

5-UNIT TOWNHOUSES

7511 ST. ALBANS RD.

Owner	1118992 BC Ltd.
Architect	Matthew Cheng Architect Inc
Landscape Architect	Donald V S Duncan Landscape Architect



5 Unit Townhouse Development
7511 St. Albans Rd.

Context

- On St Albans Rd. Between General Currie Rd & Jones
- To north 3 & 2 storey Townhouse complexes
- To south 3 storey Townhouse complexes
- To west 4 storey buildings
(w/ 1 level parking structure)



Context West side of St. Albans



3 storey Townhouses – north of block



2 storey Townhouse – north of site

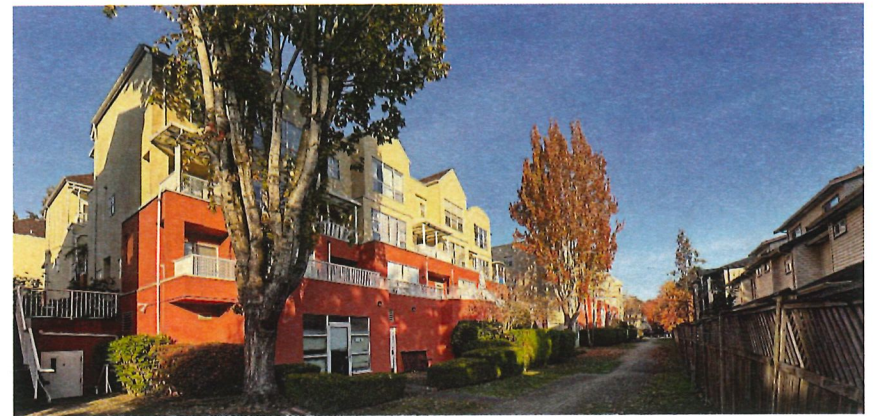


3 storey Townhouses – south of site



3 storey Townhouses – south of block

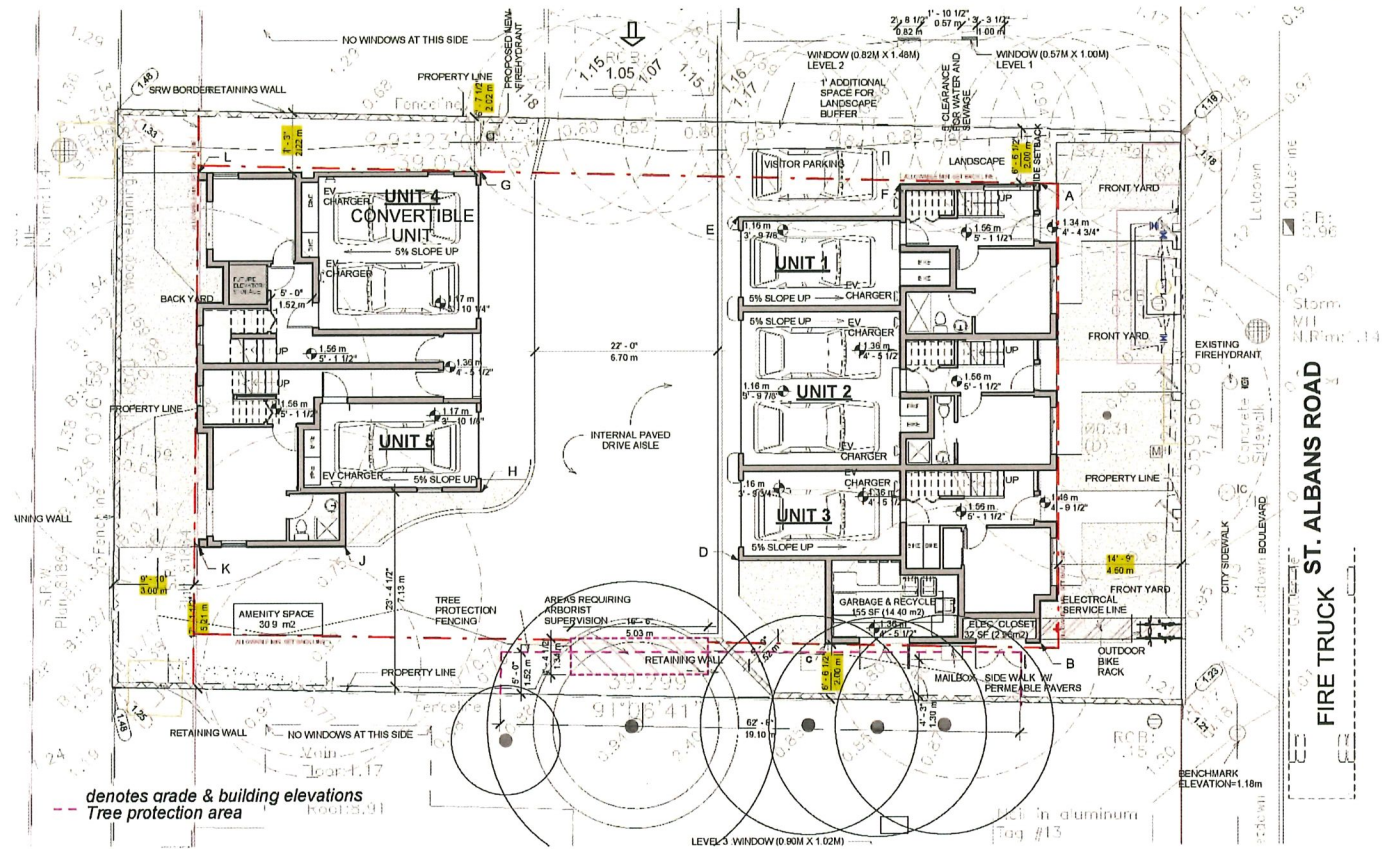
Context At rear of site



4 story apartment – Across pedestrian walkway

Site Plan

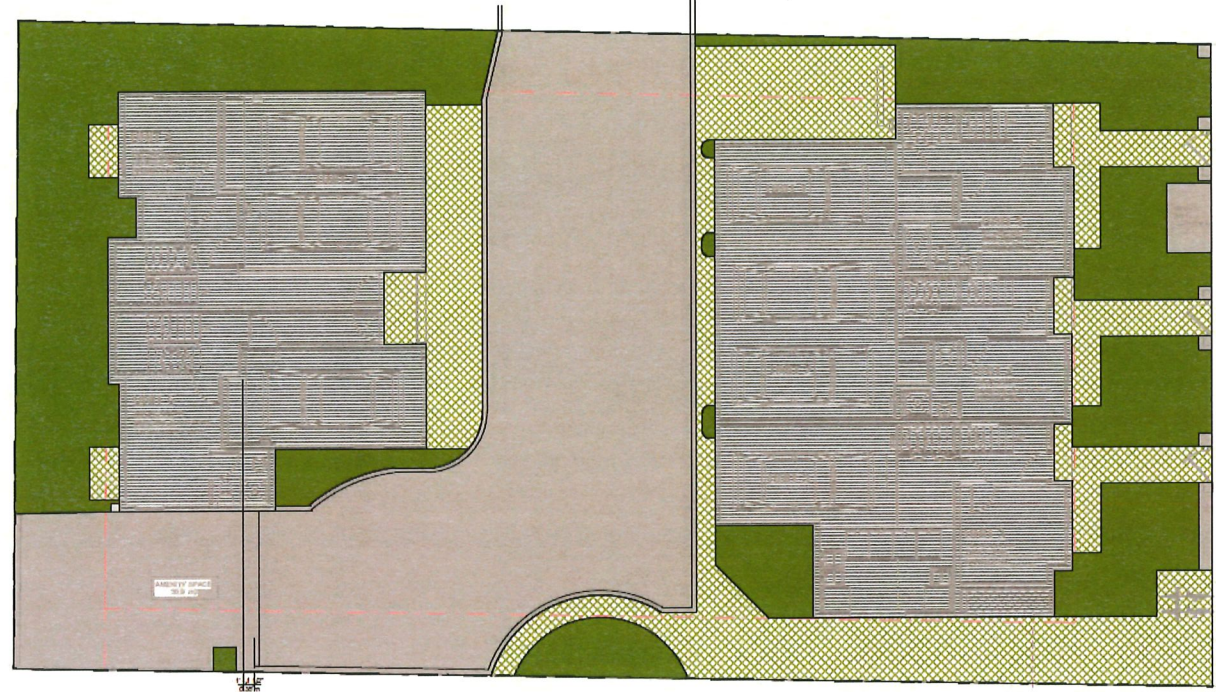
OCP	City Centre Area Plan St Albans Sub Area	
Zoning	RSM/L to RTH 1	
Site Area	825 sm.	
No of units	5	
FAR	Required 0.75	Provided 0.75



Site Plan



	Required	Provided
Coverage	45%	36.51%
Driveway & Playground		27.45%
Non-porous area	70%	63.96%
Live Plant	20%	20.34%
Permeable Pavers		15.70%
Porous Area		36.04%



