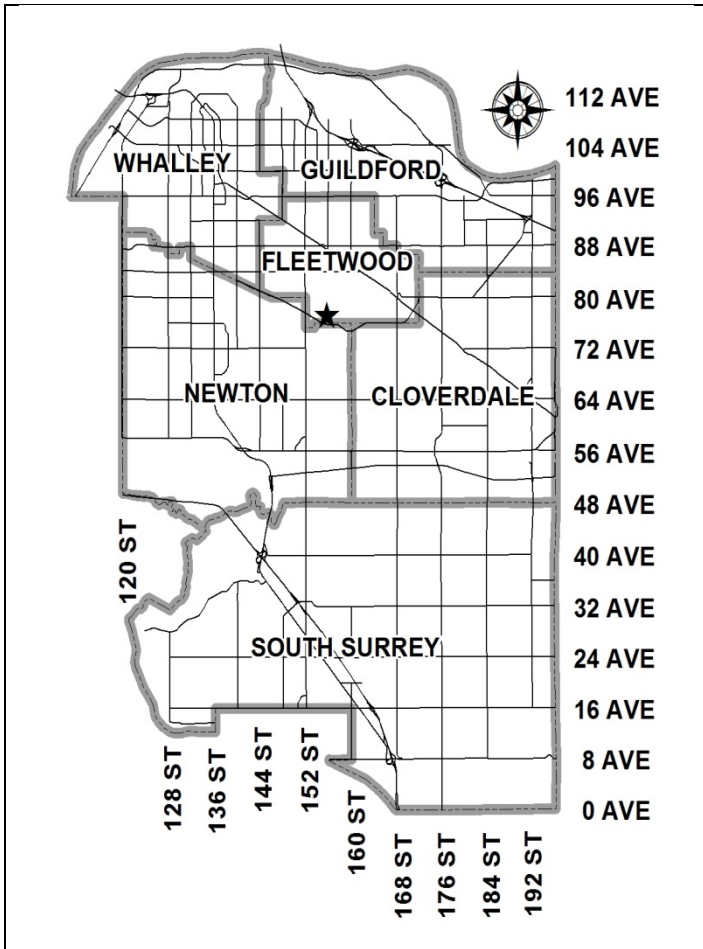


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7915-0275-00

Planning Report Date: November 2, 2015



PROPOSAL:

- **NCP Amendment** from 1/4 Acre Gross Density (4 upa) to Low-Medium Density Cluster (5 upa)
- **Rezoning** from RA to RF

to allow future consolidation with the proposed lot to the south and subdivision into 4 single family lots.

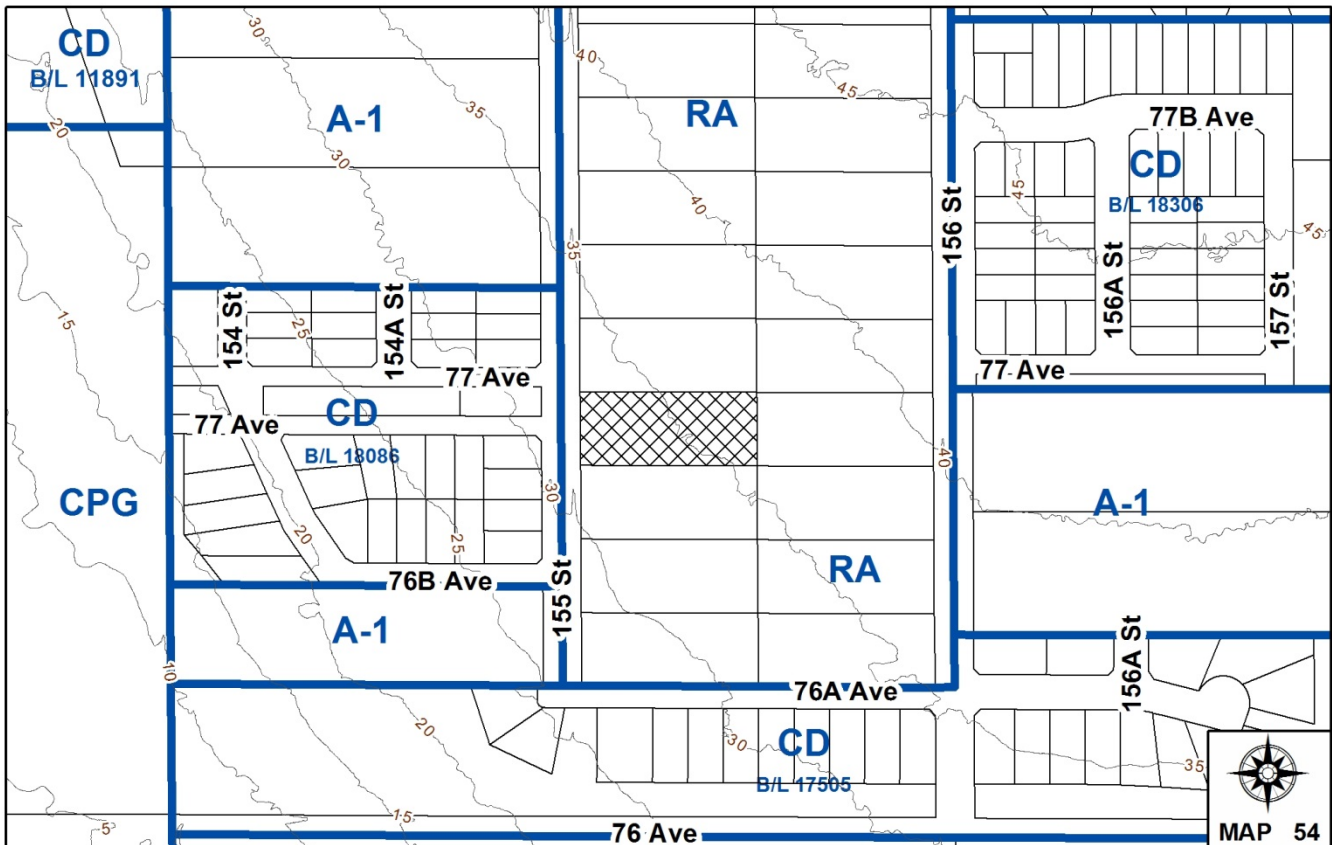
LOCATION: 7706 - 155 Street

OWNERS: Charles P Von Hahn
 Michael P Von Hahn
 Margaret L Tasker

ZONING: RA

OCP DESIGNATION: Urban

NCP DESIGNATION: 1/4 Acre Gross Density 4 (upa)



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- An amendment to the Fleetwood Enclave Infill Area Concept Plan is required to permit an increase in the allowable density from 4 upa to 5 upa.

