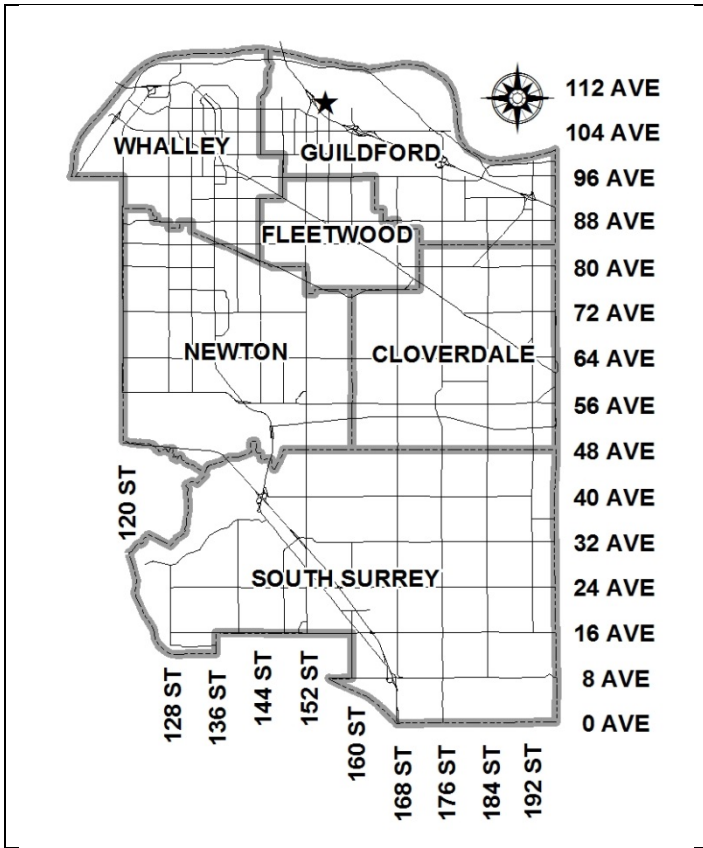


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7914-0346-00

Planning Report Date: April 13, 2015



PROPOSAL:

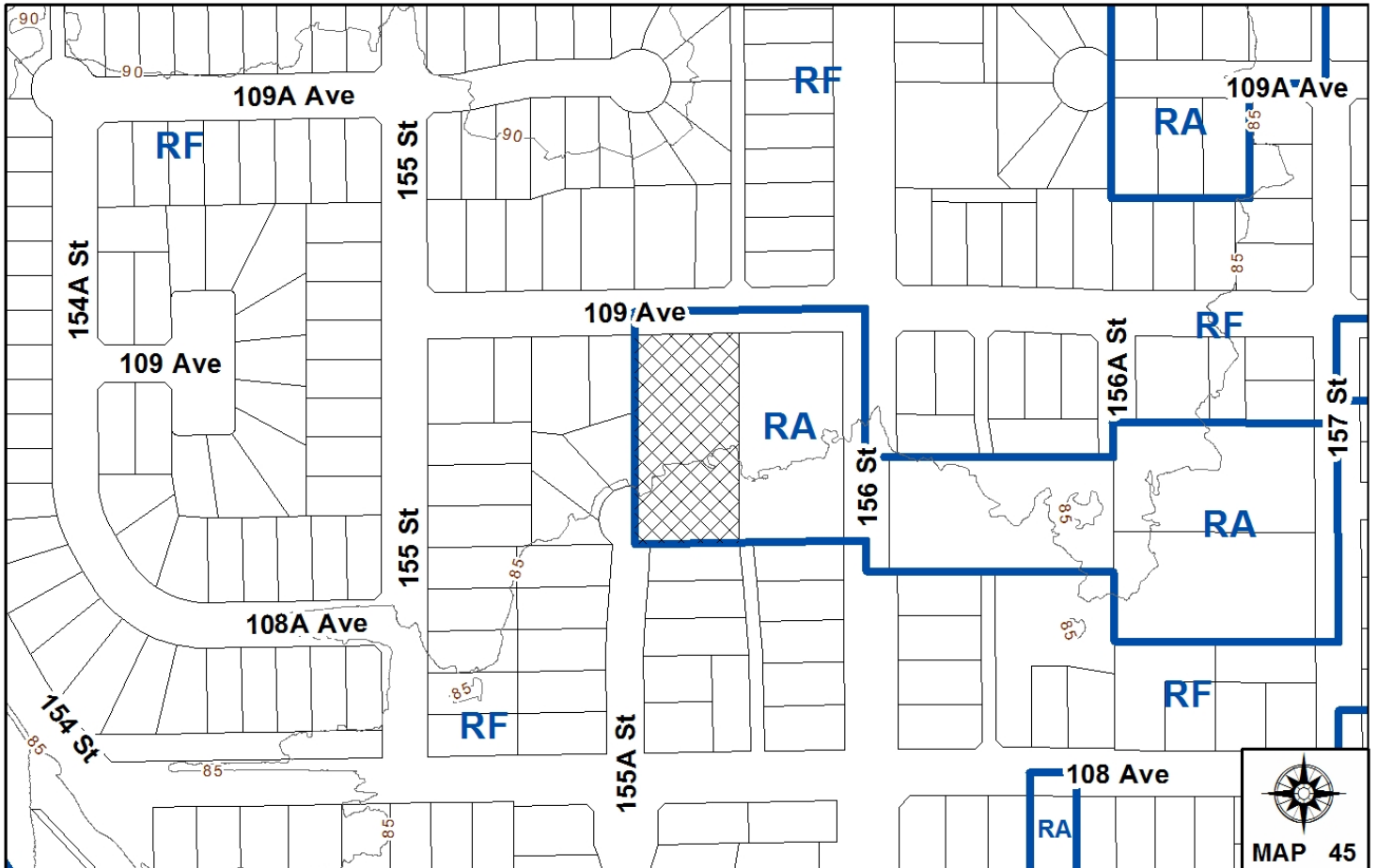
- **Rezoning** from RA to RF in order to permit subdivision into 6 single family lots.

