



**City of Richmond**  
Planning and Development Department

**Report to  
Development Permit Panel**

**To:** Development Permit Panel

**Date:** October 31, 2006

**From:** Jean Lamontagne  
Director of Development

**File:** DP 06-345111

**Re:** **Application by S-8117 Holdings Ltd. for a Development Permit at  
10171 No. 1 Road**

**Staff Recommendation**

That a Development Permit be issued which would:

1. Permit the construction of eleven (11) townhouses at 10171 No. 1 Road on a site zoned "Townhouse District (R2 - 0.6)"; and
2. Vary the provisions of the Zoning and Development Bylaw No. 5300 to increase the maximum permitted lot coverage from 40% to 41%.



Jean Lamontagne  
*Director of Development*

SB:blg  
Att.

## Staff Report

### Origin

S-8117 Holdings Ltd. has applied to the City of Richmond for permission to develop eleven (11) townhouses at 10171 No. 1 Road with access from the lane. The site currently contains an older single-family residence.

The site is being rezoned from “Single-Family Housing District, Subdivision Area E (R1/E)” to “Townhouse District (R2 – 0.6)” for this project under Bylaw No. 8086 and associated Official Community Plan (OCP) amendment Bylaw No. 8111 (Rezoning Application RZ 06- 329965).

As approved by Council at the Public Hearing, the flood indemnity covenant requirement was removed from the rezoning conditions and is an agreed condition of the Development Permit.

### Development Information

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

### Background

The subject Steveston Area site is located on No. 1 Road between Steveston Highway and Williams Road. Development surrounding the subject site is as follows:

- 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)” (minimum 18 m width);
- To the north, are existing single-family residences, zoned “Single-Family Housing District, Subdivision Area B (R1/B)” (minimum 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)” (minimum 18 m width) and a newer townhouse development (RZ 02-221885 and 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 m<sup>2</sup>/unit for universal housing units.

### Rezoning and Public Hearing Results

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

- 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 (see **Reference Plan A** and **Zoning Compliance/Variations** section below); and
- Design development to the overall landscaping plan including the programming and detailing of the outdoor amenity space – ***completed landscape plan included in development proposal (Plans #2a to #2c)***.

The Public Hearing for the rezoning of this site was held on October 16, 2006. At the Public Hearing, an online submission was received in error. The submission was intended to be made regarding the report on the legalization of secondary suites in single-family homes and expressed concern about the need for affordable housing and the negative impact of multiple suites in a single home. Although not intended as a concern relating to the proposed small-scale development, the developer has made a \$9,650 contribution to the City's affordable housing fund as part of the rezoning application.

### 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 - 0.6)" except for the zoning variances noted below.

### Zoning Compliance/Variations (staff comments in **bold**)

The applicant requests to vary the provisions of the Zoning and Development Bylaw No. 5300 to increase the maximum permitted lot coverage from 40% to 41%.

*(Staff supports the proposed variance as it is a direct result of incorporating larger front porches fronting onto No. 1 Road as requested by the Advisory Design Panel and supported by staff. The pedestrian-oriented porches animate the streetscape. The variance was noted during the rezoning process and no concerns were raised at the Public Hearing).*

### Advisory Design Panel Comments

The Advisory Design Panel was generally supportive of the proposal. The Panel sought improvements to the architectural character, way finding, paving treatment and amenity space design. A copy of the relevant excerpt from the Advisory Design Panel Minutes from June 21, 2006 is attached for reference (**Attachment 2**). In response, the design was revised and improved by the applicant.

### Analysis

#### *Conditions of Adjacency*

- The form and massing of the development generally complies with Official Community Plan (OCP) guidelines. Buildings are 2 ½-storey at the north and south edges along No. 1 Road with the roof forms stepping down towards the neighbours and two-storey along the lane;
- The units fronting onto No. 1 Road present a front yard interface with a walkway, low open picket fence and arbour gate opening onto No. 1 Road;
- The proposed height, siting and orientation of the buildings respect the massing of the existing adjacent single-family home and townhouse development. Outdoor amenity, retained mature windrow and townhouse unit back yard conditions are presented at the interface to the existing single-family home lots to the north and across the lane to the west with varying setbacks;
- The applicant has addressed privacy for the adjacent single-family home to the north and west through: providing varying setbacks of 5.2 m to the north and 9 m (3 m + 6 m lane) to

the west, the planting of trees, the provision of 1.8 m height solid wood privacy fencing and the retention of a significant mature windrow along the north property line; and

- The applicant is proposing to raise the front yards of the low site to meet the elevation of the City boulevard and sidewalk with approximately 1 m high retaining walls provided between the buildings. The existing elevation will be maintained in the outdoor amenity area and north side yard for the viable retention of the mature windrow and around the retained frontage trees. An access ramp will be provided from the sidewalk down into the site along the side of the northeast unit.

### ***Urban Design and Site Planning***

- The applicant has demonstrated a sensitive transition to the adjacent single-family homes to the north and west;
- The No. 1 Road streetscape is animated with pedestrian-oriented front entries and a communal pedestrian entry to the development (**Reference Plan A**);
- Children's play opportunities on-site include private yards and a central outdoor amenity area. Unfortunately, the outdoor amenity area does not include children's play equipment. Although the outdoor amenity area size (144 m<sup>2</sup>) exceeds the minimum requirement (66 m<sup>2</sup>), it has been designed for the retention of a significant windrow and is too narrow to accommodate the required safety clearances for children's play equipment. The design incorporates a communal pedestrian entry to the development on No. 1 Road, pedestrian path to the central drive aisle, under-storey planting and benches;
- Vehicle access is provided from the existing rear lane with loading onsite in the drive aisle. The lane will be upgraded from this site north to Williams Road through a Servicing Agreement as a part of the rezoning process;
- With the provision of a two (2) car garage in each townhouse unit, resident parking meets the Bylaw requirement. The provision of visitor parking meets the Bylaw requirement with two (2) spaces provided, including one (1) accessible parking space;
- Headlight glare into adjacent single-family lot is mitigated by the retained windrow and 1.8 m height privacy fencing;
- The site has been designed to accommodate fire-fighting requirements. A paved area has been provided adjacent to the lane driveway for garbage and recycling blue box collection. Individual garbage cans and recycling blue boxes will be stored in individual units and placed in the collection area each week on collection day;
- Universal accessibility measures have been incorporated into this development. Blocking inside of the walls will be provided in all washrooms in all units to facilitate future potential installation of grab bars/handrails; and
- An accessible unit has not been provided in this 11-unit development. An alternate floor plan demonstrating conversion potential to accommodate a person in a wheelchair is provided for the two (2) detached units with the installation of a chair lift (**Reference Plan B**).

### ***Architectural Form and Character***

- The building forms are articulated; with a combination of hip and gable pitched roofs, projecting bays and dormers and a mix of building materials;

- The proposed building materials (Horizontal vinyl siding, Hardi-plank siding, cedar shingles, wood trim, cultured stone, metal garage doors with transom windows and textured laminate asphalt shingle roofing) are generally consistent with the Official Community Plan (OCP) Guidelines. Hardi-plank horizontal siding is proposed fronting onto No. 1 Road and cedar shingles in all gable ends throughout the project (except those between buildings);
- Visual interest and variety has been incorporated with three (3) different building types;
- The impact of blank garage doors has been mitigated with transom windows, overhanging balconies, skirt roofs, decorative brackets, planting islands and pedestrian entries; and
- A small development sign will be integrated into the landscaping at the communal pedestrian entry at the outdoor amenity area.

### ***Landscape Design and Open Space Design***

- The tree retention and replacement strategy was presented to the public and Council in the staff report on the rezoning. No concerns were expressed. The developer is proposing to retain 51 existing trees and remove 18 bylaw size trees. 22 of the retained trees are bylaw size and 43 are located in a mature mixed-species windrow along the north property line. To this end, a registered arborist has been retained and protective tree fencing installed to his satisfaction (**Attachment 3**);
- The landscape design includes 23 new trees, shrubs, ground cover and lawn planting. The mailbox stand is centrally located off the lane, adjacent to the accessible parking space and concrete pad for garbage and recycling collection. An outdoor amenity space has been provided at the retained significant windrow along the north property line with under-storey planting, pedestrian connection to No. 1 Road and seating;
- Fencing will include low and open wood picket fencing along No. 1 Road, and 1.8 m height solid wood privacy fencing along the north, west and south property lines (reduced to maximum 1.2 m height in the front yard setback);
- Existing frontage includes a sidewalk behind curb. Streetscape trees will be provided in the front yard setback;
- Paving treatment includes a variety of materials to mitigate the length of the drive aisle and to differentiate between pedestrian entries and vehicle areas. Concrete pavers and permeable pavers with patterning and colour have been incorporated throughout the site, significantly improving the permeability of this development; and
- Payment of cash-in-lieu of indoor amenity space was secured through the rezoning in the amount of \$11,000 in compliance with the Official Community Plan (OCP).

### ***Affordable Housing***

- No affordable housing units are proposed in this proposed small 11-unit development. A voluntary contribution towards the City's affordable housing fund was secured through the rezoning in the amount of \$0.60 per square foot of maximum floor area ratio (e.g. \$9,650).

### ***Crime Prevention Through Environmental Design***

- Site lighting will be provided for the central drive aisle and should not impact the neighbouring single-family lots;
- Natural surveillance opportunities are provided for the linear outdoor amenity space, mailboxes, and visitor parking spaces;

- Natural surveillance opportunities are provided for most of the front entries which face the drive aisle or No. 1 Road. Surveillance of the isolated northwest unit front entry, which is recessed from the drive aisle, has been improved with site lighting, 5.2 m side yard setback, open landscape design and location next to the outdoor amenity space pedestrian path; and
- Space differentiation has been established between public and semi public outdoor spaces with landscape buffers.

