



To: Planning Committee
From: Jean Lamontagne
Director of Development

Terry Crowe
Manager, Policy Planning

Re: **Application by S-8117 Holdings Ltd. for Rezoning at 10171 No. 1 Road from Single-Family Housing District, Subdivision Area E (R1/E) to Townhouse District (R2 – 0.6)**

To Planning - Sep 7, 2006

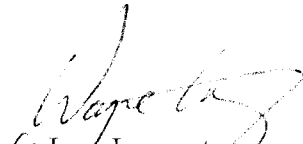
Date: August 21, 2006

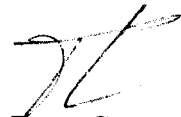
RZ 06-329965

File: 12-8060-20-8086/8111

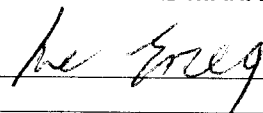
Staff Recommendation

1. That Official Community Plan (OCP) Amendment Bylaw No. 8111, to re-designate 10171 No. 1 Road from "Single-Family" to "Multiple-Family" on the Steveston Land Use Map in Schedule 2.4 of Official Community Plan Bylaw No. 7100 (Steveston Area Plan), be introduced and given first reading.
2. That Bylaw No. 8111, having been considered in conjunction with:
 - the City's Financial Plan and Capital Program; and
 - the Greater Vancouver Regional District Solid Waste and Liquid Waste Management Plans;is hereby deemed to be consistent with said program and plans, in accordance with Section 882(3)(a) of the Local Government Act.
3. That Bylaw No. 8111, having been considered in accordance with the City Policy on Consultation During OCP Development, is hereby deemed not to require further consultation.
4. That Bylaw No. 8086, for the rezoning of 10171 No. 1 Road from "Single-Family Housing District, Subdivision Area E (R1/E)" to "Townhouse District (R2)", be introduced and given first reading.


for Jean Lamontagne
Director of Development


Terry Crowe
Manager, Policy Planning

JL:sb
Att.

FOR ORIGINATING DEPARTMENT USE ONLY
CONCURRENCE OF GENERAL MANAGER


Staff Report

Origin

S-8117 Holdings Ltd. has applied to the City of Richmond for permission to redevelop 10171 No. 1 Road (**Attachment 1**) from single-family use to multi-family use (11 townhouse units).

This involves:

1. An Official Community Plan (OCP) amendment to re-designate the subject property from "Single-Family" to "Multiple-Family" in the Steveston Area Land Use Map within the Steveston Area Plan (**Attachment 2**).
2. A Rezoning of the subject property from Single-Family Housing District, Subdivision Area E (R1/E) to Townhouse District (R2-0.6) (**Attachment 3**).

Eleven townhouse units are proposed on the site with access from the existing lane (6 three-storey units along No. 1 Road and 5 two-storey units along the lane). **Attachment 4** illustrates the proposal concept with a site plan, landscape plan and building elevations. The design will be further refined through the Development Permit application process (DP 06-345111).

Findings of Fact

A Development Application Data Sheet providing details about the development proposal is provided in **Attachment 3**.

Surrounding Development

- To the west, across an operational city lane, are existing single-family residences fronting onto Scotsdale Avenue, zoned "Single-Family Housing District, Subdivision Area E (R1/E)" (Min. 18 m width);
- To the north, are existing single-family residences, zoned "Single-Family Housing District, Subdivision Area B (R1/B)" (Min. 12 m width);
- To the east, across No. 1 Road, are existing single-family residences on large lots, zoned "Single-Family Housing District, Subdivision Area E (R1/E)" (Min. 18 m width) and a newer townhouse development (RZ 02-221885 & DP 03-251106), zoned "Townhouse District (R2-0.6)"; and
- To the south, is an existing townhouse development (RZ 97-118111 and DP 98-137635), zoned "Comprehensive Development District (CD/80)" with a maximum density of 0.6 Floor Area Ratio (F.A.R.) and additional 1.4 m²/unit for universal housing units.

Related Policies & Studies

1. Official Community Plan
 - a. Steveston Area Plan

The property is designated "Single-Family" within the Steveston Area Plan. An amendment is required to re-designate 10171 No. 1 Road from "Single-Family" to "Multiple-Family" in the Steveston Area Land Use Map as part of this application.

The consolidated development site immediately across No. 1 Road at 10222 No. 1 Road, which is surrounded on three (3) sides with existing single-family homes, was re-designated to "Multiple-Family" in May 2004 through OCP amendment Bylaw No. 7578.

b. Arterial Road Redevelopment Policies

Through recently adopted OCP amendment bylaw 8063 regarding lane establishment and arterial road redevelopment, the subject property was identified as having infill Multiple-Family Residential Development potential due to its location on a major arterial road and adjacency to existing multiple-family residential development.

The lane establishment and arterial road redevelopment policies seek to increase density along designated arterial roads while reducing the number of driveway access points, utilizing or establishing rear lanes where appropriate. The vehicle access for the proposed development will be through the existing functional rear lane and the existing driveway access to No. 1 Road will be removed.

The policies also seek to enhance the interface with adjacent single-family homes through lower building heights at these interfaces. Along with significant tree retention, the proposed development includes two-storey and two and half storey buildings at the north interface with the existing single-family home.

The proposed development is in compliance with these policies.

c. Tree Retention

Council has adopted Tree Protection Bylaw No. 8057 to regulate the removal of trees throughout the city with an express exemption where a development permit and/or rezoning is approved which addresses tree removal. When evaluating discretionary rezoning applications for multi-family development, staff are guided by the Bylaw and the tree retention, replacement and planting policies in the OCP. A tree survey with accompanying arborists reports were submitted to the City (**Attachment 5**). Proposed tree retention and replacement are discussed below in the staff comments section.

Consultation

Council Policy 5043 – OCP Bylaw Preparation Consultation Policy

This policy provides direction regarding the consultation requirements for an OCP amendment. Consultation with external agencies, organizations and authorities was not deemed to be required. The statutory Public Hearing will provide area residents, businesses and property owners an opportunity to comment on the application.

The Richmond School Board – School District #38 has indicated to City staff that OCP amendments should be directed to the Board of Trustees for review when they would result in the introduction of 50 new students, with the assumption that 100 new townhouses would result in 17 new students. Therefore, applications for less than 295 new townhouses should not be forwarded to the Board for review. Accordingly, the School Board has not been consulted with regarding the subject application for only 11 townhouse units.

Public Input

Informational Rezoning application proposal signage has been installed on the property since April 18, 2006 and no comments from the public have been received regarding the subject Rezoning application.

Staff Comments

Staff Technical Review comments are provided in **Attachment 6**. No significant concerns have been identified through the technical review. As a condition of this rezoning application, the developer has agreed to provide the following (**Attachment 7**):

- Lane improvements: When the townhouse development immediately to the south was constructed, approximately 150 m of lane improvements were installed to Scotsdale Avenue. The developer has agreed to install approximately 230 m of lane improvements from the subject development site northward through to Williams Road to the same standard as the lane works constructed to the south. The developer will enter into a Servicing Agreement for lane improvement works including but not limited to the work described above;
- Flood Indemnity Covenant: Registration with a minimum Building Elevation Requirement of 0.9 m geodetic;
- Indoor Amenity Space: Contribution of cash-in-lieu (e.g. \$11,000) of indoor amenity space in compliance with the OCP and Policy No. 5041; and
- Affordable Housing: Contribution of \$0.60 per buildable square foot (e.g. \$9,650). Affordable housing units are not proposed to be built due to the small scale of development.

Tree Retention and Replacement

	Existing Trees	Bylaw Size Trees	Notes
Arborist Report	73	40	
Development Proposal			
Removing	22	18	1 specimen (Hazel) 6 conflict with lane
Retaining	51	22	43 in windrow
Planting		23 replacement trees	1.9:1

A tree survey prepared by W. Wong, Land Surveyor of Matson Peck & Topliss Surveyors & Engineers, dated March 1, 2006 and accompanying arborists reports prepared by Norm Hol, Certified Arborist of Abortech Consulting Ltd., dated April 19 and August 3, 2006 were submitted to the City (**Attachment 5**). Although the survey identifies 95 existing trees and shrubs with minimum 10 cm diameter, the accompanying arborist report indicates that a number of the trees surveyed were shrubs or multiple leaders of the same tree. The arborist indicates that there are 73 existing trees onsite, 40 of which are bylaw size (20 cm dbh).

