

Report to **Development Permit Panel**

To:

Development Permit Panel

Date:

June 26, 2006

From:

Jean Lamontagne

File:

DP 05-293675

Director of Development

Re:

Application by 359664 BC Ltd. for a Development Permit at 8291 and

8311 No. 2 Road

Staff Recommendation

That a Development Permit be issued which would:

- 1. Permit the construction of 12 townhouse units at 8291 and 8311 No. 2 Road on a site zoned "Townhouse District (R2 - 0.7)"; and
- 2. Vary the provisions of the Zoning and Development Bylaw No. 5300 to:
 - a) Increase the permitted lot coverage from 40% to 42%;
 - b) Reduce the north side yard setback from 3 m to 2 m with a maximum 0.2 m room projection at the second floor; and
 - c) Reduce the front yard setback from 6 m to 4.5 m for a mailbox structure with roof.

Jean Lamontagne

Director of Development

SB:blg Att.

Staff Report

Origin

Tom Yamamoto Architect Inc., on behalf of 359664 B.C. Ltd. to the City of Richmond for permission to develop 12 townhouses at 8291 and 8311 No. 2 Road. The site currently contains two (2) single-family homes.

The site is being rezoned from "Single-Family Housing District, Subdivision Area E (R1/E)" and "Two-Family Housing District (R5)" to "Townhouse District (R2 - 0.7)" for this project under Bylaw 7795 (RZ 04-270815).

Development Information

Please refer to the attached Development Application Data Sheet (Attachment 1) for a comparison of the proposed development data with the relevant Bylaw requirements.

Background

The subject Blundell Area site is located on No. 2 Road between Blundell and Colville Roads and across the street from a designated Neighbourhood Service Centre. The existing development surrounding the site is described as follows:

- To the north, are a newer strata-titled duplex, single-family lots with redevelopment potential and a recently built 10-unit townhouse development (RZ 03-236509 and DP 04-271746), zoned "Two-Family Housing District (R5)", "Single-Family Housing District, Subdivision Area E (R1/E)", and "Townhouse District (R2 0.7)";
- To the east, across No. 2 Road is a multi-family development and a designated 'Neighbourhood Service Centre' further north, under Land Use Contract (LUC 010) and zoned "Community Commercial District (C3)", "Comprehensive Development District (CD/66)" and Land Use Contract (LUC 087);
- To the south, are two (2) strata-titled duplexes and a recently approved 10-unit townhouse development (RZ 04-269844 and DP 05-293065), zoned "Two-Family Housing District (R5)" and "Townhouse District (R2 0.7)";
- To the west, are two (2) single-family lots fronting onto Cantley Road, zoned "Single-Family Housing District, Subdivision Area E (R1/E)".

Rezoning and Public Hearing Results

During the rezoning process, staff identified the following design issues to be resolved at the Development Permit stage (*staff comments in bold italics*):

- That the achieved density does not exceed 0.67 F.A.R. Given the location of the subject site, the provision of a permanent access for this and future development, and the limited building height, 0.67 F.A.R. was considered to be an appropriate level of density. (*Achieved*)
- Architectural design refinement. (Achieved)
- Tree retention and replacement strategies. There are a number of existing trees onsite and their retention is desirable if practicable. The applicant had agreed to replace any trees that require removal as per the guidelines set out in the Official Community Plan (OCP). (See Tree Retention and Replacement section below)

On September 20, 2004, the Public Hearing for the rezoning of this site was held and the Bylaw received Third Reading. At the Public Hearing, the following form and character concerns about rezoning the property were expressed in person and in letters submitted to the City (staff comments in bold italics):

- Impact of central drive aisle and future access to north and south on existing neighbouring duplexes in terms of location, safety, property values, privacy and liveability of homes. (See Driveway and Access to Future Development section below).
- Impact of 2% lot coverage variance on density and side yard variance. (See Zoning Compliance/Variances section below. The proposed density of 0.67 F.A.R. is not affected by the lot coverage variance and is less than the permitted 0.7 F.A.R. The lot coverage and side yard variances are a direct result of the developer providing a sensitive two-storey interface to existing duplexes to the north and south and two-storey duplex interface to the existing single-family homes to the west which front onto Cantley Road. In addition, the applicant has increased the side yard setback from the 1.5 m shown at Rezoning to 2 m with a limited 0.2 m room projection at the second floor).

During the Development Permit application review process, the City received letters regarding the proposed development from residents in the adjacent duplex to the north. Therein, the following concerns were expressed (staff comments in bold italics):

- Increased lot coverage variance of 43%. (Applicant has reduced variance request to 42%, which was identified in the rezoning staff report and is discussed below in the Zoning Compliance/Variances section below).
- Impact of driveway adjacent to duplex unit at 8273 No. 2 Road. (See Driveway and Access to Future Development section below).
- · Relocation, disappearance and installation of new survey pin between subject property and property to north. (See Fence and Retaining Wall section below).
- Impact of demolition on deterioration and sagging of wood fence and retaining wall on property to north. (See Driveway and Access to Future Development section below).

Staff worked with the applicant to address these issues in the following ways:

Tree Retention and Replacement

- There were 27 existing trees onsite and 1 existing tree in the narrow City boulevard. There was an existing hedge of 14 trees and 13 additional existing trees onsite, one (1) of which was dying and eight (8) of which were located in conflict with the existing sanitary sewer right-of-way. When the houses were demolished in September of 2005, all of the trees not identified by the arborist for retention were removed from the site and boulevard.
- Under the direction of their registered arborist and landscape architect, the developer is retaining two (2) existing trees onsite and is taking measures to protect a row of 11 existing trees on the neighbouring property to the west (Attachment 2). The two (2) trees being retained are the only trees onsite identified by the arborist for retention (Attachment 3 and Plan #3D). The applicant has been working with a registered arborist and a contract is required to ensure trees are protected during construction. The removal of 26 existing trees is being replaced with the planting of 25 new trees onsite, including a variety of species and ranging in size from 2.5 m height to 15 cm dbh calliper. A 2:1 replacement ratio is normally sought by staff but unfortunately is unable to be accommodated on or adjacent to this site due to the number of trees involved, location of a sanitary sewer right-of-way along the west edge 1747427

of the property and lack of a City boulevard along No. 2 Road. The developer instead proposes to make a voluntary cash contribution in the amount of \$12,500 to pay for the planting of approximately 25 new trees in City park land and to increase the size of 10 of the proposed new trees onsite to specimen size (15 cm dbh). Eight (8) of the specimen trees will be planted in the No. 2 Road streetscape and two (2) will be planted at the development entry for an attractive entry view from No. 2 Road. City Parks staff are looking at tree planting opportunities in nearby Kilgour, McKay, Blundell and/or Garratt parks.

