

City of Surrey
PLANNING & DEVELOPMENT REPORT

File: 7917-0469-00

Planning Report Date: June 25, 2018

PROPOSAL:

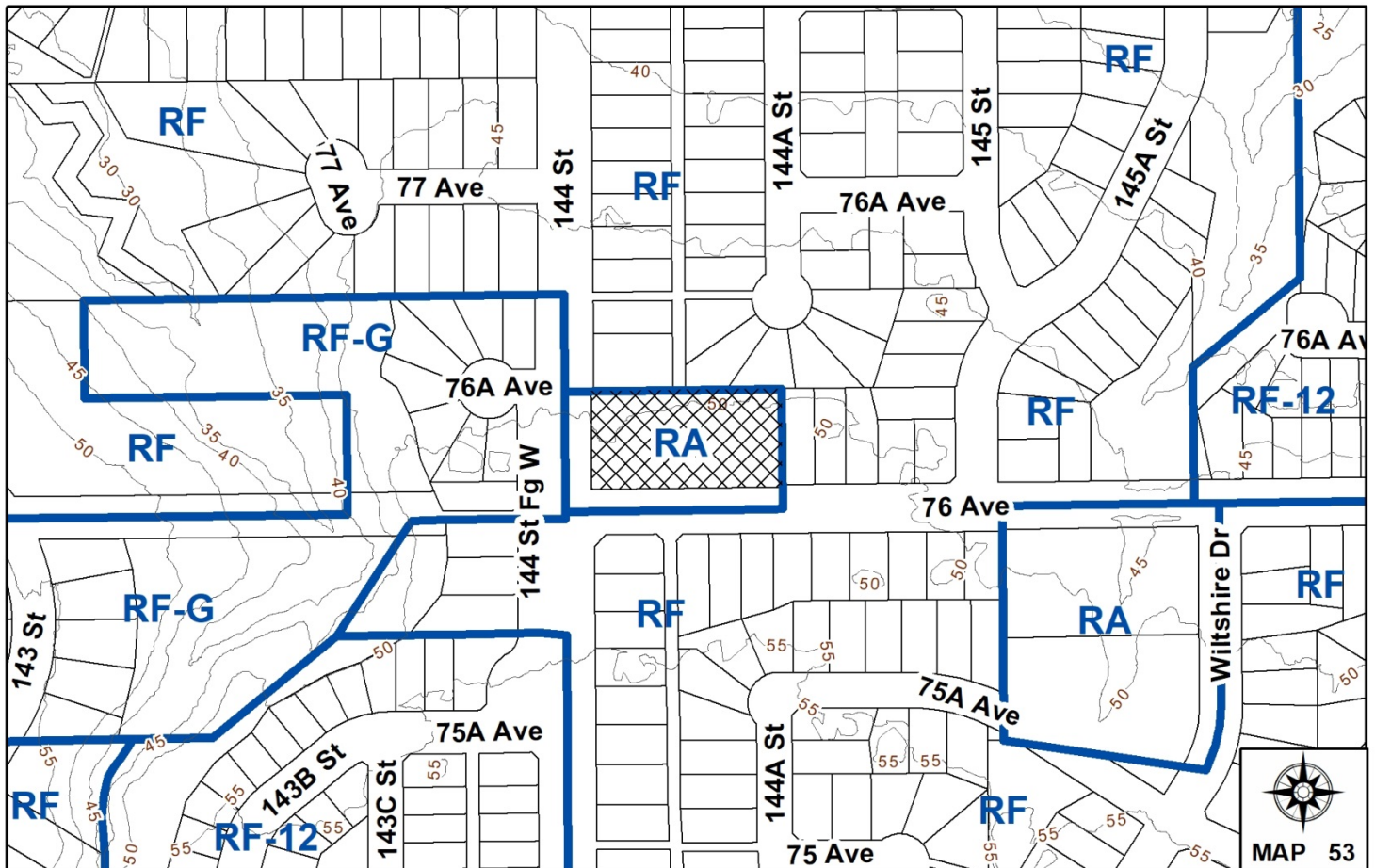
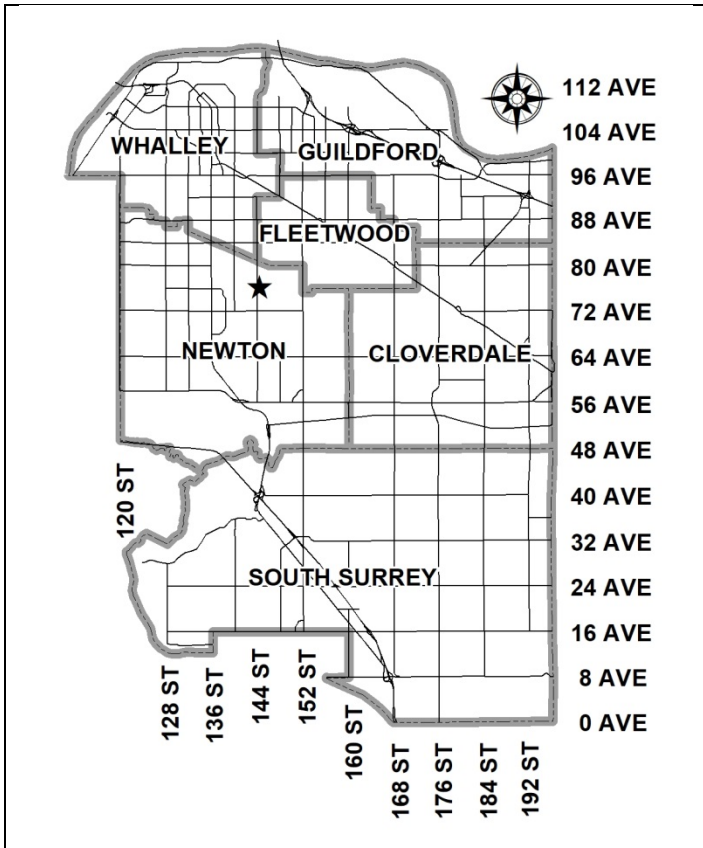
- **Rezoning** from RA to RF to allow subdivision into four RF lots.