The applicant is proposing to retain 22 bylaw size existing trees: 16 in a windrow along the north property line, 3 along the No. 1 Road frontage and 3 in a hedge along the south property line in the east corner of the site.

The arborist is recommending removal of 18 bylaw size trees: 6 conflict with required city lane improvement works, 3 are in poor condition and 9 conflict with proposed building envelopes. The arborist was asked to review the possibility of relocating the one (1) bylaw sized specimen tree onsite; a mature ornamental contorted Hazel tree in good condition and growing in the

typical bush form. The developer was proposing to retain and relocate the Hazel on the property as it conflicts with the location of both one of the units and the central drive aisle. Unfortunately their arborist advises that this bush form mature small tree would be disfigured and is not likely to survive a transplant (**Attachment 5**).

The OCP guideline is 2:1 replacement ratio for trees removed. The compensation for the removal of 18 bylaw size trees is 36 replacement trees. The applicant is proposing to plant 23 new trees for a replacement ratio is 1.3:1. This can be considered acceptable on the basis that in addition to planting 23 new trees, the applicant is proposing to retain 29 existing non-bylaw size trees (between 0.1 and 0.2 m diameter): 27 in the windrow along the north property line and 2 in the hedge along the south property line in the east corner of the site. Including the retention of existing non-bylaw size trees, the replacement ratio increases to almost 3:1. The inclusion of these undersized trees may be considered on the basis that their size at between 0.1 m and 0.2 m is generally larger than new replacement trees would be and in the context of the proposed significant retention of 70% of the existing trees onsite and the significant lane improvements which the developer has agreed to construct. The detailed landscape design will be further refined as part of the Development Permit application process.

Servicing Analysis

An independent review of servicing requirements (storm and sanitary) has concluded that no upgrades to the existing systems are required to support the proposed development.

Advisory Design Panel Comments

A development proposal was presented to and supported by the Advisory Design Panel on June 21, 2006 subject to the resolution of comments provided by the Panel through the forthcoming Development Permit process. In response, the applicant revised and improved the design and will continue to do so in the further refined forthcoming Development Permit drawings. At the request of the Advisory Design Panel, larger projecting front porches were incorporated into the design. As a direct result, the applicant is requesting a variance to increase the permitted lot coverage from 40% to 40.6% which will be explored through the Development Permit process.

Analysis

The proposed density of 0.6 F.A.R. is consistent with existing townhouse development immediately to the south and across No. 1 Road. "Townhouse District (R2-0.6)" is proposed for consistency with the relatively recent Rezoning for townhouse development across No. 1 Road at 10222 No. 1 Road (RZ 02-221885 & DP 03-251106).

The subject application is consistent with the recently adopted amendments to the OCP regarding lane establishment and arterial road redevelopment policies. It is also consistent with approved developments to the south and to the east across No. 1 Road.

The sole access to this property will be through the existing rear lane -- thereby removing direct access from the subject property to No. 1 Road. Cross access for the benefit of the properties to the north is not sought due to conflict with the proposed tree retention along the north property line and because the lots to the north have access to the existing functional lane which will be upgraded as part of this Rezoning application.

Development Permit Application

With the development permit application, the following details will receive further attention:

- A variance for increased lot coverage from the permitted 40% to 40.6% to accommodate larger porches fronting onto No. 1 Road as requested by the Advisory Design Panel and as noted above. The variance was supported by the Advisory Design Panel and is supported by staff on the basis that it improves building articulation, function of the porch, and pedestrian oriented streetscape; and
- Design development to the overall landscaping plan including the programming and detailing of the outdoor amenity space.

Financial Impact or Economic Impact

None.

Conclusion

Staff support the proposal as:

- it is consistent with the OCP and related policies;
- it is consistent with the development direction already established for the area between Williams Road and Springfield Drive;
- the development will result in direct access being removed from No. 1 Road;
- the lane will be improved from the lane frontage northward to Williams Road; and
- the development massing will step down to two and 2 ½-storey adjacent to the single-family dwelling to the north, and two-storey along the rear lane.



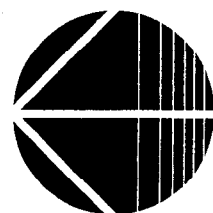
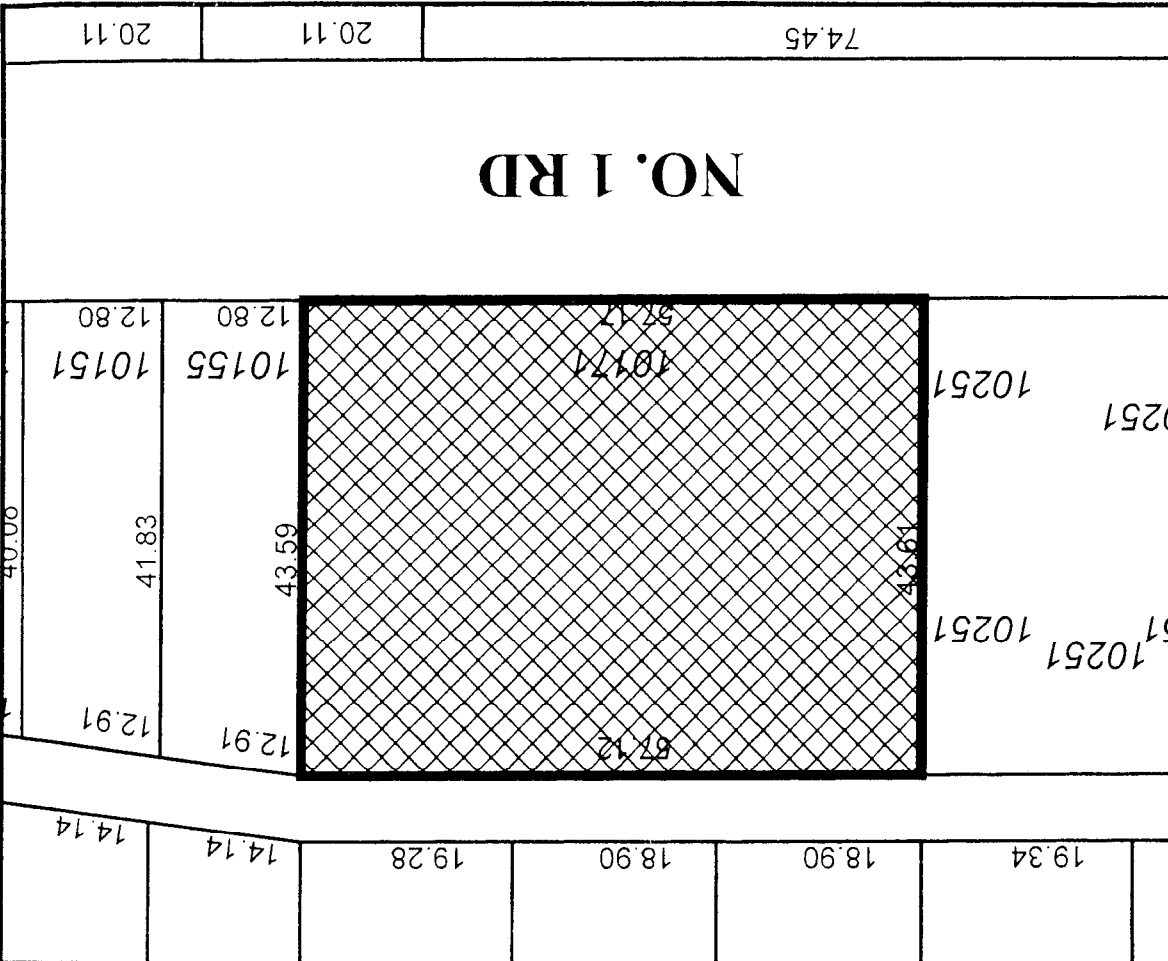
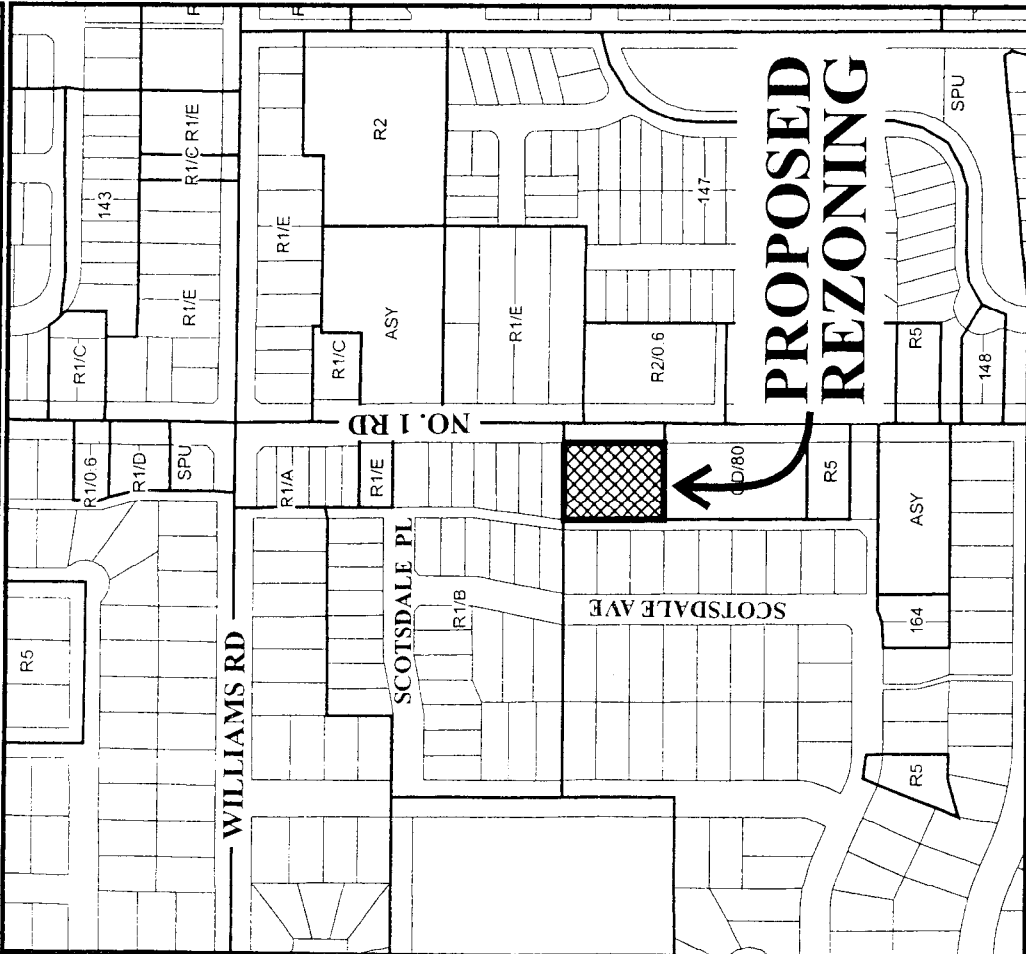
Sara Badyal, M.Arch.
Planner 1

