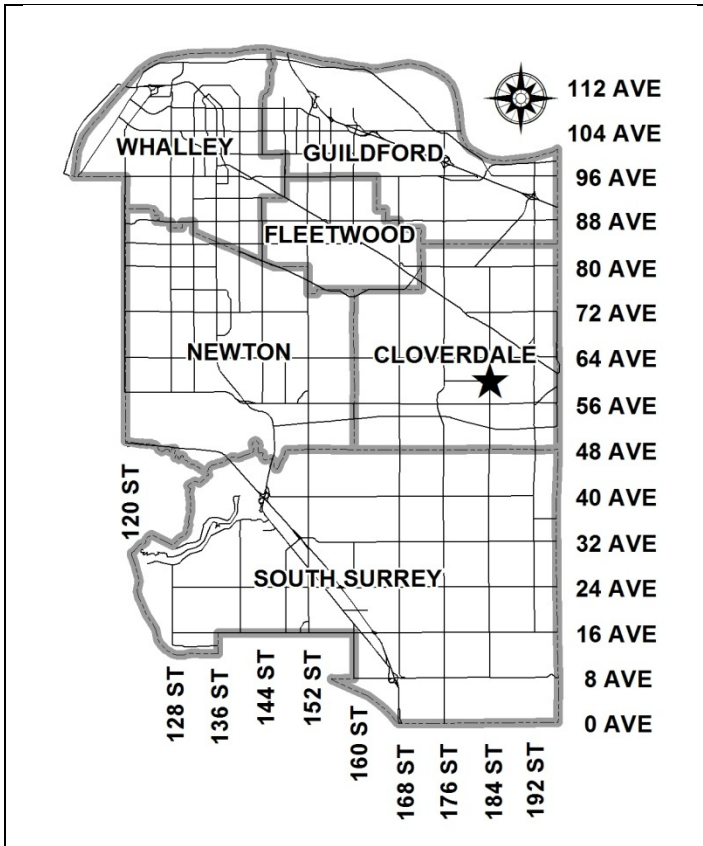


City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7910-0118-00

Planning Report Date: July 11, 2011

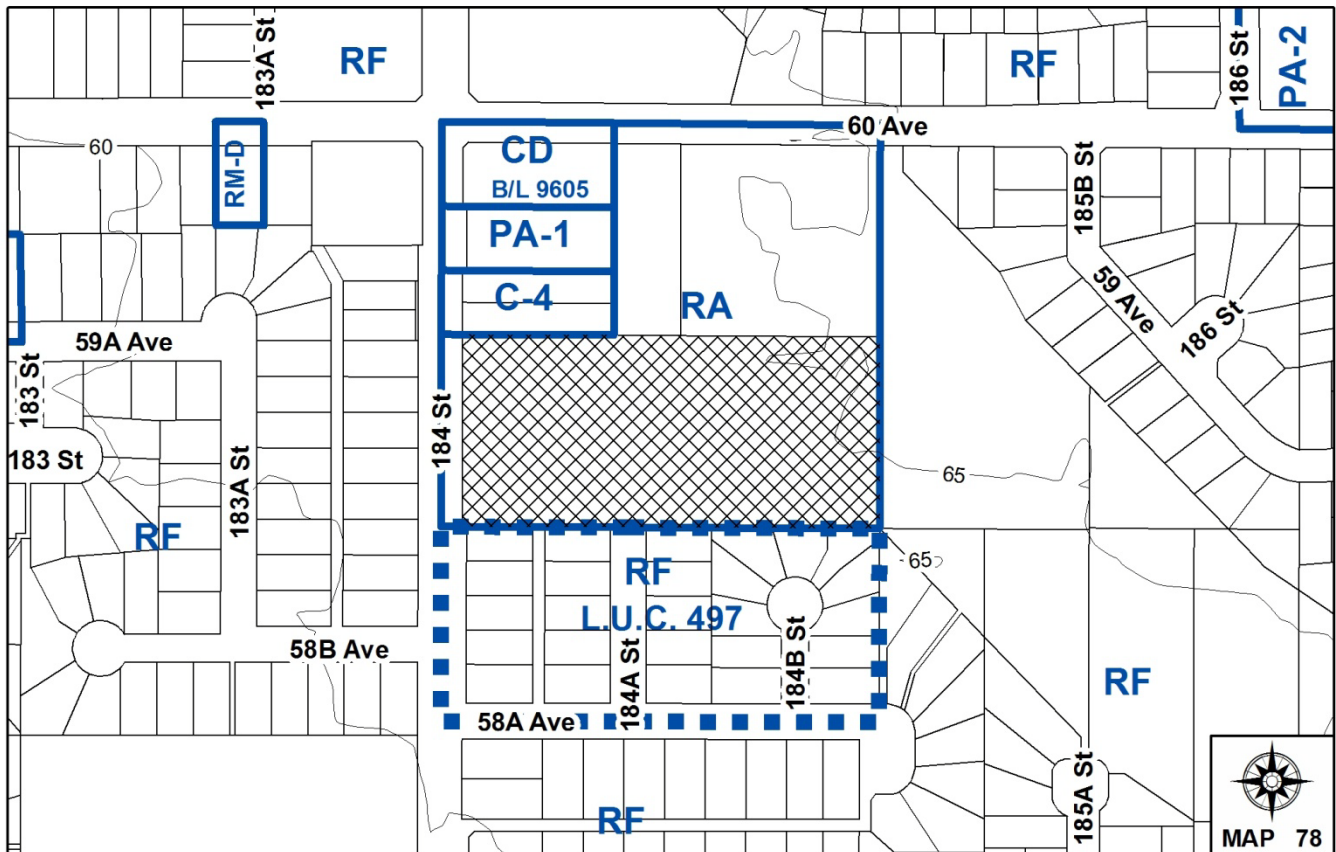


PROPOSAL:

- **Rezoning** from RA to RF-12

in order to permit the development of approximately twenty-three (23) small single family lots.

