspective

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10201 - 10239 KING GEORGE BLVD SURREY, BC

## 3D Perspective

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ISSUED FOR REZONING \& DP
NOVEMBER 4, 2022


## 3D Perspective

N.T.S.

ISSUED FOR REZONING \& DP
NOVEMBER 4, 2022


CHRIS DIKEAKOS
ARCHITECTS INC
10201-10239 KING GEORGE BLVD
SURREY, BC

## 3D Perspective

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## ISSUED FOR REZONING \& DP

NOVEMBER 4, 2022


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NOVEMBER 4, 2022




## SITE PLAN - LEVEL 1

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NOVEMBER 4, 2022




















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CHRIS DKEAKOS
ARCHITECTS NNC.

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## ENLARGED NORTH ELEVATION

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## ENLARGED SOUTH ELEVATION

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## Mixed Use Development

Issued for Rezoning/DP


(1) SITE PLAN OVERVIEW
Sheet List Table

| Sheet Number | Sheet Titie |
| :--- | :--- |
| L-01 | COVER SHEET |
| L-02 | TREE MANAGEMENT PLAN |
| L-03 | OVERALL LANDSCAPE PLAN |
| L-04A | LANDSCAPE PLAN - NORTH |
| L-04B | LANDSCAPE PLAN - SOUTH |
| L-05 | LANDSCAPE PLAN - LEVEL 2 |
| L-06 | LANDSCAPE PLAN - LEVEL 8 |
| L-07 | LANDSCAPE PLAN - LEVEL 17 |
| LS-01 | SECTIONS |
| LS-02 | SECTIONS |
| LD-01 | DETAIL |
| LD-02 | DETAIL |
| LD-03 | DETAIL |
| LD-04 | DETAIL |
| LD-05 | DETAIL |


(2) LOCATION MAP

VDZ + A




















## LAND DEVELOPMENT ENGINEERING REVIEW <br> (Commercial/Multi-Family)

## File: $\quad$ 7821-0313-00

Location: 10227 King George Boulevard
Applicant: Chris Dikeakos Architects Inc.
Address: 1635 W Broadway, Vancouver, BC
Phone: 604-291-2660
Fax: 604-291-2667
Email: nadia.s@dikeakos.com
Owner: Aimforce Surrey Centre 1 Ltd.

® DP
City Centre Plan Amendment

Land Development Engineering Contacts:
Harvinder Bains, Development Services Project Supervisor
604-591-4755, HBains@surrey.ca@surrey.ca
Jeff Pang, P.Eng., Development Services Manager
604-591-4690, jpang@surrey.ca

## Attachments:

Project Layout
Key Plan
Road Right-of-Way Requirements Sketch

## Distribution:

Applicant
Transportation Planning Manager
Sewer Engineer
Water Engineer
Drainage Planning Manager
Development Services Project Supervisor
Parks Planning Analyst

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| 1 |  | November 21, 2022 |

# LAND DEVELOPMENT ENGINEERING REVIEW 

File 7821-0313-00, Map \#o21

## Background

The applicant is proposing the following:

- Official Community Plan (OCP) text amendment to increase density from 7.5 FAR to 10.9 FAR.
- City Centre Plan amendment to increase density from 7.5 FAR to 10.9 FAR.
- Rezone from C-8 to CD.
- General Development Permit (DP) to construct one (1) 67 storey mixed building consisting of 7 storey commercial and office podium including 19,422 square metres of commercial and office space, an 8 storey residential podium and residential tower consisting of 746 residential dwelling units, with underground parking.

The review is based on the attached site plan-level 1 drawing A104 dated June 23, 2022, prepared by Chris Dikeakos Architects Inc. and from the key plan, file number 21252 dated July 9, 2021, prepared by Creus Engineering.

The development site is located within the Surrey City Centre Plan. The applicant will be required to service the site in accordance with the Surrey City Centre servicing and standards.

This Review represents the key issues that the Engineering Department is aware of at this time. The issues listed may not be fully comprehensive and exhaustive and the applicant is required, as part of the planning and design process (including Public Hearing) to identify and resolve all items relating to the proposed land development.