Existing Trees	27 onsite & 1 in the boulevard	28
Trees removed	25 onsite & 1 in the boulevard	26
Retention Trees		2
Replacement Trees Onsite		25
15 cm CAL	Columnar Red Maple	6
15 cm CAL	Pink Perfection Flowering Cherry	4
6 cm CAL	Amanogawa Cherry	10
5 cm CAL	Japanese Snowbell	1
5 cm CAL	Pink Star Magnolia	1
2.5 m HT	Japanese Maple (upright form)	3
Replacement Trees Offsite	\$12,500 for City Parks tree planting (\$500 per tree)	25

Driveway and Access to Future Development

- The subject property is located between two (2) strata-titled duplexes which are not anticipated to be redeveloped in the near future. A right-of-way along the internal drive aisle for the benefit of future long-term redevelopment potential of the properties to the north and south was secured through the Rezoning and will not impact the existing duplex buildings. A 1.8 m wood privacy fence will be provided until such a time as the right-of-way is required for redevelopment. Should the adjacent lot to the South redevelop, the driveway would be required to widen from 6 m to 7.5 m as identified during Rezoning due to the increased number of units and the traffic along No. 2 Road.
- The vehicle access has been relocated from the north edge of the property to the south edge. The proposed southern location is offers a greater distance between the proposed townhouse driveway and adjacent duplex driveway than would be achieved in the northern location. This is because the duplex to the south has a single centrally located shared driveway whereas the duplex to the north has two (2) separate driveways located at the north and south edges of the duplex lot. In addition, the southern location offers a more sensitive transition to the new home to the south by pulling the building massing away from the neighbouring duplex unit's recessed front entry which is located adjacent to the shared property line. In contrast, the adjacency to the north is to the garage of the duplex unit, with the duplex units front entries located centrally on the lot and recessed between the garages.
- The provision of a central driveway was explored by the applicant, but was not desirable as it would result in the loss of a unit or negatively impact the site plan through increased side yard setback variances or decreased outdoor amenity area. As identified above, the 6 m wide

driveway would need to be widened to 7.5 m if it were relocated away from the north or south edges of the property. Transportation staff identified during Rezoning that although a 6m wide driveway was supportable for the proposed 12-unit development, a wider driveway of 7.5 m was needed to support redevelopment of the adjacent lots to the north and south.

Fencing and Retaining Wall

- The neighbouring duplex building to the north at 8271 and 8273 No. 2 Road has a side yard setback 1.2 m from the shared property line. Its retaining wall and connected solid wood fence along the shared property line appear to encroach into the proposed development site (Attachment 4). They are approximately 10 years old and appear to be deteriorating and sagging in several locations. The existing pressure on the retaining wall (which is also the fence foundation) will be alleviated with the proposed development, as the developer will be raising the lower subject site to the same level as the higher adjacent site.
- The developer has committed to permit the existing retaining wall and fence to remain in place and will be building a new solid wood privacy fence (1.8 m height) for the future townhouse residents adjacent to the existing fence.

Staff Comments

The proposed scheme attached to this report has satisfactorily addressed the significant urban design issues and other staff comments identified as part of the review of the subject Development Permit application. In addition, it complies with the intent of the applicable sections of the Official Community Plan (OCP) and is generally in compliance with the "Townhouse District (R2 - 0.7)" except for the zoning variances noted below.

Zoning Compliance/Variances (staff comments in bold)

The applicant requests to vary the provisions of the Zoning and Development Bylaw No. 5300 to:

1) Increase the permitted lot coverage from 40% to 42%.

(Staff supports the proposed variance as it is the direct result of a design proposal which limits building height to improve the interface with surrounding duplexes and single-family homes. The variance was identified and supported in the rezoning staff report. The design proposal limits building height to 2 ½ storeys facing No. 2 Road and two-storeys in the rear at the interface to the single-family lots facing Cantley Road).

2) Reduce the north side yard setback from 3 m to 2 m with a maximum 0.2 m room projection at the second floor.

(Staff supports the proposed variance as, along with the increased lot coverage as discussed above, the variance is the direct result of a design proposal which limits building height to improve the interface with surrounding duplexes and single-family homes. The den at the second floor projects 0.2 m into the side yard for a width of 2.8 m. This projection contributes articulation to the side elevation and is less than the 1.5 m reduced side yard setback which was identified by staff in the rezoning report. The setback has been increased from 1.5 m to 2 m or 1.8 m to the second floor room projection. In addition, the proposed side yard setback exceeds the minimum required (1.2 m) under the adjacent Two-Family Housing District (R5) zoning and for standard single-family dwellings).

3) Reduce the front yard setback from 6 m to 4.5 m for a mailbox structure with roof.

(Staff supports the proposed variance as it is limited to a mailbox enclosure with a roof which contributes to the pedestrian-oriented streetscape design. The appearance of the utilitarian mailbox structure is improved with an enclosure which is sympathetic to the architectural form and character of the building and landscape design. The mailbox structure is integrated into the outdoor amenity space design).

Advisory Design Panel Comments

The Advisory Design Panel was unable to form a quorum, but members did provide comments for the applicant's consideration regarding accessibility, landscaping, and designing for security. The applicant incorporated most of the Panel member's suggestions. A copy of the relevant excerpt from the Advisory Design Panel Minutes from August 3, 2005 is attached for reference (Attachment 5). The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in 'bold italics'.

Analysis

Conditions of Adjacency

• The proposed height, siting and orientation of the buildings respect the massing of the existing duplexes to the north and south and single-family homes to the west. The applicant has addressed privacy for the adjacent duplexes to the north and south through: providing 3 m and 2 m setbacks with a room projection at the second storey; the planting of shrubs and trees; and the provision of 1.8 m height solid wood privacy fencing.

Urban Design and Site Planning

- Pedestrian-oriented frontage character has been incorporated in the units fronting onto No. 2 Road and views into the development improved with tree planting. This development proposes a two-storey duplex interface of six (6) units at the rear with adjacent single-family homes fronting onto Cantley Road and 2 ½ storey triplex interface of six (6) units fronting onto No. 2 Road.
- The applicant is providing the required outdoor amenity space onsite. Due to the small scale of the development, the amenity space is also relatively small and will not accommodate the necessary safety clearances for children's play equipment. The outdoor amenity space has instead been designed with seating, walkway and lawn area to provide informal opportunities for gathering and child's play. The central location also provides a pedestrian entry to the development from No. 2 Road separate from the vehicle entry.
- As discusses in the Driveway and Access to Future Development section above, vehicle access is provided through a 6 m wide driveway to No. 2 Road at the south edge of the property. A right-of-way was secured through the Rezoning to provide vehicle access to future potential redevelopment of the adjacent duplex lots to the north and south, for which the driveway would need to widened from 6 m to 7.5 m on the property to the south. SU-9 moving truck manoeuvring has been accommodated onsite and for future redevelopment.
- Parking is located off of the internal manoeuvring aisle. Two (2) resident parking spaces have been provided for each unit which exceeds the onsite parking requirements and visitor parking meets the requirements, including one (1) accessible parking space.

- A paved area has been provided in front of the outdoor amenity area for garbage and blue box recycling collection for the six (6) rear units. Garbage and recycling blue boxes will be collected at the curb from each of the six (6) units fronting onto No. 2 Road. The paved area is centrally located next to the outdoor amenity area and mailboxes.
- Payment of \$12,000 cash-in-lieu of onsite indoor amenity space was secured through the rezoning.

Architectural Form and Character

• The building forms are articulated and the proposed building materials (Hardi-plank siding, vinyl board and batten, painted wood trim and brackets, architectural series asphalt shingles) are generally consistent with the Official Community Plan (OCP) Guidelines.

Landscaping Design and Open Space Design

- As discussed above in the <u>Tree Retention and Replacement</u> section, there were 27 existing trees onsite and 1 boulevard tree, of which two (2) remain onsite. When the houses were demolished in September of 2005, all of the trees not identified by the arborist for retention were removed from the site and boulevard.
- Under the direction of their registered arborist, the developer is retaining two (2) of the existing trees and is taking measures to protect a row of 11 existing trees on the neighbouring property to the west (Attachment 2). The developer is retaining both of the trees identified by the arborist for retention (Attachment 3 and Plan #3D). The applicant has been working with a registered arborist and a contract is required to ensure trees are protected during construction. The removal of 26 existing trees is being compensated for with a voluntary cash contribution in the amount of \$12,500 for the planting of approximately 25 new trees in city parks and the planting of 25 new trees onsite, including 10 specimen size trees (15 cm dbh). The specimen trees will be planted in the No. 2 Road front yards (8) and at the development entry for an attractive view into the development from No. 2 Road (2).
- The landscape design also includes the planting of shrubs, perennials, ground covers and the provision of 1.8 m height solid wood privacy fencing.
- An outdoor amenity space has been provided in a central location facing No. 2 Road. The
 landscape design also includes seating, and special paving treatment including permeability,
 patterning and colour. Children's play equipment is not proposed due to the small scale of
 development. However, each of the units has a fenced outdoor space.

