



To: Richmond City Council  
Date: June 25, 2008  
From: Councillor Linda Barnes, Chair  
Parks, Recreation and Cultural Services  
Committee  
File: 03-1000-14-137  
Re: **RICHMOND FRUIT TREE SHARING PROJECT - LICENSE AGREEMENTS**

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The Parks, Recreation and Cultural Services Committee, at its meeting held on June 24, 2008, considered the attached report, and recommends as follows:

**Committee Recommendation**

*That:*

- (1) *A license from the City to the Richmond Fruit Tree Sharing Project for the use of a portion of the land at Terra Nova Rural Park for a Community Sharing Farm be approved as detailed in the staff report dated June 11, 2008 and other terms as deemed necessary by the City;*
- (2) *A license from the City to the Richmond Fruit Tree Sharing Project for the use of a portion of the land at the South Dyke Community Garden for the purposes of a community sharing farm and an apple orchard be approved as detailed in the staff report dated June 11, 2008 and other terms as deemed necessary by the City;*
- (3) *Staff be authorized to take all necessary steps to complete the matters including authorizing the Manager, Real Estate Services, to negotiate and execute all documentation to effect the transactions, including all license documentation; and*
- (4) *Staff be authorized to explore opportunities for the use of remaining City owned lands for agricultural use.*

Councillor Linda Barnes, Chair  
Parks, Recreation and Cultural Services Committee

Attach.

VARIANCE

Please note that Committee added part 4 above.

## Staff Report

### Origin

At the March 13, 2006 meeting of Council, approval was received for a two year renewal of the agreement between the City and the Richmond Fruit Tree Sharing Project at the South Dyke Community Garden. As well, direction was received to enter into an agreement with the Fruit Tree Sharing Project for use of a portion of the land at Terra Nova Rural Park for a Community Sharing Farm pending successful notification of the public of this intent.

The purpose of this report is to update Council on the successes and progress of the Richmond Fruit Tree Sharing Project at both locations and to recommend that the City enter into two new license agreements with the Richmond Fruit Tree Sharing Project for periods of five years each.

### Analysis

#### *Background:*

Over the past seven years, the Richmond Fruit Tree Sharing Project has grown over 110,000 pounds of fresh fruits and vegetables to assist low income individuals and families in Richmond. The majority of the fresh food has been donated to the Richmond Food Bank although some also supports Gilmore United Church's Community Meal program.

The Fruit Sharing Project began in 2001 with the harvesting of seeds rows of surplus vegetables from the West Coast Seeds Demonstration Garden in Richmond as well as the coordination of volunteers to pick excess fruit from Richmond property owners' fruit trees. In 2004, the Society entered into an agreement with the City to use 1.4 acres of land at the South Dyke as a Community Sharing Farm Site. This site was used for the production of vegetables until 2007 when the Society fully moved its vegetable farming operations to a site at Terra Nova Rural Park.

In 2008, the Society began implementation of its Community Teaching Orchard plan (attachment 1) for the 1.4 acre South Dyke site. Apple tree planting in the orchard began in May of this year in partnership with Kwantlen University College and the City of Richmond and with the assistance of a grant from VanCity. It is expected that apple trees planted this year will produce up to 17,000 pounds of fresh apples in three years to support approximately 1,700 people.

At Terra Nova Rural Park, the Society has expanded consistently with the Park Plan and vision to develop a Farm Centre including storage space, a greenhouse and several other small support structures. The infrastructure for this farm centre is now complete and supports all of the Society's vegetable growing. Along with the production of food, programming at the site allows individuals and groups to participate in learning about the food cycle. In 2007, over 1500 volunteers supported the project. Approximately half of these volunteers were individuals. The other half participated as members of corporate initiatives.

In addition to support from the City of Richmond for land, the Society receives financial support from major funders such as the United Way, New Horizons, Human Resources Development

Canada and Direct Access gaming funding. As it moves away from infrastructure development, the Society plans to focus on expanding its programming initiatives and developing new volunteers and board members over the coming years.

*Proposed Agreements:*

In recognition of the Society's contributions to community building and the support of low income individuals and families in Richmond and in order to provide the Society with some longer term assurances for land use in Richmond, staff recommends that five-year license agreements be drafted for each site to reflect the Society's use of the lands at the South Dyke and at Terra Nova Rural Park.

