North End Revitalization:
Landscape Architecture as a Means to Building Social Capital

by
David Bodnarchuk

A Practicum submitted to the Faculty of Graduate Studies of
The University of Manitoba
in partial fulfilment of the requirements of the degree of

MASTER OF LANDSCAPE ARCHITECTURE

Faculty of Architecture
Department of Landscape Architecture

University of Manitoba
Winnipeg

North End Revitalization:

Landscape Architecture

as a Means to Building Social Capital

David Bodnarchuk

North End Revitalization:

Landscape Architecture

as a Means to Building Social Capital

Author:

David Bodnarchuk

Advisory Committee:

Chair:

Jean Trottier

Assistant Professor

University of Manitoba

Department of Landscape Architecture

Internal:

Dr. Richard Milgrom

Assistant Professor

University of Manitoba

Department of City Planning

External:

Dr. Stéphane McLachlan

Associate Professor

University of Manitoba

Department of Environment and Geography

This book has been produced by the author for a practicum and submitted to the University of Manitoba, Faculty of Graduate Studies, as part of the requirements for a Master of Landscape Architectural Degree. 2008.

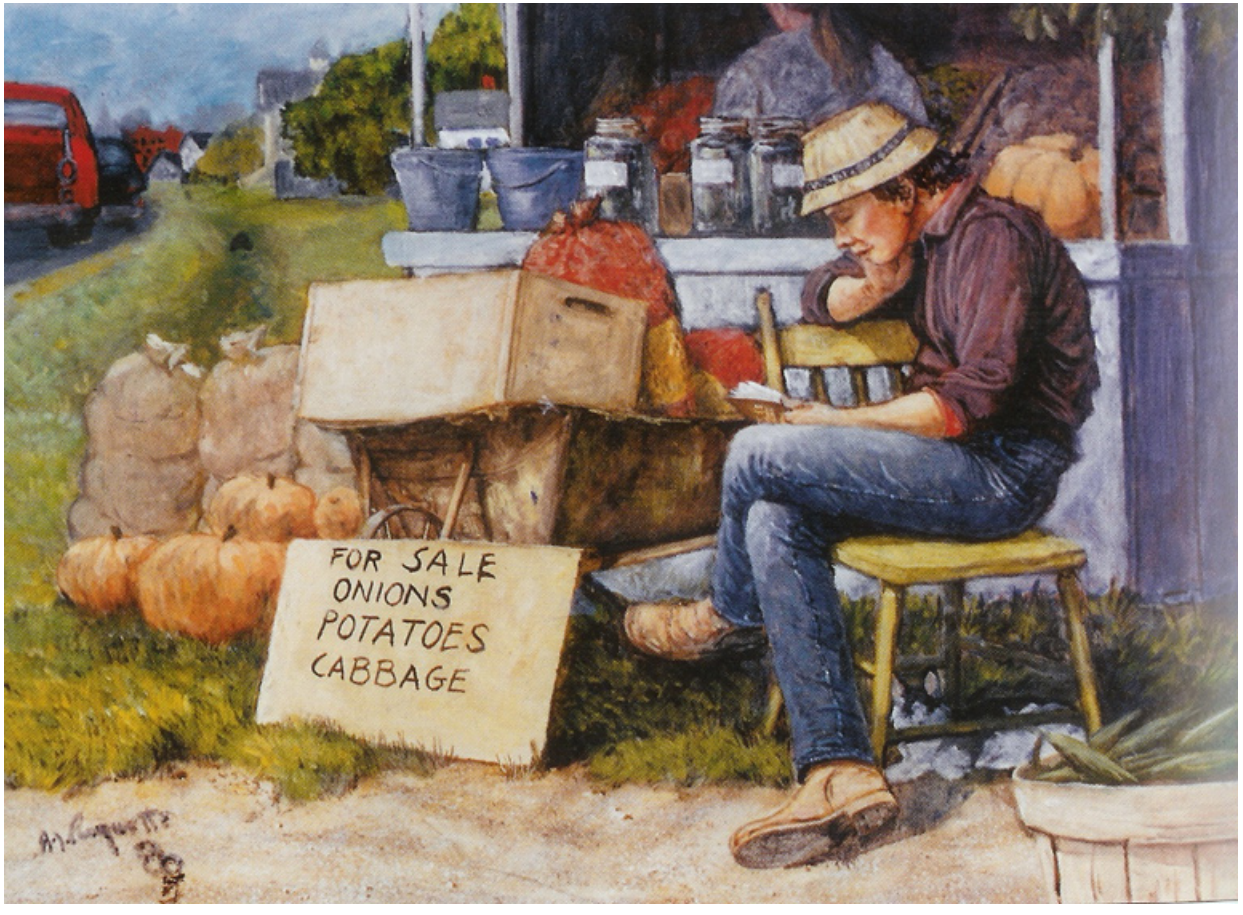
Acknowledgements

I would like to extend my thanks to my advisory committee, whose insight and expertise helped me to refine this work into something I can be very proud of. To my family and friends for their support throughout my education, without them, I could not have hoped to achieve such heights. And to my wife Kaily-Rae, whose love and encouragement has been my motivation and my foundation. Thank you all.

Proverbs 31-8

Table of Contents

PAGE


FOR SALE
ONIONS
POTATOES
CABBAGE

Chapter 1

Introduction

It can be said that we live in a culture that often values the new and novel above all else. In the North American city, the concept of permanence is one that is seldom seen or strived for. Though it may not be overtly objectionable, it never evolved as a major part of the North American building strategy. The obvious exceptions to this may be seen in the form of the cultural, social, and civic edifices upon which our society is based, however on the smaller scale such as housing, permanence is rare and often very expensive. The industrial and commercial nature of North America's upbringing has led it into a consumeristic nature. "Out with the old, and in with the new" could be considered the cultural motto. For this reason, we have been termed a 'throw away' society and wasteful in many ways. Consequently, the process of urban renewal is one that must be constantly and actively engaged in today's North American city. The majority of our infrastructure has a relatively short lifespan by intention. Thus, urban centres are becoming the focal point of many of our renewal projects on account of their relative age. Winnipeg is no exception having its share of distressed neighbourhoods especially on the fringes of its urban core.

A neighbourhood in 'distress' have its own unique set of issues that must be addressed when any form of urban renewal is proposed. There can be severe consequences for those living in the community if efforts are not taken to approach renewal properly. Displacement, gentrification, and the further concentration of poverty have all been observed as post-revitalization outcomes and have had their own measurable negative results. Traditional values in the development industry will often favour an immediate cost to benefit ratio. Though this may seem somewhat cold at times, it is seldom criticized because it is socially and politically reinforced. Today however, we are facing new issues that are bringing about a transformation in these traditional values. Developers are increasingly willing to adopt more sensitive methodologies in renewal projects in cases where long term benefits can be realized. Less energy consumption, positive social impacts, opportunities for cultural expression, all of these things can have a quantifiable value though perhaps less tangible than bottom line profits.

As we move towards the end of this century's first decade, a shift in our cultural paradigm is taking hold. Conservation and stewardship are new measures of success. Ecological awareness and environmental justice are increasingly at the forefront of a new movement. 'Green' has been transformed into a brand, marketed with unparalleled success and attached to almost every facet of our consumable world. As these innovative concepts fully pervade our culture in their attempt to address the many 'inconvenient truths' we, as individuals, are being pulled along with them.

This practicum explores a possible alternative strategy for urban renewal. Such a strategy should take into consideration the people living at risk and have the capacity to build capital of all forms, from social to economic. The renewal should have a slow and sustainable approach so as to avoid displacing or leaving people behind. Finally, the renewal effort should be inclusive to all as its success will hinge on public acceptance and participation. The ecological impacts of the strategy should also be an integral component and in as much as possible, the strategy should seek to address

matters of sustainability. The goal of this renewal strategy is ultimately to provide new housing opportunities that can attract reinvestment and rebuild confidence in the neighbourhood.

The subject of study is Winnipeg's North End. This area of the city encompasses some of Canada's most distressed neighbourhoods and is a prime candidate for some form of urban renewal. The effects of urban blight in this area are made apparent in the countless abandoned buildings and lots seen on nearly every block of every street. Though vacancy can be considered the neighbourhood's greatest detriment, it can also be considered its greatest opportunity. These, underused lots are seemingly unwanted which makes them most accessible for reuse. The lots offer a foundation for possibilities for much needed green space, social gathering spaces, as well as providing an opportunity for beautification. They can also provide the possibility for growing space. As community gardens, the lots could have an impact on all facets of the neighbourhood's community capital.

The potential of urban agriculture has been well studied and utilized as a renewal strategy. It has the productive capacity to grow a local economy, to build social cohesion, to improve one's diet and health along with so many other beneficial aspects. As a renewal method it can be sustainable and ecologically considerate. Furthermore, urban agriculture will necessitate the active participation of those living in the community and ultimately provides the critical opportunity for those people to reinvest in their own neighbourhood. Urban productivity can help people make healthier choices and limit their impact on global resources. The satisfaction alone of being self-reliant is itself a source of empowerment but can also be the impetus of a shifting focus back towards one's own community. This focus will ultimately lead to a greater investment in the community from those who are living there. Even those who rent and have little or no stake can invest their time and effort into something that will bring a return. It is that 'buy-in' that becomes the medium for any grass-roots movement in which it can grow. This practicum will explore the theoretical possibilities of utilizing urban agriculture as a means towards revitalization. In doing so, the pros and cons of such a system can be evaluated and addressed. Beyond the theoretical investigation, a more practical design exploration will address the real world requirements of urban agricultural systems and the proper on-site implementation. The practical design will take in hand matters of feasibility, accessibility and possibility. At the same time, it will help to pinpoint gaps that require further attention. Ultimately, the design begs the question, what could it look like? The response will be a space, or series of spaces that can fulfill a complex set of fundamentals that are necessitated by the system as well as being a place that can inspire and facilitate the process of building critical community capital that is often missing in the neighbourhood in distress.

Figure 1.01 - A 'throw away society' embodied in the ultra-convenient form of the single serving soda can. Unlike many forms of product packaging commonly used in today's market however, the aluminum can is recyclable.

Chapter 2

A Population at Risk

"People are gardeners first; age difference and religious affiliation assumes secondary importance."

Emma Victoria Hall

Urban Cycles and the Inner City Condition

As long as humans have been inhabiting cities, those cities have undergone a cycle of development and entropy. Cities age, buildings decay, new and innovative construction methods make things obsolete. People are often fascinated with the new and novel. Whatever the root causes, there has always been efforts to renew urban areas when they begin to lose their appeal. In the modern city, there were periods of rapid growth and periods of lull. As the city grows over time, it has a tendency to expand outward from a centralized core. As a result, the central neighbourhoods are typically older in age and thus, the first to experience significant forms of urban blight. Some of these neighbourhoods will survive and if they remain affluent, they will maintain a high status and become stable, character neighbourhoods. Other districts will not be so lucky. These are more commonly the neighbourhoods that were abandoned or were built to house the working class. The faster and cheaper the housing was erected, the less resistance it will have against the ravages of age. It is by this 'donut effect' of urban growth that city centres often fall into a state of 'distress'.

The inhabitants of these neighbourhoods will likely be the poorest in the city and thus, the most at risk and the most disenfranchised. When revitalization efforts begin to reach these areas of a city, they are not always so well received by the inhabitants. The reason being is quite simple. Renewal strategies are seldom approached in a sustainable way. The immediate result of these efforts is often wide spread displacement of the original inhabitants. Clearly, from a developer's point of view, it is a liability to have people living nearby when buildings are being demolished. So ultimately, even though the original residents are often the first to receive new housing units, they will have to wait a period of months, possibly more than a year before they can move in. If the neighbourhood undergoing the renewal is among the worst in the city, then the quality of the housing was the poorest and the cheapest. Where then can these people go? It is highly unlikely that they were living there for any reason other than pure necessity, not by choice. It is therefore, an obligation to develop and make use of a renewal strategy that can bring about positive change in neighbourhood in more sustainable way. Widespread displacement should be avoided at all costs and so to should gentrification, which is the dislocation of one social class for another one, usually higher in status.

Perhaps renewal strategies need to be a slower, more gradual shift that is inclusive of the diversity of residents. A method, that offers possibilities of personal improvement as well as infrastructural improvement. In this way, the residents move up with the neighbourhood instead of being left behind or displaced by the process. Success requires community acceptance, participation, and ownership. Most residents are not in ownership of their homes and thus, they are less invested. Opportunities for economic and social gain should be available in order to facilitate resident buy-in. This can be further emphasized if opportunities for the personalization of space should be provided. Personal expressions may be cultural or thematic in nature, but should not be in support of graffiti of other detracting statements. The visual appearance of urban decay should be countered by mitigating the offending eye sores to promote a sense of community pride. The renewal goals should provide new infrastructure that promotes good

health, active living and opportunities for social interaction; in short, building all forms of social capital simultaneously.

The Neighbourhood in 'Distress'

According to Human Resources and Social Development Canada, there are a number of cities in this nation that have neighbourhoods or tracts that are considered 'in distress'. As of 1997, there were 107 neighbourhoods in Canada and 60 of those were dispersed among just three metropolitan areas. Of those 60, 10 were found in Quebec City, 38 in Montréal and 12 in Winnipeg.[1] A distressed neighbourhood is characterized as such if it meets all 5 of a set of criteria.[2]

1. A high individual poverty rate in the census tract - above 27.66 percent;

2. A high proportion of total household income in the tract coming from transfer payments from government - above 17.36 percent;

3. A low proportion of the 15-24 population in the tract attending school full-time - below 43 percent;

4. A low percentage of the male population 15 and over, employed for pay full-time 49 or more weeks in the previous year - below 35.7 percent; and

5. A high percentage of families with children at home headed by a single parent - above 31.45 percent.

There can be a whole host of spin-off issues that develop in distressed neighbourhoods where poverty has a tendency to concentrate. Some studies have suggested that these neighbourhoods will often develop what has been classified as a 'culture of poverty', which can eventually pose a risk for a self perpetuating cycle of both income poverty and underclass behaviours.[3] Furthermore, the conditions in these troubled communities have an inclination to promote social isolationism.

"Social isolation deprives residents of inner-city neighbourhoods not only of resources and conventional role models, whose former presence buffered the effects of neighborhood joblessness, but also of ... cultural learning from mainstream social networks that facilitates social andeconomic advancement in modern industrial society. The lack of neighborhood material resources, the relative absence of conventional role models, and the circumscribed cultural learning produce ... concentration effects, that restrict social mobility. Some of these outcomes are structural (lack of labor force attachment and access to

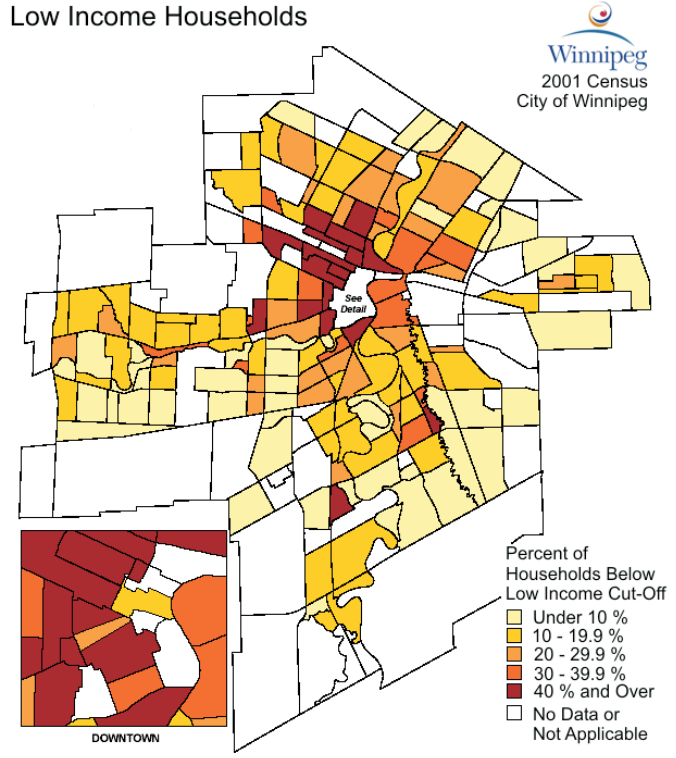


Figure 2.01 - According to the 2001 census, this map shows the neighbourhoods in Winnipeg and the percentage of households that are living in low income conditions.

informal job networks), and some are social-psychological (negative social dispositions, limited aspirations and casual work habits.)[4]

To put it in simpler terms, distressed neighbourhoods will cause distress in those who inhabit them. The connection between environment and behaviour is something that we all experience constantly. Our environment has altering effects on our mood, disposition, and level of optimism. When one wakes up and looks out their window on a scene of disarray and neglect, those external conditions may eventually begin to translate into internal conditions. "…research has identified the individual difference predictors of chronic illness, including health behaviors, use of health services, social factors such as social support, and psychological factors such as hostility and depression, it has become clear that these predictors are nested within geographic, developmental, occupational, and social environments."[5]

The First Proposals

With these sensitivities in mind, it is the intention of this practicum to investigate a possible revitalization strategy for the North End district of Winnipeg. Initially, it was not clear how that revitalization would be approached. Possible approaches such as streetscape renewal, the creation of pocket parks, strengthening the neighbourhood connective tissue, and vacant land development were considered. The earliest abstract of the proposal reads as follows.

"For years, we in the planning and design professions have been warned about urban decay and its negative effects on our cities. Although we have been aware of its impending approach, we have been powerless, or perhaps unwilling, to stop it. Now, urban decay is upon us and it has come in many forms, affecting nearly every urban centre to some degree. The relevant question to ask now is whether to obstruct this progression of urban decline or to embrace it. In nature, we find that any healthy ecosystem undergoes a constant process of entropy and succession. This is not unlike the city, whose cyclical patterns of rise and fall ultimately lead it to a point of renewal.

Urban decay can be a gradual decline over a period of years, or it can be quick and catastrophic. Consider the cow that kicked over the oil lantern in Mrs. O'Leary's barn, and the resulting fire that burned much of the city of Chicago to the ground. Had this moment of devastation not occurred, the template for the modern city might never have risen out of those ashes. This is not to advocate the willful destruction of cities or neighbourhoods for the sake of forcing redevelopment, rather I am trying to reveal the underlying pattern of disaster to growth to disaster to growth.

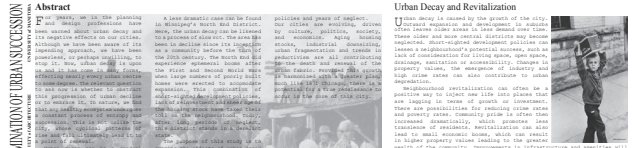


Figure 2.02 - An early proposal presentation. This proposal sought to identify the issues of urban revitalization as well as historical and contemporary information about the North End District of Winnipeg.

A less dramatic case can be found in Winnipeg's North End District. Here, the urban decay can be likened to a process of slow rot. The area has been in decline since its inception as a community before the turn of the 20th century. The North End did experience ephemeral booms after the First and Second World Wars when large numbers of poorly built homes were erected to accommodate expansion. A combination of short-sighted development policies, lack of reinvestment, and the prolonged neglect of the housing stock, have all taken their toll on the neighbourhood. Today, after long periods of disregard, parts of this district stands in a derelict state.

The purpose of this study is to examine the effects of urban decay on communities and how it affects the quality of life of those living in that community. Through case studies and qualitative research methods, a better understanding of urban succession can be gained. Ultimately, measures to mitigate urban decay without encouraging widespread displacement by gentrification and revitalization can be devised. The discipline of Landscape Architecture can provide an approach to reconnecting these spaces to their context, as well as remediation of many of the negative effects of poorly devised planning policies and years of neglect.

Our cities are evolving, driven by culture, politics, society, and economics. Aging housing stocks, industrial downsizing, urban fragmentation and trends in reductivism are all contributing to the death and renewal of the urban fabric. Provided this growth is harmonized with a greater plan, much like 1871 Chicago, there is a potential for a true renaissance to occur in the core of this city."

So, in the first proposal, the pertinent questions were:

•What is the maximum lifespan of this neighbourhood (The North End) and others like it?

•Does neighbourhood revitalization counteract poverty and crime or does it simply displace it?

•What does it mean to live in a neglected neighbourhood?

•How can landscape architecture play a role in this process of regeneration?

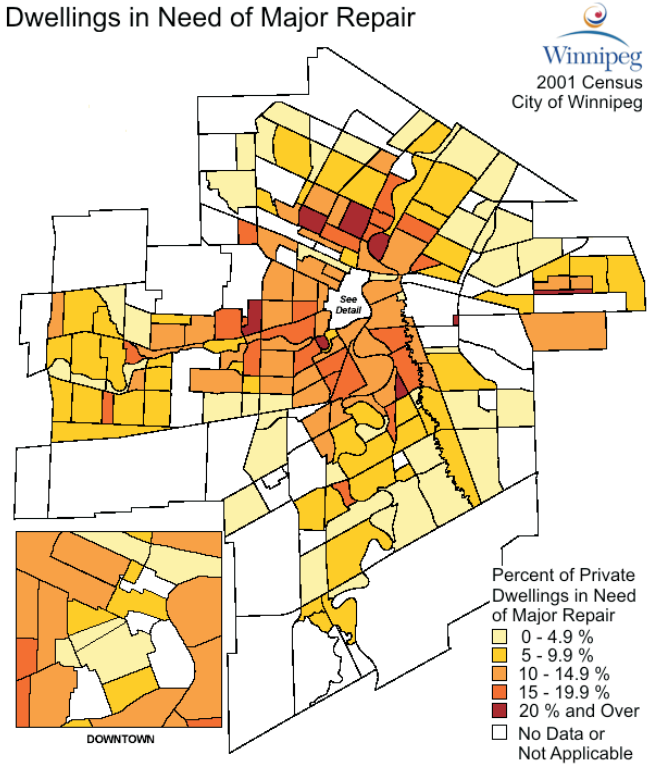


Figure 2.03 - According to the 2001 census, this map shows the neighbourhoods in Winnipeg and the percentage of their dwellings which are in need of major repair. The highest percentages, represented by darker colours are clustered around the inner city.

While this first proposal was admittedly lacking in sensitivity and appreciation for the character and history of the North End, it was addressing the concept of renewal from within. In this way, the neighbourhood can begin to prosper without creating an effect of displacement. Urban revitalization should not be measured in terms of its success at raising land values and beautification. It should, in addition, be an effort to revitalize the local economic conditions and to bring up the people along with the neighbourhood. The process of gentrification, which often follows revitalization, only displaces poverty and does not counteract it.

"Urban decay is correlated to the rate of growth of the city. Outward expansion and development in suburbs often leaves older areas in less demand over time. These older and more central districts may become neglected. Short-sighted development policies can lessen a neighbourhood's potential success, such as lack of consideration for living space, open space, drainage, sanitation or accessibility. Changes in property values, the emergence of industry and high crime rates can also contribute to urban degradation. Neighbourhood revitalization can often be a positive way to inject new life into places that are lagging in terms of growth or investment. There are possibilities for reducing crime rates and poverty rates. Community pride is often then increased dramatically, which promotes less transience of residents. Revitalization can also lead to small economic booms, which can result in higher property values leading to the greater wealth of the community. Improvements in infrastructure and amenities will then follow. The greater mixing of socio-economic classes can lead to better integration of ethnicities and cultures and a greater sense of tolerance. This is a utopian view of revitalization and does not begin to fully address the issues of displacement and gentrification. Gentrification is the replacement of lower socio-economic classes from neighbourhoods with more affluent middle or upper-middle classes. This urban succession or 'Hood Snatching" is a natural consequence of development especially when it occurs in poorer areas of a city. Gentrification can create displacement situations where less fortunate residents

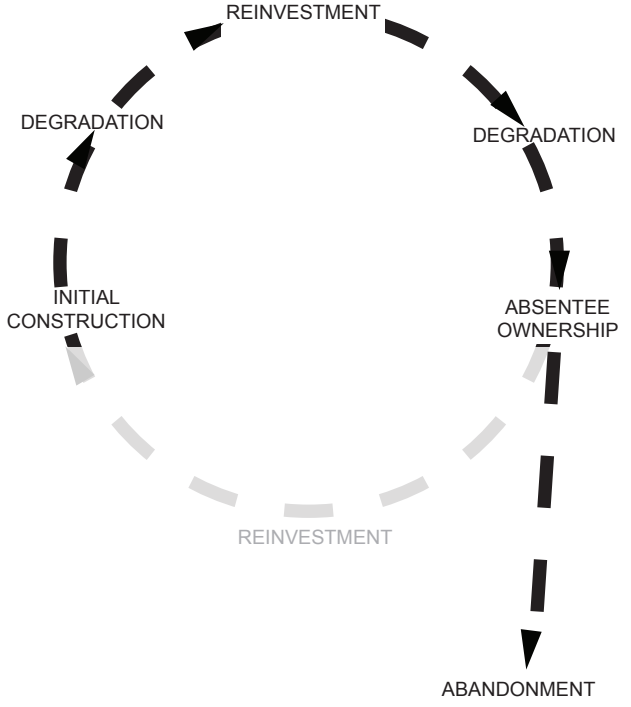


Figure 2.04 - This diagram is reflective of the cycle of urban decay and the subsequent vacancy that is present in the North End.

who lived in an area prior to revitalization can no longer afford the housing they live in. Ultimately they are forced to move and lose all investment in the particular community."

Despite its common disparagement, gentrification is not always such a detriment. Many older neighborhoods have high turnover, whether they gentrify or not, having a higher level of transience. Such neighborhoods often have so much vacant or abandoned housing that there's no need to drive anyone out to accommodate people who want to move in.[6] This is particularly the case in the North End. Conversely, in North End neighbourhoods such as Dufferin or William Whyte, gentrification may not have any beneficial effects. The reason being, that these are some of the poorest neighbourhoods in Winnipeg and, in fact, all of Canada. The housing options here are few, bad or worse. If displaced, people living here would have little hope of finding a residence that is any more affordable. Revitalization in distressed neighbourhoods has to have a more sensitive approach as there are more people and places that are at a greater risk. Of the common processes of urban renewal, only some are applicable in communities such as the North End. Some revitalization policies include the following:

The Big Push
Usually involves changes in policy, retraction of permits, and an increased presence of legal enforcements.
Leads to reductions in crime but can be discriminatory due to police profiling. As a result, resident displacement is common.

New York City, Times Square.
Mayor Rudy Giuliani in the mid-90's leads an effort to crackdown on crime and prostitution, closes down adult theaters, and nuisances such as drug dealers and squeegee-men. Critics say that the policies unfairly targeted many of the lower income residents in nearby areas such as Hell's Kitchen.

The Big Demolish
Large scale demolition of run down neighbourhoods in favour of redevelopment.
Resident displacement is mandatory, the end result is usually unhealthy segregation without diversity.

St. Louis, Pruitt-Igoe Housing complex.
Built on the site of the former De Soto-Carr neighbourhood, a failed housing project known for crime and gang activity. The 2000+ unit, high density project quickly became a racially segregated ghetto as extreme poverty was concentrated in one area. Crime rates soared higher than before, vandalism was rampant. The Pruitt-Igoe has been a commonly used argument against urban renewal and government housing projects and due to its over-whelming failure, it was demolished only 20 years after its opening.

The Histori-chic Retrofit
Influx of new residents to an historic area often after an exodus of commercial or industrial tenants. Vacancy draws in waves of new residents which leads to gradual displacement by gentrification.

Minneapolis, North Loop Warehouse District.
The antiquated warehouse district was full of historic but vacant buildings. First wave of new residents were of modest income, and often bringing a cultural influence, i.e. artists, students. This sparks higher property values and large rental increases. The second wave was mostly higher income group who then pushed out the first group.

Slow Sustainable
Grassroots approach to renewal orchestrated by a core group of

facilitators but executed by residents themselves. Displacement is minimized, renewal is gradual and controlled, residents buy in and receive a return on their investments.

San Juan, Calle Cerra.
A civic sponsored renewal project of an aging neighbourhood in San Juan, Puerto Rico known for crime and drug sales but with a strong cultural base. First phases included massive street clean-up and facade improvement projects. Residents "take back" the area with a street festival to renew confidence and inconvenience the drug trade as much as possible.

It is the latter example that would be most applicable in the North End of Winnipeg given the circumstances that exist in the neighbourhood. This revelation led to an investigation and development of a sustainable method of renewal. The prevalence of vacant lots in the area and their negative influence on their surrounds made them a natural starting point. After discussions with local social service workers it became clear that food security was an issue in the area. After much research into the precedent and feasibility of community gardens as catalysts for renewal a revitalization strategy that would incorporate urban agricultural practices was devised. The remaining and perhaps the most relevant question in this proposal as a Master's of Landscape Architecture practicum is what would that strategy, if it were incorporated, look like. The presentation of the conceptual design will reflect the process leading up to and scope of the final design solution. Though there may be a number of possible variations to any design, this approach seeks to be practical and playful in its attempt to address the functional needs of such a garden network and the people who would use it.

The Local Condition

Like many urban centres, the city of Winnipeg has its neighbourhoods that are troubled and those that are doing very well. The Red and Assiniboine Rivers meet in the central part of Winnipeg at an area known as 'The Forks' While much of this land is held in public trust, there are a few residential enclaves that have always enjoyed a prosperous and stable status. Neighbourhoods such as Osborne Village, Wolseley, Armstrong Point, and Wellington Crescent are certainly desirable places to live in the centre city and in the case of the latter two, quite exclusive as well. Conversely, the rest of the city centre is composed of neighbourhoods that are struggling, some more than others. West Broadway, Spence and Centennial neighbourhoods encircle the downtown core and exchange district. These communities have been the target of recent revitalization efforts. There have been some truly notable success stories in these areas especially in Spence and West Broadway. There is a strong polarity between some of these

Figure 2.05 - A Winnipeg Community Garden at Spirit Park.

neighbourhoods despite the minimal geographic separation.

Urban agriculture has played a role, albeit a small one, in the effort to revitalize Winnipeg's West End. Community gardens became a natural choice as a vacant lot renewal strategy. The first garden was established in the mid 90's on Sherbrook Avenue by the West Broadway Gardening Group (WBGG).[7] The lot in question had previously been known as a dumping ground and was in many ways, symbolic of the tossed away sentiment that the neighbourhood itself is subject to. Like many inner city community garden projects, the WBGG garden began as an effort to 'clean up' the area. After accomplishing that, in an attempt to maintain the new state of order and to bestow a sense of ownership, a garden was planted. Wildflowers, fruits and vegetables were cultivated to add beauty, purpose, and a sense of place. The garden created an enclave for people to gather, learn, work, and play. The WBGG set up workshops to teach and advise gardeners, a tool-lending service, and hosted social events to help gardeners and community members' network.

The garden had its share of difficulties, which are quite consistent with vacant lot gardens in general. A minimal budget, of about $3,000 from various sources; financial and in-kind from Prairie Originals, Home Depot, Winnipeg Harvest's Grow-A-Row program, T&T Seeds, Winnipeg Supply, Reimer Soils, Sherbrook Suds, Armstrong Point Residents' Association and a few other community groups. The constrained budgets will regulate ambitious expansion or installation however, this may be a blessing as waste is limited. Furthermore, the WBGG did not have ownership over its garden, nor did it have anything more than an agreement that they could occupy the lot until the owner found an otherwise more profitable opportunity. Theft and vandalism were problematic but were manageable with more frequent visits by garden users. The more lived in a garden is, the greater the presence of people who care and thus, the less who don't. Water was collected in a rain barrel but this is seldom an inadequate amount to water an entire garden. As such, an agreement was made with the adjacent buildings to supply water as well as a local laundromat. There was some contamination in the soil revealed after tests were performed by the University of Manitoba and Manitoba Conservation. "Results indicated that lead levels were high likely from traffic and dumping on-site. However lead levels were not threateningly high, or of a type that was soluble (or incapable) of being absorbed by plants."[8]

"In 1999 the gardeners harvested more than twelve bushels of tomatoes and nearly as much squash. They grow cucumbers, zucchini, pumpkins, watermelons, green and red peppers, broccoli, cauliflower, cabbage, carrots, radishes, lettuce, green onions, herbs, raspberries, strawberries and numerous varieties of annual and perennial flowers. The produce from the communal areas often goes to a community table at a local event as part of the garden's commitment to community participation and pride."[9]

The gardens of the Spence and West Broadway neighbourhoods are highly suitable as a precedent study for renewal in the North End. Both areas of Winnipeg are certainly considered 'distressed' neighbourhoods. They have a similar demographic in terms of ethnicity, level of poverty, level of education, population densities are similar, home owners versus renters, level of transience, age and condition of the housing stock as well as the prevalence of vacant lots, although the North End has a much higher number. Higher rates of vacancy wouldonly provide a greater opportunity for community garden development and the ability to have a greater impact on a more widespread area. Also, vacant lots are accessible. Many are owned by the city, and those that are not, have certainly been abandoned by their owners. They have values ranging from $5000 to $7000 typically with corner lots or larger lots being

valued somewhat higher. They are symbolic of the urban blight in the area and often become dumping grounds and are quickly overgrown with weeds, and scrub trees. They are utilized by residents only for quicker street to alleyway access. For these reasons and many more, they are a perfectly logical foundation upon which to begin a sustainable revitalization strategy. These lots can become the matrix in the renewed urban fabric. As a network of community gardens, residents of the North End can have an opportunity to 'grow' a neighbourhood renaissance, and at the same time, increasing all facets of the community capital in the area. This approach has been utilized in the past to successful ends. According to a study that encompassed 20 garden programs in New York State, the following encouraging results were found.

Figure 2.06 - A community garden on Sherbrook Street in Winnipeg. Tours of local gardens had been organized by Heifer International which has also provided a great deal of support to many garden projects in the city.

"The most commonly expressed reasons for participating in gardens were access to fresh foods, to enjoy nature, and health benefits. Gardens in low-income neighborhoods (46%) were four times as likely as non low-income gardens to lead to other issues in the neighborhood being addressed; reportedly due to organizing facilitated through the community gardens. Additional research on community gardening can improve our understanding of the interaction of social and physical environments and community health, and effective strategies for empowerment, development, and health promotion."[10]

Chapter Notes

1 *Hatfield, Michael. "Concentrations of Poverty and Distressed Neighbourhoods in Canada" Human Resources Development Canada; Applied Research Branch. 1997. http://www.hrsdc.gc.ca*

2 *Ibid. These percentages are a reflective of a proportional relation to the whole.*

3 *Wilson, William Julius. "The Truly Disadvantaged: The Inner City, the Underclass and Public Policy," The University of Chicago Press; Chicago, IL. 1987.*

4 *Wilson, W.J. "Public Policy Research and The Truly Disadvantaged" in Jencks and Peterson, op.cit, p. 463.*

5 *Taylor, Shelley E., Repetti, Rena L, Seeman, Teresa. "Health Psychology: What is an Unhealthy Environment and How Does It Get Under the Skin?" Annual Review of Psychology; 1997. p.413.*

6 *Freeman, Lance. "Displacement or Succession?: Residential Mobility in Gentrifying Neighborhoods," Urban Affairs Review, Vol. 40, No. 4, March 2005.*

7 *Hall, Emma Victoria. Manifestations Of Community Based Agriculture In The Urban Landscape: A Canadian Compendium And Four Winnipeg Case Studies. 2000. Department of Landscape Architecture, The University of Manitoba: Winnipeg MB. p.149-150.*
{Emma Hall's thesis work is an invaluable source for further information on Winnipeg's community garden scene, which has a rich history and a bright future.}

8 *Ibid. p.152.*

9 *Ibid. p.150*

10 *Armstrong, D. "A survey of community gardens in upstate New York. Implications for health promotion and community development". Health and Place 2000 6(4): 319–327.*

Chapter 3

Urban Agriculture as a Means to Sustainable Development of Social Capital

"The motivating force of the theory of a Democratic way of life is still a belief that as individuals we live cooperatively, and, to the best of our ability, serve the community in which we live..."

Eleanor Roosevelt

The term social capital was first coined in 1916 by L.J. Hanifan, a state supervisor of the West Virginia rural school system. He used the term to refer to the potential societal gains of a community supported school system.[11] Positive reinforcement in the school system would lead ultimately to a better educated, better employed, more prosperous and more established community. The term capital is one often used in the financial world to describe one's assets, resources or wealth. Thus, a well educated society is one that has a great deal of asset. Social capital can then be reinvested into the community though devotion, endowments, and empowerments. Social capital builds generation after generation as parents and grandparents bestow wisdom, wealth and opportunity upon their children and their children's children. In theory, a healthy society would be one that embraces the concept of social capital, nurturing its growth. In practice, societies are never without their troubles. As Jane Jacobs once said, "being human is itself difficult, and therefore all kinds of settlements (except dream cities) have problems." However, it would seem that the investment in social capital would be one of the surest ways to neutralize some urban ills.

Sir Benjamin Ward Richardson, a well know public health reformer in Victorian England used the slogan "A nation's health is a nation's wealth" in his journal The Sanitarian. So health is a commodity, an asset that can be invested for future returns. But there are more facets to this concept than just the social. Social capital has limitations in its definition. To be more inclusive, a new term has become increasingly accepted. Community capital goes beyond social capital and is more inclusive of a broader range of factors.

Figure 3.01 - An opportunistically placed bench is a simple way to facilitate and nurture social capital in a community.

The Many Forms of Community Capital

Human capital can be defined as the health of a population, the level of education and or skill training, the capacity for creativity and participation.

Cultural capital is the level expression and diversity of backgrounds, ethnicities, and social classes. Diversity is an indicator of good neighbourhood health as when cultural capital is high, a wider range of diversity is expressed. The contributions

of each group can enrich and enhance a community and promote tolerance.

Economic capital is the level of financial prosperity or the capacity to gain such wealth. For obvious reasons, economic capital can go a long way towards improving a community. Communities with high economic capital have a higher degree of social justice and equity, higher levels of employment and reinvestment. Communities that have strong local economies will have greater potential to increase economic capital. Strong local economies can be derived from a good mix of residential and commercial zones where people can work, live, and shop within a short distance of their home. Furthermore, business owners should live nearby and therefore have the capacity to reinvest back into their community.

Political capital is measured by the level of influence a community can exact over the greater district. This is not necessarily linked to wealth or power, but can be derived from community solidarity or participation. Highly organized communities can create more political capital than those in disarray. When many individuals have one voice, they can exert pressure on governments to carry out their will.

Built capital consists of a community's infrastructural adequacy. Built capital is a determinant factor with regards to expansion or carrying capacity. While it may include private buildings and roadways and such, the critical component is public infrastructure. Parks, hangouts, benches, schoolyards, sports fields and courts, all of these are examples of public infrastructure that offer the possibility of gathering, meeting, and community connections.

Ecological capital is the trees, flowers, grass, birds, animals, and all the things that contribute to a healthy ecosystem. Parks are derived by simple zoning, it is what is in the park that contributes to natural capital. It is beneficial for humans to maintain a strong connection with nature, especially in urban environments. Sustainable systems that can reduce waste or consumption are also a component in this form of capital.

Social capital "constitutes the 'glue' that holds our communities together. It has both an informal aspect related to social networks and a more formal aspect related to our social development programs."[12]

So these seven forms of capital can contribute to a community's wealth, capacity and sustainability. Furthermore, there is a trickle-down effect when one form of capital increases, it can have an impact on other forms of capital. In theory, neighbourhoods that are thriving have people that are thriving, even more so if those people are invested in that neighbourhood. Businesses in thriving neighbourhoods will be well supported, generating economic capital. The support will in turn encourage more businesses to open, bringing stability and diversity. Niche businesses can establish and grow to meet specific demands of the local population. These niche businesses may be cultural in nature, allowing cultural capital to be expressed. People in the community will not have to shop outside the local area for their goods generating a greater degree of reinvestment. Greater customer loyalty arises from the proximity to and frequency of visits to familiar businesses. More people on the street means more opportunities for social interaction and building social capital. The neighbourhood's walkability will increase as people become less dependent on their cars, causing an effect on the health or human capital of the area. Less dependency on cars will lessen the ecological footprint of the community. A well inhabited space will be well taken care of. People will often plant trees and flowers and otherwise 'green' the space. This will

also contribute to the area's natural capital. With greater social unity, people will naturally organize when they are likeminded or have something in common. The greater the degree of organization, the more political capital will be formed in the community. With political capital, people in the community will have the influence to leverage their governments for further improvements in the area which, will lead to increases in the neighbourhood's built capital.

Though this may be an oversimplified scenario it can illustrate the interconnectedness of these forms of capital and how they can influence each other. There could, however, be many possible exceptions to this principal when increases happen too fast or in an unsustainable manner. For example, if a community undergoes a rapid increase in economic capital, there may be a gentrification effect. This process would eventually push out many of the original inhabitants, possibly bringing about a decrease in diversity both socially and culturally. Another potential exception could occur if a neighbourhood experiences upgrades to the built capital. New infrastructures may be place in areas that were previously open or vacant. The new infrastructure may be benign such as a roadway or a sidewalk, or it could be a building that may house an industrial business bringing in jobs. These increases in built capital, economic capital, and human capital may lead to a decrease in ecological capital and subsequently the community's health capital. So, while increases in one form of capital may necessarily have an impact on other forms of capital, it may not be necessarily be a positive one. Complexities and contradictions abound here but what is important to note is that the overriding factors of capital increase are sustainability, good planning and whenever possible, prophetic visioning.

Urban agriculture can have a sustainable application that, under the right circumstances, will increase all forms of community capital.

Social capital can be built because the gardens are managed by the community themselves. To do this successfully, a good level of social cohesion and organization is required. People working in the garden network will draw nearer to each other as they begin to bond over common interests. This is reinforced when events occur that impact on all gardeners simultaneously. Sowing, harvesting, or even poor weather can help to draw parallels between garden users.

In the "ethno-racially diverse communities of modern cities, while each family tends to grow the foods with which it is familiar, before long they begin to ask about and learn about the vegetables that other cultures grow and use. It may not be long before this progresses to sharing recipes, sharing foods, establishing community dinners..."[13] Ethnicity is obviously not the only form of cultural expression and so people of other groups, affiliations, as well as seniors, children, etc. can make their mark on a garden and thus have something to share and contribute.

Human capital will be added to as people gain skills from working in their gardens. The independence gained can contribute positively to a person's sense of self reliance and confidence, things that go a long way towards personal betterment and good mental health. The activity of gardening is not particularly strenuous but it is physical activity none the less. This and the improved diet from consuming fresh food will have a measurable impact on the individual health of a gardener.

The gardeners will have the option to grow for personal consumption or if they are empowered to do so, to bring a commodity to a market. So long as the outlet is in place, a

marketplace for fresh vegetables, fruits, potted plants, cut flowers and the like can create opportunities for economic capital gain. With some training as well, commodities can be processed into more valuable products that can be sold at a higher profit. For example, tomatoes, onions, and peppers could be sold fresh or they could be cooked and canned to make salsa, a product that will fetch a substantially higher profit. Community gardens can often be an entrepreneurial enterprise, which will demand greater commitment and effort from those involved.

As vacant, unused or underused land becomes converted to garden space, the increase in ecological capital is gained. The gardens attract and provide for insects and birds, though in some cases they may be considered competition. The addition of trees to the gardens may offer shade for gardeners or provide fruit for harvest but they will also have a small mitigating effect on urban pollution. The recycling of waste materials such as food scraps, plant material, and grass clippings for compost, and greywater for irrigation is good ecological practice. When the opportunities arise to incorporate recycled building materials to create garden infrastructure, the impact on landfills is lessened.

The garden network will require a large number of contributors in order to run successfully. A structured system of ordered leadership would evolve out of necessity. Furthermore, there will be a need for specialization in labour. In addition to working individual garden plots, some gardeners will contribute to processing foods, selling produce at the markets, helping to clean and maintain the lots, providing security or educating growers on techniques. With so many people invested in so many ways, the number of people invested and relying on the gardens will be significant. This common bond will establish a sense of community pride and mutual assistance. The unity that is born from this solidarity will develop into political capital as the gardeners form associations and networks. Their voices will grow louder in unison when they lobby for better infrastructure or for better access to more vacant land and civic support.

The gardens themselves become part of the local infrastructure as they would contribute positively to and provide opportunities for the community. In addition to this, built capital in the form of the support structures such as greenhouses, open markets, cafes, restaurants, a public plaza, outlets of water and electricity will lend themselves to the positive gain to the community, as well as improve the capacity and potential of the garden network. So all forms of community capital can be produced and

Figure 3.02 - A community's built capital affects lives. Deficient or inefficient infrastructure can be a major adversity to neighbourhood walkability, especially for those who have mobility challenges.

supported by a garden network, at least in theory. However, as with any form of change there is often resistance to the development of community gardens as well as downsides to their implementation.