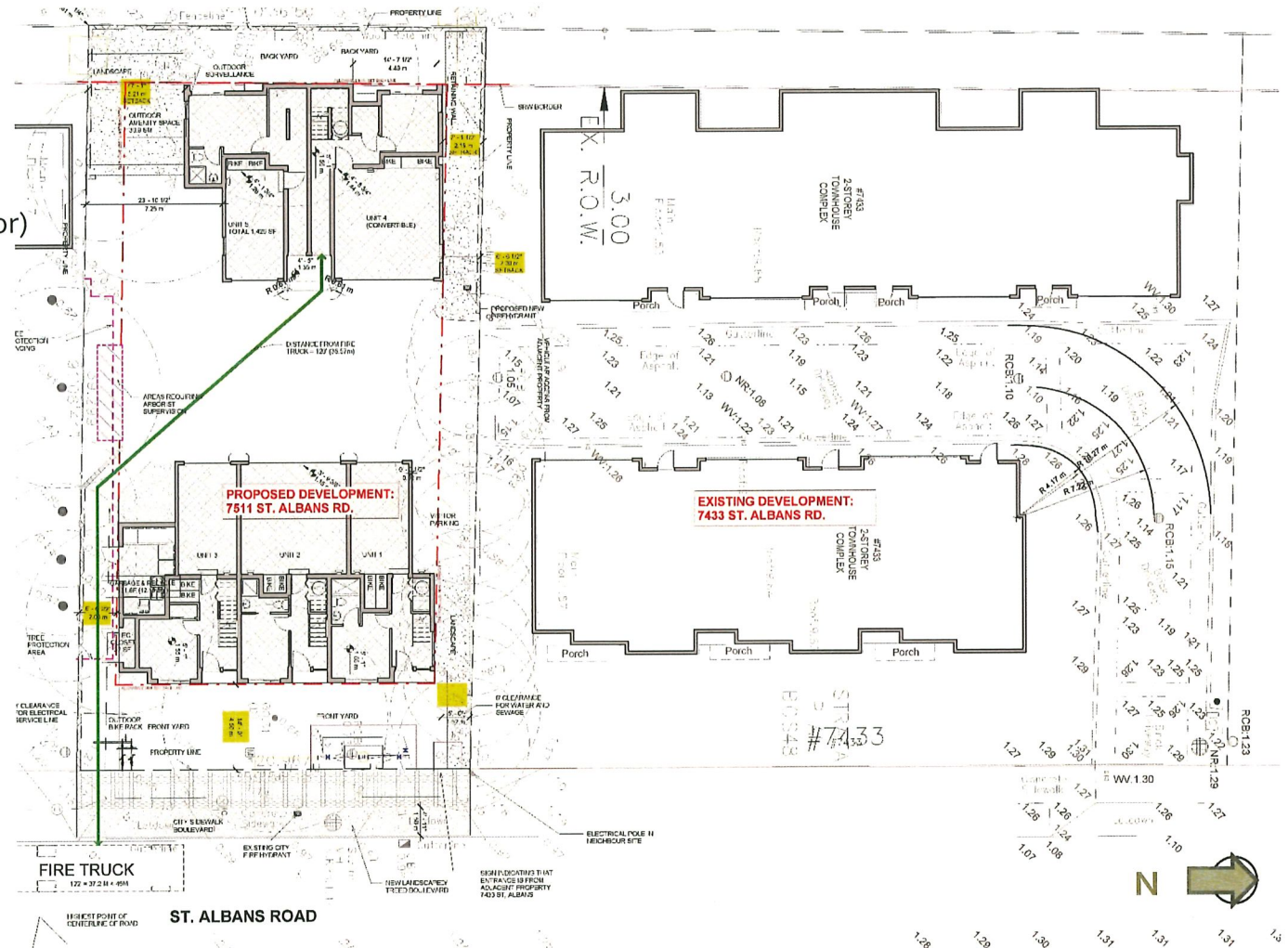
NON-POROUS AREA 5,680 SF (527.70 m2)
63.96%

POROUS AREA 3,200 SF (297.30 m2)
36.04%

- DRIVEWAY AND PLAYGROUND 2,437 SF (226.40 m2) 27.45%
- BUILDING COVERAGE 3,243 SF (301.28 m2) 36.51%
- LIVING PLANTS AREA 1,806 SF (167.78 m2) 20.34%
- PERMEABLE PAVING 1,394 SF (129.51 m2) 15.70%



36.57 m from curb to last door



Swept Path Analysis / Parking



• SWEPT PATH ANALYSIS

SU-9

• Parking

City Centre Zone 3

(1.4 / unit)

7.0 7.0

• Visitor

(0.2 / unit)

1.0 1.0

• Bike (Class 1)

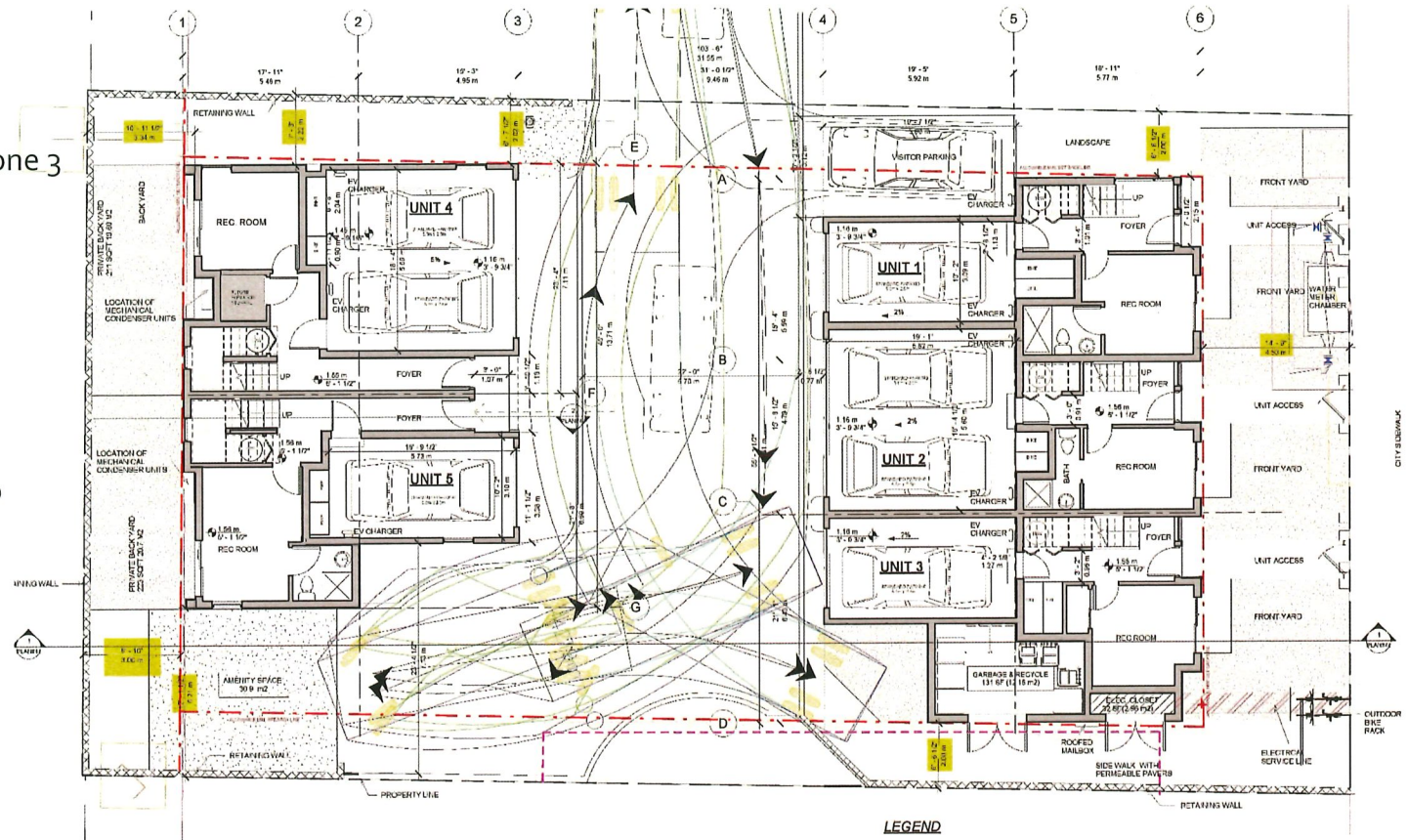
(1.25 / unit)

6.25 (7) 10.0

• Bike (Class 1)

(0.2 / unit)

1.0 2.0

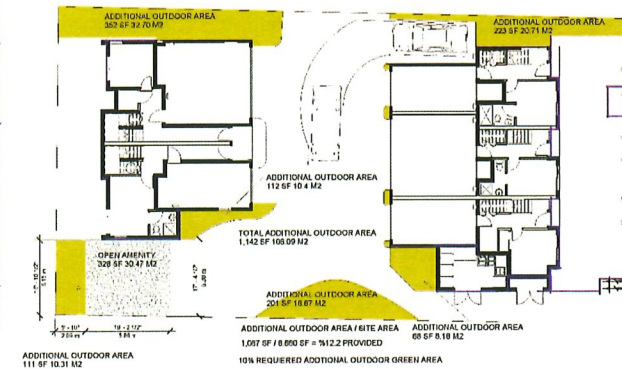
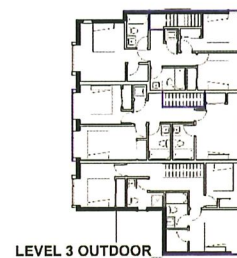
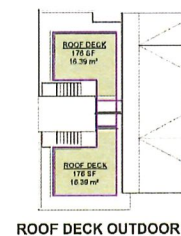
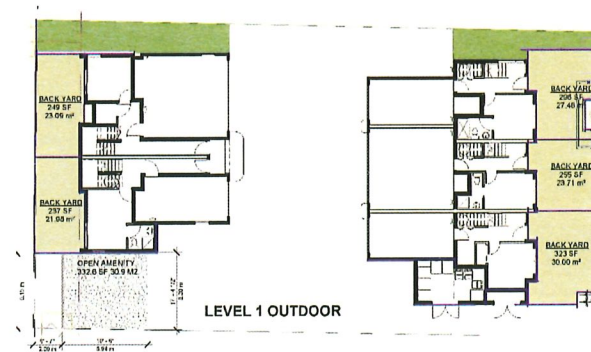


ST. ALBANS ROAD

Outdoor spaces

Outdoor private space

Unit 1	Front yard	28 sm.
	Patio	9 sm.
		37 sm.
Unit 2	Front yard	24 sm.
	Patio	13 sm.
		37 sm.
Unit 3	Back yard	30 sm.
	Patio	7 sm.
		37 sm.
Unit 4	Back yard	23 sm.
	Patio	6 sm.
	Roof top	16 sm.
		45 sm.
Unit 5	Back yard	22 sm.
	Patio	3 sm.
	Roof top	16 sm.
		41 sm.