RATIONALE OF RECOMMENDATION

- Despite the increase in density, the proposed lot areas and lot widths are consistent with those proposed in the Fleetwood Enclave Infill Area Concept Plan, which was approved by Council on March 11, 2013 (Corporate Report No. R049; 2013).
- The applicant will provide cash-in-lieu compensation to fulfill the 8.5% open space requirement of the Fleetwood Enclave Infill Area Concept Plan.
- In order to compensate for the additional pressure that an amendment to the "Low-Medium Density Cluster (5 upa)" designation will have on the larger community, the applicant has agreed to a community benefit in the form of additional cash-in-lieu compensation.
- The proposed increase in density is consistent with the development application immediately south of the subject site (File No. 7914-0357-00). That rezoning application (from RA to RF) was granted Third Reading by Council on May 11, 2015 and requires a similar amendment to the Fleetwood Enclave Infill Area Concept Plan from 4 upa to 5 upa.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the subject site 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) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;
 - (e) registration of a Section 219 Restrictive Covenant for "no build" on a portion of 7706 - 155 Street (proposed Lot 1) until future consolidation with a portion the adjacent property to the south (7690 - 155 Street);
 - (f) the applicant satisfy the deficiency in tree replacement on the site, to the satisfaction of the Planning and Development Department;
 - (g) the applicant address open space requirements of the Fleetwood Enclave Infill Area Concept Plan, to the satisfaction of the General Manager, Planning and Development; and
 - (h) the applicant provide an additional community benefit to address the additional pressure that an amendment to the "Low-Medium Density Cluster (5 upa)" designation will have on the larger community, to the satisfaction of the General Manager, Parks, Recreation and Culture.
3. Council pass a resolution to amend the Fleetwood Enclave Infill Area Concept Plan to redesignate the land from "1/4 Acre Gross Density 4 (upa)" to "Low-Medium Density Cluster (5 upa)" when the project is considered for final adoption.

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:**

- 1 Elementary student at Coyote Creek Elementary School
- 1 Secondary student at Fleetwood Park 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 late 2016.

Parks, Recreation & Culture: Parks notes that an increase in density to "Low-Medium Density Cluster (5 upa)" designation in the Fleetwood Enclave Plan will place additional pressure on parks and open space in the community. Parks supports the proposed amendment with the provision of an appropriate community benefit.

SITE CHARACTERISTICS

Existing Land Use: Residential acreage parcel with existing dwelling, to be demolished.

Adjacent Area:

Direction	Existing Use	NCP Designation	Existing Zone
North:	Single family dwellings on acreage parcels	¼-Acre Density (4 upa)	RA
East:	Single family dwellings on acreage parcels	¼-Acre Density (4 upa)	RA
South:	Single family dwellings on acreage parcels under Application No. 7914-0357-00 to rezone to RF (Third Reading)	¼-Acre Density (4 upa). Proposed for Low-Medium Density Cluster (5 upa).	RA (RF at 3 rd Reading)
West (Across 155 Street):	Single family dwellings under construction and open space	Low Density Cluster (4 upa) and Habitat Corridor	CD By-law No. 18086 (based on RF-G)

SITE CONTEXT

- The 0.35-hectare (0.85-acre) subject site is located in Fleetwood within the area that comprises the Fleetwood Enclave Infill Area Concept Plan ("Fleetwood Enclave Plan" shown as Appendix VII). The Fleetwood Enclave Plan area, which covers approximately 26 hectares (65 acres) of land, consists of large acreage residential properties, and is bordered by an established single family residential neighbourhood to the north, the unopened 76 Avenue right-of-way and ALR to the south, the Eaglequest (Coyote Creek) Golf Course to the west and Fleetwood Park to the east.
- The Fleetwood Enclave Plan was adopted by Council on March 11, 2013 (Corporate Report No. R049). The related Fleetwood Enclave Area Servicing Strategy was approved by Council on September 9, 2013 (Corporate Report No. R161).
- The subject site is designated "Urban" in the Official Community Plan (OCP), following the adoption of OCP By-law No. 18020 (approved by Council on October 20, 2014).
- The subject site is designated "1/4 Acre Gross Density (4 upa)" in the Fleetwood Enclave Plan, and is zoned "One-Acre Residential Zone (RA)".

DEVELOPMENT CONSIDERATIONS

Current Application

- The subject proposal is to redesignate the site in the Fleetwood Enclave Plan from "1/4 Acre Gross Density (4 upa)" to "Low-Medium Density Cluster (5 upa)" and to rezone from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)", in order to allow subdivision into four (4) single family lots at a density of 13 units per hectare (uph) or 5 units per acre (upa), after consolidation with a portion of 7690 – 155 Street to the south, which is currently under Application No. 7914-0357-00 (rezoning from RA to RF at Third Reading). Should Council grant Final Adoption to Application No. 7914-0357-00, proposed Lot 13 will be included in the subject application for the purpose of subdivision.
- A redesignation to increase the density from 10 uph (4 upa) to 13 uph (5 upa) in the Fleetwood Enclave Plan is necessary based on the overall site density of both the subject application and the adjacent application to the south (Application No. 7914-0357-00). When considered collectively, these two applications propose the development of 16 single family lots on a gross site area of 1.4 hectares (3.4 acres) for a gross density of 11.5 uph (4.7 upa).
- The four proposed new lots (proposed Lots 1 to 4) front the new 77 Avenue. The proposed lots range in size from 561 square metres (6,039 sq.ft.) to 567 square metres (6,103sq.ft.), are 19.9 metres (65 ft.) in width and are 28.5 metres (94 ft.) in depth.
- The Fleetwood Enclave Plan development guidelines propose a minimum lot depth of 40 metres (131 ft.), largely because this was the most practical depth after road and open space dedications for lots oriented east-west. The subject application proposes four lots oriented north-south with a depth of 28.5 metres (94 ft.) fronting future 77 Avenue.

- If proposed Lots 1 to 4 were oriented east-west towards 155 Street and 155A Street, it would be possible to achieve a depth of 39.5 metres (130 ft.). However, by orienting these four lots towards 77 Avenue, the lots will face the proposed linear park and habitat corridor within 77 Avenue thereby creating a safer environment for pedestrians.

