

PROPOSAL:

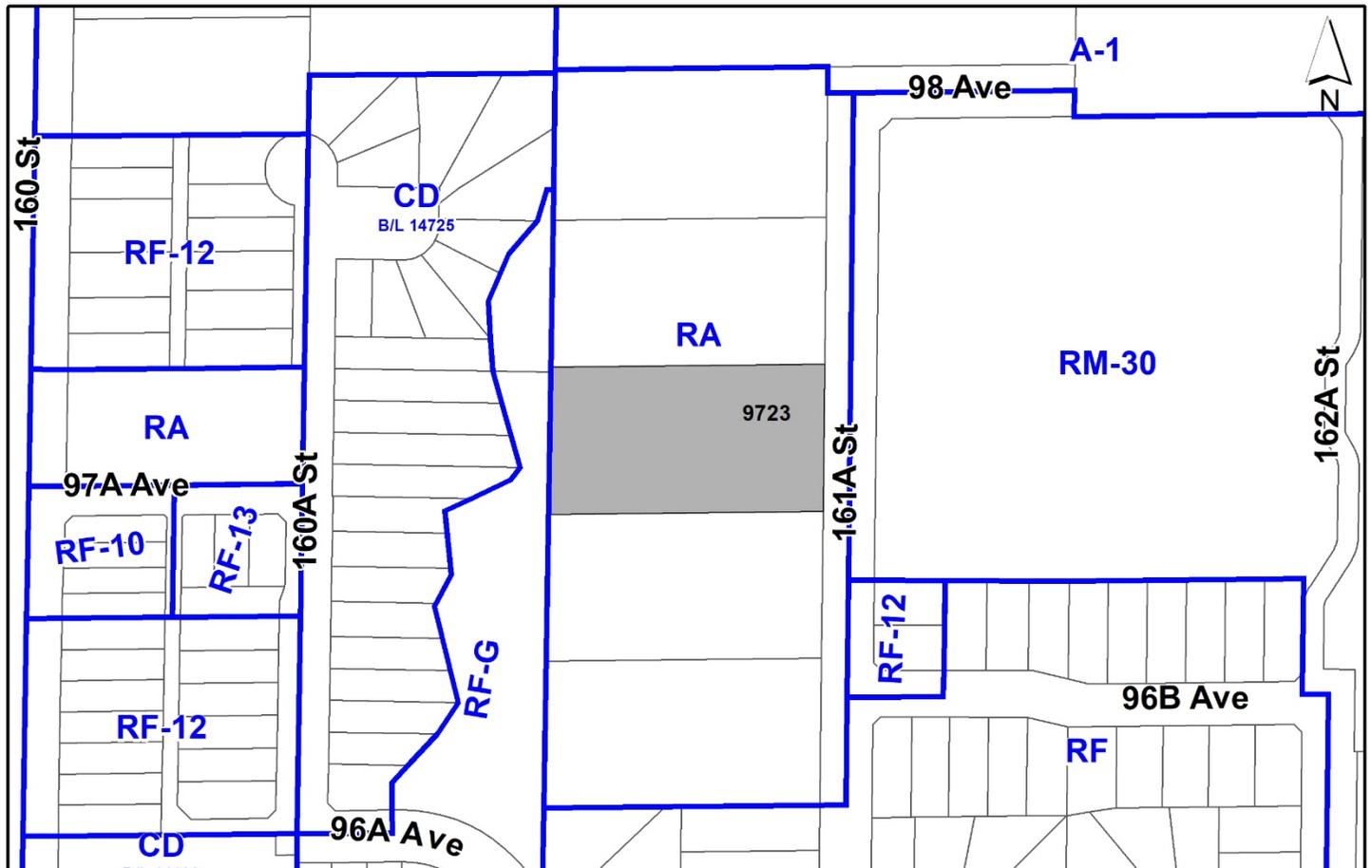
- **Rezoning** from RA to RF-13
- **Development Permit**

to allow subdivision into four single family lots and one lot to be conveyed to the City for conservation purposes.

LOCATION: 9723 - 161A Street

ZONING: RA

OCP DESIGNATION: Urban



RECOMMENDATION SUMMARY

- Rezoning By-law to proceed to Public Notification. If supported the By-law will be brought forward for First, Second and Third Reading.
- Approval to draft Development Permit for Sensitive Ecosystems and Hazard Lands.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- The proposal complies with the General Urban designation in the Metro Vancouver Regional Growth Strategy (RGS).
- The proposal complies with the Urban designation in the Official Community Plan (OCP).
- In accordance with the Council Procedure By-law (No. 15300), as amended, a public hearing is not required for the subject rezoning application. The proposed rezoning is in relation to a subdivision creating five or fewer new single-family residential lots. The proposal is consistent with the Official Community Plan (OCP). As such, Council is requested to endorse the Public Notification to proceed for the proposed Rezoning By-law. The Rezoning By-law will be presented to Council for consideration of First, Second, and Third Reading, after the required Public Notification is complete, with all comments received from the Public Notification presented to Council prior to consideration of the By-law readings.
- The proposed density and building form are appropriate for this part of Tynehead.
- The proposal complies with the Development Permit requirements in the OCP for Sensitive Ecosystems (Streamside Areas/Green Infrastructure Areas). The subject property is located within the streamside protection area of a Class A (red-coded) watercourse.
- The proposed streamside setback of 30 metres (flexed to a minimum of 28 metres and a maximum of 38 metres), measured from top-of-bank, will facilitate the construction of four new single family dwellings on the property, and the conveyance of 0.442 hectares of riparian area (or 74% of the total site area) to the City without compensation (proposed park lot).
- The applicant's Qualified Environmental Professional (QEP) has submitted as Ecosystem Development Plan that indicates the proposed subdivision and future house construction will not negatively impact the watercourse or riparian area.
- The proposal complies with the Development Permit requirements in the OCP for Hazard Lands (Steep Slopes).