LOCATION: 14435 - 76 Avenue

ZONING: RA

OCP DESIGNATION: Urban

NCP DESIGNATION: Urban Residential



RECOMMENDATION SUMMARY

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

DEVIATION FROM PLANS, POLICIES OR REGULATIONS

- None.

RATIONALE OF RECOMMENDATION

- The proposed density complies with the Official Community Plan designation (Urban) for the site.
- The proposed density complies with the East Newton North Neighbourhood Concept Plan designation (Urban Residential) for the site.

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 approval:
 - (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 arborist report to the satisfaction of the City Landscape Architect; and
 - (d) Registration of a Section 219 No-build Restrictive Covenant on a portion of proposed Lot 1 to facilitate future development with the adjacent lot to the north at 7638 – 144 Street.

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 students at M.B. Sanford Elementary School
1 Secondary students at Frank Hurt Secondary School

(Appendix VI)

The applicant has advised that the dwelling units in this project are expected to be constructed and ready for occupancy by Fall 2019.

Parks, Recreation & Culture: Parks will accept cash-in-lieu for the 5% unencumbered parkland subdivision dedication requirement.

SITE CHARACTERISTICS

Existing Land Use: Single family dwelling on an RA zoned lot.

Adjacent Area:

Direction	Existing Use	NCP Designation	Existing Zone
North:	Single family dwellings	Urban Residential	RF
East:	Single family dwelling	Urban Residential	RF
South (Across 76 Avenue):	Single family dwellings	Urban Residential	RF
West (Across 144 Street):	Single family dwellings	OCP: Urban	RF-G

DEVELOPMENT CONSIDERATIONS

- The subject site [0.4 hectare (1 acre)] is zoned "One-Acre Residential Zone" (RA). It is designated Urban in the Official Community Plan (OCP) and Urban Residential in the East Newton North Neighbourhood Concept Plan (NCP). The applicant is proposing to rezone the site from "One-Acre Residential Zone (RA)" to "Single Family Residential Zone (RF)" to allow subdivision of the land into 4 single family lots.
- All of the proposed lots conform to the minimum requirements of the RF Zone in terms of lot area, width and depth.
- The proposed lots range in size from 672 square metres (7,233 sq. ft.) to 1,592 square metres (17,136 sq. ft.). The proposed lots range in width from 15 metres (50 ft.) to 27.1 metres (89 ft.). The proposed lot areas and widths are consistent with the existing lots in the area.
- The existing home is proposed to be retained on proposed Lot 1. A Spatial Separation Report and Building Location Certificate have been provided. The information that has been provided confirms that the existing home complies with BC Building Code 2012.
- Proposed Lot 1 has additional development potential in the future and may be further subdivided into two RF lots and one remainder lot in the future. The applicant has demonstrated how Lot 1 may be subdivided.
- The applicant will be required to register a No-build Restrictive Covenant over a portion of Lot 1 (the remainder portion) to ensure that this land is available for consolidation with the property to the north at 7638 – 144 Street upon that site's development in the future.

Building Design Guidelines & Lot Grading

- The applicant has retained Michael E. Tynan of Tynan Consulting Ltd., as the Design Consultant for this project. The Design Consultant has conducted a character study of the surrounding homes, and based upon those findings, has proposed a set of building design guidelines for the proposed RF lots (Appendix V).

- The designs for the proposed lots include Neo-Traditional, Neo-Heritage, and compatible forms of "West Coast Contemporary" that are compatible with the existing homes. The new homes should exhibit "mid-scale" massing. Various elements and projections on the front of the home should be interesting architecturally, and should be located to create balance across the façade.
- A preliminary Lot Grading Plan, submitted by HY Engineering Ltd., has been reviewed by the Building Division and has been found to be generally acceptable. The applicants are proposing in-ground basements on all lots.

PRE-NOTIFICATION

- Pre-notification letters were sent out to the surrounding neighbourhood on January 26, 2018 and a Development Proposal Sign was erected on the site on December 18, 2018. To date, four residents have expressed concern about the proposed development. The following notes the concerns that have been raised by residents with staff comments provided in italics following the residents' comments.