Outdoor Amenity 30.47 sm.
Additional 88.63 sm. (10.75%)



Streetscape

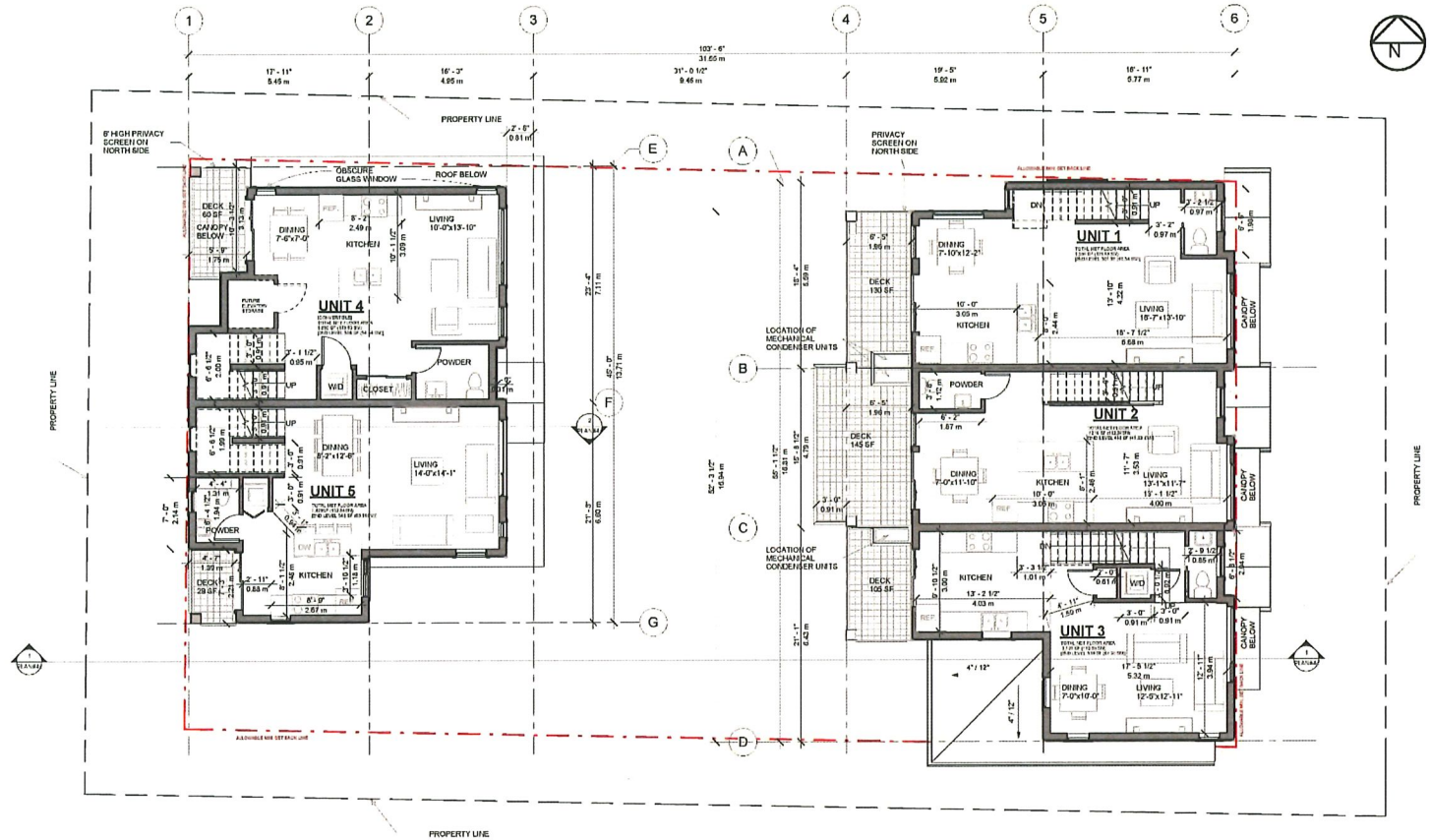


STREETSCAPE: ST. ALBANS ROAD

2/F Plan



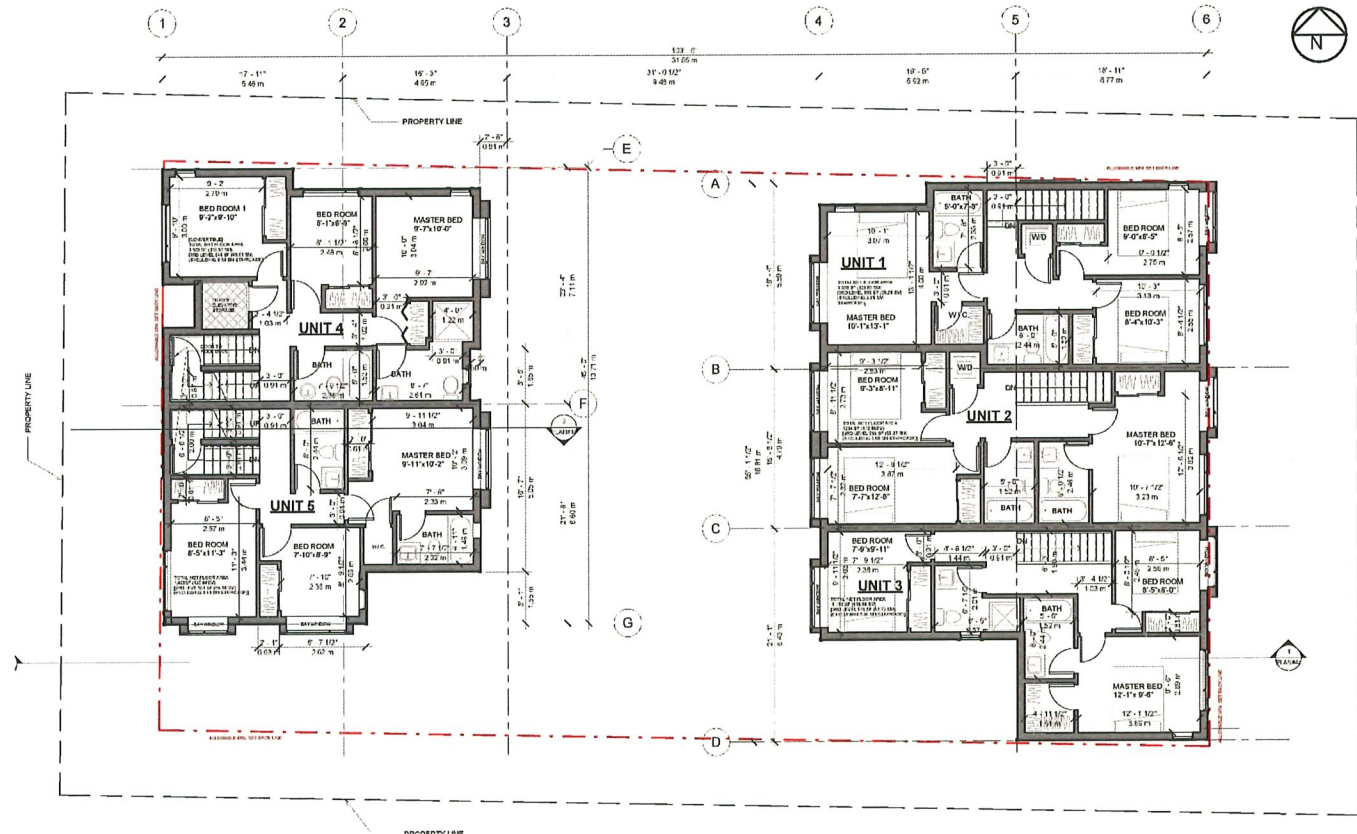
- Unit 1 Living area
- Unit 2 Living area
- Unit 3 Living area
- Unit 4 Living area
Convertible unit
- Unit 5 Living area



3/F Plan



- Unit 1 3 beds, 2 baths
- Unit 2 3 beds, 2 baths
- Unit 3 3 beds, 2 baths
- Unit 4 3 beds, 2 baths
Convertible unit
- Unit 5 3 beds, 2 baths

