



CMHC Demonstration Projects A Selected Annotated Bibliography

Demonstration Analysis Division

Demonstration Group

CMHC DEMONSTRATION PROJECTS
A SELECTED ANNOTATED BIBLIOGRAPHY

DEVELOPMENT EVALUATION AND ADVISORY SERVICES

DIVISION

CANADA MORTGAGE AND HOUSING CORPORATION

NATIONAL OFFICE

NHA 5377
ISBN 0-660-10746-5
Cat. No.: NH15-24/1980E

CONTENTS

FOREWARD	i
I INTRODUCTION	
A. CMHC DEMONSTRATION ACTIVITY	1
B. THE SELECTED ANNOTATED BIBLIOGRAPHY	3
II THE ATLANTIC PROVINCES	
A. MARYFIELD DEMONSTRATION PROJECT, CHARLOTTETOWN	5
B. THE MARKET SQUARE/CITY CENTRE, SAINT JOHN	7
III QUEBEC	
A. PORT OF CHICOUTIMI REDEVELOPMENT	11
B. LE VIEUX PORT DE QUEBEC	14
C. DUBERGER, QUEBEC CITY	21
D. LE VIEUX PORT DE MONTREAL	23
E. PROJET RUE ST-PIERRE, MONTREAL	32
F. MILTON-PARC DEMONSTRATION PROJECT, MONTREAL	34
G. SECTEUR FOURNIER, HULL	36
IV ONTARIO	
A. LEBRETON FLATS DEMONSTRATION PROJECT, OTTAWA	38
B. WOODROFFE DEMONSTRATION PROJECT, OTTAWA	52
C. HARBOURFRONT, TORONTO	60
V THE WESTERN PROVINCES	
A. MEADOW COURT, CALGARY	63
B. REVELSTOKE DEMONSTRATION PROJECT, B.C.	65

FOREWARD

Over the past seven years, Canada Mortgage and Housing Corporation has been directly involved in a number of projects intended to demonstrate new approaches to development and housing. In addition, it has been responsible for managing a number of special federal projects, initiated by the former Ministry of State for Urban Affairs. These projects are at various stages of development--some are nearly completed while others have yet to proceed beyond the planning stage.

It is important that experimental and development results from these projects are disseminated to as broad a range of public and private organizations as possible. The Selected Annotated Bibliography is one of a number of CMHC communications that attempts to fulfill that objective. It is hoped that this Bibliography will provide an interesting and informative introduction to these federal initiatives in the housing and urban planning fields.

ACKNOWLEDGEMENTS

In producing this material, much appreciation is due to Joan Michel, who prepared the text and annotations and completed the listings compiled by Gwenda Wells and Paula Archer.

W. Griggs
Director
DEVELOPMENT EVALUATION AND
ADVISORY SERVICES DIVISION

I INTRODUCTION

A. CMHC DEMONSTRATION ACTIVITY

The mandate of the CMHC demonstration activity was established in the 1973 amendments to the National Housing Act which authorized CMHC to "undertake or cause to be undertaken projects of an experimental or developmental nature..." A staff group responsible for initiating these projects was created in mid-1974.

Objectives: The principal goal of the program was to identify, implement and communicate concepts that would make a contribution to the improvement of the housing and community environment in Canada. This goal was translated into four objectives:

1. to identify appropriate ideas for demonstration, some with application in the short term, others in the long term;
2. to carry out, or help to carry out viable projects in which such ideas can be tested;
3. to disseminate the results of projects, so that they can be used by both CMHC and public and private organizations within Canada's development community;
4. to propose changes to CMHC policies, programs, standards, and guidelines on the basis of results from these activities.

Activities: The Corporation was involved in three main types of developmental pursuits:

1. the testing of broad improvements in housing, through projects which range in scale from a block or cluster to an entire neighbourhood, complete with supporting facilities and services;
2. the development of specific housing components, technologies and processes, the testing of which is usually incorporated within a housing or community demonstration project, rather than in separate experimental facilities;
3. the coordination of development planning for special federal urban redevelopment projects located on CMHC or federally owned land to production.

The variety and scope of the projects undertaken prompted CMHC to assume a number of developmental roles. In the projects outlined in the following pages, for example, the Corporation has acted as a building developer/owner, as a land developer, and as a project manager/administrator. In addition the Group has participated in a partnership arrangement, providing "add-on" assistance in the form of grants and technical staff support.

The thrust of future activities will focus more specifically on those projects that deal primarily with the provision and improvement of housing. Current interest in the rehabilitation of existing housing and the impact of energy conservation is expected to attract the Corporation's specific attention. Future projects are likely therefore to be of a small scale, "add-on" developmental nature that is supportive of the Corporation's research activities.

B. THE SELECTED ANNOTATED BIBLIOGRAPHY

This Selected Annotated Bibliography is a reference list of consultant reports and government studies on various demonstration projects. All the reports are essentially planning studies, addressing a wide range of project components, from municipal infrastructure requirements to environmental impact studies. In general, no report or study predates 1975, reflecting the recent initiation of most projects. While the list of reports presented does not exhaust the reference material available on each demonstration project, it does represent a broad summary of the research that has been carried out to date.

This Bibliography has been compiled for several reasons. It will provide government officials at all levels with the opportunity to keep abreast of innovative and experimental housing and community design from the vantage-point of public sector initiation. The reports and studies not only investigate new technologies in housing construction, but include new approaches to site specific studies on, for example, the financing of projects, the determination of population projections and socio-economic mix, the reassessment of traffic requirements for a project area, analyses of local commercial capacity and job creation potential as a result of project development, and the maintenance or upgrading of wildlife habitat, public open spaces and parkland.

The contents of the Bibliography should also provide basic reference data for any research conducted by the development or research communities concerning major public initiatives in housing and community design, as well as large urban waterfront redevelopments. It contains not simply the final development plans for each project, but also the various proposals and options that eventually give rise to a completed project. Therefore, the Bibliography functions as a forum for the presentation of demonstration ideas and development possibilities. It also serves as a body of information for those who might be involved in similar projects elsewhere in the future.

Selected reports within the Bibliography have been annotated, so that the reader may gain a clearer appreciation of the nature and scope of issues central to each project. While the profile that introduces each section briefly describes the overall project, the annotations pick up on major sectoral concerns, such as district heating, the rehabilitation of historic buildings, or planning options in general. Where several studies address the same question, an attempt has been made to annotate that study which has the broadest readership.

The bibliographical entries are listed alphabetically within

each section. Where there are multiple listings by one author, the second and following entries are prefaced by dashed lines approximating the length of the author's name. The entries are cited in chronological order--that is, the last report cited will be the most recent one published by that author.

All reports listed in the Bibliography can be obtained at or through the Canadian Housing Information Centre (CHIC), CMHC National Office, Montreal Road, Ottawa, Ontario K1A 0P7. In general, reports on Québec projects are available only in French; all other reports and studies are in English or a bilingual format.

A. MARYFIELD DEMONSTRATION PROJECT, CHARLOTTETOWN

The Maryfield Project is located in the inner suburbs of Charlottetown adjacent to the University of Prince Edward Island; commercial, educational and recreational facilities are within walking distance. This 31 hectare site, at present administered by a steering committee composed of the City of Charlottetown and CMHC officials, formed part of a federal/provincial land assembly acquisition.

The objectives of the Maryfield Project are: 1) to develop an exemplary housing community at prices which residents of Charlottetown who earn moderate incomes can afford; 2) to introduce alternatives to the large lot, detached housing which predominates in the area; and 3) working with local builders, to assure that the housing is well-constructed, attractive and is marketed creatively.

The Maryfield Project is the first medium-density housing development on Prince Edward Island. In total, 550 housing units are planned for the site, to be developed within a resource-conserving design concept. The units are located on quiet culs-de-sac in clusters of three or four units. While there will be provision made for low-income and senior citizen housing, the Maryfield Project consists primarily of units for medium-income families.

The sense of vista and spaciousness which Islanders are accustomed to has been achieved by integrating a large meadow-cum-swale system through the heart of the development, onto which the cluster housing backs. To date, approximately 100 units have been completed.

MARYFIELD STUDIES AND REPORTS

Ash, E.

(June, 1979).

User Study.

Charlottetown: Consultant report to the Maryfield Demonstration Project, CMHC.

Following the completion of a portion of Phase I of Charlottetown's Maryfield Demonstration Project, this study was initiated to obtain the views of residents so that these might be considered in future development plans for the Maryfield residential community. A population of twelve homeowners and five tenants were interviewed on their impressions, opinions and concerns regarding the housing and community design features.

The body of the report consists of the questionnaire and responses; answers are tabulated and mean figures calculated for both owners and tenants. The last section of the study reveals unsolicited suggestions and author's comments on the future of Maryfield. In general, the housing and design concepts are satisfactory, but concern is expressed about the future marketability of the project, especially whether it will receive continued attention by CMHC and the developers.

Children's Environment Advisory Service.

(March, 1978).

A Children's Environment Study.

Ottawa: Report prepared for the Maryfield Demonstration Project by the Children's Environment Advisory Service, CMHC.

Clayton Consultants Ltd.

(1976).

Housing Market Analysis Report.

Halifax: Consultant report to the Maryfield Demonstration Project, CMHC.

Glenn R. Marnoch & Associates with Environmental Associates of P.E.I.

(November, 1978).

Ecological Report.

Charlottetown: Consultant report to the Maryfield Demonstration Project, CMHC.

B. THE MARKET SQUARE/CITY CENTRE DEVELOPMENT, SAINT JOHN, N.B.

The Market Square Project, located in downtown Saint John, New Brunswick, includes a number of redevelopment initiatives to be undertaken concurrently throughout the city centre. In 1978, the Ministry of State for Urban Affairs (MSUA) was authorized to coordinate federal participation in the planning and implementation of the project; in March 1979, CMHC took over this responsibility. The project involves the combined efforts of three levels of government, and a private developer.

Five major objectives underlie this large-scale inner-city development: 1) to demonstrate how, through the collaborative efforts of the three levels of government and the private sector, city centres can be effectively and economically revitalized; 2) to make a significant contribution to the economic and physical revitalization of the core area of Saint John; 3) to create substantial job opportunities during the construction and operation phases; 4) to open up the waterfront to public use through the introduction of new public facilities; and 5) to act as a catalyst for the rehabilitation of other historic buildings in the downtown area.