Biodiversity Conservation Strategy and Open Space

- The Fleetwood Enclave Plan proposes approximately 2.5 hectares (6.2 acres) of total open space, including parkland and pathways, within the Plan area and was developed in accordance with the City of Surrey's *Biodiversity Conservation Strategy* (BCS), which was approved by Council on July 21, 2014 (Corporate Report No. R141). The proposed open space areas on the west, south and east edges of the Fleetwood Enclave Plan area will be maintained as a natural woodland habitat.
- A central concept within the BCS is the "Green Infrastructure Network" (GIN), which identifies large habitat areas throughout the City for protection (referred to as "hubs" and "sites"), and ensures connectivity between them (through "corridors").
- Protecting green infrastructure hubs and sites is critical to preserving natural habitat refuges and a diversity of habitat features, while maintaining and enhancing corridors ensures connectivity between fragmented hubs allowing for genetic variation throughout the City. The closest Biodiversity Hub connection in the GIN to the subject site is the Fleetwood Urban Forest (Fleetwood Park). Corridors are often used to meet several City objectives, including wildlife corridors as well as recreational greenways.
- The open spaces and pathways proposed in the Fleetwood Enclave Plan connect to the existing trail networks that are within the adjacent Fleetwood and Surrey Lake Parks (see Appendix VII). Both Fleetwood Park and Surrey Lake Park are valuable recreational spaces, and high value, ecologically significant hubs. The Fleetwood Enclave Plan has placed a priority on preserving and enhancing these important park spaces/hubs, and on supporting the connections that link the Fleetwood Enclave Plan area to Fleetwood Park and Surrey Lake Park.
- The BCS GIN map identifies a Local BCS corridor (identified as Corridor #81; see Appendix VIII) adjacent to the subject site, in the Fleetwood BCS management area, with a Medium ecological value. The BCS further identifies the GIN area of the subject site as having a Moderately High habitat suitability rating, derived from species at risk presence, species accounts and known ecosystem habitat inventories.
- The BCS recommends a target corridor width of 15 metres (50 ft.), which is to be provided as a linear park bisecting the Fleetwood Enclave neighbourhood. Although the GIN identifies the location of the corridor on an adjacent property, its location has shifted over time as a result of minor modifications to the Fleetwood Enclave Plan, but remains consistent with the intent of the BCS. The applicant is proposing to provide a 1,187-square metre (12,777 sq.ft.), 13-metre (43 ft.) wide portion of the subject site for the linear park, which is 34% of the total gross area of subject site, and 7.5% of the target GIN area.

- The linear park consists of a meandering pathway that is to bisect the neighbourhood from east to west through the middle of 77 Avenue, with vehicle travel lanes located on both the north and south sides of this linear park. This proposed linear park serves two purposes:
 - Designed to incorporate a meandering path, native vegetation and tree coverage, the park will function primarily as an amenity for area residents. With limited vehicle crossings, residents (particularly children) will have the ability to safely cross the neighbourhood, eventually connecting to Fleetwood Park to the east;
 - In addition, consistent with its designation as a local corridor in the GIN, it is designed to provide movement of wildlife species that are tolerant of human disturbance, serving as only one component of a larger regional network; and
 - The design concept, along with the ultimate 15-metre (50 ft.) width of this linear park, allows for the retention or re-planting of tree coverage that is more significant than that found in a typical recreational greenway.
- 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.
- Within the portion of the Fleetwood Enclave Plan area designated "1/4 Acre Gross Density (4 upa)", proposed developments are to provide either 8.5% of the gross site area as open space to allow for the development of the linear park noted above, or to provide compensation in the form of cash-in-lieu for any shortfall in area preserved as open space. This value was determined through the planning process for the Fleetwood Enclave Plan as it allows the Parks, Recreation and Culture Department to acquire and construct the linear park for the portion of the Fleetwood Enclave Plan area situated between 155 Street and 156 Street. For the remaining portions of the linear park within the Fleetwood Enclave Plan area, within the other land use designations, proposed development are to provide 13% of the gross site area as open space or cash-in-lieu compensation.
- As the applicant is proposing to redesignate the subject site to "Low-Medium Density Cluster (5 upa)", the applicant has offered to provide an additional community benefit of 2.25%, resulting in a total open space contribution (or cash-in-lieu equivalent) of 10.75%.

Road Construction Requirements

- The applicant will be required to construct 155 Street and 155A Street to the Neo-traditional Through Local Road standard, and 77 Avenue to a Unique Through Local Road standard fronting the site.

Neighbourhood Character Study and Building Scheme

- The applicant for the subject site has retained Mike Tynan of Tynan Consulting Ltd. as the Design Consultant. The Design Consultant conducted a character study of the surrounding homes and based on the findings of the study, which suggest that the older housing stock in the area does not provide suitable architectural context, has proposed a set of building design guidelines that recommend an updated design standard (Appendix V) consistent with the other new development projects in the Plan area.

Proposed Lot Grading

- In-ground basements are proposed for all lots based on the lot grading (prepared by Hub Engineering Inc.). Basements will be achieved with minimal cut or fill. The information provided has been reviewed by staff and found generally acceptable.

PRE-NOTIFICATION

- Pre-notification letters were sent out on October 16, 2015 to a total of 25 addresses. Staff did not receive any responses.

JUSTIFICATION FOR PLAN AMENDMENT

- The subject site is designated "1/4 Acre Gross Density (4 upa)" in the Fleetwood Enclave Plan (see Appendix VII). This designation comprises all of the properties in the centre of the Fleetwood Enclave Plan area, bounded by the existing single family residential neighbourhood to the north, 76A Avenue to the south, 155 Street to the west, and 156 Street to the east as well as a small area in the northwest corner of the Plan area, west of 155 Street.
- The applicant proposes to redesignate the subject site to "Low-Medium Density Cluster (5 upa)".
- Despite the increase in density, the proposed lot areas and lot widths are consistent with those proposed under the "1/4 Acre Gross Density (4 upa)" designation in the Fleetwood Enclave Plan. As previously noted, the proposed 4 lots range in size from 561 square metres (6,039 sq.ft.) to 567 square metres (6,103 sq.ft.), are 19.9 metres (65 ft.) in width and are 28.5 metres (94 ft.) in depth. The Fleetwood Enclave Plan suggests a minimum lot size of 557 square metres (6,000 sq.ft.), a minimum lot width of 16 metres (52 ft.) and a minimum lot depth of 40 metres (130 ft.) for lots created under the "1/4 Acre Gross Density (4 upa)" designation.
- On March 25, 2015, as part of the application review and public consultation process for Application No. 7914-0357-00 to the south of the subject application, the applicant (who is the same applicant as the subject application) held a Public Information Meeting (PIM) in the community. The PIM was held at Coyote Creek Elementary School to apprise local residents and property owners of the proposed amendment to the Fleetwood Enclave Plan. No objections were raised at that PIM.
- It was anticipated at that time that, if the applicant for Application No. 7914-0357-00 was successful in redesignating that subject site to the south, subsequent development proposals would likely seek similar redesignations to the remaining properties that are designated "1/4 Acre Gross Density (4 upa)". It is also reasonable to assume that the properties within the "Low Density Cluster (4 upa)" designation not currently under application may seek to redesignate to permit similar 5 upa density.
- The buildout scenarios developed for the Fleetwood Enclave Plan projected that the "1/4 Acre Gross Density (4 upa)" designation would yield approximately 79 dwelling units. A

redesignation to "Low-Medium Density Cluster (5 upa)" would result in approximately 20 additional single family lots.

