

# RESIDENT GARDENING IN SOCIAL HOUSING ENVIRONMENTS

## Identifying The Need

"This project was carried out with the assistance of a grant from Canada Mortgage and Housing Corporation under the terms of the External Research Program. The views expressed are those of the author and do not represent the official views of the Corporation."

Report prepared for:

CANADA MORTGAGE AND HOUSING CORPORATION

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March, 1983

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## ACKNOWLEDGEMENTS

The authors of the study are indebted to Garry Hiscox of the British Columbia Regional Office of Canada Mortgage and Housing Corporation for providing direction and support for the study. Thanks are also due to Sharon Richman and staff of the Greater Vancouver Housing Corporation and Ian Leman, Jim Mactier and staff of the British Columbia Housing Management Commission who made material and their time available to the study team. Finally, a special thanks to all the residents who have taken part in the study. Without their helpful co-operation this study would not have been possible.

# DEFINITIONS

## 1. Definition of RESIDENT GARDENING:

Active participation in the home landscape by residents through:

- a. Maintaining the landscape in and around the home, whether on private or common land, and reaping its products such as flowers, fruit, and herbs, from trees, shrubs, and perennials.
- b. Planting and caring for annual flower, fruit and vegetable gardens either immediately adjacent the home or on common land (i.e. garden plots and co-operative garden areas).

## 2. Definition of SOCIAL HOUSING:

- a. For the purpose of this study, social housing developments include only subsidized rental housing which is managed by the British Columbia Housing Management Commission, or the Greater Vancouver Housing Corporation.
- b. The developments studied were constructed between 1968 and 1981 and include high rise, 3-storey walk-up, and row housing building types.

## 3. Definition of LANDSCAPED AREA:

- a. Outdoor site area which is landscaped to meet government funding and management agency approval.
- b. Includes all planted outdoor areas whether private or communal (i.e. lawn areas, shrub beds, treed areas, planter boxes, roof gardens).

# INTRODUCTION

## BACKGROUND

This research was initiated by our firm to investigate a notion developed during the course of professional work that a need exists for opportunities for resident gardening at social housing developments. We are frequently involved in the landscape design of social housing environments and are faced with making decisions about what kinds of landscapes to provide and whether or not to provide places and facilities which allow future residents to garden. We felt a need to answer questions including: Are residents, in fact, interested in doing gardening? What kinds of gardening are they interested in? At what scale? What are the problems if any which occur regarding overall landscape maintenance when residents do gardening around their units? What are the policies and attitudes of management agencies towards resident gardening? Do these attitudes and policies affect the existence and/or scale of resident gardening?

General studies were carried out in the 1970's in the United States (primarily) and in Europe which established the value of re-introducing vegetation and especially, vegetable gardening into the urban environment.

"Inner city gardening projects have benefitted local neighbourhoods and residents and have resulted in the reduction of vandalism, cleaner streets, painted houses, conversion of debris-laden lots into gardens and playgrounds, and improvement of social interaction."

The Urban Ecosystem: A Holistic Approach  
Stearns, F. and T. Montag 1974.

"The sense of community that results from tenant participation in a garden can spread from unit to unit as each year more residents become involved. When residents start gardening they begin to realize that with a little effort they can make a change in their living environment, that they are an important and productive part of a community. This positive attitude change results in a reduction of vandalism and better general maintenance to what was once considered a rental unit and what is now considered their home."

Discussion Paper for the Regional Managers  
Jim Mactier. 1982 unpublished.

The therapeutic value of gardening for the elderly and disabled has also been documented. Most of this information concerns the institutional settings of hospitals and care facilities and ongoing horticulture therapy programs. Our research is based on the assumption that successes of gardening programs demonstrated in institutional settings can be of continuing benefit to disabled and elderly in the home environment. As stated by an occupational therapist ...

"It (gardening) offers a new interest to patients with no previous experience. We believe that planning, planting, and cultivating a garden is a creative art. A gardener, like a musician, a painter or a craftsman, finds satisfaction in producing something with the hands. We feel that this gardening is beneficial therapy, and, in addition, can provide a useful and enjoyable interest for the patient in leaving the hospital."

Horticultural Therapy: The Role Gardening Plays in Healing  
Mary E. Sullivan. American Health Care Association.

Economic advantages of resident involvement in the public housing landscape are beginning to be studied. Jim Mactier, People Plants and Homes program, BCHMC has begun to quantify economic advantages to overall operational budgets of increasing the land available to residents for gardening use and thereby reducing annual maintenance expenditures. This work appears to be preliminary in nature, but Mactier's initial findings warrant the further study.

As professionals, we feel there is need for more information structured for use by planners and designers which specifically addresses the issue of resident gardening in public housing environments. However, to our knowledge, no research has been done which addresses individual and group gardening in social housing environment.

The following study was intended to further the research on gardening in the urban environment examining the implications for social housing in Canada. It was designed to be an initial step, and as such, it was to be very general and brief. It tests the validity of the questions being asked, the research methods being used, and the sampling procedures. Rather than providing conclusive statistical data, the role of this research is to determine what further research is necessary.

#### THE OBJECTIVES OF THE RESEARCH

1. IDENTIFY IF A NEED EXISTS FOR INCREASED OPPORTUNITIES FOR RESIDENT GARDENING IN SOCIAL HOUSING ENVIRONMENTS.

For the purposes of this study, a need for opportunities for resident gardening exists: where a significant proportion of residents state (through questionnaires and/or meetings) that they are gardening now, or that they would like to be gardening, or that they are gardening and would like to be doing more; and where evidence is found at existing housing developments that a significant proportion of residents are gardening.

2. IDENTIFY PHYSICAL ASPECTS OF THE LANDSCAPED AREAS OF SOCIAL HOUSING ENVIRONMENTS WHICH MAY ENCOURAGE OR LIMIT RESIDENT GARDENING.

Physical conditions which encourage resident gardening include: sunlight, fertile well-drained soil, availability of water, protection from traffic and vandalism, access. Physical conditions which limit resident gardening include: lack of sunlight, poor fertility, poor drainage in soil, lack of water, poor physical and visual access by the gardener, exposure to public traffic and vandalism, damage by other means. The extent to which resident gardens do or do not exist in light of the physical conditions of the project were documented and existing underutilized opportunities were noted.

3. IDENTIFY THE ATTITUDES OF PROJECT MANAGERS AND LANDSCAPE MAINTENANCE PEOPLE TOWARDS RESIDENT GARDENING.

There are actually two sub-objectives here. One is to raise all issues related to the management and maintenance of the landscape which would influence the existence of resident gardening. The other is to determine if significant differences exist in interest or in levels of resident gardening between BCHMC projects (where a formal resident gardening program exists) and GVHC projects (where there is no encouragement from management to garden).

## SCOPE OF THE RESEARCH

Projects were chosen from two housing management corporations, funded through the National Housing Act. The British Columbia Housing Management Commission (BCHMC) and Greater Vancouver Housing Corporation (GVHC) handle a large proportion of all subsidized rental housing in the lower mainland area. Projects were chosen from these two agencies for the following reasons:

- a. Both agencies have a "balanced community" mandate which directs the selection of residents. Ideally, there was to be a variety of mixes of families, singles, various income levels, elderly and disabled, within each project. Our intention was to study a diverse resident group. However, certain building types and unit sizes fit certain groups of users. For example, highrise buildings which are built as seniors housing will remain so.
- b. Comparisons between projects which were to reveal meaningful insights into resident gardening needs or issues would be more readily made when projects were in some way similar. What all projects studied have in common is that all the residents were renting, and the projects were funded originally and are now subsidized under the National Housing Act. (Note: What is significantly different about some projects, especially between BCHMC and GVHC projects is that they are funded under different sections of the NHA. The section under which they are funded influences both the original design and current budgets.)

Fourteen BCHMC projects and six GVHC projects were visited in order to select six projects for detailed site studies. The number (six) of projects chosen was limited because of funding and scheduling constraints. The choice of specific projects was based upon the extent to which the projects, as a set of six, illustrated the following range of conditions:

- a. Three building types: clustered townhousing, three-storey walk-up apartments, and highrise buildings.
- b. Two locational situations: inner city high density (West End, Vancouver), and suburban low density (Richmond, Surrey, Delta).
- c. Projects in which resident gardening is actively ongoing as well as projects where no resident gardening occurs.
- d. Projects in which the idea of resident involvement in gardening has been promoted by the management agency (BCHMC) as well as those in which it has not (GVHC).
- e. Population breakdown: family housing and seniors housing projects were to be included.
- f. Project age: a range of ages was looked at, because age influences the original building and landscape design.

At each of the housing projects, residents were surveyed by means of a written questionnaire and at two sites, meetings were held with resident groups. Residents were asked if they garden or would like to garden and what kinds of gardening they like to do. At all six projects a brief site analysis was conducted and the projects were photographed and mapped. The condition of the landscape, opportunities for gardening and the existence of resident gardening, were recorded. One meeting was held with the management of BCHMC and with GVHC to determine what, from their point of view, were the issues regarding resident gardening. Finally, a meeting was held on site with a landscape maintenance gardener who discussed his experiences with resident gardening on projects he maintains.

# SUMMARY OF FINDINGS

The following is a brief summary of findings. The findings are organized in terms of the objectives of the research which were explained in the introduction. Results of the resident gardening surveys, resident interviews, management interviews, and site surveys are combined.

## RESEARCH OBJECTIVE ONE:

### IDENTIFY IF A NEED FOR INCREASED OPPORTUNITIES FOR RESIDENT GARDENING EXISTS.

A significant proportion, approximately 71 percent of residents responding to the Resident Gardening Survey questionnaire indicated that they were currently gardening at their housing developments. 18 percent of residents responding to the questionnaire who do not garden at the present time stated that they would be interested in gardening if gardens were provided at the housing development. Of the residents responding to the questionnaire who are gardening at the present time, 24 percent indicated that they would be interested in doing more gardening if additional gardens were provided at the housing development. However, given the limited response to the questionnaire (only 7% of residents receiving the questionnaire returned it), it is not possible to conclude whether a significant proportion of the total number of residents are interested in gardening.

Residents responding to the Resident Gardening Survey questionnaire suggested a need for additional special facilities to make gardening easier or more accessible to themselves or members of their family. 10 percent of respondents asked for raised beds, 6 percent for gardening tools, and 2 percent asked for water taps (near gardens), soil, paved paths and an electric lawn mower. Of the total number of respondents, 10% listed physical disabilities, however, only 4% suggested special facilities which would assist them with gardening. Other suggestions for special facilities came from people with no disabilities listed.

A significant number of resident gardens were found during site visits. These gardens varied in type and size. However, the majority of resident gardens were very small. Typical gardens consisted of narrow flower beds adjacent walks, one or two special shrubs, bulbs added to a shrubbed area; or on balconies, hanging baskets and planters for vegetables, flowers or small trees.

Management, when asked if they were aware of a need for increased opportunities for resident gardening, gave mixed responses:

GVHC has never been approached by a group of residents requesting opportunities to garden. GVHC does not have any resident contacts who liaise between residents and management, and does not have a program actively promoting resident gardening.

In the past, GVHC provided gardening beds for resident use within private yard areas at all its developments. Apparently, 98% of the residents did not use these gardening areas. Resident neglect of these areas resulted in maintenance problems for GVHC.



GVHC's current assumption with respect to landscape maintenance, is that they need to maintain all outdoor areas with the exception of areas actively gardened by residents.

BCHMC has received requests from residents for permission to use increased areas of housing developments for resident flower and vegetable gardens. In one instance, at Nicholson Towers, residents received permission to replace low maintenance evergreen plantings at the entry drive to the building with flower beds.

BCHMC management has had a very positive response to their People Plants and Homes Program which supports and encourages resident gardening. Through this program residents receive for plants, soil amendments and gardening advice. Orders for gardening materials have been placed annually by residents of BCHMC projects for the last three years.

## RESEARCH OBJECTIVE TWO:

IDENTIFY PHYSICAL ASPECTS OF THE LANDSCAPED AREA OF HOUSING DEVELOPMENTS WHICH MAY ENCOURAGE OR LIMIT RESIDENT GARDENING.

### A. FACTORS WHICH LIMIT GARDENING:

#### Lack of adequate sunlight:

In some developments tree plantings now reaching maturity have shaded large portions of the site available for resident gardening.

#### Lack of soil:

Several of the housing developments visited by the authors lacked sufficient topsoil for resident gardening. A resident group at Rupert Lane (BCHMC) cited a lack of topsoil as a yearly source of frustration for resident gardeners. Kingston Gardens (BCHMC) had insufficient topsoil for gardening.