The fact that community gardens are participant driven can be their greatest opposition. It can be difficult to engage the public to take part especially in the developed world. It is even more difficult in North America as opposed to other developed world nations as there is much less of a cultural affinity towards urban agriculture. The knowledge and techniques of good agricultural practice are not overly well known and so there may be competence barriers as well as cultural ones. “The planner, who is responsible to the public interest, may forgo options for future development in support of local interest in gardening, even if future participation remains an unknown variable.”[14]

It seems logical to assume that there would be two or possibly three very basic groupings of urban gardeners: those that grow out of necessity to satisfy their own dietary requirements, those that grow for market purposes to sell or trade their crops or livestock, or those that grow for a pastime or exercise or social. Most urban growers will be driven by some degree of one or more of these motives. In North America, the latter is likely the greatest motive: most urban agriculture is carried out by hobby gardeners. That is not to say that they will not consume the produce they grow, however it would most likely be a supplementation of fresh vegetables only. Consequently, there is a competition for plots between those who are gardening for their hobby and those who could possibly be in need of subsistence. Because these two gardeners will likely differ in social class, economic capacity, accessibility and personal motivation, there is seldom an even playing field.
North American community gardens are often relegated to the far

reaches of the exurban city areas, in right of ways, near airports, or other out of the way places. This restricts accessibility for many potential users that do not own transportation. The inner city gardens, if they exist will often be small and difficult to acquire for urban agricultural purposes.

In North America, the anti-poverty policies and campaigns are more focused on income security rather than food security as a means of providing relief to those in need. This sets the stage for a plethora of problems that have been a challenge for social assistance providers when trying to feed the poor. Income security based programs supply financial assistance, money that can be spent in any number of ways. This is difficult if not impossible to control after the fact. It has been argued by many critics that the welfare programs “maintained inequality, institutionalized the feminization of poverty, created work disincentives, and failed to promote participation in society.” [15] The very existence of food banks in Canadian cities is evidence of the failures of the social assistance programs.

Urban agricultural projects, especially those that are located in higher density neighbourhoods will be subject to the threat of theft or vandalism. These threats demand the installation of fences, lighting, and visibility. These and other improvements can certainly have a mitigating effect on theft and vandalism, however they must come at a cost, both for purchase and installation as well as a continued cost of maintenance and energy consumption.

The unrefined nature of many community gardens gives them a kind of ephemeral quality that can make them difficult to pin down. Leadership and management of the plots becomes difficult and resource consuming. “Even when community gardens are recognized as useful public investments, their grassroots nature denies control, and thus they often elude the

planner's map."[16]

There is often a clear and present lack of stability for urban agriculturalists. This instability arises from the fact that gardeners are seldom land owners.

"People are unlikely to invest time and scarce resources into UA if they are afraid that they will be evicted from the land before their crop is ready for harvest or that the crop will be destroyed by over-zealous officials. ...security of tenure is more important than ownership. In fact, it is clear that insisting on ownership as a prerequisite for UA artificially creates a scarcity of land." [17]

The other side of this point is seen in the reluctance of land owners to permit growers to use their property for the purposes of urban agriculture. In such cases, the owner may have difficulty clearing the garden if the lot goes up for sale or development. Unless specific timeline are agreed upon, gardeners may become attached to a lot over time as they pour their sweat equity into the land and begin to personalize and steward the space. The resultant sense of ownership may have gardeners rethinking whether they want to give the land up. Negative media attention is not uncommon for property owners who try to remove community gardens regardless of the original agreements.

Finally and perhaps most importantly, there are potential health concerns that can be associated with urban agricultural practices.

"Contamination of crops with pathogenic organisms as a result of irrigation with water from polluted streams and insufficiently treated wastewater or the unhygienic handling of the products during transportation, processing and marketing of fresh products; Contamination of crops due to prolonged intensive use of agrochemicals; Contamination of soils and products with heavy metals due to traffic emissions and industrial effluents."[18]

Of these, the most pertinent risks for growers in North American cities would be the risk of contaminated urban soils and the improper handling of the food.

Urban agriculture is an investment not only of time but of effort and resources. Typically there will be a larger amount of startup capital required to set up a garden. This capital investment can be prohibitively expensive for many people who could benefit the most. This reality will almost always require some level of social or government assistance for the initial phases. This can have an impact on the gardeners by creating a dependency which will in turn threaten the autonomy of the program. To run the garden as a network would significantly improve efficiency, reduce costs per individual and increase overall production. To accomplish this however, the gardens need a critical amount of support infrastructure. Inputs such as soil and seed, resources such as water and compost as well as more substantial things such as meeting places, info boards, marketplace opportunities for sale of fresh or prepared foods, a community kitchen for processing or canning food, storage for tools and machinery, greenhouses for early seed starts and possibly even a shared vehicle that can aid in harvesting or transporting goods and gardeners. The returns from urban agricultural investment may not be seen immediately. Many of the less tangible returns such as building social capital tend to be undervalued, while more substantial returns such as the harvests come only after great investment and dedication. This is perhaps the most restrictive component of UA from the perspectives of both patron and participant. The key to any community gardening program

will hinge on the ability to form a supportive network and to be attractive for landowners and growers alike. Mitigation of negative risks such as health concerns and vandalism need to be inherent in the planning and design. Furthermore, a plan to push the gardens towards a self sufficient and self determining existence will be the critical factor in inspiring gardeners to feel a sense of ownership for the gardens. This, above all will be the make or break issue for the gardens and that sense of appeal stewardship can in theory help to overcome the widest range of opposition.

Chapter Notes

11 *Putnam, Robert. "Bowling Alone: The Collapse of American Community". Simon and Schuster; New York, N.Y. 2000.*

12 *Hancock, Trevor. "People, partnerships and human progress: Building Community Capital." Health Promotion International. Vol.16. no.3. p.276.*

13 *Ibid. p.279.*

14 *Lawson, Laura. "The Planner in the Garden: A Historical View into the Relationship between Planning and Community Gardens". Journal of Planning History, Vol. 3 No. 2, May 2004. p. 170.*

15 *Power, Elaine M., Koc, Mustafa., McRae, Rod., Mougeot, Luc J.A., Welsh, Jennifer. (editors) "For Hunger Proof Cities: Sustainable Urban Food Systems". International Development Research Centre; Ottawa, ON. 1999. p.31.*

16 *Lawson, Laura. "The Planner in the Garden: A Historical View into the Relationship between Planning and Community Gardens". Journal of Planning History, Vol. 3 No. 2, May 2004. p. 170-171.*

17 *Mougeot, Luc J.A. "Growing Better Cities: Urban Agriculture for Sustainable Development" International Development Research Centre; Ottawa, ON. 2006. p.53*

18 *Van Veenhuizen, René. Cities Farming for the Future: Urban Agriculture for Green and Productive Cities. 2006. ETC Urban Agriculture. Leusden, Netherlands. p. 12.*

19 *Ibid. p. 10*

Figure 3.03 - A community garden on Selkirk Avenue that was resurrected from a previously vacant commercial lot. Though this garden may not last for a long period of time, it represents an effort to beautify the abandoned lots that pepper the North End District.

Chapter 4

Urban Agriculture, historical applications and precedents

"The land! That is where our roots are. There is the basis of our physical life. The farther we get away from the land, the greater our insecurity. From the land comes everything that supports life, everything we use for the service of physical life. The land has not collapsed or shrunk in either extent or productivity. It is there waiting to honor all the labour we are willing to invest in it, and able to tide us across any local dislocation of economic conditions. No unemployment insurance can be compared to an alliance between man and a plot of land."

Henry Ford

From very early on in human history, people have forged their livelihoods from the soil. Agriculture in its earliest form likely was little more than the selective collection of choice plant material. The resultant cultivation of the selected plants may not have been fully intended however, these early peoples would have ultimately found some of those choice plants growing out of the refuse piles near their homes. It was agriculture that allowed humans to live more sedentary lifestyles. They no longer had to chase or follow their food across the land on seasonal migrations, leading to what has been termed as the Neolithic Revolution. It can be argued that the practice of agriculture was a precursor to civilized society and consequently, the first forms of urbanization. Therefore it is no stretch to consider farming as an intrinsic part of our lives and a part of all that is human.

"Urban Agriculture can be defined as the growing of plants and the raising of animals for food and other uses within and around cities and towns, and the related activities such as the production and delivery of inputs, and the processing and marketing of products."

It was the development of urbanized society that began the disconnectedness that society has with agriculture. While it is arguable that the two can not coexist in sustainable ways, it is difficult to argue for the provision of lands for agricultural purposes within the confines of the settlement itself. Urban agriculture most likely arose out of a desire for convenient access to food and the avoidance of the costly need to protect one's crops which undoubtedly decreases with closer proximity. Additionally, people living in societies where land is at a premium would naturally develop a greater propensity towards urban agriculture.

Today, western societies do not necessarily require limitations to be placed on city growth based solely on the supply and demand of resources such as food. Our constraints rather are more based in economics and the availability of employment for example rather than a fear of starvation. However, even these deeply ingrained cultural biases can be overcome in times of great need. A perfect example of this resurgence of urban based agriculture in the modern era is the victory gardens made popular in the decades between the First and Second World Wars. With the ensuing political, civil and economic instability, many people, on the request of their nation, developed and tended a victory garden. During World War I, community and private gardens sprang up overnight across Canada, the U.S. and the U.K. The conflict raging on all fronts interrupted the regular processes of sowing and harvesting and by the time of America's entry into the war in 1917, Europe was facing a significant food shortage. The gardens were part of a propagandistic effort to bolster supply levels and mobilize the populations. The campaign was not discriminatory, nor did it seek to be selective with who it targeted. Rather, it had been directed at every socio-economic class. At the same time, the agrarian lifestyle of working the soil was romanticized and "portrayed as a democratizing experience that would put laborer and manager on equal ground. Rallying to such slogans as "hoe for liberty" and "plant

for freedom,"[20] Although difficult to substantiate, it has been estimated that roughly 5 million gardeners produced an amount of food valued at nearly $520 million in 1918.[21] In the spirit of patriotism, people plowed backyards, vacant lots, municipal land, and other spaces to create food-producing gardens (Figure 3). With the end of the First World War, the economies and industries of many of the western world's nations returned to their normal operating state. Thus the many of the garden programs soon found themselves to be without the necessary funding and support to keep them running. Despite many advocates of the gardens, the socially beneficial aspects of the urban agriculture programs were considered unnecessary and ultimately abandoned.

The market crash of 1929 once again brought the United States into an economic crisis, the likes of which had never and would never been witnessed again. Though it may not have been fully realized at the time, the events surrounding 'Black Monday' would send shockwaves in the global economic markets causing or contributing to similar economic collapses world-wide. What made things much worse was the coinciding environmental tragedy. A drought that knew no political or continental boundary led to a situation that became known in America as the 'Dustbowl'. The added sum of crop failures and financial ruin set the stage for a decade long 'Great Depression'. Long lines of once proud, grimy faced strangers formed at national relief offices looking for work or welfare. For the first time since the pioneering days, North Americans were faced with the very real possibility of wide spread starvation. Unemployment was rampant as businesses and factories closed. A large part of the population became dependant on some form of federal assistance in order to survive.

Advocates once again turned to Urban Agriculture as a means of rescuing the economy and motivating an otherwise distressed populace. Within the federal, state, and philanthropic programs that were developed to address the national unemployment problem of the 1930s, community gardening once again provided a stopgap measure that garnered public support and participation. Three types of gardening programs emerged: public and philanthropic work-relief gardens that employed people to produce food that was distributed to institutions, subsistence garden programs that encouraged backyard and community gardens, and industrial gardens in which companies provided land and materials to previous employees."[22]

So the allotment garden became part of the federal assistance program, designed to get people out working on something and dedicating effort to their betterment regardless of its potential to be lucrative or not. In many areas of the United States the gardens actually became a compulsory part of the welfare package bearing with the slogans like "no garden, no relief". It was far more common however that the gardens were volunteer efforts, from which the foods produced would go to the greater assistance programs as opposed to the gardeners alone. The sales of surpluses were prohibited in order to counteract the possibility of individuals profiteering from public land and the free seed that was given. In order to motivate and encourage the workers, incentives were added such as skill training, equipment and tools as well as the yearly competitions for growing the largest or highest quantities of various cops. "The federal government ended its financial support of state relief garden programs in 1937 when it established the food stamp program for farm surplus."[23] After 1937, the U.S. government began reassigning labourers in the work relief garden programs to other civil infrastructure projects, many of which became national and state parks and other recreation areas across the country.

With the onset of World War II, the concept of the victory garden was again promoted. In Britain and Canada, victory gardens sprang up over night. It was clear from very early on in the War that the conflict on continental Europe would soon spill over into the British Isles. Regular attacks on British infrastructure through unceasing bombing raids and rockets attacks took its toll on the capacity for the U.K government to supply its citizenry with the necessary goods and sustenance. Furthermore, relief shipments from the North American continent were being sunk at a rate that was as fast as the convoys were setting sail. It was understood that the gardens themselves brought about a number of social and civic benefits above and beyond the food produced in them. People could be more self-sufficient and rely less on the governments that clearly had other more pressing issues to address. The average diet was healthier; people were able to get additional exercise in their daily routines. There were the benefits of the necessary distraction that the gardens provided, allowing people to take their minds off of their loved ones that may have been in the conflict. Social and community cohesion was increased and the gardens were also had a civic beautification effect. While gardens in Canada and the U.K. were off to a flying start by the time the United States entered the war, they were quickly eclipsed by the American effort. A testament to the persuasive power of propaganda, American victory gardens were seen as a citizen's patriotic duty.

Advances in Agricultural technology and practices by 1940 had taken much of the pressure off and lessened the concerns about food scarcity in the U.S. As such, the gardening effort was more directed to supplying troops and allies abroad with the farm raised crops as opposed to the domestic individual. The campaign was so successful that victory gardens on public, private and vacant land across the nation contributed, at their most productive point, 42% of America's fresh vegetables, with an estimated crop value of $1 billion.[24]

Figure 4.01 - Propaganda posters such as this one were issued in America, Great Britain, Canada and other Commonwealth countries in order to garner public support for the war effort. The Victory Garden programs were marketed so incredibly successfully that in many cases, the gardens persisted long after the war had been won.

Since World War II, Western culture has grown increasingly depending on the Agri-business industry. We have become less and less connected to our food and its sources. Supermarket culture has raised our expectations and lowered our awareness of where our food is coming from. This disassociation led to a growing discomfort with gardens in cities. With all the hinterland the North American continent has to offer, why squander valuable urban real estate by planting radishes and carrots in it. There were no garden programs to speak of and the memories of them became nothing more than passé nostalgia. The economic boom times that followed WWII saw a dramatic proliferation of personal wealth and mobility. People in the rapidly industrializing West no longer needed to concern themselves with growing food to supplement their diets or to make of for a low income. Furthermore, thanks to some shady foreign policies, the have-not nations of South and Central America became little more than back gardens to the U.S. and Canada. With a little help to their sometimes oppressive regimes, these countries could be equipped to produce large quantities of fresh produce that could be shipped and sold on air conditioned supermarket shelves. Over time, many of the back yard gardens grew smaller eventually giving way to flawlessly maintained, dandelion free lawns. Gardening became a hobby rather than a means of sustenance. "Despite proximity to prime agricultural land and relatively high employment statistics, urban agriculture in Winnipeg is practiced; primarily for social rather than economic reasons. The social characteristics of the agriculture - particularly community pride and education - fueled much of the activity"[25]

Ultimately, in North America, community gardening began to make a limited resurgence mainly as a means of city beautification or as an answer to urban blight and the vacant lot epidemic that began to plague many inner cities. This ecological movement began as a grassroots reactionary lobby that sought to move in on inner city lots that were in a state of disarray. It was an attempt take down the fences and reclaim some of this space for the communities they were found in. These kinds of movements will seldom develop from municipal or federal initiatives outside of a time of crisis. The reality is that community gardening programs often create a tension between land owners and land users. Both groups can lay a legitimate claim on any land parcel in question which causes friction. Even owners of trash filled vacant lots are reluctant to allow gardeners in for fear of the bad press that ultimately follows when the owner finds a need to displace them. Some movements were passive and unobtrusive while others were remarkably in clandestine and in direct opposition to local laws and bylaws. Perhaps, groups such as these contributed to the stigma attached to community gardens in North America in recent years. While that stigma may not necessarily be an entirely negative one, there has been a noticeable lack of support for gardening programs. This is not to say that plots are laying fallow each year, they are not. But they are seldom settled on land that is not under transmission wires, near railroad tracks or under the flight path of hundreds of low flying jet planes. It seems conspicuously odd that an activity such as producing food could be relegated to the most forgotten corners of a city. Furthermore, whole segments of that city's population would drive within meters of these plots, passing them by with little or no notice

On the horizon, however, are the signs of change. Today, it is more and more common to hear of issues of food security and scarcity being raised in even the most mainstream of media sources. Daily, one can hear stories of crop failures, produce contamination, droughts and political unrest. So, what may come of this? Suffice to say that more people are going to be familiarized with the term 'food secure'.

Chapter Notes

20 *Lawson, Laura. The Planner in the Garden: A Historical View into the Relationship between Planning and Community Gardens. Journal of Planning History, Vol. 3 No. 2, May 2004. p. 158.*

21 *Charles Lathrop Pack, The War Garden Victorious (Philadelphia: J. B. Lippincott, 1919), 23.*

22 *Ibid. p. 160.*

23 *Ibid. p. 160.*

24 *Burdett , James H. "Home Gardeners Contribute to America's Food Supply," Gardening for Victory: A Digest of Proceedings of the National Victory Garden Conference (New York: National Victory Garden Institute, 1943), p.13.*

25 *Hall, Emma Victoria. Manifestations Of Community Based Agriculture In The Urban Landscape: A Canadian Compendium And Four Winnipeg Case Studies. 2000. Department of Landscape Architecture, The University of Manitoba: Winnipeg MB. p. i*

Chapter 5

The Global Agri-business and Current Trends

"The greatest fine art of the future will be the making of a comfortable living from a small piece of land."

Abraham Lincoln

The promise of the agribusiness industry was always a noble and idealistic one: to produce more food, more efficiently, and with less waste. It can be argued that the industry has certainly achieved that twice over. A tremendous amount of investment and research are poured into this industry from all conceivable sectors each year. Now, much like any other modern industry such as pharmaceuticals or automotive, billions of dollars are being earned and entire economies sustained. In the West, the agricultural industry has catered to the finicky needs of its relatively privileged clientele. But this industry is not without it controversies. The squeezing out of the smaller farmers by conglomerates of large scale producers, the divisive actions taken by agricultural companies in foreign nations in order to monopolize production, their powerful lobby on governments and markets, the introduction of genetically modified crops and so on. To many, the very commodification of food is the greatest controversy. However, as long as we must eat, we will be in need of their products, like it or not. And so, where there is controversy, probing questions will follow. Where did this industry begin and where is it taking us? Does the scale of the agribusiness industry make it a more feasible approach to satisfying the global food demand? Can smaller scale producers compete for a share in the global, regional or local markets? What happens when you cross the genetics of wheat with those of the arctic char?

Flawless tomatoes gleaming red like gems, bunches of lettuce with neither spot nor blemish, brilliant orange carrots peeled and packed, ready to eat. Aisle after aisle, today's consumer pushes a wobble wheeled cart along a perfectly assembled cornucopia of tastes originating from all four corners of the earth. The supermarket: even in its name one can see the magnificence of the experience that it offers. An experience that was foreign to humanity over all its entire history until this very age. The effortless harvest of the greatest variety by means of mere selection based solely upon preference. The implications of this on the culture and behaviour of people has been enormous. It seems incomprehensible to many people that before the supermarket people could only buy strawberries in season, that shortages were not uncommon, and that arriving at the corner market too late in the day may have meant that there were only two tomatoes left to pick from, the one that was too small and the one that was half bruised.

Figure 5.01 - The supermarket produce aisle offers all manner of fruits and vegetables that would have been otherwise unavailable, especially when out of season in a given locale.

It wasn't until post World War 2 that many of today's agribusinesses went from larger companies to multi-national conglomerates. As the West grew increasingly mechanized in its industrial endeavors, so to did the farm. Perhaps the greatest farming innovation since the plow was the tractor which generated a revolution in efficiency and production. This was a pinnacle for the small farmer as for a brief moment in time, even they were on the cutting edge of technology in their practice. This was not to last however, as a number of factors began to play against them. In fact, it was the efficiency in their own practice that led to great food surpluses which, in turn took effect on the market price of staple crops. Crop prices began to fall which made life more difficult for the small farmer. In order to maintain profitability, one had to work a larger plot of land to produce greater volumes of crops. This was difficult for the family farms that operated on less capital and with fewer resources. The increasing struggle to make ends meet for farmers meant that more and more of them would leave the business all together setting the stage for widespread buyouts. Agricultural companies began to accumulate more parcels of land until they were operating on massive farms that would have been unmanageable for the family farmer. The key to success was in the equipment employed in the farming process. Whole fleets of expensive machinery were used to plow, sow, and harvest with maximum efficiency. The consolidation of the agribusiness meant that huge portions of the industry would eventually be controlled by a handful of companies. Today for example, 83% of the beef packing industry is controlled by four companies, while 63% of the flour milling industry is controlled by another four.[26] This consolidation goes one step further when these large companies begin the process of vertical integration. This is achieved when a company acquires control over no simply one facet of the chain between the food in the field and your dining room table, but instead they are control the whole process. The largest agribusinesses will supply the seeds, fertilizers, and pesticides to the farmers, then buy those crops back from farmers. The agribusinesses will then process the crop in factories they themselves own, and ultimately sell the produce to retailers. Vertical integration bestows the power for a small number of companies to control supply and set prices for both producers and consumers. However, unchecked growth in the industry created a whole new set of issues that would have to be contended with in order to achieve maximum profitability, and that was sure to become the primary concern.

The large scale agribusiness had a tendency to work the land hard and without mercy. Perceived consumer demand would not allow for sustainable practices such as crop rotation and letting parcels go fallow. The resultant effect was a detriment to soil quality, creating the constant need for massive applications of fertilizers.

"The use of cover and rotational crops, composts, tillage systems, and others have been promoted as management options for enhancing soil quality and health. All cultural practices are known to directly or indirectly affect populations of soil borne pathogens and the severity of their resultant root diseases. Soil biology is a major component and contributes significantly to soil quality and productivity. The major activities of soil microbes include the decomposition of organic materials, mineralization of nutrients, nitrogen fixation, suppression of crop pests and protection of roots, but also parasitism and injury to plants. Thus, there is a great need to assure that the introduced soil management practices to improve soil quality will also result and maintain a healthy soil." [27]

Another problem resulting from agricultural consolidation is the practice of mono-cropping. Huge acreages of the same plant are grown as a method of improving efficiency. This becomes

a problem as the vastness of the crop inevitably draws in pests and diseases that will specialize in attacking that crop. These pests will spread fast, increasing the need to apply chemical pesticides, fungicides and herbicides. The industry justifies the application of such chemicals by pointing out the decreased need of tillage and other forms of crop protection. Thus the farms are consuming less fuel, contributing to less soil erosion and a producing more affordable product. The health impacts of these chemicals of the human nervous system have shown to be problematic although there is always a dispute on the subject. For every study cited that suggests the negative impacts, another will be released that states the chemicals are benign. For savvy consumers, the application on any chemical product on ones food is cause for concern.

Figure 5.02 - Many large scale agricultural installations are set up on land that is cheap and accessible. This land however is not always prime growing land. As such, some of these installations are incredibly costly in terms of resources and energy input. The form of this farm is derived from the radial extension of irrigation arms. The heavy resource input makes for a profitable agricultural solution in what is otherwise an arid desert. The source of the irrigation is often from underground aquifers or subsurface water. Their subsequent depletion is a leading cause of the desertification process.

Due to their size and critical role, agribusinesses were able to lobby government legislators to relax or ignore any petitions for environmental controls. States such as California, whose economy is based hugely in agricultural exports, were reluctant to press the industry to limit the use of chemical additives in fear of disrupting production. California is essentially the breadbasket of North America, taking a huge share of production and export, both within the United States and abroad. California is by far the largest producer of dozens of food products that cannot be grown commercially in other states. For Canadians, California makes it possible to enjoy a full bounty of out of season foods in the winter months. According to the California Department of Food and Agriculture, the state exported $1.9 billon dollars (US) to Canada in 2006.[28] There is of course, the ever-present risk that a season of instability in the Californian fields will cause a tremendous upset in the national food supply. String two or three poor seasons together and significant shortages would be unavoidable.

The safety and security of food sources have always been an issue, however in recent years it has been receiving a great deal of international media attention. Perhaps this is due mostly to the litigious nature of the American system but when lives are lost, people pay attention. The list of food borne illnesses found in a wide range of products is a lengthy one and in recent years has been making news headlines in North America and beyond.

Finally, the last and perhaps most controversial issue surrounding modern agribusiness is that of the GMO or genetically modified organism. A GMO is a plant, animal or virus that has been modified or engineered on the genetic level. Today's producers are able to grow super crops that are more disease resistant,

more weather resistant, have better germination rates, produce a heavier yield or any number of other advantages. The super crops are usually produced by crossing the genetic material of a plant with another plant or even animal in order to breed in the more auspicious qualities. Critics often say that companies such as Monsanto are going too far to produce these crops offering little regard for the potential hazards. There has been cause for concern with regard to food security. In recent years, Monsanto has produced bio-engineered crops such as their hard Red Spring wheat, a favourite of bakers, to be hearty to direct application of a commonly used herbicide, Roundup. The wheat would not be resistant to the toxicity of the chemical which would reduce competition from weeds and reduce the need for tilling. Monsanto's apparent comfort with the application of herbicides is troubling for those who desire to eat from uncontaminated sources, however it is not particularly surprising considering the fact that Roundup is actually produced by Monsanto. After all, chemicals are Monsanto's main business. This company is the very same that produced saccharin, the recalled artificial sweetener. Today, through acquisitions, the company is the producer of aspartame and Nutra-sweet. Perhaps even more disturbing, Monsanto was the producer of carcinogenic PCB's and the chemical herbicide "Agent Orange", used widely in the Vietnam War, and which was ultimately shown to have a number of negative effects on the health of those who were in contact with it. Monsanto has been drawing a great deal of international criticism for its development of so-called 'terminator' crops. These crops produce a seed that is sterile in order to keep farmers dependent on purchasing their seeds every year. Monsanto has patents on its GMO crops and maintains a legally enforced ownership over them, even in the field. The company filed a lawsuit against a Saskatchewan farmer, Percy Schmeiser when it was found that Schmeiser had Monsanto wheat growing in his field. The farmer maintained that the wheat had self-seeded itself by means of wind. However, because he had not purchased the seed, Monsanto claimed the farmer had infringed on its patent. Even more bizarre, the Supreme Court of Canada actually upheld Monsanto's right to own the grass on another man's private land.[29] The implications of the 2004 ruling are disquieting in regard to food security and the ability for producers to have a sustainable approach to their practice.

For the sake of comparison, it is important to understand that as the largest agribusinesses tighten their grip on the industry, they are squeezing out the family farm and small producers. This will inevitably cause a shift in the market that will begin to offer less diversity to the consumer. The prices will be set not by natural market forces, but by the conglomerated themselves, and people without choice, will pay them. According to the financial information supplied on their own websites, these companies are netting billions of dollars. At the same time, the media is talking about potential global food shortages and the small farmer is struggling to make a living. "…In the United States…the farming population has dropped from 6.8 million people in 1935 to 1.9 million in 1995. This is less than the total prison population in the US. In the heartland State of Nebraska many farmers are mortgaging their land to survive. Suicide is now the leading cause of death among US farmers. It is three times the national average."[30]

While Many GMO crops are grown for animal consumption, they will still end up in the human food chain via meats and dairy. Those crops that are intended for human consumption are often overlooked for what they are, because the genetic modifications are often designed to improve the appearance of the produce. Ironically, the freshest of organically grown fruits or vegetables that one may see at a farmers market, will most likely come with their consumer un-friendly flaws, visible imperfections and of course their superior taste.[31]

Chapter Notes

26 *Hendrickson and Heffernan, "Concentration of Agricultural Markets," September 2004.*

27 *Abawi G.S., Widmer T.L. "Impact of soil health management practices on soilborne pathogens, nematodes and root diseases of vegetable crops" (2000) Applied Soil Ecology, 15 (1), pp. 37-47.*

28 *California Agricultural Resource Directory 2007, California Department of Food and Agriculture. www. cdfa.ca.gov*

29 *Branch, Julian. "Farmer loses legal battle over GM plants: Court rules Monsanto holds valid patent." Winnipeg Free Press. May 22, 2004.*

30 *Katherine Ainger, "The New Peasant Revolt". The New Internationalist, January/February 2003, p.10.*

31 *Colson, Greg., Rousu, Matthew., Huffman, Wallace E. "Consumers Willingness to Pay for New Genetically Modifed Food Products: Evidence from Experimental Auctions of Intragenic and Transgenic Foods" Selected Paper prepared for presentation at the American Agricultural Economics Association Annual Meeting, Orlando, FL, July 27-29, 2008.*

Chapter 6

Food Security and the Ecological Footprint of Food

"Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous, and they are tied to their country and wedded to it's liberty and interests by the most lasting bands"

Thomas Jefferson

The Realities of Food Insecurity

The concept of food security is one that for a good many years has been unfamiliar to the average westerner. Not since the Great Depression of the 1930's has a western nation been in the unforgiving grip of economic collapse. Of the many spin off calamities of the 1929 crash was the devaluation of currency. The resulting inflation of prices made food unaffordable for many and so the bread lines grew. In the coincidental and severe drought that lasted for years, crop failures grew more and more common placing and ever increasing pressure on the national food supplies. Though it may seem inconceivable, during the 1930's people in North America lived on the edge of starvation and while one can find literature that supports both sides, it is often debated whether or not people were actually dying of starvation in Canada or the United States. What can be safely assumed, however, is that the adverse effects on health contributed to a great diversity of disease and ultimately death.[32] So there is no reason to conclude that the hardships endured by those who lack food security are lessened by the absence of reports of directly related deaths by starvation.

In more recent years on the global scale, the pace at which we are experiencing economic and demographic growth is becoming increasingly unsustainable. The global south is rising fast towards mechanization and thus placing a great deal of pressure on the limited resources at their disposal. Consumption rates are destabilizing and pushing the exploitation of previously undisturbed hinterlands such as the rain forests of the Amazon Basin, Sub Saharan Africa, and those in South Asia. As global populations skyrocket toward the estimated 9.1 billion by 2050,[33] energy consumption will climb along with it, and so to will food consumption. The Earth's arable land undoubtedly has a critical capacity for production that will inevitably be surpassed. From that point, the quality of life for the greatest number will begin to decrease substantially. The United Nations Food and Agriculture defines food security as:

"food that is available at all times; that all persons have means of access to it; that it is nutritionally adequate in terms of quantity, quality and variety; and that it is acceptable within the given culture. Only when all these conditions are in place can a population be considered "food secure".

Figure 6.01 - A breadline, formed near New York City's Brooklyn Bridge during the Great Depression of the 1930's.

Given this seemingly stringent set of provisions, it is clear that much of the world, even today, exists well below this level of basic sufficiency.

According to the International Development Research Centre of Canada, much of the food security research focus has been on the four facets of the UN's definition: availability, accessibility, acceptability and adequacy. Organizations such as these have been contributing more than just research however, with more practically applied programs being supported across the world. Many of these programs provide resources, micro-loans, and training for third world farmers in order to facilitate production. So while there is an active movement afoot to increase the profitability and facilitate the process of urban farmers, there seems to be no less threat to food security in an increasing number of places across the third world. Without doubt, the biggest threat to food security is poverty. According to the UN, the estimated global slum population as of 2004 is 1 billion people with an expected increase to 1.5 billion by 2020.[34] This population is clearly the most at risk living at levels well below those adequate to sustain good diet, health and livelihood. The growth of this particular socio-economic sector can be attributed to the rapid migration of rural populations to urban areas. Globally, the rate of urbanization is on the rise. This becomes an issue because "in contexts where long distance rural-urban migration grows, where more of the urban poor have less access to rural assets, self-provisioning becomes more important. UA (urban agriculture) has spread to become a critical source of food for urban populations in countries affected by natural disasters, economic crisis, civil wars and disease epidemics"[35] not excluding droughts and famines, these are all significant threats to food security.

The Politics of Food Security

There is an element of concern for social justice in the debate about food security. Since food is one of the most basic of human needs, it would be reasonable to take the position that food is a human right. Food is liberty in many ways: it can be freeing

Figure 6.02 - A banana tree with unripe fruit. Accessibility to tropical and exotic fruit has been taken for granted in the western world for three generations. Prior to the global expansion of producers such as the United Fruit Company, exotic foods were regarded as luxuries and were seldom available to the average consumer in a fresh and ripened state.

to those who must struggle to earn a wage that can scarcely feed themselves or their families. Food allows for a necessary stability that is required to live well. When one spends all of their efforts on meeting their rudimentary needs, there is little else to spend on bettering oneself in terms of education, skill development and the pursuit of other goals. The disparity of the world's haves and have-nots is a great divide. This alone is validation to say there is a social injustice taking place from a humanitarian point of view. Especially in consideration that much of the Global South has been for long a supply reserve for the industrialized world. For centuries in fact, the First World have been exhausting the third world's oil, minerals, forests, crop lands and so on. In the West, our need to purchase tropical bananas at 59 cents per pound far outweighs the needs of the impoverished people who must work the fields to eek out a meager living.

When necessary, First World powers will carry out covert and overt means of influencing foreign nations in order to resist any change to this modern day neo-colonial system. In 1951, Jacobo Arbenz took power in Guatemala in a decisive democratic victory after years of dictatorship rule. Arbenz, being an idealistic man, had plans to return a great deal of the nation's land to the peasant class. The land had been acquired by the United Fruit Company, an American corporation specializing in banana production. The acquisitions had been made by the UFCO from a previous Guatemalan regime under questionable circumstances after the regime had seized the land from the common farmers. Arbenz's government passed laws that favoured the working class and allowed them to expropriate uncultivated land from estates larger than 672 acres. The message from the government was clear to the landowners. Some 76% of the nation's agricultural land at the time was owned by the top 2% of landowners, the biggest of which, was the UFCO. Roughly 100,000 Guatemalan families received some of the 1.4 million acres expropriated by June 1954.[36] The threat to U.S. interests in the region led to the declaration that Guatemala had fallen into the hands of Soviet Communist influences. The Eisenhower administration allegedly feared a communist nation between Texas and the Panama Canal would ultimately sever their control over the crucial waterway. Thus, the process of regime change began with a sudden CIA sponsored invasion.[37] Within 10 days, Arbenz resigned from his position and so ended the short lived Guatemalan democracy.

Today, the term fair trade is being applied more and more to imported cash crops such as coffee, sugar and many others. Fair trade importers pay higher prices for commodities. The higher prices translate into higher wages for the workers who are growing and harvesting the crops around the world. The alternative is to eliminate middlemen in the import/export system. There is often a series of entities between the Third World grower and the First World retailer. By purchasing direct, there are fewer people scraping off the profit. Retailers are paying nearly the same but the real victory is for the growers, who are less dependant and are able to fetch a better price per unit.

The journey of a food between its origin and its destination is known as a food system. These systems "include all processes involved in keeping us fed: growing, harvesting, processing (or transforming or changing), packaging, transporting, marketing, consuming and disposing of food and food packages. It also includes the inputs needed and outputs generated at each step. The food system operates within and is influenced by social, political, economic and natural environments. Each step is also dependent on human resources that provide labor, research and education."[38] Fair trade is a food system concept that operates more on a global or international scale.

The Two Thousand Mile Tomato

Large scale food systems, for most of us, are the key source of our sustenance. “On average in the U.S., food in a supermarket travels about 2,000 km between its point of origin and its point of consumption.”[39] In Canada, it is logical to assume this distance would only be greater. The cliché of the five hundred mile tomato is perfect reflection of the flaws in the international food system. That humble tomato may begin its journey as a seed on a farm in Le Grand, California. As a plant in the ground, the tomato will receive regular applications of water, fertilizers, pesticides and herbicides. It will have been bred or genetically modified to resist these chemical treatments. The chemicals will however, tax the local environment, especially the water systems as they run off or filter into drainage channels. The irrigation will draw from the local ground water supply or from reservoirs. When the plant has grown sufficiently and produced fruits, they will be harvested before they are fully ripe. According to the California Tomato Growers Association, 100% of California’s tomato crops are harvested mechanically. Thanks to more modifications, the tomatoes are tough skinned to resist the damage that may otherwise be caused by machine harvester. The machines will themselves be powered by fossil fuel burning engines which will contribute to the overall cost and consumption. Immediately after harvest, the tomatoes are loaded into transport trucks where they are driven nearly 48 miles to a processing plant Los Banos, California. If the tomatoes are to be sold as ‘fresh’, they will be washed and boxed. If they are to undergo further processing, they will be cooked, prepared, preserved and canned. There will be a certain amount of energy consumed in the processing plant that again adds to the ecological footprint of each tomato. After Los Banos, the tomatoes will be shipped via transport truck, refrigerated if necessary to countless destinations across the continent. The distance to Winnipeg would be an additional 2044 miles of highway driving for a total of 2092 miles or 3366 km. An efficient transport truck will get about 8 miles per gallon consuming roughly 262 gallons or 990 litres of diesel fuel on the journey. Granted, this will be enough fuel to ship a truckload of tomatoes to Winnipeg but the numbers are no less astonishing.

Figure 6.03 - Tomatoes on display in a Canadian supermarket. Having traveled roughly 2000 miles, these tomatoes have been left attached to their vines in order to preserve some freshness and to aid in the ripening process.

Tangible Benefits of Urban Agricultural Practices

The local or community food system that operates within a city and its surrounds is often under developed in North America. In other regions of the world however, the local food system carries a much greater capacity. Urban agriculture can play a more dominant role in these systems as it does in many Third World countries. Wherever it is found, urban agriculture can often fill a number of specialized roles for and satisfy a number

of community needs. According to a study sponsored by the United Nations Development Programme[40] researchers found that urban agriculture had a number of advantages over more traditional, rural agriculture. The study concluded with the following observations:

- UA (Urban Agriculture) typically "uses land and water more sparingly and efficiently, integrates systems more effectively, and produces much higher yields and more specialty crops and livestock."
- UA can use a greater diversity of land types, in both short and long term timelines.
- UA "adapts to city development, with less space dependent forms surviving in central areas and the more land-demanding forms migrating to less converted locations."
- Most UA farmers are lower income people growing "food for their own consumption on small plots they do not own, with little if any support or protection." Their production will provide "much if not most of (their) households' supply of nutritious food, which would otherwise be out of their reach."
- "Producers tend not to be rivals and in many cases were born in the city where they live."
- UA "benefits the long term nutritional health of children in poor farming households and has made food aid redundant in places where it is practiced extensively."
- Any excess crop beyond personal consumption can "represent up to several months of annual income" which, may be spent on other non-consumable basic needs for the household.
- "Urban producers cope with greater competition over resources, environmental stress, tenure and crop insecurity, and inadequate or nonexistent legal, financial, and technical support. These problems result in hazardous practices; loss of resources or products; foregone gains in employment, productivity, yields, and profits; idle and wasted resources; and loss of dependable and affordable supplies of fresh and nutritious food."
- Studies also showed that in the specific case of francophone Africa, "urban agriculture does not compete with, but compliments, rural agriculture because it reduces seasonal price fluctuations and diversifies the foods supplied to cities."
- The studies also showed that there are an estimated 800 million people world wide who are engaged in UA with 200 million of those producing food directly for the local markets and 150 million being employed full time by their enterprises.[41]

Urban Agriculture in the Third World

In many cities across the developing world, the contribution of urban farmers is substantial. Many major cities such as Accra in Ghana, Bangui in the C.A.R., and Bissau in Guinea Bissau are supplied with 90 to 100% of the fresh or leafy vegetables demand from within the local community. Hanoi in Vietnam meets 50% of the city's meat demand, a figure which is expected to increase to 80% by 2010. Dakar in Senegal and Kampala in Uganda can both provide roughly 70% of the city's poultry demands from their urban suppliers. Sofia, the capital of Bulgaria is completely self sufficient in regards to its milk supply with 100% of demand being met by urban producers.[42]
In Cuba, after the fall of the Soviet Union, the island nation became increasingly isolated. With the Russian republics trying to take care of their own enterprises, the Cubans lost their most active trading partners. The American led trade blockade began to take a significant toll without the counteractive exports from Moscow. In an effort to gain more self-reliance, Cubans were faced with the necessity of adapting to the new circumstances or facing long term food insecurity. The proactive solution was to begin to develop or redevelop strategies for sustainable economic and agricultural growth. Cuba has become a major success in the world of UA. Almost all of the nation's agricultural endeavors are organic in method and driven largely by human or animal power. "Cuban cityscapes were redrawn as plantains and chicken

coups took the place of rose bushes in home gardens and as previously abandoned city lots were sown with food crops of all kinds."[43] The organic approach to farming was not necessarily based on a health or nutritional perspective, rather again on necessity. The Soviet Union had been Cuba's largest supplier of agricultural chemicals such as fertilizers, pesticides, petroleum and the like. The American embargo made it very unwise for other nations to export anything to Cuba. Since the Island was unable to meet its chemical demand independently, they had to explore alternatives to the highly industrialized agricultural methods. Alternatives such as large scale compost farms using rural and urban wastes and incorporating vermiculture (worm farming) to generate fertilizers. Crop sciences led to policy developments in crop rotation and diversification as a method of pest control, decreasing the dependence on chemical pesticides. In addition to this, there were widespread effort to provide training and education for farmers both urban and rural on proper farm and resource management. Cuba's socialist ideologies also had an impact on the farms as their rich produce would be made available to all Cubans.[44] Though most Cubans live on modest incomes at best, the people of Cuba are healthier and have a longer lifespan that the Average American.[45]

Urban Agricultural Practice in the First World

There are few examples of such widespread UA projects in the First World. Most cities in the developed world are not nearly self-sufficient; rather they rely on more on the international/ global food systems to meet their demand. While the resistance to UA in North America will be examined in more depth in the next chapter, it is fair to say that there is clearly an institutionalized, even cultural resistance to farming in urban locales. Not surprising considering the correlations drawn by the UNDP study between lower incomes and the prevalence of urban agriculture. In most of the research reviewed, the few examples of significant urban agricultural production in the First World are limited to London, England's 10% of honey demand and New York City's 49,000 litres/day of milk.[46]

The UNDP studies seem to suggest that UA is something that arises out of necessity or crisis. This is not to assume that there is something unnatural about humans farming where they live, but rather that it is more of an opportunistic approach to production as opposed to a strategic one. Perhaps culturally, most of us have a concept of agricultural lands as being more pastoral or even Arcadian in nature. Thus, the fields are usually located in the hinterland where there is less competition from other urban functions on the land. In places where urban agriculture is approached as a strategic policy, the industry will benefit from the institutional support and management structure. Contributions from such deliberately planned projects are becoming increasingly substantial in their role as economic generators, nutritional supplementers, and social liberators.

Chapter Notes

32 *According to an article by James C. Davies, 29 people reportedly died of starvation in New York City. Davies, James C. "Toward a Theory of Revolution". American Sociological Review: vol.27, no.1. p.5-19. According to the Canadian Encyclopedia, although no official accounts of starvation were recorded in Canada, there were many repots by medical authorities of scurvy and other diet deficiency diseases. www.thecanadianencyclopedia.com/index.cfm?PgNm =TCE&Params =A1ARTA0 003425*

33 *According to a February 24, 2005 press release, the United Nations estimates that global population will rise from 6.5 billion to 9.1 billion over the next 45 years. Almost all of that growth will happen in the less developed*

nations, whose populations will increase from 5.3 billion in 2005 to 7.8 billion in 2050.