LOCATION: 5920 - 184 Street
OWNER: Gunhild Damgaard
ZONING: RA
OCP DESIGNATION: Urban



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- Complies with OCP Designation.
- Complies with Infill Policy along 184 Street.
- Generally complies with Small Lot Policy.

RECOMMENDATION

The Planning & Development Department recommends that:

1. a By-law be introduced to rezone the subject site from "One-Acre Residential Zone (RA)" (By-law No. 12000) to "Single Family (12) Residential Zone (RF-12)" (By-law No. 12000) and a date be set for Public Hearing.
2. Council instruct staff to resolve the following issues prior to final adoption:
 - (a) ensure that all engineering requirements and issues including restrictive covenants, dedications, and rights-of-way where necessary, are addressed to the satisfaction of the General Manager, Engineering;
 - (b) submission of a subdivision layout to the satisfaction of the Approving Officer;
 - (c) approval from the Ministry of Transportation & Infrastructure;
 - (d) submission of a finalized tree survey and a statement regarding tree preservation to the satisfaction of the City Landscape Architect;
 - (e) the applicant address the concern that the development will place additional pressure on existing park facilities to the satisfaction of the General Manager, Parks, Recreation and Culture;
 - (f) demolition of existing buildings and structures to the satisfaction of the Planning and Development Department; and
 - (g) registration of a Section 219 Restrictive Covenant on proposed Lots 5 and 6 to increase the minimum side yard setback along the south property line from 1.8 metres (6 ft.) to 2.4 metres (8 ft.).

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:**

8 Elementary students at Martha Currie Elementary School
3 Secondary students at Lord Tweedsmuir Secondary School

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by March 1, 2012.

(Appendix IV)

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

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

SITE CHARACTERISTICS

Existing Land Use: Single family home, which will be removed.

Adjacent Area:

Direction	Existing Use	OCP Designation	Existing Zone
North:	Vacant City-owned lots and City of Surrey works yard.	Urban	C-4 and RA
East:	Sunrise Ridge Park and BC Hydro corridor.	Urban	RA
South:	Single family dwellings.	Urban	LUC No. 497 (underlying RF Zone)
West (Across 184 Street):	Single family dwellings.	Urban	RF

DEVELOPMENT CONSIDERATIONS

Proposed Rezoning and Subdivision Layout

- The subject site is located on the east side of 184 Street south of 60 Avenue in Cloverdale.
- The 2.0-hectare (5.0-acre) subject site is designated Urban in the Official Community Plan (OCP) and is currently zoned One-Acre Residential Zone (RA). The proposal conforms to the land use designation in the OCP.
- The applicant is proposing to rezone from One-Acre Residential Zone (RA) to Single Family (12) Residential Zone (RF-12) in order to allow subdivision into twenty-three (23) small single family lots.
- Proposed Lots 1 and 11 conform to the minimum requirements of the RF-12 Zone *Type I Corner Lot* in terms of lot area, width and depth. The proposed lots are a minimum 375 square metres (4,037 sq.ft.) in area, 14 metres (46 ft.) in width and 26 metres (85 ft.) in depth.
- Proposed Lots 2 to 10 conform to the minimum requirements of the RF-12 Zone *Type I Interior Lot* in terms of lot area, width and depth. The proposed lots are a minimum 320 square metres (3,445 sq.ft.) in area, 12 metres (40 ft.) in width and 26 metres (85 ft.) in depth.

- Proposed Lots 15 and 23 conform to the minimum requirements of the RF-12 Zone *Type II Corner Lot* in terms of lot area, width and depth. The proposed lots are a minimum 375 square metres (4,037 sq.ft.) in area, 15.4 metres (51 ft.) in width and 22 metres (72 ft.) in depth.
- Proposed Lots 12, 13, 14 and 16 to 22 conform to the minimum requirements of the RF-12 Zone *Type II Interior Lot* in terms of lot area, width and depth. The proposed lots are a minimum 320 square metres (3,445 sq.ft.) in area, 13.4 metres (44 ft.) in width and 22 metres (72 ft.) in depth.
- In order to provide a consistent streetscape along 184 Street and blend with the existing RF lots to the south, proposed Lots 1-5 are a minimum of 16.6 metres (54 ft.) in width, which complies with the Infill Policy.
- With the required road dedication of 4.94 metres (16 ft.) along 184 Street, the front yard setback for proposed Lots 1-5 will be generally consistent with the existing RF lots to the south.

Proposed Parkland and Access

- The subject site is encumbered by a BC Hydro right-of-way along the north east corner of the site. This area comprises 1.3 acres (5,267 square metres) and will be dedicated as open space. The dedicated area constitutes 26% of the gross land area of the subject site.
- Proposed Lots 1-5 will front onto 184 Street and gain access from the rear lane.
- Proposed Lots 6-11 will front onto 184A Street and gain access from the rear lane.
- Proposed Lots 12-15 will front onto and gain access from 184A Street.
- Proposed Lots 16-23 will front onto and gain access from the new east-west cul-de-sac.

Building Design Guidelines and Lot Grading

- The applicant for the subject site has retained Michael 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, proposed a set of building design guidelines (Appendix V).
- In order to provide a smooth massing transition between the future homes on proposed Lot 5 fronting 184 Street and proposed Lot 6 fronting 184A Street and the existing homes to the south, the Design Consultant has included special guidelines to address this interface.
- The south side yard setback for proposed Lots 5 and 6 will be increased from 1.8 metres (6.0 ft.) to 2.4 metres (8.0 ft.) and the side yard setback at the upper floor will be increased from 1.8 metres (6.0 ft.) to 6.0 metres (20 ft.). This allows for greater separation as well as a lower roof line adjacent to the existing homes to the south.