- Similarly, as there are approximately 3.4 hectares (8.5 acres) of land within the "Low Density Cluster (4 upa)" designation not currently under application, a redesignation to "Low-Medium Density Cluster (5 upa)" would result in approximately 8 additional single family lots.
- In total, the projected total number of lots in the Fleetwood Enclave Plan area at buildout could potentially increase by 28 lots, from 240 total lots up to 268 total lots.
- As part of the Engineering Servicing Strategy of the Fleetwood Enclave Plan, the City retained a Transportation consultant, Bunt & Associates Engineering Ltd, to perform a Traffic Impact Assessment (TIA) to identify potential transportation infrastructure improvements. The TIA included an assumption that 56% of the single family lots will include secondary suites, and incorporated this into the trip generation rate.
- Using information from the TIA, Transportation staff determine that an additional 28 lots will result in up to 47 additional peak hour trips to and from the neighbourhood through the intersection of 80 Avenue and 156 Street. Transportation staff anticipates that the intersection will continue to function at an adequate level of service with the potential increase in lots.
- As the size of the proposed lots are consistent with the original intent of the Fleetwood Enclave Plan, and as no concerns were raised by local residents and property owners through the pre-notification process or at the PIM held as part of Application No. 7914-0357-00, and as the applicant is volunteering a community benefit in the form of additional open space dedication or cash-in-lieu of open space contribution, staff support the proposed amendment to the Fleetwood Enclave Plan.

TREES

- Trevor Cox, ISA Certified Arborist of Diamond Head Consulting Ltd prepared an Arborist Assessment for the subject property (see Appendix VI). 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 and Cottonwood Trees			
Red Alder	2	2	0
Cottonwood	1	1	0
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Apple	1	1	0
Big Leaf Maple	24	24	0
Japanese Maple	1	1	0
Coniferous Trees			
Black Spruce	1	1	0
Lawson Cypress	1	1	0
Shore Pine	1	0	1

Tree Species	Existing	Remove	Retain
Western Red Cedar	6	5	1
Total (excluding Cottonwood Trees)	35	33	2
Additional Estimated Trees in the proposed Open Space Area	11	0	11
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		10	
Total Retained and Replacement Trees		12	
Contribution to the Green City Fund		\$17,700	

- The Arborist Assessment states that there are a total of thirty-five (35) mature trees on the site, excluding Alder and Cottonwood trees. Three (3) existing trees, approximately 8 % of the total trees on the site, are Alder and Cottonwood trees. It was determined that two (2) 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.
- The Fleetwood Enclave Plan has placed a priority on preserving and enhancing the existing habitat and open space areas connected to Fleetwood Park, and on supporting the green infrastructure network (i.e. "habitat corridors") that surround and bisect the Fleetwood Enclave. Therefore, the focus will be on the protection and replanting of native trees in the identified open space areas of the Plan.
- Table 1 includes an additional eleven (11) protected trees that are located within the proposed open space. The trees within the proposed open space 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.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 1 to 1 replacement ratio for Cottonwood trees, and a 2 to 1 replacement ratio for all other trees. This will require a total of sixty-nine (69) replacement trees on the site. Since only ten (10) replacement trees can be accommodated on the site (based on an average of 2-3 trees per lot), the deficit of fifty-nine (59) replacement trees will require a cash-in-lieu payment of \$17,700, representing \$300 per tree, 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 155 Street, 155A Street, and 77 Avenue. This will be determined at the servicing agreement stage by the Engineering Department.
- In summary, a total of twelve (12) trees are proposed to be retained or replaced on the site with a contribution of \$17,700 to the Green City Fund, with an additional eleven (11) trees proposed for retention within the future open space.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on October 27, 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"> • Within the Fleetwood Enclave Infill Area Concept Plan area.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> • Density is calculated on the gross site area, as the development is providing cash-in-lieu as compensation for open space. • Secondary suites will be permitted, offering a diversity of housing options.
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> • The development provides open space as a linear park serving as a recreational corridor and wildlife habitat corridor, as identified in the BCS, bisecting the Plan area. • Existing trees are proposed for retention.
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> • The development will connect to several multi-use pathways within adjacent open space and parks.
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> • The development incorporates CPTED principles, such as providing "eyes on the street", and is accessible to outdoor space that is suitable for different age groups.
6. Green Certification (F1)	<ul style="list-style-type: none"> • N/A
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> • N/A

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

- Appendix I. Lot Owners, Action Summary and Project Data Sheets
- 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
- Appendix VII. Fleetwood Enclave Plan
- Appendix VIII. BCS Green Infrastructure Network (GIN) Map

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

CA/dk

Information for City Clerk

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

1. (a) Agent: Name: Mike Kompter
 Hub Engineering Inc.
 Address: #101 - 7485 - 130 Street
 Surrey, B.C. V3W 1H8

 Tel: 604-572-4328

2. Properties involved in the Application

- (a) Civic Address: 7706 - 155 Street

- (b) Civic Address: 7706 - 155 Street
 Owners: Margaret L Tasker
 Michael P Von Hahn
 Charles P Von Hahn