The key element of the Market Square Project is a Central Building Complex, in which will be located a Trade and Industry Centre, a hotel, a regional library, both new and renovated retail and commercial space, an enclosed atrium, and parking facilities. Linked to the Central Building Complex will be a series of indoor and outdoor walkways and street improvements scattered about the immediate downtown vicinity. Two off-site office buildings are also planned. Along the waterfront and historic Market Slip, a retaining wall will be constructed to protect the shoreline and create a site suitable for development.

A housing complex, comprising a mixture of social and private market housing, will be developed on the waterfront. A number of historic buildings in the downtown core will be restored for use as commercial and office space, as well as to provide accommodation for federal agencies.

The whole project area will be visually integrated through the use of open spaces: tree-lined boulevards and pedestrian walkways will lead to a landscaped plaza and pleasure-craft harbour facilities along the waterfront. A second phase of the Market Square Project proposed the expansion of the Central Building Complex to accommodate a major department store on an adjacent site. Construction of the first phase under the new Market Square Corporation commenced in October 1980.

MARKET SQUARE STUDIES AND REPORTS

Arcop Associates.
(February, 1978).
Market Square Preliminary Concept.
Montréal: Consultant report to the Market Square Planning
Advisory Committee.

Broad, W.
(1978).
Preliminary Report: Convention and Exhibition Centre.
Saint John: Report to the Market Square Planning Advisory
Committee.

Citizens' Liaison Committee on Shopping Needs.
(August, 1977).
Shopping Needs Study.
Saint John: Report to the Market Square Planning Advisory
Committee.

Clayton Research Associates Ltd.
(March, 1976).
Study of the Financial Viability of the Proposed Saint John
Market Square Development.
Scarborough: Consultant report to the New Brunswick Department
of Municipal Affairs.

Fenco Consultants.
(March, 1978).
Cost Estimates for Alternative Perimeter Structures.
Saint John: Consultant report to the Market Square Planning
Advisory Committee.

(May, 1978).
Sea Wall Alternatives Study.
Saint John: Consultant report to the Market Square Planning
Advisory Committee.

General Urban Systems Corporation.
(1974).
Saint John Central Area Urban Design.
Montréal: Consultant report to the Market Square Planning
Advisory Committee.

Giffen, S.R.
(1978).

Market Square Development, Saint John.

Saint John: Consultant report to the Ministry of State for Urban Affairs.

This report discusses alternative perimeter structures for the proposed waterfront Market Square Development in Saint John, New Brunswick. While it was believed earlier that only a seawall was required to surround the area, it is now recognized that the building foundations on two sides will be close to the edge of the development and will therefore require piling.

Two approaches and their cost estimates are examined: an armour stone slope, and a piled structure. A description of each alternative is followed by an outline of its relative advantages and disadvantages. The report concludes that the cost of both would be similar. Relevant cross-sections of the perimeter are visually represented.

Jacques, Whitford and Associates.
(1976).

Review of "Preliminary Study of Proposed Seawall."

Saint John: Consultant report to Market Square Planning Advisory Committee.

Market Square Planning Advisory Committee/Arcop Associates.
(January, 1978).

Market Square Power Station Analysis.

Saint John: Joint study for the Market Square Demonstration Project.

Peat, Marwick and Partners and Zeidler Partnership/Architects.
(December, 1978).

Feasibility Study, Saint John Multipurpose Complex.

Toronto: Consultant report to the Market Square Steering Committee.

Rocca Group Ltd.
(n.d.).

Market Square Civic and Commercial Complex.

Saint John: Consultant report to the Market Square Planning Advisory Committee.

Rocca Group Ltd./Arcop Associates/Market Square City Centre
Development Management Committee
(April, 1978).

Market Square City Centre Development, Saint John, N.B.:
Feasibility Study and Concept Plan.

Saint John: Jointly produced study for the Market Square
Demonstration Project.

This report consists of the concept plan and feasibility study
for the Saint John Market Square Development. A synthesis and
scaled-down version of previous plans, it was designed so that,
if necessary, elements could be added easily in the future.

The report illustrates ways of improving the economic strength of
the city-centre through the use of an enclosed pedestrian walkway
linking work and commerce, the restoration of heritage buildings,
and the construction of the Market Square Complex -- the key
element of the project. Timing, cost estimates and
building/floor plans are included for the initial phase project;
an oversized set of concept plans supplements the report.

Saint John, City of
(1976).

Saint John Market Square Project: Application for the
Establishment of a Subsidiary Agreement.

Saint John: Application to the New Brunswick Cabinet Committee
on Economic Development.

Vermeulen, A.J.

(April, 1978, rev. May and June, 1978).

The Market Square Project: Cost Report.

Saint John: Consultant report to the Market Square Planning
Advisory Committee.

(August, 1978).

Cost Estimates.

Saint John: Consultant report to the Market Square Planning
Advisory Committee.

A. PORT OF CHICOUTIMI REDEVELOPMENT

In 1978, the federal government announced plans to redevelop the port of Chicoutimi, Quebec. The object is to transform an oil storage site of about twenty hectares into new urban uses more complementary to the nearby city centre. CMHC assumed the former Ministry of State for Urban Affairs' coordinating role in 1979; however, the planning and implementation of the project now is largely the responsibility of the Department of Public Works.

For more than thirty years, Chicoutimi's port has been primarily active in oil tanker traffic. The port's fifty holding tanks form the basis of a petroleum distribution centre serving the entire Saguenay/Lac-Saint-Jean region. The port installations and oil storage facilities, however, no longer comply with fire and environmental protection standards. Therefore, one of the principal objectives of the port redevelopment is to relocate this major potential hazard to life and property.

Port and rail installations consume 80 per cent of the heart of Chicoutimi, and cut the city off from the Saguenay River both visually and functionally. The port relocation will allow the municipal government to modernize infrastructure and promote the economic and social development of downtown Chicoutimi. Plans for the use of the reclaimed waterfront lands include the construction of housing units, and the creation of recreational and tourist facilities. Some preparatory work has been done such as the widening of arterial roads adjacent to the port site.

CHICOUTIMI STUDIES AND REPORTS

Gravel, Simard, Tremblay & Associés.
(août 1979).

Rapport préliminaire: Marina publique de Chicoutimi.
Chicoutimi: Rapport consultatif pour le compte des Travaux
publics, Canada.

Laberge et Pelletier.
(octobre 1978).

Project de développement du centre-ville: Projet collectif,
place de l'entraide économique.
Chicoutimi: Rapport consultatif pour le compte de la Ville de
Chicoutimi.

Leblond, R., L. Tremblay et Associés.
(août 1976).

Réaménagement des zones portuaires et ferroviaires: Dossier
justificatif, Chicoutimi.
Chicoutimi: Rapport consultatif pour le compte de la Ville de
Chicoutimi.

Ministère des Travaux publics.
(avril 1979).

Copie préliminaire du plan directeur d'aménagement.
Ottawa: Travaux publics, Canada.

(août 1979).

Études de marché: Projet de redéveloppement du Port de
Chicoutimi.
Ottawa: Travaux publics, Canada.

Société canadienne d'hypothèques et de logement - Bureau de
Chicoutimi.

(juillet 1979).

Rapport d'analyse: Sous-comité de l'habitation.
Chicoutimi: SCHL.

Société d'ingénierie Cartier Ltée.
(1979).

Terminus La Baie: Description du projet.
Chicoutimi: Rapport consultatif pour le compte de la Ville de
Chicoutimi.

Tremblay, Rinfret, Tremblay, ingénieurs-conseils.
(décembre 1978).

Relocalisation du Club de Yacht de Chicoutimi.

Chicoutimi: Rapport consultatif pour le compte de la Ville de
Chicoutimi.

B. LE VIEUX PORT DE QUÉBEC

Québec City's choice location at the mouth of the 960 km St. Lawrence River was the site of Canada's leading shipping harbour for almost three centuries. Today, the 69 hectare Vieux Port de Québec encompasses much the same area as was traditionally devoted to the city's waterfront activities. However, maritime activities have been severely diminished over time. In the early part of 1978, the federal government announced plans to oversee the redevelopment of this historic landmark, so that once again Le Vieux Port would form a vital component of Québec City's urban lifestyle.

There are four main objectives in Le Vieux Port project: 1) to transform obsolete land uses on a central urban waterfront into appropriate new uses that are economically viable; 2) to use the redevelopment of the port lands as a catalyst for the revitalization of the surrounding area, and for the economic benefit of the urban region as a whole; 3) to ensure that new uses meet contemporary requirements for effective urban development, at the same time as respecting the special significance of the area; and 4) to initiate a publicly conducted planning and development process that incorporates active participation by the people of Québec City.

During the summers of 1978 and 1979, extensive public exhibits were held at Le Vieux Port site, attracting a great deal of attention and generating much favourable publicity and project support. The project comprises a number of initiatives that include the proposed conversion of a cold storage warehouse into housing, conversion of abandoned warehouses into new commercial and institutional uses, a new marina, and public open space.

Recently the University of Québec has expressed interest in Le Vieux Port lands and buildings for the expansion of university facilities and the siting of student housing. In general, Le Vieux Port development phasing will be gradual in order to meet civic needs at the appropriate times, and to foster sound historical appreciation of Le Vieux Port.

The federal government, primarily through the National Harbours Board, owns 95 per cent of Le Vieux Port lands. Initially, the Ministry of State for Urban Affairs held the lead role as project coordinator and director; in 1979, CMHC assumed this responsibility. The implementation of the project will require tri-level government support as well as financial input from the private sector. Preparation for site development is now in the hands of a federal steering committee; concept plans have been drawn up and are under

public review. Actual new construction has been limited to of rebuilding the Port's seawall, in preparation for the 1984 international fête and boat show at Le Vieux Port's Bassin Louise. It is intended that development be phased in over the next eight years, and appropriate implementation mechanisms are currently under review.

VIEUX PORT DE QUÉBEC STUDIES AND REPORTS

A.P.L. Inc.

(novembre 1978).

Etude de potentiel sur l'aménagement d'un corridor de verdure à la jetée nord.

Québec: Rapport consultatif pour le compte de Parcs Canada.

Auerbach, Herbert C. Ltée.

(janvier 1976).

Propriétés fédérales à Québec, Secteurs Vieux Port-Bassin Louise
1. Programme de développement, 2. Analyse du marché.

Québec: Rapport consultatif pour le compte du MEAU.

Belzile, Brassard, Gallienne & Lavoie.

(avril 1980).

Etude de viabilité du projet d'habitation Fargues-Dalhousie.

Québec: Rapport consultatif pour le compte du Groupe de recherche et démonstration, SCHL.