34 *UN-HABITAT (2004) "Dialogue on Urban Poor". March, 2004.*

35 *Mougeot, Luc A.(editor) "Agropolis: The Social, Political and Environmental Dimensions of Urban Agriculture". International Development Research Centre. Ottawa, Canada. 2005. p.3.*

36 *Lilley, Mary Lauren., Downes, Alexander B. "Covert Action, Democratic Peace, and the Cold War". August, 2007. p.19-20.*

37 *Ibid. The covert CIA plan was officially known as OPERATION PBSUCCESS. It involved firstly, a massive psychological warfare campaign designed to divide the support for the ruling Arbenz with propaganda. Secondly, a CIA backed invasion force led by rebel leader Carlos Castillo Armas who ultimately became the U.S. friendly leader of the usurping regime.*

38 *Wilkins, Jennifer., Eames-Sheavly, Marcia. "Discovering the Food System A Primer on Community Food Systems: Linking Food, Nutrition and Agriculture". Cornell University: Department of Horticulture. http://foodsys.cce.cornell.edu/primer.html*

39 *Roseland, Mark. "Towards Sustainable Communities: Resources for Citizens and Their Governments". New Society Publishers, Gabriola Island, B.C. 2005. p.51.*

40 *Study from UNDP: Smit, J.; Ratta, A.; Bernstein, J. 1996. Urban Agriculture: an opportunity for environmentally sustainable development in sub-Saharan Africa. Environmentally Sustainable Division, African Technical Department, World Bank, Washington, DC, USA. Post-UNCED Series, Building Blocks for Africa 2025, Paper No. 11.*

41 *Quoted text from: Koc, Mustafa., MacRae, Rod., Mougeot, Luc A., Welsh, Jennifer. "For Hunger-Proof Cities: Sustainable Urban Food Systems. International Development Research Centre. Ottawa, Canada. 1999. p.16-17.*

42 *Mougeot, Luc A.(editor) "Agropolis: The Social, Political and Environmental Dimensions of Urban Agriculture". International Development Research Centre. Ottawa, Canada. 2005. p.5-7. The numbers are derived from a wide range of previous studies and presented in table form.*

43 *Mougeot, Luc A.(editor), Premat, Adriana "Agropolis: The Social, Political and Environmental Dimensions of Urban Agriculture". International Development Research Centre. Ottawa, Canada. 2005. p.153*

44 *Video: "The Greening of Cuba" Institute for Food and Development Policy. Oakland, CA. 1996.*

45 *United Nations World Populations Project 2006. Cuba life expectancy at birth, 78.3 years. United States, 78.2 years.*

46 *Mougeot, Luc A.(editor) "Agropolis: The Social, Political and Environmental Dimensions of Urban Agriculture". International Development Research Centre. Ottawa, Canada. 2005. p.5-7*

Chapter 7

Modern Applications

"It is high time that some fundamental radicals among us gathered together the loose ends of opportunity lying waste all about us, and instead of laying more by means of them project some such sensible plan for life as our forefathers hoped and believed would be ours. It is some organic sense of whole seen as entity that is now the greatest social need."

Frank Lloyd Wright

The Practice and the Potential

Due to the inherent potential of urban agriculture to positively affect the quality of life and the social capital in a community, there are many examples, both theoretical and practical, of its incorporation into urban planning. Though UA practices are often developed organically and from necessity, instances in which they are considered an integral part of a larger planning policy are becoming more common. Urban agriculture can be, for communities, a means to many ends. The increasing instability of food security or at least the perception of such volatility is raising the awareness in many people's minds as to where their food is coming from. UA can address this issue by reconnecting people with their food and the natural processes that contribute to their food security. Furthermore, urban agriculture has the potential to generate favorable outcomes in a distressed neighbourhood, not only for its positive counter effect on urban blight but also for its capacity to bring about growth in all forms of community capital in the neighbourhood. Though it is certainly not a new concept, a renaissance in urban agriculture has been taking place supported by building a body of research, knowledge, practice and innovation.

It has been shown through many academic studies as well as through practical application that urban agriculture (UA) can deliver positive impacts for city dwellers well beyond the production of food. Though food is often the major goal of

Figure 7.01 - One of the main advantages of urban agricultural practices is the close proximity between the source and the market. A significant portion of the value of many imported food products are derived from their transportation costs.

UA, it is often coupled with a wide range of beneficial side effects such as economic growth, ecological remediation, skill building and job training, opportunities for social and cultural expression and even gender equality and social justice. Given the possibilities, it seems odd that UA is often not a part of most cities' planning policies. There are of course a number of forces that oppose urban farming, for an array of reasons. Consequently, urban agriculture has a tendency to spring up out of necessity and in more laissez-faire and spontaneous patterns. Urban agriculture, when conceived as a strategic part of a city's planning policies, could have a tremendous impact on a community. Given the typical and practically inherent unsustainable nature of the urban settlement, the production of resources on a local level is always beneficial as it reduces

the amount of resources that need to be imported. “When cities rapidly replace imports, three direct results follow: 1. The sum total of economic activity expands rapidly. 2. Markets for rural goods increase rapidly because of shifts in the composition of city imports. 3. Jobs in cities grow very rapidly.”[47]

Large Scale Theoretical Approaches

Unfortunately, there is little application of a large scale, planned, urban agricultural strategy anywhere. The notion often seems to play a significant role in the ‘utopian’ cities in literature or the conceptual designs of such cities such as Ebenezer Howard’s Garden City or Frank Lloyd Wright’s Broadacre City. In the time during the modernist movement in art and architecture, designers did a lot of thinking on how people ‘ought’ to live. There is something profoundly spiritual and soul satisfying in working one’s living from the land. This romanticism that is affixed to the idealized agrarian lifestyle is a testament to the positive benefits of agriculture, urban or otherwise. As such, the practice has been and should continue to be explored as a viable method towards urban renewal for its multi-faceted capacity to enhance the lives of those that practice it.

The reality for urban planners is that it is so rare that a new city is ever built from scratch and thus, their plans must accommodate this. Plans and policies must be retrofitted to existing settlements that have developed their own, often organic patterns. Many notable urban plans such as Frank Lloyd Wright’s Broadacre City, Le Corbusier’s Ville Radieuse, and Ebenezer Howard’s Garden City were far to contrived and often necessitated the tabula rasa condition in order to fully realize their possibilities. The few examples of built works that do exist are seldom able to claim success, and some, like the Cabrini Greens housing project in Chicago, were a complete failure.

Urban Renewal via Urban Agriculture - Success Stories

Based loosely upon Le Corbusier’s Radiant City, the Cabrini Greens housing project was built in 4 stages beginning in 1948 and ending in 1962. The public housing project was home to nearly 15,000 people, a small city unto itself. With that level of density, the resultant effect on the social fabric was an extreme concentration of poverty. By the 1960’s, the Cabrini Green complex had grown to have an infamous reputation for gang activity, crime and violence. The ill repute of the project was so well known that it was the stage for a number of Hollywood and television productions where it stood in as the quintessential American ghetto. As crime levels increased, tenants that had any economic mobility whatsoever vacated as soon as they could. This place like no other, found itself in need of a revitalization strategy. Two strategies arose in response to the conditions, the first from the city and the Chicago Housing Authority (CHA), and the second from the tenants themselves.

By 1996 the CHA had decided that they would demolish and redevelop the housing stock. The first buildings began to come down a few short years later however, when the city’s demolition program became too ambitious, it began to outpace the rebuilding effort. Fearing that they would soon become homeless, a group of Cabrini Green tenants who were likely Chicago’s poorest citizens, began to protest the demolition. This is a common downside to the bulldozer method of urban revitalization. When the most at risk people are displaced, even with the promise of new housing to come, they will often be left without housing options for that period of reconstruction.

The tenants themselves had a slightly less brutal approach and one that did not exacerbate the problems of living in arguably the nation’s worst housing project. The tenants began to organize

an urban agriculture campaign specializing in both fruit and vegetable gardening as well as pastoral approach by keeping fowl and livestock. The campaign was intended to promote financial gain through an entrepreneurial approach as well as being an educative skill building experience for young people. "The gardens Cabrini Greens cultivates provide only a fraction of the group's operating budget (the rest comes from grants), but teaching kids who live in treeless, violence-plagued housing projects to nurture plants and animals has its own rewards"[48] Aside from combating social ills and increasing social capital, the garden projects also contributed to the human capital in terms of skill development and cultivating an entrepreneurial sprit. "A core group of Cabrini Greens recently spent a week at Heifer Project International's (HPI) training center in rural Arkansas learning how to make goat cheese and other goat-milk products. The group hopes to raise the $8,000 needed to buy a pasteurizing machine by later this year and to begin selling cheese to the upscale Chicago stores and restaurants that already buy their produce, such as the local Whole Foods Market and the eateries Charlie Trotter's and Michael Jordan's."[49]

In New York City, another form of urban agricultural revolution began taking place in the early 1970's. Action groups formed such as the Green Guerillas who ran a covert operation to green the city, one vacant lot at a time and often against the wishes of the owners of said lots. "Much of the credit goes to Liz Christy, a Lower East Side artist with a big heart and a green thumb. Near her home was an empty lot on the corner of Bowery and Houston Streets, the kind of garbage-filled space you can walk by for years without really noticing. One day she watched as a child was about to climb into an abandoned refrigerator with the door still attached. Horrified, she got the child out and berated the mother, only to be told back that if she cared so much about garbage why didn't she do something about it? So Christy got some friends together to help clean the place up. The garden they planted turned out to be the spark that lit the fire for what would grow to be hundreds of similar projects."[50]

The significance of this story is told in the personal attachment and passion that one feels for their community. Following the rise of guerilla gardening in New York, the city's Parks and Recreation Department implemented a program known as 'Operation Greenthumb' in 1978. The program essentially allowed gardeners to move in on vacant or neglected land and plant gardens as a means of urban renewal. The hope was however, that the city could find a way to measure and control the gardeners. Plots were leased for one year and would have limited protection so that those who planted on them could be assured an opportunity to harvest. If a redevelopment was to be carried out however, gardeners had to agree to vacant within 30 days although the cases of this happening were few and

Figure 7.02 - Guerilla Gardening is the practice of planting in public spaces with the intention of making a statement or simply for beautification. Like an ultra-modern form of graffiti, this practice has its proponents and opponents alike.

far between. Some saw the program as a way to legitimize the community gardening efforts that had been consistently resisted by previous city officials while "others saw it as a bureaucratic means to control the ad-hoc appropriation of abandoned land."[51]

"The diverse patchwork of more than 800 community gardens that have taken root in New York since the 1970s were born not out of government support, but rather its neglect. During the fiscal crisis, waves of arson and abandonment left the city scarred with thousands of crumbling buildings and vacant, rubble-strewn lots. By 1977, there were more than 25,000 vacant lots in New York."[52] As is consistent with the vacant condition, the lots became littered with trash and rats, these open sores became magnets for drugs, prostitution, and chop shops for stripping down stolen cars. Yet the city's only response was to spend thousands of dollars enclosing the lots with cyclone fencing."[53] Grassroots solutions tend to have more impact than civic or social service initiatives because they are grounded in the people themselves. Their desire to bring about change in an organized way is far more impacting than one that is prescribed for them.

Today there are countless urban gardening projects that are operating in most every North American city. Vancouver, Portland, and Philadelphia to name a few, have begun to add urban agriculture to their new development plans and initiatives. The majority of the projects are established in distressed neighbourhoods, vacant or underused spaces. They are begun in order to increase one or more of the forms of community capital by bolstering a local economy, improving the access to a healthy diet and providing for physical exercise, or by cleaning up derelict lots and reestablishing a healthy urban ecosystem. Often, the less intended effects are a greater level of social cohesion, new opportunities for cultural expression, and a more organized community that can then have the ability to influence the civic structure. While most gardens do not sustain themselves without the help of grants and donations, the most successful of them will continue to strive for sustainability and ultimately to reach an independent state of autonomy. Independence is a desirable achievement as many gardens have an inherent level of instability as most gardeners and garden networks do not own the land they work on. With the threat of losing their land ever present, sustainable practices and an effective entrepreneurial approach can be a great insurance policy.

Chapter Notes

47 *Jacobs, Jane. "The Economy of Cities". Random House; New York, NY. 1969. p.167*

48 *Oehlsen, Nadia. "Risky agribusiness: farming comes to one of America's most notorious". Metropolis; Oct., 1998, v.18, n.2, p.65,68.*

49 *Ibid, p.65-68.*

50 *Tracey, David. "Guerilla Gardening: A Manualfesto". 2007, New Society Publishers. Gabriola Island, BC. p.25*

51 *Ferguson, Sarah. Community Revitalization: A Brief History of Grassroots Greening in NYC, New Village Journal. www.newvillagepress.net*

52 *Mark Francis, Lisa Cashdan, Lynn Paxson, Community Open Spaces (Washington D.C.: Island Press, 1984) p. 4.*

53 *Ferguson, Sarah. Community Revitalization: A Brief History of Grassroots Greening in NYC, New Village Journal. www.newvillagepress.net*

Chapter 8

Winnipeg history, the formation of the North End

"[Winnipeg's location] was not thought to be suitable for a great city. It was said to be muddy and swampy and too far east from the choice lands, and "unfortunate in its surroundings," but the finger of destiny and the energy and confidence of its citizens all pointed to its being the chosen city of the prairies."

George Bryce, Illustrated History of Winnipeg, 1905

From Settlement to City

The history of Winnipeg's North End District is one of mixed intentions. Its genesis begins with Main Street or "Main Road" as it was known then. The prominence of this thoroughfare in Winnipeg was justified by its role in connecting the Selkirk Settlement and Lower Fort Garry to the Hudson's Bay Company's central establishment, Upper Fort Garry. The fort, which sat just south of Main where it met the Assiniboine River near the "Forks" was Winnipeg's raison d'être in the early years and the focal point of the settlement. The streets, if they could be called streets, extended from Main like tines of a comb and were laid out in accordance with the original river lot system, a pattern still visible today in much of Winnipeg's Exchange District. By 1874, some of the streets that today make up the southern half of the North End had been planned. Shortly after the city's incorporation, a plan full of vivid optimism had been drafted on behalf of the city which exhibited the North End as something reminiscent of a Howardian garden city. With its quaint and cozy lots revolving around a large central park reserve and an endless prairie vista stretching into the western expanse, it was clear at the time that the North End was the future of Winnipeg.[54] Despite the attempt at proper planning, much of the city's focus remained on growth along major streets such Main and Notre Dame. In fact, "up to 1877 Winnipeg tended to spread North of Notre Dame, leaving (the) southern section almost untouched."[55] After 1877, the Hudson's Bay Company began to sell off much of its land holdings to prospective settlers. The land sold was what is now known as Downtown Winnipeg and thus, growth focus shifted back to a centralized form. Portage and Broadway Avenues as well as Main were now the prominent streets. "This area quickly developed and became the most desirable residential district. Shortly thereafter, there was a sort of mini-migration to these newly available lots as the upwardly mobile citizenry began moving out of Point Douglas. In an effort to keep land values at a premium, the Company ensured that the new area had larger lot sizes, with the normal parcel being "50 by 120 feet with a 20 foot lane… Conversely, lots north of Notre Dame were sold in a size 66 by 99 feet without lanes."[56] Furthermore, , there was no protection on these lots which, often were subdivided into a

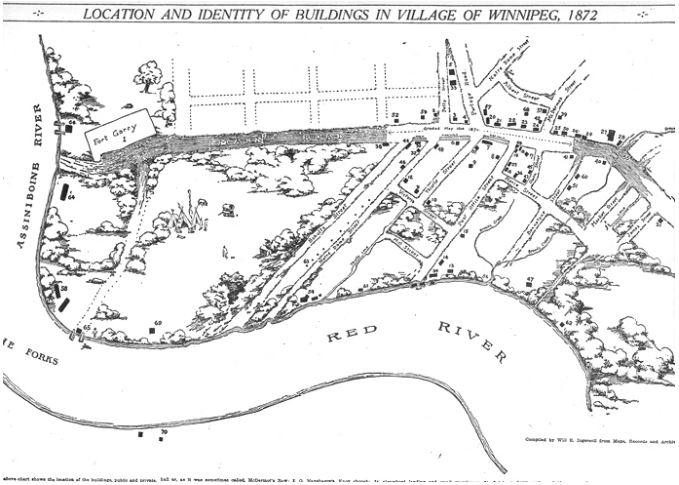


Figure 8.01 -A Map of Winnipeg, as a village in 1872. The orientation of today's streets such as Main, Portage and Notre Dame can be seen in the layout as far back as the late 19th century.

mere 33 by 99 foot parcel. Thus, the city's concentration began to shift towards the blocks west of Main and north and south of Broadway and Portage respectively. Routes which, incidentally were remnants of the original settler's trails leading to and from the Fort. This then set the stage for the future city centre or downtown, as well as reinforcing the notion of Winnipeg as a regional hub and provincial destination. This position of prominence was nearly lost however, due to political rumblings in Ottawa.

The Politics of Growth

When John A. MacDonald's Conservative Party was ousted from power after the Pacific Scandal in 1873, the location of the CPR's Red River crossing became uncertain. One thing that was certain was that the government of fledgling Dominion of Canada wanted to secure territory on the western coast of the continent. In order to do so, they had to make good on a promise to connect the colony of British Columbia via a new transcontinental railroad. Without the railways in place the agricultural and economic exploitation of the west was impossible. By 1881, after some political maneuvering, the main line through Winnipeg was approved. From that point on, the city's council and major stakeholders did "everything to encourage railway development and nothing to control it. This attitude had serious long-range consequences for Winnipeg's physical appearance and social fabric."[57]

It took at least a decade for that initial 1874 plan to be made into a reality as the city's population more than tripled from 1880 to1884.[58] In Winnipeg's haste towards expansion however, many of the novel ideas such as parks and recreation spaces gave way in favour of density. Light industries such as saw and grist mills and manufacturing companies began to cluster along the banks of the Red River and houses sprang up fast and with little consideration for good planning. The exodus triggered by the Hudson's Bay Reserve sell off created a vacuum in Point Douglas, drawing in a working class population that could support the area's new industrial expansion. The Red River was of course an asset to many industries that could draw on the strong riparian flow to drive their mechanical power wheels, to provide readily available coolant and a convenient waste disposal system. The biggest hindrance to the more utopian aspects of the city plan was to be the CPR rail yards and their intersection through the geographical centre of the community. This was to be the beginning of Winnipeg's social class turnover.

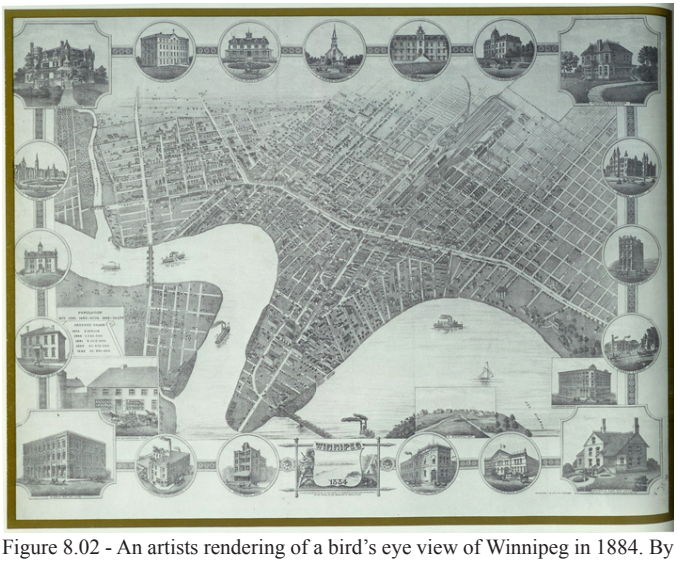


Figure 8.02 - An artists rendering of a bird's eye view of Winnipeg in 1884. By this point, the rail yards had begun their bisection of the city although much of the North End is drawn as uninhabited parcels of land.

The Influence of the CPR Railway

Between 1882 and 1884, the CPR built the 'longest railway yards in the world' to handle the freight and passenger traffic. As the centre of the grain industry in Canada's vast prairie as well as a hub for every crate, barrel and body that traveled to the west or to the east, even the longest rail yards in the world soon became inadequate. By 1903, less than ten years later, the Canadian Pacific greatly expanded its facilities in the Ward 5 yards. In his book Winnipeg: A social history of urban growth 1874-1914, Alan Artibise describes four apparent impacts that Canadian Pacific had on the remarkable evolution of Winnipeg from settlement to city, the first of which was this massive industrial expansion represented in the extension of the main line into the heart of the city. "The construction of a large station, locomotive shops, stores and office building, foundry, freight car shops, powerhouse, scrap yard, and immense marshalling yards (120 miles of track and space for 10000 cars…)"[59] From this description, it is easy to see that the CPR yards were quite obviously the dominating feature of Ward 5 and from a bird's eye view, the yards obscured and eclipsed the entire city.

The bisection of Ward 5 as it were also led to the severance of the entire North End from the rest of the community in nearly every way imaginable. This separation came in many forms both physical and otherwise. Winnipeg author John Marlyn gives his recount in the novel *Under the Ribs of Death* with descriptions of the North End as "an endless grey expanse of moldering ruin", and having "the pervading smell of coal gas and wood rot (and) the aroma of frying meat." It was "a heap seething with unwashed children, sick men in grey underwear, vast sweating women in vaster petticoats."[60] From these descriptive narratives, it is clear that even in its early days, the wards nearest to and north of the CPR yards were apparently suffering from significant symptoms of urban blight.

Artibise mentions a second critical impact: isolation. There was a practical disconnection created by the line after line of steel rail in the marshalling yards upon which, dozens of trains hitching and unhitching cargo that made accessibility to the North End all but impossible. Originally, there was only one authorized crossing of the line at Main Street. This was however an on-grade crossing and so it was common that traffic was inhibited from crossing for hours at a time every day while trains passed through and loaded and unloaded. The streetcars that serviced the North End, connecting it to the rest of the city, were forced to stop. Passengers would then often have to risk life and limb to cross the tracks despite the rolling trains and transfer to street cars on the other side. A solution to this problem came more than a decade later when the city finally had provided two overpass bridges and two subways to facilitate safer crossing. By then,

Figure 8.03 -The underpass at Main Street was a major improvement over the on-grade railway crossings. In the background, the Royal Alexandra Hotel greeted visitors as they arrived in the bustling city centre.

with some 12 years of little or no connectivity, the North End had become ingrained in its isolation. A thriving commercial development had grown up along Selkirk Avenue complete with markets, shops, theatres and the like. Hotels sprang up close to the station just east of Main Street some of which, such as the majestic Royal Alexander, achieved notoriety for being quite grand and luxurious. Many of these businessmen, aside from the hoteliers, were foreign born immigrants preferring to set up shop in a district where they were familiar with the culture and language of their customers. Old world style operations were well patronized producing handicrafts and foods that many of the immigrants left behind in Eastern Europe. The leaders of these cultural communities erected places of worship such as orthodox churches and synagogues as well as meeting places and halls for their people to gather and celebrate. Residents of the North End thus had little reason to leave their wards. Fortunately or unfortunately, as Artibise points out, "such isolation was not conducive to the assimilation process and Winnipeg in 1914 was a severely divided city, both geographically and socially."[61] The area became somewhat detested by the more well to do Winnipeggers. Unsubstantiated tales were told of the North End being a place where "bestial orgies" and other such "un-Christian activities" took place. It is for these reasons of segregation that the North End became known far and wide as the 'Foreign Quarter', 'New Jerusalem' and CPR town. After all it was the CPR that had spawned much of the area either directly or indirectly.

Artibise's third point regarding the impact of the railroad on Winnipeg is the increase of available employment brought about by the industrial boon. Such rapid expansion required a large number of working men to lay track, build shops and factories and ultimately to toil in the yards. Shoveling coal, forging spikes and other such laborious tasks were not for the refined man of the South or West Ends of Winnipeg. In fact, few Winnipeggers would take these jobs at all. Even if they were physically capable they would most certainly be demanding of a wage that could be considered by most to be fair and honest. No, these jobs were left to the immigrant, usually of Eastern European or Scandinavian stock. "By 1911, over thirty five hundred persons were employed by the CPR, more than in any other institution in the West."[62] This is without mention of the hundreds if not thousands of jobs that would have then sprung up co-dependently to the CPR. It was common then for these men and their families if they had them to locate themselves in the near vicinity to their places of employment. Given the lack of accessibility, it would have made little sense to live in any other Ward of the city such as those in the South and West ends. Furthermore, it would have been exceedingly unlikely that one could afford such a house on an immigrant's wage. A portion of the housing was even built by the railroad company on lots

Figure 8.04 - An early photograph of Winnipeg CPR workers, many of whom were new immigrants to the city. Many of these men would have purchased or rented homes in the North End where the CPR built and owned worker housing.

subdivided to be as narrow as 24 feet, nine inches. Thus the company became landlord to a number of its employees. The intention again was to build for density and not quality and so the utopian plans of 1874's city council were officially scrapped in favour of progress. The demand for affordable housing overshadowed the desire for good planning. The future of the area was determined by land developers and real estate agents:

"Not one of the rules of good design were followed: the grid street pattern was dull an monotonous; the narrow lots presented a terribly cramped appearance, since houses were built to the very edge of the property; the façade of the dwellings showed little diversity of building styles; and parks and playgrounds were conspicuously absent since land was meant to used and not 'wasted'."[63]

In subsequent years, when infrastructural improvements such as the widening of streets or laying of sewer pipes were finally considered, they had to come only at immense cost as one would expect considering the haphazard density of structures.

According to Artibise, the fourth and final major impact of the CPR on Winnipeg's North End was the industrial vacuum created by the rail yards. A vacuum which, had the power to draw in other industries to the vicinity not only from other parts of the city, but also to attract industries which previously had been less feasible to locate in Winnipeg. Without the need for long disruptive spur lines, more direct connections to what was then a metaphorical super-highway to the continent could be established for any factory wishing to gain access to the market. River front properties especially those on the Red River were freed up as established industrial companies moved to better position themselves on the rails. Industrial growth by 1914 "on both sides of the tracks from Point Douglas to the western boundary of the city was most apparent. Medium industries such as the manufacturing of carriages and wagons, farm implements, electrical appliances and malt liquors occurred in the vicinity of Higgins and Jarvis avenues. Heavy industries such as bridge and iron works, machine shops, and concrete companies also located on both sides of the tracks, particularly in the western areas of the North End."[64]

The Inevitable Impact of Segregation

This expansion came with great risk to health and home with the constant threat of fire looming over Ward 5. Negative health effects may not have been fully understood by all but the deplorable conditions did no person any good. "Fewer than half the dwellings in the North End were connected to the city's waterworks system."[65] The lack of sanitation is evidenced in a 1913 report on infant mortality rates with the North End showing more that double the number of infant deaths (248.6 per 1000 births) than the South and West Ends (116.8 per 1000 births). Beyond that, there were repetitive outbreaks of typhoid fever summer after summer. A disease that is born of fouled drinking water, the concentration of cases was always significantly greatest in the North End. As is often the case even today, there was a misunderstanding of causal factors for such outbreaks. While the city's Health Department correctly identified the link between conditions and health, many of the "civic officials and politicians attributed the poor showing of the North End to ignorance, laziness and immorality of the (area's) population"[66] As such, there was a lack of motivation and more importantly, funding that could spur improvement in the 'Foreign Quarter'.

While there is little doubt that ethnicity had anything to do with the conditions in the North End at the turn of the century, it was never out of the question for many more affluent Winnipeggers. By the outbreak of World War I, the lines drawn between have and have-not, between Anglo and immigrant, ran deep and cold.

Chapter Notes

54 *Artibise, Alan J., Dahl, Edward H. "Winnipeg in Maps" ; Ottawa. National Map Collection. Public Archives of Canada, 1975. p. 16*

55 *Ibid. p. 25*

56 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p. 150*

57 *Artibise, Alan. "Winnipeg: An Illustrated History", Toronto: James Lorimer & Company, Publishers, 1977. p.26*

58 *Artibise, Alan J., Dahl, Edward H. "Winnipeg in Maps" ; Ottawa. National Map Collection. Public Archives of Canada, 1975. p. 22*

(A figure of 30,000 inhabitants was quoted by some sources, however it has since been contested and listed at roughly 17,000. The higher figure may have been a more accurate reflection of the city however, given the high numbers of transient and migrating people.)

59 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p. 159*

60 *Marlyn, John. "Under the Ribs of Death", Winnipeg: McClelland and Stewart. 1957, p. 9*

61 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p. 160*

62 *Ibid. p. 159*

63 *Ibid. p. 161*

64 *Ibid. p. 159*

65 *Artibise, Alan. "Winnipeg: An Illustrated History", Toronto: James Lorimer & Company, Publishers, 1977. p.66*

66 *Ibid. p.66*

Chapter 9

The Evolving Cultural Dimension

"The English," he whispered. "Pa, the only people who count are the English. Their fathers got all the best jobs. They're the only ones nobody ever calls foreigners. Nobody ever makes fun of their names or calls them 'bologny-eaters,' or laughs at the way they dress or talk. Nobody," he concluded bitterly, "'cause when you're English it's the same as bein' Canadian."

Sandor Hunyadi, protagonist in
John Marlyn's "Under the Ribs of Death"

A Tale of Two Cities

The growing segregation occurring in the city of Winnipeg at the turn of the century was based as much on ethnicity as it was on socio-economic status. Most people living in Wards 5 and 6 otherwise known as the North End, were there by necessity and less by choice. Winnipeg could in those days, be thought of as two cities. The lines drawn between those two cities were not merely geographical as was literally the case with the Canadian Pacific rail yards, but the rift also formed in the hearts and minds of many of the people living on both sides of that border. Social segregation can quickly manifest itself as the highest rampart with ignorance and fear as its building blocks.

That is not to say, however, that all were forced to be there against their will. This is especially true with many of the North End business owners, many of whom did quite well for themselves. Along with employment and affordable housing, the most attractive characteristic of the Foreign Quarter to the average immigrant was the sense of community. As demonstrated by humanistic psychologist, Abraham Maslow's hierarchy of needs, the desire to have social belonging amongst ones group of peers, meets one of our most basic requirements as human beings. This is a likely explanation for the establishment of various institutions such as culturally distinctive schools, churches, clubs and synagogues, and niche businesses that catered to specific ethnic needs. The store owners could often speak more than one language and at the very least, understand the basics of what his immigrant customers were asking for. It is also said in one account that "they used to sell commodities on credit in the way and under arrangements practiced in the small towns" (of old Europe.) "The Jewish merchant knew the likes and dislikes of the Slav immigrant and tried to meet them."[67] A large sprawling outdoor farmers market set itself up autumn days on the west side of Main Street, between where Flora and Stella Avenues crossed. Regional farmers would line up their trucks and sell right out of the back of the pickup, the freshest vegetables to be found. Small grocery stores on every other street corner were a throw back to the days before the dominance of the automobile, when folks had to walk where they were going. The result was a thriving, sustainable community despite its many shortcomings. The 'endless grey expanse' cut only by

Figure 9.01 -The outdoor farmers market that was once held in Main Street between Stella and Flora Avenues. Market day was an event in the North End and a perfect place for community capital to flourish.

the colourful vibrancy and character of its diverse assembly of culture and tradition.

The Ukrainians

For many people, they were part of the largest concentration of their nationality within a thousand miles or perhaps, even the largest outside of their homelands. Some groups such as the Ukrainians became so well established that they formed their own media outlets. They "published at least five newspapers; "The Ukrainian Voice, the national paper; The Canadian Farmer, the organ of the Ruthenian Liberals in politics; The Working People, the mouthpiece of the Socialists; The Canadian Ruthenian, under the Greek Catholic dominance; and Ronok, the organ of the independent Ruthenian church."[68] As a reaction to the hum-drum of the working class life and perhaps to brighten the grayscale outlook of the North End in general, even music and drama clubs were formed by residents to provide familiar forms of entertainment to those toiling masses.

The Jewish Community

A large portion of the immigrants to the North End were Eastern European Jews, many of whom were fleeing from persecution in their old world homelands. Anti-Semitic attitudes were deep seeded in Europe after centuries of religious intolerance and conflict coming in the form of inquisitions and expulsions. The new world, thus represented a promise of limitless opportunity and the ability to self determine culturally and religiously, though it would not be without its own hardships. Between the years of 1901 and 1916, the Jewish population increased fourteen-fold, growing by nearly 11,000 people. The Jewish immigrants became concentrated in the North End of course and more specifically on the north side of the CPR yards on Dufferin and Jarvis Streets. It was this area that came to be referred to as New Jerusalem or Jew Town however, "among Jews it was often called 'Mitzraim', which is the Hebrew word for the Egypt of the captivity: a place from which to escape.

Figure 9.02 -A scene from what was then known as "New Jerusalem". The predominantly Jewish neighbourhood that was located on present day Dufferin and Jarvis avenues

In 1912 this district was the centre of a thriving and energetic Jewish community with its own synagogues, schools, social agencies, newspapers, a complex political landscape, and a Yiddish theatre."[69]

There were of course, other ethnic groups who showed significant representation in Winnipeg's North End. Immigrants came from other Slavic nations such as the Poland, Russia, and to a lesser degree, the Czechoslovakia. There was also a large community of Hungarians as well as Germans and Scandinavians.

Assimilation or Isolation

The Polish in pre-World War I Winnipeg had perhaps the most difficulty as immigrants. According to Victor Turek, in his book The Poles in Manitoba, "no more than a hundred… could secure employment of a higher standard, i.e. requiring some training and better remuneration. All the rest had to take up the most exacting kinds of manual work, and on that account the general visage of the Polish urban group in Manitoba had to have an overwhelming working-class character of the lowest wage standard and most humble social class."[70]

Of these ethnic groups, a few were able to achieve "Canadianization" without the immediate benefit or hindrance of a neighbourhood crowded with their fellow countrymen (by settling in neighbourhoods other than those North End ghettos.) Both the Germans and Scandinavians were proud of this fact, and could point to their dispersal throughout the city." Alan Artibise goes on to contend that this fact pointed out the "differential that existed between these groups and the Slavs and Jews, suggests that Germans and Scandinavians not only had more cultural affinities with the charter group (those of British descent), but also that they had the financial resources and work skills to advance their economic status."[71] At any rate, the Germans, Hungarians, Ukrainians, Polish and many other ethnic groups still gather today, in clubs and meeting halls located on the same North End streets all most a century later.

In the two decades between 1886 and 1916, the Anglo population of the North End went from an 80.8% overwhelming majority to only 38.9%. Although the Anglos were still the largest single ethnic group in 1916 with 23,624 people representing, they were only marginally larger than the 18,280 Slavs, and the 11,746 people of Jewish descent.[72] In these figures, one can see the evolution of the ethnic composition of the North End. The once British majority was actually displaced by the influx of new immigrant arrivals to the area. For the Anglos, those who could leave eventually did. Those who remained most likely had either some investment in the neighbourhood keeping them there, or they lacked the economic mobility to move to another part of the city. It is also important to note that of the Anglos that did maintain residence in the North End, "a large number of these were located in specific parts of the district, places that were as much ghettos as were areas where foreigners congregated. One of these concentrations was in the western portion of Ward 5, close to the CPR shops on Logan Avenue where railway employees lived. A more prestigious area 'a desirable location with refined associations' was east of Main Street in the vicinity of St. John's Park in Ward 6. Here an exclusive well-to-do class with a yearning after the refined suburban life was located in the delightful sylvan district on the borders of the Red River."[73]

Despite the unmitigated segregation of immigrants that occurred in the city of Winnipeg, there was still a common occurrence of clash and dispute mainly between the franchised British citizens and those of 'less desirable pedigree'. Immigrants were often blamed for the prevalence of vice and crime in the city. It was believed by many that the immigrants had brought with them all manners of disease, corruption, and ill-conduct. Even the refined ladies of the Women's Christian Temperance Union joined in the bigotry saying "They are an unfortunate product of a civilization that is a thousand years behind the Canadian." This statement was actually published in the Winnipeg Daily News on March 31st, 1883 exposing the general acceptance of such intolerance. Opinions of foreigners were often expressed in print media and among citizens and although negative attitudes were certainly not held by all. It is clear that they were given significant voice. It was the fear of many established and mainly Anglo citizens, that some foreigners had little or

no interest in assimilation. Still others seemed to gain some praise for their enthusiastic attitude towards Canadianization. Articles occasionally published in the Winnipeg media spoke of concern for the growing number of 'foreign' immigrants to the city. "There are now few people who will affirm that the Slavonic immigrants are desirable settlers, or that they are welcomed by the 'white' people of Western Canada. …Those whose ignorance is impenetrable, whose customs are repulsive, whose civilization is primitive, and whose character and morals are justly condemned, are surely not the class of immigrants which the country's paid immigration agents should seek to attract. Better by far to keep our land for our land for children, and children's children of Canadians, then to fill up the country with the scum of Europe." [sic][74]

The truth of the matter was that newly arriving immigrants, especially those of Eastern European ancestry, had a more difficult time adapting to the cultural norms of the largely British majority. The language, customs, aspirations, religion, likes, dislikes and general habits were largely unfamiliar to the immigrant. The kind of cultural pluralism that is prevalent in today's Canadian society was unimaginable to the turn of the century Winnipegger. Those who emigrated from British Ontario or the United States had a much easier time were able to pick up where they left off, resuming the roles and routines of their former homelife. Their familiarity allowed them to avoid the alienation that often befell the foreigner. Thus, "adjustment was achieved only with the utmost difficulty. Many of this group faltered, were overwhelmed and lost, because in the whole span of their previous existence they found no parallel to guide them in their new life."[75] There were of course, some success stories although few of these were found in the North End District of Wards 5 and 6. Outside the city however, many immigrants, especially those from parts of Germany and the Ukraine were able to apply their hereditary cultural skills as agricultural experts.

Pride and Prejudice

Many felt the answer to the 'immigrant problem' was in the public school system, especially those in the upper class. The prevalent view then, just as today is the education system is "the mightiest assimilation force for elevating the immigrant to the level of Canadian Life."[76] John Marlyn captures this ideology all too well in his description of the boy Sandor Hunyadi's reaction to Victoria Day and his school sponsored contest to write an essay with the topic of 'What Victoria Day Means To Me.' Sandor, the son of Hungarian immigrants, enthusiastically engages in writing his essay in the hopes that he would win the respect of his teacher and peers, especially the English. For the city's elite, assimilation was the grease by which the industrious growth machine would run smoother. Not only could Canadian language tradition, values and nationalism be instilled in the foreigner, but also a greater uniformity in thought, acceptance of second class lifestyles, and better preparation for roles in the workforce. Even with great effort and expansion of school facilities, there were still an estimated 10,000 children between ages six and sixteen that were not enrolled in school in 1911, most of whom were actually working jobs in order to supplement their family's income. To circumvent this problem, then mayor and 'merchant prince' J.H. Ashdown, devised a system of evening classes. In the inaugural year of the program, "ten English language classes were opened for foreigners and six more were soon added, twelve of the total being north of the CPR tracks."[77] By far the largest obstacle to the assimilation process was the establishment of cultural schools such as those affiliated with synagogues and churches. The Ukrainians, Polish and Jews were all schooling many of their own children and so many of the social elite felt that in doing so, they were rejecting

Canadianization.

As is the case in many ghettos, whether they are ethnically based or poverty based, there is always a strong desire in many of the inhabitants to 'make it' and get out of the neighbourhoods that defined them. Such is the case for John Marlyn's protagonist Sandor Hunyadi in the novel "Under the Ribs of Death."

"Some day he would grow up and leave all this, he thought, leave it all behind him forever and never look back, never remember again this dirty foreign neighbourhood and the English gang who chased him home from school every day. He would forget how it felt to wear rummage-sale clothes and be hungry all the time, and nobody would laugh at him again, not even the English, because by then he would have changed his name and would be working in an office the way the English did, and nobody would be able to tell that he had ever been a foreigner."[78]

Here lies what Neil Bissoondath characterizes as the delicate balance between the immigrant dream and the immigrant nightmare. Sandor Hunyadi is pressured by the forces in his life to assimilate, thus rejecting his cultural identity. It is perhaps for this reason that the force of the ghetto is one that not only pushes outward but also pulls its inhabitants in. In the case of Winnipeg, census statistics show it to be one of the most culturally diverse cities in turn of the century Canada. "Toronto, for example, had in 1911 over 91 per cent of its population born in the British Empire and only 5 per cent born in Europe. Winnipeg, on the other hand, had only 75 per cent in the former category and 19 per cent in the latter."[79]

Global Events Hit Close to Home

The first two decades of the 20th century saw a tremendous amount of turmoil both nationally and globally. Economic depressions and rising inflation made life difficult for countless people. Millions more were killed or left homeless in one of the world's bloodiest wars, World War I. The conflict created a certain amount of mistrust for the German population in the city as they were seen as sympathetic to the enemy. The 1917 surrender of the Russian Bolshevists to Germany drew even more criticism on Winnipeg's Slavic community. Things went from bad to worse following the defeat of the German forces and the end of the world's First World War when Canadian soldiers returned home from Europe. "Frustrated by the fact that many of them were unemployed while Germans and Ukrainians and other 'alien enemies' held down good jobs, it was they who most persistently demanded that the alien-pacifist-Red element be deported immediately."[80] Tensions continued to grow until riots eventually broke out in the first weeks of 1919.

For Winnipeg, the proverbial nail in the coffin came in the opening of the Panama Canal. With a short period, this shifted global and continental trade networks towards ocean-going vessels as the preferred shipping method. Winnipeg's prominent position as the hub of three intercontinental railways was now threatened. The canal allowed imports and exports from Europe to the West Coast or From Asia to the East Coast, to circumvent the continental routes passing through Winnipeg and stay on the sea for the entire course.

Tensions Boil Over - The 1919 General Strike

The increasing difficulties in the lives of Winnipeg's working classes culminated in the 1919 general strike. The strike paralyzed the city for weeks and caught the attention of workers worldwide. The constant attempts by workers unions to mobilize and be recognized by employers were met with little response and as a result the strike was called early in the morning on May 15th, 1919. It was the metalworkers that were the first to

call the strike but by 11am that morning, nearly "seventy unions backed the call as did thousands of unorganized workers. Within 3 days, about 35,000 workers walked off the job."[81] Low wages and long hours combined with rapidly inflating prices were making life increasingly unaffordable as the cost of living had increased 75% in the 6 years leading up to the general strike. In comparison, the rise in wages over the same period had only amounted to an increase of 18%. "The average construction worker earned approximately $900 per year while studies showed that the minimum requirement for an average family in Winnipeg in Winnipeg was $1,500."[82] Decades of social segregation had polarized the community and finally culminated in bloodshed on 'Bloody Sunday', June 21, 1919. Sadly, in retrospect it became clear that the strike was carried out in vain. The organization of workers failed to achieve even the least of their objectives. No settlements were reached but the strike leaders felt that too much had already been lost including the lives of two men along with hundreds injured and thus called off the strike at 11 am on June 26th.

From Bad to Worse

The strike became a turning point in the prosperity of the city as well as shattering the already fragile relations between many of the city's cultural groups. Some of the city's establishment saw the strike as a product of Eastern European Bolshevist ideologies. A good many people actually feared that the strike was an outright attack on the capitalist and constitutional institutions and even an attempt to install a foreign communist economic and political system. This sentiment was not helped by the fact that many strikers and strike organizers had openly expressed support for the recent Russian Revolutionaries and their bid to bring about change in the Old World. Despite the overt Marxist undertones of the movement in Winnipeg, the strike was not a communist action. There were actually no foreigners who figured prominently in Winnipeg's labour movement and in fact, nearly all of its leaders were of British descent including Russell, Queen, Armstrong, Heaps and Bray. What is true is that, by far, many of the people who were supporting the strike were 'foreigners' who had been making a living in the factories and warehouses. Though they had little franchise in organizing and leading the strike, they most assuredly had the most to gain, or lose from its success or failure. While the strike created divides among Winnipeg's citizenry, the lines drawn were ones that caused rifts more so between social classes and less between ethnicities. That is to say that the reinforcement of the notion of 'master and man' was underpinned and the relationship between the working and upper classes were the most strained. Though the foreign element had played only minor roles in the general strike of 1919, they were the first to feel the backlash response for the fiasco.

It took nearly six years for Winnipeg to fully recover financially and the city was able to enjoy the latter half of the twenties with renewed prosperity. The affluence was short lived however as right around the corner loomed the 'Black Monday' the stock market crash of 1929. The economic collapse sent shockwaves around the global economy causing loss of fortunes and the failure of entire nations. Countless many lost everything in their savings. What made the crash move from disaster to catastrophe was the combination of financial ruin with the lasting drought that plagued the world, ruining crops and lives and sending the world into what was to become the 'Great Depression'. It was often the poorest who were hit hardest in the Depression and the people of Winnipeg's North End District were no exception. There was a "virtual cessation of developmental activity throughout the West…" which crippled the "demand for the products of the city's large and diversified construction materials industry, while depressed agricultural income in the

hinterland brought huge reductions in demand for goods which the city manufactured and distributed. …in the bleak years that followed, the figure (of unemployment) continued to climb until thousands of workers were idle and hundreds of families on relief."[83] One of the most significant effects of the Depression, at least in its regard to immigration, was an almost total cessation of the influx of new immigrants during the 1930's.

The major economic stimulus that broke the grip of the Great Depression was that of World War II beginning in 1939. The financial up-turns driven by the war-effort and its need for manufactured goods of all sort brought about prosperity in Winnipeg that hadn't been seen in nearly a decade. The Allied war-effort created a "demand for manpower that knew no ethnic limits."[84] At the same time, it began bringing to the forefront, critical issues of libertarianism, human rights and spotlighting the evils of genocide and totalitarianism. The trickle-down effects of these cultural revolutions began to affect the hearts and minds of Canadians and spurred change in the social climate. All of this was happening this time, despite the resurgence of Germany as the enemy. While the economic and industrial growth that grew alongside the war did much to turn the tide of the Depression, it did not fully eradicate hardships. While most people were able to find employment, there was still the struggle of rationing and shortages of many common items, and the constant fear of losing loved ones.

