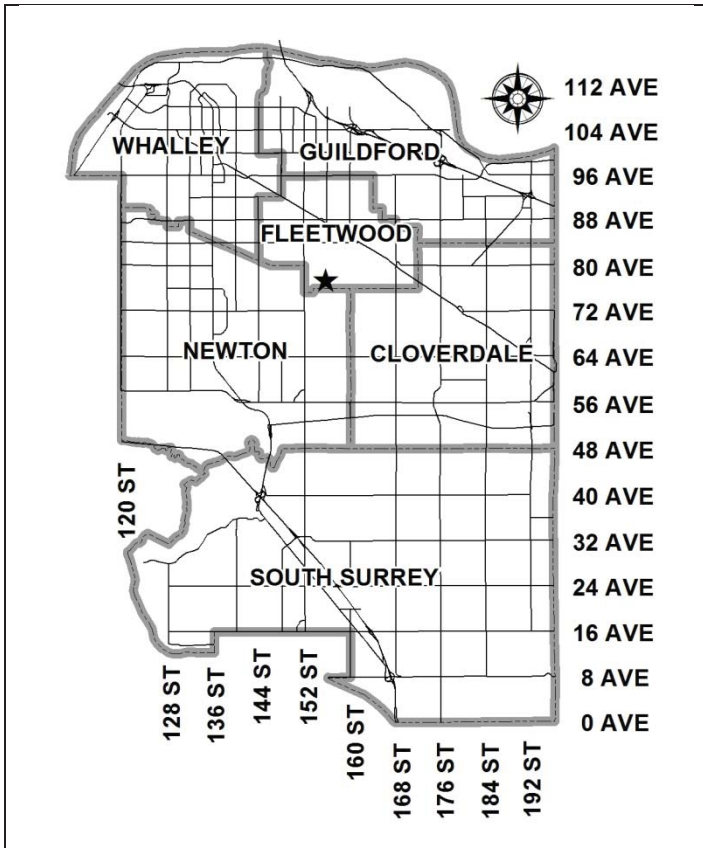


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7916-0223-00

Planning Report Date: September 12, 2016



PROPOSAL:

- **NCP Amendment** from ¼ Acre Gross Density (4 upa) to Low-Medium Density Cluster (5 upa)
 - **Rezoning** from RA to RF
- to allow subdivision into 8 single family lots.

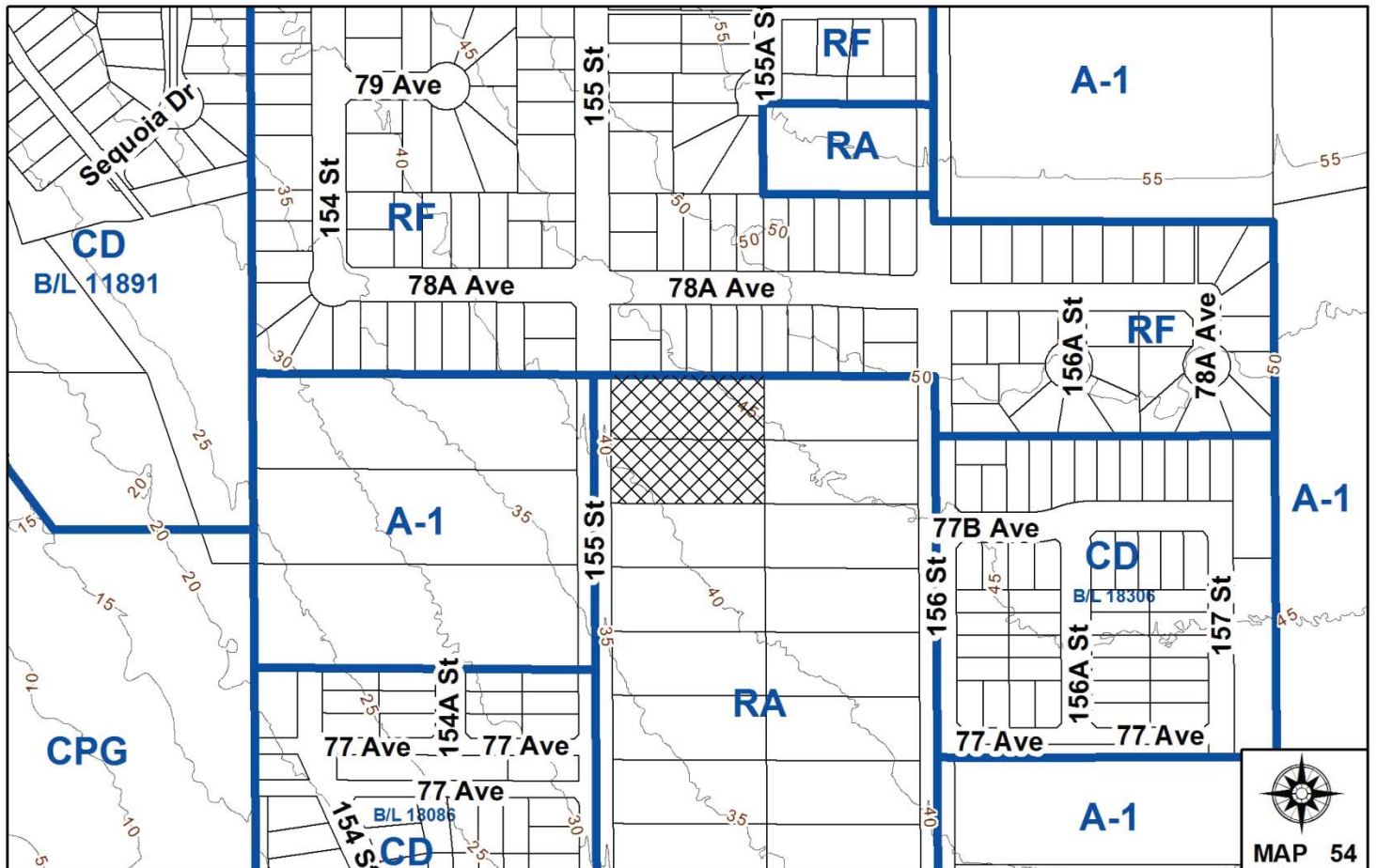
LOCATION: 7804 and 7824 - 155 Street

OWNERS: Karamjit S Sandhar et al

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 units per acre (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 applications to the south of the subject site (File No. 7915-0379-00, 7916-0066-00, 7915-0275-00 and 7914-0357-00). Each of these rezoning applications (from RA to RF) has been granted Third Reading by Council and requires a similar amendment to the Fleetwood Enclave Infill Area Concept Plan from 4 upa to 5 upa for which the applicants have agreed to a community benefit (additional cash-in-lieu of open space compensation).