Canada, ministère des Affaires urbaines.

(juin 1978).

Le Vieux Port de Québec.

Québec: Pamphlet de promotion.

Comité "Québec 1534-1984".

(août 1979).

Rapport d'étude sur l'événement Québec 1534-1984.

Québec: Chambre de commerce et d'industrie du Québec métropolitain.

Lagacé, Morel, architectes.

(novembre 1978).

Vieux Port de Québec - Potentiel d'utilisation des bâtiments.

Québec: Rapport consultatif pour le compte de Parcs Canada.

Twelve buildings and harbourfront facilities are examined to determine their potential for renovation and integration within a revitalized port area.

A comprehensive list of structural details, location, site and interior plans, along with artists' before-and-after concept drawings, are provided for each building. The utility features of the structures are underlined with careful attention paid to safety, aesthetics and innovative use. In many cases, optional

plans for living, work and retail space are included. An appendix provides an historian's perspective on the rationale for the conservation and preservation of historic sites.

Major & Martin Inc.

(janvier 1980).

Etude d'impact du Projet le Vieux Port de Québec.

Montréal: Rapport consultatif pour le compte du Groupe de recherche et démonstration, SCHL.

The Vieux Port de Québec project is intended to revitalize the recreational and residential elements of Le Vieux Port. This report examines the impact of such a revitalization on local and regional employment levels, and on Québec City's municipal finances.

The report examines both fiscal and employment situations within the context of the greater Québec City Census Metropolitan Area (CMA), identifying job losses in terms of firm relocations outside of the CMA and closures within the CMA. New jobs are measured in four ways: 1) those jobs to be located in the Vieux Port office buildings; 2) jobs, primarily of the service type, created indirectly in response to consumer demand by the projected residential sector; 3) jobs resulting from the growth potential/growth pole features of the Vieux Port complex; and 4) construction and related jobs that will last for the initial project years. Le Vieux Port master plan anticipates a new resident population of 1,000 persons, and the creation of 2,538 new jobs. The expected increase in real estate values within the Vieux Port area as a result of the redevelopment is expected to generate an additional \$1.15 million in municipal tax revenues.

Pelletier et Morel, géographes aménagistes.

(novembre 1978).

Le Havre des Douanes.

Québec: Rapport consultatif pour le compte du MAIN et de Parcs Canada.

Pluram, Inc.

(juillet 1978).

Vieux Port de Québec: Plan directeur d'aménagement - Proposition de ligne des quais 21, 22, 23.

Québec: Rapport consultatif pour le compte du MEAU.

(octobre 1978).

Problématique de l'habitation.

Québec: Rapport consultatif pour le compte du MEAU.

(octobre 1978).

Vieux Port de Québec: Plan directeur d'aménagement - Schéma d'aménagement de la zone d'accueil industrialo-portuaire.

Québec: Rapport consultatif pour le compte du MEAU.

(mars, 1979).

Vieux Port de Québec: Etude de potentiel de redéveloppement, zone basse-ville, Vieux Québec.

Québec: Rapport consultatif pour le compte du MEAU.

(mars 1979).

Vieux Port de Québec: Programmation des opérations 1979-1984 et fiches de projets (annexe au plan directeur).

Québec: Rapport consultatif pour le compte du MEAU.

An exhaustive outline of projects, together forming Le Vieux Port de Québec redevelopment plan, is set down in this report. A composite before-and-after site plan and budget and operations summary open the report, followed by over 100 individual project component listings, catalogued according to a standard format.

The report sets out in detail the various individual projects which could be incorporate within overall development. Details include: wharf construction; change of ownership administration; housing; port buildings; infrastructure; and industrial management. Site plans are provided for each section and principal sub-sections. Each is broken down into the following components: description; identification of responsibility; constant, unit, annual and total costs; expected date of completion; and timing.

(mai 1979).

Vieux Port de Québec: Plan directeur d'aménagement.

Québec: Rapport consultatif pour le compte du MEAU.

This report, the first of two volumes on Le Vieux Port de Québec master plan, consists of an inventory and comprehensive examination of existing port buildings, facilities and infrastructure, and an outline of the master plan and its underlying rationale. The second report (cited above), Programmation des opérations 1979-1984 et fiches de projets, describes in more technical terms the operational and developmental components for every detail of the Vieux Port project.

The first study is primarily concerned with establishing an understanding of the port redevelopment in terms of its historic

and current situation. It relies heavily upon a contextual appreciation of future needs: the site itself cannot be discussed in isolation from Old Québec (Lower Town) in general. A conscious attempt is made to overcome the mix of disparate functions characterizing both adjacent and port areas and to re-establish a working urban habitat.

Pluram/Urbanique/Vandry, Jobin, Gravel, Falardeau et associés.
(juillet 1978).

Réintégration d'une gare au centre-ville de Québec.

Québec: Rapport consultatif pour le compte de la ville de Québec.

Riendeau, B.
(1974).

Concurrence et complémentarité des ports du Québec par rapport à d'autres ports du Canada et aux Etats-Unis.

Québec: Rapport consultatif pour le compte de l'Office de planification et de développement du Québec.

Roche Associés Ltée.
(décembre 1978).

Etude de potentiel sur la géométrie du Bassin Louise.

Québec: Rapport consultatif pour le compte du MAIN.

Pursuant to the proposed redevelopment of Le Vieux Port de Québec, this report analyses the hydrodynamics, water and flood conditions of the port's Bassin Louise. The report's purpose is threefold: 1) to outline existing water conditions, 2) to determine conditions, assuming redevelopment plans are implemented, and 3) to summarize and recommend development parameters for the Bassin Louise.

Since the Bassin is divided into interior and exterior basins, the study first analyses water conditions given variable water flow in the interior basin, and then constant or restricted flow. The report cautions that restricted-flow analysis is largely hypothetical and that monitoring systems should be included if the second development option is chosen. Neither flow situation appears to be significantly better than the other. Extensive tables, figures and fold-out maps are provided, along with a bibliography.

Sorés Inc.
(1975).

Atlas of the Urban Waterfront Growth and Change in Canadian Port Cities: Ville de Québec.

Montréal: Consultant report for MSUA.

Travaux publics, Canada, Direction de l'aménagement immobilier.
(mars 1979).

Vieux Port de Québec: Etude de marché - Bureaux, Hôtels,
Commerce, Sport.

Ottawa: Ministère des Travaux publics, Direction de
l'aménagement immobilier.

Urbanex Inc. et Doran/Dubé et Price Waterhouse.
(décembre 1979).

Etude de réintégration d'une gare au centre-ville de Québec:
1. Conclusion et proposition; 2. Rapport d'étape Québec.

Québec: Rapport consultatif pour le compte de la Ville de
Québec.

Urbatique Inc.
(septembre 1978).

Le Vieux Port de Québec: Consultation sondage exploratoire.
Québec: Rapport consultatif pour le compte de MEAU.

Ville de Québec, Service de l'urbanisme.
(juillet 1974).

Programme de rénovation: Document de consultation - Vieux Port.
Québec: La Ville de Québec.

C. DUBERGER, QUÉBEC CITY

During the mid-1970s, CMHC participated in several housing initiatives in metropolitan Québec City. Duberger, consisting of 73 hectares in the city's inner suburbs, was considered a potential site for the location of approximately 2,000 medium-density housing units. The Duberger Project was intended to demonstrate new community and housing design, as well as more energy efficient site servicing arrangements. The development of Duberger has been postponed, following a general shift in priorities to other ventures currently being undertaken in Québec City.

DUBERGER STUDIES AND REPORTS

Pluram, Inc.

(février 1978).

Projet Duberger: Etude d'opportunité.

Québec: Rapport consultatif pour le compte de la SCHL.

D. LE VIEUX PORT DE MONTRÉAL

In December 1977, the federal government announced its intention to initiate the redevelopment of Le Vieux Port de Montréal. The primary objectives of this redevelopment are to transform obsolete urban waterfront property and uses into positive elements of the urban fabric by: 1) enhancing Montréal's heritage; 2) opening up the waterfront to the public; and 3) promoting port activity compatible with the area's new vocation. Public reinforcement of the emerging character and intensified use of Vieux Montréal should also serve as a catalyst for private sector renovations and redevelopment.

The 177 hectare site is the property of several federal agencies including the National Harbours Board, Parks Canada and CMHC. The Demonstration Group has been assigned the responsibility for overall planning and coordination. It has acquired certain portions of the site and demolished existing structures where necessary. The redevelopment of Le Vieux Port has been overseen by a federal steering committee representing the various government bodies involved in the project. The Association/Le Vieux Port, a federally mandated community organization, has ensured constant public participation in the design of Le Vieux Port de Montréal project.

Le Vieux Port site is located in downtown Montréal between Old Montréal and the St. Lawrence River. It includes Victoria, King Edward and Alexandria Piers located immediately in front of Old Montréal and forming the central harbourfront; Cité du Havre, the narrow 40 hectare projection lying across the face of the port, on which remain several Expo '67 facilities, such as Habitat '67 and the Museum of Contemporary Art; an area including the mouth of the presently unused Lachine Canal and the defunct Autostade site; and the historic Pointe-à-Callière sector, which forms an integral part of Old Montréal.

The redevelopment of Le Vieux Port de Montréal will be a gradual process. The size of fragmented components of the site demand careful planning by all public and private parties involved, in order to reflect present-day needs and attitudes. Intensive port activity will continue in parts of Le Vieux Port; in particular, it will be necessary to integrate the port activity of certain portions of the site with the new urban uses nearby. Effective public access to the site will depend upon improved intra-site vehicular and pedestrian movement, as well as more efficient transportation links from the city at large, through Old Montréal's narrow street network, to the site itself.

The four development options for the site are currently under review. The federal government is also investigating appropriate implementation arrangements to allow development to proceed.

LE VIEUX PORT DE MONTRÉAL STUDIES AND REPORTS

Association/Le Vieux Port de Montréal.

(novembre 1978).

Public Participation in Planning: Report on the First Phase, May to September 1978.

Montréal: Report to MSUA.

When the intention to redevelop Le Vieux Port de Montréal was announced by the federal government in 1977, a firm commitment to public participation was established at the outset. This report consists essentially of a status report on the public participation program for Phase I of the Vieux Port plan. In all, eleven appendices and a main report present a detailed account of the participation techniques used, and the response received from the people of Montréal.