These proposed licences are recommended to also include the following material terms as well as any others deemed necessary by the City:

1. Agreement commencement date of January 1<sup>st</sup> 2008.
2. \$10 annual payment for each site on a fully prepaid basis.
3. License area of 1.5 acres as defined in attachment 2 for the Terra Nova site and of 1.4 acres as defined in attachment 3 for the South Dyke site.
4. Recognition that the execution of the licenses may cause the sites to become taxable from a property tax perspective and that the Society shall be required to pay its share of the property taxes on each site should property taxes become payable.
5. Limits will be placed on signage on the sites and will only be permitted with the City's prior written consent.
6. Termination of the licenses may occur with 30 days written notice by either party.

**Financial Impact**

There will be a one time revenue of \$100 (\$10 per annum for five years from each site fully paid up front) to General Revenues. There are no other financial impacts of executing the licenses.

**Conclusion**

Staff recommend the City enter into 5 year license agreements with the Richmond Fruit Tree Sharing Farm Project for the purposes of a Community Teaching Orchard at the South Dyke and a Farm Centre at Terra Rural Park. This is an opportunity to continue to support an organization which provides significant community benefit and to allow that organization to be secure in its land use requirements.



Serena Lusk  
Parks Programs Manager  
(604-233-3344)

SL:sl



PROPOSAL

to establish a

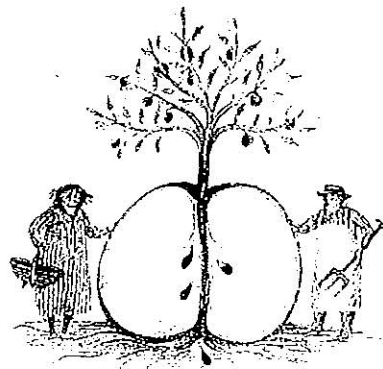
# Community Orchard

SOUTH DYKE LANDS  
Foot of Gilbert Road

January 2008

## Proposal Contents

1. Background
2. Location Rationale
3. Goals
4. Scope – Orchard Development Plan
5. Budget: Revenues and Expenditures
6. Production Schedule – 2008
7. Community Partners
8. Governance
9. Community Benefits



## Attachments

- A. Site Plan and Planting Scheme
- B. Letter from VanWell Nursery

## Acknowledgments

This draft proposal was written with the generous help from Kent Mullinix; Brenda Crockett, Arzeena Hamir, and in consultation with Dave Semple, Yvonne Stitch and Mike Redpath – City of Richmond.

## 1. Background

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The Richmond Fruit Tree Project (RFTSP) has been picking surplus fruit from gardens to give to the Richmond Food Bank since the summer of 2001. A year later, they began to grow vegetables on land donated by London Farm. They now occupy 2.5 acres of city land, and the project has harvested over 110,000 pounds of fruit and vegetables, with the help of hundreds of volunteers, for those in need.

In seven years, the following has been accomplished:

- . City of Richmond approved a concept for the Terra Nova Rural Park that provided the RFTSP with an opportunity to create an agricultural presence and establish a permanent home on those lands. (September 2004)
- . Vegetables crops were also grown on the one acre City owned site at the south end of Gilbert Road between 2004 and 2007.
- . At a RFTSP strategic planning workshop in the fall of 2005, an opportunity was identified that addressed two issues:
  - . The number of Richmond gardens with fruit trees were decreasing because of development pressures
  - . There was some concern expressed that growing row crops on two sites was challenging

It was at this workshop where the idea was introduced to consider starting a *community-based fruit tree orchard* on the South Dyke lands and to only grow vegetable crops at the Terra Nova Sharing Farm.

Meanwhile, there were other priorities to focus on because it took two years to complete most of the phased infrastructure work required to establish a permanent farm in the Terra Nova Rural Park.

In the winter of 2007, a group of UBC students researched the feasibility of establishing an orchard at South Dyke. (UBC - CLI)

A few months later, Kent Mullinix from Kwantlen University College, School of Horticulture and its research/outreach arm, the Institute for Sustainable Horticulture approached the RFTSP and expressed an interest in helping to establish an orchard in Richmond with an educational/community focus.