The Long Road to Recovery

The end of World War II marked the onset of a series of radical global changes, political, social, and economic. The most significant of these changes was to be the widespread economic expansion in many nations. New infrastructure that grew up as a part of the great 'war machine' could now be put to use for domestic and civilian purposes. This of course, created jobs, which until the war were becoming increasingly hard to come by. The social changes that came alongside the events gave rise to a resurgence by the working class whom could now see their own value. As a result, the 'master and man' philosophy that led to the oppressive working conditions that had led to the 1919 strike, began to dissolve. The franchising of the middle class led to higher wages overall and a better quality of life for many families. At roughly the same time, there came a shift in the collective mind toward consumerism, an attitude, really, that was driven by the increase in product marketing techniques and media outlets. Consumerism was to be the new staple of the post-war economy across the western world. This newly found economic freedom transformed the face of the North American city as they raced toward suburbanization. It was in the suburbs that North Americans could escape the dullness and filth of the city.

Winnipeg was of course no exception to this trend. The form of the city began to be altered by the expansion of suburban developments in all directions. Although its population was held relatively stagnant during the 1940' and 50's, the internal migration of residents created a completely new city. Many North End families had been living in their ghettos for decades. Now in their third generation as Canadians, many found the suburban dream just as appealing as anyone else. Ethnic populations began to plummet as entire extended families began to relocate themselves. The Ukrainian population, for example, while still showing a preference for the city's northern half, "decreased during the 1950's by 9.6 per cent"[85] in the core area. The Jewish population in the North End, which was perhaps the most segregated in the city "decreased by almost half, from 12,389 to 6,536"[86] during the 1950's. Most of this exodus was directed towards the suburbs of East and West Kildonan in the case of the Jewish migration, River Heights

also became a favoured destination. This desire to move into these areas was strongly represented by the reaction of John Marlyn's protagonist character, Sandor Hunyadi to the sights of River Heights.

"The green here was not as he had ever seen it on leaf or weed, but with the blue of the sky in it, and the air so clear that even the sky looked different here. In a daze he moved down the street. The boulevards ran wide and spacious to the very doors of the houses. And these houses were like palaces, great and stately, surrounded by their own private parks and gardens. On every side was something to wonder at."[87]

Along with new urban growth, the economic prosperity brought new opportunity. Education was now more accessible and certain professions, such as those in law and medicine that had formerly been quite exclusive to Anglos and other well established people, now began to open up. The new opportunities only further exacerbated the departure of 'foreigners' from the North End. As so many left the neighbourhood, "the thriving commercial life of the North End atrophied. Children chose not to take over the small corner grocery stores that their parents had owned, and in the back or on top of which many had lived."[88] Many of these small businesses faced too many difficulties anyway, and perhaps for most of them, their days were numbered. The 50's saw the introduction of larger chain stores to area. This naturally pushed many of the small specialty shops out of business. The changes took their toll on the commercial strip on Selkirk Avenue. The area's first Safeway moved in along with the first ladies ready to wear clothing shop and so many other 'firsts'. Outlets selling manufactured goods could purchase and sell products faster and cheaper than the old world style shops where products were custom-made or tailored right on site.
The population shift created a sort of cultural decline that, along with the increasing rate of assimilation, began to deteriorate the social institutions that sustained the foreign, immigrant inhabitants for three generations. The halls and cultural clubs, churches and synagogues, the literary associations and music societies, sports clubs and ethnic newspapers, all began to disappear one by one. The decline of course, came along side the rise in prosperity of the once marginalized ethnic groups and so was not entirely bitter in taste. In fact, in 1956 the upward movement of ethnic Winnipeggers was firmly established in the successful mayoral bid by Stephen Juba. (Fig. 2-6) The city's first non-Anglo mayor, Juba was a third generation Canadian, and a man of Ukrainian origin.

The vacuum created by the exodus of Eastern Europeans from the North End opened the doors for new populations to move

Figure 9.03 - The busy Selkirk Avenue shopping district was the spine of the North End's business community. Oretski's Department Store was a locally owned establishment that thrived before the introduction of the national 'chain' stores that would ultimately bring competition to the local businesses and to some extent, the local character.

in. The cheap housing attracted people of lower economic status and by the 1960's, this meant mainly those of Aboriginal descent. As the population of Winnipeg failed to grow via immigration, the bulk of new arrivals were those that were migrating from rural Manitoba. European immigrants coming to Canada were being drawn away from Winnipeg by the faster growing western cities of Vancouver, Edmonton and Calgary. At the same time, there was a shift in Aboriginal population dynamics as they began a process of urbanization. Population pressures and lack of employment and opportunity on reserves, was attracting many Native peoples to urban centres. At the time, most were lacking finances and education and thus had to take the most affordable but also most run-down housing. The North End, especially the areas just north of the CPR tracks, were opening up as the Jewish population migrated out. The Aboriginal arrivals were "strangers to the city, they were vulnerable to those who would profit from the weak, and particularly to slum lords."[89] The already deteriorating housing stock only suffered more abuse as the land lords, many of them absentees, failed to reinvest in the buildings as required. The area along Jarvis became known in infamy as 'Tomahawk Row' and was the target of numerous police crackdowns. Although the neighbourhood had been completely impoverished for more than half a century, the new arrivals were being constantly blamed for the areas poverty. "They moved to where housing was available at the lowest cost, just as Jews and Slavs had done earlier in the century. And as had been the case earlier in the century, the newcomers were subject to vile and vicious forms of racism."[90]

Chapter Notes

67 *V. Turek, "The Poles in Manitoba", Toronto: The Polish Alliance Press, 1967. McClelland and Stewart, 1971. p. 109*

68 *Ibid. p. 109*

69 *J. Blanchard, "Winnipeg, 1912", Winnipeg: University of Manitoba Press, 2005. p. 198*

70 *V. Turek, "The Poles in Manitoba", Toronto: The Polish Alliance Press, 1967. McClelland and Stewart, 1971. p. 103-104*

71 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p. 195*

72 *Ibid. p. 163*

73 *Ibid. p. 165 (with excerpts from Gray, "Boy From Winnipeg", Toronto: MacMillan Press, 1971. p. 2-4; and Tide of Winnipeg's Population Pouring Northward, p. 13*

74 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p.198-199) Excert from: Winnipeg Times, April 1906*

75 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p. 196*

76 *Kristjanson, "The Icelandic People in Manitoba", Winnipeg: Wallingford Press, 1965 p. 47*

77 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p. 200-201*

78 *Marlyn, John. "Under the Ribs of Death", Winnipeg: McClelland and Stewart. 1957, p. 9-10*

79 *Artibise, Alan F.J. "Winnipeg. A Social History of Urban Growth", Montreal and London: McGill-Queen's University Press, p. 201-202*

80 *Mott, The 'Foreign Peril', p. 23*

81 *Artibise, Alan. "Winnipeg: An Illustrated History", Toronto: James Lorimer & Company, Publishers, 1977. p. 110*

82 *Stinson, Lloyd. Political Warriors: Recollections of a Social Democrat. Winnipeg, 1975. p. 224*

83 *Artibise, Alan. "Winnipeg: An Illustrated History", Toronto: James Lorimer & Company, Publishers, 1977. p. 122*

84 *Rea, J.E. "The Roots of Prairie Society", D.P. Gagan, ed. Prairie Perspectives: Papers of the Western Canadian Studies Conference. Toronto: Holt, Reinhart and Winston, 1970, p. 53*

85 *Artibise, Alan. "Winnipeg: An Illustrated History", Toronto: James Lorimer & Company, Publishers, 1977. p. 174*

86 *Ibid. p. 174*

87 *Marlyn, John. "Under the Ribs of Death", Winnipeg: McClelland and Stewart. 1957, p. 68-69*

88 *Silver, North End Winnipeg's Lord Selkirk Park Housing Development: History, Comparative Context, Prospects p.11*

89 *Ibid. p.16*

90 *Ibid. p.18*

Chapter 10

The North End Today

"Even without the tendency of newcomers to live with their own kind, Winnipeg, by the very nature of its geographical setting, was pre-ordained to develop into a sprawling gap-toothed collection of ghettos."

James Grey, The Boy From Winnipeg, 1970

The Revolving Door of the North End

The growing segregation occurring in the city of Winnipeg at the turn of the century was based as much on ethnicity as it was on socio-economic status. A significant proportion of people living in the North End and in fact all of the poorer neighbourhoods were first or second generation immigrants well into the mid twentieth century. This, of course, is not a locally unique issue and is common in nearly all large cities across North America and much of the world. What often remains dynamic in distressed inner city neighbourhoods, including those that are in Winnipeg's North End, is not poverty or the ethnically diverse population matrix. Rather, it is the shifting ebb and flow from which that ethnic influx is coming from. In most cases, this will be influenced by a complex set of factors on the global, national and regional level. In Canada, since the 1960's, there has been a shift in immigration patterns. Political unrest, population pressure and more favourable foreign policies have created an immigration vacuum, drawing in new arrivals from the near and far east of Asia. Since then, the majority of new arrivals to Canada have come from these nations. Settlement patterns of immigrants have changed very little over time and as such, the tendency towards a clustering effect has remained. What remains in the north end is a strong concentration and diversity of ethnic minorities. What has changed is the cultural colour of the neighbourhood.

According to the 2001 Canadian census data, the largest ethnic minority represented in the North End's three central neighbourhoods, William Whyte, Dufferin and Lord Selkirk Park, is people of Aboriginal descent with just under 50% of total population in most cases.[91] In Canada, Aboriginal populations are among the few that are actually growing. This is due to the higher birth rates but in the case of Winnipeg, the increase in population can be more accurately attributed to inter provincial migration. Canadian aboriginal populations are urbanizing at a rapid pace as rural reserves fall farther behind in opportunities for employment, health services, housing quality and education potential. It is also important to make note of the further division in the aboriginal population with a majority of those self declaring as Ojibway and a smaller but still substantial number as Cree. There is no insinuation of conflict between these groups, however both are well represented in the North End and there are independent social services and cultural organizations that serve each of them. They have distinct cultures and should not be necessarily linked together based solely on greater race just as various European cultures have their own distinctions. While the various Slavic cultures still hold a strong representation in the North End, their numbers are declining as their population ages. Today, according to the 2001 census, there are no Jews living in the various North End Neighbourhoods despite being such a strong influence in the early formation of the Dufferin neighbourhood. In more recent years, Eastern Europeans have been surpassed as the largest minority group by a growing community of Filipino immigrants[92] who are now assuming the newcomer role that the Slavic immigrants of the early days played. The new cultures are now being and will continue to be reflected in the storefronts and back yard gardens. Other visible minorities that have a significant presence in the area are South East Asian and Latin American.

As the North End is evolving culturally, it is still very much

a blue collar district. According to Stats Canada, in the three neighbourhoods, more than half of all those that are employed are working in manufacturing, retail or support / custodial jobs. Economically, this is reflected in some of the lowest wages in the city earning around half that of the average Winnipegger. Unemployment rates soar to around 3 to 4 times higher than the general population, and average education levels are low.[93] Unfortunate as they are, it is perhaps these very statistics that often reduce people in the North End in the eyes of many Winnipeggers and so for the purposes of this research, there is little need to dwell on them beyond their basic acknowledgment. After all, one could expect to see similar statistics in any distressed neighbourhood.

These demographic shifts in the socio-cultural fabric of the neighbourhood have had a tell-tale impact on many facets of the area, including the infrastructure. Due to the high concentration of poorer people in Winnipeg's North End, a disproportionate number of social and cultural services now occupy a number of addresses on Selkirk Avenue and adjacent streets. In order to provide better access to those in need, these service-oriented facilities have caused a displacement of the original commercial uses. The impact of this displacement is felt in the tax base as social services will not pay the same rate and, furthermore, do not contribute to the local business improvement zone making streetscape improvements less affordable from within the community.

Large Scale 'Revitalization' comes to the North End

Public Housing is also fairly prevalent on the residential streets including the large scale Lord Selkirk Park development that was built in the late 1960's. As a district, it is the poorest in the city and among the poorest in Canada. Lord Selkirk Park is an example of the 'urban renewal' strategies of the 1960's

Figure 10.01 - Aerial view of Lord Selkirk Park

and 1970's where large tracts of land were simply cleared and rebuilt. The project was intended to be a blanket solution to the growing need for public housing. Previously the city and other levels of government had maintained the policy that housing should be taken care of in a laissez-faire manner by the housing market itself. For a number of reasons, this did not work and the demand for affordable housing was far outweighing the supply.

"In May, 1963, the expropriation of property in Salter-Jarvis began. Residents received no prior notice, and no assistance with relocation. Many found private housing nearby, in houses that themselves were

soon to be cleared. With Burrows- Keewatin full by late summer 1964, and Lord Selkirk Park not to open until 1967, most of those displaced from Salter-Jarvis after May, 1963, were on their own. Of the 480 households moved in Stage One of the four-stage relocation process, "420 were relocated to existing dwellings, mostly in the North End" (Yauk, 1973, p. 102). By the end of Stage Three of the process, "850 dwelling units had been eliminated, with only 56 households having been accommodated in public housing units" (Yauk, 1973, p. 119). The result: most of those moved in the name of urban renewal did not end up in public housing; and the already desperately-short supply of low rental housing was further reduced."[94]

Like many other large scale housing projects, the Lord Selkirk Park development has certainly been less than successful. The usual result of these projects is a closed community that becomes segregated from the greater neighbourhood. Ultimately this implosive situation tends only to concentrate poverty and the social ills that walk hand in hand and difficulties are created for law enforcement officials who must provide some level of service to the residents.

The Maturation of the Community

Selkirk Avenue however, remains a hub street for the North End and can still offer a full range of goods and services including some that are unique city-wide such as Eastern European gift shops, ethnic bakeries, meat shops and restaurants serving casual fare. The avenue also has a healthy mix of residential and commercial, something that new urbanist planners are trying to program into their designs for brand new, cutting edge suburbs. It is very common today just as it was in years gone by for a business proprietor to live in the suite or house attached to their store. Many of the small corners stores that are off the main strip have been converted over to housing with a few exceptions.

Figure 10.02 - The Merchant's Hotel, formerly the Steinman Block is an historic building in Winnipeg's North End.

A number of historic buildings still maintain their stature and location on Selkirk Avenue including the Queen's Theatre and the 1913 Steinman Block, known today as the Merchant's Hotel. While the glory days are clearly past, all the pieces of a healthy and prosperous community are still in place, albeit under-utilized.

The neighbourhood today, however, is in a state of distress. Perhaps by far, the new counter-acting force seems to be vacancy. Vacancy is an institution in the North End, visible everywhere in the boarded windows and doors, empty stores and condemned signs. Again, the 2001 Census shows a decline in population in all neighbourhoods excluding Lord Selkirk Park which is actually growing.[95] This population exodus is only contributing to the high levels of vacancy. Much of the North End's housing was built in the pre-war period and even then it was small and of a lower quality. As such a disproportionate number of dwellings today are characterized as being 'in need of major repairs'.[96] As of 2001 , in William Whyte alone, 19.7% of dwellings are in this category, which often means that the home is suffering from a faulty roof or chimney, a sagging or

crumbling foundation, rotting door sills or window frames, and, or a badly damaged interior. Consequently, the dwelling verges on being unsafe and thus is nearly unfit for habitation.

Today, vacant lots pepper the North End. Almost every block of every street and avenue has at least one or more. They are often overgrown, littered with garbage and debris and in some cases even abandoned vehicles. They become a daily reminder of the urban decay like holes in the neighbourhood fabric. The vacant lots are almost never reused or re-designated despite the distinct lack of green space or park space in the north end. The only function they seem to serve is as quicker access from street to street or to the back alleyways that are so typical in this area. Infill housing projects are taking place but at a very slow pace, far behind the rate at which the houses are coming down.

Chapter Notes

91 *Stats Can. Census 2001. Community Profiles. (William Whyte – total pop: 5745 / 2040 Aboriginal pop.)(Dufferin – total pop: 1755 / 690 Aboriginal pop.)(Lord Selkirk Park – total pop. 1340 / 735 Aboriginal pop.)*

92 *Stats Can. Census 2001. Community Profiles. (William Whyte – total pop: 5745 / 720 Filipino pop.)(Dufferin – total pop: 1755 / 155 Filipino pop.)(Lord Selkirk Park – total pop. 1340 / 75 Latin American pop.)*

93 *Stats Can. Census 2001. Community Profiles. (William Whyte – Average Wage: $16,822 / 15.9% unemployment / 56.2% without secondary school)(Dufferin – Average Wage: $17,145/ 15.6% unemployment / 64% without secondary school) (Lord Selkirk Park – Average Wage: $14,609 / 21.5% unemployment / 68.3% without secondary school.) – (Winnipeg Average – Average Wage: $29,145 / 5.7% unemployment)*

94 *Silver, North End Winnipeg's Lord Selkirk Park Housing Development: History, Comparative Context, Prospects p.18 {{Yauk, Thomas B. Residential and Business Relocation From Urban Renewal Areas: A Case Study— The Lord Selkirk Park Experience (Master of City Planning Thesis, University of Manitoba, 1973).}}*

95 *Stats Can. Census 2001. Community Profiles. (William Whyte – population change from 1996 is recorded as -7.8%)(Dufferin – population change from 1996 is recorded as -17.6%)(Lord Selkirk Park – population change from 1996 is recorded as +21.8%)*

96 *Stats Can. Census 2001. Community Profiles. (William Whyte – 19.7% of dwellings in need of major repairs)(Dufferin – 12.5% of dwellings in need of major repairs)(Lord Selkirk Park – 6.9% of dwellings in need of major repairs)*

Chapter 11

Seeing Vacancy as Opportunity

"Capital must protect itself in every way... Debts must be collected and loans and mortgages foreclosed as soon as possible. When through a process of law the common people have lost their homes, they will be more tractable and more easily governed by the strong arm of the law applied by the central power of leading financiers. People without homes will not quarrel with their leaders. This is well known among our principle men now engaged in forming an imperialism of capitalism to govern the world. By dividing the people we can get them to expend their energies in fighting over questions of no importance to us except as teachers of the common herd."

J.P. Morgan

The Potential Impacts of Vacancy

The capacity for a community to take stewardship of vacant or underused land is clear. From this activity, the land itself is renewed and the people using the land are renewed. Land left vacant is soon considered unappealing to the eye. When a lot becomes an eyesore, it inspires a lack of confidence in a neighbourhood. This lack of confidence can eventually translate into a drop in property values in adjacent lots. Businesses suffer as potential client feel uneasy when going to the establishment. Sales drop and finances slump. After a point, business owners may then consider relocation which, if decided upon will leave another property vacant. The land is difficult to sell and so it remains vacant and deteriorates. After a period of years, the deteriorating building may become a target for vandals, arsonists and the like. The building may experience further damage and ultimately be condemned if there is not regular maintenance. Property taxes accumulate on a building regardless if it is in use. At some point, an owner may decide that the reinvestment would be unwise and, instead abandons the building. The property falls into the hands of the municipality after becoming delinquent in taxes. If the building is in total disrepair by then it may be considered a liability and is then demolished becoming another vacant lot. Residential, industrial and commercial lots experience this cycle of vacancy which, threatens constantly to spread through a neighbourhood. In many North American cities today, distressed neighbourhoods are peppered with vacant lots and buildings, one begetting another. For the residents of those neighbourhoods, the vacant lots are at the same time, both the greatest liability and yet potentially, the greatest asset.

Winnipeg's North End has hundreds of vacant lots within a relatively small area. Most are fairly small on an individual basis measuring 24 to 32 feet wide by 100 to 110 feet long. Many of them are roughly a tenth of an acre in area though there are some that are much larger such as the old red river exhibition ground. Cumulatively however, there is an estimated 15 acres of vacant land in the area north of the exchange district, south in Inkster Boulevard and west of the Red River. In farming terms, this is a parcel that is significantly smaller than a quarter-section but still a substantial piece of land.

Figure 11.01 - A vacant lot on Manitoba Avenue. Years of neglect have left this lot in total disorder. Trash is strewn about, the grass is seldom cut and an old fence is falling apart.

This fragmentation of the land presents a challenge to its function as an urban farm. Though not insurmountable, what is demanded from this is a high degree of organization. The gardens would have to function as a network in support of one another. This could also be countered effectively by giving geographical preference to gardeners. Thereby, growers who live on Manitoba Avenue should have first access to gardens on Manitoba Avenue. Given the fact that there are vacant lots on nearly every block and on both sides of any given street, people will not likely need to walk far to access their garden.

The Potential Opportunities of Vacancy

In the urban context, vacancy is rarely considered to be a desirable condition. A vacant parcel is one that has no ascribed function. This should not be confused with other land use types such as park and recreation space or even naturalized and undesignated areas. Because they serve their own purposes, they are not regarded as being vacant in the purest sense. Truly vacant land is more appropriately considered abandoned, hence, the negative connotations that are associated with vacancy.

The vacant condition however, has the potential to present opportunities for the right function. In case such as the North End, the prospect of widely available and accessible land is an asset. The average value of a vacant lot in the North End ranges from roughly $5000 to $13000 give or take. Though most of the lots are not substantial large in area, the devalued nature of the parcels make them cost permitting for any renewal strategy approach. In the case of an urban agriculture network, purchasing the lots may not be required. On the other hand, if the network was to be the owner of the land that they farmed on, there could be a much greater sense of security, less need to adhere to imposed land use conditions, and after productivity begins to slow on any given lot, the network could sell the parcels to prospective buyers for a small profit, perhaps enough to help set up another garden on another lot.

As a renewal strategy, urban agriculture can fit well in this context. Furthermore, it has the potential to address many of the wide ranging needs that the North End has as a community. As mentioned previously, a successful urban renewal strategy is one that will respond to a community's specific issues by building the related forms of community capital.

A recently devised method of urban agriculture known as Small Plot Intensive or SPIN gardening has proven surprisingly effective as a means of growing of fragmented land. In Philadelphia and in Saskatoon, groups are utilizing this method to achieve a profitable and entrepreneurial form of urban agriculture. Wally Satzewich and Gail Vandersteen have been able to earn as much as $30,000 per season from as little as half an acre.[97] The Philadelphia growers Steve and Nicole

Figure 11.02 - A backyard is converted into a productive vegetable garden using SPIN farming methods. Many of these plants will provide early salad crops that tend to fetch a good price at the market.

Shelly generated $52,200 from one half acre located on city water department land. Using that math, given the 15 acres in the North End and surrounds, there is a theoretical possibility of generating $1,566,000. Of course there are limits to this possibility such as whether or not the local market demand could support that volume of production. Satzewich and Vandersteen stress the high level of effort required to manage and work the gardens, however they are only two people. Given the fact that the average income for a resident living in William Whyte is only $16,822,[98] one half an acre of land could fully substitute for three people's yearly incomes. This could be achieved in a six month growing season if all the resources were made available. What is a more likely proposition is that a greater number of people could work this amount of land, sharing not only the workload but also the income generated. This would allow for people to maintain their full or part time employment and use the gardens to supplement their incomes either by direct market sales or by reducing their grocery budgets.

Figure 11.03 - A backyard is converted into a productive vegetable garden using SPIN farming methods and taking full advantage of the urban heat island effect. This is especially helpful in cold weather climates.

The key to the successful practice of SPIN farming is in the crop selection, harvesting techniques and an intelligent marketing method. The organizers of SPIN farming have worked very hard to develop their technical approach and they make that information available to the public for a fee on their website. Therefore, it is not the intention of this paper to divulge all of their trade secrets. To give a concise overview however, it is sufficient to say that staying small is staying profitable. Keeping costs down is the key to maximizing profits. There are inevitable startup costs such as tools, machinery such as a roto-tiller, a refrigerator and a pick-up truck, garden hoses, wash basins, etc. as well as operating costs like seeds, bags or packaging, gasoline, and rent for the land. Proper crop selection is also a key to success. Planting crops such as salad greens, spinach, yellow purslane and other more exotic varieties will often attract more consumer interest. Other vegetable crops that are from heritage seed varieties, or otherwise not commonly found in the supermarkets will go over well also. Potatoes and carrots and anything that can be harvested young when they are their sweetest and most flavourful will sell fast. Urban growers can capitalize on the phenomena known to meteorologists as the 'urban heat island'. According to weather reports taken in Winnipeg, it is common for temperatures at the Winnipeg International Airport to be 5 to 6 degrees colder than those taken downtown.[99] This heat is trapped and held in the buildings, street surfaces, and under the tree canopies of the urban core. It is this heat bonus that allows some crops to mature weeks faster than typical rural agricultural crops. Thus, according to Satzewich, the SPIN farmer can be the first to market with fresh greens and monopolize on the head start. An additional advantage to harvesting 'baby' crops is the potential to replant and get 2 or 3 harvests in a season.

Another hinge of successful SPIN farming is the access to markets and other outlets for crops. These outlets may be

Figure 11.04 - A take off of a World War II era victory garden poster. Victory posters were an effective part of an ad campaign that mobilized and motivated people to contribute to the common good even in the toughest of times. Posters such as this could again be effective in inspiring North End residents to work together to build a stronger community.

farmers markets, restaurants and cafes, grocery stores and the like. These outlets are very present in the North End. Selkirk Avenue is a commercial hub with a strong presence in the area. There is a distinct lack of large grocery stores in the North End and so people rely heavily on the mom and pop style corner stores that stand at every other intersection. These stores are well patroned and are part of the neighbourhood character. They promote a walkable lifestyle although they are more likely walked to out of necessity rather than by choice.

The vacant status is certainly an opportunity from a cultural perspective. With the exception of a few environmental factors, the lots are essentially blank slates that can be developed as gardens that reflect the character of their users. It would be likely that people would begin to grow some crops that are consistent with their heritage or ethnicity. In a neighbourhood such as the North End, there is no end to the possibilities as it is an incredibly culturally diverse area. The diversity would not stop at the selection of food crops, but would also be expressed in the décor chosen by the users. Thus the neighbourhood could begin to come alive, reflecting the richness and multiplicity that it embodies. The many cultural organizations located in the North End could sponsor and care for a vacant lot of their own and use it as a meeting place.

According to the 2001 census, there are also large populations of both seniors and young children. Gardens could also add a social component to the neighbourhood by being developed to suit these demographic groupings. Schools and senior centres could be given authority to steward and distribute the plots as they see fit. By doing so, they can provide a service to their respective communities while at the same time, relieving the burden of care from the rest of the garden network. Other additions to gardens that may build social capital could be elements as

simple as a bench, or a small shelter structure where people will gather. Poster boards where people can post messages, notices, want ads, and so on, can also work to create social cohesion. The gardens themselves would be regarded as pocket parks by those who use them and those who considerately visit them. Furthermore, the elements with in them would be an addition to the area's built capital which is conspicuously void of public spaces and parkland.

The occupation of vacant lots by local residents could amount to a grassroots movement by locals to 'take back' their neighbourhood both physically and emotionally. The level of organization demanded by the garden network in order to function well would require a number of people to become more accountable to their neighbourhood. Lot leaders and block captains would step up and assume a managerial role. The result of the increase in responsibility could lead to a greater sense of community pride, personal ownership and civic duty. People watching people is the best way to combat crime and one can only expect that theft and vandalism would be a concern in the gardens. Their status as vacant lots would only exacerbate the problem of vandalism but the greater community presence in the gardens would heighten onlookers' attention to what is happening in the gardens and who is in them. The interdependence of gardeners to each other can facilitate social inclusivity, and draw out a democratic response to adversities and decision making. All of these things are an excellent foundation upon which political capital can be built.

Management Strategies for a Garden Network

In order for a garden network to come to fruition and bring potential profit, it will require a high degree of specialization and a wide knowledge base of agricultural know-how. Techniques of sowing, growing, maintaining and harvesting will be essential. Beyond that, processing, packaging and preserving will be critical for proper marketing of products. Knowledge of the basic ecology and botany of plants, methods of identifying preferred plants from those that are considered weeds at a very early stage, identification of pests or plant diseases, and so on will be required. The list of skills and training that can be gained from gardening on the vacant lots is limitless. Skills that could lead to better and more diverse forms of employment, the virtue of patience, a critical ecological awareness, are all potential long term benefits to human capital. The added health value of a better diet and regular exercise can not be discounted either.

The ecological benefits to the proposed garden network would be felt in the entire neighbourhood. By cleaning up the lots, a large amount of invasive or emergent plant material would be removed. Pollinating insects that are beneficial to food production could be attracted by growing flowers on each site. The gardens would attract birds and butterflies providing an entertaining and educational component. Of course, some birds and small animals may be regarded as pests while others may be attracted in order to limit harmful pests. The gardens provide an outlet for some household wastes such as compostable food products. Also, a limitless list of household items such as containers, buckets, or dowels may find a new and innovative use in the gardening process. Newspapers and cardboard may be shredded for mulch, old tires or basins can be used as raised planters. Reducing waste of any kind will lessen the stress on local landfills, thereby reducing the ecological footprint of the area's residents.

Environmental Concerns and Recommended Strategies

One of the most concerning ecological considerations is in the quality of the soils. There are some significant possibilities for soil contamination in urban lots such as high level of traffic which releases harmful emissions, industrial processes that may have been carried out on lots in previous years, and the introduction of contaminants from the building or demolition of a structure. "Some elements, such as arsenic, cadmium, mercury and lead, are potentially harmful to human health… The presence of these elements may reflect industrial contamination or natural levels… Other elements, such as chromium, copper, manganese and zinc are beneficial to human health at trace levels, whereas the roles of nickel and tin in human metabolism are unclear, they are not thought harmful at low levels."[100] There are ways to mitigate this form of pollution however, so as not to deny the possibility of food production although it would be recommended that any lot's soils be tested before establishing a garden. To get a sense of the possibility for contamination, some of the environmental factors that should be assessed are the proximity to busy streets which would increase traffic levels; the historical use of the lot which can be uncovered by researching the lot in the local Henderson Directory; the age of the building that stood on the lot previous to being demolished may help determine the likelihood of lead paint, lead pipe, asbestos siding or plasters that may have been used in construction.

Mitigation begins with soil tests that will determine the level of contamination. If the levels are too high, then the lot can be utilized to grow non-edibles, such as cut flowers, potted plants or nursery stock, or ornamentals such as decorative gourds, pumpkins, or multi-coloured corn cobs for example. These products can be shellacked to preserve them or carved seasonally as in the case of pumpkins. As non-consumables, they will not pose a health risk and can still be marketed for a profit. Studies on the subject of heavy metal absorption through edible plants have revealed that some crop species have a higher susceptibility to contamination than others. Typically, the heavy metal absorption ratio of plant parts (is) fruits and seed to leaves and roots = 1:10. This means that fruits and seeds are 10 times safer to consume than leaves and roots. (Therefore, it is wise to discourage) people from growing celery parsley, leeks, lettuce, spinach, carrots, beets, and radishes. Better options are (grain crops, seed crops) legumes, gourds, onions, garlic, tomatoes, and fruit trees and shrubs"[101] on land that is contaminated. Cover crops can be planted that will remove heavy metals although this process often takes a number of seasons to have an adequate effect. For lots that may be developed as gardens in subsequent years, this method could not hurt.

In cases where contamination is minimal, gardens with raised bed can be assembled and new soils can be brought as a clean growing medium. Organic composts and fertilizers can be used in order to prevent any further chemical application. Ideally, the beds should be raised 18 inches however, based on the intended crop, this may change. What is important to note is that contaminants will tend to leach down as opposed to moving upward in the soil. The downside to raised beds is that they will "usually suffer for lack of water except in poorly drained soils."[102] By adding more organic matter such as peat and by incorporating efficient watering practices such as drip systems, excess water demand can be controlled.

As the North End ages, its housing stock is in a state of constant flux. The shifting vacancy is ever present in the neighbourhood. From one year to the next, a number of old houses will come down and a number of new infill projects will go up. Because of the age of the homes coming down, the greatest threat of potential contamination happens during the demolition. A

regulatory and enforceable practice should be adopted by those who are demolishing buildings on lots especially those that are not intended for immediate redevelopment. Even those that may be built upon right away should be regulated in order to minimize contamination in general.

Some building materials may be salvaged prior to demolition of a residence. While many components will be in a state of disrepair, some will remain durable enough or valuable enough to be salvaged. Windows, doors, faucets, light fixtures, cabinetry, hardware, switches, piping (pvc or copper), electrical conduits, wire, sinks, bathtubs, etc., etc. A limited number of these components may be recycled back into the garden network. This could be an opportunity to recover some of the cost lost during subsequent phases. These materials could then be used to construct components for the gardens such as compost bins, raised planters, etc.

Demolition is by far the most costly phase in the process of lot renewal. This cost is usually incurred by the municipal government which is in turn, a burden for all taxpayers. Demolition requires the use of heavy equipment and heavy labour. The result is a large amount of waste material that must then be removed from the site to a landfill. These materials can be somewhat toxic and if not contained properly, the immediate area can be contaminated. Building materials such as paints, especially those that are lead based, insulations, asbestos in its many forms are of huge concern. Also of concern is the content of the residence, oil rags, stored chemicals, etc. This is perhaps the most sensitive phase of the process as well as the most costly.

Excavation is essentially the final stage of demolition after most of the material has been removed from site. The remaining foundation is broken up and removed using heavy equipment. Foundations are often removed even if they are in good shape which is ultimately a waste. Any remaining material is removed at this point as well. An opportunity exists at this point to preserve a foundation in good condition or, if it must be removed, an opportunity exists to remove as much contaminated material as possible including existing soils. This process uncovers all utility lines such as water, gas and communications which must then be re-routed and capped. Old foundations could serve the garden network in the form of cold storage buildings or greenhouses if they were covered with a simple roof structure.

Backfilling is a necessity when a foundation has been removed. This is seldom a quick solution as settling soils will often leave a lasting depression that must be filled more than once. The solution is often to backfill with large pieces of the foundation or other such questionable materials that may or may not contain contaminants. An opportunity exists here to drastically improve soil quality to one that is suitable for growing food. Backfill material should be in any case, regulated. There is no need to fill the excavated hole with high quality topsoil, this would be very costly and since topsoil has poor structural qualities, it would settle out anyway. There are plenty of accessible sources of clean fill from the booming new home construction business. Many of these builders have to pay to have soils removed from their sites and would be pleased to donate it.

After the lot has been cleared, a minimal remediation process begins. Debris is removed and bare soils are either seeded or sodded with grass. There are many opportunities here to prepare the site for some sort of redevelopment such as bringing utilities into a universal housing box, planting bio-remediating vegetation, preparing existing foundations for new structures, adding clean, quality soils, and so on. Regardless, more attention ought to be paid to this process as an ounce of prevention can be

worth a pound of cure.

Factors Resisting Community Gardens

Another potential threat to the urban agricultural approach to revitalization could be the lack of tenure that gardeners would have on any given plot. A vast number of lots are city owned and therefore, potentially a little more accessible. There are likely an equal number of lots that are in the hands of private ownership although they are no less vacant and no less strewn with trash. The ambiguity of ownership makes it difficult to access the lots for gardening purposes. It would be beneficial if the City of Winnipeg were to track these lots more closely and perhaps penalize those owners with a fee if the continue to allow a lot to sit vacant. An opportunity to apply for an extension period could be granted if the owner has plans to eventually develop the land.

Ultimately, development is a positive thing. The prevalence of vacancy in the North End is problematic and even if the vacant lots were all developed into a small pocket park or community garden, the problem of vacancy would persist. A healthy neighbourhood should be able to maintain a good density. This will provide the proper support and stability for local businesses and services that ultimately sustain the community. What the North End needs is housing renewal and though it is happening through infill projects, the effort is not matching the pace of the degradation. It would therefore, be beneficial if the garden network could work within the context of the greater community need. The gardens themselves should not inhibit redevelopment, rather they should facilitate it. To accomplish this, the gardens should attempt to recycle the lots. As stated previously, a vacant lot is a detractor. It has a tendency to spread vacancy by decreasing land value in adjacent properties. So, if the vacant lot is developed as a garden, it adds to land value. People begin to use it, to care for it, to protect it. This has a trickle-down effect on the entire area restoring confidence in the neighbourhood and attracting reinvestments. But, in 5 or so years, when the lot comes up for that redevelopment, the garden does not stand it the way of progress. Instead, it packs up and moves after taking its harvest, leaving behind only that which will foster the new growth. A new fence, fruit trees, a parking pad, good soils, and other elements that will attract a buyer. Instead of grieving the loss, the gardeners look forward to beginning again on a new lot nearby that has just been demolished. In this way, the revolving vacant condition is met with the same response of renewal in an urban lifecycle of death and rebirth.

Chapter Notes

97 *"Seeds in the City: An Evening of Urban Agriculture" St. Matthews Church, Winnipeg, MB. Friday March 2nd, 2007. Satzewich and Vandersteen were presenters at this conference.*

98 *2001 census, Stats Canada. This and more information is available on the city of Winnipeg website. (www.winnipg.ca)*
Observed regularly over a period of time in early 2008, Based on Environment Canada data.

99 *Weeks, C. A., Brown, S. N., Vazquez, I., Thomas, K., Baxter, M., Warriss, P.D. and Knowles, T. G. (2007) 'Multi-element survey of allotment produce and soil in the UK', Food Additives & Contaminants, 24:8, 877 — 885*

100 *Bellows, Anne C., (Koc, Mustafa., McRae, Rod., Mougeot, Luc J.A., Welsh, Jennifer. –editors-) "For Hunger Proof Cities: Sustainable Urban Food Systems". Ottawa: International Development Research Centre; 1999. p.134.*
Based on studies carried out by the Polish Ecological Club-Gliwice.

101 *Kains, M.G. "Five Acres and Independence: A Handbook for small farm management" New York: Dover Publications, 1973. p.94.*

Chapter 12

The Functional Network

"Old ideas can sometimes use new buildings. New ideas must use old buildings."

Jane Jacobs

Structuring a Network - Cohesive Independence

The fragmented nature of a vacant lot gardening program will give rise to its own set of issues that single lot gardens may not face. There is an inherent decentralization with a fragmented system such as that, which could be instituted in Winnipeg's North End. The decentralization in concept has some significant social implications. It is more democratic in many ways with individual lots all running autonomously but towards the same goals. In a distressed neighbourhood, this can be an advantage as people will feel free to self-determine and to add to their own personal garden space as they see fit. It should not be overlooked that residents in distressed neighbourhoods will be relatively more likely to be living in 'at risk' conditions. It is then understandable that there may be an inherent distrust for centralized associations among these residents. Although this is most certainly a generalized statement, it should not be disregarded on those grounds alone. The program would be heavily dependent on community acceptance and participation.

Alternatively, the fragmented gardens could be disadvantaged by their separation and autonomy and thus would do better to function as a network. The crux of this network would be in its facilitation and organization. The reality is that each garden would be better suited to growing different plants. So, a garden on the north side of the street may get better light than the lot across the street, or perhaps one of the lots is directly under the canopy of one of the neighbourhood's majestic elm trees. So the light conditions may vary, the accessibility may vary, the proximity to concentrations of interested user groups may vary. It is these determinant factors that should have some influence on the content of the garden lots for the sake of efficiency. As such, for a gardener to agree to grow a specific few crops, on all or the majority of their space may take some convincing. It would very likely decrease the amount of perceived autonomy or freedom that an individual gardener can have. Though it would not be advisable to enforce this in any way whatsoever, incentives could be offered to growers who want to be part of the network. Free seeds, access to support facilities, subsidized fees, and access to the marketplace outlets are all possible ways to encourage cohesion in the network.

The Garden's Basic Components

There are three main components to a functional garden network: the gardens, the support or processing areas, and the community market outlets. The gardens themselves would be the foundation upon which the network stands. Each garden would have to strive for self-sustainability as much as possible. There will be shortcomings however and those would have to be considered by the other components in the network.

The elements in the gardens should be accessible and uncomplicated. As some gardens may have shorter tenure, the elements should be modular in the sense that they are standardized, easily built and made of readily available materials. They should be light and mobile enough to be carried and installed by a single person and transported longer distances by a pickup truck. Some of the necessary elements for each garden would be raised planters, benches, compost bins, rain barrels, and a solution to the need for fencing.

The best source for materials to construct these elements could

be from demolitions on nearby lots. Being conscientious of the materials in these older homes and the purposeful selection of reusable lumber, hardware, and the like will only serve to raise awareness of the materials in general. Aside from this, a supplementary source of materials could be the Habitat for Humanity Re-Store. This is an outlet for recycled and donated building materials. So long as there are no contaminated materials used, the ecological footprint of each garden could be significantly reduced. After the tenure of the garden is up, the modular elements can be packed up and removed to another site.

Elements that are to remain on site after a garden's tenure is over should be considerate of the rebuilding process. Thus, they should add something to the lot as an incentive for re-investment. A fence structure could save the new home owner the expense of installing one. A gravel parking pad in the back alley, new fruit trees could all possibly add to land value. There is an opportunity as well to have a legacy element that may remain behind, adding to the neighbourhood character and telling a story of the revitalization effort.

The gardens will undoubtedly be resource deficient. The vacant lots will not have a high enough quality soil to comprise a good enough growing medium. While an onsite compost bin can help in amending the soil, it cannot generate nearly enough on its own. Soils therefore, will have to be mixed and stored at other supportive sites nearby to the network. The gardens will also be water deficient. This is a substantial problem as any reliance on the city water system will increase the gardens' ecological footprint and perhaps more practically, their operating costs. However, the risk of prolonged drought is too great to overlook and so the city system should be used in cases where crop failure is imminent. Especially when growing in raised planters, the water consumption will increase. A 500 square foot raised bed will require 45 gallons of water per day or roughly 6750 gallons over the growing season. By mulching the surface of the beds and drip watering, that number can be reduced. Still there will be a need to supplement the rain water. Winnipeg receives an average of 15.83 inches of between May 1st and September 30th.[102] On a 500 square foot plot, this totals 4242 gallons over the growing season or just over 28 gallons per day, without consideration for spillage, evaporation, wind, etc. According to this calculation, the gardens are only 62% water sufficient at best. Additional water can be sourced from adjacent rooftops or from nearby buildings. While this can alleviate the need for dependence on potable water from the city system, it does create the need for its own rain collection infrastructure and may also be dependent on good neighbourly collaboration.

Each garden should contain certain common constituents other than the gardening elements. The gardens should have an area for storage. This may be a small shed or structure depending on availability and investment. On smaller lots, storage for a few shovels or other implements could be accommodated in small fixed lockboxes. It would however be beneficial to have a central tool-lending centre. This would require participation in the network but could lessen the burden on individual gardeners to purchase and store tools and equipment.

Each garden should incorporate some form of social component. This could be something as simple as a bench. Gardeners would then have the opportunity to sit and rest and at the same time, the potential of social interaction is increased. Two benches facing each other are even better. The social space should be closer to the street where passersby may also be engaged in a conversation about the weather or the garden. In this way, the traditional character of the North End is preserved through front yard living in a metaphorical front porch. Another social

component could be a simple notice board where gardeners can post messages, notices, invitations, etc. This way, the gardeners of each lot are less isolated from the greater network by being kept informed of upcoming events, tutorials, pest warnings, or harvest information.

Figure 12.01 - An early diagrammatic overview of the Garden Network and its interdependent elements. The functional areas support the growing areas which in turn, supply the community output areas such as the market.

The processing and support facilities can serve the garden network by displacing some of the more spatially demanding components. Storage of materials, composts, soils, and water can be accommodated on larger properties. One such property could be the North End vocational school, R.B. Russell. Some of the gardeners needs could be met by the students as part of their curriculum and community service requirements. The fabrication of the garden components would require some specialization of skills such as carpentry, metal working, on so on. Students of the vocational school would be well suited as they would have the expertise needed.

Greenhouses and cold storages are examples of support facilities that are useful at times of harvest and to get early seed starts. Green houses and cold storages could be constructed on old preserved foundations after a demolition. By capping the old foundation, a support facility could be assembled without the need to build an entirely new structure. This would allow gardeners who are participating in the network to have access to early plants that would allow them to get earlier harvests. By being the first to market with crops such as salad greens, the network could monopolize sales while rural farmers are 2 or 3 weeks from their harvest. In the fall after harvest, the network gardeners can extend their market season with proper storage of their crops. By keeping them fresh longer, they can sell well into the fall.

Beyond this, a canning and drying facility could also increase the market potential of the network's produce. Canned vegetables, jams, jellies and salsas have a 'value-added' principle and tend to fetch a higher price than the value of their components alone. Other forms of processing such as drying herbs or fruits can take advantage of the value-added principle as well. Tying garlic bulbs together in a string makes them worth more than the garlic itself. Other ornamentals such as autumn corn, gourds, and pumpkins can be prepared and shellacked. Cut flowers

can be arranged in bouquets or potted as houseplants. These products are all very marketable and the level of diversity in the products would increase consumer interest.