The key to the participation structure was the creation of an Association responsible for ensuring meaningful, efficient and balanced citizen representation in the planning process. By September 1978, more than 600 individuals and 50 groups had responded to membership solicitation. During the summer of 1978, several consultation techniques were then put to the people of Montréal: a public conference with activities ranging from boat and bus tours of the site to workshops; briefs and letters; a summer exhibition which received over 18,000 visitors; a series of questionnaires; and a 'design-in', allowing Montrealers to illustrate their ideas themselves. Ten major and eight sectoral recommendations are outlined in the resulting report, forming a summary of key planning ideas and themes expressed by the people. Eleven extensive appendices contain the full participation input in its original form.

(décembre 1979).

Participation publique à la planification - Rapport sur la première phase et commentaires.

Montréal: Rapport par l'Association/Le Vieux Port de Montréal.

(December, 1979).

A Redevelopment Strategy for Le Vieux Port de Montréal.

Montréal: Report by the Association/Le Vieux Port de Montréal.

The Association/Le Vieux Port is a broadly based community organization set up and mandated by the federal government to represent Montrealers in the planning of Le Vieux Port de Montréal redevelopment. This report represents the preliminary version of the Association's proposed redevelopment strategy, one based on an extensive program of public consultation in 1978-79.

A wide variety of subjects is touched upon, the culmination of which is a set of key recommendations. Topics discussed include: the participation process, development options, historic and regional contexts, physical planning, port activities, cultural/institutional activities, commerce and industry, housing, social aspects, and management and financing. The overall tenor of the report is one of restraint, reflecting in part a desire to avoid the pitfalls of costly grand scale projects such as Expo '67 and the Montréal Olympics.

Beauchamp, Pelletier, architectes.
(novembre 1978).

Canal de Lachine, plan d'aménagement: Secteur Bonaventure.
Montréal: Rapport consultatif pour le compte de Parcs Canada.

Canada, ministère d'Etat aux Affaires urbaines/Société canadienne d'hypothèques et de logement.

(juin et novembre 1978).

Le Vieux Port de Montréal, Vol. 1, no 1 et 2 (périodique).

Chénier, Rémi.

(décembre 1978).

La Pointe-à-Callière: Aperçu historique de 1611 à nos jours.

Montréal: Rapport consultatif pour le compte de Parcs Canada.

Communauté urbaine de Montréal, Service de la planification.

(décembre 1976).

Canal de l'aqueduc - Proposition pour l'aménagement d'une piste cyclable.

Montréal: Communauté urbaine de Montréal.

Conseiller en projet communautaires Ltée.

(avril 1969).

Cité du Havre.

Montréal: Rapport consultatif pour le compte de la SCHL et le Conseil des Ports nationaux.

Desnoyers, Mercure, Gagnon, Sheppard et Moshe Safdie, architectes, urbanistes et associés.

(April, 1977).

Old Harbour and Cité du Havre, Montréal.

Montréal: Consultant report to CMHC.

(February, 1978).

Montréal Waterfront Action Programme.

Montréal: Consultant report to CMHC.

(mai 1978).

Vieux Port de Montréal: Plan d'étude.

Montréal: Rapport consultatif pour le compte du MEAU.

(December, 1978).

Urban Design Concept Plan.

Montréal: Consultant report to CMHC.

(March, 1979).

Options for Le Vieux Port de Montréal: A Project of the Ministry of State for Urban Affairs.

Montréal: Consultant report to MSUA and CMHC.

Essentially a summary of the planning that has been done to date, this report contains a general description of the four principal development options that have been suggested for Le Vieux Port de Montréal Project. The report is intended as a background paper for government officials, the public at large and the press. A full complement of consultant reports and studies on the project is provided at the outset.

The report presents an historical introduction to the Vieux Port; a site inventory of land, buildings and infrastructure; the major planning issues; and examines the preservation of existing port structures. The four development options are: 1) a minimum development plan which presents the Vieux Port as a major recreational resource to the city; 2) a maximum development plan, which would extend the fabric of the city to the river and place heavy emphasis on developing a residential sector; 3) a mixed development plan, containing a balance between open space and development; and 4) the Lachine Canal Basin Plan, a radical departure from the other three options, entailing major reconstruction of the port's physical and built environments. Statistics and estimated development costs accompany each option. A bibliography closes the report.

Dufour, P.

(février 1978).

Le Port de Montréal: Aperçu historique et thématique de recherche.

Montréal: Rapport de Parcs Canada.

This research paper addresses the history of Montréal's port from the mid-seventeenth century to present day. It is divided into seven sections: 1) the gestating port 1640-1830; 2) the fluvial port 1830-1850; 3) the maritime port 1850-1900, 4) the grain port 1900-1930; 5) the port in relative decline; 6) research themes; and 7) a collection of historic photographs and site plans.

Natural barriers such as rapids, strong currents and unsuitable winds and river depths, limited Montréal's port activities to barges and Durham boats for much of the city's early years. At the end of the eighteenth century, however, the influx of European immigrants and the introduction of canals linking Montréal and the Great Lakes, combined to provide the impetus for substantial port development, particularly to cater for ocean-going ships. Dredging activity in lac Saint-Pierre, the ascension of the steam ship, and Montréal's growing urban/ industrial complex, all eventually provided a strong foundation for a growing maritime port. The early twentieth century witnessed the opening of the Prairies and the rise of Montréal as not only the home of the major Canadian grain port, but also of the second largest port in North America after that of New York City. Since that time, however, the Port of Montréal has steadily lost ground to Vancouver, especially in the amount of export trade it handles. The report concludes that recent redevelopments in Montréal may yet serve to stem the Port's decline.

Gaucher, Pringle.
(août 1978).

Etude préliminaire des coûts de démolition et de recyclage des entrepôts des quais Alexandra et King Edward.
Montréal: Rapport consultatif pour le compte du MEAU.

(septembre 1978).
Vieux Port de Montréal: Etude des coûts a) recyclage des entrepôts, et b) modification des quais.
Montréal: Rapport consultatif pour le compte du MEAU.

(novembre 1978).
Vieux Port de Montréal: Etudes des coûts c) recyclage des entrepôts, option commercial.
Montréal: Rapport consultatif pour le compte du MEAU.

Gendron, Lefebvre Inc.
(septembre 1978).
Etude de génie civil.
Montréal: Rapport consultatif pour le compte du MEAU.

Hydro-Québec.
(février 1978).
Direction des projets de lignes de transport.
Montréal: Rapport consultatif pour le compte du MEAU.

Lahaye, Jean-Claude.
(octobre, 1969).
Canal Lachine: Tome I - navigation; Tome II - autres fonctions.
Montréal: Administration de la voie maritime du St-Laurent.

Lemieux, Morin, Bourdages, Doucet, Simard & Associés, ingénieurs
- conseils.
(février 1979).
Rapport d'étape 1 - Etude écologique pour le développement du
Vieux Port de Montréal: 1. Les données de base; 2. Dossier
visuel.
Montréal: Rapports consultatifs pour le compte de la SCHL et du
MEAU.

Lincourt, M.
(juillet 1974).
Port de Montréal: Etude de redéveloppement.
Montréal: Rapport consultatif pour le compte du MEAU.

(janvier 1975).
Port de Montréal: Etude de service en valeur, société générale
des systèmes urbains.
Montréal: Rapport consultatif pour le compte du MEAU.

Parcs Canada.
(mars 1979).
Canal de Lachine: Plan directeur.
Montréal: Planification, Région du Québec, Parcs Canada.

A Redevelopment Plan for Montreal's Lachine Canal was released in April 1978. This report and master plan consists in part of reactions to the Redevelopment Plan by Parks Canada officials, as well as Montreal industrialists, municipal authorities and urban community groups. The objectives of the master plan are: 1) to preserve heritage resources and to develop public spaces for cultural, social and recreational purposes; 2) to ensure accessibility to the Canal area from adjacent areas and the Montreal region; 3) to develop a primarily passive recreational resource; and 4) to ensure that existing facilities near the Canal are taken into consideration.

The Lachine Canal, stretching 13.4 km and encompassing bands of

land varying in width from 3 to 35 metres on each side, is no longer an operational transit corridor. The report examines the Canal's potential in terms of physical structure, land use, and vehicular traffic circulation, and also looks at the major development constraints. The concept plan illustrates in detail the emphasis placed on the various levels of accessibility and the need for functional integration of Canal facilities with those already existing in the city. Several historic photographs and fold-out maps illustrate the scope of the Lachine Canal Plan.

Québec, gouvernement du.
(septembre 1979).

Projet Archipel de Montréal: Synthèse de l'étude de préféabilité.
Québec.

Research Committee, Le Vieux Port Project.
(March, 1979).

Report on the evaluation of Railway Access Options.
Montréal: Report to the Interministerial Planning Committee,
CMHC.

Sorès Inc.
(juin 1978).

Projet d'aménagement du Vieux Port de Montréal: Etude de marché - Rapport d'étape 1.
Montréal: Rapport consultatif pour le compte de la SCHL et du
MEAU.

(octobre 1978).

Vieux Port de Montréal - Elaboration d'un concept urbain: Etudes de marché.
Montréal: Rapport consultatif pour le compte de la SCHL et du
MEAU.

Any development of Le Vieux Port de Montréal must consider neighbouring development in the City of Montréal, as well as overall metropolitan and regional growth patterns. This report examines the port's development potential in terms of housing, commercial, service and industrial space, recreation and tourism, in the context of adjacent Lachine, Old Montréal, the downtown core and the greater metropolitan region.

Although housing demand within the City of Montréal has been limited in recent years, and the downtown core saturated with restaurants, boutiques and other retail outlets, the report concludes that a successfully developed Vieux Port complex could

support the proposed residential and commercial facilities. Particular attention is paid to evaluating the potential for an interior market structure similar to Boston's Faneuil Hall Market, called the Place du Marché Bonsecours.

Travaux Publics (Canada).
(mars 1977).
Rapport sur le concept de développement.
Montréal: Travaux publics.

Urbec.
(mai 1978).
Canal de Lachine: Etude d'intégration urbaine.
Montréal: Rapport consultatif pour le compte des Travaux publics, Canada.

Walton, C.
(1979).
Designs for the Old Port of Montreal/Projects pour le Vieux Port de Montréal.
Boston: Report prepared for the Urban Design Program, Graduate School of Design, Harvard University.

Westburn Development Consultants Ltd.
(June, 1978).
Executive Summary: Simulation Analysis of Grain Elevators at the Port of Montréal.
Montréal: Consultant report to MSUA.