#### Poor drainage:

High water tables or inadequate provisions for site drainage preempt potential resident gardening activities in large areas of Guildford Glen and Greenbrook (GVHC) housing developments.

#### Lack of suitable gardening space:

Residents in some BCHMC projects are planting in shrub beds in the common areas of their developments because there is a lack of individual private gardening space. The problem is particularly acute at Comox and Sunset Towers.

#### Landscape areas suited to resident gardening were occupied by unused facilities:

In some developments, site areas with optimum conditions for resident gardening, are occupied with unused facilities. For example, Nicholson Tower (BCHMC seniors residence), 44% of the site area is occupied by a pleasure garden. A significant portion of this garden is paved over as shuffleboard courts. Referring to our interview with Mr. Leman, General Manager, BCHMC, the shuffleboard courts are never used. He feels they are provided by

designers with stereotyped notions about seniors and that they are rarely, if ever used. This sunny area at Nicholson, easily accessible and well drained would be suited for garden plots and raised planters for resident gardeners.

Lack of protection for garden areas from pedestrian traffic and from children's activities:

The authors have seen evidence at all housing developments of resident gardeners making barriers or fences to enclose and protect their gardens. Specific requests were received at resident meetings for fencing material. A great deal of conflict between residents and maintenance people has resulted from maintenance people weeding out or cutting over resident gardens. Management has had to compensate residents for lost plants. Maintenance is frustrated because areas gardened by residents were not always clearly marked. Authors have suggested management have a supply of stock fencing materials for residents to install as required which would result in a unified landscape appearance and meet the changing needs of gardeners as they arise.

Vandalism:

Local children have vandalized seniors gardens. At Rosewood (BCHMC) children have pulled plants and trampled gardens. Neatly installed perimeter fencing has helped as does the Neighbourhood Watch program now in effect in the area.

Lack of adequate watering facilities:

Two hoses used for car washing and other grounds watering were shared by 26 gardeners at Rosewood. The two hose bibs were located approximately 20 and 30 meters away from the nearest garden and have to cross a parking lot to reach the gardens. At Rupert Lane, there were two hose bibs for each 2-storey walk-up apartment block. Most gardeners have to draw water from inside taps.

Lack of a means of disposing of wastes which cannot be buried:

Adequate areas for composting would be an ideal provision which is entirely lacking in all housing developments.

Lack of tool storage facilities:

This problem is especially acute in high rise projects where gardeners have to carry tools back and forth to their suites.

## **B. FACTORS WHICH ENCOURAGE RESIDENT GARDENING:**

The most significant finding was that the enclosure of private yard spaces encourages resident gardening.

While we have no conclusive evidence, we believe that the provision of very small garden plots within fenced enclosures with adequate watering facilities, topsoil, and drainage are conditions which would encourage resident gardening.

With regard to balcony gardening, we observed a significant number of very lush, well cared for balcony gardens at BCHMC projects. This may be due to the provision of plants through the People Plants and Homes program, however, without further study, this cannot be conclusively stated.

### RESEARCH OBJECTIVE THREE:

#### A. ISSUES RELATED TO MANAGEMENT AND MAINTENANCE OF THE LANDSCAPE WHICH AFFECT RESIDENT GARDENING:

How can management expectations with respect to landscape appearance be compatible with resident gardening activities?

Overall order and unity of landscape appearance is important to GVHC in providing market housing. Resident gardens can be as individual as the gardeners themselves. Not only do you have contrasts between different resident gardens but also between residences where there is a garden and ones where there is not. How does one co-ordinate and unify the landscape into a coherent whole?

Is there an increased need for resident gardens because of the reduction of maintenance budgets?

Reduced budgets mean more sterile landscapes. Lawns replace shrubs. Low maintenance evergreens replace rich selections of deciduous shrubs. Pavement sometimes replaces all three. Open soil areas available for resident gardening disappear. While residents might wish to have a more seasonally attractive landscape, the landscapes provided are only those which management can afford to look after.

How can management manage resident gardening?

Some residents want to garden, some don't. Abandoned resident gardens become maintenance expenses.

When residents get involved in decisions with respect to the landscape development at their home projects it costs management time and money. Decisions as to whether a tree should or should not be pruned or removed can be debated at length by resident groups. Getting approvals to do removal is the responsibility of the landscape maintenance gardeners. They do not have the time to budget for lengthy debate.

Resident gardening activities are primarily small scale efforts. Resident gardeners are primarily interested in going their own way. Co-ordinating resident gardening with the work of landscape maintenance gardeners is very difficult.

Can resident gardening activities be co-ordinated with the overall landscape maintenance work?

When landscape maintenance is handled on a contract basis, grey areas, like resident participation in maintenance through gardening are difficult to include. If maintenance contracts are awarded annually the chances are that it will be difficult to establish relationships between long term residents and short term maintenance crews.

Some maintenance people are very well-qualified gardeners. They see the resident gardeners as amateurs making an intrusion upon their domain.

If residents were to take over more of the ground maintenance tasks, unions would protest the lack of jobs.

B. WHAT DIFFERENCES EXIST IN RESIDENT GARDENING BETWEEN PROJECTS WHICH HAVE ACTIVE PROGRAMS PROMOTING RESIDENT GARDENING AND THOSE WHICH DON'T?

BCHMC has the People Plants and Homes program. The existence of this program greatly assisted us in doing our study. The program co-ordinator Mr. Jim Mactier was able to introduce us to resident contacts at each housing development and enabled us to meet BCHMC resident gardeners and hold resident meetings.

GVHC does not have a program to promote resident gardening. Resident contacts are made only for payment of rents or if residents are not fulfilling the terms of their rental agreements.

We found that an average of 62% of the housing units in BCHMC developments we surveyed had gardens. An average of 41% of the housing units in GVHC developments we surveyed had gardens. The relative significance of these figures is difficult to assess. The BCHMC projects are all much older and more established than the GVHC projects. The numbers of projects included in our survey does not constitute a statistically valid sampling. However, what is important to note is that resident gardening does not appear to be dependent upon an active promotion program for its existence.

Other, perhaps more significant differences were mentioned by Mr. Ian Leman, General Manager, BCHMC. He felt that there were many positive benefits returned to the management because of their investment in a resident gardening program. Mr. Leman felt that the People Plants and Homes program improves relationships between residents and management.

(Gardening) "is a topic which can easily be discussed, it gets the tenant and landlord together more often, it improves communication." \*

He saw other positive benefits as well. They include a belief that resident gardening fosters a long term sense of belonging and source of personal pride for the resident.

"A garden is something which allows you to identify a place as your own." \*

\* Mr. Leman, General Manager, BCHMC.

## RESIDENT AND SITE SURVEYS

The following is a chart showing the six housing developments which were studied in detail. The projects are arranged on the chart according to building type, location, and population type. The agency by which the development is managed is shown in brackets.

POPULATION TYPE/ LOCATION	SENIORS INNER CITY	FAMILIES INNER CITY	SENIORS SUBURBAN	FAMILIES SUBURBAN
BUILDING TYPE				
ROW HOUSING	(Not Applicable)	MACLEAN PARK (BCHMC)		EARLE ADAMS VILLAGE & KINGSTON GARDENS (GVHC)
WALK-UP APARTMENTS			RUPERT LANE (BCHMC)	RUPERT LANE (BCHMC)
HIGH RISE	NICHOLSON TOWER (BCHMC)	(Not Applicable)	ROSEWOOD VILLAGE (BCHMC)	(Not Applicable)

The Site Surveys conducted include the following information:

1. General data: building type, number of homes, overall site area, density (in dwelling units per hectare), date of construction, population statistics (numbers of families, singles, seniors, children, average monthly rent, average monthly income).
2. Land uses: relative percentages of different land uses within the project based on a diagrammatic site plan; percentage of built area (i.e. roads, parking, buildings) and open area (i.e. private outdoor areas, common outdoor areas, designated children's play) and any rooftop areas accessible for gardening use.
3. Condition of the landscape: amounts of landscape cover (i.e. grass, shrub beds, trees, actively managed vegetable/flower gardens, unused land) and quality or general condition of landscape cover (i.e. well-maintained, poorly maintained, overused).
4. Extent of existing gardening: areas maintained by residents; flower or vegetable gardens by residents; support facilities (tool storage, water supply, vehicular access, fencing, lighting, access for elderly or disabled); and orientation and microclimate of resident gardens.
5. An estimate of: the extent of land within the existing projects which could be used for additional resident gardening (assuming minimum site modification, i.e. changes to landscaped areas only); ambiguous open spaces (i.e. space which appears to be long to no one); planted spaces which could accommodate additional food-producing plants; note retain-wall situations which could readily be converted to raised bed gardens; excess, underutilized lawn areas (given the anticipated, observed, or described uses). Both private and common areas will be included.

All data from Item #1 is listed at the start of each project description. This data is primarily background information which is of assistance in understanding the findings of each project. Land uses and the extent of existing gardening is data which has been mapped for each project as well as summarized in the context of the discussion for each project. The condition of the landscape and opportunities for further gardening at each project site are also summarized in the project discussions.

A single page questionnaire (see Appendix 2) was distributed door to door to a total of 743 units at eight housing developments (one extra seniors building and two extra mixed developments were included in this survey). The questionnaire asked people to provide the following information:

1. Particulars: household size; family type; number of children.
2. Do they currently garden? If so, what and where, and if not, would they like to?
3. Perceived inadequacies (or opportunities) provided by the physical environment.
4. Perceived attitudes of management towards resident gardening.
5. Preferred kinds of gardening.
6. Relevant disability requirements.

This information is summarized under each project discussion and as well, in the summary of findings. The figures used in these summaries represent either exact numbers found or they are percentages based upon the total numbers of responses received. The basis of any figure quoted has been explained where it is quoted.

# Nicholson Tower

## STATISTICS\*

Location	inner city
Site area	(.98 Ac) .39 ha
No. of dwelling units	221
Density	(225 du/Ac) 566 du/ha
No. of single men	82
No. of single women	121
No. of couples	16
Average monthly income	
single seniors	\$499
senior couples	\$935
Average monthly rent	
single seniors	\$129
senior couples	\$224
Date of construction	1968

\* as of December 1, 1982

## SITE SURVEY SUMMARY

Nicholson Towers is a 20-storey highrise. It is located in a high density part of the city surrounded by other highrise apartment buildings and is adjacent to a city park. Approximately 50% of the site is occupied by roads, parking lots, and building. The remaining 50% is divided into three areas.

The largest is a very sunny grassed common outdoor area occupying approximately 44% of the site. It is surrounded on three sides by a landscaped berm planted with well-maintained 'low maintenance' evergreen ground covers, shrubs and trees. Residents have planted bulbs and perennials within the shrub beds in this area. A significant portion of this garden is paved over with unused shuffleboard courts. This sunny area could be used for additional garden plots and raised planters.

The second area is adjacent the entry drive. Residents have received permission from BCHMC to remove the low maintenance evergreen plantings in this area and replace them with seasonally flowering perennials and bulbs.

The last area is somewhat isolated from the rest of the grounds and it is here that the majority of resident gardening activities take place. The area is screened from the adjacent road by a low berm and it receives good sunlight throughout all but the early morning hours of the day. There are 8 garden plots



averaging 2 meters wide by 5 meters long. Both flowers and vegetables are grown by the residents. We were unable to determine the numbers of people who gardened in this area.





