

PIQUTIVUT

BUILDING OUR CAPITAL.

Places to Play, Protect and Prosper

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P E R C

DIALOG™



MMM GROUP



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## Executive Summary

The City of Iqaluit is quickly emerging as a regional social, economic, and cultural activity centre for business, transportation, health and education in Nunavut. It is also the hub for sporting events and sport development within the Territory. With an annual growth rate of three to four percent, the City's population is projected to increase from a current population of 7,000 to 10,000 by 2022.

Iqaluit recognizes that various infrastructure improvements and additions are needed to accommodate existing and future growth in the city: it does not have indoor recreation facility types enjoyed by other Canadian cities, and even some Nunavut communities, such as multipurpose halls, running and walking tracks, soccer fields and modern aquatic centres.

At the 2009 Strategic Planning Workshop, attended by City Councilors and City Management, a new Aquatic Centre was identified as the top priority capital infrastructure project for the City of Iqaluit. At this workshop, several other large capital infrastructure needs were identified, including:

- New Recreation Facilities;
- A new Emergency Services and Protective Services Centre and;
- A new City Hall.

In 2010, the City's Emergency Services and Municipal Enforcement Departments were combined to form a new "Emergency and Protective Services Department". With these two departments merged, the above priorities have been modified to include a new Emergency and Protective Services Centre.

An important consideration in developing priorities for this project is that the lease for the Astro Hill Pool Complex ends in March 2013 – a new aquatic centre should be in place by that date.

As there is limited space available for these types of large infrastructure projects in Iqaluit, the City feels that it is important to consider all of these needs when allocating the land to different projects. Furthermore, to ensure the effective use of City resources, the benefits and cost savings (both capital and operational) associated with grouping different facilities together need to be considered.

The City has retained the services of services of FSC Architects and Engineers who has assembled a team of experts to undertake a comprehensive feasibility study and business plan that will build on past work and guide the City on how to best address the Iqaluit's infrastructure needs. This report, **PIQUTIVUT – Building Our Capital** – is the result of many months of planning and consultation. It concludes 'Phase One' of the project wherein needs are assessed and quantified and building sites are identified.

### Consultation

Residents of Iqaluit and stakeholders have played a key role in determining the needs and priorities of the project.

The team adopted a procedure that included working closely with project stakeholders – the Mayor, councilors, numerous sports organizations, agencies and city hall, emergency and protective services staff, - to develop parameters for public feedback. These 'workshop' sessions included:

- Philosophical and Functional Priorities planning with Council;
- Recreation stakeholder interviews;
- Functional programming meetings to determine space requirements for city departments and facilities;
- Identification of possible sites (long list);
- Site Analysis (short list) and;
- Site Configuration (fit of buildings on lots)

After each of these sessions the planning team developed panels for public presentation, which were presented at public drop-in sessions. The purpose was to explain each stage of development and, more importantly, to obtain valuable feedback. A total of **six** drop-in sessions were held in the fall of 2010 at various locations including Northmart (3), Abe Okpik Hall in Apex, the High School and the Mass Registration.

Public consistently supported, in the clear majority:

- A new Aquatic Centre;
- A new Indoor Soccer Field House;
- A new Community Hall;
- A second Ice Arena;
- To the extent possible, facilities located in the downtown core, accessible by foot to greatest sector of the population;
- Relocation of the youth centre to a downtown facility;
- A broad understanding that a new Emergency Services Centre is vital to the city, and;
- Agreement that a new home for City Hall is overdue.

It is also important to note that a referendum vote may be needed to move forward with the design and construction of the new facilities, namely the aquatic centre. This is being planned for the fall of 2011. The key to a successful result lies in ensuring that the broadest possible cross-section of the public has been consulted and listened-to.

### Needs Assessment

This section of **PIQUTIVUT – Building Our Capital** focuses on determining the required facilities based on the outcomes of the consultation process while taking into consideration the long-term needs of the community. While the findings of the assessment generally agree with public expectations, there is one exception: a new regulation ice sheet to replace Arnaitok Arena is not fully sustainable. Current ice time can be scheduled on one ice surface with limited sacrifices to time slots. Drop-in and instructional skate time could be accommodated on a 'leisure' ice surface approximately 60% smaller than a regulation surface. This report recommends that the preferred option from a recreational perspective is to build a new regulation ice surface. If added to the existing AWG Complex, the expanded facility could accommodate large events (trade shows, conventions), Arctic Winter Games and, from the perspective of the 'public good' provide extra ice time for youth at risk.

It is determined that:

- A new **downtown recreation facility** totaling approximately 11,760 m<sup>2</sup> is required soon to
- replace the existing pool at Astro Hill. It will house a new aquatic centre, an indoor soccer field, a 'flexi-hall' (gym and large gathering/community hall) two smaller multipurpose halls, a fitness centre, a climbing wall, a preschool program area, indoor playground, a youth center and an elder's space

- A 4000 m<sup>2</sup> **addition** to the **Arctic Winter Games Complex** is needed if a new regulation ice arena is considered sustainable.
- The existing **Curling Club** is expected to be acquired by the City in 2011 and will continue to be used as a curling facility in the winter and a skate park for the balance of the year.
- An approximate 1,850 m<sup>2</sup> **Emergency and Protective Services Centre** is required to fulfill expanding firefighting and emergency response requirements and to replace an inadequate, noncompliant existing facility, and;
- **City Hall** requires 3,100 m<sup>2</sup> of new space to replace its current second floor accommodation above the fire hall. The current city hall is not large enough to house all city offices. Additional office space has been leased in order to accommodate city staff. The existing facility does not meet building code requirements, is poorly serviced and is not barrier free accessible.
- In addition to the above noted new facilities, **an animal shelter** is needed to facilitate bylaw services and a new **records storage/inventory warehouse** is needed to supplement the proposed City Hall functional program.

To address the uncertainty raised by the dilemma of the second ice surface, alternatives are proposed. As the downtown facility is constructed, interest in hockey may wane: indoor soccer is a rapidly growing sport nationally while additional recreation facilities will also draw attention away from ice sports. It may come to pass that an addition to the AWG may not be necessary, or a different one required:

- **Recreation Facility Alternative 1** proposes relocating the indoor soccer field to an 8,711m<sup>2</sup> AWG addition that would include a leisure ice surface for drop-in and instructional skating programs. This would in turn reduce the size of the downtown facility by about 4000 m<sup>2</sup> to 7,718m<sup>2</sup>.
- **Recreation Facility Alternative 2** proposes relocating the indoor soccer field to a smaller 6,800m<sup>2</sup> AWG addition that would not include any additional dedicated ice surface. In lieu, the soccer surface would be convertible to an ice surface for large tournaments, or function as a space for large indoor events in conjunction with the existing AWG surface. This would again reduce the size of the downtown facility by about 3,900 m<sup>2</sup> to 7,800 m<sup>2</sup>.

It is important that ice surfaces remain adjacent to each other, to take advantage of ice-making and ice-cleaning equipment and optimize maintenance staff allocations.

A negative aspect of Alternative 1 and 2 is the relocation of indoor soccer away from the downtown. This shifting of the 'centre of gravity' works against the feedback received at drop-in sessions and the guiding principles of the Iqaluit General Plan.

### Site Analysis and Selection

A total of 20 sites were identified for potential development of the proposed Facilities at an initial workshop with city. A 'Locational Lens' was introduced to the selection process, helping to filter out sites based on the tenets of the General Plan: sustainable development of the downtown core with an emphasis on allowing maximum pedestrian access to the greatest amount of people.

The result was a shortlist of sites in the core, acknowledging that any ice-related additions should take place at the AWG Complex.

Shortlisted sites were evaluated at a workshop with city staff. The results were developed into public presentation panels that were used at drop-in sessions to solicit public feedback. The outcomes found general consensus:



- The only site suitable for the Downtown Recreation Facility is the current Arnaitok Arena/Fire Hall/City Hall location, identified as Site 1. All other potential situations are either too small, not immediately available or are inappropriate for the intended use;
- The AWG Complex is the only site identified for **New Ice Surfaces** and related development alternatives discussed above;
- Three sites were earmarked for the **Emergency and Protective Services Centre**, including Site 11 on Federal Road, owned by QIA, Site 8 at the northwest corner of the Road to Apex and the Road to Nowhere and Site 20, 'Frosty's Refrigeration Lot' next to the Elks. **Site 11** was identified as the Preferred Option for size, proximity to the core and potential ease of development. Though good from a 'public presence' perspective, site 8 poses numerous technical challenges. Site 20 is also close to the core, but is small and potentially serves as a parking location for the downtown recreation facility;
- Three sites were also indicated for the new **City Hall**: Site 6, the old courthouse site adjacent to the waterfront and Iqaluit Square is well located from a civic perspective while site 2, the air base garage lot at the Four Corners occupies a prime city location. Ultimately the preferred location is the re-purposing of the existing Legislative Assembly Building at **Site 12**. At least cost, good functional fit and room for expansion, this latter alternative is viable: the Legislative Assembly lease expires in May, 2019 and temporary accommodations in existing office space downtown are available.
- The existing Public Works lot and warehouse are a suitable location for both a new records and inventory centre as well as an animal shelter for bylaw animal control.

Each site discussed above was configured to accommodate the proposed facilities in conjunction with parking required by the Zoning Bylaw. With the exception of the Downtown Recreation Facility, all sites potentially support the anticipated use.

Parking is at a premium downtown, as is available land. However, the most intensive use of the Downtown Recreation Centre will be in the evening, after normal work hours. Approximately 204 parking stalls are needed. Four potential spaces are available for development: Site 2, The Airbase Garage lot, is already slated for an infill development that will make approximately 65 parking spaces available to the City. Nunavut Drive, which runs between the Curling Club and Site 1 has space for up to 70 parking stalls. The adjacent courthouse site has space for about 30 cars, but an agreement would be required with the GN. It is proposed that the remaining 40 or so stalls be accommodated through the purchase of Site 20. All of the sites are within reasonable walking distance of the proposed centre.

Sustainability and the effects of Climate Change are a significant consideration of this study. This will follow through into the detailed designs developed in Phase 2. Of the sites under consideration, only the Old Courthouse, Site #6, faces a potential threat: sea level rise. However, discussions with the Geological Survey of Canada (GSC) indicate the anticipated change in water levels should not affect construction at this location. This is a very preliminary observation and is subject to verification by survey of the site by GSC relative to the current high tide mark.

Moving forward, many aspects of the proposed designs will come under scrutiny to ensure the required screening of proposed development adequately addresses the future effects of climate change.

A final aspect of the site planning will be the phasing of the work. The construction of a new Emergency and Protective Services Centre, together with the relocation of City Hall will take time to execute economically and efficiently. At the same time, an Aquatic Centre is needed on Site 1. The project team has confirmed that there is adequate space remaining on the north east section of the lot to develop the new Aquatic Centre.

Once a new building is constructed for the E&PSC, and new or temporary accommodations for City Hall are established, the balance of the Downtown Recreation Facility can be constructed. Additions to the AWG Complex could be deferred indefinitely as the City determines the real need for a second ice surface – regulation or otherwise.

### Pre-Feasibility

This initial review of potential funding sources for the City of Iqaluit City Hall, Emergency Services and Recreation infrastructure is preliminary in nature, focusing on an examination of the key internal resources of the City and critical external sources, primarily of the Government of Nunavut and the Government of Canada. Subsequent business planning, which will be carried out as part of Phase 2 of the planning project, will undertake detailed analysis of potential project financing.

The two primary internal sources of the City of Iqaluit for project financing, outside of user fees, are increases in property taxes, and loans from a registered financial institution or from territorial and federal governments. A third funding source may be available to the City through the Federation of Canadian Municipalities (FCM)' Green Fund, but this avenue will require further investigation and analysis. This FCM initiative is funded by the Government of Canada. A critical element of the future analysis in Phase 2 business planning will be examination of the potential impact of proposed project financing on property tax levels in Iqaluit. This analysis will be complemented by a detailed comparison of property tax levels in other northern municipalities, and where possible southern municipalities. This comparison must be based not only on a comparison of property tax mill rates but also on the differing property value assessment systems used in each case, as well as other critical factors determining the overall tax burden on municipal residents.

Currently, municipalities in Nunavut do not have the power to issue municipal bonds. Investigation of the potential for this as a future financing option will be pursued in Phase 2. At the same time, the innovative approach utilized in the financing of the NWT Legislative Assembly building in Yellowknife, under which bonds were issued by a privately incorporated society, may have applicability in Iqaluit, depending on whether this is permissible under Nunavut territorial legislation.

Government of Nunavut funding for City of Iqaluit infrastructure is provided through the GN five-year capital planning process. A key element of GN capital funds are those provided by Infrastructure Canada under the Provincial/Territorial Base Fund of the Building Canada Program, which is administered as an integral part of the GN capital planning. Project funding of 75% is provided by the federal program, with the remaining 25% provided by the Government of Nunavut. At this time, the list of territorial projects to be considered for Building Canada funding for the fiscal years 2011-12 to 2013-14 does not include the proposed City of Iqaluit infrastructure. The City of Iqaluit can request that the GN include the City Hall, Emergency Services and Recreation infrastructure in subsequent Building Canada capital plans, but it appears that these projects may be ranked low in comparison with other GN critical infrastructure needs. The Phase 2 business planning will have to address the need for project support from both the federal and territorial governments.

The final major current source of infrastructure funding is the PPP Canada funds which can provide capital financing for Public Private Partnership (P3) projects. Funding proposals are assessed on a merit basis, and if accepted can provide capital contributions of up to 25% of

project costs. The overall applicability of the P3 approach will be examined and assessed as part of the Phase 2 business planning.

### Next Steps

It is important to move ahead with Phase 2 of **PIQUTIVUT – Building Our Capital**: timelines for the design and construction of the new Aquatic Centre are seriously constrained and dependent upon the successful outcome of the referendum. Timing for the vote will be the fall of 2011. The completion of Phase One will entail acceptance of this report by council, followed by a public presentation of the findings.

The City faces three major challenges to pave the way for the delivery of Phase 2 detailed design, costing, business planning and implementation:

1. Site 20 needs to be acquired to ensure adequate parking for the Downtown Recreation Facility;
2. A comparative analysis of the cost to purchase the Legislative Assembly relative to the cost of new construction needs to be undertaken to account for interim accommodations, financing and long term operating costs, and;
3. Negotiations with QIA on the cost and availability of a portion of the Federal Road site need to consider the owners' long-term vision and the intent of the General Plan.

The City must determine if P3 project delivery is appropriate: will the long term costs of a lease-to-own design-build agreement outweigh the debt burden of more conventional design build project delivery method, where-in the city would own its facilities at the outset?

Finally, work must begin as quickly as possible on the design of the new Aquatic Centre

# 1 Introduction

## 1.1 BACKGROUND

The City of Iqaluit has experienced immense growth and development since it became a Capital City of Nunavut in 1999. Home to many federal and territorial departments, northern businesses and Inuit organizations, the City is quickly emerging as a regional social, economic, and cultural activity centre for business, transportation, health and education. With an annual growth rate of three to four percent, Iqaluit's population is projected to grow from a current population of 7,000 to 10,000 by 2022.

Iqaluit recognizes that various infrastructure improvements and additions are needed to accommodate existing and future growth in the city. Many indoor recreation facility types enjoyed by other Canadian cities, and some Nunavut communities, such as community halls, running and walking tracks, soccer fields and modern aquatic centres are lacking.

Time is running out for other city assets: the current lease on the City of Iqaluit Swimming Pool ends March 31st 2013 while Arnaitok Arena, the Fire Hall and City Hall occupy a 40 year-old structure well past its useful service life. In both cases, renovation is more costly than new construction.

At the 2009 Strategic Planning Workshop, attended by City Councillors and City Management, a new Aquatic Centre was identified as the top priority capital infrastructure project for the City of Iqaluit. At this workshop, several other large capital infrastructure needs were identified, including:

- New Recreation Facilities
- A new Emergency Services Centre and;
- A new City Hall.

In 2010, the City's Emergency Services and Municipal Enforcement Departments were combined to form a new "Emergency and Protective Services Department". With these two departments merged, the above priorities have been modified to include a new Emergency and Protective Services Centre.

As there is limited space available for these types of large infrastructure projects in Iqaluit, the City feels that it is important to consider all of these needs when allocating the land to different projects. Furthermore, to ensure the effective use of City resources, the benefits and cost savings (both capital and operational) associated with grouping different facilities together need to be considered.

Some studies have already been completed on the above-mentioned facilities. In 1999, the City of Iqaluit commissioned a study on the development of a Civic Centre and in 2002 it undertook the development of a Recreation Master Plan. In 2005, an Aquatic Centre Feasibility Study was completed, following which a referendum took place asking the tax payers for support for the City to borrow funds for: i) a new Aquatics Centre, and ii) a new City Hall. The referendum was unsuccessful in obtaining a majority vote in both cases. More recently, in 2009, a survey on the recreation needs of the community was completed.

The City has retained the services of services of FSC Architects and Engineers who has assembled a team of experts to undertake a comprehensive feasibility study and business plan that will build on past work and guide the City on how to best address the Iqaluit's infrastructure

needs. “PIQUTIVUT” is the result: bringing into reality a vision for Iqaluit’s future infrastructure needs.

## 1.2 OBJECTIVES

This comprehensive feasibility study and business plan addresses the following questions with respect to these priority infrastructure projects:

- What types of facilities are needed?
- How much space is needed for these facilities over the next 15 years?
- Are there existing facilities that can help accommodate some of these needs?
- How should the facilities be grouped and where will they go?
- What will the facilities look like? (conceptual design)
- How much will they cost? (cost analysis)
- How will the City pay for them? (business plan)
- How can these facilities be made as sustainable and energy efficient as possible?
- What will the implementation plan look like?

The end purpose of this feasibility study and business plan is to:

- Provide the City with a long term plan for the facilities that will ensure an effective and efficient use of land and financial resources;
- Enable priority projects, such as a new Aquatic Centre, to proceed as quickly as possible;
- Identify opportunities for partnerships, funding and revenue generation;
- Ensure that the recommended solutions reflect the views and needs of the residents of the community.

The overall goal of the Feasibility Study and Business Plan is to answer the question:

“How can the City develop the facilities in the most economical and sustainable manner while meeting the current and long-term needs of the community?”

## 1.3 STRATEGY

This project will pave the way to building the new recreation, emergency, protective and city hall facilities it so desperately requires. The work will be carried out in two phases:

### Phase One

This first stage of the project involves a detailed analysis of the City’s options with regard to the development of the facilities. It incorporates feedback from extensive consultation with the community, stakeholders, City staff and Council. The work includes:

- A Needs Assessment to determine the recreation, emergency and protective services and city hall facility needs for the next 25 years
- Site Analysis to determine which sites are suitable for the facilities and which best reflect the long term planning goals of Iqaluit;
- Facility Configuration Options to determine which facilities should be grouped together on which sites
- Identification of Preferred Configuration Options

## Phase Two

Once the objectives of Phase One are accomplished the conceptual design can begin. This second part of the project will be comprised of:

- Conceptual Designs for the required facilities on the selected sites;
- A Business Plan outlining how the facilities will be paid for and operated, and;
- An Implementation Plan.

This Preliminary Report summarizes the work and recommendations from Phase One. Once the City Council approves Phase 1 of the study, Phase 2 will focus on further developing the preferred facility configuration option approved in Phase 1.

## 1.4 TEAM

The City of Iqaluit formed a Working Committee as described in the table below, to develop the Request for Proposals and manage the project. Other department heads and city staff provided valuable input throughout the process.

Team Member	Role	Title
Amy Elgersma	Project Manager	Director of Recreation
Megan Leach	Sustainability Oversight and Project Advisor	Director of Engineering and Sustainability
John Hussey	Financial & Administrative Oversight	Chief Administrative Officer

The consulting team consists of FSC Architects and Engineers as the prime consultant along with a team of sub-consultants all of which have extensive experience working in Iqaluit. The consulting team members and firms are outlined in the table below.

Firm	Team Members	Firm Role
FSC Architects & Engineers	Terry Gray, Principal-in-Charge Rod Kirkwood, Principal Architect Harriet Burdett Moulton, Architect	Prime Consultant; Lead Architectural and Engineering Consultants
PERC	Brian Johnson, Recreation Planning Consultant Don Hunter, Recreation Facility Specialist	Recreation Planning Consultants
Dialog (Office for Urbanism)	Antonio Gomez-Palacio, Principal	Urban Planning & Design
MMM Group	Jim Gough, P. Eng. Partner	Transportation Engineering Emergency Response Planning
Aarluk Consulting	Fred Weihs, Financial Consultant Terry Forth, Financial Consultant	Business Planning
Hanscomb	Grant Mercer, PQS Paul Weatherby, PQS	Quantity Surveying

## 1.5 PUBLIC CONSULTATION

The City of Iqaluit is committed to an inclusive planning process in the development of these important facilities. As a result, the process has been designed to include extensive public consultation and engagement program.

As part of this program, the consultants proactively identified all those individuals or groups who might be interested in or impacted by the feasibility study and invited them to participate.



Furthermore, the program also provided several “drop-in” opportunities to provide a variety of opportunities for the general public to participate in the process.

Key communication tools/mechanisms include:

- City of Iqaluit Website
- Recreation E-Newsletter
- Local News Media (interviews, etc.)
- Email List Serves
- Local Bulletin Boards

Key consultation methods include:

- Stakeholder interviews/meetings
- City of Iqaluit staff interviews (individual) and meetings (group)
- Public Events (ex. Presentations, Northmart and Mass Registration Booths, Open House Events)
- Public Survey (conducted in 2009)
- Council workshops
- Feedback forms (distributed at public meetings and made available on the project website).

Specific details on the engagement/consultation activities conducted during the Needs Analysis and Site Selection stages of the project are outlined and identified in the following report. The consultation plan is included in Appendix F.

## 1.6 ACKNOWLEDGEMENTS

The Project Team would like to acknowledge the time and valuable input from the Mayor, City Council and past Mayor of Iqaluit, Director of Emergency Services and Fire Captain and all City of Iqaluit Department Directors and contributing staff, participating Recreation Stakeholder Groups and the many citizens of Iqaluit that offered input and feedback throughout the Phase One consultation process.

## 2 Context

### 2.1 IQALUIT DEMOGRAPHICS

Iqaluit is a young and rapidly growing capital city. The impact of division at the turn of the century coupled with economic growth is straining infrastructure and the gap, between what is needed and what existing, is widening. This section outlines the scale of growth as a measure of the challenges faced in *Building Our Capital*.

#### 2.1.1 Community Overview

The City was known as Frobisher Bay from 1955 to 1987 when it reverted to its original name of Iqaluit, which is Inuktitut for “place of many fish”. An early American air base, it became operational in 1943. Between 1955 and 1957, the base and community served as a center for Distant Early Warning (DEW) Line construction, and then housed a U.S. Strategic Air Command Unit from 1960-1963 when the base was abandoned. Iqaluit was selected by plebiscite as the future capital of Nunavut in December 1995, and became the official capital with the formal creation of Nunavut on April 1, 1999. On April 19, 2001, Iqaluit received the order of official status as a city. Iqaluit hosted the 2002 Arctic Winter Games and the G7 Summit in Feb. 2010.

With an estimated current population of 7,300 -8,000, Iqaluit is far larger than the next largest Nunavut community of Rankin Inlet at 2,450 and the other 8 Nunavut communities with a population of at least 1,000. Iqaluit has a landmass of 52.34 sq km, including the nearby neighbourhood of Apex. It is accessible only by air and water and relies largely on ships for the delivery of fuels and large commodities when the Koojesse Inlet is ice-free. Shallow water and an extensive tide make cargo off-loading difficult, although a deep-water port is under consideration. According to the Iqaluit General Plan, the number of private dwellings has increased from 2,460 in 2006 to 2,830 in January 2009. The City is bordered by Sylvia Grinnell Territorial Park to its west and scenic Tar inlet to the East.

#### 2.1.2 Demographic Sources and Limitations

**Statistics Canada Census:** The official count of the population is done by Statistics Canada every five years. They produce detailed *Community Profiles* that outline population demographics, and household and economic characteristics of Canadian municipalities and regions. The last Census count was done on May 16, 2006, and the results were released during 2007 and 2008. In terms of the actual Census count, Statistics Canada has estimated that the count does not capture all Canadians; they estimate a 3.1% under-coverage figure. Statistics Canada does provide ongoing population projections, but only on a national and provincial/territorial basis, and not at the community level.

**Iqaluit General Plan:** The Iqaluit General Plan compiles several demographic sources to come up with low, medium and high population projection, for use in decision-making and future planning. It was approved in May 2010 and is intended to support policy and planning decision making until 2030.

**Nunavut Bureau of Statistics:** The Nunavut Bureau of Statistics is a division of the Department of Executive and Intergovernmental Affairs, Government of Nunavut. It bases its population data on the Census and updates from Statistics Canada, but also carries out detailed reviews of residential and non-residential construction, labour force statistics, the economy, and health and social service indicators on a territorial level.



### 2.1.3 Population Growth Patterns from 1991 to 2006 Census Periods

The 2006 Census counted 6,184 individuals in Iqaluit. The actual population in 2006 was closer to 6,375 based on the Stats Canada 3.1% under-coverage estimate. Table 1 provides an overview of the Iqaluit population growth over the last four Census periods, and the rates of growth over the 5-year period between them.

**Table 1: Census Populations and Growth Patterns**

Census Year	Population of Iqaluit	Iqaluit 5 Year % Growth	Population of Nunavut	Nunavut 5 Year % Growth
1991	3,552		(NWT)	NA
1996	4,220	18.8%	(NWT)	NA
2001	5,236	24.1%	26,745	NA
2006	6,184	18.1%	29,474	10.2%

Iqaluit has been one of the fastest growing communities in Canada over the last 15 years, increasing by 74% over that period and by 18.1% in the last 5 years. While Nunavut didn't exist as a territory until 1999, it grew more slowly than Iqaluit at 10.2% between 2001 and 2006, but was still the third fastest growing jurisdiction in Canada after NWT (11.0%) and Alberta (10.6%). Canada as a whole grew only 5.4% over the same period.

### 2.1.4 Age Group Distribution in 2001 and 2006

Table 2 provides the age group distribution in Iqaluit and Nunavut for both the 2001 and 2006 Census counts by number and proportion.