LOCATION: 15560 - 109 Avenue

OWNER: Yu H Lee

ZONING: RA

OCP DESIGNATION: Urban



RECOMMENDATION SUMMARY

- By-law Introduction and set date for Public Hearing for rezoning.

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with the Urban designation in the OCP.
- The proposed density and building form are appropriate for this part of Fraser Heights.
- The proposed 15.1-metre (50-ft.) wide lot frontages are comparable in width to neighbouring properties.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the subject site from "One-Acre Residential Zone (RA)" (By-law No. 12000) to "Single Family Residential Zone (RF)" (By-law No. 12000) 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) approval from the Ministry of Transportation & Infrastructure;
 - (d) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (e) 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;
 - (f) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department; and
 - (g) 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:**

3 Elementary students at Dogwood Elementary School
2 Secondary students at Fraser Heights Secondary School

(Appendix IV)

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

Parks, Recreation & Culture: Parks have some concerns about the pressure this project will place on existing Parks, Recreation and Culture facilities in the neighbourhood. The applicant will be required to address these concerns prior to final adoption of the rezoning by-law.

Ministry of Transportation & Infrastructure (MOTI): Preliminary approval of the rezoning has been granted.

SITE CHARACTERISTICS

Existing Land Use: One-acre residential lot with single family dwelling, which will be removed.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North (Across 109 Avenue):	Single family dwellings.	Urban	RF
East:	Acreage residential lot.	Urban	RA
South:	Single family dwellings.	Urban	RF
West:	Single family dwellings.	Urban	RF

DEVELOPMENT CONSIDERATIONS

Background

- The 0.41-hectare (1.02-acre) subject site consists of one property located at 15560 – 109 Avenue, west of 156 Street in Fraser Heights.
- The site is designated "Urban" in the Official Community Plan (OCP) and is zoned "One-Acre Residential Zone (RA)".
- The site contains an existing single family dwelling on the northern portion of the lot, which will be removed as part of the proposed development.
- The subject property is among a few remaining lots with subdivision potential in this area of Fraser Heights. Existing subdivisions in the area were built out starting from the late 1980's and early 1990's, through to the early 2000's.
- A drainage ditch runs east / west within the road right-of-way along the south shoulder of 109 Avenue, fronting the subject property. Rolf Sickmuller, Registered Professional Biologist, of Envirowest Consultants Inc. has submitted a watercourse classification assessment on behalf of the applicant, identifying the ditch as a Class C habitat. The report has been reviewed by staff and found to be acceptable.

Current Proposal

- The applicant is proposing to rezone the site from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" in order to permit subdivision into 6 single family lots.
- Proposed Lots 1 through 3 will complete the existing half cul-de-sac on 155A Street, while proposed Lots 4 through 6 will front onto 109 Avenue.
- All of the proposed lots meet or exceed the minimum width, depth, and lot area requirements of the RF Zone with lot widths ranging from 15 metres (50 ft.) to 16.88 metres (55 ft.), depths ranging from 28 metres (92 ft.) to 38 metres (125 ft.), and lot areas ranging from 570 square metres (6,135 sq. ft.) to 835 square metres (8,988 sq. ft.).
- The applicant's agent has demonstrated that the existing RA-zoned property to the east of the subject site has the potential to be rezoned and subdivided in the future with lots fronting onto 156 Street with rear lane access (Appendix II).

Design Guidelines and Lot Grading

- The applicant has retained Mike Tynan of Tynan Consulting Ltd. as the Design Consultant. The Design Consultant conducted a character study of the surrounding homes in the area and based on the findings of the study, proposed a set of design guidelines for new houses on the proposed lots (Appendix V). The design guidelines will ensure that the new homes are compatible with the design character of other newer homes in the neighbourhood.
- Based on the proposed grading, basements can be achieved on all proposed lots. A preliminary lot grading plan was submitted by Hub Engineering Inc. and reviewed by staff and was determined to be adequate.