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) submission of a finalized landscape plan and cost estimate for the landscape buffer along the north lot line of proposed Lots 1 to 6 to the satisfaction of the City Landscape Architect;
 - (e) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department;
 - (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;
 - (h) the applicant provide an additional community benefit to address the additional pressure that an amendment to the "Low-Medium Density Cluster (5 u.p.a.)" designation will have on the larger community, to the satisfaction of the General Manager, Parks, Recreation and Culture;
 - (i) registration of a Section 219 Restrictive Covenant to require a minimum 15-metre (49-ft.) rear yard setback to the principal building and to ensure installation and maintenance of the 7.5-metre (25-ft.) wide landscape buffer at the rear of proposed Lots 1 to 6; and
 - (j) registration of a Section 219 Restrictive Covenant for "no build" on a portion of proposed Lot 6 until future consolidation with a portion of the adjacent property to the east (7819 – 156 Street).
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:**

4 Elementary students at Coyote Creek Elementary School
2 Secondary students 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 Summer 2017.

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 parcels with existing houses, to be demolished.

Adjacent Area:

Direction	Existing Use	OCP/NCP Designation	Existing Zone
North:	Single family dwellings.	Urban in OCP	RF
East:	Single family dwelling on acreage parcels.	1/4-Acre Density (4 upa)	RA
South:	Single family dwelling on acreage parcel under Application No. 7916-0080-00 (to be considered by Council on September 12, 2016).	1/4-Acre Density (4 upa). Proposed for Low-Medium Density Cluster (5 upa).	RA (RF proposed)
West (Across 155 Street):	Single family dwellings on acreage parcels under Application No. 7915-0448-00 (under review).	Low-Medium Density Cluster (5 upa) and 1/4-Acre Density (4 upa). Proposed for Low-Medium Density Cluster (5 upa).	A-1 (CD based on RC and RF-12 under review)

SITE CONTEXT

- The 0.69-hectare (1.70-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 or recently created single family lots, 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 eight (8) single family lots at a density of 4m7 units per acre (upa) or 11.6 units per hectare (uph).
- A redesignation to increase the density from 4 upa (10 uph) to 5 upa (13 uph) in the Fleetwood Enclave Plan is necessary based on the proposed overall gross site density of 4.7 upa (11.6 uph).
- Six of the proposed new lots (proposed Lots 1 to 6) front a new 78 Avenue. These proposed lots are approximately 600 square metres (6,458 sq.ft.) in area, 15 metres (50 ft.) in width, and 40 metres (131 ft.) in depth.
- The remaining two lots (proposed Lots 7 and 8) front 155 Street and a new 155A Street, respectively. These proposed lots are approximately 708 square metres (7,621 sq.ft.) in area, 17.9 metres (59 ft.) in width and 39.8 metres (131 ft.) in depth.
- A "no build" restrictive covenant is required over a portion of proposed Lot 6 until future consolidation with a portion of the adjacent property to the east (7819 – 156 Street).

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) to the south of 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 and surrounding area 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. 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 developments are to provide 13% of the gross site area as open space or cash-in-lieu of open space compensation.
- The proposed linear park does not bisect the subject site. The applicant will therefore be required to provide 8.5% cash-in-lieu of open space.
- 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 cash-in-lieu of open space contribution of 10.75%.

Private Landscape Buffer

- Proposed Lots 1 through 6 will have increased rear yard setbacks of 15 metres (49 ft.) to facilitate the installation of a 7.5-metre (25-ft.) wide landscape buffer as per the Fleetwood Enclave Plan.
- The intent of the landscape buffer on private property is to soften the transition between the new developments in the Fleetwood Enclave and the established single family residential community to the north. The landscape buffers will be installed prior to the issuance of building permits on these lots and will be comprised of existing trees, new coniferous and deciduous trees and native vegetation. A corresponding Section 219 Restrictive Covenant (Landscaping Buffer) is to be registered on proposed Lots 1 through 6 to increase the rear yard building setback and to secure installation and maintenance of these buffers. See Trees Section for details regarding the proposed landscape buffer.

Road Construction Requirements

- The applicant will be required to construct 155 Street, 155A Street and 78 Avenue to the Neo-Traditional 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 June 29, 2016 to a total of 90 addresses and the development sign was installed on August 16, 2016. Staff received the following response:

- A resident adjacent to the proposed development expressed concern that the proposed lot depths of 40 metres (131 ft.) for proposed Lots 1 through 6 will impact their ability to independently develop their property in the future.

(Staff commented to the resident that the 40-metre (131-ft.) depths have been proposed in order to accommodate the required 7.5-metre (25-ft.) landscape buffer on the northern portion of the lots as per the Fleetwood Enclave Plan and to ensure that the lots still have functional yards.

Staff also advised that the proposed lot depths do not preclude them from future development, however they will need to cooperate with other property owners in the future, as per the land consolidation areas identified by the Fleetwood Enclave Plan.)

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 generally consistent with those proposed under the "1/4 Acre Gross Density (4 upa)" designation in the Fleetwood Enclave Plan. As previously noted, the proposed 8 lots range from approximately 600 square metres (6,458 sq.ft.) to 708 square metres (7,621 sq.ft.), are 15 metres (50 ft.) to 17.9 metres (59 ft.) in width and 39.8 metres (131 ft.) to 40 metres (131 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 southwest of the subject application, the applicant 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 received Council support for redesignating that subject site to the southwest, 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 a 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.
- 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 determined 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 anticipate 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 an additional cash-in-lieu of open space contribution, staff support the proposed amendment to the Fleetwood Enclave Plan.

