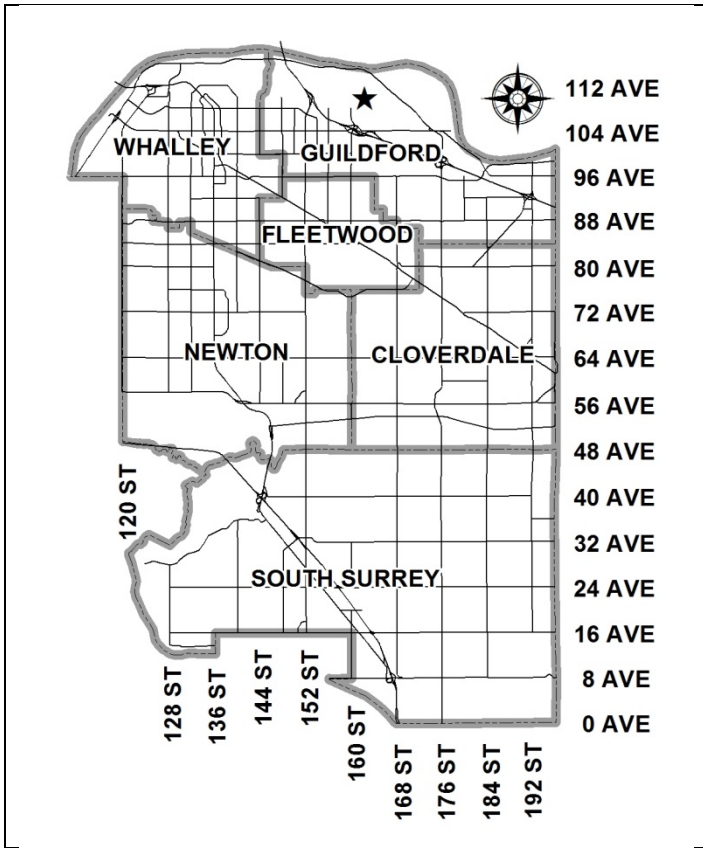


City of Surrey  
**PLANNING & DEVELOPMENT REPORT**

File: 7915-0159-00

Planning Report Date: November 16, 2015



**PROPOSAL:**

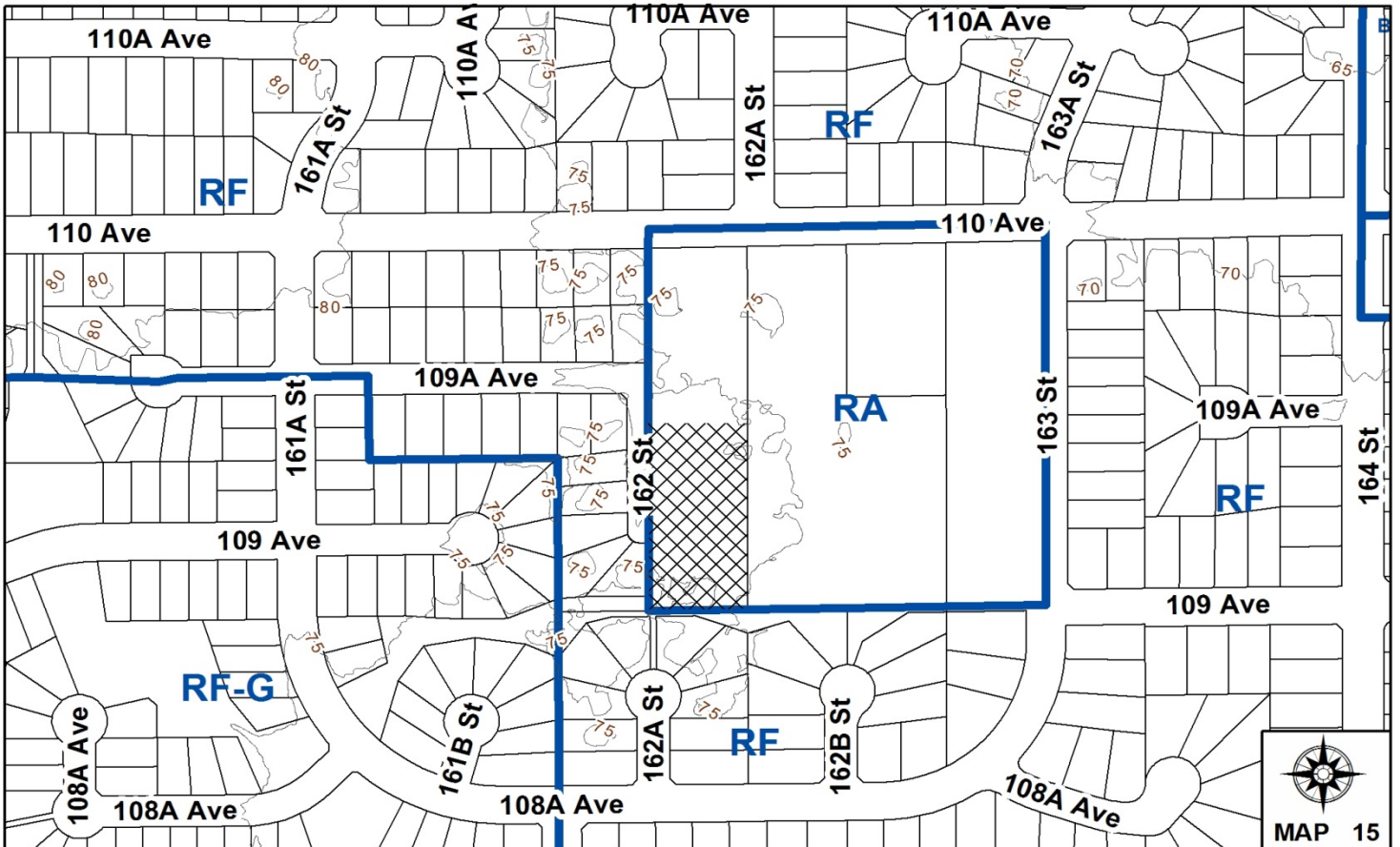
- **Rezoning** from RA to RF to allow subdivision into 6 single family lots, parkland and one remainder lot.