PRE-NOTIFICATION

Pre-notification letters were sent on January 19, 2015 advising property owners in the area of the proposed rezoning and subdivision. Staff received one (1) telephone call and two (2) letters in response (*staff comments in italics*):

- One area resident expressed concern that the proposed subdivision will increase traffic along 155A Street.

(The proposed subdivision will create 3 additional lots on 109 Avenue and 3 additional lots on the 155A Street cul-de-sac and will result in minimal impact on traffic volumes in the neighbourhood.)

- Two area residents expressed concern that secondary suites within the proposed homes will increase the potential for parking issues in the neighbourhood.

(Based on the proposed lot grading, basements can be achieved on all of the proposed lots. The Zoning By-law permits one secondary suite in all single family homes, provided certain requirements are met including the provision of one additional on-site parking space.)

There will be 4 parking spaces provided on each lot, based on 2 in the garage and 2 in the driveway. It is not anticipated that the proposed development will exacerbate any existing parking issues.)

- One area resident expressed concern about the size of homes that would be built on the proposed lots. They do not want to see "monster homes" being built in an established neighbourhood.

(The majority of the existing homes in this area are two-storeys, have a floor area ranging from 232 square metres – 278 square metres (2,501 sq. ft. – 3,000 sq. ft.), and were constructed at a smaller size than what is currently permitted in the RF Zone. However, the lot widths of the proposed lots are compatible with existing lot widths in the area. Therefore, the massing of future homes on the subject lots will be compatible with existing homes in the area when viewed from the street.)

- The Fraser Heights Community Association is concerned about the potential loss of trees on the property.

(The applicant has submitted an Arborist Report which was reviewed by staff. Eighteen (18) out of 58 on-site trees are Alder or Cottonwood trees. Of the remaining 40 on-site trees, four are proposed to be retained. The majority of the trees to be removed have poor structure or will be affected by the development (such as services, drainage swales, lot grading and building footprints), and cannot be retained.

In response to the Associations concerns, Peter Mennel, the consulting Arborist, re-assessed the project for a second time to determine if additional trees can be retained, but ultimately, confirmed that only four trees could be retained given the health and location of the trees relative to building envelopes, grading conditions, and servicing requirements. In addition to the four retained trees, 18 replacement trees will be planted and cash-in-lieu will be provided to the Green City Fund for the tree replacement deficiency.)

TREES

- Peter Mennel, ISA Certified Arborist of Mike Fadum & Associates Ltd. prepared an Arborist Assessment for the subject property. At staff's request, the consulting Arborist assessed the trees a second time, to ensure the maximum number of trees could be retained. The table below provides a preliminary 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 and Cottonwood Trees			
Alder / Cottonwood	18	18	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Bitter Cherry	1	1	0
Cherry	2	2	0
Elm	3	2	1

Tree Species	Existing	Remove	Retain
Bigleaf Maple	2	2	0
Red Maple	1	0	1
Paper Birch	1	1	0
Canada Plum	3	3	0
Coniferous Trees			
Western Red Cedar	21	19	2
Deodar Cedar	1	1	0
Douglas Fir	2	2	0
Falsecypress	1	1	0
Hemlock	1	1	0
Austrian Pine	1	1	0
Total (excluding Alder and Cottonwood Trees)	40	36	4
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		18	
Total Retained and Replacement Trees		22	
Contribution to the Green City Fund		\$21,600	

- The Arborist Assessment states that there are a total of 40 mature trees on the site, excluding Alder and Cottonwood trees. Eighteen (18) existing trees, approximately 31% of the total trees on the site, are Alder and Cottonwood trees. It was determined that 4 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 90 replacement trees on the site. Since only 18 replacement trees can be accommodated on the site (based on an average of 3 trees per lot), the deficit of 72 replacement trees will require a cash-in-lieu payment of \$21,600, representing \$300 per tree, to the Green City Fund, in accordance with the City's Tree Protection By-law.
- In summary, a total of 22 trees are proposed to be retained or replaced on the site with a contribution of \$21,600 to the Green City Fund.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on February 12, 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.