## Property and Right-of-Way Requirements

The following road right-of-way dedication and statutory rights-of-way (SRW), as illustrated on the Road Right-of-Way Requirements sketch attached, is required on existing roads fronting the site:

- Dedicate varying dedication between 3.064 m (north end) and 3.605 (south end) along King George Boulevard for the ultimate 42.0 m arterial road standard.
- Dedicate 5.856 m along 102 Avenue for the ultimate 30.0 m arterial road standard.
- Dedicate $5.0 \mathrm{~m} \times 5.0 \mathrm{~m}$ corner cut at King George Boulevard and 102 Avenue intersection.
- Provide 0.5m wide SRW along King George Boulevard and 102 Avenue.

The following road right-of-way dedication and SRW is required for proposed road within the site:

- Dedicate 12.0 along 102A Avenue for the ultimate 24.0 m collector road standard.
- Dedicate 12.0 m for the ultimate north-south Green Lane.
- Dedicate $5.0 \mathrm{~m} \times 5.0 \mathrm{~m}$ corner cut at King George Boulevard and 102A Avenue intersection.
- Dedicate 3.0m x 3.0m corner cuts at the Green Lane and 102 Avenue intersection.
- Provide 0.5 m wide SRW along Green Lane.

The applicant should address all road dedication and rights-of-way issues prior to finalizing layout or commencing legal survey or detailed design.

## Servicing Requirements

The applicant submitted attached key plan, file number 21252 dated July 9, 2021, prepared by Creus Engineering. The design and construction of the required ultimate works and services are not captured fully in the key plan, and will be finalized through the detailing stage.

These Works are required as a condition of this Rezone.

## Transportation/Traffic Management

The applicant is to implement the recommendations of Traffic Impact Assessment (TIA), as required by the City Transportation Division. Traffic Signal requirements will be reviewed further in conjunction with the TIA and will be finalized during detailing stage.

The following road works are required on existing roads fronting the site:
King George Boulevard arterial road per modified CCSD-5a to 5d:

- Construct west side of King George Boulevard to the City Centre arterial road standard complete with acceptable travel lanes, bike friendly barrier curb and gutter, $+/-1.8 \mathrm{~m}$ wide curb side boulevard with ornamental street lighting based on opposite configuration and street trees, 2.0 m wide protected bike lane with soil cells and/or structural soil, 2.om boulevard with standalone pedestrian lighting based on opposite configuration and street trees, and 2.0 m wide concrete sidewalk at the property line.
- Pay cash-in-lieu (CIL) for ultimate barrier curb and gutter if the existing curb will remain at its current location on interim basis.
- Pay CIL for $50 \%$ of the construction cost of the ultimate centre median if not being constructed with the development.
- Submit details on achieving the required soil volume for the boulevard trees.
- Submit benklebeam report to address the road work requirements.
- Ensure grading at property line is within $+/-300 \mathrm{~mm}$ of the ultimate centerline elevation.
- Finalize the ultimate cross-section design through detailing stage.

102 Avenue arterial road per CCSD-6a to 6d:

- Construct north side of 102 Avenue to the City Centre arterial road standard complete with minimum 6.4 m wide pavement, bike friendly barrier curb and gutter, o.9m curb side boulevard, 2.0 m wide bike lane with soil cells and/or structural soil, 2.0 m wide boulevard with ornamental street lighting and street trees, 2.0 m wide concrete sidewalk at property line.
- Pay CIL for $50 \%$ of the construction cost of the ultimate centre median if not being constructed with the development. Add design details confirming ultimate location and its impact to the existing raised median. Confirm if the existing trees within the raised median will get impacted.
- Submit details on achieving the required soil volume for the boulevard trees.
- Submit benklebeam report to address the road work requirements.
- Ensure grading at property line is within $+/-300 \mathrm{~mm}$ of the ultimate centerline elevation.
- Finalize the ultimate cross-section design through detailing stage.