## RESIDENT GARDENING SURVEY

Total forms distributed:	223
PERCENTAGE OF FORMS RETURNED:	3.6%
Average length of tenancy of respondents:	3.5 years
Percentage of respondents now gardening:	25%
Percentage of respondents who would garden if specific garden areas were made available:	25%
TOTAL PERCENTAGE OF RESPONDENTS EXPRESSING INTEREST IN GARDENING:	50%

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding kinds of gardening were:

Flowers	25%
Vegetables	100%
Fruit	-
Ornamental Trees and Shrubs	-
General Yard Maintenance	-
Herbs (added by respondent)	25%

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding sizes and types of gardens were:

Small Beds	50%
Allotment Gardens	-
Containers and Trellises	-
Raised Planters	-

The locations of existing gardens were listed as:

Adjacent to Home	50%
Elsewhere in the Development	-
Outside the Development	50%

Special, or additional gardening facilities requested by the respondents included:

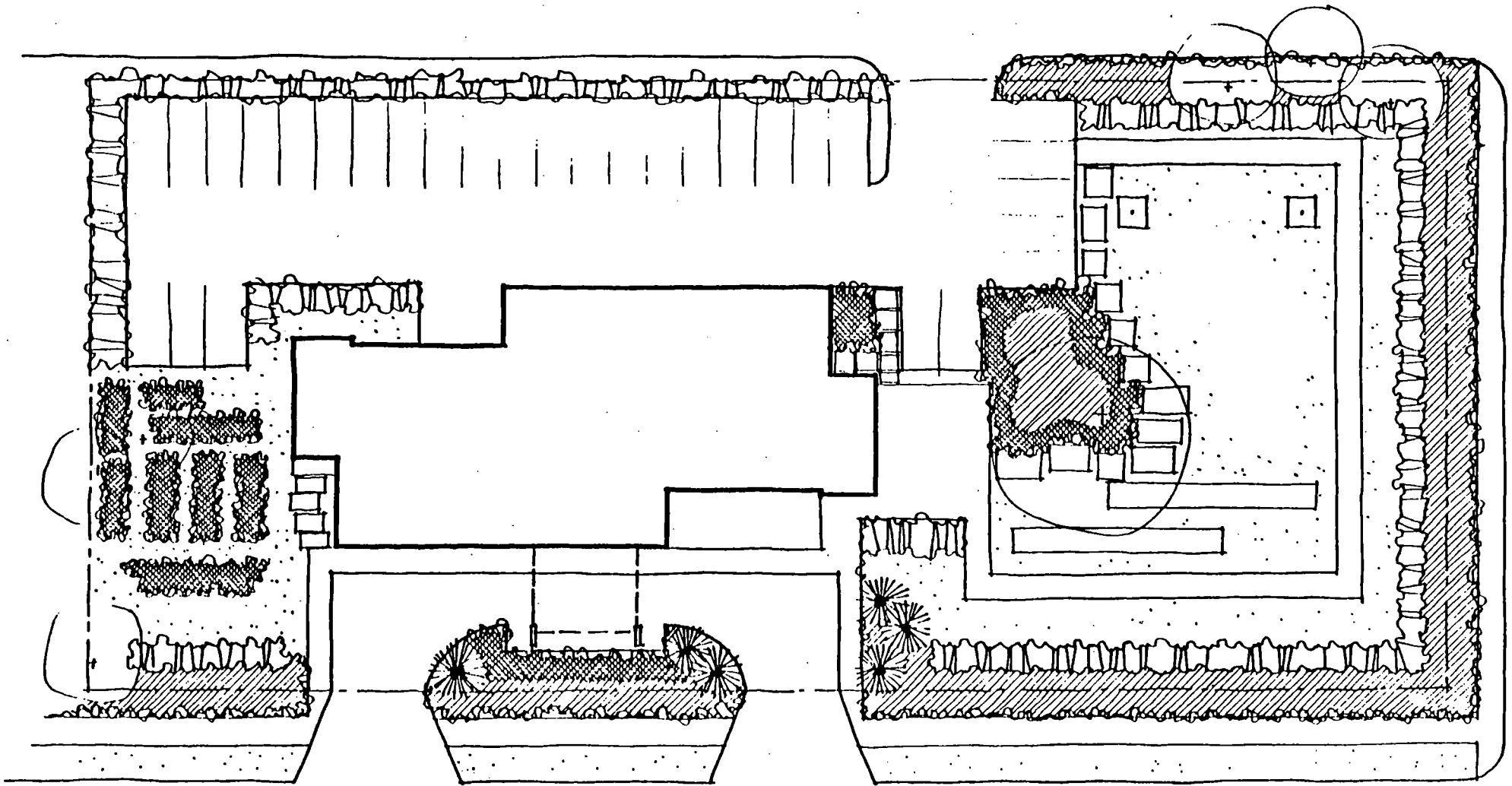
### Gardening Tools

30% of the respondents felt that there were additional places for gardening at Nicholson Tower, listing common grounds around the building. 20% felt that there were no other locations suitable for gardening.

63% of the respondents felt that the management of the building encouraged resident gardening, while 25% replied that they did not know.

-  Resident Gardens
-  Planted Areas
-  Grass
-  Container Garden

- BG Balcony Garden
- Resident Fences
- \* Hose Bibs
- Fences, Walls



10 Meters



# Rosewood Village

## STATISTICS\*

Location	suburban
Site area	(3.6 Ac) 1.47 ha
No. of dwelling units	169
No. of handicapped units	7
Density	(47 du/Ac) 119 du/ha
No. of single men	14
No. of single women	86
No. of couples	68
Average monthly income	
single seniors	\$539
senior couples	\$998
Average monthly rent	
single seniors	\$140
senior couples	\$248
Date of construction	1975

\* as of December 1, 1982

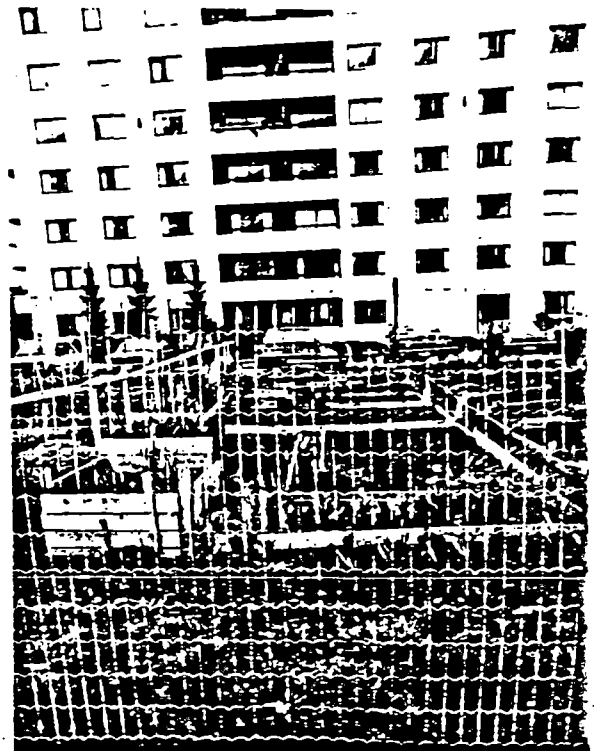
## SITE SURVEY SUMMARY

Rosewood Village is located adjacent a small shopping centre, elementary school, municipal park, intermediate centre facility, and multi-family housing project. Buildings, roads and parking lots occupy approximately 70% of the site area, the remaining 30% is devoted to low maintenance shrub bed areas and open lawns. The plantings are not particularly well-maintained. Deciduous trees have recently been severely pruned and the strips of lawn area are patchy and shrub beds are fairly compacted.

Resident gardening occurs primarily on municipal parkland east of the housing development on adjoining property. Here there are 26 allotment gardens approximately 4.5 meters by 17 meters each. Currently 24 of the 26 plots are gardened annually by the same individual or married couple. These gardens have recently been enclosed on the park side with a 1.2 meter high wire fence.

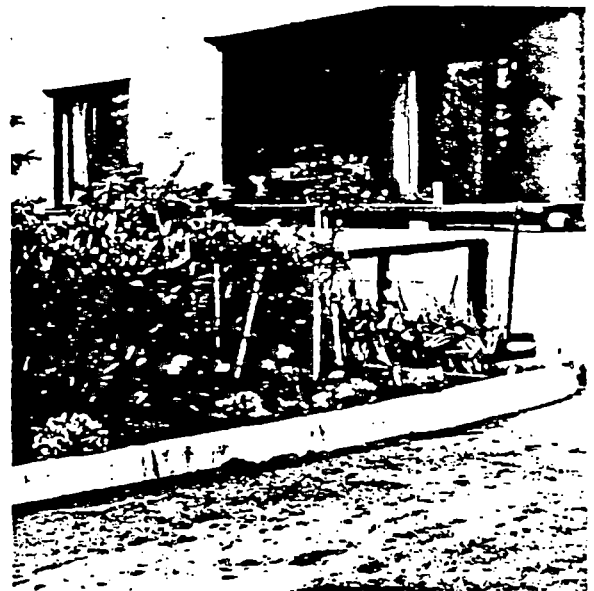
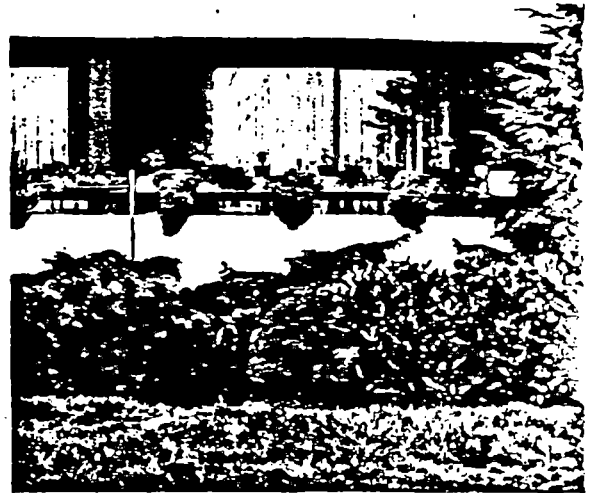
Vandalism of the gardens has been a problem due to large numbers of children living in the adjacent areas.

An informed group of people initiated the allotment gardens and continues to manage them. The gardeners themselves provide all of their own tools, stakes, etc., and most of their own seeds, plants and soil amendments.



In addition to the allotment gardens there are 30 balcony gardens. Also, a resident of each building has assumed responsibility for planting an entry garden of bulbs and flowers at the main entrances of each building. Other residents have planted bulbs along the edges of the shrub bed areas throughout the site.

If one assumes that there is no overlap between allotment gardeners and balcony gardeners a total of 54 units house people involved in resident gardening. This is approximately 32% of the total number of units.



## RESIDENT GARDENING SURVEY

Total forms distributed:	176
PERCENTAGE OF FORMS RETURNED:	9%
Average length of tenancy of respondents	5.4 years
Percentage of respondents now gardening:	88%
Percentage of respondents who would garden if specific garden areas were made available:	0%
TOTAL PERCENTAGE OF RESPONDENTS EXPRESSING INTEREST IN GARDENING:	88%

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding kinds of gardening were:

Flowers	88%
Vegetables	69%
Fruit	6%
Ornamental Trees and Shrubs	6%
General Yard Maintenance	-

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding sizes and types of gardens were:

Small Beds	-
Allotment Gardens	25%
Containers and Trellises	-
Raised Planters	-

The locations of existing gardens were: (Note: Not all gardeners responded to this question. Percentage is of existing gardens.)

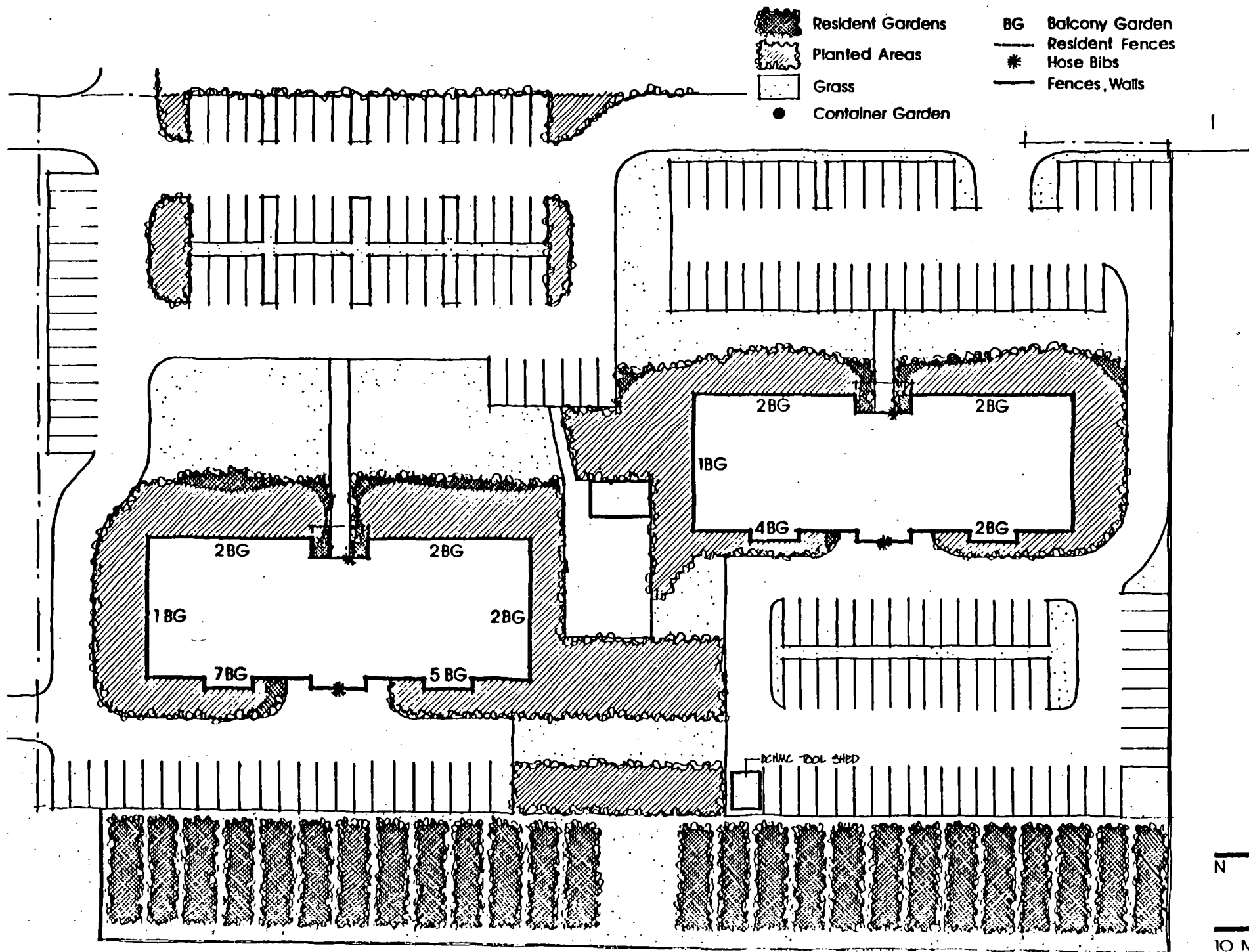
Adjacent to Home	19%
Elsewhere in the Development	-
Outside the Development	6%
Balconies (added by respondents)	19%

Special, or additional gardening facilities requested by the respondents included:

Better Waste Disposal (i.e. bins)  
Improved Watering Facilities  
Paved Paths  
Raised Beds for Wheelchair People

No respondents answered question #3 regarding additional gardening areas, stating in a number of cases that adequate space was available.