- Proposed Lots 1 to 5 will have approximately 0.5 metre (1.6 ft.) to 1.2 metres (3.9 ft.) of fill to achieve the existing 184 Street road grade. Proposed Lots 6 to 11 will have approximately 0.5 metre (1.6 ft.) to 0.8 metres (2.6 ft.) to achieve the existing 184A Street road grade. Basements will be achieved on all lots. The information has been reviewed by staff and found to be generally acceptable.

Tree Preservation and Replacement

- The applicant has submitted an arborist assessment prepared by Trevor Cox, Certified Arborist of Mike Fadum and Associates Ltd. The report has identified 122 mature trees. All of the trees within the development site will need to be removed to accommodate the construction of small single family lots, new roads, widening of existing roads, or due to the amount of fill to achieve existing road grades. The following chart reflects the trees proposed for removal by species:

Tree Species	Number of Trees	Number to be Retained	Number to be Removed
Apple	1	0	1
Alder	58	0	58
Black Cottonwood	20	0	20
Cherry/Plum	2	0	2
Douglas-fir	10	0	10
Elm	3	0	3
Hawthorn	2	0	2
Horse Chestnut	2	0	2
Locust	2	0	2
Lombardy Poplar	6	0	6
Monkey Puzzle	1	0	1
Scots Pine	3	0	3
Shore Pine	1	0	1
Western Red Cedar	10	0	10
Willow	1	0	1
Total	122	0	122

- The proposal indicates that 58 trees will be planted on-site. However, 158 replacement trees are required under the Tree Protection By-law. Therefore, the applicant will be required to provide \$300 per tree for a total of \$30,000 towards the Green City Fund for the shortfall of replacement trees.

PRE-NOTIFICATION

Pre-notification letters were sent on January 21, 2011 and staff received six (6) phone calls and one (1) written response from property owners within the Pre-notification area. Four of the callers were looking for general information about the site. The other property owners expressed the following comments:

- Concern with through access to 184 Street via 184A Street, as 184A Street is currently a dead end.

(As part of the proposal, the remaining portion of 184A Street at this location will be constructed and will connect to 184 Street. This connection will provide an alternative to 58A Avenue for residents to access 184 Street.)

- Concern with the impact of the proposed development on drainage on neighbouring properties.

(As a standard requirement for all projects, surface drainage from a development site needs to be addressed without impacting adjoining properties, lot grading will be to City standards including swales and drains placed along the southern boundaries of the site to safeguard the existing properties to the south.)

- Concern with the character of new homes blending with the existing homes in the neighbourhood.

(The applicant for the subject site has retained Michael 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, proposed a set of building design guidelines.

In order to provide a smooth massing transition between the future homes on proposed Lots 5 and 6 and the existing homes to the south, the Design Consultant has included special guidelines to address this interface.)

- Concern with secondary suites permitted within the single family homes.

(With recent changes to Surrey Zoning By-law No. 12000, one secondary suite is permitted on each single family-zoned lot, excluding those regulated by a Land Use Contract. The immediate subdivision to the south is regulated by Land Use Contract No. 497. The proposed RF-12 zoning for the subject site will permit one secondary suite on each lot.)

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

original signed by Judith Robertson

Jean Lamontagne
General Manager
Planning and Development

JLM/kms

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Information for City Clerk

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

1. (a) Agent: Name: Mike Helle
 Coastland Engineering & Surveying Ltd.
 Address: #101 - 19292 - 60 Avenue
 Surrey, B.C. V3S 3M2

 Tel: 604-532-9700 - Work
 604-532-9700 - Fax

2. Properties involved in the Application

- (a) Civic Address: 5920 - 184 Street
- (b) Civic Address: 5920 - 184 Street
 Owner: Gunhild Lydia Damgaard
 PID: 011-031-450
 Lot 2 Section 9 Township 8 New Westminster District Plan 4046

3. Summary of Actions for City Clerk's Office

- (a) Introduce a By-law to rezone the property.
- (b) Application is under the jurisdiction of MOTI.

MOTI File No. 2011-00379

SUBDIVISION DATA SHEET

Proposed Zoning: RF-12

Required Project Data	Proposed
GROSS SITE AREA	
Acres	5.0 acres
Hectares	2.0 hectares
NUMBER OF LOTS	
Existing	1
Proposed	23
SIZE OF LOTS	
Range of lot widths (metres)	12.5 m - 18.7 m
Range of lot areas (square metres)	368 m ² - 570 m ²
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	12 upha/5 upa
Lots/Hectare & Lots/Acre (Net)	
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	25%
Estimated Road, Lane & Driveway Coverage	29%
Total Site Coverage	54%
PARKLAND	
Area (square metres)	5,267 m ²
% of Gross Site	26%
Required	
PARKLAND	
5% money in lieu	NO
TREE SURVEY/ASSESSMENT	
	YES
MODEL BUILDING SCHEME	
	YES
HERITAGE SITE Retention	
	NO
BOUNDARY HEALTH Approval	
	NO
DEV. VARIANCE PERMIT required	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO

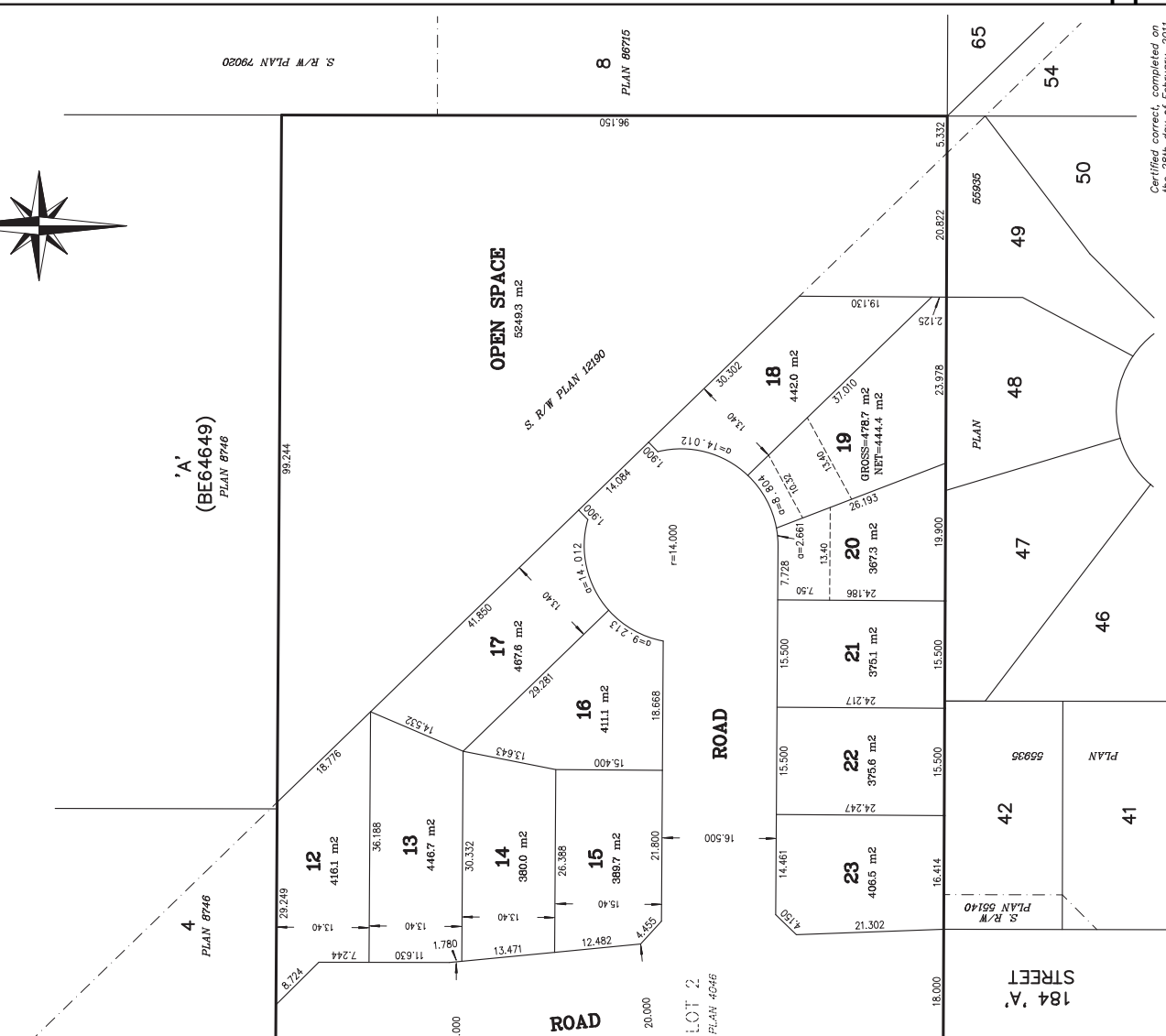
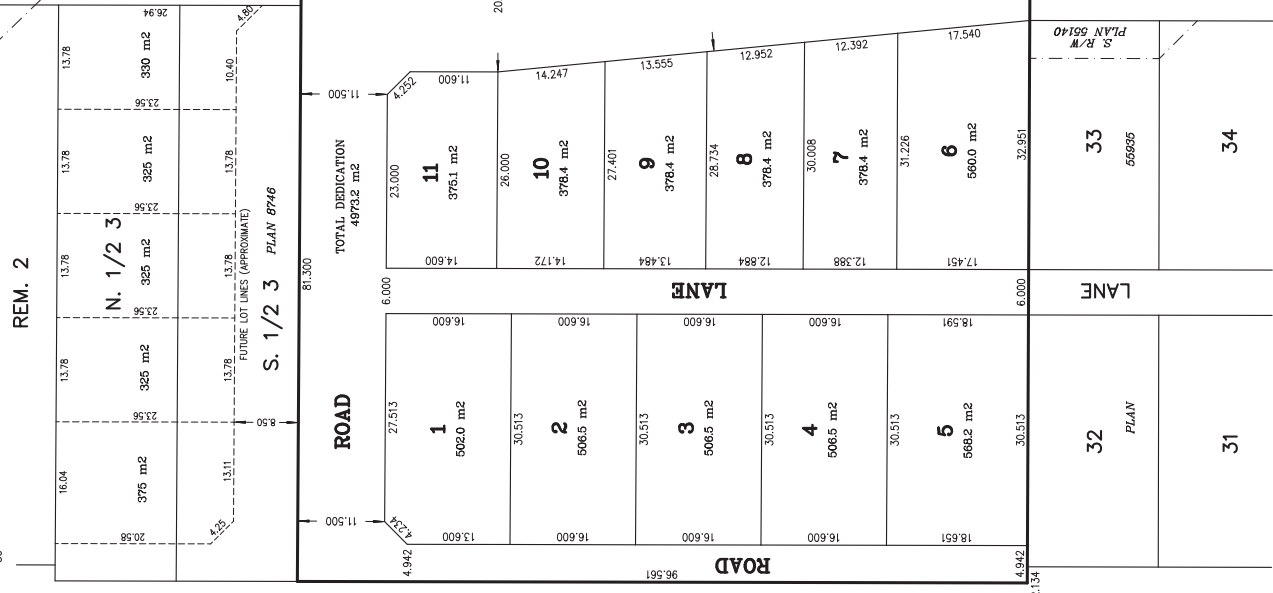
**PRELIMINARY SUBDIVISION PLAN OF
LOT 2, SECTION 9, TOWNSHIP 8,
NEW WESTMINSTER DISTRICT PLAN 4046.**

CIVIC ADDRESS
5920.184th STREET
SURREY, B.C.
P.I.D. 011-031-450



SCALE 1:500
All Distances are in Metres.

