

ADVISORY PLANNING COMMISSION – AGENDA

Agenda for the Advisory Planning Commission Meeting scheduled for Monday, October 7, 2019 at 7:00 p.m. in Council Chambers at Village Hall, 2697 Sunnyside Road, Anmore, BC



1. **Call to Order**

2. **Approval of the Agenda**

Recommendation: That the agenda be approved as circulated.

3. **Minutes**

Page 2 (a) **Minutes of the Advisory Planning Commission meeting held on September 9, 2019**

Recommendation: That the Minutes of the Advisory Planning Commission meeting held on September 9, 2019 be adopted, as circulated.

4. **Business arising from the Minutes**

5. **Unfinished Business**

6. **New Business**

Page 6 (a) **Infill Development Rezoning Application 231 Strong Road**

Report dated September 27, 2019 from the Manager of Development Services is attached.

7. **Adjournment**

ADVISORY PLANNING COMMISSION MEETING – MINUTES

Minutes of the Advisory Planning Commission Meeting held on Monday, September 9, 2019 in Council Chambers at Village Hall, 2697 Sunnyside Road, Anmore, BC



MEMBERS PRESENT

Denny Arsene
Garnet Berg
Steve Hawboldt (Chair)
Wayne Keiser
Julia Robertson
Bruce Scatchard*

MEMBERS ABSENT

Olen Vanderleeden

OTHERS PRESENT

Mayor John McEwen, Council Liaison
Jason Smith, Manager of Development Services
Martin Greig, Building Inspector/Bylaw Enforcement Officer

1. CALL TO ORDER

Chair Hawboldt called the meeting to order at 7:00 p.m.

2. APPROVAL OF THE AGENDA

It was MOVED and SECONDED:

That the agenda be approved as circulated.

Carried Unanimously

3. MINUTES

- (a) **Minutes of the Advisory Planning Commission meeting held on February 11, 2019 and Minutes of the Advisory Planning Commission meeting held on May 6, 2019**

It was MOVED and SECONDED:

That the Minutes of the Advisory Planning Commission held on February 11, 2019 and adopted at the May 6, 2019 Advisory Planning Commission meeting be amended under item 6 (a) discussion points to remove the reference to Anmore Elementary and to replace it with Eagle Mountain Middle School and That the

Minutes of the Advisory Planning Commission meeting held on May 6, 2019 be adopted, as circulated.

Carried Unanimously

4. **BUSINESS ARISING FROM THE MINUTES**

None.

5. **UNFINISHED BUSINESS**

None

6. **NEW BUSINESS**

*Committee member, Bruce Scatchard, recused himself from the meeting due to a conflict of interest regarding a current application relating to updates in the zoning bylaw.

(a) Updates to the Zoning Bylaw

Mr. Jason Smith, Manager of Community Development, provided an overview of the staff report and proposed amendments to the zoning bylaw. Mr. Smith reported that Council is seeking feedback from the Advisory Planning Commission (APC) on the proposed amendments to the zoning bylaw.

Proposed amendments as outlined in the staff report were presented and discussion ensued:

1. Siting exceptions – projections
 - Clear existing ambiguity between zoning and building bylaw
 - Concerns regarding existing non-conforming structures
 - Clarification of allowable length for projection of eaves
2. Off street parking and front yard setbacks
 - Ensure that regardless of how garage was used that there would always be adequate off street parking available
3. Accessible Parking Space
 - To provide requirement for accessible parking in the civic institutional zone
4. Construction equipment and large vehicles on double fronting lots
 - Reduce visual impacts of large vehicles and construction equipment
 - General support from APC members while concern exists regarding existing properties

5. Garages and coach houses

- Concerns over coach house garage conversions to living space
 - General support from APC members to clarify intent of below grade floor area exception to apply to only principal building
 - General support from APC members regarding addition of language clarifying that garage area in an accessory building is not included in total floor area of coach house but is included in calculation of the floor area of an accessory building.
-
- Additional concerns were expressed by APC members regarding breezeway components that may result in sprawled housing design

It was MOVED and SECONDED:

That the Advisory Planning Commission support the following proposed zoning bylaw amendments as referred by Council and included in the Report to Council dated August 30, 2019 from the Manager of Development Services:

1. Siting exceptions – projections, with consideration to be given to projections of roof eaves to be permitted in compliance with building code requirements.
2. Off street parking and front yard setbacks
3. Accessible parking space in Civic Institutional Zone
4. Construction equipment and large vehicles on double fronting lots
5. Garages and coach houses.

Carried Unanimously

It was MOVED and SECONDED:

That the Advisory Planning Commission recommend THAT Council consider providing direction to staff to research and report back regarding the issue of use of breezeway design components as an expansion of secondary homes within a principal residence.

Carried Unanimously

ADJOURNMENT

It was MOVED and SECONDED:

To adjourn the meeting at 8:35 p.m.

Carried Unanimously

Certified Correct:

Approved:

Karen Elrick
Corporate Officer

Steve Hawboldt
Chair, Advisory Planning Commission



VILLAGE OF ANMORE

REPORT TO COUNCIL

Date: September 27, 2019 File Number: 3360-01/20
Submitted by: Jason Smith, Manager of Development Services
Subject: Infill Development Rezoning Application – 231 Strong Road

Purpose / Introduction

The purpose of this report is to present Council with an infill development rezoning application for 231 Strong Road.

Recommended Options

That Council direct staff to refer the rezoning application for 231 Strong Road to the Advisory Planning Commission for comment.

Background

In July of 2018, the Village of Anmore adopted an Official Community Plan (OCP) amendment to enable infill development, OCP Policy RLU-16. The OCP amendment was accompanied by an Infill Development Policy that provided further direction and clarity as to what the Village's expectations were for infill development.

The Village has recently received its first application for rezoning under the infill development provisions of the OCP.

Discussion

The owner of 231 Strong Road has submitted an application for rezoning and subdivision (Attachment 1). The applicant is proposing to create 2 lots from the existing 1 acre property. The two proposed lots are 2/3 and 1/3 acre in size. There is an existing home on the property that will be retained on the proposed 2/3 acre parcel.

Official Community Plan Considerations

The application for rezoning is for the property located at 231 Strong Road. OCP Policy RLU-16 establishes criteria that must be met for a parcel to be eligible for consideration for rezoning under the OCP Policy.

Report/Recommendation to Council

Infill Development Rezoning Application – 231 Strong Road

September 27, 2019

Parcels that are eligible for consideration must:

1. Not have been created through a previous comprehensive development plan;
This parcel was not created by a comprehensive development plan and is currently zoned Residential 1 (RS-1).
2. Be between 3925 m² and 8094 m² in area;
The parcel is 4070 m² in size
3. Have an average slope, as determined by a registered surveyor, equal to or less than 20%;
The survey provided with the application only shows a maximum elevation change on the property of 4 metres and a site visit makes obvious that this property has an average slope less than 20%.
4. identify a building site(s) that is equal to or less than 20% slope;
The parcel is flat and the proposed building sites have a slope less than 20%.
5. Not require the extension or expansion of any Village road or water infrastructure;
The site plan shows that the property is bound on two sides by public roadway and there are existing water mains that run in front of the property on both Strong Road and Lancaster Court. Therefore no extension of public infrastructure is required to service the proposed parcels.
6. Have at least 50 m of frontage on a public highway; and
The parcel has over 146 metres of frontage on a public highway.
7. Have been in existence for a least 10 years.
This parcel was created in 2005.