81% of the respondents felt that the management of the buildings encourages resident gardening, and the remainder did not answer.



# MacLean Park Extension

## STATISTICS\*

Location	inner city
Site area	n.a.
No. of dwelling units	174
Density	
No. of adults (+18 years)	374
No. of children	314
0 - 5 years	69
6 - 12 years	118
13 - 18 years	127
No. of families	174
single parent	57
two parent	117
Average monthly income per household	\$970
Average monthly rent per household	\$233
Date of construction	1968

\* as of December 1, 1982

## SITE SURVEY SUMMARY

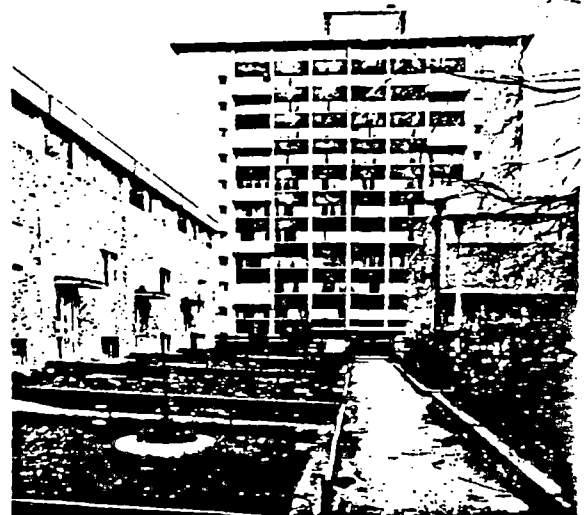
MacLean Park housing development is located on the eastern edge of Chinatown. It is surrounded by similar multifamily housing projects, single family residences, a small urban park and downtown shops and businesses.

The total development consists of 282 seniors residences and 177 family residences. The portion studied included 59 family townhouse units.

The approximate percentage of site study area occupied by roads, parking lots and buildings is 60%. The remaining 40% is open space. The majority of this open space is contained within private entry gardens.

There are two distinct landscapes within the project. One is the landscape within townhouse areas adjacent the more public circulation route of the project. This landscape consists of lawns and trees and accommodates a small number of resident gardens. Low wood rails surround the perimeters of the walks resulting in an ordered but rather sterile appearance.

The second landscape character area is located between facing townhouse units. Circulation within this area is more likely to be used by residents of the area. Here a wealth of different resident gardens exists. Some are very ornamental, containing



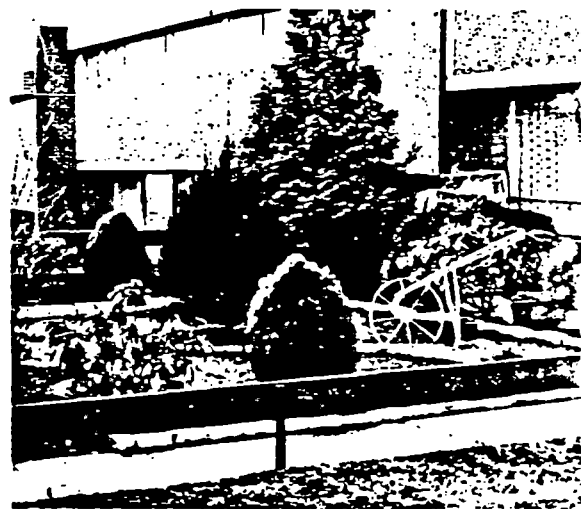
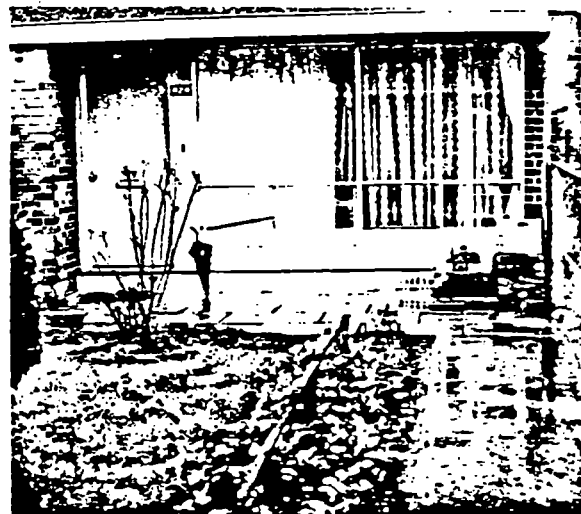
meticulously pruned trees and shrubs, white stones bordering the planting areas, with painted garden ornaments. Others are primarily vegetable and flower bed gardens. Almost all are very neat and well cared for in appearance.

There are two types of townhouses. One type are back to back units which have only front yards, the others are townhouses having both front and rear yards. Of the 42 back to back townhouse units, 36 or 86% had resident gardens. Of the 17 townhouses with both front and rear yards, 10 or 59% had resident gardens. 4 of these townhouses had gardens in both front and rear yard areas, and 6 had either front or rear yard gardens.

On average, resident gardening activities were evident at 78% of all the housing units studied.

Of the 42 back to back townhouse units 10 had gardens which were partially enclosed by high walls or fences. This separated them from public walks, but not from adjacent neighbours. The remaining 32 back to back townhouse units had gardens defined by low wood rails. Residents at a considerable number of these had planted shrubs and hedges to augment the separation of their gardens from the central public walks. Most of the gardens were out of town areas adjacent walkways, building edges and retaining walls and were 1/2 to 1-1/2 meters wide. Watering facilities were available to all of the gardens.

All of the townhouses have either east or west or south exposures, all have at least one front yard area which is delineated by a wood railing. There is no available unused land which could be further developed for gardening. Therefore, MacLean Park currently offers the maximum amount of land possible for resident gardening. Facilities such as better fencing for privacy, and outdoor tool storage could improve gardening conditions.





## RESIDENT GARDENING SURVEY

Total forms distributed:	59
PERCENTAGE OF FORMS RETURNED:	1.7%
Percentage of respondents now gardening:	100%

Of the respondents, all of whom were gardeners, their preference regarding kinds of gardening were:

Flowers	100%
Vegetables	67%
Fruit	33%
Ornamental Trees and Shrubs	33%
General Yard Maintenance	-

Of the respondents, their preferences regarding size and type of gardens were:

Small Beds	100%
Allotment Gardens	-
Containers and Trellises	-
Raised Planters	33%

67% of the respondents stated that their gardens were located adjacent to the home. The others did not answer.

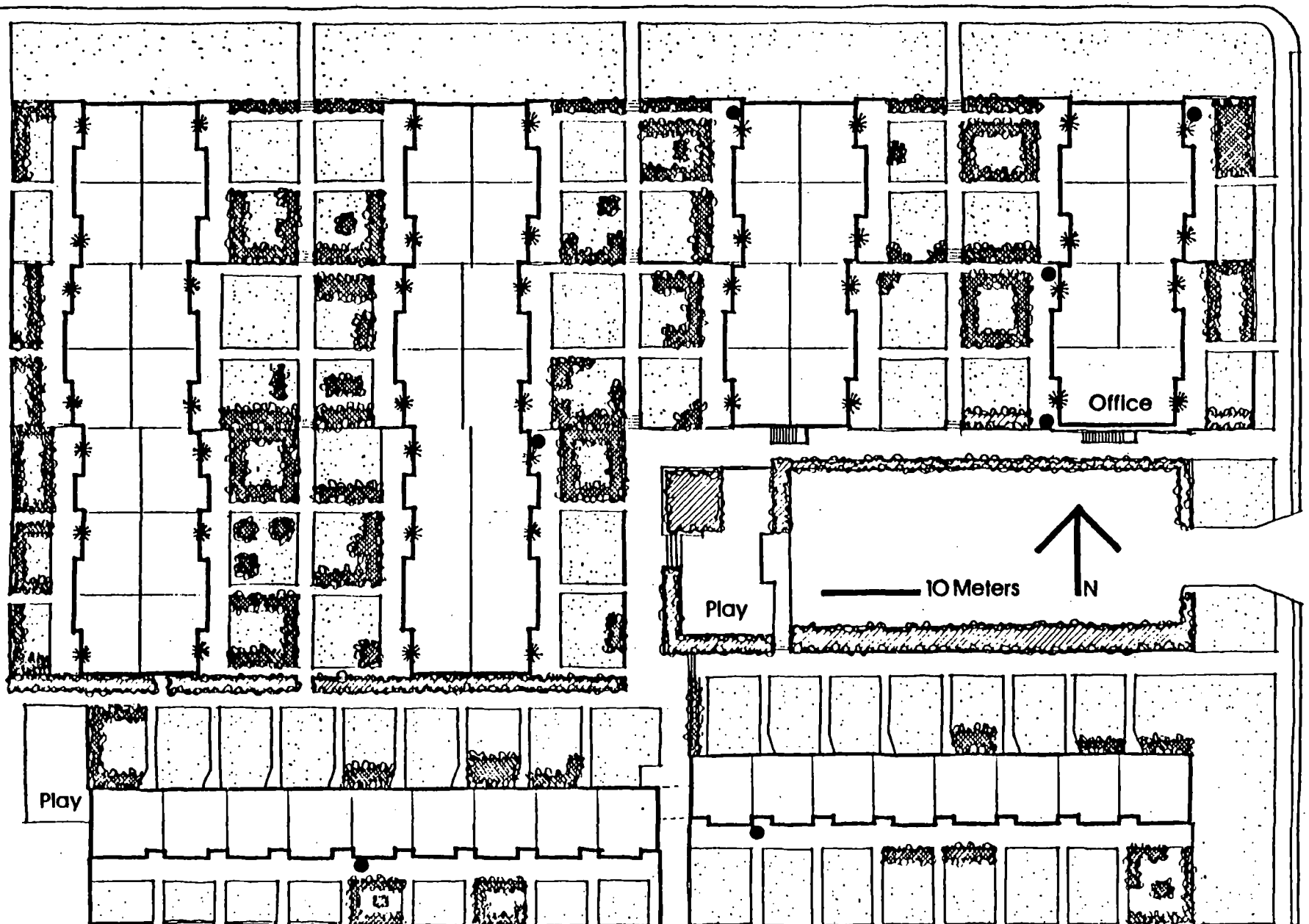
Special, or additional gardening facilities were not requested.

67% of the respondents felt that additional gardening could occur in private yard areas, while 33% stated that there was no space for additional gardening.

67% of the respondents felt that the management encouraged resident gardening and 33% did not know whether management encouraged or discouraged it.

-  Resident Gardens
-  Planted Areas
-  Grass
-  Container Garden

- BG Balcony Garden
- Resident Fences
- \* Hose Bibs
- Fences, Walls



# Rupert Lane

## STATISTICS\*

Location	suburban
Site area	(1.5 Ac) .6 ha
No. of dwelling units	41
Density	(27 du/Ac) 70 du/ha
No. of adults (+18 years)	55
No. of children	42
0 - 5 years	15
6 - 12 years	12
13 - 18 years	15
No. of families	39
single parent	22
two parent	8
other	9
Average monthly income per household	\$762
Average monthly rent per household	\$192
Date of construction	unknown

\* as of Decemer 1, 1982

## SITE SURVEY SUMMARY

Rupert Lane is located in a primarily single family housing neighbourhood on a long narrow site adjacent a proposed ALRT corridor. There are four blocks of buildings. Two are two-storey walk-up apartments containing 16 and 17 suites respectively. Two are two-storey townhouses, one with 4 and the other with 5 townhouse units.