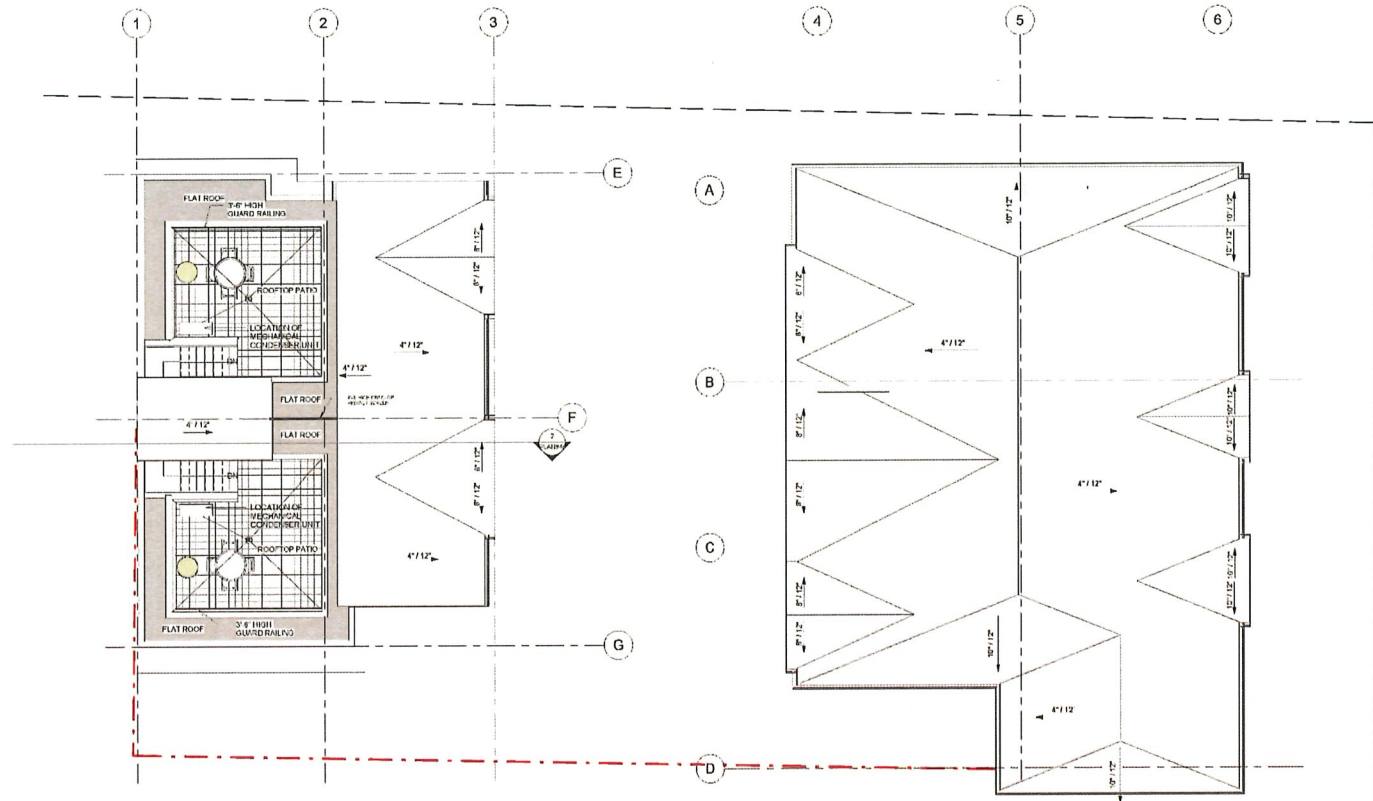


Roof Plan

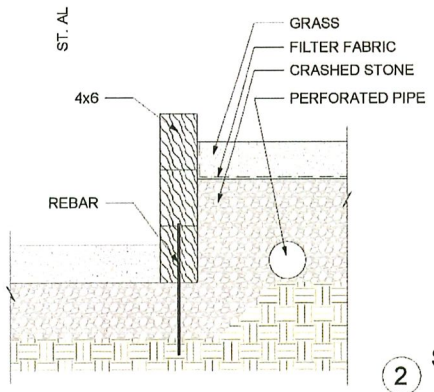
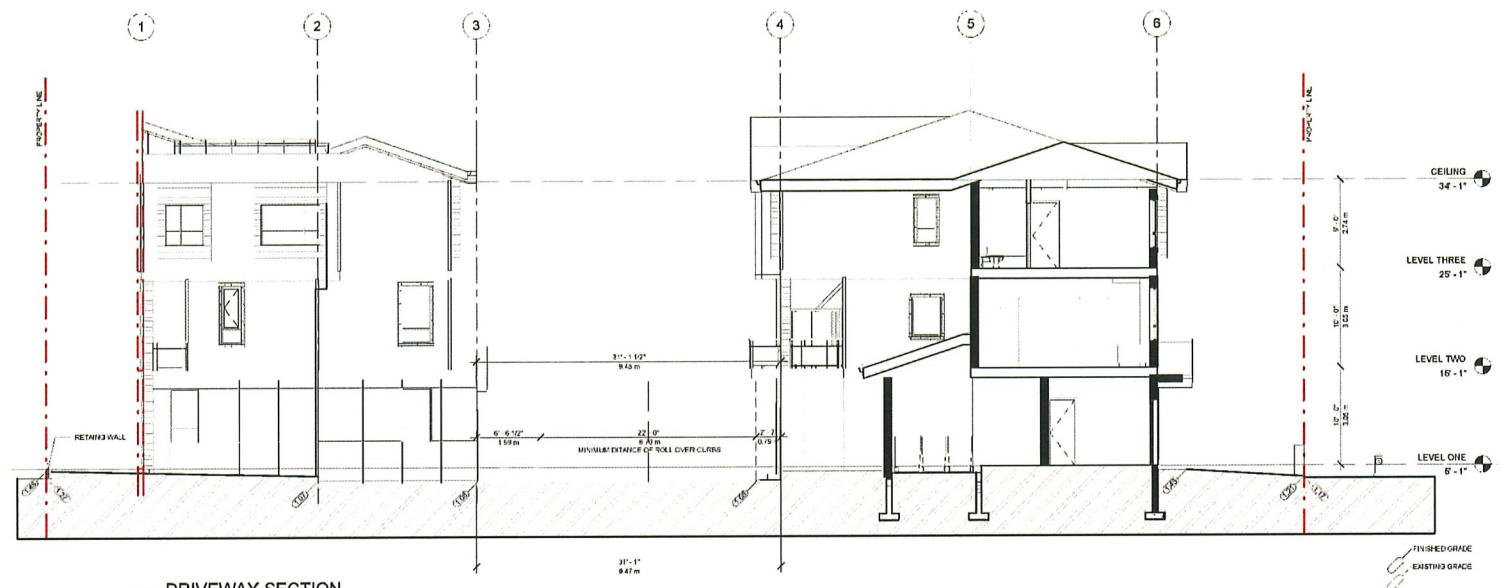


Unit 4 Roof Top Patio

Unit 5 Roof Top Patio



Section



3 RETAINING WALL DETAIL
3/4" = 1'-0"

Convertible Units

- Vertical lift to all levels
- 4m (13'-2") wide accessible parking space provided
- Entry door (2'-10" clear) (Rough in for future door opener) (No Step)
- Interior doors (2'-8" clear) (1 bed & 1 bath)
- Hallway (3'-0")

WC

- Toilet at side and in front (3'-4")
- Blocking for future grab bars (Toilet, Tub, Shower)
- Lever - style plumbing fixtures
- Cabinets easily removed
- Bath and shower controls accessible

Kitchen

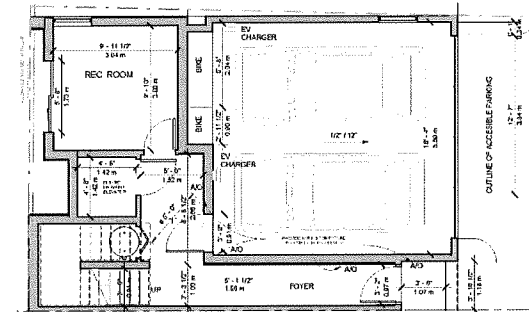
- Plumbing and gas pipes clear of under counter space
- Cabinets easily removed
- 5' turning diameter
- Level-type handles

Windows

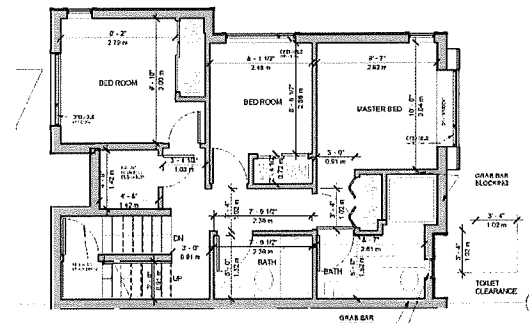
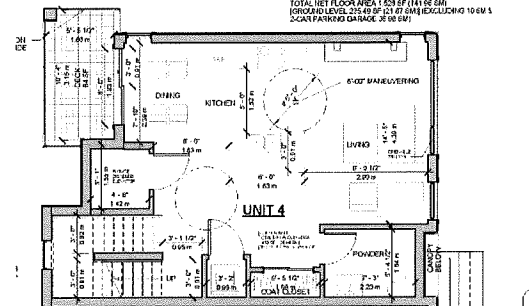
- Opened with 1 hand (Min. 1)

Outlets and switches

- Outlets beside window, bottom of stair, beside toilet, above exterior door, in front of kitchen counter
- Within proximity of control center for smart home option
- Upgrades to four-plex outlets in master bed, home office, garage & rec rm



UNIT 4- CONVERTIBLE
TOTAL NET FLOOR AREA: 1,528 SF (141 SQ M)
(GROUND LEVEL: 235.45 FT (71.87 M) EXCLUDING 10.6M²
SLOPE PARKING GARAGE: 28.08 SQ M)



Aging in place

Aging in place in all units

- Stairwell handrails
- Lever-style plumbing faucets & door handles
- Blocking in washroom walls for grab bars

Acoustic

- **Interior Noise Criteria (Quiet Zone)**
 - 55 dBA during Day time
 - 45 dBA during Night time
- **Exterior Walls Construction (No upgrade required)**
 - 2X6 construction
 - 5/8" Gypsum Wall Board
- **Exterior Windows & Glazed Doors (No upgrade required)**
 - All windows 3-13-3 Glazing
 - To meet A3 rating for air tightness
- **Ventilation**
 - Assumed windows closed
 - Fresh air ventilation system
- **Heat pump or condenser (No noise control required)**
 - Samsung 52 dBA



Figure 2: Aerial photograph showing bylaw PORs and predicted heat pump noise levels.

Sustainability

- **Energy Step Code 3 + Zero Carbon EL-4 Level**

- **Certified Energy Advisor**
Enersave Solutions Inc.

- **Heating & Cooling**
Air source heat pump

- **Domestic Hot water**
Electric storage tank

- **HRV**

- **Insulation**

Walls (2X8 @ 24")	R-28
Roof	R-50
Flat Roof	R-40
Floor over unheated space	R-28

- **Windows**

U value	1.30 or lower
SHGC (solar heat gain coefficient)	0.38 or higher

- **Airtightness**

ACH @50 Pa (Air exchange per hour)	2.5 or less
---------------------------------------	-------------

Water Conservation

- Dual flush toilets
- Drought tolerant plants

Energy Conservation

- Energy star appliances
- LED lighting
- Electric car charging
- Programmable thermostats
- Motion sensing light in power rm & master ensuite
- Low E glass windows

Building materials

- Renewable materials – wood
- Local building materials
- Durable building materials

Waste Reduction

- 3 stream waste bins for construction
- Compost bins in kitchen
- Garbage and recycle bins in garage

Health and Air quality

- Retain and plant perimeter trees
- LOC paints, adhesives and floorings

Form & Character



Form & Character



Form & Character



Exterior colors and materials - Front buildings

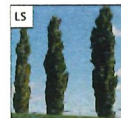


EXTERIOR MATERIAL LEGEND

	A - DARK CHERRY - METAL SIDING		B - PREPAINTED HARDIE PLANK-COBBLE STONE		C - PREPAINTED HARDIE BOARD-RICH ESPRESSO		D - SHINGLE - SHADOW GRAY		E - PREPAINTED HARDIE BOARD-COBLE STONE
	F - PAINTED FIBERGLASS DOOR		G - PAINTED STEEL GARAGE DOOR WITH TOP-LIGHT COBBLE STONE		H - DOUBLE GLAZED VINYL WINDOW WITH BLACK FRAME		K - PREPAINTED HARDIE TRIM COUNTRYLANE RED		L - ALUMINUM RAILING / PRIVACY SCREEN WITH GLASS PANEL

Landscape Plan 1

TREES



Liquidambar s. 'Slender Silhouette'

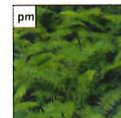


Pinus sylvestris 'Fastigiata'

CONIFEROUS SHRUBS



Thuja occidentalis 'Smaragd'



Polystichum munium

BROADLEAF EVERGREEN SHRUBS



Abelia grand. 'Edward Goucher'



