

ABSTRACT

Title of Thesis: A CELEBRATION OF CULTURAL HERITAGES

Rawle D. Sawh, Master of Architecture, 2007

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The City of Brampton, Ontario is one of Canada's fastest growing and most diverse communities. Today, 40% of Brampton's population is comprised of emigrates from foreign countries. These diverse communities must co-exist if a truly multi-cultural society is to be achieved.

This thesis is "committed to the preservation, development and celebration of the cultural heritages of the diverse ethnic communities of Brampton."¹ 'Carabram,' an annual Multi-Cultural Festival, has long been a Brampton tradition. However, currently Carabram has neither a permanent infrastructure nor a central location for its celebration.

This thesis promotes that there be a unifying place for this celebration of diversity. Visitors will gain a better understanding of cultural differences and learn to appreciate these differences. It is a place where various cultures can co-exist and a place where cultural individualism is encouraged. Its main objective is to create an exhibition arena that celebrates Brampton's diversity.

¹ Carabram, Brampton's Multicultural Festival. <<http://www.carabram.org/index.html>>

A CELEBRATION OF CULTURAL HERITAGES

by

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Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park in partial fulfillment
of the requirements for the degree of
Master of Architecture
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DEDICATION

For my parents & family, I am grateful for their love, support and constant prayers for me. Especially my mother, Dora Sawh, whose faith in her children is second only to her faith in God.

For Rushan M. Grant, I am thankful for her continued love and faith in all of my endeavors.

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Introduction

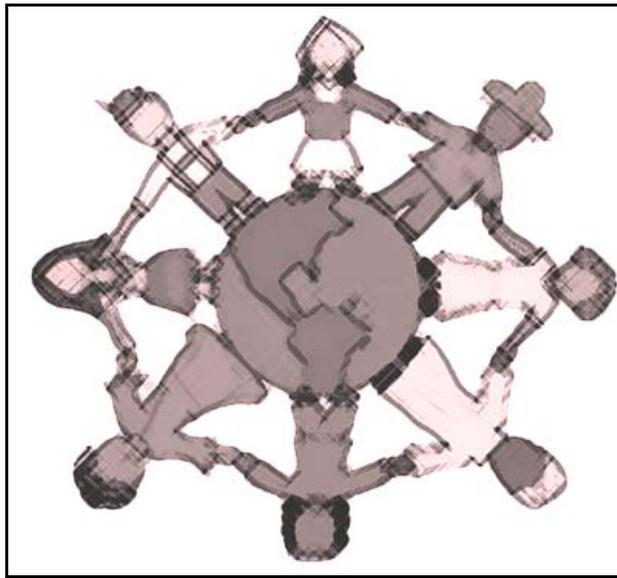


Figure 1 - Embracing Diversity
[<<http://www.sidneycsd.org/scs/LIBRARY/SIELMC/sielmc.html>>]

In the introduction, the foundations of this thesis are established. It describes the importance of diversity and its impact on a site. It posits that diversity is an issue prevalent in many cities, and this thesis is about creating a place for the celebration of diversity.

“Cultures can only realize their further richness by honoring other traditions. And only by respecting natural life can humanity continue to exist.”

- Daisaku Ikeda (Japanese Peace Activist, 1928)



The banner features the Carabram logo on the left, which is a circular emblem with a globe in the center and the text 'CARABRAM' at the top and 'CELEBRATING TOGETHER' at the bottom. To the right of the logo, the text 'Carabram Brampton's Multicultural Festival' is displayed in a stylized font. The background of the banner shows silhouettes of people and a red figure in a dynamic pose.

[<<http://www.carabram.org/index.html>>

Carabram Mission Statement

- to encourage the preservation, development and promotion of the cultural heritages of the diverse ethnic communities of Brampton

Goals

- to provide services, resources, support, mentoring, networking and programs that addresses cultural issues, needs and concerns
- to improve the development of multicultural sensitivity and leadership in Brampton's population as well as other parts of Ontario
- to support community engagement and civic duty
- to serve as an advocate for those on non-Canadian descent
- to move beyond tolerance towards acceptance and nurturance of diversity issues in thought and by deed

Values

- to instill a sense of pride and appreciation for one's culture & heritage
- to instill a sense of pride and appreciation for other cultures & heritages

Figure 2 - Carabram Mission Statement, Brampton, Ontario Canada

Establishing a set of goals & values is essential to the realization of this thesis. Many of these goals and values have been adapted from previously set principles to specifically relate to multiculturalism. The Mission Statement has not been modified and is specific to the Carabram organization.

Diversity is as important today as it was hundreds of years ago. It is the thread that binds humanity. The world functions from the principles of diversity. Successful societies have learned to utilize the principles of diversity within their communities. Cross cultural interaction is a vital part of our understanding of diversity. Creating a place for diversity to exist is an essential step towards acceptance and respect. This thesis proposes a building free of political agendas and social injustices. It proposes a harmonious environment for the celebration of diversity.

Many North American cities have experienced an influx of immigrants from across the world in recent years. As a result, the issue of diversity has catapulted to the forefront of discussion and become a subject that must be addressed throughout Canada and the United States. Cities such as Miami, New York, and Toronto have long established diverse traditions; in comparison cities such as Vancouver and Montreal have only begun to recognize their diversity. According to the United Nations Development Programme (UNPD), Toronto has the second highest percentage of foreign born population among world cities, only after Miami, Florida.² As of 2001, more than 40% of Toronto's population belonged to a visible minority group and by 2017 visible minorities are projected to comprise the majority.³

As a country, Canada has addressed the issue of diversity on many different levels. In 1988, the Canadian government passed the Multiculturalism Act. The Act was the first of its kind to be ratified into law anywhere throughout the world. The Act allowed federal funds to be distributed to ethnic groups to help them preserve their culture. In 1997 after the cities of Etobicoke, Scarborough, North York, York, and

² United Nations Development Programme, 12 October 2006 < <http://www.undp.org/>>

³ Statistics Canada, 22 November 2006 < <http://www.statcan.ca/start.html>>

Toronto merged to form the new city of Toronto, the new Government realized the city was deserving of a new motto. After feedback was received from questionnaires sent to all Toronto residents, a motto that better reflected the diverse ethnic backgrounds of the city was chosen. On October 30, 1998 the new motto, “Diversity Our Strength” was passed into law.

The City of Brampton is located 20 miles northwest of downtown Toronto. While it is not considered a part of the City of Toronto, it lies within the Greater Toronto area. The City of Brampton is not only one of Canada’s fastest growing cities, it is also one of Canada’s most diverse. It has undoubtedly become a diverse city because of its close proximity to Toronto. According to Statistics Canada 2001 census, almost 40% of Brampton residents are foreign-born. This percentage is expected to jump to 50% by 2011. The City of Brampton has also adopted the same set of ideals Toronto has, that is, diversity is something that should be recognized and celebrated.

‘Carabram,’ founded in 1982, is billed as Brampton’s premier multicultural festival. It is an organization “dedicated to the preservation, development and promotion of the cultural heritages of the diverse ethnic communities of Brampton.”⁴ Two things must be present for organizations such as Carabram to be successful. A city must possess a diverse social infrastructure appropriate for fostering multiculturalism, something Brampton undoubtedly does. Second, a city needs the appropriate physical infrastructure for the celebration of diversity to occur. Herein lies the foundation for this thesis. Currently, there is no central location for Carabram’s Multicultural Festival. This thesis proposes a unifying place for the celebration of diversity in Brampton, more importantly Carabram.

⁴ Carabram, Brampton’s Multicultural Festival < <http://www.carabram.org/history.html>>

Organizations such as Carabram are essential for the ideas of multiculturalism to be achieved. Mississauga, a city just west of Toronto, is home to a similar organization named 'Carassauga'. It has not yet seen the success of Carabram because it has been in existence for only a few years. Vancouver, British Columbia is home to the Vancouver Multicultural Society. Since 1974, the Society has organized and implemented community-based, cross-cultural and public education programs. These organizations must have the support of not only various cultures but also the community if they are to be successful. They must respond to the needs of those they are serving and reach out to those in need. If and only then, can a truly multicultural society be achieved.

I. Diversity & its Implications



Figure 3 - Carabram Seal
[<<http://www.carabram.org/index.html>>]

In this chapter, the term diversity is defined. The chapter addresses the views on diversity and multiculturalism and the impact each has on a certain society. It also posits that a particular notion of multiculturalism is more successful than others.

“...to recognize and promote the understanding that multiculturalism reflects the cultural and racial diversity of Canadian society and acknowledges the freedom of all members of Canadian society to preserve, enhance and share their cultural heritage.”

- **Act for the Preservation and Enhancement of Multiculturalism in Canada 1988**

What is Diversity?

Diversity is an important ingredient in life that makes us who we are today.

Cultural diversity is defined as the variety of human cultures in a specific region, or in the world as a whole. Differences in race, ethnicity, language, nationality or religion among various groups within a community or a nation are what make up our diverse cultures. Since the dawn of time civilizations have varied in their cultural values. For centuries they have mixed and adapted each other's philosophies. Each country on earth has contributed to the growth and development of its neighbors.

New York City is often referred to as a 'melting pot' because of its exceptional diversity. The term 'melting pot' refers to the way in which homogeneous societies develop. That is, the ingredients in the pot (people of different cultures) are combined in such a way that they sometimes lose their discrete identities and give way to a final product of uniform consistency and flavor. Herein lies the problem with the 'melting pot' concept. Not enough emphasis is put on how people retain their own cultural identities. Rather, the definition implies people lose their discrete identities and give way to a homogeneous society. This certainly is not the case as many culturally distinct neighborhoods have developed in cities throughout the United States and Canada. For instance, the Richmond Hill section of Queens, NY has a very large West Indian population and in many ways is very unique from the surrounding neighborhoods. The Washington Heights section of Manhattan is also one of these neighborhoods, the only difference being is that it has a predominantly Hispanic population. As former Vice-President Hubert H. Humphrey said, "fortunately, the time has long passed when people liked to regard the United States as some kind of melting pot, taking men and women

from every part of the world and converting them into standardized, homogenized Americans. We are, I think, much more mature and wise today. Just as we welcome a world of diversity, so we glory in an America of diversity, an America all the richer for the many different and distinctive strands of which it is woven.”⁵

Canada is often referred to as a ‘cultural mosaic’ also because of its exceptional diversity. In contrast to the term melting pot, in a cultural mosaic each ingredient (people of different cultures) retains its integrity and flavor, while contributing to a successful final product. The term ‘cultural mosaic’ was first used by Canadian John Murray Gibbon in 1938, a man who clearly disapproved of the melting-pot concept. Gibbon coined the term to describe the ‘patchwork quilt’ of ethnic groups, languages and cultures that co-exist within Canadian society. It is indeed possible for multiculturalism to exist harmoniously. Many Canadians are able to maintain their cultural identity and still be considered “Canadians.” They want you to share and take part in the differences that make them unique.

Multiculturalism was adopted in Canada in 1971, following the Royal Commission on Bilingualism and Biculturalism. The Commission was set up amid countless grievances from Canada’s French-speaking minority. The Royal Commission encouraged the Canadian government to recognize Canada as a bilingual and bicultural society and adopt policies to preserve this policy. Biculturalism received an enormous amount of criticism from Canadians of neither English nor French descent, because it did not address other cultural minorities. In response to the criticism, the policy was changed from ‘bilingualism and biculturalism’ to ‘bilingualism and multiculturalism.’

⁵ Hubert H. Humphrey, former U.S. Vice-President from 1965-1968

Former Canadian Prime Minister, Pierre Trudeau, first announced plans for an official Multiculturalism Policy in 1981. However, it wasn't until 1988 that the Act for the Preservation and Enhancement of Multiculturalism in Canada was passed. It began the process of distributing federal funds to ethnic groups to help them preserve their cultures. Funds were typically distributed for ethnic-oriented programs and the construction of ethnic-oriented community centers. The Multiculturalism Act, in many ways, is viewed as a way of strengthening national identity by binding citizens to a single moral community.

According to Diane Ravitch, former United States Assistant Secretary of Education both the 'melting pot' concept and Canada's cultural mosaic can be described as multicultural. She goes on to differentiate between them as being pluralistic and particularistic multiculturalism. "Pluralistic multiculturalism views each culture or subculture in a society as contributing unique and valuable cultural aspects to the whole culture. Particularistic multiculturalism deals with preserving the differences between discrete cultures."⁶

The beauty of Canadian society lies within its people. A vast melange of cultures and people joined together in harmony, unity and respect. To have true diversity one must be able to share his/her cultural heritage with others and have those beliefs respected, not annihilated.

⁶ Diane Ravitch, former United States Assistant Secretary of Education

Canada's Official Multiculturalism Act of 1988	
Objectives	Is it important to this thesis?
a) recognize and promote the understanding that multiculturalism reflects the cultural and racial diversity of Canadian society and acknowledge the freedom of all members of Canadian society to preserve, enhance and share their cultural heritage	Yes <i>Everyone has the right to preserve, enhance and share his/her cultural heritage</i>
b) recognize and promote the understanding that multiculturalism is a fundamental characteristic of the Canadian heritage and identity and that it provides an invaluable resource in the shaping of Canada's future	Depends <i>Not only a resource for the shaping of Canada's future but for everyone's future</i>
c) promote the full and equitable participation of individuals and communities of all origins in the continuing evolution and shaping of all aspects of Canadian society and assist them in the elimination of any barrier to such participation	Yes <i>This thesis attempts to eliminate any such barriers in society.</i>
d) recognize the existence of communities whose members share a common origin and their historic contribution to Canadian society and enhance their development	Yes, definitely <i>Approximately 40% of Brampton's population is comprised of emigrates.</i>
e) ensure that all individuals receive equal treatment and equal protection under the law, while respecting and valuing their diversity	Yes <i>Respect is a key element in the success of multiculturalism</i>
f) encourage and assist the social, cultural, economic and political institutions of Canada to be respectful and inclusive of Canada's multicultural character	Yes, definitely <i>This thesis serves to reach out to Brampton's multicultural character.</i>
g) promote the understanding and creativity that arise from the interaction between individuals and communities of different origins	Yes, definitely <i>This thesis is developed on the basis that interaction must occur.</i>
h) foster the recognition and appreciation of the diverse cultures of Canadian society and promote the reflection and the evolving expressions of those cultures	Yes <i>In essence, a caravan of cultures.</i>
i) preserve and enhance the use of languages other than English and French, while strengthening the status and use of the official languages of Canada	No
j) advance multiculturalism throughout Canada in harmony with the national commitment to the official languages of Canada	No

Figure 4 - Canadian Multiculturalism Act of 1988

[Canadian Multiculturalism Act. R.S. c. 24. 4th Supp. 1985.]

Ten objectives were set forth by the Canadian government in the Multiculturalism Act of 1988. This figure asserts those that are important and why they are important to the development of this thesis.

What is ‘Carabram’?

With its roots dating back to 1982, ‘Carabram’ is Brampton’s Multi-Cultural Festival. It is a non-profit organization “dedicated to the preservation, development and promotion of the cultural heritages of the diverse ethnic communities of Brampton.”⁷ It is known throughout Canada as the premier Multi-Cultural Festival. The festival draws upwards of 40,000 visitors each year some as far away as England, Germany and Scotland.

Participating Countries (Past & Present)			
Africa - Egypt - Ghana - Nigeria	Americas - Canada - Chile - Mexico - West Indies Bahamas Barbados Guyana Jamaica Trinidad/ Tobago	Asia - China - India - Israel - Pakistan - Phillipines	Europe - Croatia - England - Germany - Greece - Holland - Ireland - Italy - Macedonia - Poland - Portugal - Romania - Scotland - Ukraine

Figure 5 - List of Countries, Carabram, Brampton, Ontario, Canada

Italy, Ukraine, Scotland and the West Indies were the four original participants in 1982. Since then, the festival has increased in popularity and has drawn as many as twenty different ethnic groups. Each ethnic group hosts a pavilion representing its culture and heritage through song, dance, costume, and food.

Currently there is no central location for this celebration. Rather, visitors are bused from one pavilion to another. Pavilions are set-up throughout the city of Brampton, the two furthest being 8.25 miles apart. This thesis promotes a unifying place for the celebration of diversity, more importantly ‘Carabram.’ The proposed design programmatically consists of three main functions. The performance area serves as an exhibition arena that can accommodate various performances. The gallery component

⁷ Carabram, Brampton’s Multicultural Festival. <<http://www.carabram.org/index.html>>

displays the fine arts and evolution of each culture. The outdoor space serves as a multi-functional gathering space for Carabram's marquee Multi-Cultural Festival and markets.



Figure 6 - Shoemaking at the Dutch Pavilion
[<http://www.carabram.org/holland_photos.html>]



Figure 7 - Traditional dance at Filipino Pavilion
[<<http://www.carabram.org/279.html>>]



Figure 8 - Caribbean Steel Band Performance
[<<http://creative.gettyimages.com/source/home/homeCreative.aspx>>]



Figure 9 - Traditional Indian Dance
[<<http://www.kalanidhifinearts.org/files/vision.htm>>]



Figure 10 - Chinese New Year Dragon Dance
[<<http://www.clearwisdom.net/emh/articles/2004/7/27/50724p.html>>]



Figure 11 – Man & Woman playing Swiss Alphorn
[<<http://mobius.cs.uiuc.edu/rhk/pics/switzerland/castle>>]

II. The Program’s Role in Fostering Multiculturalism

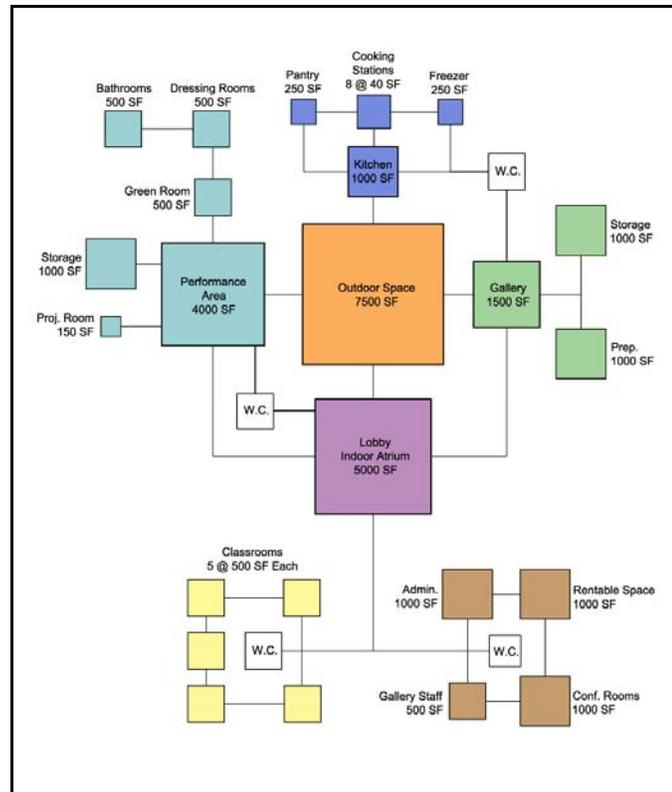


Figure 12 – Preliminary Program Analysis

In this chapter, the functional requirements of this thesis are discussed. It addresses issues relating to public and private functions, space requirements, adjacency requirements.

“As the soil, however rich it may be, cannot be productive without cultivation, so the mind without culture can never produce good fruit.”

- Seneca (Roman Philosopher, 1st Century A.D.)

Description – What’s Needed ? Why ?

Carabram is a non-profit organization that sponsors an annual Multicultural Festival. Because the festival is Carabram’s only yearly event, this thesis proposes turning Carabram into a year-round organization that sponsors events/programs throughout the year. Not only does this thesis serve as a Multicultural Center but it also serves as a means/method of reaching out to the rest of the community. Programs/events include a lecture series, a dialogue series, leadership retreats, youth groups, movie nights, classrooms for ESOL (English for Speakers of Other Languages), translation services, advocate services, adult services, ethnic cooking classes, job opportunities, fundraisers and community development.

These programs take place throughout the year. The Multicultural Festival will still serve as Carabram’s marquee event, however the festival will now last an entire week as opposed to its present format of only one weekend.

This thesis proposes Carabram have the appropriate infrastructure in the form of a permanent structure housing Carabram and its programs/events. A major component to be designed is an outdoor space for its annual Multicultural Festival. This outdoor space is where a weekly/daily market can be accommodated. Directly adjacent to this outdoor space is an indoor space capable of accommodating a large number of visitors for performances such as a Caribbean steel-band performance, a traditional Indian dance or a performance of an Italian opera. This indoor space also serves as spill-out space in the event that the outdoor space cannot be used due to inclement weather.