One resident expressed concern about lot grading, as the existing conditions create a pool of water in the resident's rear yard in extreme rainfall.

(The applicants have revised their lot grading plan to install sodded swales and multiple lawn basins in a private drainage easement at the rear of Lots 2 – 3 to address any off-site drainage concerns).

Three residents inquired whether the temporary lane outlet to 144 A Street between properties 7651 & 7643 144A Street would be removed if this application is approved.

(The City's Transportation Engineering Division has confirmed that, should this proposal be supported by Council, the temporary lane will no longer be required, and the SRW would be discharged as part of this application.)

TREES

- Glenn Murray, ISA Certified Arborist of Froggers Creek Tree Consulting prepared an Arborist Assessment for the subject property which confirms that there are no protected trees on the site.
- The applicant is proposing to plant a total of 12 trees on the site (three trees per lot), which exceeds City requirements.

SUSTAINABLE DEVELOPMENT CHECKLIST

The applicant prepared and submitted a sustainable development checklist for the subject site on October 5, 2017. The table below summarizes the applicable development features of the proposal based on the seven (7) criteria listed in the Surrey Sustainable Development Checklist.

Sustainability Criteria	Sustainable Development Features Summary
1. Site Context & Location (A1-A2)	<ul style="list-style-type: none"> The site is located in the East Newton North Neighbourhood Concept plan on a site that is designated for Urban Residential.
2. Density & Diversity (B1-B7)	<ul style="list-style-type: none"> The permitted density is 14.8 u.p.h. (6 u.p.a.) and the applicant is proposing a density of 11.1 u.p.h. (14.5 u.p.a.).
3. Ecology & Stewardship (C1-C4)	<ul style="list-style-type: none"> Not being provided.
4. Sustainable Transport & Mobility (D1-D2)	<ul style="list-style-type: none"> Not being provided.
5. Accessibility & Safety (E1-E3)	<ul style="list-style-type: none"> Not being provided.
6. Green Certification (F1)	<ul style="list-style-type: none"> Not being provided.
7. Education & Awareness (G1-G4)	<ul style="list-style-type: none"> Not being provided.

INFORMATION ATTACHED TO THIS REPORT

The following information is attached to this Report:

Appendix I.	Lot Owners and Action Summary (Confidential) 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.	Tree Removal and Replacement Plan

original signed by Ron Hintsche

Jean Lamontagne
General Manager
Planning and Development

HS/cm

APPENDIX I HAS BEEN
REMOVED AS IT CONTAINS
CONFIDENTIAL INFORMATION

SUBDIVISION DATA SHEET

Proposed Zoning: RF

Requires Project Data	Proposed
GROSS SITE AREA	
Acres	1.0 Acres
Hectares	0.40 Hectares
NUMBER OF LOTS	
Existing	1
Proposed	4
SIZE OF LOTS	
Range of lot widths (metres)	14.4 m – 36.7 m
Range of lot areas (square metres)	672 – 1,592 square metres
DENSITY	
Lots/Hectare & Lots/Acre (Gross)	10 Lots/Hectare & 4 Lots/Acre
Lots/Hectare & Lots/Acre (Net)	11.1 Lots/Hectares & 4.5 Lots/Acre
SITE COVERAGE (in % of gross site area)	
Maximum Coverage of Principal & Accessory Building	36%
Estimated Road, Lane & Driveway Coverage	16%
Total Site Coverage	60%
PARKLAND	
Area (square metres)	N/A
% of Gross Site	
	Required
PARKLAND	
5% money in lieu	YES
TREE SURVEY/ASSESSMENT	YES
MODEL BUILDING SCHEME	YES
HERITAGE SITE Retention	NO
FRASER HEALTH Approval	NO
DEV. VARIANCE PERMIT required	
Road Length/Standards	NO
Works and Services	NO
Building Retention	NO
Others	NO



Planning & Development Department
 13450 - 104th Avenue, Surrey
 British Columbia, Canada V3T 1V8
 Tel. (604) 591-4441 Fax. (604) 591-2507