## Traffic Signalization:

- Modify the existing traffic signal at the intersection of 102 Avenue and King George Boulevard, if recommended by TIA. Upgrading the existing traffic signal to current City Centre standards will be required at the minimum.

The following road works are required on proposed roads within the site:
102A Avenue collector road per CCSD-7a to 7d:

- Construct south side of 102A Avenue to the City Centre collector interim half road standard complete with minimum 6.0 m wide pavement, barrier curb and gutter, 1.0 m curb side boulevard, 1.5 m wide bike lane with soil cells and/or structural soil, 2.0 m wide boulevard with ornamental street lighting and street trees, 2.0 m wide concrete sidewalk at property line.
- Pay CIL for the removal of any interim works being constructed and for the construction of the ultimate works.
- Submit details on achieving the required soil volume for the boulevard trees.
- Submit geotechnical report to address the road work requirements.
- Ensure grading at property line is within $+/-300 \mathrm{~mm}$ of the ultimate centerline elevation.
- Finalize the ultimate cross-section design through detailing stage. Refer to the crosssection proposed under project 7820-0071-oo.


## Green Lane per CCSD-9b:

- Construct full Green Lane complete with $8.0 m$ pavement, barrier curbs and gutters on both sides, 0.5 , boulevard on the east side, 2.0 m wide west boulevard with ornamental street lighting and street trees, and 1.5 m wide concrete sidewalk at the property line.
- Submit geotechnical report to address the road work requirements.
- Finalize the ultimate cross-section design through detailing stage.

Traffic Signalization:

- Construct traffic signal at the intersection of 102A Avenue and King George Boulevard. The applicant is to confirm with the City about the availability of $50 \%$ CIL to be submitted by project 7820-0071-oo for the construction of the traffic signal.

Access:

- Construct 7.3 m concrete letdowns to the Green Lane.

Driveway access is not permitted to King George Boulevard,102 Avenue and 102A Avenue; the lot fronting these roads must have access from the Green Lane.

Completion of the onsite hard surface area between the sidewalk at property line and the building, fronting onto King George Boulevard, 102 Avenue, 102A Avenue and the Green Lane will need to be coordinated between the applicant and the City Planning Department and will be part of the Development Permit landscaping details.

## Drainage/Environmental

The following City storm drainage facilities are located in the vicinity to the site:

- 1500 mm storm main fronts the site along King George Boulevard.
- 750 mm storm main fronts the site along 102 Avenue.
- 200 mm storm main fronts the site on the north side of 102 Avenue. This main does not meet the current minimum pipe size requirement.
- 450 mm east-west storm main exists within the development site. This main is located within the SRW, and the property west of the development site is likely connected to this storm main. The applicant is required to provide design details confirming how will the storm main section located within the development site be decommissioned and how will the required flows for the west property be maintained.

City records are not complete for King George Boulevard drainage systems installed while the road was under the jurisdiction of the Ministry of Transportation. The developer's civil consultant must verify the existing drainage system.

The following storm drainage facilities are required:

- Construct storm main along new 102A Avenue for road drainage, as applicable.
- Construct storm main within the new Green Lane for road drainage, as applicable.
- Upgrade undersized storm main along 102 Avenue as applicable.
- Provide an adequately sized service connection, complete with inspection chamber, to the lot.
- Abandon surplus connection(s), if any.


## The City Centre Plan area has specific stormwater management requirements:

- Provide 0.5 cubic metres of free draining topsoil for every square metre of impervious area, as applicable. Direct runoff to the landscaped area in an acceptable manner to allow flows to infiltrate. If there are insufficient native soil areas available for the placement of a reasonable depth of topsoil to meet the above requirement then on-site detention must be provided for the remainder of the site.
- Provide detention for the remaining area not mitigated by topsoil. The detention volumes required are as below:
* 0.05 cubic metres of detention for every square meter of bare plain impervious surface.
* o.o2 cubic metres of storage for every square metre of landscaped area on top of an impervious surface such as a parkade or rooftop.

Maximum release rate of detained water is $3 \mathrm{l} / \mathrm{s}$ per hectare of area treated. A restrictive covenant (RC) must be registered on title for this and all other on-site drainage features.