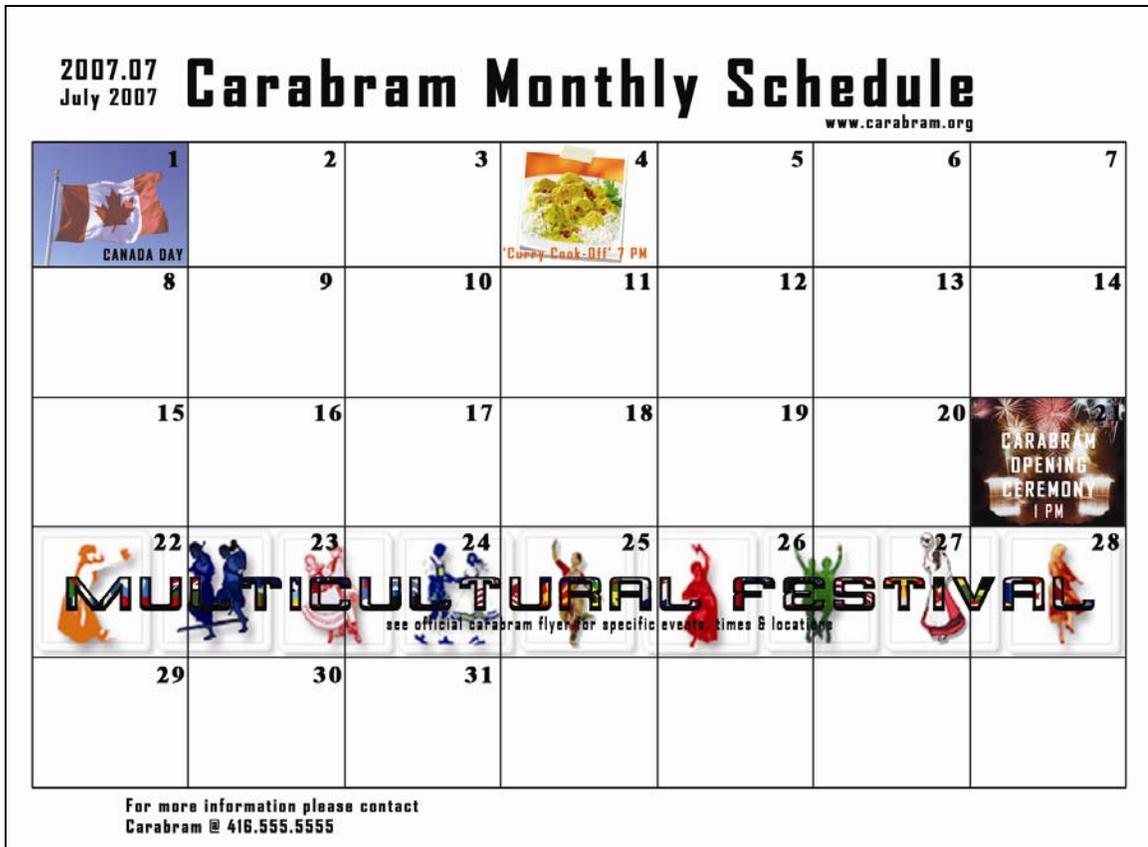


Figure 13 - Sample Monthly Calendar

Programs/events other than Carabrams’s Multicultural Festival must take place throughout the year in order for this building to be successful. Events include a lecture series, movie nights, ethnic cooking classes and Carabram BINGO. In addition, Carabram will serve host to numerous cultural holiday celebrations throughout the year including Canada Day, Chinese New Year and various other festivities.

A museum/gallery is to be a part of Carabram’s new facilities. Permanent exhibits include the history/evolution of various cultures while the rotating exhibits include works of various ethnic artists, architects, and sculptors.

Program Description

Public Functions

Performance Area

4000 s.f. [370 s.m.]

The performance area is flexible enough to accommodate various types of performances ranging from music to theatrical plays. In many ways, the performance area is similar to a Black Box Theater in that none of the equipment is fixed. This space can also be used in conjunction with the Multi-Cultural Festival's numerous events. Performances have a capacity of approximately 500 spectators. Various support spaces include dressing rooms, a green room, a projection room, bathrooms and storage. The performance area must also have a large scale access door for loading large scale equipment and/or props in and out of the theater. The performance area should be located adjacent to the loading/receiving area.

Gallery

1500 s.f. [140 s.m.]

Numerous cultures are represented in the gallery, no matter how small their population. Both permanent and temporary exhibitions are on display in the gallery. Permanent exhibitions include the history/evolution of various cultures while temporary exhibitions include, but are not limited to, works of various ethnic architects, artists, sculptors, etc. Various types of work can be accommodated ranging from sculptural pieces to those that need to be displayed in cases. The gallery is also climate and humidity controlled so as not to damage the work. Concerns about the security of artwork are not taken lightly. Closed

circuit televisions, motion sensors and pressure sensors all monitor the gallery 24 hours a day.

Classrooms (4-5)

500 s.f. each [45 s.m.]

Classrooms are an important part of Carabram's facility. Because this is a Multi-Cultural Center, translation services and ESOL (English for Speakers of Other Languages) classes are offered after school for students and in the evenings for working adults. In addition to this, many of the adult program services take place within the classrooms. These services are to be utilized by the entire community. Settlement workers are given the responsibility of helping new families to the country adjust to their new settings. They are responsible for assisting families with everything from learning English to recommending places to shop/eat. It is anticipated that many of the day-to-day interactions between the families and their settlement workers take place in the classrooms.

Indoor Atrium Space

5000 s.f. [465 s.m.]

A large indoor atrium space serves as the lobby for Carabram's facility as well as the performance area. This space can be rented out for banquets and/or wedding receptions or it can also be used as a gathering space during inclement weather when the outdoor space cannot be utilized. Support spaces include an information desk, a staging room and restrooms.

Outdoor Space

7500 s.f. [695 s.m.]

The outdoor space is primarily used as a daily/weekly market space during the summer months. At the market, patrons can purchase fruits and vegetables from all over the world. A system of pavilions accommodates the numerous stalls that

are needed. The outdoor space can also be used as the main gathering space for Carabram's marquee Multi-Cultural Festival with a capacity to accommodate a large crowd of people. The indoor atrium space is located directly adjacent to the outdoor space in case of inclement weather. During the winter months, the outdoor space will be transformed into a skating rink similar to the transformation that Gage Park undergoes.

Private Functions

Administrative Offices

2350 s.f. [220 s.m.]

This thesis proposes turning Carabram into a year-round facility. As a result, Carabram requires a full-time staff with its own offices. Offices are designated for the President, 1st & 2nd Vice-President, Secretary, Treasurer, Directors (3), Cultural Coordinators and the administrative staff. A break room, kitchen and bathrooms are all incorporated within the administrative suite.

Rentable Administrative Space

2500 s.f [230 s.m.]

It is written in Carabram's by-laws that only non-profit organizations are allowed to operate pavilions during its Multi-Cultural Festival. Because many of these organizations are run from personal residences, there is an overall lack of adequate administrative space. Administrative suites for rent are incorporated into this facility. It is possible that all of the non-profit organization affiliated with Carabram can be accommodated in this space. It is also possible that a significant portion of administrative space will be a part of Carabram's facility to serve as office space for non-affiliated organizations and to help defer the cost of construction.

Gallery Staff**800 s.f. [75 s.m.]**

The gallery is on display throughout the year, as such a permanent staff is required. Staff offices are located adjacent to the gallery or the administrative suite. Offices are designated for the Curator, Director and administrative staff.

Conference Rooms (4-5)**500 s.f. each [45 s.m. each]**

The conference rooms serve as support spaces for the Carabram staff, the gallery staff and non-profit organizations. Non-profit organizations are able to utilize the conference rooms to hold their weekly/monthly meetings. The conference rooms are best located adjacent to the administrative suites. Each room has video-conferencing capabilities and equipment to play/present various types of media.

Kitchen Complex**1000 s.f. [95 s.m.]**

The kitchen for Carabram's facility is comparable in both size/quality to a food services kitchen. It is capable of accommodating the heavy strain required of it during such celebrations as Carabram's marquee Multi-Cultural Festival and weddings/banquets.

Cooking Stations**50 s.f. each [5 s.m. each]**

One of the programs that Carabram offers throughout the year is ethnic cooking classes. 8-10 cooking stations, each with its own sink, stove and oven, are provided. A larger cooking station for the instructor serves as the instructional area as well as the presentation area for the food. The cooking stations are located directly adjacent to the larger kitchen facility and can be used as overflow space in the event the kitchen cannot accommodate certain events.

Food Storage/Pantry **250 s.f. [25 s.m.]**

Generous food storage is provided directly adjacent to or in the kitchen to accommodate the large volume of food that the kitchen requires. Food storage and pantry space is divided between both the kitchen and cooking stations. A large pantry is dedicated solely for the storage of food obtained for the food bank.

Walk-In Freezer **250 s.f. [25 s.m.]**

A large walk-in freezer provides the kitchen with enough storage space to accommodate the large volume of frozen food the various users require.

The walk-in freezer is located directly adjacent to the kitchen.

Projection Room **150 s.f. [15 s.m.]**

The projection room includes equipment to play/present various types of media ranging from Blu-ray discs to DVD's, PowerPoint presentations and 3D programs. All of the audio, video and lighting equipment for the performance area are located within the projection room. The projection room is located directly adjacent to the performance area.

A/V Room **750 s.f. [70 s.m.]**

The A/V Room is utilized mainly for movies and small lectures with a capacity of 150 people. Similar to small lecture halls, this space has special lighting features to facilitate presentations and equipment to play/present various types of media among other things.

Exhibit Storage **1000 s.f. [95 s.m.]**

A storage space is necessary to accommodate pieces of work when they are not being exhibited in the gallery. This space is large enough to store various shapes and sizes of exhibits. Similar to the gallery, this space is climate and humidity controlled because of the nature of some pieces of work. Exhibit storage is located adjacent to the gallery.

Exhibit Prep Room/Wood Shop **1000 s.f. [95 s.m.]**

This space serves as the handling room before and after the pieces of work are on exhibit. It also serves as the staging area for exhibits that are in-transit. A wood shop is also provided to prepare exhibits for display and shipping. The exhibit prep room is also located adjacent to the gallery.

Dressing Rooms **250 s.f. each [25 s.m.]**

Dressing rooms are essential to any performance space. Two dressing rooms are located directly adjacent to the performance area, one male, one female. Each is capable of accommodating up to 25 persons. The dressings rooms also include bathrooms, lockers, a wet bar and costume storage.

Green Room **250 s.f. [25 s.m.]**

The green room is also an essential part of any performance area. It is generally located adjacent to the performance area. It is where cast members patiently await their cues to the stage. The green room is also available for visits with audience members after the end of the show. The primary stage door to the performance area is at the back of the green room.

Misc. Functions

Loading **1000 s.f. [95 s.m.]**

The loading/receiving area is located adjacent to both the exhibit prep room and the performance area to accommodate large deliveries/shipments.

Circulation (20% of GSF) 7270 s.f. [675 s.m.]

Mechanical (15% of GSF) 5450 s.f. [505 s.m.]

Underground/Parking Facility 350 spaces

A parking structure accommodates the large number of visitors to Carabram's facility. Also, an appropriate number of parking spaces are necessary to accommodate Carabram's full-time staff and those with disabilities.

Program Sizes

Function	Capacity	Total Area [s.m.]	Total Area [s.m.]
Public			
Performance Area	500	3,000	280
Multi-Use			
Gallery	200	1,500	140
Permanent Exhibits			
Temporary Exhibits			
Classrooms (4-5)	30 Each	2,500	230
ESOL Classes			
Translation Services			
Indoor Atrium Space	500	5,000	465
Lobby			
Weddings/ Banquets			
Outdoor Green/Market Space	1,000	7,500	695
Festival Space			
Market Space			
A/V Room	150	750	70
Bathrooms (M/F)	25 Each	500	45
Miscellaneous			
Circulation (20%)	N/A	4,350	405
Mechanical (15%)	N/A	3,260	305
Loading	N/A	1,000	95
Underground/Parking Facility	350 Spaces		
Sub-Total Public Functions		29,360	2,730

Figure 14 - Public Functions Square Footages, Brampton, Ontario, Canada

Function		Capacity	Total Area [s.m.]	Total Area [s.m.]
Administrative Private				
	President	1	250	25
	1 st & 2 nd Vice President	1	400	35
	Secretary	1	100	10
	Treasurer	1	100	10
	Directors (3)	1	600	60
	1 Coordinator/Culture	1	500	45
	Administrative Staff	5	250	25
	Kitchen	5	150	15
	Break Room	10	250	25
	Staff Bathrooms	5	150	15
Gallery Offices				
	Curator	1	250	25
	Director	1	250	25
	Administrative Staff	3	200	20
	Staff Bathrooms	5	100	10
	Rentable Administrative Suite	50	2,500	230
	Conference Rooms (4-5)	25	2,500	230
Back of House Private				
	Kitchen	75	1,000	95
	Cooking Stations (6-8)	2 Each	400	35
	Food Storage/Pantry	N/A	250	25
	Walk-In Freezer	N/A	250	25
	Projection Room	2	150	15
	Exhibit Storage	N/A	1,000	95
	Exhibit Prep Room/Wood Shop	N/A	1,000	95
	Dressing Rooms (M/F)	25 Each	500	45
	Bathrooms (M/F)	25 Each	500	45
Miscellaneous				
	Circulation (20%)	N/A	2,920	270
	Mechanical (15%)	N/A	2,190	205
	Loading	N/A	1,000	95
	Private Parking	15 Spaces	N/A	N/A
Sub-Total Private Functions			19,710	1,850
Total		N/A	49,070	4,580

Figure 15 - Private Functions Square Footages, Brampton, Ontario, Canada

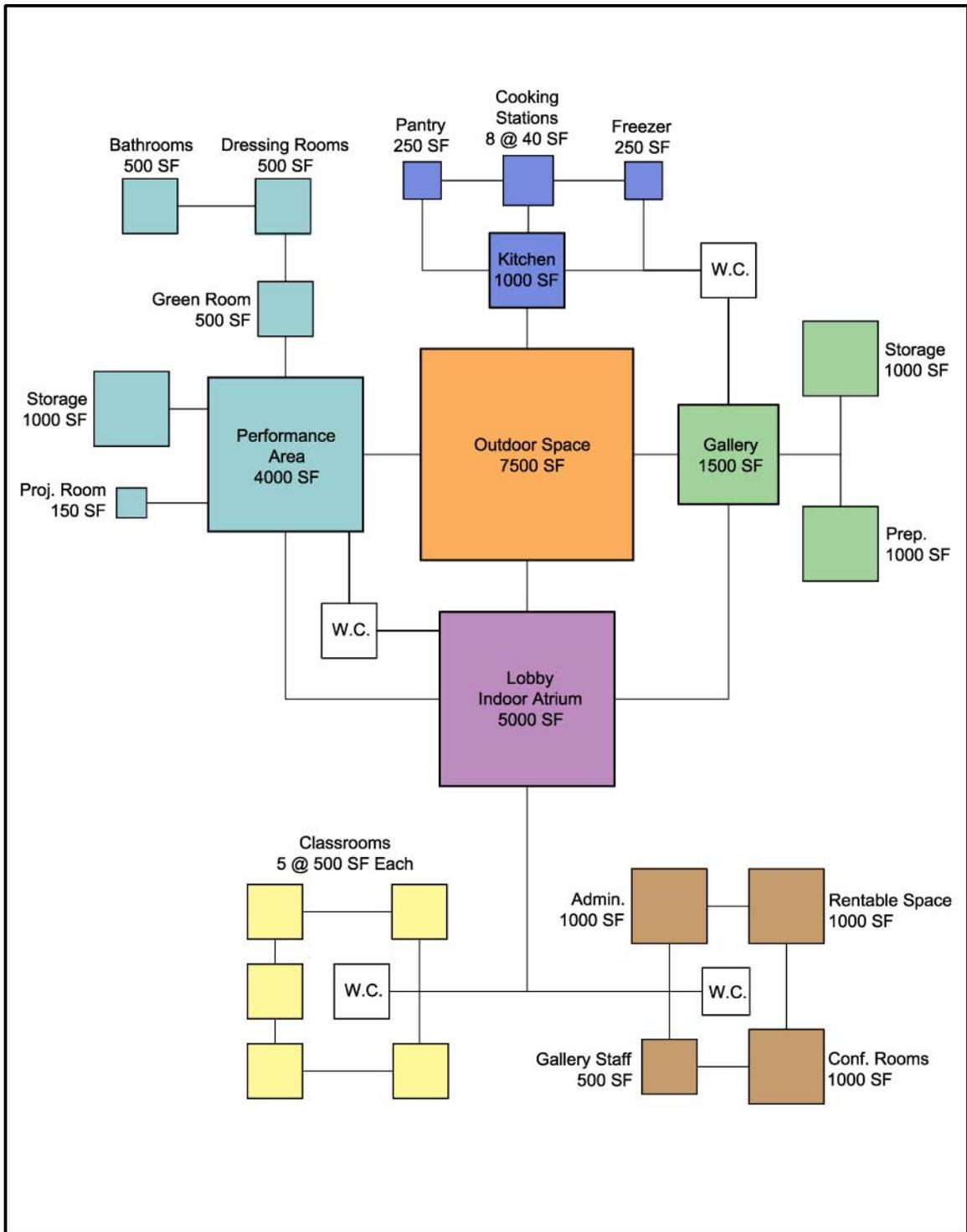


Figure 16 - Size Relationships, Brampton, Ontario, Canada

This diagram shows the size and adjacency relationships between the main spaces of Carabram's new facility. The lobby/indoor atrium space serves as the center of Carabram's facility. As such, many of the main spaces are directly accessible from this space. In addition to the lobby/indoor atrium space, the outdoor space serves as the venue for Carabram's Annual Multicultural Festival. The outdoor space can also be used as a daily/weekly market where patrons can purchase fresh fruits & vegetables.

Many of the functions of this thesis have dual uses. The gallery is used both to exhibit the fine arts and evolution of each culture as well as a gathering space. The classrooms, offices, etc. are used both to run the everyday functions of Carabram as well as serving as pavilions for each cultural sub-set. The duality of each space is articulated in the permanent or ephemeral nature of its architecture.

III. The Role of Site in a Multicultural Society



Figure 17 - Intersection of Queen Street & Main Street, 1920
[Loverseed, Brampton: An Illustrated History]

In this chapter, an appropriate site for Carabram's Multicultural Center is chosen based on a pre-established set of criteria. The chapter provides a brief history of the development of the site over time. Also, site analysis and site documentation are provided.

“Diversity may be the hardest thing for a society to live with, and perhaps the most dangerous thing for a society to be without.”

- William Sloane Coffin Jr. (American Activist)

Many different issues were considered in selecting a site for the development of this thesis. These criteria were then evaluated based on possible sites within the Greater Toronto Area. Eventually, the City of Brampton was chosen as the location for this thesis because it fulfilled all of the criteria set forth.

Site Selection Criteria		
	Criteria	How does it relate to this thesis?
X	a) must be within close proximity of a large metropolitan area	Brampton is part of the Greater Toronto Area and is located approximately 25 miles northwest of downtown Toronto.
X	b) must have a diverse population (at least 30 %)	As of 2001, 40% of Brampton's population were foreign-born immigrants. It is estimated that by 2011, that number will increase to 45%.
X	c) must have various ethnic backgrounds/cultures	Over 25 different ethnic backgrounds/cultures live in Brampton.
X	d) must have an existing organization dedicated to the celebration of diversity or exhibit need for such an organization	Carabram was founded in 1982 and is Canada's Premier Multicultural Festival.
X	e) must have some sort of support from government (e.g. Multiculturalism Act, government finances, etc.)	Canada passed the Multiculturalism Act in 1988 which allocates funding for ethnic-oriented programs.
X	f) show indications of re-development within city	Brampton recently passed a re-development plan for Downtown Brampton. It extends from Main St. to Kennedy Rd.
X	g) centrally located within larger city	The intersection of Queen Street and Highway 410 is centrally located within Brampton.

Figure 18 - Site Selection Criteria, Brampton, Ontario, Canada

Seven criteria were set forth as guidelines for the selection of a site. This figure asserts the importance of those criteria as it relates to the selection of Brampton, Ontario, Canada.

General Overview

Named after a rural village outside Cambridge, England, Brampton is a city in the Greater Toronto Area of Ontario and is the center of the Peel region. It is located 25 miles northwest of downtown Toronto and one of Canada's fastest growing cities.

Brampton was once known as the Flowertown of Canada, a title it earned as a result of the city's large greenhouse industry.

Brampton is one of the largest urban centers in Canada with a population of 405,000. It is estimated that by 2030, the population will grow to over 700,000.⁸ Not only is Brampton one of Canada's fastest growing cities, it is also one of Canada's most diverse. As of 2001, 40% of Brampton's residents had emigrated from foreign countries.

Name	Type	Total population	Canadian-born population	Foreign-born population	Immigrated before 1991	Immigrated between 1991 and 2001
Canada		100.0%	80.9%	18.4%	12.2%	6.2%
Brampton (Ont.)	C	100.0%	59.6%	39.9%	26.3%	13.5%
Brandon (Man.)	C	100.0%	94.5%	5.3%	4.3%	1.0%
Brant (Ont.)	C	100.0%	89.8%	9.9%	8.9%	1.0%
Brantford (Ont.)	C	100.0%	85.3%	14.2%	11.8%	2.5%
Brazeau No. 77 (Alta.)	MD	100.0%	96.3%	3.6%	2.8%	0.7%
Bridgewater (N.S.)	T	100.0%	95.3%	4.7%	4.0%	0.7%
Brighton (Ont.)	T	100.0%	89.2%	10.9%	10.5%	0.4%
Brock (Ont.)	TP	100.0%	91.8%	8.2%	7.7%	0.5%
Brockton (Ont.)	TP	100.0%	94.3%	5.6%	5.4%	0.2%
Brockville (Ont.)	C	100.0%	90.4%	9.4%	7.7%	1.8%
Bromptonville (Que.)	V	100.0%	98.7%	1.3%	0.8%	0.5%

Figure 19 - Brampton Immigrant Population Status (by %)
[Statistics Canada – Census 2001]

As of 2001, approximately 40% of Brampton's population was foreign born. This percentage has increased to almost 45% in recent years.

These diverse communities must co-exist if a truly multicultural society is to be achieved. This thesis attempts to achieve a multicultural society by creating a multicultural center within a diverse framework. The City of Brampton shows exemplary signs of diversity that is vital to the success of this thesis.