E. PROJET RUE ST-PIERRE, MONTRÉAL

This project, located in the Pointe-à-Callière district of Vieux Montréal, consists of six former warehouses which were acquired by CMHC in late 1977. It was intended that the restoration of the buildings would act as a catalyst for private investment and renovation in Vieux Montréal, thus complementing the public initiatives and development of the adjacent Vieux Port de Montréal Project.

The primary objective of the rue St-Pierre Project is to demonstrate that old buildings in historic urban areas need not be demolished; they can be restored and recycled to provide residential accommodation. Unlike much restoration which has taken place as a result of a general awakening interest in the inner-city, this project is not aimed at a specialized high-income market, at artisan accommodation nor at capitalizing on the potential tourist trade. It will demonstrate the potential of converting a variety of structural types for residential use by a broader cross-section of inner-city residents.

Therefore, through joint public and private initiatives, the six warehouses will be recycled into moderately priced residential units with a complementary mix of commercial and residential facilities. Three of the structures could accommodate conversion into 125-150 housing units. A mix of uses, including cultural, commercial, institutional and residential will be developed in the largest warehouse, which sits next to the Grey Nuns' Hospital. Renovation will commence on the buildings in the fall of 1980.

RUE ST. PIERRE STUDIES AND REPORTS

Asselin, Benoit, Boucher, Ducharme, Lapointe Inc. Coordination.
(décembre 1975).

Restauration de l'ancien hôpital général des Soeurs grises de
Montréal.

Montréal: Rapport consultatif pour le compte des Soeurs grises.

Association/Le Vieux Port de Montréal.

(November, 1978).

Proceedings of the Pointe-à-Callière Conference: Résumé of
Workshops.

Montréal: Pointe-à-Callière Public Participation Conference.

Burman, Bouchard, Architectes.

(juin 1979).

Musée Mare-Aurèle Fortin.

Montréal: Rapport consultatif pour le compte du Groupe de
recherche et démonstration, SCHL.

Consultas Inc.

(juin 1978).

Réfections de deux bâtiments dans le Vieux Montréal.

Montréal: Rapport consultatif pour le compte du Groupe de
recherche et démonstration, SCHL.

Desnoyers, Mercure, Gagnon, Sheppard & Moshe Safdie,
architectes.

(août 1978).

Projet rue St-Pierre.

Montréal: Rapport consultatif pour le compte du Groupe de
recherche et démonstration, SCHL.

(septembre 1979).

Le Cours St-Pierre: Edifice E.

Montréal: Rapport consultatif pour le compte du Groupe de
recherche et démonstration, SCHL.

Lambert, V.

(1978).

Inventaire, rue de la Commune.

Montréal: Rapport consultatif pour le compte du MEAU.

F. MILTON-PARC DEMONSTRATION PROJECT, MONTREAL

Milton-Parc, a five-block area located in downtown Montréal just east of McGill University, has been the setting of a prolonged confrontation between citizens and developers since the late 1960s. Although it has experienced some high-rise redevelopment, such as the La Cité apartment and office complex, the area was eventually down-zoned and further redevelopment was severely restricted. In May 1979, at the request of Montreal's heritage organization, CMHC purchased approximately 720 Milton-Parc dwelling units from private developers. These units now comprise an experimental project aimed at rehabilitation and conversion of inner-city rental units to co-op and non-profit housing.

This somewhat unique experiment in protecting older housing from demolition or conversion into expensive housing will result in 600 improved units, with target residents being those already living in the houses. The objectives of the Milton-Parc Demonstration Project include: 1) to rehabilitate run-down housing in the inner-city within a financial framework that ensures continued accessibility by lower-income households, especially the existing tenants; 2) to test the feasibility and desirability of developing a large community of small co-ops and non-profit organizations; and 3) to preserve buildings and streetscapes that are considered to be of significant heritage value.

CMHC, through a promise of sale agreement with Heritage Montréal's non-profit organization, La Société Patrimoine Urbaine de Montréal (SPUM), will act an intermediary in the rehabilitation activities. CMHC's role is to facilitate the retention and renovation of the housing under several of the National Housing Act's social housing programs. SPUM is responsible for coordinating the renovation of renovating and reselling the units, which will be reorganized into non-profit and co-op projects for existing tenants whenever possible. The organization will also act as a resource group for Milton-Parc residents, ensuring continued community participation in this project.

MILTON-PARC STUDIES AND REPORTS

Société du Patrimoine Urbain de Montréal.
(June, 1979).

An Action Plan.

Montréal: Report to the Research and Demonstration Group, CMHC.

This report examines financial aspects, such as general feasibility, market rent, and purchase price, within the framework of present NHA funding. Several means of transferring 550 units from the private rental sector to resident controlled and maintained co-op/non-profit housing are examined. An accompanying Annex sets out a detailed report of budgetary, historical, architectural and demographic analyses.

G. SECTEUR FOURNIER, HULL

The Secteur Fournier Project, a 40 hectare site located in Hull, Québec, was identified by the National Capital Commission and CMHC as a potential location for a joint housing venture. Secteur Fournier, which already includes a resident population of approximately 2,000 people, sits across the Ottawa River from Parliament Hill on a somewhat isolated and water-bound site. In the spring of 1975, plans were initiated for the demonstration housing community. Work to date has consisted of landscaping the shorelines for public recreational use.

The Secteur Fournier development proposal had several objectives. As a demonstration housing project, the Secteur was intended to make available to the residents of Hull -- particularly those affected by recent and planned urban renewal programs -- a range of dwelling and tenure choices at an affordable price. It was also intended to help catalyze further inner-city revitalization on the Hull side of the Ottawa River. The project is currently inactive due to existing market conditions.

SECTEUR FOURNIER STUDIES AND REPORTS

Ouellet Reeves Architectes.

(novembre 1976).

Secteur Fournier: Etude pour un projet de démonstration
résidentiel.

Montréal: Rapport consultatif pour le compte de la SCHL et de la
CCN.

A. LEBRETON FLATS DEMONSTRATION PROJECT, OTTAWA

The LeBreton Flats Project is a joint National Capital Commission/Canada Mortgage and Housing Corporation demonstration project located on downtown Ottawa land assembled about 1 km west of Parliament Hill. Before the federal government acquired the site in the late 1950s and early 1960s, the LeBreton Flats neighbourhood contained a mixture of houses and heavy industry.

The original purpose for acquiring the 63 hectare Flats was to provide a headquarters for the Department of National Defence. In 1974, however, the federal government directed that the cleared lands should be developed into an exemplary residential community, and that CMHC was to assume the role of delivery agent.

There are three principal demonstration objectives underlying the overall development of LeBreton Flats: 1) to create a plan for a model inner-city community; 2) to use the development of the project as an "urban laboratory," in which design and related ideas can be tested; and 3) to develop the project by means of an open planning process and with a much greater degree of consultation with approvals bodies and the public.

This model community is intended to provide: high quality social and physical environments by offering a variety of housing and tenure choices to a wide range of income groups; mixed land uses that will ensure the vitality characteristic of an inner-city environment and contribute to the repopulation of the Ottawa downtown core; integration with the surrounding communities and responsiveness to developing inner-city housing demand; privacy, individuality and security within the context of urban density levels; maximization of economies of energy, land and materials, given LeBreton's downtown location; the accommodation of regional transportation requirements without the creation of adverse effects on LeBreton Flats.

Site planning for LeBreton Flats began in 1975 and continued to 1977. A number of planning studies related to the early approach.

In 1977 emphasis was placed on the development of Phase One, consisting of 425 units adjacent to the existing Dalhousie neighbourhood. Following construction of 8 prototypical units, 10 development parcels were offered to private and "non-market" developers. CMHC Demonstration Group has been responsible for installing services, leasing development parcels and coordinating development. Three

hundred units are now under construction or are completed and occupied.

Development plans for the remainder of LeBreton Flats are now under review. An evaluation of the success of Phase I will be a factor in the planning of future phases of the project.

LEBRETON FLATS STUDIES AND REPORTS

Barnard, Peter, Associates, with Soloway, Wright and Houston.
(July, 1977).

LeBreton Flats Land Tenure Study.

Toronto: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

From the beginning of the LeBreton Flats Demonstration Project, there has been much discussion about how land is to be conveyed to a variety of individuals and corporations who are to occupy or build the units. Essentially, the tenure options are leasehold or freehold, freehold being by far the most common form available in Canada. This report sets out the tenure issues and analyses alternative options.

Federal government objectives focus on retaining full control over LeBreton lands in order to guide development, prevent private sector profiteering, and maintain public redevelopment potential. Given a target mix of homeowners, renters, non-profit, co-op and public housing tenants, along with the other project goals, this report goes on to evaluate the two tenure alternatives. Leasehold, it is concluded, has few advantages, especially where marketability is concerned. A background paper, consisting of a more indepth tenure analysis, supplements the report.

Beamish, A., N. Ironside and R. Moran.
(April, 1976).

Integrating LeBreton and Dalhousie: Architectural Guidelines.

Ottawa: Report to the Dalhousie Planning Office by members of the School of Architecture, Carleton University, Ottawa.

Bond, P.
(December, 1974).

Application of Housing Programs for LeBreton Flats.

Ottawa: Report on the LeBreton Flats Demonstration Project for the NCC.

Brais, Frigon, Hanley & Associates Ltd.
(May, 1978).

LeBreton Flats Demonstration Project: District Heating Analysis.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

The purpose of this report was to investigate the technical feasibility of a district heating plant for the LeBreton Flats Demonstration Project, the alternative methods and phasing of its construction, potential plant location and cost estimates. The

report does not contain an economic analysis nor does it consider the validity of initially opting for a district heating plant.

Drawing heavily upon technical material found in the Woodroffe Demonstration Project, Energy Utilization Study, by the same authors, the report concludes that, for an estimated total capital cost of \$6,275,000, a district heating plant could be constructed. The Department of Public Works Canada's proposed heating plant planned for the same area was considered, and the feasibility of using the old brewery building on the LeBreton Project site to house temporarily the Project's heating plant.

The report was not acted upon. A more modest district heating system is now being explored.

Burton, R.

(December, 1975).

LeBreton Housing Study.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Central Mortgage and Housing Corporation/National Capital Commission.

(January, 1979).

Public Participation Program: Some Perspectives.

Ottawa: Report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Damas and Smith Ltd.

(October, 1975).

Planning Approvals Process Status Report.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(December, 1975).

Transportation Planning Study: Phase One Status Report.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(December, 1976).