266	
1	PLAN BCP44464
2	PLAN S. 1/2 3 PLAN 8746
182	
185	57930
186	
189	PLAN 57930
190	57930
193	
194	PLAN 57930



'A'
(BE64649)
PLAN 8746

S. R/W PLAN 79020

8
PLAN 88715

Certified correct, completed on
the 28th day of February, 2011.



B.C.L.S.

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

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

DATE: **June 21, 2011** PROJECT FILE: **7810-0118-00**

RE: **Engineering Requirements
Location: 5920 184 Street**

REZONE/SUBDIVISION

Property and Right-of-Way Requirements

- Dedicate 6.0m for north-south lane;
- Dedicate 20.0m for 184A Street, tapering to 18.0m at the south property line to match existing;
- Dedicate 16.5m for 59 Avenue complete with 3.0-metre X 3.0-metre corner cuts and 14m radius cul-de-sac at the east end; and
- Dedicate 11.5m for 59A Avenue half-road with 3.0-metre X 3.0-metre corner cuts at 184 Street and 184A Street.

Works and Services

- Construct south half of 59A Avenue to a Local half-road standard as per SSD -R.12;
- Construct 184A Street to Through Local Road standard;
- Construct 59 Avenue to Limited Local Road standard including cul-de-sac;
- Construct north south residential lane south of 59A Avenue;
- Construct drainage and sanitary mains to service the proposed lots;
- Construct 200mm water main on 184A Street and loop it to 184 Street; and
- Construct 100mm water main on 59Avenue to service the cul-de-sac lots;

A Servicing Agreement is required prior to Rezone/Subdivision.



Bob Ambardar, P.Eng.
Development Project Engineer

RSS



SCHOOL DISTRICT #36 (SURREY)

Monday, January 31, 2011
Planning

THE IMPACT ON SCHOOLS

APPLICATION #: 10 0118 00

SUMMARY

The proposed 23 single family lots are estimated to have the following impact on the following schools:

Projected # of students for this development:

Elementary Students:	8
Secondary Students:	3

September 2010 Enrolment/School Capacity

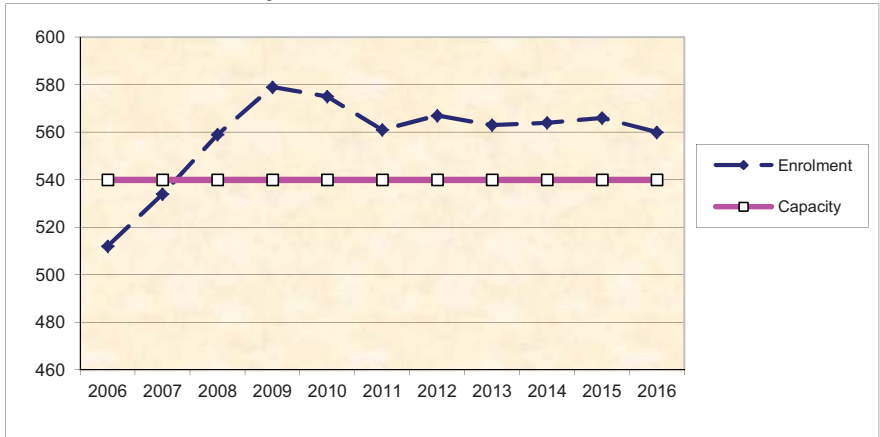
Martha Currie Elementary	
Enrolment (K/1-7):	67 K + 508
Capacity (K/1-7):	40 K + 500
Lord Tweedsmuir Secondary	
Enrolment (8-12):	1711
Capacity (8-12):	1400

School Enrolment Projections and Planning Update:

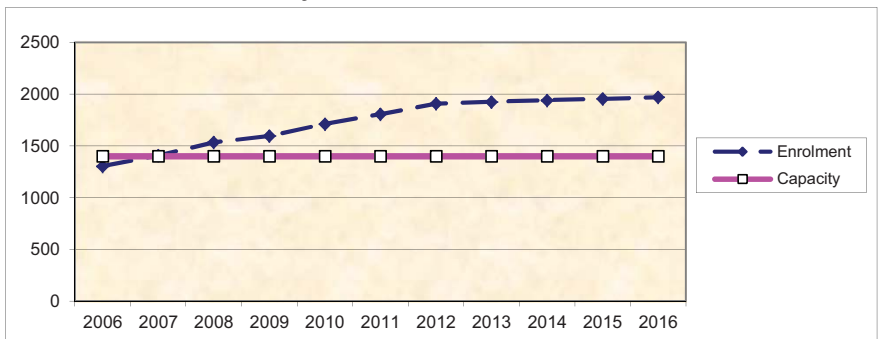
The following tables illustrate the enrolment projections (with current/approved ministry capacity) for the elementary and secondary schools serving the proposed development.

There are no new capital projects proposed at the elementary school and no new capital projects identified for the secondary school. The capacity for Martha Currie has been adjusted for the implementation of full day Kindergarten and inclusion of a "Strongstart" program for preschool age children and their parents. Both Martha Currie Elementary and Lord Tweedsmuir Elementary have multi track program (regular and district French Immersion). There are no portables located at Martha Currie Elementary and 2 portables at Lord Tweedsmuir Secondary. A new secondary school is proposed in the capital plan for North Clayton Area to reduce long term overcrowding in the east region of Surrey. The proposed development will not have an impact on these projections.