⁸ <http://en.wikipedia.org/wiki/Brampton,_Ontario>



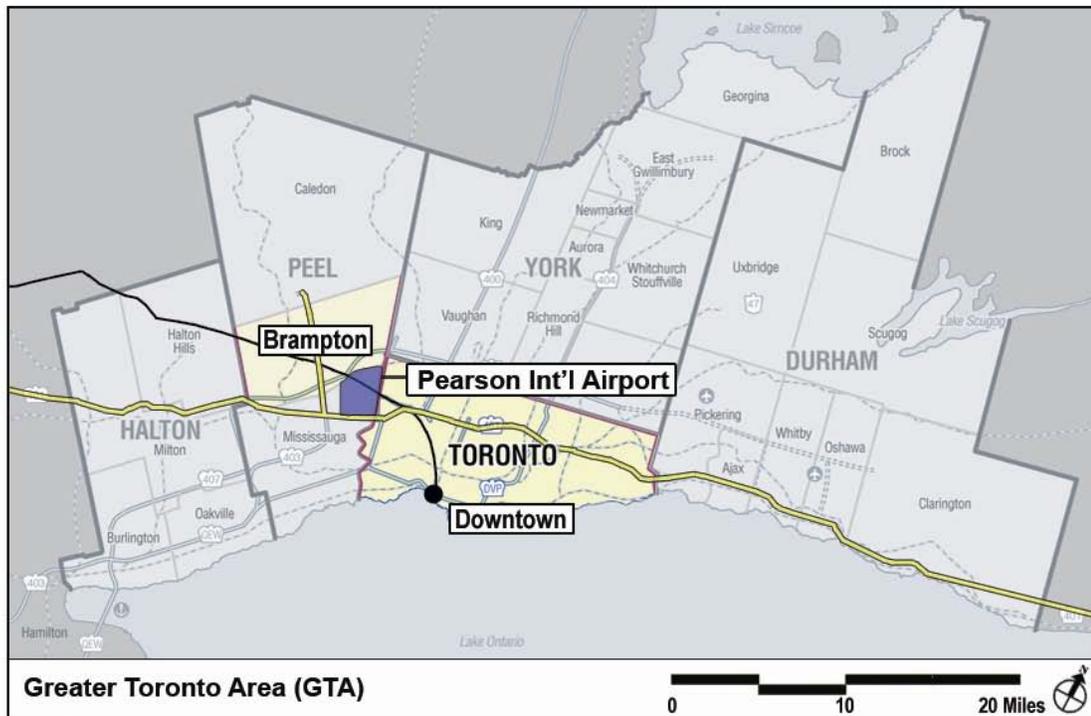
[<http://www.brockfrench.com/push/2006/04/the_greater_toronto_area.html>]



[<<http://www.thesuperguide.com/>>]

View of Toronto skyline at dusk.

View of Pearson International Airport looking south towards Downtown Toronto.



The MacDonal-Cartier Freeway (Highway 401), one of Canada's most important highways, and Pearson International Airport are located just south of Brampton. Both of these serve as the transportation backbone for the entire Greater Toronto Area.

Figure 20 - Greater Toronto Area, Ontario, Canada

Brampton, Ontario is located approximately 20 miles northwest of Downtown Toronto. It lies within the Region of Peel, which along with the Regions of Halton, York & Durham make up the Greater Toronto Area.

History of Brampton

The first settlers began arriving in Ontario in 1780. However, the region now known as Brampton was still wilderness during the early 1800's. By 1818, settlers began arriving in Brampton and tracts of land were slowly cleared for cabins and farmland. By 1820, the historical heart of the city was established at the intersection of Queen Street and Main Street. Today, this intersection is known as 'Four Corners.'

In the early 1820's, an Englishman by the name of John Elliott settled in the region. He had the village renamed to Brampton in honor of his English home, Brampton, Cumberland, England. By 1846, the village had two stores, a tavern and a tannery; at this point the population had reached 150 people. In 1853, Brampton was officially incorporated as a village with a population of approximately 500. The local economy was expanding and the population was growing.

In 1856, the Grand Trunk Railway Station was constructed and its arrival triggered an economic boom. Sizeable plots of land were surveyed and later subdivided to build houses for many new residents. After years of continuous growth, Brampton was incorporated as a town in 1873. Andrew Carnegie, one of America's most influential businessmen, opened up a library in 1910 after the population had reached 4,000.

After World War II, the automobile slowly began to transform the city. Subdivisions began developing throughout the entire GTA not just in Brampton. In 1960, neighboring Bramalea was created as a planned community designed to accommodate 50,000 people. The population skyrocketed to almost 90,000 after Bramalea and Brampton were merged in 1972. In 1974, the Region of Peel was created which led to Brampton becoming a city.



Figure 21 - Intersection of Queen Street & Main Street, 1920
 [Loverseed, Brampton: An Illustrated History]

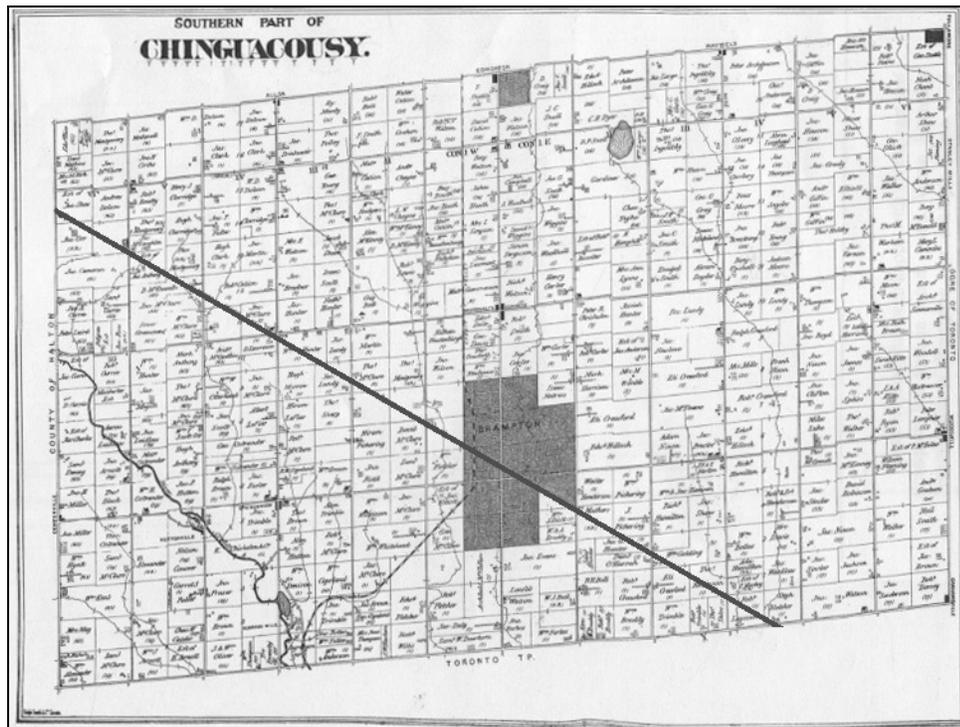


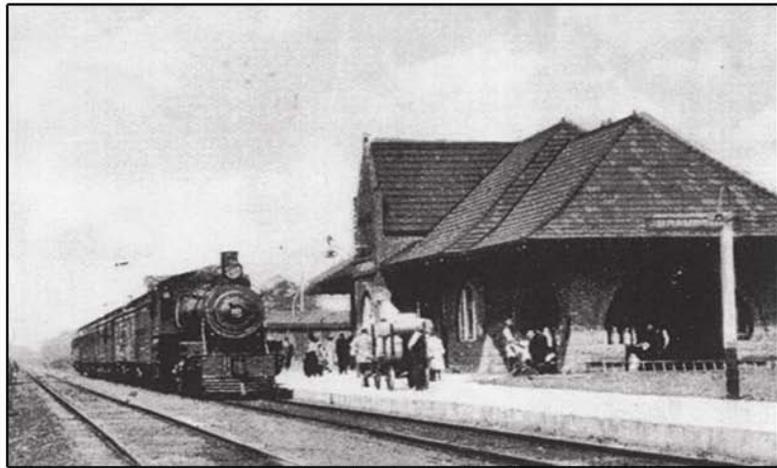
Figure 22 - Village of Brampton & surrounding farmland, 1873
 [Loverseed, Brampton: An Illustrated History]

Brampton was founded at the intersection of Queen Street & Main Street. Notice how the commercial district is centered on this intersection. The Grand Trunk Railway line also passes directly through the center of Brampton.



Historical Core of Brampton showing the Grand Trunk Railway Line & Station.

Constructed in 1856, the Grand Trunk Railway Station triggered an economic and population boom. The station is seen here during the 1920's.



[Loverseed, Brampton: An Illustrated History]

1920

The Grand Trunk Railway Station still exists today and is used by the GO Train & VIA Train. Both trains offer daily service to much of the GTA.



[Photographer: Rawle D. Sawh]

2006

Figure 23 - Grand Trunk Railway Station, Brampton, Ontario, Canada

The introduction of railroad lines into many North American cities triggered enormous economic and population booms. The City of Brampton was no different. When the railroad was built in 1856, Brampton had a population of approximately 500 people. This number expanded to approximately 3,500 people by 1900.

Queen Street Corridor

Queen Street is one of Brampton's main streets. It runs East-West through the entire city. It stretches from an industrial region adjacent to Pearson International Airport in the East, through Brampton, to farmland in the West. Queen Street, west of Highway 410, is very typical of a suburban strip mall. Buildings are placed in the middle of the blocks and surrounded by parking on at least three sides. Further west, Queen Street leads to the historic core of Brampton. In the historic core, the building fabric is very consistent and the buildings hold the street edge well.

Three sites, each along Queen Street, were considered for the placement of Carabram's Multicultural Center. The first site considered is just east of Highway 410. This parcel of land is currently a strip mall surrounded by surface parking lots. By placing Carabram's new facility on this parcel of land it can serve as a gateway into the commercial core of Brampton. It has the opportunity to be seen by visitors traveling west on Queen Street. Despite this opportunity, the site is very disconnected from the surrounding neighborhoods except by vehicular traffic.

The second site considered is located at the intersection of Queen Street and Main Street, the historic center of the city. This district of Brampton is characterized by a very tightly knit building fabric and buildings that provide a continuous edge. There is currently a proposal for the redevelopment of this area that includes restoring/renovating much of the existing infrastructure. However, because of the tightly knit building fabric, existing building conditions, and new construction there are no available sites for Carabram's new facility.

The third site considered is located between Highway 410 and Kennedy Road. This area currently serves as the commercial core of Brampton. It is very typical of suburban strip malls in that buildings are placed in the middle of blocks and there is an abundance of surface parking. The existing commercial core has the opportunity to become a well designed suburban street, similar to parts of Rockville Pike, by separating vehicular and pedestrian traffic and increasing the density. By placing Carabram's new facility on this site, it can re-center the City of Brampton around the newly planned commercial core.

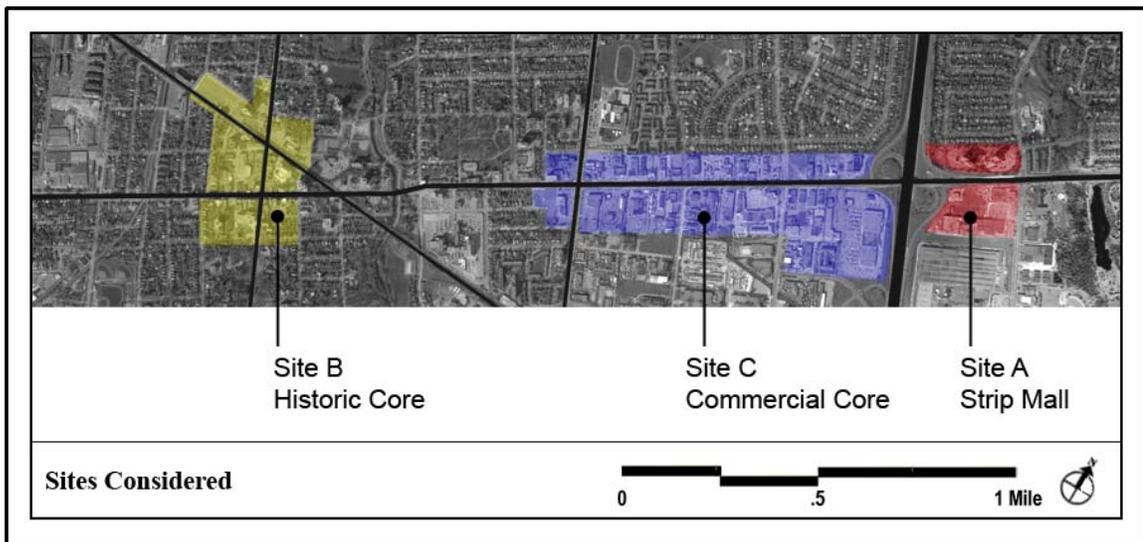


Figure 24 - Sites Considered along Queen Street Corridor, Brampton, Ontario, Canada

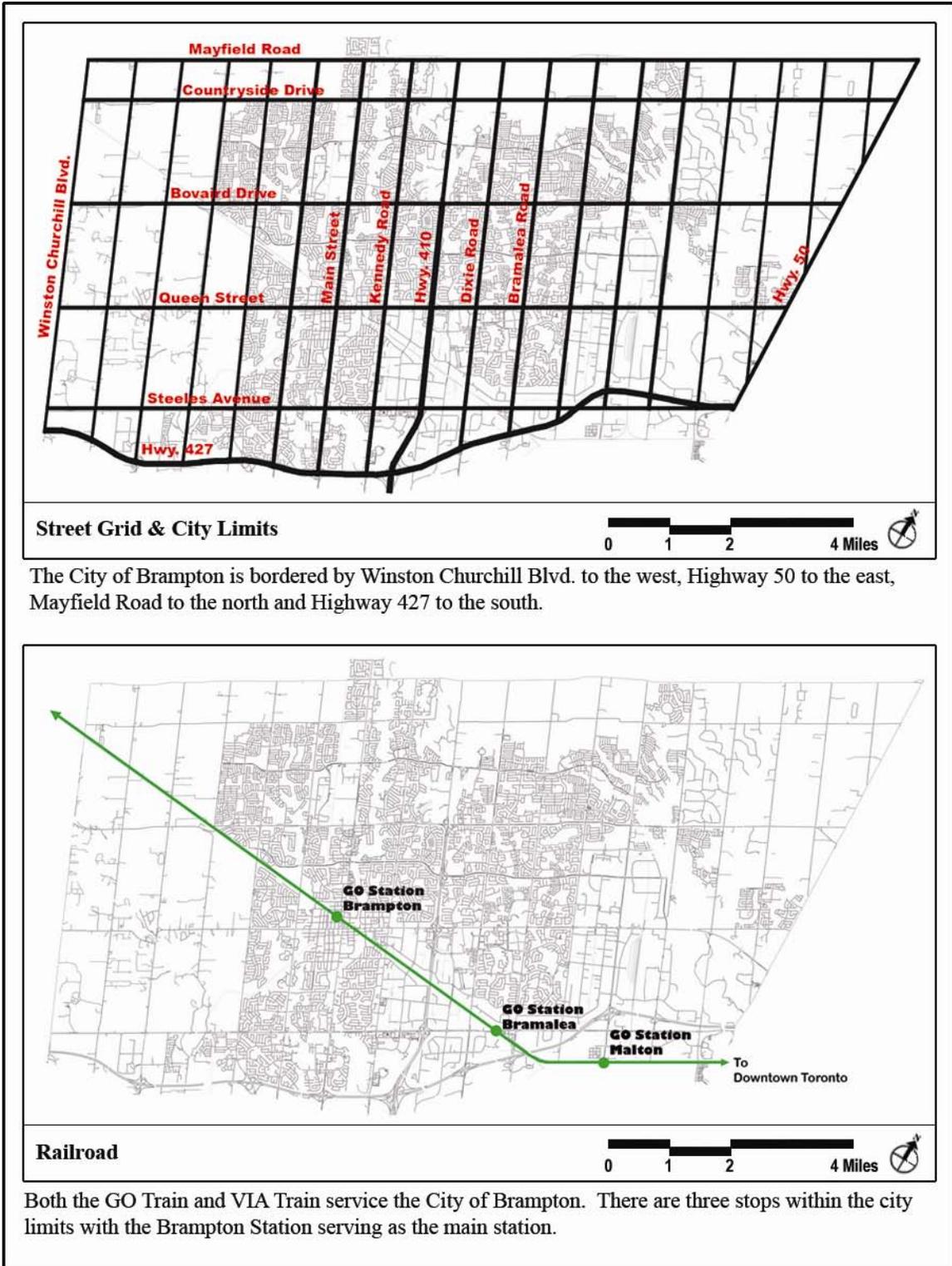


Figure 25 - Street Grid & Railroad Line, Brampton, Ontario, Canada

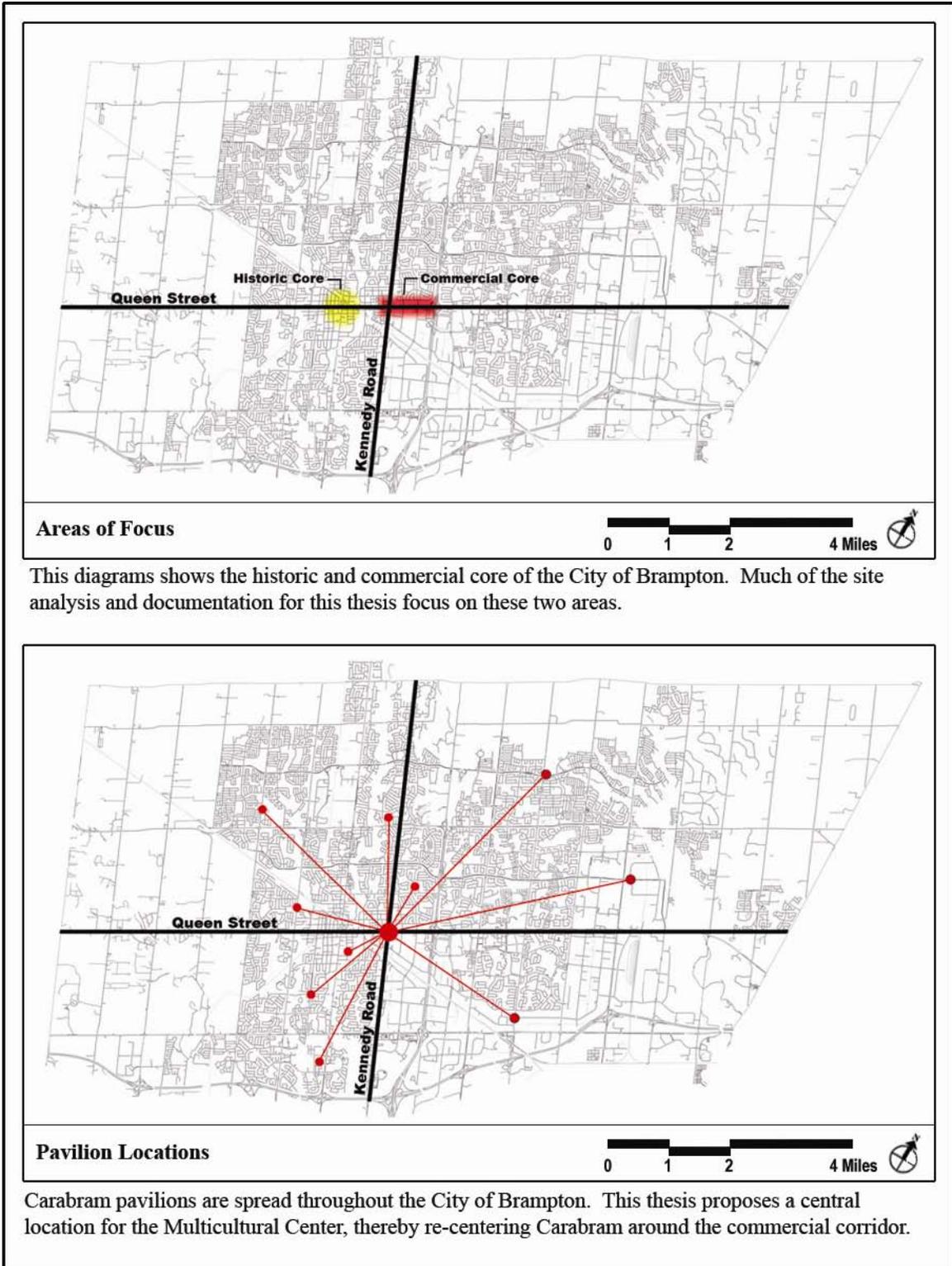


Figure 26 - Areas of Focus & Pavilion Locations, Brampton, Ontario, Canada



1 - Beatty Fleming Senior Public School



2 - Central Peel Public Secondary School



3 - Madoc Drive Public Elementary School



4 - Father C.W. Sullivan Elementary School



5 - Ecole Sainte Jeanne D'Arc



6 - Peel Heritage Complex



7 - Brampton City Hall



8 - Rose Performing Arts Center



9 - Brampton YMCA



10 - William J. Osler Health Centre

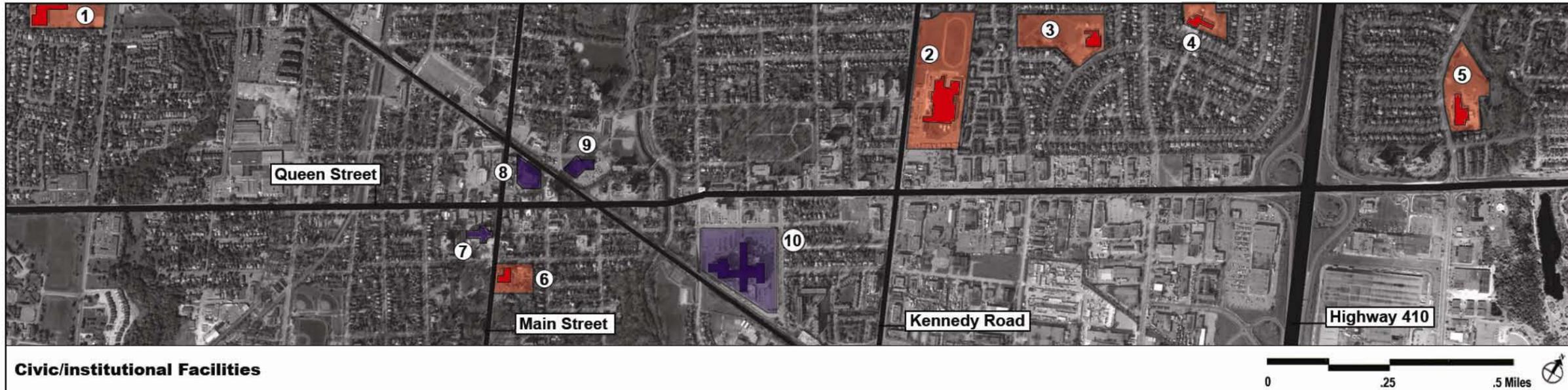


Figure 27 - Civic/Institutional Facilities, Brampton, Ontario, Canada [Photographer: Rawle D. Sawh]

Many schools are located within walking distance of Queen Street. These include two senior public schools, two elementary schools and a French Immersion Schools that teaches students to be proficient in both English and French. Many civic institutions are also located along Queen Street including the Peel Heritage Complex, Brampton City Hall, the new Rose Performing Arts Center, the Brampton YMCA and the William J. Osler Health Centre.