Transportation Study Area Isolation Analysis.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

This transportation study of the LeBreton Flats Demonstration Project is a continuation of the National Capital Region Traffic Analysis carried out by the same authors. The object of this second study is to determine traffic volumes and turning movements on the major street system encompassing LeBreton for the year when the National Capital Region population reaches 1.4 million people.

The study is based primarily on the Regional Municipality of Ottawa-Carleton Official Plan, and comprises three tests, using the LeBreton Flats preliminary concept plan and two alternate networks proposed for the area. A network analysis and truck movement network assessment is carried out for each of the three. Fold-out maps of each test are included.

(December, 1976).

Transportation Study: National Capital Commission Regional Traffic Analysis.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(April, 1977).

Proposed Steam Plant Access Feasibility Study.

Ottawa: Consultant report for DPW.

De Leuw Cather Canada Ltd./Beauchemin Beaton Lapointe Ltd.

(February, 1976).

Rapid Transit Appraisal Study for the Regional Municipality of Ottawa-Carleton.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Diamond, A.J. Ltd.

(February, 1976).

Urban Planning and Design: Phase One.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(February, 1977).

Draft Report.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Domicil.

(n.d.),

A Prototype Modular Housing System.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

D.P.A. Consulting Ltd.

(February, 1979).

Impact of LeBreton Flats on the Dalhousie Neighbourhood.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

The Dalhousie Neighbourhood, located directly south of the LeBreton Flats Demonstration Project, is characterized by middle- and low-income families and predominantly tenant-occupied housing. This study explores the potential for change and concomitant instability in Dalhousie as a result of the LeBreton project.

An examination is made of the local and Ottawa real estate markets, the investment potential for white-painting and redevelopment, public neighbourhood assistance programs and the role of non-profit, co-op and community organizations. The report presents options which would promote continued housing opportunities for lower- and middle-income families in Dalhousie, at the same time as integrating the older neighbourhood with the new. Site maps are included, as well as substantial technical and demographic data in the appendices.

Frood, P.

(February, 1977).

Sharewood Housing Cooperative: A Housing Needs Study.

Ottawa.

Geoconsult Ltd.

(November, 1975).

Summary of Geologic Subsurface Studies in LeBreton Flats.

Ottawa: Consultant report to J.L. Richards and Associates Ltd.

Hamilton, D.C., Consultants.

(July, 1976).

Preliminary Market Study for Retail/Commercial Space in LeBreton Flats.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(February, 1977).

Commercial/Retail Market Study.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(March, 1977).

Fiscal Impact Analysis of the LeBreton Flats Development.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

The development of the LeBreton Flats Demonstration Project will necessarily make demands upon Ottawa's municipal, regional and educational services. This report analyses the fiscal impact of such demands for the year 1976, assuming that the project was in existence and receiving a level of service comparable to that in the rest of the city.

The report includes an outline of methodology and procedure, a set of thirteen financial impact statements, and a discussion of issues and limitations to fiscal impact analysis. It concludes that the city and the Regional Municipality of Ottawa-Carleton would enjoy net revenues, but that the net expenditures for education would cancel out these revenues, the result being a slight project deficit. Cost analysis tables and a bibliography supplement the report.

Hough, Stansbury and Associates Ltd.

(January, 1979).

LeBreton Flats Landscape Development Interim Report.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Institute of Environmental Research.

(September, 1976).

Small Group Process, Volumes 1 and 2.

Toronto: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

The "small group process" is a group animation technique designed specifically for the LeBreton Flats Demonstration Project. The purpose of the technique is to identify attitudes, preferences and needs of groups of people who could be used as surrogates for future residents of LeBreton.

Ten groups -- for example, teenagers, French elderly, the handicapped, English low-income, and working couples -- were

perceived as having particular needs not usually considered in the planning process. Each group took part in four three-hour discussion sessions, wherein views were aired on such topics as 'Ottawa as a place to live', community components, and 'the ideal community'. The ten groups completed their work by each designing a LeBreton site plan. Although extensive conclusions concerning attitudes and preferences could not be drawn, predominant views are underlined in this report.

(September, 1976).

User Needs Interviews.

Toronto: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(December, 1976).

Community Services Report.

Toronto: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

McRostie, Soto, Genest and Associates Ltd.

(1975).

Report on 1975 Subsurface Investigation.

Ottawa: Consultant report to J.L. Richards and Associates Ltd.

Morrison, M.

(July, 1976).

Communal Households in Ottawa.

Ottawa: Consultant report to the LeBreton Flats Planning Team.

Morrison, Hershfield, Theakston and Rowan Ltd.

(October, 1976).

Wind and Snow Control Studies.

Guelph: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Murray and Murray Ltd.

(1974).

Wellington Street West: Development Study, Volume 1.

Ottawa: Consultant report to DPW.

National Capital Commission.

(February, 1977).

Density.

Ottawa: Report to the LeBreton Flats Demonstration Project, NCC/CMHC.

-----, and Central Mortgage and Housing Corporation.
(October, 1975).
Phase I Pre-planning Report.
Ottawa: NCC/CMHC.

(December, 1976).
Preliminary Design Criteria Phase I.
Ottawa: NCC/CMHC.

Neighbourhood Improvement Committee.
(1973).
Citizens Proposal for the Physical Evolution of an Inner-City Area.
Ottawa: Neighbourhood Improvement Committee.

Rankin, E.
(December, 1974).
Population Profile: LeBreton Flats and the Surrounding Communities.
Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Realty Research Group Ltd.
(October, 1975).
Compendium Report: Marketability of Housing on LeBreton Flats Site.
Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(October, 1975).
Phase One Planning Program: Housing Market Research.
Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(June, 1977).
Retail Marketability Analysis, LeBreton Flats.
Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(September, 1978).

LeBreton Flats Housing Demand.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Considerable changes in Ottawa's demographic and socio-economic structure have taken place since the Realty Research Group first completed their population and housing demand projections for the LeBreton Flats Demonstration Project (see Compendium Report: Marketability of Housing on LeBreton Flats Site). The federal government's decentralization policy, and spending cutbacks of the late 1970s have significantly affected Ottawa's employment-dependent population growth, and necessitated an update of the 1975 figures.

The present report re-examines Ottawa/Hull employment, population and household growth, along with its aggregate housing demand; an appendix includes cost comparables for Ottawa/Hull apartments and condominiums. Original projections regarding LeBreton Flats' probable capture of the housing market were not very different from the ones presented here. The significance of the new data is that, in the face of a lower projected population, resulting consequently in lower housing demand, the LeBreton planning team will have to place greater emphasis on the marketing of LeBreton units, at the same time as safeguarding the social housing character of the project.

(December, 1978).

LeBreton Flats Retail/Commercial Space.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

One of the objectives of Ottawa's LeBreton Flats Demonstration Project is to integrate commercial and retail services within the new community. Following an outline of existing retail/commercial space found within Dalhousie Ward, this report goes on to examine how much new space LeBreton Flats could realistically support.

In order to keep the retail/commercial component well below the regional scale, a department store cannot be included in LeBreton. The absence of such a drawing force led the authors to conclude that a good variety and mix of stores, the majority located in a weather-protected mall, would be required. Each retail and service type is examined, and recommended floor spaces given for Phases 1, 4 and 5/6 of LeBreton's development.

Richards, J.L., and Associates Ltd.
(November, 1975).

Pre-planning Infrastructure Report.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

The purpose of this study was to identify the planning constraints posed by infrastructure servicing of the LeBreton Flats Demonstration Project. The report emphasizes innovative servicing for LeBreton's water, sanitary and storm sewers, and its mechanical, electrical and communications systems.

The existing combined sewers presented the greatest planning constraint because of the sewage overflows in the LeBreton vicinity. The report recommends that a sewage separation program be top priority for the City of Ottawa, and that a new storm-sewer system be constructed. Solar assisted electrical energy was suggested for the mechanical system, and a 'wired city' concept (e.g., remote meter reading and sensing) was evaluated for the LeBreton communications system. Supplementary studies included an examination of foundations from Old LeBreton housing, and a bacteriological/chemical analysis of water in the canal and Ottawa River adjacent to the site.

(June, 1977).

Infrastructure Requirements: LeBreton Flats Stage One Development.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

The purpose of this report is to establish the extent and probable costs of infrastructure required for Phase I of the LeBreton Flats Demonstration Project. This phase consists of approximately 425 units of low-rise multiple housing to be located on a site which retains portions of Old LeBreton's infrastructure.

The report concludes that there will be no difficulty in providing ample water for domestic use and fire protection, using the existing Regional distribution system. Sanitary and storm sewers already in place will have adequate capacity to serve LeBreton. The report notes that the two sewer types will have to be separated within the development blocks; it is not expected, however, that construction of extensive new street sewers will be necessary. An underground electrical power distribution system is recommended to replace Old LeBreton's overhead Hydro plant. Since almost all of the area's old Bell telephone plant has been removed, it is clear for new servicing. Upgrading of sidewalks and roads will be necessary, but the realignment of Rochester

Street, considered separately in the report, is not considered to be a major engineering difficulty. Fold-out site plans illustrate existing/proposed water mains and sewers, and site photographs show road conditions. Cost schedules are provided for each infrastructure component.

(July, 1977).

Report on Heating of the LeBreton Flats Residential Community:
Stages One and Two.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

(n.d.).

Infrastructure Considerations.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

Shawinigan Engineering Co. Ltd.

(October, 1975).

LeBreton Flats Environmental Study.

Ottawa: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

This report contains an examination of the natural carrying capacity of the LeBreton Flats Demonstration Project site. While not an impact study, the report does provide an indication of the natural limitations of the site, and therefore establishes certain planning parameters for LeBreton Phase I Preplanning.

Site analyses were carried out on a wide range of physical and biological elements, including soils, the shoreline, landform, wildlife, micro-climate, water and air quality, solar energy, and archaeology. As a result of thin topsoil depths, low water-holding capacity of the soils, wind and pollution exposures and some erosion, vegetation is limited. The shoreline is generally stable and provides some of the best site potential for wildlife. LeBreton's air quality is adequate, although water quality, because of its bacterial content, is not sufficient to allow swimming in all locations. Fold-out site diagrams are provided for each analysis.

(March, 1977).

District Heating, Cooling and Solid Waste Conversion: A Technical Presentation and Discussion.

Ottawa: Consultant report to the Department of Public Works Canada.

Steering Committee, LeBreton Flats Project.
(1976).

LeBreton: Phase I Summary Report.

Ottawa: Report to the LeBreton Flats Demonstration Project,
NCC/CMHC.