The parcel meets all of the eligibility requirements and the proposed density of 2 units/acre meets the density criteria.

Infill Development Policy Considerations

Council also adopted any accompanying Infill Development Policy to provide further direction of what the expectations are for infill development proposals.

Report/Recommendation to Council

Infill Development Rezoning Application – 231 Strong Road

September 27, 2019

The proposal meets the parcel size requirement that states parcels may be created as small as 1/3 of an acre to, in this case, enhance tree protection and retention.

Each of the proposed parcels has well over 25 metres of frontage on a public highway with 43 metres for one parcel and 103 metres for the other parcel.

Both lots can accommodate a building site that complies with the existing RS-1 setbacks and parcel coverage as shown in the attached site plan.

The existing home is approximately 2800 square feet in size and well under the size requirements of the new parcel it will be situated on.

The applicant has offered a Community Amenity Contribution of \$150,000, to have the new parcel to have a requirement for new construction to meet Energy Step Code 3, and to have the new home to be constructed be equipped with fire sprinklers.

The applicant has furnished an arborist report that identifies a total of 56 trees on the parcel and proposes that 44 of those trees be retained in order to maintain tree cover on the property.

Neither proposed parcel will require additional public infrastructure to service.

Process

Staff recommend referring the application to the Advisory Planning Commission (APC) for comment and, should Council choose to pursue that option, staff would return to Council with any comments from the APC and a draft Zoning Bylaw amendment. Council at that time would have the option to give initial readings to the proposed bylaw and proceed to a public hearing.

Other Options

The following options are presented for Council's consideration:

1. That Council direct staff to refer the rezoning application for 231 Strong Road to the Advisory Planning Commission for comment.

Or

Report/Recommendation to Council

Infill Development Rezoning Application – 231 Strong Road

September 27, 2019

2. That Council advise the applicant that it does not want to proceed with the application

Or

3. That Council advise staff of any additional information they would require before proceeding with the application.

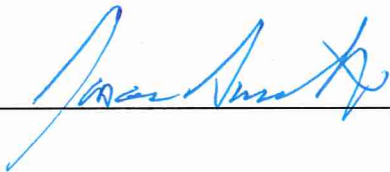
Financial Implications

There are no financial implications for any of the options presented as the costs of a rezoning application are covered by the fees for the application.

Attachments:

1. 231 Strong Road Application Package

Prepared by:



Jason Smith

Manager of Development Services

Reviewed for Form and Content / Approved for Submission to Council:

Chief Administrative Officer's Comment/Concurrence



Chief Administrative Officer

The Village of Anmore
2697 Sunnyside Road
Anmore, BC V3H 5G9

Re: Rezoning and Subdivision Application for 231 Strong Road

Please consider our proposal to rezone and subdivide our property under the Infill Development OCP Policy.

Our lot is 1.05 Acres and we have lived on the property for over thirty years.

We would like to propose a one-third acre subdivision. This parcel size will serve to enhance tree preservation on both the proposed lot and the remaining property. We have included an Arborist report that identifies the existing trees that would be left on the proposed lot, as well as the remaining property.

A one-third acre lot will benefit the community by providing a more affordable and manageable property for seniors or first time buyers.

The proposal will leave the remaining lot with our existing home meeting all current setbacks. We attach a survey outlining the the proposed lot and the remaining lot setbacks. The "shed" identified on the lot survey south border is a moveable covered 3'x 8' firewood storage stand, which has now been moved south of the proposed property line.

This proposal also allows for both lots to retain the 20% retention requirement outlined in the tree cutting by-law, while maintaining the semi-rural character of the neighborhood. A subdivision larger than one third of an acre would not leave us enough property for a back yard, and would leave us with no trees at the rear of our home.

The proposed lot would have over 40 meters of frontage on Lancaster and will not require any expansion of public infrastructure. We understand driveway access can be developed at a later date when building permits are pursued.

The proposed lot has a minimal slope with native trees and natural ground cover. There are no environmentally sensitive areas on the lot. We have attached a geotechnical survey outlining slope and soil content, which is suitable for sewage disposal on all tested areas.

on

We agree to pay the CAC target, which we understand is \$150,000 payable approval of Rezoning.

Attached please find:

Development application requirements and checklist
Rezoning application
Subdivision application
State of Title Certificate
Landmark Engineering Site Plan
Tree Men Tree and Topographical Survey
Braun Geotechnical Ltd. Land Survey

Thank you for your consideration in this matter

William & Julie Prior

[REDACTED]

INFILL SUBDIVISION AT 231 STRONG ROAD, ANMORE, BC

GENERAL NOTES:

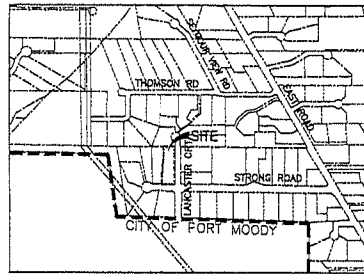
1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH VILLAGE OF ANMORE WORKS & SERVICES BY-LAW WITH AMENDMENTS 242-1988, APPLICABLE CONTRACT DOCUMENTS AND ALL SPECIFICATIONS REFERENCED THEREIN AND MASTER MUNICIPAL CONSTRUCTION DOCUMENTS (LATEST EDITION).
2. THE CONTRACTOR SHALL MAINTAIN ON SITE COPIES OF THE ABOVE DOCUMENTS AND SHALL ENSURE THAT ALL TRADES ARE THOROUGHLY FAMILIAR WITH THE APPLICABLE SECTIONS OF THESE DOCUMENTS.
3. ALL WORKS SHALL BE CONSTRUCTED TO THE SATISFACTION OF THE VILLAGE OF ANMORE ENGINEER OR HIS APPOINTED REPRESENTATIVE AND WITH THE NOTES AND DETAILS ON THESE DRAWINGS.
4. RESIDENTS DIRECTLY AFFECTED BY CONSTRUCTION OF THIS PROJECT SHALL BE GIVEN 48 HOURS WRITTEN NOTICE OF THE PROPOSED START OF CONSTRUCTION. IF CONSTRUCTION ENTERS ONTO PRIVATE PROPERTY, THE CONTRACTOR OR DEVELOPER'S AGENT WILL REQUIRE WRITTEN AUTHORIZATION FROM THE PRIVATE PROPERTY OWNERS.
5. THE CONTRACTOR SHALL ENSURE THAT ALL APPROVALS/PERMITS REQUIRED FOR THE PROPOSED WORKS HAVE BEEN OBTAINED FROM ALL AUTHORITIES AND AGENCIES PRIOR TO COMMENCEMENT OF WORK.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORKS WITH THE VILLAGE OF ANMORE, B.C. HYDRO, TELUS, CABLE, AND PORTIS BC.
7. THE LOCATION AND ELEVATION OF ALL EXISTING SERVICES ARE APPROXIMATE ONLY AND SHOULD BE CONFIRMED BY A PIPE LOCATOR OR MANUAL DIGGING PRIOR TO CONSTRUCTION. ANY DISCREPANCY OR CONFLICT SHOULD BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROCEEDING. WHERE THE POSSIBILITY OF DAMAGE TO UNDERGROUND UTILITIES MAY BE CAUSED BY NEW CONSTRUCTION SHOWN ON THESE PLANS, SUCH UTILITIES SHALL BE EXPOSED, RAISED/LOWERED, RELOCATED OR IF NECESSARY REMOVED AT THE DEVELOPER'S EXPENSE UNDER DIRECTION OF THE PROJECT ENGINEER.
8. ALL DIMENSIONS ARE SHOWN IN METERS UNLESS NOTED OTHERWISE.
9. THE CONTRACTOR SHALL TAKE EXTREME CARE WHEN WORKING NEAR OR AROUND EXISTING SERVICES/MAINS. ANY DISTURBANCE TO THESE SERVICES SHALL BE REPLACED OR MADE GOOD TO THE SATISFACTION OF THE VILLAGE OF ANMORE OR THE OWNER OF THE UTILITY.
10. ALL EXISTING PAVEMENTS, BOULEVARDS, DRIVEWAYS, ETC. ARE TO BE RESTORED TO THE SATISFACTION OF THE VILLAGE OF ANMORE'S INSPECTOR. IN SPECIAL CASES THE INSPECTOR MAY REQUIRE WRITTEN ACCEPTANCE OF RESTORATION WORK PERFORMED FROM AFFECTED PROPERTY OWNER.
11. ALL MONUMENTS, POSTS OR IRON PINS DISTURBED OR DESTROYED SHALL BE REPLACED AND RESURVEYED AT THE CONTRACTOR'S EXPENSE AND TO THE VILLAGE OF ANMORE'S SATISFACTION.
12. ALL EXISTING LIVE SERVICES SHALL BE MAINTAINED OPERATIONAL DURING CONSTRUCTION.
13. WORK REFERENCED AS 'BY DEVELOPER' SHALL BE CARRIED OUT BY THE CONTRACTOR. WORK REFERENCED AS 'BY BUILDER' WILL BE CARRIED OUT BY OTHERS.
14. WHERE INFILLING OF EXISTING DITCHES, ETC. IS REQUIRED AND WHERE SERVICES ARE CONSTRUCTED, INFILL WITH 100mm GRAVEL, COMPACTED TO 95% MODIFIED PROCTOR.