### ***Servicing and Utilities***

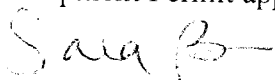
- As noted in the staff report on the rezoning, the developer has submitted storm and sanitary sewer capacity analyses as requested by the City's Engineering Department. There are no identified sanitary sewer upgrades required to facilitate the proposed development.

### ***Flood Indemnity Covenant***

- As approved by Council at the Public Hearing, the registration requirement was removed from the rezoning conditions and is an agreed condition of the Development Permit.

### **Conclusions**

The applicant has provided a development proposal that provides new multi-family housing choices and significant tree retention in the Steveston area with a sensitive interface between existing townhouse development and adjacent single-family homes. 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. Staff recommend support of this Development Permit application.



Sara Badyal, M.Arch.

Planner I

(Local 4282)

SB:blg

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

- Registration of a flood indemnity covenant;
- Installation of protective tree fencing and periodic inspection during construction to the satisfaction of a registered arborist for the protection of onsite and neighbouring trees;
- Proof of a contract with a registered arborist (with a minimum of four (4) site visits through construction) to ensure proper protection of existing onsite and neighbouring trees; and
- Receipt of a Letter-of-Credit for landscaping in the amount of \$42,657.

Prior to future Building Permit issuance, the developer is required to complete the following requirements:

- Receipt of a construction parking and traffic management plan to the satisfaction of the Transportation Department (<http://www.richmond.ca/services/ttp/special.htm>); and
- Incorporation of accessibility measures for aging in place in Building Permit drawings for all units including lever handles for doors and faucets and blocking in all washroom walls to facilitate future potential installation of grab bars/handrails.

Attachment 1 Development Application Data Sheet  
Attachment 2 Advisory Design Panel Minutes  
Attachment 3 Arborist Report



# City of Richmond

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

## Development Application Data Sheet Development Applications Division

**DP 06-345111**

**Attachment 1**

Address: 10171 No. 1 Road

Applicant: S-8117 Holdings Ltd.

Owner: S-8117 Holdings Ltd.

Planning Area(s): 2.4 Steveston Area

Floor Area Gross: 1,981.5 m<sup>2</sup>

Floor Area Net: 1,493.3 m<sup>2</sup>

	Existing	Proposed
Site Area:	2,491 m <sup>2</sup>	No change
Land Uses:	Single-Family Residential	Multi-Family Residential
OCP Designation:	Neighbourhood Residential	No change
Zoning:	Formerly R1/E	R2 - 0.6
Number of Units:	1	11

	Bylaw Requirement	Proposed	Variance
Floor Area Ratio:	Max. 0.6	0.6	None permitted
Lot Coverage:	Max. 40%	41%	1% Increase
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
Lot Size:	Min. 30 m width Min. 35 m depth	57.1 m width 43.6 m depth	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 <sup>2</sup>	Cash-in-lieu	None
Amenity Space – Outdoor:	Min. 66 m <sup>2</sup>	144 m <sup>2</sup>	None

Excerpt from the Minutes from  
The Design Panel Meeting

Wednesday, June 21, 2006 – 4:00 p.m.

Rm. M.1.003

Richmond City Hall

The design response from the applicant has been included immediately following the specific Design Panel comments and is identified in '*bold italics*'.

2. 11 Townhouses  
Ken Chow, Interface Architecture Inc.  
10171 No. 1 Road

The comments of the Panel were as follows:

- more generous porch entries on the No. 1 Road side units would be a more historically accurate approach;
- there could be an opportunity in the single units to place a little window in the stairwells, giving the entry a little more character and helping articulate the front edges;
- if the hazelnut tree could be relocated to the amenity area it could help define that area;
- the applicant's plan is fairly straightforward;
- pulling the sidewalk off the curb could create a boulevard to separate traffic from pedestrians, and the magnolias planned for the site could then be repeated on the boulevard – ***Sidewalk relocation is not sought by staff as this development is mid block and there is unfortunately little opportunity for further redevelopment in the block.***
- it is admirable that the applicant is proposing permeable paving;
- signage or a gateway feature would assist in moving people from the street to the back units;
- explore creation of more of a streetscape along the lane, instead of a 6' fence;
- the 2 end units, or "bookends", exhibit a quirkiness and their asymmetry is delightful; consider ways in which to inject that quirkiness into the middle units and this would help to tie the project together;
- the bay windows could be bigger;
- the garage doors could be articulated somehow, perhaps with glazing;
- concern was expressed regarding how cultured stone and vinyl siding will work;
- look further at the materiality of the project, especially being aware of the monochromatic palette of the area;
- vinyl siding is cheap and is maintenance-free but it is a poor choice;
- asphalt shingles should be reconsidered;
- owners' front doors facing the vehicle court, are beige and unattractive;
- the landscape plan is thin and appears incomplete;
- the corners of the units at the back should be softened somehow;
- the step landing in front of the doors may be a safety hazard. extending the landing out with perhaps a secondary stair may address the safety hazard;
- concern that the amenity area is accessible only through the garage doors;
- the design is very one-sided and it seems that design time has not equally been allocated between the units that front No. 1 Road which are well developed, and the back units located on the west side of the site;
- the central core, the vehicle court, needs a lot of development;
- the ADP panel has, in the past, supported the idea of porches projecting onto lawns;



- it is a good idea to take half the trees out on the north side;
- there will be sufficient screening for privacy reasons (along the north edge of the site) because the trees and hedges that are left will grow in and become substantial.

In summarizing the Panels' comments, Chair Westermarck recommended the following:

- make porches more generous, perhaps large enough to provide for a seating area – ***Incorporated;***
- two steps up to the front door, instead of the proposed one step, provides an opportunity to reduce the apparent height of the building at the front – ***Incorporated;***
- a window on the stairway, at the front, could be considered – ***Incorporated;***
- consider replanting the hazelnut tree to the amenity area, and not the southeast corner of the site– ***Unfortunately removal is proposed as recommended by the registered arborist as the mature contorted Hazel tree is located in a building envelope and would be disfigured by and would not likely survive relocation;***
- on the north path, signage or a gateway could be added – ***Incorporated;***
- permeable pavers at the unit patios – ***Concrete pavers proposed. The developer is concerned that the wider gaps in permeable paving would interfere with patio furniture;***
- consider exploring an entry from the lane to the units – ***Considered. Pedestrian friendly open public interface with lane designed at driveway;***
- integrate the signage, the mailboxes and the recycling centre and show details on the plans – ***Pedestrian entry feature with signage detail provided;***
- explore adding quirkiness to the centre in order to connect the “bookend” units – ***Windows were matched across No. 1 Road elevations to tie designs of both building types together;***
- consider softening the corner of the “bookend” units at the rear on the lane side – ***softened with hip roofs over garages and second floor and incorporation of knee brace details;***
- design development to the rear of the units to reflect the design of the front of the units – ***design of drive aisle elevations improved;***
- add articulation to the garage doors to avoid sameness and plainness – ***Elevations improved with addition of pedestrian doors and transom windows incorporated;***
- reconsider cultured stone and asphalt shingles – ***Materials remain the same. The asphalt shingles are textured and charcoal in appearance; laminated with tri-coloured surface grains;***
- use higher quality materials other than vinyl siding – ***Hardi-plank incorporated along No. 1 Road frontage, cedar shingle and board and batten incorporated in gable ends;***
- additional detail to the landscape plan is required – ***Incorporated;***
- ensure adequate screening of visitor parking – ***Visitor parking screened from No. 1 Road with retaining wall, trees and bushes;***
- increase accessibility to amenity area – ***Incorporated.***

**It was moved and seconded:**

**That the forthcoming DP application associated with RZ 06 – 329965, 11 Townhouses at 10171 No. 1 Road, proceed to the Development Permit Panel with the support of the Advisory Design Panel conditional to the proposed design remaining fundamentally as presented, and to ADP comments being addressed and resolved to the satisfaction of staff.**

**CARRIED**



### MEMORANDUM:

April 19, 2006 rev Oct 31 2006

File: 06124

Attn.: **Jerry Ralla**

**Greypointe Development**

12900 Mitchell Road

Richmond, BC V6V 1M8

cc: Fred Liu – Landscape Architect  
Sara Badyal – City of Richmond  
Ken Chow – Interface Architecture

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 concept 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 review has been undertaken on October 2006 to address comments from the City. A revised **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 <sup>1</sup>	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

<sup>1</sup> 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.
<b>T17</b>	30	Contorted Hazel	Good	A stout form and healthy small tree.
<b>T18 to T22</b>	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.
<b>T29 to T31</b>	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.
<b>T32 to T35</b>	Multi	Hazel	Poor	These multiple stemmed trees are formed by weakly structured stump sprouts from decayed old coppice stumps.
<b>T36</b>	25	Lilac	Fair	A small tree in a cluster with adjacent trees
<b>T38</b>	15	Colorado spruce	Fair	A small tree in codominant structural class along with adjacent tree #T39
<b>T39</b>	10	Holly	Fair	A small tree in codominant structural class along with adjacent tree #T38
<b>T53</b>	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.
<b>T55</b>	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.
<b>T57</b>	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.
<b>T59</b>	35	Ash	Fair	The roots plate is asymmetric due to its proximity to the existing house.
<b>T94</b>	Multi	Hazel	Poor	Some decay noted in central leaders of this multiple stemmed tree.
<b>T95</b>	Multi	Hazel	Poor	Decay was observed in central leaders of this multiple stemmed tree.
<b>WINDROW</b>		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, T70, T71, T72, T73, T87, T88, T89, T90 AND T91.***
- ***Also retain the selected understory trees in the vicinity of the north windrow as noted on the plan. These include undersized tree #'s T41, T66, T67, T69, T74, T75, T76, T77, T78, T79, T80, T81, T82, T83, T84, T85 and T86.***
- ***Prune the north windrow trees to accommodate active land use beneath the trees as amenity space. This will include raising the crowns to an applicable height and cleaning the crowns of deadwood and weakly formed branches. The ground cover specification by the landscape architect should consist of soft surfaces and herbaceous or woody plants that are shade tolerant in this zone.***
- ***Prune the undersized retention trees located along the north property line to reduce overall size. This will consist of selective heading back on the south side of their crowns and reducing their height.***

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, T17, T36, T57 and T59.***
- ***Also remove undersized tree #'s T40, T44, T49, T60 and T68 to accommodate more active land use in the vicinity of the north windrow, and to mitigate conflicts with the proposed buildings and the tree protection fence installation.***

## **TREE REPLACEMENT**

The landscape architect is charged with all specifications for planting trees and other landscape components for this site. Please refer to the landscape plan by Fred Liu for a complete list of trees to be planted as it relates to compensation for trees to be removed.