**LOCATION:** Portion of 16240 - 110 Avenue

**OWNER:** Irene Schimkat

**ZONING:** RA

**OCP DESIGNATION:** Urban



RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for rezoning a portion of the property.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with the “Urban” Designation in the OCP.
- Partially completes the single family neighbourhood in this portion of Fraser Heights.
- The applicant is proposing to dedicate 0.14 acre (568 sq. m) of parkland along the southern property line, providing an improved connection to J.R. Douglas Park to the east.
- Facilitates the completion of a walkway connection to the south.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the portion of the subject lot shown as Block A on the Survey Plan attached in Appendix I, from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" and a date be set for Public Hearing.
2. 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 address the concern that the development will place additional pressure on existing park facilities to the satisfaction of the General Manager, Parks, Recreation and Culture; and
  - (e) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department.

REFERRALS

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

School District: **Projected number of students from this development:**

2 Elementary students at Fraser Wood School  
1 Secondary student at Fraser Heights School

(Appendix IV)

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by November 1, 2016.

Parks, Recreation & Culture: Parks, Recreation and Culture has concerns with the pressure the project will place on existing parks and recreation facilities in the area.

SITE CHARACTERISTICS

Existing Land Use: Treed site, with single family dwelling on the northern portion, (proposed Lot 7) to be retained.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North (Across 110 Avenue):	Single family dwellings	Urban	RF
East:	J.R. Douglas Park	Urban	RA
South (Across linear park):	Single family dwellings	Urban	RF
West (Across 162 Street):	Single family dwellings	Urban	RF

DEVELOPMENT CONSIDERATIONS

- The subject lot, located at 16240 – 110 Avenue, is located on the south side of 110 Avenue between 161A Street and 163 Street in Fraser Heights and is designated Urban in the Official Community Plan (OCP) and is currently zoned "One-Acre Residential Zone (RA)".
- The applicant is proposing to rezone the southern portion of the subject lot from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" to allow for the development of six (6) single family lots, one lot to be dedicated to the City as parkland and one remainder lot (zoned RA) with future subdivision potential if rezoned.
- Proposed Lots 1-6 will front onto, and gain access from, the proposed completion of the 162 Street cul-de-sac to be constructed as part of the proposed development.
- Proposed Lots 1-6 conform to the minimum requirements of the RF Zone in terms of lot width (15 metres/49 ft.), depth (28 metres/92 ft.) and area with lot areas ranging from 576 square metres (6,200 sq. ft.) to 663 square metres (7,136 sq. ft.).
- The remainder lot, proposed Lot 7, with lot width of 50 metres (164 ft.), lot depth of 94 metres (308 ft.) and lot area of 1.1 acres (4522 square metres) meets or exceeds the minimum requirements of the RA Zone.
- The subject lot is one of the last properties in this block along 110 Avenue in Fraser Heights to be redeveloped. The proposed development completes the existing road network and continues the subdivision pattern established in 2005 on the lands to the west (application no. 7903-0402-00).
- The existing single family dwelling fronting 110 Avenue will be retained on proposed Lot 7.
- The applicant has provided a concept demonstrating the development potential for the remainder lot, proposed Lot 7, should this land be rezoned to RF.

- The applicant is proposing to dedicate 0.14 acre (568 square metres) as parkland to satisfy the 5% parkland requirement of the proposed subdivision, based on the area of the entire subject lot. The proposed parkland is located along the southern property line of the subject property and extends the existing open space corridor east from 161A Street linking J.R. Douglas Park with the existing open space network in the neighbourhood.
- A 6-metre (20-ft.) wide walkway will be constructed within the parkland connecting the 162 Street cul-de-sac to the existing walkway to the south.

#### Building Design Guidelines and Lot Grading

- The applicant for the subject site has 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).
- A preliminary lot grading plan, submitted by Coastland Engineering & Surveying Ltd., has been reviewed by staff and generally found acceptable.
- The applicant proposes to have in-ground basements on all lots and is not proposing any fill. 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.

#### TREES

- Trevor Cox, ISA Certified Arborist of Diamond Head Consulting Ltd. prepared an Arborist Assessment for the subject property. The table below provides a summary of the tree retention and removal by tree species for the southern portion of the subject lot proposed for rezoning:

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

Tree Species	Existing	Remove	Retain
<b>Alder and Cottonwood Trees</b>			
Alder	7	7	0
Cottonwood	2	2	0
<b>Deciduous Trees (excluding Alder and Cottonwood Trees)</b>			
Bigleaf Maple	4	4	0
Bitter Cherry	1	1	0
<b>Coniferous Trees</b>			
Douglas Fir	29	25	4
Sitka Spruce	1	1	0
Western Hemlock	5	5	0
Western Red Cedar	20	17	3
<b>Total (excluding Alder and Cottonwood Trees)</b>	<b>60</b>	<b>53</b>	<b>7</b>

<b>Total Replacement Trees Proposed (excluding Boulevard Street Trees)</b>	<b>14</b>
<b>Total Retained and Replacement Trees</b>	<b>21</b>
<b>Contribution to the Green City Fund</b>	<b>\$15,000</b>

- The Arborist Assessment states that there are a total of 60 mature trees on the site, excluding Alder and Cottonwood trees. 9 existing trees, approximately 13% of the total trees on the site, are Alder and Cottonwood trees. It was determined that 7 trees, one in the rear yard of proposed Lot 2, 5 in the rear yard of proposed Lot 5 and one in the rear yard of proposed Lot 6, 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 115 replacement tree. Since only 14 replacement trees can be accommodated on the site (based on an average of 3 trees per lot), the deficit of 101 replacement trees will require a cash-in-lieu payment of \$15,000, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- In addition to the replacement trees, boulevard street trees will be planted on 100 Avenue. This will be determined by the Engineering Department during the servicing design review process.
- In summary, a total of 21 trees are proposed to be retained or replaced on the site with a contribution of \$15,000 to the Green City Fund.