Sustainability Criteria	Sustainable Development Features Summary
1. Site Context & Location (A1-A2)	<ul style="list-style-type: none"> The subject site is designated Urban in the OCP, and is within an urban infill area.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> Secondary suites will be permitted.
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> Absorbent soil and dry swales will be used.
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> N/A
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> The houses will front the street.
6. Green Certification (F1)	<ul style="list-style-type: none"> N/A
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> Pre-notification letters were mailed to area residents and a development proposal sign was installed.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners, Action Summary and Project Data Sheet
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

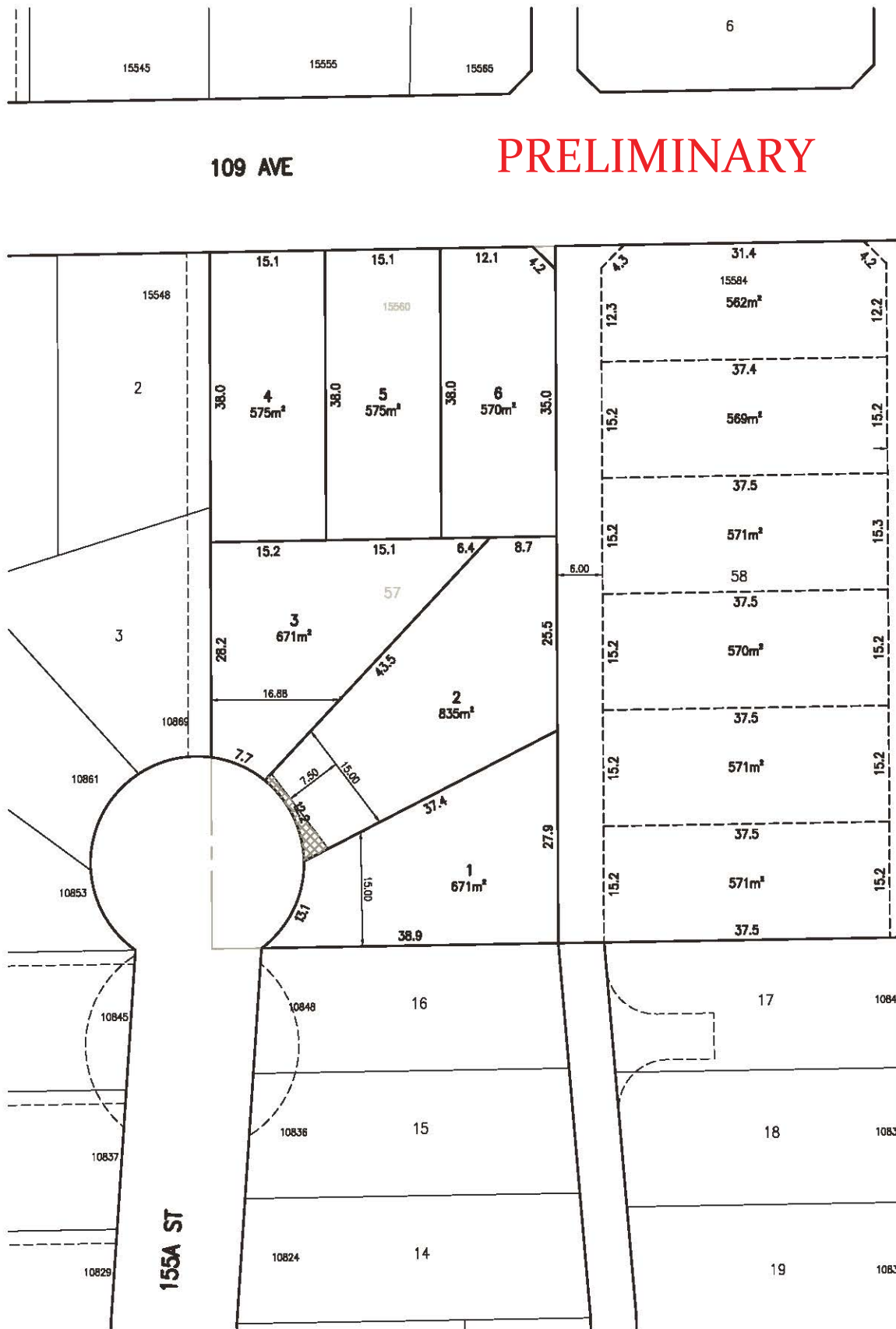
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SUBDIVISION DATA SHEET

Proposed Zoning: RF

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	1.02
Hectares	0.41
NUMBER OF LOTS	
Existing	1
Proposed	6
SIZE OF LOTS	
Range of lot widths (metres)	15-16.88
Range of lot areas (square metres)	570-835
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	14.6 lots/ha & 5.88 lots/acre
Lots/Hectare & Lots/Acre (Net)	15.4 lots/ha & 6.25 lots/acre
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	38
Estimated Road, Lane & Driveway Coverage	27
Total Site Coverage	65
PARKLAND	
Area (square metres)	n/a
% of Gross Site	n/a
Required	
PARKLAND	
5% money in lieu	YES
TREE SURVEY/ASSESSMENT	
	YES
MODEL BUILDING SCHEME	
	YES
HERITAGE SITE Retention	
	NO
FRASER HEALTH Approval	
	NO
DEV. VARIANCE PERMIT required	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO



PRELIMINARY

109 AVE

155A ST



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Hub Engineering Inc.
 Engineering and Development Consultants
 Member
PACIFIC LAND GROUP
 Land Use, Development & Environmental Strategies
 101 - 7485 - 130 Street, Surrey, B.C. V3W 1H8
 Tel: 604-572-4328 Fax: 604-501-1625 E-mail: mail@hub-inc.com