## **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 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***

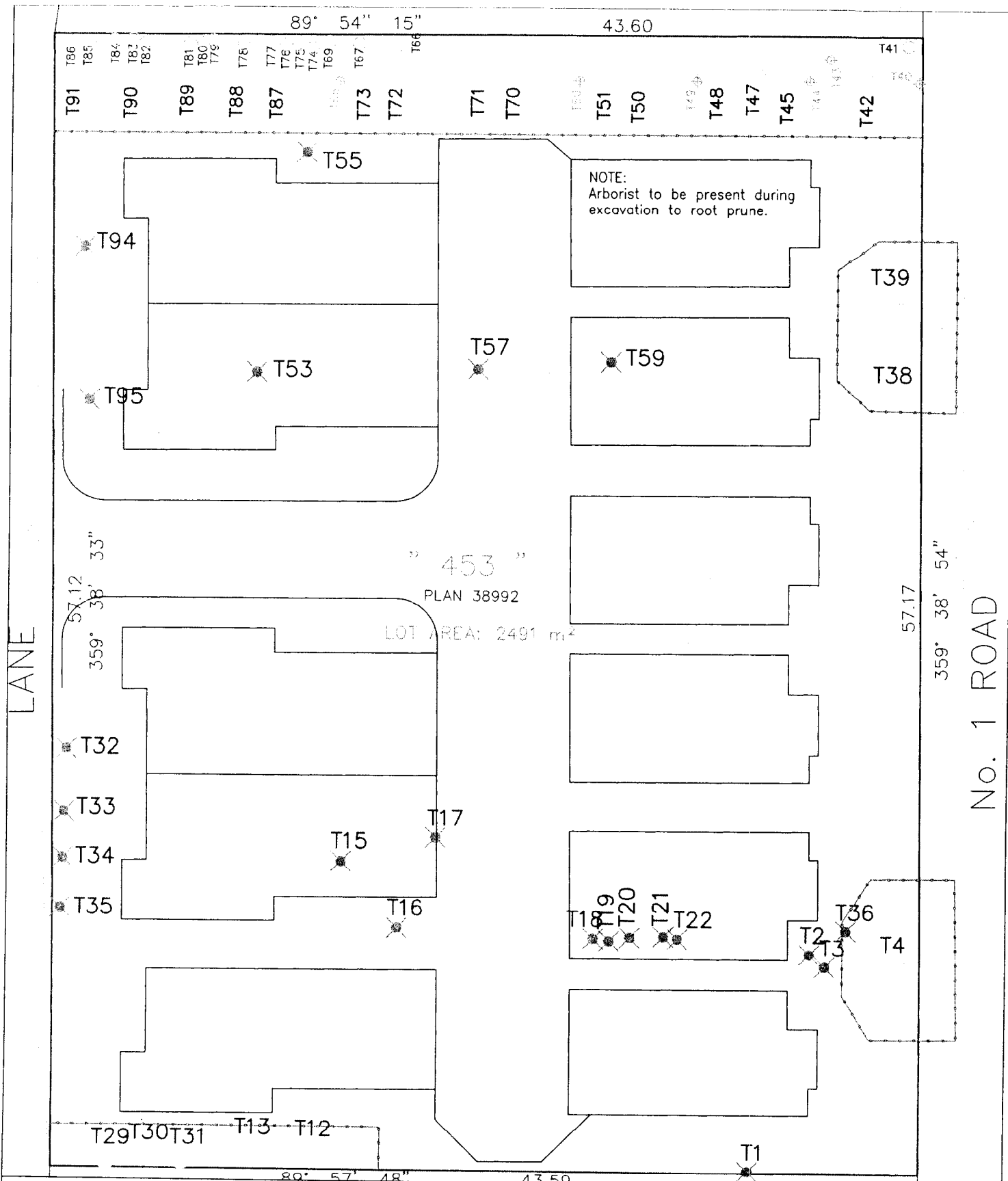
The retained trees can be pruned in order to meet site safety and landscape objectives, for example to clean deadwood from the crown and to increase lines of sight by crown raising (removing lower limbs). Other treatments such as remedial pruning may be required if branches are wounded or damaged. Trees 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***

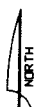
The retained trees may be prone to drought stress from changes to their growing environment. Along with other factors, impacts from root loss, lateral drainage from soil exposed to excavations, and partial clearing of a site causing increased evaporation from the soil may require intervention. In some 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 undersize tree or shrub to be RETAINED
- ✕ denotes tree to be REMOVED
- ✕ denotes undersize tree or shrub 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

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

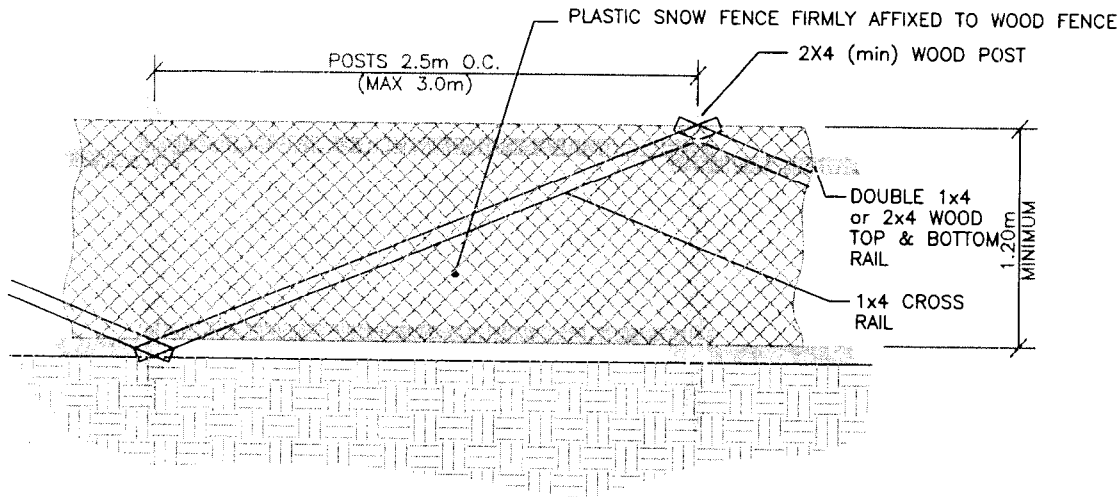
file 06124

OCT 31 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 rail (top and bottom) frame with 1.2 m snow fence and a cross brace 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.

*Professional Tree & Vegetation Consultants*

Suite 204 - 3740 Chatham Street  
Richmond BC Canada V7E 4L6  
ph 604 275 3484 fax 604 275 9554  
e-mail trees@arbortech.bc.ca



**City of Richmond**  
Planning and Development Department

**Development Permit**

**No. DP 06-345111**

To the Holder: S-8117 HOLDINGS LTD.  
Property Address: 10171 NO. 1 ROAD  
Address: C/O MR. ROD LYNDE  
LYNDE DESIGNS LTD.  
8171 CLAYSMITH ROAD  
RICHMOND, BC V7C 2K9

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 maximum permitted lot coverage from 40% to 41%.
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 \$42,657 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 06-345111

To the Holder: S-8117 HOLDINGS LTD.  
Property Address: 10171 NO. 1 ROAD  
Address: C/O MR. ROD LYNDE  
LYNDE DESIGNS LTD.  
8171 CLAYSMITH ROAD  
RICHMOND, BC V7C 2K9

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8. The land described herein shall be developed generally in accordance with the terms and conditions and provisions of this Permit and any plans and specifications attached to this Permit which shall form a part hereof.

This Permit is not a Building Permit.