SB:rg

- Attachment 1: Location Map and Aerial Photograph
- Attachment 2: Steveston Area Plan Land Use Map
- Attachment 3: Development Application Data Sheet
- Attachment 4: Conceptual Development Plans
- Attachment 5: Arborist Report and Tree Survey
- Attachment 6: Staff Technical Review Comments
- Attachment 7: Conditional Rezoning Requirements Concurrence



City of Richmond

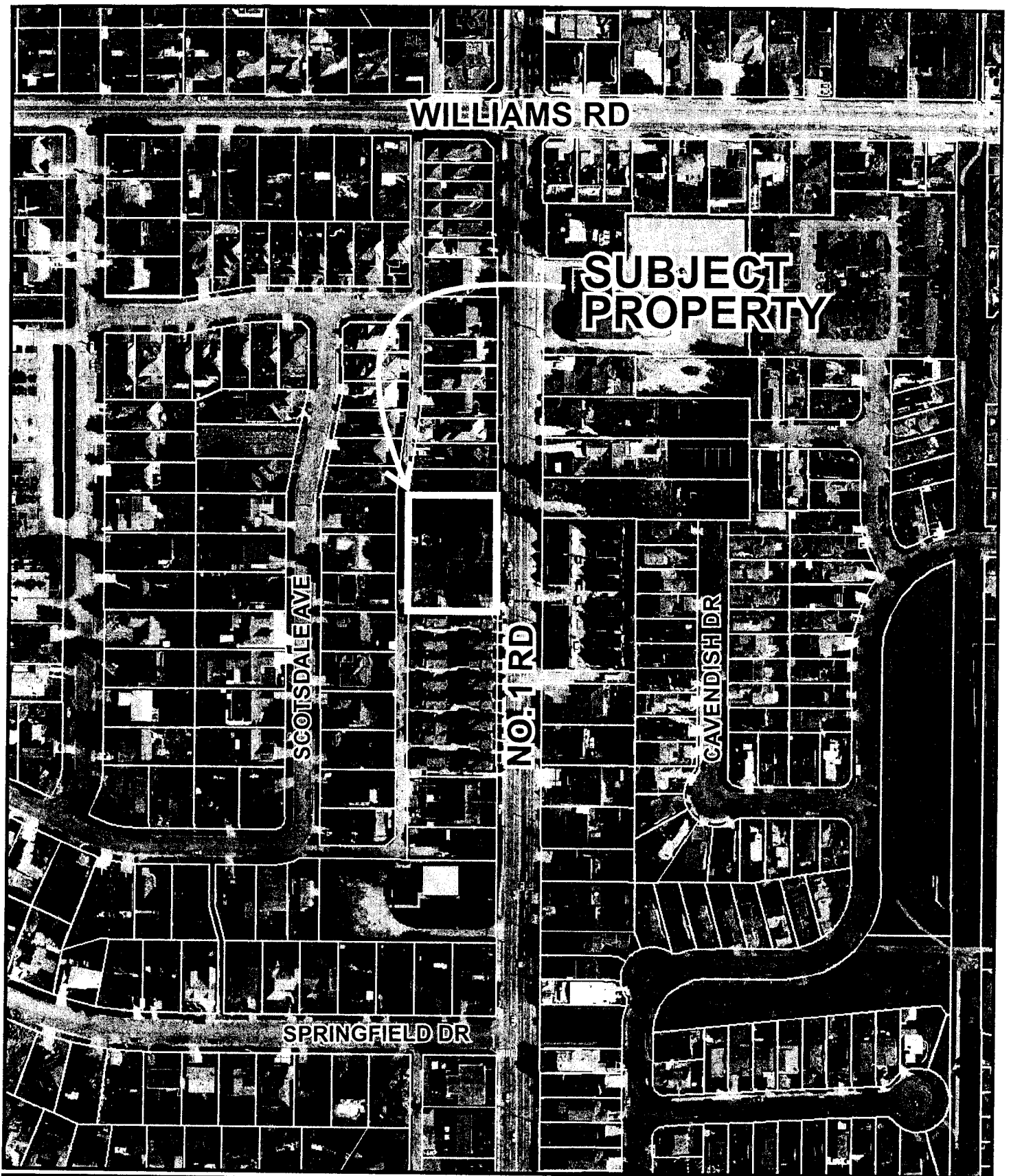


RZ 06-329965

Original Date: 04/04/06

Revision Date:

Note: Dimensions are in METRES



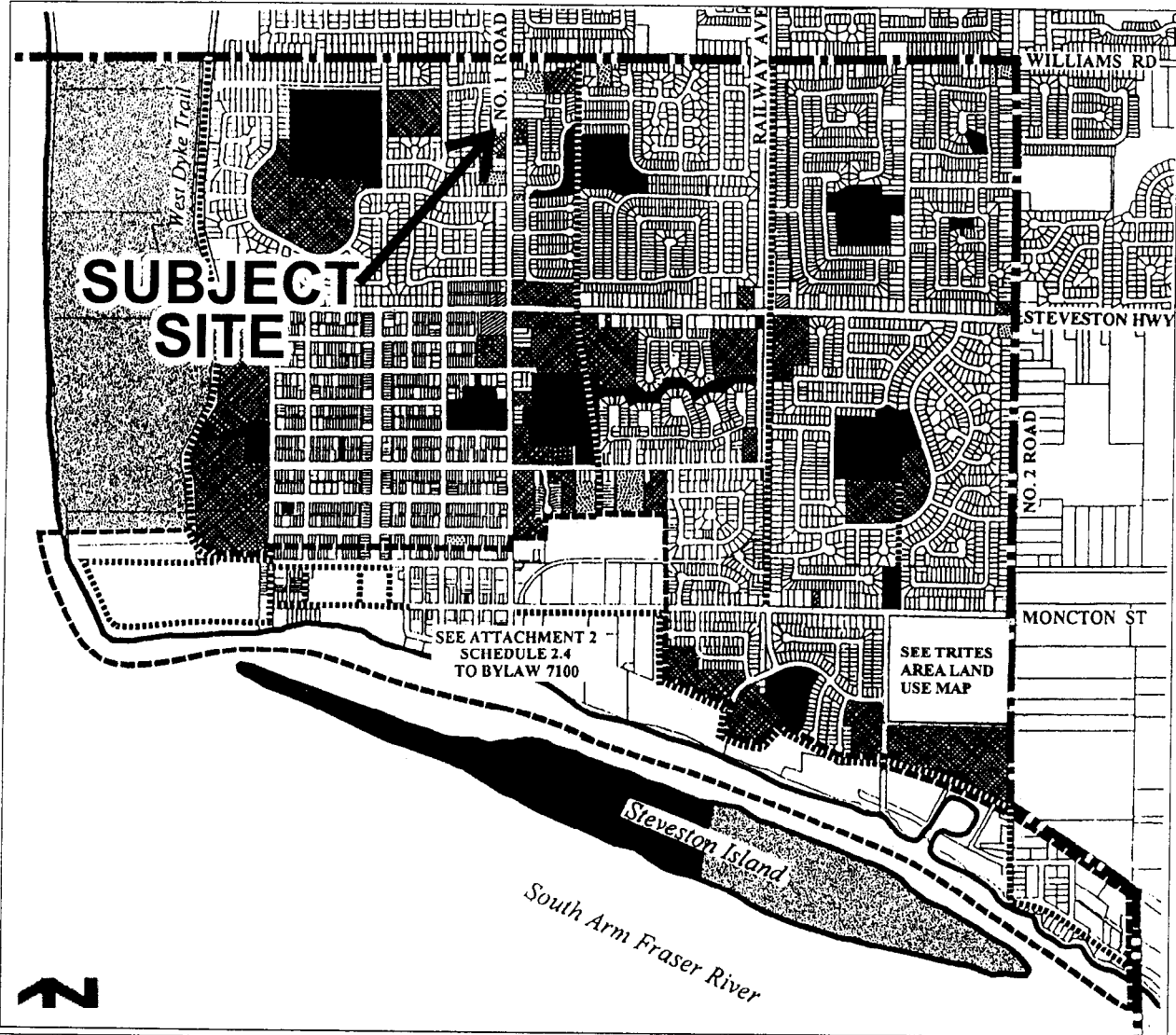
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









Original Date: 08/08/06

Amended Date:

Note: Dimensions are in METRES

Steveston Area Land Use Map *Bylaw 7862
2005/01/17*



	Single-Family		Commercial		Conservation Area
	Multiple-Family		Industrial		Trail
	Public Open Space		Institutional		Steveston Area Boundary
					Steveston Waterfront Neighbourhood Boundary



City of Richmond

6911 No. 3 Road
 Richmond, BC V6Y 2C1
 www.richmond.ca
 604-276-4000

**Development Application
 Data Sheet**

RZ 06-329965 **Attachment 3**

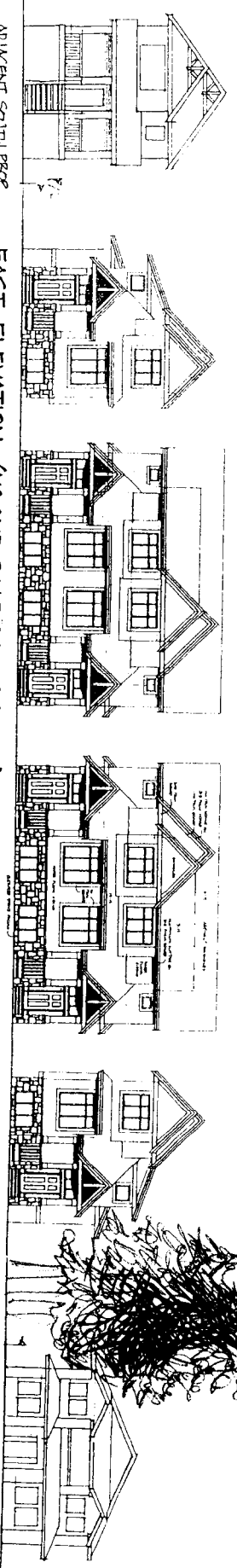
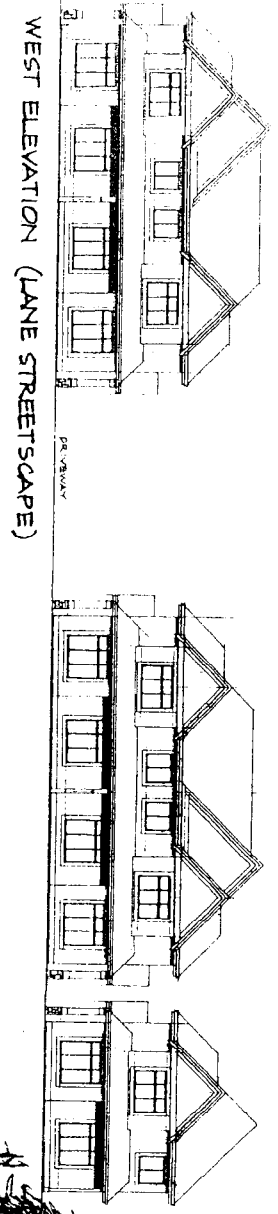
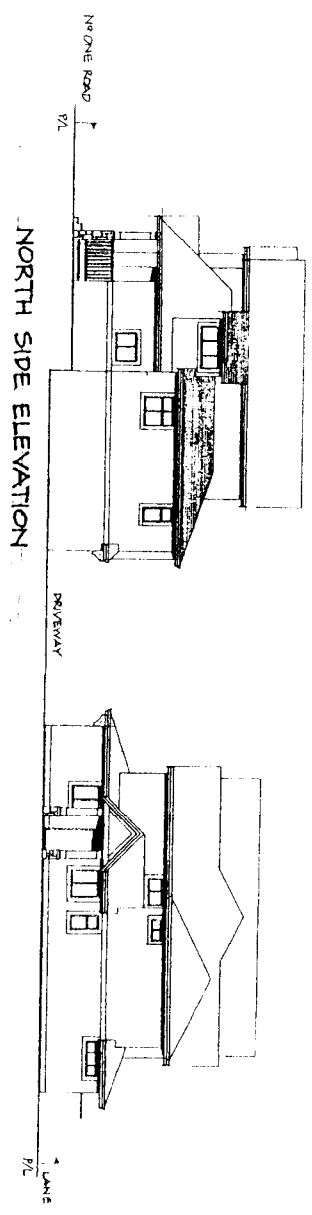
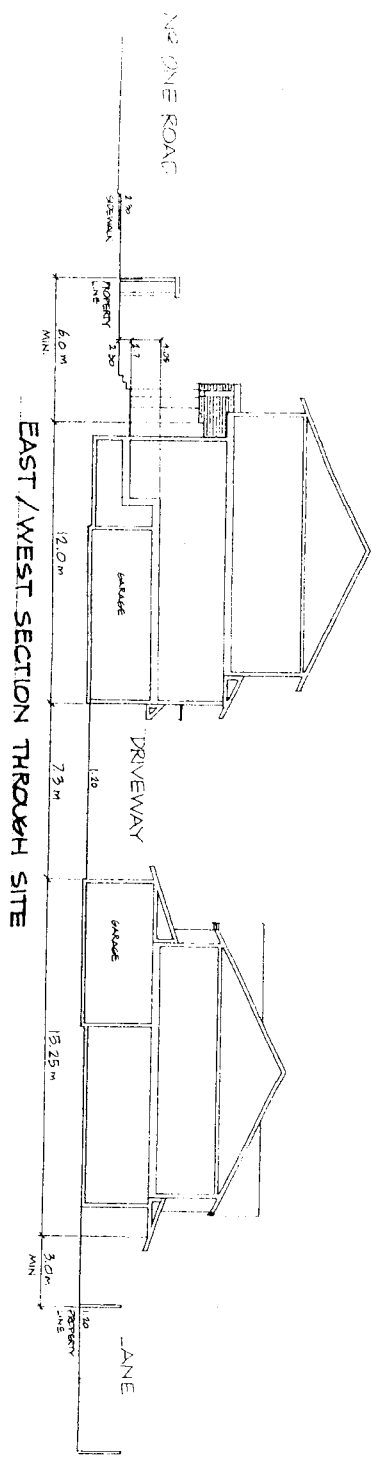
Address: 10171 No. 1 Road

Applicant: S-8117 Holdings Ltd.