CLIENT:		PROJECT: 1556-109 STREET, SURREY			
DRAWING TITLE: RESIDENTIAL SUBDIVISION					
PROJECT No. 14072	DATE: JAN 2015	LEGAL:	SCALE: 1:500	MUNICIPAL PROJECT No:	
PRELIMINARY PLAN - SUBJECT TO APPROVAL(S) FROM FEDERAL, PROVINCIAL AND LOCAL AUTHORITIES					



Planning January-20-15

THE IMPACT ON SCHOOLS

APPLICATION #: 14 0346 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.
 Dogwood Elementary is below capacity and has room for enrolment growth. The addition to Fraser Heights Secondary, completed in April 2014, increased the school capacity from 1000 to 1200 + Neighbourhood Learning Centre (which provides additional functional instructional space), to help reduce overcrowding at the school. The proposed residential development will not have a significant impact on projections.

SUMMARY

The proposed 6 Single family with suites are estimated to have the following impact on the following schools:

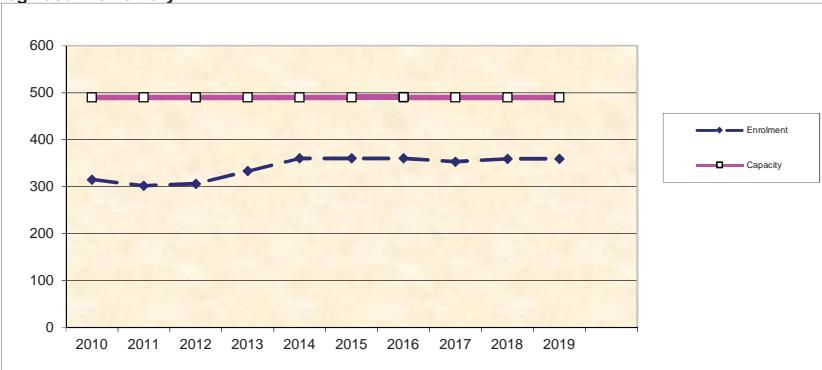
Projected # of students for this development:

Elementary Students:	3
Secondary Students:	2

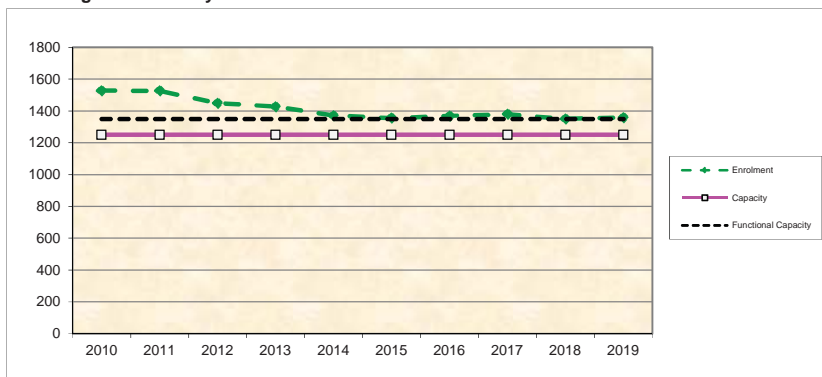
September 2014 Enrolment/School Capacity

Dogwood Elementary	
Enrolment (K/1-7):	44 K + 316
Capacity (K/1-7):	40 K + 450
Fraser Heights Secondary	
Enrolment (8-12):	1371
Nominal Capacity (8-12):	1250
Functional Capacity*(8-12):	1350

Dogwood 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

Surrey Project no: 7914-0346-00
 Project Location: 15560 - 109 Avenue, Surrey, B.C.
 Design Consultant: Tynan Consulting Ltd., (Michael E. Tynan)

The draft Building Scheme proposed for this Project has been filed 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:

This area was built out over a time period spanning from the 1960's to the 2000's. The age distribution from oldest to newest is: 1960's (7%), 1970's (19%), 1980's (59%), and post year 2000's (19%). A majority of homes in this area have a floor area in the 2501 - 3000 sq.ft. size range. Home size distribution is: 2001 - 2500 sq.ft. (13%), 2501 - 3000 sq.ft. (56%), 3001 - 3550 sq.ft. (25%), and over 3550 sq.ft. (6%). Styles found in this area include: "Rural Heritage" (14%), "West Coast Modern" (29%), "West Coast Contemporary (assembly of geometric shapes type)" (13%), "West Coast Traditional" (6%), and "Neo-Traditional" (43%). Home types include: Split Level (6%), Basement Entry (25%), and Two-Storey (69%).