Crime Prevention Through Environmental Design

- The line of sight to the recessed entries for the A1 units has been improved by orienting the door to be visible from the drive aisle. The southwest entry is in line with the driveway and adjacent to an open visitor parking space and the northwest entry has been pulled closer to the drive aisle and is adjacent to an open visitor parking space.
- The location of the outdoor amenity space with mailboxes allows for natural surveillance from No. 2 Road and the main living area of the adjacent units.

General

- No accessible units are proposed due to the small scale of development. An adaptable floor plan has been provided demonstrating how the one (1) type 'Aa' two-storey unit could be converted to increase accessibility with the reconfiguration of one of the three bedrooms for the installation of a platform lift (**Reference Plan B**).
- Blocking will be provided in the bathroom walls of all units to facilitate future installation of grab bars to improve accessibility.

Servicing and Utilities

The developer has submitted a capacity analysis as requested by the City's Engineering Department. Engineering staff agreed with the applicant's consultant that no storm or sanitary sewer capacity upgrades are required.

Conclusions

The applicant has satisfactorily addressed issues that were identified through the rezoning process, as well as staff and the Advisory Design Panel's comments regarding conditions of adjacency, site planning and urban design, architectural form and character, and landscape design. The applicant has presented a development that fits into the existing and future Blundell neighbourhood context in close proximity to the Neighbourhood Service Centre at Blundell and No. 2 Roads. Staff recommend support of this Development Permit application.

Sara Badyal, M.Arch.

Sala B

Planner 1 (Local 4282)

SB:blg

The following conditions are required to be met prior to forwarding this application to Council for approval (Attachment 6):

- Cash contribution in the amount of \$12,500 towards tree planting in City parks. City Parks staff will look at planting opportunities in proximate Kilgour, McKay, Blundell and/or Garratt parks;
- Proof of a contract with a registered arborist (minimum 4 site visits through construction) for tree retention and protection of adjacent trees;
- Installation of wood framed protective tree fencing to the satisfaction of the registered arborist; and
- Receipt of a Letter-of-Credit for landscaping in the amount of \$41,572.

The following conditions are required prior to future Building Permit issuance:

- Submission of a Construction Traffic Management Plan (http://www.richmond.ca/services/ttp/special.htm) to the satisfaction of the Transportation Division; and
- Incorporation of accessibility measures into the Building Permit drawings including blocking inside of the walls
 in all washrooms in all units to facilitate future installation of grab bars.

Attachment 1 Development Application Data sheet
Attachment 2 Landscaping Measures for Tree Retention

Attachment 3 Arborist Report Attachment 4 Survey Plan

Attachment 5 Advisory Design Panel Meeting Minutes Annotated Excerpt

Attachment 6 Conditional Development Permit Requirements



Development Application Data Sheet

Development Applications Department

DP 05-293675	Attachment 1
Address: 8291 and 8311 No. 2 Road	
Applicant: Tom Yamamoto Architect Inc.	Owner: <u>359664 BC Ltd.</u>
Planning Area(s): Blundell Area	
Floor Area Gross: 1,931 m ²	Floor Area Net: 1,529.7 m ²

	Existing	Proposed
Site Area:	2,284 m²	No Change
Land Uses:	Single-Family Residential	Multi-Family Residential
OCP Designation:	Low-Density Residential	No Change
Zoning:	Formerly R1/E & R5	Currently R2 - 0.7
Number of Units:	2	12

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.7	0.67	None Permitted
Lot Coverage:	Max. 40%	42%	2% Increase
Setback – Front Yard:	Min. 6 m	6 m for buildings 4.5 m for mailboxes	1.5 m Decrease for mailboxes
Setback – Side Yard:	Min. 3 m	3 m & 2 m with 0.2 m projection	1.0 m Decrease
Setback – Rear Yard:	Min. 3 m	3.5 m to 4.4 m	None
Height (m):	Max. 11 m & Max. 3 storey	9 m & Max. 2 ½ storey	None
Lot Size:	Min. 30 m width & Min. 35 m depth	49. 9 m width & 45.7 m depth	None
Off-street Parking Spaces – Regular/Commercial:	18 and 3	24 and 3	None
Off-street Parking Spaces – Accessible:	1	1	None
Total off-street Spaces:	21	27	None
Tandem Parking Spaces	not permitted	none	None
Amenity Space – Indoor:	Min. 70 m ²	cash-in-lieu	None
Amenity Space – Outdoor:	Min. 72 m ²	76 m²	None



June 15, 2006

359664 B.C. Ltd #100 – 8831 Odlin Crescent Richmond, B.C. V6X 3Z7

Attention:

Stacy Maeda

Dear Stacy,

Re:

8291 and 8311 No. 2 Road

Richmond

We've reviewed the outstanding comments from the City of Richmond and have the following responses:

- 1. In regards to tree planting compensation, we are limited to the locations where trees can be planted. Initially, we had trees along the West P.L., but the City has identified a Sanitary ROW along the West P.L. With this constraint, it limits the number of trees we can locate on site. Twenty-five trees have been identify to be removed. Of these identified, they all have low value based on the Arborist's assessment. As compensation for these removals, we are proposing 10 trees at 10cm Cal., and 15 at 5-7cm Cal. Again please note that we are not permitted to plant any trees along the West P.L., setback so there is no other spaces to locate additional trees.
- 2. In regards to the grade transition, we are working jointly with MGF Hort to design means of tree retention around the site. MGF has indicated that a retaining wall +/- 12-18" is permitted along the West P.L. with no requirement for a tree root aeration system. Given only a small amount of material being placed along this western edge, we will use a growing medium with higher sand content to allow moisture and nutrients to penetrate down to the original root zone. The amount of material we will place closer to the West P.L. will be less and increase as we move away towards the patios. We anticipate on average 12-15" of material being place over the existing grades. If we were placing >18-24" of material, we would then incorporate an aeration system.
- We've resubmitted plans back to you with an updated Landscape plan indicating trees with increased sizes, and a Tree Management Plan with a summary of tree removal and replacement.

If you have any questions or require additional information, please contact us.

Mary Chan-Yir, Principal DMG Landscape Architects

Yours

Tree Assessment for 8291 & 8311 No. 2 Road, Richmond

File Number <u>DP 04-271746</u>

DP 05-293675

Prepared for:

DMG LANDSCAPE ARCHITECTS Suite C100 - 4185 Still Creek Drive Burnaby, BC, V5H 1H3 Phone 604-437-3942 Fax 604-437-8723

Prepared by:

MGF HORTICULTURAL INC. 9790-128A Street, Surrey, BC; V3T 3C9 Phone 604-240-0309 Fax 604-589-2888

Arborist: Michael Fadum, ISA 705

January 27, 2005

1.0 Introduction

On January 4, 2005, the undersigned attended the land development application site located at 8291 and 8311, No. 2 Rd. in Richmond, to review the tree inventory. The tree assessment was conducted for DMG Landscape Architects, on behalf of Maeda Development. A tree survey has been prepared and provided by others. It has been modified to reflect the recommendations of this report and is attached hereto as the Tree Preservation and Removal Plan.

The parcel is an amalgamation of two residential properties. Both properties are significantly lower in elevation than the flanking No. 2 Road and the neighbouring sites. It is however, very similar to the elevation of the property to the west. This is of significance because a stand of trees exists slightly off property to the west. These and most others will be impacted, to some degree, by the preload and lot grading efforts. Mitigating works will be described later in the report and in following documents.