STORM SEWER NOTES

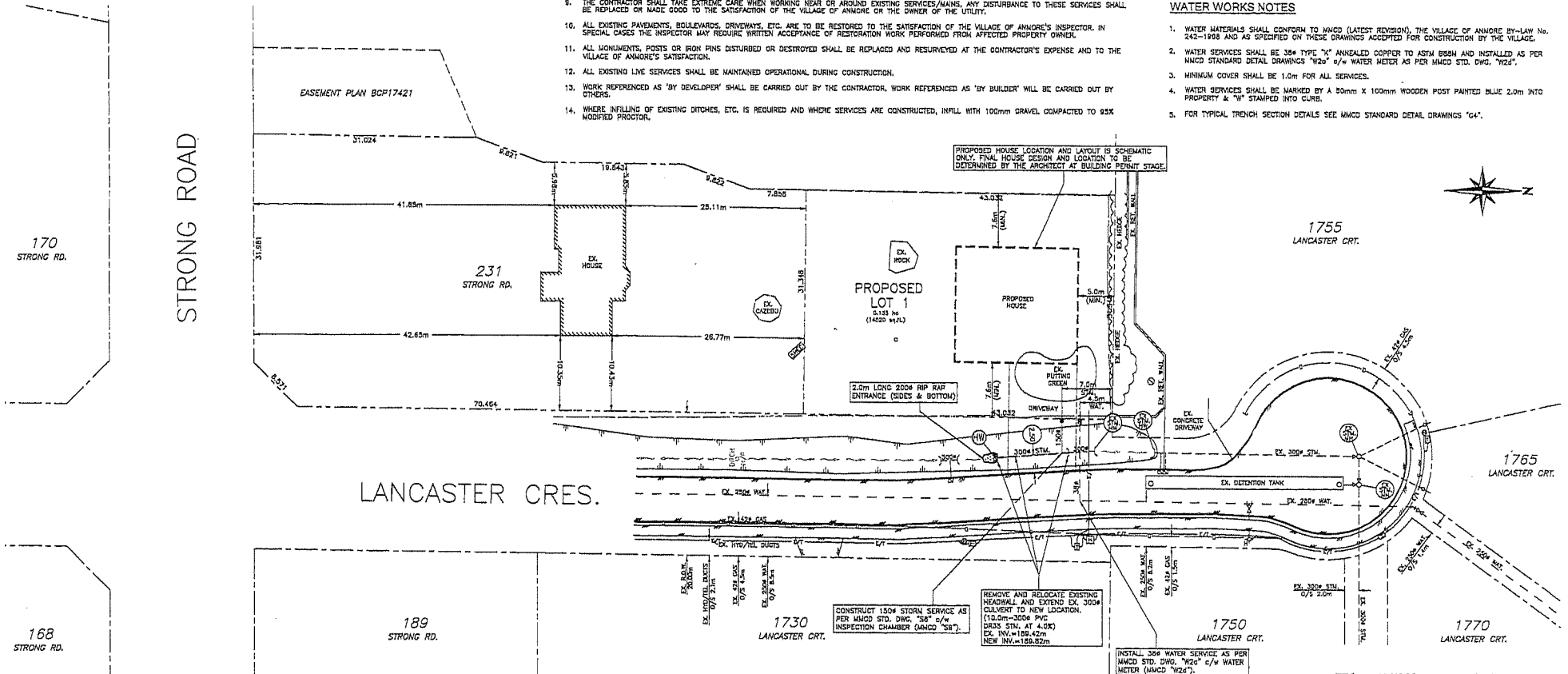
1. STORM SEWER MATERIALS SHALL CONFORM TO MMCD (LATEST REVISION), THE VILLAGE OF ANMORE BY-LAW No. 242-1988 AND AS SPECIFIED ON THESE DRAWINGS ACCEPTED FOR CONSTRUCTION BY THE VILLAGE.
2. FOR TYPICAL TRENCH SECTION SEE MMCD STD. DETAIL "04".
3. ALL STORM SEWER SERVICE CONNECTIONS ARE TO BE 150mm DIAMETER PVC DR20 PIPE 6/M INSPECTION CHAMBER (MMCD "50") AND INSTALLED AS PER MMCD STD. DETAIL "55".
4. STORM SERVICES SHALL BE MARKED BY A 50mm X 100mm WOODEN POST PAINTED GREEN 2.0m INTO PROPERTY MARKED "W" TO INVERT & "D" STAMPED INTO CURB.
5. MANUFACTURED WYES OR APPROVED ALTERNATIVE SHALL BE USED FOR ALL SERVICE CONNECTIONS TO STORM MAINS.
6. STORM SEWER MAINS SHALL BE 300mm PVC DR30 PIPE.
7. STORM SEWERS TO BE CONSTRUCTED WITH SEALED JOINTS UNLESS OTHER-WISE SPECIFIED ON THE DESIGN DRAWINGS.
8. FOR TYPICAL HEADWALL DETAILS SEE MMCD STD. DWG. "513".