Planning Area(s): 2.4 Steveston Area

	Existing	Proposed
Owner:	Mr. John Senkow	S-8117 Holdings Ltd.
Site Size (m²):	2,491 m ²	No change
Land Uses:	Single-Family Residential	Multi-Family Residential
OCP Designation:	Neighbourhood Residential	No change
Area Plan Designation:	Single-Family	Multi-Family
702 Policy Designation:	None	No change
Zoning:	R1/E	R2 - 0.6
Number of Units:	1	11

On Future Subdivided Lots	Bylaw Requirement	Proposed	Variance
Density (units/acre):	N/A	17.9 upa	N/A
Floor Area Ratio:	Max. 0.6	0.6	None permitted
Lot Coverage:	Max. 40%	40.6%	0.6% Increase
Lot Size (min. dimensions):	Min. 30 m width Min. 35 m depth	57.1 m width 43.6 m depth	None
Setback – Front Yard (m):	Min. 6 m	6 m Min.	None
Setback – Side & Rear Yards (m):	Min. 3 m	3 m – 6 m	None
Height (m):	Max. 11 m & 3 storey	11 m & 2 - 3 storey	None
Off-street Parking Spaces – Regular (R) / Visitor (V):	2 (R) and 0.2 (V) per unit	2 (R) and 0.2 (V) per unit	None
Accessible Parking Spaces:	1	1	None
Off-street Parking Spaces – Total:	25	25	None
Tandem Parking Spaces:	Not permitted	None	None
Amenity Space – Indoor:	Min. 70 m ²	Cash-in-lieu	None
Amenity Space – Outdoor:	Min. 66 m ²	144 m ²	None



ADJACENT SOUTH PROP.
THREE STOREY TOWNHOUSE

EAST ELEVATION (NO ONE ROAD STREETSCAPE)

ADJACENT NORTH PROP.
SINGLE FAMILY HOME

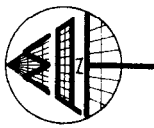
R-06-15012-TREE

**SURVEY PLAN OF LOT 453 SECTION 34
BLOCK 4 NORTH RANGE 7 WEST
NEW WESTMINSTER DISTRICT PLAN 38992**

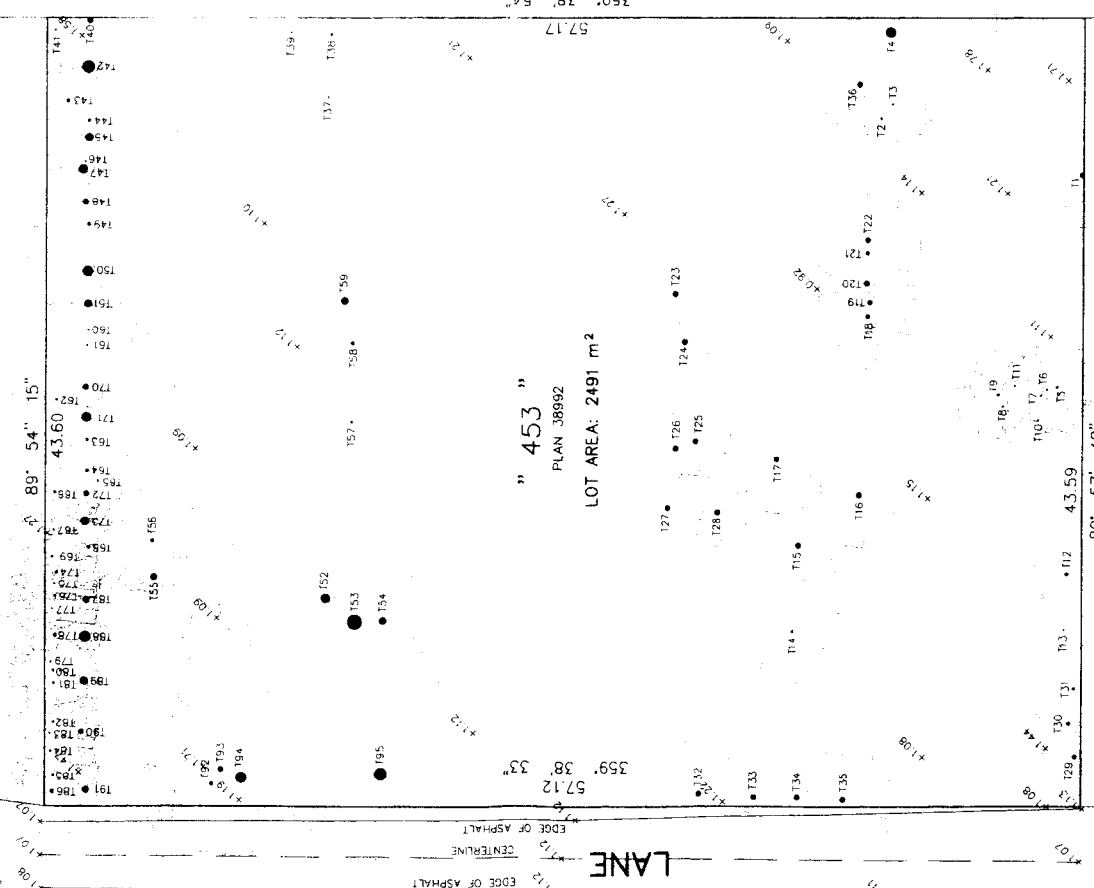
SHOWING TREES ACCORDING TO CITY OF RICHMOND
BYLAW No. 8014

PARCEL IDENTIFIER (PID): 008-608-411

CLIENT ADDRESS:
#10171 No 1 Road
RICHMOND, B.C.



SCALE 1:200



No. 1 ROAD

NOTE LEGAL PROPERTY DIMENSIONS ARE SUBJECT TO
CONFIRMATION BY FIELD SURVEYS
ELEVATIONS ARE DERIVED FROM CITY OF RICHMOND
BENCH MARK - ROADSIDE NUT ON FIRE HYDRANT
ON WEST SIDE NO. 1 ROAD AT HOUSE #10171
WITH AN ELEVATION OF 3.165 METRES

W. N. B. S.

DATE OF SURVEY: MARCH 1, 2006

© COPYRIGHT
MATSON PECK & TOPLISS
SURVEYORS & ENGINEERS
#210 - 8171 COOK ROAD
RICHMOND, B.C.
V6Y 3T8
PH: 604-278-9331
FAX: 604-270-4137
CADFILE: 15012-TREE-IPC-1.FLX

CLIENT REF: RALLA HOMES

R-06-15012-TREE



**ARBORTECH
CONSULTING LTD.**

"Stewards of the trees and plants in your environment"

MEMORANDUM:

April 19, 2006

File: 06124

Attn.: **Jerry Ralla**

Greypointe Development

12900 Mitchell Road

Richmond, BC V6V 1M8

Project: **Townhouse Development Application
10171 No. One Road Richmond BC**

Re: **Tree Retention Report**

Dear Mr. Ralla,

As requested, I have undertaken a detailed assessment of the existing tree resource at the above referenced project. The site is presently a rural sized lot with a single family residence and landscaped yard. The site is moderately treed, mostly with ornamental varieties but mixed with some large native coniferous trees on the east and north perimeters of the lot. This study relates to the application by the owners to change the land use designation and to undertake subdivision to allow 11 townhouses to be constructed.

I have been provided with plans showing the proposed development layout, and a CAD file of the topographic and tree survey. My field inspections were undertaken in April 2006 to collect details of the size, type and condition of existing trees and/or stands of trees. A **Tree Retention Report** and a **Tree Retention Plan** is attached for reference and use in the planning and construction phases of the project. The report and plan summarize the study findings including recommendations for tree retention viability within the context of the proposed land use.