A place for market prep would also be invaluable to the network. Produce needs to be washed, sorted, prepared and bagged to increase consumer attraction. A community kitchen with stoves, sinks, prep tables and such, could serve all of these needs. The kitchen could be a suitable gathering place for social events, or potentially for classes, tutorials and stakeholder meetings. The skills gained by gardeners in the kitchen would be invaluable as job training, creating the potential for growers to gain both human and economic capital independently.

Potential market outlets are the key to the success of the network. The market outlets should be as centralized as possible in order sustain an efficient operation and to establish an identity for the network. Historically, a farmers market served the North End and surrounding area from its location off Main Street, between Flora and Stella Avenue. This market was very much a part of life in the neighbourhood and was regarded as a place to meet and greet as well as to buy fresh produce. Thus, the market had a great deal to offer the neighbourhood. It is this kind of presence that the garden network should seek to reestablish. The old market site today is occupied by buildings and the traffic flow around it, while not entirely cut off, has been redirected due to the construction of Lord Selkirk Park. What was most advantageous about that site was its proximity to other commercial enterprises. This combination of services added to the draw and the businesses and the market helped sustain each other. Selkirk Avenue offers this kind commercial potential and, because of a higher degree of vacancy, land is more accessible. Selkirk Avenue is the symbolic heart of the North End as well and so lends itself well to the concept. Additionally, it would be more central to many of the vacant lots and so is more easily reached.

The market area could be a place for a number of mutually supportive outlets. Firstly, the farmers market where fresh produce is first pre-washed, packaged and then sold. Good branding can increase interest in the networks product at the market level. Produce that is less presentable but of no less quality could be used in a café or restaurant on the same site. Consumers could buy a healthy, affordable meal that was grown within meters of their seat. For ecologically conscientious people who want to follow a 100 mile diet, would be well accommodated. By committing to serving local foods and produces, the restaurant could establish a niche market that is in demand right now. Another local restaurant called the Ellice Street Café has a subsidized rate for customers who are very poor. The restaurant receives donated foods that are then served for affordable prices. The establishment is a non-profit organization which could also be a suitable model for a Selkirk Avenue eatery.

An open market for local artists and craftspeople could be an effective distraction for market customers. Providing a diversity of goods and services in the same location works well and for a nominal fee, a market cart could be rented. Also, allowing local growers from rural locations may be beneficial. Although it could introduce competition, it may also introduce more diversity to the market.

A small store where garden network products could be purchased at any time will free the growers from depending on an ephemeral market concept. Most farmers markets are weekend events, but from Monday to Friday, they are non-existent. Having a small store may be more convenient for consumers to shop at their leisure. Products that are less perishable such as canned goods or ornamentals would be best sold here.

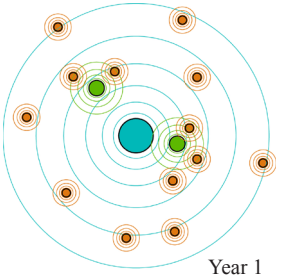
The market component has requirements for both indoor and outdoor space. A suitable site for this should be chosen based upon its proximity to meet the spatial needs. Furthermore, the market site should be well located near to existing commercial outlets than can benefit in a reciprocal arrangement, it should be accessible for the purposes of loading and storage, it should be a highly visible and well trafficked site, it should be in close proximity to city transit stops, and it should tie in well to the neighbourhood's character, historical and contemporary.

Managing the Garden Network

The structure of management and administration is something that must be considerate of the common attitudes of a distressed neighbourhood. There may be an anti-establishment undertone to the thoughts and feelings of the North End's residents. This creates an obstacle for the proposed Garden network as it would likely struggle to function without outside help, especially in the startup phases where a great deal of capital would be required. It should therefore, be the mandate of the garden network to strive for autonomy as soon as possible beginning with covering its own operating costs, and ultimately accumulating enough savings to fund expansions on its own. There would always need to be an agreement with the city as much of the growing land would be on city property. Property taxes and development fees would have to be waived. The gardens could theoretically pay for their own energy and water consumption after income from the first harvest returns becomes available. In the meantime, a nominal gardener's fee or rent could be charged to growers at the beginning of the year. There are downsides to this however as asking for money from cash-strapped people could be exclusive of those who are in the greatest need. Rent fees may be collected after harvest, but this does not solve the early cash flow issue.

Year 1

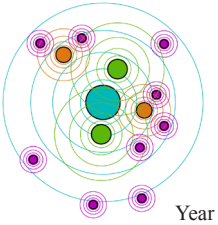
In year 1, the primary funding source (blue) would be from government sources including the municipal, provincial and federal levels. Much of this funding would come in the form of grants and land leases. The secondary funding sources (green) would be organizations that may directly support some of the garden groups such as schools, faith-based, culturally-based or seniors groups to name a few possibilities. The reminder of the funding (orange) would come from private donations or investments from groups and individuals.



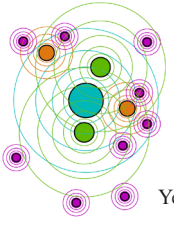
Year 1

Year 2

By year 2, a shift takes place in the funding as the garden network begins to be able to raise it's own funds. The two green ripples in year two now reflects the network's ability to sell it's own products in raw form, canned form as well as prepared form through a cafe/restaurant outlet. The second green ripple reflects other fund raising potentials that are not directly related to the service of food. Opportunities such as gardener dues, slavage of materials from derelict houses, plant sales, festivals and functions, 50/50 draws, etc., etc., etc. Funding from other sources such as organizations and private investments become less in proportion, also, the government funding sources will decrease after the first year where a graet deal of start-up capital was crucial.



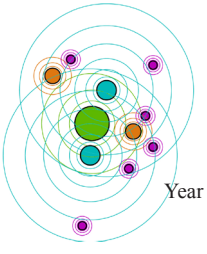
Year 2



Year 3

Year 3/4

By years 3 and 4, the government funding decreases as the garden network becomes more and more self-sustaining via revenues that it can generate for itself. At this point the network actually becomes the primary funding source.



Year 4

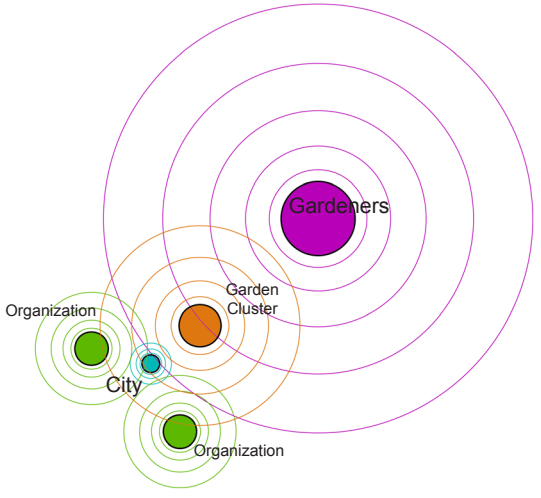
Figure 12.02 - Ripple diagram - Funding

Additional funding could be made available through the many government grant programs. Grant monies are available for projects of all kinds including revitalization efforts, beautification and green space development, those that are connected to food security, programs that have an educational component, programs that offer job training or those that create employment opportunities. Furthermore, grants can be acquired for culturally based developments or those that target certain demographics such as children or seniors. By adding a sustainable or ecological approach to a project, yet more grant money is available. Some of these funds come through the government directly, while others are offered through connected organizations such as the North End Community Renewal Corporation, WHHI or SEED Winnipeg to name a just a few. There are dozens of windows to government money which, often adds complications to the application process, but for the sake of acquiring the necessary startup capital, going through these organizations would certainly be the most effective approach.

After the first and second years, the amount of capital generated by the network itself may begin to approach a more self sustaining level. As previously stated, it should be the goal of the network to reach for an autonomous existence so it can operate without the need to seek financial assistance. This will bolster the level of achievement and stability of the organization. As a co-op, the gardeners will have a greater share in the profit and are thus, more likely to contribute by growing crops that can be marketed more effectively or those that are better suited to the individual lot.

It will often take a few years of working a garden plot to get the best potential harvest. First year harvests are often smaller and less productive. The take steadily increases year after year to a maximum yield so long as the soils are being treated well and reinforced with compost periodically. After a period of 5 to 10 years, the soils will become more and more heavily taxed by the small plot, intensive agricultural methods. Plots will then likely require the addition of significant amounts of organic material to sustain productivity. Because the tenure of many gardens may be shorter than 10 years, this would not be a problem as it may encourage gardeners to seek a new nearby lot to grow on.

The maintenance of the gardens would ultimately fall on the individual gardeners themselves. Beginning with the single gardener, they would be responsible to weed and maintain their own plots. An average sized vacant lot would have enough room for 4 or 5 gardeners. They would be responsible together to contribute equally towards larger maintenance issues such as the



This diagram is showing the maintenance structure for a single garden lot in the network.

Figure 12.03 - Ripple diagram - Maintenance

spring clean up after the snow melt and possibly mulching the beds in fall. All would be responsible for the mutual protection of the lot from theft and or vandalism. This may demand that tools be secured, valuables are not left behind, and gates be closed, if there is one. Also, trash should be cleaned up to avoid drawing in animals. For the sake of avoiding conflict, the lots should not have an appointed overseer. All gardeners should contribute equally as a team of co-dependents or co-investors. A block captain should be appointed as a liaison between gardeners and the network. Block captains may themselves be a gardener and would manage a group of lots in their vicinity. It obviously would be advantageous if the block captain actually resided in their mandated area, as a result, as the garden locations shift, new captains may be appointed. For a more democratic approach, the block captain could be appointed or elected by the gardeners in their group. 'Blocks' should be determined by a 5 or 10 minute walking distance so the captain can visit all the gardens periodically and address their needs individually. If additional resources are needed such as soil, seedlings or a water barrel refill, the block captain would make those official requests to the network. This will help organize the relationship between the network and the individual lots and reduce the number of individuals calling in for supplies.

The next step of organization should be a committee with representatives mainly from the gardening community, but also from the various support organizations. Block captains or individual gardeners alike should have reserved seats. The City of Winnipeg should have a representative and possibly the Province of Manitoba as they will be contributing a great deal of funding at least initially. Community and cultural representatives from the social services and community renewal organizations in the area should also have a seat at the table. A member of the school division should be involved as well. The

This diagram reflects the influence of administrative bodies on the proposed garden network. There is a reflection of geographical locale in this diagram. The primary administration would be led by the city of Winnipeg which is not represented on this diagram. The blue and primary influence represent the garden cluster. This would be an amalgamation of all the garden lots within a .25 km radius or 10 to 15 city blocks. Thus creating a super-imposed series of garden neighbourhoods based on proximity. The secondary level of administration is represented by the green ripples. This level reflects the location of organized societal components such as schools and senior's housing as well as faith based organizations. These organized bodies extend an influence on the gardens that are within the closest proximity to them. The organizations can theoretically offer some level of manageent for those gardens that fall within their realm of influence. The tertiary level of ripples reflect the gardens themselves. At this level, lots are grouped together to facilitate their management. A qualified "Block Captain" of sorts could be nominated to manage the garden lots in each group.

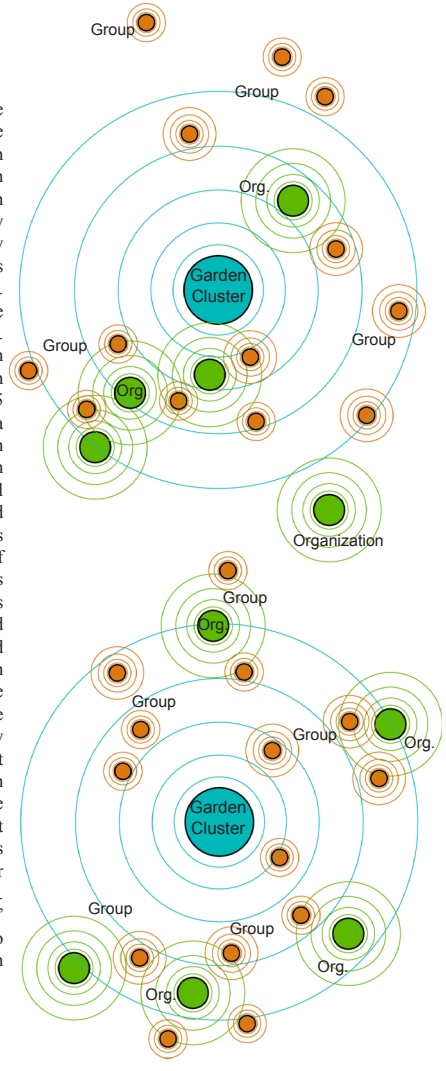


Figure 12.04 - Ripple diagram - Administration

R.B. Russell Vocational School is within the garden network's area and could certainly contribute to the program. There are a number of large senior's homes in the Selkirk Avenue area. Most are apartment block style where the residents have little or no personal space. As backyard gardens were always a characteristic sight in the North End many long-term senior residents would likely find a garden plot close by as something very appealing, although proximity and accessibility will be crucial. The Selkirk Avenue Business Improvement Zone would have some influence over the market outlets and as a local business, the network markets would be paying dues to the BIZ. The BIZ should therefore be included. Linking the commercial opportunities with the existing business in a mutually supportive way is a positive approach and beneficial for the entire commercial district. The Manitoba Food Charter is currently working with North End organizations and residents to set up some food and food security related programs. The Charter has a tremendous amount of knowledge and expertise at its disposal that would make an incredible contribution to the garden network by having a committee seat. It may however, be a disadvantage to involve the North End's many cultural and faith based organizations at the administrative level. The risk of creating a politically charged environment would be a detriment. With so much cultural diversity, it is impossible to select one over another and while their contributions and support could be hugely beneficial, they would have to be content to take an administrative back seat.

The purpose of the committee would be to apply for and allocate funds and resources, to define boundaries and approve decisions, to direct expansion, organize community events, coordinate training programs and educative tutorials, facilitate the gardening process from sowing to harvest, set up off season and winter events, hire staff as needed, and finally to manage or oversee the market outlets.

Chapter Notes

102 *Cumulative total taken from Environment Canada average weather records.*

Chapter 13

Inventory and Analysis

"We can't solve problems by using the same kind of thinking we used when we created them."

Albert Einstein

The North End - Taking Stock

In order to begin the process of problem solving, it is crucial to first understand the context and circumstances surrounding the situation. A detailed inventory and analysis of the community framework will often provide more questions than it will provide answers however, this is not counterproductive. Meaningful questions elicit meaningful responses.

The North End of Winnipeg is not a clearly defined political boundary. It is instead, an amalgamation of neighbourhoods that reside north of Logan Avenue and the City Centre district, south of Inkster Boulevard and the West Kildonan district, west of the Red River, and east of McPhillips Street and the Inkster Industrial Park. The CPR railway yards, which include the Weston Yards and the Winnipeg Yards bisect the North End and its southern neighbourhood. The North End is almost completely surrounded on two fronts, south and west, by large industrial zones. The rail yards have for generations, been the major isolation mechanism for the North End. In the earlier years, the only way to cross the rails to access the North End was at Main Street. Initially this was an on grade crossing but was later replaced by an underpass for vehicles and pedestrians. That crossing still exists today along with bridges at Salter Street, Arlington Street and another underpass at McPhillips. The Red River can be crossed at the Redwood Bridge and the Disraeli and Louise Bridges in Point Douglas. On the western front, the Inkster Industrial Park is fairly imposing, allowing only a handful of roadways through to access the North End. From the north, accessibility is relatively unlimited. Significant east to west roadways are Selkirk, Burrows, Redwood and Mountain Avenues. Significant north to south roadways are McPhillips, Airlies, Arlington, McGregor, Salter, and Main Streets.

The North End is fairly well serviced by Winnipeg Transit routes with all major areas of the city connected to the community via Main Street, Selkirk Avenue, Inkster or McPhillips Street. (see figure 13.02)

Though it has been suggested by this paper that the North End is truly a neighbourhood in distress it is also important to note that

Figure 13.01 - A satellite view of Winnipeg's North End with major roadways in yellow overlay.

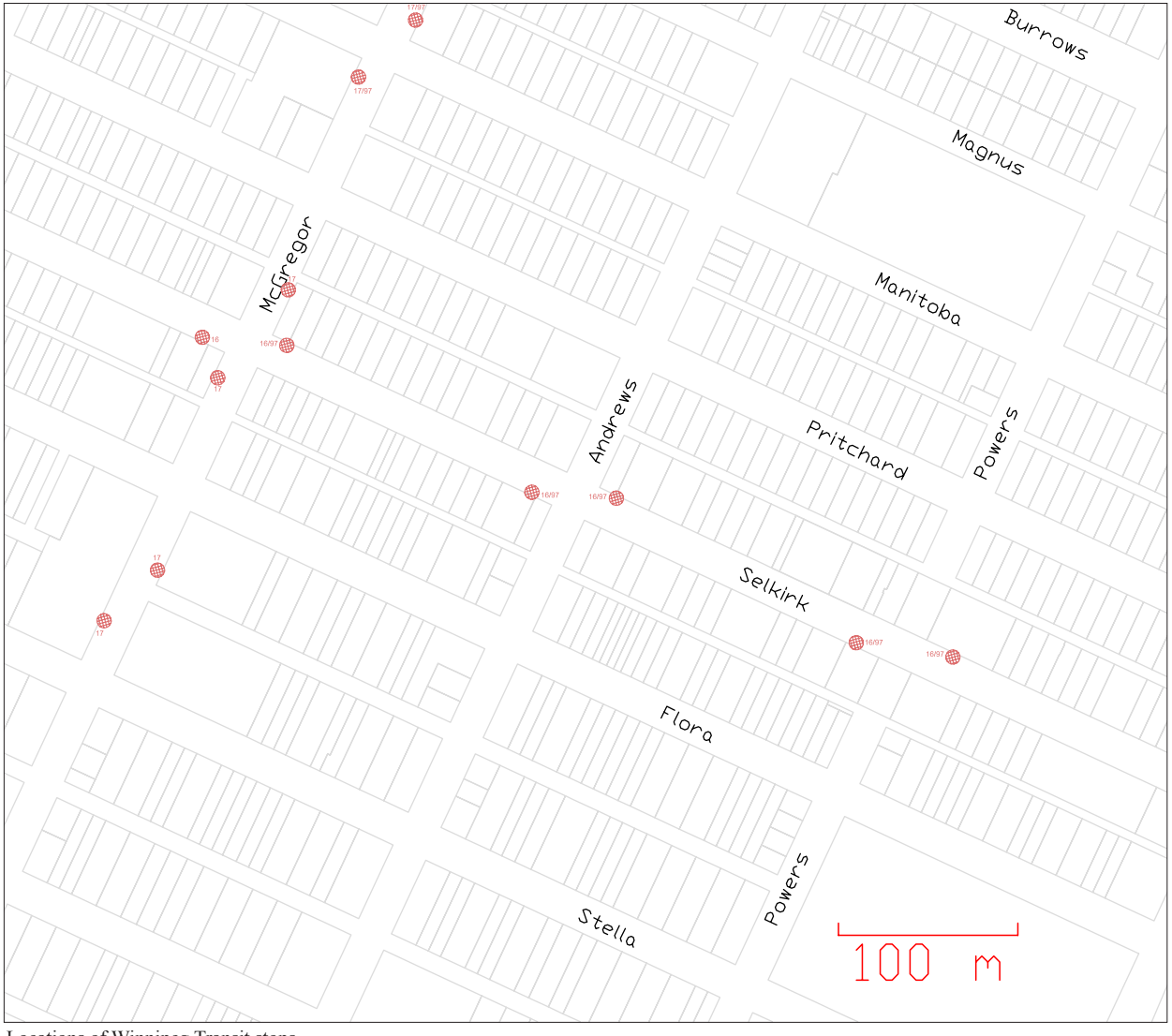


Figure 13.02 - Locations of Winnipeg Transit stops

it has in the past enjoyed sustained periods of prosperity and stability. As such, history has invested in the area in the form of infrastructure and character. From this, the neighbourhoods have gained a number of assets that may be underutilized or neglected today. So, the building blocks of a potentially successful neighbourhood are still in place and need only be rediscovered or reassigned. The vacancy in the area must be used to the advantage of the renewal effort as it is clearly a liability at this point. Vacancy is clearly a major issue in the North End with vacant lots found on nearly every block of nearly every street. The vacant lots range in size but represent several acres of land collectively. (see figure 13.03)

In comparison, the amount of green space or recreational areas in the area is conspicuously low. There is a green space 'void' in William Whyte and Dufferin neighbourhoods with much of the North End's recreation parks situated nearer to the river or in the northern section, nearer to Inkster Avenue. (see figure 13.04)

The major commercial areas are in strip form. Main Street is clearly the anchor for the North End, not only for its denser commercial offerings, but also as a strong link to the rest of the city. In the North End, it would seem that all roads lead to Main. Selkirk Avenue, also a strong commercial strip, is the traditional heart of the North End. It is here that the specialty shops that are so characteristic of the area are found. Winnipeg institutions such as Gunn's Bakery, Wawel Meat Market, Baltona Meats and Deli, Todaschuk Sisters Ukrainian Boutique, and many more are found within a few blocks of each other on Selkirk. While Main Street was something that was shared by the entire city, Selkirk Avenue was an enclave, totally reserved for the residents of the district. It wasn't uncommon for proprietors to carry culturally unique goods and even to speak a number of languages in order to better serve their mostly immigrant clientele.[103] Selkirk was formerly the entertainment centre of the community as well with its grand theatres such as the Palace and the Queen where many famous entertainers performed. Selkirk Avenue's commercial buildings are interesting in the sense that so many of them are a combination of main floor commercial and top floor residential. Others still are simply two-storey houses with a commercial frontage attached. This combination of stores and homes has always reinforced the success of many businesses. When a small business has a regular clientele living right in the area, there is often a greater level of support. Also, it is not uncommon for business owners to occupy the residence above their store as well. This has also had an impact on the street's commerce in that many owners were doubly invested in the neighbourhood. The Selkirk Avenue Business Improvement Zone operates on that avenue between Main and Arlington Streets.

A number of small corner store outlets are located on the side streets at the key roadway intersections. If Selkirk Avenue was the backbone of the area's commerce, these were the appendages. One can find the remnants of these tiny stores on every other block. It is clear that there would have been no need to have a car in recent years as a corner store would have been only minutes away by foot from any home in the area. These stores were a residential and commercial mix where the proprietors would have either lived in or rented out the suite above. Only a few of these stores are operating today and in today's supermarket culture, this is not surprising. The rest of the mom and pop corner stores have been converted to residential, though they still remain commercially zoned properties. The conversions are such that the old stores are very apparent despite having a new function. The buildings are quite conspicuous as their brick front facades extend right to the edge of the sidewalks. These old stores are also a viable asset due to their zoning potential, convenient locations, and their contribution to the

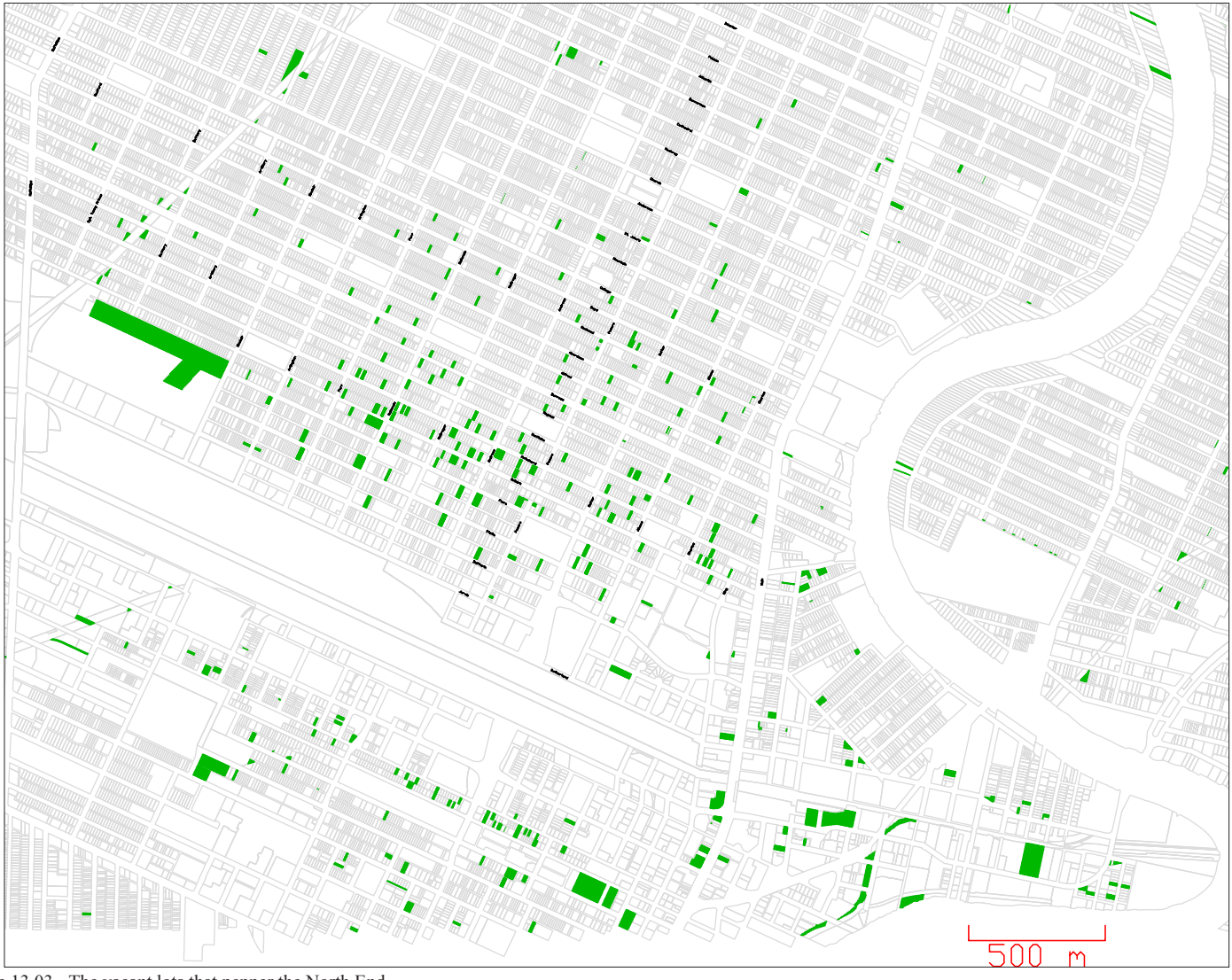


Figure 13.03 - The vacant lots that pepper the North End.

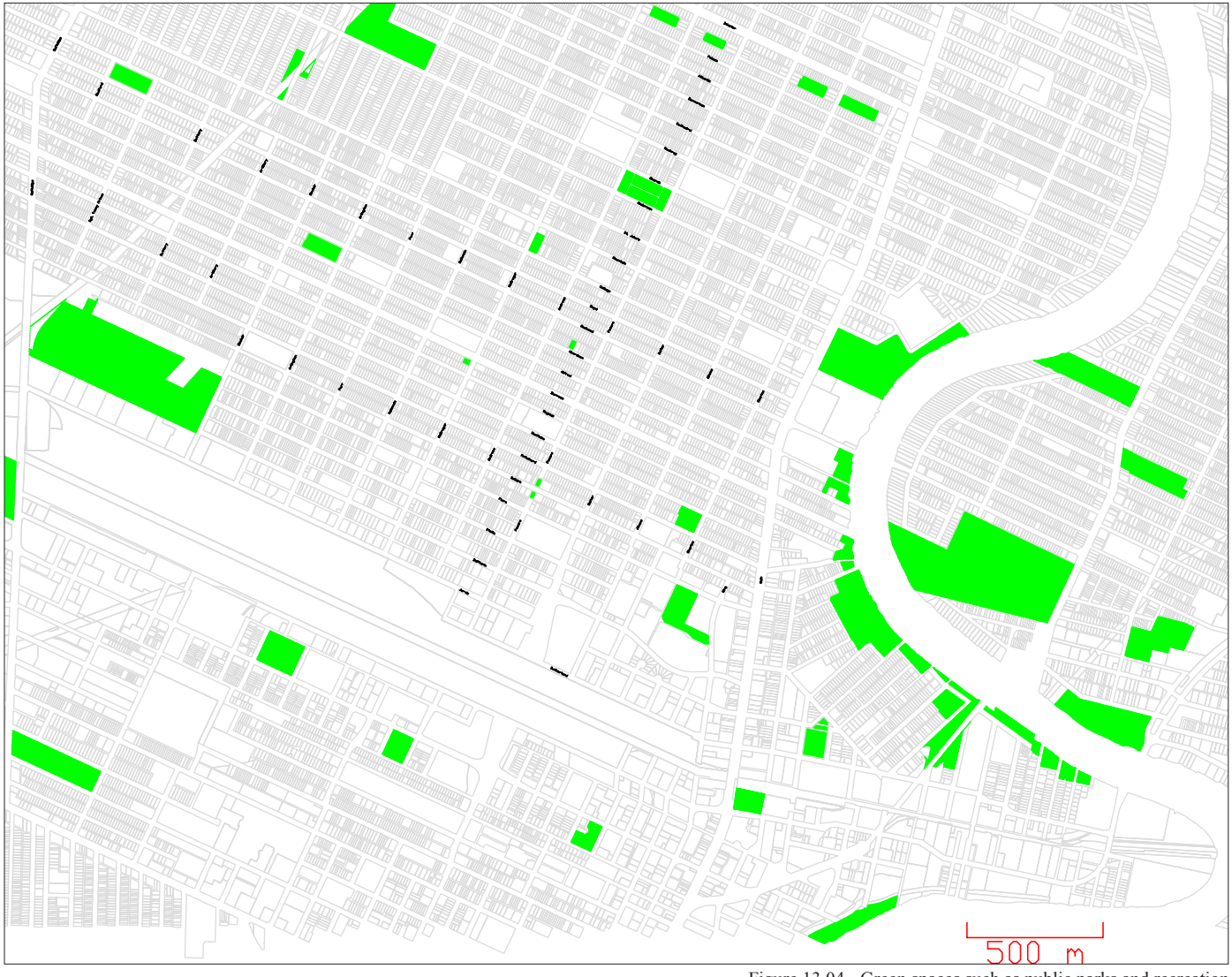


Figure 13.04 - Green spaces such as public parks and recreation areas

neighbourhood character and charm. Today, there is a small but evident counter-culture movement away from 'Big Box' chains and supermarkets. The corner store emphasizes the 'walkable' community and the ecological, social, and health benefits of that way of life. (see figure 13.05)

Today, there are seven buildings and building blocks on Selkirk Avenue that have been declared historic by the City of Winnipeg. Most of them are old commercial warehouses although one is a hotel, one is a theatre, and another is a very modest private residence. These historic buildings are mainly two-storey structures built in the warehouse style with iron columns on a grid pattern. The Richardson Romanesque style was common in Winnipeg, especially it's Exchange District at the turn of the 20th century. Though the North End buildings were not nearly as grand as those in the Exchange their appearance was still dominated by their brick frontage in a classical or neo-Italianate style.[104] The construction style allowed for lighter structures that had more available and uninterrupted interior space. Local stone is used in some cases at the ground level and as lintels over windows and doors, and the decorative cornices give these buildings a more grand and formal cap. The one standout exception would be the Queen's Theatre at 239 Selkirk Avenue. A former Presbyterian church, converted to a Jewish theatre, it was a centre of Winnipeg's entertainment scene for decades. Its architecture is very unique to the area, appearing to be almost Art Deco in style though its 1890 construction date would mean it was built long before the Deco style became popular in the 1920's. It is most likely therefore, a later addition to the façade. Those historic structures that are still standing in the North End linger as remnants of the former prosperity and diversity of the area. Although today some of the buildings are functioning at less than full capacity others such as the 1913 Steinman block is home to a somewhat contentious hotel, bar, and off-sale liquor vender. Even the once great Queen's Theatre where Charlie Chaplin once entertained,[105] is now serving the community as a Bingo Hall. Not nearly as glorified a function but fittingly, the building is still supplying entertainment at nearly 120 years of age. Because of their inherent story and lasting structure, the historic buildings on Selkirk Avenue could and should play a significant role in any neighbourhood renewal effort. (see figure 13.06)

The housing stock in Winnipeg is perhaps its greatest single advantage and disadvantage. While very affordable relative to many Canadian cities, much of the housing predates World War II, especially the housing south of Burrows Avenue. Many homes in the North End are smaller, ranging from 800 to 1200 square feet. A good portion of this stock was put up as workers housing by the Canadian Pacific Railway. There are some homes that even predate the turn of the 20th century in fact. The City of Winnipeg provides assessment values for all lots. As of the 2003 market, very few houses in the North End were valued at more than $50,000 to $60,000. Given the increases in property values over the last 5 years in Winnipeg, houses of this value may be more frequent however. Most houses, as of 2003, averaged in the $30,000 to $40,000 range making them affordable to nearly anyone with a somewhat steady job. Unfortunately, according to the 2001 census, in some North End neighbourhoods the percentage of home renters is as high as 67%. When housing is provided as a means of generating revenue, such as in the rental market, the bottom line becomes a profit-based one. It would not be fair to brand all absentee owners with the same mark although it is safe to say that most renters will not invest their own money into a home they do not own and so the burden of repair is on the landlord, as it should be. When a landlord is absent, there is less chance that they will be making those repairs as needed. Furthermore, there is a higher incidence of damage caused by renters which only

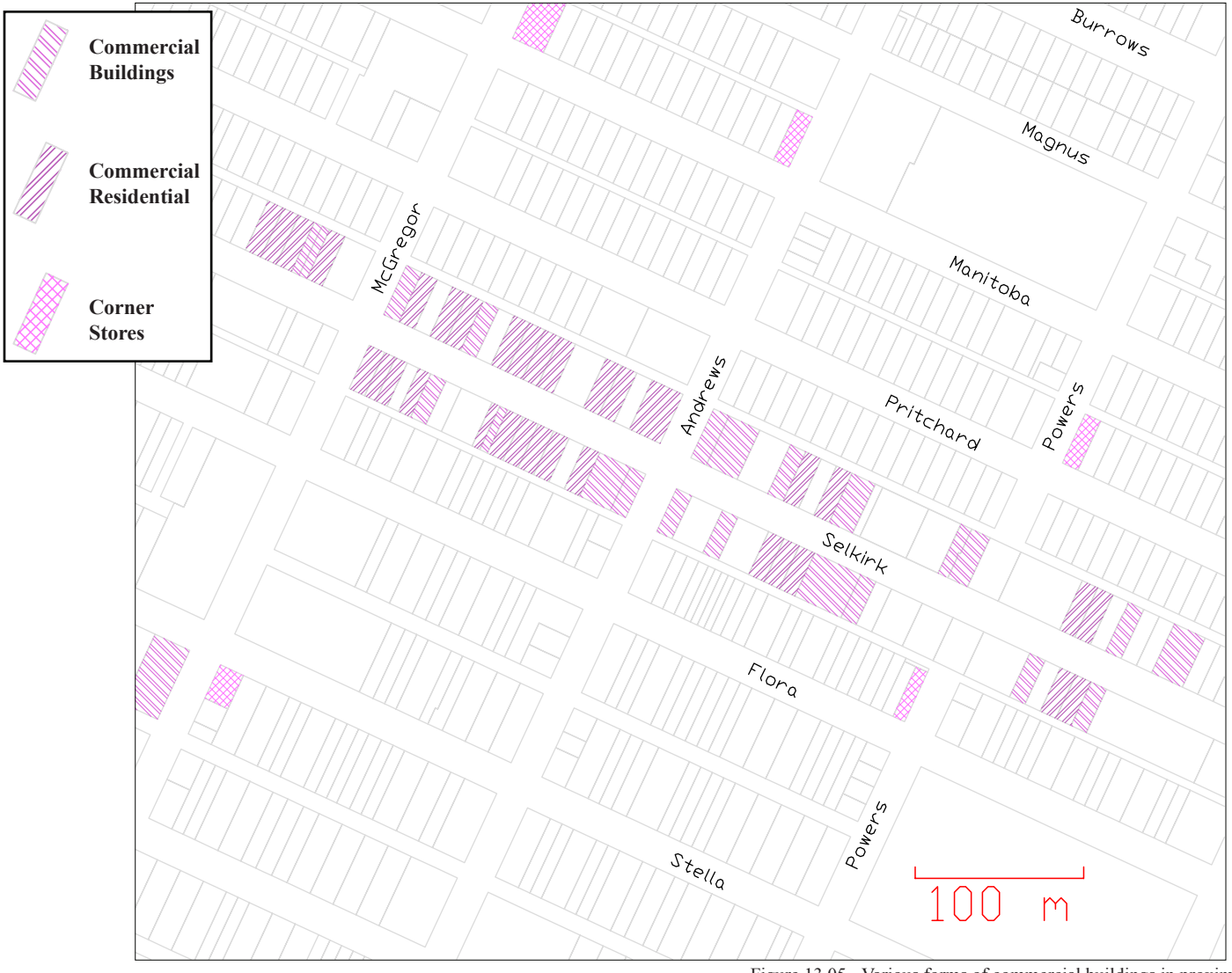


Figure 13.05 - Various forms of commercial buildings in proximity to the site

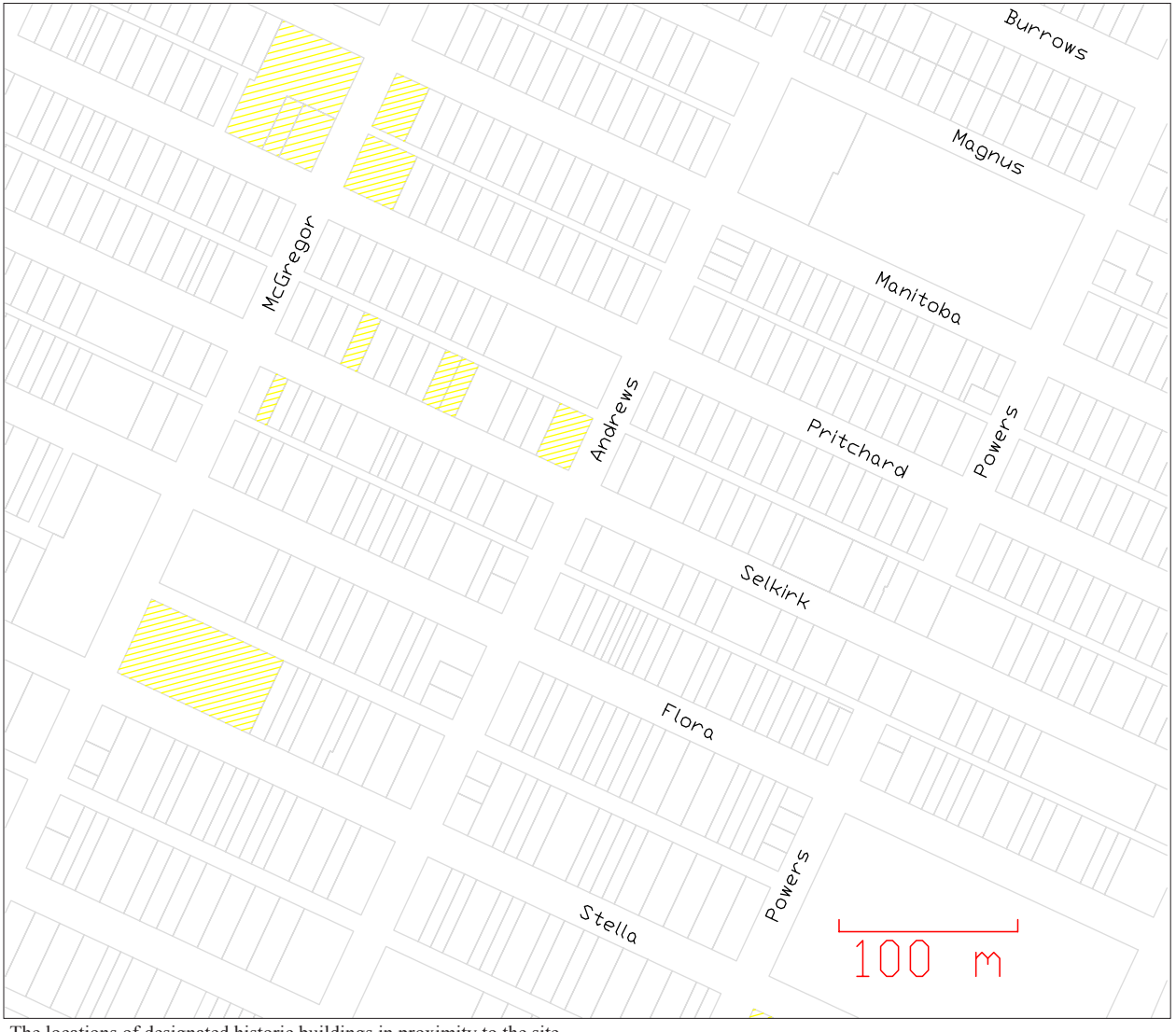


Figure 13.06 - The locations of designated historic buildings in proximity to the site

exacerbates the degradation of the home. Since the post WWII increase in automobile ownership, many owners had erected detached garages with a back lane entry. This significantly decreases the square footage of the already tiny lots, some of which are as narrow as 24 feet. The back alleys are found on nearly every block and add a second dimension to the lots. These alleys are used by vehicles and pedestrians but are not perceived as safe by those who are unfamiliar.