WATER WORKS NOTES

1. WATER MATERIALS SHALL CONFORM TO MMCD (LATEST REVISION), THE VILLAGE OF ANMORE BY-LAW No. 242-1988 AND AS SPECIFIED ON THESE DRAWINGS ACCEPTED FOR CONSTRUCTION BY THE VILLAGE.
2. WATER SERVICES SHALL BE 35mm TYPE "K" ANNEALED COPPER TO ASTM B88M AND INSTALLED AS PER MMCD STANDARD DETAIL DRAWINGS "W20" 6/W WATER METER AS PER MMCD STD. DWG. "W22".
3. MINIMUM COVER SHALL BE 1.0m FOR ALL SERVICES.
4. WATER SERVICES SHALL BE MARKED BY A 50mm X 100mm WOODEN POST PAINTED BLUE 2.0m INTO PROPERTY & "W" STAMPED INTO CURB.
5. FOR TYPICAL TRENCH SECTION DETAILS SEE MMCD STANDARD DETAIL DRAWINGS "04".



SITE MAP
SCALE=1:7500



ENGINEER:
**LANDMARK ENGINEERING
& PLANNING LTD.**
#226-3030 LINCOLN AVE., COQUITLAM, BC, V3B 6B4
TELEPHONE 604-357-3541 FAX 604-357-3799



LEGEND: ALL EXISTING WORKS SHOWN THIN / ALL PROPOSED WORKS SHOWN BOLD

WATER MAIN	WATER VALVE	UTILITY POLE
SANITARY MAIN	WATER VALVE ASSOCIATED AIR RELEASE VALVE	EDGE OF PAVEMENT
STORM MAIN	WATER VALVE ASSOCIATED AIR RELEASE VALVE	CORE & GUTTER
UTILITY	WATER VALVE ASSOCIATED AIR RELEASE VALVE	GRAVEL SHOULDER
STORM CHECK	WATER VALVE ASSOCIATED AIR RELEASE VALVE	STREET LIGHT
CATCHMENT	WATER VALVE ASSOCIATED AIR RELEASE VALVE	

DEVELOPER:
**WILLIAM &
JULIE PRIOR**
231 STRONG ROAD
ANMORE, BC, V3H 5E9
c/o: Bill Prior
Tel: 604-619-0241

REVISIONS

NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR APPROVAL	9/26/19	G.S.W.
2	REVISION		

BOUNDARY: GEODETIC DATUM BASED ON SUN
FREQUENCY DIFFERENTIAL CARRIER PHASE GPS OBSERVATIONS TO
BCDC (CON/87/2844), VANCOUVER CITY FIRE HALL #1 ACP
BCDP (CON/16/2743), SURREY FIRE HALL #2 ACP

LEGAL: TOPOGRAPHIC PLAN OF A
PORTION OF LOT 1
SECTION 27, TOWNSHIP 26,
R.16, S. PLAN BCP17420

231 STRONG ROAD,
ANMORE, BC
P.O. 020-274-333

ENGINEER'S
TITLE:
KEY PLAN

The Village of Anmore

INFILL SUBDIVISION AT 231 STRONG ROAD
DESIGN: G.S.W. SCALE: Horiz. 1:300 Vert. N/A
DRAWN: J.R.G.

FILE NO.
19-2018-56
SHEET NO.
1 OF 1
DATE
SEPT. 6, 2019
REV. NO.
0



May 6, 2019

ABC TREE MEN

CERTIFIED ARBORIST REPORT

PROJECT LOCATION:

231 Strong Rd, Anmore

PREPARED FOR:

William & Julie Prior

PREPARED BY:

ABC Tree Men
8952 15th Ave, Burnaby B.C.

May 6, 2019

Francis R. Klimo
ISA Certified Arborist
ISA Certified Tree Risk Assessor
BC Wildlife Danger Tree Assessor

1.0 SCOPE OF WORK

ABC Tree Men was contracted by William & Julie Prior to conduct and prepare a Tree assessment, Tree management plan, and Arborist report for their proposed subdivision application located at 231 Strong Rd, Anmore. The objective of this report is to ensure the proposed subdivision application will be in compliance with the *Anmore Tree Management Bylaw No. 430, 2007* and *Best Management Practices*. We conducted our field inspections on May 6, 2019 at around 10:30am. Our scope of work was to identify all on/off-site as per the Topographical Survey, assess, document their condition, and recommend actions on removing or retaining the trees in question.

❖ 1.1 Limits of assignment

- Our investigation is based solely on visual inspection of the trees on May 6, 2019 and the analysis of photos taken and tree diagnosis gathered during the inspection.
- Our inspection was conducted from ground level. We did not conduct soil tests or below grade root examination to assess the condition of the root system of the trees.
- We conducted a level 2 assessment.
- Sunny, hot, spring day, no notable weather conditions.

❖ 1.2 Purpose and use of the report

- Meet municipal criteria for Arborist report submissions and to provide documentation pertaining to on/off-site trees to supplement the proposed subdivision application for 231 Strong Rd, Anmore.

2.0 SITE ANALYSIS

Currently on the property there is an existing house situated on a ^{40,000}14,000 (Approx.) square feet lot. The existing house will remain and the property will undergo a subdivision application for the northern portion of the property. Towards the future a plan would be to re develop the property to make way for a new single family dwelling.

A total of fifty (50) trees were observed and examined on and off site. The subject trees were located throughout the property and were primarily located towards the southern limits of the lot and surrounding the edges of the P/L and landscaped trail. The subject trees consisted of mature coniferous native species developing within close proximity of one another. Observing the site, the property is a corner lot bounded by Lancaster Ct and Strong Rd, residential properties to the west and north. The property is flat-lying without any significant grade differences.

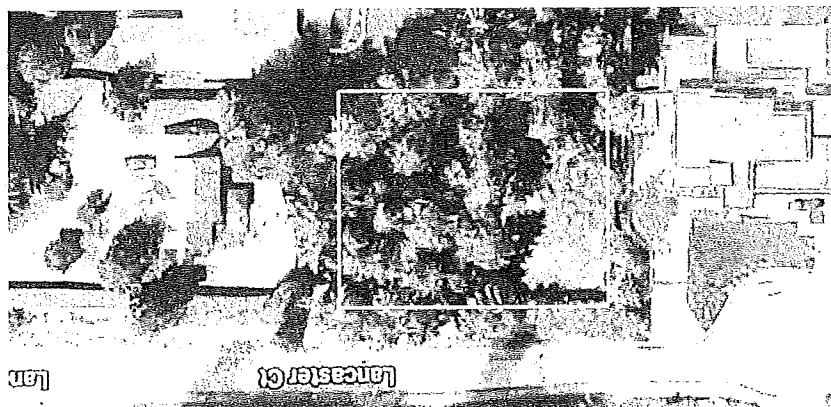


Figure 1. Location of subject site— 231 Strong Rd, Anmore

3.0 TREE ASSESSMENT PROCESS

Our tree inspection process is a systematic process for accurately identifying and cataloging trees. Using the site survey as a reference to their location and the proposed plans aiding in our suitability for retention assessment, we have produced accurate findings to our recommendations to ensure the use of proper tree protection during the construction phase and as applicable, prescribing tree removal recommendations. Our assessment of the on-site and off-site trees consists of gathering and documenting sizes (*DBH, Height, and Crown spread*), condition, species, location, growth form, and other site factors. The data collected will be documented into the inventory and will also aid in the selection for retention and or removal of the subject trees. In addition, accurate tree preservation measures could be implemented for the optimal retention and protection of trees throughout the duration of construction and up to the completion of the project.