**Table 2: 2001 and 2006 Age Group Distribution: Iqaluit and Nunavut**

Age Group	Iqaluit 2001	Iqaluit 2006	Nunavut 2001	Nunavut 2006	Canada 2006 %
0-14	1,490 (28.5%)	1,555 (25.1%)	10,105 (37.8%)	9,995 (33.9%)	17.7%
15-24	785 (15.0%)	1,040 (16.8%)	4,650 (17.4%)	5,620 (19.1%)	13.4%
25-44	2,020 (38.6%)	2,290 (37.0%)	8,015 (30.0%)	8,655 (29.4%)	27.9%
45-64	860 (16.4%)	1,180 (19.1%)	3,545 (13.3%)	4,385 (14.9%)	27.4%
65+	75 (1.4%)	135 (2.2%)	595 (2.2%)	815 (2.8%)	13.7%
Median Age	28.3 yr	28.8 yr	22.1 yr	23.1 yr	39.5 yr

Iqaluit grew in every age group cohort between 2001 and 2006, including children aged 0-14, which went down in most other jurisdictions across Canada as national birth rates continue to lower. The proportions of this age group in Nunavut are more than twice as high as the rest of Canada, although the actual number went down by 110 children in the territory. The large proportion of young adults aged 25-44 will place further demands on services. In Canada, the median age goes up by just over two years each 5 years and was 39.5 in 2006. Iqaluit and Nunavut aged far more slowly, and the proportions of older adults aged 65+ were far lower at 2.2% and 2.8% in Iqaluit and Nunavut respectively, than the Canadian proportion of 13.7%.

### 2.1.5 Population Growth Projections

Statistics Canada only provides population estimates for the country and the provinces and territories between Census periods. The July 1, 2010 estimate for Nunavut was 33,200 which is a 12.6% increase over the 4 years since the May 2006 Census; this is already higher than the 10.2% growth between 2001 and 2006. Iqaluit had 18.1% growth over the same 5-year period.

Iqaluit recorded 6,184 people in the 2006 Census. Using Statistics Canada's own undercount estimate of 3.1%, the actual population in May 2006 would be closer to 6,375. If the same growth rate of 18.1% between May 2001 and 2006 is assumed, the May 2011 Census count should be 7,298 and the actual population at 7,525 (using the 3.1% undercount). This means that if we assume a constant growth rate from 2001 through 2010, the July 1, 2010 population of Iqaluit was approximately **7,300**.

However, the '2010 Nunavut Economic Outlook' prepared by the Nunavut Economic Forum cites changes in growth trends brought about by 'out-migration': the high cost of living and low vacancy rate are forcing people, including birthright citizens, to relocate south. This has had the effect of stemming the growth rate from approximately 3% noted above to about 1.8% as reported by Statistics Canada from the 2006 Census. The actual degree of out-migration, and its effects if any on Iqaluit, won't be clear until the 2011 census.

The Iqaluit General Plan (2010) takes a number of factors into account when predicting population increases and wisely provides a range of estimates based on high, medium and low estimates based on predictions from Nunavut Bureau of Statistics, Statistics Canada, and past growth rates. The population estimates from the General plan are shown in Table 3.

**Table 3: Future Population Estimates for Iqaluit (General Plan)**

Year	Low 2.04%	Medium 2.87%	High 3.38%
2010	7,227	7,405	7,516
2015	7,993	8,532	8,877
2020	8,842	9,830	10,484
2025	9,780	11,326	12,282
2030	10,820	13,050	14,265

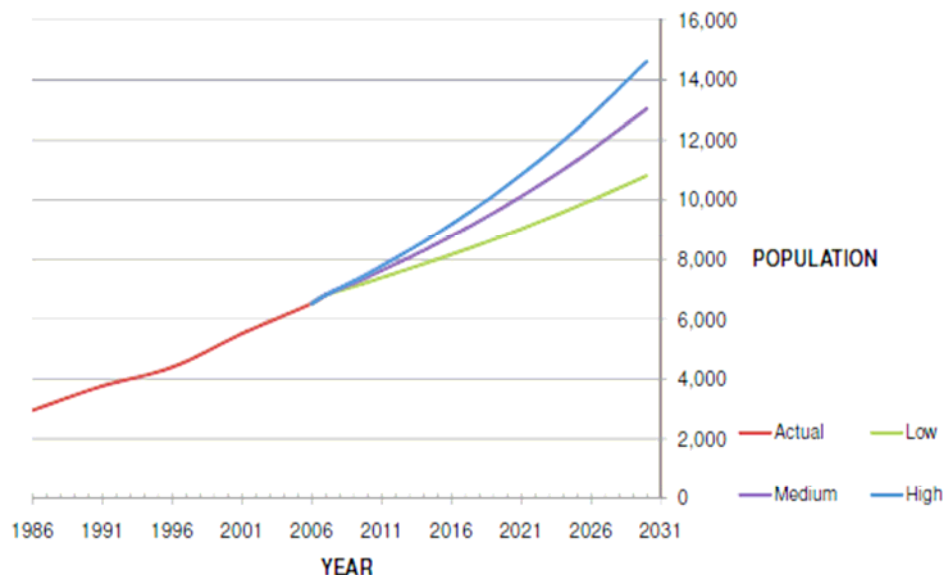


Figure 1: City of Iqaluit Growth Projection<sup>1</sup>

<sup>1</sup> From The Iqaluit General Plan (October 2010)

The General Plan recommends using the Medium projection and this appears to be a reasonable approach. A central planning issue is how to address the current shortage of housing in Iqaluit and to predict housing needs over the life of the General Plan.

### 2.1.6 Areas of Future Growth in Community

Based on a projected population of 13,050 in 2030, and an average household size of 2.9, a total of 4,500 dwelling units will be required. At the start of 2009, there were an estimated 2,830 dwellings, so that 1,670 units or approximately 80 units per year will need to be built. Iqaluit requires a greater planning effort to make this happen than many southern communities where supply/demand can be more quickly handled by the private sector. The issues facing Iqaluit include time and shipping constraints on the delivery of many building materials, the shortened construction period, and the lack of easily developable land – beyond the densification of already developed areas. There is also a need for affordable housing in a community where current housing and rental prices are already on the high side.

Future development is planned in three phases. These are:

#### Phase 1: (from 2010 to 2013)

- a. Remaining lots in Lake and Road to Nowhere subdivisions
- b. Remaining lots in phase 2 on Plateau and development of phases 3 and 4 of Plateau
- c. Infill and redevelopment of Core Area

#### Phase 2: (from 2014 to 2020)

- d. Development of either Future Development Area A or B
- e. Infill and redevelopment of Core Area
- f. Federal Road Special Policy Area

#### Phase 3: (beyond 2020, identical to Phase 2)

Phase 3 varies from Phase 2 only in the timing of whether Area A or B is developed first. Both need a sewage treatment station, which will be expensive, meaning that they lend themselves to sequential development. All three phases include the infill and redevelopment of the Core Area, with resulting greater densification. Area A is on the road to Apex, and immediately to the Government of Nunavut reserve lands. Area B is to the East of the Lake subdivision and to the north of the VHF-DF site.

The development of these three phases should satisfy the housing demands, and current shortfall, until 2030. While completing current subdivisions and developing Areas A and B are essential, the densification of the Core and other development area are just as important.

### 2.1.7 Implications from Demographics

There are a number of implications for recreation services in Iqaluit that arise from the demographics analysis. These include:

- Iqaluit will continue to experience strong population growth and the addition of new residents will place a greater demand on public services.
- The high and growing proportion of children will place a higher demand on pre-school and children's program services and opportunities. The same holds true for young adults, with or without families.

- The effects of out-migration on growth rates should be addressed. Any action by the city to improve the quality of life in Iqaluit could have an impact stemming this negative tendency.
- Conversely, the number of older adults did grow from 75 to 135 between 2001 and 2006, but remains a low proportion of the population. Coupled with the trend of individuals in their 60's to remain in mainstream facilities, there is likely not a demand for new stand-alone seniors facilities. The integration of seniors' social spaces within new multi-generation facilities should meet their needs.
- The growth patterns in the City suggest that downtown facilities would be well received, and that the AWG site will also be well positioned as future growth occurs in Areas A and B.
- There may be further opportunities to reflect Inuit culture and traditional activities in newer facilities that have more flexible spaces and include an area for large gatherings.
- While the average household income in the city is high, there are a number of low income and one-parent families that will need affordable access to services.

The 2011 Census will provide a more accurate picture of Iqaluit's population when it is released over 2012 and 2013. The City should update the demographic profile at that time.

## 2.2 PAST STUDIES AND PLANS

### 2.2.1 Iqaluit General Plan

The Iqaluit General Plan was completed in February 2010 and adopted by council as Bylaw #703 in October 2010. The plan is the result of wide ranging consultation from the individual resident of Iqaluit to the Nunavut and Federal Governments, and most significantly, City Council. The plan is a reflection of the consultation. It will influence and guide decisions made with respect to all other bylaws including the Zoning and Building Bylaws. It incorporates related plans completed or in the process of completion as identified in the next section. The Plan can be summarized as espousing:

- Environmentally responsible sustainable development of the Core Area;
- Development that encourages economic opportunities but which is in turn economically feasible and sustainable;
- Mixed use opportunities that acknowledge the high cost of development;
- Housing options, in light of chronic housing opportunities, and especially affordable housing;
- Respect for Inuit cultural values;
- Respect for the fragile arctic environment;
- Effective development that is participatory and inclusive;
- Development that anticipates the effects of climate change;

### 2.2.2 Related Master Plans

The Iqaluit General Plan incorporates the following specific developed master plans (with excerpts from the General Plan):

The **Recreation Master Plan** outlines policy actions that the City may use to improve quality of life for Iqaluit residents through the provision of park and recreation services. The Plan identifies needs, provides direction, and establishes priorities for planning recreation facilities and services for a ten year horizon that are tied into the Capital planning process. The plan embraces the guiding principles of environmental and economic sustainability by encouraging centralization of new recreation components in the core area.

The **Community Economic Development Plan** focuses on policy actions that will improve both economic development and quality of life within the community.

The **Sylvia Grinnell Master Plan** contains specific policy actions for the protection and development as a recreation centre of Sylvia Grinnell Park.

The **Core Area & Capital District Redevelopment Plan** contains more detailed information regarding the design themes and strategies for redevelopment of the central area of the City.

The **Integrated Community Sustainability Plan** (to be adopted) will describe long-range goals, strategies and prioritized actions for governmental and nongovernmental organizations, as well as the community at large.

The **Community Action Plan** outlines reduction measures to reduce greenhouse gas emissions from Municipal operations.

### 2.2.3 Iqaluit Long Term Planning Report

In 2008 Iqaluit joined the PLUS Network and retained the International Centre for Sustainable Cities (ICSC) to develop a long term plan promoting sustainable growth in the context of a healthy, economically viable community with representative governance. In many ways that are measurable, this study influenced the need for a Core Area Development Strategy, which in turn directly influenced the Iqaluit General Plan in its current form.

### 2.2.4 Nunavut Economic Outlook

This 2010 report is prepared by the Nunavut Economic Forum; a broad group of member organisations whose intent is identify and share information on economic activity in Nunavut. The Outlook characterizes future economic growth to be very strong in the near term, suggesting additional pressures on existing infrastructure. This trend, together with evidence of out-migration due to cost of living challenges, as well as increasing trends of higher death rates and worsening health conditions, all point to a need for enhanced recreational facilities. An improved quality of life will compete with the desire to leave and more options for exercise will create healthier lifestyles and decrease healthcare burdens.

### 2.2.5 2010 Recreation Survey

The City of Iqaluit Recreation Survey both supplements and reinforces the findings of the Recreation Facilities Consultation phase carried out by PERC. In order of priority the survey supports:

- New swimming pool;
- New Community hall;
- New multi-purpose gym;
- New indoor soccer field and;
- Second (repaired AWG) ice rink – Now completed.

### 2.2.6 Aquatic Centre Feasibility Study

In addition to the City of Iqaluit Recreation Master Plan, the City engaged FSC Architects and Engineers, in association with PERC, to prepare a Feasibility Study for a new Aquatic Centre in 2005. The study found that:

- There are proven health and social benefits to indoor aquatic recreation;

- The existing facility does not meet the needs of the (then current) population of Iqaluit. At full capacity the existing facility is less than 50% capable of accommodating the national average swims per capita; at projected population growth, the current facility will be at least 75% under capacity;
- There is a need for a contemporary facility that meets the diverse indoor Aquatic needs of Iqalummuit. Those needs include recreational, competitive and fitness aspect of indoor swimming;
- After considerable site analysis development adjacent to Joamie School was recommended offering spectacular views of the city and its surrounding landscape. Adjacency to schools and future development was also a primary consideration;
- A 2130m<sup>2</sup> facility incorporating a 5-lane lap pool, leisure pool with waterslide, community gathering areas and ancillary functions was recommended;
- The facility would cost approximately \$10.5M plus project costs (about \$12M overall), in 2005 dollars. Funding strategies were explored;

To quote the executive summary:

*“The current Iqaluit swimming pool, built in 1970 to service approximately 900 people, is reaching the end of its service life. The pool is dilapidated, will require increasing amounts of money for maintenance, and does not meet the needs of the population. In the meantime, the tremendous growth and development of Nunavut’s capital city provides and exciting opportunity to replace the aging facility with a modern, state-of-the-art Aquatic Centre.”*

The referendum for the new swimming pool held shortly after the Feasibility Study’s completion was defeated; largely by poor timing in the context of the AWG Complex slab failure and other negatively perceived developments that affected public perception.

The Aquatic Centre Study preceded the ICSC Long Term Planning Study, the Core Area Development Strategy and the latest iteration of the Iqaluit General Plan. As such, the guiding principles of sustainable core area development have not matured in the public mind. Nonetheless, the need for a modern swimming pool that engenders community pride eclipses all other recreational needs and is the mainstay of this study: the lease on the existing swimming pool space expires at the end of March 2013, at which time a new Aquatic Centre must be operational.

A new swimming pool is the ‘driver’ of **Building Our Capital: Places to Play, Protect and Prosper**, both in the sense of a direct and immediate functional requirement and because previous experience dictates the need for an inclusive and transparent consultation process.

## 2.3 CLIMATE CHANGE IMPACT ANALYSIS

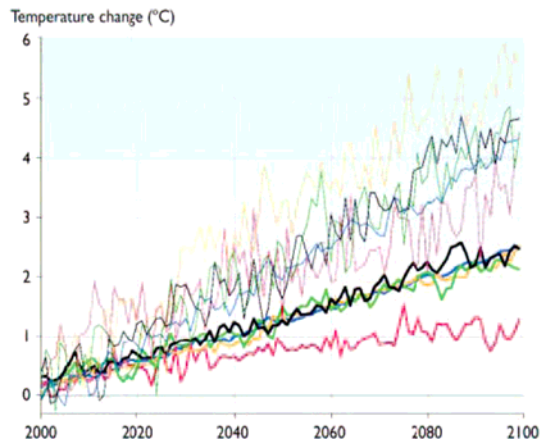
### 2.3.1 Introduction

The earth is experiencing changes in climate norms including more frequent and extreme weather events and more climate variability. While this is an accepted worldwide trend, the variability and impacts in Arctic Canada are expected to be greater than global averages. Figure 2.3.1 shows the forecasted global surface and air temperature change for the arctic for the years 2000 – 2100 projected by the five ACIA models for simulation. The graph also shows the forecasted changes for the arctic during the same period. As time passes, the forecasts for the arctic reach twice as high as the global mean. Most current infrastructure is planned and constructed for a life span of 20 – 100 years. For infrastructure with long life spans, the effects



of anticipated climate changes may present themselves within the lifecycle causing expensive reconstruction or relocation if not properly addressed in the planning and design phases.

PROJECTED SURFACE AIR TEMPERATURE CHANGE



*This graph shows average temperatures projected from five ACIA climate models. The thinner lines at the top are projected arctic temperature increases and the heavy lines at the bottom are global temperature increases.*

Source: ACIA, 2005

<sup>2</sup> Projected Surface Air Temperature Change Graph

The following table summarizes the predicted climate trends for Iqaluit in the next 30 to 100 years.

**Table 2.3.1**

Climate Variables	Projection	Description	Reference
Temperature	2010 - 2039 +1.7 deg C.      2040 - 2069 +3.2 deg C.	Mean annual increase projected over baseline climate	The City of Iqaluit's Climate Change Impacts, Infrastructure Risks & Adaptive Capacity Project. Researcher & Author Debbie Nielsen. Editor Julie Kronenberger dated March 2007.
Precipitation	2010 - 2039 +5.2 %	Mean annual increase projected over baseline climate	The City of Iqaluit's Climate Change Impacts, Infrastructure Risks & Adaptive Capacity Project. Researcher & Author Debbie Nielsen. Editor Julie Kronenberger dated March 2007.
Extreme Weather Events	Increased frequency	Examples include increased wind speeds and increased incidents of significant seasonal storms	The City of Iqaluit's Climate Change Impacts, Infrastructure Risks & Adaptive Capacity Project. Researcher & Author Debbie Nielsen. Editor Julie Kronenberger dated March 2007.
Sea Level Rise	2010 - 2100 0-70cm	Min and maximum change relative to present mean sea-level	Geological Survey of Canada Open File 6715 Sea-level Projections for Five Pilot Communities of the Nunavut Climate Change Partnership

In the past, infrastructure has been designed using historical climatic records to predict future conditions. Given the observed and predicted climatic change trends, this is no longer an appropriate approach (ref engineers Canada). To insure that new municipal facilities are

<sup>2</sup> Arctic Climate Assessment, Cambridge University Press, 2005; Lead Authors Vladimir M. Kattsov, Erland Källén Page 123

resilient to climate change impacts, it is important that potential climate change impacts be considered early in the design phase. Indeed, The City of Iqaluit's Climate Change Impacts, Infrastructure Risks and Adaptive Capacity Project (March, 2007) recommends that "all new municipal infrastructure be designed and constructed to specifications that withstand projected changes in climate over the expected lifecycle...".

### 2.3.2 Climate Change Analysis

Climate change analysis will be important in both the siting and design of the Facilities. Future climate must be considered for the sites of this study as it has the potential to affect the site performance and capacity for hosting buildings and infrastructure on the sites. Future climate will also impact building design requirements such as foundation design and material selection. Climate change impacts of particular concern for this study include:

- Changes in permafrost regimes and load bearing capacities (site selection, foundation design)
- Increased ultraviolet radiation (impact on material performance),
- Changes in precipitation (heavier rains and snowfalls will impact snow loading and site drainage)
- Changes to the coastal environment (sea level rise and associated flooding, storm surges and erosion)
- Increase in extreme weather events (safety factors).

Permafrost degradation presents the most significant concern related to climate change for the facilities proposed by this study. Northern regions commonly depend on permafrost for foundation stability; therefore, the CSA (reference the permafrost guideline) recommends that design of foundations in permafrost regions should consider the potential for change to the conditions of the permafrost resulting from climate change, particularly as a result of increases in air temperature. Permafrost regimes will impact foundation type selection and design depending on the permafrost regimes identified at selected sites.

Table 2.3.2 summarizes a preliminary climate change analysis conducted on the major design elements of the facility.

**Table 2.3.2**

Design Elements	Climate Change Trends					Considerations
	Temperature Increase	Precipitation Increase	Increase in Extreme Weather Events	Sea Level Rise	Permafrost Regime / Potential for Permafrost Degradation	
<b>Site Selection</b>	X				X	Reconsider sites in proximity to 100 year high tide mark
<b>Foundations on Bedrock</b>				X		A geotechnical report is required based on National Building Code (NBC) 4.1.2 importance category



Design Elements	Climate Change Trends					Considerations
	Temperature Increase	Precipitation Increase	Increase in Extreme Weather Events	Sea Level Rise	Permafrost Regime / Potential for Permafrost Degradation	
<b>Foundations on permafrost</b>	X			X		Geothermal analysis is required, in addition to a geotechnical report; determine NBC 4.1.2 importance category
<b>Foundations on thermo-syphon systems</b>	X			X		Geothermal analysis is required, in addition to a geotechnical report; determine NBC 4.1.2 importance category
<b>Building Orientation</b>	X	X	X			Will affect building energy use, snowdrift effects
<b>Site Drainage</b>		X	X	X		Review soil stability; control runoff
<b>Ramps, Stairs &amp; Sidewalks</b>	X		X	X		Frost heave/differential movement; water runoff
<b>Roof Structure</b>	X	X	X			Long term ground snow load; determine NBC 4.1.2 importance category; consider increased safety factors?
<b>Wall Structure</b>			X	X		Bracing for seismic restraint; determine NBC 4.1.2 importance category,
<b>Building Envelope</b>	X					Determine lifecycle costing by energy model during design and consider increased safety factors.
<b>Building HVAC</b>	X					Long term summer cooling requirements; energy efficiency measures for heat recovery
<b>Plumbing</b>	X	X	X			Roof water drainage; water saving measures
<b>Electrical</b>			X			Consider emergency power requirements; determine NBC 4.1.2 importance category

In addition to identifying opportunities for climate change adaptation, this analysis identifies steps that must be taken as the site selection and facility design process continues. For example:

- As identified in the table, a geotechnical and/or geothermal analysis will be need to be conducted on the selected sites to help guide the foundation design process;
- Review of section 4.1.2 of the National Building Code to determine importance category of the design element?
- Energy modeling

In order to inform the site selection process, a preliminary climate change impact analysis was also conducted on the short-listed sites (see Section 4.7). In phase 2, this table will be further analyzed in a stakeholder workshop session, which will include administration, operations, maintenance staff and the facility designers along with Climate Change impacts experts. At the workshop issues will be reviewed are rated by their anticipated impact (high, med, low). This analysis will allow for the scrutiny of the preliminary work presented here and will aid in the establishment of design criteria, which will address anticipated climate change impacts.

### 2.3.3 Next Steps

It is recommended that the following next steps be taken in determining the effects of climate change on this study, during Phase 2 of the project:

1. Perform a preliminary climate change impact analysis on the short-listed sites (see section 4.3)
2. Prepare terms of reference and proposal for geotechnical analyses of the selected sites. This should include an optional additional service to conduct geothermal analyses of the Federal Road, downtown and courthouse sites.
3. Carry out geotechnical studies to inform the concept designs and prepare for implementation. Such a service is outside of the scope of this assignment.
4. As part of a design workshop for the facilities in Phase 2, conduct a 'climate change affects' workshop that brings informed facility stakeholders together with selected professionals in the field of climate change analysis to develop a comprehensive understanding of the factors influencing the lifecycles of the respective facilities. Such a service is outside of the scope of this assignment.

## 2.4 SUMMARY

The pre design information presented in this first section of the report provides a background for decision-making:

- Iqaluit is growing at a rate of between 3.5 and 6% per year. The population is 'young' with pressing recreational needs
- Numerous prior studies including the Iqaluit General Plan point to the need for transparency and inclusive, public decision making
- All prior analysis indicates overwhelming support for, not to mention the cultural and environmental imperative of, the sustainable development of the downtown core area
- The Recreation Master Plan re-iterates the need for a downtown multi-use recreational facility so located to benefit the most residents at the least long-term environmental footprint.

The project team, which includes the consultant group in cooperation with the working committee, has adopted a clear and comprehensive consultation plan that engages public input and embraces the guiding principles of the **Iqaluit General Plan**.

### 3 Needs Assessment

#### 3.1 OVERVIEW

This section develops specific Recreation, Emergency and Protective Services and City Hall facility requirements with a view to:

- Describing the condition and functional capacity of any existing facilities
- Summarizing the findings of the public consultation stage of the project (ongoing)
- Review current trends with respect to each Facility type
- Provide a Gap Analysis between the existing facilities and what is needed
- Provide Functional Space Programs or a Statement of Requirements (SOR) that address the size and type of facilities required to close the Gap.

Appendix C includes the detailed SOR's, which have in turn been used to determine Order of Magnitude Costs and to develop building areas for testing within the various site configurations discussed in Part 4 and 5. The SOR will be used as a basis for conceptual design work in Phase 2 of the project.

This section is organized by facility type, in order of priority.

#### 3.2 MUNICIPAL INFRASTRUCTURE TRENDS

Facilities of any age require a life cycle management plan to review the condition, and repair and replace systems within reasonable timeframes.

Fossil fuel costs will continue to increase and systems to reduce consumption need to be considered based on payback. These include high performance, durable building envelopes, heat recovery systems, variable speed motors (on pumps and air handling units) to reduce power consumption as well as occupancy sensor-activated lighting and ventilation. Buildings should be designed with appropriate green building or LEED principles, and supplementary energy sources should be reviewed for reduced greenhouse gas emissions, cost and payback.

Water use needs to be reduced in showers, toilets and the pool utilizing proven and affordable technologies.

Active transportation systems are a major contributor to individual and community health. Ideally, walkway and bikeway connections should be made to indoor facilities. At a minimum, adequate bicycle parking and storage should be provided.

Energy conservation in facilities needs to become a greater priority, especially with older facilities that are "energy hogs". Municipalities should consider becoming environmental leaders in their communities through a combination of sound environmental practices, educational programming, and citizen involvement.

##### 3.2.1 Recreation

The City of Iqaluit's Recreation Master Plan includes the following statement:

***"The City will use ...recreation services as a vehicle to achieve certain socially worthwhile goals and objectives, where achieving them clearly results in indirect benefits to all citizens".***

Several of the Iqaluit recreation facilities were built in the early 1970's including the Arnaitok Arena and the Astro Hill Complex, which houses the existing swimming pool. As building systems

such as roofs and mechanical equipment age, deterioration accelerates with time. Repairs that are put off generally become more serious and costly. With an ever-increasing youth population, currently 31% under 25 years old and a growing demand for recreation opportunities, new and improved facilities are needed.

### 3.2.2 Recreation Stakeholder Engagement and Public Consultation

The workshops, stakeholder interviews and drop-in information sessions carried out by PERC, in association with FSC, represent the most comprehensive investment of energy of the Phase One consultation plan.

#### Council Recreation Workshops and Information Sessions

PERC initiated recreation consultation with a daylong review of the 2000-01 Iqaluit Recreation Master Plan with City Council and Department Heads. The workshop confirmed that the inherent principles of the original plan remained intact with a view to ensuring:

- A new centralized recreation facility in the core of the City;
- A new indoor swimming pool within that facility;
- Facilities that focus on the public good, with youth (and youth at risk) as the highest priority;
- Relocation of the Youth Centre from the AWG to the downtown recreation facility;
- Better access to the waterfront;
- A new Town Square;

The former plan presages the current findings of this analysis, which stated:

“In summary, Iqaluit currently has quite a good parks and recreation system. However, it needs to replace its pool and develop some cultural spaces and centralize all its leisure spaces at the old arena site.”

The Master Plan will be updated in the New Year (2011) within the context of Phase One, but as a stand-alone document.

#### Stakeholder Interviews

PERC held a weeklong series of stakeholder interviews with over 23 recreation groups covering all aspects of organized indoor leisure recreation in Iqaluit, including the. These latter interests have been assessed by virtue of their dominant use of existing indoor arenas and gymnasiums, scheduled through the City of Iqaluit’s recreation department. The curling club was also unavailable for interview but information was obtained through Iqaluit’s Recreation Department.

One of the most notable aspects of the interviews was the prevalent call by all groups for a new indoor swimming pool. A new soccer facility, youth centre and centralized recreation facility also figured highly in opinions expressed across the participating catchment group. Details of the stakeholder interviews are included in **Appendix A**.