TREES

- Michael Harray, 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:

Table 1: Summary of Tree Preservation by Tree Species:

Tree Species	Existing	Remove	Retain
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Apple	1	1	0
Bigleaf Maple	3	3	0
Bitter Cherry	1	1	0
Cherry	2	2	0
Japanese Maple	1	1	0
Norway Maple	1	1	0
Paper Birch	4	4	0
Red Oak	1	1	0
Weeping Willow	1	1	0
Coniferous Trees			
Black Pine	3	2	1
Douglas Fir	2	1	1
Lawson Cypress	1	1	0
Shore Pine	1	0	1
Western Redcedar	21	21	0
Total (excluding Alder and Cottonwood Trees)	43	40	3
Total Replacement Trees Proposed (excluding Boulevard Street Trees)		21	
Total Retained and Replacement Trees		55	
Contribution to the Green City Fund		\$11,200	

- The Arborist Assessment states that there are a total of 43 mature trees on the site, none of which are Alder or Cottonwood trees. It was determined that three (3) 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.
- Approximately thirty-one (31) additional trees are proposed to be planted within the landscape buffer on private property at the north end of the subject site (located at the rear of proposed Lots 1 through 6). The project arborist is proposing a double row of trees be planted amongst the existing trees, primarily low maintenance indigenous species including Maple, Sitka Spruce, Western Hemlock, and Western Red Cedar. Large boulders will be placed to delineate the southern edge of the landscape buffer.
- For those trees that cannot be retained, the applicant will be required to plant trees on a 2 to 1 replacement ratio. This will require a total of eighty (80) replacement trees on the site. Only twenty-one (21) replacement trees can be accommodated on the site (based on an average of 3 trees per lot), plus the proposed thirty-one (31) trees in the landscape buffer, for a total of fifty-two (52) replacement trees. The deficit of twenty-eight (28) replacement trees will require a cash-in-lieu payment of \$11,200, representing \$400 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 78 Avenue. This will be determined by the Engineering Department during the servicing design review process.
- In summary, a total of fifty-five (55) trees are proposed to be retained or replaced on the site with a contribution of \$8,400 to the Green City Fund.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on May 16, 2016. 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 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 incorporates Low Impact Development Standards such as natural landscaping. • The development will contribute to the acquisition and development of open space in the neighbourhood which is to be provided as a linear park bisecting the Plan area.

Sustainability Criteria	Sustainable Development Features Summary
	<ul style="list-style-type: none"> Some existing trees are proposed for retention.
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 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. Landscape Buffer Plan
- Appendix VIII. Fleetwood Enclave Plan and Instream Amendments
- Appendix IX. BCS Green Infrastructure Network (GIN) Map

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

LM/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: 12992 - 76 Avenue, Suite 212
 Surrey, BC V3W 2V6

 Tel: 604-572-4328

2. Properties involved in the Application
 - (a) Civic Address: 7824 - 155 Street
 7804 - 155 Street

 - (b) Civic Address: 7824 - 155 Street
 Owner: Karamjit S Sandhar
 PID: 010-017-496
 Lot 8 Section 23 Township 2 Plan 14887 New Westminster District

 - (c) Civic Address: 7804 - 155 Street
 Owner: 1073934 BC Ltd
 Director Information:
 Victor Aujla
 Gurinder Dhaliwal

 Officer Information:
 None

 PID: 010-017-518
 Lot 9 Section 23 Township 2 Plan 14887 New Westminster District