The North End has a seemingly disproportionate number of schools than other areas of the city. There are 23 schools of all levels in the district, all within the Winnipeg 1 school division, and more than a dozen more within just a few blocks of the area's outer reaches. This is a higher frequency of schools than in most other areas of the city that are comparable in size. This is perhaps because a higher percentage of the North End's population is of school age. Some of the area's schools are culturally based or part of a local religious institution. Some have attached or shared recreation fields that serve as some of the North End's only parks or green spaces. Other than school fields, the main parks in the community are Sinclair Park, the Old Exhibition Grounds, and St. John's Park off Main Street. There are a handful of other small parks such as Boyd Park and Machray Park although the rest are smaller than 1 block in area.(see figure 13.07)

Demographically, the North End has a high proportion of school age children but also a high proportion of senior citizens. There are a number of senior's housing buildings and assisted living facilities in the neighbourhood. A number of the people living in the area are active in the community and have lived in the area for a long time. Those who have are thus, well invested and well informed in community matters and would be able to contribute a great deal based on that. These two demographic groups could play a significant role in any renewal proposal and should be included in decision making whenever possible. They have the ability to contribute a great deal into each other's lives and their inclusion could also influence the sometimes less enthusiastic adult population. (see figure 13.08)

There are a number of culturally based organizations in the North End. Winnipeg's Polish, German, Hungarian, Spanish, and two Ukrainian communities operate social clubs in the area. There is also strong representation from the Ojibway and Cree Nations as well as the Filipino community, all of whom have a cultural presence and impact in the North End. While no revitalization effort should attempt to be specific to any single culture, their inclusion on their own terms would be a significant achievement. The momentum that could be gained by these cultural organizations would go a long way towards bolstering the acceptance of the individual residents. (see figure 13.09)

There is a very high number of social services in the North End and on Selkirk Avenue in particular. Many of these organizations are currently developing programs that will help residents to get better educations, develop economic opportunities, encourage healthier diets and lifestyles, offer a safe place to go, and to facilitate a wide range of beneficial effects in people's lives. Many of these needs could be met at least in part by the garden network. So, the social services could play an integral role as a window to the network by which people can access the gardens. The organizations could help connect people to the gardens nearest their homes, collect fees, sign residents up for tutorials and training sessions and so on. (see figure 13.10)

Also playing a role of service to the North End community are its many faith based organizations. Many of these churches have long supported the North End and have become the cornerstone

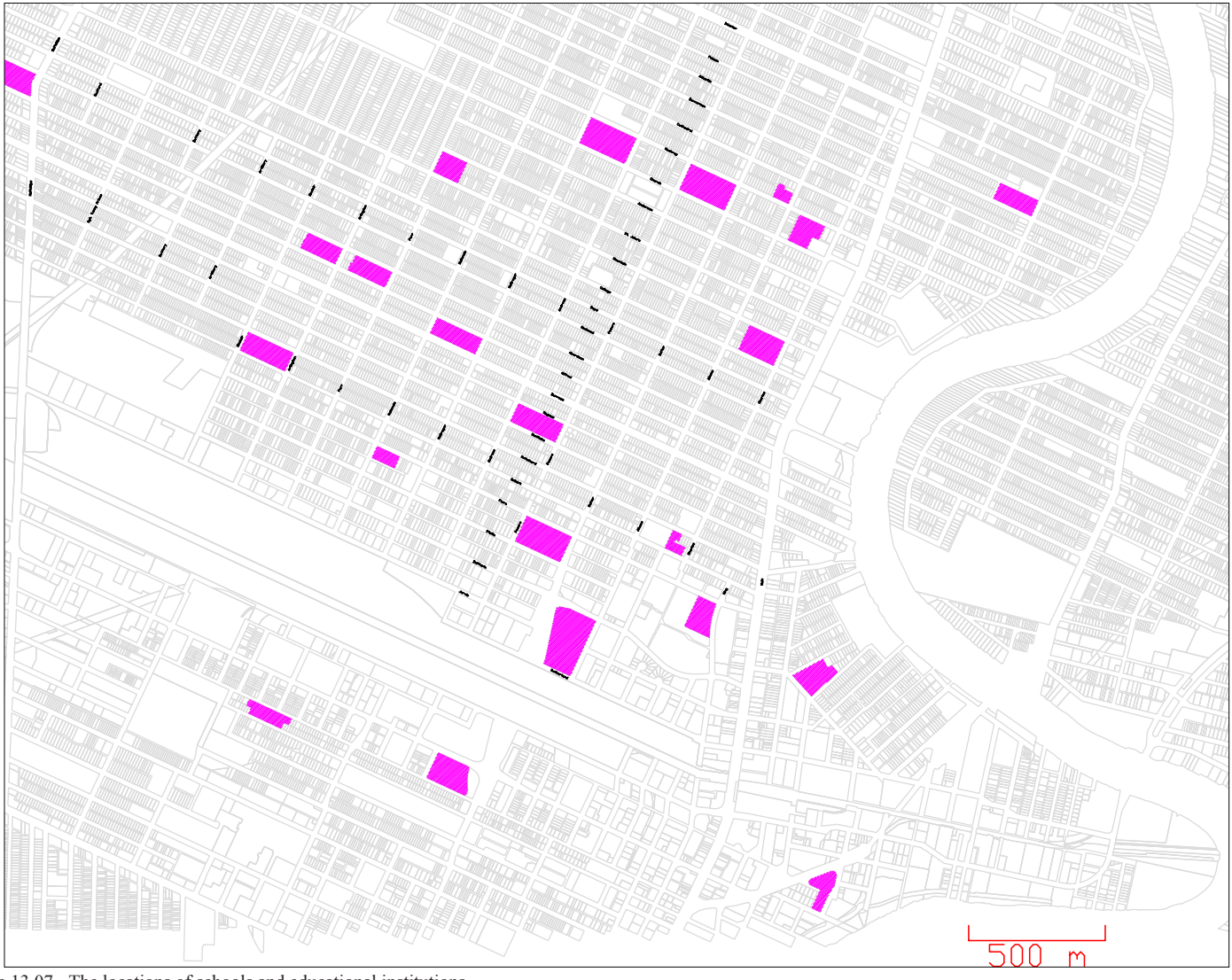


Figure 13.07 - The locations of schools and educational institutions

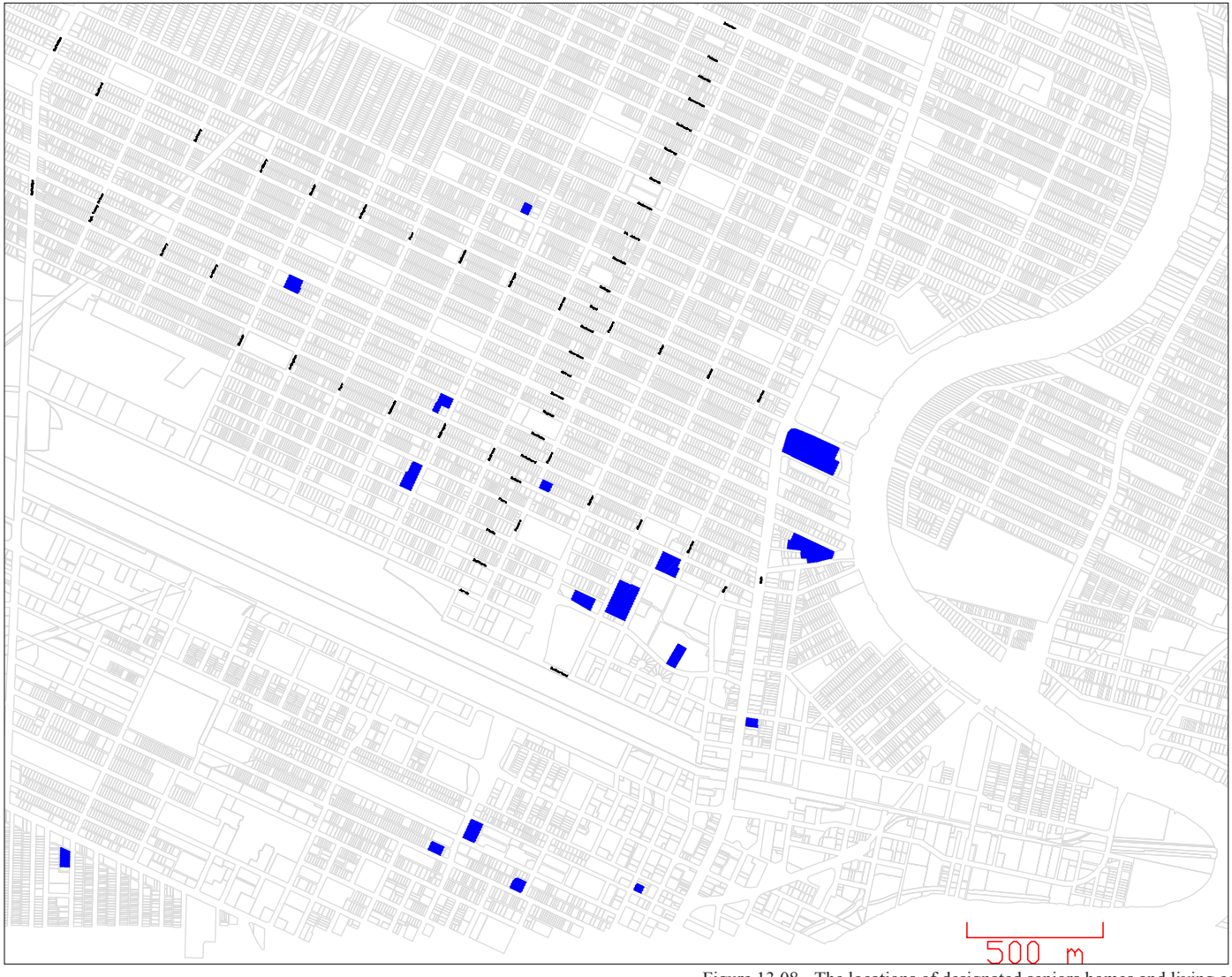


Figure 13.08 - The locations of designated seniors homes and living centres

Figure 13.09 - The locations of culturally associated clubs or meeting halls

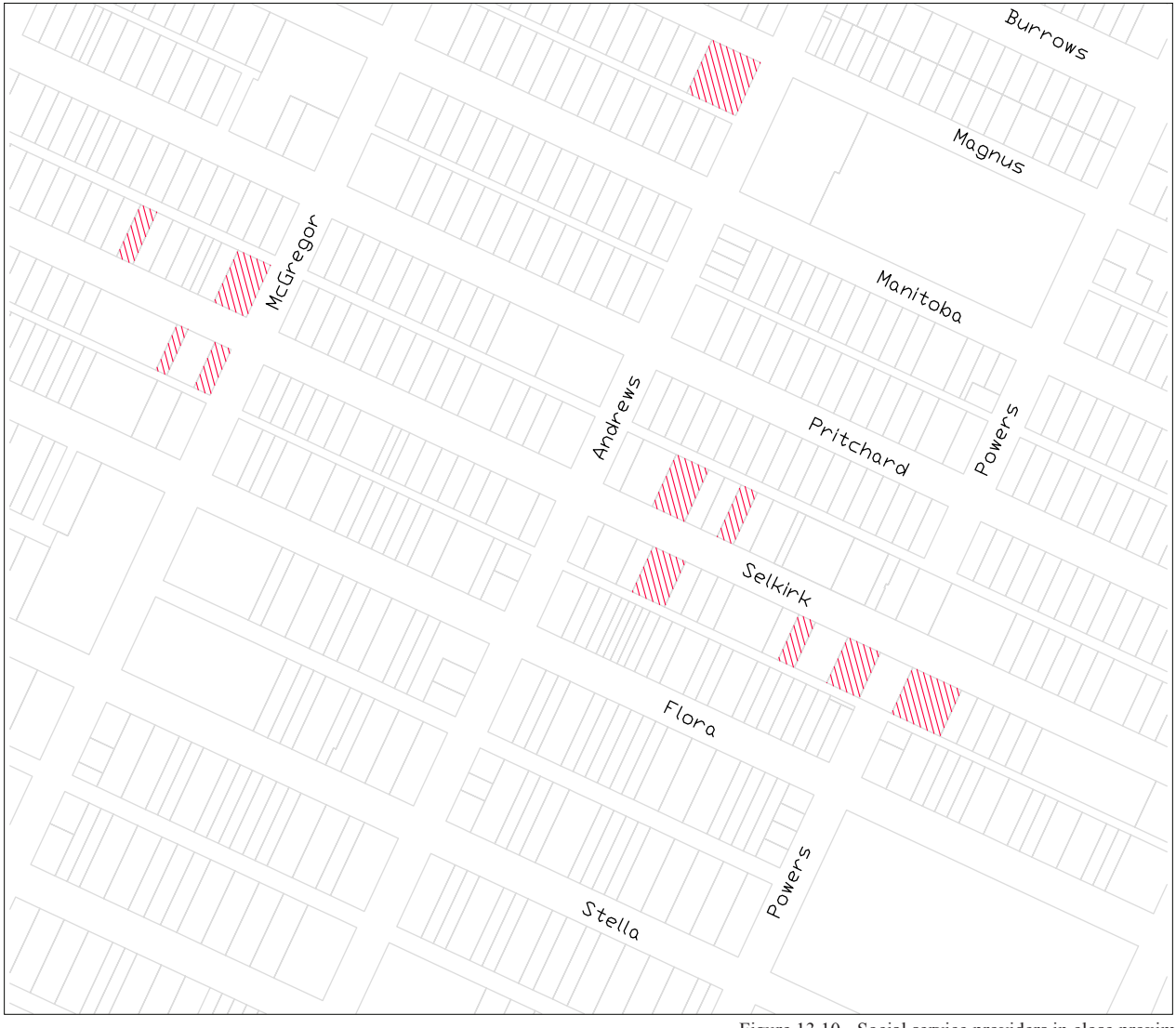


Figure 13.10 - Social service providers in close proximity of the site

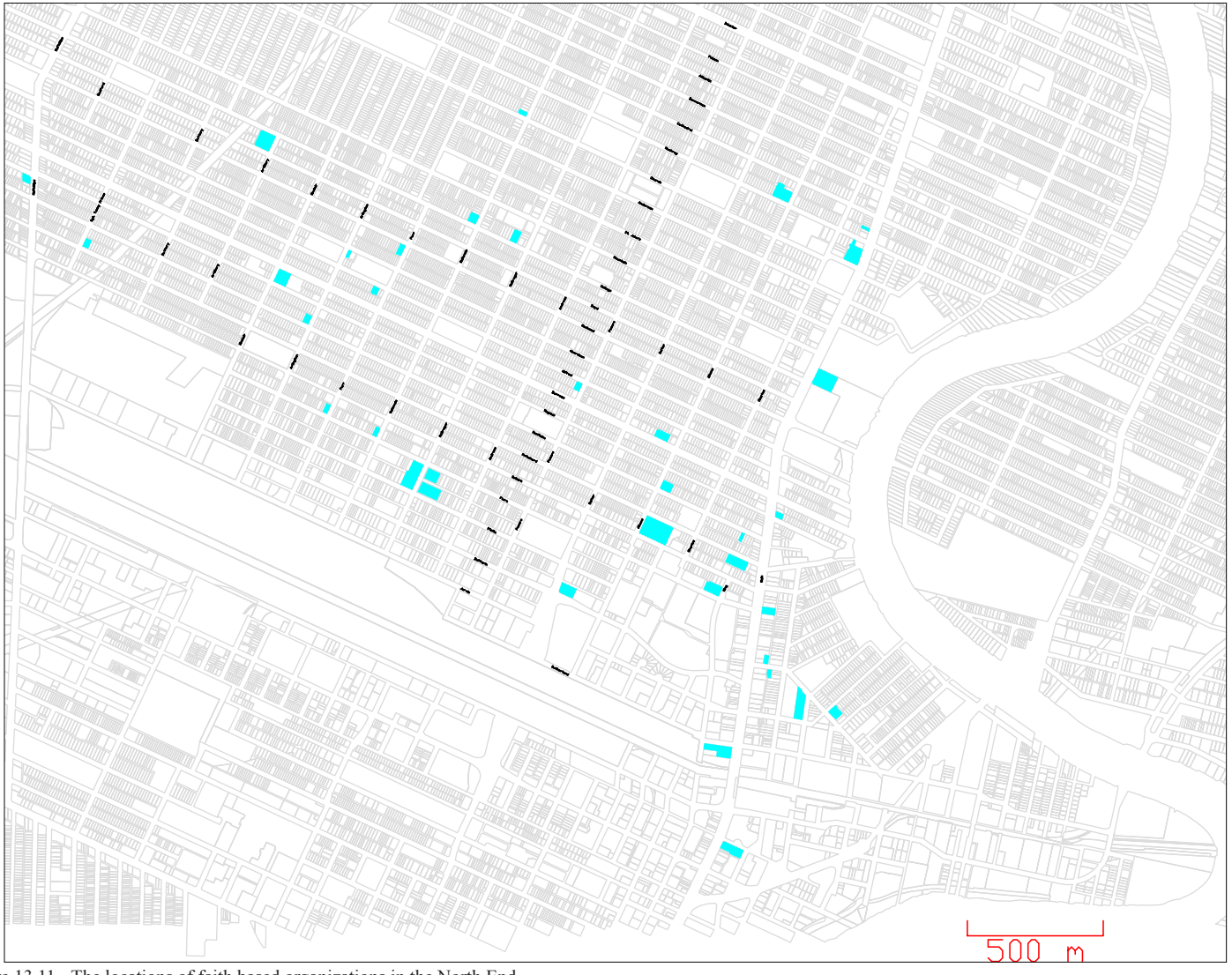


Figure 13.11 - The locations of faith based organizations in the North End

of the community. Many of them offer their own social services and many of them have their own cultural affiliations. Great cathedrals such as St. Volodymyr's and St. Olga's on McGregor, St. John's, Holy Trinity on Main, and Holy Ghost all have a significant presence in the Selkirk Avenue Area. Not to be dismissive of the innumerable other places of worship representing a huge range of religious denominations. Many of these faith based organizations have their own community outreach programs and will seldom, if ever, be discriminating as to who they will help. (see figure 13.11)

In the analysis of the North End's various inventories, it can be clearly seen that the neighbourhood has a great deal of potential. Unlike most newer suburban neighbourhoods, the North End can offer a much greater diversity of goods, services and experiences. Though it is struggling as a community today, it has always been a blue collar neighbourhood. Therefore, there is reason to strive for upper class developments. As a blue collar neighbourhood should, the North End can offer affordable housing on modest lots. If the housing stock was in better shape it would be far more attractive to first time buyers, young families, students and those who live on humble budgets. The back lanes that are so prevalent in the area are also an asset. They were not always quite as intimidating according to nostalgic accounts of the North End, where the back lanes were a place to play for children or to lean over a fence and greet neighbours. In those same accounts it is revealed that many back yards were almost entirely occupied by vegetable gardens although the popular detached garages one finds today, makes gardening difficult. Back lanes can also serve the neighbourhood by lifting some of the burden off of the street sides for parking space. Fewer cars parked along the streets means safer, more usable frontages. The houses in the North End are set forward with smaller front yards. Some homes have front porches and it is a common site to see people sitting on their front steps. This is potentially the making of a good social environment where people can know each other enough to greet one another at least in passing. This ties well into the higher degree of walkability in the neighbourhood. With the bustling Selkirk Avenue and the many corner stores so nearby, residents don't have to travel far to get what they need. Thus, those who don't have or can't afford a car are not left at a tremendous disadvantage.

Chapter Notes

103 *Stewart, Lindsay. "Neighbourhoods: Where the City Lives: Explore Winnipeg's Multicultural Neighbourhoods." Where Magazine: Winnipeg. May 2001.*
www.where.ca/winnipeg/article_feature~listing_id~13.htm

104 *Kalman, Harold. "A Concise History of Canadian Architecture." Don Mills, Oxford University Press 2000. p.284-285*

105 *Stewart, Lindsay. "Neighbourhoods: Where the City Lives: Explore Winnipeg's Multicultural Neighbourhoods." Where Magazine: Winnipeg. May 2001.*
www.where.ca/winnipeg/article_feature~listing_id~13.htm

Chapter 14

Conceptual Design

"It is impossible to design a system so perfect that no one needs to be good."

T.S. Eliot

Guiding the Form of the Network

The first design proposal identified a number of potential sites that could accommodate the various individual requirements of the garden network. The requirements were broken down into three categories, the growing areas, the processing or functional areas and the market outlets. Due to the vast size of the North End in area and the high number of vacant lots, the initial approach was to meet these requirements on a number of lots that would be as evenly dispersed as possible. So, there would be several dozen lots that could be growing areas though perhaps not all at one time. There could be several functional lots that would support the gardens as needed and possibly 2 market outlets on the commercial strip of Selkirk Avenue where the products could eventually reach the greater community. The entire North End could be divided by artificial boundaries in order to more effectively administrate and organize the gardens. This would counteract the pattern of dispersion that makes cohesion of the lots so difficult. The boundaries were initially based upon manageable walking distances though this proved to be ineffective as it left unclaimed areas and an uneven dispersal. Each designated area would have a non-specific number of garden lots, although this may fluctuate over time, and a support lot that would be as centrally located as possible. The market outlets would be located in a more opportunistic strategy rather than one that is strategic as land on, or near Selkirk Avenue is much less available and thus, less accessible. For the sake of concision, this proposal would investigate in a higher level of detail what these components would look like within one of the administrative boundaries.(see figure 14.01)

The Garden Lots

The gardens themselves were to be located on vacant lots although in theory they could have occupied space on school grounds, municipal parks, R.O.W.'s, or on boulevards. For the purposes of this practicum, the vacant lots were the main focus. The gardens had a set of design criteria that were intended to guide their layout rather than to prescribe their appearance. The need for this flexibility was necessary as there would be fluctuations in the size and dimensions of each individual vacant lot. The environmental conditions such as orientation, solar and wind exposure should have some determination in layout. The needs of a particular user group may also have in impact on layout. (see figure 14.02/ 14.03)

Vacant Lot – Garden Design Criteria

●*Garden lots should be designed and conceived of as ephemeral installations with a limited tenure on any single site. The design of components for these gardens should facilitate quick assembly and installation on site. Conversely, the disassembly should be just as easily maneuvered. Components that are not intended to be removed post tenure of the garden should remain and contribute to the redevelopment in some way. These remnants should in some way stand as legacy elements that can tell a story of the renewal process.*

●*Components of each garden should be modular in nature. That is to say, they should be standardized in form and fabrication. Materials used to construct the components should be readily available and if possible, sourced from the demolition of derelict homes in the area. Otherwise, materials should re-used or recycled from other applications in the industry. No material should be contaminated nor contribute to the contamination of soils or food in the garden. No single component should be larger than that which can be transported in the back of a pickup truck.*

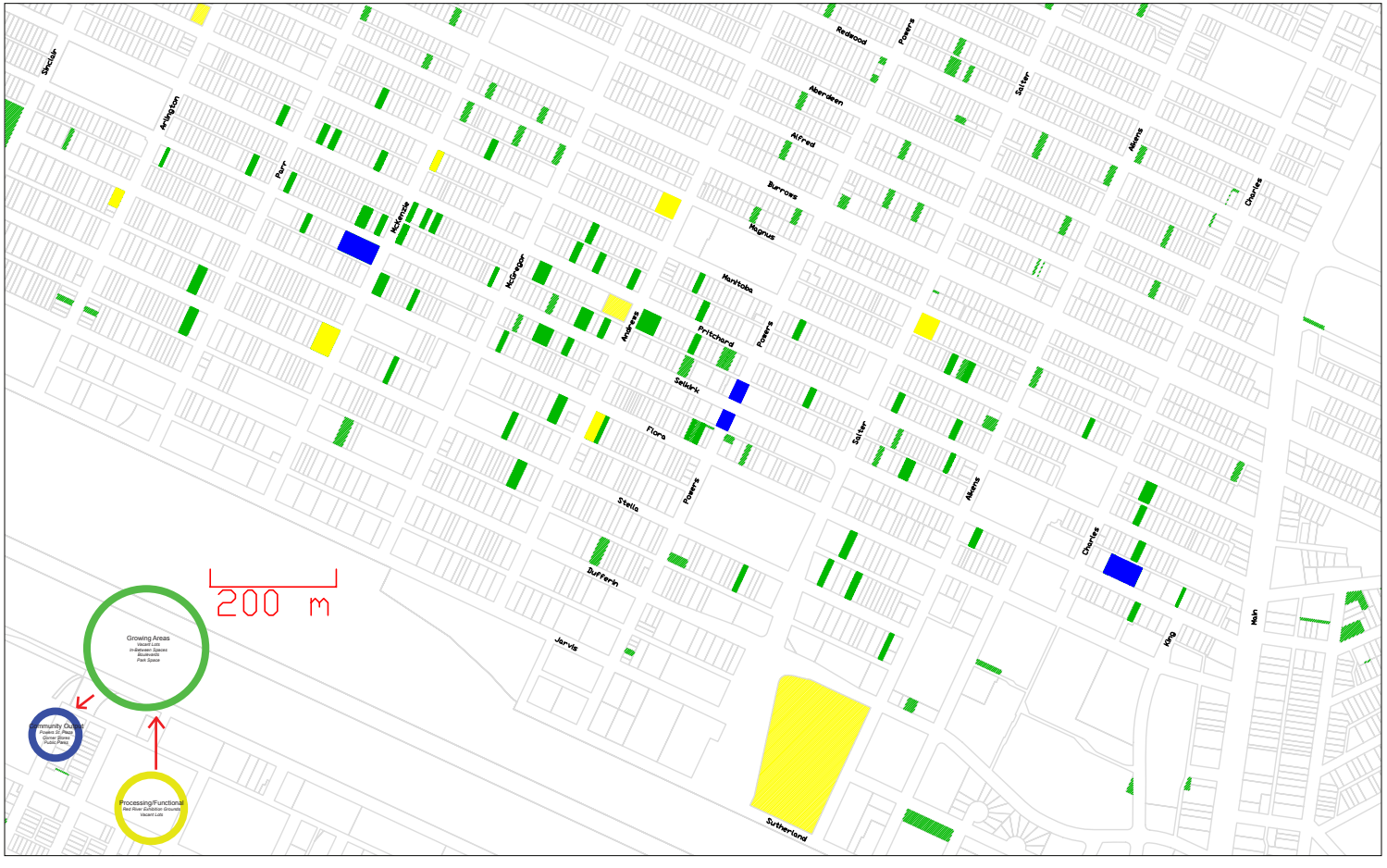


Figure 14.01 - This plan shows the physical relationship between the 3 network elements as described in fig. 12.01.

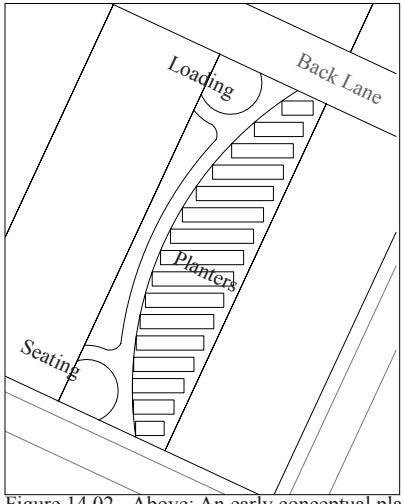


Figure 14.02 - Above: An early conceptual plan of a typical vacant lot garden and 3D perspective view. This garden incorporated a number of basic elements that could make the space more versatile as well as accommodating the intended function

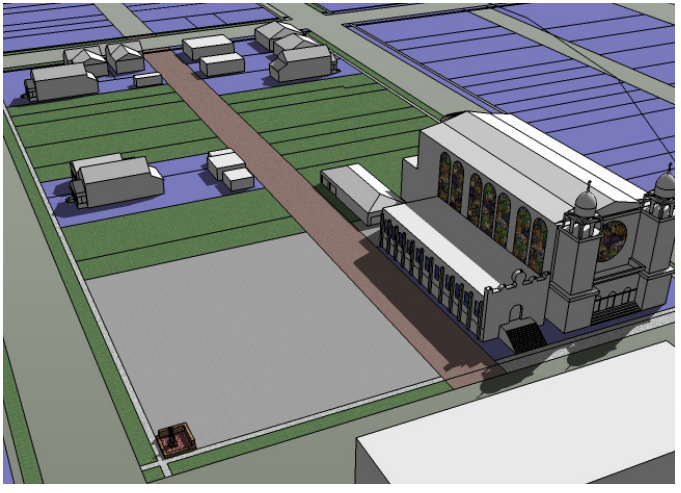


Figure 14.03 - Above: The potential for larger scale urban agricultural projects where a number of lots cluster together. Sites such as these offer expanded possibilities by potentially affecting the number of users, the type of crops grown, and allowing for additional functions such as mini-markets or processing areas.

●Lot layout should respond to immediate local conditions to facilitate gardening. This includes maximizing sun exposure as well as minimizing wind exposure. Cooperation with adjacent lots is advantageous for purposes of security and resource collection. Water may be collected from adjacent roofs and stored on site if neighbourly agreements are arranged.

●Lots should provide space for social interaction and leisure.

●Lots should respond to target user groups such as children, seniors, families, entrepreneurial gardeners.

●Lots should be considerate of the security of property as well as accessibility.

●Lots should allow for loading and shipping and will have to accommodate deliveries of soil and other materials as well as the pick up of harvested produce.

●Lots should provide some form of shelter and storage.

●Lots should respond to neighbourhood culture and the sense of place. This may include the provision for facilitation of some form of self-expression by gardeners. The components and layout should directly embrace one culture over another and so these statements are best made by gardeners themselves.

The Support Lots

A functional support lot that would accommodate purposes such as storage of soils, equipment, and tools as well as a site for community composting and vehicle parking was selected. This site would require a large amount of area as well as good accessibility for vehicle and pedestrians as well as for loading and unloading. Thus lots with alleyway access would lend themselves well for this purpose. Secondly, lots that are located on corners that would consequently have two street side accesses would also be auspicious. Lots that could have a preserved concrete basement foundations would serve well as greenhouses, cold storage for preservation or as processing facilities for cooking, canning, and preparing and packaging food products. So, support lots required a greater amount of area and possibly an indoor space to meet their requirements. Instances where two or three vacant lots were found adjacent to each other were the best candidates for this component of the garden network. The support lots should not be conceived of as permanent installations in the community. They should however, outlast the short lives of the garden lots as they will have to serve a number of gardens over a period of successive turnover. At the end of their working lifespan, the support lots could serve as community spaces or as a kind of new economic enterprise zones. (see figure 14.04)

Vacant Lot – Support Site Design Criteria

●Storage areas should be in highly accessible locations however, they should be minimized visually so as to hide their negative appearance. Support sites should be able to accommodate storage for a limited amount of soil, community compost bins, garden components, and other such materials.

●Lots should provide sheltered rest area for workers and visitors as well as a WC.

●Indoor space is required for processing stations. Support lots should accommodate a community kitchen, a greenhouse or cold storage facility. A classroom style space should be available for tutorials or displays. Potted plants may be stored here and seed starts that will later be transplanted into gardens.

●Amenities such as running potable water, electricity and lighting should be provided on site to facilitate work.

●Fencing should be installed to increase security on support lots. This fencing should be selected so as not to create the appearance of a 'compound'. Fencing should not be standoffish or detracting in appearance, within reason.

●Layout of support lots should balance accessibility and work space and should not be cramped or overcrowded in appearance.

The Market Lots

Market outlets will be the crux of the garden network. This will be the outlet of all garden produced goods and the contact point to the greater community. These outlets will be the face of the garden network. Market outlets should be located as close to the major commercial zones as possible and should attempt to 'feather in' to existing infrastructure. Some of the characteristic corner stores in the neighbourhoods could be retrofitted and reopened as market outlets. The outlets should offer a wide range of services, most of which should be centered upon the garden network and its products. However, by creating opportunities for market diversity, the outlet will attract a wider range of clientele thus increasing the rate of market convergence. To achieve this, a crafters market area could be set up and local businesses could have small outlets in the market. The market may also provide space for a restaurant or café to sell prepared meals from garden network produce. (see figure 14.05)

Vacant Lot – Community Market Site Design Criteria

●The market outlet should be conceived of a permanent public space. Whether plaza or park like in appearance, it should stand as a lasting fixture in the community. As a public space, access should not be restricted within reason for those who are not making purchases. Amenities such as bench seating and shade or shelter should be available here as in any good public space.

●Eateries, stores and market stalls should provide a non-prescriptive economic opportunity.

●The market should be useable in all seasons including winter. This may achieved by adding seasonal interests and indoor space.

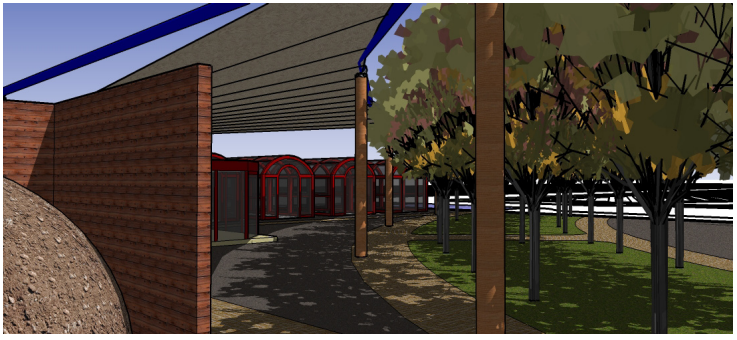
●The market should be able to accommodate a larger number of people for community events such as festivals and street parties at planting season, mid-summer and especially harvest time. Large events can help to generate interest and support in the garden network.

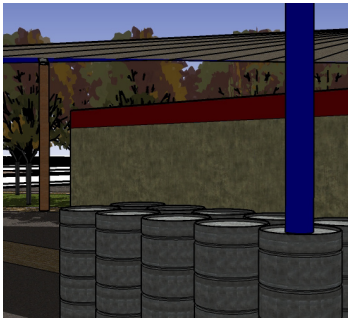
●The market should be as sustainable as possible in its approach, limiting consumption of resources and incorporating ecologically friendly strategies.

●The market should be expressive of the North End's character and work well with existing functions.

●The market should be located nearby to transit stops, offer limited parking for clientele, and be a pedestrian friendly environment.

Some of the anticipated difficulties the garden network will face would be water deficiency and threats of vandalism and theft. Water deficiency is common for community gardens that do not have a secured water source, especially those with raised beds. Each lot can collect water and store it in rain barrels but this will still prove to be inefficient. Mulches could be added to the soil surface to retain moisture and watering could be carried out with drip hoses as opposed to surface watering. Both of these strategies will decrease the need for outside water sources but again, they will not solve the deficiency. Thus, the need to acquire and store a greater amount of water is required for the successful establishment and maintenance of the gardens. A water catchment system that can collect water from the building roofs on Selkirk Avenue could be a viable way to supply water to the garden network. A simple aqueduct style piping system can take water from downspouts and channel it through a simple filtration mechanism and ultimately to a large storage cistern or a series of smaller ones. From here, the water could be put in rain barrels and transported by vehicle to the garden sites as needed. As water is the lifeblood of the garden, the catchment





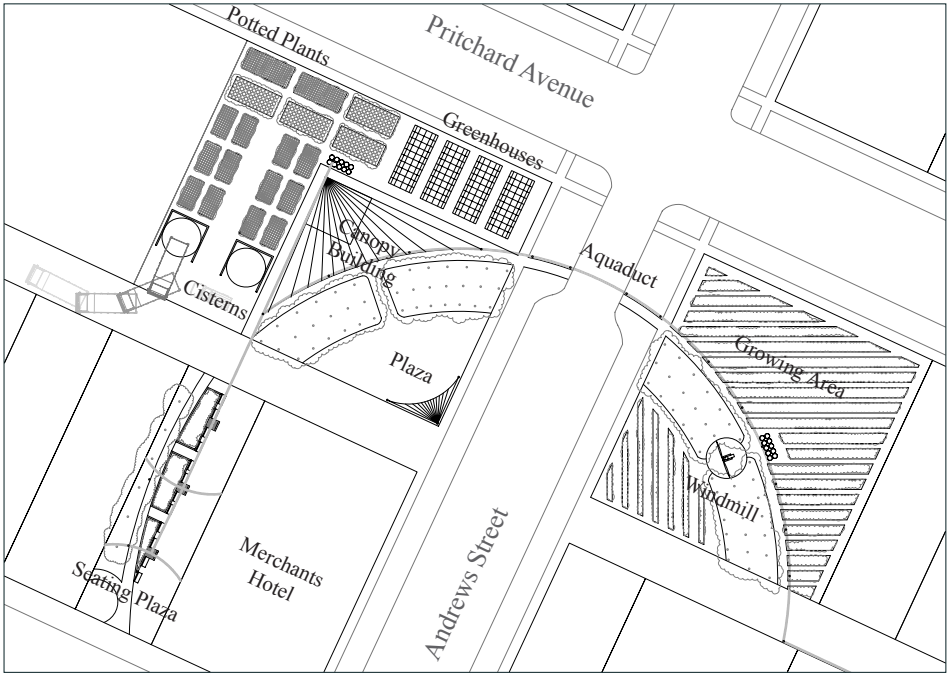
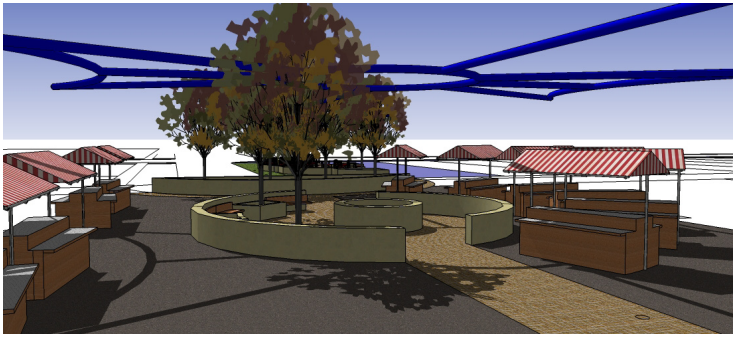


Figure 14.04 Early conceptual design of a support area on the Andrew's Street site. This area provided for the functional needs of the nearby garden lots as well as providing some growing areas. A small park-like area was laid out and surrounded by a border of trees. Water was to be collected from adjacent roofs and from a tent canopy on the site. Other sustainable energies such as wind power was harnessed on site with use of a windmill. A small pocket park on Selkirk Avenue was connected to the main site as a more formal gateway.



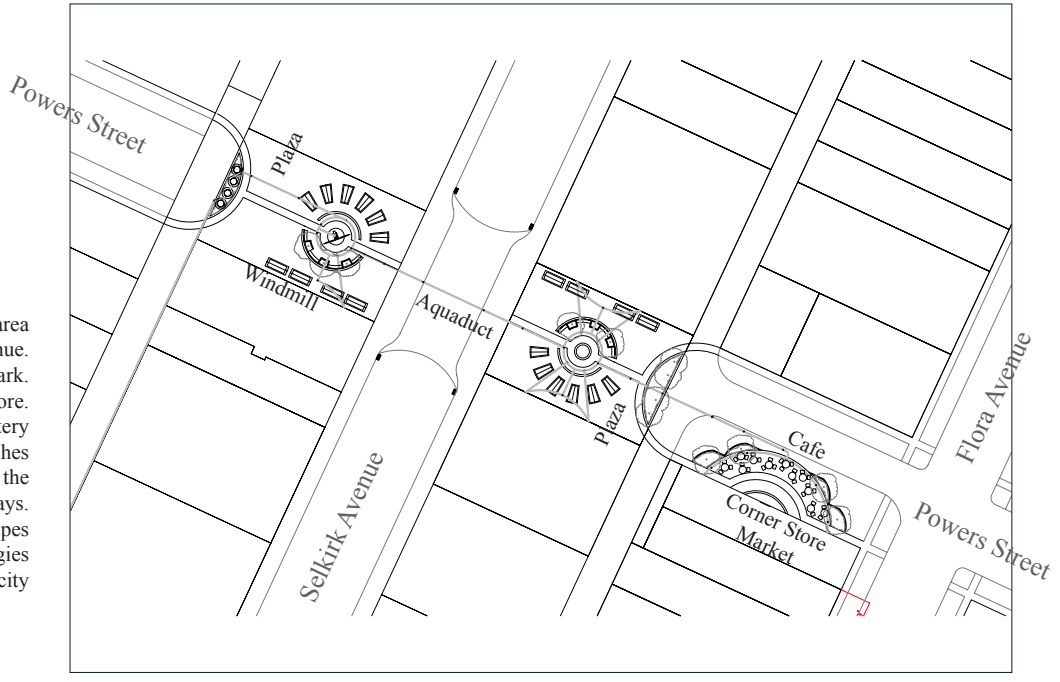


Figure 14.05 Early conceptual design of a market area at the Powers Street interchange with Selkirk Avenue. This is a high profile, yet underused plaza style park. Just north of the plaza, is a characteristic corner store. The corner store is redesigned as a café style eatery and market store. In the plaza, planters and benches provide much needed social amenities and set the scene for small carts to be set up on market days. Water is collected from buildings via overhead pipes and stored here in cisterns. Again, alternative energies such as wind power are used to generate electricity and to circulate water.

system should be celebratory of that lifeblood and not seek to hide the piping and infrastructure. A light rainfall has the potential to become an exciting event to experience.

After the first phases of the conceptual design it was determined that to separate the market and support area was counterproductive to their function as components in the garden network. Thus in a second design scheme, a plan that amalgamated the two components into a more cohesive and centralized whole was explored. The site at Andrews Street, between Selkirk and Pritchard Avenues was chosen for the intervention. There was a high incidence of vacant lots in this area. On Pritchard Avenue, there were five lots that were vacant, and one on Selkirk Avenue. This site provided the critical square footage necessary to meet the program of both components. A lot with frontage on Selkirk would serve as a public plaza and gateway to the market. The section of Andrews street at the site could serve as an overflow for a street market or festival space.

In a third phase of the design, the use of the lot on Selkirk Avenue was reevaluated and deemed redundant. Instead, it was decided that the focus should be place on the street, in this case, Andrews Street. In this way, the vacant lot on Selkirk could be saved for possible redevelopment. The life and living that would take place in the gateway plaza could be reserved for the street side. In the new scheme, the adjacent buildings were given more consideration as to how they could be more successfully integrated into the market site.

Preliminary concepts for rainwater catchment and storage for use in the garden network.
Figure 14.06 Above Right: Plan A has the water collecting only from a few selected locations. It is then channeled to a set of cisterns in the market area via pipes and driven by wind powered pumps. Although wind often accompanies rainfall event, it can not be counted on exclusively. Also the storage of water at the market area and not the support area created potential difficulties.

Figure 14.07 Below: Plan B is one that has amalgamated the market and support functions into one site. In this scheme water is collected from a much larger catchment area using two blocks of Selkirk Avenue buildings. The windmills are foregone in favour of a gravity fed, aqueduct system of pipes. Water is stored in large cisterns on the main site for easier access.

Chapter 15

Detailed Design

"Think simple" as my old master used to say - meaning reduce the whole of its parts into the simplest terms, getting back to first principles."

Frank Lloyd Wright

Shifting Scales

The focus of this chapter is to examine in greater detail the design proposal of this practicum. It addresses the main components of the garden network, including individual garden lot designs as well as the design for a centralized market and support area. The criteria upon which these designs were constrained will be found in the previous chapter. The more detailed design of various garden elements will be found in the next chapter. This chapter represents the fruition of the research from the preceding chapters. From, the analysis of that information, it has been proposed that any approach to revitalization in a distressed neighbourhood such as Winnipeg's North End would greatly benefit from a more sustainable method. Given the precedents of successful renewal campaigns based on urban agriculture and vacant lot development, it can be proposed that a process such as this could well be sustaining enough to contribute to the North End's community capital. This then, is the synthesis of that information. As is the goal of Landscape Architecture, this practicum seeks to answer first and foremost, what would this proposal look like.

Vacant Lot Gardens

In this design scheme, individual vacant lots would be designed as community gardening lots. In this approach, the design of each lot is less prescriptive and more conceptual in nature. The greatest reason for this is of course the lack of regularity in the size, shape, and conditions of each lot. The gardens, therefore, have a more generalized appearance, differing mostly in the layout and arrangement of the mainly modular components. Differentiation in the arrangements can allow the layout to facilitate a range of intended purposes as well as target user groups. For example, a senior's garden would have an entirely different organization than a garden that would be for schoolchildren. Both of these would then differ from the lot that was intended for maximized food production. The common traits that all garden types will share are the inclusion of some form of common space, raised garden planters as well as in ground planting beds, a legacy element, an option for fencing where fencing does not already exist, a lighting element, front display gardens, pollinator attractors, fruiting trees, a parking /loading area, and a space reserved for compost bins and water barrels. The arrangement of these elements will depend partly on environmental factors such as proximity to existing objects as well as being informed by the social dynamic of the intended user.

The Production Garden

For the entrepreneurial gardener or in cases when a larger number of families of individuals are sharing one lot, this layout is intended to put as much of the land into production as possible. Aisle widths are kept narrow: only 18 inches wide in some cases. The raised planters are assembled on the land where the footprint of the former house would have been. In-ground planting beds are placed strategically where space allows. The in-ground beds are always set on land that would have been highly unlikely to have been occupied by a building footprint such as the extreme front, back and sides of the yard. While this is no certain guarantee that soil quality will be substantially better in these locations, it is in principal, a good measure to

take. Ultimately, soil quality would have only a minimal impact on the actual layout of the garden lots. It would however have significant influence on the appearance of the garden through plant choices. Vegetables may be substituted for attractive flowers, potted perennials or shrubs and ornamentals that are not intended for consumption. All beds, regardless of type are arranged according to the solar orientation to maximize light exposure.

The lot will be accessible for loading and deliveries via the back lane. A contained gravel surface will be prepared for this purpose at the back of each lot. This pad will be composed of at least 6 to 8 inches of crushed limestone set 4 inches below grade. This will accommodate the future possibility of resurfacing the parking area with pavers or asphalt for a more formal parking spot. Nearby, a community composting station could be situated. Local homeowners would be able to drop off their household wastes into the bins. Nearby, a compost mixing drum would be available for the preparation and processing of organic soils.

Water can be collected and stored on site from the roof runoff of the adjacent houses. By linking rain barrels together the water will overflow from one barrel to the next. Though this may prove insufficient for the garden's water requirements it is a renewable resource that should not be squandered. It will hinge of course on an agreement with homeowners on adjacent properties. These barrels would not be moved unless empty and should sit on a durable compacted gravel base.

A light standard would be well suited for the backyard to give light to the garden as well as the back alley. A well lit garden will have a better chance to deter would-be vandals and thieves who may cause damage. It also facilitates gardeners to work later hours in spring and fall.

In-ground beds will cover the 'backyard' of each lot. Given the historical usage pattern of homes in the area, it was not uncommon for many North Enders to have gardens that occupied much of their backyards. As such, it is more likely that the soils here will be of better quality. These beds can be dedicated to production and, considering their more northern location on the lots, would be suitable for taller plants such as corn or climbing beans. These backyard beds are also well suited for pollinator attracting plants as opposed to locating them in the front yard. The potential of attracting bees and wasps is best left to areas that will be less trafficked.

A small seating area is located in the 'front yard' like characteristic front porch. Benches or other seating opportunities can be placed here. The benches should face back into the garden but should be arranged so that people sitting on either bench are in view of one another which could facilitate social interactions. The seating area should be able to accommodate impromptu gatherings, on-site tutorials and other such uses. This would also be the best place to locate a signage element that may allow for garden network news to be posted or for gardeners to leave messages for one another. A standard set of user rules could also have its place on any such board.