#### Public Information/Consultation Sessions

Four Recreation Specific drop-in information/consultation sessions were held at the High School, the Youth Centre, Northmart and the Recreation Mass Registration. FSC set up tables with banners illustrating examples of different recreation facilities and queried Iqalummuit about their views on what Iqaluit needs to move ahead in the 21<sup>st</sup> century. These sessions repeated and confirmed the evolving consensus that a downtown recreation facility that includes a swimming pool, a soccer field house and a relocated youth centre among other dry surface

components will provide the most public good in addition to attracting and retaining residents, including new businesses, to the city of Iqaluit. The results of these sessions can be found in **Appendix A** as well.

### 2009 Recreation Survey Results

In June 2009, the City of Iqaluit conducted a survey to gather information for community input in order to assist in creating a long-term vision for recreation in our city and to help in the design of a new recreation complex. A total of 202 surveys were completed and summarized in Appendix G.

The City of Iqaluit Recreation Survey both supplements and reinforces the findings of the Recreation Facilities Consultation phase carried out by PERC. In order of priority the survey supports:

- New swimming pool.
- New Community hall,
- New multi-purpose gym
- New indoor soccer field
- Second (repaired AWG) ice rink – Now completed) and
- Youth Centre relocated to a downtown location

Over 75% of respondents are age 20 and older and most live in households above median income levels. This implies, understandably, that youth interests may not have been fully represented. Nonetheless, facilities that are or would be used by youth, such as the indoor soccer field, a second ice arena and the youth centre, all figured strongly in the survey.

It is also important to note that two-thirds of respondents are not property owners. This should be considered in the context of a referendum.

### Consultation Summary

The results of the findings can be summarized with the following needs identified:

- A new centralized recreation facility in the downtown core of the City
- A new indoor swimming pool within the downtown facility
- A new community hall and flexible gym space
- Facilities that focus on the public good, with youth (and youth at risk) as the highest priority
- Relocation of the Youth Centre from the AWG to the downtown recreation facility
- Inclusion of all age groups and population sectors in all facilities
- Dedicated space for elders
- The need for a second ice surface
- An indoor soccer field.

Consensus on the above-noted priorities was clear among stakeholders and the public: most organized recreation groups agreed with feedback from public surveys and drop-in sessions that the highest priority for new recreation infrastructure is the indoor swimming pool. Equally consistent were priorities aligning with the guiding principles of the General Plan: sustainability, environmental stewardship, cultural inclusion and economic viability.

A full summary of the consultation proceedings and findings is included in Appendix A.

### 3.2.3 Existing Municipal Recreation Facilities

The following table summarizes municipally owned and operated recreation facilities. A basic description is included describing size, function and condition.

Arnaikok Arena		Constructed 1970	
Description	Use	Condition	Notes
<ul style="list-style-type: none"> <li>Ice surface 179'9"x 81' 9"</li> <li>Gravel base</li> <li>4 change rooms</li> <li>Small lobby</li> <li>Canteen</li> <li>R22 refrigerant</li> </ul>	<ul style="list-style-type: none"> <li>Ice Programs</li> <li>Arnaikok Arena has been well used for close to 40 years.</li> <li>The ice sheet is smaller than regulation size.</li> </ul>	<ul style="list-style-type: none"> <li>Brine lines need replacing;</li> <li>Wood under boards is rotting;</li> <li>Old facility;</li> <li>Condenser fans replaced in 2008</li> <li>1 Compressor replaced in 2010</li> <li>Chiller is older unsure of year</li> </ul>	<ul style="list-style-type: none"> <li>Until 1992 hockey was played in an unheated and un-insulated structure on natural ice. In 1992 the building was insulated, artificial ice installed with change rooms and bleachers</li> </ul>

AWG Complex		Constructed 2001	
Ice Arena			
Description	Use	Condition	Notes
<ul style="list-style-type: none"> <li>Ice surface 85'x200'</li> <li>Concrete floor</li> <li>Change rooms</li> <li>Lobby</li> <li>Canteen</li> <li>Skate Sharpening lease space</li> <li>Youth Centre</li> <li>Recreation Dept. Offices</li> <li>Ice plant uses R22 refrigerant</li> </ul>	<ul style="list-style-type: none"> <li>Ice Programs</li> <li>Large events</li> <li>Youth Centre uses arena when ice is in and when ice is out</li> <li>NHL-sized ice surface</li> </ul>	<ul style="list-style-type: none"> <li>Floor and brine lines are new</li> <li>Ice plant 2001</li> <li>One compressor replaced in 2010</li> <li>New brine pump required for new design</li> <li>Dehumidifiers scheduled to be installed 2011</li> </ul>	<ul style="list-style-type: none"> <li>Used as an arena until 2003 when the slab on grade began to fail due to subgrade erosion; slab on grade reconstructed 2010.</li> <li>Thus ice arena components have not been in full use for more than 3 years.</li> </ul>
Makkuttukkuvik Youth Centre			
<ul style="list-style-type: none"> <li>230 m<sup>2</sup></li> <li>Open concept</li> <li>Kitchenette</li> <li>Office for Youth Programmer</li> <li>Storage room</li> <li>Control area</li> </ul>	<ul style="list-style-type: none"> <li>Teen drop-in centre open after school, evenings and weekends</li> <li>Pre-teen program for a few hours each Saturday</li> </ul>	<ul style="list-style-type: none"> <li>Good condition</li> <li>Well maintained</li> <li>Much of the fit-up is based on volunteer work, which though un-professional, fits the spirit of the centre.</li> </ul>	<ul style="list-style-type: none"> <li>The space is overused and should be expanded.</li> <li>The centre should be located closer to the downtown for better accessibility by the people who need to use it.</li> </ul>
Recreation Department Offices			
<ul style="list-style-type: none"> <li>6 offices, 9 staff in office</li> <li>Recently built reception area for receptionist and facilities staff</li> <li>One boardroom/workroom</li> </ul>	<ul style="list-style-type: none"> <li>City department offices</li> </ul>	<ul style="list-style-type: none"> <li>Good condition;</li> <li>Requires superficial upgrades</li> <li>Could be better working environment</li> </ul>	<ul style="list-style-type: none"> <li>Not enough offices</li> <li>Boardroom/work-room too small,</li> <li>Needs separate work room.</li> </ul>



Curling Rink		Constructed 1989	
Description	Use	Condition	Notes
<ul style="list-style-type: none"> <li>146'4"x56'9"</li> </ul>	<ul style="list-style-type: none"> <li>Four sheets of artificial curling ice are provided in the existing Iqaluit Curling Club</li> <li>Also houses the Iqaluit Skate Park when the ice is removed from May-October.</li> </ul>	<ul style="list-style-type: none"> <li>The facility and equipment are in good condition.</li> </ul>	<ul style="list-style-type: none"> <li>The ice is underused because it targets a specific sport and community subgroup but it is not feasible to take away from the City's overall recreational program.</li> </ul>

Pool		Early 1970's	
Description	Use	Condition	Notes
<ul style="list-style-type: none"> <li>Located in the Astro Hill Complex. The City leases this facility from Nunastar</li> <li>4 narrow lanes each 18.5m long with resultant main tank (pool) sized 18.5m by 10m;</li> <li>3' deep - 8' deep in centre - tapered on all sides;</li> <li>The capacity of the pool and deck area is 35 people</li> <li>Small/narrow deck</li> <li>One built-in lifeguard chair</li> </ul>	<ul style="list-style-type: none"> <li>Open 12 months for an average of 80 hours per week;</li> <li>Public survey completed in 1999 as part of the Recreation Master Plan indicated that 76.5% of the respondents have used this facility.</li> <li>There were numerous comments about the need for a new facility; that the current facility has insufficient</li> <li>The pool serves a broad population of the community</li> <li>Children often stand in line for over an hour to ensure they can have a spot in the pool and will not be turned away due to the pool being at capacity</li> </ul>	<ul style="list-style-type: none"> <li>water damage on deck walls and downstairs ceiling</li> <li>insufficient showers, which have poor floor drainage</li> <li>two showers per change rooms which not enough</li> <li>poor deck drainage creating water damage and slippery surfaces</li> <li>basin and skimmers are leaking into the lower level of the building</li> <li>Recently (Jan 2011) a serious leak occurred to the skimmer in the shallow end of the pool</li> <li>change rooms are dilapidated – they are too small</li> <li>sauna is substandard but well liked by patrons</li> <li>foyer is too small and often crowded</li> <li>high rate sand filter</li> </ul>	<ul style="list-style-type: none"> <li>On lease from a private owner since the 1970's, this four-lane pool is operating at peak capacity much of the time.</li> <li>Programs are at full capacity</li> <li>Does not meet the current and future needs of Iqaluit.</li> <li>The current lease on the existing facility will terminate at the end of March 2013. <i>Other concerns include:</i></li> <li>Deep end tapered on sides: safety hazard and restriction for deep water activities</li> <li>Pool systems are out dated/ difficult to maintain</li> <li>Pool "office" is undersized No on-deck storage</li> <li>Staff change room is a small storage closet</li> </ul>

Elders Qammaq		Constructed 1989	
Description	Use	Condition	Notes
<ul style="list-style-type: none"> <li>Open Concept space with ample seating for Elders</li> <li>Small kitchen with freezer and refrigerators for country food etc.</li> <li>One storage room, two washrooms, janitorial room, exterior deck facing the bay</li> <li>Large windows facing the bay</li> </ul>	<ul style="list-style-type: none"> <li>Drop-in program for Elders Monday-Friday from 12:00-4:30P.M.</li> <li>Serves a population ages 55 and up</li> </ul>	<ul style="list-style-type: none"> <li>Occasional freeze ups of sewer tank</li> <li>Good condition</li> <li>Requires superficial upgrades</li> </ul>	<ul style="list-style-type: none"> <li>Strong relationship with and elders residence located next door: lunch program, transportation for Elders to Elders Qammaq (GN pays for these services)</li> </ul>



Abe Okpik Hall			
Description	Use	Condition	Notes
<ul style="list-style-type: none"> <li>Open Concept Hall</li> <li>small kitchen,</li> <li>office (which is used as a storage area for the parent and tot playgroup),</li> <li>storage room for City programs,</li> <li>janitorial room</li> </ul>	<ul style="list-style-type: none"> <li>Parent and Tot Association runs a playgroup (with additional resources for parents and young children) three mornings per week.</li> <li>Two different church groups rent the hall on a weekly basis (Sundays) however both these groups are in the process of building their own facilities</li> <li>Rented out occasionally for birthday parties, social events and meetings</li> <li>Recently, the City's after-school recreation program partnered with the Nanook school and is now running out of the school rather than the Hall</li> <li>During the summer a half-day camp for kids is being run out of the hall</li> </ul>	<ul style="list-style-type: none"> <li>Sewer Tank Freeze up problems</li> <li>Interior needs repair</li> <li>Exterior needs repair</li> <li>Subject to vandalism and break-ins</li> </ul>	

### 3.2.4 Other Recreational Facilities

#### School Gymnasiums

All indoor sports teams use Nanook School in Apex, Joamie School, Inuksuk High School, Nakasuk Primary School, Aqsarniit Middle School, and Arctic College Nunatta Campus Residence gymnasiums to play indoor soccer, badminton, basketball, volleyball, gymnastics, and a variety of martial arts. The gyms are generally too small for most organized indoor sports. Those that are large enough serve the entire community and cannot meet demand. In the winter, there is added pressure on the gymnasiums to provide indoor alternatives.

Gymnasiums			
School	Size	Activities	Comments
Aqsarniit Middle School	<ul style="list-style-type: none"> <li>Large</li> </ul>	<ul style="list-style-type: none"> <li>Gymnastics</li> <li>Soccer</li> <li>Judo</li> <li>Boys Club</li> <li>Basketball</li> </ul>	<ul style="list-style-type: none"> <li>Recently renovated and upsized to regulation size basketball courts</li> </ul>
Inuksuk High School	<ul style="list-style-type: none"> <li>Medium</li> </ul>	<ul style="list-style-type: none"> <li>Volleyball</li> <li>Badminton</li> <li>Tai Chi</li> <li>Theatre</li> <li>Soccer</li> <li>Basketball</li> </ul>	<ul style="list-style-type: none"> <li>Has been upgraded/renovated</li> <li>Iqaluit's largest gymnasium</li> <li>Wood floor</li> </ul>
Joamie Elementary School	<ul style="list-style-type: none"> <li>Small</li> </ul>	<ul style="list-style-type: none"> <li>Karate</li> </ul>	<ul style="list-style-type: none"> <li>New facility (2005)</li> <li>Limited viewing</li> </ul>

Gymnasiums			
School	Size	Activities	Comments
Nakasuk Elementary School	• Small	<ul style="list-style-type: none"> <li>• Recreation Department Minor Soccer</li> <li>• Community Events</li> </ul>	<ul style="list-style-type: none"> <li>• Undersized facility; Has been under renovation</li> </ul>
Nanook School, Apex	• Small		<ul style="list-style-type: none"> <li>• Small Gym</li> <li>• Not accessible by foot</li> </ul>
Arctic College Nunatta Residence	• Medium	<ul style="list-style-type: none"> <li>• Basketball</li> </ul>	<ul style="list-style-type: none"> <li>• Under-utilized</li> <li>• Low ceiling (16')</li> </ul>

The French school, École Trois Soleils does not have a gym. Its multi-purpose room is used activities such as yoga and dance.

#### Frobisher Bay Racquet Club

The racquet club adjacent to the curling rink has three racquet courts, which are the only in town. The club operates as a privately owned space in the same building as the Iqaluit curling club. This facility serves a sub-set of the population and at this time would remain unchanged and unaffected by the programming for the new recreation complex.

#### Frobisher Inn Fitness Centre

This newly opened facility comprises approximately 100 m<sup>2</sup> on the main floor in the hotel mall. It features treadmills, stationary bikes and elliptical trainers, as well as free weights and a universal training component. The centre is free to guests and has a limited membership of fifty open to the public. These are currently almost fully taken.

#### Atii Fitness Centre

Atii Fitness Centre is a privately owned, non-profit fitness studio in Iqaluit. It consists of approximately 300m<sup>2</sup> space comprising a multi-use studio, a free weight program with approximately twenty stations and a twelve-piece aerobic workout facility.

#### City Playgrounds

The City owns and operates seven playgrounds with two more being added in the summer of 2011. These playgrounds are popular with children and families but are closed during winter months due the frozen ground not meeting safety standards.

### 3.2.5 Recreation Trends Analysis

This section looks at societal trends and how they affect the type and nature of recreation facilities Iqaluit needs. Keeping track of developments in recreation is important on many levels: it will assist Iqaluit to achieve better footing in athletic competition outside Nunavut; it helps counter the effects of out-migration by understanding what other population centres offer in terms of recreation services, and; the information can be used to provide state-of-the-art facilities that respond to health and community related challenges.

Appendix F contains a full assessment of national trends affecting recreation service delivery. Following are highlights from that detailed analysis.

### 3.2.6 Demographic Trends

#### National Trends

The Baby Boom generation will continue to be active and place a high demand on services. Their preferences, however, will shift to less strenuous physical activities as they age and to cultural activities.

As job schedules become more flexible and people retire, there will be increased demands for daytime use – especially informal drop-in use.

#### Northern/Nunavut Trends

As discussed earlier in this study, the effects of out-migration extend to the Nunavut economy. Without an educated population base, the territory's capacity to generate income for itself and its people is reduced and the potential for quality of life improvement is hampered.

#### Iqaluit Trends

Iqaluit is a 'young' city with a young population. It is currently experiencing higher birth and overall growth above the national average. This will affect the number of youth using facilities and impact the types of facilities needed. The proportion of elders will increase, but new elders will likely continue to use multi-generational facilities for longer periods of time.

### 3.2.7 Recreation Trends

#### National Trends

Due to its accessibility and low cost of entry, indoor soccer has become Canada's fastest growing sport in terms of registration. Indoor and outdoor soccer together are Canada's number 1 sport.

Many ethno-cultural groups place a premium on indoor and outdoor gatherings, (as do many organizations). The provision of large outdoor group areas with adequate shelter and washrooms should be considered within parks systems, and larger indoor spaces are also required.

The development of open space and pathway systems is a key priority for community open spaces systems. These systems contribute to personal and environmental health.

Programs aimed at rehabilitation and wellness are increasingly being offered through partnerships with the health sector. Programs offered in community, rather than clinical settings, are more likely to lead to ongoing healthy lifestyle behaviour.

Elders' oriented spaces should be grouped with other adult program spaces and include social elements. This will help address changing expectations of an aging population and encourage transfer of traditional knowledge

Stand-alone youth facilities have also proven to be less effective in most settings than the inclusion of youth elements in multi-generational facilities. Again, these spaces should be grouped with gymnasiums and other active areas. The most successful youth facilities have enough elements that they attract a range of youth groups and interests. These elements may include a skateboard facility, sport courts and social gathering spaces.

#### Northern/Nunavut Trends

Traditional sports such as Inuit Games, (the high kick, the back push, the one arm reach and the sitting knuckle pull, to name a few) are popular in most regions. Super Soccer is a pan-territorial

indoor event is hosted in Yellowknife annually. Arctic Winter Games, featuring indoor and outdoor events, are hosted every four years on a rotating basis in circumpolar countries (North America, Scandinavia and Russia). Other territorial events offer people in Nunavut opportunities to travel and connect with people from other areas of the Territory, sharing knowledge and skills, building community.

**Iqaluit Trends**

Soccer is becoming increasingly popular demonstrated by high school participation and increased enrolment in the City's minor soccer program. Swimming enrolment is up and competitions are popular for participants and spectators. Elders enjoy watching activities that the children and youth are participating in.

Iqaluit is hosting more large scale sporting events such as the National Mixed Curling Championships, Territorial tournaments and competitions.

While the number of visible minorities is small, there may be opportunities to have these people share their cultural background.

Many children and families in Iqaluit face barriers to accessing recreational opportunities; therefore, accessibility and affordability be should be a priority.

**3.2.8 Emerging Trends**

There will be greater demands on drop-in opportunities in recreation facilities; scheduling should ensure that these are available throughout the day.

More experiential programs will be in high demand. These include outdoor adventure programs, cultural learning and participation, and more intensive learning opportunities.

Where feasible, more programs should be offered in compressed timeframes – a one or two day workshop instead of on a weekly basis for a longer timeframe. There is a willingness to pay a premium for focussed sessions that can be easily scheduled. Busy day-to-day work patterns make long-term commitments difficult to keep for some. For others, the converse is true; many people enjoy the constancy and social aspects of ongoing programs. Especially for older adults, social elements should be included as part of the post-activity period.

There may be opportunities for rehab/health and wellness services and health sector partnerships within the aquatic and fitness facilities.

**3.2.9 Gap Analysis**

The following table compares existing recreational spaces against the Statement of Requirements laid out in **Appendix B** (Functional Program). The difference between the highlights the current 'Gap' in service provision.

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
<b>Skating Surface</b>				
<ul style="list-style-type: none"> <li>One NHL-sized arena and one smaller non-regulation-sized arena</li> </ul>	<ul style="list-style-type: none"> <li>One full sized ice surface and one smaller leisure ice surface</li> </ul>	<ul style="list-style-type: none"> <li>Minus 0.6 of an ice surface (based on 2010)</li> <li>Plus 0.4 ice surface (based on 2009)</li> </ul>	<ul style="list-style-type: none"> <li>Two full sized skating surfaces aren't required and won't be optimally used</li> </ul>	<ul style="list-style-type: none"> <li>It is not a high priority to reduce the existing capacity. But it would become a high priority if either of the two existing facilities were to have</li> </ul>

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
				technical problems that required them to be phased out <ul style="list-style-type: none"> <li>It is very expensive to both build and operate capacity that is underutilized</li> <li>National trends indicate ice use is declining. It is expected ice use will decline further if indoor soccer is provided.</li> </ul>
<b>Indoor Skateboard Park</b>				
<ul style="list-style-type: none"> <li>Custom designed wood and Masonite skateboard ramps, half pipes, and safety equip. Installed in the Curling Surface (May-October)</li> </ul>	<ul style="list-style-type: none"> <li>Could be located in Recreation Centre with greater public visibility (suggestion).</li> </ul>	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>To ensure construction is safe and secure, to reduce risk to City.</li> <li>Higher visibility makes the facility safer; 'wow' factor is enhancing.</li> <li>Could be year-round</li> </ul>	<ul style="list-style-type: none"> <li>Youth Facilities are a high priority</li> </ul>
<b>Curling Surface</b>				
<ul style="list-style-type: none"> <li>Four sheets of artificial curling ice which operate from October to April</li> </ul>	<ul style="list-style-type: none"> <li>Two to three sheets of artificial ice</li> </ul>	<ul style="list-style-type: none"> <li>No Change</li> </ul>	<ul style="list-style-type: none"> <li>Existing facility is underutilized, but it may be impractical to demolish some of that capacity and leave some remaining</li> </ul>	<ul style="list-style-type: none"> <li>Curling is low priority in the community as it serves a distinct subset of the population and has very few users</li> </ul>
<b>Indoor Soccer</b>				
<ul style="list-style-type: none"> <li>None, although some activity accommodated in school gyms and in Ukkvik Hall - Nunatta Residence which doesn't have an appropriate indoor soccer surface</li> </ul>	<ul style="list-style-type: none"> <li>One new indoor soccer field totaling 1730 m<sup>2</sup></li> <li>Sized to the Western Canada game as that is becoming the norm</li> </ul>	<ul style="list-style-type: none"> <li>One new indoor soccer field totaling 1730 m<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Soccer is becoming increasingly popular in Northern communities, possibly because of the universal rise in popularity and it is not an expensive sport to outfit on an individual basis.</li> </ul>	<ul style="list-style-type: none"> <li>Very high priority</li> <li>Indoor soccer is very accessible and growing in popularity.</li> <li>Must meet requirements for Arctic Winter Games competitions.</li> </ul>

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
<b>Flexihall</b>				
<ul style="list-style-type: none"> <li>A few large gyms in the community in schools - largest of which is approximately 400 sq. m.</li> </ul>	<ul style="list-style-type: none"> <li>One new large 800 sq. m. Flexihall available 100 hours per week</li> </ul>	<ul style="list-style-type: none"> <li>One new large 800 sq. m. Flexihall available 100 hours per week</li> </ul>	<ul style="list-style-type: none"> <li>A larger facility is needed than is currently available for larger events, and needs to be available for many more hours per day than existing facilities are available</li> </ul>	<ul style="list-style-type: none"> <li>High priority</li> <li>Existing gyms meet partial demand in the short term.</li> <li>A Flexihall available in the same facility as some smaller multipurpose spaces allows more flexibility for large events</li> </ul>
<b>Multipurpose Spaces (Yoga, dance, crafts, training, meetings)</b>				
<ul style="list-style-type: none"> <li>Various halls &amp; multipurpose spaces exist in public institutions (e.g. schools and college and Abe Okpik Hall) and non profit facilities (Legion Hall)</li> </ul>	<ul style="list-style-type: none"> <li>2 purpose built new spaces adjacent to other recreation spaces totaling 490 sq. m. of usable space</li> </ul>	<ul style="list-style-type: none"> <li>2 purpose built new spaces adjacent to other recreation spaces totaling 490 sq. m. of usable space</li> </ul>	<ul style="list-style-type: none"> <li>Several spaces optimized for subsets of uses, but operated together provides economic synergies and flexibility of uses not available currently</li> </ul>	<ul style="list-style-type: none"> <li>Medium priority as some existing spaces could continue to be used to satisfy some of the demand</li> <li>Abe Okpik Hall may be able to be phased out of operation and site used for another purpose depending on location of the new spaces</li> </ul>
<b>Elder's Area</b>				
<ul style="list-style-type: none"> <li>One Elders Centre exists at the Elder's Qammaq approximately 170m<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>One additional space is proposed of 300m<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>Additional 300m<sup>2</sup> of space in a new complex</li> </ul>	<ul style="list-style-type: none"> <li>Existing space will continue to meet needs; a new space will welcome elders into the new Complex.</li> </ul>	<ul style="list-style-type: none"> <li>Low priority as other strategies could be used to bring elders into the new facility</li> </ul>
<b>Teen Centre</b>				
<ul style="list-style-type: none"> <li>A 172m<sup>2</sup> Youth Centre is located and the AWG Complex</li> </ul>	<ul style="list-style-type: none"> <li>A 288m<sup>2</sup> downtown Youth Centre.</li> </ul>	<ul style="list-style-type: none"> <li>A larger Youth Centre is required.</li> <li>Relocate the Youth Centre to a downtown location</li> </ul>	<ul style="list-style-type: none"> <li>This successful facility needs to continue to be provided</li> <li>A larger space is needed because the downtown location will draw in more youth</li> </ul>	<ul style="list-style-type: none"> <li>Very high priority for this to be provided either in its current space and location or in a more central location as part of other spaces</li> <li>A slightly larger one is needed as youth will congregate in it initially, but many will then progress to activity in many other spaces in the Complex.</li> </ul>
<b>Preschool Program/Child Minding Space</b>				
<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>One facility recommended</li> <li>130m<sup>2</sup>, high ceilings</li> </ul>	<ul style="list-style-type: none"> <li>One new facility provided</li> </ul>	<ul style="list-style-type: none"> <li>This is new service not currently available in the community</li> </ul>	<ul style="list-style-type: none"> <li>High priority as it will serve this strategically important segment of the community, having</li> </ul>



What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
				<p>preschoolers getting used to using the Complex at an early age.</p> <ul style="list-style-type: none"> <li>It will serve not only the preschoolers but also their parents</li> </ul>
<b>Fitness Centre</b>				
<ul style="list-style-type: none"> <li>Two privately owned and operated facilities: one in curling club building, one in Frobisher Inn.</li> <li>One Non-Profit Fitness Centre in Coman Arctic Building</li> </ul>	<ul style="list-style-type: none"> <li>Replace existing Non-Profit Centre with new 40m<sup>2</sup> equipment studio plus 280m<sup>2</sup> aerobic studio adjacent to other spaces for maximum synergy.</li> <li>10 m<sup>2</sup> storage</li> </ul>	<ul style="list-style-type: none"> <li>One non-profit facility of 330m<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>New facility will be higher quality and more capacity overall.</li> <li>This would require a partnership or rental agreement with the not-for-profit fitness centre.</li> </ul>	<ul style="list-style-type: none"> <li>High priority as existing facilities will meet a portion of demand until this new one, which replaces one of them, is provided. A public service is required in the community and one located in a complex will be much more effective than one by itself, because it will create a synergy by association with other programs</li> </ul>
<b>Indoor Pool</b>				
<ul style="list-style-type: none"> <li>Rented facility</li> <li>4 narrow lanes each 18.5m long</li> <li>One tank sized 18.5m by 10m;</li> <li>3' deep - 8' deep in centre tapered on all sides;</li> <li>The capacity of the pool and deck area is 35 people</li> </ul>	<ul style="list-style-type: none"> <li>Publicly-owned facility</li> <li>Increased quantity and quality of aquatic service</li> <li>Water surface area of about 700 square meters</li> <li>Configured to serve all 8 categories of aquatic services</li> </ul>	<ul style="list-style-type: none"> <li>Main tank 350 m<sup>2</sup>, 6 lanes 25m long</li> <li>Leisure Tank, 350 m<sup>2</sup>, c/w water slide, whirlpool and sauna.</li> <li>Year-round, vibrant facility</li> </ul>	<ul style="list-style-type: none"> <li>Existing Lease expire March 2013</li> <li>Aquatic services serve a broader cross section of the population than any other public recreation service and has extensive benefits to users and the community</li> </ul>	<ul style="list-style-type: none"> <li>Very high priority as there is no alternative to developing a new pool, and the community has enjoyed having this service for years.</li> </ul>
<b>Climbing Wall</b>				
<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>One modest climbing wall recommended</li> </ul>	<ul style="list-style-type: none"> <li>One new climbing wall</li> </ul>	<ul style="list-style-type: none"> <li>This offers a new opportunity not currently available, one that is growing in popularity</li> </ul>	<ul style="list-style-type: none"> <li>Very high priority</li> <li>It can be provided with relatively low capital and operating cost</li> </ul>
<b>Racquet Courts</b>				
<ul style="list-style-type: none"> <li>Privately Owned Racquet Courts</li> </ul>	<ul style="list-style-type: none"> <li>Three courts</li> </ul>	<ul style="list-style-type: none"> <li>No Change</li> </ul>	<ul style="list-style-type: none"> <li>This was not analyzed due to private club outside of services provided by City.</li> </ul>	<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Indoor Walking/jogging Track</b>				
<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>One recommended</li> <li>Track is associated with the soccer pitch because a soccer</li> </ul>	<ul style="list-style-type: none"> <li>One new walking / jogging Track</li> </ul>	<ul style="list-style-type: none"> <li>This will serve a very broad cross section of the community cost effectively.</li> <li>The activity in the</li> </ul>	<ul style="list-style-type: none"> <li>High priority</li> </ul>

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
	field is a large space with high ceilings. Will not increase the footprint of the building and it can use the residual heat provide to the soccer stadium.		stadium can add interest to the pedestrian activity.	
<ul style="list-style-type: none"> <li>Note on relative priority - There are good reasons to be provide all recommended spaces and therefore all have a reasonably high priority. However, if they can't be afforded at present, and priorities have to be determined for the purpose of phasing development, this column is provided.</li> </ul>				

### 3.2.10 Ice Surface Review

Arnaitok arena needs to be replaced and will be phased out as part of the construction of a new downtown recreation facility. It is 40 years old, beyond the end of its service life and too expensive to renovate.