RECOMMENDATION

The Planning & Development Department recommends that:

1. Council endorse the Public Notification to proceed for a By-law to rezone the subject site from One-Acre Residential (RA)" to "Single Family Residential (13) Zone (RF-13).
2. Council authorize staff to draft Development Permit No. 7922-0142-00 for Hazard Lands (Steep Slopes) and Sensitive Ecosystems (Streamside Areas and Green Infrastructure Areas) generally in accordance with the attached drawings (Appendix VI) and the finalized Ecosystem Development Plan and Geotechnical Report.
3. Council instruct staff to resolve the following issues prior to final adoption:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a subdivision layout to the satisfaction of the Approving Officer;
 - (c) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (d) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department;
 - (e) submission of a finalized Ecosystem Development Plan to the satisfaction of City staff;
 - (f) the applicant satisfy the requirements for a P-15 agreement;
 - (g) conveyance of riparian areas and Biodiversity Conservation Strategy areas to the City;
 - (h) submission of a finalized Geotechnical Report to the satisfaction of City staff;
 - (i) the applicant adequately address the City's needs with respect to the City's Affordable Housing Strategy, to the satisfaction of the General Manager, Planning & Development Services;
 - (j) registration of a Section 219 Restrictive Covenant to require the site to be developed in accordance with the finalized geotechnical report; and
 - (k) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department.

SITE CONTEXT & BACKGROUND

Direction	Existing Use	OCP Designation	Existing Zone
Subject Site	Single Family Residential with Class A watercourse (Townline Creek)	Urban	RA
North:	Single Family Residential with Class A watercourse (Townline Creek)	Urban	RA
East (Across 161A Street):	Multi-family Residential	Multiple Residential	RM-30
South:	Single Family Residential with Class A watercourse (Townline Creek)	Urban	RA
West:	Greenbelt (City-owned)	Urban	RF-G

Context & Background

- The subject property is located on the west side of 161 A Street, north of 96 Avenue. The property is designated “Urban” in the Official Community Plan (OCP) and is zoned “One Acre Residential Zone (RA)”.
- The site is approximately 5,990 square metres, with a lot width of 57 metres and a lot depth of 106 metres.
- To the south of the subject site (9671 – 161A Street), Development Application No. 7922-0116-00 received Conditional Approval from Council on May 1, 2023 for rezoning from RA to RF-13 to allow subdivision into four single family lots and one lot to be conveyed to the City for conservation purposes.
- The property is encumbered by a Class A (red-coded) watercourse which runs through the centre of the site, flowing from south to north. As the subject property is within 50 metres of the stream, it is subject to a Sensitive Ecosystem Development Permit in accordance with the provisions identified in the OCP.
- It is noted that under Part 7A “Streamside Protection” of the Zoning By-law No. 12000, for new lots (created after September 12, 2016) the minimum setback from top-of-bank for a Class A (red-coded) watercourse is 30 metres.
- To the west of the subject property is a City-owned greenbelt which was dedicated to the City to preserve and protect environmentally sensitive areas through Development Application No. 7997-0099-00.

DEVELOPMENT PROPOSAL

Planning Considerations

- The applicant is proposing to rezone the subject site from “One Acre Residential Zone (RA)” to “Single Family Residential 13 Zone (RF-13)”, and a Development Permit for Hazard Lands and Sensitive Ecosystems in order to permit subdivision into four single family lots and one park lot to be conveyed to the City for conservation purposes.

	Proposed
Lot Area	
Gross Site Area:	5,990 square metres
Park Lot Conveyance:	4,419 square metres
Net Site Area:	1,571 square metres
Number of Lots:	4 single family lots
Unit Density:	25 units per hectare (net)
Range of Lot Sizes	393 square metres
Range of Lot Widths	14.2 metres
Range of Lot Depths	28.0 metres

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 four (4) school-age children generated by this development, of which the School District has provided the following expected student enrollment.

2 Elementary students at Serpentine Elementary School
1 Secondary student at North Surrey Secondary School

(Appendix III)

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

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by September 2024.

Parks, Recreation & Culture:

Parks will accept the conveyance, without compensation, of 0.442 hectares of aquatic and riparian area to satisfy “maximum safeguarding” requirements of the Sensitive Ecosystem Development Permit Area guidelines. A P-15 agreement is required for restoration, monitoring and maintenance of the conveyed area.

North Surrey Community Park is the closest active park with amenities including, outdoor sport fields, and is 785 metres walking distance from the development. The closest park natural area will be conveyed from the development.

Transportation Considerations

- Vehicle access for proposed Lots 1 to 4 is from 161A Street, along the east property line.
- The proposed development is located in close proximity to transit service. A bus stop is located approximately 400 metres walking distance west of the site along 160 Street, services by bus route 335 with connection between Surrey Central Skytrain Station, and Guildford and Newton Bus Exchanges.

Parkland and Natural Area Considerations

- To the west of the subject property is a City-owned greenbelt which was dedicated to the City to preserve and protect environmentally sensitive area through Development Application No. 7997-0099-00. This greenbelt is considered to be part of the Tynehead Regional Park Hub, and has high ecological value as per the City of Surrey’s Biodiversity Conversation Strategy.

Sustainability Considerations

- The applicant has met all of the typical sustainable development criteria, as indicated in the Sustainable Development Checklist.

School Capacity Considerations

- The School District has advised North Surrey Secondary is operating at 126% capacity. The School District is planning an addition to North Surrey Secondary targeting to open in September 2030 to accommodate projected enrollment. This project has yet to be approved by the Ministry of Education.

POLICY & BY-LAW CONSIDERATIONS

Regional Growth Strategy

- The proposal complies with the General Urban designation in the Regional Growth Strategy.

Official Community Plan

Land Use Designation

- The proposal complies with the Urban designation in the Official Community Plan (OCP).

Themes/Policies

- The proposed development is consistent with the following guiding policies and objectives in the OCP:
 - Support compact and efficient land development that is consistent with Metro Vancouver Regional Growth Strategy (OCP Policy A1);
 - Permit gradual and sensitive residential infill within existing neighbourhoods in areas adjacent to transit corridors, support significant transit improvements, utilize existing infrastructure (A3);
 - Retain existing trees and natural features in existing neighbourhoods (A3);
 - Support infill development that is appropriate in scale and density to its neighbourhood context (A3);
 - Preserve riparian area and watercourses in their natural state and link them with upland areas to develop a connected network of natural areas throughout Surrey (D1);
 - Work towards protecting existing natural urban forest and natural vegetative coverage to maximize Surrey's tree canopy (D1);
 - Encourage ecological restoration of riparian and/or significant natural areas to improve stream health, to support biodiversity and to improve ecological health of the GIN (D1).

Zoning By-law

- The applicant proposes to rezone the subject site from "One-Acre Residential Zone (RA)" to "Single Family Residential (13) Zone (RF-13)".
- The table below provides an analysis of the development proposal in relation to the requirements of the Zoning By-law, including the "Single Family Residential (13) Zone (RF-13)", streamside setbacks and parking requirements.