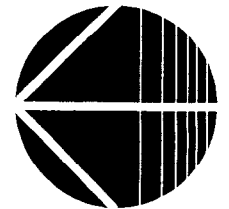
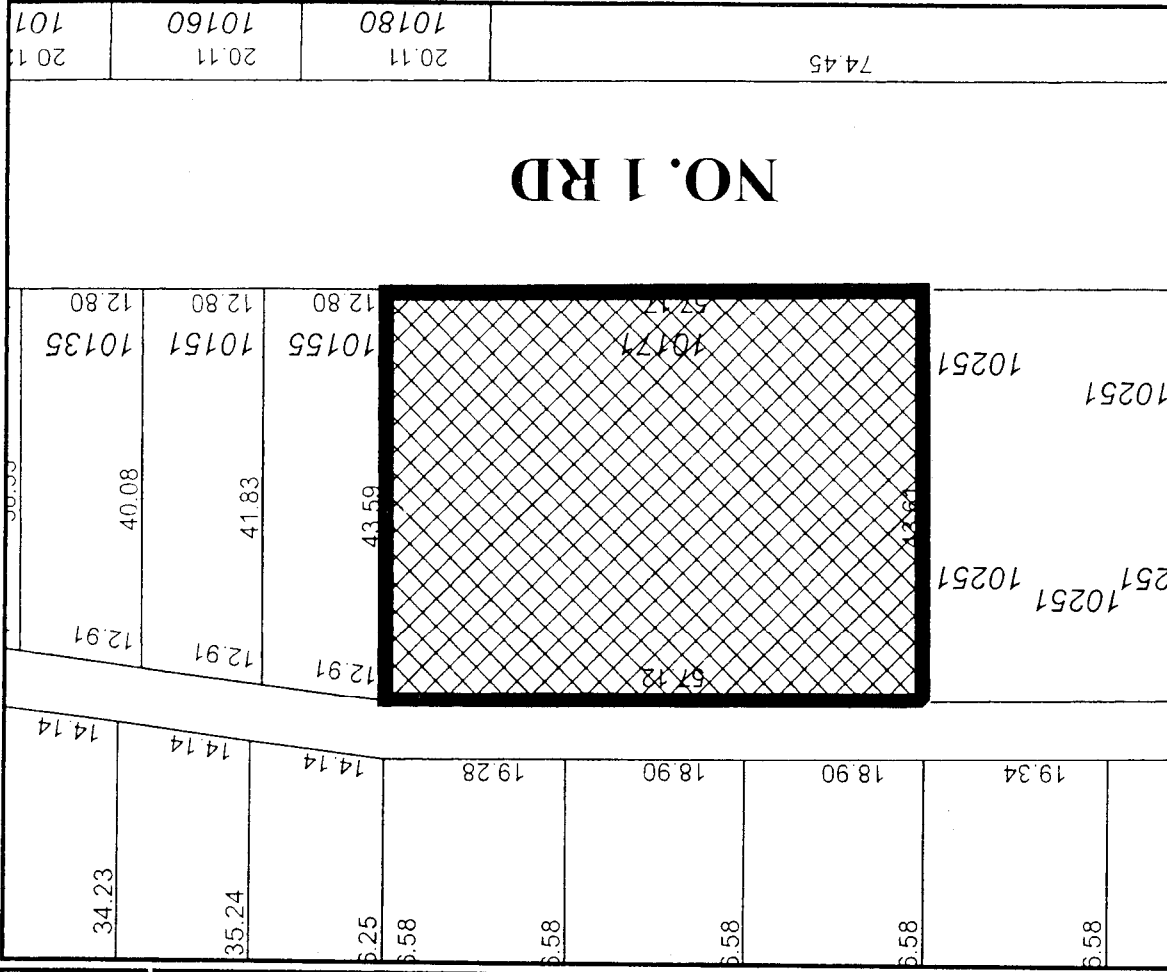
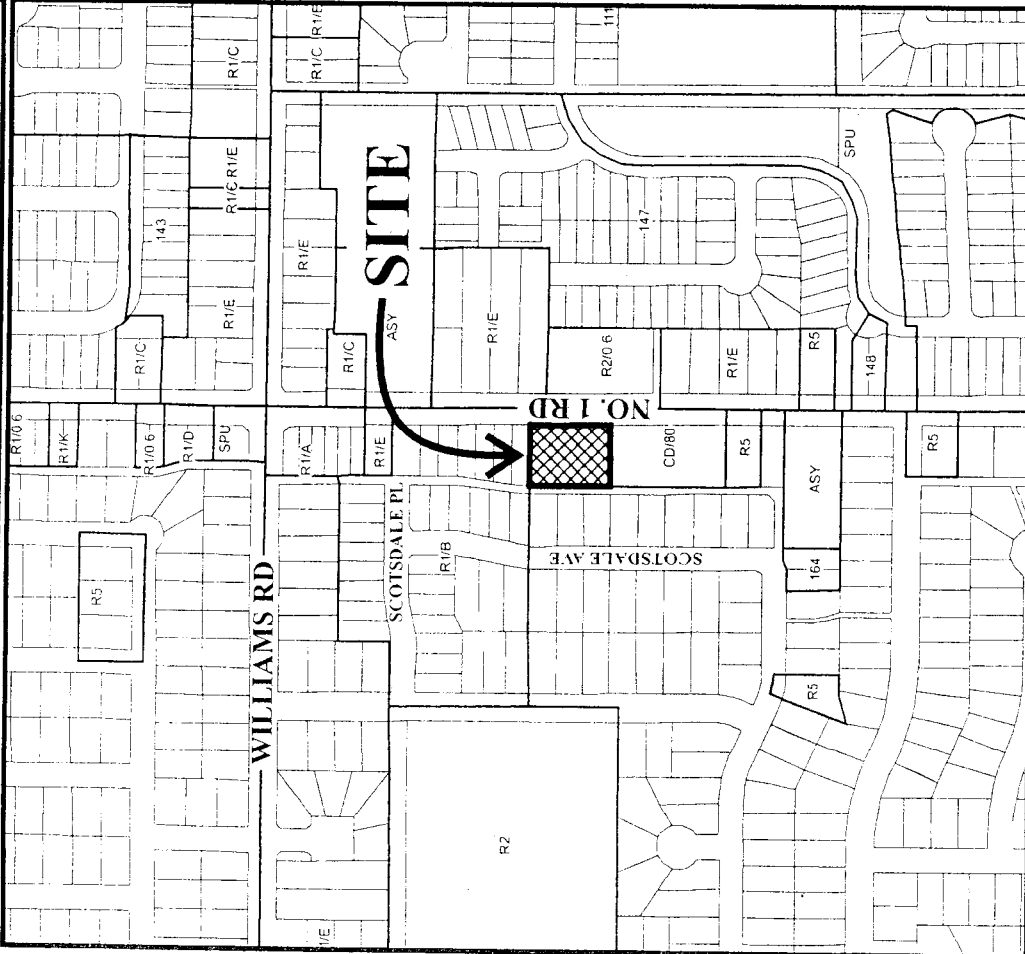
AUTHORIZING RESOLUTION NO. ISSUED BY THE COUNCIL THE  
DAY OF , .

DELIVERED THIS DAY OF , .

\_\_\_\_\_  
MAYOR



City of Richmond



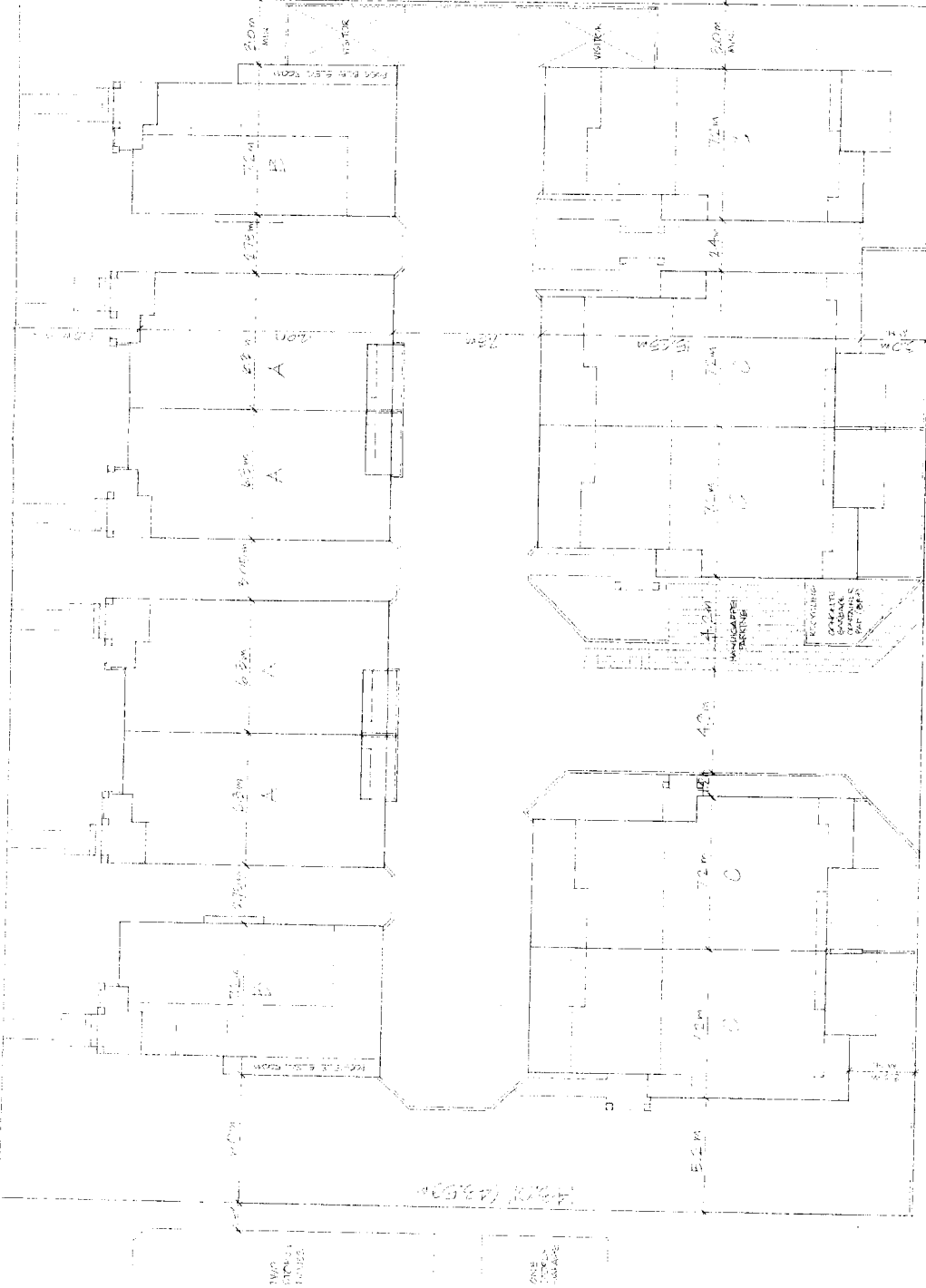
# DP 06-345111 SCHEDULE "A"