Martha Currie Elementary



Lord Tweedsmuir Secondary



BUILDING GUIDELINES SUMMARY

Surrey Project no: 7910-0118-00
Project Location: 5920 - 184 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. Of twenty-two homes surveyed, twenty were constructed in the 1960s. Sixteen of these can be classified as "Basement Entry" type or "Cathedral Entry" (also known as Split Entry) type. In the 1960's these home types were typified by economical floor-above-floor construction techniques which result in homes with a high mass, box-like appearance as the upper floor area is completely visible from the street (i.e. not hidden behind a roof structure). The homes have simple, low slope (4:12) common gable or common hip roof structures with one or two street facing common gable projections. Most homes have an interlocking tab type asphalt shingle roof, but some homes have recently had the older asphalt shingles replaced with new shake profile asphalt shingles. Wall cladding materials include cedar, aluminum, stucco, vinyl, brick and stone. Trim and detailing elements are modest by modern standards; most homes do not have window trim or other feature elements. The colour range is broad, including neutral, natural, primary, and primary derivative colours. Many of the homes have either a single garage or no covered parking because the garages have been converted for living use. Driveways on most lots are constructed from asphalt. Landscapes include sod and a few mature trees. None of the homes or yards in this area provide suitable architectural or landscaping context for a year 2011 RF-12 zone development.

The four older Split Level homes range in size from 1800 to 2200 square feet. The homes have low to mid-scale massing characteristics, and are not objectionable in any way. However the homes do not meet year 2011 standards for massing design, construction materials, or trim and detailing elements.

There are two new homes under construction on the west side of 184 Street near the northwest corner of the subject site. These homes are 3000+ sq.ft "Neo-Heritage" style Two-Storey type homes constructed on RF zone lots. The homes have mid-scale, well balanced, correctly proportioned massing designs. Both homes have a significant one storey high covered entrance veranda. Roof structures are common gable and/or common hip forms at slopes ranging from 8:12 to 12:12. The roofs are surfaced with shake profile asphalt shingles. Walls are clad in painted horizontal Hardiplank siding. Wood wall shingles have been used on both homes. Landscaping has not been started on either of these two lots. These homes provide good architectural context for the subject site.

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

- 1) Context Homes: There are two homes in this area that provide suitable architectural context for the subject site. These homes are located at 5947 – 184 Street, and at 5955 – 184 Street.
- 2) Style Character : Both context homes are best described as "Neo-Heritage" style. "Neo-Heritage" and the compatible "Neo-Traditional" styles are recommended.
- 3) Home Types : Basement Entry and Cathedral Entry type homes are dominant in this area. There are also four Split Level types. Both context homes are Two-Storey type.
- 4) Massing Designs : Only the two new context homes described above provide desirable massing context. These homes are well balanced and correctly proportioned.
- 5) Front Entrance Design : Front entrance porticos range from one to 1 ½ storeys in height.
- 6) Exterior Wall Cladding : A wide range of cladding materials including Vinyl, Stucco, Cedar, Aluminum, Hardiplank, brick, and stone have been used, meaning that a relatively wide variety of cladding materials should be permitted.
- 7) Roof surface : 21 of 22 homes have an asphalt shingle roof. One home has a cedar shingle roof near the end of its service life.
- 8) Roof Slope : Only the two aforesaid context homes have a roof slope of 8:12 or higher. The vast majority of homes in this area have a 4:12 slope roof.

Dwelling Types/Locations:	Two-Storey.....	9%
	Basement Entry/Cathedral Entry	73%
	Rancher (bungalow).....	0%
	Split Levels.....	18%

Exterior Treatment /Materials: Wide variety of cladding materials including cedar, aluminum, stucco, vinyl, Hardiplank, brick and stone.

Roof Pitch / Materials: 21 homes have an asphalt shingle roof. One home has a cedar shingle roof. Older homes have a 4:12 slope roof. New context homes have an 8:12 to 12:12 slope roof.

Window/Door Details: Rectangular dominant.

Streetscape: There are two identities; a 1960's "West Coast Traditional" style, box-like Basement Entry/Cathedral Entry home-with-low-slope-roof identity, and a post year 2000's "Neo-Heritage" mid-scale Two-Storey home with high slope roof identity. Landscaping standards meet a common old urban standard.

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" or "Neo-Heritage". 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)

Strong relationship with neighbouring “context homes” at 5947 and 5955 – 184 Street. Therefore, homes will be “Neo-Traditional” and “Neo-Heritage” styles only. Similar massing characteristics. Similar roof types, roof pitch, roofing materials. Similar siding materials.

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 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 8:12.

Roof Materials/Colours:

Cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap and new environmentally sustainable roofing products providing that aesthetic properties of the new materials are equal to or better than the traditional roofing products. Grey or brown 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 17 shrubs of a minimum 3 gallon pot size on interior lots, and a minimum of 25 shrubs of a 3 gallon pot size on corner lots. 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: March 16, 2011

Reviewed and Approved by:

A handwritten signature in blue ink, appearing to read "Michael Egan", written over a horizontal line.

Date: March 16, 2011



TREE PRESERVATION SUMMARY

Surrey Project No.: 10-1158
 Project Location: 5920 184th Street, Surrey BC
 Registered Arborist: Trevor Cox, MCIP
 ISA Certified Arborist (PN1920A)
 Certified Tree Risk Assessor (43)
 BC Parks Wildlife and Danger Tree Assessor

Detailed Assessment of the existing trees of an Arborist's Report is submitted on file. The following is a summary of the tree assessment report for quick reference.

1. General Tree Assessment of the Subject Site: Five acre parcel with a single residence upon it. Protected sized pioneer and ornamental species trees found within site. Numerous well cared for under bylaw sized trees on site that would make suitable replacement trees.

2. Summary of Proposed Tree Removal and Placement:

- The summary will be available before final adoption.