Approximately 42% of the site is occupied by parking lots and buildings. The remaining site areas are either private or common outdoor spaces. The overall condition of the landscape has a worn and somewhat untidy appearance. All common outdoor areas show signs of heavy use.

Existing plantings consist of evergreen hedges, large deciduous trees in the central common area, small deciduous trees near the townhouses and small areas of foundation plantings against buildings. Lawn extends throughout the open space areas.

At 8 of the 9 townhouse units there were signs of resident gardening activities. 5 had both front and rear yard gardens, 3 had only rear yard gardens.

At 24 of the 33 two-storey walk-up apartments there were signs of resident gardening activities. Of the apartments having ground access, 12 had resident



gardens. 13 of the remainder had balcony gardens. 32 of the 42 housing units or 76% had resident gardens.

Of the 20 on-grade gardens at Rupert Lane, 11 gardens were completely enclosed with fencing or hedging. In some cases these enclosures were shared between two units. 5 of the fences were constructed by the tenants and in some locations the hedging was reinforced by tenant plantings. The gardens varied tremendously, from flower beds edging walks, to fairly large areas planted in vegetables, to gardens consisting only of shrubs and trees.

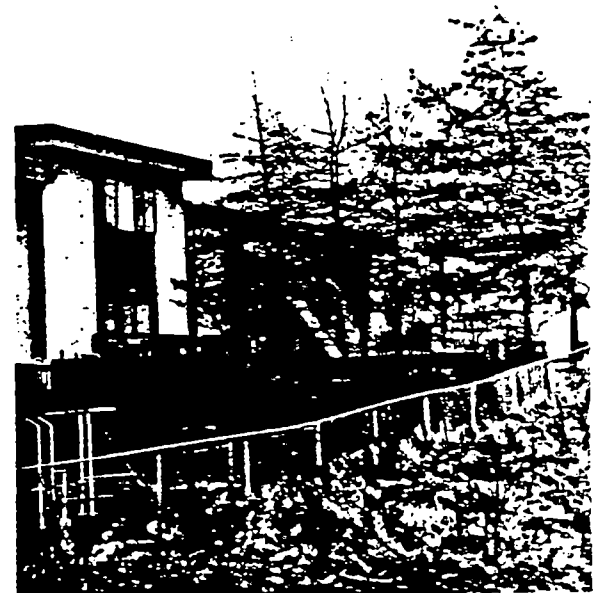
In addition, residents have planted shrubs and flowers in a container garden located along the edge of a central walk adjacent a children's play area. Decisions as to what to plant, who plants, and who maintains the plantings are handled informally. No organized gardening group exists at Rupert Lane.

The on-grade gardens were all located within clearly delineated private patio areas. They appeared to be primarily newly planted shrubs and flowers. Three out of four of the on-grade gardens were located on the south side of the townhouse block. Hose bibs were located immediately adjacent to the gardens with one for every townhouse. Balcony gardens were located on south, west and north sides of the buildings, evenly distributed.

The project has a considerable amount of open grassy area, without any apparent function. Conceivably, certain areas could be utilized for allotment or group gardens. However, site preparation would be required to improve drainage and to upgrade very poor soils. Additionally, walkways are generally through the middle of the grassed areas and garden areas would require fencing.

Several factors make resident gardening a challenge. First, a large percentage of the site is partially shaded. Large deciduous trees are planted to the south of two apartment buildings. The long buildings create partial or full shade condition for the majority of the gardening areas to the north.









Second, watering facilities are inadequate. Only two hose bibs, one on each side of the building, are provided for each building. As a result, most gardeners draw water from inside taps.

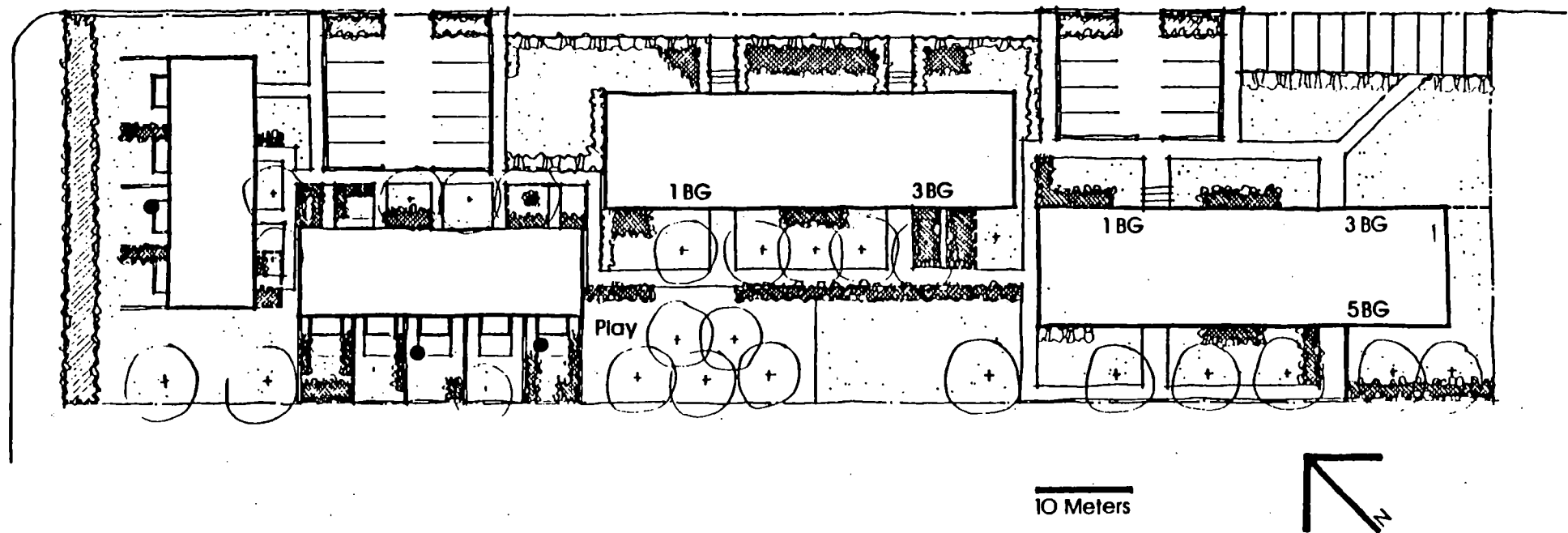


Third, there is a lack of protected gardening areas. Areas of the site could be used for resident gardens if these areas were fenced.

Two areas of the site could accommodate additional resident gardens. One is the area 5 meters wide between the apartment buildings and the public walks. This area could be fenced to provide individual resident gardens. The second is a ten by twenty meter, south facing public lawn area. With additional fencing on three sides and with improved soil and drainage the area could be used for allotment gardens.



-  Resident Gardens
-  Planted Areas
-  Grass
-  Container Garden
-  BG Balcony Garden
-  Resident Fences
-  Hose Bibs
-  Fences, Walls



## RESIDENT GARDENING SURVEY

Total forms distributed:	42
PERCENTAGE OF FORMS RETURNED:	16.6%
Average length of tenancy of respondents	5+ years
Percentage of respondents now gardening:	72%
Percentage of respondents who would garden if specific garden areas were made available:	14%
TOTAL PERCENTAGE OF RESPONDENTS EXPRESSING INTEREST IN GARDENING:	86%

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding kinds of gardening were:

Flowers	86%
Vegetables	43%
Fruit	-
Ornamental Trees and Shrubs	14%
General Yard Maintenance	28%

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding sizes and types of gardens were:

Small Beds	57%
Allotment Gardens	14%
Containers and Trellises	43%
Raised Planters	-

The locations of existing gardens were: (Note: Not all gardeners responded to this question. Percentage is of existing gardens.)

Adjacent to Home	100%
Elsewhere in the Development	-
Outside the Development	-

Special, or additional gardening facilities requested by the respondents included:

Electric Lawn Mower

43% of the respondents felt that there were additional places for gardening at Rupert Lane, in private yard areas and common grounds. 43% also felt that there were no other areas where there could be resident gardens. No space, no sun, too wet and traffic were listed as hinderances.

57% of the respondents felt that the management of Rupert Lane encourages resident gardening, while 28% felt that gardening was discouraged by management. 14% did not know.

# Earle Adams Village

## STATISTICS\*

Location	suburban
Site area	(8.7 Ac) 3.5 ha
No. of dwelling units	104
Density	(12 du/Ac) 29 du/ha
No. of adults (+18 years)	173
No. of children	174
No. of families	104
single parent	34
two parent	50
other	20
Average monthly income per household	\$ 1,630
Average monthly rent per household	\$ 412
Original landscape budget	\$98,500

\* as of February, 1981.

## SITE SURVEY SUMMARY

Earle Adams is surrounded by multi-family cooperative and market housing projects. Like Earle Adams most are two-storey townhouse developments. Earle Adams has been sited on rolling ground within a primarily deciduous second growth forest area. The existing grade and forest areas have been preserved wherever possible.

Of a total of 105 townhouse units, 66 are three-bedroom, 35 are two-bedroom, and 4 are for disabled residents. Approximately 50% of the site is occupied by roads, parking lots and buildings, 30% is relatively undisturbed forest and 20% is either private or common outdoor area.

The site survey included a sample of 27 of the 105 townhouses. 16 of the townhouses or 59% had resident gardens. 5 had both front and rear yard gardens. 9 had either a front or rear yard garden. 2 had hanging baskets and planter boxes on fences.

The gardens were all located within entirely fenced front yards, or partially fenced rear yards. In a few cases, infill fencing had been used to completely enclose the rear yard. All of the gardens were narrow plots lining the edges of buildings, fences and walks often leaving a tiny patch of grass, one to two meters square, in the middle. The gardens were evenly distributed in all aspects, however, there was a certain clustering effect where adjacent units would all have gardens. Water taps were located on





the sides of each end unit, leaving nine interior units without outside taps of their own. Despite this, there were gardens at 3 or 33% of these interior units.

Because this site is wooded in all significantly large public spaces, there are not any other suitable locations for resident gardening, outside of the private front and rear yard areas.



## RESIDENT GARDENING SURVEY

Total forms distributed:	105
PERCENTAGE OF FORMS RETURNED:	6%
Average length of tenancy of respondents	3 years
Percentage of respondents now gardening:	57%
Percentage of respondents who would garden if specific garden areas were made available:	43%
TOTAL PERCENTAGE OF RESPONDENTS EXPRESSING INTEREST IN GARDENING:	100%

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding kinds of gardening were:

Flowers	71%
Vegetables	43%
Fruit	29%
Ornamental Trees and Shrubs	43%
General Yard Maintenance	29%

Of all the people who expressed interest in gardening, their preferences, by percentage, regarding sizes and types of gardens were:

Small Beds	43%
Allotment Gardens	14%
Containers and Trellises	14%
Raised Planters	29%

The locations of existing gardens were listed as:

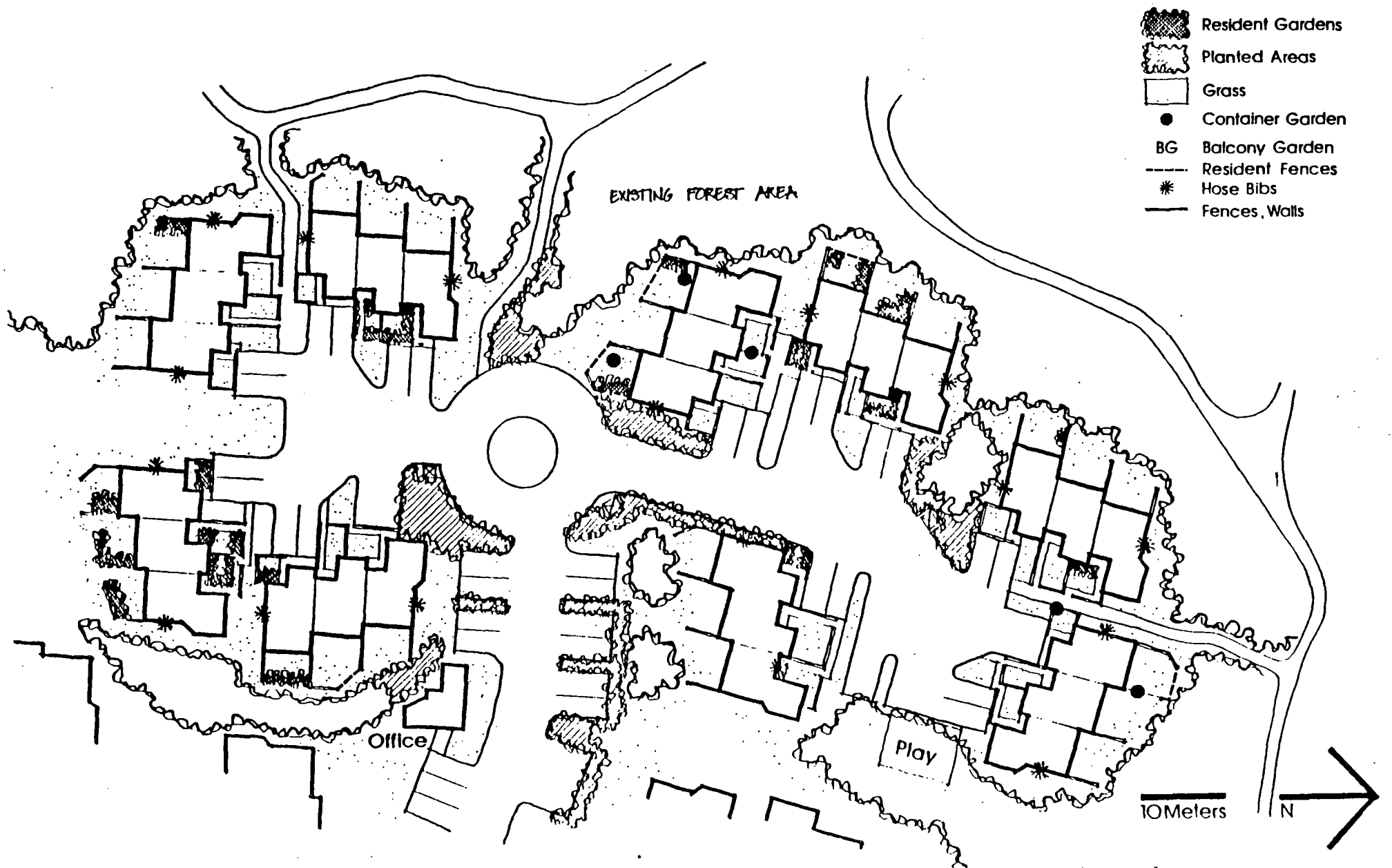
Adjacent to Home	100%
Elsewhere in the Development	-
Outside the Development	1 person

Special, or additional gardening facilities requested by the respondents included:

Raised Beds  
Special Tools (for the raised beds?)  
Private Allotments (of garden plots)

43% of the respondents felt that there were additional places for gardening at Earle Adams Village, listing private yards and common areas (where there is currently nothing but "dirt"). Also, 43% felt that there were no other areas where there could be resident gardening, listing hinderances such as no space, no private yards and poor soil.

57% of the respondents felt that the management encouraged resident gardening; 28% felt that they discouraged it; 14% did not know whether the management encouraged or discouraged it.



# Kingston Gardens

## STATISTICS\*

Location	suburban
Site area	n.a.
No. of dwelling units	99
Density	n.a.
No. of adults (+18 years)	151
No. of children	177
No. of families	99
single parent	36
two parent	38
other	25
Average monthly income per household	\$ 1,647
Average monthly rent per household	\$ 412
Original landscape budget	\$75,000

\* as of February, 1981.

## SITE SURVEY SUMMARY






Kingston Gardens is located in a suburban area currently undergoing development. It is surrounded on two sides by vacant partly forested land, on one side by a park and children's day care facility and on one side by a major collector road.

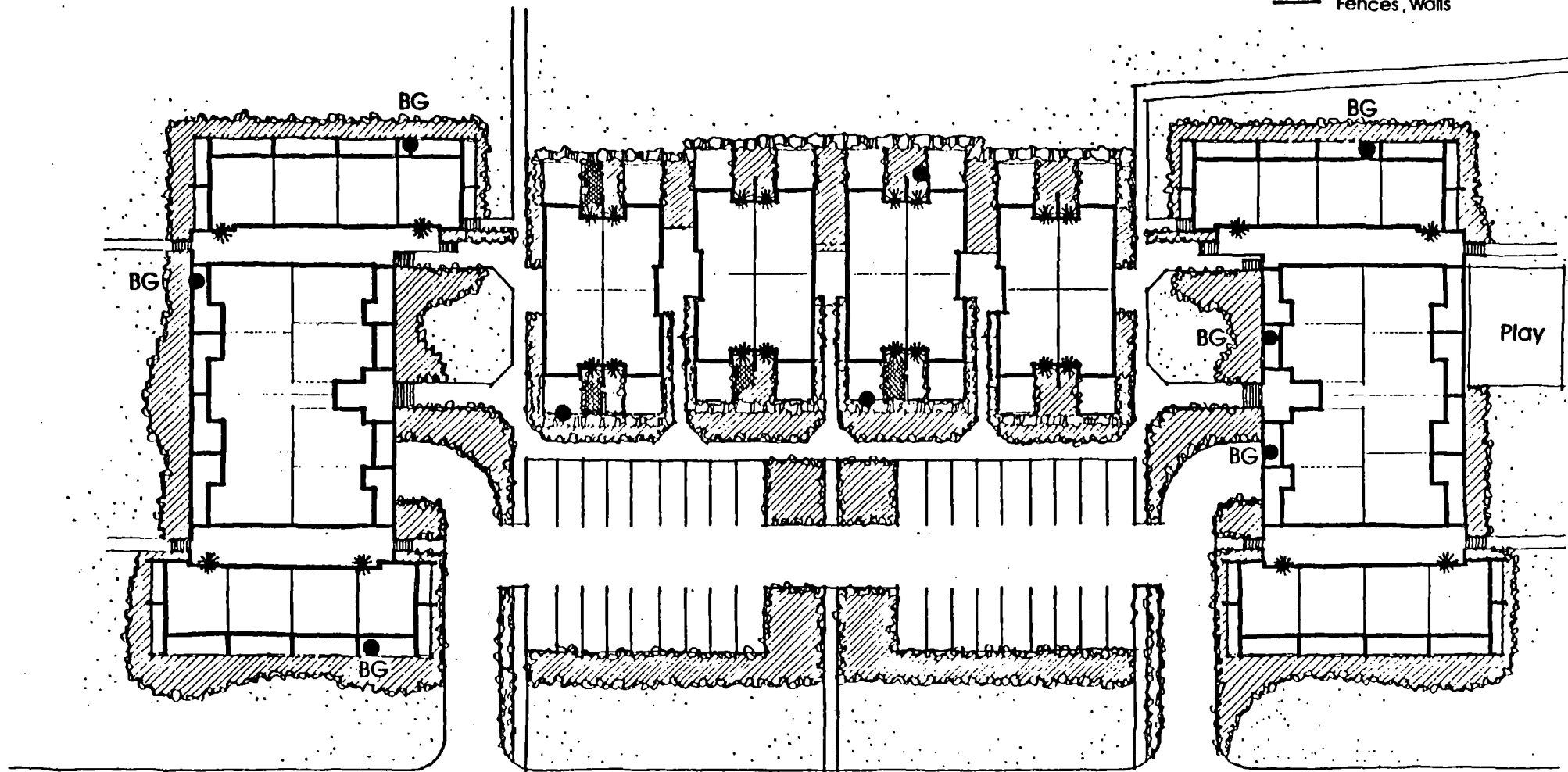
Portions of the site are mature second growth forest preservation areas. A large central lawn contains a depressed water catchment area. Tree plantings are small and rather sparse. It was evident that there was very little topsoil on site in lawn and shrub bed areas. The plantings near the residences consisted of 'low maintenance' evergreen ground covers and shrubs and the overall appearance was neat and tidy.

The townhouses at Kingston Gardens are of two types. One type is built over parking garages and none of these units have ground level access. Planter boxes have been provided and planted with low maintenance materials. The other type of townhouses is located on grade with surfacing parking adjacent. Private outdoor areas are clearly defined with hedges, fences, and ground cover plantings.

The site survey included 48 townhouse units in one cluster out of a total of 192 townhouse units on the site. Of the 16 on grade townhouse 4 or 25% had resident gardens. 1 of 16 had a container garden. Of the remaining above grade townhouse units 6 or 19% has container gardens. A total of 11 of 48 townhouse units or 12% showed signs of having resident gardens.



-  Resident Gardens
-  Planted Areas
-  Grass
-  Container Garden
- BG Balcony Garden
- Resident Fences
-  Hose Bibs
- Fences, Walls



10 Meters



## RESIDENT GARDENING SURVEY

THE PURPOSE OF THIS QUESTIONNAIRE IS TO FIND OUT HOW INTERESTED RESIDENTS ARE IN GARDENING AND WHETHER THE OPPORTUNITIES FOR RESIDENTS TO GARDEN AT THIS HOUSING DEVELOPMENT ARE ADEQUATE.

The survey is being conducted with the assistance and permission of G.V.H.C. by Landscape Architects who are professionally responsible for the design of the outdoor environments of housing developments.

The surveyors welcome the opportunity to speak with you when they make a brief visit to your housing development to photograph and map ongoing resident gardening. Please feel free to make additional comments regarding gardening on the back of this sheet.

HOUSEHOLD SIZE (I.E. NUMBER OF PEOPLE): 1 PEOPLE

HOUSEHOLD STRUCTURE:

☐ Family with children ☐ Number of children       
☐ Seniors

1. DOES ANYONE AT YOUR HOME DO ANY FORM OF OUTDOOR GARDENING AT THIS HOUSING DEVELOPMENT? ☐ YES ☒ NO

WHAT KIND:

☐ Flowers  
☐ Vegetables  
☐ Fruit  
☐ Ornamental Trees and Shrubs  
☐ General Yard  
☐ Maintenance  
☐ Other:     

WHERE:

☐ Adjacent to Home  
☐ Elsewhere in this Development  
☐ Outside this Development

2. IF SPECIFIC GARDENING AREAS WERE MADE AVAILABLE WOULD ANYONE AT YOUR HOME USE THEM? ☒ YES ☐ NO

WHAT ARE YOUR PREFERENCES FOR KINDS OF GARDENS?:

☒ Flowers  
☒ Vegetables  
☒ Fruit Trees  
☒ Ornamental Trees and Shrubs  
☐ Other:     

SIZE AND TYPE OF GARDENS:

☒ Small Beds  
☐ Allotment Gardens  
☒ Containers & Trellises  
☒ Raised Planters

3. DO YOU FEEL THAT THERE ARE PLACES AT YOUR DEVELOPMENT WHERE THERE COULD BE RESIDENT GARDENS?

☐ YES Where?

☐ Private Yard Areas  
☐ Common Grounds: (Where?)     

☒ NO Why Not?

☒ No Space  
☒ No Private Yards  
☐ No Sun  
☐ Other - Specify:     

4. DOES THE MANAGEMENT OF YOUR HOUSING DEVELOPMENT ENCOURAGE OR DISCOURAGE GARDENING OR LANDSCAPING BY YOU, THE RESIDENT?

☐ ENCOURAGE

☒ DISCOURAGE

☐ DON'T KNOW

5. DOES ANYONE IN YOUR HOME HAVE ANY FORM OF MENTAL OR PHYSICAL DISABILITY WHICH WOULD REQUIRE SPECIAL FACILITIES FOR GARDENING?

NO

CAN YOU SUGGEST APPROPRIATE SPECIAL FACILITIES? (SUCH AS RAISED BEDS, PAVED PATHS, SPECIAL TOOLS?) GIVE US AN AREA TO

WORK ON.

6. HOW LONG HAS YOUR HOUSEHOLD LIVED IN THIS HOUSING DEVELOPMENT?

☒ Less than one year  
☐ One to two years  
☐ Five years  
☐ Longer than five years

ON OR BEFORE FEBRUARY 11, 1983  
PLEASE RETURN THIS SURVEY TO:

GVHC PROJECT OFFICE  
Kingston Gardens IV

## APPENDIX 1 NEED FOR FURTHER RESEARCH

This study has revealed some very important factors with respect to resident gardening at subsidized rental housing developments:

1. Although specific garden plots were not initially provided, some residents, over time, developed gardens adjacent to their homes, either in the ground or on balconies.
2. Some residents develop these gardens under very adverse conditions. This may be because they were unaware that conditions could be greatly improved, or because they did not have the time or resources to make improvements. Nevertheless, to pursue gardening under adverse conditions suggests a great desire to garden.
3. The resident survey indicated that there were people who did not garden, but would like to and people who would like to garden more if adequate places were provided.
4. Conflicts with maintenance staff and other management problems had occurred at some existing housing developments where resident gardening has been introduced.