2.0 Site Findings

The tree inventory includes both coniferous and deciduous species but consists primarily of Paper Birch and Lombardy Poplar. The trees have been assigned numbers for the assessment process as plotted on the plans attached. The following is a summary of the findings.

Tree #1 -- Paper Birch (Betulus papyrifera) -- DBH: 0.40m

This tree is of poor quality. It has been deliberately ringed at approximately 2.5m above grade. The cambium tissue has been significantly damaged and the tree will therefore not survive.

Recommendation: Remove tree.

Tree #2 – Grand Fir (Abies grandis) – DBH: 0.25m and 0.20m

This tree is co-dominantly attached at approximately 1m. It has a visible vertical plane of included bark which significantly increases the risk of trunk failure. This tree is not considered suitable for preservation.

Recommendation: Remove tree.

Tree #3 – Paper Birch (Betulus papyrifera) – DBH: 0.45m

This tree has two main trunks from a point of attachment at approximately 3m. The attachment appears to be sound. This tree is considered to be of low value but has been considered for preservation efforts. We conclude that the construction impacts will be significant and that survival is not anticipated. Recommendation: Remove tree.

Tree #4 – Lombardy Poplar (*Populus nigra* 'Italica') – DBH: 0.60m

This tree is comprised of 4 main stems which appear to be poorly attached. This tree is not considered suitable for preservation. Furthermore it will be impacted significantly by construction.

Recommendation: Remove tree.

Tree #5 - Paper Birch (Betulus papyrifera) - DBH: 0.35m

This tree leans significantly in an easterly direction. The east side has been delimbed to $\frac{1}{2}$ of its height. It is considered to be of poor form and will be impacted by the lot grading and construction.

Recommendation: Remove tree.

Tree #6 – Paper Birch (Betulus papyrifera) – DBH: 0.35m

This tree has been delimbed on the east side to approximately $\frac{1}{2}$ of its height. It has been considered for preservation but will be significantly impacted by lot grading and construction.

Recommendation: Remove tree.

Tree #7 – Paper Birch (Betulus papyrifera) – DBH: 0.20m

This small tree has been shade suppressed. It has an asymmetrical canopy and is not considered suitable for preservation. Furthermore it is located at the edge of the building footprint.

Recommendation: Remove tree.

Tree #8 – Hedgerow of Lombardy Poplar (*Populus nigra* 'Italica') – DBH: varying sizes from 0.30m – 0.60m

This hedgerow is comprised of ten trees, all of which are of poor structure. Indications of past stem and limb failures are visible throughout the canopies of several of the trees. Deadwood is also present throughout the canopies. These

trees are not considered suitable for preservation due to both the species characteristics and the structural defects. Furthermore they are located well within the building footprint.

Recommendation: Remove trees.

Tree #9 – Paper Birch (*Betulus papyrifera*) – DBH: 0.25m and 0.10m

This is a twin stem tree exhibiting a significant lean in a southerly direction. It is of poor form and is not considered suitable for preservation. It is also located within the building envelope.

Recommendation: Remove tree.

Tree #10 – Indigenous Cherry (*Prunus emarginata*) – DBH: 0.20m

This tree is of moderate form. It had a sub-dominant attachment near the base which has been pruned out resulting in a large wound. This tree is not considered to be suitable for preservation efforts.

Recommendation: Remove tree.

Tree #11 – Paper Birch (Betulus papyrifera) – DBH: 2 x 0.20m

This tree has two main stems and is of moderate form. It is located within the building envelope and is not worthy of site reconfiguration.

Recommendation: Remove tree.

Tree #12 - Paper Birch (Betulus papyrifera) - DBH: 0.20m

This tree is of moderate form. It is slightly shade suppressed and has had a sub-dominant attachment removed from the base. This tree is not considered suitable for preservation.

Recommendation: Remove tree.

Tree #13 – Bigleaf maple (*Acer macrophyllum*) and Paper Birch (*Betulus papyrifera*) attached at the base – DBH: Bigleaf maple 0.40m and 0.30m, Birch 0.20m and 0.20m

This clump of multiple stems is comprised of two trees of separate species. They are joined at the base. The Bigleaf maple is of rather poor quality. One stem has a significant lean to the south while the other one leans to the southwest. The Birch is also of poor quality. One of its main stems leans towards the north and the other leans towards the east. The base elevation is significantly lower than the sidewalk located approximately 5m away. This clump of trees is located within the building envelope and is not considered suitable for preservation.

Recommendation: Remove tree.

Tree #14 - Spruce (Picea spp.) - DBH: 0.25m

This tree exhibits indications of stress including short shoot elongation. It has been topped for line clearance and de-limbed to approximately 3m. The base elevation is similar to that of the sidewalk. It has been considered for preservation as it does not pose a significant risk of failure but it has a poor

appearance. Due to its low aesthetic value, we recommend that it is removed and replaced with an appropriate species.

Recommendation: Remove and replace tree.

Tree #15 – Spruce (*Picea spp.*) – DBH: 0.25m

This tree has been de-limbed to approximately 4m. It has a lean towards the southeast and has a rather poor appearance.

Recommendation: Remove tree.

Tree #16 - Paper Birch (Betulus papyrifera) - DBH: 0.40m

This tree is of moderate form. It is considered to be suitable for preservation but will be impacted by construction and the implementation of the final grades which are significantly higher than the existing grades.

Recommendation: Preserve this tree on a preliminary basis and re-assess in conjunction with construction plans and during construction. Provide tree wells including root zone aeration. The plans for the aeration can be further designed in conjunction with lot grading and development construction details. See tree preservation summary section for further information.

Tree #17 - Spruce (Picea spp.) - DBH: 0.20m

This tree has a dog-leg at the upper canopy. It has been significantly shade suppressed but may be considered for preservation with surrounding trees.

Recommendation: Preserve this tree on a preliminary basis and re-assess in conjunction with construction plans and during construction. Provide tree wells

including root zone aeration, which can be further designed in conjunction with lot grading and development construction details. See tree preservation summary section for further information.

Tree #18 - Paper Birch (Betulus papyrifera) - DBH: 0.20m and 0.25m

This twin stemmed tree is of poor structure. The eastern most stem leans significantly eastward. It is not considered suitable for preservation.

Recommendation: Remove tree. Minimize impact to adjacent trees to be preserved by grinding stump rather than excavating.

Tree #19 - Birch (Betulus papyrifera) - DBH: 0.35m

This tree is of poor structure. It has a poorly attached secondary trunk and is not considered suitable for preservation.

Recommendation: Remove tree. Minimize impact to adjacent trees to be preserved by grinding stump rather than excavating.

Tree #20 - Hedgerow of trees slightly off property

These trees all appear to be off property. They include a Red Alder at the south end which has a DBH of approximately 0.40m. The Red Alder is of poor form and is not considered suitable for preservation. Removal is subject to the owner's approval. Slightly north of the Red Alder is a Douglas-fir of poor to moderate form. Further north are conifers including Western Redcedar trees. They, including the Douglas-fir, are considered to be suitable for preservation but will be impacted by lot grading and construction. We recommend the

implementation of a root zone aeration system to improve the likelihood of survival.