- **3.1 Health and structure rating**

Basic Definition of general overall tree health, broken into five (5) defined categories with their corresponding suitability for retention split into three (3) categories:

- **Good** - A healthy, vigorous tree, reasonably free of disease, with good structure and form typical of the species. *Suitable for retention.*
- **Fair to good** - Tree is growing well for its species. No overt or identifiable significant defects, and is well suited for retention. *Suitable for retention.*
- **Fair** - Subject tree that has an average vigour for its species. Small amount of twig dieback, minor structural defects that could be corrected. *Marginal for retention.*
- **Fair to poor** - A tree with moderate to poor vigor, moderate twig and small branch dieback, thinning of crown, poor leaf color, moderate structural defects that may affect its survival considering construction impacts. *Marginal for retention.*
- **Poor** - A tree in decline, epicormics growth, extensive dieback of medium to large branches, significant structural defects that cannot be abated. And a tree in severe decline, dieback of scaffold branches and or trunk, mostly epicormic growth; extensive structural defects that cannot be abated. *Unsuitable for retention*

4.0 SUMMARY OF FINDINGS

On May 6, 2019, ABC Tree Men conducted a site visit and visual inspection. A total of fifty-six (56) trees have been identified on/off-site.

- Seven (7) trees were observed off-site on the neighboring property,
- Five (5) trees were observed off-site on parks property,
- Forty-four (44) trees were observed on-site,

We observed four (4) types of species located on/off-site: Western redcedar, Silver birch, Western hemlock, and Douglas fir.

DBH varies from 18cm to 60cm for trees off-site and 14cm to 75cm for trees identified on-site.

Of the fifty-six (56) trees identified, the forty-four (44) on/off-site trees will be retained using tree protection measures and the twelve (12) on/off-site trees are located directly within construction zones with high disturbances requirements and have been selected for removal.

5.0 SUMMARY OF TREE PRESERVATION BY TREE SPECIES:

Tree Species	Existing	Remove	Retain
Alder and Cottonwood Trees			
Alder			
Cottonwood			
Deciduous Trees (excluding Alder and Cottonwood Trees)			
Silver birch	3	3	
Coniferous Trees			
Douglas fir	16	2	14
Western Red Cedar	9		9
Western hemlock	28	7	21
Condition			
Unsuitable	12	12	
Marginal	31		31
Suitable	13		13
Total	56	12	44

6.0 TREE RETENTION / REMOVAL RECOMMENDATIONS

A total of fifty-six (56) trees have been found on/off-site. As the proposed plans have yet to be planned, the retention / removal recommendations are based on the subject trees current health and a complete Tree Management Plan would be included when the final plans are completed.

Based on the factors that include the pre-existing condition of the subject trees as detailed in the general observations, tree inventory, and overall health, trees are proposed to be treated a follows.

❖ Tree retention

Pursuant to the *Anmore Tree Management Bylaw No. 430, 2007* the following trees are recommended for retention as detailed in the report and tree recommendations. Information regarding specific recommendations can be found in the *Tree retention plan recommendations above and section 10.0 Tree Protection barriers*.

- On-site Trees #1-117, 2-118, 3-119, 4-120, 5-121, 6-122, 7-123, 11-127, 12-128, 13-129, 14-130, 15-131, 16-132, 17-133, 19-135, 20-136, 21-137, 22-138, 29-145, 30-146, 31-150, 32-095, 33-094, 34-093, 35-092, 36-091, 37-090, 38-088, 40-085, 41-078, 43-080, 44-087, 45-077, 46-076, 47-081, 48-082, 49-083, 50-084, 51-147, 52-148, 53-149, 54-097, 55-096, and 56-089 will be retained with tree protection measures implemented. The retention recommendations are based on the subject trees current health and a complete Tree Management Plan would be included when the final plans are completed.

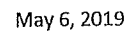


May 6, 2019

❖ **Tree removal**

Pursuant to the *Anmore Tree Management Bylaw No. 430, 2007* the following trees are recommended for removal as per the following sections or as detailed in the report.

- On-site trees #8-124, 9-125, 10-126, 18-134, 23-139, 24-140, 25-141, 26-142, 27-143, 28-144, 39-086, and 42-079 are recommended for removal as they are unsuitable for retention due to their poor overall health and observable defects.

[illegible]



May 6, 2019

8.0 TREE INVENTORY

Table 1												
ABC Tree Men												
May 6, 2019												
231 Strong Rd, Anmore												
ID#	Surveyed Y/N	On-site / Off-site	Common name	Botanical name	DBH (cm)	LCR (%)	Canopy (Dia M.)	Condition	Comments	Retention Suitability	Retain / Remove	TPZ (m)
1-117	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	73	30	5	Co dominant with a deeply imbedded junction. Minor reaction wood. Fair condition.		Suitable	Retain	4.4
2-118	Yes	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	66	35	4	Single stemmed. Few overextended limbs. Crown developing towards the south. Fair to good condition.		Suitable	Retain	4.0
3-119	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	46	25	6	Single stemmed. Slight lean of the structure away from tree#118. No other major defects and or signs of stress. Fair to good in condition.		Suitable	Retain	2.8
4-120	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	33	30	2	Single stemmed growth form. Sheltered from larger trees. Limited crown development. Fair condition.		Marginal	Retain	2.0
5-121	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	32	20	3	Single stemmed growth form. Sheltered from larger trees. Limited crown development. Fair condition.		Marginal	Retain	2.0
6-123	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	27/14	30	1	Competing stem examined from the base. Main trunk has a single stemmed growth. Crown development towards the south. Fair condition.		Marginal	Retain	2.5
7-124	Yes	On-site	Silver birch	<i>Betula pendula</i>	22	N/A	N/A	Multiple tops. Subject tree is dead.		Unsuitable	Remove	1.4
8-125	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	18	10	2	Serve decline with no major corner development. Poor condition.		Unsuitable	Remove	1.2
9-122	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	42	40	2	Single stemmed form with a low live crown ratio. Dead lower limbs due to lack of sunlight. Fair condition.		Marginal	Retain	2.6
10-126	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	55	30	5	Portion of the top is dead. Large trunk wound wrapping around its mid trunk. Single stemmed growth form. Fair to poor in condition.		Unsuitable	Remove	3.3
11-127	Yes	On-site	Western redcedar	<i>Thuja plicata</i>	20	20	4	Low live crown ratio. Single stemmed growth form. Fair condition.		Marginal	Retain	1.2
12-128	Yes	On-site	Western redcedar	<i>Thuja plicata</i>	26	30	4	Rapid growth of the tree examined due to large trees sheltering. Fair condition.		Marginal	Retain	1.6