Original Date: 10/31/06

Revision Date:

Note: Dimensions are in METRES

Number One Road

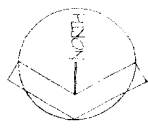


lane

LOT COVERAGE 41%  
BY VARIANCE

### ANALYSIS

Lot Area 26,822 sq. ft. (2,491.6 m<sup>2</sup>)  
Maximum Site Coverage 41% = 11,077 sq. ft. (1,026.7 m<sup>2</sup>)  
This Plan: Lot A = 1,023 sq. ft. X 1 = 1,023 sq. ft.  
Lot B = 1,023 sq. ft. X 2 = 2,046 sq. ft.  
Lot C = 1,023 sq. ft. X 2 = 2,046 sq. ft.  
Lot D = 1,023 sq. ft. X 1 = 1,023 sq. ft.  
Total 10,889 sq. ft. (1,011.6 m<sup>2</sup>)  
Maximum Floor Area (G.O.S.F.A.R.) = 16,093 sq. ft. (1,495.0 m<sup>2</sup>)  
This Plan: Lot A = 1,023 sq. ft. X 1 = 1,023 sq. ft.  
Lot B = 1,023 sq. ft. X 2 = 2,046 sq. ft.  
Lot C = 1,023 sq. ft. X 2 = 2,046 sq. ft.  
Lot D = 1,023 sq. ft. X 1 = 1,023 sq. ft.  
Total 16,074 sq. ft. (1,493.3 m<sup>2</sup>)  
Parking Required: 2 spaces per unit plus  
6.2 spaces X 11 units = 24.2 spaces  
Parking Provided: 2 enclosed spaces per unit plus  
2 visitor parking spaces  
2 enclosed spaces per unit plus  
25 visitor spaces  
No variances required for setbacks



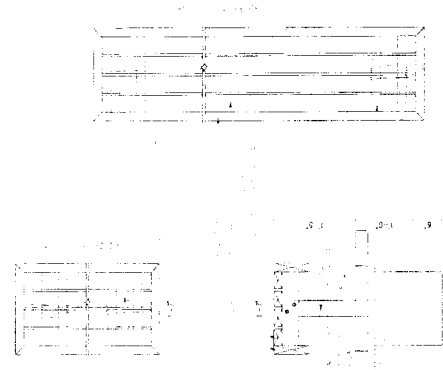
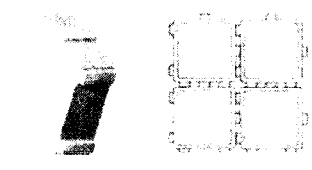
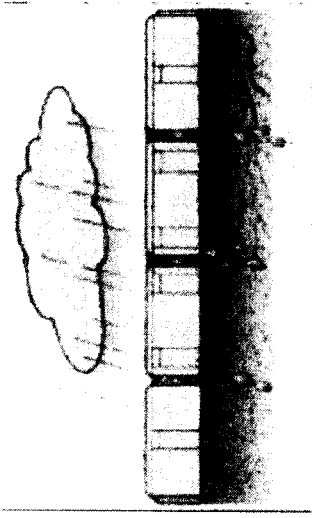
### SITE PLAN

SCALE 1/8" = 10'-0"

TOWN  
SHEET  
TOWN  
HOUSE

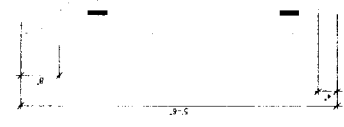
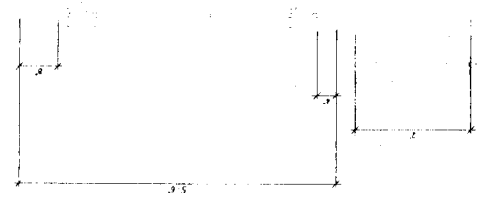
PLAN #1 NOV 29 2006  
DP 06345111

1

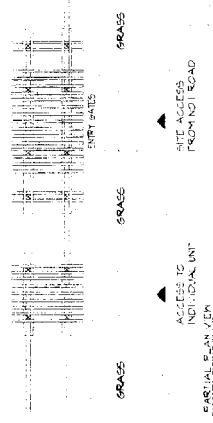


Rev	Date	Description
1	Dec 21, 2006	Initial design and drawing of building and site plan for the proposed building and site plan

Lynde Design Ltd.  
1111 University Ave., Suite 200, W. York, ON  
L4B 1A1 (416) 291-1445

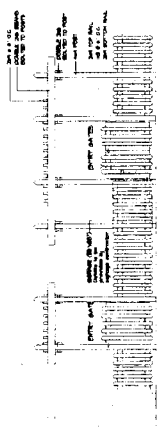


PLAN #2B  
NOV 29 2006  
DP06345111



NO ROAD

- 1. Building shall be built to meet the minimum requirements of the Building Code of Ontario.
- 2. Building shall be built to meet the minimum requirements of the Fire Code of Ontario.
- 3. Building shall be built to meet the minimum requirements of the Electrical Code of Ontario.
- 4. Building shall be built to meet the minimum requirements of the Plumbing Code of Ontario.

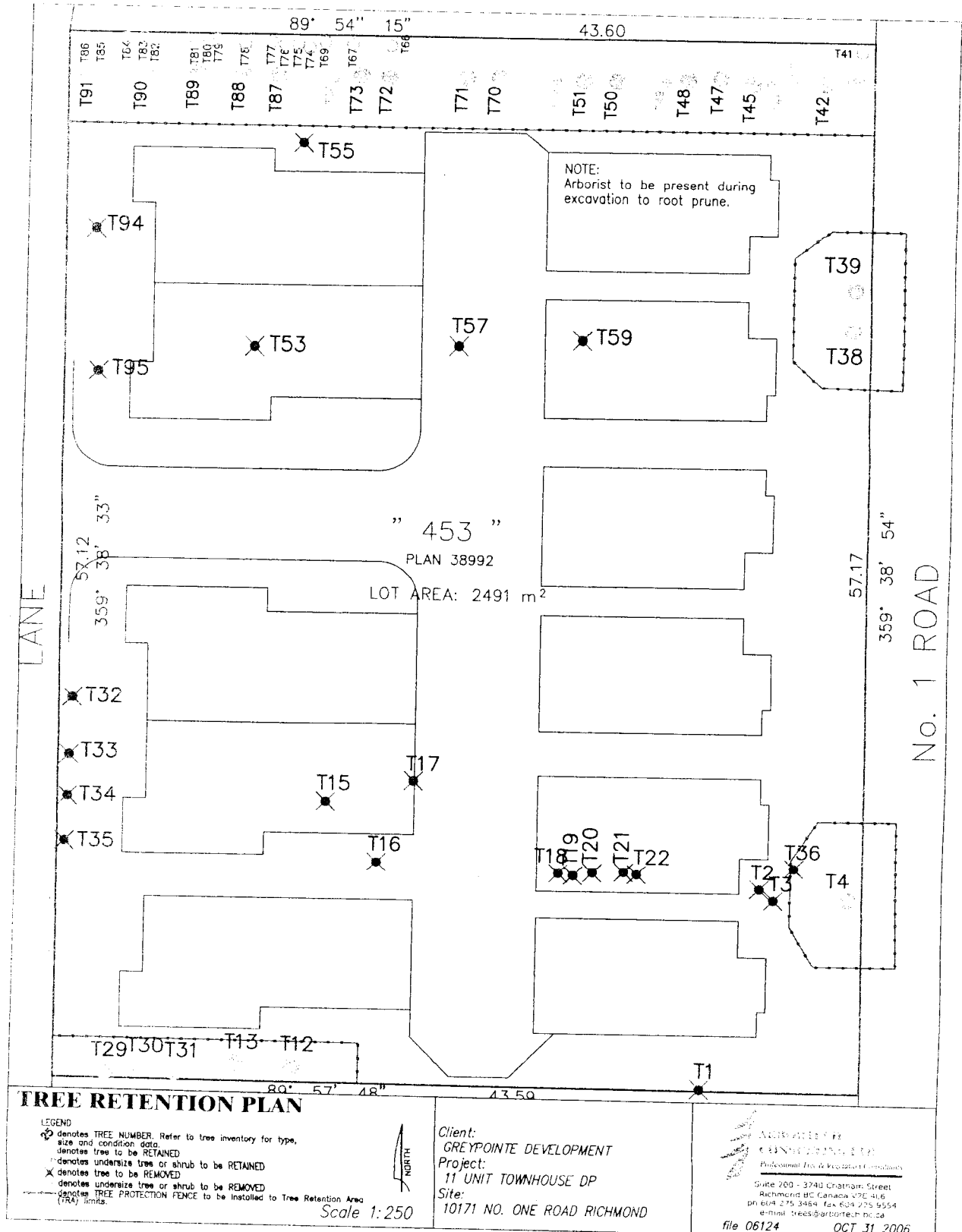


TITLE: SITE PLAN  
SCALE: 1/4" = 1'-0"