#### BIODIVERSITY CONSERVATION STRATEGY

- While the subject site is not identified as a Hub or Corridor through 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), the proposed parkland dedication to the City as open space will contribute to the City's overall network of environmental features.

#### PRE-NOTIFICATION

Pre-notification letters were sent on September 18, 2015 to a total of 106 neighbouring property owners and two development proposal signs were erected on the property. Staff received four phone calls and five written responses from property owners. The property owners expressed concerns with changes to J.R. Douglas Park, the impact of the proposed development on J.R. Douglas Park, on-street parking and garbage truck access, as described in more detail below with staff comments in italics:

- Residents expressed concern with the development of J.R. Douglas Park and requested clarification of the proposal.

*(Staff explained that the subject site proposed for development is located at 16240-110 Avenue to the immediate west of the park and there are no changes proposed to the park.*

*(Staff provided clarification of the proposal and provided a copy of the proposed subdivision for additional information.)*

- One resident expressed concern with the proposed density and the impact of the proposal on J.R. Douglas Park with respect to noise.

*(Staff explained the subject site complies with the “Urban” designation in the Official Community Plan (OCP) and is consistent with the surrounding single family development in the neighbourhood.)*

- Concerns regarding lack of street parking and garbage truck manoeuvring on 162 Street.

*(The proposed rezoning and subdivision will facilitate the completion of the 162 Street cul-de-sac and widen the road to the ultimate standard. The widening will accommodate additional on-street parking as well as more room for manoeuvring of garbage trucks.)*

#### SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on October 7, 2015. The table below summarizes the applicable development features of the proposal based on the seven (7) criteria listed in the Surrey Sustainable Development Checklist.

<b>Sustainability Criteria</b>	<b>Sustainable Development Features Summary</b>
1. Site Context & Location (A1-A2)	<ul style="list-style-type: none"> <li>The site is located within Fraser Heights.</li> <li>The proposed development is consistent with the “Urban” designation of the Official Community Plan.</li> </ul>
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> <li>Proposed gross density is 12 lots/hectare (5 lots/acre).</li> </ul>
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> <li>The proposed development will convey 568 square metres (6,114 sq. ft.) of parkland.</li> </ul>
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> <li>The proposed dedication and construction of a walkway will facilitate a pedestrian connection to the existing network to the south.</li> </ul>
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> <li>N/A</li> </ul>
6. Green Certification (F1)	<ul style="list-style-type: none"> <li>N/A</li> </ul>

7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> <li>• The typical notifications to area residents has occurred (i.e. development proposal signs and Pre-notification letter).</li> </ul>
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### INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners, Action Summary, Project Data Sheets and Survey Plan
Appendix II.	Proposed Subdivision Layout
Appendix III.	Engineering Summary
Appendix IV.	School District Comments
Appendix V.	Building Design Guidelines Summary
Appendix VI.	Summary of Tree Survey and Tree Preservation

*original signed by Judith Robertson*

Jean Lamontagne  
General Manager  
Planning and Development

JLM/dk

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KD 11/10/15 11:59 AM



Information for City Clerk

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

1. Agent:           Name:               Michael Helle  
  Coastland Engineering & Surveying Ltd.  
  Address:            #101 - 19292 - 60 Avenue  
  Surrey, B.C. V3S 3M2  
  
  Tel:                 604-532-9700
  
2.       Properties involved in the Application
  - (a)      Civic Address:           16240 – 110 Avenue
  
  - (b)      Civic Address:           16240 – 110 Avenue  
                                  Owner:                Irene Schimkat  
                                  PID:                 011-311-673  
                                  North Half Lot 2 Section 14 Block 5 North Range 1 West New Westminster District Plan  
                                  8444
  