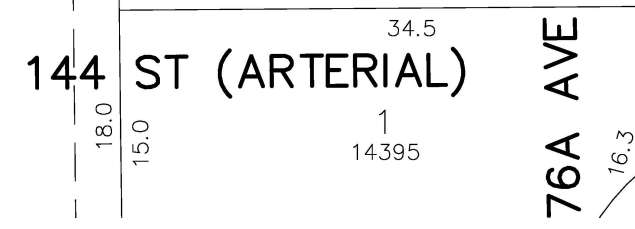
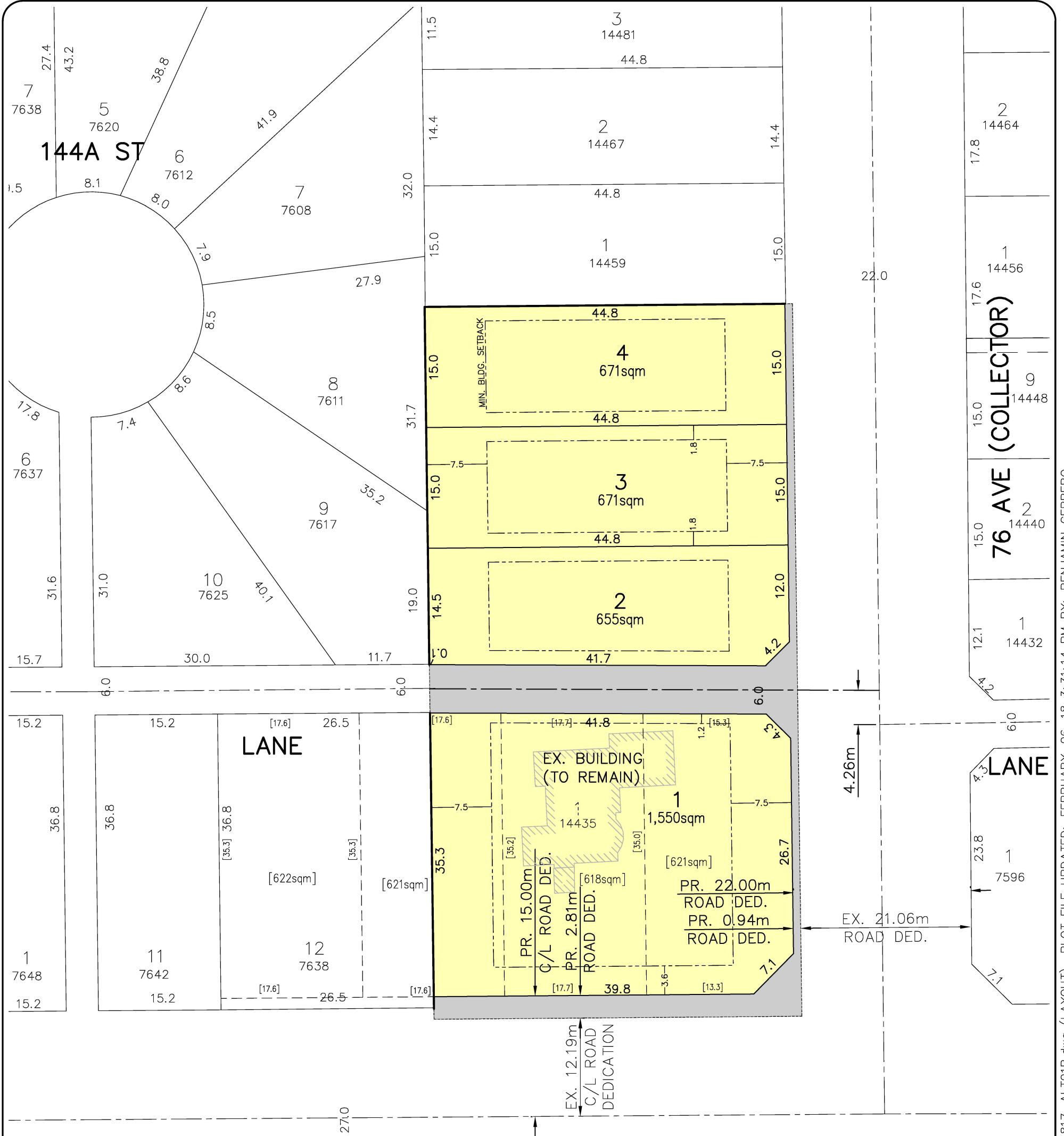
PROPOSED SUBDIVISION LAYOUT

Appendix II

File No: 79 -0 -00
 EXIST. ZONE: RA
 PROP. ZONE: RF



CIVIC ADDRESS: 14435 - 76 AVE., SURREY
 LEGAL: LOT 1, SECTION 22, TOWNSHIP 2, N.W.D., PLAN 69585



H.Y. ENGINEERING LTD.
 • #200-9128-152nd. ST. Surrey, BC V3R 4E7 • TEL 604-583-1616
 • Website: www.hyengineering.com • FAX 604-583-1737

GROSS SITE AREA: 4,051sqm (1.00ac)
 5% PARK DEDICATION: 203sqm (CASH-IN-LIEU)
 ROAD DEDICATION: 500sqm (0.12ac)
 NOTE: LOCATIONS OF EXISTING STRUCTURES WERE DERIVED FROM ORTHOGRAPHIC DATA, EXACT LOCATIONS MUST BE DETERMINED BY SURVEY
 NOTE: ALL EXISTING ONSITE STRUCTURES ARE TO BE REMOVED UNLESS NOTED OTHERWISE

H.Y.#:174817 | ALTERNATIVE#01B-1 | DATE: 06 FEB/18 | SCALE: 1:500

DRAWING PATH: E:\PROJECTS\174817-PLANNING\174817-ALT01B.dwg (LAYOUT) PLOT FILE UPDATED: FEBRUARY-06-18 3:31:14 PM BY: BENJAMIN CEBRERO