In addition, questions have arisen through this study which must be answered to confirm the need to provide opportunities for resident gardening. There are also problems which occur with respect to resident gardening for which both landscape design and managerial solutions need to be found. The following is a brief outline of specific areas of research which we believe are important in the pursuit of more suitable and functional landscapes for social housing environments:

1. Co-operative housing: Because co-operative housing now forms a significant proportion of all social housing currently being funded in Canada, a similar overview study such as this should be conducted to assess the status of resident gardening at co-operative housing projects. It would be important to produce statistically valid results which would then be usable by CMHC in assessing funding and approvals processes for upcoming projects, and by co-operative housing societies, funding agencies, and architects.
2. Landscape maintenance procedures, standards and relative costs: Economic evaluations are needed which investigate costs of installing and maintaining landscapes where resident gardening exists. Comparisons between housing projects at which resident gardening does not occur and those at which resident gardening contributes to the landscape maintenance would be valuable. As well, suggestions for updated, more cost effective maintenance procedures need to be developed and made available to housing managers.
3. It would be valuable to understand the relative effects of physical environment factors versus social planning (i.e. gardening programs) and management factors with respect to the need for and existence of resident gardening. The following questions would need to be answered in order to justify changes in design, management and funding with respect to providing resident gardening: What reasons do people have for gardening? What personal gains do people feel they achieve through gardening? Do positive social changes occur when residents at social housing projects garden either individually or in groups? What are the advantages of formalized programs such as People Plants and Homes?

4. Case studies would be valuable in generating innovative physical design solutions to site and landscape design which incorporates resident gardening opportunities. Properly funded case studies would give designers the opportunity to do thorough research into creative solutions, to document and communicate these solutions to other designers, and to monitor projects over time to evaluate successes and failures. These opportunities are not readily available to design professions within current design fee structures (for social housing developments).



## APPENDIX 2 SAMPLE RESIDENT GARDENING SURVEY

### RESIDENT GARDENING SURVEY

A total of 743 survey forms were distributed by hand to 8 housing developments. 51 survey forms or 7% of them were answered and returned. Of those 51 respondents, 71% stated that they currently were gardening at the housing development. An additional 18% stated that they would be interested in gardening if gardens were provided at the housing development. This gives a total of 89% of the respondents expressing interest in gardening.

The survey form provided spaces for people to indicate their preferences and needs with regard to kinds of gardening and gardening places. The following are the percentages of positive response received on each item listed. Questions 1 and 2 were combined due to apparent confusion on the part of the respondents. Only one positive response per respondent was counted for each item on the list.

KIND OF GARDENING	PERCENT OF POSITIVE RESPONSE
Flowers	78%
Vegetables	55%
Fruit	14%
Ornamental Trees and Shrubs	18%
General Yard Maintenance	8%
SIZE, TYPE OF GARDENING PLACE	PERCENT OF POSITIVE RESPONSE
Small Beds	31%... Note: overall response to these
Allotment Gardens	14% questions totalled only 56%.
Containers and Trellises	22%
Raised Planters	12%
Balconies (listed by respondents)	8%

With regard to the question of whether the residents felt that management encouraged or discouraged resident gardening, the results are tabulated below (percentages are of all respondents). Because BCHMC actively encourage resident gardening through the People Plants and Homes program, whereas GVHC has no such program, results from projects under the two different agencies are kept separate.

BCHMC DEVELOPMENTS	
Encourage	73%
Discourage	7%
Don't Know	11%
Not Answered	9%

GVHC DEVELOPMENTS	
Encourage	50%
Discourage	38%
Don't Know	12%

Not everyone answered question 5 regarding mental and physical disabilities and special gardening facilities. However, 10% of the respondents stated that they did have disabilities, and listed the following: heart condition, poor eyesight, bad back, physical difficulties and inability to do physical work. 49% stated that no one in their household had any form of disability and the remaining 41% did not answer the question. Various people suggested special facilities including: raised beds (10%), gardening tools (6%), water taps (near gardens), soil, paved paths (10%), electric lawn mower.

Of the housing developments surveyed, three were seniors' buildings and the remaining five were mixed projects including primarily family housing. However, of the respondents, 63% were seniors. The percentage return of the survey forms was much lower at the family projects, resulting in unequal representation with regard to family structure.

## RESIDENT GARDENING SURVEY

THE PURPOSE OF THIS QUESTIONNAIRE IS TO FIND OUT HOW INTERESTED RESIDENTS ARE IN GARDENING AND WHETHER THE OPPORTUNITIES FOR RESIDENTS TO GARDEN AT THIS HOUSING DEVELOPMENT ARE ADEQUATE.

The survey is being conducted with the assistance and permission of B.C.H.M.C. by Landscape Architects who are professionally responsible for the design of the outdoor environments of housing developments.

The surveyors welcome the opportunity to speak with you when they make a brief visit to your housing development to photograph and map ongoing resident gardening. Please feel free to make additional comments regarding gardening on the back of this sheet.

HOUSEHOLD SIZE (I.E. NUMBER OF PEOPLE): \_\_\_\_\_ PEOPLE

HOUSEHOLD STRUCTURE:

\_\_\_\_ Family with children      \_\_\_\_ Number of children  
\_\_\_\_ Seniors

1. DOES ANYONE AT YOUR HOME DO ANY FORM OF OUTDOOR GARDENING AT THIS HOUSING DEVELOPMENT?      YES      NO

WHAT KIND:

\_\_\_\_ Flowers  
\_\_\_\_ Vegetables  
\_\_\_\_ Fruit  
\_\_\_\_ Ornamental Trees  
and Shrubs  
\_\_\_\_ General Yard  
Maintenance  
\_\_\_\_ Other: \_\_\_\_\_

WHERE:

\_\_\_\_ Adjacent to Home  
\_\_\_\_ Elsewhere in this  
Development  
\_\_\_\_ Outside this  
Development

2. IF SPECIFIC GARDENING AREAS WERE MADE AVAILABLE WOULD ANYONE AT YOUR HOME USE THEM?      YES      NO

WHAT ARE YOUR PREFERENCES FOR  
KINDS OF GARDENS?:

\_\_\_\_ Flowers  
\_\_\_\_ Vegetables  
\_\_\_\_ Fruit Trees  
\_\_\_\_ Ornamental Trees and Shrubs  
\_\_\_\_ Other: \_\_\_\_\_

SIZE AND TYPE OF GARDENS:

\_\_\_\_ Small Beds  
\_\_\_\_ Allotment Gardens  
\_\_\_\_ Containers & Trellises  
\_\_\_\_ Raised Planters

3. DO YOU FEEL THAT THERE ARE PLACES AT YOUR DEVELOPMENT WHERE THERE COULD BE RESIDENT GARDENS?

\_\_\_\_ YES Where?

\_\_\_\_ Private Yard Areas  
\_\_\_\_ Common Grounds: (Where?) \_\_\_\_\_

\_\_\_\_ NO Why Not?

\_\_\_\_ No Space  
\_\_\_\_ No Private Yards  
\_\_\_\_ No Sun  
\_\_\_\_ Other - Specify: \_\_\_\_\_

4. DOES THE MANAGEMENT OF YOUR HOUSING DEVELOPMENT ENCOURAGE OR DISCOURAGE GARDENING OR LANDSCAPING BY YOU, THE RESIDENT?

\_\_\_\_ ENCOURAGE      \_\_\_\_ DISCOURAGE      \_\_\_\_ DON'T KNOW

5. DOES ANYONE IN YOUR HOME HAVE ANY FORM OF MENTAL OR PHYSICAL DISABILITY WHICH WOULD REQUIRE SPECIAL FACILITIES FOR GARDENING?

\_\_\_\_\_  
\_\_\_\_\_

CAN YOU SUGGEST APPROPRIATE SPECIAL FACILITIES? (SUCH AS RAISED BEDS, PAVED PATHS, SPECIAL TOOLS?) \_\_\_\_\_

6. HOW LONG HAS YOUR HOUSEHOLD LIVED IN THIS HOUSING DEVELOPMENT?

\_\_\_\_ Less than one year  
\_\_\_\_ One to two years  
\_\_\_\_ Five years  
\_\_\_\_ Longer than five years

## APPENDIX 3 INTERVIEW TRANSCRIPTS

An interview was held with Mr. J.C. Leman, Acting General Manager of British Columbia Housing Management Commission. A general discussion took place regarding positive and negative aspects of the People Plants and Homes program. Other points covered in the interview included:

1. Problems or conflicts which arise for landscape maintenance staff where resident gardening occurs.
2. Concerns and expectations of management with respect to appearance and maintenance of landscaped areas.

At GVHC, a group interview was held with people in managerial positions: Sharon Richman, Manager of Administration and Property Management, Chuck Herman, Supervisor of Construction and Architectural Development, Lance Evans, District Supervisor of Property Management. Questions directed to the group covered the following points:

1. Policies of management towards resident gardening.
2. Management strategies which do or could provide for resident gardening.
3. Concerns and expectations of management with respect to appearance and maintenance of landscaped areas.

One meeting was held with a landscape maintenance staff person, who handles all downtown area projects for BCHMC. While we had hoped to interview someone who does landscape maintenance for GVHC, we found that they handle their work on a seasonal contract basis, and during the time of this study no one was working. The following issues were discussed with the BCHMC gardener:

1. Perceived conflicts between landscape maintenance activities and resident gardening.
2. Areas in which resident gardening would assist landscape maintenance activities.
3. Perceived attitudes of residents towards the project landscape development and maintenance.

Informal meetings were held with two resident groups. One held at Rupert Lane, a family housing development, and one at Rosewood Village, a seniors highrise development with extensive allotment gardens. These groups were interested in meeting with us and had been gardening for several years. These people had the experience to discuss both the problems and the rewards of gardening in social housing environments. Discussions with the residents covered the following points:

1. History of resident gardening at the development.
2. Forms of organization which resident gardeners have.
3. Adequacy of facilities, or lack thereof.
4. Benefits of gardening.

# Housing Managers

February 4, 1983

## MEETING WITH J.C. LEMAN, ACTING GENERAL MANAGER, BRITISH COLUMBIA HOUSING MANAGEMENT CORPORATION.

### 1. CAN YOU SEE POSITIVE RESULTS IN TERMS OF RESIDENTS' INTEREST IN CARING FOR THEIR HOUSING LANDSCAPE?

Giving residents the opportunity to garden has resulted in their showing a greater interest in the rest of the grounds.

Gardening gets residents out, gives them something to do, it's a social activity, a topic which they can discuss and something they can take pride in, something to show visitors.

Spin-off activities result, such as visits to other gardens, to garden shops, it's a very social activity.

### 2. IS THERE ANY WAY IN WHICH IT MAKES THE RELATIONSHIP OF MANAGEMENT TO RESIDENTS MORE POSITIVE?

It improves relations between tenants and landlords because it's a topic which can easily be discussed; it gets the tenant and landlord together more often, it improves communication.

In taking a greater interest in the grounds, residents point out mistakes, and make recommendations of how landscapes can be improved. This is helpful.

In seniors' developments there may exist an opportunity for those who are interested in gardening and landscape maintenance to accept responsibility for specific tasks. A pilot project would be required to determine the feasibility of such a scheme.

### 3. CAN RESIDENT GARDENING REPLACE MANAGEMENT MAINTENANCE IN FAMILY DEVELOPMENTS?

While we welcome resident gardening in our family developments it is extremely doubtful that it would ever replace management maintenance of the grounds.

Resident gardening in family developments is often quite difficult due to the lack of properly fenced garden areas and clear delineation between resident gardens and common areas.

Nothing is more soul destroying than to see your efforts or those of your children destroyed by vandals.

Many of our developments have a high incidence of single mothers as tenants and while many single parents have been involved in our gardening programs, other simply do not have the time to devote to gardening.

In many of our family developments, the original design did not consider resident gardening in the overall development plan.

Social planners and architects should think of resident gardening as more of a priority when designing family and seniors' projects. The proliferation of shuffleboard courts in seniors' projects comes from stereotyped notions of senior activities; perhaps, the highest and best use of the scarce land resource would be resident gardening.

There are many good things to be said of the potential of resident gardening developments. Vegetable gardens result in savings in food bills. Gardening fosters a long term sense of belonging and personal pride. A garden is something which allows you to identify a place of your own.

4. WHAT FEEDBACK HAVE YOU HAD FROM MAINTENANCE PEOPLE WITH RESPECT TO RESIDENT GARDENING ACTIVITIES?

Just like any other innovative program it has its supporters and its detractors.