3.       Summary of Actions for City Clerk's Office
  - (a)      Introduce a By-law to rezone a portion of the property.

## SUBDIVISION DATA SHEET

Proposed and Existing Zoning: RF and RA

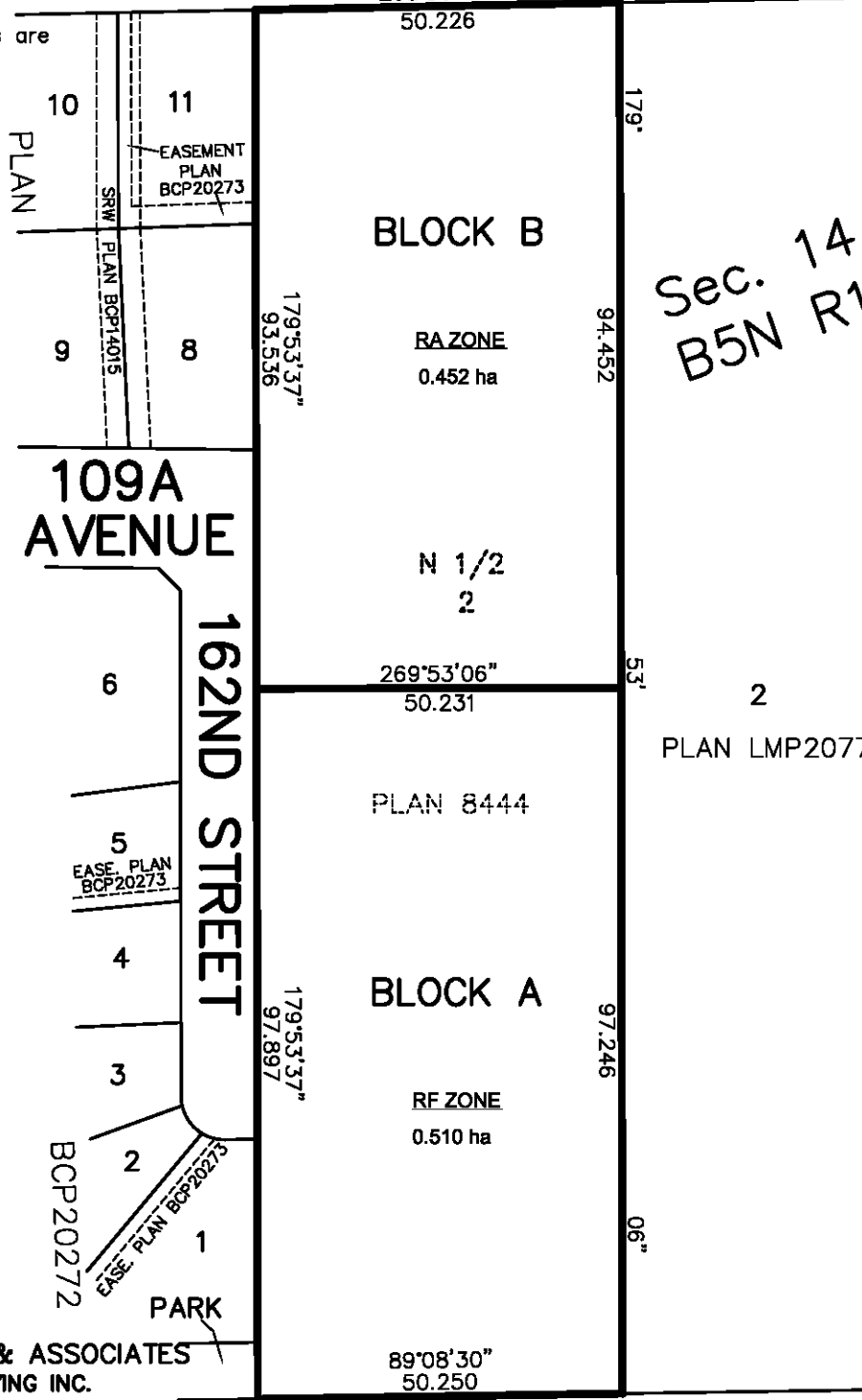
Requires Project Data	Proposed
<b>GROSS SITE AREA</b>	
Acres	2.38
Hectares	0.962
<b>NUMBER OF LOTS</b>	
Existing	1
Proposed	6 RF and 1 RA
<b>SIZE OF LOTS</b>	
	(RF Portion)
Range of lot widths (metres)	15 m – 17 m
Range of lot areas (square metres)	576 m <sup>2</sup> – 663 m <sup>2</sup>
<b>DENSITY</b>	
	(RF Portion)
Lots/Hectare & Lots/Acre (Gross)	11.8 lot/ha & 4.8 lots/acre
Lots/Hectare & Lots/Acre (Net)	14.4 lots/ha & 5.7 lots per acre
<b>SITE COVERAGE (in % of gross site area)</b>	
	(RF Portion)
Maximum Coverage of Principal & Accessory Building	41%
Estimated Road, Lane & Driveway Coverage	24%
Total Site Coverage	65%
<b>PARKLAND</b>	
Area (square metres)	568 m <sup>2</sup>
% of Gross Site	5.9%
	<b>Required</b>
<b>PARKLAND</b>	
5% money in lieu	NO
<b>TREE SURVEY/ASSESSMENT</b>	
	YES
<b>MODEL BUILDING SCHEME</b>	
	YES
<b>HERITAGE SITE Retention</b>	
	NO
<b>FRASER HEALTH Approval</b>	
	NO
<b>DEV. VARIANCE PERMIT required</b>	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO

**SURVEY PLAN TO ACCOMPANY CITY OF SURREY REZONING  
BYLAW NO. \_\_\_\_\_ OVER NORTH HALF OF LOT 2 SECTION 14  
B5N R1W NEW WESTMINSTER DISTRICT PLAN 8444**

BCGS 92G.027  
SCALE 1:1000

**110 AVENUE**

-All distances are  
in meters.