The frontage of the lot is occupied by a small display garden. Some gardeners may opt for a more showy display of plants such as flowers that have a range of colours. These in-ground beds will be the best foot forward for the lot and can go a long way to improving neighbourhood character. A legacy element stands in the front right corner. This legacy element is essentially an address block that identifies the lot number. Its dual purpose is to serve as a housing unit for the lot's utility lines. This can potentially give gardeners limited access to these utilities but, more importantly, will facilitate redevelopment

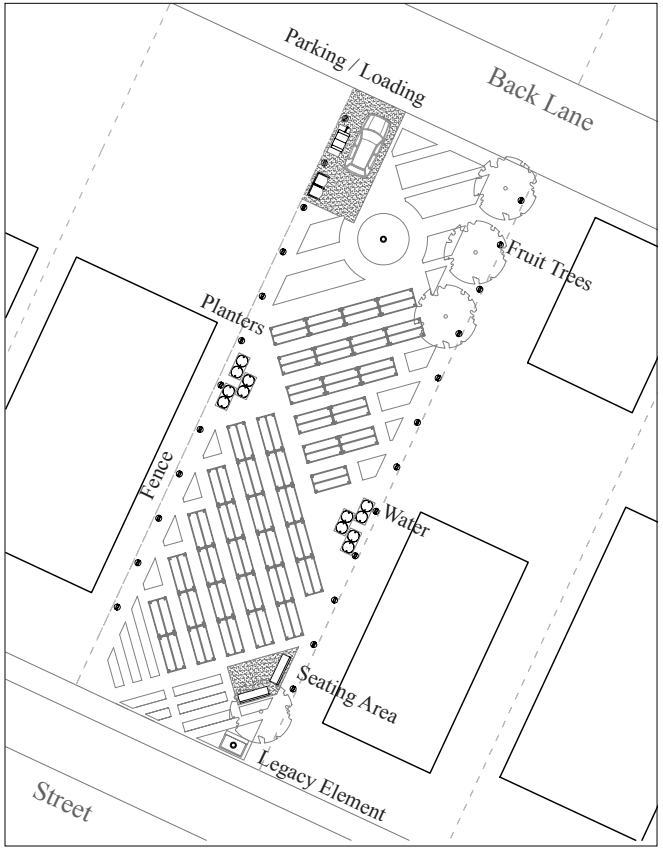


Figure Set 15.01 Plan view and perspectives of a vacant lot garden that is geared towards maximizing production. Most of the available space is occupied by some for of growing area. Raised beds are more appropriate for growing over areas where a structure once stood and soil quality is poorer. In-ground beds are a more efficient use of resources and can be strategically placed on the lots.

by allowing quick access to the utilities when a new home is being constructed. Commonly, after demolition the utilities are capped and left buried. The rediscovery or reinstallation of these critical pipes and conduits can be a costly and time consuming endeavour.

The property can also have perimeter fencing solution. This can add to the security of the garden as well as adding a permanent amenity to the site that may encourage redevelopment. The fencing strategy would involve the installation of permanent posts and not the actual fencing material.

The Senior's Garden

A garden that is suited to a specific demographic group would still contain many of the same standard components as any other. They could, however, be arranged in such a way so as to facilitate usage by a specific group. In this case seniors have different needs, both social and physical.

In order to facilitate access the garden planters can be stacked two high. This would raise the soil level by roughly 30 inches above grade and decrease the need for gardeners to bend over or kneel down to work the soil. Because stacking the planters would increase the number needed per site, there are fewer overall in the seniors garden. If half of all beds in the senior's garden were double stacked, the number of total planters used would be nearly the same as the production garden. So, rather than being organized to maximize square footage, the senior's garden is somewhat less dense with growing areas. Instead, there is a focus on the social component that the gardens could offer. This is facilitated by a clustering effect in the planter layout and emphasized by a larger main seating area. The clustering of the raised planters will promote mixing of gardeners more so than the row style. For better accessibility, aisle widths are larger on average. The entire site is accessible via a meandering but uninterrupted path from front to back.

The seating area is slightly more central, occupying an area that was most certainly under a building footprint. There are a higher number of seating opportunities here as well as other bench seating in the back of the garden where shade can be sought under the trees. The central benches all face inward towards each other where larger gatherings can be held.

Again, front and back yard in-ground planters can be used as a display garden or perhaps, if an agreement is made some more entrepreneurial gardeners can incorporate the SPIN methods and produce crops on the land. It can be assumed that most seniors would choose not to take on a huge amount of growing space for themselves. The implications of this are two-fold. Firstly, there would be more individual gardeners in each lot that is assigned to seniors. One lot may suffice for an entire building of seniors. Secondly, the likelihood of intensive food cropping is lower. This means less degradation of the soil over time. If food is grown, it may be crops that are culturally relevant or perhaps a small amount of more exotic vegetables that are seasonal.

Seniors gardens should be promoted as much as possible for the benefit of the garden network. There is a wealth of skills and knowledge of cultivation techniques as well as canning and preserving techniques in the senior population. Thus, the social spaces in senior's gardens could also serve the dual purpose of being a sharing space where the gaps between generations could be bridged. Because these gardens are very preferably located near to the senior's housing, their tenure should be protected for a longer period of time until another lot becomes available.

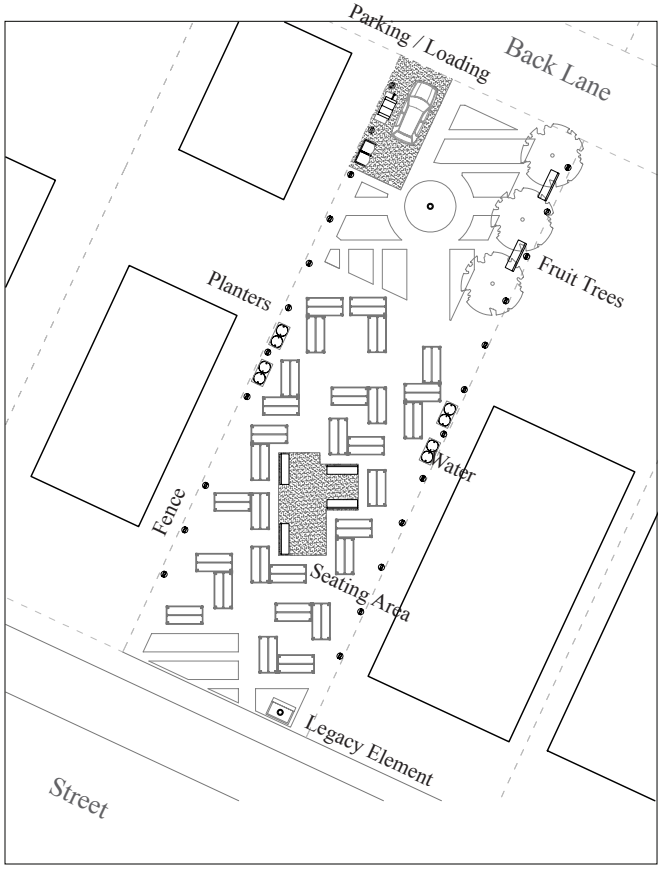


Figure Set 15.02 Plan view and perspectives of a vacant lot garden that is geared towards a more senior gardener. Many of the raised planters are stacked two high so they are easier to reach. There are less in-ground growing areas as they will be in less demand. More benches are installed in senior gardens to promote social integration and to offer more places to rest.

The School Garden

The children's gardens can be organized in such a way that responds to the structure of the education system by providing grade-based groupings of planters like small rooms. This way, instruction is facilitated and supervision by a teacher is made easier as the planters actually serve to contain the children together. Teachers and guardians can easily see and assemble the children within their class plot.

Near the front of the school garden, an outdoor classroom style space can be provided for instructive purposes, story reading, or other such educational purposes. The outdoor classroom could also serve as an overflow space during events such as harvesting or planting. It could serve as a lunch space if a snack is prepared. A tree planted on either side of the outdoor classroom will eventually provide shade and should not interfere with subsequent redevelopments.

By assigning each grade their own set of planters, the children can gain a sense of ownership over their space, and their plants. Class projects can be carried out in the garden space with lessons to be learned in all areas of a curriculum despite the grade level. The main difficulty of children's gardens is the absence of children during the summer months. For this reason, school gardens should be located in areas that are close to the school itself. Good neighbour agreements may be hard to come by but, if possible, the homeowners in adjacent houses and, or the garden network itself could periodically tend the gardens over the summer. If this can be achieved, the children will see the fruition of their work in a fall harvest.

The best crops to plant in children's gardens would be crops that produce and 'edible out of hand' food. Peas, beans and carrots are all good staples. The front of back in-ground beds could produce berry crops such as strawberries and raspberries. A pizza garden or a salsa garden could add an element of fun to the gardens. Precautions should be taken to limit exposure to possible allergens. Some foods may cause a reaction in children and with the incidence of allergies seemingly on the rise, on cannot be too careful. Fewer flowers and other bee attracting plants should be utilized in the children's gardens.

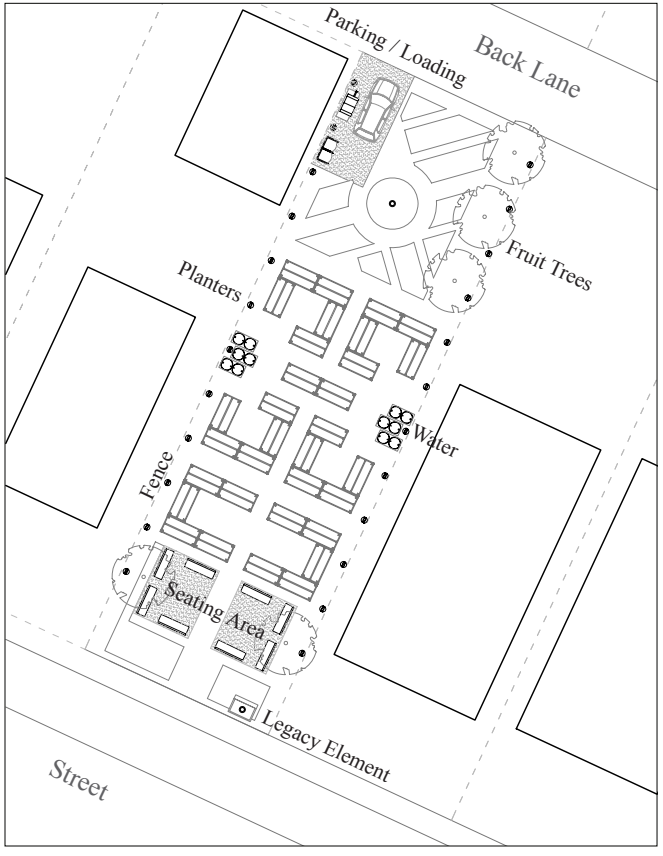


Figure Set 15.03 Plan view and perspectives of a vacant lot garden that is geared towards school children. The garden is arranged according to grade levels with each grade in from kindergarten to 6th grade having their own distinct area. Larger seating areas can be used by two small or one large group as a classroom type space.

Supporting and Marketing the Gardens

While the garden lots are intended to have a short-term tenure the Andrews Street site is intended to have a lasting presence. Thus, the market and support facilities have designed with the intention of creating a public space that can provide long term economic opportunities. It is feasible for the site to be converted after the vacant lots have been renewed, to a functioning garden centre where local residents can purchase nursery grown shrubs, flowers, and vegetables. Though it is not the purpose of this study to investigate this possibility, it can be said that the proper infrastructure would be available on site should this ever be realized.

In order to centralize the supportive functions of the garden network, it was more efficient to combine these elements with the market outlets on the same site. The site selected is located on Andrews Street, between Selkirk and Pritchard Avenues. This site serves as the nerve centre of the network, serving a wide range of purposes. Aside from being the market outlet of the entire garden network, this site will be the location for the network's administration office. Furthermore, it will be required to accommodate a number of roles that are supportive to the network.

The site will be recognized by its interruption in appearance. Here, a new paving pattern will serve to differentiate the space from its context. The sidewalks will no longer be a mere 5 feet wide, rather they will open up to cover the boulevards and some of the adjacent lots. In this way, they are more plaza-like in nature, setting the foundation for a larger civic space. The space will focus itself on the streets where the public can engage it more freely. Here there is no contesting who can or should be there as the intention is to create a place for the community. The gardens themselves will be accessed via gates and is thus separated from the truly public areas.

Inspiration for the form of the support/market site was borrowed from a successful strategy applied by *LOOM Architects* of Minneapolis, Minnesota. In that city, the firm designed a community garden called Knox Garden. The Minneapolis site used a conventional material, chain-link fencing, in extraordinary ways to define space and delineate boundary. The rather mundane form of fencing was accentuated by a series of colourful coatings that guide visitors and users through a colour coded series of experiences. Due to the large extent of growing areas at the Andrews Street site, the fencing strategy was a fitting response to the various needs that a complex programme such as this might require.

Figure Set 15.04 Perspective Image of Knox Garden in Minneapolis. The garden was designed by LOOM Architects, also of Minneapolis, with an exemplary use of a banal material such as chain-link fence.

Figure 15.05 Plan view of the Andrews Street Site where the Market and Support facilities are located.

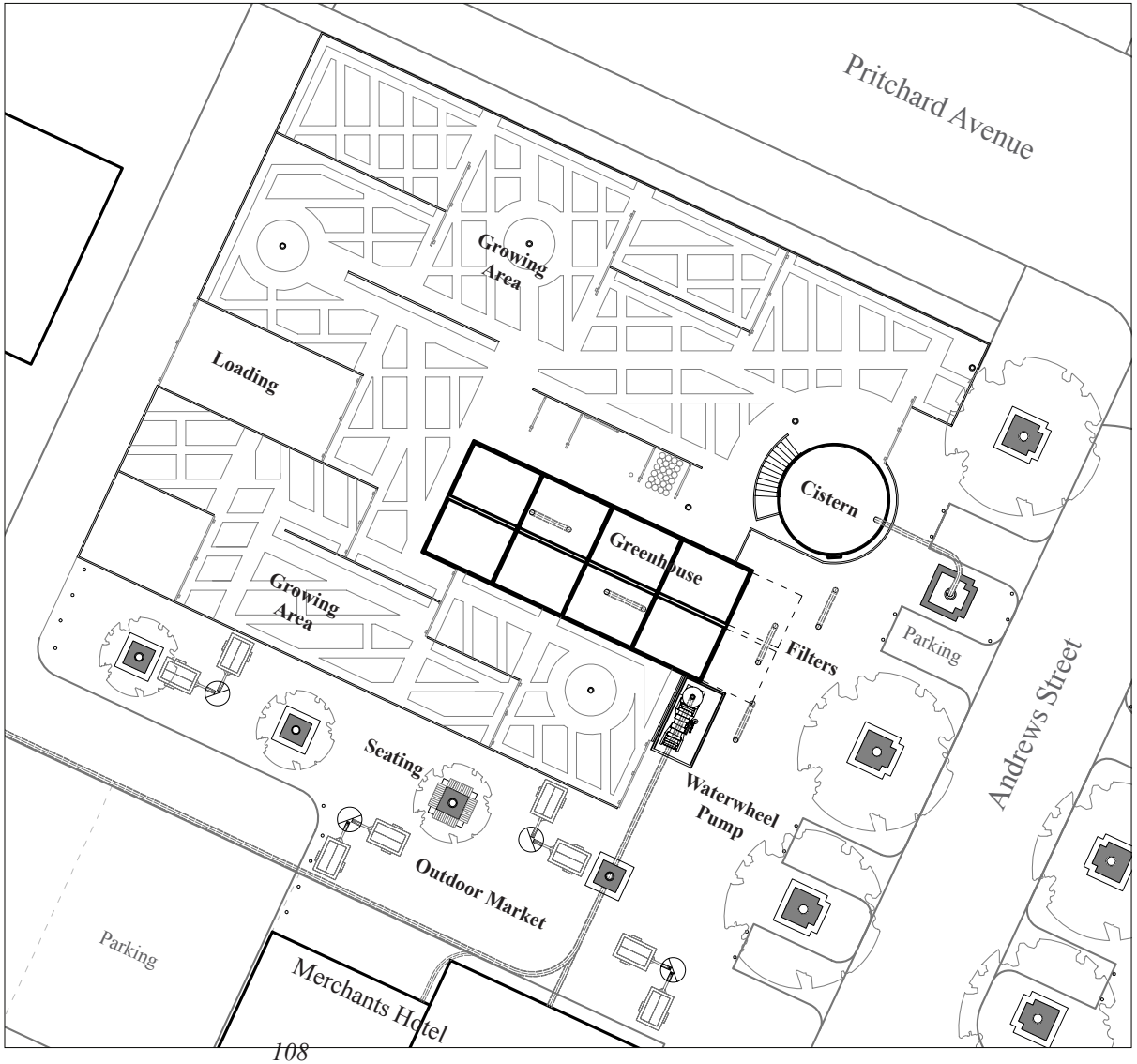


Figure 15.06 Plan view of the West Garden.

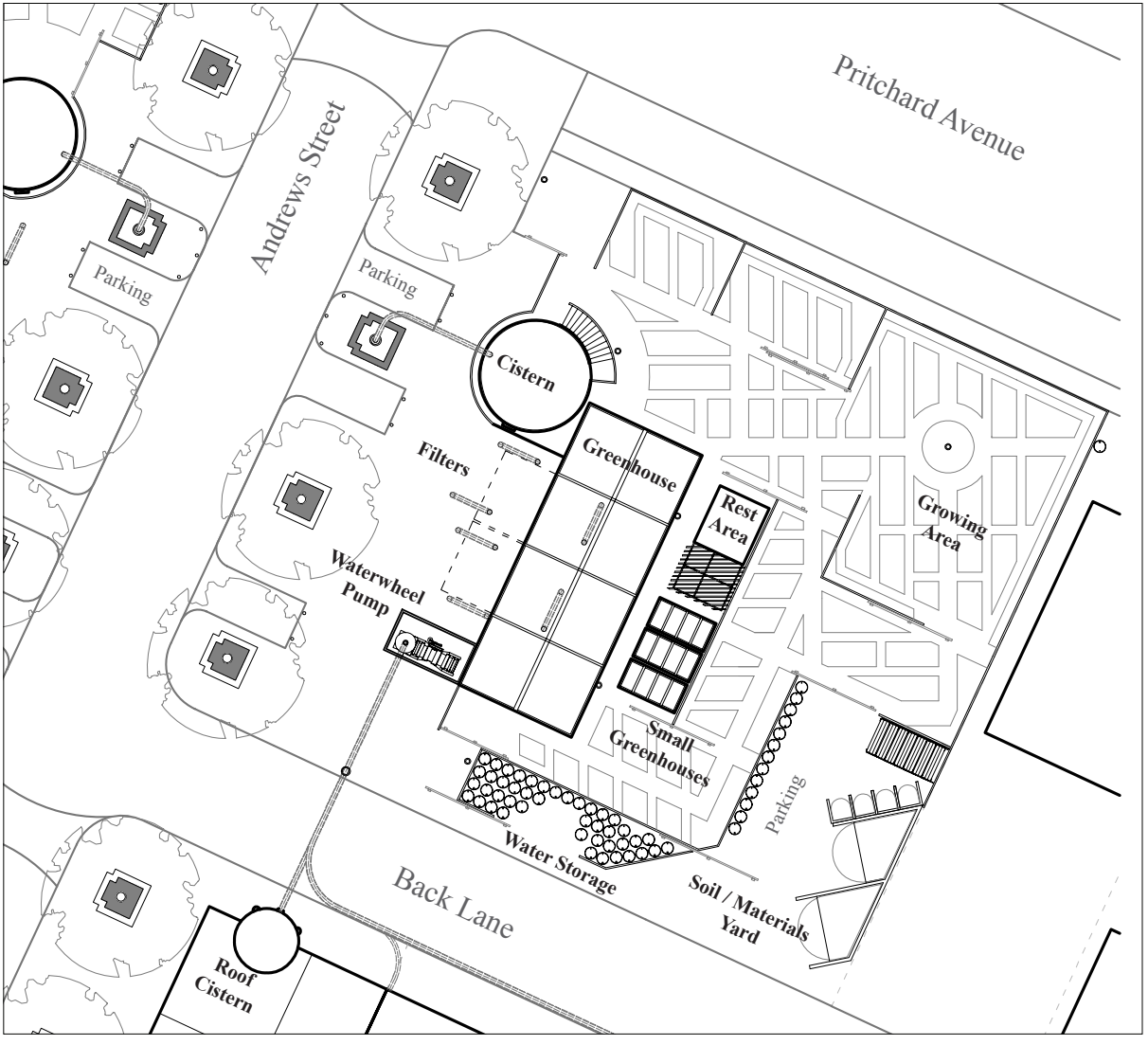


Figure 15.07 Plan view of the East Garden.

Figure 15.08 Plan view of the main market area at the Merchant's Hotel.

The Support Area

The functional support component will provide limited storage space for soils and materials that are used by the garden lots. A larger scale of storage could be housed at the R.B. Russell Vocational School off Salter and Dufferin Avenue. There, students could, as part of their curriculum, assist the garden network in the fabrication of garden elements. The Andrews site would have to store enough soil and compost however for it to be less dependent on regular shipments from the Vocational School. The Andrews site could also serve as a drop-off site for compostable materials. Local residents would be invited to bring their household waste to the main site and much like a recycling depot, place specific items in specific bins according to their type. When used properly compost bins should not produce offensive odors, thus neighbouring properties are less likely to oppose their installation.

The Andrews Street site should be able to provide for the garden network's immediate needs. The program for this space should therefore include green houses where early seed starts can be established. These greenhouses would have to be relatively large in size as a huge number of seed starts would be required. The greenhouses could also serve the dual purpose of being a nursery for potted plants that may be sold to the public at the market. Other facilities that would be required would be a community kitchen and tutorial space where information can be disseminated. Since the network gardeners would be in a union-like association and since good organization is a key component of the network's success, a meeting place should be made available. Indoor space is required for this function to be met. The Merchant's Hotel is a perfect location to house these components. Its context to the site makes it an obvious choice. The building is an historic structure, recognized by the city of Winnipeg, and is thus a part of the North End's local heritage. It is today, an underutilized building. Though it is an operating hotel, it is more known, perhaps infamously known, for its bar and beer vendor. The building has for some time been the subject of some controversy on the street and while it may provide a service to local residents a case for redevelopment could be made for the building based purely on the grounds that a restaurant and market store may be just as profitable. The redevelopment of some second and third storey rooms as office space may provide a more steady and reliable income source. Garden network administration offices could be housed here.

There is a potential to collect and store water on this site. The rainwater runoff from the commercial buildings on Selkirk Avenue could help to supplement the water deficiency in the garden network. These buildings run water off their roofs at the back alley. It is here that the water can be caught in a system of pipes and channeled towards the site. The water can then be drive through a series of filters using a simple pumping mechanism after which it can be stockpiled in cisterns. From there it can be loaded into barrels or a reservoir on a truck and brought to gardens in need. Though rainwater is considered to be grey water, it is as light grey as grey water can be. By incorporating a 'first flush' tank on each building pollutants can be eliminated. The first several gallons of water to run off in a rain event will have a cleansing effect on the surface of a roof. This water will contain most of the incident contaminants that may have accumulated. The cisterns on site would have to be relatively large in scale. They would have to be accessible within reason to a vehicle that may load water from them. The water catchment process provides a pedagogical opportunity in the design to inform the public about ecological and technical issues. Water is something we seldom view with reverence despite its crucial role in our sustenance. For the garden network, water will be the life blood. For this reason, the design of this space will serve

to emphasize the rain event. In many ways a rainfall will alter the entire space aside from the obvious ways. When it rains, water will begin to flow through the pipe aqueducts. Running the length of the block and gravity fed, it will pick up velocity. It's outlet is over a mechanical waterwheel, which will begin to turn as the water flows over it. The waterwheel, which is a timeless machine, will drive a lever pump via a device called a 'pitman arm'. The pitman arm is a low-tech, simple machine that converts the centripetal motion of the waterwheel to the vertical motion of the lever pump. The pressure generated by the pump will drive the water from the waterwheel, through a series of underground pipes that contain sand and carbon filters. These pipes break the surface occasionally serving as impromptu seating opportunities. Water can be seen moving through the system in some areas where Lucite pipe inserts are installed. After passing through the filtration system, the water collects in large cisterns. These cisterns have to be fairly large in order to accommodate the volume that can be collected. Two 30000 gallon reservoirs would be adequate for storage and could easily see the gardens through a period of seasonal drought. From the cisterns, the water is accessible by a service station style pump where water tanks on a truck or rain barrels can be filled. Most of this system would be driven by alternative natural energies although there would likely be a need for an electric backup pump to support the mechanical systems.

The Andrews site would have a large amount of outdoor growing space. The East garden would be an in-ground growing area where plants could be produced either for gardens in the network or for sale to the public. The west garden would combine in-ground growing areas as well as beds that could accommodate potted plants. In this nursery-style set up the public can browse the plants and purchase potted plants, flowers and shrubs for their own home gardens. A series of fences would divide the gardens into sections. The fences would be colour-coded as mentioned previously to facilitate navigation through. Fences and gates can be manipulated to cordon off certain areas that may have sensitive seedlings or for areas where plants are not for sale. The fences would be simple chain-link which is not uncharacteristic of the North End. The look of this fence may be unappealing to some and so, with a coloured powder-coat painting, the fence will have a lasting look that is less jarring. By varying the height of the fences, a further articulation is achieved which will add another quality to the appearance. Despite the preconceived notions attributed to chain-link fencing the material is quite well suited for this application. Firstly, it is readily available although the coloured finish would be much less standard. It is a cost effective solution but will provide the security required for such a site. It is light and does not block light which is of paramount importance for the growing areas. However, when applicable, the chain-link can provide a perfect surface for climbing vines and other food bearing plants such as beans, peas, grapes, etc.

The Market Outlet

The site has the potential to offer a diverse range of market outlet opportunities. Food and goods produced in the gardens can be sold here in all forms and degrees of processing. Market outlets should be outfitted to sell fresh produce, preserved, dried and frozen products, canned goods such as anything pickled, salsas, jams or jellies, as well as prepared foods that can subsequently be packaged. All of these forms of products require their own sort of market outlet. Furthermore, a café or restaurant can sell food that has been baked or cooked. As one adds to the complexity of the product sold, there is a value added principal applied. A bag of salad greens may fetch a few dollars as fresh produce. However, if it is put in a bowl with some dressing added, it may sell for twice that in a restaurant. So providing the setting

for a greater diversity of market opportunities on site can increase the potential gains for the garden network. Selling a jar of garden network salsa in a small store again, will fetch a greater price than as fresh produce. In principal, the whole is greater than the sum of its parts.

In addition to selling consumables, the market outlet can provide opportunities for the sale of a range of related products. Potted plants tend to be quite profitable considering the cost that goes into producing them. Small shrubs and perennials for the home garden, potted herbs or other food bearing plants that people will often buy from garden centres such as tomatoes, peppers, or cucumbers. Other products that could be sold are crafts made by gardeners or local artists, ornamental corn, garlic, gourds, etc. floral arrangements or simple cut flowers. For additional support from the local business community, companies could be offered stalls in the market to sell their goods on certain days. This allows the market to provide the diversity it needs with little risk and less inventory investment. Local farmers could also have space at the market. Parking stalls where a truck or van can back in a serve as a spontaneous market cart would be the best option for farmers as they would be transporting their goods over longer distances. Again the diversification would be positive as local producers would be able to offer foods that the network may not specialize in such as corn, squash and other plants that are more spatially demanding.

This market area will provide enough space for a small street festival at key points in the year. Holding larger events such as this will help the market reach out into the community. If necessary, the section of Andrews Street between Selkirk and Pritchard Avenues could be closed off to accommodate the event. During market events, small portable carts can be brought out from an on-site storage location. These small carts can be reserved for network gardeners or rented by others. After the event is over, the carts can be simply put away.

Figure 15.09 View towards the old Merchant's Hotel building from under the east greenhouse canopy.

Figure 15.10 The new Selkirk Market Café in the old Merchant's Hotel building. This historic building is given new life and new energy with a street side eatery and other components supporting the garden network.

Figure 15.11 View towards the old Merchant's Hotel building from under the east greenhouse canopy.

Figure 15.12 The Selkirk Market Café.

Figure 15.13 Small carts line the market mall which was once a back lane. When not in use, the carts can be stored in the Merchant's Hotel Building. A new garage style entry has been provided for this purpose. When in use, the carts can be anchored to the bases of the light standards. Electrical outlets on the standards can be accessed and carts can be plugged in to provide additional lighting, cooling or heating when hot food is prepared. This can facilitate the sales capacity of the carts, the diversity of products that can be sold, and it can extend the hours of potential operation. The market mall offers a well lit pathway for pedestrians as well as seating opportunities. During larger market events, more carts can be used and set up anywhere in the market area.

Figure 15.14 The Selkirk Market Store located in back of the building links up with the outdoor market mall. The store provides a year round opportunity to sell goods produce by the garden network. The second and third floors are accessible to the garden network and house the necessary office space, tutorial space and meeting rooms. New exterior balconies allow a stronger connection from the building to the market and gardens below.

Figure 15.15 The rainwater catchment system begins at the roofs of the buildings on Selkirk Avenue. The water collects here and flows towards the back lane where it would normally be lost to downspouts. The catchment system interrupts this wasteful flow and captures the water. The 'first flush' barrel collects the initial gallons of water which will contain the greatest portion of potential contaminants. Once this barrel fills, it triggers an overflow mechanism that the allows the fresher water to flow into the aqueduct.

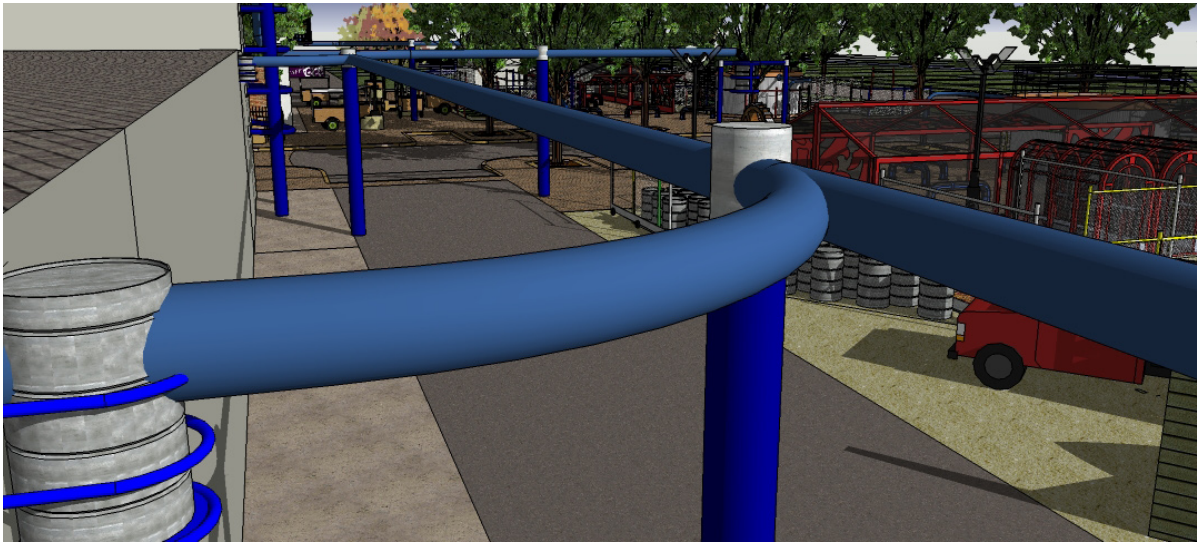
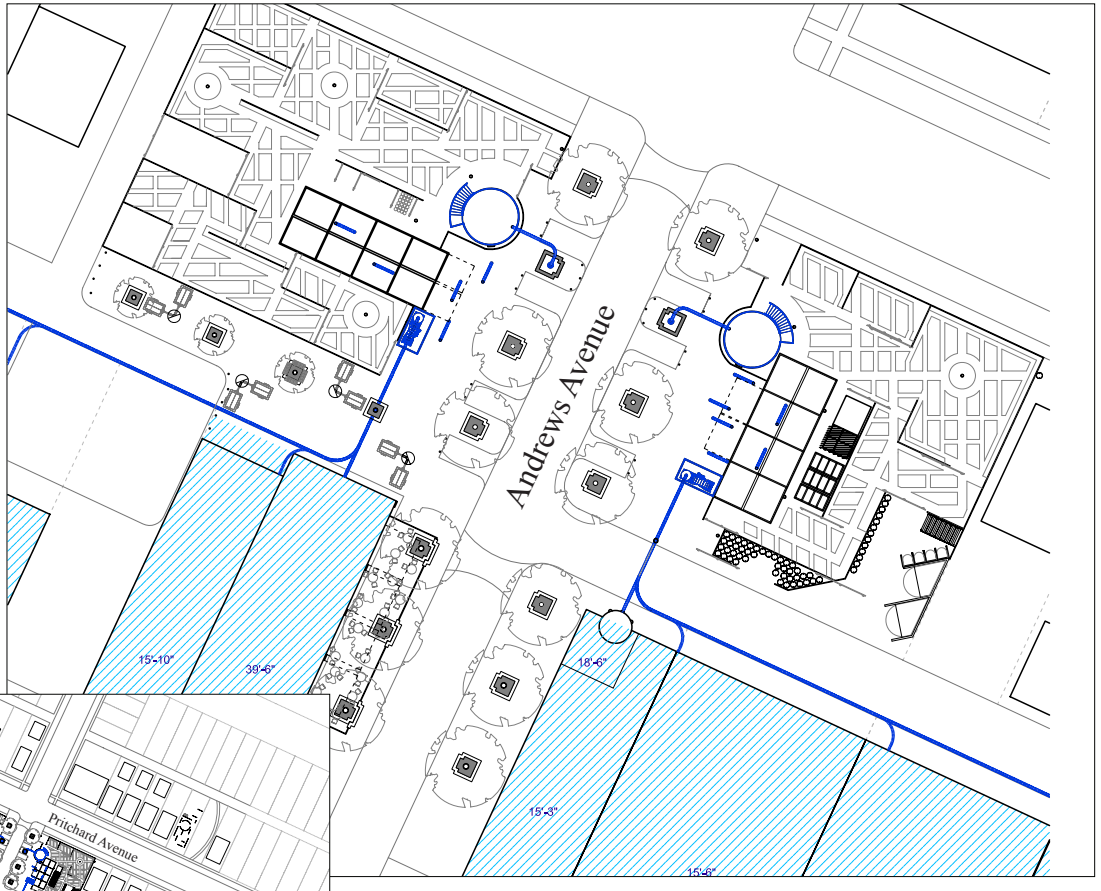


Figure 15.16 Plans of proposed rainwater catchment area and components. The blue solid areas represent the flat roof where rainwater is caught. The blue lines represent the aqeducts or piping that channels the water to the filters and cisterns.

Right: Expanded plan of the Andrews Street site, where rain catchment is eventually channeled, filtered and stored.

Below: The North Selkirk Avenue Catchment.



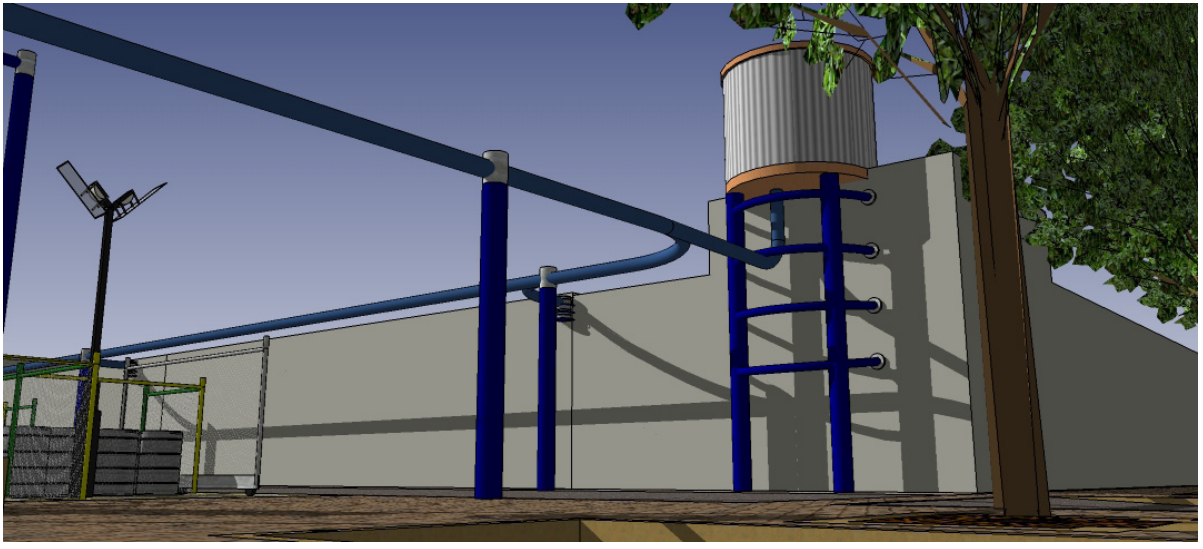


Figure 15.17 The building shown in this image is the back of a local laundromat. In an effort to link with existing context, a large reservoir is added here. Rainwater can be diverted to the laundromat's cistern if need be. Also, in some cases, grey water from the laundering process could supplement the gardens. This water would have to be drawn from machines that are regulated however and should be free of phosphates. Laundry water however, has been shown in many cases to be useable on crops, even those intended for consumption although in fairness, there are some limited risks involved.

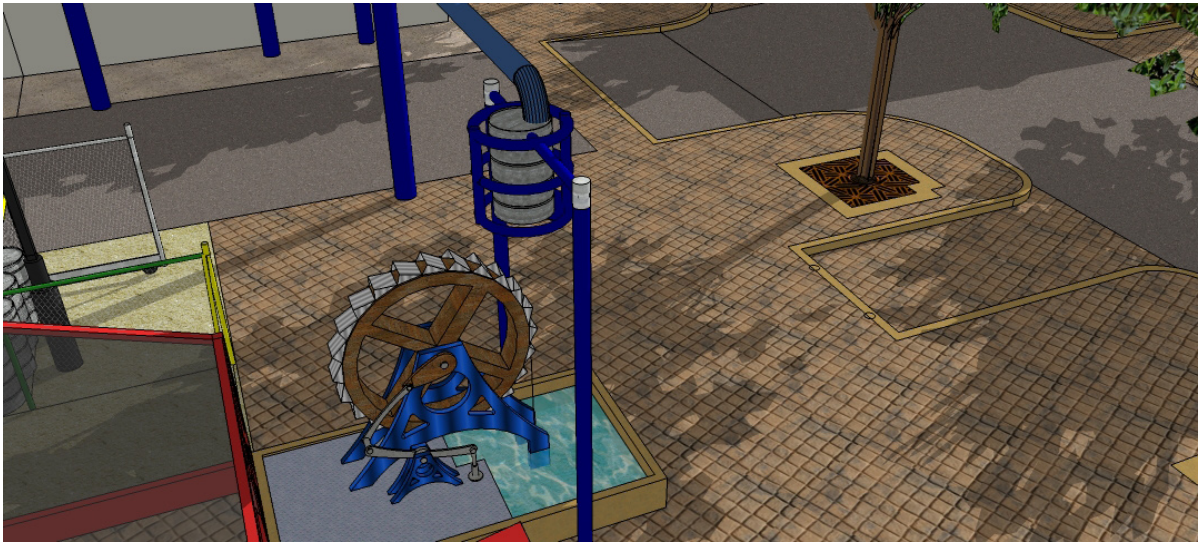


Figure 15.18 The water is channeled from the buildings to this point where it builds up in a barrel tank. This allows to water to fall with maximum pressure, over the waterwheel. The waterwheel is a simple and ancient mechanical device which can drive the pump in front. From here, the water is pumped from the basin below the wheel into a pipe filtration system.

Figure 15.19 Pipes rise and fall above and below ground. Though this image is conceptual, clear Lucite pipes are available for this application. The Lucite is durable and resistant to weather extremes. The clear pipe allows one to see the filtration process in action. Water flushes through the pressurized system through sand and charcoal filters to remove debris. Here, the pipes above ground offer an impromptu seating opportunity for pedestrians.

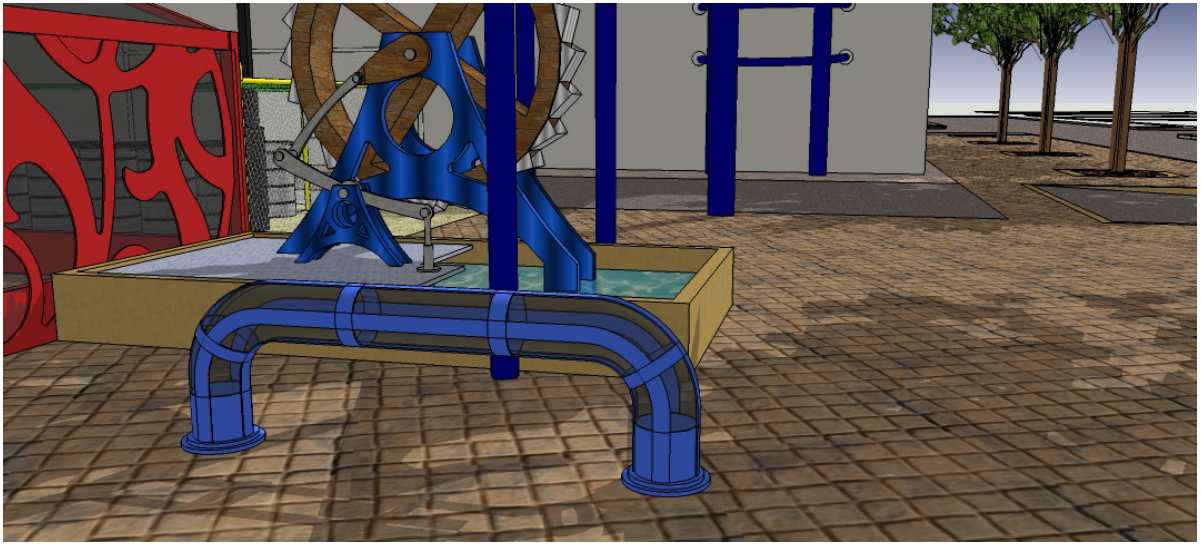


Figure 15.20 The rainwater finally ends up in one of two large cisterns. The cisterns are structural culvert steel, reinforced to accommodate a useable roof. The two cisterns are linked to each other by un underground pipe. This allows for them to always maintain an equal level of water. A simple pump inside the cistern keeps the water moving at all times. The circulation prevents stagnation which can allow for a bacterial buildup. While this may not necessarily be hazardous to health, it adds an odor to the water that is certainly unpleasing.

Figure 15.21 The connective pipe has an outlet where, similar to a vehicle service station, water can be pumped into barrels or a tank of the back of a truck. From here, water can be moved to and from garden sites when requested. Ideally this water could be accessed by anyone at any time, however in order to prevent tampering, the pumps would have to be shut off and secured until use.

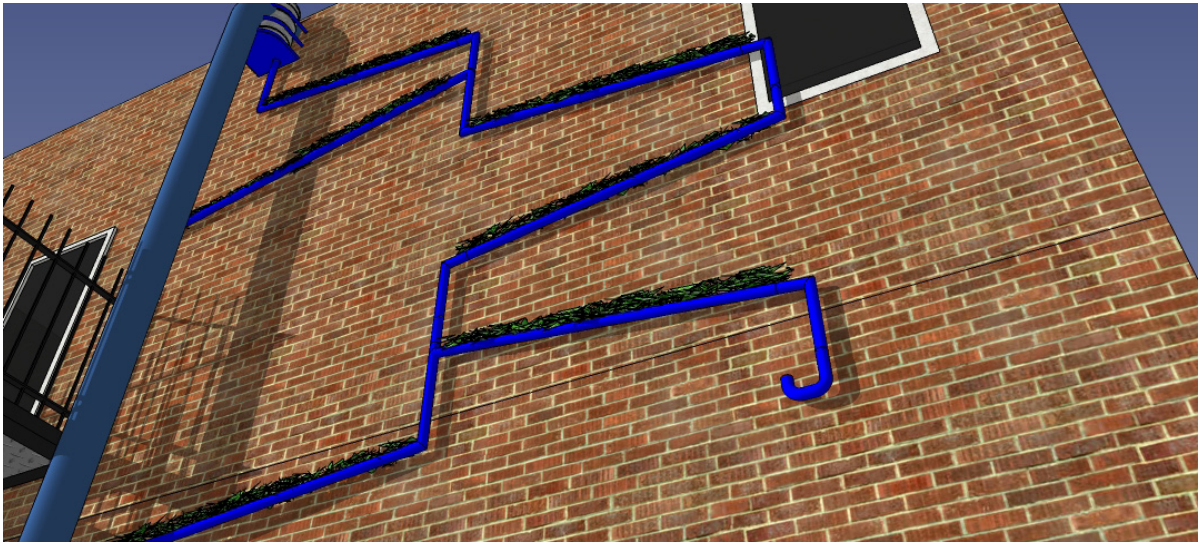


Figure 15.22 On taller buildings such as the Merchant's Hotel, there is an opportunity to use the first flush system in a more decorative and functional way. Here, a system of downspout pipes can hold the water that flushes off. By filling the pipes with a growing medium such as potting soil or perlite, plants will grow. These plants can be flowering ornamentals or for a lower maintenance solution, they can be emergent weeds. Similar strategies have been designed by Buster Simpson in his Seattle Vine Street project. Conceptually, it corresponds well to this proposal as it has a pedagogical quality, revealing natural processes and increasing awareness of the urban ecology.