 PID: 010-026-258
 Lot 14 Section 23 Township 2 Plan 14887 NWD

3. Summary of Actions for City Clerk's Office

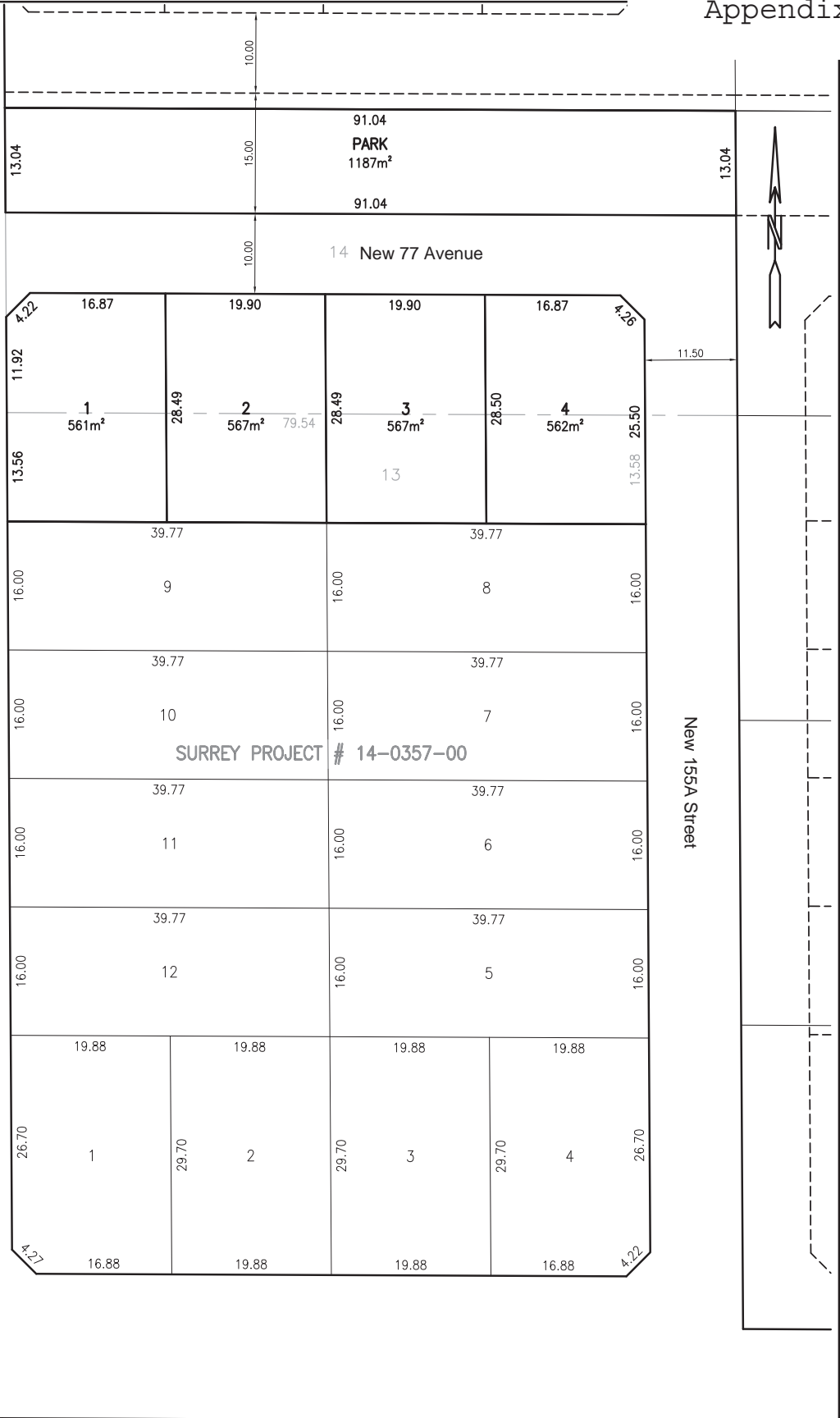
- (a) Introduce a By-law to rezone the property.

SUBDIVISION DATA SHEET

Proposed Zoning: RF

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	0.85 (1.12 after consolidation)
Hectares	0.35 (0.45 after consolidation)
NUMBER OF LOTS	
Existing	1
Proposed	4
SIZE OF LOTS	
Range of lot widths (metres)	19.9 metres
Range of lot areas (square metres)	561 – 567 sq. metres
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	11.5 uph / 5 upa (based on overall site area)
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	38%
Estimated Road, Lane & Driveway Coverage	23%
Total Site Coverage	61%
PARKLAND	
Area (square metres)	1,187 sq. metres
% of Gross Site	34% (26% of the ultimate site area after consolidation)
Required	
PARKLAND	
5% money in lieu	NO
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

155 STREET



SURREY PROJECT # 14-0357-00

76A AVENUE

Hub Engineering Inc.
Engineering and Development Consultants



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: 7644, 7666, 7690, 7706 - 155 ST			
DRAWING TITLE: RESIDENTIAL SUBDIVISION					
PROJECT No. 14079	DATE: JUN 2015	LEGAL:	SCALE: 1:500	MUNICIPAL PROJECT No:	

G:\Projects\14079\140 Drawings\Layouts\Lot_Layout - Op. 10a - Jun 29, 2015.dwg [Lot. Portrait: 11x17] 10/28/2015 12:29PM

INTER-OFFICE MEMO

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

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

DATE: **October 27, 2015** PROJECT FILE: **7815-0275-00**

RE: **Engineering Requirements
Location: 7706 - 155 Street**

NCP AMENDMENT

There are no engineering requirements relative to NCP Amendment.

REZONE/SUBDIVISION***Property and Right-of-Way Requirements***

- Dedicate 11.5 m for 155A Street;
- Dedicate 10.0 m for 77 Avenue;
- Dedicate 3.0 m x 3.0 m corner cuts at the intersections; and
- Provide 0.5 m wide for maintenance of sidewalk and service connections.

Works and Services

- Construct east side of 155 Street to Neo-Traditional Through Local standard;
- Construct 155A Street to Neo-Traditional (Half Road) Through Local standard;
- Construct 77 Avenue to Unique Through Local standard;
- Construct sanitary main and storm main on 155 Street, and water main, sanitary sewer main and storm main on 155A Street and on 77 Avenue to service the site;
- Secure and provide off-site SROW's for the proposed works;
- Provide working easement from applicable neighbouring properties;
- Submit arborist report specific to impact to off-site trees from proposed works;
- Register restrictive covenants for on-site stormwater management and features; and
- Pay applicable sanitary and drainage latecomer fees.

A Servicing Agreement is required prior to Rezoning and Subdivision.