An analysis of ice surface requirements was carried out by PERC as part of the programming process. This detailed review, included in **Appendix H**, concluded that, from a purely financial perspective, Iqaluit does not need two full sheets of recreational ice. It can sustain 1.4 sheets (1 full sheet plus a .4 size leisure surface). The review acknowledged that as indoor soccer and other new recreation facilities are introduced, attendance at hockey will most likely diminish. The PERC review discusses moving adult recreational ice times to later time slots to allow time slots from Arnaitok Arena to be moved to the AWG Complex.

But input from stakeholder surveys and drop-in sessions indicate a preference for two full ice sheets.

- Beyond the regularly scheduled recreation uses of the ice surface, a number of additional functions are afforded by a twin pad complex:
- Large scale events such as trade shows require more than one pad surface
- A second pad could serve as an indoor soccer tournament surface without seriously disrupting ice surface schedules.
- A second ice surface makes Arctic Winter Games delivery viable

In the functional review below, it is important to understand that by planning a second full ice sheet as an addition to the AWG Complex, it can be phased in at any time. To this end, the impacts of other new facilities on hockey registration can be assessed and evaluated.

### 3.2.11 Functional Program & Relationships

Based on the Gap Analysis a functional program has been developed for the major spaces identified. A full matrix is located in **Appendix B** and the major components are identified as:

#### Ice Surfaces

If the ice sheet in the Arnaitok Arena is to be replaced it would be feasible to replace it with a second sheet of ice at the AWG site so that there can be an economy of shared facilities achieved; for example, if the site topography permits, the Zamboni could be shared. The existing artificial ice making plant is sufficient for the existing arena to operate from October to April. It would need to be replaced with a new plant sufficient in size to supply two sheets of ice. There may be other equipment and spaces that could be shared to reduce building or operating cost at



the AWG as well. There is an advantage to having all the similar facilities in one location, familiar to the public.

The secondary ice sheet and its supporting space is a facility that can be phased because it was not identified as a high priority in the Gap analysis. Following is a summary of functional spaces that would be built as an addition to the AWG Complex:

- **Regulation hockey sized ice surface** 85' by 200'; 40% rental ice, 10% drop in public skating, and 10% learn to skate programs, closed remainder of time (970 m<sup>2</sup>); Regulation rink boards - ability to get large equipment into main floor for a trade show - extra electrical outlets to support such a use; polished insulated concrete floor with brine pipes embedded
- **Spectating Area** for 400 people: standing area and bleacher seating, 90% drop in use, and some controlled spectating at special events; two rows of bleacher seating on each side of the main ice surface complete with overhead heating (250 m<sup>2</sup>)
- 6 separate rectangular shaped **Dressing Rooms** (total 87 m<sup>2</sup>), with shared showers and washrooms between each pair of changerooms; for team use before and after a rental use, also some use by figure skaters putting on skates. Referee Change Room with shower/washroom.
- Additional foyer, storage and maintenance space

A leisure sheet of ice is being considered as a sheet of natural ice potentially in the downtown core. If it is determined that a leisure sheet of artificial ice is required it could potentially be phased in with the second Ice hockey surface at the AWG arena site or combined with the soccer stadium for cost savings.

### Aquatic Centre

Contrasting with the existing pool, the proposed new aquatic centre will be spacious and filled with daylight, serving as a recreational and social anchor for Iqalummuit. It will be a focal point of the new recreation centre accommodating competitive, leisure, recreational, educational and therapeutic water-based activities.

The proposed new facility will legally accommodate 250 swimmers, though a typical optimum capacity of 150 is expected. This will translate to a total possible annual usage of 200,000, though actual usage is expected to be 40,000 in the early years. Key spatial features of the centre will include:

- **Main Tank** (350 m<sup>2</sup>) 40% drop in, 50% program and 10% rental uses - recreational swimming, fitness swimming, learn to swim and fitness programs, rental to swim clubs for training and competition. Rectangular tank 25M long and 6 lanes each 2.2 m wide with additional width in outside lanes for total width of 14m. Depth varies in a single plane from 1.22M to 1.5M and then plunges to a hopper shaped deep end - about 6 teaching stations - average water temp. of about 80-82 degrees Fahrenheit
- **Leisure Tank** (350 m<sup>2</sup>) 70% drop in, 30% program uses recreational swimming, water orientation, therapeutic activity. Free form tank with a lazy river feature, some water play elements - depth from zero entry to maximum 1.52 M deep - about 2 to 3 teaching stations; average water temp maintained at about 88-92 degrees Fahrenheit
- **Water Slide** drop-in uses during public swims; stair tower up to landing platform onto slide flumes, with all slide sections elevated and splashdown runway on deck
- **Whirlpool** and **Sauna** 100% drop-in recreational and therapeutic activity; whirlpool will be a free form tank with conversation alcoves and maximum ratio of wall space to water volume, stairs and ramp entry - 1.2 M deep - average water temp maintained at about 104 degrees Fahrenheit. Sauna will be two spaces which allows operational flexibility for separation by temperature or gender, Irregular shaped, low ceiling height

- **Deck Space** (936 m<sup>2</sup>) Mostly drop in casual uses, but also some socializing, birthday parties, and some on-deck instruction and some spectating areas built into deck for parents to watch lessons - also, on irregular occasions, on deck spectating would occur for community special events and competitions Reasonable widths around pool tank to allow high level of patron activity and staff guarding operation - also some areas for socializing and on deck instruction
- **Program Room** (25 m<sup>2</sup>) For meetings, spectator viewing, temporary office space, leadership training classes, and rentals to groups for birthday parties Dry floor room off the main pool deck with easy access/egress to pool deck
- Additional functional components will include **On-Deck Control, First Aid, Public Washrooms, Staff Room, Storage and Maintenance Areas.**

The total net useable floor space requirement for the pool itself is about 2800 m<sup>2</sup>, not including allowances for circulation structure and service space.

### Soccer Field House

1914m<sup>2</sup> of floor space have been programmed for a new soccer pitch in Iqaluit. This footprint includes spectator's stands and change rooms. The Walking/Jogging track (outlined below) is a programmed space of 847 m<sup>2</sup> and will be installed a mezzanine level of the soccer stadium or the new ice arena because those are the two spaces that are large enough to accommodate a ribbon of space. In some cities the Walking /Jogging track surrounds the Ice Hockey sheet. The running track would be located at a mezzanine level and would not be a cold place to run or walk; but if the new ice arena is located at the AWG site the track will be away from the downtown core and less accessible to pedestrians.

- **Soccer Surface** (1730 m<sup>2</sup>) 70% rental uses, and 20% drop in uses, 10% special events; Primarily used as a dry floor indoor soccer centre, rink boards (with Plexiglas viewing areas) and players benches. Polished insulated concrete floor with artificial turf ('Field Turf' or 'Rec Turf II' depending on program requirements and alignment with other soccer facilities) soccer playing surface added over; capacity of 300 for a trade show, but typically 20-30 for a soccer practice or game. In Option A, with the capability of adding ice for a major hockey tournament.
- **Spectating Area** for 400 people: standing area and bleacher seating, 90% drop in use, and some controlled spectating at special events; two rows of bleacher seating on each side of the main ice surface complete with overhead heating (250 m<sup>2</sup>)
- **Storage Rooms** for equipment and turf covering/chair storage
- 6 separate rectangular shaped **Dressing Rooms** (total 87 m<sup>2</sup>), with shared showers and washrooms between each pair of change rooms; for team use before and after a rental use, also some use by figure skaters putting on skates. Referee Change Room with shower/washroom.

### Indoor Walking/Jogging Track

The Walking /Jogging track is a programmed space of 847 m<sup>2</sup> and will be installed a mezzanine level of the soccer surface

- The **Track** will be used for Walking and jogging around indoor track for fitness, rehabilitation, training, or socializing; almost all drop-in uses. An elevated area; potentially suspended from roof structure over ancillary spaces such as changes rooms and storage spaces. Rubberized artificial flooring; 20-30 people at a time.

### Flexihall

The Flexihall is a community hall that doubles as a small gym for the Youth Centre. It will be located in the downtown recreation facility and will host community meetings and performances.

- **Flexihall:** 800 m<sup>2</sup> 50% program uses, 20% rentals, and 30% drop in uses; suitable for both active, gymnasium related uses, as well as social, and special event uses; Should have a combination holding/teaching kitchen immediately adjacent; need 32' clear height for badminton and volleyball. There will be a stage program space along one wall; with capability to sound separate it for separate use; however, stage is one of the other multipurpose spaces; 50 participants at a time plus about 400 spectators
- **Kitchen** 30 m<sup>2</sup>, will be used for some cooking programs, drop in uses, and some use by a caterer; Set up with residential style appliances for teaching, and also suitable for holding and serving meals prepared off site. Lots of counters and cupboards, cooking appliances, lots of extraction fans and institutional grade dishwashing (3-compartment sink or industrial dishwasher)
- 20 sq. m. of additional **Storage** under the stage which is also a raised program space

### Multipurpose Spaces

Multipurpose spaces are programmed to be in the dry-floor space in the downtown core. They are programmed together or in association with the pool and soccer pitch. They are never a stand-alone facility and in the case of the Iqaluit Recreation Facility some of the amenities are associated with groups using the pool because they will get lots of use for miscellaneous activities, such as birthday parties, occasional social events; watching swim meets. The spaces are also suitable for arts and crafts programming, and have been programmed with a large adjacent storage area.

- **Small Multipurpose Space** 180 m<sup>2</sup> 70% program uses, 30% rentals, some of which are associated with groups using the pool - lots of use for birthday parties, occasional social events; occasionally for spectating for swim meet; also suitable for arts and crafts programming, with large adjacent storage. The room should be adjacent to the pool enclosure to facilitate viewing through glass. Equipped with counter, sink and coffee service, floor drains. Hardwearing surfaces 20-25 people
- **Medium Multipurpose Space** 280 m<sup>2</sup>, 70% program uses, 30% rentals, primarily in the areas of fitness, dance and martial arts. Rectangular room, with walls in ratio of 2:3, with a good AV system for dance and fitness classes. Sprung, hardwood floor, one wall with bars and mirror, 40 at a time for an active program or class
- **Storage**, 25 m<sup>2</sup> shared by Flexihall and multipurpose spaces.

### Youth Centre

The Makkuttukkuvik Youth Centre is a vital functional space for Iqaluit's teen population. By extension, it is a significant service to the entire city. Many youth are at risk and use the centre as a home base, study area and social centre. Adjacency to the AWG ice surface is also important: hockey allows many kids an outlet- something to focus on. But the current remoteness from the downtown core (about a 2.5km or ½ hour walk) can mean a long cold trek in the dark. By relocating the centre to the downtown recreation facility, there will be easier access to a greater variety of activities for the largest youth group at risk.

- A larger **Youth Centre** is proposed at 288m<sup>2</sup>. This new space has been programmed into the downtown complex for a new Teen Centre;
- Almost all drop in supervised uses; free form area with various alcoves for computer work, lounging and watching screen, and various play machines, pool, foosball;
- Hardwearing surfaces, kitchen counter with sink, fridge, microwave;
- Up to 100 visitors at a time.

### Elders Qammaq

Although the existing Elders Qammaq provides a strong social centre in Iqaluit, allowing a dedicated, welcoming space within the fabric of the downtown recreation centre will encourage elder participation and inclusion, in turn benefiting youth and encouraging transfer of traditional knowledge and cultural values.

- A new 30 m<sup>2</sup> **Elders space** with a kitchen counter, sink fridge and stove for preparing tea and coffee
- Soft seating, natural, soft finishes
- Dimmable soft lighting, temperature control.

### Climbing Wall

A key draw for the downtown recreation facility will be a climbing wall. A relatively small investment requiring qualified supervision.

- 20 m<sup>2</sup> **Climbing Wall** space 70% supervised drop in timeslots, and 30% programs of instruction for all ages and both genders; Need vertical 20 plus feet of surface, 20 feet wide (could be 10 feet each way from one corner)
- Could be one corner or a larger high ceiling space, with adjustable climbing surfaces to vary the climbing experience - auto belayers, and manual belaying
- High quality lighting, fiberglass panels attached to a roughly finished wall, fall protection mats
- 10 in a class, but only five at a time on the wall

### Pre-School/Child Minding Space

The proposed double use of this facility reduces capital cost and fulfills a much-needed function of the modern recreation centre. By allowing a pre-school facility to function after hours as a child minding space, families have the agility to enjoy leisure time together in a socialized setting.

- 130 m<sup>2</sup> Pre School Program Centre will have some drop-in uses to support adults coming in to use the space, but also lots of program uses for pre-school aged participants.
- Open plan with a program area and a dedicated indoor playground, employing a play apparatus suitable for a variety of ages.
- Rubberized mat flooring under apparatus with hardwearing surfaces and finishes elsewhere.
- Storage space for play equipment storage.
- Accommodating 25 at a time, but only five on the play apparatus at any given time.

### Fitness Centre

Tenant areas have been programmed into the facility as unfinished space, the capital and operating costs of which are financed by leaseholders. The Fitness Centre, 330m<sup>2</sup> (again, this number is not consistent with gap analysis) is programmed into this category.

- 40 m<sup>2</sup> equipment studio, almost all drop in use, but some personal training and instruction allowed during drop in time, rubberized floor surface
- 280 m<sup>2</sup> aerobic studio, mostly programmed use, with 10 m<sup>2</sup> storage space. Sprung hardwood floor.
- Free form area; Variety of high quality strength, endurance, and flexibility equipment, some entertainment monitors; mirrors on some walls, could be located over pool support spaces,

### Tenant Area and Food and Beverage Areas

Spaces are leased with a view to generating competitive market income with a view to enhancing and supporting the recreation centre experience.

- **Tenant Area** 100 m<sup>2</sup> leased to retailer and/or operator of related services like health and wellness services. Unfinished space, the capital and operating costs of which are financed by lease holders; leaseholder designs and improves space
- **Food and Beverage** space consists of 35m<sup>2</sup> preparation, cooking serving and seating space for 10 patrons. 4m<sup>2</sup> for receiving, storing pre-prepared food and beverage items. A small serving area into pool and arena viewing areas, and a separate small seating area Kitchen area will need to be well ventilated, although most prep will happen off site Hardwearing high quality finishes throughout; 3 staff and 10 patrons seated

### Support Spaces

The downtown recreation centre, and to a lesser degree the addition to the AWG Complex, will be glued together with a series of supporting spaces: An Entrance Foyer, a Circulation Spine, Reception and Control Point, Staff Offices, Boardroom, Office Work Area, Staff Room, Maintenance Workshop, Building Storage, Public Washrooms and Building services (HVAC and electrical).

## 3.3 EMERGENCY AND PROTECTIVE SERVICES

In 2010, the City's Emergency Services and Municipal Enforcement Departments were combined to form a new "Emergency and Protective Services Department". With this merger a new Emergency and Protective Services Centre is being planned to accommodate the needs of both the Emergency Services (fire/rescue, ambulance and dispatch services) and Protective Services (municipal enforcement and animal control).

This section assesses the functional requirements for Emergency and Protective Services. This was done by consulting with stakeholders, reviewing the existing facility, analyzing trends in service delivery and then conducting a Gap Analysis. A Gap Analysis establishes what facilities and services exist compared with what is required. The difference between the two is the 'Gap'. From this matrix the team established an outline of required program elements. These are presented in greater detail in Appendix B as 'Functional Programs' that identify all required elements that make up the spatial requires of the facility.

### 3.3.1 Emergency and Protective Services Consultation

Key stakeholders for the needs analysis were identified as:

- Director of Emergency and Protective Services
- Enforcement Officers
- Chief Administrative Officer
- City Council
- General Public

Consultation on the new Emergency and Protective Services began in late summer with council and City Department heads in attendance. The City Working Committee, together with the Consultant Team, met 3 times with Emergency and Protective Services to discuss Facility Program Needs. On each occasion requirements were refined iteratively, culminating in an afternoon teleconference between FSC and the Fire Chief to finalize preliminary functional requirements for the combined service building.

Workshops with the Iqaluit Fire Department delivered a clear picture of the non-performance of the existing building:

***“Conditions at the facility are not acceptable”***

- Chronic space shortage, for equipment, human resources and storage
- Numerous code deficiencies including poor or non-existent fire separations
- CO2 emissions in the apparatus bays are a health violation
- No room for expansion
- No space for new fire trucks that must be purchased to meet regulations and which will not fit in the current facility
- The integration of Municipal Enforcement and EMS in to one Department of Emergency and Protective Services cannot be done within the existing facilities of either department

***“It is impossible to operate a proper emergency services centre from such a building. It is even more difficult (hypocritical) to enforce bylaws, building regulations and fire codes while being accommodated in such a deficient environment.”***

The consultation process moved quickly to identifying an appropriate course of action:

- The basic building requirements and functional spaces were defined
- Optimal sites were defined (the ‘North-Forty’ was initially preferred being close to the future training site)-
- Alternate sites close to the core or within public view were ultimately added for the exposure of the Emergency and Protective Services Centre as a public symbol of security, permanence and civic pride
- Protective Services were introduced under the same roof. It was agreed that the dog pound facility, a component of the Protective Services Department would remain separate from the Emergency and Protective Services Centre.
- As a result of the discussions, it was agreed MMM would be retained to prepare a Risk Assessment of Emergency Services and Emergency Response capability in Iqaluit. The Risk Assessment Report from MMM is located in Appendix H

The workshops formed the basis for a proposed functional program for the Emergency and protective Services Centre.

The general public was informed of the process at drop-in sessions in November, held at Northmart and Abe Okpik Hall in Apex. Further opportunities for input will be possible at the presentation of Phase 1 and as the work evolves in Phase 2.

### 3.3.2 Existing Facilities

Existing emergency services is located in the same building that houses Arnaitok Arena and City Hall. The Iqaluit Fire Department (IFD) occupies approximately 640 m<sup>2</sup>, 608 m<sup>2</sup> of which is at ground level. This space also accommodates the fire and ambulance dispatch centre.

Constructed in the early seventies, it was purpose built as a Fire Hall and Ice Rink, with a second floor left unfinished. The second floor was ultimately developed in the early 1980’s as municipal offices that became, with territorial separation, a City Hall in 1999.

The building is constructed of structural steel frame and concrete. The floor of the fire hall is a concrete slab-on-grade. The exterior cladding is prefabricated, moulded fibreglass.



The inner wall system is comprised of a batt insulation fill stud wall with conventional polyethylene vapour barrier. Insulation values are approximately R20. Neither the air/vapour barrier nor the insulation value approximates any level of good building practice. The roof is flat; the assembly is unknown. Other observations include:

- Cladding is showing UV damage
- Facility is not secure, allowing for compromise of emergency response i.e. walk in access to dispatch area, difficulties in maintaining confidentiality while administratively serving the public
- Service cannot expand to meet growing needs of the Community as there is no more space for an increase in human resources, or new specialty equipment such as hazardous materials, water rescue, etc.
- Existing facilities likely would not be able to function for more than 24 hours in a sustained incident, redundancies are not built into existing department framework, i.e. generator
- Systems responses cannot expand; no phone or radio banks, additional human resources, if called in, simply cannot fit into the functional areas.
- Facility does not support either a functional primary or secondary Emergency Operation System
- Exterior window openings are almost non-existent: there are few exterior windows; those that exist are not operable and are double layered acrylic domes. The plastics are discoloured and offers very limited visibility;
- Exterior doors are worn and should be replaced with new, code compliant hardware;
- Overhead doors are poor and a large component of the IFD O&M budget;
- Building mechanical and electrical systems are original and well past the end of their service life. An upgrade of mechanical systems planned in 2004 was cancelled after tender prices came in over budget;

The facility is plagued with code deficiencies. For example:

- The building is not sprinklered; incident starting in another area of the building would result in the loss of fire protection for the entire town;
- There is no horizontal fire separation or rating of columns support the second floor City Hall space;
- Vertical fire separations are compromised;
- Doors are required to be propped open due to inadequate hardware;
- The building does not support apparatus, quality of life or basic functional requirements of a typical Fire Hall

Existing Protective Services is currently located in a leased facility; Building 2425, former Fisheries & Oceans office. This facility lacks both efficient office, storage and customer service space as well as security features. The layout does not serve the client/public needs. Upgrades to the facility are expensive and difficult. Wiring form computer server systems are exposed and breaches exist in the fire separation.

As this building is across town from the Emergency Services, shared resources and reporting aspects requires staff to travel back and forth between the two buildings. Nominal inconvenience, but inefficient use of resources none the less.

Both Emergency and Protective services will require offsite facilities, dog pound and fire training grounds. Depending on site selection and proximity to private homes, some of these features may be located on site or near site of a new Emergency and Protective Services facility.



### 3.3.3 Trends

The 'Fire Hall' has been a prominent symbol of safety and security in the towns and cities of North America since the 18<sup>th</sup> Century. The consultation process with the Iqaluit Fire Department and the City of Iqaluit confirmed a clear intent to continue this tradition.



Figure 2: New Fire Hall in Brandon Manitoba (in the right foreground, a museum of local fire fighting history)

Three fundamental trends are influencing most contemporary workspaces, of which the:

- Greater vigilance toward workplace safety as executed by Workers Safety and Compensation Boards;
- A financial and environmental imperative to reduce energy consumption;
- An understanding that healthy, pleasant working environments contribute significantly to productivity in turn reducing absenteeism;

The Iqaluit Fire Department facility falls significantly short on all three points.

**Workplace Safety** is compromised by close working conditions to vehicles, poor ventilation of apparatus bays, inadequate exhaust fume extraction equipment and flagrant code deficiencies.

The building envelope is poorly insulated, compromising its **Energy Efficiency**. The unforgiving prefabricated fibreglass skin makes an energy retrofit of the wall difficult, costly and ultimately unsustainable.

The building is void of any attributes of a **Healthy Workplace**. There is little or no natural light or view to the exterior; it is poorly ventilated and artificial light is aging and subject to glare.

There are no specific Emergency and Protective Services trends directly affecting the facility, other than the fact that existing facility does not accommodate most of the required equipment, support space and office requirements.

### 3.3.4 Gap Analysis

The following table identifies current and recommended space provisions for Emergency and Protective Services with a view to establishing the shortfall or 'gap' between the two. A rationale for the recommended provision and an understanding of the relative priority of the requirement is established in the last column.

#### Emergency Services

A new exhaust extraction system was installed in late 2010 to alleviate CO<sub>2</sub> emissions that were providing health risks to the occupants of the Fire Hall as well as City Hall above.

There is insufficient space for the current fleet or future expansion and there are no training facility spaces. A new backup generator was purchased for the dispatch centre however it does not provide an uninterruptible power supply (UPS). It is recommended that a UPS be installed for the dispatch centre and fire station.

### Protective Services

Current space and access is limited; located in the Old Fisheries Building 2425 with Planning and Lands. Four officers share a single office space. There is a garage for 2 ME (municipal enforcement) vehicles and the hearse.

The current Protective Services environment is untenable: there is no secure storage, leaving sedation drugs for animals, as well as other sensitive equipment, vulnerable and difficult to account for. The existing Animal Protection shelter is makeshift and should be purpose-made with proper drainage and washing facilities. There should be outdoor runs for animals contiguous with individual kennel spaces.

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
<b>Emergency Services</b>				
<b>Apparatus Bays</b>				
One full length 15m and two 12m Bays (39m total)	5 full length (15m) Bays (75m total)	Approximately 2-1/2 full Bays or 36m total Bay lengths required.	At least one additional apparatus is required; there is insufficient space around the pumper truck and medical response units. There is no additional space for fleet growth (change) or ancillary equipment (ATVs, snow machine trailer, zodiac trailer)	The risk assessment has identified the need for an additional ladder truck as a high priority. Safety is a very high priority.
4.4m (14'-6") wide apparatus bays	5.4m (18'-0") wide apparatus bays	1metre+ (3'-6") additional width on apparatus bays	According to staff there is insufficient (unsafe) clearance around vehicles though there are no clear guidelines or	
No CO2 monitoring or exhaust, or fresh air supply.	CO2 monitoring and dedicated exhaust system; fresh air supply to ASHRAE standard	CO2 monitoring and dedicated exhaust system; fresh air supply to ASHRAE standard	Code Requirement	Mandatory
<b>Ancillary Space</b>				
Limited space for bunker gear, washing and proper equipment maintenance	Space for two bunker washers, hose drying and staff uniform cleaning; space to clean equipment (axes) with regulatory separation of hazardous waste.	Space for two bunker washers, hose drying and staff uniform cleaning; space to clean equipment (axes) with regulatory separation of hazardous waste.		