3. Summary of Actions for City Clerk's Office
 - (a) Introduce a By-law to rezone the site.

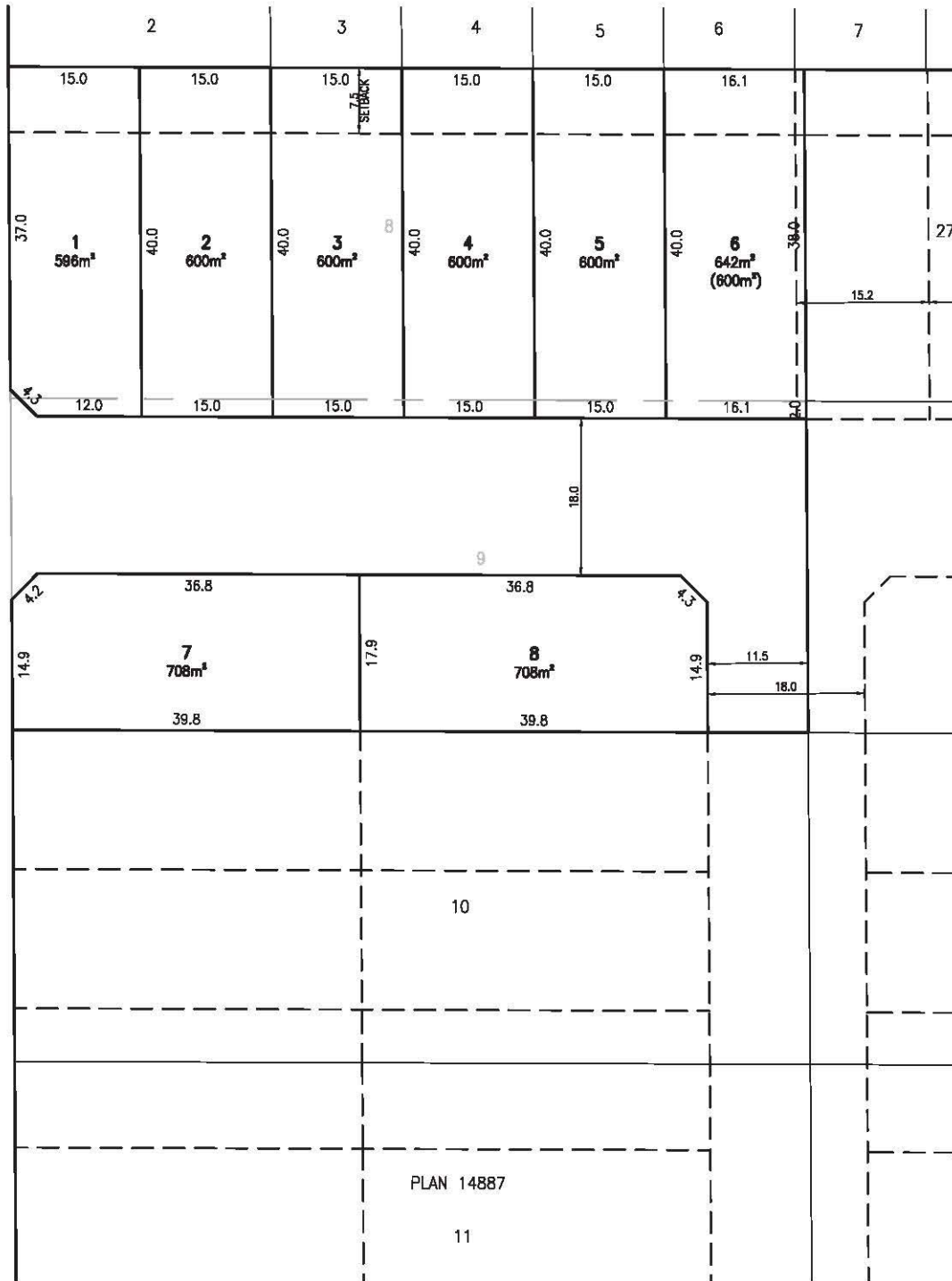
SUBDIVISION DATA SHEET

Proposed Zoning: RF

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	1.7 acres
Hectares	0.69 hectares
NUMBER OF LOTS	
Existing	2
Proposed	8
SIZE OF LOTS	
Range of lot widths (metres)	15 - 17.9 m
Range of lot areas (square metres)	596 - 708 m ²
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	11.6 lots/hectare & 4.7 lots/acre
Lots/Hectare & Lots/Acre (Net)	16 lots/hectare & 6.4 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	56%
PARKLAND	
Area (square metres)	N/A
% of Gross Site	N/A
Required	
PARKLAND	
5% money in lieu	YES (plus additional)
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



Hub Engineering Inc.

Engineering and Development Consultants



Suite 212, 12992 - 76 Avenue, Surrey, B.C. V3W 2V6
 tel: 604-572-4328 | fax: 604-501-1625 | mail@hub-inc.com | www.hub-inc.com

CLIENT:	PROJECT: 7804 & 7824 - 156 STREET, SURREY		
DRAWING TITLE: RESIDENTIAL SUBDIVISION			
PROJECT No. 16036	DATE: AUG 2016	LEGAL:	SCALE: 1:500
MUNICIPAL PROJECT No:			

PRELIMINARY PLAN - SUBJECT TO APPROVAL(S) FROM FEDERAL, PROVINCIAL AND LOCAL AUTHORITIES

G:\Projects\16036\16036.dwg Drawings\Layouts\Lot_Layout - Op 2 - Aug 23, 2016.dwg [Lot Portrait: 11x17] 8/24/2016 11:10AM

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

FROM: **Development Project Engineer, Engineering Department**

DATE: **August 25, 2016** PROJECT FILE: **7816-0223-00**

RE: **Engineering Requirements
Location: 7804 & 7824 - 155 Street**

NCP AMENDMENT

There are no engineering requirements relative to the NCP Amendment.

REZONING AND SUBDIVISION

Property and Right-of-Way Requirements

- Dedicate 18.0 m for the 78 Avenue Local Road allowance;
- Dedicate 11.5 m towards 155A Street 18.0 m Local Road allowance;
- Dedicate 3.0 m x 3.0 m corner cuts at the intersections; and
- Provide 0.5 m wide statutory rights-of-ways along frontages.

Works and Services

- Construct east side of 155 Street to Local Road standard;
- Construct 155A Street to Local Half Road standard;
- Construct 78 Avenue to Local Road standard;
- Construct sidewalk under Development Coordinated Works on 155 Street;
- Construct sanitary main, storm main and water main on 155A Street and 78 Avenue and sanitary main and storm main on 155 Street to service the site;
- Submit arborist report regarding impact to off-site trees from proposed works;
- Secure and provide applicable off-site working easements; and
- Register restrictive covenants for on-site stormwater management features, if applicable.

A Servicing Agreement is required prior to Rezoning and Subdivision.



Robert Cooke, Eng.L.
Development Project Engineer

HB



Monday, July 25, 2016
 Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 16 0223 00

SUMMARY

The proposed 8 Single family with suites are estimated to have the following impact on the following schools:

Projected # of students for this development:

Elementary Students:	4
Secondary Students:	2

September 2015 Enrolment/School Capacity

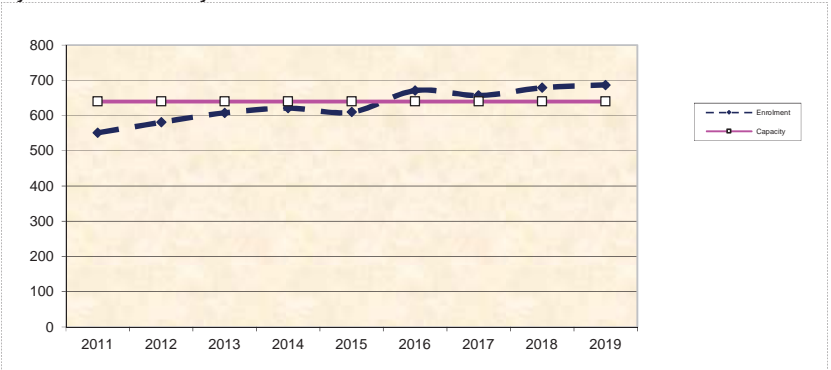
Coyote Creek Elementary	
Enrolment (K/1-7):	61 K + 549
Capacity (K/1-7):	40 K + 600
Fleetwood Park Secondary	
Enrolment (8-12):	1371
Nominal Capacity (8-12):	1200
Functional Capacity*(8-12):	1296