Thank you for choosing Arbortech for your consulting needs. If you have any questions please call me at 604 275 3484 to discuss.

Regards,

Norman Hol
Consulting Arborist
ISA Certified Arborist, Certified Tree Risk Assessor, Wildlife and Danger Tree Assessor

Enclosures; Tree Retention Report, Tree Retention Plan



TREE RETENTION REPORT

DATE: **April 19, 2006**
 PROJECT: **GREYPOINTE DEVELOPMENT**
 CLIENT: **11 UNIT TOWNHOUSE DEVELOPMENT**
 ADDRESS: **10171 NO. ONE ROAD RICHMOND BC**

TREE ASSESSMENT – GENERAL

The subject site is located fronting on No. One Road and backing onto an existing lane. It is bound on the south by a recently completed multi-family development and to the north by an existing single-family residence. The soils are clayey with some zones covered in variable depths of organic topsoil overburden. An existing house, two outbuildings and a driveway cover approximately 20% (estimated) of the site area. Most existing trees are growing in the yard and surrounding the buildings in the form of clusters, groves and windrows. Only a few sparsely distributed individually grown trees are found.

Existing trees consist of a collection of ornamental varieties of various age and size classes. A majority of the trees are found to have outgrown their planting site. Many trees in clumps are competing with and/or are reliant on the adjacent trees. The dominant trees consist of the windrow of mostly fir trees along the north property line, the fir on the road frontage, and a poplar in the northwest quadrant. All of the significant trees have been assessed and inventoried, with details of size, species and condition compiled in the tree list below. Some shrubs and very small trees shown on the survey have been excluded from this assessment.

TABLE 1. *Tree List*

Tree #	Dbh ¹	Species	Condition	Assessment
T1	28	Western redcedar	Poor	Spindly and sparse foliage resulting from chronic stress. This tree is in poor health and is not retainable.
T2	12	Holly	Good	Small tree in good health
T3	10	Holly	Good	Small tree in good health
T4	55	Douglas-fir	Fair	Dominant tree in the road frontage with good structure and fair health. Open grown class tree with good value in retention.
T12	20	Decid.	Good	Good health
T13	10	Holly	Fair	Fair condition. Part of hedge with T29 to T31.
T15	30	Sawara cypress	Poor	Weak structure due to excessive lean toward the east, and decay observed in the trunk.
T16	30	Japanese cherry	Poor	Some heavy past pruning, and a sprout from the root stock has created

¹ Dbh denotes the diameter of the trunk measured at a height of 1.4m above grade (multiple stem sizes are noted)

				poor form. Bacterial cankers were noted on scaffold limbs and twigs. Poor condition tree not well suited to retention.
T17	30	Contorted Hazel	Good	A stout form and healthy small tree.
T18 to T22	25 avg	Sawara cypress	Poor	This windrow of cypress is comprised of 5 trees closely spaced, all being reliant on the row for structural support. Some lean, and the multi-stemmed form of individual trees make them prone to splitting apart in the long term.
T29 to T31	20 avg	Holly	Fair	This hedge is formed along with tree T13 and provides some privacy screening between the subject site and the neighbouring townhouse development. This hedge can be retained at the developers discretion, depending on construction needs.
T32 to T35	Multi	Hazel	Poor	These multiple stemmed trees are formed by weakly structured stump sprouts from decayed old coppice stumps.
T36	25	Lilac	Fair	A small tree in a cluster with adjacent trees.
T38	15	Colorado spruce	Fair	A small tree in codominant structural class along with adjacent tree #T39
T39	10	Holly	Fair	A small tree in codominant structural class along with adjacent tree #T38
T53	50	Lombardy poplar	Poor	This large tree has been topped at approximately 15m and multiple leaders have grown with very weak structure to heights of approximately 8m above the old topping wound. Decay is suspected within the trunk at the topping wound. This tree is an invasive species not well suited to residential land use.
T55	35	Prunus	Poor	This tree leans and has an asymmetrical crown in the same direction as the lean. Some decay and broken scaffold limbs were noted.
T57	15	Weeping larch	Fair	This small specimen has minor dieback noted, and is asymmetrical in the root plate due to its close proximity to the existing house.
T59	35	Ash	Fair	The roots plate is asymmetric due to its proximity to the existing house.
T94	Multi	Hazel	Poor	Some decay noted in central leaders of this multiple stemmed tree.
T95	Multi	Hazel	Poor	Decay was observed in central leaders of this multiple stemmed tree.
WINDROW		Douglas-fir		Comprised of T42, T45, T47, T48, T50, T51, T7, T71, T72, T73, T87, T88, T89, T90 AND T91. Also includes assorted small sized holly and laurel trees as noted on the plan. This windrow is predominantly Douglas-fir, but contains a few western redcedar trees. These trees have been topped in the past at a height of approximately 17m high, with small leaders arising from the old topping site. A few select trees were noted as having twin leaders from near the base, however this row of trees is generally strong from a structural perspective, and their health is fair to good.

TREE RETENTION RECOMMENDATIONS

Several factors not related to the trees themselves play an important role in developing a tree retention strategy. Internal road network design and building siting constraints are limiting to tree retention in order that the city and the developer meets land use and density goals for the property. While small adjustments can commonly be made, substantial changes to the design may result in the loss of developable lands, possibly making the development untenable. Excavations for infrastructure such as site servicing and underground utilities, re-grading required to establish finished grades, and related cuts and fills will also impact existing trees.

The value and condition of the existing trees must be considered when determining if project design changes can be made to accommodate tree retention. On this site, the developer has provided a large setback along the north perimeter to accommodate the retention of the fir windrow. The setback area along the eastern road frontage also provides opportunity to retain tree(s) in that zone of the site.

Based on the current design, and considering the condition of the tree resource, I have determined that the project can accommodate the following trees for retention:

- ***RETAIN AND PROTECT TREE #'s T4, T12, T13, T29, T30, T31, T38, T39, T42, T45, T47, T48, T50, T51, T72, T73, T87, T88, T89, T90 AND T91.***
- ***Also retain the understory trees in the vicinity of the north windrow as noted on the plan.***
- ***Prune the north windrow trees to accommodate active land use beneath the trees as amenity space. Ground cover should consist of soft surfaces and herbaceous plants that are shade tolerant in this zone.***

Trees in poor condition are not considered for retention due to their short remaining lifespan, weak structural form, or strong likelihood that the present health decline will continue. These include:

- ***REMOVE POOR CONDITION TREE #'s T1, T15, T16, T18, T19, T20, T21, T22, T32, T33, T34, T35, T53, T55, T94, AND T95.***

This site will require that the rest of the site be fully disturbed for the construction footprint including buildings, driveways and underground services. Remove the following trees to accommodate the development:

- ***REMOVE TREE #'s T2, T3, T36, T57, T59, T70 AND T71.***

The above recommendations do not preclude the opportunity to preserve and protect other small trees and shrubs for re-use on site or for use on other sites, at the discretion of the developer.

TREE PROTECTION

In order to mitigate the potential for construction impacts to retained trees, trees will need to be protected from damage. Note that direct mechanical damage to trunks, limbs and roots cannot be repaired. A tree may be made hazardous as a result of wounds, broken limbs and/or root loss. Indirect damage to roots by soil compaction or fill placement may kill or destabilize the tree without symptoms over an extended period, therefore it also should be avoided. Please refer to the guidelines to implement best management practices for tree protection on this construction site as per the attached "Tree Protection Detail".

TREATMENTS

Root Pruning

The trees being retained in close proximity to any excavation will require monitoring and inspection during the excavation process. Roots that are encountered must be pruned cleanly at the excavation limits, in order to protect the roots from being damaged at a point closer to the tree, and to initiate re-growth of roots. Further detail of root pruning methods will be provided if the treatment is required.