## **2. Rationale to Establish a Fruit Tree Orchard at the South Dyke Location**

The major advantages to continue to occupy the City of Richmond South Dyke acreage are:

- . Considerable soil amendments have been undertaken
- . Excellent drainage
- . Irrigation system installed 4 years ago
- . Beneficial climate zone - warmer than Terra Nova
- . Adjacent city tree nursery and community garden allotments will encourage opportunities to share resources

## **3. Goals**

To develop "Block One" as a pilot project teaching orchard with potential in the future to possibly expand the orchard, with other kinds of fruit trees, in the field to the east.

To promote the community benefits of a teaching/educational orchard that will produce healthy fruit for those in need. (RFTSP mandate.)

To involve volunteers, trainees/apprentices and people of all ages, from diverse backgrounds - similar to the proven successes of the Sharing Farm's past achievements (2002 - 2007).

To actively engage community partners in the orchard operation.

#### 4. Scope - Researched and written by Kent Mullinix

##### Richmond Sharing Tree Project: Orchard Development Plan for Block One

Block One is the western most field. It is approximately .8 acre and will be planted to apple (6 cultivars). The following identifies cultivars, rootstock and estimated harvest time for trees to be planted in that block. Harvest will be spread from mid- August to late October. Upon maturity the block yield will be an estimated 20 bins or 17,000 lbs of fruit. Later harvested cultivars are best suited for storage (potentially up to 3 months).

Cultivar	Rootstock	Harvest
Crimson Gala	M7A	Mid to late August
Wealthy	M7A	Late August
Liberty	M7A	Early September
Jonafree	M7A	Early- mid September
Spartan	M7A	Mid- late September
Granny Smith	M7A	Late October

**Rootstock:** M7A is a dwarfing (75% of standard) rootstock producing trees approximately 15-20 ft in height. Trees on M7A are free standing and somewhat precocious. Bearing (very modest) should begin in the 4th leaf with full production achieved by the 8<sup>th</sup> or 9<sup>th</sup> leaf. Planting will be 14 ft X 16 ft for a density of 179 trees/acre. Total trees planted in this field will be about 120.

**Production:** All orchard production practices will reflect and advance the concepts, objectives and practices of sustainable, community based agriculture. Crops will be certified Organic.

**Training system:** Trees will be trained to a Pacific Northwest central leader system. They will be approximately 16 ft. tall with three whorls of four permanent scaffolds, emanating from a central axis. The first whorl starts about 4 ft. from the ground. The second whorl begins 4 ft. above the first and the third whorl 4 ft. above the second. Scaffold branches are trained to various angles (generally about 65° to 45°) depending upon cultivar vigor and growth habit. Tree canopies are trained to a conical shape.

**Planting Plan:** Rows should be oriented North-South and of varying length per field dimensions. Exact row position, length and trees per row will need to be determined in the field. There will be approximately 13 rows the longest of which (in the middle of the field) about 180 ft, the shortest (on the east and west ends) accommodating only two or four trees. Some land must be dedicated to accommodating machinery operation.

**Pre-plant site preparation:** The site will be disked, soil pH adjusted (if necessary), row and tree placement staked, irrigation riser (head of each row) installed, pre-augering/digging of planting holes.



**Drive row cover crop:** The cover crop should be established the same year as and soon after planting. The cover mix should include flowering plants such as yarrow, birdsfoot trefoil, sweet clover and other adapted, persistent plants that will flower during the growing season to attract and provide food for adult parasitoids and provide refugia for generalist predatory species.

**Weed management:** An in row, under tree, weed free strip approximately 5 ft wide will be maintained by applying a mulch of chipped tree waste 5 inches deep. This must be done immediately after planting to control weeds and conserve moisture. Young fruit trees are severely negatively affected by competition from weed species. Long term orchard yield potential will be severely compromised if weed management is not effective in the establishment years.

**Irrigation:** Microjet (Rondo) or some similar water conserving emitter is recommended. Each row will have a valved, 3/4inch PVC riser from the 2" main running along the southern boundary. Black poly lateral lines (3/4 inch) will run the length of each row with emitters every 12 ft in the row staggered between rows. Required water pressure is 35 psi. The system must be installed very soon after planting to assure adequate water availability to establishing trees.