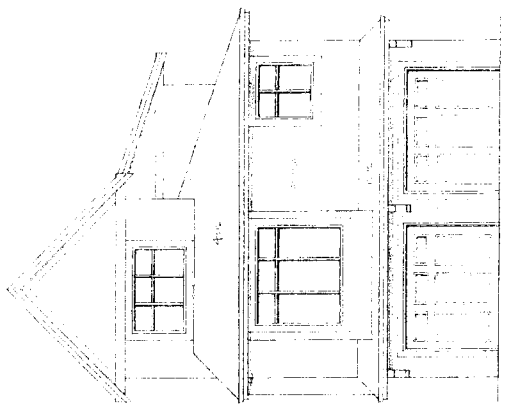
PLAN # 2C NOV 29 2006

DP 06345111

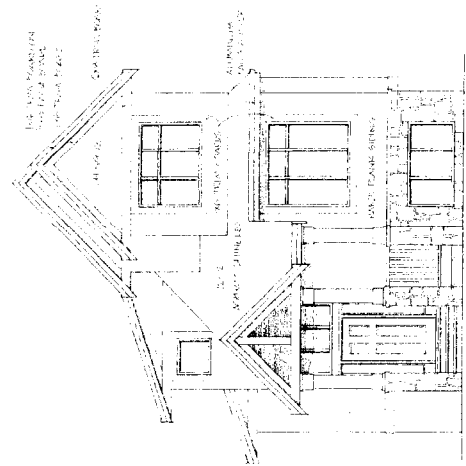




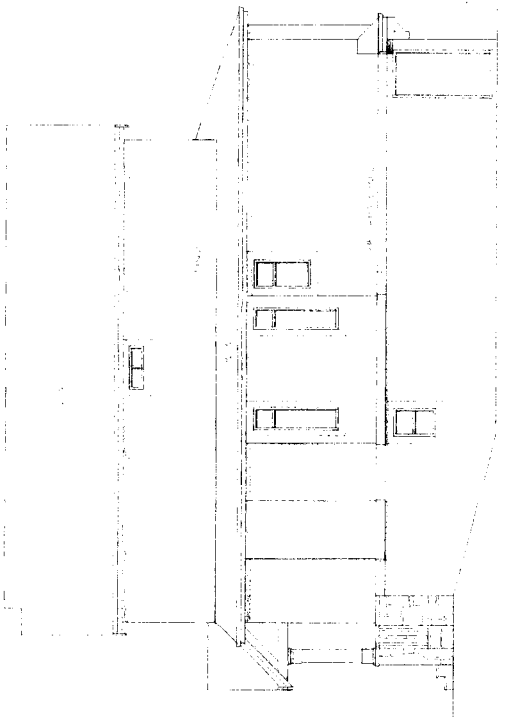




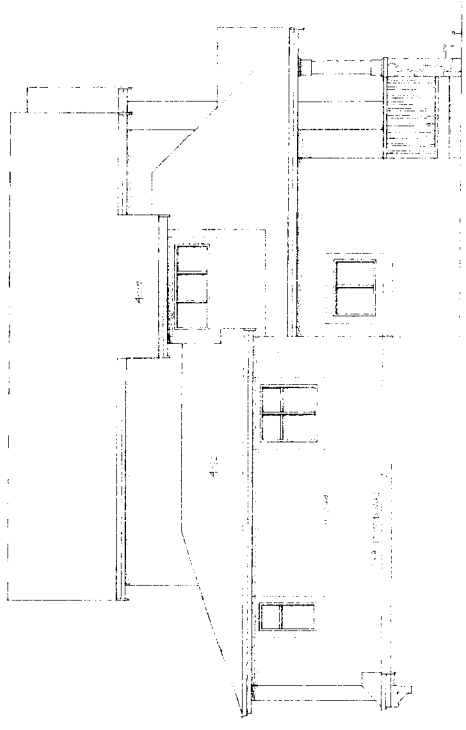
FRONT ELEVATION



REAR ELEVATION

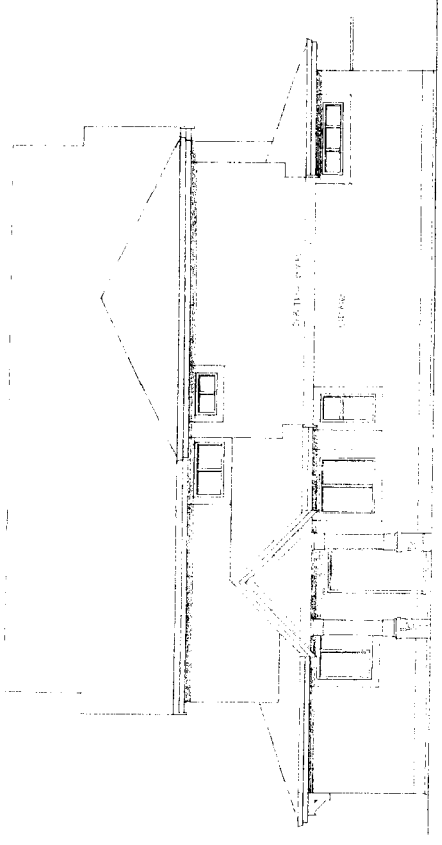


SIDE ELEVATION

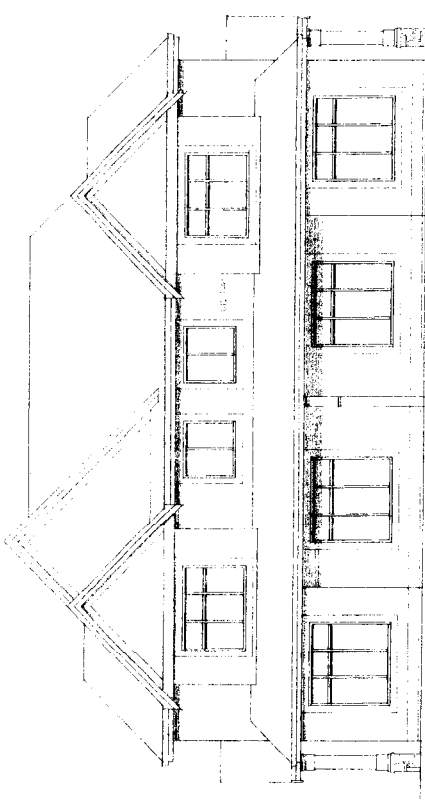


SIDE ELEVATION

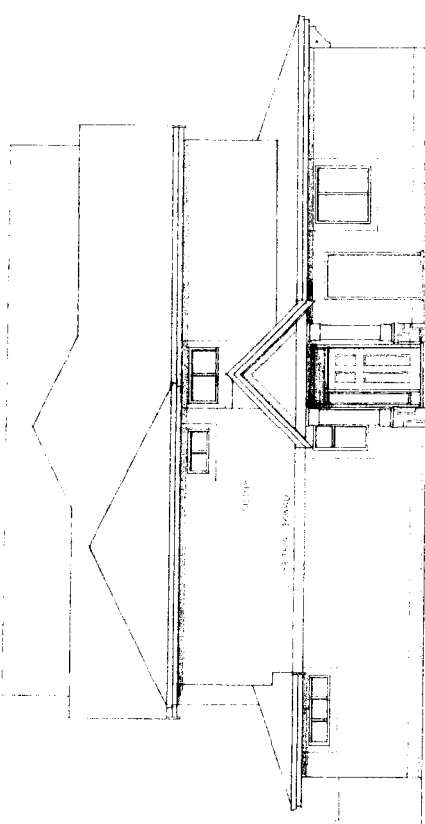
NOV 29 2006  
 PLAN #4  
 DP 06345111  
 UNIT B