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ID#	Surveyed Y/N	On-site / Off-site	Common name	Botanical name	DBH (cm)	LCR (%)	Canopy (Dia M.)	Condition	Comments	Retention Suitability	Retain / Remove	TPZ (m)
13-129	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	31	25	5	Low live crown ratio. A portion of the crown appears to have dieback. Dead lower limbs examined. Fair to poor in condition.		Marginal	Retain	1.9
14-130	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	35	40	4	Low live crown ratio. Top structure of tree has a phototropic growth. Dead lower limbs examined. Fair to poor in condition.		Marginal	Retain	2.1
15-131	Yes	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	41	25	4	Single stemmed growth form. Low live crown ratio. Dead lower limbs. Fair condition.		Marginal	Retain	2.5
16-132	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	14	10	2	Small diameter tree. Situated against the base of tree #133. Fair condition.		Marginal	Retain	1.2
17-133	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	55	40	6	Single stemmed growth form with the majority of its crown developing towards the north. Slight basal lean towards the east. No other major defects and or signs of stress. Fair to good in condition.		Marginal	Retain	3.3
18-134	Yes	On-site	Silver birch	<i>Betula pendula</i>	39	25	7	Significant decline. No major crown development. Multiple conks observed within its structure. Poor overall growth form. Poor condition.		Unsuitable	Remove	2.4
19-135	No	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	63	40	6	Trunk wound examined at around 13m. Single stemmed growth form. Overextended limbs examined. Low live crown ratio. Fair condition.		Marginal	Retain	3.8
20-136	Yes	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	63	40	11	Good overall structure and growth form. No observable suppression from neighbouring trees. Few overextended limbs and dead limbs towards the south. Fair to good in condition.		Suitable	Retain	3.8
21-137	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	29	35	5	Single stemmed growth form. Few dead limbs examined. Crown developing towards the west. Fair condition.		Marginal	Retain	1.8
22-138	Yes	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	75	40	9	Single stemmed growth form. Optimal growth of the crown free of suppression. Crown appears to be healthy. Fair to good in condition.		Marginal	Retain	4.5
23-139	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	55	35	5	Dieback of the crown examined. Few dead limbs observed. Crown appears to be stressed. Poor condition.		Unsuitable	Remove	3.3
24-140	Yes	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	44	40	4	Single stemmed growth form. Development of the crown towards the north east due to phototropics. Fair condition.		Unsuitable	Remove	2.7

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ID#	Surveyed Y/N	On-site / Off-site	Common name	Botanical name	DBH (cm)	LCR (%)	Canopy (Dia M.)	Condition	Comments	Retention Suitability	Retain / Remove	TPZ (m)
25-141	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	18	30	2	Smaller diameter tree. Lower crown appears to be dying due to the lack of sunlight. Fair condition.		Unsuitable	Remove	1.2
26-142	Yes	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	47	35	7	Split top at around 13m. Several trunk wounds examined. Fair to poor condition.		Unsuitable	Remove	2.9
27-143	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	52	35	6	Single stemmed growth form. Dieback examined throughout its crown. Appears to be stressed. Fair to poor condition.		Unsuitable	Remove	3.2
28-144	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	33	15	5	Suppressed growth form. Extensive dieback and sparseness observed. Poor condition.		Unsuitable	Remove	2.0
29-145	Yes	On-site	Western redcedar	<i>Thuja plicata</i>	45	60	7	Basal lean towards the east examined. Single stemmed growth form. High live crown ratio. No major defects and or Signs of stress. Fair to good condition.		Marginal	Retain	2.7
30-146	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	50	45	11	Single stemmed growth form with a high live crown ratio. Portion of the lower crown appears to even developing towards the east. Crown appears to be healthy. Fair to good condition.		Suitable	Retain	3.0
31-150	Yes	On-site	Western redcedar	<i>Thuja plicata</i>	34	90	5	Developing within the lower crown of tree #097. Single stemmed growth form with a high live crown ratio. Slight basal lean away from tree #97 observed. Fair to good condition.		Suitable	Retain	2.1
32-095	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	23	40	3	Smaller diameter tree. No early defects and or signs of stress. Fair to good condition.		Marginal	Retain	1.4
33-094	Yes	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	22	35	3	Smaller diameter tree. No early defects and or signs of stress. Fair to good condition.		Marginal	Retain	1.4
34-093	No	On-site	Douglas fir	<i>Pseudotsuga menziesii</i>	25	35	3	Low live crown ratio with a single stemmed growth form. Crown appears to be sparse with its growth developing towards the east. Fair condition.		Marginal	Retain	1.5
35-092	No	On-site	Western hemlock	<i>Tsuga heterophylla</i>	21	45	2	Suppressed growth form due to sheltering from other larger trees. Fair to poor in condition.		Marginal	Retain	1.3
36-091	No	On-site	Western hemlock	<i>Tsuga heterophylla</i>	35	30	3	Top of the crown appears to be sparse with dieback. Dead limbs examined within its crown. Poor condition.		Marginal	Retain	2.1
37-090	No	On-site	Western hemlock	<i>Tsuga heterophylla</i>	40	30	4	Large tree with a single stemmed growth form. Phototropic influenced development of the crown. Fair condition.		Marginal	Retain	2.4

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ID#	Surveyed Y/N	On-site / Off-site	Common name	Botanical name	DBH (cm)	LCR (%)	Canopy (Dia M.)	Condition	Comments	Retention Suitability	Retain / Remove	TPZ (m)
38-088	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	56	40	5	Slight sparseness of the crown examined. Dead limbs examined within the crown. Fair condition.		Marginal	Retain	3.4
39-086	Yes	On-site	Western hemlock	<i>Tsuga heterophylla</i>	44	N/A	N/A	Co dominant from its base with a poor union. Subject tree is dead.		Unsuitable	Remove	2.7
40-085	No	On-site	Western redcedar	<i>Thuja plicata</i>	40	80	6	Single stemmed growth form. The top of the crown appears to be developing within the lower crown of tree#84. Fair to good in condition.		Suitable	Retain	2.4
41-078	No	On-site	Western redcedar	<i>Thuja plicata</i>	27	50	2	Small diameter tree with a suppressed growth form. Fair condition.		Marginal	Retain	1.7
42-079	No	On-site	Silver birch	<i>Betula pendula</i>	30	N/A	N/A	Multiple conks situated on its structure. Subject tree is dead.		Unsuitable	Remove	1.8
43-080	No	On-site	Western hemlock	<i>Tsuga heterophylla</i>	18	60	2	Single stemmed growth form. Dead lower limbs due to the lack of sunlight. Top of the crown appears to be healthy. Fair condition.		Marginal	Retain	1.2
44-087	Yes	Shared	Douglas fir	<i>Pseudotsuga menziesii</i>	44	60	6	Single stemmed growth form. Dead lower limbs due to the lack of sunlight. Top of the crown appears to be healthy. Fair condition.		Marginal	Retain	2.7
45-077	No	Off-site	Western redcedar	<i>Thuja plicata</i>	26	60	2	Smaller tree situated within close proximity to tree#076. Phototropic growth of its secure and crown observed. Fair condition.		Marginal	Retain	1.6
46-076	Yes	Off-site	Douglas fir	<i>Pseudotsuga menziesii</i>	56	50	3	Single stemmed growth form. No major defects and or signs of stress. Fair to good condition.		Suitable	Retain	3.4
47-081	No	Off-site	Douglas fir	<i>Pseudotsuga menziesii</i>	60	40	8	Single stemmed growth form. No major defects and or signs of stress. Fair to good condition.		Suitable	Retain	3.6
48-082	No	Off-site	Douglas fir	<i>Pseudotsuga menziesii</i>	45	40	7	Low live crown ratio with a single stemmed growth form. Few limbs have failed as observed by jagged wounds. Fair condition.		Marginal	Retain	2.7
49-083	No	Off-site	Douglas fir	<i>Pseudotsuga menziesii</i>	60	60	8	Crown appears to be developing without any major defects. Single stemmed growth form. Moderate to high live crown ratio. Fair to good condition.		Suitable	Retain	3.6
50-084	No	Off-site	Western redcedar	<i>Thuja plicata</i>	25	70	4	Younger tree. Good overall growth for and structure. No major defects and or signs of stress. Fair to good condition.		Suitable	Retain	1.5
51-147	Yes	Off-site	Douglas fir	<i>Pseudotsuga menziesii</i>	32	70	5	High live crown ratio. Single stemmed and with a good overall growth form. Fair to good condition.		Suitable	Retain	2.0