## 5. Budget

### Summary - Revenue Sources - 2008

City of Richmond: Donated land, water, equipment	\$ 1500
VanWell Nursery 120 Apple Trees (Attached letter)	\$ 840
Project Manager's in-kind expertise and supervision	\$ 1500
Richmond Fruit Tree Project - Seed Money	\$ 1000
VANCITY Community Project Grant - Pending	\$ 7500

## Proposed Project Expenditures - Prepared by Kent Mullinix

Establishment/ year one management budget - 2008

Item/operation	Estimated cost-donated/in-kind	Estimated cost-Cash out of pocket	Notes
Trees	\$840		120 @ \$7.00 ea.
Site preparation	\$500	\$1000	Discing, lime, staking, augering holes, soil testing
Irrigation system		\$2000	Materials
Irrigation system	\$500		Installation- labor
Fertilizer		\$150	Materials and labor
Equipment shed		\$1000	Secure
Fuel/ oil		\$500	
Machinery rental	\$500		Tractor, auger, mower, front-loader, trailer
Truck rental		\$300	Pick up trees, misc
Tools/ supplies		\$800	Shovels, rakes, loppers, hand shears, picking bags, limb spreaders etc.
Hardware, wire, misc.		\$560	
Planting	\$500		Labor
Volunteer Coordinator		\$1000	
Training/pruning	\$500		Labor
Cover crop seed		\$100	Materials
Cover crop sowing	\$100		Labor
Mulch	\$400		Materials and labor
Mouse/ rabbit guards	\$100	\$100	Materials and labor
Pest management	\$250	\$250	Labor and materials
Management	\$500		Horticulture/ IPM advising
Land and water, other	\$1500		City of Richmond
Organic certification		\$100	Certified Organic Associations of BC
<b>TOTAL</b>	<b>\$6190</b>	<b>\$7860</b>	

**Total In-kind + Expenditures \$ 14,050**

## 6. Production Schedule 2008

The following table delineates major orchard establishment and management tasks for year one with approximate times of completion. Exact timing will depend on seasonal development and overall progress as one task leads to others. The majority of intensive, time sensitive work is required to establish the orchard and occurs in the spring. It will be imperative to have labor volunteers, services contributors and materials lined up well in advance. Fruit trees are poor foragers of water and nutrients and as such do not compete well with other plant species. Therefore timely completion of mulching for weed control around young trees and installation of the irrigation system are absolutely critical for bringing the planting into bearing and achieving anticipated production potential. Prolonged and severe water stress and competition (for water and nutrients) from weeds can and likely will permanently stunt and render a tree relatively unproductive for its entire life. Other tasks will occur throughout the growing season as required.

Task	Timing	Notes
Install tool/ supply shed	March	
Site preparation	March - April	Tilling; marking rows and trees
Soil testing	April	Nutrients, pH, OM
Irrigation riser installation	April	
Tree planting	April May	As early as possible
Irrigation installation	May	After planting
Cover crop sowing	May	
Initial tree training	May- June	Initial heading followed by scaffold and leader selection
Fertilizer application	June	Compost
Rodent guard installation	June	Wire guards
Mulch application	May- June	Chipped municipal tree waste
Mowing	July- Oct	3-4 times
Limb positioning	June- July	Insertion of toothpicks and then spreaders
General orchard horticultural management/ pest monitoring and management	June- Dec.	Irrigation, fertility, beneficial and pest sampling

## 7. Proposed Community Partners

The City of Richmond  
Kwantlen University College  
Richmond Food Security Task Force/Poverty Response Committee  
Richmond School District  
Richmond Food Bank  
Richmond Seniors Groups

## 8. Proposed Governance

The lands are owned by the City of Richmond. Through a License to Occupy agreement, the Richmond Fruit Tree Sharing Project would assume a stewardship role that emphasizes collaborations and partnerships with other educational institutions, and organizations interested in the benefits of local food systems.

## 9. Community Benefits

The benefits are numerous and for the purposes of this proposal, research and feasibility aspects have included looking into similar projects such as Vancouver Parks Board, LifeCycles in Victoria, teaching orchards in Washington State, and community orchards in England.