Massing scale (front wall exposure) characteristics include: Low to mid-scale massing (13%), Mid-scale massing (63%), Mid to high scale massing (6%), and High scale massing (19%). The scale (height) range for front entrance structures includes: One storey front entrance (87%) and 1 ½ storey front entrance (13%). The range of roof slopes found in this area is: 5:12 (29%), 6:12 (24%), 7:12 (35%), and 10:12 (12%). Main roof forms (largest upper floor truss spans) include: Main common hip roof (75%), and Main common gable roof (25%). Feature roof projection types include: Common Hip (38%), Common Gable (14%), Dutch Hip (10%), Boston Hip (14%), Boston Gable (3%), Shed roof (10%), and Carousel Hip (10%). Roof surfaces include: Rectangular profile type asphalt shingles (6%), Shake profile asphalt shingles (75%), Concrete tile (rounded Spanish profile) (6%), and Concrete tile (shake profile) (13%).

Main wall cladding materials include: Horizontal cedar siding (13%), Vertical channel cedar siding (6%), Horizontal vinyl siding (31%), Hardiplank siding (19%), Stucco cladding (25%), and full height brick at front (6%). Feature wall trim materials used on the front facade include: No feature veneer (5%), Brick feature veneer (68%), Stone feature veneer (11%), Vertical board and batten cedar accent (5%), Horizontal Hardiplank accent (5%), and 1x4 vertical battens over Hardipanel in gable ends (5%). Wall cladding and trim colours include: Neutral (32%), Natural (55%), Primary derivative (9%), and Warm (5%).

Covered parking configurations include: Single vehicle garage (6%) and Double garage (94%). Driveway surfaces include: Asphalt (13%), Broom finish or smooth concrete (31%), and Exposed aggregate (56%).

A variety of landscaping standards are evident, ranging from a modest old urban standard featuring sod and only a few shrubs (19%) to an above average modern urban landscape standard features numerous shrub plantings (6%). Fifty six of homes are landscaped to an "average modern urban landscape standard.

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

- 1) **Context Homes:** There are a few homes in this area that could be considered to provide acceptable architectural context including homes at 10853 - 155A Street, 10869 - 155A St., 10848 - 155A Street, 10836 - 155A Street, 10824 - 155A Street, 15545 - 109 Avenue, 15565 - 109 Avenue, 15575 - 109 Avenue, and 15548 - 109 Avenue. However, massing design, construction materials, and trim and detailing standards for new homes constructed in RF zone subdivisions now exceed standards evident on the context homes. The recommendation therefore is to adopt standards commonly found in post year 2010 RF zoned subdivisions, rather than to specifically emulate the aforesaid context homes.
- 2) **Style Character:** There are a mix of old urban and modern urban styles in this neighbourhood. Preferred styles for this site include "Neo-Traditional" and "Neo-Heritage", as these styles are an ideal bridge between old urban and modern urban. Note that style range is not restricted in the building scheme. However, the consultant refers to the character study when reviewing plans for meeting style-character intent.
- 3) **Home Types:** There are a wide range of home types evident, and so some flexibility is justified. Home type (Two-Storey, Bungalow, Basement Entry, Split Level, etc.) will not be regulated in the building scheme.
- 4) **Massing Designs:** Massing designs should meet new standards for RF zoned subdivisions. New homes should exhibit "mid-scale" massing. Various elements and projections on the front of the home should be interesting architecturally, and should be in pleasing natural proportions to one another. These elements and projections should be located so as to create balance across the façade.
- 5) **Front Entrance Design:** Front entrance porticos range from one to 1 ½ storeys in height. The recommendation is to limit the range of entrance portico heights to between one storey and 1 ½ storeys to ensure there is not proportional overstatement of this one element.
- 6) **Exterior Wall Cladding:** A wide range of cladding materials have been used in this area, including Vinyl, cedar, stucco, fibre cement board, brick, and stone. Reasonable flexibility should therefore be permitted, including the use of vinyl siding, provided the overall quality of wall cladding materials meets or exceeds common standards for post year 2010 RF zone developments.
- 7) **Roof surface:** Roof surfacing materials used in this area including concrete roof tiles and asphalt shingles. The roof surface is not a uniquely recognizable characteristic of this area and so flexibility in roof surface materials is warranted. The recommendation is to permit cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roof products that have a strong shake profile.
- 8) **Roof Slope:** Roof slopes of 7:12 or higher have been used on context homes. This is a suitable minimum roof slope given the objectives of ensuring continuity with context homes and to ensure that homes appear style-authentic within the proposed style range.

Streetscape: The subject site is double fronting, spanning from 109 Avenue at the north side to the 10800 block of 155A Street to the south, and so there are two relevant streetscapes. Homes at the south side of the site were all constructed in the 1980s, and are "West Coast Modern" and "Neo-Traditional" Two-Storey and Basement Entry type homes. The area has a desirable, consistent character, and most homes have desirable massing characteristics. All roof surfaces are asphalt shingles, and main wall cladding materials include vinyl or stucco and most homes have a brick feature veneer. Homes at the north side (109 Avenue) are more varied, ranging in age from near-new to 55 years old. Home types include Two-Storey, Split Level, and Basement Entry. The style range includes "Rural Heritage", "West Coast Contemporary", "Neo-Traditional", and "West Coast Modern. Roof surfaces include asphalt shingles and concrete roof tiles. Wall cladding materials include stucco, cedar, vinyl, fibre-cement board, stone and brick. Landscapes range from modest old urban to above-average modern urban.