Pruning

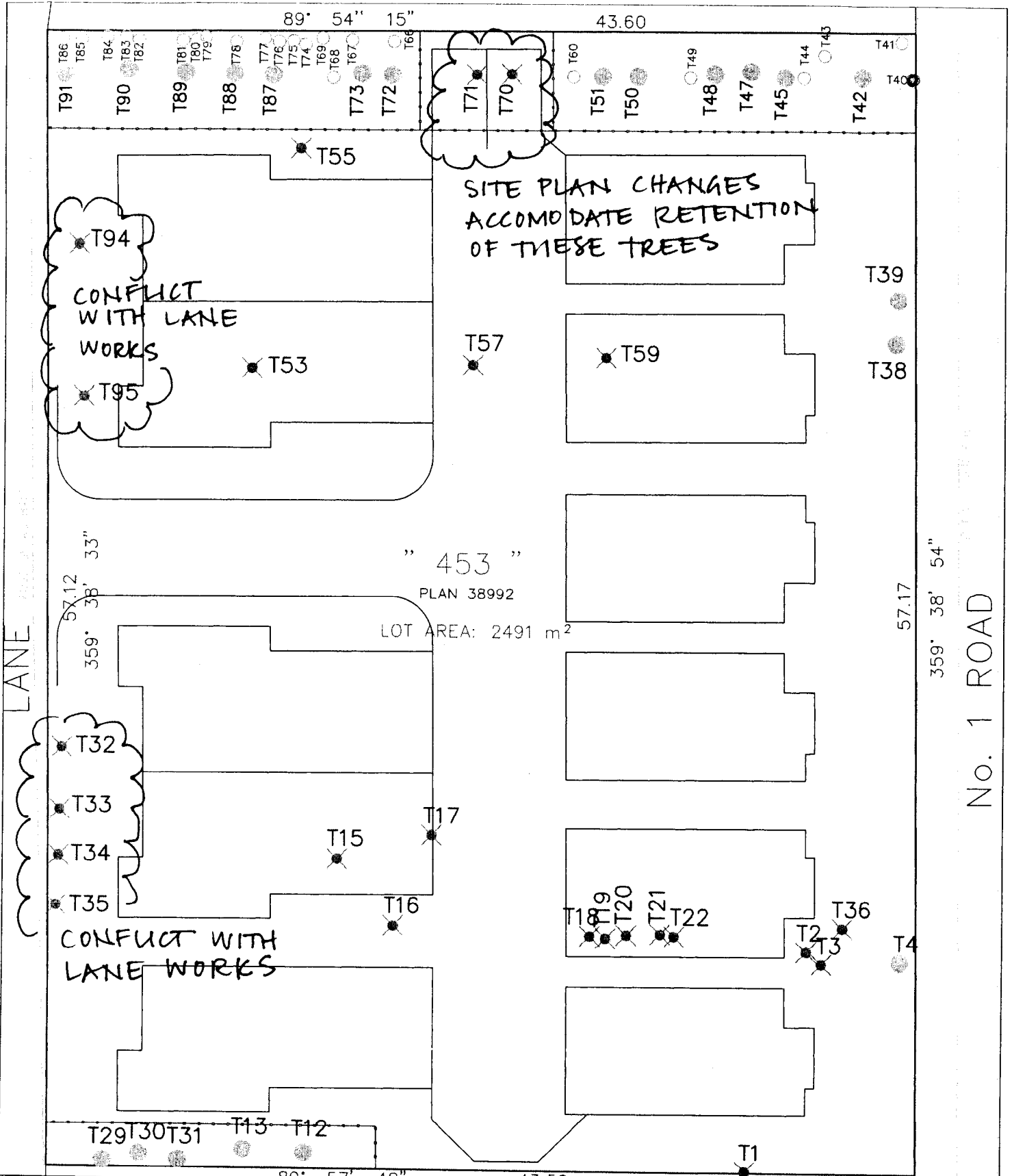
The retained trees can be pruned in order to meet site safety and landscape objectives, for example to clean deadwood from the crown and to increase lines of sight by crown raising (removing lower limbs). Other treatments such as remedial pruning may be required if branches are wounded or damaged. Trees that may be increased exposure to wind and that have dense crowns may need to be thinned by light spiral pruning methods. All treatments would require hiring a tree service company, and would be restricted to completion by a qualified arborist who can demonstrate competency in proper pruning techniques. The full scope of the treatments can be provided in a specification developed by the project arborist.

Mulching

Trees that may be affected by disturbance may benefit from a protective layer of mulch over their root zones. Trees that have new direct sun exposure to the soil caused by the removal of adjacent trees, or that may have soil desiccation related to adjacent excavation may require treatment. Placement of 75 mm of bark mulch over the root zone of affected trees may be prescribed by the project arborist to mitigate.

Supplemental Watering

The retained trees may be prone to drought stress from changes to their growing environment. Along with other factors, impacts from root loss, lateral drainage from soil exposed to excavations, and partial clearing of a site causing increased evaporation from the soil may require intervention. In some cases, retained trees may require manual watering of their root zones for an interim period as they adjust to the new disturbance around them. This may require a water source close by, or the use of a water truck. A contractor may need to be hired to provide such services.



TREE RETENTION PLAN

LEGEND

- ⊕ denotes TREE NUMBER. Refer to tree inventory for type, size and condition data.
- denotes tree to be RETAINED
- ⊗ denotes tree to be REMOVED
- denotes TREE PROTECTION FENCE to be installed to Tree Retention Area (TRA) limits.

Scale 1:250

Client: GREYPOINTE DEVELOPMENT
 Project: 11 UNIT TOWNHOUSE DP
 Site: 10171 NO. ONE ROAD RICHMOND

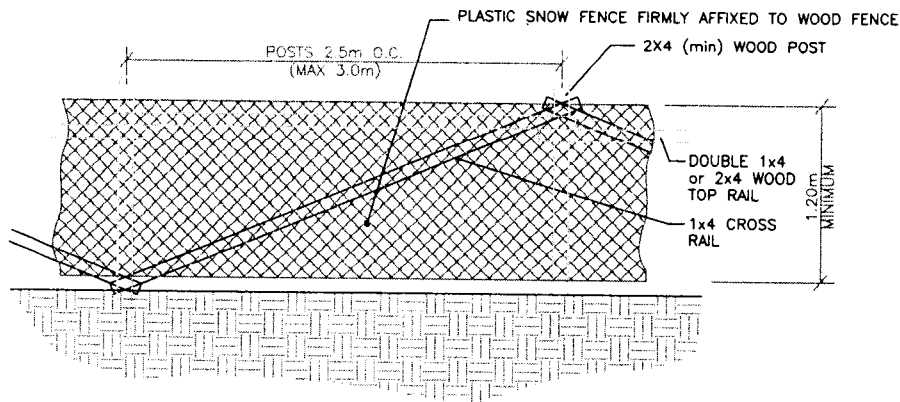
ARBORTECH CONSULTING LTD.
Professional Tree & Vegetation Consultants

Suite 200 - 3740 Chatham Street
 Richmond BC Canada V7E 4L6
 ph 604 275 3484 fax 604 275 9554
 e-mail trees@arbortech.bc.ca

file 06124 APRIL 19 2006

TREE PROTECTION FENCE DETAIL

NOT TO SCALE



Tree Protection Fencing and Restrictions

In order to mitigate the potential for construction impacts to retained trees, trees will need to be protected from damage. Note that direct mechanical damage to trunks, limbs and roots cannot be repaired, the tree will suffer from wounds, broken limbs and/or root loss. Indirect damage to roots by soil compaction or fill placement may not be manifested immediately, but may kill or destabilize the tree without symptoms over an extended period. Please refer to the following guidelines to implement best management practices for tree protection on a construction site:

1. Temporary tree protection fencing must be installed at alignments specified by the project arborist before any land clearing, demolition or construction phases commence. If the site is forested, then the clearing limits must be flagged or roped thoroughly, and then once the forest edge has been treated for windfirming (i.e. hazard trees removed) the fence can be constructed.
2. The fence must be sturdily built of suitable materials. A wood post and top rail frame with 1.2 m snow fence is a common standard, although in some cases steel posts with snow fence and a top wire are more practical. Chain link or steel rental fences can also be used where appropriate. Signs stating "TREE PROTECTION AREA - NO ENTRY" must be affixed every 10 m or other suitable frequency. This fence must be maintained in good order until the new infrastructure and buildings for the site are substantially complete. The fence must be removed within two weeks of construction completion.
3. The tree protection fencing must be inspected and approved by the project arborist prior to work commencing and should be checked on a regular monitoring frequency during the course of construction. The frequency will be determined based on the level of construction activity in the vicinity of the retained trees and the conformance results.
4. If encroachment into the tree protection zone is required for any reason, it should be authorized in advance by the project arborist. Special measures may need to be implemented to allow access, and some activities will not be allowed.
5. Underground services, drainage (especially pipes and swales), and finished grading shall not cause any grade changes (any excavation or fill) within the tree protection zones, or grade changes of surrounding lands that would result in storm water accumulation or depletion within the tree protection zone.
6. Activities within and access to the tree protection zones are restricted so that no one may cause or allow the deposit of any soil, spoil, aggregate, construction supplies, construction materials and/or waste materials. Vehicles and equipment may not pass within these zones. The retained trees may not be used to affix signs, lights, cables or any other device. Pruning, root pruning or any other treatment to the retained trees must be performed by a qualified arborist or under the direction of the project arborist. Treatments that may be specified are included in the accompanying arborists report.
7. Retained trees or tree retention areas should be re-inspected by the project arborist prior to the occupation of the site, and whenever the site superintendent or owner deems necessary.
8. Trees damaged by the Developer must be replaced by the Developer at their cost, at the discretion of the municipality. Penalties for unauthorized removal may be assessed to the Developer by the municipality.
9. Supplemental watering of retained trees during the growing season may be required, and must be undertaken by the Developer at their cost as recommended by the Project Arborist.