Azalea japonica 'Ino Crimson'



Lonicera pilcata



Photinia x fraseri



Vaccinium ovatum

PLANT LIST

TREES						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE & SPACING
PS	8	Pinus sylvestris 'Fastigiata'	Scotch Sentinel Pine	4.0 m ht	100 mm x 4.0 m dbh 1.8 m height 1.8 m spread	2.5 m height 7.5 m spread as shown
LS	4	Liquidambar s. 'Slender Silhouette'	Slender Silhouette Sweetgum	8 cm cal	100 mm x 8 cm dbh 1.8 m height 1.8 m spread	as shown
CONIFEROUS SHRUBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE & SPACING
TS	42	Thuja occidentalis 'Smaragd'	Smaragd Hedges Cedar	1.2m B&B	minimum 25 cm height	75 cm height 25 cm width 50 cm
BROADLEAF EVERGREEN SHRUBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE & SPACING
AG	8	Abelia grand. 'Edward Goucher'	Edward Goucher Abelia	#5 pot	minimum 45 cm height	120 cm height 120 cm width 60 cm
AJ	16	Azalea japonica 'Ino Crimson'	Crimson Japanese Azalea	#2 pot	minimum 45 cm height	120 cm height 120 cm width 50 cm
LP	20	Lonicera pilcata	Knockout Honeyuckle	#3 pot	minimum 45 cm height	120 cm height 120 cm width 60 cm
PH	7	Photinia x fraseri	Fraseri Photinia	#5 pot	minimum 45 cm height - bushy	120 cm height 120 cm width 60 cm
VO	38	Vaccinium ovatum	Evergreen Huckleberry	#3 pot	minimum 45 cm height	120 cm height 120 cm width 60 cm
FERNS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE & SPACING
PM	83	Polystichum munium	Swordfern	#1 pot	minimum 45 cm height	150 cm height 150 cm width 30 cm
GROUND COVERS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE & SPACING
AL	240	Arctostaphylos uva-ursi	Kinnikinnick	10 cm pot	10 cm height	10 cm height 10 cm width 30 cm
LA		Lawn	Shade Tolerant Blend			

GENERAL NOTES

- COMPLIANCE, GOVERNMENT - ALL WORK SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY OF RICHMOND AND SHALL COMPLY WITH ALL STANDARDS AND REGULATIONS OF THE SAME. CONTRACTORS SHALL ENSURE COMPLIANCE OF ALL WORK PRIOR TO INSTALLATION.
- COMPLIANCE, STANDARDS - ALL MATERIAL, SHIPPING PROCEDURES, AND INSTALLATION OF LANDSCAPE ELEMENTS SHALL CONFORM TO LATEST EDITION OF CANADIAN LANDSCAPE STANDARD AVAILABLE AT COMMENCEMENT OF WORK.
- COMPLIANCE, IRMO - ALL WORKS SHALL CONFORM TO THE LATEST IRMO DETAILS AND SPECIFICATIONS AVAILABLE AT COMMENCEMENT OF WORK WHERE NO SPECIFIC DETAIL, NOTE OR SPECIFICATION IS PROVIDED IN THE DRAWING SET OR ATTACHED MATERIALS.
- EXISTING SERVICES - REFER TO ENGINEERING DRAWINGS FOR LOCATIONS OF ALL BURIED SERVICES. CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL UTILITIES LOCATIONS AND ANY AND ALL COSTS WHICH ARISE FROM DAMAGE TO SERVICES CAUSED BY ANY ACT OR FAILURE TO ACT OF THE CONTRACTOR.
- COORDINATION - THESE DRAWINGS SHALL BE TAKEN TO BE PART OF THE LARGER SET OF DRAWINGS AND SPECIFICATIONS, WHETHER DIRECTLY ATTACHED OR NOT, ISSUED FOR THE CONSTRUCTION OF THE ASSOCIATED BOUNDARY WORKS. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH SUCH DOCUMENTATION AND, WHERE CONFLICTS ARISE, THE CONTRACTOR SHALL IMMEDIATELY REPORT SUCH CONFLICTS TO THE LANDSCAPE ARCHITECT. THE WORK IS TO BE DONE IN COORDINATION WITH THE CONTRACTOR OR CONTRACTORS ENGAGED IN CONSTRUCTION OF SUCH ADJACENT WORKS.
- CONCRETE FORMS - THE CONTRACTOR SHALL COMPILE DIMENSIONS PROVIDED WITH SITE CONDITIONS AND IMMEDIATELY REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT AND THE ENGINEER. ONCE COMPLETED THE CONTRACTOR SHALL CALL FOR INSPECTION OF THE FORMS PRIOR TO PLACING STEEL REINFORCEMENT. CONTACT LANDSCAPE ARCHITECT A MINIMUM OF 48 HOURS PRIOR TO DESIRED INSPECTION TIME.
- CONCRETE REINFORCEMENT - ALL CONCRETE REINFORCEMENT SHALL BE INSPECTED AND APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO POURING OF CONCRETE. CONTACT STRUCTURAL ENGINEER A MINIMUM OF 48 HOURS PRIOR TO DESIRED INSPECTION TIME.
- GRADING, GENERAL - THE CONTRACTOR SHALL ESTABLISH GRADES SUCH THAT THERE IS, IN ALL AREAS, POSITIVE DRAINAGE TO AN ADJACENT DRAIN. MINIMUM SLOPES SHALL BE AS FOLLOWS:

PEDESTRIAN PAVED AREAS	1%
VEHICULAR PAVED AREAS	1%
LAWN AREAS	2%
PLANTED BEDS	2%
- GRADING, ALLOWANCES AND TOPSOIL PLACEMENT - OVERALL DEPTH OF PLANTING MEDIA AFTER SETTLEMENT SHALL BE:

GRASS AREAS	150 MM
SHRUB BEDS	450 MM
GROUND COVER AREAS	300 MM
TREES	600 MM

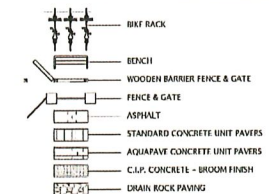
 MIN. 10 mm / DECIDUOUS TREE (MIN. 2 m) / CONIFEROUS TREE
- ALL SOIL SHALL BE TESTED NOT MORE THAN 14 DAYS PRIOR TO INSTALLATION ON SITE. TESTING SHALL BE SPECIFIC TO THIS WORK. CONTRACTOR SHALL ACHIEVE THE SOIL ACCORDING TO THE RECOMMENDATIONS OF THE SOILS TESTING LAB.
- GRADING, BUILDING FINISHED FLOOR & CORNER ELEVATIONS - SEE ARCHITECTURAL DRAWINGS.
- GRADING, GENERAL RETENTION WORKS - ALL RETENTION WORKS, EITHER SHOWN HERE OR REQUIRED DUE TO UNANTICIPATED CONDITIONS AT THE TIME OF CONSTRUCTION, SHALL BE BUILT FACING ALAN BLOCK, WITH THE EXCEPTION OF RETAINING WORKS IN THE SIDE YARD DRAINAGE AREAS SPECIFICALLY NOTED AS PRESSURE TREATED WOOD. SHOULD UNANTICIPATED RETAINING WALLS BE REQUIRED, THE CONTRACTOR SHALL INFORM THE TOWNSHIP OF LANGLY GREEN INFRASTRUCTURE SERVICES DEPARTMENT IN WRITING OF THE LOCATION, HEIGHT AND EXTENT OF SUCH WALL.
- PLANT MATERIAL, QUANTITIES - CONTRACTOR SHALL CONFIRM ALL PLANT MATERIAL QUANTITIES. ANY DISCREPANCIES BETWEEN THE PLANT LIST AND THE DRAWING SHALL BE REPORTED TO THE CONSULTANT. IN CASE OF DISCREPANCY CONTRACTOR SHALL INSTALL PLANT MATERIAL AS PER DRAWING. IN CIRCUMSTANCES WHERE THERE IS A DISCREPANCY BETWEEN GROUND COVER QUANTITY AND SPACING THE SPACING REQUIREMENT WILL PREVAIL.
- PLANT MATERIAL, SUBSTITUTIONS - NO SUBSTITUTIONS TO PLANT LIST SHALL BE MADE BY CONTRACTOR WITHOUT PRIOR WRITTEN AUTHORIZATION FROM CONSULTANT.
- PLANT MATERIAL, HEALTH - ALL PLANT MATERIALS MUST BE DISEASE FREE FROM CERTIFIED NURSERY.
- MULCH - PLANTING AREAS SHALL BE MULCHED WITH 50 MM OF HEMLOCK BARK MULCH. THE USE OF CEDAR MULCH OR ANY MIX CONTAINING CEDAR IS NOT PERMITTED.
- IRRIGATION - AN IRRIGATION SYSTEM SHALL BE INSTALLED AS A DESIGN/INSTALL BY AN ACCREDITED IRRIGATION CONTRACTOR. THE SYSTEM SHALL PROVIDE FULL COVERAGE. THE IRRIGATION CONTRACTOR SHALL PROVIDE SLEEVES AND COVERS AS NECESSARY. A PLAN OF THE PROPOSED SYSTEM SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO INSTALLATION.