2. Proposed Design Guidelines

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

- the new homes are readily identifiable as one of the following styles: "Neo-Traditional", "Neo-Heritage", "Craftsman-Heritage", "Rural Heritage", or "West Coast Contemporary". Note that the proposed style range is not contained within the building scheme, but is contained within the residential character study which forms the basis for interpreting building scheme regulations.
- a new single family dwelling *constructed* on any *lot* meets year 2000's design standards, which include the proportionally correct allotment of mass between various street facing elements, the overall balanced distribution of mass within the front facade, readily recognizable style-authentic design, and a high trim and detailing standard used specifically to reinforce the style objectives stated above.
- trim elements will include several of the following: furred out wood posts, articulated wood post bases, wood braces and brackets, louvered wood vents, bold wood window and door trim, highly detailed gable ends, wood dentil details, stone or brick feature accents, covered entrance verandas and other style-specific elements, all used to reinforce the style (i.e. not just decorative).
- the development is internally consistent in theme, representation, and character.
- the entrance element will be limited in height (relative dominance) to 1 to 1 ½ storeys.

2.2 Proposed Design Solutions:

Interfacing Treatment with existing dwellings)

There are homes in this area at 10853 - 155A Street, 10869 - 155A St., 10848 - 155A Street, 10836 - 155A Street, 10824 - 155A Street, 15545 - 109 Avenue, 15565 - 109 Avenue, 15575 - 109 Avenue, and 15548 - 109 Avenue that could be considered to provide acceptable architectural context. However, massing design, construction materials, and trim and detailing standards for new homes constructed in most new (post year 2010) RF zone subdivisions now exceed standards evident on the context homes. The recommendation therefore is to adopt standards commonly found in post year 2010 RF zoned subdivisions, rather than to specifically emulate the aforesaid two context homes.

- Exterior Materials/Colours:** Stucco, Cedar, Vinyl, Hardiplank, Brick, and Stone.
- “Natural” colours such as browns, greens, clays, and other earth-tones, and “Neutral” colours such as grey, white, and cream are permitted. Primary colours are not recommended for this development. “Warm” colours such as pink, rose, peach, salmon are not permitted. Trim colours: Shade variation of main colour, complementary, neutral, or subdued contrast only.
- Roof Pitch:** Minimum 7:12, with standard exceptions.
- Roof Materials/Colours:** Cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roofing products should be permitted, providing that the aesthetic properties of the new materials are equal to or better than that of the traditional roofing products. Greys, black, or browns only.
- In-ground basements:** Permitted, subject to determination that service invert locations are sufficiently below grade. Basements will appear underground from the front.
- Treatment of Corner Lots:** Not applicable; no corner lots.
- Landscaping:** *Moderate modern urban standard:* Tree planting as specified on Tree Replacement Plan plus minimum 20 shrubs of a minimum 3 gallon pot size. Sod from street to face of home. Driveways: exposed aggregate, interlocking masonry pavers, or stamped concrete. Broom finish concrete is permitted only where the driveway directly connects the lane to the garage slab at the rear side of the dwelling.

Compliance Deposit: \$5,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. Date: February 9, 2015

Reviewed and Approved by:  Date: February 9, 2015

MIKE FADUM AND ASSOCIATES LTD.
VEGETATION CONSULTANTS

Tree Preservation Summary

Surrey Project No: 14-0346-00

Address: 15560 - 109 Avenue

Registered Arborist: Peter Mennel ISA (PN-5611A)

On-Site Trees	Number of Trees
Protected Trees Identified (on-site and shared trees, including trees within boulevards and proposed streets and lanes, but excluding trees in proposed open space or riparian areas)	58
Protected Trees to be Removed	54
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	4
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 18 X one (1) = <u>18</u> - All other Trees Requiring 2 to 1 Replacement Ratio 36 X two (2) = <u>72</u> 	90
Replacement Trees Proposed	18
Replacement Trees in Deficit	72
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	NA