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

FROM: **Development Engineer, Engineering Department**

DATE: **Jun 14, 2018** PROJECT FILE: **7817-0469-00**

RE: **Engineering Requirements
Location: 14435 76 Avenue**

REZONE/SUBDIVISION

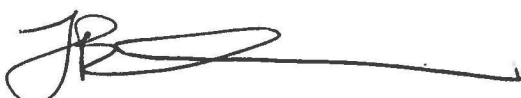
Property and Right-of-Way Requirements

- Dedicate 2.808 m along 144 Street towards the ultimate 30.0 m Arterial Road Standard.
- Dedicate 0.942 m along 76 Avenue towards the ultimate 22.0 m Collector Road Standard.
- Dedicate 6.0 m for the North/South Lane.
- Dedicate 3.0 x 3.0 m corner cuts at the intersection of the North/South Lane and 76 Avenue.
- Dedicate 5.0 x 5.0 m corner cut at the intersection of 144 Street and 76 Avenue.
- Provide a 0.5 m Statutory Right-of-Way along the 144 Street and 76 Avenue frontages.

Works and Services

- Ensure grading at the property line along 144 Street is within +/- 300mm of the centreline elevation. Remove the existing landscaping and fence within the 144 Street dedication and restore with topsoil and sod.
- Ensure grading at the property line along 76 Avenue is within +/- 300mm of the centreline elevation. Remove the existing driveway and fence and restore with topsoil and sod boulevard and barrier curb and gutter.
- Construct 6.0 m North/South Lane to the Residential Lane Standard (SSD-R.12).
- Construct 6.0 m concrete driveway letdowns for lots 2-4.
- Register a restrictive covenant restricting the access to Lot 1 to the North/South Lane.
- Provide water, storm, and sanitary service connections to each lot.
- Construct onsite stormwater mitigation features per the Lower Bear Creek Park Integrated Stormwater Management Plan.
- Register applicable legal documents as determined through detailed design.

A Servicing Agreement is required prior to Rezone/Subdivision.



Tommy Buchmann, P.Eng.
Development Engineer

CE4

NOTE: Detailed Land Development Engineering Review available on file



Planning February-06-18

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.

M.B. Sanford Elementary catchment is made up of established, maturing neighbourhoods. A boundary change was done prior to 2010 which moved students from an overcrowded Chimney Hill elementary into the MB Sanford catchment to capitalize on their surplus space. But even with this phased in boundary change, the District's projections show a slow decline in enrollment over the next 10 years. The current school is operating at 93% capacity and it is anticipated to drop to 87% by 2027. Currently, there are no plans to expand the school.

Frank Hurt Secondary continues to accept overflow from Sullivan Heights Secondary that currently has capped in-catchment enrollment to the school. Currently, Frank Hurt is operating at 100% capacity and it is projected to grow to 132% over the next 10 years. As a result, as part of the District's 2018/19 Capital Plan submission to the Ministry of Education, there is a capital request to construct a 400 capacity addition targeted to open September 2022. The Ministry has yet to approve capital funding for this project.

THE IMPACT ON SCHOOLS

APPLICATION #: 17 0469 00

SUMMARY

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

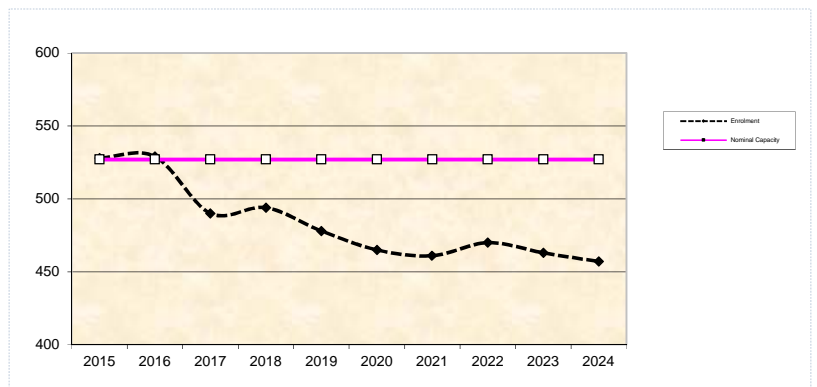
Projected # of students for this development:

Elementary Students:	1
Secondary Students:	1

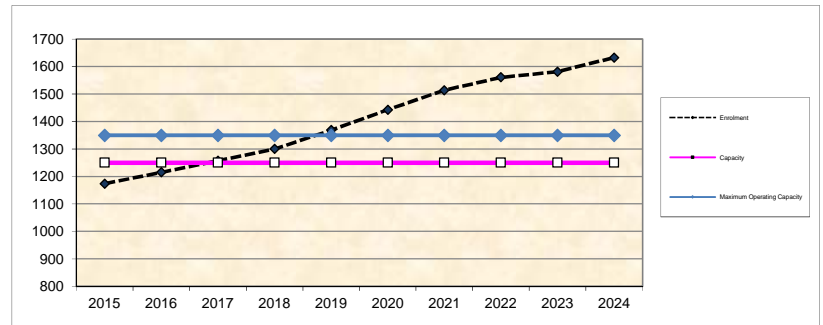
September 2017 Enrolment/School Capacity

M.B. Sanford Elementary	
Enrolment (K/1-7):	58 K + 432
Operating Capacity (K/1-7)	38 K + 489
Frank Hurt Secondary	
Enrolment (8-12):	1258
Capacity (8-12):	1250
Maximum Operating Capacity*(8-12):	1350

M.B. Sanford Elementary



Frank Hurt Secondary



* Nominal Capacity is estimated by multiplying the number of enrolling spaces by 25 students. Maximum operating capacity is estimated by multiplying the number of enrolling spaces by 27 students.