**Sec. 14  
B5N R1W**



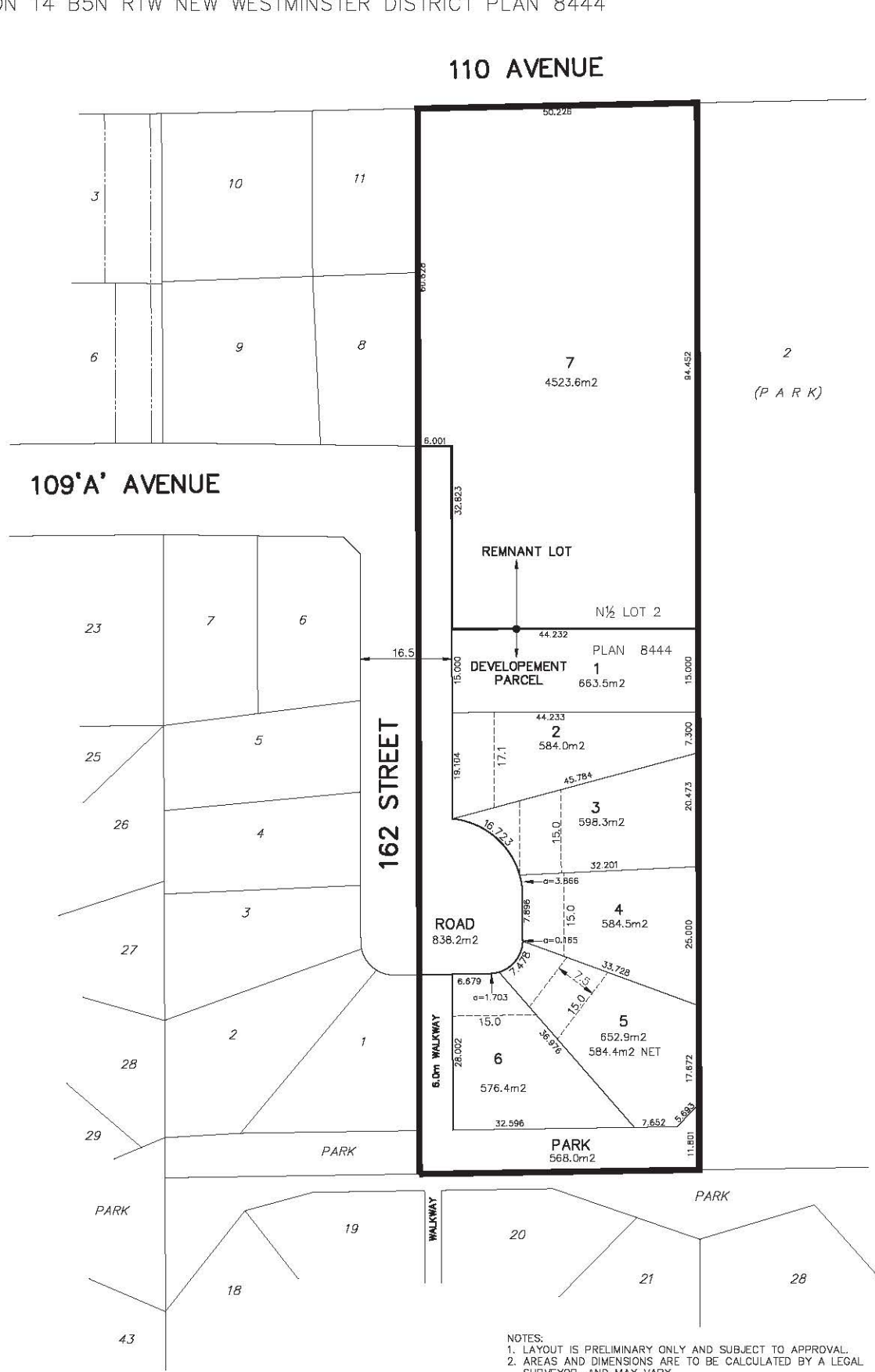
**DHALIWAL & ASSOCIATES  
LAND SURVEYING INC.**  
216-12899 76th Avenue  
Surrey, B.C.  
V3W 1E6  
(ph) 501-6188  
(fx) 501-6189  
FILE: 1504004-Z01

Certified correct to survey dated  
the 03rd day of November, 2015

**THIS PLAN LIES WITHIN THE  
GREATER VANCOUVER REGIONAL DISTRICT**

Gene Nikula, BCLS 803

PLAN OF PROPOSED SUBDIVISION OF NORTH HALF LOT 2  
SECTION 14-B5N R1W NEW WESTMINSTER DISTRICT PLAN 8444



NOTES:  
1. LAYOUT IS PRELIMINARY ONLY AND SUBJECT TO APPROVAL.  
2. AREAS AND DIMENSIONS ARE TO BE CALCULATED BY A LEGAL SURVEYOR, AND MAY VARY.  
3. DO NOT USE FOR LEGAL TRANSACTIONS.



**Coastland**  
engineering & surveying ltd.

#101, 19292 - 60 Avenue  
Surrey, B.C. V3S 3M2  
Phone: (604) 532-9700  
Fax: (604) 532-9701

PROJECT No: #2474  
LAYOUT-G  
SCALE: 1:500  
DATE: 2015 SEPTEMBER

---

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

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

DATE: **October 21, 2015** PROJECT FILE: **7815-0159-00**

---

RE: **Engineering Requirements  
Location: 16240 110 Avenue**

**REZONE/SUBDIVISION**

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

- Dedicate 6.0 m for 162 Street ultimate 16.5 m Limited Local Road Standard.
- Dedicate necessary lands to complete the 14.0 m 162 Street cul-de-sac.
- Provide a 0.50 m Statutory Right-of-Way (SRW) along the 162 Street frontages.
- Dedicate 6.0 m for the walkway from 162 Street to connect to the Park.

***Works and Services***

- Construct south half of 110 Avenue to the Through Local Road Standard.
- Construct east half of 162 Street to the Limited Local Road Standard.
- Construct a 3.0 m concrete walkway with pedestrian lighting.
- Provide on-site mitigation features per the Bon Accord –North Slope ISMP.
- Pay applicable latecomers.

A Servicing Agreement is required prior to Rezone/Subdivision.

*R. Dubé*

*per*

Rémi Dubé, P.Eng.  
Development Services Manager

CE



Wednesday, October 07, 2015  
 Planning

**THE IMPACT ON SCHOOLS**

APPLICATION #: 15 0159 00

**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.

There are no new capital projects proposed at the elementary school. An addition to Fraser Heights Secondary was completed in April 2014, increasing the school's nominal capacity from 1000 to 1200 + Neighbourhood Learning Centre. Fraser Heights Secondary still has some capacity constraints.