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ID#	Surveyed Y/N	On-site / Off-site	Common name	Botanical name	DBH (cm)	LCR (%)	Canopy (Dia M.)	Condition	Comments	Retention Suitability	Retain / Remove	TPZ (m)
52-148	Yes	Off-site	Western redcedar	<i>Thuja plicata</i>	39	50	5	Basal lean towards the north due to phototropics. No major crown development towards its lower trunk. Fair condition.		Marginal	Retain	2.4
53-149	Yes	Off-site	Douglas fir	<i>Pseudotsuga menziesii</i>	35	65	5	Co dominant at around 11m. A moderate to poor union was observed. Lower crown developing towards the east. Fair condition.		Marginal	Retain	2.1
54-097	Yes	Off-site	Western hemlock	<i>Tsuga heterophylla</i>	18	70	3	Single stemmed growth form. Crown is developing free of suppression. Good overall growth form and structure. Fair to good condition.		Suitable	Retain	1.2
55-096	Yes	Off-site	Western hemlock	<i>Tsuga heterophylla</i>	21	35	4	Developing within the lower crown of tree#97. Slight dieback and suppression from the crown was observed. Fair condition.		Marginal	Retain	1.3
56-089	Yes	Off-site	Western hemlock	<i>Tsuga heterophylla</i>	57	45	6	Sparseness of the top of the crown examined. Single stemmed growth form. Fair condition.		Marginal	Retain	3.5

9.0 GENERAL OBSERVATIONS, RECOMMENDATIONS AND PHOTOS



Photo 1 – On-site trees #1 -117 to #15 -131

Species: Western redcedar (*Thuja plicata*), Western hemlock (*Tsuga heterophylla*), Douglas fir (*Pseudotsuga menziesii*)

Tree#: 1 -117 to 15 -131

Observations: The forested section begins around the existing gazebo situated along the proposed subdivision line. In this densely populated section, Douglas firs with an average DBH ranging from 22cm to 73cm was examined with an overall height ranging between 7m to 30m. A crown spread of about 2m to 8m was measured.

The subject trees have developed and shaped in relation to the proximity of one another developing low live crown ratios and or limited crown growth. Observing their overall structure, all of them appeared to be single stemmed with a few having split tops and or being co dominant at varying heights from the ground. Overall, the subject trees situated alongside the existing gazebo ranges in fair to good condition and a few trees that are situated within the group range being in poor to fair condition.

On-site trees towards the north west discussion



Photo 2 - Facing towards trees #24-140 to #30-146

Species: Western redcedar (*Thuja plicata*), Western hemlock (*Tsuga heterophylla*), Douglas fir (*Pseudotsuga menziesii*)

Tree#: 24-140 to 30-146

Observations: The majority of forested stand growing in stand is dominated by mainly coniferous species with an average DBH ranging from 18cm to 65cm. Stands of this nature grow together, competing for resources and put most of their energy into vertical growth to compete for available sunlight. Trees in these stands often have high height to diameter ratios and rely upon the stand as a whole to withstand oncoming winds. The common live crown ratios in these types of stands are roughly 0.2 to 0.4. These trees have not grown the type of wood structure or rooting system to withstand oncoming winds individually.

A couple of the hemlocks are showing sparseness in the upper canopy and a poor overall vigor was examined. Dieback is a condition in which branches in the tree crown die from the tips toward the centre and was examined on a few of the subject trees. Due to the extent of their overall health, these trees appear to be in decline.

On-site trees #18-134 - #42-079 discussion



Photo 3 - Facing towards tree #18-134



Photo 4 - Facing towards tree #42-079

Species: Silver birch (*Betula pendula*)

Tree#: 18-134, 42-079

Observations: Observing trees #18-134 and #42-079, their overall structures compromised of decaying stems and both trees appeared to be dead. Within its lower trunk area, a large open wound with observable inner deadwood was identified inside. The wound may have been caused by mechanical, animal, and or insect damages and are potential points of entry for organisms.

As depicted in photo four, multiple fruiting bodies of Birch polypore can be observed around the lower trunk area of tree #42-079 and upper structure of tree #18-134. Conks are an indicator of decay within a tree and as multiple bodies were identified, internal decay is presumably extensive and the subject trees have a higher chance of failure and overall risk.

Trees along Lancaster Court



Photo 5 - Facing towards trees # 31-150 to #40-085

Species: Western redcedar (*Thuja plicata*), Western hemlock (*Tsuga heterophylla*), Douglas fir (*Pseudotsuga menziesii*)

Tree#: 31-150 to 40-085

Observations: The majority of forested stand growing in Stand is dominated by mainly coniferous species with an average DBH ranging from 50cm to 87cm. Stands of this nature grow together, competing for resources and put most of their energy into vertical growth to compete for available sunlight. Trees in these stands often have high height to diameter ratios and rely upon the stand as a whole to withstand oncoming winds. The common live crown ratios in these types of stands are roughly 0.3 to 0.5. These trees have not grown the type of wood structure or rooting system to withstand oncoming winds individually.



Wood Decay in Western hemlocks can be generally split into two types: white rot and brown rot. Brown rots darkly stain the wood, which eventually degrades into a brittle, cube-like structure. White rot cause lighter staining and the wood eventually become spongy and stringy. Other characteristics of potential tree decay and or stress can be examined in its roots. Roots disease in young trees as related to this site will die more quickly as compared to older ones. *Arceuthobium tsugense*, *Armillaria ostoyae*, and *Chondrostereum purpureum* are all common types of tree decay and diseases prevalent in B.C. A few of the Hemlocks have been removed from the site due to their overall health. It is common that the same species in the same areas may have the same type of symptoms of decay.

WINDTHROW DISCUSSION

Our main concern when removing the subject trees is the result of neighboring trees to blow over due to the changes in wind patterns, exposure, and roots system overlap. When examining the site, neighboring trees, root structure, and foliage it is unforeseeable to see neighboring trees affected by the strong winds. This applies to all stands on this property.

Usually cases of blown over trees can be identified by the excessive removal of interior part of a forest or woody area as the structural strength may differ from the trees along the edge and or from open-grown trees. Below are the 3 main categories when evaluating exposure:

- Protected (*least exposure*)
- Partially (*some wind exposure*)
- Fully exposed (*maximum exposure to wind*)

Most of these trees have not been fully exposed to winds from the north, east, south, and have been growing in this type of area since juvenile. A few of the trees that are in decline are recommended for removal and would not drastically affect the remaining trees.

9.0 TREE REPLACEMENT PLAN

Outlined in the *Anmore Tree Management Bylaw No. 430, 2007* replacement trees will be needed to be planted for every protected tree being removed depending on lot size. According to the bylaw a replacement of three (3) trees will be needed based on one (1) tree being removed. A total of thirty-six (36) trees will be required to be planted on-site as twelve (12) bylaw sized trees will be removed. Any of the trees outlined in the table below could be planted as long as the measurements requirements are in place.