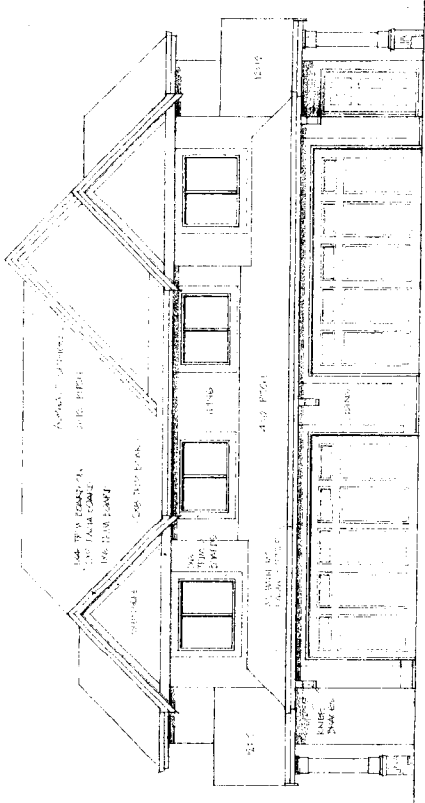
REAR ELEVATION



REAR ELEVATION

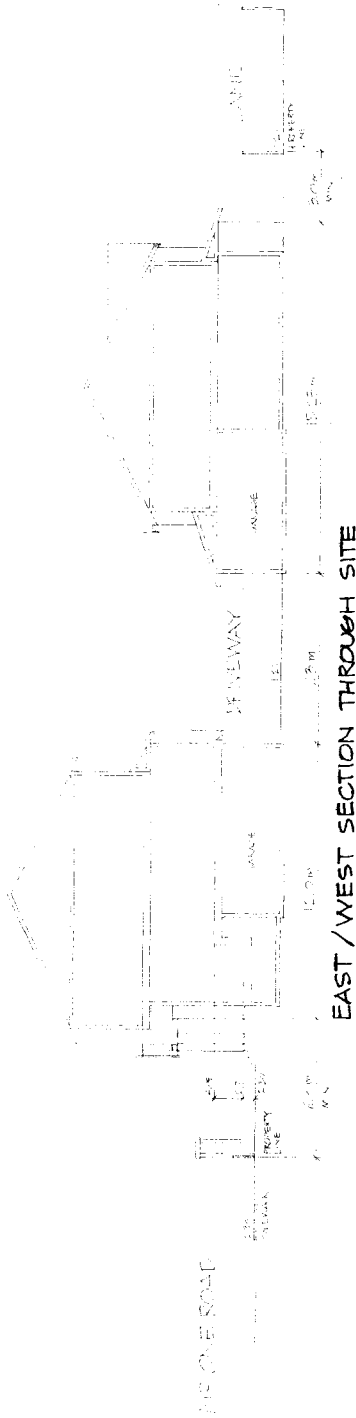


LEFT ELEVATION

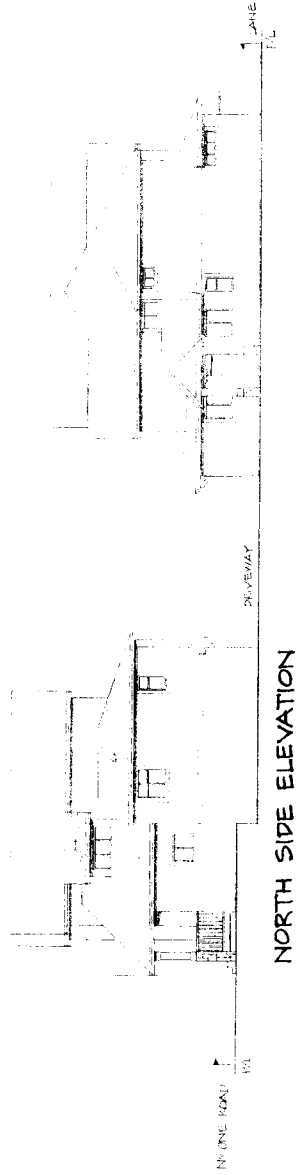


FRONT ELEVATION

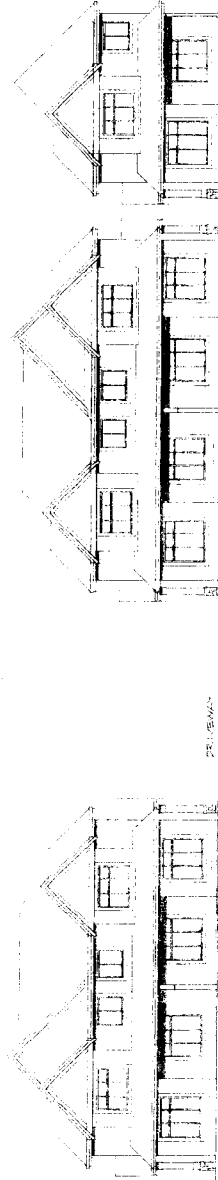
PLAN #5 NOV 29 2006  
 DP 06345111  
 UNIT C



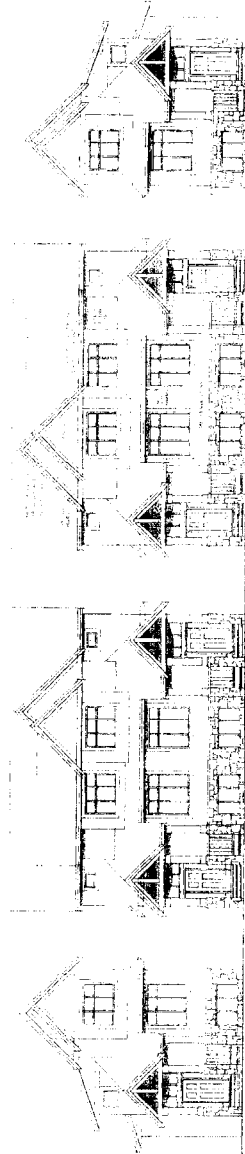
EAST / WEST SECTION THROUGH SITE



NORTH SIDE ELEVATION



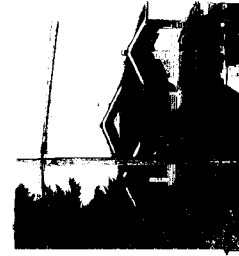
WEST ELEVATION (LANE STREETScape)



EAST ELEVATION (Nº ONE ROAD STREETSCAPE)



THE CHINESE JOURNAL OF  
POLITICAL ECONOMY



ADJACENT NORTH PROPERTY  
SINGLE FAMILY HOME

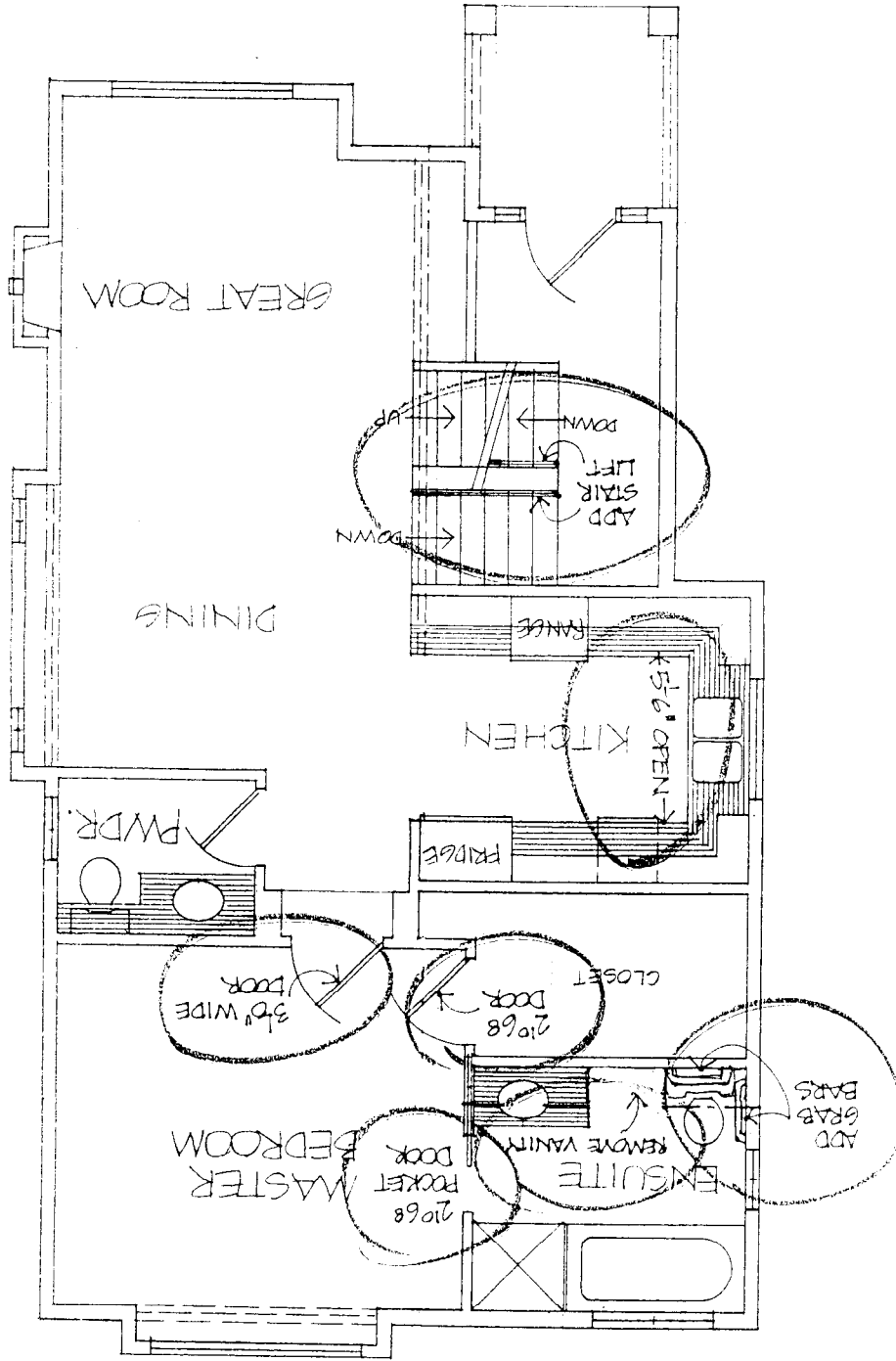
## REFERENCE

PLAN# A

DP063451

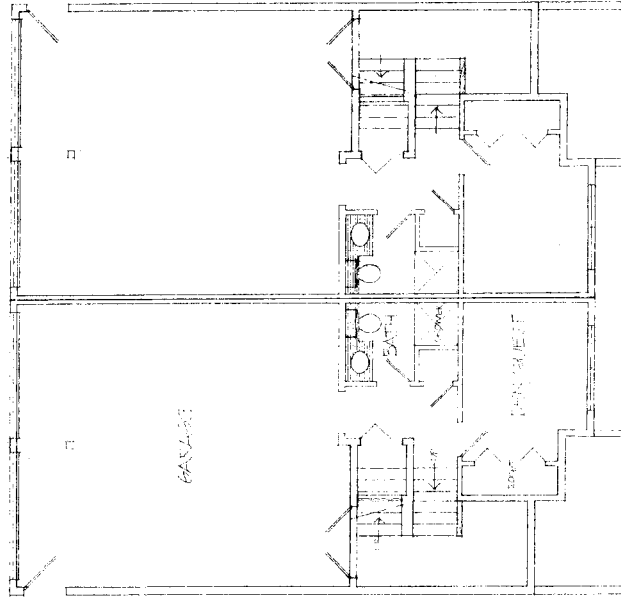
# PLAN SHOWING FEATURES OF ADAPTABLE UNITS OF

PROPOSED TOWNHOUSE DEVELOPMENT  
AT #10171 N<sup>O</sup> ONE ROAD, RICHMOND B.C.