**SUMMARY**

The proposed 7 single family lots are estimated to have the following impact on the following schools:

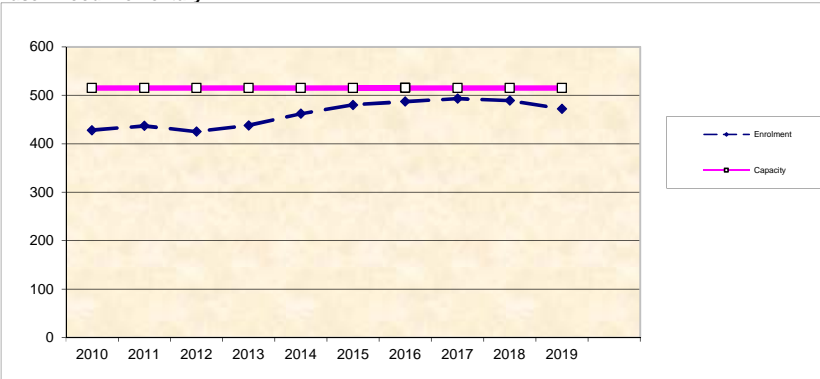
**Projected # of students for this development:**

Elementary Students:	2
Secondary Students:	1

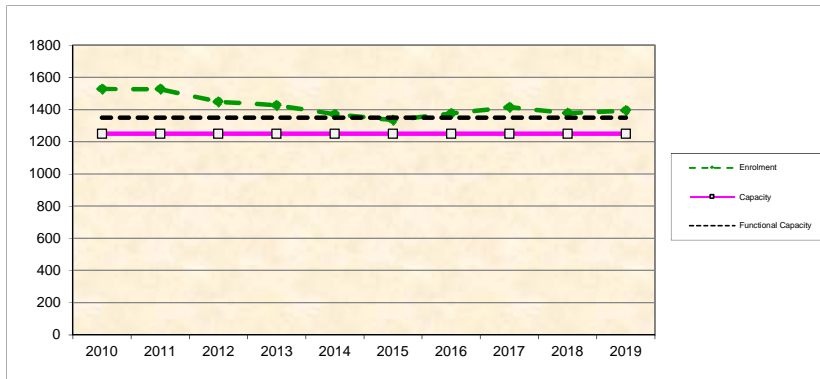
September 2014 Enrolment/School Capacity

<b>Fraser Wood Elementary</b>	
Enrolment (K/1-7):	61 K + 401
Capacity (K/1-7):	40 K + 475
<b>Fraser Heights Secondary</b>	
Enrolment (8-12):	1371
Nominal Capacity (8-12):	1250
Functional Capacity*(8-12):	1350

**Fraser Wood Elementary**



**Fraser Heights Secondary**



\*Functional Capacity at secondary schools is based on space utilization estimate of 27 students per instructional space. The number of instructional spaces is estimated by dividing nominal facility capacity (Ministry capacity) by 25.

**BUILDING GUIDELINES SUMMARY****V.1.0**

**Surrey Project no.:** 15-0159-00  
**Property Location:** 16240-110 Ave, Surrey, B.C

**Design Consultant:** Apex Design Group Inc.  
 Ran Chahal, Architectural Technologist AIBC, CRD  
 #157- 8120 -128 Street, Surrey, BC V3W 1R1  
 Off: 604-543-8281 Fax: 604-543-8248

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 old urban area built out in the 1960's – 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 to mid-massing characteristics with 96% of the homes having a one and on half storey front entry.

Roof pitch varies from economical low pitch (6/12 or lower) to medium pitch (7-9/12) common truss roofs with simple gables and common hips with Concrete Tiles roof being most common.

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

Landscaping is of a moderate planting standard with 100% of the homes having Exposed Aggregate driveways.

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

Many of the existing homes have covered front verandas which would be encouraged in any new home to be built in the future. Since the majority of the existing homes in the study area are 10-40 years old, a new character area will be created. 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.

<b>Dwelling Types/Locations:</b>	“Two-Storey”	100.0%
	“Basement Entry/Cathedral Entry”	0.00%
	“Rancher (Bungalow)”	0.00%
	“Split Levels”	0.00%
<b>Dwelling Sizes/Locations: (Floor Area and Volume)</b>	Size range:	0.00% under 2000 sq.ft excl. garage
		100.00% 2001 - 2500 sq.ft excl. garage
		0.00% over 2501 sq.ft excl. garage
<b>Exterior Treatment /Materials:</b>	Cedar: 0.00% Stucco: 100.0% Vinyl: 0.00%	
	Brick or stone accent on 70.0% of all homes	
<b>Roof Pitch and Materials:</b>	Asphalt Shingles: 0.00%	Cedar Shingles: 0.00%
	Concrete Tiles: 100.0%	Tar & Gravel: 0.00%
	50.00% of all homes have a roof pitch 6:12 or lower.	
	<b>Window/Door Details:</b> 100% of all homes have rectangular windows	

**Streetscape:** A variety of simple “Two Story”, 10-40 year old “West Coast Traditional” homes are set 25 to 50 feet from the street in a common old urban setting typified by coniferous growth and mature shrubs. Roofs on most homes are simple low pitch common hip or common gable forms with Cedar Roof Tiles on most of the homes. Most homes are clad in Vinyl.

**Other Dominant Elements:** I would encourage the new homes to have covered verandas at the front of the home. All of the homes have concrete tile roofs but I believe the newer homes should have a choice of other materials and not be restricted to just concrete tile. All of the existing homes are clad in Stucco, so I would recommend the use of stucco on at least 50% of the front exterior facade on any street facing side of the home.

## 2. Proposed Design Guidelines

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

Guidelines will not preserve the existing old urban character. Rather, the guidelines will ensure that a desirable new character area is created in which 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/Locations:** Two-Storey, Split Levels and Ranchers (Bungalows).