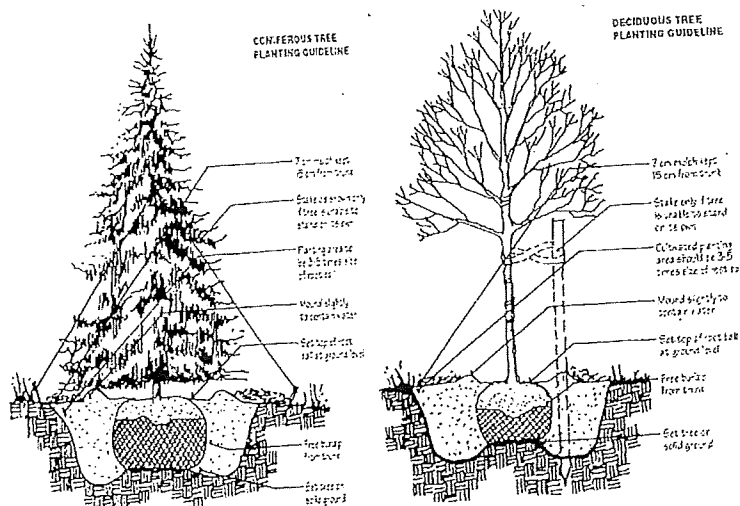
It is important to locate your new plantings in accordance with the species' growing habits or tendencies. It is crucial to avoid planting your trees alongside buildings in which root ingress into drainage systems can occur and this can result in costly remedial work, also it is good practice not to plant your tall growing trees under power lines or utility lines as this can lead to pruning that may grossly adulterate the overall form or shape of the tree. Planting trees in the right location is the key to sustaining a balanced urban forest.

The proposed replacement trees will need to be a minimum 6cm in caliper size (*trunk width measured at 15 centimetres above the ground*) or 3.5 metres height at the time of planting. At least one metre away

from any site boundary, any accessory building or any other structure on or adjacent to the site that may adversely affect the tree, and at least 3.0 metres away from any principle building, and; at least 2.5 metres away from any other tree on or adjacent to the site.

Tree replacement plan		
Planting(s) should be scheduled for the late winter/ early spring or early fall		
Quantity	Name	Species
7	Nootka spruce	<i>Cupressus nootkatensis</i>
7	Amur Maple	<i>Acer ginnala</i>
7	Flowering dogwood	<i>Cornus florida</i>
7	False cypress	<i>Chamaecyparis</i>
8	Norway spruce	<i>Picea abies</i>

Please see map for location Note: Planting cannot be within 3 meters of another significant tree



9.1 TREE REPLACEMENT PLAN RECOMMENDATIONS

Based on the factors that include the existing condition of the trees as detailed in the tree inventory list, the general observations as noted above, and our recommendations, trees are proposed to be treated as follows.

- **Planting techniques:** Ideally when digging a planting hole it should be at least two to three times the width of the root ball at the base. If the root ball is burlaped remove the top and upper side portions. In very compacted clay landscape soils, widening the planting hole to five times the width of the soil ball will be recommended. If the sides of the planting hole are glazed breaking up the surface would be beneficial. When backfilling use the same soil that was removed from the planting hole.
- **Water demands:** Proper watering is the key to survival of newly planted trees. If water is excessively soaked into the planting hole it displaces soil oxygen and results in transplant death. Watering should be done as follows, after backfilling water to moisten the soil to 1 foot deep. This amount of water is 1 to 1.5 inches on a light, sand soil and 2 to 2.5 inches on a heavy, clay soil. Water should be gently soaked into the root ball.



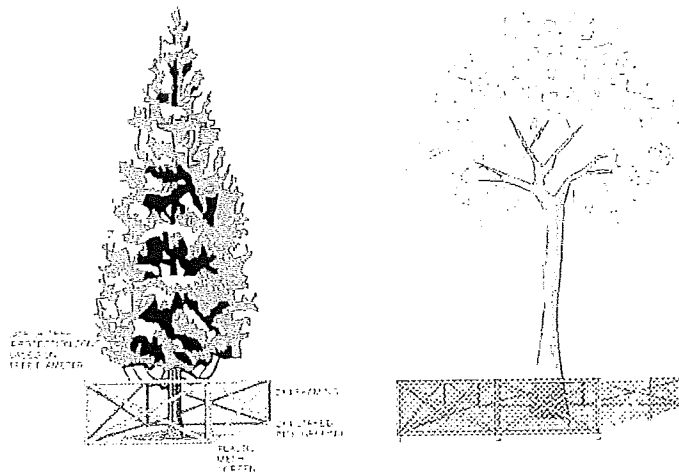
- **Fertilizing:** Fertilizing is neither recommended nor necessary since the root system of a newly planted tree is limited. If fertilizer is used a slow release nitrogen fertilizer is suggested.
- **Mulching:** One of the simplest and least expensive things that can be done to help trees survive there new location would be to apply 2 to 4 inches of organic mulch. The radius in which to spread the mulch would depend on the trees size. For example a tree with a caliper of 1 to 2 inches a circle of mulch of at least 6 feet would be recommended. It is crucial to not to place mulch against the stem of the tree as this will increase the chance of bacterial and fungal infections.
- **Tree stabilization:** Tree stabilizing of newly planted trees is not always necessary. Usually it can have a negative effect on trunk taper and produce less roots for anchorage. Tree stabilization could be used on trees that do need support and on windy sites. A common method is to use two stakes and attach a material that is smooth non-abrasive and somewhat elastic as low along the trunk as is practical while still providing necessary support.

10.0 TREE PROTECTION BARRIER

Tree protection barrier summary				
Tree number (species)	Minimum tree protection barrier Radial span (m)		Tree number (species)	Minimum tree protection barrier Radial span (m)
1-117	4.4		33-094	1.4
2-118	4.0		34-093	1.5
3-119	2.8		35-092	1.3
4-120	2.0		36-091	2.1
5-121	2.0		37-090	2.4
6-122	2.6		38-088	3.4
7-123	2.5		40-085	2.4
11-127	1.2		41-078	1.7
12-128	1.6		43-080	1.2
13-129	1.9		44-087	2.7
14-130	2.1		45-077	1.6
15-131	2.5		46-076	3.4
16-132	1.2		47-081	3.6
17-133	3.3		48-082	2.7
19-135	3.8		49-083	3.6
20-136	3.8		50-084	1.5
21-137	1.8		51-147	2.0
22-138	4.5		52-148	2.4
29-145	2.7		53-149	2.1
30-146	3.0		54-097	1.2
31-150	2.1		55-096	1.3
32-095	1.4		56-089	3.5

- As the proposed plans have yet to be planned, the removal recommendations that are noted * are preliminary and are based on the proposed designs and setbacks

All trees identified above will require tree protection barriers to protect and prevent the tree trunk, branches and roots being damaged by any construction activities/operations. Prior to any construction activity on site, tree protection fences must be constructed at the specified distance from the tree trunks. The protection barrier or temporary fencing must be at least 1.2 m in height and constructed of 2 by 4 lumber with orange plastic mesh screening. Structure must be sturdy with vertical posts driven firmly into the ground. This must be constructed prior to excavation or construction and remain intact throughout the entire period of construction. Further standards for fencing construction can be found at: *Anmore Tree Management Bylaw No. 430, 2007*.



11.0 CONCLUSIONS

Based on our findings, a total of fifty-six (56) trees have been identified off/on-site. A total of forty-four (44) trees will be retained and twelve (12) trees will be removed as they are a poor candidate for retention.

Thank you for choosing ABC Tree Men. Any further questions can be forwarded to Francis Klimo at (604)358-5562

Regards,

Francis Klimo

Francis R. Klimo
ISA Certified Arborist #PN-8149A
ISA Certified Tree Risk Assessor (TRAQ)
BC Wildlife Danger Tree Assessor #7193



May 6, 2019