A stormwater management plan must be completed to the satisfaction of Surrey Drainage Engineering to assess the 5 year post development flows (minor system) and 100 year post development flows (major system) within the catchment. The applicant is required to confirm downstream capacity from all fronting storm mains to the nearest trunk storm main ( $>20$ ha catchment area), as applicable.

The applicant will be required to obtain an Erosion \& Sediment Control (ESC) Permit, under Bylaw, 2006, No. 16138, from the Engineering Department, as part of the off-site works and services for this site and as part of on-site work prior to issuance of the Building Permit. The process requires submission and approval of an ESC Plan that minimizes sediment and sediment-laden water from entering the City drainage system, during site servicing and building construction.

## Water

The following City water facilities are located in the vicinity to the site:

- 300 mm water main fronts the site on the west side of King George Boulevard.
- 350 mm water main fronts the site on the south side of 102 Avenue.
- 200 mm water main fronts the site on the south side of 102 Avenue.


## Submit fire flow calculations and daily water demand analysis to determine the required water main pipe sizes and to confirm velocity requirements being met.

The following water facilities are required:

- Construct/upgrade water main if determined by fire flow calculations.
- Relocate the existing hydrants fronting the site on 102 Avenue and King George Boulevard if these conflict with the ultimate city infrastructure. Confirm the existing hydrant meets the current city standards.
- Provide an adequately sized metered service connection complete with backflow preventer to the lot. Connection to be off 350 mm water main on 102 Avenue.
- Abandon surplus connection(s), if any.

Metering features can be located at the property line or within the building (if the service is 75 mm or greater), in accordance with the Water Meter Design Criteria Manual \& Supplementary Specifications. Calculations are to be submitted to confirm the size of the metered domestic service connection and the size of the fire service required for the proposed development..

Through normal processing by the Planning and Development Department - Building Division, the on-site fire protection requirements will be reviewed at building permit application stage and may require additional improvements to the building to meet the B.C. Building Code.

## Sanitary Sewer

The following City sanitary sewer facilities are located in the vicinity to the site:

- 600 mm sanitary force main fronts the site on the north side of 102 Avenue.
- 100 mm sanitary force main located within SRW on property 13551-102 Avenue.

The applicant is required to complete a sanitary sewer capacity analysis downstream of the subject application up to tie-in point with 1050 mm sanitary interceptor along University Drive near 105 Avenue due to the proposed Land use plan amendment which will result in increased population and subsequent sanitary demand. Sewer capacity analysis to use scenario: NCP zoning + Instream. The applicant will be required to resolve any downstream pipe capacity constraints.

Project 7820-oo71-oo is proposing to construct new 200 mm dry sanitary force main along the new green lane up to new 102A avenue, new 375 mm sanitary main located with SRW on 10252 City Parkway and to upgrade the existing sanitary main from 10277 King George Boulevard to Central Avenue. The subject site should be connecting to the LPS main in the green lane proposed by project $7820-0071$-oo. Developer to double bond for sanitary works proposed by $7820-0071-00$ and provide off-site SRW as applicable. Submit sanitary servicing details and coordinate design with project 7810-0071-oo.

The following sanitary sewer facilities are required:

- Construct sanitary force main along the green lane with tie-in to the proposed sanitary force main by project 7820-0071-oo. Register RC for sanitary pump connection for the maintenance of the on-site pump by the property owner.
- Provide an adequately sized service connection, complete with inspection chamber, to the lot.
- Abandon surplus connection(s), if any.


## District Energy

Surrey City Council has authorized the establishment of a district energy utility that will distribute thermal energy for heating and cooling of buildings and provision of domestic hot water. District energy systems are being planned and developed in the City Centre area. This development falls within the projected service area and, as such, the City is seeking to coordinate connection of this site to district energy. Please contact Jason Owen, Manager, Sustainability and Energy Services for further information.