3.0 Tree Retention Summary

We recommend that six of the trees located on or slightly outside of the property line and the two trees slightly within property at the south west corner of the development are considered for preservation. The procedures of fill, preload and construction will have a significant impact on the trees. This impact may cause them to decline and die but an implementation of root zone aeration may improve the chances of survival. All parties must be aware that this will increase the costs of development and will in no way guarantee success for tree survival. The details of the aeration plan will be developed at a later date in conjunction with the construction plans. The basis of the plan consists of perforated pipes placed on existing grade surrounded by a layer of clear crush aggregate. The pipes will be continued with vertical connections cut flush to finish grade with at surface, perforated caps. These will provide for air exchange to the root zone. The soil horizon within the root zones contains millions of microorganisms which are essential for plant health. It is a complex environment and is not well suited to impacts such as compaction, or saturation, which deplete air pockets. The implementation of the aeration system is intended to provide air to the rootzone which is essential for survival of the microorganisms which in turn nourish the trees. If the soil becomes saturated with water for an extended period of time, or compacted, then the soil may become anaerobic which is not conducive to a

healthy growing environment. In order for this aeration system to be a success it must provide air to the root zone while at the same time ensure that the gravel layer does not become water saturated. Air exchange and adequate drainage must both be provided for any degree of success.

4.0 Limitations

This Arboricultural field review report is based on site observations on the dates noted. Effort has been made to ensure that the opinions expressed are a reasonable and accurate representation of the condition of the trees reviewed. All trees or groups of trees have the potential to fail. No guarantees are offered or implied by MGF Horticultural Inc. or its employees that the trees are safe given all conditions. The inspection is limited to visual examination of accessible items without dissection, excavation, probing, coring or climbing. Trees can be managed, but they cannot be controlled. To live, work or play near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.

The opinions expressed in this report are valid for a period of one year only. Any trees retained should be reviewed on a regular basis. The root crowns of all of the trees to be retained must be reviewed immediately following land clearing or grade disturbance.

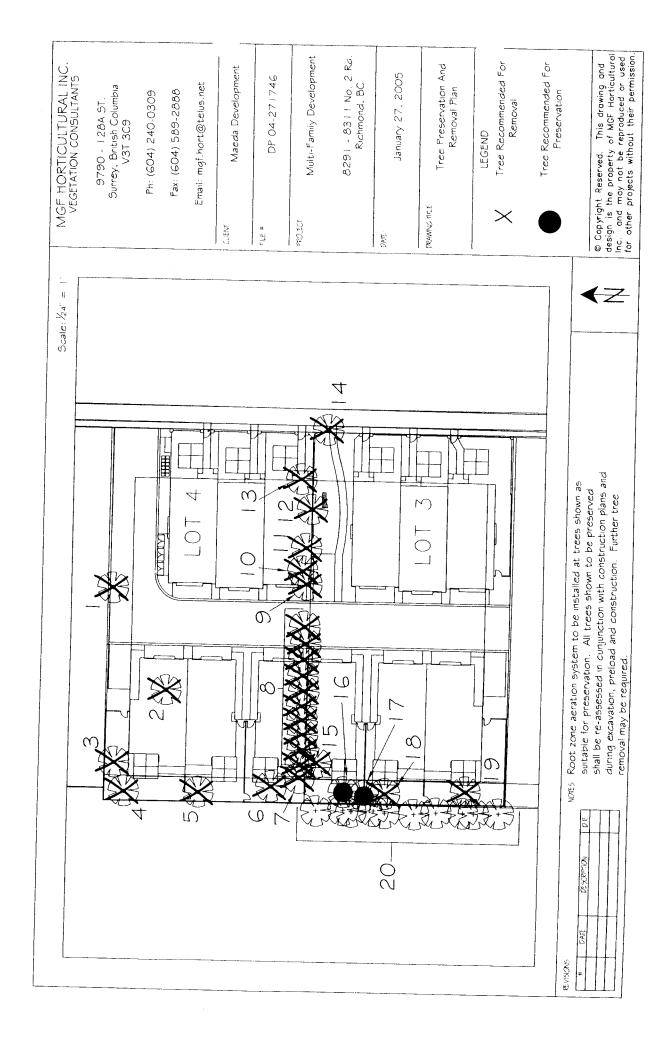
Please contact the undersigned if you have any questions or concerns regarding this report.

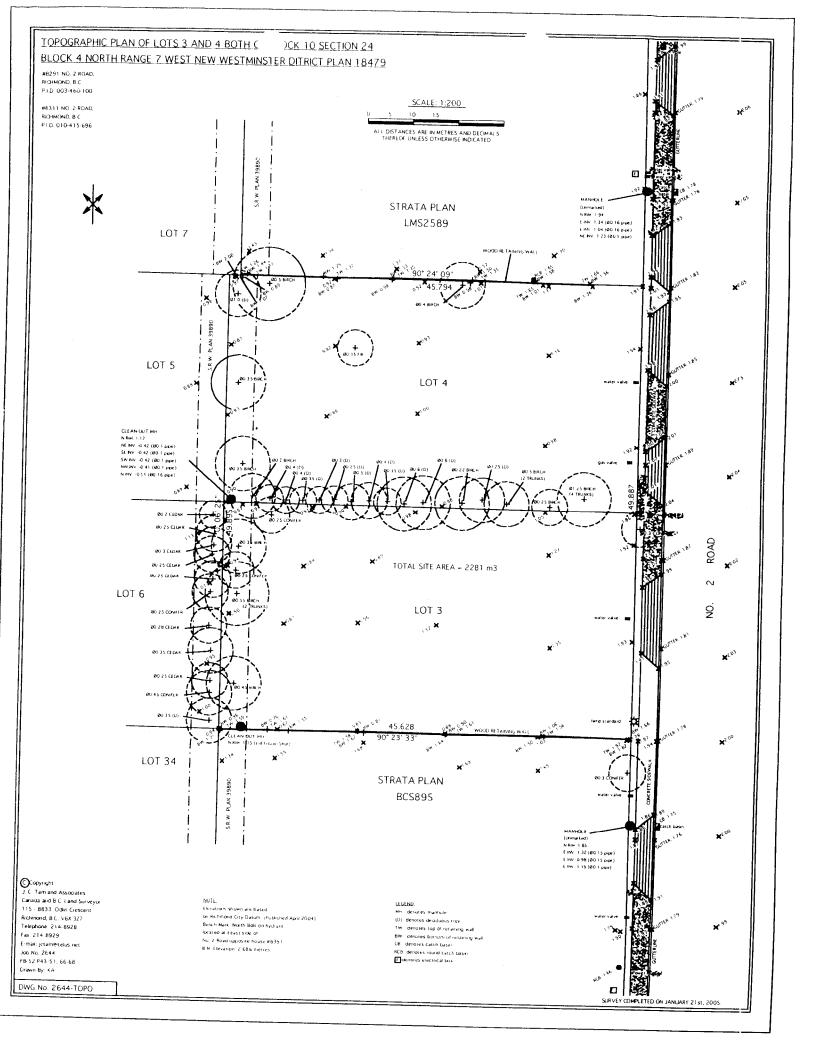
Yours truly,

MGF Horticultural Inc.