**Dwelling Sizes/Locations:** Two-Storey or Split Levels - 2000 sq.ft. minimum



<b>(Floor Area and Volume)</b>	Basement Entry - 2000 sq.ft. minimum Rancher or Bungalow - 1400 sq.ft. minimum (Exclusive of garage or in-ground basement)
<b>Exterior Treatment /Materials:</b>	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.
<b>Exterior Materials /Colours:</b>	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.
<b>Roof Pitch:</b>	Minimum 7:12 In order to achieve a cohesive streetscape with the cul-de-sac homes, I would recommend a maximum roof pitch of 10:12 on the upper floor, except for the gables, which can be steeper as long as they do not exceed the highest roof peak of the upper floor 10:12 roof.
<b>Roof Materials/Colours:</b>	Cedar shingles, Concrete roof tiles in a shake profile and asphalt shingles in a shake profile. Grey or brown only.
<b>Window/Door Details:</b>	Dominant: Rectangular or Gently arched windows.
<b>In-ground basements:</b>	Permitted if servicing allows.
<b>Landscaping:</b>	Trees as specified on Tree Replacement Plan plus min. 17 shrubs (min. 5 gallon pot size).
<b>Compliance Deposit:</b>	\$ 5,000.00

**Summary prepared and submitted by:**

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

November 5, 2015  
 Date

Table 3. Tree Preservation Summary

TREE PRESERVATION SUMMARY	
Surrey Project No:	
Address:	16240 110 Avenue, Surrey, BC
Registered Arborist:	Trevor Cox, MCIP ISA Certified Arborist (PN1920A) Certified Tree Risk Assessor (43) BC Parks Wildlife and Danger Tree Assessor
On-Site Trees	Number of Trees
<b>Protected Trees Identified</b> (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	<b>69</b>
<b>Protected Trees to be Removed</b>	<b>62</b>
<b>Protected Trees to be Retained</b> (excluding trees within proposed open space or riparian areas)	<b>7</b>
<b>Total Replacement Trees Required:</b>	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio <u>9</u> X one (1) = 9	<b>115</b>
- All other Trees Requiring 2 to 1 Replacement Ratio 53 X two (2) = 106	
<b>Replacement Trees Proposed</b>	<b>14</b>
<b>Replacement Trees in Deficit</b>	<b>101</b>
<b>Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]</b>	
Off-Site Trees	Number of Trees
<b>Protected Off-Site Trees to be Removed</b>	
<b>Total Replacement Trees Required:</b>	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio <u>    </u> X one (1) = 0	<b>4</b>
- All other Trees Requiring 2 to 1 Replacement Ratio 2 X two (2) = 4	
<b>Replacement Trees Proposed</b>	<b>0</b>
<b>Replacement Trees in Deficit</b>	<b>4</b>

Summary prepared and  
submitted by:

Arborist



May 21,  
2015

Date



109 'A' AVENUE

REMNANT LOT

DEVELOPMENT PARCEL

162 STREET

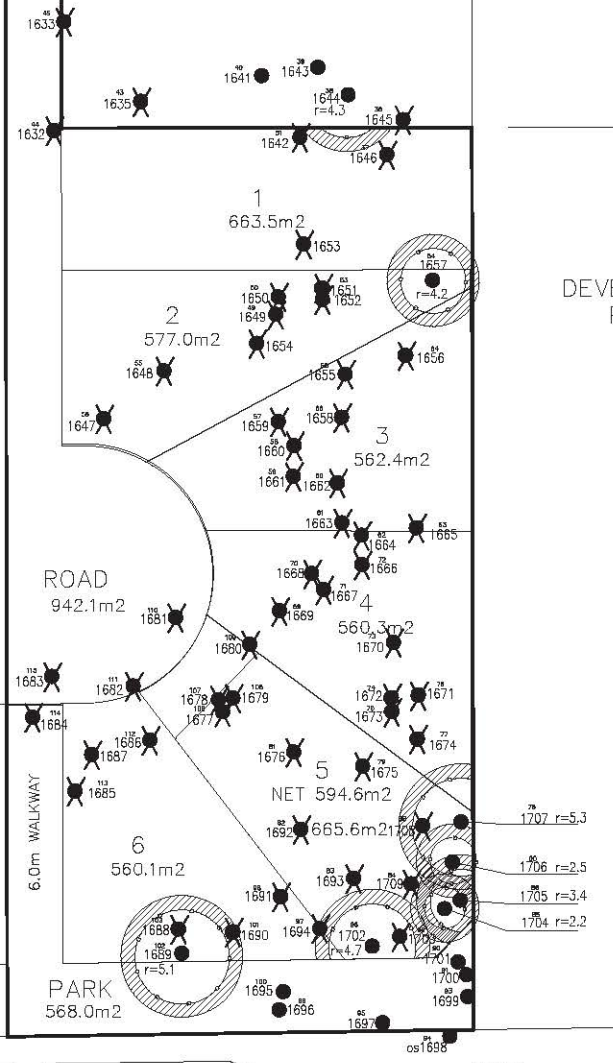
ROAD  
942.1m<sup>2</sup>

6.0m WALKWAY

PARK  
568.0m<sup>2</sup>

PARK

PARK



LEGEND

- = TREES TO BE RETAINED
- ⊗ = TREES TO BE REMOVED
- = PROTECTION BARRIER
- ⊘ = NO-BUILD ZONE

DATE	REVISIONS	NO.