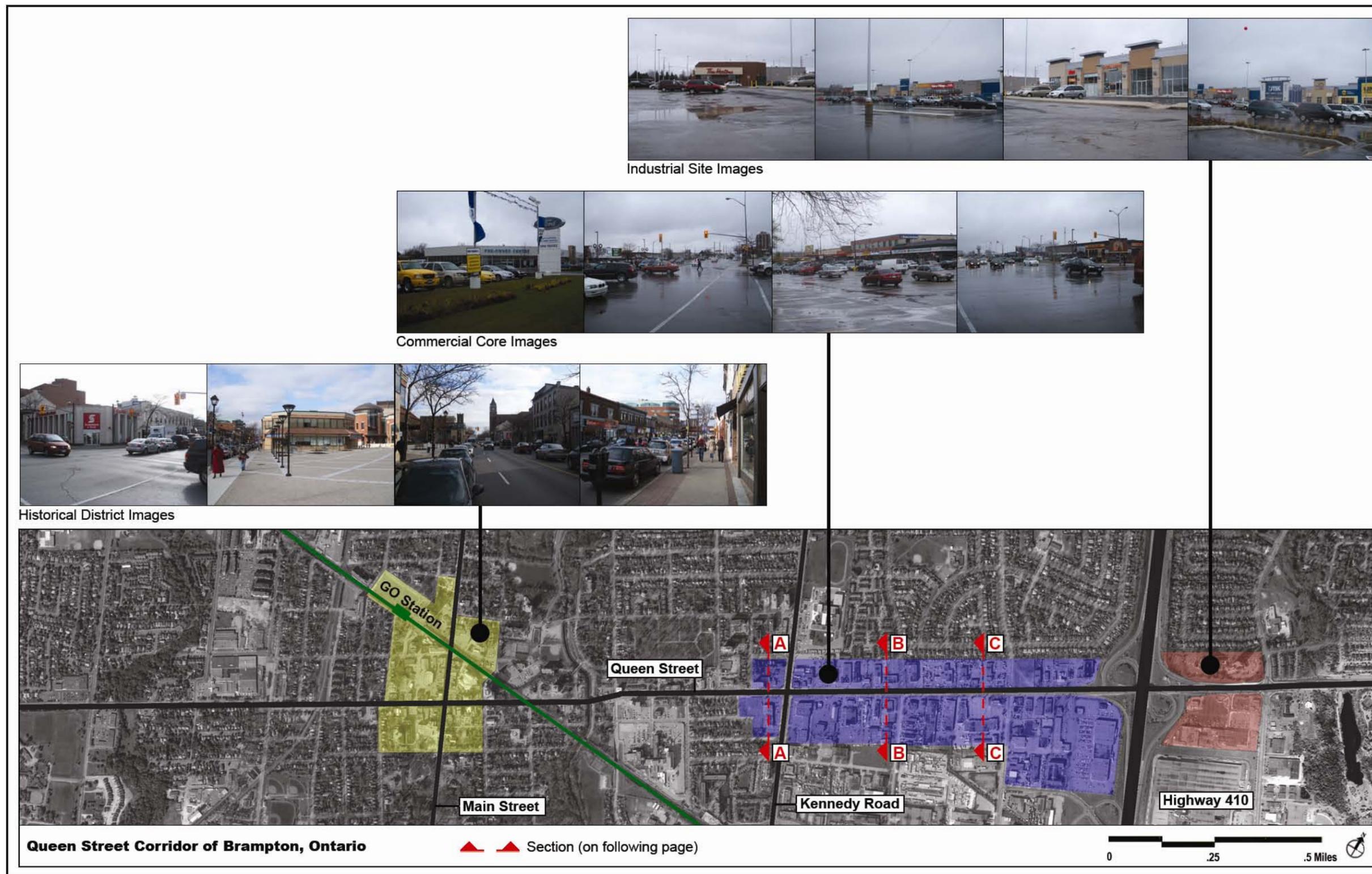
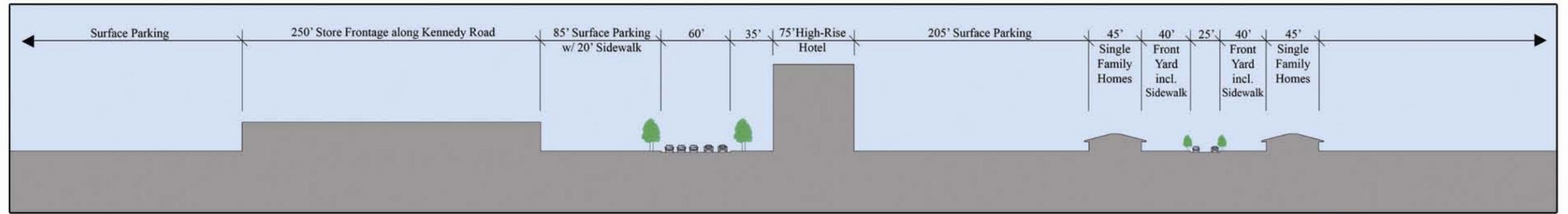
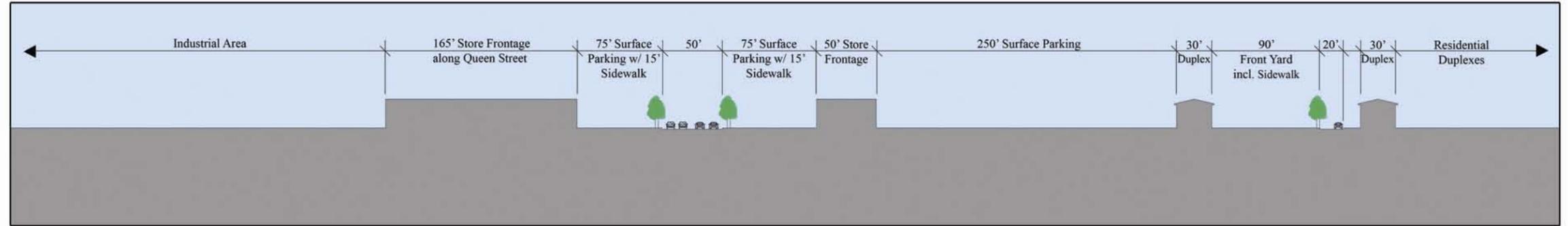


Figure 28 – Site Considerations, Brampton, Ontario, Canada [Photographer: Rawle D. Sawh]

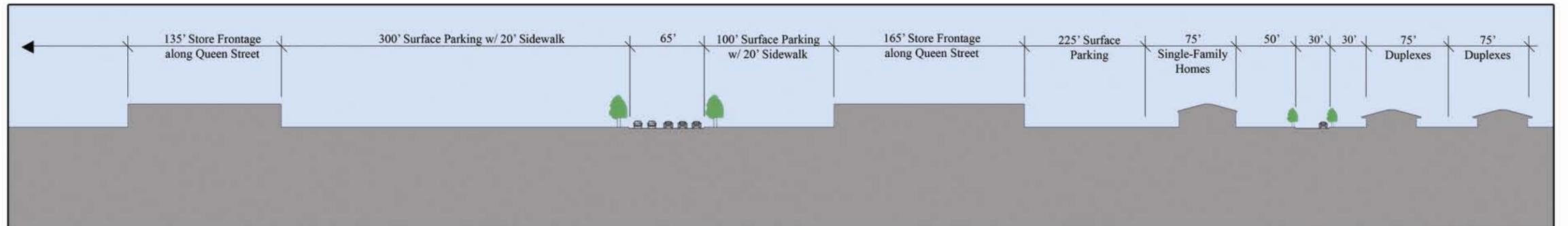
Three sites were considered for this thesis, all along Queen Street. The first is located in the historical fabric of the city, the second is located in the commercial core of the city and the third is located on an industrial plot of land. After careful consideration, the commercial core of the city was chosen as the best possible location for the Multi-Cultural Center.



Section A-A Queen Street and Kennedy Road



Section B-B Queen Street and Hansen Road



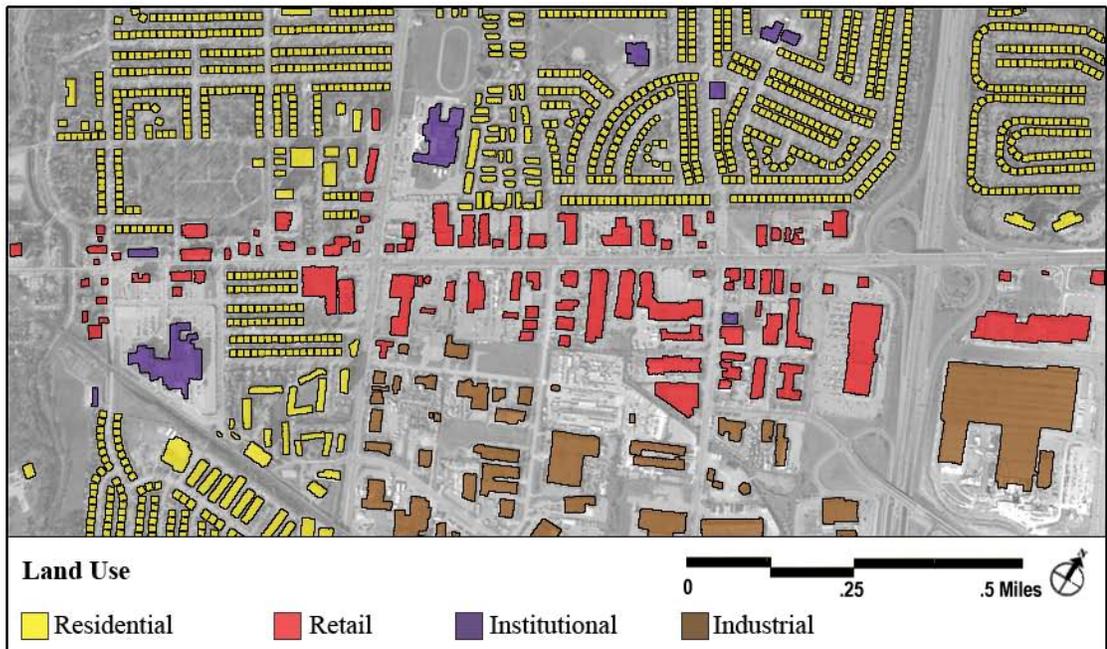
Section C-C Queen Street and Rutherford Road

Figure 29 - Queen Street Sections, Brampton, Ontario, Canada

Many of the establishments along Queen Street have pulled their buildings away from the street edge to accommodate vehicular parking. In some cases, the establishments are almost 300 feet from the street edge. Over the years, this has resulted in a surplus of surface parking and a very poorly defined street edge.

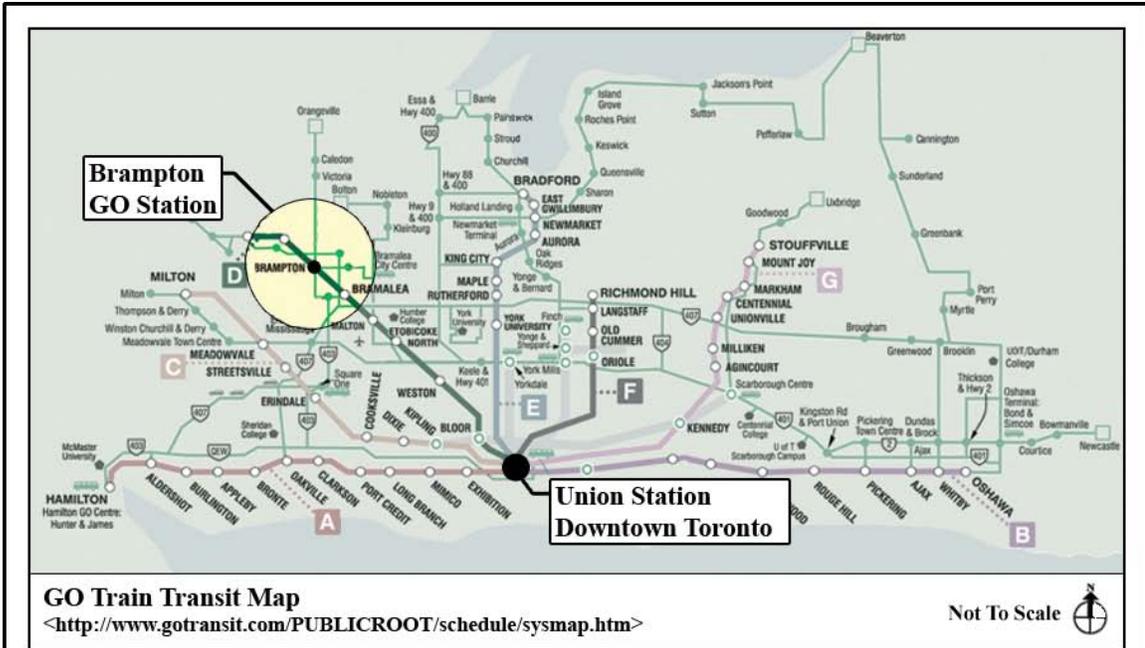


This figure ground represents the built form of Brampton's Queen Street corridor. It is apparent that the buildings do not hold the street edge very well, especially along Queen Street.

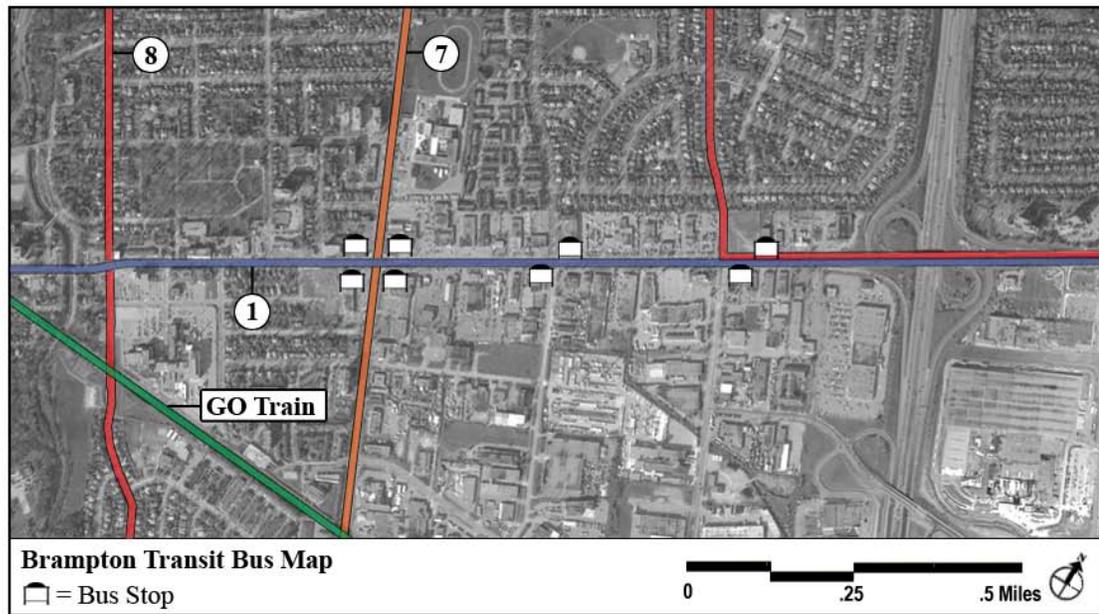


Notice how the commercial core of Queen Street is bordered by single-family residential homes to the north and industrial areas to the south. Also, the Peel Regional Police Dept., Brampton Fire Dept. and William Osler Health Centre all have offices in this area.

Figure 30 - Space Positive & Land Use Diagrams, Brampton, Ontario, Canada



Brampton is served by the GO Train Transit System of Toronto. This service not only connects Brampton to Toronto but to Pearson Int'l Airport and the entire GTA. Trains run to and from Union Station in downtown Toronto 7 days a week. Fares range based upon peak travel hours and distance traveled. Adult one-way fares cost \$6.25 from the Brampton GO Station to Union Station.



Three Brampton transit buses, No. 1, No. 7 and No. 8, service the Queen Street corridor between Highway 410 and Kennedy Road. Adult one-way fares cost \$2.50 w/ a transfer and cost \$.50 with a GO train transfer.

Figure 31 - Public Transportation Diagrams, Brampton, Ontario, Canada

The City of Brampton is served by the GO Train Transit System, the VIA Train Transit System and the Brampton Bus Transit System.

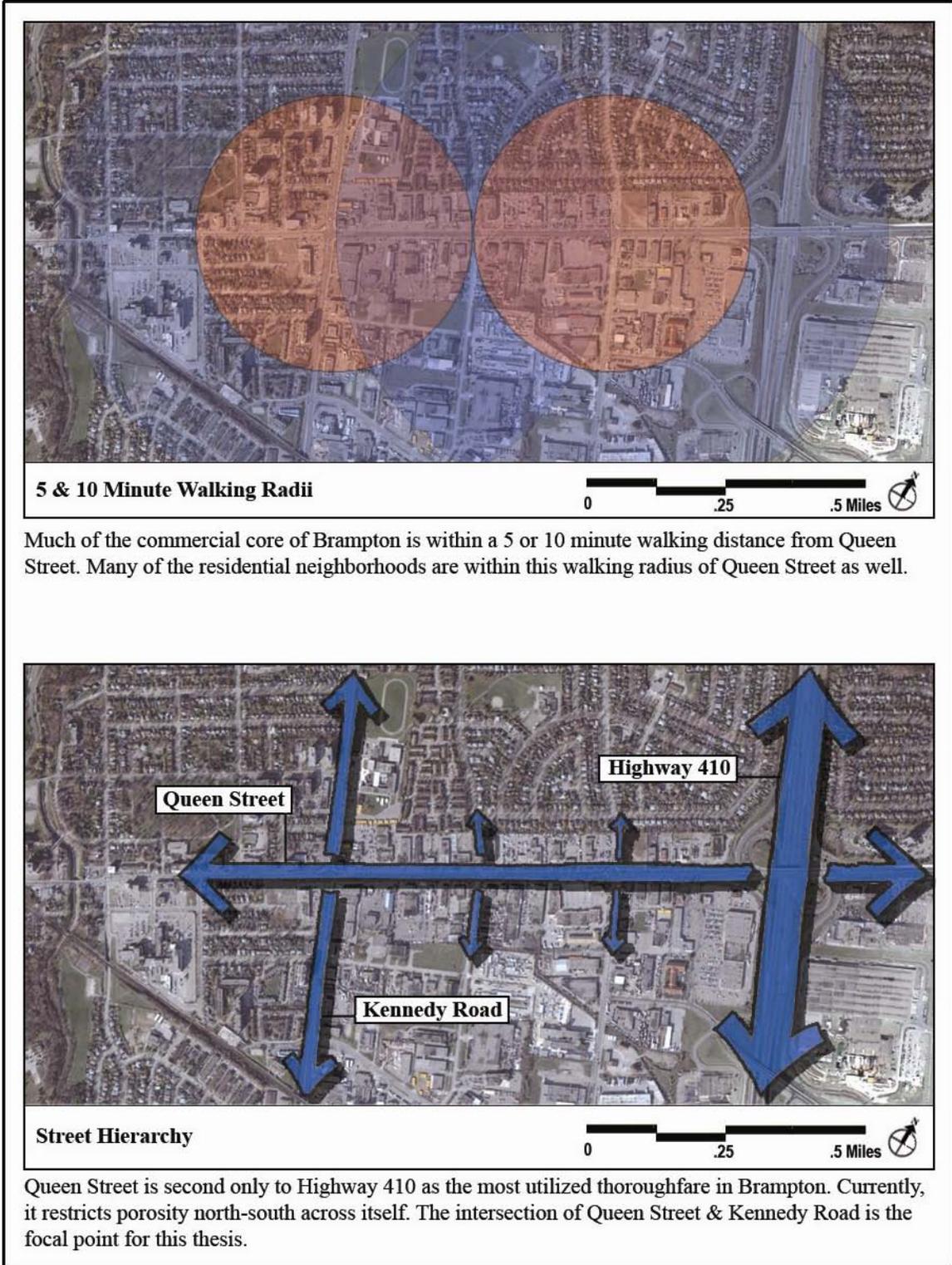


Figure 32 – Walking Radii & Street Hierarchy Diagrams, Brampton, Ontario, Canada



Figure 33 - Land Uses, Queen St. & Kennedy Rd., Brampton, Ontario, Canada

Retail is concentrated within one block north & south of Queen Street. Industrial facilities are located just south of the retail along Queen Street. In some cases, packaging facilities are just across the street from residential homes and apartments.