RF-13 Zone (Part 16B)	Permitted and/or Required	Proposed
Unit Density:	28 units per hectare	25 units per hectare
Lot Size		
Lot Size:	For Type II: 336 square metres	392.5 square metres
Lot Width:	13.4 metres	14.2 metres
Lot Depth:	24 metres	28 metres
Streamside (Part 7A)	Required	Proposed
Streamside Setbacks		
Class A (red-coded) Stream:	30 metres	30 metres*

*The streamside setback area is being flexed to a minimum of 28 metres and a maximum of 38 metres.

Lot Grading and Building Scheme

- The applicant retained Ran Chahal of Apex Design Group Inc. as the Design Consultant. The Design Consultant conducted a character study of the surrounding homes and based on the findings of the study, proposed a set of building design guidelines (Appendix V).

- Styles recommended for this site include Neo-Traditional, Neo-Heritage, Rural-Heritage and West Coast Modern.
- A preliminary lot grading plan, submitted by Coastland Engineering & Surveying Ltd., and dated March 31, 2023, has been reviewed by staff and found to be generally acceptable. The applicant does propose in-ground basements. The feasibility of in-ground basements will be confirmed once the City's Engineering Department has reviewed and accepted the applicant's final engineering drawings.

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 \$4,272 per new unit.
- The proposed development will not be subject to the Tier 2 Capital Plan Project CACs as the proposal complies with the densities in the OCP 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 \$1,000 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. A fee update has been approved in April 2023, under Corporate Report No. R037; 2023.
- The applicant will be required to contribute \$1,068 per new lot to support the development of new affordable housing.

PUBLIC ENGAGEMENT

- Pre-notification letters were sent on May 19, 2023, and the Development Proposal Signs were installed on May 17, 2023. Staff received response from one neighbouring resident asking for information about the proposed subdivision.

DEVELOPMENT PERMITS

Sensitive Ecosystems (Streamside Areas) Development Permit Requirement

- The subject property falls within the Sensitive Ecosystems Development Permit Area (DPA) for Streamside Areas in the OCP, given the location of an existing Class A (red-coded) watercourse which flows south to north. The Sensitive Ecosystems (Streamside Areas) Development Permit is required to protect aquatic and terrestrial ecosystems associated with streams from the impacts of development.
- In accordance with Part 7A (Streamside Protection) of the Zoning By-law, a Class A (red-coded) watercourse requires a minimum streamside setback of 30 metres, as measured from top of bank. The applicant has chosen to apply the flex provision that is permitted under Part 7A to comply with the setback requirements. The flex provision states that the minimum distance from the top of bank of a watercourse may be reduced by no more than 5 metres and increased by no more than 10 metres as long as there is no net loss in the total size of the streamside setback area. The applicant is proposing to reduce the streamside setback to a minimum of 28 metres and a maximum of 38 metres. In total, the setback area gain is approximately 34.1 square metres and loss is 31.9 square metres, which meets the requirement that there is no net loss of the streamside setback area.
- The riparian area is proposed to be conveyed to the City as a lot for conservation purposes as a condition of rezoning approval, in compliance with the OCP.
- An Ecosystem Development Plan, prepared by Libor Michalak, *R.P. Bio.*, of Keystone Environmental Ltd. and dated August 30, 2023 was reviewed by staff and found to be generally acceptable, with some modifications to content and format of the report still required. The finalized report and recommendations will be incorporated into the Development Permit.

Sensitive Ecosystems (Green Infrastructure Areas) Development Permit Requirement

- The subject property falls within the Sensitive Ecosystems DPA for Green Infrastructure Areas in the OCP, given the location of a Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) Hub located to the west of the subject site. The Sensitive Ecosystems (Green Infrastructure Areas) Development Permit is required to protect environmentally sensitive and/or unique natural areas from the impacts of development.
- The City of Surrey Biodiversity Conservation Strategy (BCS) Green Infrastructure Network (GIN) map, adopted by Council on July 21, 2014 (Corporate Report No. R141; 2014), identifies a portion of the Tynehead BCS management area west of the subject site as having High ecological value.
- The BCS further identifies the western portion of the subject site as having Very High and Moderate High habitat suitability rating, derived from species at risk presence, species accounts and known ecosystem habitat inventories.
- The development proposal conserves 4,419 square meters of the subject site through Riparian Conveyance which is 74 % of the total gross area of subject site. This method of GIN retention will assist in the long-term protection of the natural features and allows the City to better achieve biodiversity at this location consistent with the guidelines contained in the BCS.

- An Ecosystem Development Plan, prepared by Libor Michalak, *R.P. Bio.*, of Keystone Environmental Ltd. and dated August 30, 2023 was reviewed by staff and found to be generally acceptable, with some modifications to content and format of the report still required. The finalized report and recommendations will be incorporated into the Development Permit.

Hazard Lands (Steep Slope) Development Permit Requirement

- The subject property falls within the Hazard Lands (Steep Slope) Development Permit Area (DPA) in the OCP, given that the site contains steep slopes in excess of 20% gradient. The Hazard Land (Steep Slope) Development Permit is required to protect developments from hazardous conditions.
- The topography of the site is relatively flat for the eastern half, with the watercourse and bank slopes occupying the western half. Within the western portion, the bank slope varies from approximately 30% to 70%, with a grade difference of approximately 5 to 6 metres.
- A geotechnical report, prepared by Jaswinder Singh Bansal, *P. Eng.*, of Bansal and Associates Consulting Engineers Inc. and dated July 11, 2023, was peer reviewed by Qiyang (Rick) Jiang, *P. Eng.*, of Tetris Geotechnical Engineering Ltd. and found to be generally acceptable by the peer reviewer. The report and peer review were reviewed by staff and found to conform to the OCP Development Permit guidelines for Hazard Lands, with some modifications to content of the report still required. The finalized geotechnical report will be incorporated into the Development Permit.
- The geotechnical report investigated issues related to slope stability and natural storm water drainage, from a geotechnical perspective, to determine the feasibility of developing the site and proposes recommendations to ensure the ongoing stability of the slope.
- The consultant has determined that the development is feasible provided that the recommendations in their report are incorporated into the overall design of the site, including a 12.0 metre geotechnical setback from top of bank, existing grades will not be raised, and existing vegetation will stay.
- Registration of a Section 219 Restrictive Covenant that requires the owner to develop the site in accordance with the conditions in the geotechnical report is required as a condition of final adoption.
- At Building Permit stage, the Building Division will require Letters of Assurance from a geotechnical engineer to ensure that the building plans comply with the recommendations in the approved geotechnical report.