School Enrolment Projections and Planning Update:

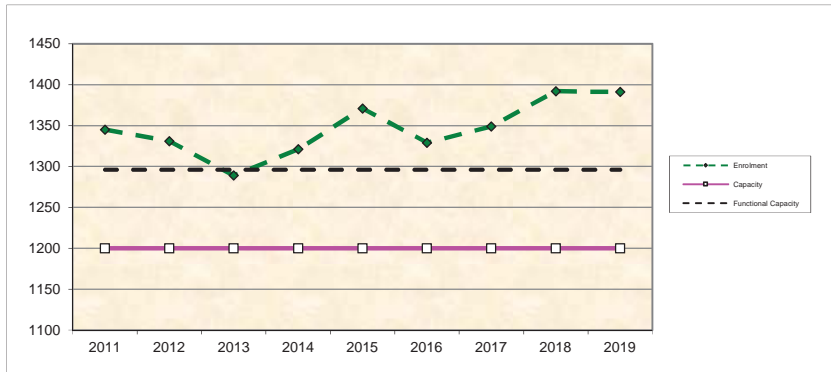
The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

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 phased 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: 7916-0223-00
 Project Location: 7804 and 7824 - 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 many new applications in the immediate area. There are now 15 of 17 lots on 155 Street between 76A Avenue and 78A Avenue that are under application, comprising Surrey projects 7912-0308-00, 7913-0017-00, 7915-0048-00, 7914-0357-00, 7915-0275-00, 7916-0066-00, 7915-0379-00, 7916-0080-00, and 7916-0223-00 (subject 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). It should be noted that north of the site there is a 1990's development area comprised of 3000 - 3500 sq.ft. "Modern California Stucco" style Two Storey homes with desirable mid-scale massing characteristics. These homes have 6:12 and 7:12 pitch common hip roofs with common gable projections and roof surfaces of either cedar shingles or concrete roof tiles. The homes are clad in stucco only with stucco relief features (no masonry or wood accents). Although these homes are not objectionable in any way, they are not recommended for specific context, as the new character with updated massing design and materials standards proposed at all of the aforesaid nearby developments will easily meet or exceed these standards, and it is preferable to establish a consistent new updated character for all proposed homes in the 7600 and 7800 blocks of 155 Street than it is to simply emulate the older standard.

The 7600 and 7700 blocks of 155 Street were 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 2015 RF zone development. Massing scale, massing designs, roof designs, construction materials, and trim and detailing elements have improved 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 eight 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. It should also be recognized that there is a strong style change in demand now toward "West Coast Contemporary" designs. Manifestations of this style that are reasonably compatible with other homes approved at the subject site should also be considered.
- 3) **Home Types :** Most existing homes are small old Bungalows which are not suitable for use on most new 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 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 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 year 2015 RF developments.

- 7) **Roof surface :** This is area in which most homes have asphalt shingle roofs. It is expected that most new homes will also have asphalt shingle roofs, and for continuity, asphalt shingles are recommended. A single cedar shingle or concrete tile roof would stand out as inconsistent due the large difference in textures (thickness) between asphalt shingles and cedar shingles or concrete tiles, and so these products are not recommended. However, where opportunities arise to introduce new environmentally sustainable products, they should be embraced. Generally, these materials have thicknesses between asphalt shingles and cedar shingles and will not appear out of place texturally. Therefore, to ensure consistency of character, only shake profile asphalt shingles and shake profile sustainable products are recommended.
- 8) **Roof Slope :** Most existing homes have low slope roofs that are not suitable for use on a post year 2015 RF zone development. Roof slopes of 7:12 or higher are recommended to ensure that homes appear style-authentic within the proposed style range (with common roof slope exceptions used in most building schemes).

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 2015. The homes

at the subject site will have similar regulations to the aforesaid 8 nearby new developments, and the consistent interface will result from consistent building scheme regulations.

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, dark colonial red, or dark forest green can be considered providing neutral trim colours are used, and a comprehensive colour scheme is approved by the consultant. “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, subject to compliance with BC Building Code. 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:** June 5, 2015

Reviewed and Approved by:



Date: June 5, 2015

Table 4. Tree Preservation Summary

TREE PRESERVATION SUMMARY

Surrey Project No:
 Address: 7824 & 7804 155th Street, Surrey, BC
 Registered Arborist: Andrew Connell, B.Sc.
 ISA Certified Arborist (PN-6991A)
 ISA Qualified Tree Risk Assessor (TRAQ)
 BC Parks Wildlife and Danger Tree Assessor
 Certified Landscape Technician

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)	43
Protected Trees to be Removed	40
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	3
Total Replacement Trees Required:	
- Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio 0 X one (1) = 0	80
- All other Trees Requiring 2 to 1 Replacement Ratio 40 X two (2) = 80	
Replacement Trees Proposed	21
Replacement Trees in Deficit	59
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	
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