PROPOSED TOWNHOUSES 7511 ST. ALBANS ROAD RICHMOND BC

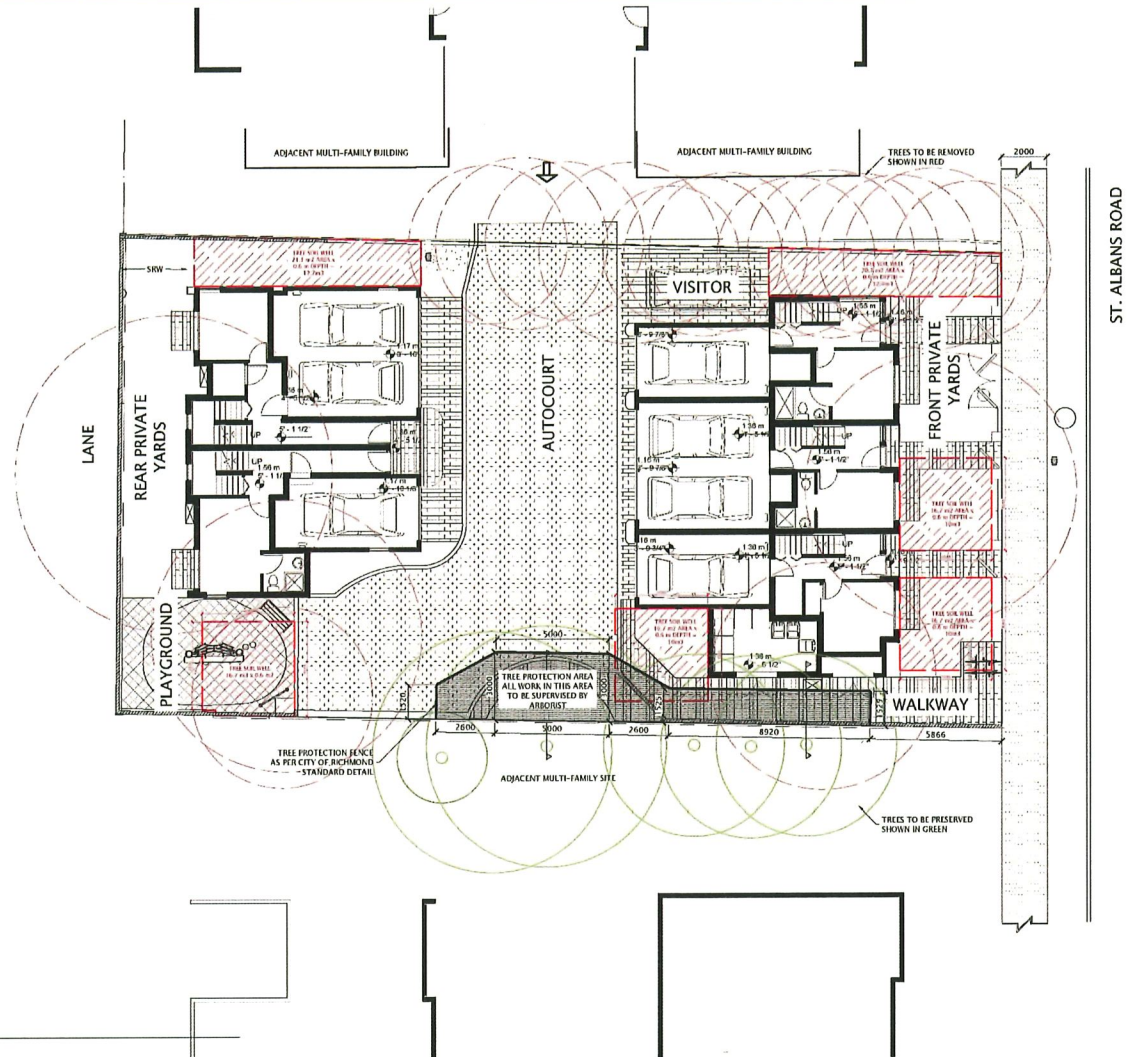
DRAWING INDEX

- | | |
|-----|---------------------------------|
| 3.0 | NOTES & SYMBOLS |
| 3.1 | KEY PLAN |
| 3.2 | PREVIOUS / IMPERVIOUS AREA PLAN |
| 3.3 | LANDSCAPE PLAN |
| 3.4 | LIGHTING / IRRIGATION PLAN |
| 3.5 | PLANTING PLAN |
| 3.6 | TREE MANAGEMENT PLAN |
| 3.7 | DETAILS |
| 3.8 | DETAILS |
| 3.9 | DETAILS |

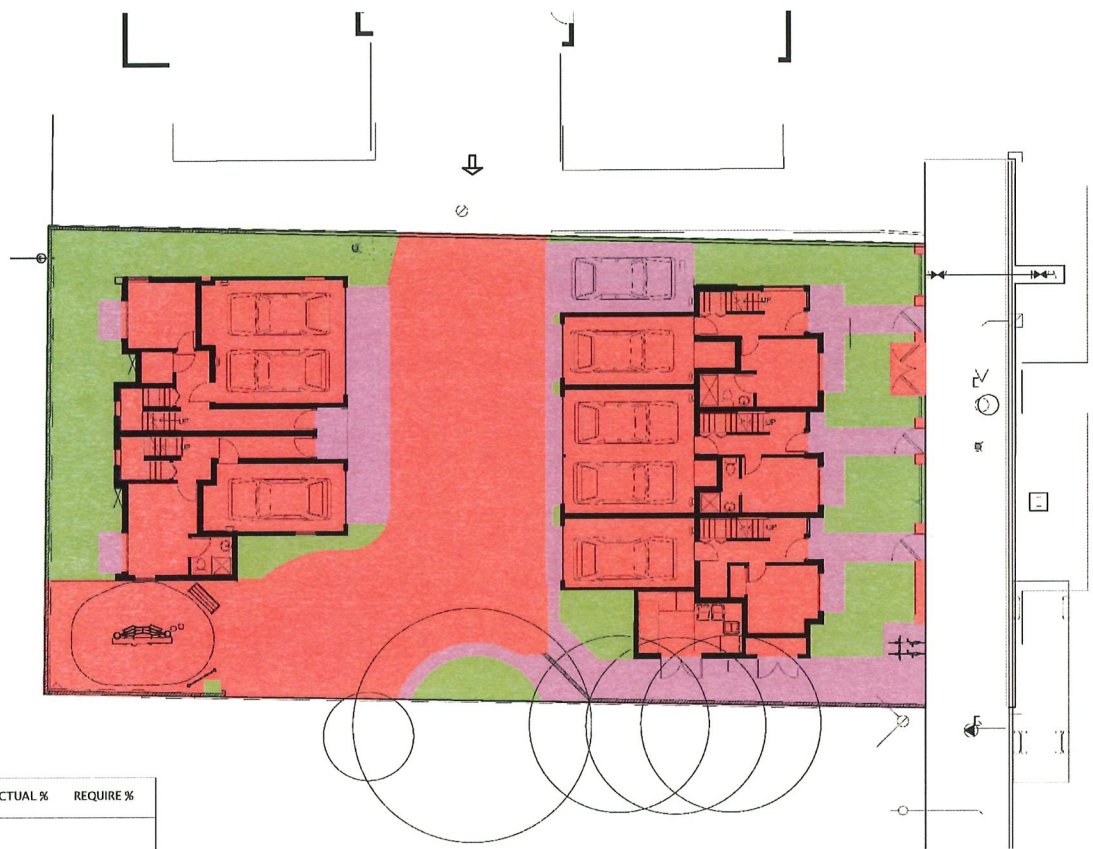
HARD LANDSCAPE KEY



Landscape Plan 2



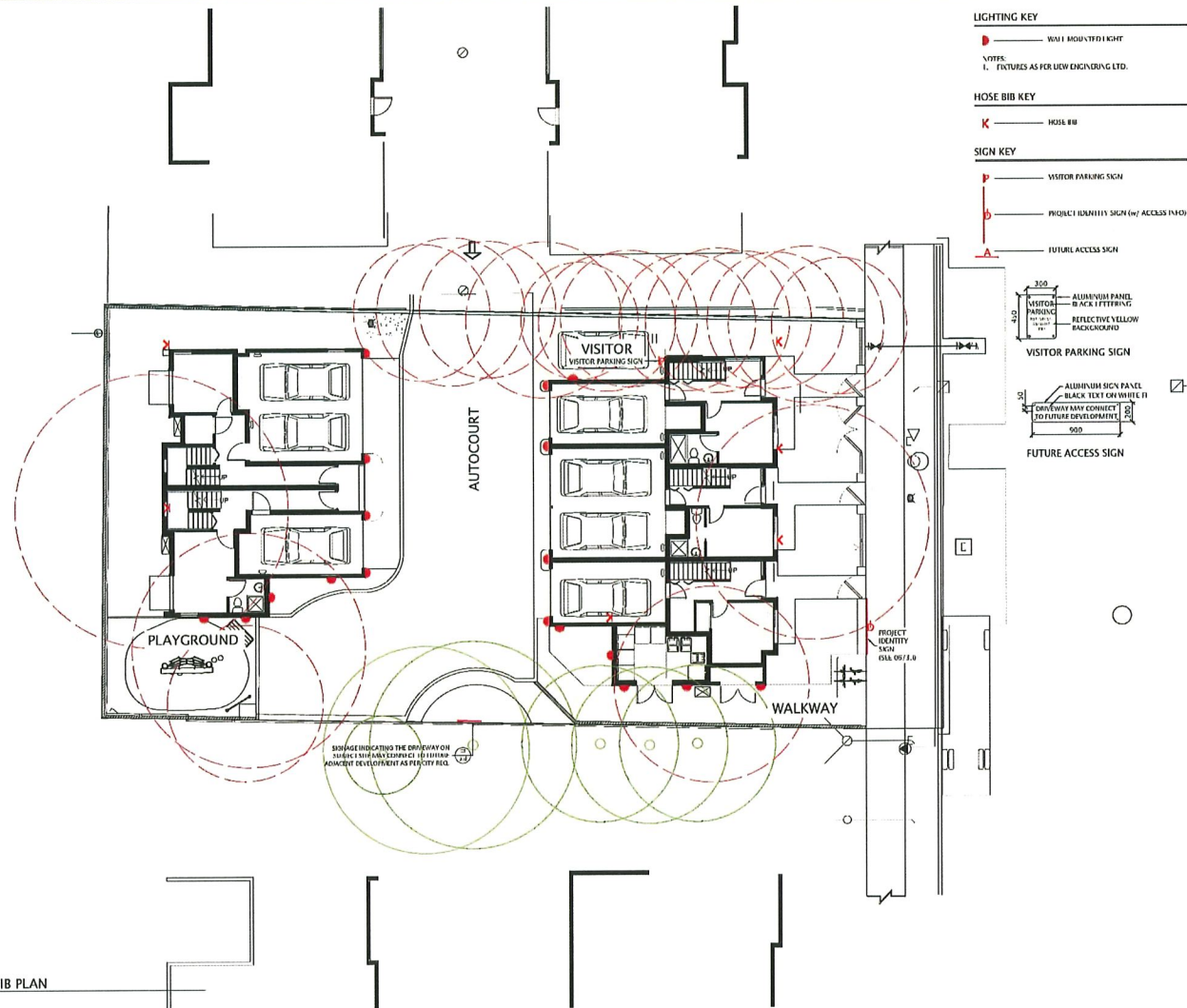
Landscape Plan 3



AREAS	AMOUNT	ACTUAL %	REQUIRE %
LOT AREA	825 m2		
IMPERVIOUS	526 m2	63 %	70 % MAX.
PERMEABLE PAVING	129 m2	16 %	
LIVING PLANT	170 m2	21 %	20 % MIN.