Briefly, some of the benefits for a proposed orchard include:

- . Excellent example of a sustainable investment
- . Connections to a local food system
- . Teaching orchard for people of all ages and backgrounds
- . In approx. 4 years, apple harvests would yield an estimated 17,000 pounds = 1700 people would benefit @ 10 pounds ea.
- . The orchard, as part of the City of Richmond's park system, could be used as a festival, special event site

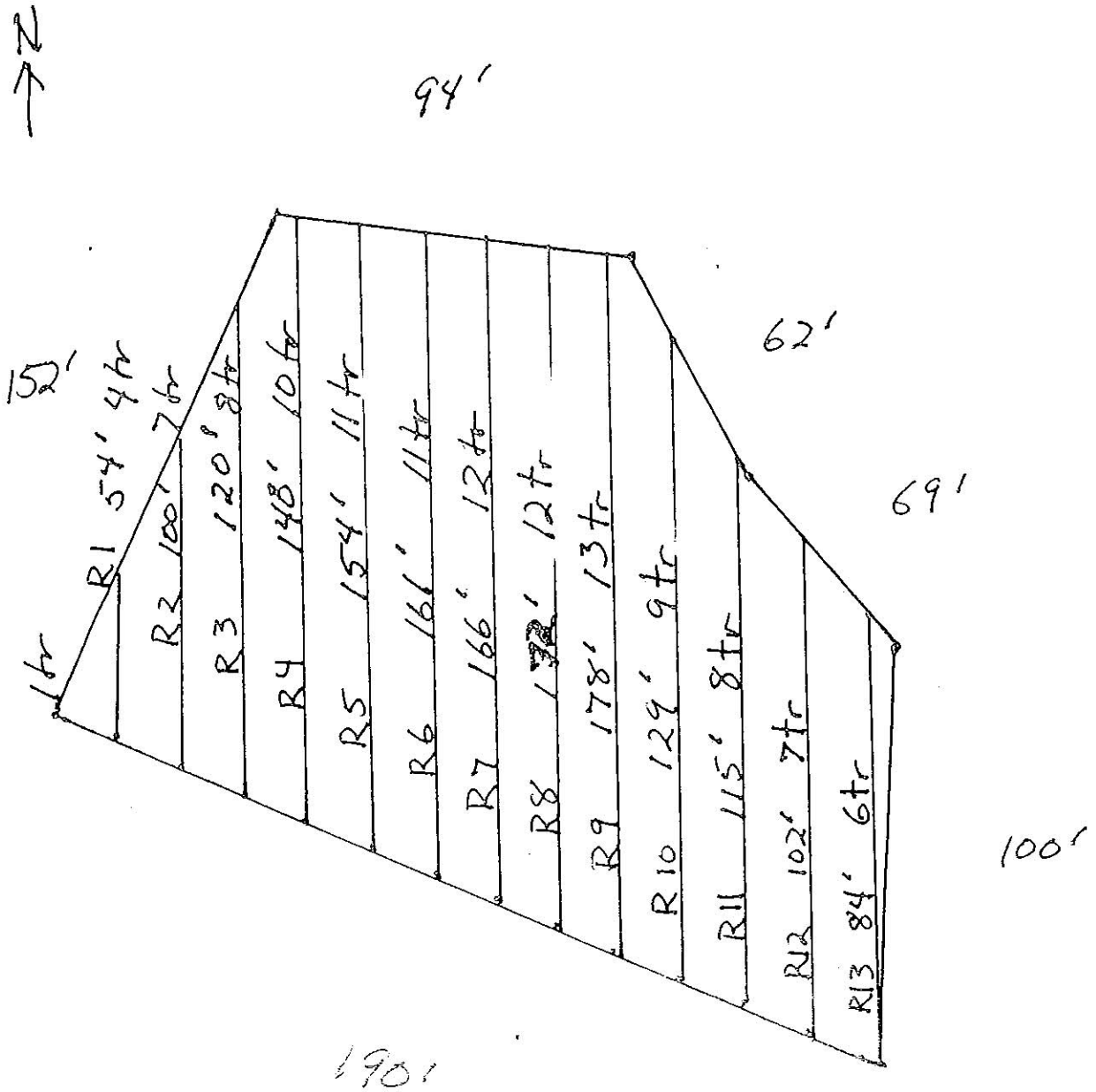
- . The proposal recognizes a revived interest in growing fruit - a community orchard will encourage more people to think of fruit trees when they purchase trees for their gardens
- . Orchard location has the potential to draw visitors into the site as the South Dyke area is a major recreational corridor
- . The orchard will encourage much wildlife, especially birds since semi-dwarf trees will be planted and grown organically