TREES

- Francis Klimo, ISA Certified Arborist of Klimo & Associated Ltd. prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species:

Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Alder Trees			
Alder	1	1	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Weeping Willow	0	0	0
Norway Maple	0	0	0
Mountain Ash	0	0	0
Common Holly	1	1	0
Common Cherry	1	1	0
Paper Birch	0	0	0
Common Laurel	0	0	0
Coniferous Trees			
Western Red Cedar	8	7	1
Western Hemlock	20	20	0
Douglas Fir	17	17	0
Total (excluding Alder and Cottonwood Trees)	47	46*	1
Additional Trees in the proposed Riparian Area (not included in total above)	50	0	50
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		12	
Total Retained and Replacement Trees		13	
Contribution to the Green City Program		\$34,650	

*Nine (9) trees included in this summary are dead and do not require replacement trees.

- The Arborist Assessment states that there are a total of 47 mature trees on the site, excluding Alder and Cottonwood trees. One (1) existing tree, approximately 2% of the total trees on the site, is an Alder tree with no Cottonwood trees present. It was determined that 1 tree 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.

- Table 1 includes an additional 50 protected trees that are located within the riparian area. All 50 trees within the riparian area will be retained except where removal is required due to hazardous conditions. This will be determined at a later time, in consultation with the Parks, Recreation and Culture Department.
- A detailed planting plan prepared by a Registered Professional Biologist (R.P. Bio.) and an associated P-15 agreement are required for the monitoring and maintenance of the proposed trees to be planted in the conveyed riparian area.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Alder and Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of 75 replacement trees on the site. No replacement trees are required for the nine (9) dead trees included in the summary above. The applicant is proposing a total of 12 replacement trees (based on an average of 3 per lot), the deficit of 63 replacement trees will require a cash-in-lieu payment of \$34,650, representing \$550 per tree, to the Green City Program, in accordance with the City's Tree Protection By-law.
- In addition to the replacement trees, boulevard street trees will be planted on 161A Street. 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 Flowering Dogwood and Persian Ironwood.
- In summary, a total of 13 trees are proposed to be retained or replaced on the site, with a contribution of \$34,650 to the Green City Program, and an additional 50 trees to be retained within the riparian area.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Proposed Subdivision Layout
Appendix II.	Engineering Summary
Appendix III.	School District Comments
Appendix IV.	Summary of Tree Survey and Tree Preservation
Appendix V.	Building Design Guidelines Summary
Appendix VI.	Streamside Protection Area Map

approved by Ron Gill

Don Luymes
General Manager
Planning and Development

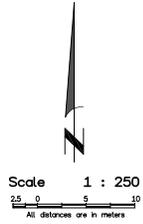
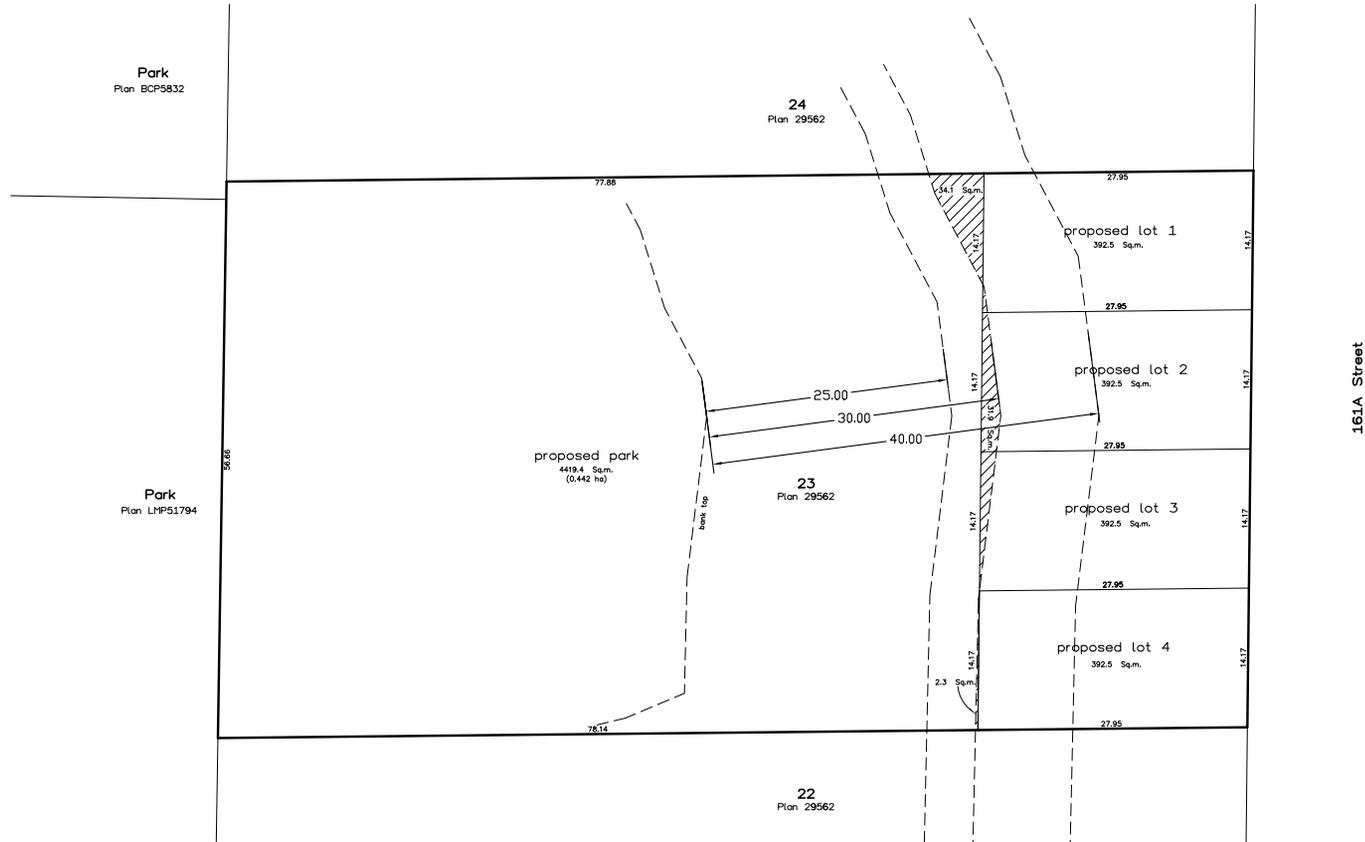
**SKETCH PLAN SHOWING PROPOSED SUBDIVISION
OF LOT 23 SECTION 35 BLOCK 5 NORTH RANGE
1 WEST NEW WESTMINSTER DISTRICT PLAN
29562**

Appendix I

Civic Address:
8723 161A Street, Surrey, B.C.
P.U.D. 009-034-889

LEGEND

ha denotes hectares
Sq.m. denotes square metres



The intended plot size of this plan is 864mm in width and 580mm in height (D size) when plotted at a scale of 1:250.