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
<b>Emergency Response Centre/ Training Facility</b>				
No accommodation	A large space that can be converted from a training facility into a secondary emergency response centre.	120m <sup>2</sup> Convertible space c/w public access control/checkpoint, LAN/Comm. capable with UPS.	Dedicated training and emergency response are vital to the provision of adequate emergency response services.	Very High Priority
<b>Public Interface/ Reception</b>				
No accommodation	Reception counter with shared fax/copy/supply support space	Reception counter with shared fax/copy/supply support space	There is little or no public control, way-finding clarity or interpretive space	High Priority
<b>Staff Accommodations</b>				
One undersized space for 6-8 people	A living area for 12, a dining area for 12, a kitchen support space, sleeping dormitories for 12 (double bunk) washroom and laundry facilities.	For the most part, all new accommodations are required.	Quality of life improvements will attract new members to the force and reduce tension.	High Priority
<b>Municipal Enforcement</b>				
<b>General</b>				
Shared leased space in separate building 6 officers in squad room and chief in an office	Include in new EPS facility	Squad room for six officers (including animal control officer). An enclosed office for the chief, file storage room, fire arm lock up, drug lock up and storage and equipment storage. Shared reception with Emergency Services	To better serve and protect residents, an all encompassing EPS	Very High EPS can better serve the City with the department sharing resources
<b>Vehicle Storage</b>				
Vehicles are parked behind the Municipal Enforcement Office at building #2425 Two parked inside, two in use Four vehicles	Add additional apparatus bays to house 6 vehicles		Vehicles should be stocked and ready to go. Equipment that should be kept in vehicles in heated indoor space: Lap top, tranquilizer drugs for animal control. Screens for radio equipment,	
<b>Office Space</b>				
A dispatch space and two shared offices, one on the second floor separate from the fire hall; space for 6 FTE's; very poor work environment with no daylight.	With the addition of Protective Services under the Emergency Services mandate, there is a requirement for accommodating approximately 16 current and future FTE's	Contemporary workspace for 10 FTE's is required. Proper day lighting, lighting ventilation heating and daylight/views required.	Adequate space with proper building systems with daylight and views is a minimum requirement for all modern workspaces.	High priority for functionality and ability to deliver services as well as staff recruitment and retention

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
<b>Dog Pound and Humane Society</b>				
Currently operates out of a City owned (lease to own) facility – a converted apartment unit. Part of the facility is used by the Iqaluit Humane Society, a partnership has been formed with the City. The dog pound can currently accommodate 15 dogs. Because of drainage issues they cannot currently use their puppy room and quarantine rooms. Pipes often freeze up. Drains are frequently plugged from cleaning the facility and bathing dogs. Humane society next door currently has 12 cages .	The location is adequate. A larger facility is required. One that is designed for this purpose Indoor/outdoor kennels Dog wash area Raised floors with adequate drainage Built in hose connections Control area for public interface  What is needed is: 16 indoor/outdoor dog runs, a puppy room that can hold 10 puppies/small dogs, and a separate area for vicious dogs (capacity 2).		The facility is not large enough to accommodate the number of animals that need to be housed. It is difficult to keep clean. Kennels do have dog runs to the outdoors. Excessive handling of dogs is required as facility is not designed for this purpose- (risking injury to workers and increased stress for animals)	

### 3.3.5 Functional Program

Based on the Gap Analysis, and supplemented by the Emergency Services Risk Analysis, a functional program for a new 1850m<sup>2</sup> Emergency and Protective Services Facility has been developed for the major spaces identified. The spaces should be configured on two stories to the extent possible, with training and ancillary spaces on the main floor adjacent to vehicle bays and public reception. Care should be taken to design office and firefighter accommodations with a view to quality of life issues.

A full matrix is located in **Appendix B** and the major components are identified as:

#### Shared Reception

Emergency and Protective Services will share reception space that will include a generous public lobby with an interpretive area for visitors (primarily school children):

- An inviting counter that allows security to staff (vault protection)
- Access to copy/fax room and supplies
- Easily accessible to stairs to second floor.

#### Training

The new E&PS Centre will include a state of the art training room that will double as a secondary Emergency Operations Centre

- 100m<sup>2</sup> classroom space with LAN and Comm. Lines; UPS. Will include kitchenette and overhead project capability
- Small screening vestibule from public reception
- Separate access via corridor direct to exterior parking

### Offices

To achieve economy of construction, Emergency Services and Municipal Enforcement offices as well as accommodation areas will be located on the second floor to minimize building footprint.

- Offices will have good daylight and views; glare control
- Systems will allow individual control of workplace environment
- Ensure secure storage for Municipal Enforcement/Animal Protection

### Apparatus Bays

As noted in the gap analysis, 5 full-length apparatus bays will be provided, each 5.4m wide. Double length bays with drive-in, drive out access, or single length, back-in drive out access is recommended, depending on site constraints.

- 3 bays, 15m long x 5.4m wide with minimum clear height of 4.8m (16') for fire fighting apparatus
- 2 Emergency vehicle bays 15m long x 4.26m wide with minimum clear height of 4.8m (12-16')
- 2 Protective Service Vehicle Bays 15m long x 4.26m wide with minimum clear height of 4.8m (12-16')
- Vehicle exhaust removal systems, compressed air and power drop lines, and hot and cold water connections

### Ancillary Space

Care will be taken to design proper movement from day areas through bunker gear storage to apparatus bays.

- Allow for 30 position bunker gear storage
- Open air 'Ready Rack'
- Adjacent to industrial cleaning room, c/w floor drains, hose bib
- Consideration should be given to quarantine room for clear hazardous materials
- Separate spaces for clean and soiled equipment cleaning and maintenance

### Dispatch

Space for two people on shift.

- Consideration should be given to call centre location (911)
- Main dispatch for all city services to public.

### Accommodations

Crew day area, living and dining for 12 people in each space.

- 6 double bunk rooms
- Male female capable
- Shower and laundry facilities

## 3.3.6 Off-Site Functional Components

### Animal Protection Shelter

The location of the animal shelter has not yet been determined. It should be separate from the E&PSC, due to noise and potential functional conflict with animals, the public and vehicle movement.

- 16 kennels contiguous with outdoor runs;

- Proper drainage, concrete floors, metal walls; hose bibs;
- Puppy room (10);
- Vicious dog quarantine space (2);
- Office, storage, public reception.

### 3.4 CITY HALL

The seat of Municipal governance in North America and around the world is invariably a physical symbol of the democratic ideals that the particular place embodies. Different from other cities, Iqaluit does not have ward based electoral districts. Relying more on the tradition of consensus based decision-making.

#### 3.4.1 City Hall Stakeholder Consultation

Meetings with City Council and Department heads were held to confirm the space requirements for City Hall. These are included in Appendix C and in turn informed the Gap Analysis in the next section. Fundamental concerns raised during the consultation process include:

- A requirement to make public spaces easily accessible for elders, either on one floor or utilizing a clearly demarcated elevator.
- Concurrence with the concept of transparency and the clear delineation of meaningful public spaces
- Adherence to the guiding principles laid out in the General Plan
- Consideration for a new Records Management and Inventory Control Centre on the existing Public Works 'Federal Road Garage site.

It was generally felt that if the Legislative Assembly Building were to be available, its renovation into a new city hall would be appropriate symbolically, functionally and financially.

#### 3.4.2 Existing Facility

The existing City Hall is located in the same building as the Fire Hall and Arnaitok Arena. City Hall occupies second floor space above the Fire Hall. It occupies about 580 square metres of the 608m<sup>2</sup> available floor space. The building was fit-up for City Hall in the early 1980's, created within unfinished base building space as part of the municipal complex constructed in the early 1970's. The space was partially renovated in 1988-89.

The current City Hall area accommodates 23 City employees as well as Council Chambers and the mayor's office. There is a severe space shortage at City Hall and functionally, City Hall does not work the way it should. Departments have limited exposure for access to the public. The City has leased office space at building #2425 and 1554 D in a response to space shortages in City Hall. The following departments and positions are located off-site because of the space shortage: Planning and Lands, Public Works, Engineering and Sustainability, Economic Development, Municipal Enforcement, Building Inspector and the Safety Officer.

There are no file rooms at City Hall and workspaces consist of some offices and a variety of different desk models and types throughout the building. There is no space for expansion, typically about 2-4 FTE positions per year. The Council Chamber functions more as a large boardroom than as a formal meeting with space designed for public delegations and presentations. There are no committee rooms and the City is always forced to rent space for the smallest of meetings. The Council Chamber is often used for meeting of 2-4 people.



Although there are many functional deficits that can be assigned to City Hall, the most important one is the absence of a civic gathering space connected to it. To be acknowledged, the electorate needs a place to celebrate their communality; a place to feel proud of where you are from. To be heard, they need somewhere to voice their concerns. This is what public squares do, but they should be linked in a fluid way with City Hall. Currently Iqaluit Square is located in front of the Elders Qammaq and adjacent to the Arnakallak Building (Old Courthouse) in Iqaluit, the public square should be partly inside due to cold weather. An inside “square” becomes the “town hall” meeting space, a common ground where many Canadian cities debated their inception centuries ago.

These functional shortfalls will be identified below in Section 3.4.4., “Gap Analysis”

Many of the technical deficiencies that challenge the Fire Hall and Arnaitok Arena are consistent with issues facing City Hall accommodations.

The building is constructed of structural steel frame and concrete. The second floor is constructed of poured concrete on metal deck supported on a steel structure.

Exterior walls are masonry infill between structural steel columns. The exterior cladding is a 75mm (3”) insulated double wall prefabricated, moulded fibreglass panel. The insulation value of the walls does not meet good building practices: the 75mm panel achieves a maximum RSI value of 2.6. That is approximately half the minimum requirement of RSI 5.4. Air leakage and thermography tests conducted on the building in the 1980’s indicated that although the walls are not well insulated, heat loss through air transfer and thermal bridging is minimal.

The roof is flat; and was renovated (City Hall portion only) in 1989 with additional insulation and a state of the art, torch-applied membrane roof system.

As with the fire hall:

- Interior Finishes are typically at the end of their service life.
- Exterior window openings are almost non-existent: there are few exterior windows; those that exist are not operable and are double layered acrylic domes. The plastics are discoloured and offered very limited visibility.
- Exterior doors are worn and should be replaced with new, code compliant hardware.
- Building mechanical and electrical systems are original and well past the end of their service life. An upgrade of mechanical systems planned in 2004 was cancelled after tender prices came in over budget.
- From a building code perspective, City Hall is a ‘D’ Occupancy, mixed with the ‘A3’ Arena and the ‘F2’ Fire Hall below. The building is greater than 2500 square metres in total area. The same code deficiencies discussed in the context of the Fire Hall and Arena apply to City Hall:
- The building is not sprinklered. If the wall between the arena and the City Hall/Fire Hall portion is not a firewall, then the area requirements determine that the building should be sprinklered.
- The main entry stair is wood panelled; potentially contravening flame spread limits for interior surfaces of exits.
- There is no horizontal fire separation or rating of columns support the second floor City Hall space
- Vertical fire separations are compromised
- Doors are required to be propped open due to inadequate hardware.



City Hall must either upgrade to meet modern requirements for Codes, better Energy Efficiency and basic functionality or procure new accommodations in some fashion. If a renovation did occur:

- Two thirds of City Hall Functions would have to remain off site unless the Fire department vacated premises (which is likely);
- There would still be a 1/3 space deficit with no room for expansion, and;
- The cost of renovating structures of this era to current standard well exceeds the cost of new construction;

### 3.4.3 Trends

As implied above, City Hall is increasingly becoming a more transparent, inclusive institution across North America. At the same time, the civic importance of the Council Chamber has given over somewhat to creating spaces for people to gather in celebration or debate.



Figure 3.4.2: New Kitchener City Hall

City Hall should embody the guiding principles laid out in the Iqaluit General Plan. Specifically, it should be responsibly and sustainably developed, respecting and embracing the cultural traditions of the Iqalummuit, in harmony with the surrounding natural environment. Encompassing all of these goals should be a concern for the economic viability of a new facility: the long term, or lifecycle cost of a new City Hall should respect the residents of Iqaluit by not burdening them financially.

Contemporary issues confronting the Emergency and Protective Services Centre also figure into the design and construction of a new City Hall, but with greater emphasis on the work environment that dominates the functional program.

City Hall should be a model for **Healthy Workplace** design. Open office space can be daylight-filled and pleasant, with good acoustics and adaptable climactic controls.

The building should be a leader in **Energy Efficient** design. It could feature local stone and be constructed with natural, sustainably manufactured or recycled materials. LEED® certification should be considered as a tool for public information and education about the distinct long-term benefits of smart design.

**Workplace Safety** should also figure prominently in the way the facility is maintained.

### 3.4.4 Gap Analysis

The following table compares existing spaces at City Hall against the Statement of Requirements laid out in Appendix C (Functional Program). The difference between the two highlights the current 'Gap' in service provision.

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
<b>Public Space</b>				
No accommodation	200m <sup>2</sup> public reception hall	200m <sup>2</sup> public reception hall	Council Chambers require a crush space; this can in turn be used for cue space to reception counters and will double as a town hall meeting space.	Medium priority; this space could be reduced in area but remain effective
<b>Council Chamber</b>				
62m <sup>2</sup> rectangular meeting space with limited delegation and observer capacity (+/- 12 people)	150m <sup>2</sup> council chamber, 9 council/mayor seats, space for 4 staff and 2 delegate presenters; up to 100 observer seating in the round	88m <sup>2</sup> council space, configured in the round		High Priority
<b>Committee Rooms</b>				
No accommodation	120m <sup>2</sup> meeting space for 60, Second space for small meetings up to 12	120m <sup>2</sup> meeting space for 60, Second space for small meetings up to 12	Dedicated spaces are necessary for small and medium scale public meetings that encourage the accessibility of City Hall and its staff.	High Priority
<b>Primary Emergency Operations Centre</b>				
No accommodation	Self-contained 70 m <sup>2</sup> space out of public view with LAN/Comm. capability with UPS. Security clearance vestibule and kitchenette.	Self-contained 70 m <sup>2</sup> space out of public view with LAN/Comm. capability with UPS. Security clearance vestibule and kitchenette.	EOC is a fundamental function of City Hall as the seat of responsibility for Iqaluit.	High Priority
<b>Public Reception</b>				
Approximately 2.4m (8') reception desk	Approximately 16 lineal metres of public counter space	13.5 Lineal Metres counter space	Departments with public business require clear boundary where an interface may occur but beyond which information is confidential	High Priority

What Exists Now	What is Recommended	Gap - Required to Provide	Rationale for Recommendation	Comment on Priority
<b>Office Space</b>				
Approximately 350m <sup>2</sup> of inadequate working conditions.	Approximately 1,100m <sup>2</sup> healthy workspace required (net) including council/mayor's offices.	For the most part, all new accommodations are required; 850m <sup>2</sup> shortfall	Current office space is spread around the City. At city hall there is 1/3 the required space and indoor environmental quality is extremely poor.	High Priority
<b>Storage</b>				
Minimal on site storage	Approximately 200m <sup>2</sup> including loading bay and circulation One storage area per floor for office supplies	Approximately 200m <sup>2</sup> including loading bay and circulation	Hallways and offices are cluttered with storage boxes and filing cabinets	High Priority
<b>Internal Meeting Space</b>				
No accommodation	85m <sup>2</sup> including plan rooms which can double as staff meeting space.	85m <sup>2</sup>	Available meeting space increases departmental communication	High Priority
<b>Staff Support</b>				
Minimal accommodation	50m <sup>2</sup> coffee/coat staff lounge space	50m <sup>2</sup> coffee/coat staff lounge space	Ensures quality of life at work, improving staff recruitment and retention	High priority for staff recruitment and retention

### 3.4.5 Functional Program

The Functional Program included in Appendix C summarizes all required spaces for a new City Hall. Totalling **3,111 square meters**, it is anticipated that the office spaces will be accommodated in a 3-storey block, the third floor of which would be given over to leas-able space and, possibly, archival storage. This would allow room for future expansion.

The idea of the program is the creation of a lofty 2-story internal space, "Iqaluit Hall", that welcomes visitors and orientates them to various components: Council Chambers, Committee Rooms, Public Counters, the Mayor's Office, a stair and an elevator to the upper levels.

Iqaluit Hall would be filled with daylight. It would look onto Iqaluit Square and perhaps Koojesse Inlet. A place for public debate, concerts and welcoming visiting dignitaries, this welcoming space would facilitate way finding and invigorate the day-to-day business of city government.

#### Public Space

The main entry should give on to a generous civic space capable of hosting public events such as town hall meets, performances, talks, debates, etc.

- Space should articulate the various public 'parts' of the building: departmental access, 'bill paying' committee rooms, council chamber and Mayor's office.
- Surfaces should have a sense of permanence and be hardwearing but handsome
- Daylight and potential views should be explored to maximize spatial experience and to make connections with outdoor civic space.

**Council Chambers & Committee Rooms**

These rooms should be clearly accessible to the public. Committee Rooms should have an element of transparency while council chambers should be acoustically designed and robust in finish.

- Committee Rooms should have access to daylight and views
- Council Chambers can be more inward looking.
- Accessible to council office and lounge
- Translation booths should have visual access to chambers and committee rooms from single location, though cameras and monitors may be used
- Rooms should be wired for audio-visual presentations, translation equipment.
- Accessible to public washrooms
- Public coat room.

**Emergency Operations Centre**

The primary EOC will be located at City Hall but will be concealed from public view.

- Accessible to translator booth
- Accessible to Administration Department and Mayor's Office
- LAN/Communications Wiring; UPS
- Multiple computer stations
- Multiple flat screen monitor display
- Vestibule for security clearance
- Secondary entrance from exterior via corridor
- Kitchenette

**Public Reception**

There should be clarity of movement upon entry to the building. The role of reception is to personalize way finding which should otherwise be self-evident, answer queries and provide a first level of security screening.

- Accessible to administration, corporate services and the Mayor's office.
- Secure but inviting public barrier

**Office Spaces**

Workspaces should be state of the art with natural, glare free day-lighting, views to the exterior, good acoustics in an open space setting.

- Must meet GN office space standards
- Achieve a 20% enclosed/80% open office ratio
- Good staff break areas

**Storage**

Care should be taken to provide appropriate departmental storage as and where required.

- Plan Rooms
- Secure file storage (land titles, personnel)

### Internal Meeting Spaces

In a good open office environment there needs to be a variety of meeting space for different levels of interaction.

- Available break-out spaces for privacy, teleconferencing, small meetings
- Available large meeting space
- Private interview rooms

### **3.4.6 Off-Site Functional Components**

#### Warehouse

A facility is required on the existing North Forty lot that currently accommodates Public Works. It should be a multi-use facility that works in conjunction with the existing building to accommodate:

- Stores/Inventory Control
- Records Management
- Public Works equipment

The space has not been programmed but will be a required as an extension of City Hall internal support services.

#### Waste Management

A stand-alone 53.5m<sup>2</sup> (12' x 48') crew building for 4 staff is required at the solid waste facility that includes:

- Supervisor's Office
- Lunch/warm up room
- Washroom
- Shower/Change Room
- Lockers
- Storage

## 4 Site Analysis

### 4.1 INTRODUCTION

#### 4.1.1 Site Selection Objectives

The overall goal of the site selection study for Recreational Facilities, Emergency Services, and City Hall is to answer the question: “how can the City develop The Facilities in the most economical and sustainable manner while meeting the current and long-term needs of the community?” The study was conducted with the following objectives in mind:

- to analyze and evaluate different sites in Iqaluit where different facilities could be located;
- to make recommendations for the location/grouping of such facilities;
- to enable priority projects, such as a new Aquatic Centre, to proceed as quickly as possible;
- to provide stakeholders with an opportunity to participate and to voice their opinions; and
- to ensure that the recommended solutions reflect the views and needs of the community.

#### 4.1.2 Site Selection Process

The planning process for site selection was carried out over two phases.

Through consultation and an analysis of best practices, **Phase 1** consisted of establishing through consultation and an analysis of best practices site requirements and criteria, which was used for identifying and reviewing a broad and inclusive list of sites for the different facilities. From the broad list, key sites were identified for further exploration for each of the facilities (recreational, emergency services, and City Hall). Through a participatory process that involved a number of meetings with the community and City staff, the potential sites were short-listed to 2 to 3 key sites for each type of facility.

**Phase 2** included analyzing the short-listed sites in greater detail as well as creating site plans that reflect input received from the community, city staff, and stakeholders, to explore how the facilities might fit on the sites. The outcome of this analysis is described in later sections of this report. The report concludes by recommending the selected sites and outlining potential development features and opportunities and constraints for each one. The diagram below summarizes the site selection process and the key steps in each phase.

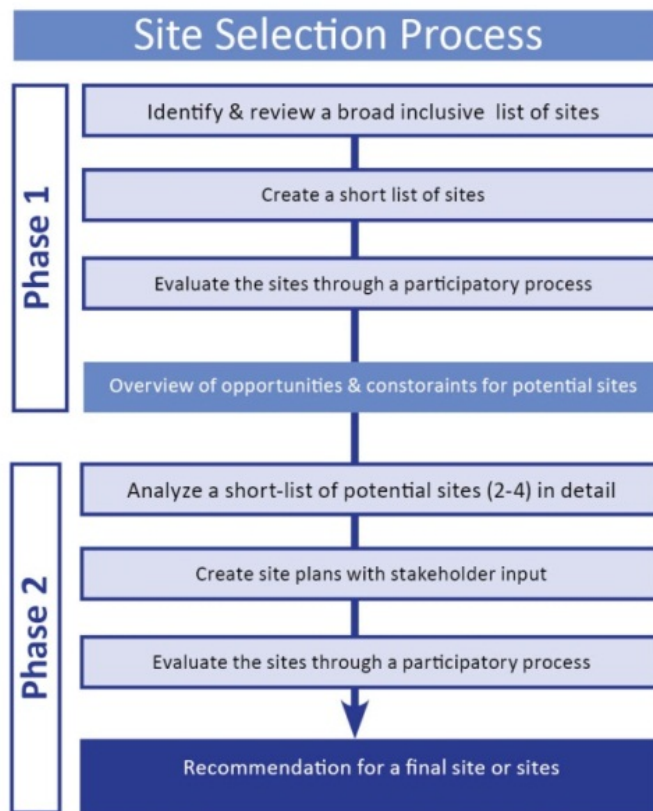


Figure 4.1.2: Site Selection Process

### 4.1.3 Site Selection Consultation

The site selection phase involved extensive public and stakeholder consultation, including:

- An initial workshop was held with City department Managers September 15<sup>th</sup> 2010, where parameters for site selection were established and initial site selection for the 'long list' was made;
- A presentation to council to discuss potential sites and evaluation criteria was conducted on October 5<sup>th</sup> 2010;
- A second site workshop with City Staff was held November 12<sup>th</sup> 2010 to develop a short list of selected sites;
- A series of drop-in information and feedback sessions held November 10-13, 2010 with the Public, at Northmart;
- A work-in-progress presentation to City Council was held November 25<sup>th</sup> 2010;
- Presentation to Committee December 6, 2010 identifying site configurations;
- Public presentation of Site Selection was held December 6-7 (a Power point presentation of the site selection panels can be found in **Appendix C**);
- Presentation of site configurations to council December 7, 2010;

The outcomes of these consultations are outlined in detail throughout this Chapter.



#### 4.1.4 The “Locational Lens”

A “locational lens” was developed in the early stage of the project, recognizing that there were locational opportunities and constraints unique and related to each type of facility’s use and design requirements.

##### Clustering Civic Uses in the Core

It was agreed that civic uses are generally most beneficial when located in the Core Area of the city. Benefits relate to the social, environmental, and economic sustainability of Iqaluit.

From a social sustainability perspective, locating and concentrating civic functions and services in the Core Area helps to capture the critical mass of people from existing commercial activities and residential neighbourhoods and adds to the creation of a more vibrant and attractive Core Area. At the core, civic services are more accessible by all – especially to people who do not have access to a car – and therefore more equitably located.

From an environmental sustainability perspective, clustering civic uses in the core is a strategy that is consistent with City’s goals for sustainability and addressing climate change. By focusing civic services in the core, walking is encouraged, land, resources, and services are used more efficiently, and a clearer and more sustainable development pattern that does not depend on the automobile for mobility, is delineated.

From an economic sustainability perspective, cost-savings and synergies in construction, operations, and maintenance are capitalized on co-locating civic uses with many of the existing activities in the core. Each facility also has locational considerations unique to its use, programming, and design requirements.

##### Recreational Facilities

Recreational facilities general benefit from being near civic functions of the city, as well as existing residential populations – the users. By locating near the core, recreational uses can capitalize on synergies of being in proximity of other civic uses without competing with existing higher uses such as office and commercial uses. This is an important consideration due to the significant spatial, infrastructural and operational needs associated with building recreational facilities (e.g. pools, field houses, parking, etc.). Recreational facilities require larger lot sizes that may make it challenging to locate directly in the Core. Resource sharing and capitalizing synergies between uses in areas such as transportation (community shuttles), staffing, maintenance, and servicing, is also enabled through locating near the Core.

By being the near the core, recreational facilities also enable more equal access for residents who live inside as well as outside of the Core. It also helps in defining a clearer development pattern.

##### Emergency Services

Emergency Services should locate along clear access routes to areas of concern within the City, in order to meet emergency response time guidelines for effective response. They also require adequate space to accommodate both main and where possible, supporting uses such as training grounds and truck maintenance areas. Emergency Services facilities should also be located and designed to minimize impacts on adjacent residences and other sensitive land uses where possible – particularly training facilities where burning may take place.

A key strategy identified by the Fire Department for reducing response times is to locate emergency services in the Core where most fire fighters and volunteer reside. Often, emergency

services staff and volunteers host and participate in community events, and thereby would benefit from locating in a central, visible and accessible location for the wider community.

### City Hall

City Hall benefits from being located in a prime location in the city that is accessible, visible, and prominent. As a key focus for civic services, City Hall functions should be concentrated centrally in the Core to capture synergies with other key civic and commercial uses of the city. Locating City Hall in the Core Area also helps contribute to the City's objective of creating a distinct and improved Core Area and Capital District, symbolizing and adding to the development of a community heart. City Hall also has the potential of adding to a strong civic realm and presence at the Core where there is greatest accessibility to all by walking – thereby encouraging more opportunities for public participation in civic activities and more frequent and equitable use of civic services.

## 4.2 DEVELOPMENT OF SITE SELECTION CRITERIA

The following reflects a list of criteria that address city context and objectives, site-specific characteristics and requirements, and potential impact on the community. While the “locational lens” provides a general umbrella framework for considering the sites, the criteria reflect more specific requirements for assessing site suitability. The Site Selection Criteria was developed and vetted at an initial site selection workshop with City staff on September 15th 2010.