Number of Protected Trees Identified	122	(A)
Number of Protected Trees declared high risk due to natural causes	-	(B)
Number of Protected Trees to be removed	118	(C)
Number of Protected Trees to be Retained (A-B-C)	4	(D)
Number of Replacement Trees Required (C-B) x 2	158	(E)
Number of Replacement Trees Proposed	58	(F)
Number of Replacement Trees in Deficit (E-F)	100	(G)
Total Number of Protected and Replacement Trees on Site (D+F)	62	(H)
Number of Lots Proposed in the Project	23	(I)
Average Number of Trees per Lot (H / I)	2.70	

3. Tree Survey and Preservation / Replacement Plan

- Tree Survey and Preservation / Replacement Plan is attached _____
- This plan will be available before final adoption _____

Summary prepared and submitted by:

Arborist

May 10, 2011

Date



LEGEND
● = TREES TO BE RETAINED
✕ = TREES TO BE REMOVED
○ = PROTECTION BARRIER

DATE	REVISION
9/25/11	CRANES/CITY REQUEST
	1

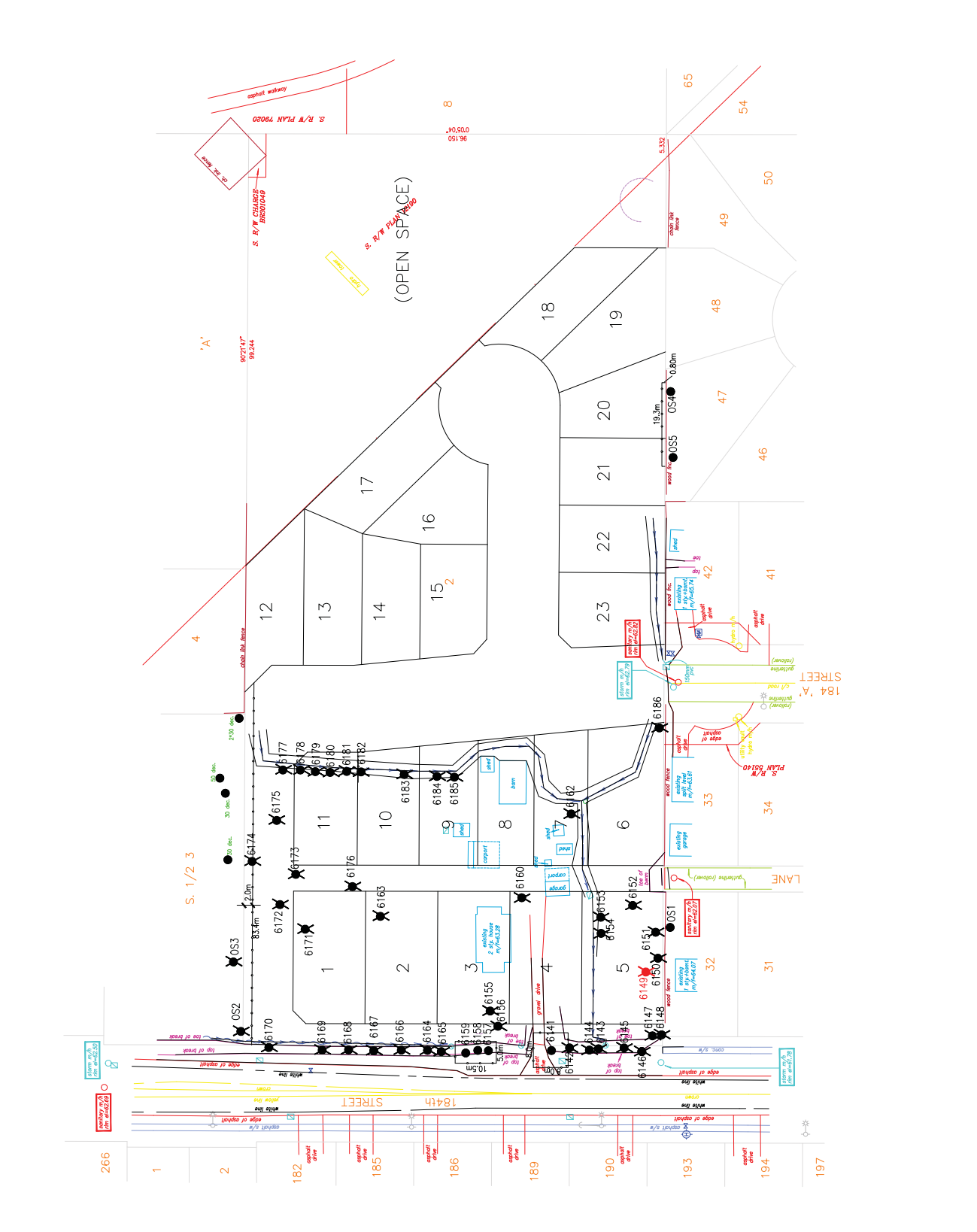
C. KAVOLINIS & ASSOCIATES INC.
BCSA, CSA
2165 SOUTH COURT
4885 GARDENS, S.W.
VANCOUVER, B.C.
V6V 2B8
PHONE (604) 871-2378

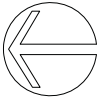
CLIENT
MR. MIKE BELLE
CONSULTING ENGINEERING & SURVEYING LTD.
1922 - 60th AVENUE
SUITE 100
VANCOUVER, B.C.
V6N 1S3
PHONE (604) 532-9700

TITLE
PLAN VIEW
TREE LOCATION PLAN
TREE RETENTION PLAN
23 LOT SUBDIVISION
3000 - 184th STREET
VANCOUVER, B.C.