Figure 34 - Topography, Queen St. & Kennedy Rd., Brampton, Ontario, Canada

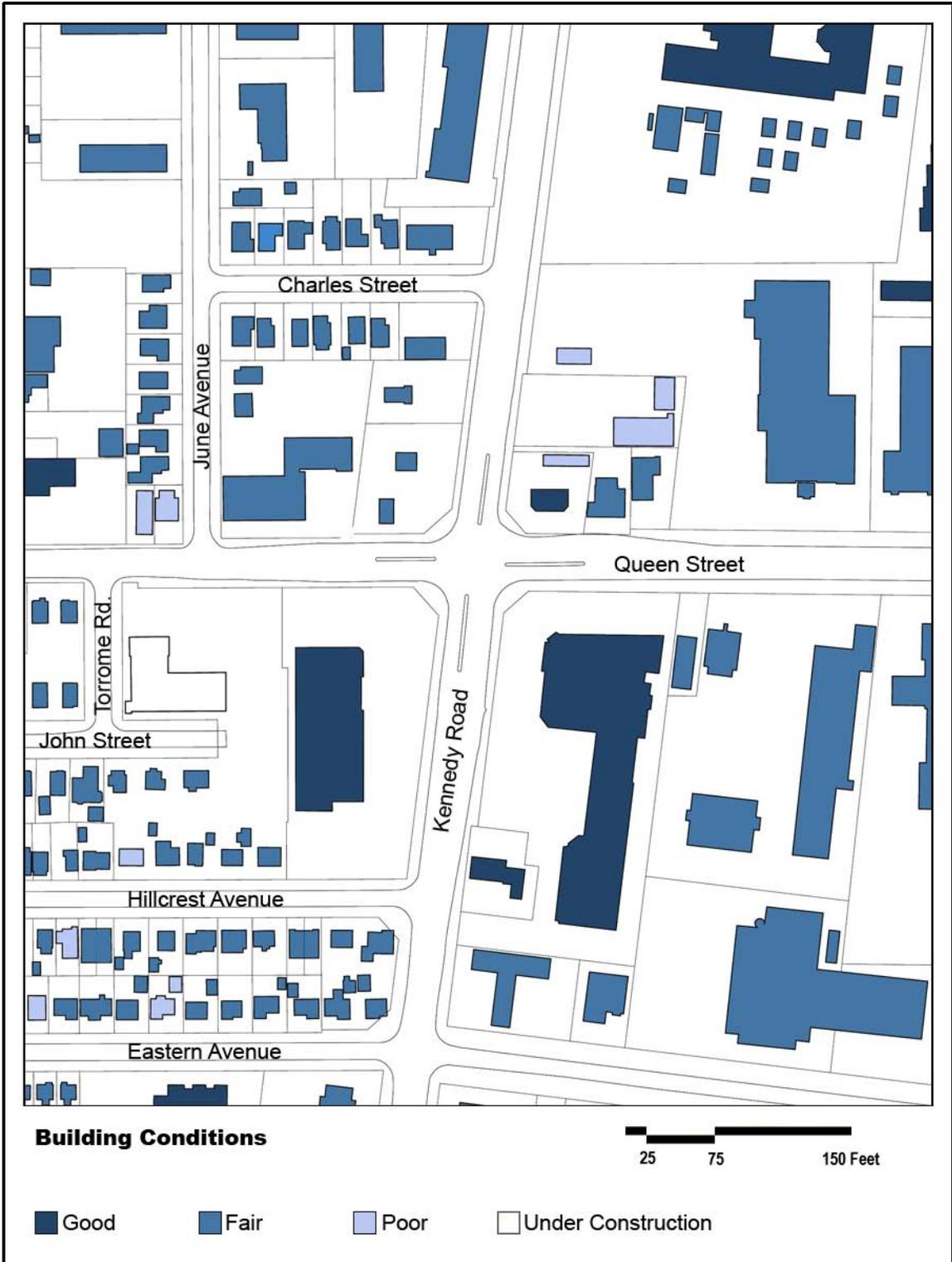


Figure 35 – Bldg. Conditions, Queen St. & Kennedy Rd., Brampton, Ontario, Canada
 For the most part, the retail establishments along Queen Street are in fairly decent condition. However, there are a few buildings that are in poor condition. Of those, almost all have been abandoned.



Figure 36 – Bldg. Heights, Queen St. & Kennedy Rd., Brampton, Ontario, Canada

Many of the buildings that line Queen Street are 2-3 story retail establishments with one or two high rise developments placed in between. While there are very few high rise developments in the vicinity of this site, they are not uncommon along Queen Street. In addition, many of the single-family homes are flats.



Figure 37 – Bldg. Entrances, Queen St. & Kennedy Rd., Brampton, Ontario, Canada
 Many of the businesses along Queen Street do not have their entrances on Queen Street rather the entrances face parking lots. Buildings have been pulled away from the street edge to increase the amount of off-street parking.



Figure 38 - Surface Parking, Queen St. & Kennedy Rd., Brampton, Ontario, Canada

Designing to accommodate the vehicle has created a very unpleasant pedestrian environment. In many cases, there is now a surplus of off-street parking. This thesis proposes creating a street character conducive to pedestrian activities.

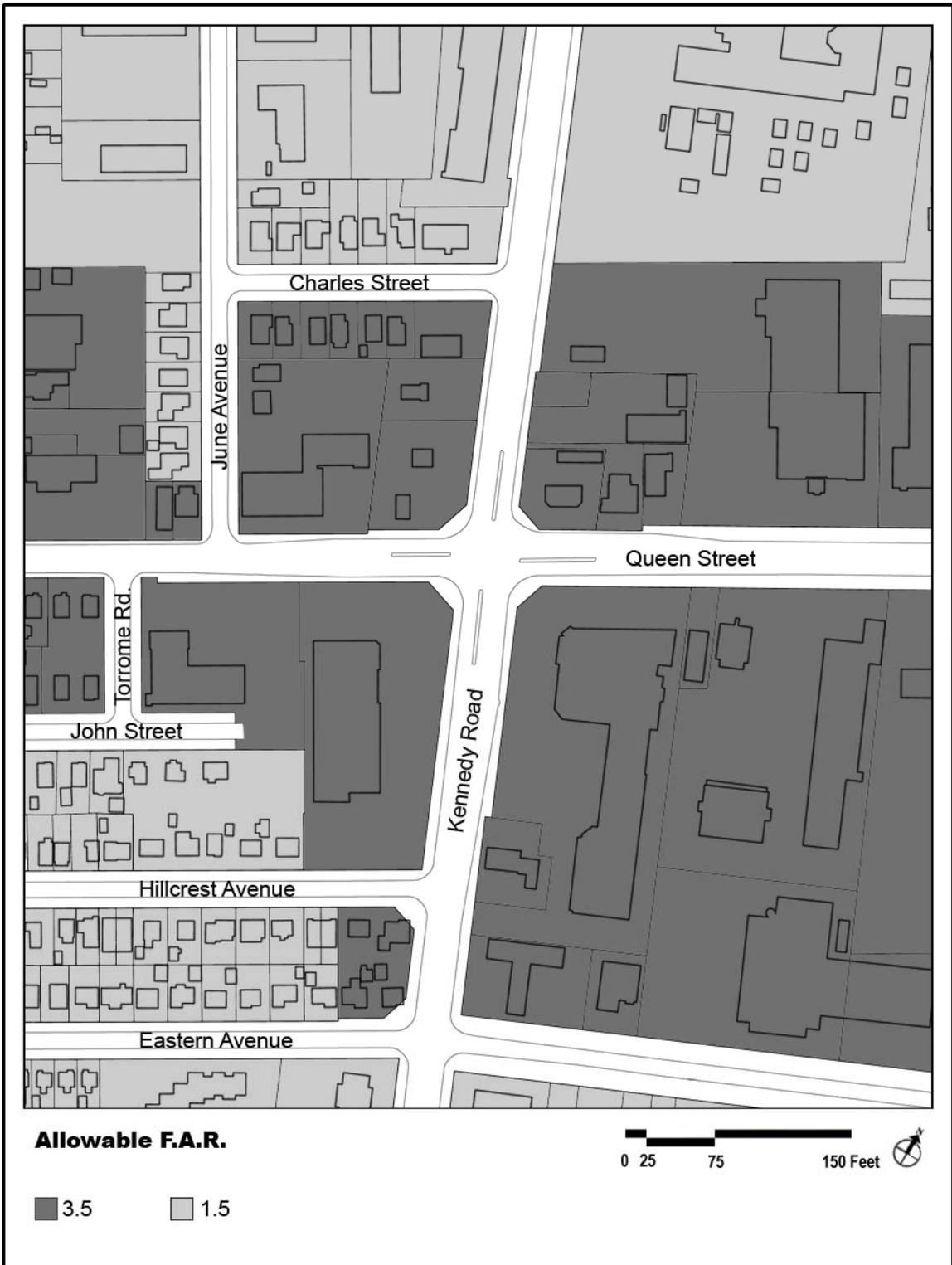


Figure 39 - Allowable F.A.R., Queen St. & Kennedy Rd., Brampton, Ontario, Canada



Figure 40 – Utilities, Queen St. & Kennedy Rd., Brampton, Ontario, Canada



Figure 41 - Site Dimensions, Queen St. & Kennedy Rd., Brampton, Ontario, Canada
 The site chosen for this thesis is located at the NW corner of the intersection of Queen Street & Kennedy Road. The site is fronted on the other two sides by single-family residential homes. It has a total area of approximately 136,800 square feet.

Multi-Cultural Center Site

The site for this Multi-Cultural center can be thought of as one of two ways. First, it can help to reinforce the ambiguous street edge by introducing a new building fabric at the Queen Street and Kennedy Road intersection. The Multi-Cultural Center then becomes a primary element to the urban fabric. The Multi-Cultural Center can also function as an iconic building. A civic institution such as a Multi-Cultural Center does not have to be a part of the urban fabric. Instead, it can be an iconic building in which the urban fabric pulls away from it. This then gives character to both my Multi-Cultural Center and to the city of Brampton.



Figure 42 – Ground Level Plan, Renzo Piano, Morgan Library, New York, NY
[Renzo Piano Building Workshop, <<http://rpbw.rui-pro.com>>]

Renzo Piano's Morgan Library does an exemplary job of reinforcing the building fabric and street edge. Notice how Piano's addition extends beyond the existing Library to engage the pedestrian along Madison Avenue.



Figure 43 - Frank Gehry Walt Disney Concert Hall, Los Angeles, CA

[<<http://www.arcspace.com>>]

Frank Gehry's Walt Disney Concert Hall is an iconic building. Its sweeping curves, while they give character to the Concert Hall, do nothing to reinforce the building form. However, the Concert Hall's plan does reinforce the building fabric.

IV. Understanding the Past & Designing for the Future



Figure 44 - Living Arts Centre, Mississauga, Ontario
[Photographer: Rawle D. Sawh]

By studying and understanding the past, one is able to learn from it. This chapter discusses some of the basic principles of various built work and how they relate to this thesis. Everything from materials to programmatic elements are addressed.

“We have all examined our past critically and are very much aware of even the unpleasant things. Now, we need to look at what we plan to do with the lessons we have learned from the past.”

- Heinz Fischer (Federal President of Austria)

Mississauga City Hall



Main Entrance

[Photographer: Rawle D. Sawh]

Name of Building:

Mississauga City Hall

Location:

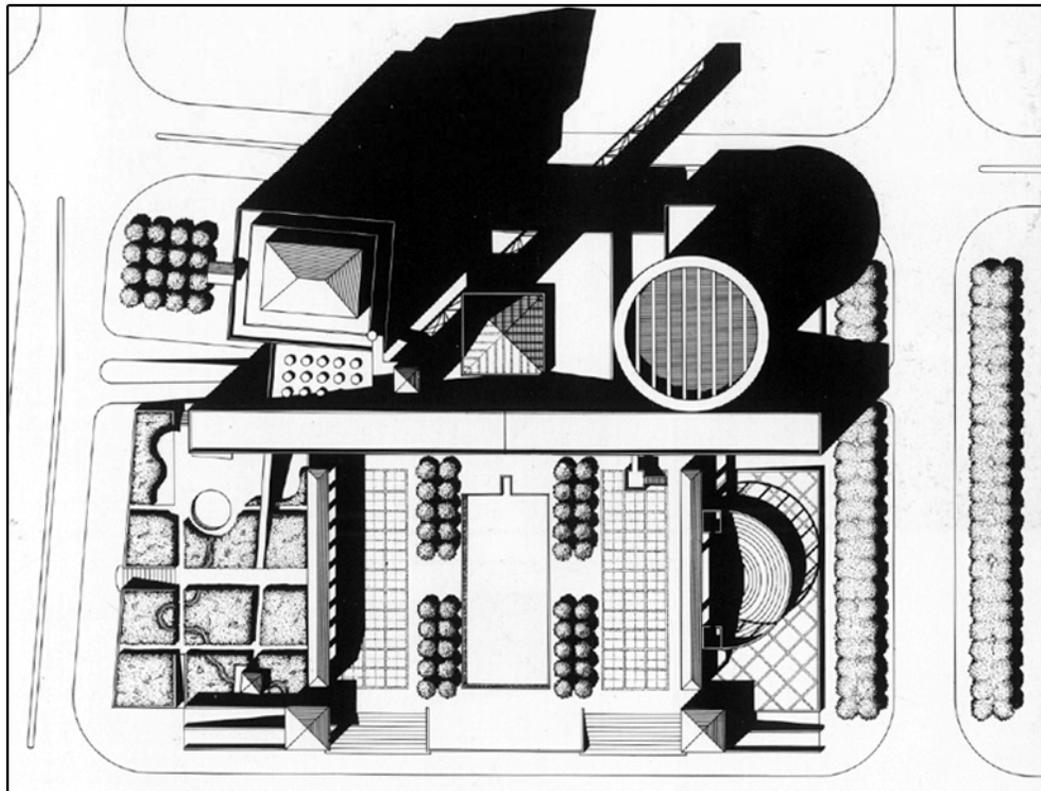
Mississauga, Ontario, Canada

Architect:

Edward Jones & Michael Kirkland

Date of Completion:

1987

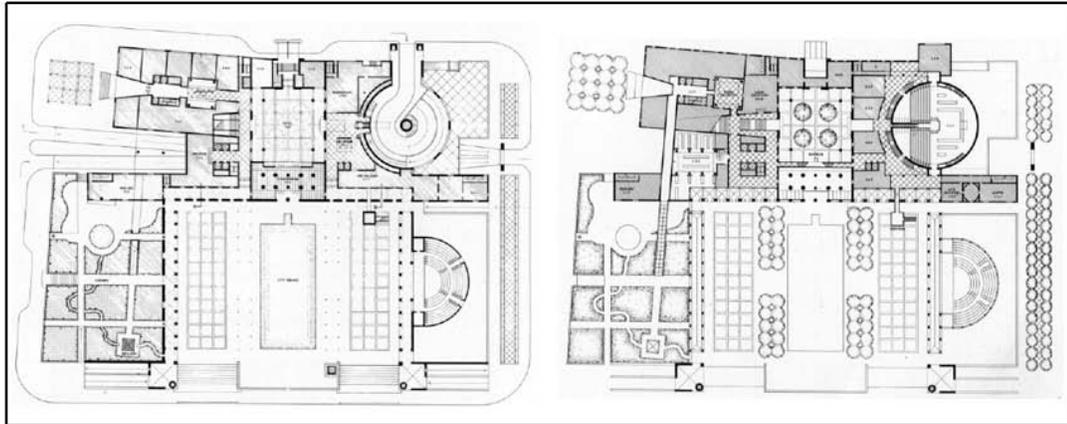


Site Plan

[Peter Arnell, *Mississauga City Hall: A Canadian Competition*]

Figure 45 - Mississauga City Hall, Mississauga, Ontario, Canada

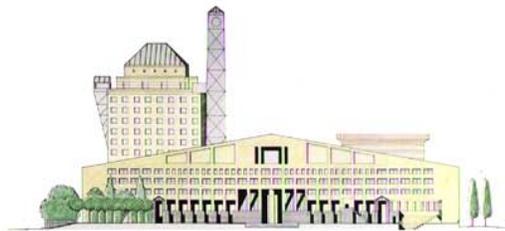
Mississauga's decision to build a new City Hall followed a period of rapid growth during the late 1970's in which large plots of rural land were quickly developed into one of the fastest growing cities in Canada.



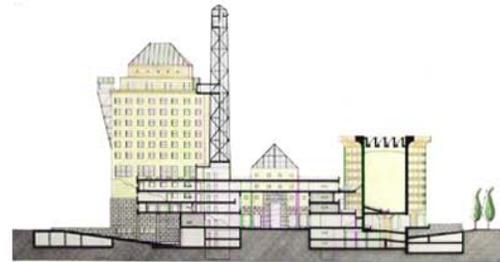
Ground Level & Second Floor Plans



Site Model



South Elevation



Transverse Section

[Peter Arnell, Mississauga City Hall: A Canadian Competition]

Figure 46 - Mississauga City Hall (cont.), Mississauga, Ontario, Canada

The site chosen for the new City Hall is north of Mississauga's historical core, on the edge of what was the furthest developed area of the city. It is located approximately 20 miles west of downtown Toronto.

“In the belief that Canada has all the architectural talent and expertise to design a building worthy of becoming the focus of Mississauga, the city invited all Canadian architects to enter the new City Hall design competition.”⁹ Mississauga officials received over 240 entries from across Canada and they all in some way “reflected the spirit and civic identity to which Mississauga aspires.”¹⁰

The jury unanimously chose the submission of Jones & Kirkland as the winner of the competition, praising it for its superior architectural quality. The scheme comprised of a long bar building which stretched across the entire site. A formal open square is centered on the bar building and bordered on either side by two freestanding arcades. A tower piece accommodates all of the administrative departments while a freestanding cylindrical form accommodates the council chamber just north of the bar building.

Mississauga’s City Hall successfully creates a strong civic identity for the city. This thesis aspires to create a civic identity for the City of Brampton similar to that of Mississauga. As a way of celebrating the rich diversity of Brampton, this thesis establishes a Multicultural Center in the heart of the city fostering cross-cultural appreciation and creating a civic identity.

⁹ Peter Arnell, Mississauga City Hall: A Canadian Competition. (New York: Rizzoli, 1984) 9.

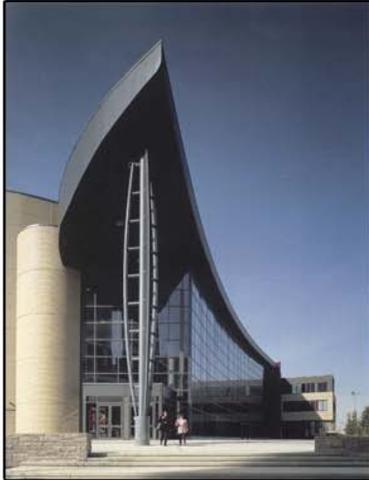
¹⁰ Arnell 9.



Figure 47 - Size Comparison, Mississauga City Hall, Brampton, Ontario, Canada

The figure above shows the relative size of Mississauga’s City Hall at the intersection of Queen Street & Kennedy Road. Notice how the footprint of the entire complex fits well within the boundaries of the site. The formal courtyard space, while large, is designed at a human scale. Freestanding arcades border the courtyard on either side, behind which are an amphitheater and garden space. The entire courtyard is set up on a five foot plinth to add to its civic presence.

The Living Arts Centre



Name of Building:
The Living Arts Centre

Location:
Mississauga, Ontario, Canada

Architect:
Zeidler Roberts Partnership

Date of Completion:
September 1997

Main Entrance

[Eberhard Zeidler, Zeidler Roberts Partnership: Ethics and Architecture]

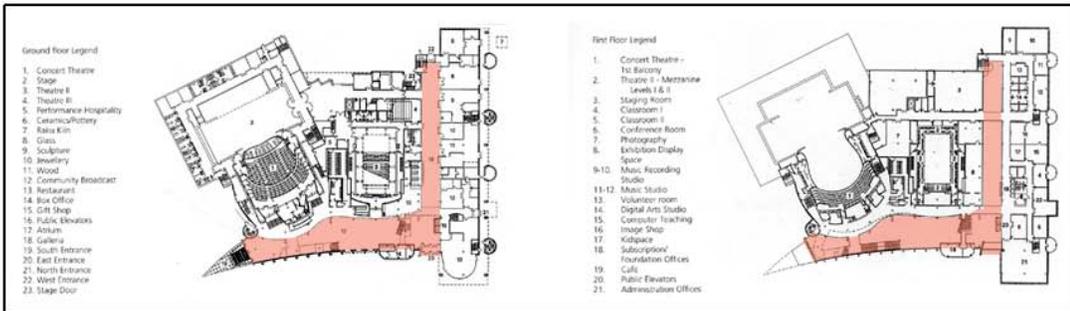


Exterior View

[Eberhard Zeidler, Zeidler Roberts Partnership: Ethics and Architecture]

Figure 48 - Living Arts Centre, Mississauga, Ontario, Canada

The Living Arts Centre houses three performances venues as well as more than a dozen creative art studios. Shown above is its sweeping glass façade behind which is the lobby/indoor atrium space.



Ground Level & First Floor Plans - highlighted areas shown below



Main Lobby during Intermission

The Visual and Digital Arts Lobby is in many ways similar to an indoor street. It is used as a gathering space for visitors as well as gallery/display space for various works of art.



Main Lobby

[Eberhard Zeidler, Zeidler Roberts Partnership: Ethics and Architecture]

Figure 49 - Living Arts Centre (cont.), Mississauga, Ontario, Canada

Situated on a six-acre site just north of Mississauga's City Hall, the 210,000 square foot Living Arts Centre has two major components. A three story digital and visual arts wing incorporates numerous creative arts and contains over a dozen studios for those art forms. The Living Arts Centre also houses three performance venues, each specifically designed for different types of performances. Hammerson Hall, specifically designed for operas, ballets, symphonies and recitals, can accommodate up to 1,300 people. The 400 seat Royal Bank Theatre serves as the community recital theatre and can also be equipped to operate as broadcasting and recording facilities. Rogers Theatre, the smallest of the three performance venues, can accommodate up to 100 people and is used primarily for small recitals.

All of three of these performance venues are linked by a three-story indoor lobby/atrium space. Every effort was made to bring all the arts together in their everyday routine, yet allow for segregation of the various activities during performance times. In doing so, the architect purposefully created an indoor street where not only do people gather but works of arts are put on display. It also demonstrates the interactive nature of the arts. Similar to the Living Arts Centre, this thesis proposes the creation of an indoor street where not only do visitors gather but are also engaged in the realization of a multicultural society.



Figure 50 - Size Comparison, Living Arts Centre, Brampton, Ontario, Canada

The figure above shows the relative size of the Living Arts Centre at the intersection of Queen Street & Kennedy Road. Notice how the footprint of the entire complex fits well within the boundaries of the site. Also, it is clear that the indoor atrium space serves as the link between the centre's three components including the performance venues and studios.