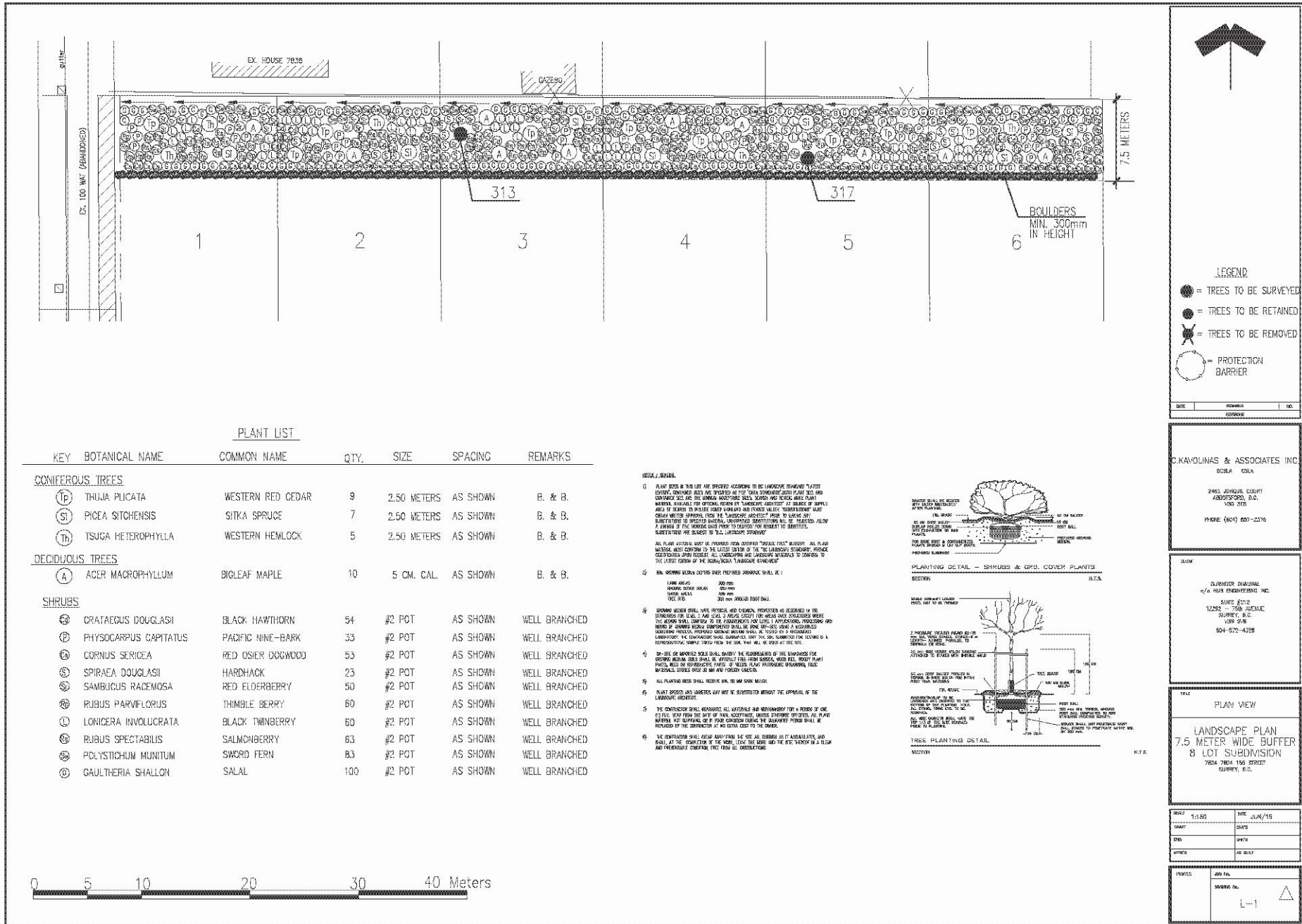
Summary prepared and
submitted by:



June 17, 2016

Arborist

Date



LEGEND

- (●) = TREES TO BE SURVEYED
- (○) = TREES TO BE RETAINED
- (✕) = TREES TO BE REMOVED
- (○) = PROTECTION BARRIER

DATE: _____ DRAWN BY: _____ NO. _____

KAVOLINAS & ASSOCIATES INC.
 8034 156A
 2965 AGRICULTURAL CIRCLE
 FORT WORTH, TEXAS 76103
 PHONE (817) 637-2370

OWNER
 SUPERIOR DEVELOPMENT
 c/o HUBB ENGINEERING INC.
 SUITE 2012
 12202 - 75TH AVENUE
 SURREY, B.C.
 V3W 2G8
 604-572-4228

TITLE
 LANDSCAPE PLAN
 7.5 METER WIDE BUFFER
 8 LOT SUBDIVISION
 SURVEY: B.C.