Lot dimensions are derived from Field Survey.

This document shows the relative location of surveyed structures with respect to the boundaries of the parcel described above.

All rights reserved. No person may copy, reproduce, transmit or alter this document in whole or part without the consent of the signatory.

The signatory accepts no responsibility or liability for any damages that may be suffered by a third party as a result of any decisions made, or actions taken based on this document.

Certified Correct
Dated the 24th day of February, 2023.

Zheng Tong
B.C.L.S.

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

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

DATE: **September 18, 2023** PROJECT FILE: **7822-0142-00**

RE: **Engineering Requirements
Location: 9723 161A St**

REZONE/SUBDIVISION

Property and Right-of-Way Requirements

- Register 0.5 m SRW along 161A St.
- Register RC for on-site sustainable drainage on all lots.

Works and Services

- Construct west side of 161A St.
- Construct drainage, water, sanitary service connections, and driveways to each lot.
- Complete sanitary flow analysis and storm catchment analysis to determine existing capacity and resolve downstream constraints as identified.
- Construct on-site stormwater mitigation features.
- Register applicable legal documents as determined through detailed design.

A Servicing Agreement is required prior to Rezone/Subdivision.

DEVELOPMENT PERMIT

The following issues are to be addressed as a condition of issuance of the Development Permit for Sensitive Ecosystems (Streamside) associated with the proposed construction of new single-family dwellings on the RA property:

- The applicant will be required to provide a combined statutory right-of-way/restrictive covenant (SRW/RC) for the class "B" watercourse located within 9723 161A St. The SRW/RC is to be registered over the setback from the top of bank.



Jeff Pang, P.Eng.
Development Services Manager

JNC

NOTE: Detailed Land Development Engineering Review available on file

Department: **Planning and Demographics**
Date: **May 18, 2023**
Report For: **City of Surrey**

Development Impact Analysis on Schools For:

Application #: **22 0142 00**

The proposed development of **4** Single Family units are estimated to have the following impact on elementary and secondary schools within the school regions.

School-aged children population projection	4
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Projected Number of Students From This Development In:	
Elementary School =	2
Secondary School =	1
Total Students =	3

Current Enrolment and Capacities:	
Serpentine Heights Elementary	
Enrolment	359
Operating Capacity	434
# of Portables	0
North Surrey Secondary	
Enrolment	1478
Operating Capacity	1175
# of Portables	8

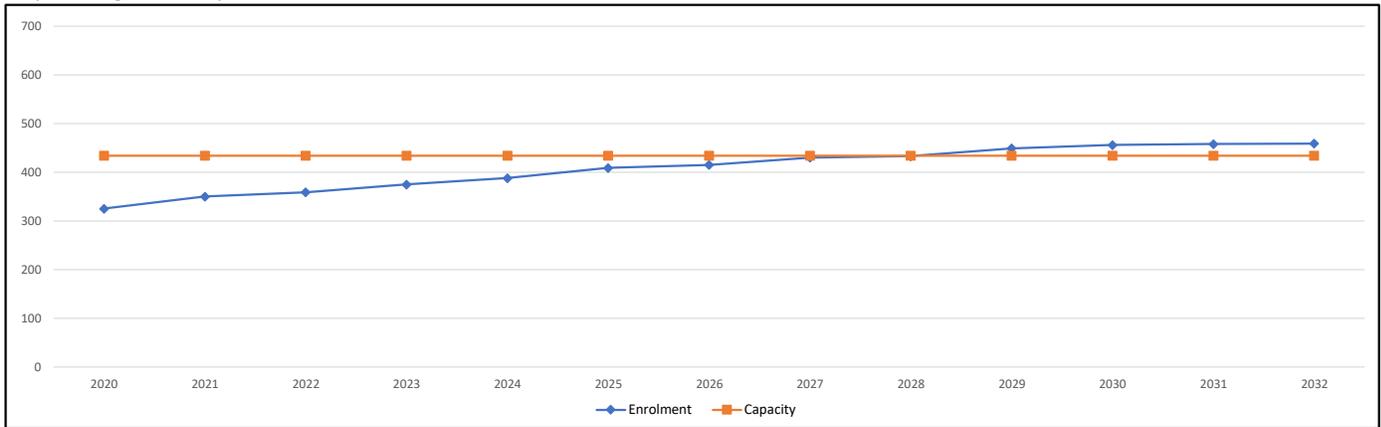
Summary of Impact and Commentary

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.

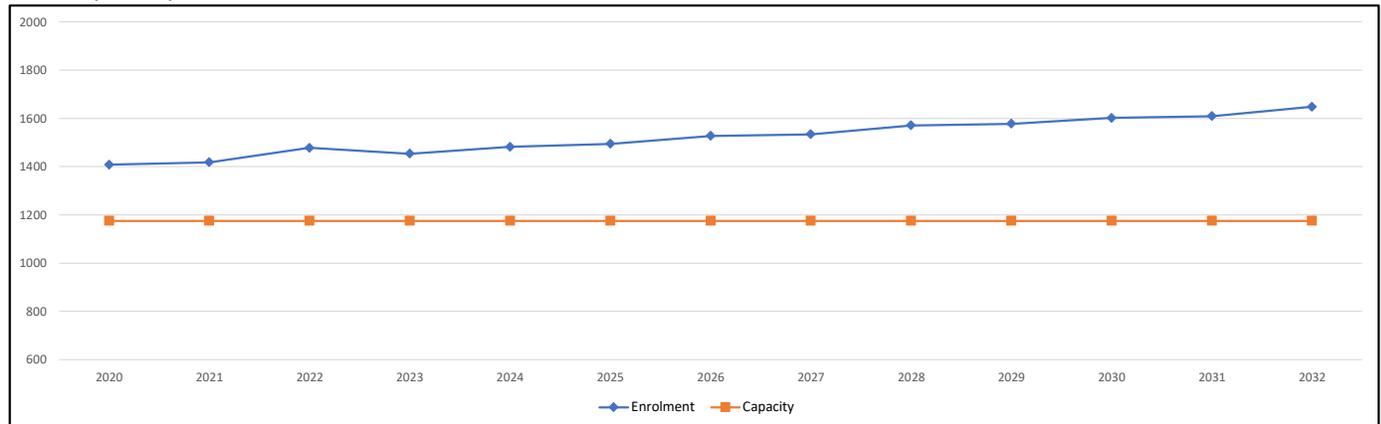
Serpentine Heights is one of the few elementary schools in the northeast area of the District that still has enrolling space available. This school will serve the future Anniedale/Tynehead community, until the west side of NCP new residential housing can support a new school in the local area. The enrolment projection table should be regarded as conservative. Serpentine Heights will accommodate any enrolment growth within its existing capacity and portables until a new school is constructed in the community.