UNIT B  
MAIN FLOOR PLAN  
FIN FLOOR AREA: 819 sq ft

REFERENCE  
PLAN # B NOV 29 2006  
DP 06345111



REFERENCE

PLAN

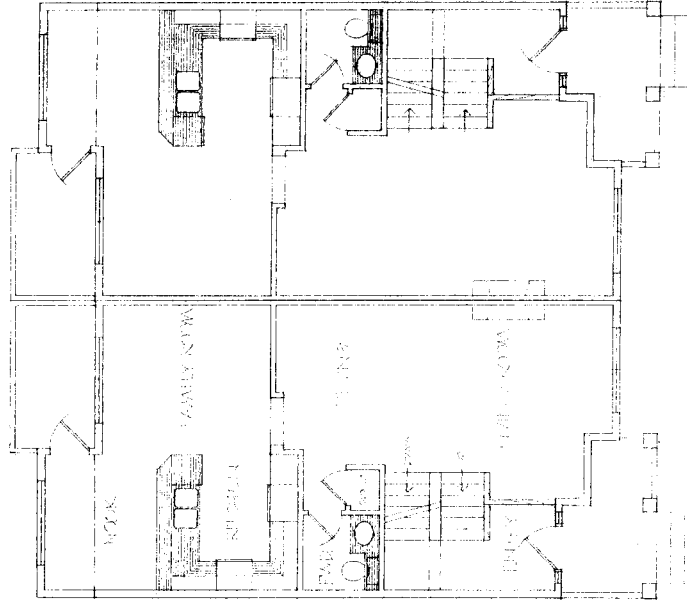
NOV 29 2006

DP 06345111

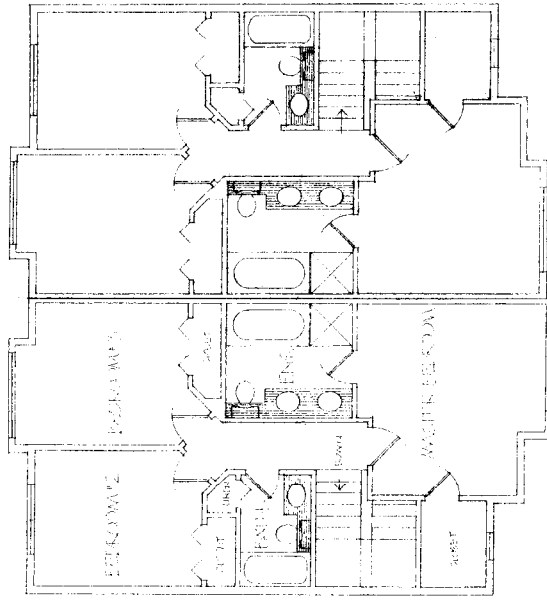
UNIT A

6000 1000 10000 10000  
10000 10000 10000 10000  
10000 10000 10000 10000

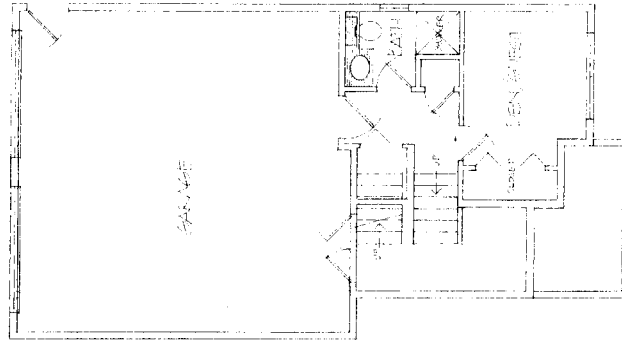
REFERENCE NOV 29 2006  
PLAN  
DP 06345111  
UNIT A



UNIT A  
10171 NUMBER ONE ROAD  
RICHMOND, B.C. V6X 1A4



UNIT B  
10171 NUMBER ONE ROAD  
RICHMOND, B.C. V6X 1A4



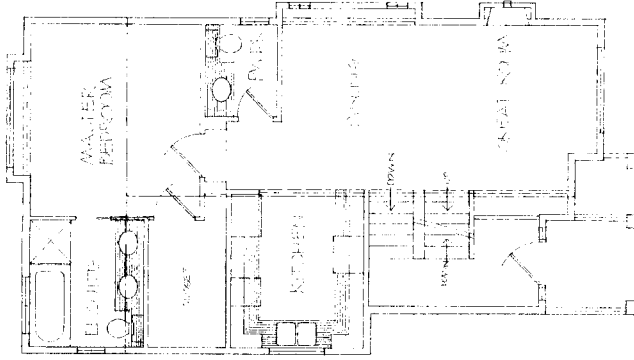
REFERENCE  
 PLAN

NOV 29 2006  
 10171 NUMBER ONE ROAD  
 RICHMOND, B.C. V6X 1A1  
 TEL: 604-273-1111  
 FAX: 604-273-1112  
 WWW.INTERFACEDesign.com

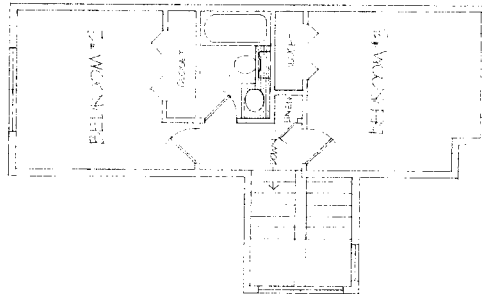
NOV 29 2006

DP 06345111

UNIT B

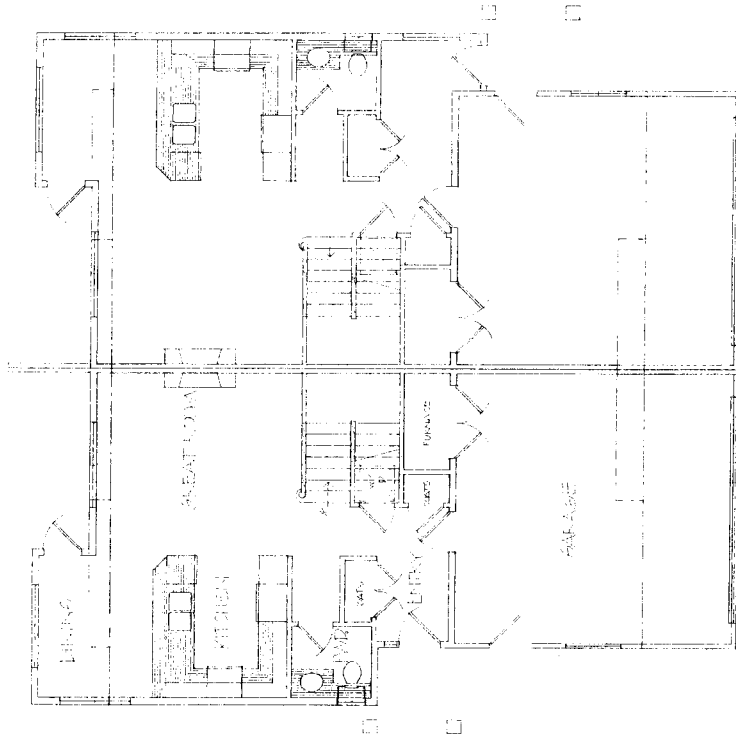


MAIN FLOOR PLAN



SECOND FLOOR PLAN



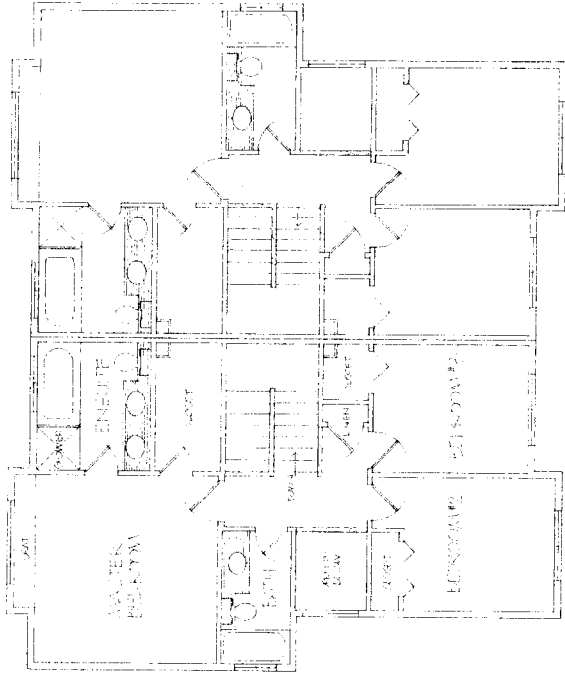


REFERENCE NOV 29 2006  
PLAN  
DP06345111

MAIN FLOOR PLAN  
UNIT C  
INTERFAC ARCHITECTURE INC.

MAIN FLOOR PLAN  
UNIT C  
INTERFAC ARCHITECTURE INC.

UNIT C



UPPER FLOOR PLAN  
UNIT C  
INTERFAC ARCHITECTURE INC.