Mike Fadum

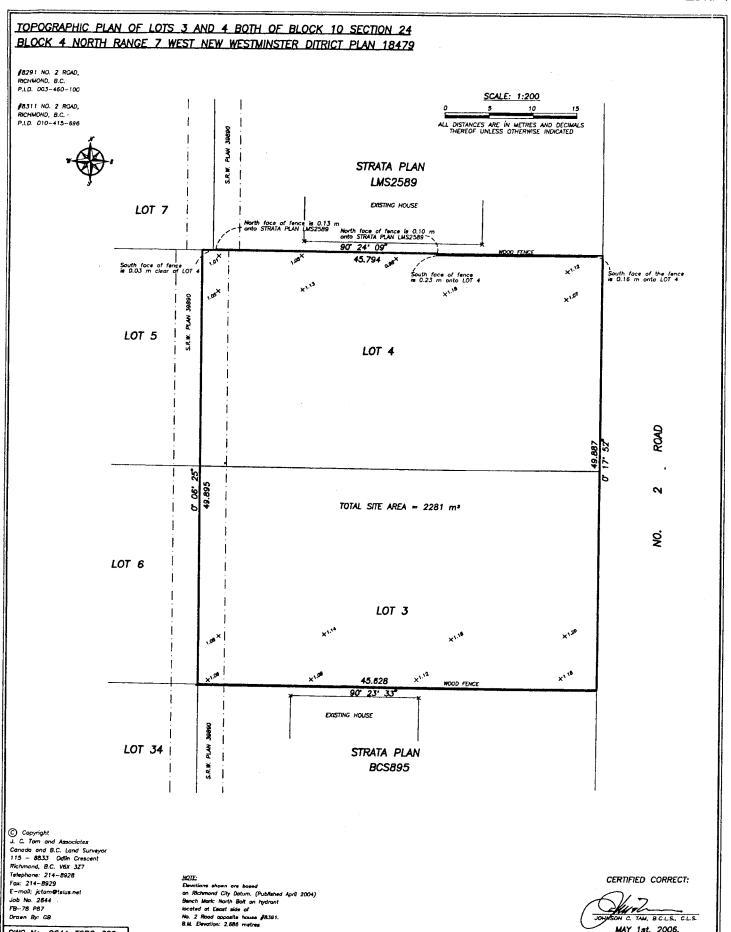
ISA Certified Arborist PN 705A, Horticulturist





SON C. TAM, B.C.L.S., C.L.S.

MAY 1st, 2006.



DWG No. 2644-TOPO-002

FB--78 P87

Excerpt from the Minutes from The Design Panel Meeting

Wednesday, August 03, 2005 – 4:00 p.m. Rm. M.1.003
Richmond City Hall

2. <u>Townhouses</u> Tomizo Yamamoto, Architect 8291/8311 No. 2 Road

DP 05-293675

General questions put forth by the Panel included:

- Landscape along edge of driveway facing No. 2 Road – This was not done because this would be used as a common driveway by this as well as future developments.

Comments from members of the Panel were as follows:

- The second floor bathroom of the A unit was not accessible, more room was needed alongside the commode to accommodate a wheelchair the den could be eliminated or the B unit would be better suited for accessibility *bathroom modified*
- The entrance for Unit A [northwest unit] was recessed, street surveillance was not possible Northwest unit reconfigured and recess to front entry has been reduced by half and site lighting included.
- Well planned development. Bench was not in the best location could the trellis be pulled back a bit and the bench and mailboxes placed towards the street *Incorporated*
- Appreciate trees towards No. 2 Road could there be a larger tree at the end of the project for shade purposes and could decorative pavers be introduced at turning point Trees at north and south ends of project have been incorporated and decorative paving expanded to include visitor parking spaces and drive aisle at amenity to visually mitigate length and widening of pavement.
- Add pervious paving at visitors parking to decrease impervious surface *Incorporated*
- Could some trees/hedge be planted to buffer single family homes abutting the property Trees have been incorporated at the north and south interfaces to adjacent duplexes. Unfortunately planting of new trees along the west interface to single-family homes is not permitted due to conflict with existing sanitary sewer right-of-way.

Since enough members were not available to form a quorum, the applicant was told that he could either return to the Panel with this project or take it forward to the next stage.

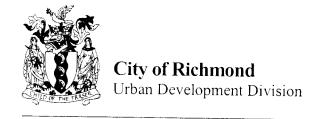
Conditional Development Permit Requirements 8291 & 8311 No 2 Road DP 05-293675

Prior to forwarding the Development Permit application to Council, the developer is required to complete the following requirements:

- 1. Contribution in the amount of \$12,500 towards tree planting in City parks. City Parks staff will look at planting opportunities in proximate Kilgour, McKay, Blundell and/or Garratt parks.
- 2. Proof of a contract with a registered arborist (minimum 4 site visits through construction) for tree retention and protection of adjacent trees.
- 3. Installation of wood framed protective tree fencing to the satisfaction of the registered arborist.

4. Receipt of a Letter-of-Credit for landscaping in the amount of \$41,572.

July 6,2006



Development Permit

No. DP 05-293675

To the Holder:

359664 BC LTD.

Property Address:

8291 AND 8311 NO. 2 ROAD

Address:

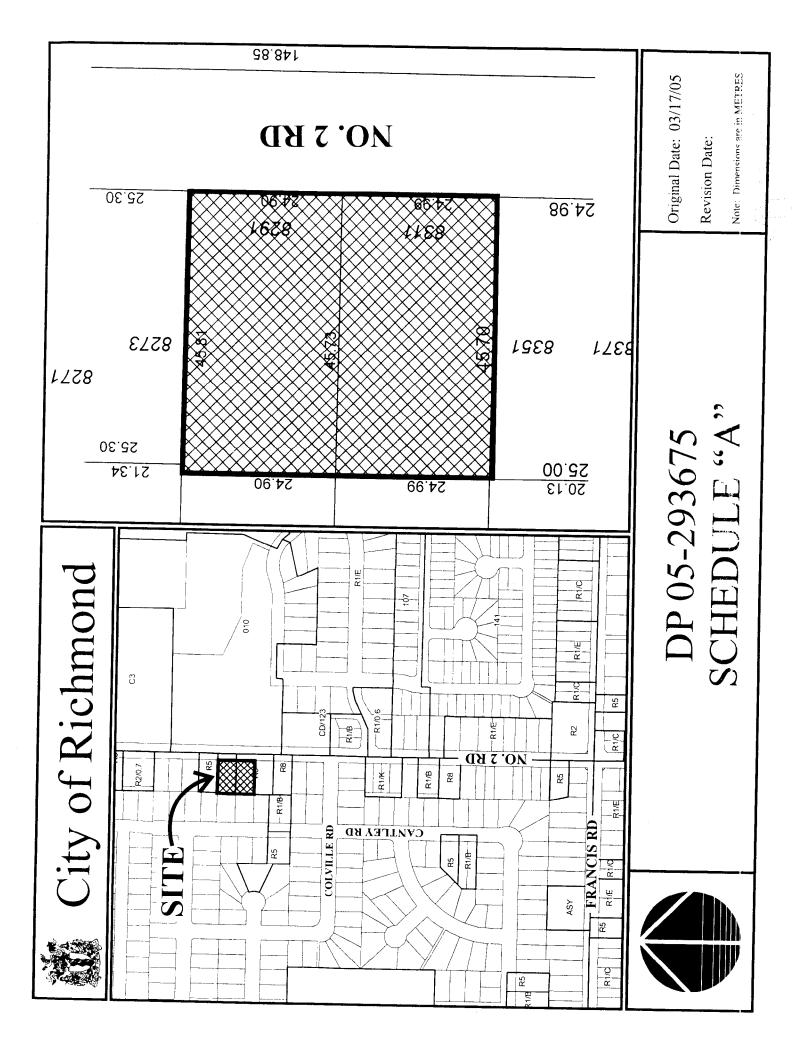
C/O TOM YAMAMOTO 2386 OAK STREET

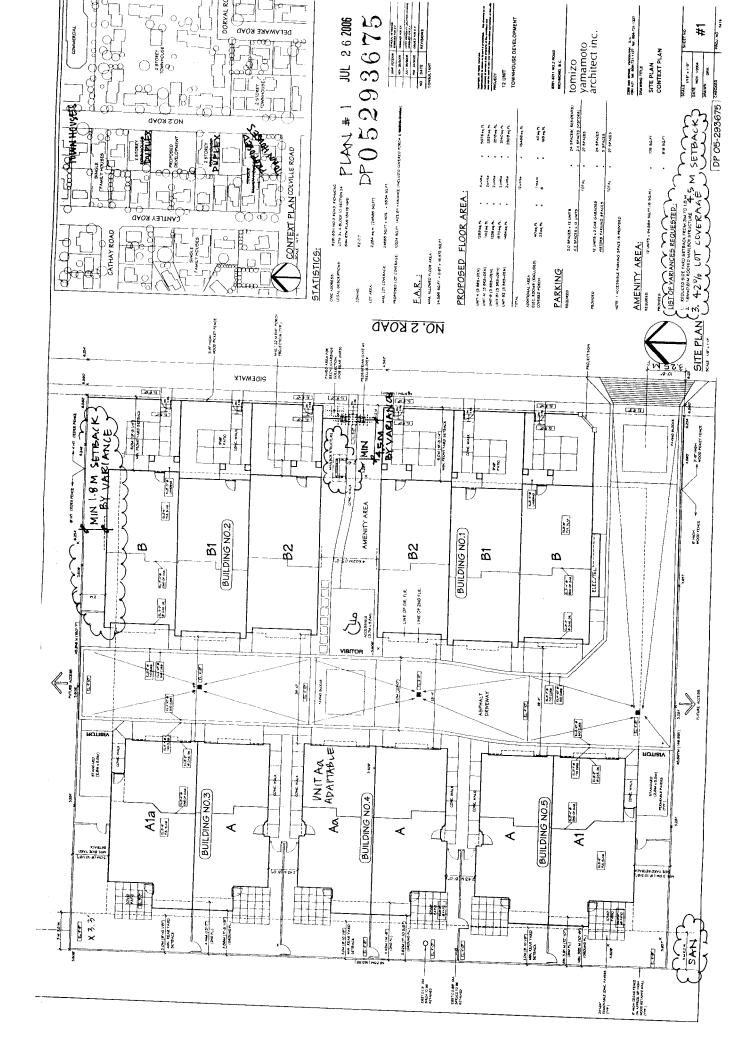
VANCOUVER, BC V6H 4J1

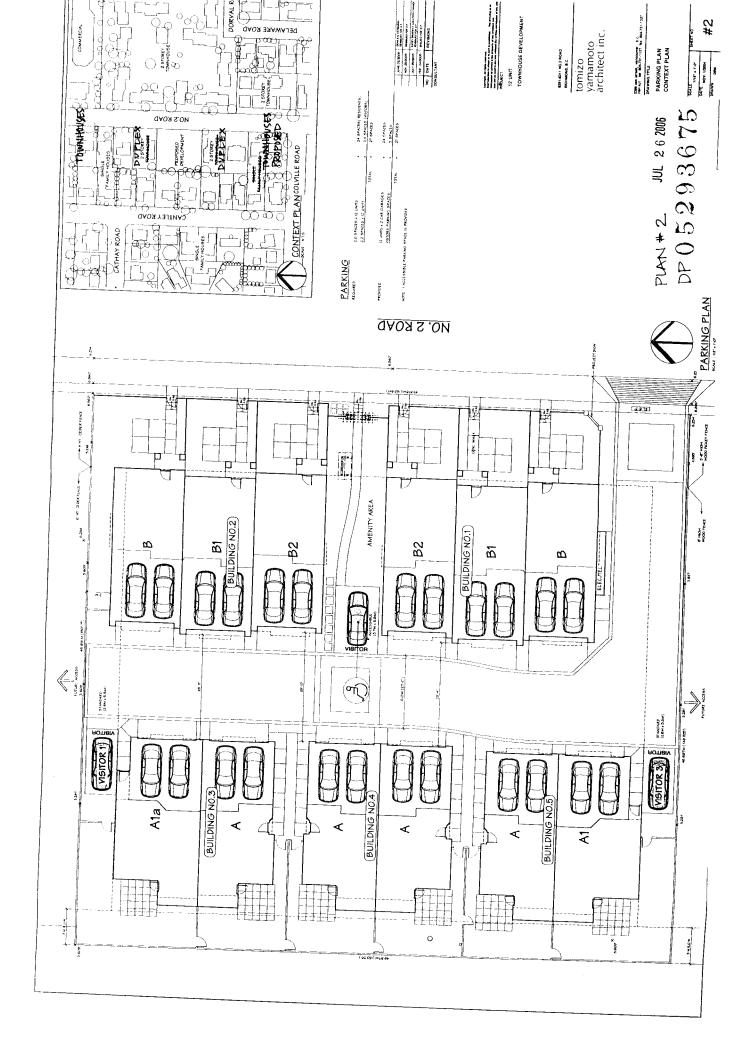
- 1. This Development Permit is issued subject to compliance with all of the Bylaws of the City applicable thereto, except as specifically varied or supplemented by this Permit.
- 2. This Development Permit applies to and only to those lands shown cross-hatched on the attached Schedule "A" and any and all buildings, structures and other development thereon.
- 3. The "Richmond Zoning and Development Bylaw No. 5300" is hereby varied to:
 - a) Increase the permitted lot coverage from 40% to 42%.
 - b) Reduce the north side yard setback from 3 m to 2 m with a maximum 0.2 m room projection at the second floor.
 - c) Reduce the front yard setback from 6 m to 4.5 m for a mailbox structure with roof.
- 4. Subject to Section 692 of the Local Government Act, R.S.B.C.: buildings and structures; off-street parking and loading facilities; roads and parking areas; and landscaping and screening shall be constructed generally in accordance with Plans #1 to #5 attached hereto.
- 5. Sanitary sewers, water, drainage, highways, street lighting, underground wiring, and sidewalks, shall be provided as required.
- 6. As a condition of the issuance of this Permit, the City is holding the security in the amount of \$41,572. to ensure that development is carried out in accordance with the terms and conditions of this Permit. Should any interest be earned upon the security, it shall accrue to the Holder if the security is returned. The condition of the posting of the security is that should the Holder fail to carry out the development hereby authorized, according to the terms and conditions of this Permit within the time provided, the City may use the security to carry out the work by its servants, agents or contractors, and any surplus shall be paid over to the Holder. Should the Holder carry out the development permitted by this permit within the time set out herein, the security shall be returned to the Holder. The City may retain the security for up to one year after inspection of the completed landscaping in order to ensure that plant material has survived.
- 7. If the Holder does not commence the construction permitted by this Permit within 24 months of the date of this Permit, this Permit shall lapse and the security shall be returned in full.