BUILDING GUIDELINES SUMMARY

Surrey Project no: 17-0469-00
 Project Location: 14435 - 76 Avenue, Surrey, B.C.
 Design Consultant: Tynan Consulting Ltd., (Michael E. Tynan)

The draft Building Scheme proposed for this Project has been filed with the City Clerk. The following is a summary of the Residential Character Study and the Design Guidelines which highlight the important features and form the basis of the draft Building Scheme.

1. Residential Character

1.1 General Description of the Existing and/or Emerging Residential Character of the Subject Site:

The subject site is located within a modern urban development area, in which most homes were constructed after the year 2000. The one exception is the site home at 14435 - 76 Avenue, which is to be retained. This home is a 1980's, 2800 sq.ft. (+/-)"Cape Cod" style 1½ Storey type home with desirable low to mid scale massing characteristics. Most of the upper floor area is contained within the roof extending up from the main floor. There are two dormers balanced within the upper floor massing in a common Cape Cod configuration. The roof has an asphalt shingle surface. Wall cladding is horizontal white vinyl siding with grey gable end trim and shutters.

The style of all homes other than the site home can be described as early 2000's "Neo-Traditional". Also, other than the 1 ½ Storey site home, all homes are Two-Storey type, ranging in size from 3000 - 3500 sq.ft.

There is consistency in the massing design. Nearly all homes have a 1 ½ Story high front entrance, with double garage on one side and 12 foot (+/-) wide room on the other. The upper floor is set back 20% of the area of the main floor, on the front, resulting in a roof system concealing a portion of the upper floor. Most homes have an 8:12 pitch main common hip roof with several street facing common gable or Dutch hip projections. Roof surfaces include asphalt shingles, and shake profile concrete roof tiles (dominant).

Wall cladding materials include vinyl or stucco, in a colour range that includes neutral, natural, and primary colours. Most homes have a stone accent. Street facing common gable projections are clad with wood battens over fibre cement board, or with stucco, or with wood shingles. Trim and detailing standards are typical of those found on most homes constructed in post year 2000's RF zone developments.

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

- 1) **Context Homes:** There are a few homes in this area that could be considered to provide acceptable architectural context. However, massing design, construction materials, and trim and detailing standards for new homes constructed in RF zone subdivisions now

exceed standards evident on the context homes. The recommendation therefore is to adopt standards commonly found in post year 2016 RF zoned subdivisions, rather than to emulate specific components of the aforesaid context homes.

- 2) **Style Character** : Existing surrounding homes are of styles typical of those found in modern urban developments in Surrey in the early 2000's. Styles recommended for this site include "Neo-Traditional" (dominant style in this area) and "Neo-Heritage" (a compatible style), and compatible forms of "West Coast Contemporary" that blend compatibly with the existing homes. 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** : All surrounding homes are Two-Storey type, and it is expected that all new homes constructed at the subject site will be Two-Storey type. However, home type (Two-Storey, Bungalow, Basement Entry, Split Level, etc..) will not be regulated in the building scheme.
- 4) **Massing Designs** : Massing designs should meet new standards for RF zoned subdivisions. New homes should exhibit "mid-scale" massing. Various elements and projections on the front of the home should be interesting architecturally, and should be in pleasing natural proportions to one another. These elements and projections should be located so as to create balance across the façade.
- 5) **Front Entrance Design** : Front entrance porticos range from one to 1 ½ storeys in height. The recommendation is to limit the range of entrance portico heights to between one storey and 1 ½ storeys to ensure there is not proportional overstatement of this one element.
- 6) **Exterior Wall Cladding** : A wide range of cladding materials have been used in this area, including Vinyl, stucco, fibre cement board, brick, and stone. Reasonable flexibility should therefore be permitted, including the use of vinyl siding, provided the overall quality of wall cladding materials meets or exceeds common standards for most post year 2016 RF zone developments.
- 7) **Roof surface** : All homes in this area have roofs surfaced with shake profile concrete roof tiles (dominant) or shake profile asphalt shingles. Some flexibility in roof surface materials is warranted. The recommendation is to permit cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roof products that have a strong shake profile. Where required by the BC Building Code for lower slope applications membrane roofing products can be permitted subject to consultant approval. Small decorative metal roofs should also be permitted.
- 8) **Roof Slope** : The recommendation is to set the minimum roof slope at 6:12. Steeper slopes will be encouraged, especially on street facing roof projections. However, a relatively low 6:12 slope may be required to meet maximum height as specified in the RF bylaw. A provision is also recommended to allow slopes less than 6:12 where it is determined by the consultant that the design is of such high architectural integrity that the roof slope reduction can be justified, or that lower slopes are needed on feature projections or at the front entrance veranda to ensure adequate depth upper floor windows can be installed without interference with the roof structure below.