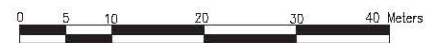
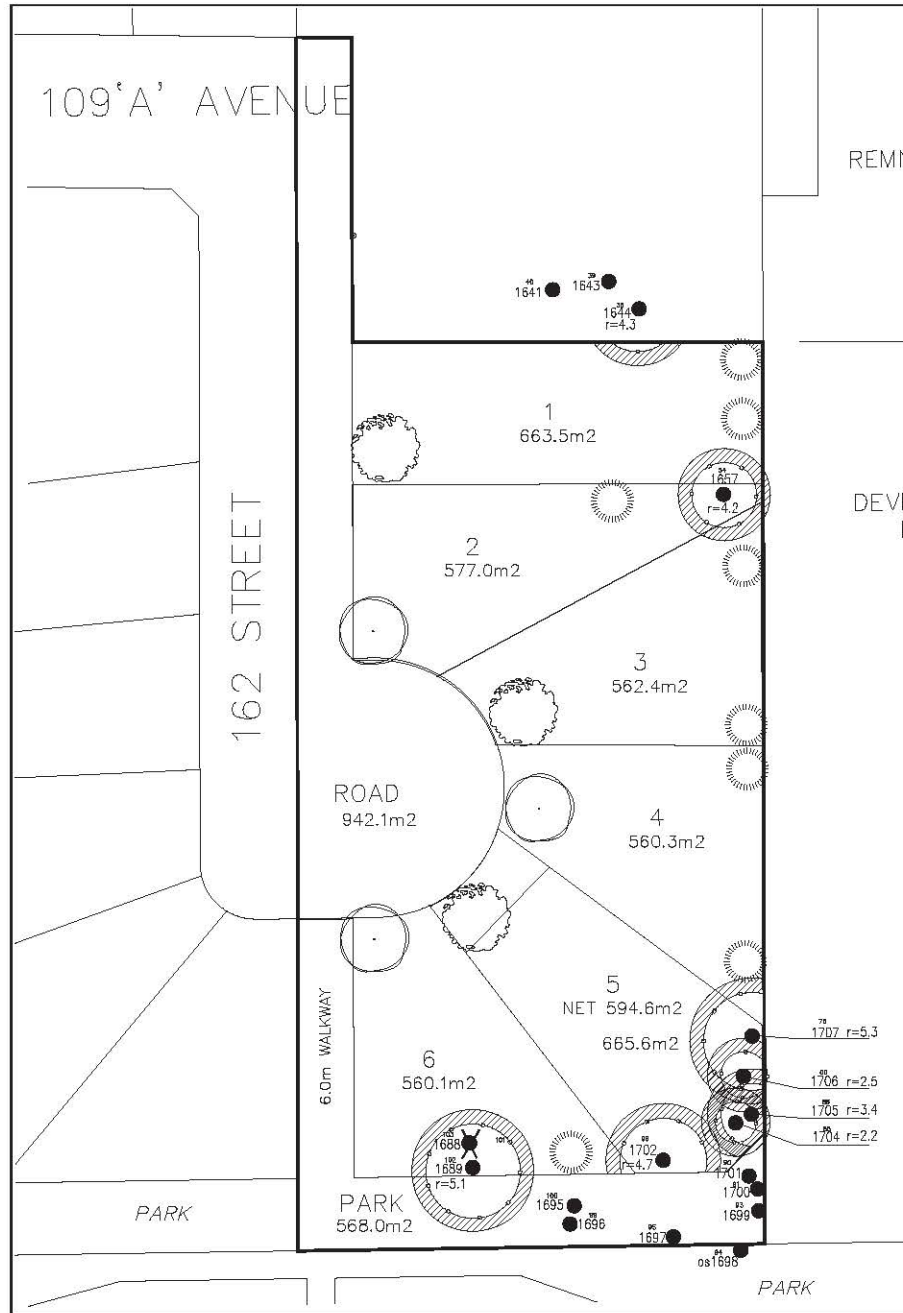
**KAVOLINAS & ASSOCIATES INC**  
BCMA CMA  
2462 JONKAIL COURT  
ABINGFORD, B.C.  
V3B 3E8  
PHONE (604) 857-2376

CLIENT  
MR. MIKE HELLE  
COASTLAND ENGINEERING & SURVEYING LTD.  
SUITE #101  
19282 - 80th AVENUE  
SURREY, B.C.  
V3R 1E5

TITLE  
PLAN VIEW  
**TREE LOCATION PLAN  
TREE RETENTION PLAN  
6 LOT SUBDIVISION**  
16240 - 110 AVENUE  
SURREY, B.C.

SCALE	1:250	DATE	MAY/15
DRAWN	CAK/S	CHECKED	CAK/S
DATE	CAK/S	APPROVED	AS BUILT

PRINTED	DATE	
ISSUED BY		△
		TR-1



KEY	BOTANICAL NAME	PLANT LIST COMMON NAME	QTY.	SIZE	SPACING	REMARKS
	PRUNUS YEDDENSIS 'AKEBONO'	DAYBREAK CHERRY	3	8 CM. CAL.	AS SHOWN	B. & B.
	CORNUS FLORIDA 'YUBRUM'	RED FLOWERING DOGWOOD	3	8 CM. CAL.	AS SHOWN	B. & B.
	PICEA PUMILENS GLAUCO	BLUE SPRUCE	8	1.00 METERS	AS SHOWN	B. & B.

PLANTS IN THE PLANT LIST ARE SPECIFIED ACCORDING TO THE LANDSCAPE CANADA GUIDE SPECIFICATIONS FOR NURSERY STOCK AND THE BCNTA STANDARD FOR CONTAINER GROWN PLANTS.

ALL LANDSCAPING AND LANDSCAPE MATERIALS TO CONFORM TO THE LATEST EDITION OF THE BCINA/BCSLA "LANDSCAPE STANDARDS"

ALL ASPECTS OF THIS PLAN AND THE WORK THAT IT REFERS TO OR SUGGESTS MUST CONFORM TO THE CITY OF SURREY'S TREE PRESERVATION BY-LAW #10100



LEGEND

- = TREES TO BE RETAINED
- = TREES TO BE REMOVED
- = PROTECTION BARRIER
- = NO-BUILD ZONE

DATE	ISSUES	BY

C. KAVOLINAS & ASSOCIATES INC.  
BCLA CSLA

2162 JINGJUL COURT  
ABBOTSFORD, B.C.  
V3J 1E8

PHONE (604) 857-2378

CLIENT

MR. MIKE HELLE  
COASTLAND ENGINEERING & SURVEYING LTD.  
SUITE #101  
16202 - 800 AVENUE  
SURREY, B.C.  
V3S 1E5

TITLE

PLAN VIEW

TREE LOCATION PLAN  
TREE REPLACEMENT PLAN  
6 LOT SUBDIVISION  
18240 - 110 AVENUE  
SURREY, B.C.

SCALE	1:250	DATE	MAY/15
DRAWN	DMK	CHECKED	DMK
DATE		APPROVED	MS BUILT

PROJECT

JOB NO.

DRAWING NO.

TR-2