Phase I of the LeBreton Flats Demonstration Project, preplanning, consisted of: 1) an examination of physical, social and economic constraints and potentials; 2) an identification of goals, objectives and planning issues; and 3) a development of site planning approaches. This report presents the LeBreton Steering Committee's Phase I findings and conclusions.

A planning program establishes LeBreton's management structure complete with a public participation element. Goals and social mix/community needs are identified, and an analysis of the housing market, physical site and transportation network set out. The housing market analysis includes an evaluation of socio-economic household configurations, tenure and unit distributions. Site planning approaches, such as an examination of LeBreton/neighbouring community interfaces, underline the breadth of approach assumed by the LeBreton planning team.

Teasdale, P.

(September, 1978).

A User and Visitor Generated Evaluation of Eight Experimental Townhouses.

Montréal: Consultant report to the LeBreton Flats Demonstration Project, NCC/CMHC.

This resident/visitor evaluation was carried out after the completion of the first eight houses in Phase I of the LeBreton Flats Demonstration Project. In order to determine what components of Phase I should be repeated or abandoned, five resident families and 210 visitors were interviewed regarding their satisfaction with the eight units and their general views on the project.

An exhaustive investigation of the five families was made, complete with demographic data, furniture mapping of former and LeBreton houses, and site photographs. Approximately 80 factors were presented to both residents and visitors for their evaluation. The overall conclusion of the report was highly favourable for the designers of LeBreton, although it was suggested that the eight representative units should be designed with more types of households in mind than the median family.

Thomson, Claudette.

(January, 1976).

Citizen Participation in the LeBreton Flats Project: Phase I Report.

Ottawa: Report to the LeBreton Flats Demonstration Project,
NCC/CMHC.

When the LeBreton Flats Demonstration Project was launched in May 1975, CMHC and NCC officials had already committed themselves to a public involvement process. The object of such a process was twofold: to allow for broad and meaningful participation of those who will be affected by the new community in the planning process, and to ensure participation at each planning stage.

The LeBreton Flats Citizens Committee was formed to carry out the above objectives. This report describes the Committee's inception, its organization (internal and with respect to the LeBreton planning and working teams), and accomplishments. Future plans and considerations are discussed, the focus placed on a renewed effort to broaden the base of public participation in LeBreton.

Zeidler Partnership Architects.

(December, 1975).

Mall Wellington Street West.

Ottawa: Consultant report to DPW.

B. WOODROFFE DEMONSTRATION PROJECT, OTTAWA

In 1974, approximately 162 hectares of former farmland in Ottawa's west end greenbelt were transferred from the Department of Public Works to CMHC for the development of the Woodroffe Demonstration Housing Project. The Woodroffe Project, had been envisaged as an alternative to the typical suburban development of the 1970s, providing for a broader range of housing opportunities than was available in traditional suburban developments. As a demonstration project, Woodroffe was intended to serve as a testing ground for innovative housing forms, community designs and technological developments.

The first Concept Plan which evolved for Woodroffe was based upon a resident population of 12,000 to 14,000 people. About 4,000 dwelling units had been planned in the form of low-profile, ground-oriented units with a net housing density of 3.3 units per hectare. These units would satisfy demand for a wide variety of housing types and prices and, at the same time, retain the most desirable features of the single-detached house, such as optimal privacy.

A matrix of green spaces, comprised of the area's hedgerows and wood lots, would form the skeleton for a series of residential precincts, distinguishable in size, density and housing prototypes. These micro-communities would have as their pivot a project core consisting of a full range of commercial, community, recreational, employment and residential facilities. The mixed land use within the core would preclude the necessity of long journeys by car in order to satisfy day-to-day needs, a departure from the typical suburban mobility pattern.

For a number of reasons, this subdivision plan was not registered. It was later felt that certain aspects of the plan no longer respected existing or future market realities and the initial implementation were arrangements no longer considered appropriate. This led to an announcement by CMHC in November 1980 that the overall concept design would be modified, and that the site would be offered to other developers on the basis of conditional sales for development by the private sector.

WOODROFFE STUDIES AND REPORTS

Barnard, Peter, Associates.
(June, 1975).

Woodroffe Phase 1: Market Research Input.

Toronto: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

Barnard, Peter, Associates/Ruston Shanahan & Associates.
(March, 1975).

Woodroffe Concept Plan Appraisal: Market Research.

Toronto: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

(June, 1975).

Summary of Market and User Research.

Toronto: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

Brais, Frigon, Hanley and Associates, and Shawinigan Engineering
Company Ltd.

(1977).

Energy Utilization Study.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

This report and accompanying supplementary papers examine the means whereby the Woodroffe Demonstration Project could be most efficiently and inexpensively heated. Six heating options are considered: traditional individual heating, cluster, precinct, multiple district, district and multiple source heating (using solar energy).

The report recommends the construction of a district heating plant for the Woodroffe Project. It has the advantages of wide-range future adaptability to retrofit, interim and long-term fuel cost savings and profitability. Cost, maintenance, administration and delivery factors are considered, as well as the implications of federal-provincial and municipal involvement. Site plans are included, along with profit structures and comparative cost tabulations.

Canada, Environment Canada.
(December, 1975).

CMHC Woodroffe Demonstration Project: Some Forest Inventory Data
1975.

Ottawa: Report from the Urban Forestry Program, Forest
Management Institute, Environment Canada, to the Woodroffe
Demonstration Project, CMHC.

Clemann, Large, Patterson and Associates, Ltd.
(May, 1978).

Energy Heating Analysis.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

This report investigates in detail all aspects of energy
consumption in the Woodroffe Demonstration Project. The object
is to determine the potential for 'unit-based' energy
conservation, based on average user habits as indicated by local
utilities and reference data.

The report includes an energy budget, and space heating, domestic
water heating, hydro, water and sewer, and economic analyses.
Capital investment and energy costs are examined for two cases:
no active solar assist, and domestic hot water solar assist. A
physical analysis of proposed site units establishes their
recommended skin composition; cash flow and payback analyses are
then carried out on all suggested unit fittings. The report
repeatedly emphasizes energy saving features, and the extent to
which user co-operation can be expected.

Currie, Coopers and Lybrand.
(April, 1976).

Tenure Study.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

Six tenure alternatives were considered for this report on the
Woodroffe Project: conventional freehold sale; CMHC 100% land
mortgage; conventional freehold sale with a community
association; CMHC land leasing; community of condominiums; and
special community corporation.

Each option was evaluated according to the following set of
criteria: financial, social consequences, legal complexity,
flexibility for CMHC, transferability to the private sector,
and political consequences. The effect of each option was
assessed for CMHC, the municipality, the private sector lenders
and developers, as well as the consumer. A second report, Tenure
Policy for Woodroffe Demonstration Project, addresses the
recommended option, CMHC land leasing.

(April, 1976).

Tenure Policy for Woodroffe Demonstration Project.

Ottawa: Consultant report to the Woodroffe Demonstration Project, R & D Group, CMHC.

Following on from an initial comparative analysis of six alternative forms of tenure (see Tenure Study by same authors), this report elaborates upon a recommended tenure of CMHC land leasing for the Woodroffe Project. Land leasing best satisfies the three objectives set out for the project: to provide a form of tenure affordable to a wide spectrum of people, to achieve economic vitality for the Woodroffe Project, and to demonstrate new concepts that are transferable to the private sector.

Land leasing would reduce costs for prospective homeowners, would have a positive influence on land price escalation, and would limit speculation and restrictive zoning practices. The issue of recapturing unearned profits upon resale by initial residents did not fall within the scope of this study.

De Leuw Cather Canada Ltd.

(September, 1975).

Infrastructure Planning.

Ottawa: Consultant report to the Woodroffe Demonstration Project, R & D Group, CMHC.

Desnoyers, Mercure, Leziy, Gagnon, Sheppard.

(June, 1977).

Urban Design Concept.

Montréal: Consultant report to the Woodroffe Demonstration Project, R & D Group, CMHC.

Doelle, L.L.

(February, 1976).

Woodroffe Demonstration Project Site Acoustics.

Montréal: Consultant report to the Woodroffe Demonstration Project, CMHC.

Golder Associates.

(September, 1977).

Soil and Groundwater Investigation: Woodroffe Avenue Demonstration Project.

Ottawa: Consultant report to the Woodroffe Demonstration Project, CMHC.

Graham, D.W. and Associates.
(March, 1979).

Landscape Intent Manual.

Ottawa: Consultant report to the Woodroffe Demonstration Project,
R & D Group, CMHC.

(March, 1979).

Landscape Studies, Phases 1 & 2.

Ottawa: Consultant report to the Woodroffe Demonstration Project,
R & D Group, CMHC.

Hanscomb Roy Associates.
(June, 1975).

Cost Plan Control.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

King, D.S., Canada Permanent Trust Company.
(November, 1977).

Overview Appraisal, Woodroffe Community.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

Kumove, Leon, Social Planning Ltd.
(1975).

An Analysis of Services of Interest, Social Planning.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

(September, 1975).

Analysis of Population Alternatives, Woodroffe New Community.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

The purpose of this report was to review possible population sizes for the Woodroffe Demonstration Project. An initial examination of population sizes included the decision to consider Woodroffe and adjacent existing neighbourhoods of Briargreen and Forest Ridge as an integrated unit. There have been indications that a considerable social distance separates Briargreen and Forest Ridge as a result of differences in ownership/residency patterns, numbers of children, and so on. It is hoped that the Woodroffe Project will function as a cohesive factor in the area, not only by integrating well itself, but also by promoting a greater sense of community spirit in the area as a whole.

An analysis of general Canadian and Ottawa region population parameters as well as those of the two existing communities -- together comprising a given base of 3,200 people -- led to a recommended total population of 17,000. A detailed account of population options and their impact on the local economy and infrastructure forms the body of the report. The comparative approach includes examination of such diverse factors as the requirements of the handicapped and the role of bilingualism and biculturalism within the community.

MaClaren, James F. Ltd.
(December, 1978).

Woodroffe Environmental Planning Study: Phase I - Data Review.
Ottawa: Consultant report to the Woodroffe Demonstration
Project, CMHC.

Nepean Township.
(1977).

"Restricting Area By-Law for the Woodroffe Community."
Nepean Township.

(1977).
Secondary Plan for the Woodroffe Community.
Nepean Township.

Oliver, Mangione, McCalla and Associates Ltd.
(October, 1977).
Woodroffe Demonstration Project Servicability Analysis.
Ottawa: Consultant report to the Woodroffe Demonstration
Project, CMHC.