Streetscape: Other than the 1980's 2800 sq.ft. Cape Cod style 1½ Storey site home to be retained, all homes are post year 2000's, 3000 - 3500 sq.ft. "Neo-Traditional" style Two-Storey homes with street facing double garages and 1½ storey high front entrances. These homes have an 8:12 pitch main common hip roof with several street facing common gable or Dutch hip

projections. Roof surfaces include asphalt shingles, and shake profile concrete roof tiles (dominant). Wall cladding materials include vinyl or stucco, in a colour range that includes neutral, natural, and primary colours. Most homes have a stone accent. Street facing common gable projections are clad with wood battens over fibre cement board, or with stucco, or with wood shingles. Trim and detailing standards are typical of those found on most homes constructed in post year 2000's RF zone developments. Landscapes are "average modern urban" consisting of 10 - 15 shrubs in front yards, sod, and replacement trees.

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", compatible forms of "West Coast Contemporary", or other compatible styles with appropriate transitions in massing and character, 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 2016's design standards, which include the proportionally correct allotment of mass between various street facing elements, the overall balanced distribution of mass within the front facade, readily recognizable style-authentic design, and a high trim and detailing standard used specifically to reinforce the style objectives stated above.
- trim elements will include several of the following: furred out wood posts, articulated wood post bases, wood braces and brackets, louvered wood vents, bold wood window and door trim, highly detailed gable ends, wood dentil details, stone or brick feature accents, covered entrance verandas and other style-specific elements, all used to reinforce the style (i.e. not just decorative).
- the development is internally consistent in theme, representation, and character.
- the entrance element will be limited in height (relative dominance) to 1 to 1 ½ storeys.

2.2 Proposed Design Solutions:

Interfacing Treatment with existing dwellings)

There are homes in this area that could be considered to provide acceptable architectural context. However, massing design, construction materials, and trim and detailing standards for new homes constructed in most new (post year 2016) RF zone subdivisions now exceed standards evident on the context homes. The recommendation therefore is to adopt standards commonly found in post year 2016 RF zoned subdivisions, rather than to specifically emulate the aforesaid two context homes.

Exterior Materials/Colours:

Stucco, Cedar, Vinyl, Fibre-Cement Board, 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 6:12, with exceptions to prevent roof ridges from becoming too high (overshadowing of neighbouring lots), to allow for veranda roofs that do not cover upper floor windows, to allow for artistic expression in feature roofs, and to provide a path for exceptional designs with lower slope roofs to be approved subject to consultant approval.

Roof Materials/Colours: Cedar shingles, shake profile concrete roof tiles, shake profile asphalt shingles with a raised ridge cap, and new environmentally sustainable roofing products should be permitted, providing that the aesthetic properties of the new materials are equal to or better than that of the traditional roofing products. Greys, black, or browns only. Membrane roofs permitted where required by B.C. Building Code.

In-ground basements: In-ground basements are subject to determination that service invert locations are sufficiently below grade to permit a minimum 50 percent in-ground basement to be achieved. If achievable, 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 a minimum of 30 shrubs of which not less than 12 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, stamped concrete, or coloured concrete in dark earth tones or medium to dark grey only. Broom finish concrete is permitted only on lots 1 and 2 if the driveway directly connects the lane to the garage slab at the rear side of the dwelling.

Compliance Deposit: \$5,000.00

Summary prepared and submitted by: Tynan Consulting Ltd. Date: December 15, 2017

Reviewed and Approved by:  Date: December 15, 2017

Tree Preservation Summary

Surrey Project No:

Address: 14435 76th Avenue Surrey

Registered Arborist: Glenn Murray

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)	0
Protected Trees to be Removed	0
Protected Trees to be Retained (excluding trees within proposed open space or riparian areas)	0
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio $\underline{\quad 0 \quad} \times \text{one (1)} = 0$ - All other Trees Requiring 2 to 1 Replacement Ratio $\underline{\quad 0 \quad} \times \text{two (2)} = 0$ 	0
Replacement Trees Proposed	12
Replacement Trees in Deficit	-12
Protected Trees to be Retained in Proposed [Open Space / Riparian Areas]	

Off-Site Trees	Number of Trees
Protected Off-Site Trees to be Removed	0
Total Replacement Trees Required: <ul style="list-style-type: none"> - Alder & Cottonwood Trees Requiring 1 to 1 Replacement Ratio $\underline{\quad \quad \quad} \times \text{one (1)} = 0$ - All other Trees Requiring 2 to 1 Replacement Ratio $\underline{\quad \quad \quad} \times \text{two (2)} = 0$ 	0
Replacement Trees Proposed	
Replacement Trees in Deficit	0