Figure 15.23 A birds eye view of the east garden in the foreground.

Figure 15.24 A rooftop view of the east garden and its back lane storage area. This area provides space for a truck to park and storage space for rain barrels, garden components and other required materials. This area also has a supply of soil, aggregates and compost station where organic materials of all kinds can be stored and mixed.

Figure 15.25 A birds eye view of the west garden from the third floor balcony of the Merchant's Hotel building.

Figure 15.26 A birds eye view of the west garden and the tree lined market mall.

Figure 15.27 A ground level view from the west garden, looking towards the Merchant's Hotel building.

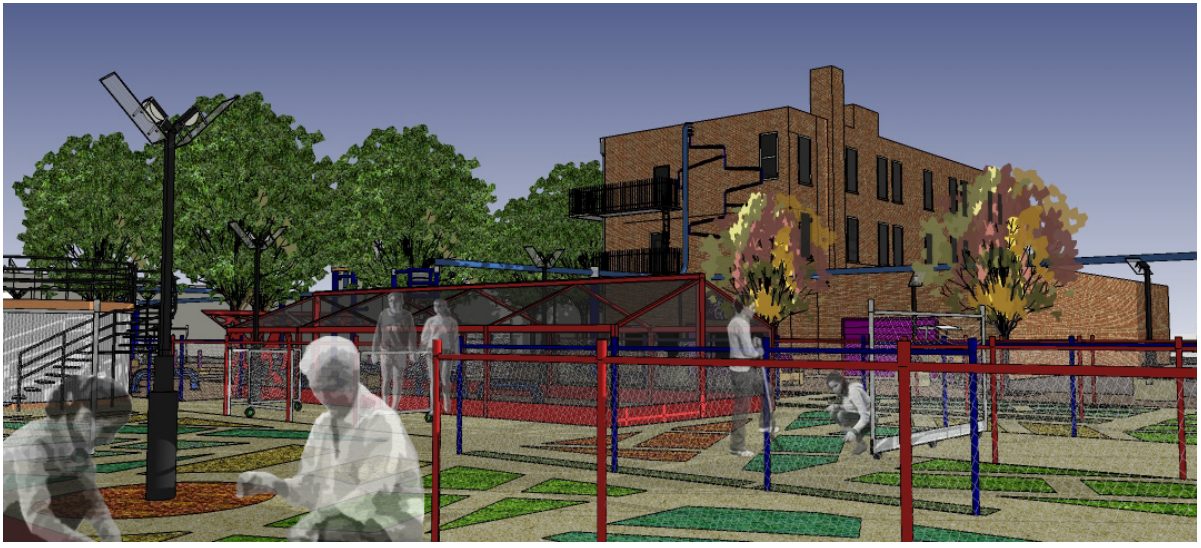


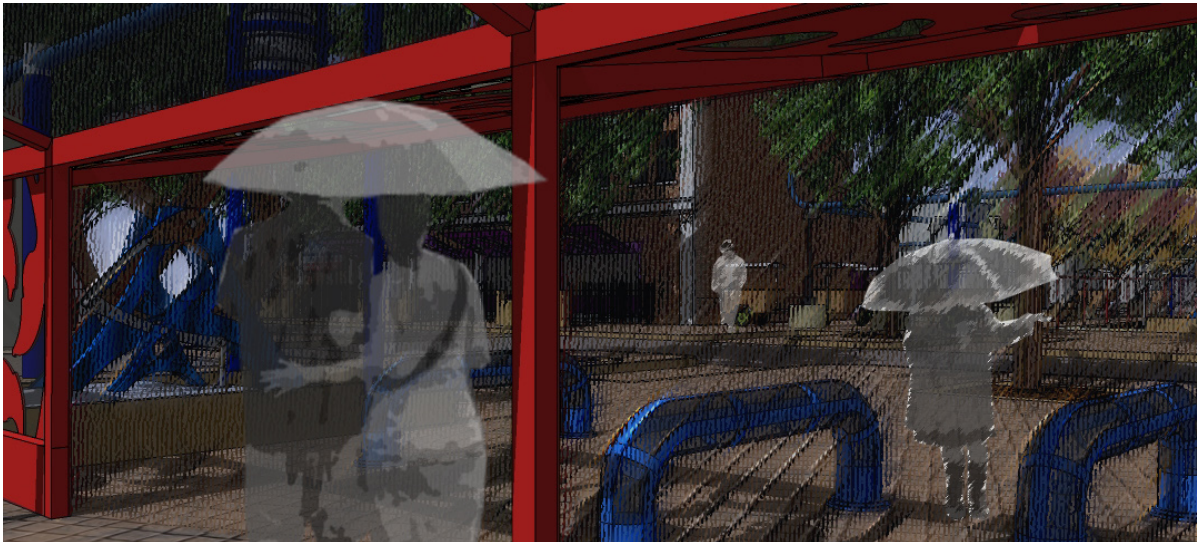
Figure 15.28 The market streetscape looking south along Andrews Street.

Figure 15.29 The market streetscape looking north along Andrews Street.

Figure 15.30 Smaller support greenhouses and a workers cabin. Colour coded fences guide visitors and workers alike. Mobile gates on wheels allow the space to be redefined as needed. Variations in height of the fences in some locations adds a diversity and more dynamic appearance. Minneapolis architectural firm, LOOM Architects have designed a community garden project called Knox Garden which incorporates similar materials quite successfully.

Figure 15.31 View from within the west greenhouse looking across Andrews Street.

Figure 15.32 The market during a rainfall. Rainfalls are an event in this space as the mechanical systems begin to come alive. The waterwheel turns, water rushes through the pipe system. Lucite sections allow visitors to watch the filtration process unfold. The east greenhouse canopies and the café across the street provide a welcoming shelter and a perfect view of the action.



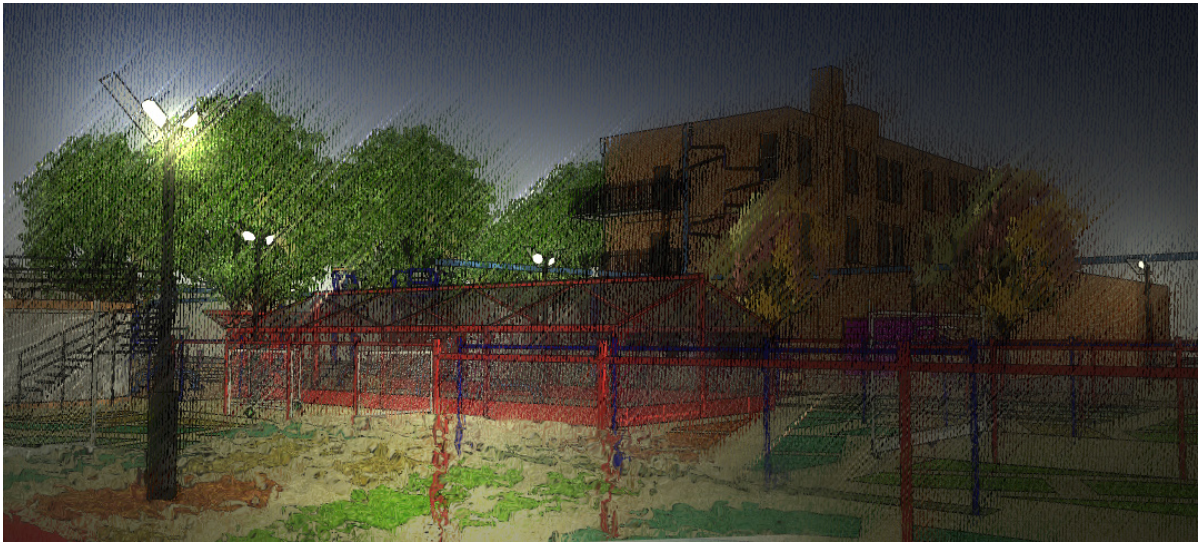


Figure 15.33 Rainfalls make a visual impact on the site. These light standards are designed to catch water on textured glass. As rainwater flows over the glass, the light filters through casting a rippled effect on the ground. Thus, the light celebrates by dancing in the rain and the entire site comes alive in motion.

As a renewal method, this design proposal should be weighed according to its response to the community's needs and its potential to build the various forms of community capital; social, cultural, human, economic, ecological, built and political.

During the conceptual and schematic development of this design, capital building was one of the foremost concerns that informed many the design decisions. As such, the design was not driven by the development of one space. Rather it addressed the challenge of designing multiple spaces in a connected way so as to facilitate their combined and interrelated functions. In addition, the intent was to produce a design that could support or be the foundation of a sustainable urban renewal strategy. Thus, tangible design interventions were developed in order to provide fixtures that could embody the concepts of community capital.

In design terms, social capital can be established by the thoughtful placement of a bench or perhaps the addition of outdoor chess tables. This is of course an oversimplified way of viewing an exceedingly complex concept such as social capital but that is the nature it. Social capital is something that is relatively impossible to pin down and quantify, all the while it can arise spontaneously out of the most benign situations. When two or more people have a shared experience, social capital can develop from that. It may be a casual greeting or an impromptu conversation. The greater the frequency of such situations, the more the capital develops. This particular design intervention has sought to create a range of community spaces to serve a range of purposes. In the gardens, the shared experiences that gardeners will have can be the basis of endless conversation. How has the weather been, the incidence of garden pests this season, a tutorial on the proper practice

of composting, or the year's bountiful harvest are just a few examples of the conversations that would be overheard in the gardens. The reciprocal relationships of growers will be fostered as one gardener offers to trade a basket of tomatoes for a basket f cucumbers. Benches and other physical objects will be the fertile soil for social capital but the activities going on in the garden network will be the seeds from which it can grow.

Cultural capital in concept is one that can be expressed in countless physical manifestations. The challenge to the design process is that these manifestations are difficult to plan. They are often very personal and culturally specific. They can be related not only to one's ethnicity but also one's lifestyle, spiritual beliefs or group affiliations. From the perspective of the designer there is an inherent difficulty in being prescriptive in regards to cultural representation. A designer will undoubtedly draw criticism for being too deliberate in the planning of such things, likewise if the designers role is too passive, critics will often read this as neglecting the cultural component. In an area like the North End, culture is paramount. The neighbourhood's history is tied intrinsically to its cultures and not just one, but a diverse mosaic of ethnic heritages. This presents a problem when trying to determine an appropriate design response. In this design proposal, it was concluded that specific cultural reference would be avoided in favour of more a general agrarian aesthetic. However, not to avoid the issue, the established design criteria presented a requirement for places and object through which people could express their individual culture. White washed fencing boards and planter boxes allow for people to personalize their gardens with paint or other décor. In spaces that are more public such as the market areas, a more general iconography was used because this would be a shared space although conceptually no prohibition of cultural representations would be recommended in any case. The intent behind a more generally appealing aesthetic reflects the sensitivity of the approach in consideration of the high level of disenfranchisement felt by many people in the community. At the risk of being slightly more sterile in appearance, a higher degree of inclusivity was the intent in order to avoid any single ethnic identity from overwhelming the others. In generations past, the farmer's market in the North End would have been ripe with the diverse ethnic flavours most prominent in the neighbourhood. In time, perhaps a new North End farmers market would develop in such a way, but organically as opposed to prescriptively.

In order to develop human capital, a design has to provide a tangible mechanism for the advancement of those concepts associated with this form of capital. It is safe to say that the addition of fresh foods grown from the gardens to the average diet would provide some form of health benefit. Though this may be dependent on the amount and frequency of supplementation in the diet, it would likely be quantifiable in some way. This however is not a direct product of the design proposal itself. Some of the design responses to this can be seen in the details such as the garden components. Raised planters will mean better soil quality in which food is grown resulting in a more organic food product. Another example is the compost containers that will eliminate the need for chemical fertilizers which can subsequently introduce chemicals into the dietary intake. These are physical design responses to the need for human capital. Furthermore, since human capital also includes a person's education and skills, there is the provision of an indoor space as a learning environment for things such as gardening techniques. The Merchant's Hotel on Selkirk Avenue is directly adjacent to the central market site and could be included in the design proposal to meet many of the needs of the garden network. Though the interior spaces were not de-

signed as a part of this proposal, the programme for the building could accommodate the administrative functions in the form of office space. A kitchen facility could be the basis of a learning environment for gardeners to take courses on good growing practices, on cooking or canning and other product driven concepts. Currently the building contains a restaurant and a bar which could easily be converted to house a café and eatery, a small supermarket or even a floral shop where garden produce could be sold. The inclusion of such a facility to the design proposal lays the groundwork for a range of potential job training to be acquired.

The market facilities also provide a platform for the development of economic capital. This is the form of capital that we are most familiar with. It is more concrete than some of the more ethereal forms of capital and perhaps to many, it may be more important. This is reinforced by the reality that generating economic capital would add to the sustainability and survivability of the garden network as an entity.
In this way, the network could move out of the realm of being a social service to being a sound economic enterprise. For this reason, as a part of the design proposal an attempt at establishing a network brand was made. The design of small market carts of the sale of crafts and produce was also a response to the need for economic capital. In the streetscaping, curb lines were articulated in order to provide on permanent parking for larger vehicles. A common sight at many farmers markets, many growers will sell their produce directly out of their trucks and vans. This simplifies the process of retailing and allows for a greater range of sellers to join the market. This is beneficial to the market even if all the growers are not from the garden network. Having too many spaces and not enough sellers is a detriment and does not foster the kind of dynamic vibrancy that a thriving market should have. Though outside growers shouldn't take precedence over network gardeners, if the venue has empty spaces, they can be filled when needed so long as the competition isn't disadvantageous of course.

Ecological capital is a concept that is growing in significance year after year. Today, there is tremendous concern for the integrity of the environmental condition. From a very early stage it was the consideration of this proposal to have an ecologically sustainable approach. This is not a far stretch considering the nature of urban agriculture and the demands that it makes on the context. There is an inherent need to be as resource efficient as possible while still attempting to maximize production. Early calculations revealed that given the average amount of seasonal rainfall in Winnipeg, the gardens themselves would likely be water deficient. As such, a need arose to provide essential water to the gardens from some outside source. It is not uncommon to see wind driven water pumps on farms even today. A windmill was often used to drive a pump which drew water from a well in order to irrigate the fields, an ingenious and relatively sustainable method for providing the critical support for the agricultural process. In this design proposal, a resource recovery system was developed from the conceptual stage to a highly detailed and fully integrated system. The intent was to devise a watery collection system that could be functional and practical while being playful and pedagogical at the same time. The latter two objectives are perhaps somewhat contrary to the former two however, as a design exercise the high degree of technical innovation required for the system to work led to some unique solutions and interesting forms. Admittedly, cost was not of a primary concern when designing the resource recovery system, this is justified by the intention that the market space would have a permanent tenure and the establishment of a meaningful community space. The value of the network's sustainability as well as the awareness it can bring to natural processes in the urban

environment can also be considered of value to the development of ecological capital.

This design proposal addresses the neighbourhood's need for increased built capital in a number of ways. Firstly, the North End is an area that is significantly lacking in public green space. With exception to schoolyards, there is very little land designated as park space. Vacant lot gardens have the potential to serve the community in this capacity though this could introduce an inherent compromise in the security of the gardens. Gardens are also themselves a form of infrastructural improvement as they are now adding productively to the residents lives. Secondly, the market space at the Andrew's Street site adds a wealth of infrastructure to the community. A large public plaza provides a place for congregations and festivals to happen as well a creating a strong community centre where people can gather and meet. The market plaza also expands the extent of Selkirk Avenue's commercial sector. With many buildings being currently occupied by social service providers, the number of buildings available for retail is decreasing. The nature of the market also provides a range of commercial opportunities for businesses that have a more modest ambition. Hopeful entrepreneurs need not risk an investment in purchasing commercial space and instead they may rent a cart for a month to sell some crafts or other products. So the market itself is a tremendous addition to the North End's built capital.

Political capital is the one form of capital that is perhaps the most difficult to programme. In built terms, having a community space for large gatherings can facilitate the growth of this form of capital but there is little else that the design can offer. In order to institute a greater political capital in the North End, the design proposal would have to be well established and enjoy a significant amount of community support. It is from that public espousal and togetherness that this form of capital will develop. It is not uncommon for community gardeners to form a mutually reciprocal relationship. It is the organization among them and the common bonds they share lead to a unified voice which is the instrument of political capital. Unity is the key, and though it may not be inherent in the design itself, it is inherent in the driving concept. So this form of capital will hinge on the success of the garden network, not just its financial success, but its ability to effectively bring about renewal. The influence on civic policy that the gardens and gardeners can have could be very validating. Currently, the city of Winnipeg does not have an established set of policies regarding the practice of urban agriculture beyond the scope of backyard and community gardens. There are a few forgotten by-laws that concern the keeping of livestock or fowl within city limits but because these practices are so rare, there has been little need to define them. As a garden network grows in the North End, it will undoubtedly find itself challenging some of these policies. Having a political voice will be essential to the network's interests. Beyond the design, other methods of building this form of capital could come from partnerships with and sponsorships by corporate entities, social groups, faith based organizations and so on. Furthermore, a better awareness of the network outside its functioning area is critical. For this purpose, an identifying brand should be established that will help expand the market of the network and subsequently garner support from the rest of the city.

Beginning with an attempt to identify an urban revitalization method that could be applied to a neighbourhood in 'distress', community capital gains are what this design proposal and this practicum are all about. As described in an earlier chapter, urban agriculture itself has tremendous potential to address all forms of capital at least in theory. The design proposal has sought to ask the question of what will the application of

urban agriculture look like in practice. Though the built manifestation of the gardening network does not alone ensure these capital gains, it can begin in many ways, some more subtle than others, to facilitate and foster the growth of community capital. What is perhaps more important is the way in which the designed spaces and components are used and the degree to which they are accepted by the community. Without a doubt, if this design proposal was ever made reality, those who were using it would soon begin to adapt it to their own uses in order to make it work for them. This level of personalization and customization is something that is always difficult for the designer to pin down but it is where the design becomes fully realized.

Chapter 16

Component Design

"God is in the details."

Ludwig Mies van der Rohe

From the Meso to the Micro

The focus of this chapter is to examine in greater detail the There are many potential factors that may stand in the way of an urban agricultural network in Winnipeg from ever forming. Many of these factors are directly related to social, political and environmental issues. It is possible to accommodate some of these issues through the design and conceptualization of the network and its gardens. It is the intention of this practicum to explore some of these avenues in order to facilitate the process and to add to the feasibility of such a project to be accomplished. This chapter focuses on the design of the garden component, which are ultimately the building blocks of the entire network.

Sustainability and accessibility are two of the important aspects when approaching component design. As stated in previous chapters, the components should have a modularity in that they are standardized in form, assembled with standard materials and are able to be fabricated very quickly and arranged on site as needed. Their size should be kept to a minimum and should be no larger than the back of a pickup truck. Also, whenever possible, they should stack well together when in storage. The use of recycled building materials will add to the sustainability and accessibility of the components. It will also add an ecologically positive impact.

The main component of the gardens will certainly be the raised planter beds. Many of the gardens will require 30 to 40 of these planters and thus, they must be as easily fabricated as possible. The planters should also facilitate the gardening process as well as being potentially customizable.

The Planters

The planters are made of recycled lumber from building demolitions. The exterior walls are made of either 4 - 2"x4" boards stacked or 3 - 2"x6" boards stacked for a total of 16 to 18 inches in height. The boards are secured by screwing them to corner posts which are either 4"x4" or double 2"x4" lumber, depending on availability. Angle irons are fastened to the outside corners. These irons will allow the planter to be secured to the ground by simply pounding it down lightly. A length of PVC piping is suspended and fastened inside the planter. The length of PVC is drilled full of holes and wrapped in a geo-fabric or common cloth. This permits the gardeners to water far more efficiently by delivering moisture directly to the roots of their plants. A water bucket with a hole in the bottom can be set on the pipe opening and allowed to slowly percolate into the soil. Drip watering is crucial for proper resource conservation. Considering that the gardens will be water deficient if they rely on rainfall alone, the planter design adds a level of sustainability and feasibility.

The Compost

A set of community compost bins for 'green' and 'brown' should be installed near the loading area of each garden. The local households will be able to contribute to and replenish the compost at their convenience. The mixing drums are essentially a barrel, suspended on its side, with a handle added that can be rolled to achieve a good integration of the 'green' and 'brown' materials. Holes are drilled to allow air circulation and a latched trap door is cut into the barrel for loading and unloading. The

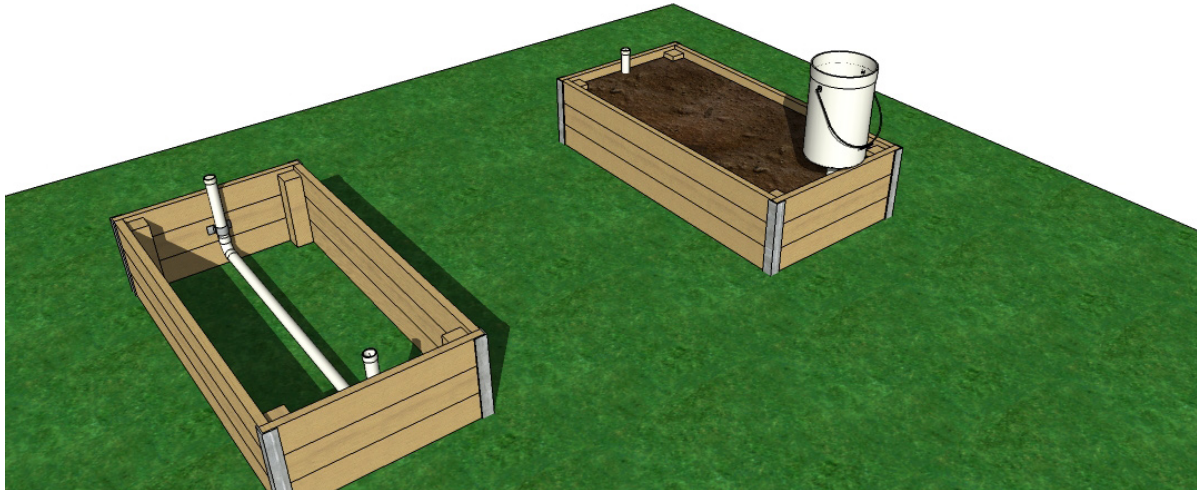


Figure 16.01 The standard garden planter show with and without a watering bucket attached. Note the perforated PVC piping inside that allows for maximum efficiency with watering.

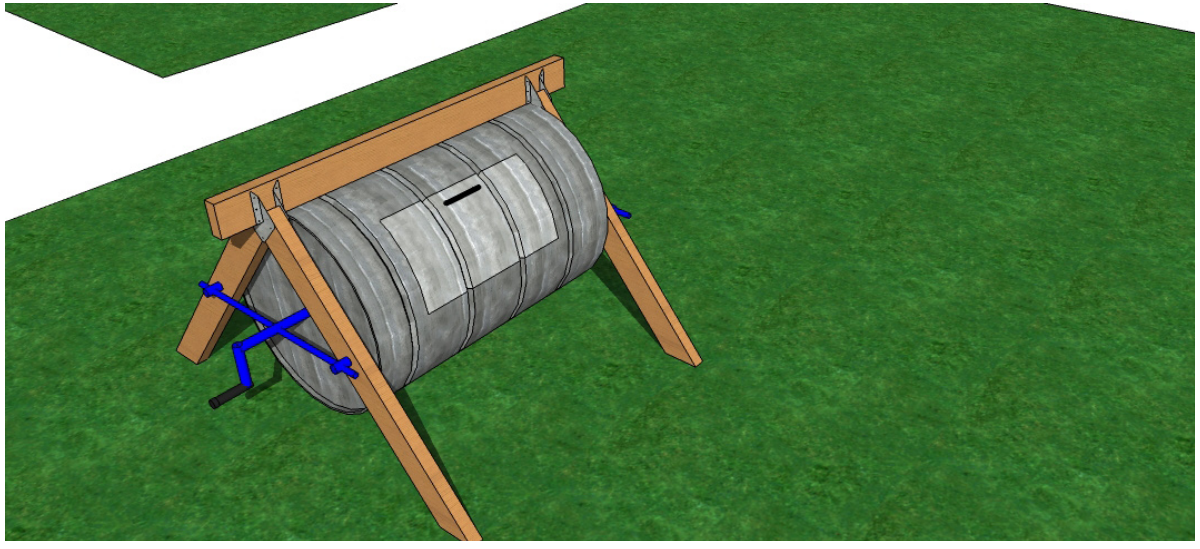


Figure 16.02 A compost barrel. One of the easiest ways to produce compost. Proper mixing can be achieved with a few turns of the handle. The composting process is made easy and manageable with this element.

barrel is by far the most user friendly composting solution. A convenient solution considering proper composting procedures are often difficult to follow along with.

The Fence

Perimeter fencing can be installed for the gardens when there are no existing fences. In this proposal, the fences to be installed are simply concrete piles poured in place using 10 foot sono-tubes spaced at 8 foot apart on-centre. By placing a foam insert into the sono-tube, the fence posts are formed with a groove on both sides. This grove allows for 8 foot lengths of lumber to be placed between them to form a solid fence. The 8 foot lengths of lumber can be easily salvaged from demolitions since the width of the board is not crucial, neither is the appearance. By painting the boards white, their appearance can be standardized. By leaving them white, the fences will become reflectors of light, bringing the sun's rays to the shady corners of the lot. Or possibly, gardeners may find the white fences to be blank slates ready for customization and self expression. The fences provide another opportunity for climbing plants and would be more than adequate to support a series of planters. Drought tolerant plants or plants needing a higher degree of light may be well suited to fence planter.

Fences can be costly to install when one moves in to a new home. Often, homeowners have little choice but to spend their money on a fence as it is a very desirable component of the typical yard. Providing privacy and security, fences will certainly add to the value of a home. Therefore, these fences or designed in such a way that they become both permanent in nature, but also ephemeral. The concrete posts are intended to be left as a remnant of the garden. The boards that are installed between the posts can be removed and brought to a new site. In this way, the needs of the garden are satisfied and an incentive for redevelopment is left behind.

The Legacy Element

After demolition of a house, the utilities such as water, hydro and communications lines are severed. In the North End, the hydro and communications typically are run from utility poles along the back lanes, while the water is run from the street side. The legacy element serves as a new housing for all of these essentials and brings them to a single outlet. This makes them more accessible for the potential builders of the next home to occupy the lot. In the meantime, when needed, the utilities may be able to be subsidized for the benefit of the garden. Emergency water, night lighting, even the possibility of an emergency response line. While the use of these utilities would require strict agreements between the garden network and the agencies in control of them, the possibility of providing a range of services of apparent.

It is the housing for the utilities that presents the possibility of a remnant component that is a legacy element of sorts. In this proposal, a concrete frame with a raised wall is installed to protect the utility line from being disturbed. The raised wall is a perfect place for an address sign as it would be in the very front of the yard. A common sight in suburban neighbourhoods is the green box like structure that caps the utilities, making them accessible for service. These boxes are seldom seen as pleasant additions to the front yard however, in some cities such as San Diego and Surrey, B.C. the municipalities have allowed artists and property owners to paint the boxes in order to make them more appealing. After redevelopment, if the utilities are run to a building, the cap could be removed leaving behind a small planter for flowers and a formal address sign. In the future, as

people stroll down the streets of a North End in renewal, they would see the address markers in the front yards of all the new homes situated on lots that served as gardens in the past. The legacy element is designed to tell a story about the community and its process of revitalization. It adds another layer to the historical character of Winnipeg's North End. Though some of these elements may be more or less practical than others, the intention behind them is to leave something behind that could possibly attract a confidence in the neighbourhood that is so critical to any hope for an urban renewal project.

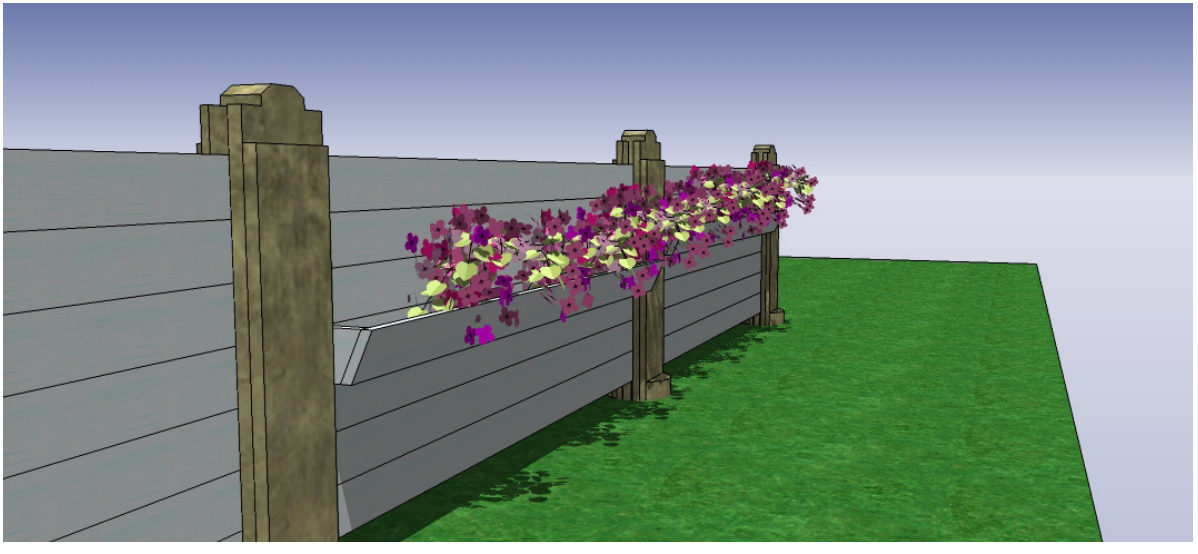
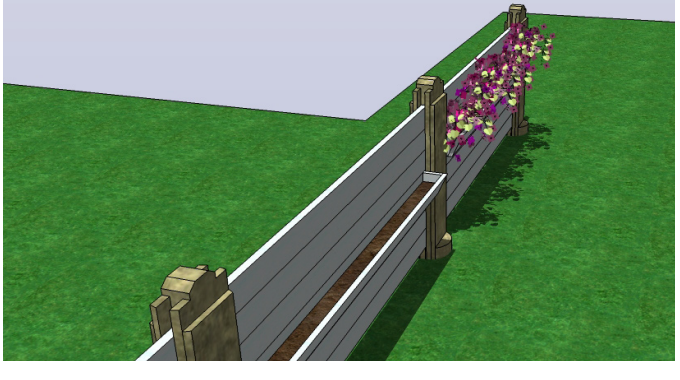


Figure 16.03 This series of images depicts the fencing strategy that involves installing permanent concrete posts and interchangeable fencing boards. When the garden moves, the posts remain and the fencing travels. Painted white, the fences reflect light into dark corners. They can be customized to reflect gardener's personalities. Raised planters can be installed to increase growing area.



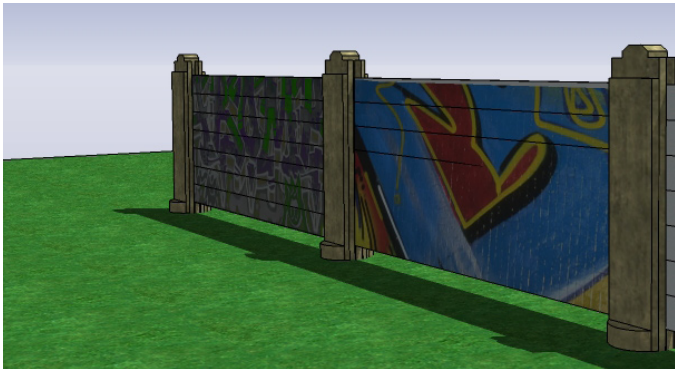


Figure 16.04 The legacy element. This component serves as a housing for utility lines after a demolition takes place. The cover can be painted in order to make it more appealing. An address set into the concrete denotes a sense of place and leaves a reminder of the past use of the lot and those who occupied it.

Chapter 17

Reflections and Conclusions

"Speak truth to power"

Milton Mayer

Finding Inevitable Shortcomings and Opening Future Avenues

Revitalization in a distressed neighbourhood is something that should be approached with all due sensitivity and care. In communities such as these, there are people living in at-risk situations. This is often something that cannot simply be revitalized away. For this reason, urban renewal projects need to begin with the basic foundation of a neighbourhood, that being its inhabitants. This is an especially impacting realization as areas of cities that are in good standing are seldom targeted for redevelopment. Rather, it is the struggling centres that garner this kind of attention. In Winnipeg, it has been proposed on many occasions that areas such as the North End should be simply left to the bulldozer. Perhaps at some point, this may happen however, those who make this proposal should justly be prepared for that urban blight to shift into another community. One must question the true intentions of revitalization projects. Is it an attempt to raise land values? Is it a deliberate decision to displace people from an area that may serve a better, more profitable purpose? The decision to renew a neighbourhood may often be disguised as one that is intended to help the poor souls living in those terrible conditions. However, when the bottom line is based on profit, the well being of the residents will tend to fall by the wayside.

Many neighbourhoods that are being targeted for renewal are often inner city neighbourhoods. They are geographically located in the inner cities because they are often old. Incidentally, it is not uncommon for some of these areas to have a proud history as being the one time area for 'well to do' residents. Such is the case in Winnipeg's Point Douglas area. Though there is certainly still some good quality housing in that area today, it also has its share of industrial scenery, vacancy and urban blight. What should be considered here is the newest trends in urban development or rather redevelopment. Whereas cities were once experiencing a 'donut' effect from the rapid suburbanization migrations, there is now a movement back to the centre in some cities. The costs of living are rising and will continue to do so. The price of gasoline, natural gas, and home heating oils are making life in the suburbs increasingly expensive. So it may be expected that cities will reverse their 'donut' growth patterns and opt for the 'timbit' pattern of growth where the hole in the centre city is filled at the expense of the outer ring. In theory then, from a developer's point of view, all of a sudden the centre city becomes so much more appealing. Now, after sustained periods of urban decay, land values in inner city neighbourhoods like the North End are at their lowest, relatively speaking. This will only serve to increase instability in such communities.

So, a renewal strategy that is slower and more sustainable could allow the residents of a distressed neighbourhood to play a more crucial role in the renewal process. Subsequently, the residents are lifted up with the neighbourhood and have a greater chance to reinvest in their own community. Ideally, the residents who are renting would buy the homes they occupy. As the community undergoes revitalization, the land values and thus the investments would increase. What convinces a person to buy in to a neighbourhood is not always a profit based decision. It requires confidence in the community and an affinity to that sense of place. As the old adage implies: this is when a house become a home.

The purpose of this practicum was to investigate urban agriculture as a means to sustainable revitalization in a distressed neighbourhood. This is does not imply that urban agriculture is the only means to this end, however according to the vast amount of supportive literature, it a good candidate. Its ability as a method to generate positive results in all facets of the community capital of a neighbourhood is its greatest asset. This method however is largely dependent on inclusion, effort and empowerment of those who would be benefiting the most, the residents. To its credit, it is not a renewal method that involves huge sums of capital investment. Though its effects may be slower to take hold, they are quite likely to have a longer lasting effect.

Luc Mougeot of the International Development Research Centre points out the key principals that are required for a successful urban agricultural program to work.

- *Integration into urban management – supporting and valuing UA (urban agriculture) as an integral part of urban development and an effective tool for urban management.*

- *Self reliant local food systems – Actively supporting UA through policies and research to develop a more robust urban food supply.*

- *Productive green spaces – Helping to purify the air and bridge the inequality of access to such spaces between rich and poor.*

- *Resource recovery – Recognizing the efficient treatment and reuse of solid and liquid wastes as a valuable resource for UA*

- *Producer access- Organizing formerly marginalized producers into groups that can more effectively negotiate access, utilize research findings, and market their produce at a fair profit.*

While not all of these requirements can be fully addressed through design alone, they can certainly be buttressed and sustained with supportive infrastructure in place. This practicum has attempted to address all of these needs to some degree though in circumstances where the desired outcome hinges on a non-tangible such as effort, care, community pride, anger or love, no design will be sufficient in its own right.

Food is becoming an increasingly critical issue in the modern world. The stability of the food supply is arguable as stable as the oil supply. In light of very recent events in 2008, oil supplies are anything but stable. 2008 has seen oil prices rise as high as $144US per barrel. This has affected the price of gasoline at the pump, caused volatility in the economic markets and it has affected the global food systems. The agri-industrial sector of the economy is based on cheap accessible oil. “ Our tractors, harvesters, and irrigation pumps rely on oil, as do all the trucks, trains, and cargo ships that supply farmers with their fertilizers and pesticides (themselves made from oil’s geologic cousin, natural gas) and transport all the farmers’ outputs to market.”[106] The product packaging that our food is shipped in can also be costly in terms of the energy consumed to make them. It was cheap oil that allowed the agricultural industry to over-extend itself beyond that which is sustainable without that petroleum input. Thus, for one to believe that the food system is stable, one would have to accept that the oil industry is stable.

This study did not attempt to take sample of soil on urban lots for the purpose of conducting quality tests. Soil tests can be a costly procedure and time consuming. A few samples would need to be taken on each lot before a gardening could begin especially if a marketable food crop was to be grown. Research was conducted to gain a better understanding of the issues in both a general and site specific manner. The Manitoba Archives

has Henderson directories that can reveal a glimpse into a lots past life. Industrial processes such as a tannery or other chemical dependent light industries may have been located on site through out its history. Recommendations were made in this study to mitigate contamination though it would always be recommended to test before one plants a crop.

The main market at the Andrews Street site could be studied further to assess its capacity to acquire a LEED certification. The strategies that have been incorporated to control, collect and re-use runoff water, the re-use of an historical building, the energy efficient pumps and waterwheels, and the many other ecologically sensitive functions may make it a candidate for a silver certification. This recognition often goes a long way towards increasing the public awareness of the site and the project in general. Having said that, the extent of the design proposal could be considered by some to be lofty in its expectations and its scope. The expense of such an intervention could ultimately make it cost prohibitive given the grassroots nature of this project in concept. This is perhaps where the design proposal took some liberties in its exploration of ideas. In defense of the proposal, it was the intention to create a space that was inspirational. A space that could generate enthusiasm and interest in not only the garden network, but also in the lesser known realities of urban ecology and the natural processes that carry on with little notice all around us. The design was to produce a central community space that was meaningful and vibrant. For this reason, and for the sake of creative expression, many of the real world constraints such as budgetary concerns were not considered limitations and yet, many of the material components are standard, modular and low-tech.
Beginning a revitalization strategy at the grass roots level is perhaps the best way to involve local residents in the process. In doing this so, the hope is to foster the kind of community acceptance that can often make or break a project like this. This particular study did not make use of surveys or questionnaires to gauge the potential local response to an urban agricultural network. This may be seen by some as a weakness in the approach. Such forms of community outreach will undoubted require ethical scrutiny mostly due to the reality that many of the people in the area could be considered ‘at risk’. While there is no contention that such information could have added a deeper level of understanding to the proposal, it is to some degree, tangent to the intention of a Landscape Architectural practicum. Instead, the study accepted certain anecdotal evidences that urban agriculture could provide the framework for significant community capital gains as observed in other parts of North America and around the world. Furthermore, recent successful attempts to establish community gardens in other parts of Winnipeg have played a role in helping to revitalize distressed neighbourhoods such as Spence and West Broadway. There are social organizations in the North End that have been looking into gardening programs and offering education in healthy cooking and canning. Incidentally, there is currently a fledgling committee that includes representatives from the North End resident community, the non-profit North End Community Renewal Corporation and the Manitoba Food Charter. The purpose of their meetings to raise awareness and to institute some food based programs for the area neighbourhoods. From this, one can fairly assess that there is a need for such programs and more importantly, a growing interest.

Chapter Notes

106 *Roberts, Paul. “The End of Food” New York: Houghton Mifflin Company. 2008, pg. 223.*

Image Credits

Images not credited were produced exclusively by the author, David Bodnarchuk.

(Front cover) "Weeding", 1993: (Alkyd Paint on 8" x 10") by A.J. Paquette. Reprinted, by permission from Mayberry Fine Art.

(pg. ii) "Free Enterprise, McPhillips", 1995: (Alkyd Paint on 12" x 16") by A.J. Paquette. Reprinted, by permission from Mayberry Fine Art.

Fig. 2.01: (pg. 4) "Low Income Households: City of Winnipeg 2001 Census". Courtesy of the City of Winnipeg.

Fig. 2.03: (pg. 6) "Dwellings in Need of Major Repair: City of Winnipeg 2001 Census". Courtesy of the City of Winnipeg.

Fig. 2.05: (pg. 9) "Community Garden at Spirit Park in Winnipeg, Manitoba." Courtesy of Julie Price.

Fig. 2.06: (pg. 10) "Community Garden on Sherbrook Street in Winnipeg, Manitoba." Courtesy of Julie Price.

Fig. 3.01: (pg. 12) "Politics", 1994: (Alkyd Paint on 10" x 8") by A.J. Paquette. Reprinted, by permission from Mayberry Fine Art.

Fig. 4.01: (pg. 21) "Your Victory Garden Counts More Than Ever!" 1945: by Hubert Morley. Image is in the public domain. Publisher: U. S. Government Printing Office, Agency: War Food Administration.

Fig 5.02: (pg. 26) "Circles of Green. Farmington, New Mexico." Photo by Alex S. MacLean. From the book "Taking Measures Across the American Landscape" by James Corner and Alex S. MacLean. Published by Yale University Press; New Haven, CT. 1996. Reprinted, by permission from Yale University Press. Copyright: Alex S. MacLean.

Fig. 6.01: (pg. 29) "New York, New York. Bread line beside the Brooklyn Bridge approach" 1930-1935?: (Black & White film negative on 4" x 5") by unknown photographer. Image is in the public domain. Publisher: Library of Congress, Prints and Photographs Collections. CALL NUMBER: LC-USW33- 035391-C [P&P]

Fig. 6.02: (pg. 30) "Banana Tree. (zoo_02_bg_120306.jpg)" Image is in the public domain. Courtesy of PDPhoto.org

Fig. 8.01: (pg. 40) "Location and Identity of Buildings in Village of Winnipeg, 1872." Image is in the public domain. Reprinted, courtesy of Library and Archives Canada/ Accession 756/55110, Microfiche No. 7188.

Fig. 8.02: (pg. 41) "Bird's Eye View: Winnipeg, 1884." Image is in the public domain. Reprinted, courtesy of Library and Archives Canada/ Credit: W.G. Fonsega, Ottawa Nordimer Co. Lith./ Accession 82302/2548, Microfiche No. 22647.

Fig. 8.03: (pg. 42) "Subway and Alexandra Hotel, Winnipeg, Canada" Image is in the public domain. Reprinted, courtesy of Archives of Manitoba N10924 Winnipeg-Streets-Main d910-13.

Fig. 8.04: (pg. 43) "Dinner Hour, C.P.R. shops, Winnipeg, Manitoba." Image is in the public domain. Reprinted, courtesy of Archives of Manitoba N Winnipeg-Railway Yards-CPR-14.

Fig. 9.01: (pg. 46) "The Farmer's Market", 1994: (Alkyd Paint on 18" x 24") by A.J. Paquette. Reprinted, by permission from Mayberry Fine Art.

Fig. 9.02: (pg. 47) "Scene of 'New Jerusalem' in the North End, Winnipeg" Image is in the public domain. Reprinted, courtesy of Archives of Manitoba N7962 Winnipeg-Streets-Dufferin-2

Fig. 9.03: (pg. 53) "Late Night Shopping, Selkirk Ave.", 1993: (Alkyd Paint on 24" x 36") by A.J. Paquette. Reprinted, by permission from Mayberry Fine Art.

Fig. 10.01: (pg. 57) "Lord Selkirk Park: Aerial Photo". Courtesy of Google. (Educational, Non-Textbook Use)

Fig. 11.02, 11.03: (pg. 61,62) "SPIN Farming". Courtesy of Wally Satzewich. (spinfarming.com)

Fig. 11.04: (pg. 63) Collage Composition by David Bodnarchuk. Based in part on "Pitch in and help. Join the Women's Land Army of the U.S. Crop Corps" 1944: by Hubert Morley. Image is in the public domain. Publisher: U. S. Government Printing Office.

Fig. 13.01: (pg. 76) "Winnipeg's North End: Aerial Photo". Courtesy of Google. (Educational, Non-Textbook Use) Assembled in Collage by David Bodnarchuk.

Fig. 15.04: (pg. 106) "Knox Community Garden". Courtesy of Ralph Nelson, designed by LOOM Studio. Minneapolis, Minnesota.