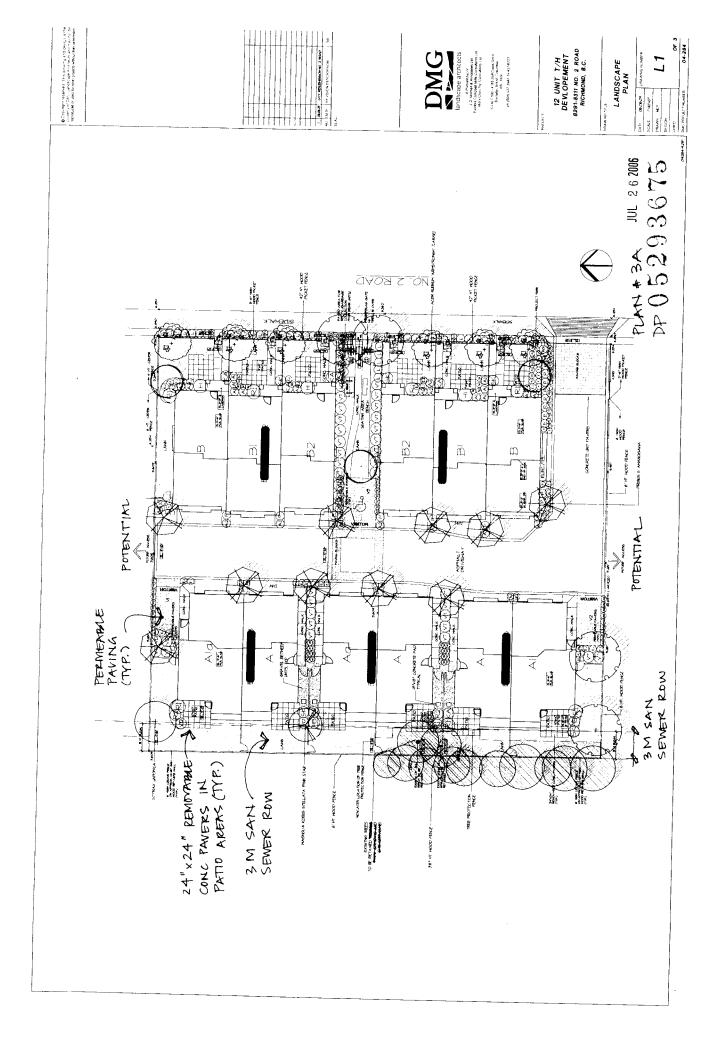
Development Permit

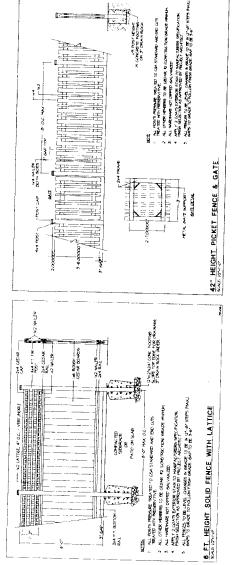
		No. DP 05-293
To the Holder:	359664 BC LT	ΓD.
Property Address:	8291 AND 831	11 NO. 2 ROAD
Address:	C/O TOM YAN 2386 OAK STI VANCOUVER	
8. The land described he conditions and provisi Permit which shall for	ons of this Permit a	oped generally in accordance with the terms and and any plans and specifications attached to this
This Permit is not a B	uilding Permit.	
AUTHORIZING RESOLDAY OF ,	UTION NO.	ISSUED BY THE COUNCIL THE
DELIVERED THIS	DAY OF	,
MAYOR		











1-5-1

Dispungin reserved. Pais dispung any repugnic me problems and may include repetits without her permassion.



Surv. C100 - 4183 Still Creek Diseas Burnating British Colembia VMC 4028 pric604; 437-3842, n. 437-4727

I GLOTICO PLANT LIST - TREE SCHOOL
NO DATE REVISION DESCRIPTION
SEAL

PLANTED BIZE / REMARKE 254 AT 848 UPQANT FORM SCH CAL 24 STR 849 PLANT SCHEDULE

THE ANT SCHEDULE

THE SCHEDULE SCH CAL, LOP STR BUR KOH CAL, LOM STR, BUB BOH CAL, 20M STR, BUB SCH CAL, 13M STR, BUB ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE MURSERY. PROVIDE CERTIFICATION UPON REQUEST.

12 UNIT T/H DEVLOPEMENT 8291-8311 NO. 2 ROAD RICHMOND, B.C.

OF 3

COCOLOR INCAMENTAL MILITER H

LANDSCAPE DETAILS

12

L WIN I			
	BOLANICAL NAME	COMMON NAME	PLANTED SIZE / REMARKS
n o n	ACER PALMATUM BLOODGOOD! ACER RUBRUM "ARMSTRONGII" (LARGE) EX "TDEE	JAPANEGE MAPLE COLUMNAR RED MAPLE	25M HT; B4B; UFRIGHT FORM ISCM CA : 2M STD: R4R
0 - 0 4 -	DA, INCL. MAGNOLIA KOBUS STELLATA PINK STAR' PRUNUS SERRULATA "AMANOGAVA" PRUNUS SERRULATA PINK PERFECTION' STYRAX JAPONICA	PINK STAR MAGNOLIA AMANOGAWA CHERRY PINK PERFECTION FLOWERING CHERRY LAPANESE SNOWBELL	5CM CAL., I CM 5TD, B4B 6CM CAL, I OM 5TD, B4B 15CM CAL, 2 OM 5TD, B4B 5CM CAL, 15M 5TD: B4B 5CM CAL., 15M 5TD: B4B
(3) (4) (5) (6) (7) (7) (8) (7) (8) (7) (8) (8) (8) (8) (8) (8) (8) (8) (8) (8	AZALEA JAPONICA BLUE DANUEE' AZALE AZALEA JAPONICA HARDIZER'S BEAUTY' AZALE HBISGUS STRIACUS HTDRANGEA SERRATA BLUEBIRD' ROSE HTDRANGEA SERRATA BLUEBIRD' BLUEB KALMA LATIFOLIA LIGUSTRUM JAPONICUM TEXANUM ELGUSTRUM JAPONICUM TEXANUM PRINUS LUSITANICA RHODODENDRON DAMARKS TELLOM' RHODO ROSA NOARE' RODODENDRON PURPLE SPLENDOR' RHODO ROSA NOARE' CARPE SKIMMA JAPONICA (108 MALE) THUJA OCCIDENTALIS SMARAGD' CARPE SKIMMA JAPONICA (108 MALE) THUJA OCCIDENTALIS SMARAGD' DAVIDI VIBURNUM DAVIDII VIBURNUM DAVIDII VIBURNUM TINUS DAVARF' SPRING	AZALEA, BLUISH-VIOLET AZALEA, LIGHT PINK AZALEA, RED-VIOLET ROSE OF SHARON BLUEBIRD MYDRANGRA MOUNTAIN LAUREL, COLOUR VAR. GLOBE PRIVET (CONTAINER STD) PORTUGESE LARKEL RHODODENDRON, YELLOW RHODODENDRON, YELLOW RHODODENDRON, DARK PURPLE, L. MAY CARRET ROSE, RED JAPANESE SKIMMIA EMERALD GREEN CEDAR DAVID'S VIBURNIM SPRING BOUGUET	#2 POT; 25CM #1 POT; 25CM #2 POT; 25CM #3 POT; 40CM #3 POT; 40CM #3 POT; 50CM #3 POT; 50CM #3 POT; 50CM #3 POT; 50CM #3 POT; 50CM #3 POT; 30CM #3 POT; 30CM #3 POT; 50CM #3 POT; 50CM #3 POT; 50CM
(E) (E) 74 E	ERICA CARNEA RUBY GLOW' ERICA CARNEA MYELLII' BUONYMS JAPONICA EMERALD GAIETY'	HEATH, DARK RUBY RED HEATH, BRONZY RED FOLIAGE EUONYMUS, SILVER VARIEGATED	#I POT #: POT #2 POT-400M

CATA STANDARDS. BOTH PLANT SIZE AND CONTAINER SIZE ARE THE MINNAM ACCEPTABLE SIZES. * REFER TO STECHICATION. CONTAINER SIZES SPECIFIED AS PER MEASUREMENTS AND OTHER PLANT SIZE AND CONTAINER SIZE ARE THE MINNAM ACCEPTABLE SIZES. * REFER TO STECHICATIONS FOR DEFINED CONTAINER MEASUREMENTS AND OTHER PLANT MATERIAL REQUIREMENTS. * SEARCH AND REVIEW WARE PLANT MATERIAL AVAILABLE FOR OPTIONAL REVIEW BY APPROVAL FROM THE LANDSCAPE ARCHITECT AT SOURCE OF SUPPLY. AREA OF SEARCH TO INCLUDE LOWER MAINLAND AND FRASEN VALILEY. * SUBSTITUTIONS, OBTAIN WRITTEN REJECTED. ALLOW A MINIMUM OF FIVE DAYS PRIOR TO DELIVERY FOR REGILEST TO SUBSTITUTIONS MILL BE STANDARD. * DEFINITION OF CONDITIONS OF AVAILABILITY.

ALL PLANT MATERIAL MUST BE PROVIDED FROM CERTIFIED DISEASE FREE NURSERY. PROVIDE CERTIFICATION UPON REQUEST.