<b><u>City Area and Vision</u></b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Improves Core Area and Capital District</li> <li><input type="checkbox"/> Livable City: supports arctic lifestyle, clear development patterns, economic opportunities, and safety</li> <li><input type="checkbox"/> Sustainable City: respects and enhances natural environment</li> <li><input type="checkbox"/> Effective community planning: location encourages public participation</li> <li><input type="checkbox"/> Climate-change goals: geotechnical considerations in regards to changes in permafrost conditions (if present)</li> <li><input type="checkbox"/> Civic Place-making: contributes to a vibrant civic realm</li> </ul>
<b><u>Public Benefits</u></b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Results in clear public benefits (e.g. parks, amenities, pedestrian facilities)</li> <li><input type="checkbox"/> Benefits many people (close to critical mass of people and activities)</li> <li><input type="checkbox"/> Benefits the disadvantaged and under-resourced</li> </ul>
<b><u>Value Creation</u></b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Improves Core Area, adjacent properties, and public spaces</li> <li><input type="checkbox"/> Benefits: site has associated and added benefits</li> <li><input type="checkbox"/> Consider views: existing public views, views from and toward site</li> </ul>
<b><u>Longevity</u></b>
<ul style="list-style-type: none"> <li><input type="checkbox"/> Phasing and future opportunities: considers future expansion and investments</li> <li><input type="checkbox"/> Longevity: considers long-term benefits and permanence</li> <li><input type="checkbox"/> No undue loss of 'higher and better' land use opportunities</li> </ul>

<b><u>Function and Programming</u></b>
<input type="checkbox"/> Size and shape of site(s): meet development and design objectives <input type="checkbox"/> Architectural objectives: meet facilities design requirements <input type="checkbox"/> Co-location opportunities and site efficiencies capitalized
<b><u>Access, Parking, &amp; Servicing</u></b>
<input type="checkbox"/> Accessibility: accessible by walking and contributes to a pedestrian-oriented environment, adjacent to main road to enable future transit access <input type="checkbox"/> Traffic access, servicing, and parking requirements are met <input type="checkbox"/> Practical and regulatory constraints: emergency access response times and addressing <input type="checkbox"/> Snow-clearing: emergency access can be maintained
<b><u>Capital and Operating Costs</u></b>
<input type="checkbox"/> Construction costs: life-cycle approach to costing and sustainability (e.g. topography, site-leveling, potential remediation, flood prevention, wind) <input type="checkbox"/> Servicing, Maintenance, and Energy costs: Consider service/maintenance and sustainable energy opportunities (e.g. passive solar heating, district heating) <input type="checkbox"/> Enhancing/adding to existing buildings/infrastructure: seek opportunities <input type="checkbox"/> Ownership: no major constraints and allows for partnership opportunities <input type="checkbox"/> Land value and future economic potential considerations (e.g. jobs, job creation)

### 4.3 Development Of Long-List Of Sites

In Phase 1, through discussions with City staff, a total of 20 potential sites were identified throughout the city. These sites ranged in location, size, and configuration. These sites were at times identified for further exploration for more than one type of facility. The sites were assessed against the locational considerations and the criteria above at the September 15<sup>th</sup> Site Workshop held with City Staff at the Planning and Lands Office.

Site	Location	Area
1	Existing City Hall	1.1 Ha (2.7 acres)
2	4 Corners / Air Base Garage	0.4 Ha (1.1 acres)
3	Joamie School Hill	1.0 Ha (2.5 acres)
4	AWG Adjacent Sites	1.6 Ha (3.8 acres)
5	New Growth Area - Road to Nowhere -	31 Ha (78 acres)
6	Old courthouse	0.4 Ha (1.0 acre)
7	Old RCMP Detachment	0.3 Ha (0.8 acres)
8	Corner of Road to Nowhere	1.3 Ha (3.3 acres)
9	Inukshuk High School	5.2 Ha (12.8 acres)
10	Nakasuk School Open Area	0.88 Ha (2.2 acres)
11	QIA Lands on Federal Road	4.8 Ha (12 acres)
12	Existing legislature building	0.3 Ha (0.7 acres)
13	Inuit Broadcasting / Flower Shop Building	0.2+0.3 Ha (0.5+0.7 acres)
14	Lots across from Northmart	0.6+0.3 Ha (1.5+0.7 acres)
15	New Development on Apex Road	36 Ha (88 acres)
16	VOR International Beacon	5.7 Ha (14 acres)
17	Area across from Old Courthouse site (currently single family housing)	0.70 Ha (1.74 acres)
18	Site - Northwest of Core on Federal Road	0.92 Ha (2.27 acres)
19	Site - Northwest of Core adjacent to City Garage	0.78 Ha (1.93 acres)
20	Frosty Refrigeration, adjacent to the Elks	0.44 Ha (1.07 acres)



Figure 4.3.1: Map of Potential Sites

#### 4.4 SITE LONG-LIST EVALUATION

The Site evaluation process included the participation of the wider community. Site evaluation panels were presented at 3 public meetings held on November 12<sup>th</sup> and 13<sup>th</sup>, 2010.

The 20 sites were evaluated according to the Criteria and assessed for opportunities and constraints. If merits were found based on the evaluation, the sites were identified for further exploration. Sites identified for further exploration were further analyzed as potential development options – in some cases, a combination of sites were considered to meet spatial and locational needs of facilities. Site concepts were developed through preliminary schematic site plans for City Hall and recreational facilities to begin exploring fit of the site.

Refer to Appendix A to view the Matrix of Site Selection (Opportunities & Constraints), development options, and site concepts that were presented to the community for their input.

#### 4.5 SITE SHORT-LIST DEVELOPMENT

Based on further site analysis and public feedback, 2 to 3 sites were selected for each type of facility to study at a more detailed level as part of Phase 2 of the site selection process. The public and stakeholder consultation process brought new information, which resulted in the elimination of several sites that did not adequately meet site selection criteria.



Site	Location	Area
1	Existing City Hall	1.1 Ha (2.7 acres)
2	4 Corners / Air Base Garage	0.4 Ha (1.1 acres)
4	AWG Adjacent Sites	1.6 Ha (3.8 acres)
6	Old courthouse	0.4 Ha (1.0 acre)
8	Corner of Road to Nowhere	1.3 Ha (3.3 acres)
11	QIA Lands on Federal Road	4.8 Ha (12 acres)
12	Existing Legislature Building	0.3 Ha (0.7 acres)
20	Frosty Refrigeration, adjacent to the Elks	0.44 Ha (1.07 acres)

recreational facilities
SITE(S)
1
Existing City Hall
4 + 1
AWG Adjacent Sites - Existing City Hall

emergency services
SITE(S)
8
Corner to Road to Nowhere
11
QIA Land on Federal Road
20
Adjacent to the Elks

city hall
SITE(S)
2
4 Corners / Air Base Garage
6
Old Courthouse
12
Existing Legislature Building



Figure 4.5.1: Map of Selected Sites

#### 4.6 SITE SELECTION IMPLICATIONS

Two significant outcomes of the short list site selection process should be discussed.

##### No ‘Single-Complex’ Site

None of the sites selected are suitable for a ‘mega-complex’ housing all or most of the identified facility components – Recreation, Emergency and Protective Services and City Hall.

A number of sites are large enough: Sites 5, 9, 11, 15 and 16 could accommodate all components under one roof. However, only two of the five met the criteria of the **Locational Lens**: Sites 5, 15 and 16 all sit outside the downtown core and would therefore not address the long term goals of sustainability and ease of public accessibility.

Only **Site 11** on Federal Road and **Site 9**, Inuksuk High School, are located near the core. The future of Site 9 is uncertain, as the school is in the midst of a mid-life retrofit. **Site 11**, owned by QIA, is earmarked for downtown residential development with preference to birthright interests. The team considered it inappropriate to pursue this site for much more than a small portion compatible with these goals (such as the Emergency and Protective Services Centre).

### Joamie Hill Site

**Site 3**, Joamie School Hill, was the preferred site identified in the 2005 Aquatic Centre Feasibility Study for a new pool facility, but did not make the shortlist.

Site 3 is located outside of the downtown core (and is limited in area) but close to the school district. This latter adjacency could be suitable for the single-function Aquatic Centre being contemplated in 2005. However, the third aspect of the Locational Lens - economic viability - encourages the co-location of numerous recreation components under one roof for maximum benefit. This, together with the need to locate within the core, makes Site 3 less desirable in 2011.

## 4.7 STUDY OF OPTIONAL SITES BASED ON CLIMATE CHANGE ANALYSIS

At this time the quality or location of permafrost at any of the sites has not been studied to our knowledge. We therefore consider them to be of equal vulnerability with respect to permafrost degradation. The Road to Nowhere is in a location of bedrock so permafrost issues are not a concern at this time. Ultraviolet considerations are essentially equal for all sites, as is the vulnerability with respect to changes in precipitation and extreme weather events.

The only differing site that presents concerns for increased vulnerability at this time of the study is the Old Courthouse site which is located close to the shore and is therefore subject to higher vulnerability resulting from coastal changes from rises in the sea level and storm surges. The old courthouse site is within 3m above current sea level, or 2.3m above the maximum average sea level predicted for 2100. The development of this site is a long-term solution; however it does have limited land for expansion. Discussions with Don Forbes of the GSC indicate that sea level rise information is not currently available but that a 'gut feel' is that it should not pose a high risk to this site.

We recommend that further research, study and analysis be commissioned in order to determine whether sea level rise will affect the ranking/eligibility of the courthouse site. Notwithstanding further study, there are viable solutions to sites adjacent to the waterfront. These include the construction of a berm to isolate the built area or added fill to raise grade to a known safer level. If the courthouse site is chosen for City Hall, we recommend that specific geotechnical and geothermal studies be completed in order to determine the most appropriate foundation solution.

## 4.8 ANALYSIS OF SHORT-LISTED SITES

### 4.8.1 Recreational Facilities

Due to the large spatial requirements of the recreational facilities (12,000 m<sup>2</sup>), only the existing City Hall parcel (Site 1), located in the Core Area, fulfilled the criteria for this use. This site has the potential to locate, in a concentrated manner, a large amount of recreational facilities, fulfilling the imperative of identifying a Core Area location – accessible by walking to a large population. Furthermore, new recreational facilities should be designed to interact with and complement the curling facility located across Nunavut Drive. To do so, Nunavut Drive may be re-designed an open space plaza and can potentially be transformed with perpendicular parking stalls on both sides.

A plaza can be created on the south corner along Niaqunngusiaq Street, which could be programmed with outdoor activities, including an outdoor skating rink.

The Arctic Winter Games site (AWG), located at the outskirts of the city on the road to Apex, includes a recently constructed ice rink, which will necessarily be part of the complete roster of recreational facilities across Iqaluit. In fact, full-sized ice rinks are currently located on both sites. The rink on Site 1 is an old rink that is slated for demolition, while the rink on Site 4 is fairly new and will be kept. Given the logistical and cost efficiencies of co-locating ice-based recreational activities (reducing the need for additional equipment and maintenance) it was generally deemed that all new ice-based facilities would be preferably located at the AWG site.

Thus, the analysis pointed towards options that combine the existing City Hall site (Site 1) with the AWG site (Site 4).

Site 1 + 4	The existing City Hall site and the AWG site
City Area and Vision	The existing City Hall site is in keeping with the vision of a community facility located in a manner that is visible and accessible to the community and contributes to a vibrant civic realm. This site is especially well located relative to an existing residential population. The AWG site already has a community function and is adjacent to several schools.
Public Benefits	Both sites are well located to function as a civic centre for community interaction. The existing City Hall site is exceptionally well located to serve a large population by walking.
Value Creation	The development of the existing City Hall site is in keeping with raising the profile of the Core Area and Capital District and benefits from the adjacency of the Curling Club and other facilities. The development of the AWG site benefits from the presence of the existing ice facilities.
Longevity	The development of both sites is a long-term solution and enables opportunities for expansion.
Function and Programming	A combination of both sites accommodates the anticipated programming and needs. Parking at the existing City Hall site is a long-term constraint and will necessitate alternative strategies. Refer to Section 5 below.
Access, Parking, & Servicing	Both sites are easily accessible for vehicles. The existing City Hall site is especially accessible to pedestrians. Parking issues are discussed in Section 5 below.
Capital and Operating Costs	Sites are owned by the City. Identified expansion area behind the AWG Complex (site 4) is controlled by the Government of Nunavut's Department of Education. No undue capital or operating costs/benefits are foreseen for this option.
In conclusion:	A combination of both these sites provides ample opportunities to accommodate recreational functions. The use of the AWG site enables the efficient co-location of existing and new ice facilities. The use of the existing City Hall site enables the location of recreational facilities within walking distance of a large population of users.

### Phased Development

Through a phasing approach the site plan analysis suggested that it is possible to build the Aquatic Centre on Site 1, while conserving the existing municipal services (arena, emergency services, and City Hall) as part of a Phase 1. The existing building can then be demolished to enable the construction of new recreational facilities during a Phase 2.

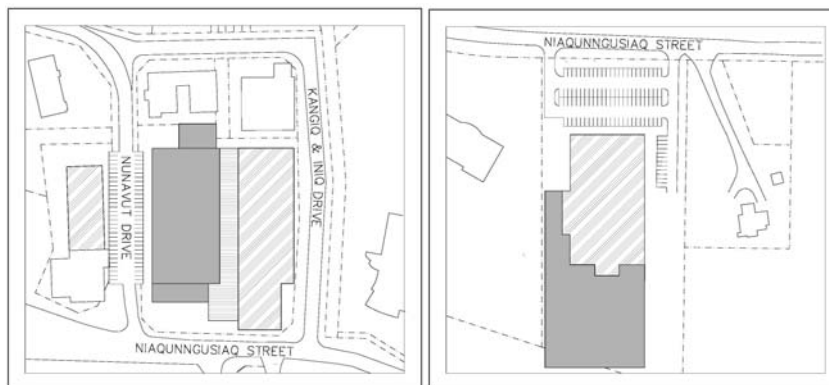
This opportunity is significant as it entails that the Aquatic Centre can be built immediately, maintain the ongoing operations of all facilities within the existing building (arena, emergency services, and City Hall). The demolition of these facilities is not necessary until replacement facilities are constructed elsewhere in Iqaluit.

Both the existing City Hall site and the AWG site are owned by the City, which makes it easier to manage the timing of development.

Based on the findings above, all options include:

- a site plan that has regard for the initial phasing of the Aquatic Centre; and;
- a combination of the existing City Hall site (Site 1) and the AWG site (Site 4), evaluating the location of different dry recreational functions at each.



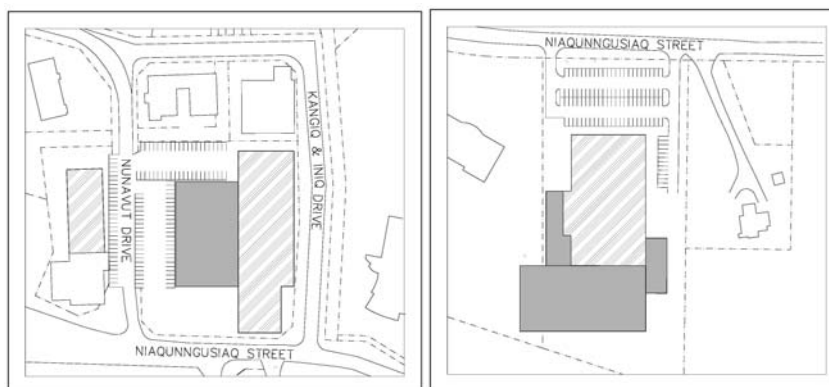
**Option 1: All dry facilities at the Existing City Hall (Site 1)**

**Option 1** considers locating all dry recreational facilities (Aquatic Centre, the Dry Recreation Centre, and the Fieldhouse) on Site 1 and a new Regulation Ice Surface at the AWG site.

This option has the benefit of: locating as many facilities as possible within the walking distance of a large population (i.e. in the Core Area); and enabling the efficient co-location of ice-based facilities at the AWG site.

As part of a site plan, the space created between the Aquatic Centre and other recreational facilities could become an interior amenity space (an interior “street”) accessing all of the facilities, including the functions located on the second level.

An element of this option, which can be both an opportunity and a constraint, is that in order to locate the Fieldhouse on Site 1, it may be necessary to stack some of the facilities. The long-term benefits and efficiencies (maintenance and operations) of concentrating a critical mass of functions should be counterbalanced with the construction costs of realizing additional levels.

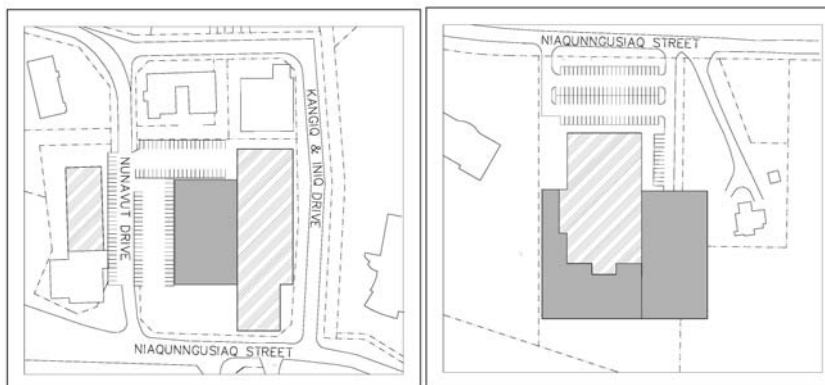
**Option 2: Fieldhouse at the AWG site**

**Option 2** is similar to Option 1, but evaluates locating the Fieldhouse at the AWG site (in addition to a new Regulation Ice Rink). The Aquatic Centre and the Dry Recreation Centre continue to be located at the existing City Hall site (Site 1). The implication being that fewer facilities are located in the Core Arena, and the AWG site requires either: greater amount of land to be developed; or the development of a stacked facilities (i.e. building the Fieldhouse and the arena one above the other).

Site 1 could accommodate all of the programming requirements. A plaza is created on the south corner along Niaqunngusiaq Street. Nunavut drive could potentially be transformed with

perpendicular parking stalls on both sides. On Site 4, the only possible location for the new arena is the area in the back of the existing arena. A corridor along the west side of the building would enable servicing. All parking would front onto the street.

### Option 3: a convertible Arena/Fieldhouse at the AWG site



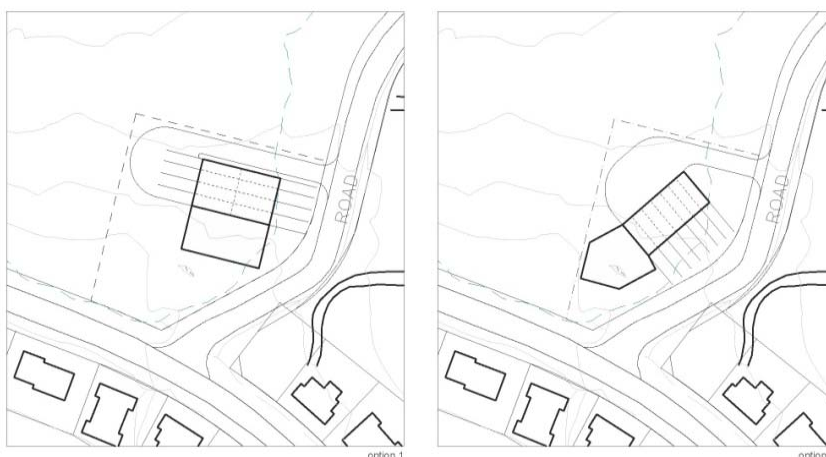
**Option 3** is similar to Option 2, but considers constructing a new facility at the AWG site (Site 4) that can be converted from an Arena to a Fieldhouse, and back, as required. Plus, the AWG site would accommodate a Leisure Ice Sheet. The Aquatic Centre and the Dry Recreation Centre continue to be located at the existing City Hall site (Site 1).

This option creates an opportunity for year-round leisure skating, while maintaining two regulation ice rinks during high season (when the Fieldhouse would be converted to ice). The constraint being that there would not be simultaneous use of the Fieldhouse and two ice arenas.

#### 4.8.2 Emergency Services

Three sites were selected for the emergency services facility – with two potential options for the proposed building on each of the sites. Options differ mainly in terms of site access and the parking bay's layout. Parking bays are either single-loaded (preferred) or they are double-loaded with two trucks parked in a line. In general, emergency functions are negatively affected by traffic congestion at intersections. Any location for emergency services should be evaluated and explored to include a secondary by-pass route or access and exit point.

### Corner of Road to Nowhere and Niaqunnsiaq Street (Site 8)



On Site 8, access points in both options are located on the Road to Nowhere, away from the intersection with Niaqunngusiaq Street. Site 8 is the closest site to Apex and the new development happening to the west and the north. The double-loaded bay option is compact and primarily fronts the Road to Nowhere. The building also spreads along the Road to Nowhere and addresses Niaqunngusiaq Street. The single-loaded bay option requires a slightly smaller lot size.

Site 8	Corner of Road to Nowhere and Niaqunngusiaq Street
City Area and Vision	The site is in keeping with the vision of a civic institution located in a manner that is visible and accessible to the community (albeit it is less accessible to pedestrians). The contribution to a vibrant civic realm is commensurate with the nature of emergency services.
Public Benefits	It is well located for emergency services and moderately well located to function as a civic centre for community interaction.
Value Creation	The development of this site is in keeping with raising the profile of this area of the city.
Longevity	The development of this site is a long term solution, with room for expansion (only constrained by topography).
Function and Programming	The site can accommodate emergency services facilities, including parking on-site. The location of the site within the city is effective for proper emergency response time.
Access, Parking, & Servicing	This site is challenged by topography, and its development will entail careful consideration of grade, access, and snowdrifts. Preliminary analysis by MMM with respect to road grades suggests that these issues are solvable through proper site engineering. Some re-grading may be required on the Road to Nowhere. A second driveway access onto the Road to Apex may be required. Location relative to the city is efficient for managing response time, but may present some challenges for emergency personnel to reach the facility, as most people live closer to the downtown core. Traffic demands do not pose an issue for this location.
Capital and Operating Costs	Site is owned by the City. This site will require re-grading and may require additional municipal servicing. The site is easy to access by car, but difficult to access for pedestrians. No other undue capital or operating costs/benefits are foreseen for this option.
In conclusion:	The site is functional and efficient, however, given the necessary site engineering and the constraints for pedestrian access, other sites may be considered first.

**QIA land on Federal Road (Site 11)**



Site 11 is located on Federal Road near the Core Area. It has generally good vehicular access. The two options are very similar in term of access and relation to the street. The single-loaded option for this site also requires slightly less land than the double-loaded option.

Site 11	QIA Land on Federal Road
City Area and Vision	The site is in keeping with the vision of a civic institution located in a manner that is visible and accessible to the community. The contribution to a vibrant civic realm is commensurate with the nature of emergency services.

Site 11	QIA Land on Federal Road
Public Benefits	It is well located for emergency services and well located to function as a civic centre for community interaction.
Value Creation	The development of this site is in keeping with raising the profile of this area of the city.
Longevity	The development of this site is a long term solution, with ample room for expansion.
Function and Programming	The site can accommodate emergency services facilities, including parking on-site. The location of the site within the city is effective for proper emergency response time. However, the time for volunteers to reach the site in case of an emergency could be a concern, given that most volunteers will likely have to pass through the busy Four Corners area. This site is close the industrial areas of the City and the airport, so emergency response to those high risk areas would be effective from this site.
Access, Parking, & Servicing	This site is easily accessible for vehicles and pedestrians. Location relative to the city is efficient for managing response time. Time for emergency personnel to reach the facility may be an issue, as they must generally pass through the Four Corners. This option should not preclude the future bypass of the Four Corners. As the extent of development will determine the size of site, parking and vehicle access will not be an issue.
Capital and Operating Costs	Site is owned by QIA. This area is known to contain marshlands and/or a low water table. On-site investigation will be required, and mitigation measures may be required. No other undue capital or operating costs/benefits are foreseen for this option.
In conclusion:	The site is functional and efficient for both the operations of emergency services and reasonably adequate for the community presence required by Emergency Services. Site is perceptively flat and straight-forward to develop (albeit, some mitigation measures may be necessary for ground water).

**The Frosty Refrigeration (Site 20)**



Site 20 is located in the Core Area, just a block away from two of the main roads in Iqaluit - Federal Road and Niaqunngusiaq Street. Site 20 is an assemblage of two lots. The two options show a double-loaded bay configuration with option 2 mirroring option 1. Both options allow the emergency services building to have a very urban treatment and interface with the street.

Site 20	The Frosty Refrigeration Lots
City Area and Vision	The site is in keeping with the vision of a civic institution located in a manner that is visible and accessible to the community. The contribution to a vibrant civic realm is commensurate with the nature of emergency services.
Public Benefits	It is well located for emergency services and exceptionally well located to function as a civic centre for community interaction.
Value Creation	The development of this site is in keeping with raising the profile of this area of the city. A constraint with this option is that this land could be more effective to provide parking for a Recreational Facility constructed on the existing City Hall site.
Longevity	The development of this site is a long term solution; however it does have limited room for expansion.
Function and Programming	The site can accommodate emergency services facilities, including parking on-site. The location of the site within the city is effective for proper emergency response time. This site is close the industrial areas of the City and the airport, so emergency response to those high risk areas would be effective from this site.

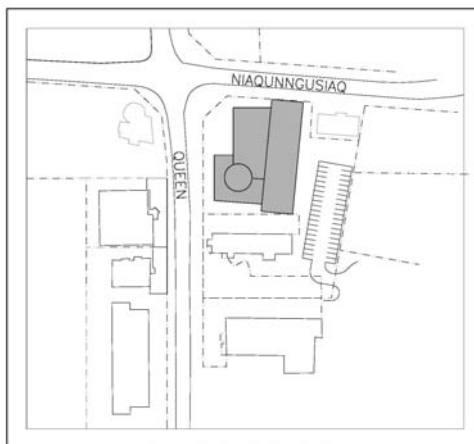


Site 20	The Frosty Refrigeration Lots
Access, Parking, & Servicing	This site is easily accessible for vehicles and pedestrians. Location relative to the city is efficient for managing response time, as well as for emergency personnel to reach the facility. However, there are potential constraints due to small amount of space available for parking on-site. Vehicle access to the east could be achieved via Kangiq & Iniq, bypassing the 4 Corners. Site is less than optimal in terms of not being on a main road (w.r.t. speed of response). The very tight site will pose challenges for accommodating enough parking (35 vehicles) and movement of emergency vehicles.
Capital and Operating Costs	Site is owned privately. No undue capital or operating costs/benefits are foreseen for this option.
In conclusion:	The site is functional and efficient for both the operations of emergency services and the community presence required by Emergency Services. Site is perceptively flat and straight-forward to develop. It is a good option for locating Emergency Services Facilities, limited only by other potential uses that can be located on this site (e.g. Core Area parking for Recreational Services).

### 4.8.3 City Hall

Three sites were selected for City Hall.