SCALE	1:150	DATE	JUN/15
DRAWN	DMR	CHECKED	
DATE	DMR	DATE	
APPROVED	AS SHOWN		

PROJECT: 8034 156A
 DRAWING NO. L-1





- LEGEND**
- = TREES TO BE SURVEYED
 - = TREES TO BE RETAINED
 - ⊗ = TREES TO BE REMOVED
 - = PROTECTION BARBER

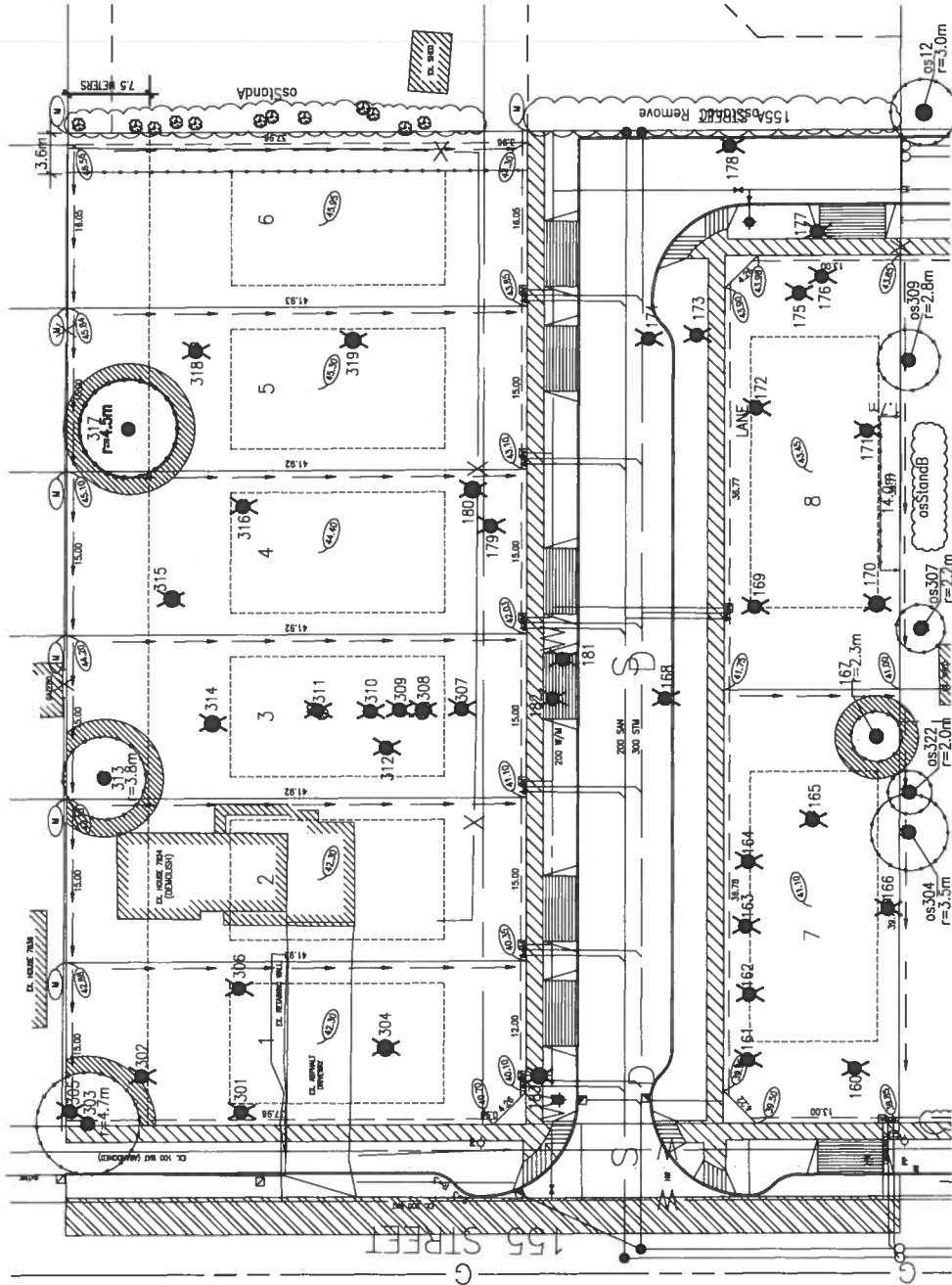
CRAWLINS & ASSOCIATES INC.
MECHANICAL ENGINEERS
1402 JENNIFER COURT
ANNAPOLIS, M.D. 21403
PHONE (410) 261-2378

CLARENCE CRAMER
474 HARBOR DRIVE
SUITE 202
ANNAPOLIS, M.D. 21403
PHONE (410) 261-2328


PLAN VIEW
TREE LOCATION PLAN
TREE RETENTION PLAN
8 LOT SUBMISSION
7000 155 STREET
ANNAPOLIS, M.D.

DATE	12/20/00
SCALE	
BY	
CHECKED	
APPROVED	

PROJECT NO.	TR-1
DATE	JUN/18
SCALE	
BY	
CHECKED	
APPROVED	



0 5 10 20 30 40 Meters



LEGEND

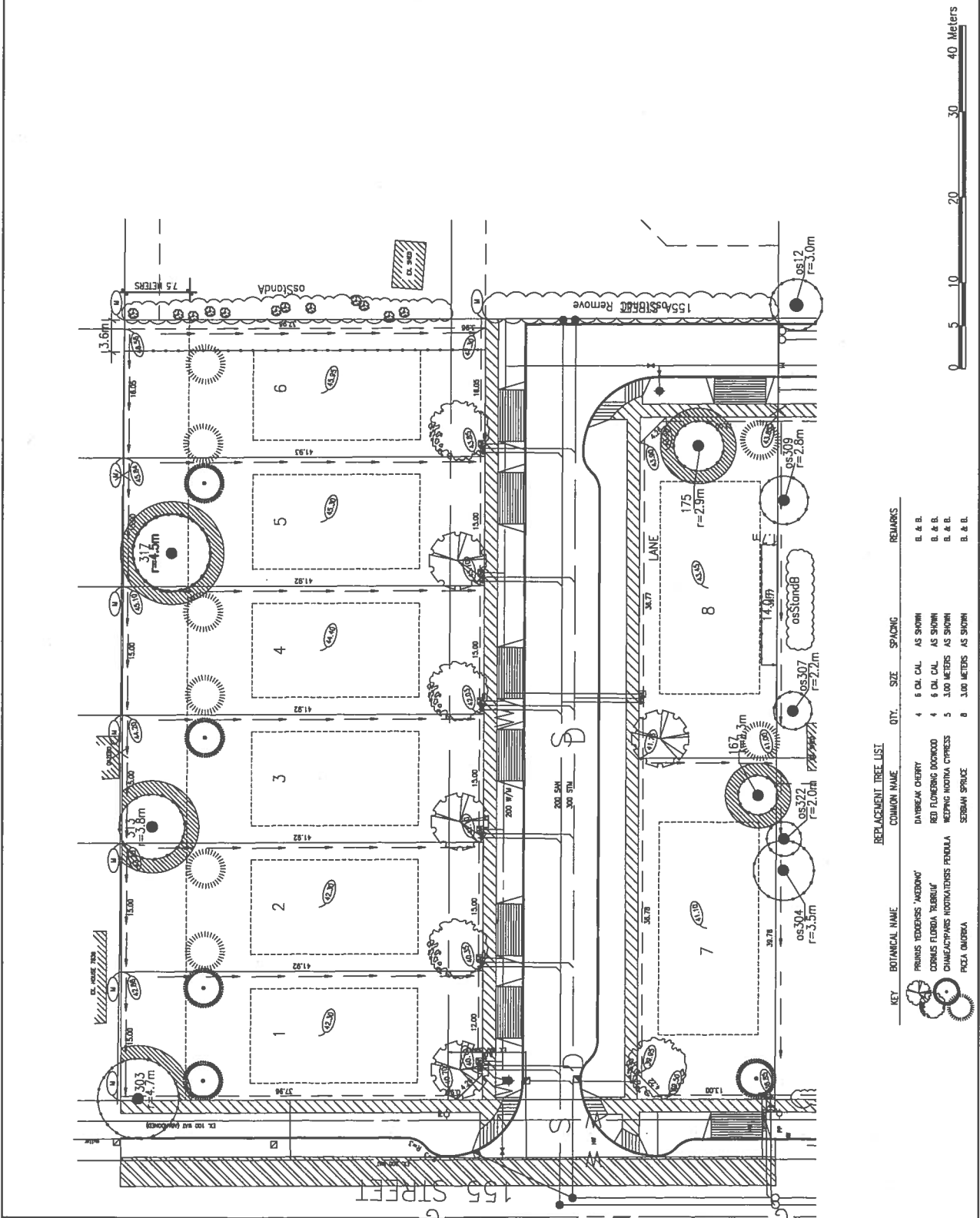
- = TREES TO BE SURVEYED
- = TREES TO BE RETAINED
- ⊗ = TREES TO BE REMOVED
- (with cross-hatch) = PROTECTION BARRIER