Toronto Centre for the Arts



Main Entrance

[<<http://www.answers.com/topic/toronto-centre-for-the-arts>>]

Name of Building:

Toronto Centre for the Arts
(formerly Ford Centre for the Performing Arts)

Location:

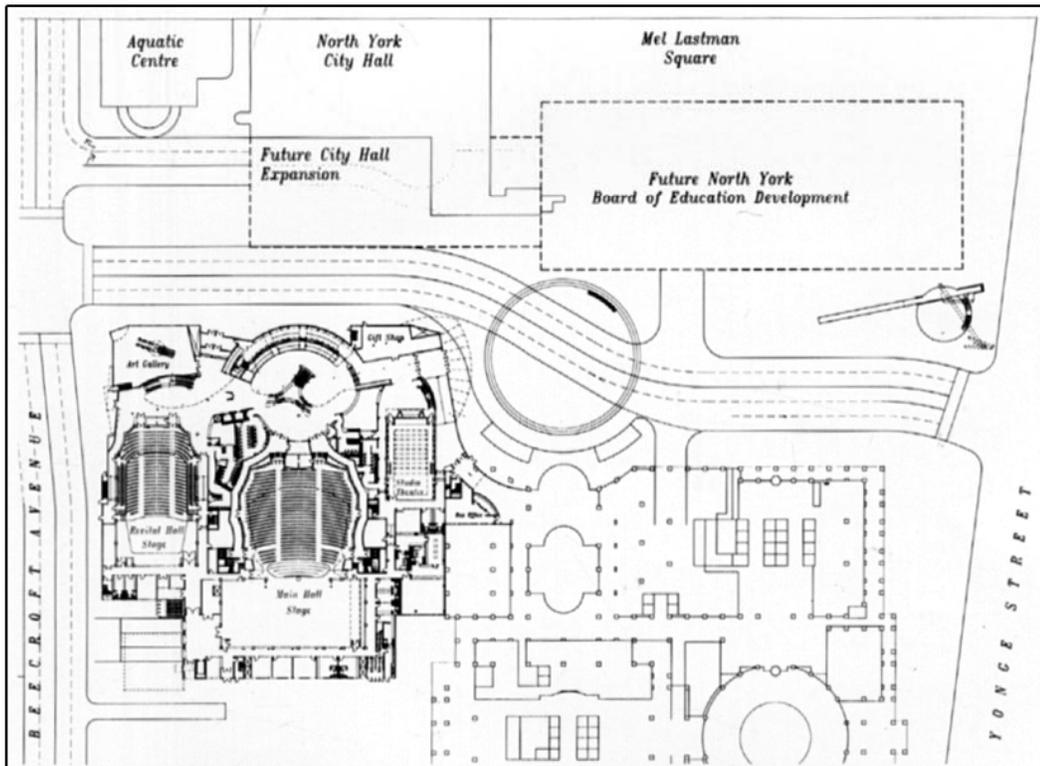
Toronto, Ontario, Canada

Architect:

Zeidler Roberts Partnership

Date of Completion:

October 1993

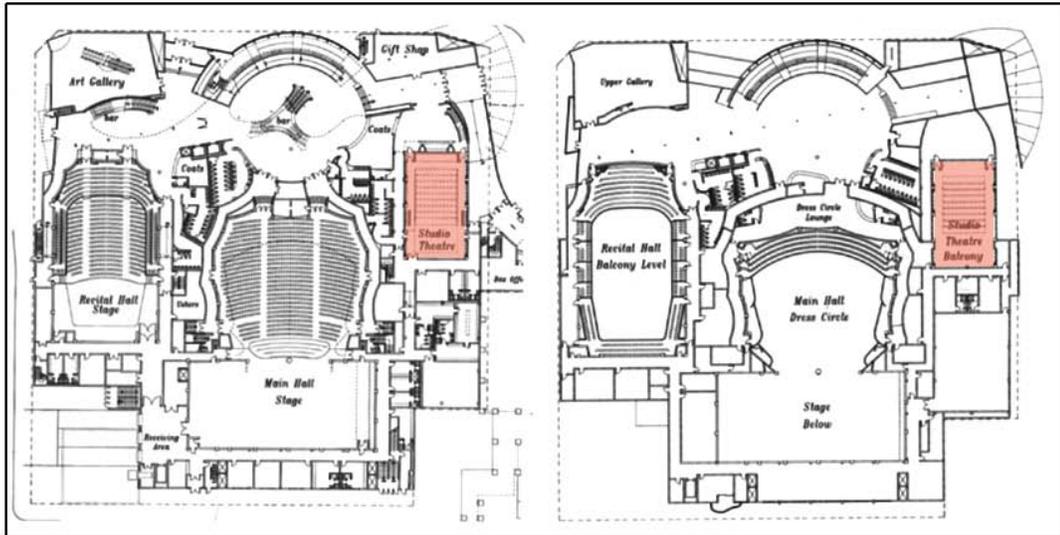


Site Plan

[Eberhard Zeidler, Zeidler Roberts Partnership: Ethics and Architecture]

Figure 51 - Toronto Centre for the Arts, Toronto, Ontario, Canada

The Toronto Centre for the Arts is one of the largest performances venues in the GTA. Located in the heart of downtown Toronto, its completion reinvigorated a struggling Arts District.



Ground Level & First Floor Plans - highlighted areas shown below



The Studio Theatre can accommodate up to 250 people and is designed for experimental performances and community functions.

[Eberhard Zeidler, Zeidler Roberts Partnership: Ethics and Architecture]

Figure 52 – Toronto Centre for the Arts (cont.), Toronto, Ontario, Canada

Similar to the Living Arts Centre, all three performance venues at the Toronto Centre for the Arts share a common gathering space. The architect describes this gathering space as a ‘theatre of audiences.’

The Toronto Centre for the Arts, located in the heart of downtown Toronto, is one of Canada's premier performance venues and at 218,000 square feet it is also one of the largest. The complex houses three theatres and an art gallery. The Apotex Theatre seats up 1,900 people and was designed to accommodate musicals, ballets and operas. The George Weston Recital Hall is a tall shoe box-shaped room designed specifically for unamplified musical performances e.g. piano. It has an audience capacity of up to 1,025 people. The Studio Theatre can provide a maximum seating capacity of 250 people. Above all, it is designed for flexibility. It can accommodate various types of performances and seating arrangements including proscenium-style drama, theatre-in-the-round, experimental theatre, films and lectures. In essence, it is a 'Black Box' Theatre.

This thesis proposes a multi-functional, flexible performance area for Carabram. In many ways, a 'Black Box' Theatre is appropriate. A 'Black Box' Theatre can easily accommodate the various performances including, concerts, dances, musicals, films and lectures that Carabram sponsors.



Figure 53 - Size Comparison, Toronto Centre for the Arts, Brampton, Ontario, Canada

The figure above shows the relative size of Toronto's Centre for the Arts at the intersection of Queen Street & Kennedy Road. Notice how the footprint of the entire complex fits well within the boundaries of the site. The Toronto Centre for the Arts has a main gathering space that serves as the link between each of its performance venues, similar to that of the Living Arts Centre.

Nordic Embassy Complex



Sketch of Complex Plan

Name of Building:

Nordic Embassy Complex
(Master Plan & Common Building)

Location:

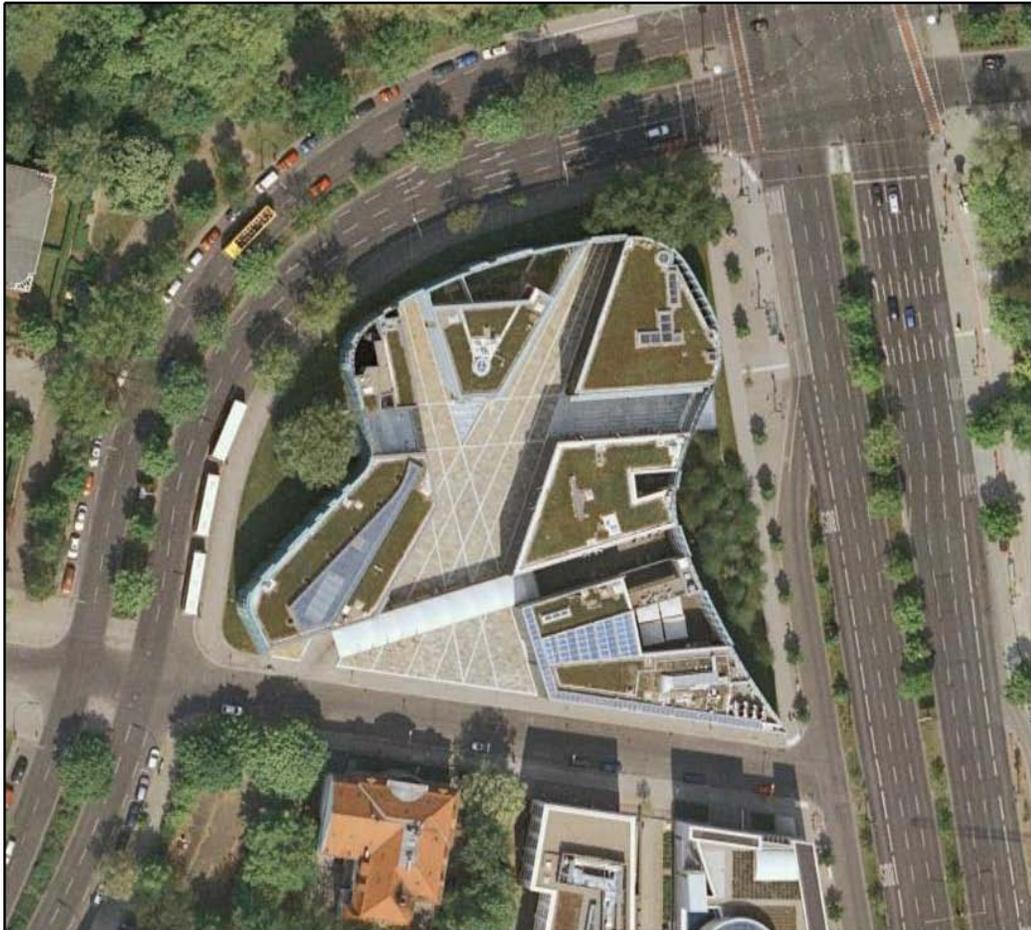
Berlin, Germany

Architect:

Berger + Parkkinen Architects

Date of Completion:

1999



Site Plan [Google Earth]

Figure 54 - Nordic Embassy Complex, Berlin, Germany

It is not the buildings themselves that give the Nordic Embassy Complex an architectural presence, rather it is how they define the voids between them. As such, each façade responds to the interior plaza/void.



Nordic Embassy Complex Master Plan
 [<http://www.berger-parkkinen.com/eng/port_emb.html>]

The semi-public interior plaza is covered with natural stone from Norway and Sweden. As a symbol for the ocean connecting all of the Nordic countries, a water basin cuts through the complex.



'Felleshus' & Complex Entry
 [<http://www.berger-parkkinen.com/eng/port_emb.html>]

The 'Felleshus' was designed as a 'house for all,' a place for congregation, both for members of the embassies and visitors. As the entrance building to the complex it is the most visited. The 'Felleshus' houses the consular activities of each embassy as well as an auditorium,



'Felleshus' at Night
 [<http://www.arcspace.com/architects/berger-parkkinen/cbmp_index.htm>]

The 'Felleshus' building is wrapped by wood planks from the Nordic region set off of the glass beneath. At night, the activities that take place within the building appear fragmented as they are seen through the slatted wood facade.



Copper Band
 [<http://www.berger-parkkinen.com/eng/port_emb.html>]

A copper band encloses all six buildings of the Nordic Embassy Complex as a continuous element. It allows for a transition between the scale of the building and the scale of the entire complex. In many ways, the 'sum of the parts' of the complex are more important than the whole.

Figure 55 - Nordic Embassy Complex (cont.), Berlin, Germany

The Nordic Embassy Complex uses many materials local to the Nordic region. From the wood that wraps the 'Felleshus' to the Norwegian and Swedish marble set in the plaza, no material is overlooked.



Figure 56 - Size Comparison, Nordic Embassy Complex, Brampton, Ontario, Canada

The figure above shows the relative size of Nordic Embassy Complex at the intersection of Queen Street & Kennedy Road. Notice how the footprint of the entire complex fits well within the boundaries of the site. The complex houses the embassies of Denmark, Sweden, Finland, Norway and Iceland as well as a common building. The entire complex is wrapped in a continuous copper band to symbolize the unification of the Nordic countries.

Gage Park

Name of Park:

Gage Park

Location:

Brampton, Ontario, Canada



Fall @ Gage Park

[Photographer: Rawle D. Sawh]



Winter @ Gage Park

[<<http://members.virtualtourist.com/m/8597b/de60a>>]

One of the major programmatic elements of this thesis is a large outdoor space that would be used for Carabram's Multicultural Festival during the summer months. However, such a large space would not be useful to Carabram during the winter months. Borrowing from the local character of Brampton, the outdoor space could be turned into an outdoor skating rink, similar to the transformation that Gage Park undergoes every year.

Figure 57 - Gage Park, Brampton, Ontario, Canada

Gage Park is located in the heart of Brampton's historical core next to City Hall. It is a longstanding tradition that every winter Gage Park is turned into an outdoor skating rink for all to enjoy.

Sustainability Statement

Sustainability has played a very important role in architecture in recent years. As a result, this thesis demonstrates numerous sustainable ideas. “It's a simple approach. sustainable architecture looks to the future by looking at the past.”¹¹ Carabram’s facility, in essence, is a facility for the future.

Since this thesis is located in Brampton, Ontario, a temperate climate, solar orientation plays an integral role in its design. It is oriented with a southeastern exposure to allow maximum solar gain during the day which is imperative in Brampton’s climate. Brampton has fairly cold winters that begin sooner and end later in comparison to Maryland. Specialty ECS systems are also integrated within the facility’s design to assist in achieving a Silver LEED Rating.

Carabram’s facility is modeled, in many ways, after the Genzyme Center in Cambridge, MA by Behnisch, Behnisch and Partners. Completed on an old brownfield site in 2003, the Genzyme Center is the first truly environmentally conscious office block in the U.S. It follows a number of innovative principles including natural ventilation, a highly efficient climate control system, sun-tracking mirrors to direct sunlight into the building and a double-skin facade that ventilates the building in the summer and utilizes solar gain in the winter.

¹¹ Stephen Gist <http://en.thinkexist.com/quotes/stephen_gist/>



Indoor Atrium

[<<http://www.behnisch.com/>>]

Name of Building:
Genzyme Center

Location:
Boston, MA

Architect:
Behnisch, Behnisch & Partners

Date of Completion:
2003



Genzyme Center at Night

[<<http://www.newenglandfutures.org/>>]

Figure 58 - Genzyme Center, Boston, MA

The Genzyme Center is one of numerous projects by Behnisch, Behnisch & Partners to be LEED accredited throughout the world. Built on an old brownfield site, it helped rejuvenate a poorly developed area of Boston.

V. Design Objectives/Considerations

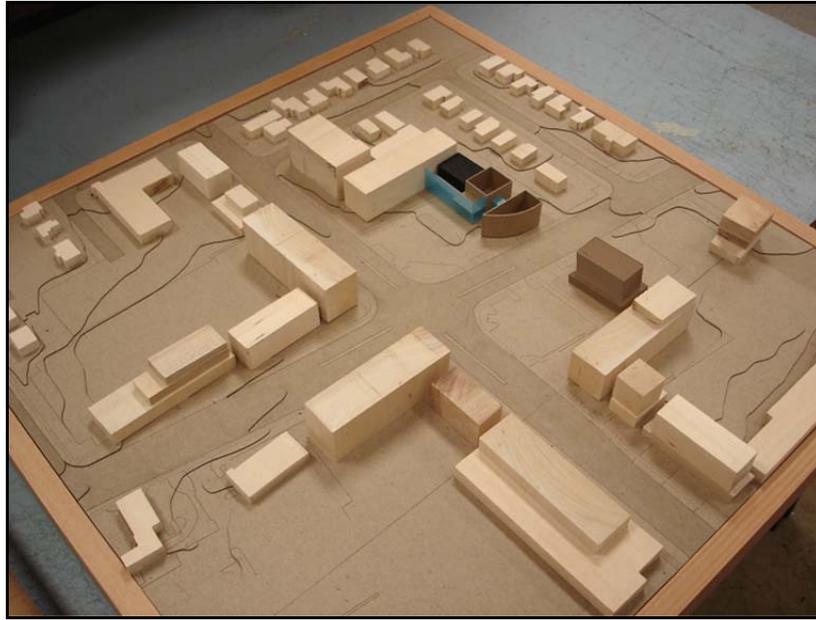


Figure 59 - Process Model

In this chapter, urban design issues are addressed through the development of possible urban design strategies. Also, building parti's are proposed that have resulted from in-depth programmatic and site analysis.

“We all should know that diversity makes for a rich tapestry, and we must understand that all the threads of the tapestry are equal in value no matter what their color.”

- Maya Angelou (American Poet 1928-)

Urban Design Parti

Currently, Queen Street is not very pedestrian friendly. The City of Brampton has acknowledged this and according to future development plans, the Queen Street corridor between Kennedy Road and Highway 410 will become a transit-oriented, pedestrian friendly corridor. A gradual change is envisioned towards mixed-use development with street-level retail and 3-4 stories of affordable housing above.

The urban design component of this thesis proposes designing a street section that is conducive to pedestrian activities therefore separating vehicular and pedestrian traffic is imperative. This thesis proposes introducing a planted berm and street parking along Queen Street in addition to 4-5 stories of mixed-use retail/commercial and housing. Retail establishments can be serviced from the alley in the rear of the buildings. Street parking can accommodate those who choose to do their shopping along Queen Street while an underground parking garage can accommodate those who reside above. Wide sidewalks allow store owners to engage their customers while street trees add to their character.

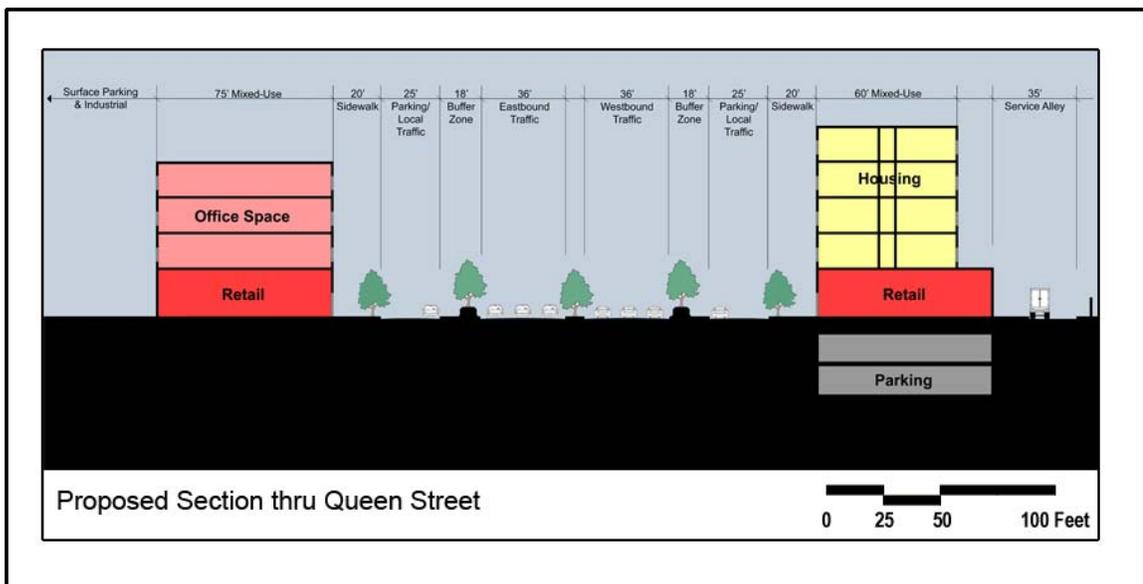


Figure 60 - Proposed Street Section, Brampton, Ontario, Canada

Multicultural Center Parti A

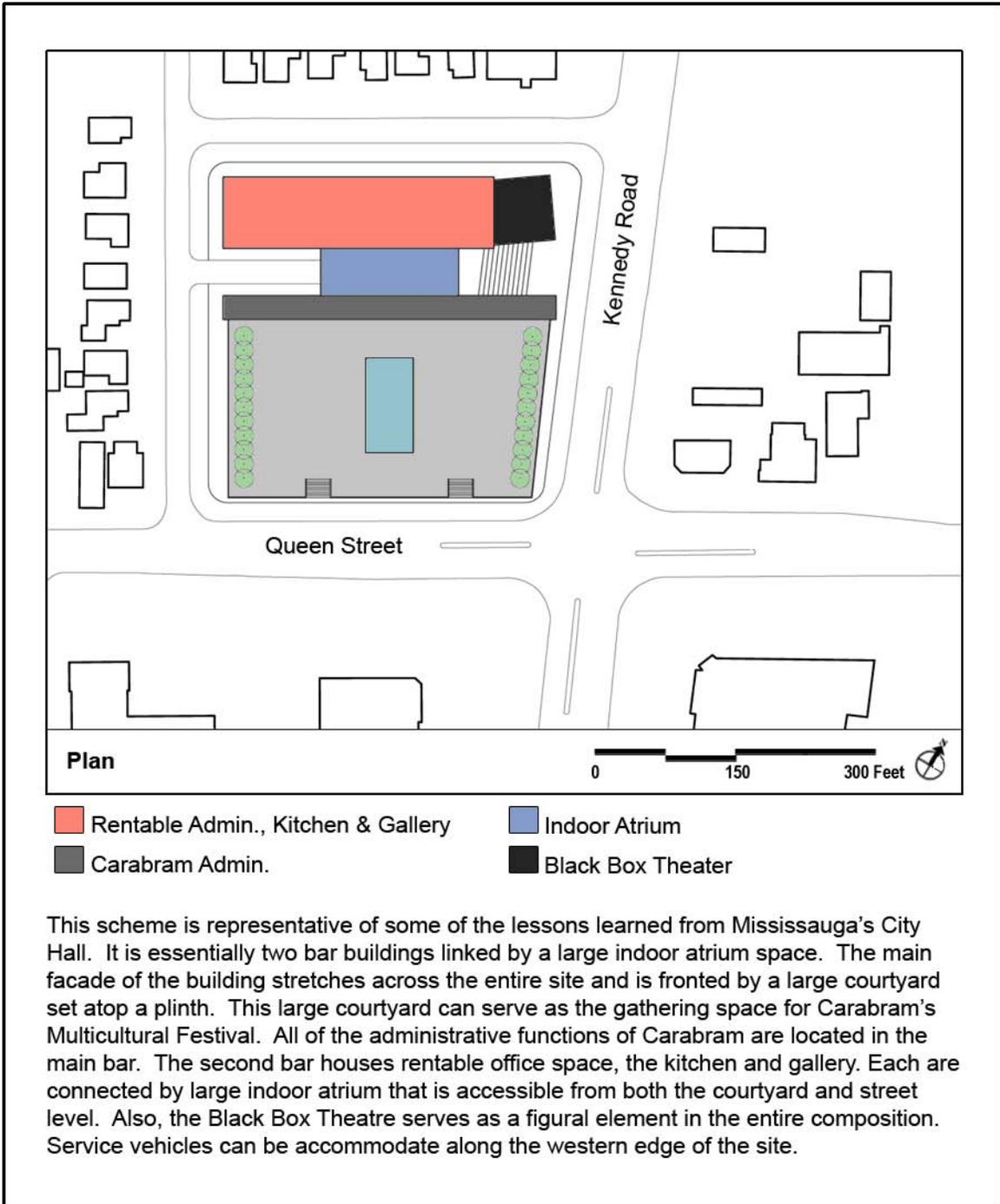


Figure 61 - Parti A, Plan

Although this scheme has a strong civic presence, it does have a few drawbacks. The courtyard space is rather substantial and may seem too large to pedestrians. As such, it must be programmed at the human scale. Also, the entire courtyard is set atop a plinth which may disconnect it from street level pedestrian traffic.