North Surrey Secondary is currently operating at 126% with eight portables on site. Over the next 10 years, enrolment is projected to increase significantly due to development growth around the Skytrain area. As part of the District's 2023/24 Five Year Capital Plan submission, there is a request of 525 capacity addition targeted to open September 2030. This project has yet to be approved by the Ministry.

Serpentine Heights Elementary



North Surrey Secondary



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.

Appendix IV

8.0 TREE PRESERVATION SUMMARY

Surrey Project No: N/A

Address: 9723 161A St, Surrey, B.C., V4N 2E8

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>	48
Protected Trees to be Removed	47 (9 are dead)
Protected Trees to be Retained <i>(Excluding trees within proposed open space or riparian areas)</i>	1
Total Replacement Trees Required:	
Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio	
1 X one (1) = 1	1
All other Trees Requiring 2 to 1 Replacement Ratio	
37 X two (2) = 74 <i>Nine (9) trees are dead & not included</i>	74
Replacement Trees Proposed	12
Replacement Trees in Deficit	63
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	50

Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	11
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	
11 X two (2) = 22	22
Replacement Trees Proposed	0
Replacement Trees in Deficit	22

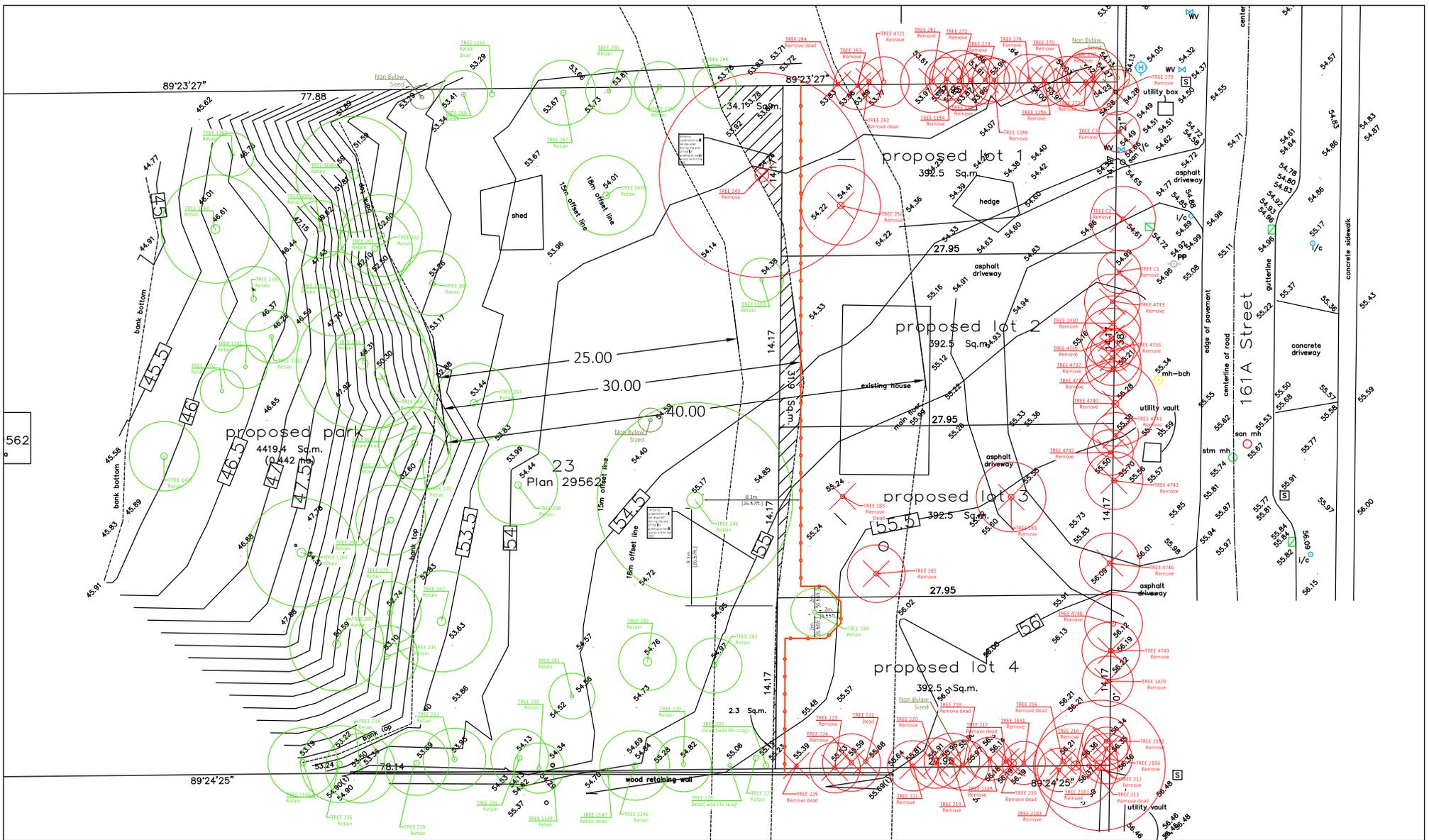
Summary, report and plan prepared and submitted by:



October 11, 2023

(Signature of Arborist)