R. Dubé

RD
Rémi Dubé, P.Eng.
Development Services Manager

HB



Thursday, October 22, 2015
Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 15 0275 00

SUMMARY

The proposed 4 single family lots are estimated to have the following impact on the following schools:

Projected # of students for this development:

Elementary Students:	1
Secondary Students:	1

September 2014 Enrolment/School Capacity

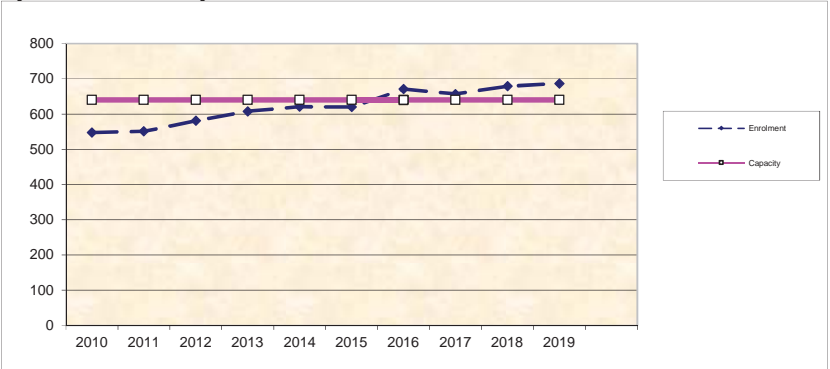
Coyote Creek Elementary	
Enrolment (K/1-7):	73 K + 548
Capacity (K/1-7):	40 K + 600
Fleetwood Park Secondary	
Enrolment (8-12):	1321
Nominal Capacity (8-12):	1200
Functional Capacity*(8-12):	1296

School Enrolment Projections and Planning Update:

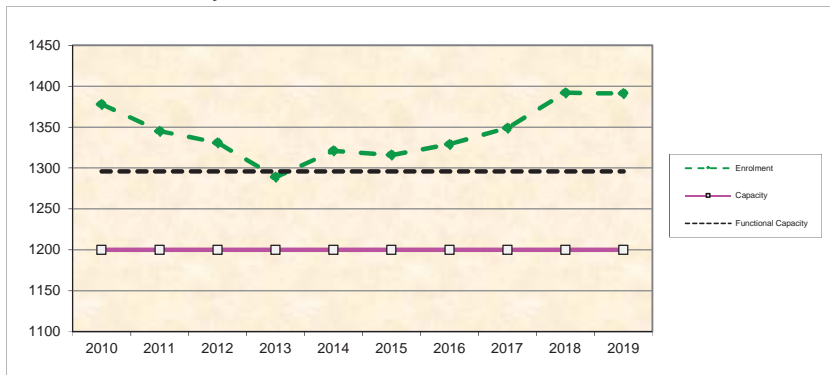
The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

Capacity for Coyote Creek Elementary in the table below includes the main school building (40K + 500) plus a modular classroom complex with capacity for 100 students. The projections below include the estimated enrolment growth from The Enclave and other development in the catchment area. Both the elementary school and secondary school are projected to be at or over capacity in the near future and portables or catchment changes may be required to balance enrolment in the future.

Coyote Creek Elementary



Fleetwood Park 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: 7915-0139-00
 Project Location: 7706, 7728, 7748, 7768, 7784 - 155 Street, 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:

The subject site is located in an old growth area that is being redeveloped at a rapid pace, as evidenced by several new applications in the immediate area. There is an eight lot RF zone development (7914-0357-00) under application located adjacent to the south side of the subject site, which is owned by the same developer as the subject site. West, and opposite of the subject site an application for a 15 lot RF and RF12 zone site (7913-0017-00). South of 7913-0017-00 and west of the subject site is a 32 lot RF and RF12 site. These nearby sites provide a suitable source of "regulations context" for the subject site. (Therefore, building scheme regulations at the subject site will be similar to those of the aforesaid nearby sites).

This area was built out over a time period spanning from the 1950's to the 1970's. The age distribution from oldest to newest is: 1950's (21%), 1960's (64%), and 1970's (14%). A majority of homes in this area have a floor area in the under 1000 sq.ft. - 1500 sq.ft. size range. Home size distribution is: under 1000 sq.ft. (29%), 1000 - 1500 sq.ft. (29%), 1501 - 2000 sq.ft. (21%), 2001 - 2500 sq.ft. (14%), 2501 - 3000 sq.ft. (7%). Styles found in this area include: "Old Urban" (93%), "West Coast Traditional (French Provincial emulation)" (7%). Home types include: Bungalow (71%), Split Level (14%), Basement Entry (14%).

Massing scale (front wall exposure) characteristics include: Low mass structure (71%), Mid-scale massing (21%), High scale, box-like massing (7%). The scale (height) range for front entrance structures include: One storey, understated front entrance (14%), and one storey front entrance (86%).

The range of roof slopes found in this area is: flat (1% slope for drainage) (7%), 2:12 (7%), 3:12 (13%), 4:12 (33%), 5:12 (27%), 8:12 (7%), 12:12 (7%). Main roof forms (largest upper floor truss spans) include: Main common gable roof (93%), Main Mansard roof (7%). Feature roof projection types include: None (36%), and Common Gable (64%). Roof surfaces include: Tar and gravel (7%), Roll roofing (7%), Interlocking tab type asphalt shingles (40%), rectangular profile type asphalt shingles (33%), and cedar shingles (13%).

Main wall cladding materials include: Horizontal cedar siding (13%), Horizontal Waney edge cedar siding (27%), Vertical channel cedar siding (7%), Horizontal vinyl siding (13%), Vertical vinyl siding (7%), and Stucco cladding (33%). Feature wall trim materials used on the front facade include: no feature veneer (54%), brick feature veneer (15%), wood wall shingles accent

(8%), and horizontal cedar accent (23%). Wall cladding and trim colours include: Neutral (52%), Natural (24%), and Primary derivative (24%).

Covered parking configurations include: No covered parking (13%), Single carport (19%), Double carport (19%), Single vehicle garage (13%), and Double garage (38%).

A variety of landscaping standards are evident, ranging from "natural state with substantial underbrush and native trees" to an "average old suburban" standard. Driveway surfaces include: Gravel (15%), and asphalt (85%).

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

- 1) **Context Homes:** The housing stock in the area surrounding the subject site does not provide suitable architectural context for a post year 2010 RF-12 and RF zone development. Massing scale, massing designs, roof designs, construction materials, and trim and detailing elements have improved significantly, and average home size has increased substantially since most homes in this area were constructed. It is more sensible therefore, to use updated standards that result in reasonable compatibility with the older homes and that also facilitate the improvement in standards over time, than it is to specifically emulate the older homes by building to the older standards. It should be noted that although there are no context homes in the immediate area, other than some new homes on the south side of 76A Avenue (15500 block), there are three new applications in the immediate area that provide suitable regulations context for the subject site.
- 2) **Style Character :** Styles recommended for this site include "Neo-Traditional" and "Neo-Heritage", and compatible styles as determined by the design consultant. 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 :** Most existing homes are small old Bungalows which are not suitable for use on most new RF-12 and RF zoned lots. 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-12 and 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 proportions should be located so as to create balance across the façade.
- 5) **Front Entrance Design :** Front entrance porticos on all homes in this area are one storey in height. However, the existing housing stock will not be emulated, and in fact, most of the existing housing stock will be demolished as a result of the build-out of the subject site and the aforesaid nearby developments. The most common entrance height standard for new RF-12 developments is in a height range from one to 1 ½ storeys. 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, and brick. 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 2010 RF and RF-12 developments.