01 AREAS PLAN
3.C SCALE 1:100

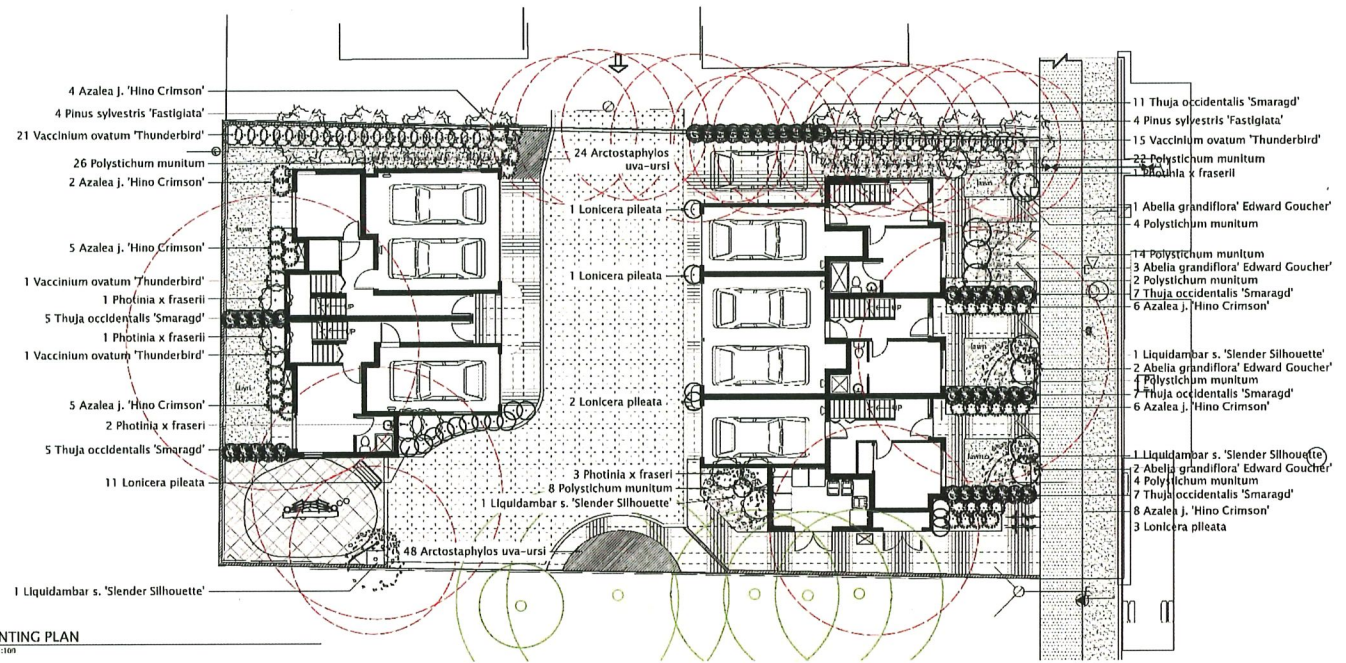
Landscape Plan 5



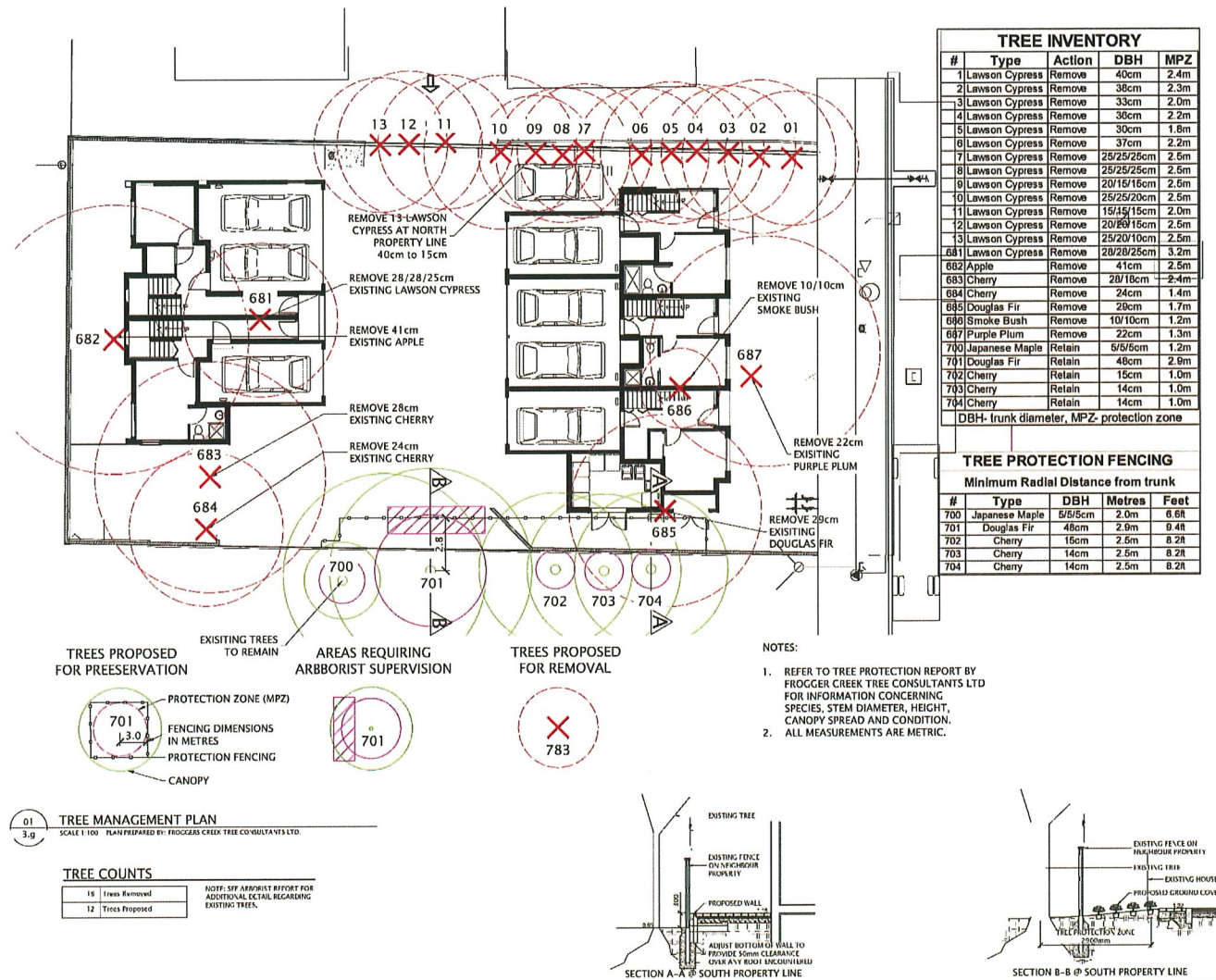
Landscape Plan 6

PLANT LIST

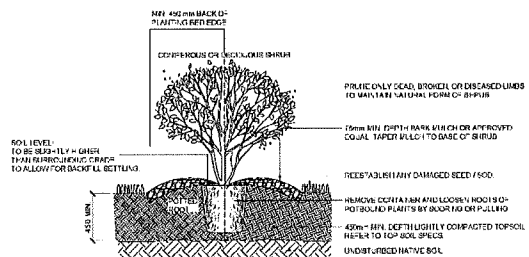
TREES						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE SPACING
ps	8	<i>Pinus sylvestris</i> 'Fastiglata'	Scotch Scedal Pine	4.0 m ht.	10m x 10m x 10m	as shown
ls	4	<i>Liquidambar s.</i> 'Slender Silhouette'	'Slender Silhouette' Sweetgum	8 cm cal.	10m x 10m x 10m	as shown
CONIFEROUS SHRUBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE SPACING
ts	42	<i>Thuja occidentalis</i> 'Smaragd'	Smaragd Hedging Cedar	1.2m B&B	10m x 10m x 10m	10cm
DECIDUOUS SHRUBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE SPACING
ag	8	<i>Abelia grandiflora</i> 'Edward Goucher'	Edward Goucher Abelia	#1 pot	10m x 10m x 10m	60cm
aj	86	<i>Azalea japonica</i> 'Hino Crimson'	Crimson Japanese Azalea	#2 pot	10m x 10m x 10m	30cm
lp	70	<i>Lonicera pileata</i>	Burford Honeyuckle	#3 pot	10m x 10m x 10m	60cm
ph	7	<i>Photinia x fraseri</i>	Fraser Photinia	#5 pot	10m x 10m x 10m	90cm
vo	36	<i>Vaccinium ovatum</i> 'Thunderbird'	Evergreen Huckleberry	#3 pot	10m x 10m x 10m	60cm
HERBS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE SPACING
pm	81	<i>Polystichum munifolium</i>	Swordfern	#1 pot	10m x 10m x 10m	30cm
GROUND COVERS						
CODE	QTY	SCIENTIFIC NAME	COMMON NAME	SIZE	COMMENTS	MATURE SIZE SPACING
u	740	<i>Arctostaphylos uva-ursi</i>	Kinnikinnick	10cm pot	10m x 10m x 10m	30cm
la		Lawn	Shade Tolerant Blend			