Date



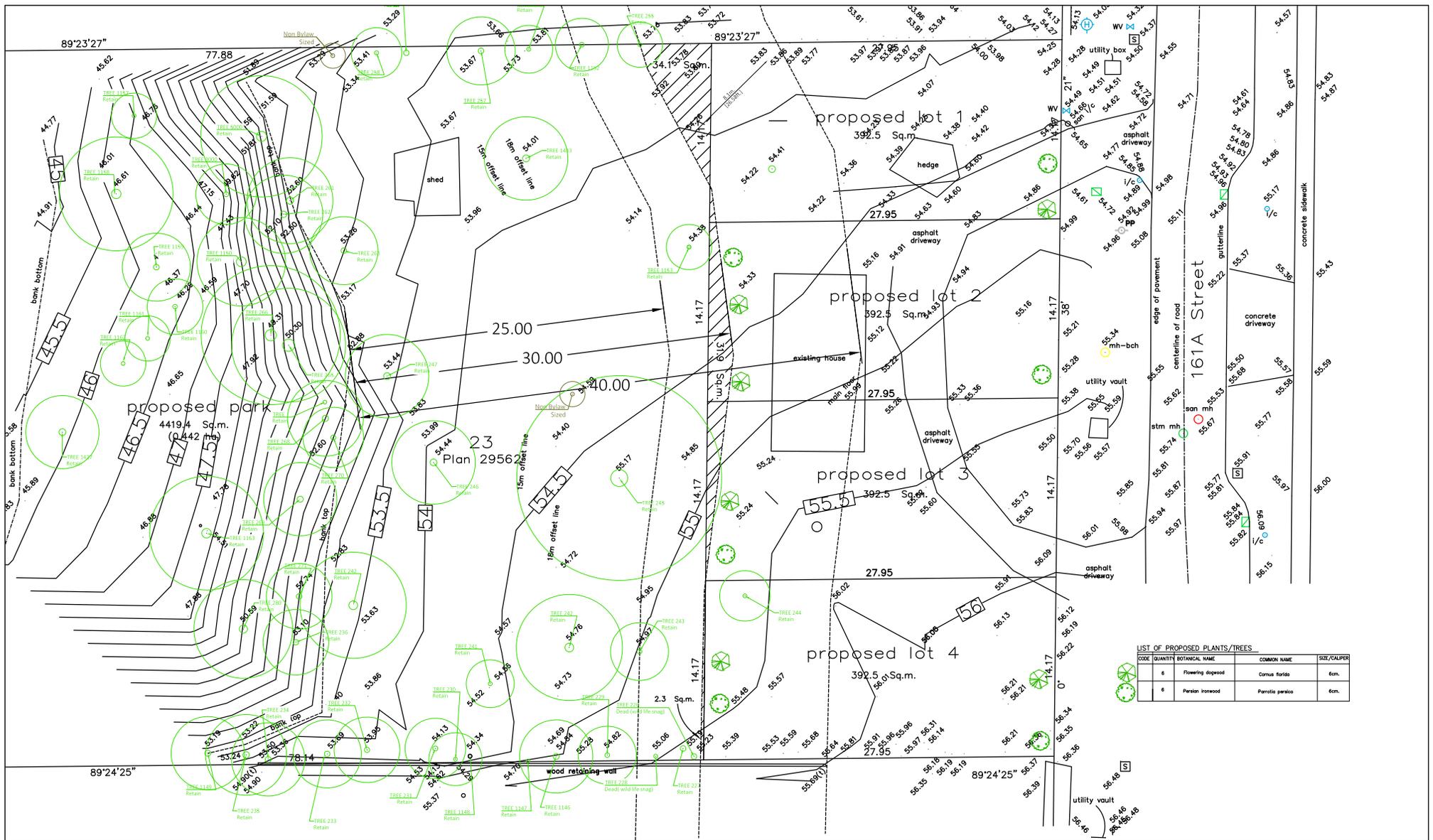
TREE MANAGEMENT PLAN	
Project Number	
Date	Sheet #
Scale	1:150
Drawn	
Checked	

Francis R. Klimo
 ISA Certified Arborist #PN-8149A
 ISA Certified Tree Risk Assessor (TRAQ)
 BC Wildlife Danger Tree Assessor #7193

Revisions	
No.	Date
1st.	January 13, 2023
2nd.	August 21, 2023
3rd.	August 25, 2023
4th.	October 3, 2023
5th.	October 11, 2023
Consultants	

9723 161A St, Surrey

Klimo & Associates



LIST OF PROPOSED PLANTS/TREES

CODE	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE/CALIPER
6	6	Flowering dogwood	Coronaria florida	6cm.
6	6	Persian ironwood	Parrotia persica	6cm.

TREE REPLACEMENT PLAN

Project Number: _____

Date: _____ Sheet #: _____

Scale: 1:150

Drawn: _____

Checked: _____

Revisions

No.	Date	Description
1st.	January 13, 2023	
2nd.	August 21, 2023	
3rd.	August 25, 2023	
4th.	October 3, 2023	
5th.	October 11, 2023	

Consultants

Francis R. Klimo
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9723 161A St, Surrey

Klimo & Associates

BUILDING GUIDELINES SUMMARY

V.1.0

Surrey Project no.: 22-0142 Kalsi
Property Location: 9723 161A Street, Surrey, B.C

Design Consultant: Ran Chahal, Architectural Technologist AIBC, CRD.ASTTBC
 Apex Design Group Inc.
 #202- 8484 -128 Street, Surrey, BC V3W 4G3
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The draft Building Scheme proposed for this Project has been files with the City Clerk. The following is a summary of the Residential Character Study and the Design Guidelines, which highlight the important features and form the basis of the draft Building Scheme.

1. Residential Character**1.1 General Description of the Existing and/or Emerging Residential Character of the Subject Site:**

The area surrounding the subject site is an urban area built out in the 1960-1990's with a few newer homes built in the 2000's. Most homes are simple "West Coast Traditional" style structures with habitable areas of between 1000-3000sf.

Most of the existing homes have mid massing characteristics with 74.00% of the homes have one storey front entry, 26 having one and one half storey front entry.

Roof pitch varies from economical low pitch of 4-6/12 to 9/12 and over common truss roofs with simple gables and common hips with Asphalt Roof Shingles being most common.

Wall surface materials are limited in the most part to one of the following: Vinyl (dominant), Cedar, Hardi and Stucco with Brick or Stone for an accent material. Accent trims are evident on most of the existing homes.

Landscaping is of a moderate planting standard with 80.00% of the homes having Brushed Concrete driveways.

1.2 Prevailing Features of the Existing and Surrounding Dwellings Significant to the Proposed Building Scheme:

The majority of the existing homes in the study area 20-60 years old but a few newer homes do reflect some characteristics we would be in favor of today. The new homes will meet modern development standards especially with respect to overall massing and balance in each design and to proportional massing between individual elements. Trim and detailing standards and construction materials standards will meet 2000's levels. Continuity of character will be ensured through style and home type restrictions as described below.