- 7) **Roof surface :** This is a new growth area in which most new homes will have a shake profile asphalt shingle roof. The asphalt roof characteristic will be readily identifiable soon, and a single home with a roof surface other than asphalt shingles would stand out as inconsistent. Therefore, to ensure consistency of character, only shake profile asphalt shingles are recommended.
- 8) **Roof Slope :** Most existing homes have low slope roofs that are not suitable for use on a post year 2010 RF-12 and RF zone development. Roof slopes of 8:12 or higher are recommended to ensure that homes appear style-authentic within the proposed style range.

Streetscape: The subject site is located in the 7600, 7700, and 7800 blocks of 155 Street. Lots on the west side of 155 Street are large (10,000m²) A-1 zone lots and lots on the east side are large (3500 m²) RA zoned lots all of which are landscaped from "near natural state" to "modest suburban" standards. The housing stock is comprised mainly of 40-60 year old, 1000-1500 square foot Bungalows with simple massing designs, simple low slope common gable roof forms and asphalt shingle or cedar shake roofs.

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”, or compatible style as determined by the design consultant. 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)

Existing neighbouring homes do not provide suitable context for the proposed RF zone homes at the subject site. Interfacing treatments are therefore not contemplated. Rather, massing design, construction materials, and trim element treatments will meet or exceed standards commonly found in RF developments constructed in Surrey subsequent to the year 2010.

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 in subdued tones such as navy blue, colonial red, or forest green are not recommended for main cladding materials, but could be considered for trim elements. “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.

Roof Materials/Colours:

Only shake profile asphalt shingles with a raised ridge cap and new environmentally sustainable roofing products providing that aesthetic properties of the new materials are equal to or better than asphalt shingles, as determined by the consultant. Greys, browns, or black 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:

Significant, readily identifiable architectural features are provided on both the front and flanking street sides of the dwelling, resulting in a home that architecturally addresses both streets. One-storey elements on the new home shall comprise a minimum of 40 percent of the width of the front and flanking street elevations of the single family dwelling. The upper floor is set back a minimum of 0.9 metres [3'- 0"] from the one-storey elements.

Landscaping:

Moderate modern urban standard: Tree planting as specified on Tree Replacement Plan plus minimum 20 shrubs of a minimum 3 gallon pot size. Corner lots shall have an additional 10 shrubs of a minimum 3 gallon pot size, planted in the flanking street sideyard. Sod from street to face of home. Driveways: exposed aggregate, interlocking masonry pavers, or stamped concrete.

Compliance Deposit: \$5,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. **Date:** August 6, 2015

Reviewed and Approved by:  **Date:** August 6, 2015

Table 4. Tree Preservation Summary

TREE PRESERVATION SUMMARY	
Surrey Project No:	15-0275
Address:	7706 155 th Street, 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
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)	38
Protected Trees to be Removed	36
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	2
Total Replacement Trees Required:	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 3 X one (1) = 3	69
- All other Trees Requiring 2 to 1 Replacement Ratio 33 X two (2) = 66	
Replacement Trees Proposed	10
Replacement Trees in Deficit	59
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	11
Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	
Total Replacement Trees Required:	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio ___ X one (1) = 0	0
- All other Trees Requiring 2 to 1 Replacement Ratio X two (2) = 0	
Replacement Trees Proposed	
Replacement Trees in Deficit	0

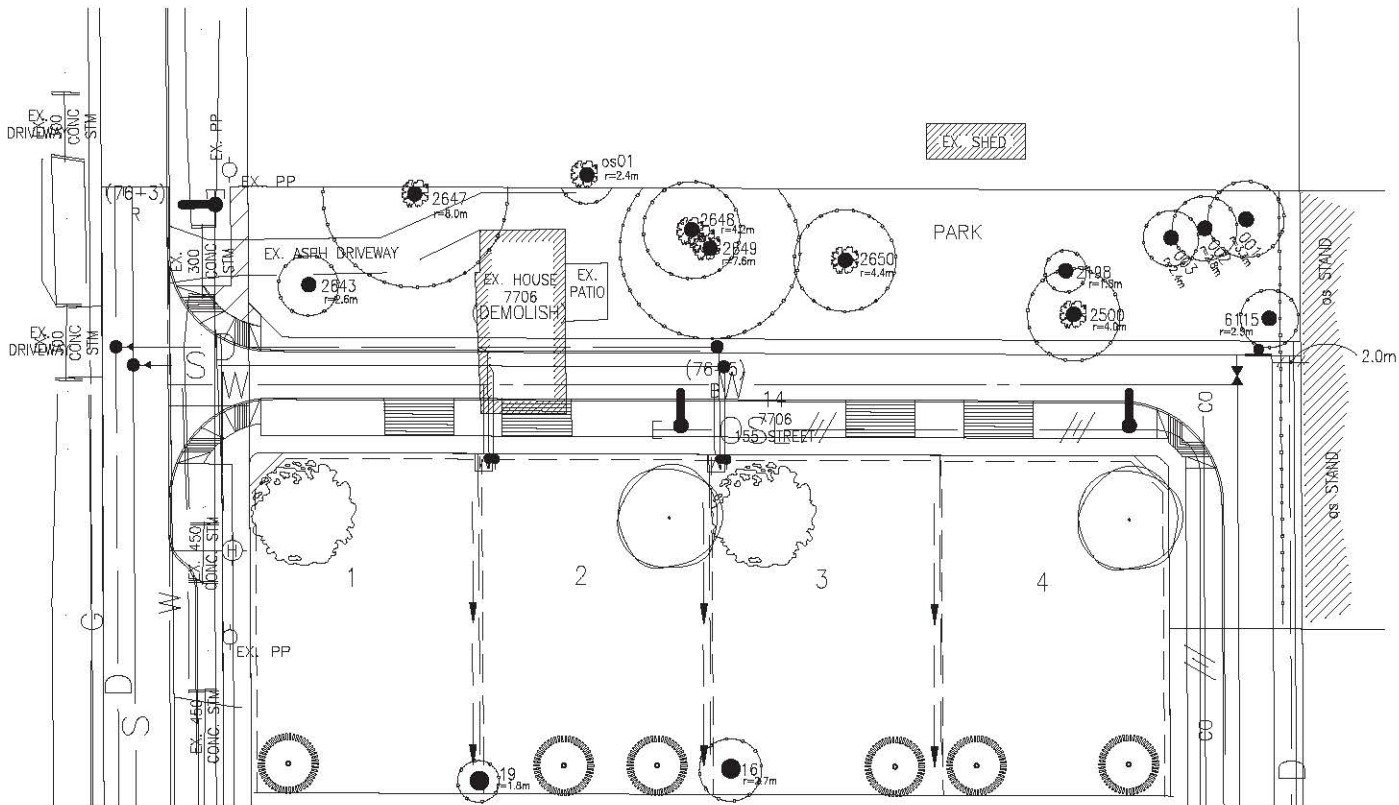
Summary prepared and
submitted by:

Arborist



October
28, 2015

Date



LEGEND

- = TREES TO BE RETAINED
- ⊗ = TREES TO BE REMOVED
- = PROTECTION BARRIER

DATE	DESCRIPTION	BY
10/1/15	additional park	1

C.KAVOLINAS & ASSOCIATES INC.
 BC/CA BC/CA
 2662 KINGSWAY COURT
 ABOTTSFORD, B.C.
 V3G 3J8
 PHONE (804) 857-3376

CLIENT
 MR. MIKE HEDDERLEY
 HLB ENGINEERING INC.
 SUITE 212
 12892 - 78 AVENUE
 SURREY, B.C.
 V3W 2J8
 804-572-4328

SITE
 PLAN VIEW
 TREE LOCATION PLAN
 TREE REPLACEMENT PLAN
 2 LOT SUBDIVISION
 7706 - 158 STREET
 SURREY, B.C.

SCALE	1:500	DATE	OCT/15
DRAWN	DN/C	CHECKED	
INCH	DN/C	DATE	
APPROVED	HS/MLT		

PROJECT	JOB NO.
	DRAWING NO.
	TR-2

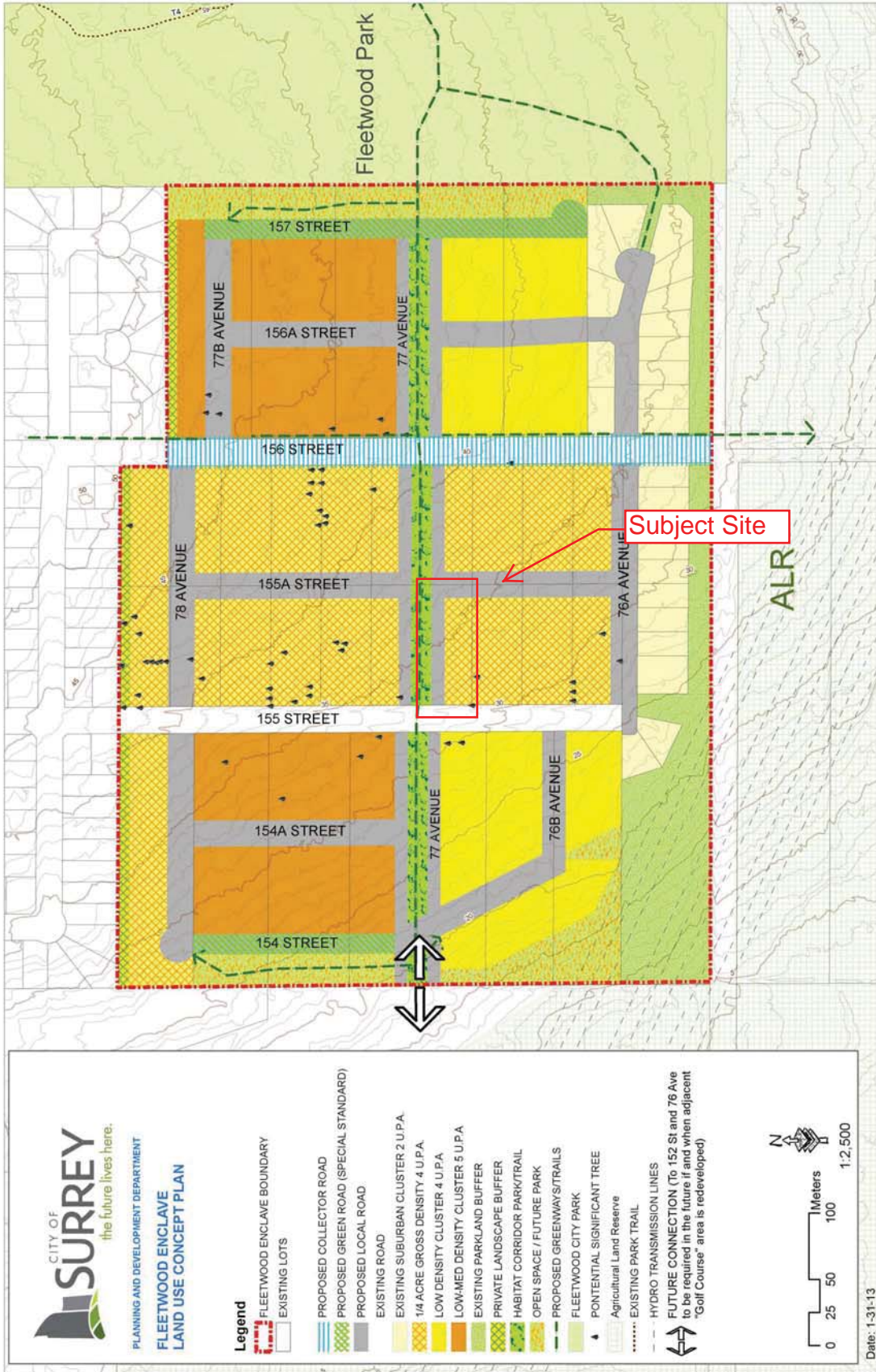
KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	REMARKS
	PRUNUS YEDONENSIS "AKEBONO"	DAYBREAK CHERRY	2	6 CM. CAL.	AS SHOWN	B. & B.
	CORNUS FLORIDA "RUBRA"	RED FLOWERING DOGWOOD	2	6 CM. CAL.	AS SHOWN	B. & B.
	PICEA OMORICA	SERBIAN SPRUCE	6	1.00 METERS	AS SHOWN	B. & B.

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 BC/CA/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 #18100







Approximate Location of Subject Site



Biodiversity Strategy

GREEN INFRASTRUCTURE NETWORK

- GREEN INFRASTRUCTURE NETWORK
- PROTECTED HUBS AND SITES
- UNPROTECTED HUBS AND SITES
- REGIONAL CORRIDORS
- LOCAL CORRIDORS
- SUPPORTING PARK SITES
- AGRICULTURAL LAND RESERVE

JUNE 2014

Data Sources: City of Surrey
 Data Developed By: Diamond Head Consulting Ltd.
 Map Design: Ecoplan International