SCALE	1:600	DATE	FEB/11
DRAWN		CHECKED	
DATE		DATE	
APP'D		DATE	

JOB No. **TR-1**
DRAWING No. **TR-1**



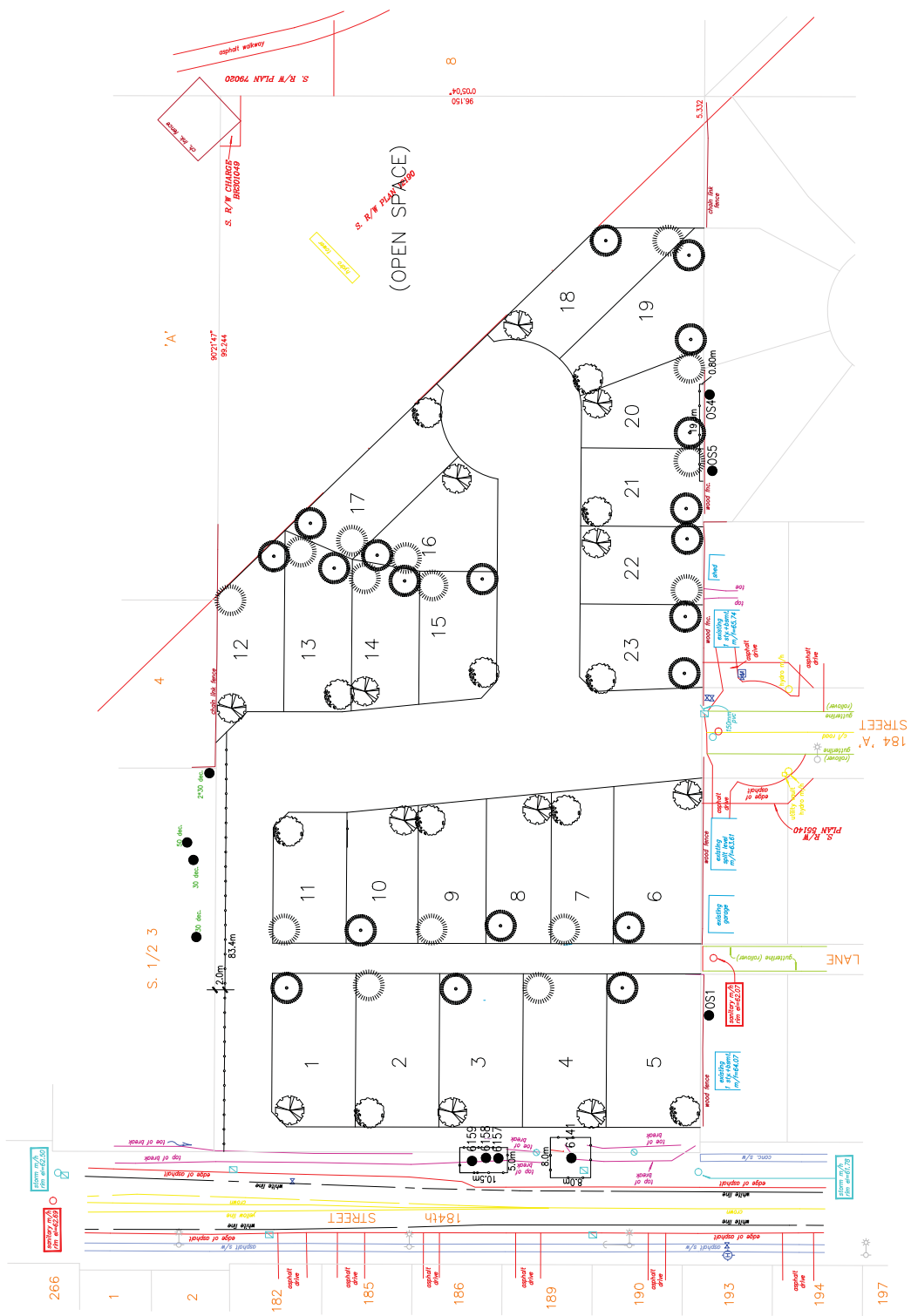


PLANTS IN THE PLANT LIST ARE SPECIFIED ACCORDING TO THE LANDSCAPE CANADA PLANT SPECIFICATION GUIDE FOR NURSERY STOCK AND THE BONTA STANDARD FOR CONTAINER GROWN PLANTS.

ALL LANDSCAPING AND LANDSCAPE MATERIALS TO CONFORM TO THE LATEST EDITION OF THE BCLM/BCLCA "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 #B1610

KEY	BOTANICAL NAME	PLANT LIST COMMON NAME	QTY.	SIZE	SPACING	REMARKS
	MAGNOLIA GALAXY	GALAXY MAGNOLIA	12	5 CM CAL.	AS SHOWN	B. & B.
	MAGNOLIA BUTTERFLIES	YELLOW FLOWERING MAGNOLIA	11	3.00 METERS	AS SHOWN	B. & B.
	CHAMAECIPARIS NODATENSIS 'PEDIOLA'	WEeping NODKA CYPRESS	20	2.50 METERS	AS SHOWN	B. & B.
	PICEA OMORICA	SERBIAN SPRUCE	15	2.50 METERS	AS SHOWN	B. & B.



DATE	DESCRIPTION	NO.
9/5/11	GRADING/CITY REQUEST	1

LEGEND

● = TREES TO BE RETAINED

○ = TREES TO BE REMOVED

○ = PROTECTION BARRIER

C. KAVOLINUS & ASSOCIATES INC.
 BCSEA, CSA
 2482 JODOL COURT
 ABERFORD, B.C.
 V2X 3J2
 PHONE (604) 867-2378

MR. MIKE WELLS
 CONSTANT ENGINEERING & SURVEYING LTD.
 SUITE #01
 18000 144th STREET, B.C.
 V3S 1L5
 PHONE (604) 332-9700

TITLE

PLAN VIEW

TREE LOCATION PLAN
 TREE REPLACEMENT PLAN
 23 LOT SUBDIVISION
 5000 - 184th STREET
 SURREY, B.C.

SCALE	DATE
1:400	FEB/11
DRAWN	CHECKED
DATE	DATE
APP'D	DATE

JOB NO.
 DRAWING NO. TR-2