Summary, report and plan prepared and submitted by:

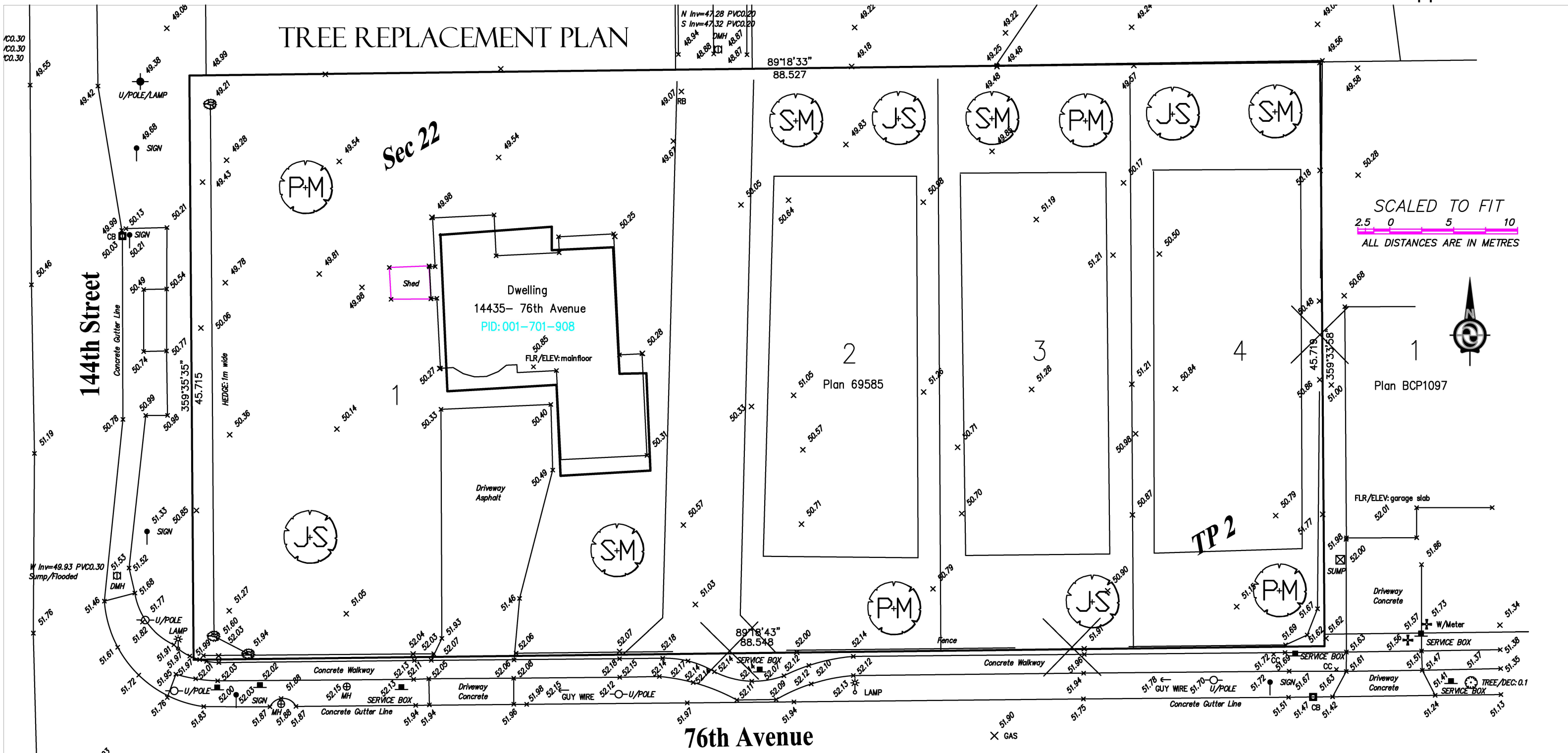


(Signature of Arborist)

14-Nov-17

Date

TREE REPLACEMENT PLAN



REPLACEMENT TREES

QTY	Type	Size
4	Japanese Snowbell	6cm
4	Paperbark Maple	6cm
4	Saucer Magnolia	6cm



NOTES:
 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 CONFORM TO THE LATEST EDITION OF THE BCNTA/BCSLA "LANDSCAPE STANDARDS".

- NOTES:
1. SITE LAYOUT INFORMATION AND TREE SURVEY DATA PER SUPPLIED DRAWING
 2. REFER TO ATTACHED TREE PROTECTION REPORT FOR INFORMATION CONCERNING TREE SPECIES, STEM DIAMETER, HEIGHT, CANOPY SPREAD AND CONDITION.
 3. ALL MEASUREMENTS ARE METRIC

Froggers Creek
Tree Consultants Ltd

7763 McGregor Avenue Burnaby BC V5J 4H4
Telephone: 604-721-6002 Fax: 604-437-0970

14435 76th Street Surrey

TREE REPLACEMENT PLAN
THE DRAWING PLOTS REPLACEMENT TREES IN RELATION TO PROPOSED LAYOUT

November 14, 2017