## Commercial Utilities

The development must be serviced with hydro, gas, telecommunication and cablevision in accordance with utility company requirements and City standards. The applicant must contact Hydro at early stage of design to confirm if on-site vista switch will be required to service the development. A written confirmation from Hydro will be required. The development must provide ultimate Hydro/Tel/Cable duct bank along King George Boulevard and along 102 Avenue, if required to achieve the ultimate third party utility servicing strategy within the City Centre.

## Project Management

A Servicing Agreement must be executed before the proposed Rezone can be completed.
The following legal documents are known at this time to be required for this project:

- SRW along site frontages.
- RC for sustainable drainage features.

All Engineering legal documents required for this project must be executed prior to issuance of the Servicing Agreement.

## Financial

A processing fee of $\$ 134,214.08$ (GST included) is required for the Servicing Agreement.
The following charges and levies must be paid as a condition of the Servicing Agreement:

- Amenity charge for undergrounding existing overhead electrical and telecommunication infrastructure.

An application fee of $\$ 2,200.00$ (GST exempt) is required for administration of the ESC Permit process. A separate ESC processing fee will be required for off-site works and on-site building permit works.

## Project Layout

(Excerpt from site plan - level 1 drawing AıO4 dated June 23, 2022, prepared by Chris Dikeakos Architects Inc.)


## SITE PLAN - LEVEL 1

## Key Plan

(Excerpt from key plan, file number 21252 dated July 9, 2021, prepared by Creus Engineering)


## Road Right-of-Way Requirements Sketch



September 6, 2022
Planning

THE IMPACT ON SCHOOLS

$$
\text { APPLICATION \#: } 21031300
$$

## SUMMARY

The proposed 746 highrise units
are estimated to have the following impact
on the following schools:
Projected enrolment at Surrey School District for this development:

| Elementary Students: | 72 |
| :--- | :--- |
| Secondary Students: | 69 |

September 2021 Enrolment/School Capacity

|  |  |
| :--- | :--- |
| Old Yale Road Elementary |  |
| Enrolment (K/1-7): | $47 \mathrm{~K}+388$ |
| Operating Capacity (K/1-7) | $19 \mathrm{~K}+419$ |
|  |  |
| Kwantlen Park Secondary | 1462 |
| Enrolment (8-12): | 1200 |
| Capacity (8-12): |  |


| Projected population of school-age children for this development: | 179 |
| :--- | :--- |

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

School Enrolment Projections and Planning Update:
The following tables illustrate the enrolment projections (with current/approved ministry
capacity) for the elementary and secondary schools serving the proposed development.

Old Yale Road catchment serves the central business district of Surrey. The timing of future high rise development in this area, with good market conditions could impact the enrolment growth upwards from the projections below. As of September 2021, the elementary was operating at 99\% capacity. The school requires 2 portables to manage this growth. This catchment is being monitored over the next several years as the projected growth in the area has yet to arrive as projected last year. As part of the 2023/24 Capital Plan, the District is requesting a 10-classroom addition. No capital funding has been approved at this time.

As of September 2021, Kwantlen Park Secondary is currently operating at $122 \%$ with 13 portables on site used for enrolling classes. In March 2020, the Ministry of Education supported a 300capacity addition to move from capital plan request to preparation of a feasibility study.

Old Yale Road Elementary


## Kwantlen Park Secondary



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


## Table 1 : Tree Preservation Summary

```
Surrey Project No:
TBD
Address: 10201-10239 King George Boulevard, Surrey, BC
Registered Arborist: D. Glyn Romaine - ISA Certified Arborist PN-7929A
```