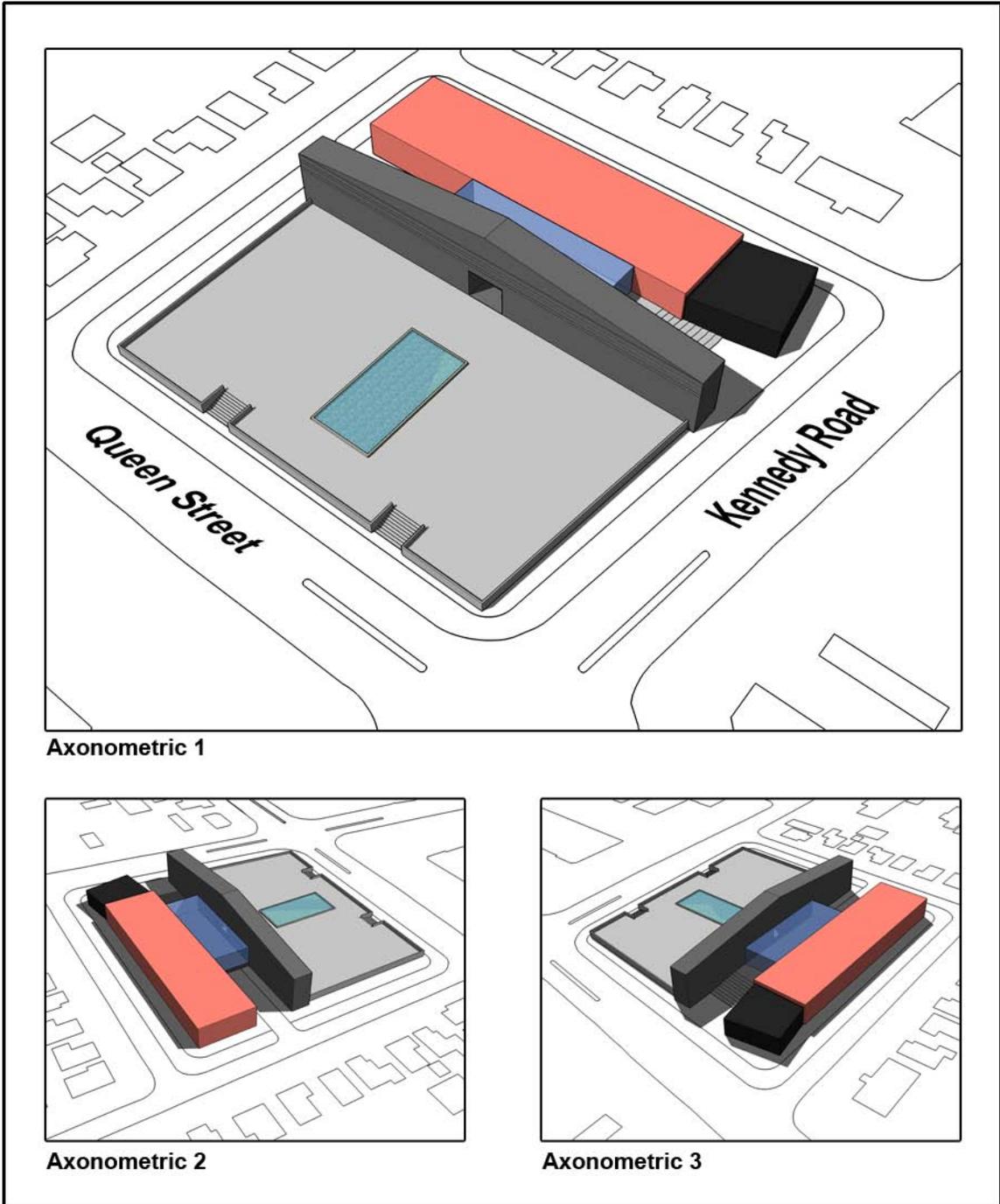


Figure 62 - Parti A, Axonometric

Axonometric 1 shows the main façade of this scheme and its relationship to Queen Street and the courtyard. Axonometric 2 shows the western edge of the site and service access to the building. Axonometric 3 shows the Black Box Theater and the street level entry into the indoor atrium.

Multicultural Center Parti B

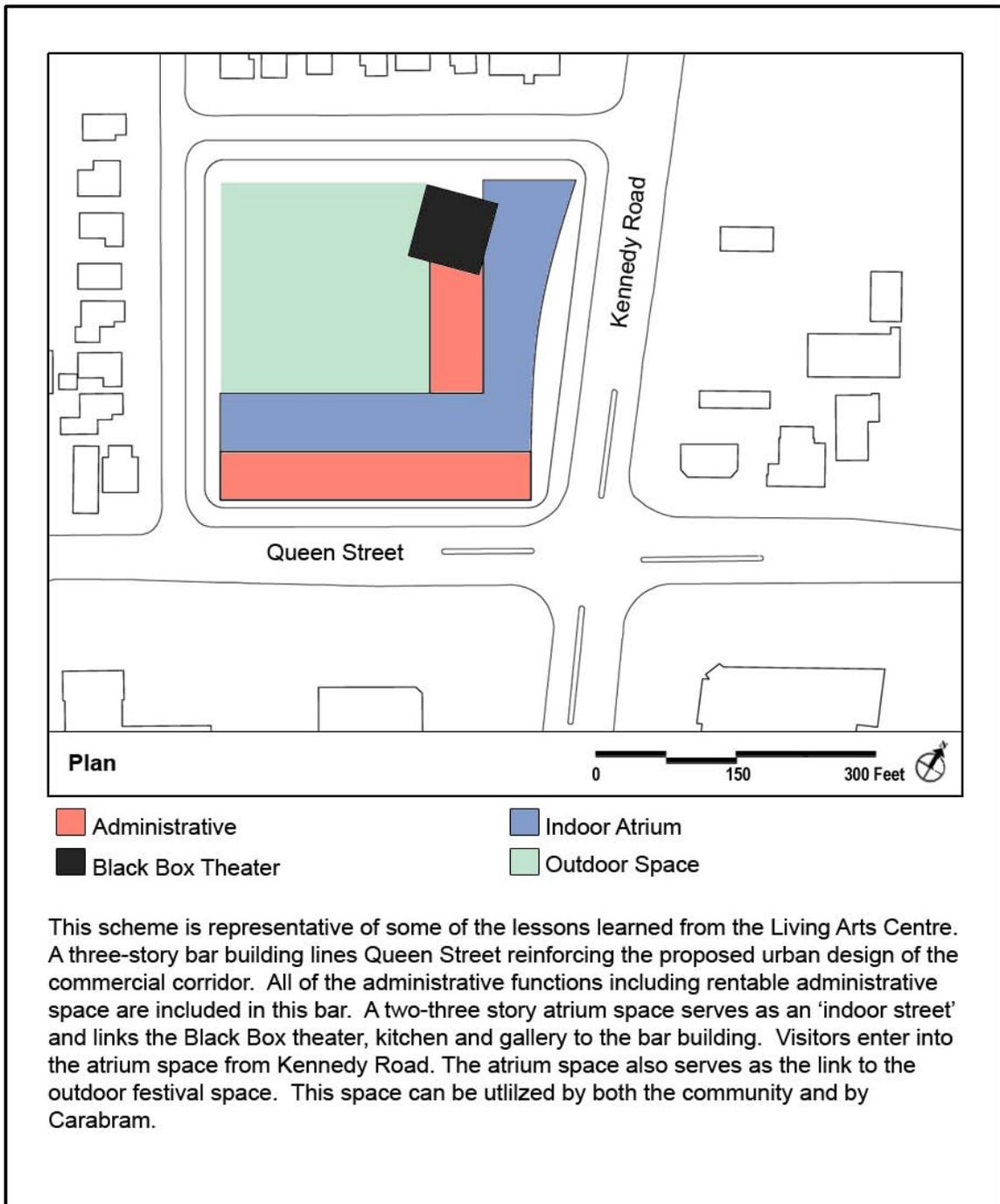


Figure 63 - Parti B, Plan

The biggest concern of this proposed scheme is the large amount of circulation space required to create an 'indoor street.' Because of this, the 'indoor street' must be used in a variety of ways. It can be used for celebratory space during Carabram's Multicultural Festival, exhibition space, weddings/banquets, etc.

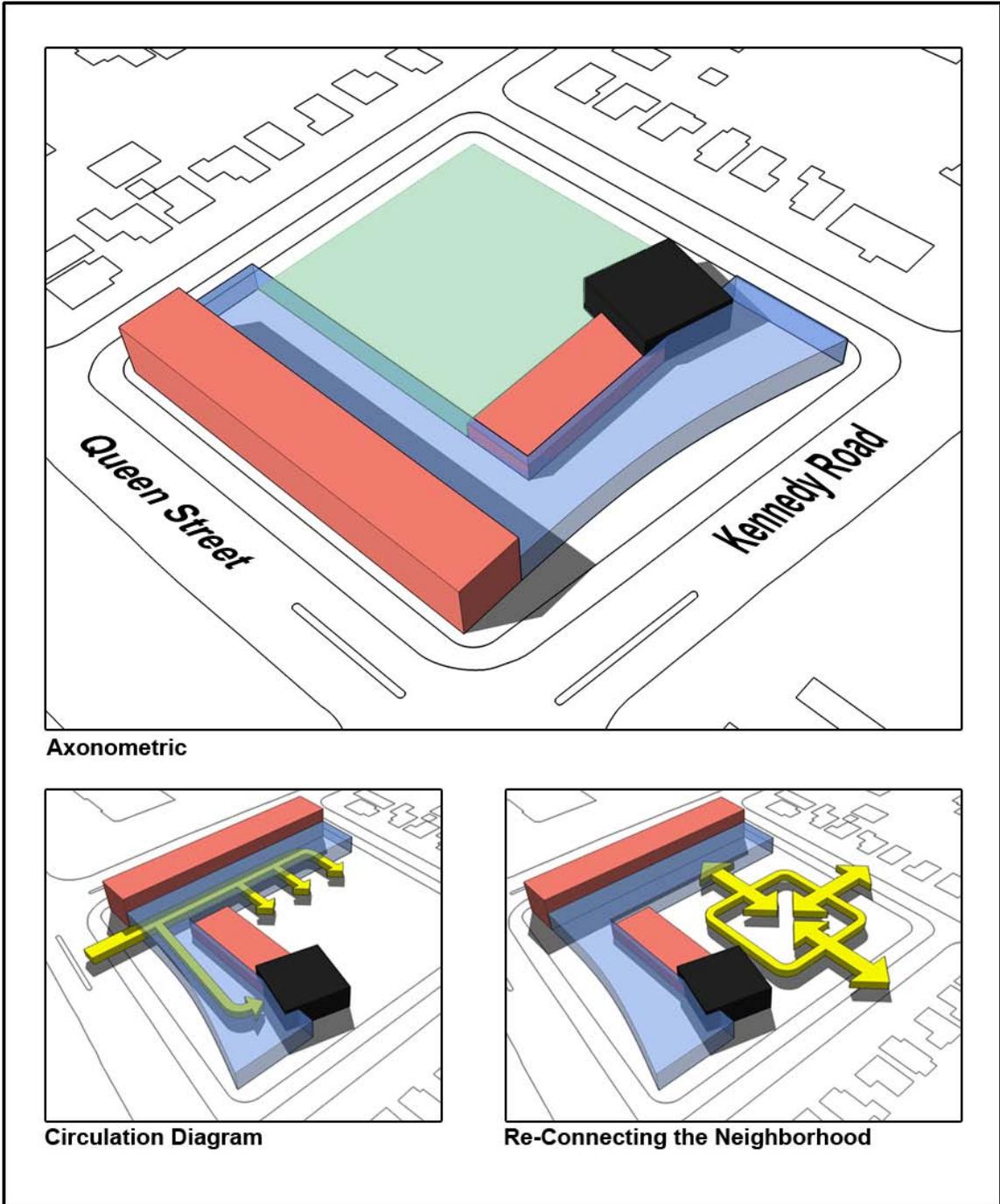


Figure 64 - Parti B, Axonometric & Diagrams

The axonometric shows the massing of this scheme and the relative heights. The circulation diagram shows the intended use of the atrium space as an ‘indoor street.’ Also, the proposed scheme attempts to establish an outdoor space that can be utilized by both the community and Carabram.

Multicultural Center Parti C

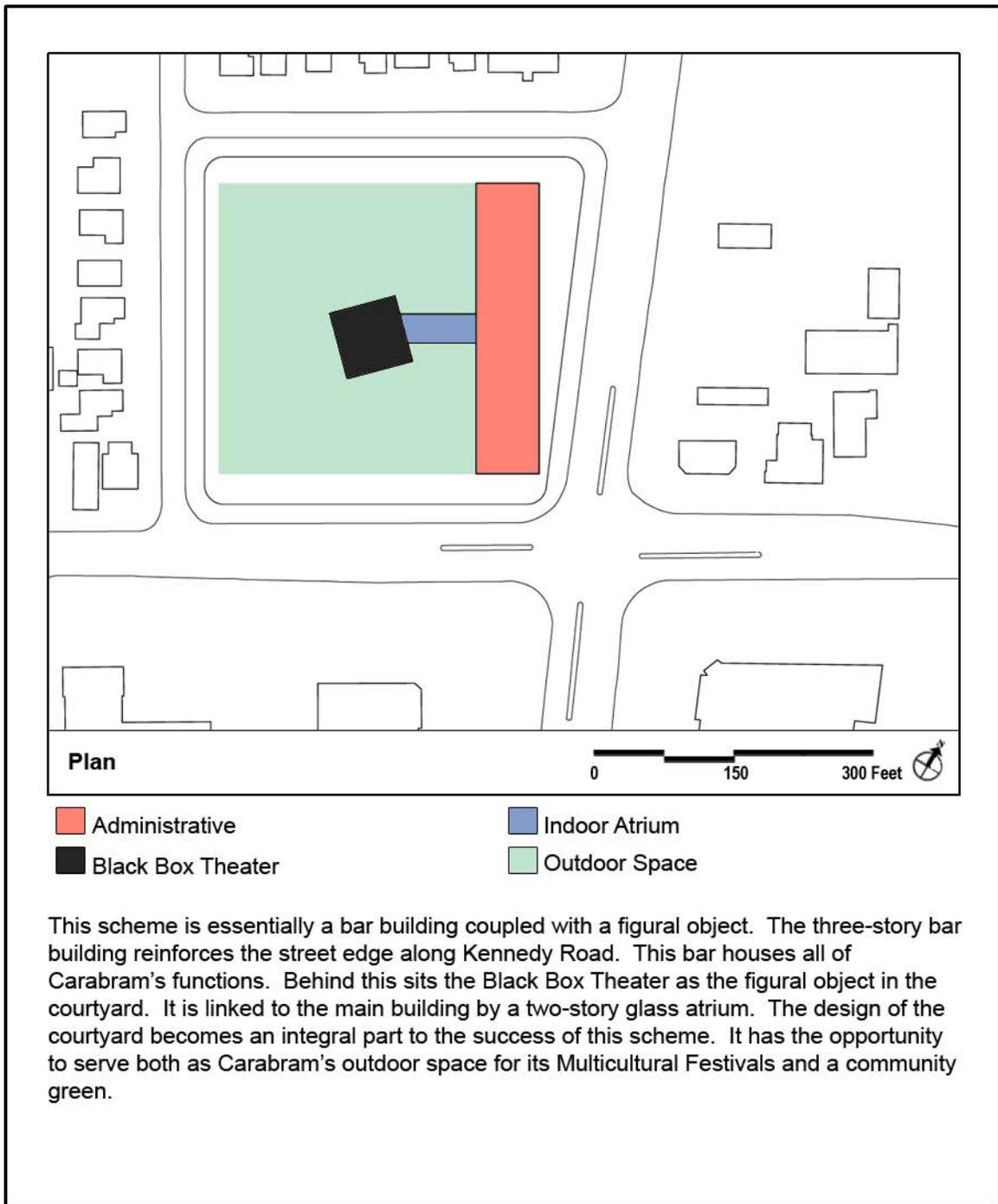


Figure 65 - Parti C, Plan

Perhaps the biggest drawback of this scheme is the large courtyard. It must address both the human scale and building scale in its design. It must also be designed to accommodate Carabram's Multicultural Festival as well as community functions.

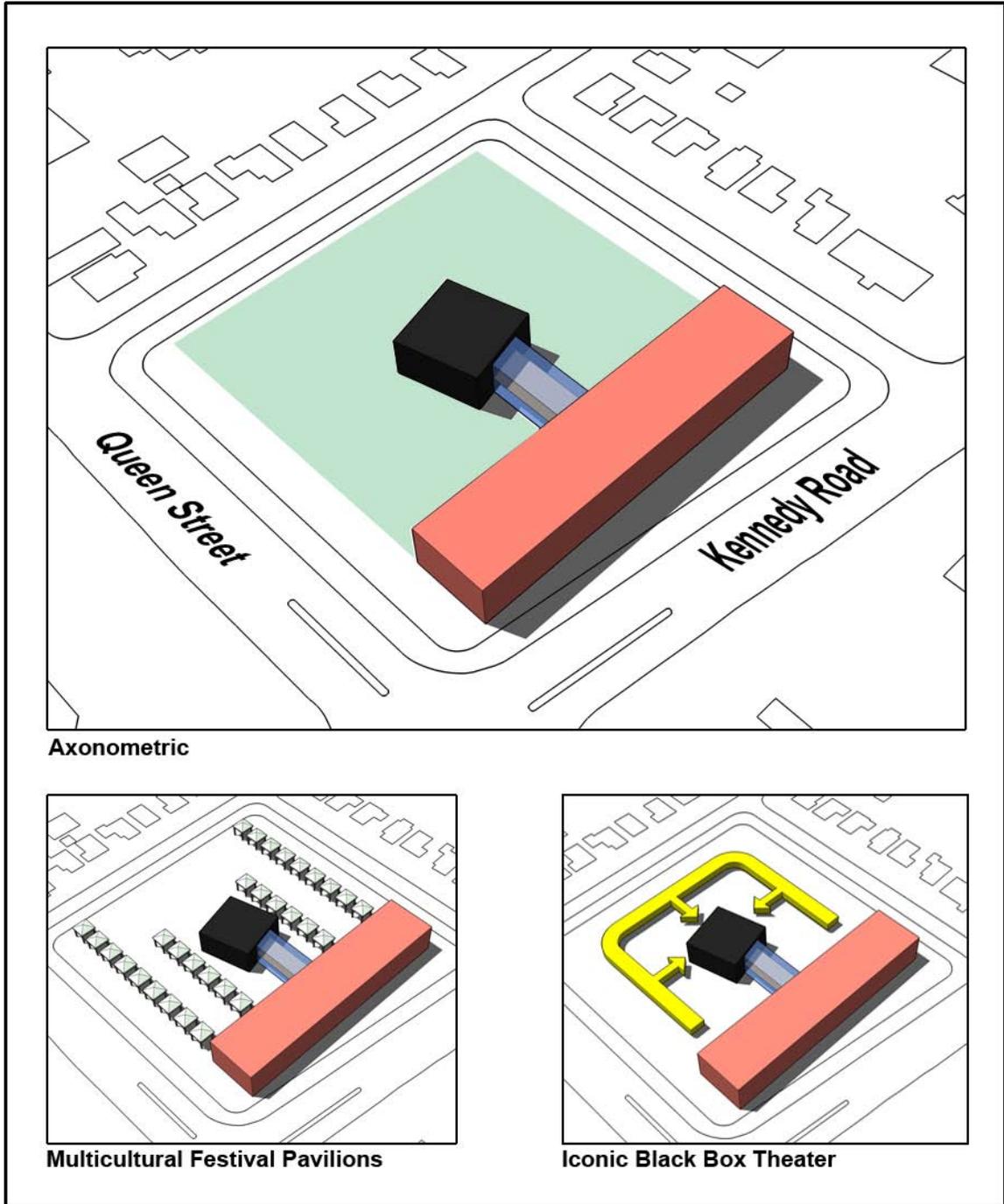


Figure 66 - Parti C, Axonometric & Diagrams
 The axonometric shows the massing of this scheme and the relative heights. The ‘pavilions’ diagrams shows how the courtyard space could possibly be used during Carabram’s Multicultural Festival. The courtyard space allows the pavilions to actively engage the community and pedestrian during its Multicultural Festival. The final diagram shows how the Black Box Theater acts as a figural object in the courtyard. It becomes the ‘iconic’ image of the Carabram organization.