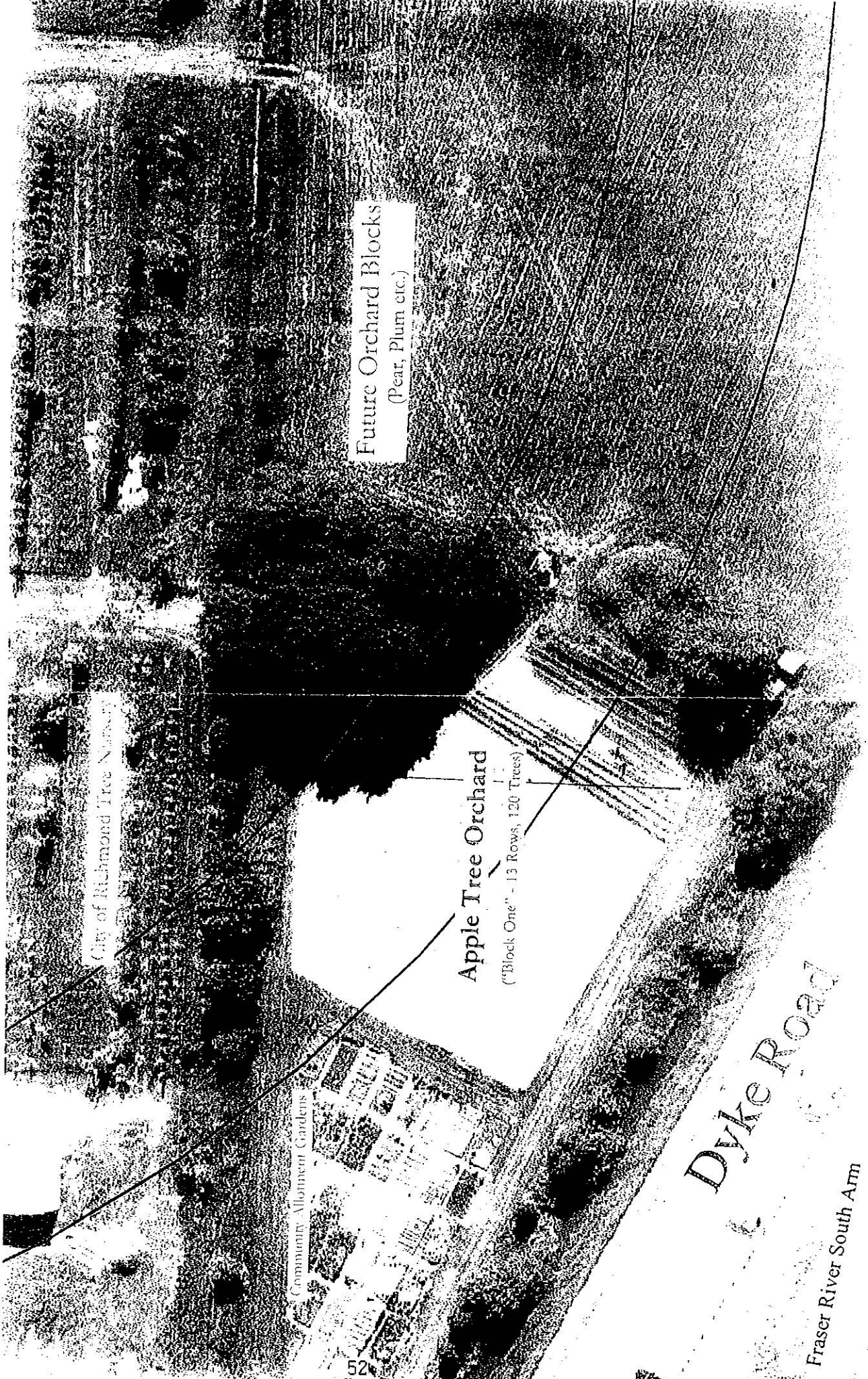
#### ATTACHMENTS:

- A. Site plan and Planting Scheme
- B. Letter from VanWell Nursery

# Apple Tree Orchard Planting Scheme - South Dyke

Drawn by Kent Mullinix, Jan. 08





City of Richmond Tree Nursery

Future Orchard Blocks  
(Pear, Plum etc.)