Parker, C.C. and Associates Ltd.
(1975).
Traffic Study for Ottawa West (Woodvale) Shopping Centre.
Ottawa: Consultant report to Sheahan Estates Ltd.

Sesquaig Incorporated.
(August, 1977).
An Approach to the Woodroffe Community.
Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

Shawinigan Engineering Company Ltd.
(1975).

Energy Utilization Study.

Ottawa: Consultant report to the Woodroffe Demonstration Project,
R & D Group, CMHC.

(May, 1975).

Woodroffe Demonstration Project Environmental Study.

Ottawa: Consultant report for Zeidler Partnership/Architects to
the Woodroffe Demonstration Project, R & D Group, CMHC.

Smith, Larry, Research Ltd.

(July, 1974).

Ottawa West Shopping Centre Opportunity.

Ottawa: Consultant report to Sheahan Estates Ltd.

Standen, N.M.

(September, 1978).

Landscape Configurations to Reduce Snowdrifting: CMHC Woodroffe
Development.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, CMHC.

Stevenson and Kellogg Ltd.

(March, 1975).

Information Systems to Enhance Effective Management of the
Woodroffe Demonstration Project.

Toronto: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC, draft.

(July, 1975).

An Operational Control System for the Planning Phase of the
Woodroffe Demonstration Project.

Toronto: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

Sunderland Preston Ltd.

(1976).

Woodroffe Plan Proposal.

Ottawa: Consultant report to the Woodroffe Demonstration
Project, R & D Group, CMHC.

Sunderland, Preston, Simard & Associates Ltd.
(May, 1977).

Technical Memorandum: Environmental Appraisal of the Woodroffe Study Area.

Ottawa: Consultant report to the Woodroffe Demonstration Project, CMHC.

Wallace, McHarg, Roberts and Todd.
(January, 1978).

Woodroffe Environmental Impact Study.

Philadelphia: Consultant report to the Woodroffe Demonstration Project, R & D Group, CMHC.

This report consists first of a summary of general views on the environmental impact of the Woodroffe Demonstration Project; and, second, of specific views on the proposed storm drainage management plan and its effects on hedgerows indigenous to the Woodroffe site.

An outline of findings is followed by a list of recommendations, including specific instructions regarding the storm-water management plan and the ensuing health of the hedgerow population. As well, it was suggested that a comprehensive Environmental Impact Assessment Report be carried out, and a Long-term Environmental Monitoring Program be established.

Woods, Gordon and Company.
(1975).

Financial Analysis: Control Concepts for the Construction Project.

Ottawa: Consultant report to the Woodroffe Demonstration Project, R & D Group, CMHC.

(June, 1975).

Interim Financial Model.

Ottawa: Consultant report to the Woodroffe Demonstration Project, R & D Group, CMHC.

Zeidler Partnership/Architects.
(n.d.).

Interim Planning Approach.

Ottawa: Consultant report to the Woodroffe Demonstration Project, R & D Group, CMHC.

C. HARBOURFRONT, TORONTO

Harbourfront, consisting of approximately three kilometres of shoreline along Toronto's central waterfront, is the object of a large-scale, ongoing redevelopment that will include a broad range of urban activities. Originally created by landfill and developed for port industry and bulk storage, the Harbourfront site retains several massive, fully operational grain elevators and warehouses. Since the original federal initiatives of 1972, Harbourfront has evolved into a multi-use site, accommodating both industries and a broad spectrum of recreational, educational, cultural and artistic pursuits.

The Harbourfront lands are controlled by the federal government. In 1976, the Harbourfront Corporation was established to assume control over planning, management and site operations. In 1979 CMHC assumed from MSUA the responsibility for directing the preparation of a long-term implementation strategy and development framework for the site. The essential focus of the Harbourfront Plan is to develop the area so that, once again, Toronto will be a city whose inner-core is built to the edge of Lake Ontario. Over the last few years, Harbourfront has been successful in providing much-needed parkland, waterfront promenades, and flexible settings for the activities of a wide variety of community and cultural groups, musicians and artists. Future phases will be concerned with the more substantial aspects of the development, such as the renovation of vacated industrial plants and the construction of new buildings, to house residential and commercial, as well as cultural and recreational, facilities.

The project is now being overseen by Public Works Canada.

HARBOURFRONT STUDIES AND REPORTS

Central Waterfront Planning Committee.
(April, 1976).

Waterfront Precedents.

Toronto: Report to the Central Waterfront Planning Committee.

Harbourfront Corporation.
(March, 1978).

Harbourfront '78.

Toronto: Report to MSUA, the City of Toronto, and the
Municipality of Metropolitan Toronto.

Harbourfront Corporation.
(October, 1978).

Harbourfront Development Framework (supplement to Harbourfront
'78).

Toronto: Report to the Harbourfront Demonstration Project,
MSUA.

The Harbourfront Development Framework follows from Harbourfront '78, Harbourfront Council's first publication. The second document proposes a much more specific planning framework than had the original report. Most importantly, the development framework launched the idea of Harbourfront as an urban precinct; the redevelopment would contain a mix of cultural, recreational, residential and commercial uses in a water-oriented urban environment.

While not a master plan in the traditional sense, this report presents a set of goals, guiding principles, an organizational structure, and financial strategy for the Harbourfront project. Emphasizing flexible planning parameters, which will take into account Harbourfront's special location, conditions and history, the report outlines preliminary development plans for the as yet undeveloped bulk of the project. The housing component is addressed in a special appendix, which includes a plan for approximately 5,000 units.

Harbourfront Council.
(1976).

Harbourfront Corporation.

Toronto: Report to MSUA, the Municipality of Metro Toronto and
the City of Toronto.

In order to coordinate and implement a joint venture opportunity for governments to revitalize a large section of Toronto's Central Waterfront, it had been recommended that a special corporation be established. This report considers the initiation

of the Harbourfront Corporation, its objectives, structure and budgetary accounts.

The report summarizes the concept plan for the Harbourfront: a mix of recreational, cultural and complementary commercial activities. The emphasis is on innovative use, both in terms of developing a unique urban meeting place, and providing 'public windows' on traditional port activities. An accompanying document, 'Selected Appendices', provides a detailed analysis of selected site components.

London, Mark.

(December, 1975).

Urban Waterfronts: A Survey of Precedents.

Montréal: Consultant report to MSUA and Harbourfront.

Wallace, McHarg, Roberts and Todd.

(December, 1976).

Environmental Resources of the Toronto Central Waterfront.

Philadelphia: Consultant report for the Central Waterfront

Planning Committee and the City of Toronto Planning Board.

A. MEADOW COURT, CALGARY

The Meadow Court project is located in Calgary, in the neighbourhood of Spruce Cliff. The 9.35 hectare site consists of 455 housing units, spread over eight blocks, in the form of low-rise apartment buildings. In the mid-1970s, CMHC considered renovating the development as part of a demonstration housing project for low- and middle-income households. The project was intended to demonstrate the opportunities for the redevelopment of large-scale multifamily projects nearing the end of their initial useful life. However the study did not identify any acceptable solution and the Corporation recently decided upon an alternative implementation strategy for the site.

However, based on this initial study, the Demonstration Group is continuing to investigate the feasibility of the redevelopment and "recycling" of large institutionalized Public Housing and similar projects.

MEADOW COURT STUDIES AND REPORTS

McMillan, Hugh, Architect.
(1978).

Feasibility Study.

Calgary: Consultant report to the R & D Group, CMHC.

B. REVELSTOKE DEMONSTRATION PROJECT, REVELSTOKE, B.C.

The Revelstoke Housing Project is located on an 8.3 hectare site in the City of Revelstoke, British Columbia. The project is found in the northeast corner of the city, on an alluvial terrace some 11 metres above the city's general elevation.

CMHC purchased the site in 1975 to undertake a demonstration housing project for small urban communities. The several objectives underlying the initiative were: 1) to demonstrate that there are alternatives to large single-detached houses, mobile homes and conventional walk-up apartments; 2) to demonstrate the social advantages of planned integration of different types of households and forms of housing in the setting of a smaller community; 3) to demonstrate new solutions to housing and community design in severe snowfall areas; 4) to show how the natural setting can be enhanced and preserved through sensitive design; and 5) to demonstrate how the design-development process in smaller communities can include a high quality of design as well as the participation of local entrepreneurs.

Historically, Revelstoke has been a boom and bust town. Recently, the forest and tourism industries have served to stabilize the city's economy. B.C. Hydro Dam projects at Mica Creek and in the Revelstoke Canyon are now injecting Revelstoke with new economic potential.

Revelstoke's urban experience over the last century has left a legacy of land-consuming and service inefficient housing that is limited in terms of tenure and lifestyle. Through the demonstration project, CMHC wanted to offer housing alternatives to the current residents of the city, as well as to prepare for future housing demand resulting from the area's Hydro Dam activity. Thus, in the summer of 1977, the development of 200 residential units by private builder-developers was begun. Approximately 130 units have been completed to date.

REVELSTOKE REPORTS AND STUDIES

Canada, Central Mortgage and Housing Corporation.
(1975).

Revelstoke Demonstration Housing Project.

Ottawa: Report on the Revelstoke Demonstration Project, CMHC.

This report represents a detailed summation of recommendations for the development of a CMHC demonstration housing project in the City of Revelstoke, B.C. It focuses on four central issues: 1) social considerations with respect to the site itself and the relationship between the site and town; 2) physical factors, including housing and other facilities; 3) financial considerations, specifically the prices of housing and the development's impact on the city's housing market; and 4) implementation details, such as marketing and timing.

Careful attention is paid to aesthetics, both natural and man-made, the economic context of the city and surrounding employment opportunities, and particularly the matching of people with housing needs and preferred living styles. Maps, tables and schematic drawings provide substantial visual representation of the development plan, as well as technical, financial and demographic data.

Realty Research Group Ltd.
(January, 1976).

Housing Marketability Study: 20 Acre Thunderbird Site,
Revelstoke, B.C.

Toronto: Consultant report to the Revelstoke Demonstration Project, CMHC.

This report presents a comprehensive housing market study of Revelstoke, B.C. It analyses the Revelstoke Demonstration Project in the context of the city's overall housing supply-and-demand parameters, rather than the site itself. Two major assumptions underlie the study: 1) that the B.C. Hydro Dam project, located in the immediate vicinity, is developed and on time, and 2) that the Demonstration Project units are substitutable with private development units. The report investigates the economic situation (past, present and future) in Revelstoke. Particular attention is paid to the effect on housing of the Hydro Dam construction, in terms of population, employment, income and housing demand, and supply structures.