C. KAWULINS & ASSOCIATES INC.
 DESIGN CONSULTANTS
 2142 JENSEN COURT
 ANNAPOLIS, M.D. 21403
 PHONE (410) 271-2178

BLANCKO CONSULTING
 474 W. BENTLEY BLVD.
 SUITE 212
 ANNAPOLIS, M.D. 21403
 PHONE (410) 271-1320

PLAN VIEW

TREE REPLACEMENT PLAN
 B LOT SUBDIVISION
 750 WEST STREET
 ANNAPOLIS, M.D.

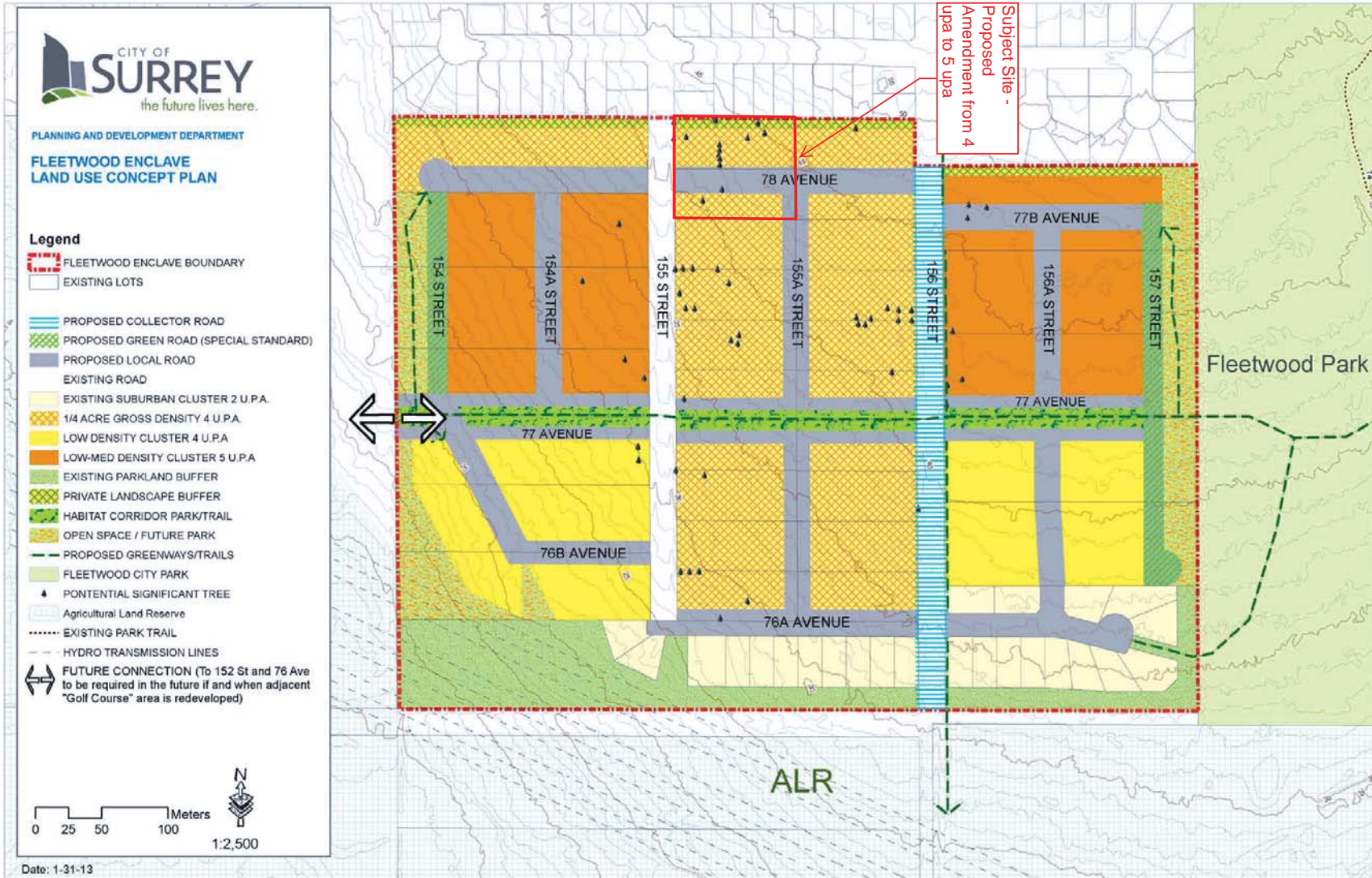


REPLACEMENT TREE LIST

KEY	BOTANICAL NAME	COMMON NAME	QTY.	SIZE	SPACING	REMARKS
○	PRUNUS TENDRIS 'ALABAMA'	DAWDBARK CHERRY	4	6 DL CAL	AS SHOWN	B. & B.
○	CORNUS FLORIDA 'FLORIDA'	RED FLOWERING DOGWOOD	4	6 DL CAL	AS SHOWN	B. & B.
○	CHAMAECYPARIS NODIFLORA	KEPPING NODIFLORA CYPRESS	5	3.00 METERS	AS SHOWN	B. & B.
○	PECEA QUINQUE	SERRAH SPRUCE	8	3.00 METERS	AS SHOWN	B. & B.



Section 1: Planning





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