TREE PROTECTION DETAIL

Client:
GREYPOINTE DEVELOPMENT
Project:
11 UNIT TOWNHOUSE DP
Site:
10171 NO. ONE ROAD RICHMOND



**ARBORTECH
CONSULTING LTD.**
Professional Tree & Vegetation Consultants

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ph 604 275 3484 fax 604 275 9554
e-mail trees@arbortech.bc.ca

file 06124 APRIL 19, 2006

REC'D AUG 3/06.

**ARBORTECH
CONSULTING LTD**

MEMORANDUM:

April 19, 2006

File: 06124

Attn.: **Jerry Ralla**

Greypointe Development
12900 Mitchell Road
Richmond, BC V6V 1M8

Project: **Townhouse Development Application**
10171 No. One Road Richmond BC

Re: **Tree Transplant Review**

RZ 06-329965

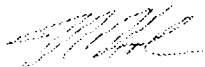
Dear Mr. Ralla,

As requested, I have reviewed TR17 (contorted hazel) for consideration of transplanting it and re-planting it on the site as part of the new landscape. Please be advised that I have determined that the plant would suffer significant damage and stress related to root loss and crown loss that would result from the pruning for working space around the tree. In addition, while the size of the tree appears relatively small, it is a mature specimen with a well established and wide spreading root zone. Mature and established trees have a relative intolerance to disturbance related to transplanting.

It is my opinion that this tree would not likely survive a transplant, and the tree would be permanently disfigured from the pruning. The cost to move this tree would be very high considering that a large root ball would need to be prepared, making it very heavy. A spade is not a viable option considering the crown form and other factors.

Based on the above, I trust that the city will reconsider their request to transplant this tree. If you require any further information, please call me directly at 604 275 3484 to discuss.

Regards,



Norman Hol,
Consulting Arborist, ISA Certified Arborist, Certified Tree Risk Assessor, Wildlife and Danger Tree Assessor

Staff Technical Comments

Engineering Works Design

Engineering accepts findings for capacity analysis for storm & sanitary sewer, requiring no upgrades. Sanitary capacity & HGL profile for storm sewer to be included on Servicing Agreement drawings.

Development Applications-Engineering supports the Rezoning application. Site visit confirmed that No. 1 Road frontage works are not warranted as the proposed development is mid block with little other potential redevelopments. The lane however, does need an upgrade. Per comments in file MAJ94-189 at 10011/31 No 1 (copy in file), this site is to complete lane improvements from their site, north to Williams Road. Servicing Agreement for this design and construction, required as a condition of the RZ, and are at the developer's sole cost. Works included, but are not limited to, full lane construction (matching standard done via SA98-138182) 6 m asphalt, storm sewer and laneway lighting, but no curb or gutter. Servicing Agreement design to include service tie-ins for 10171 plus capacity analysis results. No covenant for access required as this is controlled via forthcoming Development Permit (lane only).

Transportation

1. Frontage improvements along the site's No. 1 Road frontage are NOT required.
2. Rear lane improvements from the site's south PL to Williams Road are required. Works include as per Engineering Works Design comments above.
3. Access to be off the rear lane only.
4. Conform to City's Parking Bylaw requirements on the number and dimensions of off-street parking spaces. Three visitor parking spaces are required. One HC parking is required for this 11-unit townhouse development.
5. Dimension driveway and drive aisle width on the Development Permit plan. Driveway (off the lane) pavement width to be a minimum of 5.1 metres (clear of any obstructions or overhangs) and be able to accommodate for onsite turning movement for moving trucks (SU 9) and the safe manoeuvring of emergency vehicles, if required by the Fire Department. Contact Fire Department for their comments and requirements on emergency vehicle accessibility.
6. Prior to issuance of BP, a construction parking and traffic management plan to be provided to the Transportation Department to include: location for parking for services, deliveries, workers, loading, application for request for any lane closures (including dates, times, and duration), and proper construction traffic controls as per Traffic Control Manual for Works on Roadways (by Ministry of Transportation) and MMCD Traffic Regulation Section 01570.

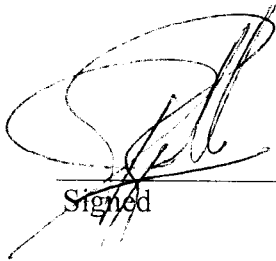
Conditional Rezoning Requirements

10171 No. 1 Road RZ 06-329965

Prior to final adoption of Zoning Amendment Bylaw 8086, the developer is required to complete the following requirements:

1. Registration of a flood indemnity covenant.
2. Payment of \$1,000 per dwelling unit (e.g. \$11,000) in-lieu of on-site indoor amenity space in accordance with the Official Community Plan.
3. Contribution of \$0.60 per buildable ft² (e.g. \$9,650) towards the City's affordable housing fund.
4. The submission and processing of a Development Permit* completed to a level deemed acceptable by the Director of Development.
5. Enter into a Servicing Agreement* for the design and construction of lane improvements across frontage and from their site, north to Williams Road at the developer's sole cost. Works include, but are not limited to, full lane construction (matching standard done via Servicing Agreement (SA 98-138182) 6 m asphalt, storm sewer and laneway lighting. No curb and gutter required. Servicing Agreement design to include paving treatment adjacent to retention tree at northwest corner of the subject property, service tie-ins for subject property and capacity analysis results.

* Note: This requires a separate application.



Signed

AUG. 4th / 2006

Date



**Richmond Official Community Plan Bylaw 7100
Amendment Bylaw 8111 (RZ 06-329965)
10171 No. 1 Road**

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

1. Richmond Official Community Plan Bylaw 7100 is amended by repealing the existing land use designation on the Steveston Land Use Map in Schedule 2.4 thereof of the following area and by designating it "Multiple-Family".

P.I.D. 008-609-411

Lot 453 Section 34 Block 4 North Range 7 West New Westminster District Plan 38992

2. This Bylaw may be cited as "**Richmond Official Community Plan Bylaw 7100, Amendment Bylaw 8111**".

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

ADOPTED



MAYOR

CORPORATE OFFICER



**Richmond Zoning and Development Bylaw 5300
Amendment Bylaw 8086 (RZ 06-329965)
10171 NO. 1 ROAD**

The Council of the City of Richmond, in open meeting assembled, enacts as follows:

- 1. The Zoning Map of the City of Richmond, which accompanies and forms part of Richmond Zoning and Development Bylaw 5300, is amended by repealing the existing zoning designation of the following area and by designating it **TOWNHOUSE DISTRICT (R2-0.6)**.

P.I.D. 008-609-411

Lot 453 Section 34 Block 4 North Range 7 West New Westminster District Plan 38992

- 2. This Bylaw may be cited as “**Richmond Zoning and Development Bylaw 5300, Amendment Bylaw 8086**”.

FIRST READING

A PUBLIC HEARING WAS HELD ON

SECOND READING

THIRD READING

OTHER REQUIREMENTS SATISFIED

ADOPTED

CITY OF RICHMOND
APPROVED by
<i>[Signature]</i>
APPROVED by Director or Solicitor
<i>[Signature]</i>

MAYOR

CORPORATE OFFICER