Apple Tree Orchard  
("Block One" - 13 Rows, 120 Trees)

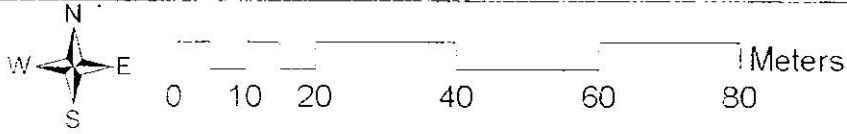
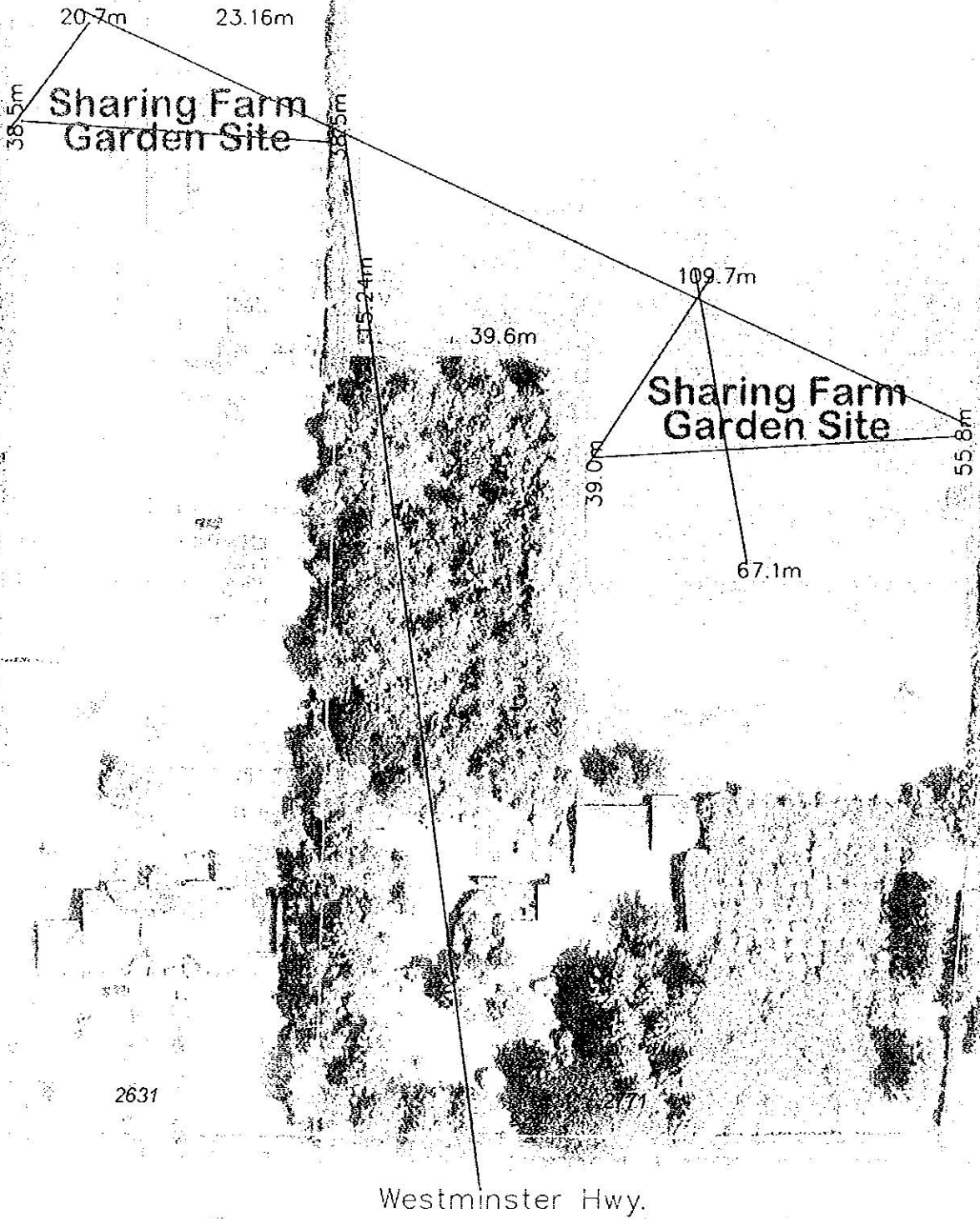
Community Allotment Gardens

Dyke Road

Fraser River South Arm



ERANG/TERRA NOVA/SHARING FARM







**Sharing Farm  
Garden Site**

0 5 10 20 30 40 Meters

13871 No. 3 Road  
Schedule 1 : Garden Site