Landscape Plan 7

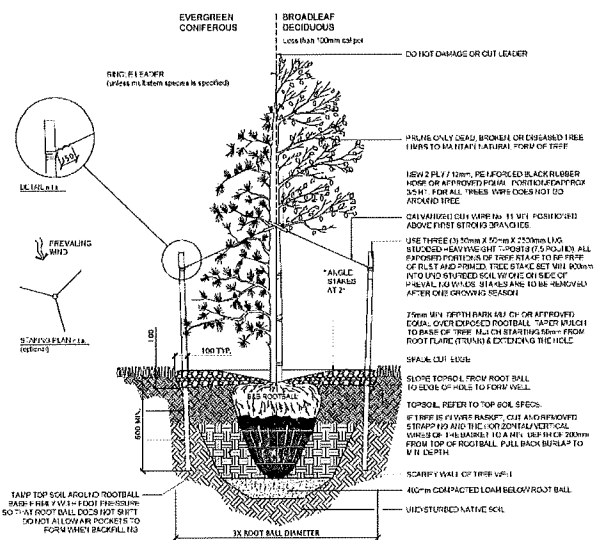


Landscape Plan 8

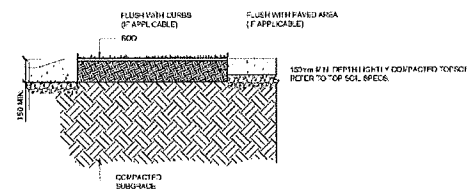


01
3.h

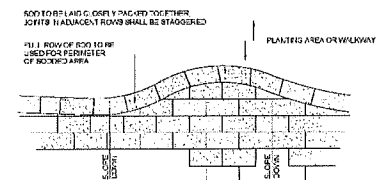
TYPICAL SHRUB INSTALLATION
SCALE 1:20



02
3.1
TYPICAL TREE INSTALLATION
SCALE 1:20



SECTION THROUGH SOO



FLAT VIEW OF SOIL LAYOUT AND EDGINGS
NOT TO SCALE

03
3.11

TYPICAL LAWN INSTALLATION
SCALE 1:20

Landscape Plan 9



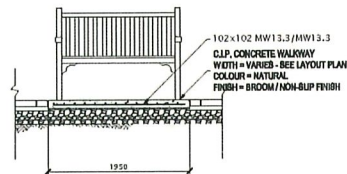
BENCH (TYP.)
MODEL: QUEEN CHARLOTTE
MANUF.: SARTIA

4x10mm DIA. GALV. STEEL ANGLE BRACKET ON BOTH REAR LEGS OF BENCH

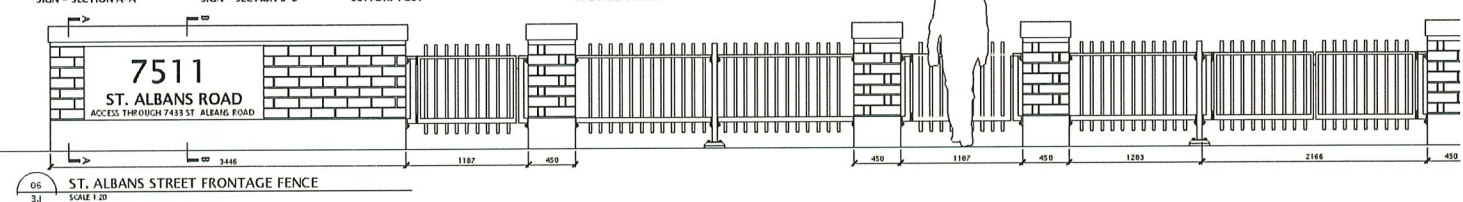
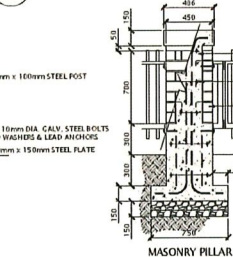
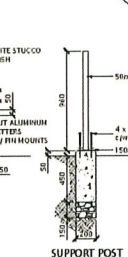
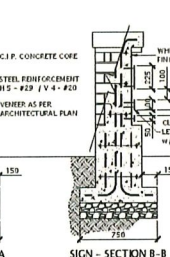
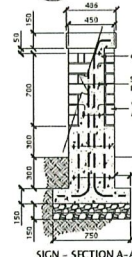
12mm GALV. STEEL CARRIAGE BOLT

12mm Ø THREADED ROD OR BOLT w/ 90° BEND SET INTO CONC. PAD

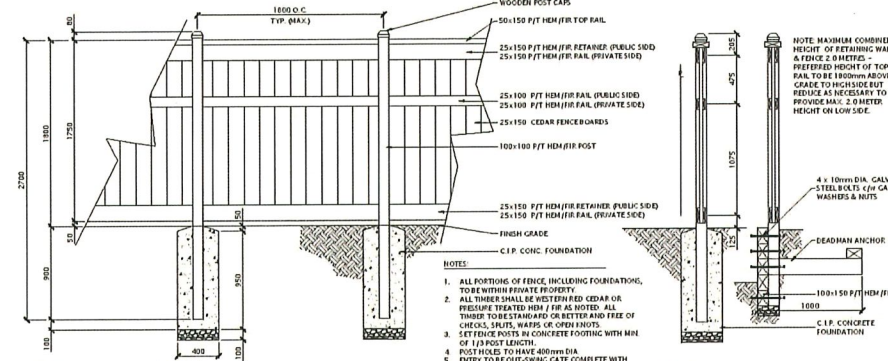
100mm DEPTH 20mm MINUS CRUSH GRAVEL COMPACTED TO 95% RFD



01 AMENITY AREA BENCH
SCALE 1:20

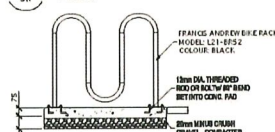


06 ST. ALBANS STREET FRONTAGE FENCE
SCALE 1:20

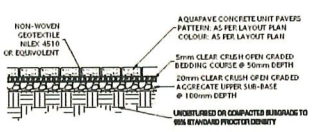


INTERIOR ELEVATION - GATE ENTRANCE

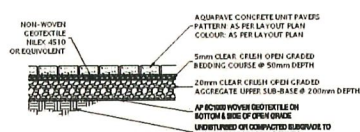
02 LANE FRONTAGE FENCE
SCALE 1:20



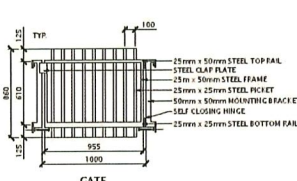
03 BICYCLE PARKING
SCALE 1:20



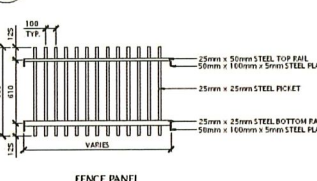
04 PEDESTRIAN UNIT PAVING
SCALE 1:20



05 PERMEABLE UNIT PAVING
SCALE 1:20

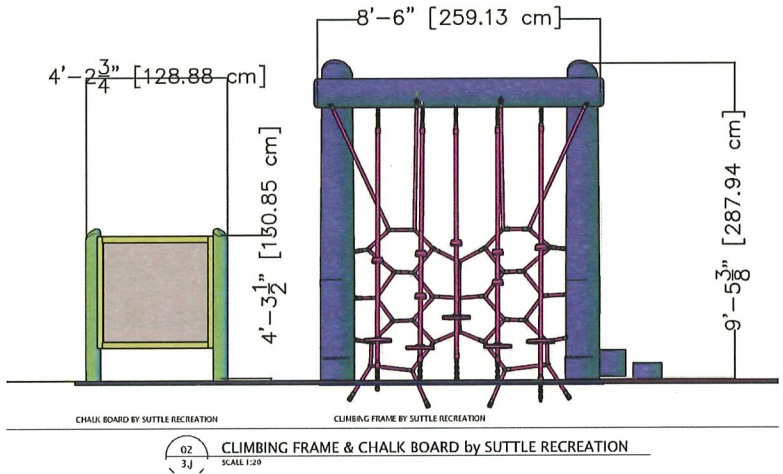
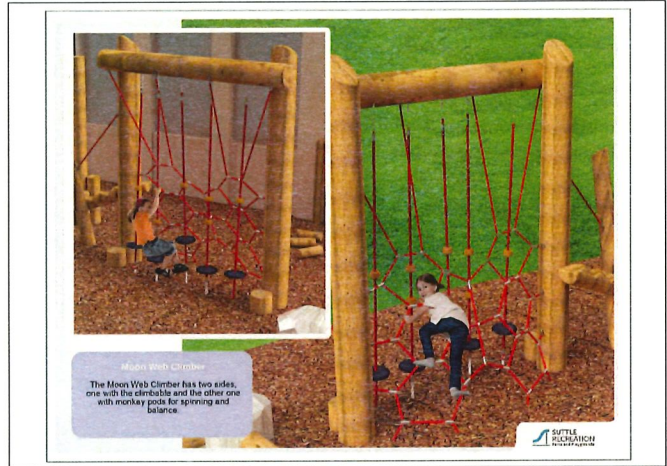
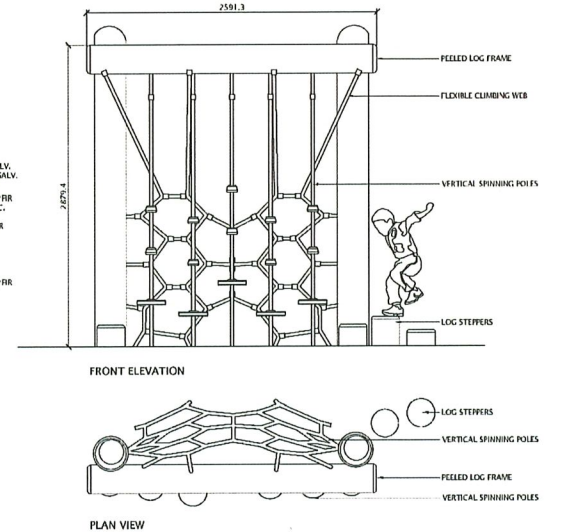
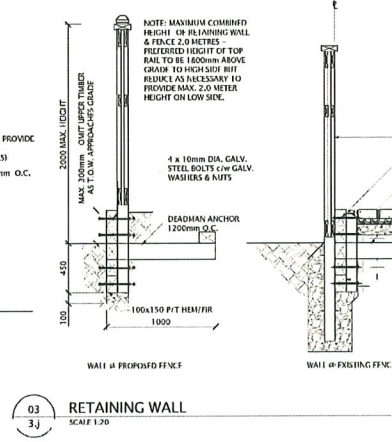
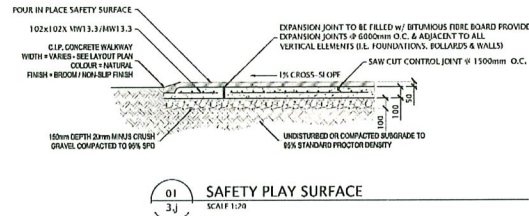


GATE



FENCE PANEL

Landscape Plan 10





THANK YOU