#### Airbase Garage (Site 2)

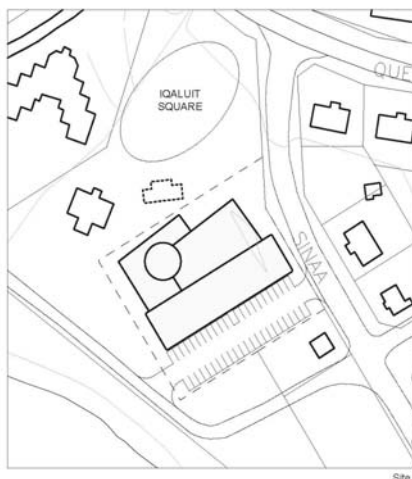


Site 2 is located right at the Four Corners. The site size is just adequate to accommodate all of City Hall’s functions including a parking area, but excluding a public square. The site is also accessible from the back of the lot on Mattaaq Lane. Site 2 requires assembly of lots – one of the lots is currently planned to become a parking facility for an office building across the street.

Site 2	The Airbase Garage
City Area and Vision	The site is in keeping with the vision of a civic institution located in a manner that is visible and accessible to the community and contributes to a vibrant civic realm.
Public Benefits	It exceptionally well located to function as a civic centre for community interaction.
Value Creation	The development of this site is in keeping with raising the profile of the Core Area and Capital District.
Longevity	The development of this site is a long term solution; however it does have limited room for expansion. Expansion (for the creation of a public square) is possible only as adjacent sites become available (i.e. the Nunavut Arctic College Fine Arts building)
Function and Programming	The site can accommodate all necessary programming on-site, including parking. A building can be constructed with additional floors, enabling the City to lease out additional space in the short-term, and have space to grow into in the long-term.
Access, Parking, & Servicing	This site is easily accessible for vehicles (from Mattaaq Lane) and pedestrians (from Queen Elizabeth Ring Road and from the Road to Apex). There appears to be adequate space for parking, however, the city is currently developing parking for City Hall in conjunction with the owners of the Komatiq Building. This configuration needs to be confirmed. Traffic queues at peak times could block the access driveways.

<b>Site 2</b>	<b>The Airbase Garage</b>
Capital and Operating Costs	Site is owned by the City. However, part of the site has been leased for parking for an adjacent office building, and would require re-negotiation. Adjacent sites (considered for future expansion) are owned privately. No undue capital or operating costs/benefits are foreseen for this option.
In conclusion:	The site is functional and efficient for City Hall. It has an extraordinary civic presence within the Core Area and Capital District. A constraint may be the limited space for future construction of a civic square. Vehicle access during peak times is also an issue.

**Old Courthouse (Site 6)**



Site 6 is located near the core and close to the water. The site is just big enough to accommodate City Hall’s functions and some parking. Iqaluit Square is located nearby and is a public space that would complement the civic functions of City Hall. Locating City Hall on site 6 would create a municipal institutional node apart from the federal institutions located around the 4 Corners. The site is also located near the Elders’ Centre. The parking area can be fairly integrated and accessible from both Sinaa Street and the back lane.

<b>Site 6</b>	<b>The Old Courthouse</b>
City Area and Vision	The site is in keeping with the vision of a civic institution located in a manner that is visible and accessible to the community and contributes to a vibrant civic realm.
Public Benefits	It exceptionally well located to function as a civic centre for community interaction.
Value Creation	The development of this site is in keeping with raising the profile of the Core Area and builds on the vitality of several adjacent uses: the waterfront, Iqaluit Square, the Elder’s Centre, the Museum, the Library, and others.
Longevity	The development of this site is a long-term solution; however it does have limited land for expansion. Discussions with Don Forbes of the GSC indicate that sea level rise information is not currently available but that a ‘gut feel’ is that it should note pose a high risk to this site.
Function and Programming	The site can accommodate all necessary programming on-site, including parking. A building can be constructed with additional floors, enabling the City to lease out additional space in the short-term, and have space to grown into in the long-term.
Access, Parking, & Servicing	This site is easily accessible for vehicles (from Sinaa Street and the back lane) and pedestrians (from the streets, as well as from Iqaluit Square and from the waterfront). There is adequate access for servicing and ample space for parking. Traffic access is not a concern.
Capital and Operating Costs	Site is owned by QIA. No undue capital or operating costs/benefits are foreseen for this option.



<b>Site 6</b>	<b>The Old Courthouse</b>
In conclusion:	The site is functional and efficient for City Hall. It has an extraordinary civic presence within the Core Area and benefits greatly from the adjacency of the waterfront, Iqaluit Square, the Elder's Centre, the Museum, the Library, and other uses. This was the preferred site for City Hall during public consultation.

**Existing legislature building (Site 12)**



This site – the existing Legislature Building – is located in the Core Area and Capital District, adjacent to Nunavut Square.

The Legislature has announced their intention to build a new facility outside of the Capital District. This presents an opportunity for City Hall to locate within the Legislature Facility. The building already has a purpose-built Council Chamber and office spaces. Opportunities may even exist for the temporary sharing of some facilities (e.g. Council Chambers) during the relocation of both levels of government.

<b>Site 12</b>	<b>The existing Legislature Building</b>
City Area and Vision	The site is in keeping with the vision of a civic institution located in a manner that is visible and accessible to the community and contributes to a vibrant civic realm.
Public Benefits	It exceptionally well located to function as a civic centre for community interaction.
Value Creation	The development of this site is in keeping with raising the profile of the Core Area and Capital District and benefits from the adjacency of Nunavut Square.
Longevity	The development of this site is a long term solution. While there is limited land for expansion, the floor area of the building will allow the city to lease the third floor until it needs to expand.
Function and Programming	The site is small and does not offer much opportunity for future expansions. FSC has carried out a preliminary planning study and the layout accommodates the functional program with very limited issues.
Access, Parking, & Servicing	This site is easily accessible for vehicles and pedestrians. Some parking already exists on the adjacent lot on the west but may be too small to fit all of the parking requirements for the new City Hall. This site would add to the traffic and pedestrian demands through the Four Corners, but that would be balanced off by the transportation demand reduction expected due to relocation of the Legislature activities.
Capital and Operating Costs	Site is owned privately and leased by the Government of Nunavut. No undue capital or operating costs/benefits are foreseen for this option.
In conclusion:	The site is functional and efficient for City Hall. It has an extraordinary civic presence within the Core Area and Capital District. The major constraint is knowing/controlling the timing of its availability. Timing for the end of the current lease is 2018. The City would need to move out before March 2013 into temporary accommodation until that time. It should be noted that the owner, NCC, has available office space and can arrange access to the assembly for council meetings.

## 5 Site Selection Recommendations

### 5.1 OVERALL VISION

Throughout the process of public consultation and due diligence it became clear that the site selection and eventual design of the different municipal facilities under consideration should be directed by a fundamental vision and principles.

#### 5.1.1 The Vision

Municipal facilities in Iqaluit will be sited and designed in a way that builds on the city's vision, creates public benefits, has longevity, and is socially, environmentally, and economically sustainable.

#### 5.1.2 The Principles

- Locate and design facilities in keeping with the city's Vision.
- Locate and design facilities to fulfill the vision and programmatic needs of each facility/function.
- Locate and design facilities in a way that fosters civic pride and community participation.
- Locate and design facilities prioritizing pedestrian and universal access.
- Locate and design facilities to facilitate synergies with adjacent uses.

### 5.2 RECREATIONAL FACILITIES

#### 5.2.1 Concept

Recreational Facilities are some of the most publicly used and visible facilities the municipality runs. As such, it is a priority that they are readily accessible, highly visible, and contribute a civic presence and function to the city as a whole.

The rationale for locating the Recreational Facilities includes:

- Wherever possible, recreational facilities ought to be located in the Core Area, enabling a greater number of people to access them by walking and/or alternative modes of transportation.
- The AWG site already includes a new ice surface, of long-term value. Efficiencies can be gained from locating future ice surfaces (leisure or regulation) on the AWG site, sharing equipment and logistics with the existing facility.
- The Aquatic Centre is the most time sensitive program of the recreational facilities, given the impending closure of the existing venue, therefore, the selected site should allow this project to proceed quickly.

#### 5.2.2 Preferred Option for Recreational Facilities

A distinct opportunity is available to build an Aquatic Centre, adjacent to the existing arena on the City Hall site, without requiring the demolition of existing facilities. This allows: 1) the Aquatic Centre to move forward in an expedite manner; and 2) enables the concerted phasing of other recreational facilities, including those on the same site.

A Dry Recreation Centre can be built on the current City Hall site, attached to a new Aquatic Centre, once the existing facilities are demolished (i.e. once Emergency Services and City Hall are relocated). At this point, a Fieldhouse can also be built on this site, should that be a desirable option.

- On Site 1: locate the Aquatic Centre, the Dry Recreation Centre, and the Fieldhouse.
- At the AWG site: locate a Regulation Ice Surface.

This option has the benefit of: 1) locating as many facilities as possible within the walking distance of a large portion of the population (i.e. in the Core Area); and 2) enabling the efficient co-location of ice-based facilities.

- The AWG Site is located in the middle of future residential development, further strengthening the notion of accessibility and sustainability.

### 5.2.3 Alternative 1

Recreation facilities would be split between site 1 and AWG in the following way:

- On Site 1: locate the Aquatic Centre and the Dry Recreation Centre.
- At the AWG site: locate a Regulation Ice Surface and the Fieldhouse.

### 5.2.4 Alternative 2

Recreation facilities would be split between site 1 and AWG in the following way:

- On Site 1: locate the Aquatic Centre and the Dry Recreation Centre.
- At the AWG site: locate a leisure ice surface and a convertible Fieldhouse.

## 5.3 EMERGENCY SERVICES

### 5.3.1 Concept

The siting and design of Emergency Services must balance the needs of: 1) operating and mobilizing emergency vehicles and personnel efficiently in an emergency situation; and 2) maintaining a civic presence and community base.

The rationale for siting the Emergency Services includes:

- Emergency Services must be located and designed in a manner that enables the efficient deployment of emergency vehicles and personnel, to and from the facilities, in an emergency situation.
- This premise elevates the efficiency of sites within, or close to, the Core Area, given that most emergency personnel live in, and most emergency calls originate from, the Core Area.

### 5.3.2 Preferred Site for Protective and Emergency Services: QIA Lands on Federal Road

The QIA lands on Federal Road is the preferred site for Protective and Emergency Services, given that it is well located to meet programmatic objectives, perceptively flat, and unencumbered by construction.

### 5.3.3 Alternative 1

The Frosty Refrigeration Lots, Site 20, is a sound alternative location for Protective and Emergency Services. Parking would prove to be a challenge as the site area is limited. However, the same site is also a good location for off-site parking for the Recreational Facilities (surface or structured).

### 5.3.4 Alternative 2

This site at the NW corner of the Road to Nowhere and the Road to Apex provides a good second alternative, as it is also city-owned. In the event the first two alternatives cannot be secured, the location allows a contingency plan. From the perspective of public (civic) presence, the site is more central than others. However, it poses some engineering challenges given its topography, steep road access, exposure to snow drifting, and the presence of snowmobile trails. Although these challenges can be overcome, it is recommended that this site remain as an alternative to the other two.

## 5.4 CITY HALL

### 5.4.1 Concept

City Hall is perhaps the most significant civic facility for any city. Certainly for Iqaluit, the siting and design of City Hall has the potential to establish a physical and symbolic centre for Iqalummuit to gather and share in the political and quotidian life of the community.

The rationale for siting City Hall includes:

- Prioritizing sites that are highly visible and symbolic within the community, building on the vision for the Core Area and Capital District.
- Prioritizing sites that are highly accessible to pedestrians and others.
- Considering opportunities for an exterior space (e.g. a public square) that can support the civic functions and presence of City Hall.
- Having regard for the opportunity to provide expansion space for City Hall functions. This space may be built at the same time as the main facility, and leased out on an interim-basis, until the municipality requires the full use of the building.

### 5.4.2 Preferred Site for City Hall: Existing Legislative Assembly Building

This site is preferred given that it is well located, ready and purpose built. In many regards, this is an ideal option. At the same time that taxpayers are afforded a cost effective replacement, the fit is good and the re-use emblematic of responsible government. Nevertheless, other players including the GN and the building owner will control the timing and availability of the building, which may render this a non-viable option.

### 5.4.3 Alternative 1

The old Court House site is a strong option from a variety of perspectives: it is excellently located as a civic use in the Core Area; directly linked to Iqaluit Square, the Elders Centre, and the waterfront; it is the right size and scale; and it enhances a clustering of public building that includes the library and museum.

### 5.4.4 Alternative 2

Site 2, the Four Corners, Airbase Garage has a good civic presence and is located in the midst of the Core Area and Capital District. Buildings such as the Airbase Garage can be removed with minimal effort. In the future, the relocation of some adjacent uses (e.g. Arctic College) may offer opportunities for expanding the property to include a public square. Traffic access may be problematic during peak travel times.

## 5.5 TRAFFIC AND PARKING IMPLICATIONS

This section checks the requirements for vehicle traffic and parking relative to the requirements of each specific facility: the downtown recreation centre, and the AWG site recreation additions together with the Emergency and Protective Services Centre and City Hall.

### 5.5.1 Traffic Analysis

MMM Group, as part of the consulting team for the Iqaluit Facilities Planning Study, has been working closely with the consultant team analyzing potential sites and development options for Iqaluit's new recreation facility, emergency services centre and City Hall.

In order to understand the effect of the proposed facilities on pedestrian and traffic movement, an analysis of transportation within the study area around the potential development sites was completed. The purpose of this analysis was to identify operational concerns for existing traffic conditions and the potential effects of each development, at various locations, on pedestrian and traffic conditions.

The analysis points to a number of benefits and drawbacks relative to each facility type and the proposed site selection for each. It discusses traffic and parking implications for each location. Following is an overview of the key points raised by the analysis:

- Congestion at the Four Corners is an ongoing concern that should be addressed. The proposed 'Bypass' solution from the *Transportation and Urban Design Study* (2005) will significantly offset this problem and help mitigate emergency response times. Signalization of the intersection, as recommended in the iTRans report of 2009, could also assist with this concern;
- Development of the recreation centre in the downtown core will not affect traffic issues there, because the peak times are offset from those of core traffic (typical 'rush hour' volumes). The facility demands will peak after school and in the early evening;
- The development of these facilities in the Core will reduce reliance on vehicular traffic, and therefore the space and cost required for parking, due to ease of pedestrian access;
- The AWG site will pose challenges for parking capacity. To this end, limiting the additions to that facility to a maximum of one more ice surface, as opposed to the entire recreation component, is advantageous. Pedestrian access and safety should be reviewed in that area, and crosswalks and bollards considered;
- Of the sites selected for the Emergency and Protective Services Centre, Site 11 on Federal Road appears to offer most flexibility with respect to parking, access and to a lesser extent, adequacy of emergency response times. With respect to the latter, the 'bypass' should alleviate traffic delay pressures, which are still well within acceptable norms;
- All sites proposed for the City Hall are dense and with limited space for parking. None of the sites will affect core area traffic significantly, though the Four Corners (Site 2) will be challenging in terms of access. Again, the Bypass solution, together with creative access to parking areas (and consideration for remote supplementary parking) will help alleviate this problem;
- Although parking is a concern for the City Hall and the E&PSC, detailed review for each of the sites carried out after completion of the Traffic Analysis suggests that only the City Hall (Legislative Assembly) **Site 12** and the E&SPC (Frosty's) **Site 20**, pose issues for parking for each facility respectively;
- Care should be taken to address pedestrian access to the Downtown Recreation Centre at the existing City Hall Intersection. This specifically relates to children accessing the downtown facility after school from the Road to Apex. The horizontal and vertical curve of this road section is a concern for pedestrian sightlines. Pedestrian activity should be monitored at this location. All-

way stop control and warning signage may need to be introduced at some point, if pedestrian crossings and traffic volumes continue to grow.

The MMM Traffic Analysis is included the **Appendix D** of this report.

### 5.5.2 Parking Analysis

The following summarized the parking requirement analysis and recommendations for the Recreation Facilities, recognizing that they pose a unique condition and require a unique solution. Though the basic parking requirements for City Hall and for Emergency Services are presented here, they are not detailed in the same way, as they do not present the same degree of complexity and are generally considered to be met on site (under the different site/scenarios).

### 5.5.3 Parking Requirements for Recreational Facilities

A parking requirement analysis, based on the City of Iqaluit Zoning By-Law #704 (ZBL 704), was conducted to evaluate an approximate number of stalls for each option on both the existing City Hall **Site #1** and existing the **AWG Site** (existing Arctic Winter Games Complex). Parking requirements for Recreation Facilities are governed under Part 6, Section C) 'Institutional'. It stipulates that the number of parking be determined as follows:

- 4 parking stalls per ice sheet or court,
- Plus 5 parking stalls per 100m<sup>2</sup> of common or assembly area.

The various components of the program were broken down into one of two elements; 1. Court/Ice Sheet or 2. Common/Assembly Spaces for the purposes of these calculations, per Section 6 of the By Law. The following assumptions were made:

- Each pool tank (main and leisure), soccer and ice (existing, new regulation or leisure) surface count as one Court/Ice Sheet each
- The running track is treated as a separate 'Court/Ice Sheet'
- Dry Recreation Spaces noted below include the Flexihall, the two multipurpose rooms, the fitness centre, the climbing wall, the youth centre and the elders' area. These spaces taken together comprise two 'Court/Ice Sheet(s)'
- Common or Assembly Areas were taken directly from the functional programs for each option (presented in Appendix B) and include all support and circulation spaces but do not include service spaces

These assumptions were reviewed with FoTenn Planning Consultants (authors of ZBL 704) and approved by the Department of Planning and Lands. The parking requirements for the two zoning elements noted above were calculated in the context of the Site Configurations Options recommended in Part 5 above:

#### Preferred Option

- **Site 1:** locate the Aquatic Centre, Dry Recreation Spaces (Flexihall, 2 multi-purpose rooms, Fitness Centre, Climbing Wall, Youth Centre and Elders Space), and the Fieldhouse with Running Track.
- **AWG site:** add a Regulation Ice Surface to the existing AWG Complex.

#### Alternative 1

- **Site 1:** locate the Aquatic Centre and Dry Recreation Spaces (Flexihall, 2 multi-purpose rooms, Fitness Centre, Climbing Wall, Youth Centre and Elders Space).
- **AWG site:** add a Regulation Ice Surface and the Fieldhouse with Running Track.



**Alternative 2**

- **Site 1:** locate the Aquatic Centre and the Dry Recreation Spaces (Flexihall, 2 multi-purpose rooms, Fitness Centre, Climbing Wall, Youth Centre and Elders Space).
- **AWG site:** add a leisure ice surface and a convertible Fieldhouse with Running Track.

The following table illustrates the calculations for each Option:

**Table 5.5.3 Parking Requirements**

Component	Icesheet/court	Parking stalls per Icesheet/Court	M2 of common area	Parking Stalls (5 per 100m2 common area)	# of parking stalls required
<b>Preferred Option</b>					
<b>Site 1</b>					
Main pool tank	1	4	-	-	4
Leisure pool tank	1	4	-	-	4
Soccer Field House	1	4	-	-	4
Dry Floor Spaces w/ Running Track	3	12	-	-	12
Common/Assembly Area			3091	155	155
Curling rink (exist.)	1	4			4
Common/Assembly Area*			430	22	22
<b>Preferred Option Site 1 Stalls Required</b>					<b>204</b>
<b>AWG</b>					
New Regulation Icesheet	1	4	-	-	4
AWG Icesheet (exist.)	1	4	-	-	4
Common/Assembly Area**			2120	106	106
<b>Preferred Option AWG Stalls Required</b>					<b>114</b>
<b>Alternative 1</b>					
<b>Site 1</b>					
Main pool tank	1	4	-	-	4
Leisure pool tank	1	4	-	-	4
Dry Floor Spaces	2	8	-	-	8
Common/Assembly Area			2059	103	103
Curling rink (exist.)	1	4			4
Common/Assembly Area*			430	22	22
<b>Alternative 1 Site 1 Stalls Required</b>					<b>144</b>
<b>AWG</b>					
New Regulation Icesheet	1	4	-	-	4
Soccer Field House w/Running Track	2	8	-	-	8
AWG Icesheet (exist.)	1	4	-	-	4
Common/Assembly Area**			3273	164	164
<b>Alternative 1 AWG Stalls Required</b>					<b>180</b>
<b>Alternative 2</b>					
<b>Site 1</b>					
Main pool tank	1	4	-	-	4
Leisure pool tank	1	4	-	-	4
Dry Floor Spaces	2	8	-	-	8
Common/Assembly Area			2059	103	103
Curling rink (exist.)	1	4			4
Common/Assembly Area*			430	22	22
<b>Alternative 2 Site 1 Stalls Required</b>					<b>144</b>
<b>AWG</b>					
Convertible Soccer Field House w/ Track	2	8	-	-	8
New Leisure Icesheet	1	4	-	-	4
AWG Icesheet (exist.)	1	4	-	-	4
Common/Assembly Area**			2635	132	132
<b>Alternative 2 AWG Stalls Required</b>					<b>148</b>
<i>* Assumed common/assembly area based on existing parking allowance</i>					
<i>**Assumes 1000m2 existing common/assembly space not including youth centre.</i>					

Available parking in Iqaluit is in short supply. This is as true at the AWG Site as it is downtown. Given the tight constraints of both Site #1 and the AWG, offsite parking will be necessary. This premise has been reviewed and agreed to in principle by the Department of Planning and Lands.

The existing Arctic Winter Games Complex has approximately **45** parking spaces available, but there is ample space for development adjacent to the proposed addition.

The following table summarizes available parking spaces for the downtown facility.

Possible Available		
Location	Stalls	Comments
Site # 1	50	Onsite; Only available in Alternatives 1 and 2. Preferred Option occupies all of
Nunavut Drive	70	On Nunavut Drive between Curling/Raquet Club and Downtown Complex
Airbase	65	Under Development
Court House	30	Across future Bypass Road
<b>Total</b>	<b>215</b>	

From the potential on and off site available parking for both sites, the following Gap Analysis identifies the shortfalls in available parking:

Option	Parking Stalls					
	Site 1			AWG		
	Required	Available	Gap	Required	Available	Gap
Preferred Option	204	165	39	114	45	69
Alternative 1	144	215	0	180	45	135
Alternative 2	144	215	0	148	45	103

### Implications

The preferred option carries the largest program in the Core Area site and consecutively the larger number of stalls required. (This option exceeds the capacity given by the site, Nunavut Drive and other available sites by 39 stalls.)

One possible solution to this dilemma is the acquisition of the 'Frosty Refrigeration Lot' or **Site 20**. Currently being considered as a potential site for the Emergency and Protective Services Centre, this site is capable of accommodating up to 128 parking stalls.

British Columbia's Victoria Transport Policy Institute has published acceptable distances for walking from parking areas to sports venues. Their research suggests a walk of less than 1600 metres is acceptable for recreation uses. The Courthouse parking lot, Nunavut Drive and Site 20 all fall within this parameter. The airbase parking lot would be slightly over at 1,740 metres. The following diagram illustrates the proximity of available parking spaces to the downtown facility.

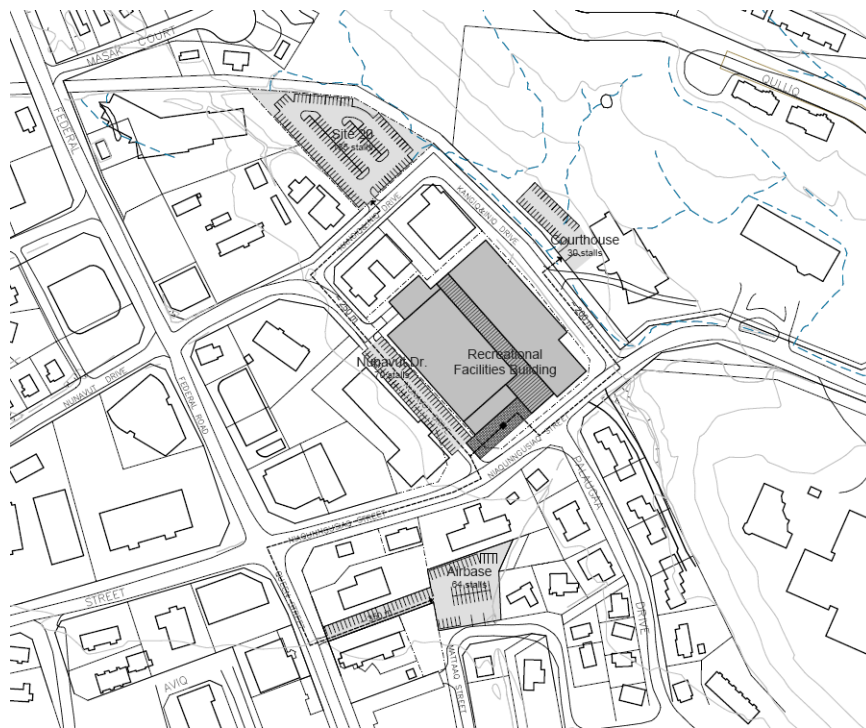


Figure 5.3.3: Potential Downtown Facility Parking

Potential solutions to the gap in downtown parking are:

- Development of a shuttle or transit system
- Acquisition of Frosty Refrigeration Site 20
- Detailed re-evaluation of required parking stalls in Phase 2

The latter point was raised by FoTenn in discussion with Dialog and presents an opportunity to reduce parking requirements based on actual usage at various existing facilities. It is a recommendation of this report however, that acquisition of Site 20 should be seriously considered to alleviate downtown parking requirements generally and the specific dilemma of the Preferred Option for the Downtown Recreation Facility.

Alternatives 1 and 2 are identical for the number of stalls (144) required in the Core Area site. In both options, some on-site parking, Nunavut drive and the proposed Airbase lot will be necessary to accommodate the parking requirement. However Alternative 1 requires 32 more stalls than Alternative 2 on the AWG site. The difference is explained by the larger need of common spaces required for the full ice sheet (Alt. 1) versus a leisure ice sheet (Alt. 2).

The AWG site is large enough to accommodate the parking requirements in the 3 options.

#### 5.5.4 Parking requirements for Emergency & Protective Services Building

Based on the zoning By-law, an analysis of required parking stalls for the Emergency and Protective Services Centre was conducted. This Zoning by-law interpretation is based on

- Industrial use: 1 per 250 m<sup>2</sup> or 1 stall per 2 employees, whichever is greater.
- Place of assembly: 1 stall per 15 persons

Based on the proposed area of the facility, 1678m<sup>2</sup>, 7 spaces are required. However, based on the number of occupants, more stalls are required. The following table summarizes anticipated occupant loads:

Space	# people
Emergency Services Offices	5
Protective Services Offices	1
Dispatch	2
General Office	1
Bylaw Officers On Duty	4
Fire Fighting Crew on Duty	12
<b>Total</b>	<b>25</b>

Therefore 13 parking stalls are required for the operational components.

In addition, a training centre accommodating 60 persons form part of the program. As a place of assembly, 1 stall per 15 persons is required or 4 additional stalls. These would also accommodate visitors on a regular basis.

**17** parking stalls at the Emergency and Protective Services Centre (E&PSC) is recommended.

### Implications

Given a requirement for 25 stalls, two of the three sites proposed in this section for the future E&PSC can readily accommodate the parking needs of the facility:

**Site 8**, on Niaqunngusiaq Street where it meets the Road to Nowhere and **Site 11**, on the QIA lot on Federal Road will have no problem meeting parking needs.