In some instances resident gardening and its expansion could be viewed as a threat to employment tenure of existing maintenance and landscape/gardening crews.

The majority of the staff are very supportive of resident gardening and appreciate the tenants' efforts. They feel that it is excellent that the residents are taking an interest in the grounds and are participating through their own efforts to improve the appearance of their homes.

For the program to be a total success the People, Plants and Homes Co-ordinator has to be highly organized in ensuring that:

- (a) There is a clear understanding as to what areas the residents will be responsible for.
- (b) That once the garden areas are established, volunteers/residents are responsible for the ongoing upkeep.
- (c) Clear communication of the program needs in terms of supplies, soil, fertilizer, equipment, etc. to the respective Regional Managers.

5. DO LANDSCAPE BUDGETS AND LANDSCAPE MAINTENANCE BUDGETS DIFFER ON A PROJECT BY PROJECT BASIS?

In terms of the original design of many of our projects it would appear that the landscaping, playgrounds, individual garden/patio areas, etc. were not considered a high priority.

Many social housing projects are pretty stark, there are exceptions but there is a tendency to overdo the blacktop, concrete and bark mulch treatment.

Funds spent on the original design is often directed solely towards appearance and little or no consideration is given to the residents' use of the grounds for activities.

6. WHAT ARE THE EXPECTATIONS OF BCHMC MANAGEMENT WITH RESPECT TO THE APPEARANCE AND MAINTENANCE OF LANDSCAPED AREAS? WHO SETS STANDARDS?

The Director of Housing Operations, in conjunction with appropriate staff, set the maintenance standards for our projects.

One of our objectives is to ensure that BCHMC projects are maintained to a standard that is as good if not better than that of similar looking private sector developments.

7. WHAT IS THE BALANCED COMMUNITY CONCEPT?

Income and social integration is a fundamental principle of the Commission's family housing management. This principle when implemented avoids the segregation of low income families, disabled persons and ethnic groups and ensures the developments blend into the local communities in which they are situated.

8. HOW LONG DO TENANTS STAY IN BCHMC PROJECTS?

The length of stay varies from a few months to 30 years.

We have many, many success stories but like every landlord we have the usual problems related to rental housing.

January 21, 1983

**MEETING WITH SHARON RICHMAN, CHUCK HERMAN, AND LANCE EVANS, GREATER VANCOUVER HOUSING CORPORATION.**

Sharon Richman is the Manager of Administration and Property Management. Chuck Herman is the Supervisor of Construction and Architectural Development. Lance Evans is the District Supervisor of Property Management.

**1. WHAT ARE THE POLICIES OF MANAGEMENT TOWARD RESIDENT GARDENING AND OTHER LANDSCAPE CHANGES WHICH RESIDENTS MAY MAKE?**

GVHC's policy in 1978 was to provide opportunities for all residents to garden. Planting beds were left open within yard areas. The result was disappointing. 98% of the residents did not garden and most did not even take care of their yards. (SR)

GVHC's current policy supports the idea of resident gardening. They are open to residents proposing to develop gardens in their developments but no one has come forth with proposals. They allow residents to plant flowers and bulbs and have provided some small gardening plots in private fenced areas.

Management has considered providing incentives (i.e. awards or prizes) to encourage residents to garden but have, as yet, never acted upon these ideas.

In light of the past resident gardening failures, however, GVHC now assumes that residents will not do landscape maintenance. GVHC does all landscape maintenance including grass cutting in private fenced yard areas. A maintenance contract is tendered and a contractor hired to do the work.

**2. ARE THERE POSITIVE INSTANCES WHERE RESIDENT GARDENING IS BEING ACCOMMODATED?**

The manager of Earle Adams project has excellent gardens. Other residents living nearby have also developed nice gardens.

**3. WHAT ARE SOME OF THE MANAGEMENT PROBLEMS GVHC FACES IN ACCOMMODATING RESIDENT GARDENING?**

A unified landscape, important to overall appearance, is difficult to achieve where resident gardening is taking place. There are definite contrasts between the appearance of one yard and another. One can be very well kept while another is not.

It is difficult to manage renovations or changes to the developments by including resident input in the process. First, resident input is not entirely representative, and when asked what residents want, residents often have unrealistic demands.

How do you manage allowing residents to garden? How can you assure that tenants know how to maintain landscapes (i.e. knowledge of trees/landscape maintenance)? (CH)

Some of the projects GVHC has taken over have inherent problems with respect to resident gardening. Budget cuts on projects or cost overruns often result in landscape budget reductions. One such project, Guildford Glen, has a history of landscape problems. High water table and lack of soil preclude easy resident gardening.

4. WHAT ARE THE CONCERNS AND EXPECTATIONS OF MANAGEMENT WITH RESPECT TO THE APPEARANCE AND MAINTENANCE OF LANDSCAPED AREAS?

GVHC is concerned with providing competitive market housing. Prospective tenants must see an attractive landscape.

Simplicity and uniformity are considered important (i.e. trees with grass). The landscape design must correspond to what GVHC can look after.

Landscape appearance has to meet Municipal or City planning approvals.

Landscape maintenance is handled by contract by a landscape maintenance firm.

5. WHO SETS OR INFLUENCES THE LANDSCAPE APPEARANCE OR MAINTENANCE STANDARDS?

Standards are in part set by the initial landscape installation which meets city or municipal standards.

Managers set the tone of landscape appearance by their own yards often influencing residents to personalize or beautify theirs.



**DISCUSSION WITH LANCE EVANS, DISTRICT SUPERVISOR OF PROPERTY MANAGEMENT GVHC, REGARDING LANDSCAPE MAINTENANCE.**

GVHC landscape maintenance is handled on a contract basis. therefore the terms of the contract must be spelled out clearly for equitable bidding. Grey areas, such as having residents involved in gardening in public areas, are very difficult to deal with.

GVHC landscape maintenance contracts are publicly tendered once a year. This often results in a new landscape maintenance contractor each year. This is not ideal in terms of establishing a good long term relationship between residents and maintenance crews.

# Resident Groups

February 9, 1983

## MEETING WITH RESIDENTS OF RUPERT LANE FAMILY HOUSING DEVELOPMENT MANAGED BY BCHMC.

All residents attending the meeting have lived at Rupert Lane for more than five years.

### 1. IS THERE A RESIDENT GARDENING CLUB OR ORGANIZATION AT RUPERT LANE?

All resident gardening takes place on an informal basis. Meetings between gardeners are held over the fence or over a cup of coffee. No formal meetings are held, no one person is specifically in charge. Gardening is pursued largely on an individual basis.

The only garden area held in common is a line of planter boxes adjacent the children's play area. Two or three resident gardeners plant flowers here each year.

### 2. WHAT DO THE RESIDENTS THINK OF OVERALL SITE LANDSCAPE MAINTENANCE PROVIDED BY BCHMC AND WHAT KIND OF RELATIONSHIP DO THE RESIDENTS HAVE WITH LANDSCAPE MAINTENANCE CREWS?

Residents do not feel that maintenance crews are skilled gardeners. One resident explained how maintenance people mowed over her vegetable and flower garden area on one occasion and on another cleaned out all the flowers she had planted while doing general weeding.

Landscape maintenance crews are never the same from year to year. Resident gardeners do not meet with maintenance supervisors or crews and are never sure when they will be on site working. Residents have made complaints about landscape maintenance activities to BCHMC management but have never had any direct contact with maintenance people.

### 3. WHAT SORTS OF ADDITIONAL FACILITIES, SUPPLIES, AND PHYSICAL CHANGES WOULD MAKE RESIDENT GARDENING BETTER?

Residents requested truckloads of good soil in the spring as a basic gardening need. They receive plants, fertilizer and some gardening advice from the People Plants and Homes program. They see these as frills. Without good soil their gardening efforts are never fully realized.

The second need expressed by the residents was for adequate fencing around private yard areas. Fences are required to keep both the kids and the maintenance crews out.

Most resident gardeners felt they have adequate tools but cited the need for outside tool storage.

Another inadequacy was in the number of hose bibs provided. At Rupert Lane there is only one hose bib on each side of the building blocks. One resident runs a hose off her kitchen sink and out her kitchen window to water her garden.

4. HOW MANY RESIDENTS ARE INTERESTED IN GARDENING AT RUPERT LANE?  
HOW LONG HAVE MOST RESIDENTS LIVED AT RUPERT LANE?

Out of 42 units, there are 10-12 units in which residents are actively gardening.

Some people have lived here for more than twelve years.

5. COULD RESIDENTS TAKE ON MORE OF THE LANDSCAPE MAINTENANCE  
ACTIVITIES WITHIN THE DEVELOPMENT?

There could be problems if residents were responsible to cut the grass. Some would do their share. Others would not bother at all. Landscape maintenance crews should be retained to cut the grass. Perhaps this is all they should be responsible for and let residents do the rest.

February 11, 1983

**MEETING WITH RESIDENTS OF ROSEWOOD VILLAGE SENIOR CITIZENS HOUSING DEVELOPMENT MANAGED BY BCHMC.**

Rosewood Village has 26 allotment gardens located on adjacent municipal park land. The majority of gardeners have lived at Rosewood Village for more than seven years.

**1. COULD YOU BRIEFLY EXPLAIN THE HISTORY OF THE ALLOTMENT GARDENS AT ROSEWOOD?**

Seven years ago one resident interested in gardening spoke to the Treasurer of the Residents Association about the possibility of using park land for resident gardens. The idea was put forward at a resident meeting and a delegation of residents went to the Parks Board. Their request was granted. The Parks Board prepared the soil the first two years and subsequent support from BCHMC Plants People and Homes program has supplied perimeter fencing and some plant material and fertilizer annually.

**2. HOW DO THE GARDENERS ORGANIZE THEMSELVES TO DO GARDENING TOGETHER?**

All organizational matters are dealt with very informally. There is no garden club, no meetings held and no one specifically in charge. It was emphasized that all the gardeners like to go their own way and do not like to be told what to do or how to do it. Sharing limited watering facilities is accomplished by each gardener respecting the watering time preferences of the others and being regular in terms of their own watering schedules.

**3. ARE GARDENING FACILITIES ADEQUATE?**

No, most people would like to have a common shed available for tool storage adjacent the gardeners. Taking tools back and forth to their highrise suites is a big problem for some.

Watering facilities are inadequate. Two hoses run 20 to 30 meters across the parking lots to reach the gardens. These hoses are shared by people washing cars or doing general site watering.

The residents felt that hose bibs, strictly for use by the gardeners, located adjacent the gardens were needed. They did not know how many hose bibs they would like to have. Given the arrangement of the gardens, one hose bib for every two gardens appeared an ideal solution to the authors.

Protection from vandalism is inadequate. Local children go through the gardens and pull vegetables and trample plants. The fencing helps reduce vandalism as does the Neighbourhood Watch program but residents would like to do something more to curb the vandalism.

Some means of collectively disposing of wastes which cannot be buried is also required by the resident gardeners.

4. WHAT DO THE RESIDENTS THINK OF THE OVERALL SITE LANDSCAPE MAINTENANCE PROVIDED BY BCHMC AND WHAT KIND OF RELATIONSHIP DO THE RESIDENTS HAVE WITH LANDSCAPE MAINTENANCE CREWS?

Residents did not have much good to say about the landscape maintenance or the maintenance crews. Residents felt the crews did not know what they were doing. They cited examples of irregular and drastic pruning, lack of any organized fertilizing program and damages done to lawns because of poor fertilizer application procedures.

Residents felt that maintenance crews were made up of unskilled labourers whose only useful function was in keeping the grass cut.

On occasion residents have spoken to maintenance crews about doing something or other a different way and they have felt that their comments were not very well received. Residents tend to maintain their distance from maintenance crews and are frustrated by the lack of input they have with respect to the care of their common landscapes.

5. DO RESIDENTS FEEL THEY COULD TAKE ON MORE OF THE GROUNDS MAINTENANCE WORK PROVIDED THEY WERE COMPENSATED IN SOME WAYS FOR THEIR EFFORTS?

No, residents unanimously felt that they were not physically able to do all the necessary grounds work. They pointed out as well, that there would be union problems if they suggested taking over the maintenance work.

6. WHAT BENEFITS HAVE RESIDENTS RECEIVED BECAUSE OF THE GARDENS AT ROSEWOOD?

All gardeners harvest more than enough food for their own use from their gardens. They freeze, can, or pickle a lot and enjoy sharing surplus produce with their neighbours, friends and families.

All resident gardeners enjoy the physical exercise gardening provides.

As news of the beautiful gardens at Rosewood spreads, Rosewood residents are beginning to get visitors from all over. Most residents take great pride in their gardens and truly enjoy the visits.