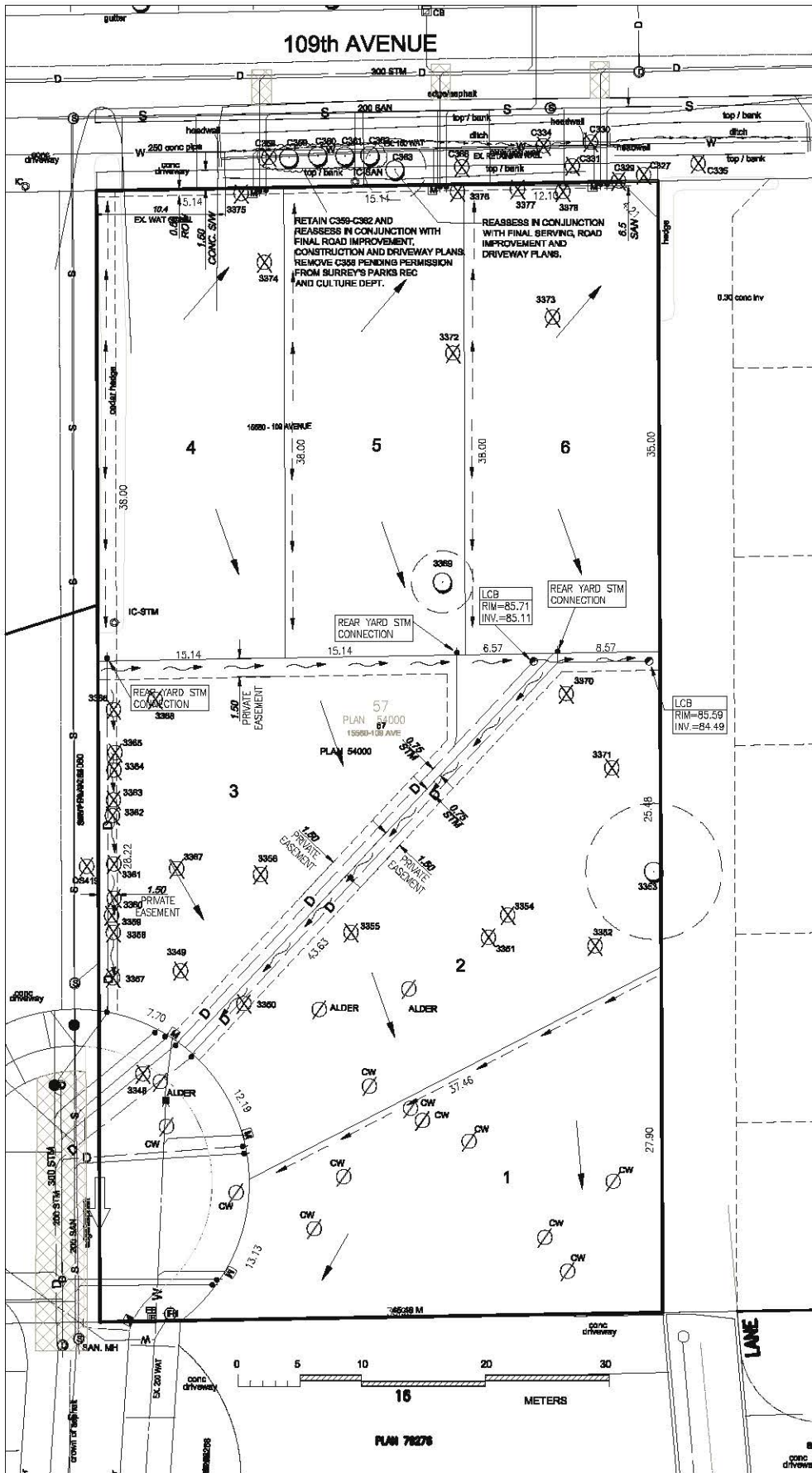
Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	1
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio X one (1) = - All other Trees Requiring 2 to 1 Replacement Ratio 1 X two (2) = 	2
Replacement Trees Proposed	TBD
Replacement Trees in Deficit	TBD

Summary report and plan prepared and submitted by: Mike Fadum and Associates Ltd.

Signature of Arborist:

Date: February 26, 2015





LEGEND

	TREE TO BE RETAINED		MINIMUM NO DISTURBANCE ZONE (6X DIAMETER AS PER CITY OF SURREY POLICY)
	TREE TO BE REMOVED		TREE TO BE REMOVED ALDER/COTTONWOOD

MIKE FADUM AND ASSOCIATES LTD. VEGETATION CONSULTANTS

#105, 8277 129 St.
 Surrey, British Columbia
 V3W 0A6
 Ph: (778) 593-0300
 Fax: (778) 593-0302
 Mobile: (604) 240-0309
 Email: mfadum@fadum.ca

CLIENT

FILE NO.

PROJECT TITLE
TREE PRESERVATION AND PROTECTION PLAN

15560 109 AVE.,
 SURREY, B.C.

REVISIONS:

NO.	DATE	BY	REVISION
1	JAN0615	SL	NEW HOUSE PLAN

NOTE: NON BY-LAW TREES HAVE BEEN REMOVED FROM THE PLANS

SHEET TITLE
T1 - TREE PRESERVATION AND REMOVAL PLAN

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 SGL

SCALE
 AS SHOWN

DATE
 JANUARY 6, 2015

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 SHEET 1 OF 2