VI. Design Conclusions

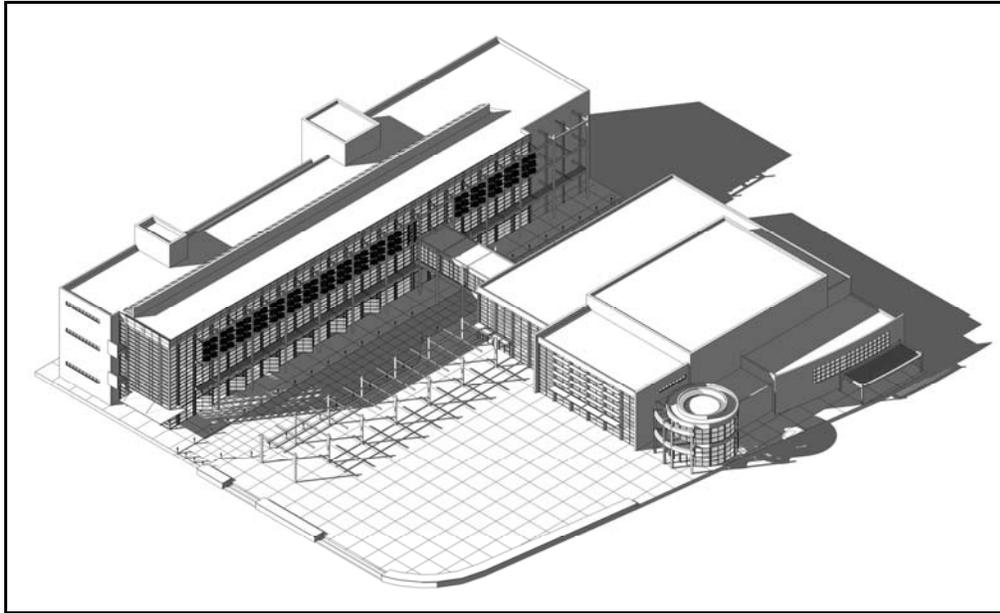


Figure 67 - Building Axon

In this chapter, all of the requirements for this thesis are presented.

“Diversity is the one true thing we all have in common. Celebrate it every day.”

- Unknown Author

Many North American cities have experienced an influx in immigrants from across the world in recent years. As a result, the subject of diversity has catapulted to the forefront of discussion and become a subject that must be addressed throughout Canada and the United States. Cities such as Miami, New York and Toronto have long established diverse traditions.

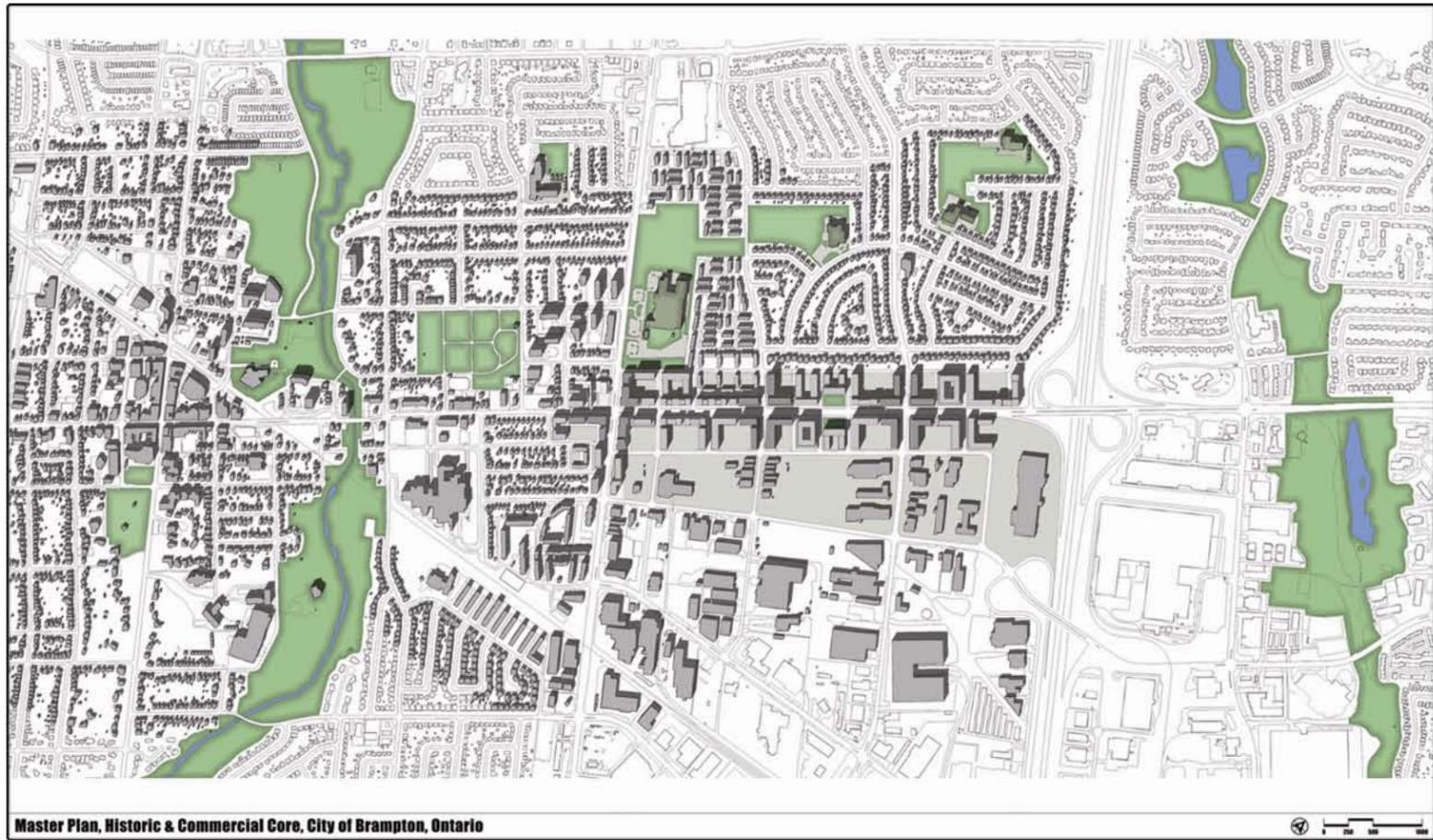
This thesis proposes a unifying place for the celebration of diversity in Brampton, more importantly Carabram. It is designed to give the City of Brampton an image and a civic presence. It is designed to be a part of the building fabric while still being an icon for the City of Brampton. It is a place where various cultures can co-exist through the full and equitable participation of individuals and communities of all origins. It is designed to promote the understanding and creativity that arise from the interaction between those cultures. It is a place where cultural individualism is encouraged. It is a place that fosters the recognition and appreciation of all cultures and promotes the reflection and evolving expressions of those cultures.

The goal of the urban design was to establish a new commercial/cultural center that created a dialogue with the downtown core. An integral part of achieving this goal was creating a 'sense of place' along Queen Street long known for its strip malls and unfriendly pedestrian environment. This was done by creating pockets of mixed-use developments at major intersections with residential infill that can support the increase in development. In addition, increasing street life by adding sidewalk café's, places of repose, planters, street tress, etc. The urban design also called for the creation of an urban plaza at the confluence of two major streets, Queen Street & Kennedy Road. This

intersection was chosen as the location of an urban plaza because of its high exposure to those traveling to and from work.

It was the intention of the multicultural center to be seen as a 'blank canvas.' A 'blank canvas' that serves as an opportunity for various cultures to demonstrate, display and exhibit their cultural customs, traditions, food and dance. As such, the final design called for a number of multi-functional spaces. First, a 'black box' performance space that can accommodate performances ranging from typical proscenium theatre to performances in the round. Second, a galleria that functions both as a gallery and atrium space that can accommodate sculptural pieces of work, large banquets and celebrations typical of Carabram. Third, themed classrooms can accommodate the various programs/services that Carabram offers in addition to serving as 'pavilions' during Carabram's festivals/celebrations. Finally, an urban plaza that can be utilized for celebrations/festivals as well as a market space throughout the week where stalls can be set-up.

Organizations such as Carabram are essential for the ideas of multiculturalism to be achieved. These organizations must not only have the support of various cultures but also the community if they are to be successful. They must respond to the needs of those they are serving and reach out to those in need. If and only then, can a truly multicultural society be achieved.



Master Plan, Historic & Commercial Core, City of Brampton, Ontario



Queen Street, City of Brampton, Ontario

Figure 68 - Urban Design Master Plan & Queen Street Plan, Brampton, Ontario, Canada

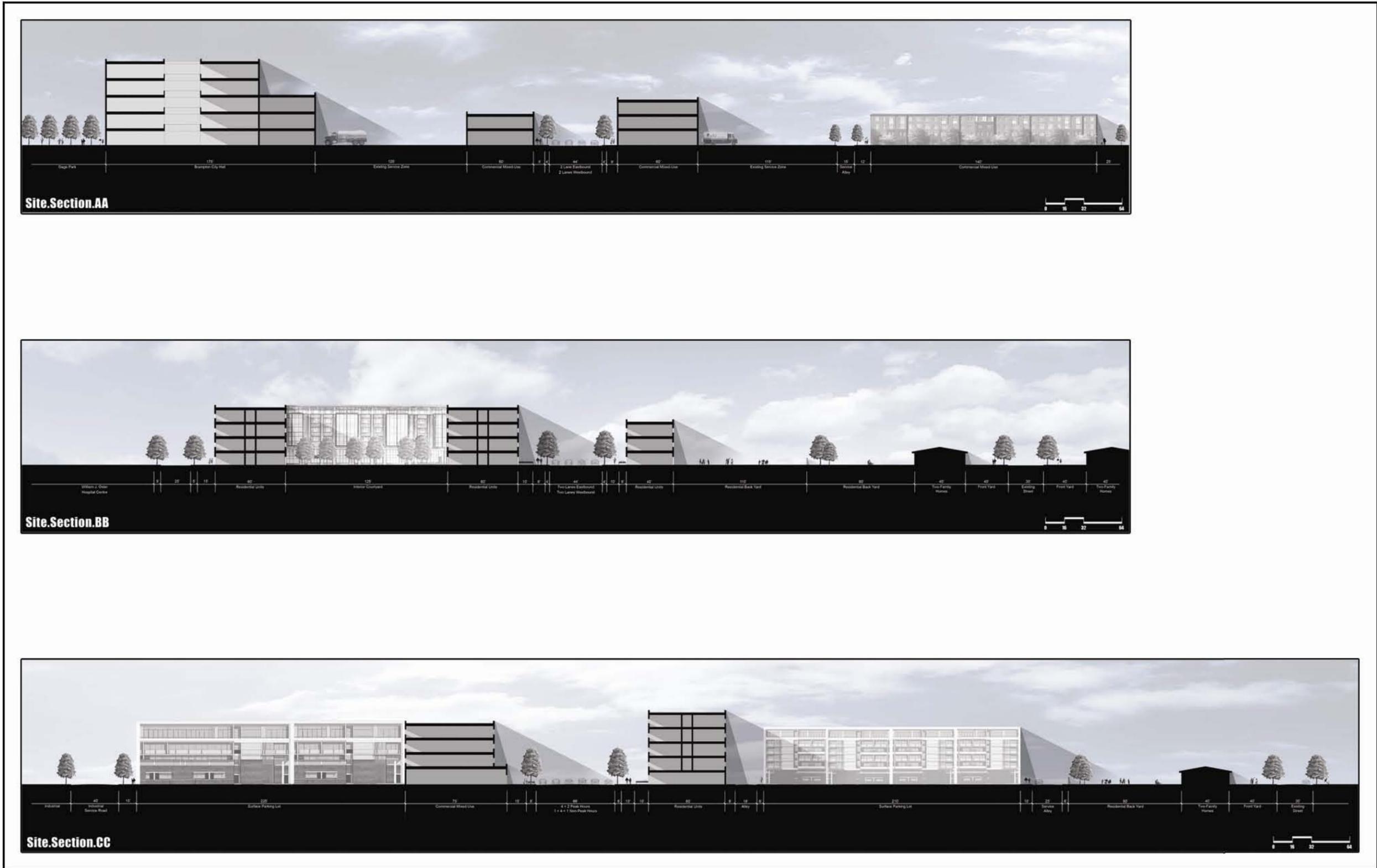


Figure 69 - Urban Design Site Sections, Brampton, Ontario, Canada

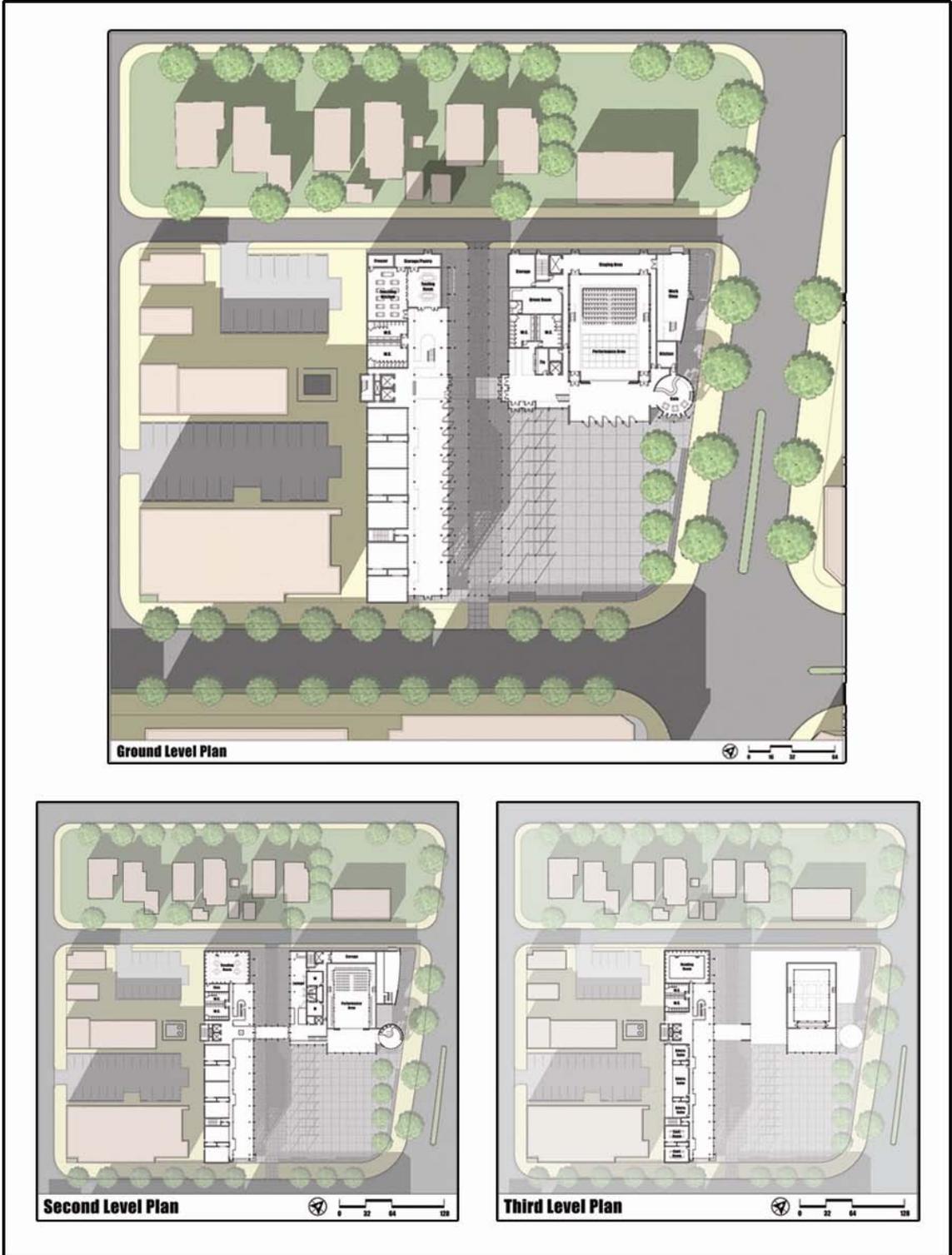


Figure 70 – Building Plans, Brampton, Ontario, Canada

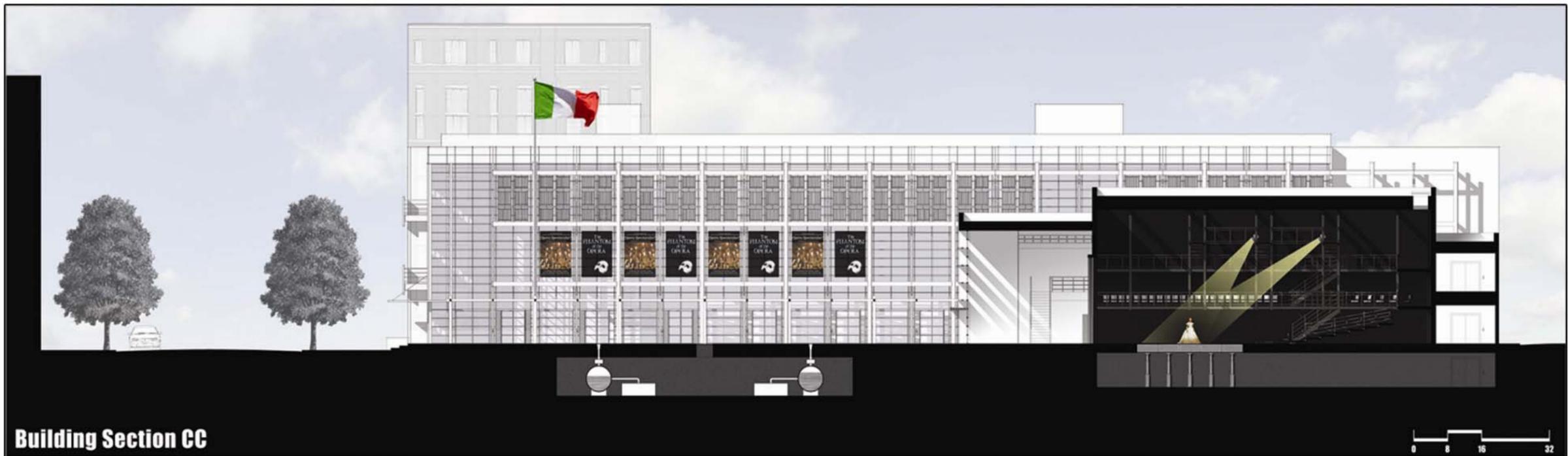


Figure 71 - Building Sections, Carabram, Brampton, Ontario, Canada



Figure 72 - Building Elevations, Carabram, Brampton, Ontario, Canada

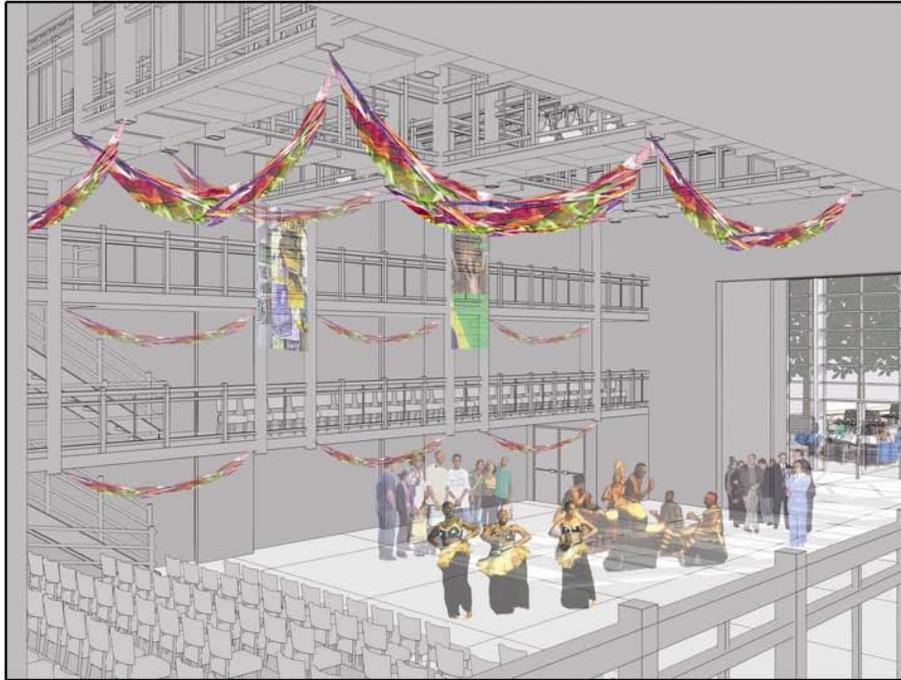


Courtyard during Chinese New Year Celebration



Galleria during Greek Celebration

Figure 73 - Perspectives, Brampton, Ontario, Canada



West Indian Festival in Performance Area



Carnival Celebration in Performance Area Lobby

Figure 74 - Perspectives, Brampton, Ontario, Canada

BIBLIOGRAPHY

- Arnell, Peter. Mississauga City Hall: A Canadian Competition.
Rizzoli International Publications. New York, 1984.
- Asensio, Paco. Renzo Piano.
teNeues. New York, 2002.
- Brampton's 100th Anniversary.
Charters Publishing Comp. Ltd. Ontario, 1973.
- Bureau of Architecture and Urbanism. Toronto Modern Architecture: 1945-1965.
Coach House Press. Toronto, 1987.
- Carabram. Carabram, Brampton's Multicultural Festival.
<<http://www.carabram.org/index.html>>, 9 September 2006
- Department of Justice Canada. Canadian Multiculturalism Act.
<<http://laws.justice.gc.ca/en/C-18.7/text.html>>, 3 March 2006.
- Findley, Lisa. Building Change – Architecture, Politics and Cultural Agency.
Routledge: London, 2005.
- Gibbon, John Murray. Canadian Mosaic. Dodd Mead & Company. New York, 1939.
- Loverseed, Helga V. Brampton: An Illustrated History.
Windsor Publications, Ltd. Burlington, Ontario, 1989.
- Piano, Renzo. Renzo Piano Logbook.
Moncelli Press. Italy, 1997.
- Statistics Canada. Canada's National Statistic Agency Profiling Canada's Business, Economy and Society. <<http://www.statcan.ca/start.html>>, 1 October 2006.
- Thomsen, Christian W. Eberhard Zeidler: In Search of Human Space.
Ernst & Sohn. Hong Kong, 1992.
- Zeidler, Eberhard. Zeidler Roberts Partnership: Ethics and Architecture.
L'Arca Edizioni. Italy, 1999.