| On-Site Trees | Number of Trees |
| :---: | :---: |
| Protected Trees Identified <br> (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excludg trees in proposed open space or riparian areas) | 22 |
| Protected Trees to be Removed | 9 |
| Protected Trees to be Retained <br> (excluding trees within proposed open space or riparian areas) | 13 |
| Total Replacement Trees Required: <br> Alder \& Cottonwood Trees Requiring 1 to 1 Replacement Ratio $0 \times \text { one }(1)=0$ <br> All other Trees Requiring 2 to 1 Replacement Ratio $9 x \text { two }(2)=18$ | 18 |
| Replacement Trees Proposed | 44 |
| Replacement Trees in Deficit | 0 |
| Protected Trees to be Retained in Proposed [Open Space / Riparian Areas\} | N/A |
| Off-Site Trees | Number of Trees |
| Protected Off-Site Trees to be Removed | 1 |
| Total Replacement Trees Required: <br> Alder \& Cottonwood Trees Requiring 1 to 1 Replacement Ratio $0 \times \text { one }(1)=0$ <br> All other Trees Requiring 2 to 1 Replacement Ratio $1 \times \text { two }(2)=2$ | 2 |
| Replacement Trees Proposed | 16 |
| Replacement Trees in Deficit | 0 |



CHRIS DIKEAKOS ARCHITECTS INC.

| DATE | August 25, 2022 |
| :--- | :--- |
| PROJECT | 10201-10239 King George Blvd Mixed-use Development in Surrey, BC |
| ATTENTION | Ingrid Matthews, Special Projects Planner |
| ADDRESS | Area Planning and Development - North Division 13 |
| FROM | Nadia Said, Architect AIBC |
| RE: | Response to Advisory Design Panel Comments |

Dear Ingrid,
Please find below our written response to the Advisory Design Panel comments.

## Key Points

- Consider providing greater differentiation between the residential and office lobbies.

This item was addressed by revising both the residential and office lobbies. For the residential lobby, the vestibule massing was pushed back and aligned with the podium curve. For the office lobby, the vestibule was recessed into the massing to create an indentation and definition. Refer to sheets A104 and A210 for site and level 1 plans respectively, A300 and A302 for east elevations, and the 3D perspectives.

- Create stronger connections between the indoor and outdoor amenities.

A total of eight access points were added on the level 8 amenity deck to facilitate a stronger connection between the indoors and outdoors. Refer to sheet A213 for the level 8 amenity plan.

- Consider providing sliding doors in lieu of swing doors to optimize the usable space of smaller balconies for more usability.
Sliding doors may be provided if air filtration requirements are met. In lieu, the balconies' door swing could be reversed towards the interior. Refer to sheets A214-A218 for residential floor plans of levels 9-65.
- Consider reconciling the geometry between the podium arc and the centerline of the tower above.

The podium arc and tower curvature have been reconciled to align at the centerline by adjusting the commercial podium's curve. Refer to sheets A104 and A210-A214 for the podium and tower's geometric overlay in the podium plans.

- Consider extending the copper façade treatment along south façade eastward, replacing the treatment of the middle volume, reducing three volumes to two.
The copper framing on the south façade has been extended eastward. Additionally, in response to City of Surrey staff feedback, the copper framing was extended vertically to act as a functional trellis on level 8. Refer to sheets A09 for the façade treatment diagram, A300, A304, and A305 for elevations, and 3D perspectives.
- Consider terminating the vertical white feature at the base of the tower top taper.

Extending the vertical white feature to the tower top is part of the architectural design intention to define the tower's silhouette.

- Consider toning down the contrast of the mid-tower columns.

As discussed during the Advisory Design Panel presentation, the glass colour shown in the renderings displayed darker than intended which led to higher contrast. Refer to 3D perspectives for colour correction.

- Consider specifying more transparent glass at the office podium façade.

Higher transparency in the office podium's glazing has been provided, refer to the 3D perspectives.

- Consider removing the bump out and recessing the lobby along King George; liberate the triangle column feature from the façade at grade.
The projecting residential lobby entrance has been removed so that the lobby's façade aligns with the podium's curvature, exposing the triangular column to be featured as part of the streetscape. Refer to sheets A104 and A210 for site and podium plans of level 1 respectively, and the 3D perspectives.
- Consider replacing opaque material adjacent to King George Boulevard lobby with continuity of the glazing system and maintain the flow of the façade in lieu of flattening the geometry.
The opaque material was replaced with glazing. Refer to sheets A104 and A210 for site and podium plans of level 1 respectively, and the 3D perspectives.
- Consider further development of the white volumes along the lane; simplify the volumes.