Dwelling Types:	“Two-Storey”	67.00%
	“Basement /Cathedral Entry”	0.00%
	“Rancher (Bungalow)”	20.00%
	“Split Levels”	13.00%
Dwelling Sizes: (Floor Area)	Size range: 27.00% under 1500 sq.ft excl. garage	
	7.00% 1500 - 2000 sq.ft excl. garage	
	66% over 2000 sq.ft excl. garage	
Exterior Treatment /Materials:	Vinyl: 54.00% Cedar: 27.00% Hardi:13.00% Stucco:6.00%	
	Brick or stone accent on 54.00% of all homes	
Roof Pitch / Materials:	Asphalt Shingles: 94.00% Cedar Shingles: 6.00%	
	Concrete Tiles: 0.00% Clay Tiles: 0.00%	
	87.00% of homes have a roof pitch of 4-6:12 and	
	13.00% have a roof pitch of 9:12 and greater.	
Window/Door Details:	94.00% of all homes have rectangular windows	
Streetscape:	A variety of simple “Two Story”, 20-60 year old “West Coast Traditional” homes in a common urban setting. Roofs on most homes are simple medium pitch common hip or common gable forms with Asphalt Roof Shingles is on most of the homes. Most homes are clad in Vinyl and Cedar.	
Other Dominant Elements:	Most of the existing homes located in the immediate study area have covered front verandas and trim detail around all street facing windows and doors.	

2. Proposed Design Guidelines

2.1 Specific Residential Character and Design Elements these Guidelines Attempt to Preserve and/or Create:

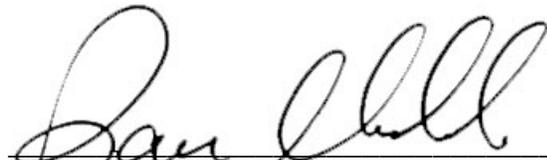
The guidelines will ensure that the existing character of the homes are maintained with modestly sized Two-Storey, Bungalow and Split Level type homes are constructed to 2000’s standard. Continuity of character will be achieved with restrictions permitting the use of compatible styles, roof forms and exterior construction materials. Landscapes will be constructed to a modern urban standard.

2.2 Proposed Design Solutions:

Dwelling Types:	Two-Storey, Split Levels and Ranchers (Bungalows).	
Dwelling Sizes:	Two-Storey or Split Levels -	2000 sq.ft. minimum
Floor Area/Volume:	Basement Entry -	2000 sq.ft. minimum
	Rancher or Bungalow -	1400 sq.ft. minimum
	(Exclusive of garage or in-ground basement)	

Exterior Treatment /Materials:	No specific interface treatment. However, all permitted styles including: “Neo-Traditional”, “Neo-Heritage”, “Rural-Heritage” or “West Coast Modern” will be compatible with the existing study area homes.
Exterior Materials /Colours:	Stucco, Cedar, Vinyl, Hardiplank, Brick and Stone in “Neutral” and “Natural” colours. “Primary” and “Warm” colours not permitted on cladding. Trim colours: Shade variation on main colour, complementary, neutral or subdued contrast.
Roof Pitch:	Minimum 3:12
Roof Materials/Colours:	Cedar shingles, asphalt shingles in a shake profile. Grey, brown or black tones only.
Window/Door Details:	Dominant: Rectangular or Gently arched windows.
In-ground basements:	Permitted if servicing allows.
Landscaping:	Trees as specified on Tree Replacement Plan plus min. 12 shrubs (min. 3 gallon pot size).
Compliance Deposit:	\$ 5,000.00

Summary prepared and submitted by:



 Ran Chahal, Design Consultant
 Architectural Technologist AIBC, CRD.ASTTBC
 Apex Design Group Inc.

October 1, 2023
 Date

TOPOGRAPHIC SITE PLAN SHOWING PROPOSED
SUBDIVISION OF LOT 23 SECTION 35 BLOCK 5
NORTH RANGE 1 WEST NEW WESTMINSTER DISTRICT
PLAN 29562

Civic Address:
9723 161A Street, Surrey, B.C.
P.I.D. 009-034-889

LEGEND

- ⊕ denotes fire hydrant
- ⊗ denotes catch basin - top entry
- ⊙ denotes catch basin - round
- ⊕ denotes utility pole
- ⊗ denotes street light - davit
- ⊕ denotes water valve
- ⊗ denotes sanitary manhole
- ⊙ denotes storm manhole
- ⊕ denotes tree and canopy extent
- ⊗ denotes ground elevation
- ⊕ denotes top of retaining wall elevation
- ⊗ denotes sanitary inspection chamber
- ⊙ denotes storm inspection chamber
- ⊕ denotes bc hydro manhole
- ⊗ denotes coniferous trees
- ⊙ denotes deciduous trees
- ⊕ denotes tree canopy dimension
- ⊗ denotes sign

FLEX (GAIN 2.2m²)

34.1m² flex

31.9m² encroachment to setback

Area to be conveyed where a P15 will be required for conveyance. Property must be free of all invasive species and structures.

30m setback from top of bank with fence during construction and permanent fence post construction dedicated land to City as Maximum Safeguarding

Townline Creek Top of Bank and approximate Geotechnical setback line @ 53m contour

Park Plan BCP5832

Park Plan LMP51794

Townline Creek High Water Mark

23 Plan 29562 0.999 ha

24 Plan 29562

proposed lot 1

proposed lot 2

proposed lot 3

proposed lot 4

proposed park

23 Plan 29562



Scale 1 : 250
2.5 0 5 10
All distances are in meters

The intended plot size of this plan is 864mm in width and 560mm in height (D size) when plotted at a scale of 1:250.

Lot dimensions are derived from Field Survey.

Elevations are Geodetic (CVD28 GVD-2018 - in meters)
Derived from Control Monument 79H0013 located on center of 98' line, about 350m west of 160th St.
Elevation = 67.778m

Spot elevations along curb are taken in gutter.

Tree diameters are taken at 1.4m above grade and are shown in cm.

Invert elevations and offsets of services from property lines are derived from municipal records and field survey.

Contractor to verify all service locations and inverts prior to construction.

If this plan is used in digital form, Evolution Land Surveying will only assume responsibility for information content shown on original unaltered drawing.

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Certified Correct

Dated this 4th day of April, 2022.

Zheng Tong
B.C.L.S.

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Figure 1



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