The white volumes are part of the adjacent property. Coordination efforts are being pursued to unify the architectural expression of the proposed development and adjacent development by providing a continuous canopy and using similar colour schemes for integration.

- Give further design consideration to the 'second' plaza on the northwest corner.

VDZ+A: we will get information from the adjacent project and modify our design to integrate the landscape design between the two properties.

- Consider using energy and thermal comfort modelling to inform your design development. Use future climate files (2050/2080) to best understand the impact of shock events and overall resiliency of the project.
Energy modelling is required as part of BCBC Step Code compliance and will commence in the design development phase.
- Consider specifying curtain wall for the entire building.

This item has been noted; curtain wall systems will be provided for the proposed project.

- Consider providing passive ventilation for the office spaces.

Passive ventilation has been provided on levels 2-7 of the commercial podium, and on the level 8 amenity facade. Refer to sheets A300-A305 for elevations, and the 3D perspectives.

CHRIS DIKEAKOS
ARCHITECTS INC.

- Consider engaging your mechanical engineer as early as possible.

The mechanical engineer was engaged in the early preliminary design stage.

- Consider specifying thermally broken balcony connections.

Thermally broken balconies will be considered in the next phase of design development.
Site

- The proposed setbacks appear appropriate

This item has been noted.

- Further review King George public realm, the pavement, lighting, public art, and landscaping. VDZ+A: we will work with City staff to further develop the King George public realm.


## Form and Character

- The treatment of lower retail or office floors is good. The tower is simple yet striking. It will make a significant contribution to City Centre skyline.
This item has been noted.
- Reconsider the tower location to the corner of the site to enhance gateway junctions.

During initial design stages, the tower location was determined by future tower separation requirements. The tower was carefully positioned with City staff approval based on the required tower separation.

- Reconsider the white vertical strip fin in the middle of tower facades on the top and bottom The architectural design intention to extend the vertical strip fin to the top and bottom is to define the tower's silhouette. Refer to sheets A300-A305 for elevations, and the 3D perspectives.
- Consider the changes to the exterior elevations as the proportions of glazed to insulated panel wall changes to conform to code requirements from $70 \%$ currently proposed. Additional insulated and opaque panels will be introduced, if required, to conform to the applicable code.


## Landscape

- Consider providing multiple accesses from indoor amenity space to outdoor amenity space.

VDZ+A: we will work with the architect to address this comment.

- Consider further design development of the secondary plaza on the northwest to better integrate the plaza space for both buildings. Grading will need to be carefully reviewed to ensure that minimum slopes of $2 \%$ are able to be maintained between the two buildings.
VDZ+A: we will get information from adjacent project and modify our design to integrate the landscape design between the two properties.

CHRIS DIKEAKOS
ARCHITECTS INC.

## CPTED

- No specific issues were identified.

Noted.
Sustainability

- Provide sustainable strategy for this 'Super Highrise’ tower, which has more stringent energy requirements. A heat pump system may be required for heating and cooling each unit which will require the unit layout to further develop and will change the facade side of the building. A sustainable strategy will be provided in the next phase of design development. Heat pumps will be one of the items considered for this tower.
- Consider engaging your mechanical engineer as early as possible for cooling and heating for this significant project.
The mechanical engineer was engaged in the early preliminary design stage.
- Recommend reducing window to wall ratio to reach energy performance codes.

Additional insulated and opaque panels will be introduced, if required, to reach energy performance codes.
Accessibility

- Consider accessible facilities in amenities spaces such as accessible playground structures.

VDZ+A: all public amenities will be accessible.

- Provide adaptable units within the project.

Suite 02 in the tower floor plan will be modified as an adaptable unit in the next phase. A total of 41 adaptable units will be provided between levels 18-58. Refer to sheet A216.

Per
addaul:

Nadia Said
Architect AIBC, AAA
Chris Dikeakos Architects Inc.

## FIGURE 1



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

## DISTRICT ENERGY SERVICE AREA (SERVICE AREA A \& SERVICE AREA B)