**Site 20**, (Frosty's) is a tight fit and will have difficulty accommodating the requirement.

### 5.5.5 Parking requirements for City Hall

Based on the zoning By-law, an analysis of required parking stalls for City Hall was carried out. This Zoning by-law interpretation is based on

- Commercial use: 1 stall per 50 m<sup>2</sup> of office space (.02 factor)
- Place of assembly: 1 stall per 15 persons (.066 factor)

It is fair to assume that the council chambers, committee rooms and office spaces will never be fully occupied at the same time. However, it is conceivable that a town hall meeting, or rally, could be held during the day in the public hall. Based on 132 m<sup>2</sup> at .75 m<sup>2</sup> per person, the hall could reasonably hold 175 people. The following table summarizes anticipated occupant load and required parking stalls:

Space	Area	# Persons	Factor	Stall
Offices	1143		.02	23
Public Hall		175	.066	12
<b>Total</b>				<b>35</b>

The additional 12 stalls created by the public hall occupant load reasonably accommodates daily visitors doing business at City Hall.

**35** parking stalls at the City Hall facility is recommended.

### Implications

Given a requirement for 35 stalls, two of the three sites proposed in this section for the future City Hall can readily accommodate the parking needs of the facility:

**Site 2**, the Airbase site at Four Corners and **Site 6**, the old courthouse site by the waterfront, both have adequate space for parking. There is an existing agreement for parking for Komatiq building on the lot adjacent to site 6 that could further supplement City Hall and the Recreation Centre parking needs.

At **Site 12**, re-purposing the Legislative Assembly Building parking on an adjacent site west of the building may be insufficient. This will be reviewed when that parking information becomes available from the building owner.

## 5.6 SERVICING, ACCESS, AND ENGINEERING

### 5.6.1 General Servicing Discussion

A general overview for the municipal water and sewer servicing for each of the options was completed. The intent of the exercise was to determine if there were existing piped utilities in the area of each option and whether or not they would be suitable for a future facility. Existing record drawing information that the project team had on hand was utilized to complete this task.

### 5.6.2 General Access Discussion

The concept plans shown above in this report illustrate the vehicular access arrangements for the preferred sites. As planning proceeds into the design phase, it is recommended that the plan for each building make provision for clear, well-lit and secure pedestrian access routes as well.

No vehicular-related improvements are proposed for the roads adjacent to the recommended sites. The sites work well in terms of avoiding overload of the Core road network, by distributing the traffic more broadly across this area. The location of the recreational facilities on Site 1 works well adjacent to the 4 Corners, because the peak traffic demands are expected to occur outside the times when the 4 Corners intersection experiences the greatest demands.

For the City Hall site 6, bollards demarcating the pedestrian path should be extended further along the Queen Elizabeth Ring Road as far as Sinaa Street, to enhance the pedestrian connection between the Capital District and the new City Hall.

The analysis completed for this study reinforces the need to preserve opportunities for the Bypass road link around the 4 Corners. Traffic has increased significantly since the 2006 Transportation and Urban Design Study was completed, and much of this demand passes through the 4 Corners.

### 5.6.3 General Engineering Discussion

The commentary on engineering issues was to highlight anticipated challenges that would present themselves to the design team if that particular site was chosen. This was a general overview that was completed utilizing existing mapping information and feedback gathered through discussions that were held leading up to the creation of this document.

#### 5.6.4 Recreational Facilities

##### Servicing

Site 1: Existing City Hall Site

There are several options for servicing this building. 200mm and 250mm diameter water mains surround this property and there are 200mm and 250mm diameter sanitary mains parallel to three of the four property lines.

Site 4: Arctic Winter Games Site

Based on information provided by the City of Iqaluit, there is a 200mm diameter water service main with a 200mm diameter recirculation line. As well, there is a 150mm diameter sanitary service line. These terminate in AV 358, which services the existing AWG facility. It is our understanding that the City of Iqaluit is required to invest in additional pumping capacity at its water boosting station to provide adequate water pressure levels in this AV. This is required whether or not there is additional development on this property.

##### Access

Site 1: Existing City Hall Site

This site is accessed through a main arterial thoroughfare. There are collector roads on the remaining three sides. There are no concerns regarding access at this time.

Site 4: This site is accessed through a main arterial thoroughfare (Apex Road). There are no concerns regarding access at this time.

##### Engineering

Site 1: Existing City Hall Site

No immediate concerns with respect to engineering the site to accommodate the facility, based on the information available at this time.

Site 4: Arctic Winter Games Site

If this site is utilized, there will be a significant amount of fill (19,600m<sup>3</sup>) required to provide an adequate foundation for the addition to the existing facility.

#### 5.6.5 Emergency and Protective Services

##### Servicing

Site 11: QIA Land on Federal Road

This site has a relatively recently installed 300mm diameter water main that passes the frontage of this entire property. There is no existing sanitary piping along the front of this property. However, when the new RCMP building was developed, a 200mm diameter sanitary main was extended to AV 416 that serves the building. It could be possible to extend this sanitary main up Federal road to service this site. However, this would need to be verified during detailed design, which is beyond the scope of this document.

Site 20: Frosty Refrigeration Site



AV 201 and AV 200 sit along the frontage of this site. There are existing 200mm diameter water and sanitary mains that could be utilized to service this property.

Site 8: Road to Nowhere

This site has 250mm diameter water and 200mm diameter sewer mains along Apex Road and the Road to Nowhere; there are no concerns with respect to municipal servicing.

### Access

Site 11: QIA Land on Federal Road

This site is accessed through a main arterial thoroughfare. There are no concerns regarding access at this time, based on the information available at this time.

Site 20: Frosty Refrigeration Site

This site is centrally located on a collector road; there are no concerns with access from an engineering standpoint, based on the information available at this time.

Site 8: Road to Nowhere

Access to this site would be from the Road to Nowhere. While the location is ideal, the Road in this area is quite steep and is approximately 10% or steeper, which could be problematic for emergency vehicles.

### Engineering

Site 11: QIA Land on Federal Road

The site is relatively flat. This site may experience seasonal water flow issues that would need to be addressed further.

Site 20: Frosty Refrigeration Site

No immediate concerns with respect to engineering the site to accommodate the facility, based on the information available at this time.

Site 8: Road to Nowhere

There are a number of engineering concerns with this site. The main issues are: snow drifting and earthworks on the site. Winds in Iqaluit are predominantly from the northwest. This intersection currently experiences snow-drifting issues. Placing a building on the North corner of this intersection could make this situation worse.

A preliminary analysis of earthworks shows that a considerable amount of fill, approximately 20,000m<sup>3</sup>, would be required. To prevent encroachment of the toe of slope on adjacent roadways, and to reduce fill, it would be prudent to consider the construction of a retaining wall similar to the Qikiqtani Hospital site.

## 5.6.6 City Hall

### Servicing

Site 12: Existing Legislative Assembly Building

No concern, based on the information available at this time, this existing building is already fully serviced with piped water and sanitary sewer.

## Site 6: Old Courthouse

There is a 200mm diameter sanitary sewer main that fronts this property from MH 12 to MH 13. There might be a water main connecting MH 14 and MH 15 across the street in front of the property that could service the building. Alternatively, there is a 150mm diameter water main that connects into MH 13 that could possibly service the property.

## Site 2: Airbase Garage

AV 204, 205 and 405 run along the road on the same side of this site. There is a 200mm diameter water and sewer main that could be utilized to service the property.

**Access**

## Site 12: Existing Legislative Assembly Building

No immediate concerns, based on the information available at this time, this existing building's access is already established.

## Site 6: Old Courthouse

This site is centrally located of a collector road, there are no concerns with access, based on the information available at this time.

## Site 2: Airbase Garage

This site is centrally located of a collector road, there are no concerns with access, based on the information available at this time.

**Engineering**

## Site 12: Existing Legislative Assembly Building

No immediate concerns, based on the information available at this time.

## Site 6: Old Courthouse

There are concerns regarding the possible effects of global warming on this site. These concerns are discussed in Section 2.3 – Assessment of Vulnerability Considering Climate Change.

## Site 2: Airbase Garage

No immediate concerns, based on the information available at this time.

## 6 Preliminary Feasibility

### 6.1 PRE-FEASIBILITY: POTENTIAL SOURCES OF FINANCING

#### 6.1.1 Funding Infrastructure Through Property Taxation

Phase 1 of this Facilities Feasibility Analysis focuses on an assessment of the needs for City Hall, Emergency Services and Recreation Facilities within the City of Iqaluit, and on identification of preferred sites for these facilities that best reflect the long-term planning goals for the City. Phase 2 of the planning will address both preparation of conceptual designs for the required facilities on the selected sites and development of a business plan to identify and assess the viability of options for financing of the facilities and implementation of the development plan.

The estimated order of magnitude costs identified in Phase 1 project total construction costs of \$18,197,500 for the City Hall and \$10,623,000 for the Emergency and Protective Services Centre. Estimated construction costs for the recreation facilities range from \$70,988,000 to \$82,459,100 for the three options presented in this report.

**City of Iqaluit Facilities  
Estimated Construction Costs**

	Option A	Option B	Option C
City Hall	\$18,197,500	\$18,197,500	\$18,197,500
Emergency Services	10,623,000	10,623,000	10,623,000
Recreation Facilities			
Recreation Centre (AWG)	28,363,600	20,117,400	33,278,500
Recreation Centre (Downtown)	<u>42,594,400</u>	<u>62,341,700</u>	<u>42,970,300</u>
Total Recreation	\$70,957,400	\$82,459,100	\$76,248,800
<b>Total Construction Estimate</b>	<b>\$99,778,500</b>	<b>\$111,279,600</b>	<b>\$105,069,300</b>

At a projected total cost of \$100 million or more, the City faces a significant challenge in the financing of the required facilities. In terms of its own resources, the City has established a fundraising initiative called *REACH* (Recreation, Environmental Leadership, Aquatic Centre, Community Building and Healthy Living) to raise capital through donations from the private sector and community. As a committee of Council, *REACH* will be able to issue tax receipts, with an initial fundraising target of \$500,000.

Currently the City has \$1,307,580 in reserve available for application to future capital costs.<sup>3</sup> Possibilities may also exist for some significant contributions from the private sector should an interest be developed by a potential sponsor such as Baffinland Iron Mines. If Baffinland Iron is approved they would be expected to provide significant contributions towards projects in those communities affected by the development, and Iqaluit could expect to be a major hub for this mine.

In addition to the capital reserves noted above, the City will have access to very significant funds that will be freed up from the completion of current lease arrangements. These funds will be available for application to capital or ongoing mortgage requirements. Sources for this funding include the following:

<sup>3</sup> Personal communication, Amy Elgersma, Director of Recreation, City of Iqaluit

- *Curling Rink Lease:* the lease-to-own agreement for the Curling Rink is expected to be completed in the current year; this will make available \$140,000 per year starting next year (2012).
- *Pool Lease and Utilities:* currently the City pays costs of \$260,000 for the lease and heating of the current pool facility; while lease costs will increase by 3% annually until March 2013, as of that date the funds will be available to assist in financing the new Aquatic Centre.
- *Building 2425:* The City is currently leasing all of building 2425 to provide office space for City staff as a result of a shortage of space in the current City Hall, at an annual cost of \$175,000; these funds will be available as a result of construction of the new City Hall facilities.

The City has the power to undertake long-term borrowing from a Canadian or foreign financial institution, or from the Governments of Canada and Nunavut. Municipalities in Nunavut are currently not allowed to issue debt instruments such as municipal bonds. This would likely require changes in territorial legislation (City, Towns and Villages Act) and ministerial approval. The City of Iqaluit is currently obtaining legal advice on this option.

According to the 2009 financial statements, the level of long-term debt for the City stood at \$10,714,316. However, 81% of the City's total long-term debt, or \$8,666,842, was borrowed for land development and is amortized over a fifteen-year period. All of the land development financing costs will be recovered through revenues from the fifteen-year land leases. Plateau 1 and Plateau 2 are four and two years old respectively, and repayment has now commenced on Plateau 3 as well. Financing of the previous Road to Nowhere development was completely paid off in 2010.

The remaining 19%, or \$2,647,474, of the long-term debt was used for the leasing of capital equipment, and therefore has a relationship with tax payer financing. Any additional long-term loans to finance capital construction costs could result in increases in property taxes and would require approval by the City's ratepayers. Likewise, ongoing operations and maintenance costs could also have an impact on current property tax levels, although future operating and maintenance expenses would be balanced by user fees and savings from the replacement of old, inefficient infrastructure.

### 6.1.2 Funding Infrastructure Through Property Taxation

The primary sources of revenue for the City of Iqaluit are taxation (taxes and grants in lieu), user charges (for water and sewer, land development, etc.), and government transfers (including equalization and other contributions, subsidies, and program contracts). Sources of revenue for the City for the fiscal years 2006 to 2009 for which financial statements are available are presented in the table on the following page.

**City of Iqaluit**  
**Sources of Revenue From Financial Statements**  
**2006 to 2009**

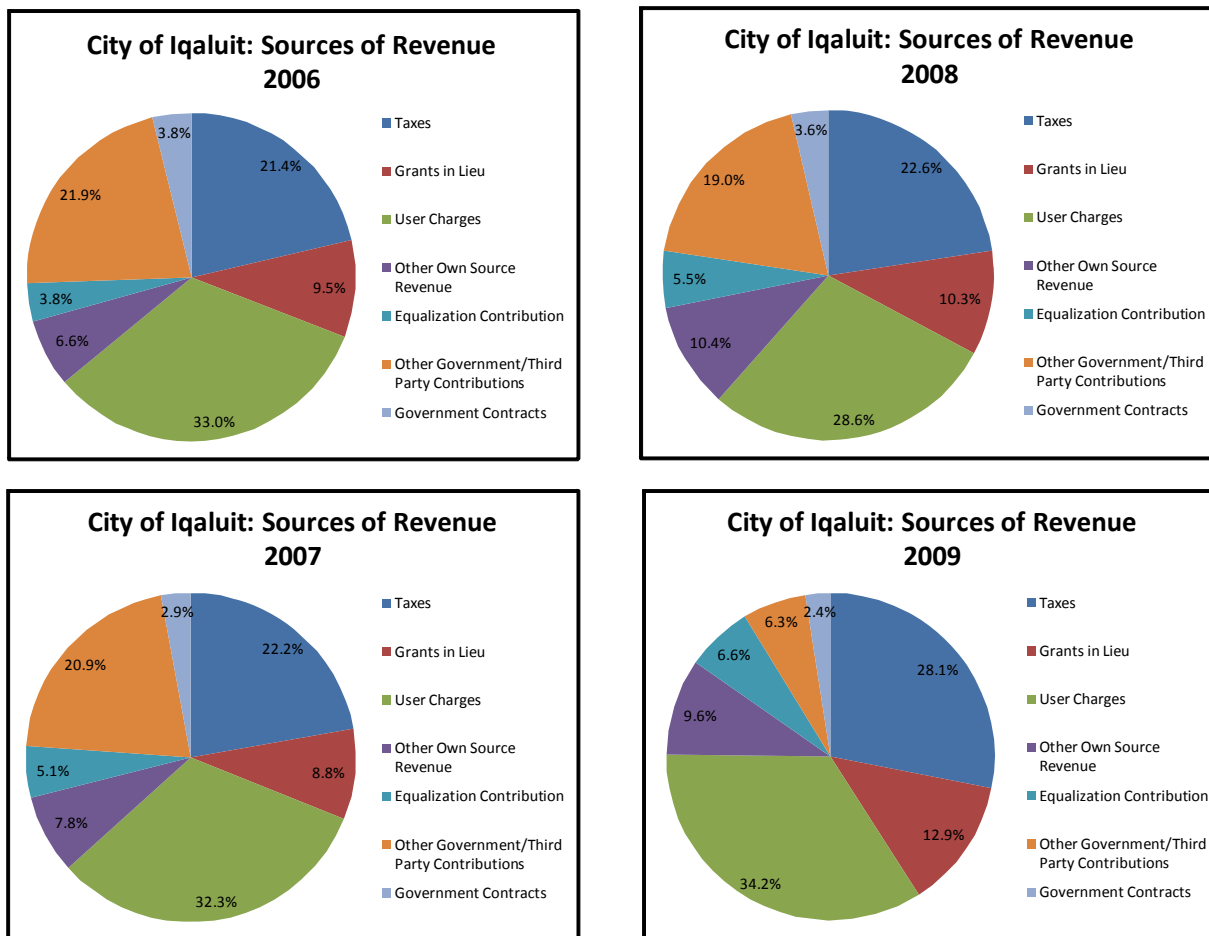
Revenue Source	2006	2007	2008	2009
<b>Taxation and User Charges</b>				
Taxes and Grants in Lieu	6,151,354	6,558,350	7,170,429	7,485,907
Grants in Lieu	2,741,248	2,607,809	3,255,381	3,431,961
<i>Total: Taxes and Grants in Lieu</i>	<i>8,892,602</i>	<i>9,166,159</i>	<i>10,425,810</i>	<i>10,917,868</i>
Water and Sewer	4,491,349	4,587,516	4,733,652	4,753,619
Sanitation Services	1,699,789	1,495,750	1,446,749	1,518,218
Land Sales	1,734,910	2,200,068	1,661,695	1,550,816
Interest on Land Leases	939,645	845,597	832,061	893,591
Lot Leases and Fees	510,623	290,249	233,970	219,370
Gravel	110,681	108,259	145,870	175,546
Other Revenue from Own Sources	1,902,164	2,292,801	3,281,940	2,547,137
Sale of Capital Assets	1,500			
<b>Government Transfers</b>				
Equalization Contribution	1,091,782	1,500,173	1,749,080	1,746,793
Water and Sewer Subsidies	975,626	1,107,237	1,074,335	1,130,485
Land Administration and Other Contribution	75,000	75,000	75,000	163,011
Government Capital Contributions	5,031,297	4,845,755	4,643,799	
Capital Contribution - Other	187,663	112,220	27,962	
Government Operating Transfers				121,697
Economic Development Contribution				256,500
Contracts	1,084,098	869,286	1,149,312	649,188
<b>Other</b>				
Third Party Land Contributions	10,300	40,921	214,873	-
<b>Total</b>	<b>28,739,029</b>	<b>29,536,991</b>	<b>31,696,108</b>	<b>26,643,839</b>

The relative contribution of property taxes to overall City revenue is shown graphically in the pie charts on page 5 below, including the proportion of total revenue represented by each of the main sources of revenue:

- Property taxes were stable proportionally from 2006 to 2008, varying from 21.4% to 22.6% over the three-year period. In 2009, property taxes were 28.1% of total City revenue; however, the proportional increase in 2009 was due to a major decrease in government capital contributions that reduced overall City revenue by 16% in that one year (see table above).
- Grants in lieu of taxes also increased proportionally in the same year, 2009, to 12.9% of total revenue.
- User charges were generally stable proportionally, varying between 32.3% and 34.2%, except in 2008.

Total government and other transfers varied only from 36.1% to 38.5% between 2006 and 2008, but decreased proportionally to 26.6% in 2009 as a result of the major reduction in capital contributions in that year.

City of Iqaluit: Sources of Revenues from Financial Statements, 2006 to 2009



The property tax base in Iqaluit is relatively small compared to other northern cities. The 2006 Census of Canada found that out of a total of 2075 private dwellings in the City of Iqaluit, only 23% were owned as opposed to rented; the business tax base is also much smaller proportionally compared to other northern capitals. At the same time the City of Iqaluit is experiencing rapid growth. Between 2010 and 2015 (the projected completion date for construction of the facilities) there will be an estimated 13% increase in the population based on a medium growth scenario (see Phase 1 Report, page 9 above). This should result in a significant increase in the residential tax base and in commercial and industrial activity, particularly if the exploitation of mining development opportunities continues to expand within the region.



The 2010 property tax mill rates for Iqaluit are presented in the table below.

**City of Iqaluit  
Property Tax Mill Rates**

Property Tax Classification	Mill Rate
Residential: Class 7/8	24.37
Residential: Class 9/10	33.70
Commercial/Transmission/ Transportation/Mixed Use	38.71
Industrial	41.78
Institutional	46.91

*Source: City of Iqaluit, Bylaw No. 701 – 2010 Mill Rate Bylaw*

Based on a total property tax assessment for land and improvements of \$342,266,100, estimated full rate collections for 2010 from these mill rates are \$7,831,000. This revenue is augmented by \$3,588,300 of grants in lieu of taxes, for total estimated collections of \$11,420,920. This represents a 4.6% increase over taxes and grants in lieu in the 2009 fiscal year. Tax collections alone, not including grants in lieu, represent 2.2% of total assessment value.

Municipal property tax mill rates vary very significantly among cities across Canada, and reasons for this variation are discussed below. The “nominal” mill rates for the City of Iqaluit represent higher nominal rates compared with many other cities, but are not necessarily out of line. For example, the mill rates for three smaller cities in northern and southern Manitoba with population levels between 7,906 and 13,446 are shown in the table below.

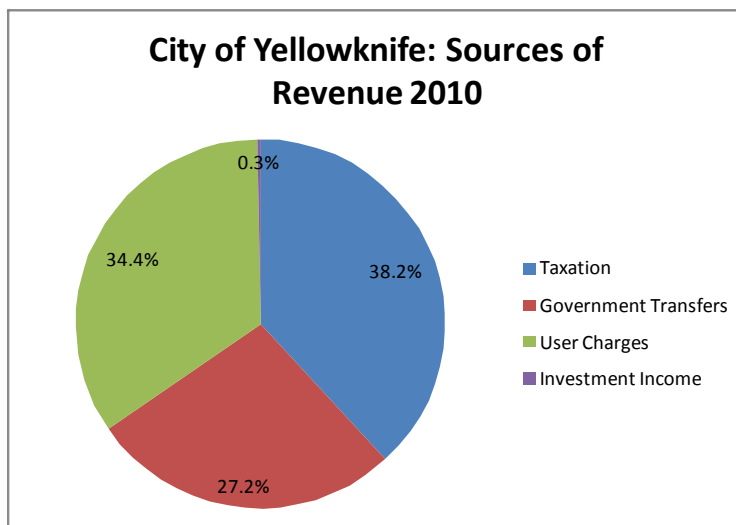
Manitoba  
Examples of Property Tax Mill Rates From Selected Small Cities

	Population (2006)	Residential Mill Rate	Commercial Mill Rate
Dauphin	7,906	32.87	32.87
Selkirk	9,515	23.04	23.04
Portage la Prairie	12,728	26.66	26.66
Thompson	13,446	26.19	26.19

In comparison with the other Northern territorial capital cities - Yellowknife and Whitehorse – Iqaluit is in a somewhat unique situation. Whereas both Yellowknife and Whitehorse essentially have year-round road access and a larger population base, Iqaluit has no road access, a relatively small population base, low home ownership levels and a less developed business sector. Costs for supplies and the provision of municipal services are higher for Iqaluit due to factors such as the costs of sealift and air transportation, and the high prices paid for fuel. The cost structure for Iqaluit impacts on the municipal mill rates and overall levels of taxation. However, equally important in comparing and mill rates are the specific, differing systems of property assessment used by each of these municipalities.

For the City of Yellowknife, 38.2% of the City’s 2010 revenue was obtained through taxation, as shown in the pie chart below, a higher level generally than that for Iqaluit.

City of Yellowknife  
Sources of Revenue from 2010 Budget



According to the 2006 Census, the population of Yellowknife was 18,700. 54% out of total of 6,630 private dwellings were owned rather than rented, a rate of home ownership over twice that of Iqaluit. Yellowknife had a total tax assessment, including land and improvements, of \$2.235 billion in 2010, and budgeted property tax collections of \$21,352,000 based on the mill rates shown in the table below. Thus, tax collections represent 0.9% of total assessed value of land and improvements.

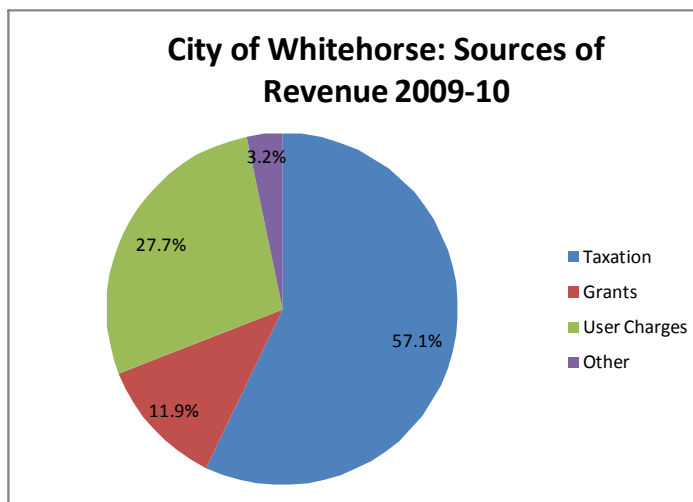
City of Yellowknife  
Property Tax Mill Rates

Property Tax Classification	Mill Rate
Residential	7.93
Multi-Residential	8.53
Commercial and Industrial	14.51
Mining and Quarrying	16.40
High-Density Parking	7.58
Agricultural	7.93

Source: City of Yellowknife, By-Law No. 4570

For the City of Whitehorse, the total assessed value of land and improvements for fiscal 2009-10 was \$36.424 billion, providing \$67.874 million in property tax revenue for the City, or 0.2% of total assessed value. As shown in the pie chart below, this represents 57.1% of total municipal revenue in that year.

**City of Whitehorse:  
Sources of Revenue from 2009-10 Budget**



With a total population of 20,465 in 2006, just over two-thirds of the 8,275 private dwellings in Whitehorse are privately owned. Property tax mill rates for 2010 for the capital of Yukon are shown in the table below.

**City of Whitehorse  
Property Tax Mill Rates**

Property Tax Classification	Mill Rate
Residential	11.79
Non-Residential	16.19
Agricultural	10.78

*Source: City of Whitehorse, Bylaw 2010-13*

It would appear then on a superficial view, that the nominal property tax mill rates in Yellowknife and Whitehorse are a third to half the level of those in Iqaluit, based partly on different rates of home ownership, assessed value of land and improvements, and sources of revenue generation. In reality however, each of the three jurisdictions utilizes a specific and differing system of property assessment. This is a major factor in determining the mill rates within a jurisdiction, and the result is that direct comparisons of tax burden between jurisdictions based on nominal mill rates are not possible.

All three northern territorial capital cities employ a similar two-tier system of assessing separately the value of land and the value of improvements such as buildings. For the assessment of land value, territorial legislation in each case establishes that the assessed value of land will be equal to 100% of market value. However, each municipality has different criteria for calculating this market value:

- *Iqaluit*: Market values are based on “100% of actual costs”. In the case of new properties this is relatively straightforward since land development costs were undertaken by the city and are simply passed along to purchasers. Market value of land for older properties is calculated using a market-based system established in 1995.
- *Yellowknife*: Assessed value is 100% of typical market values for a base year of 2005, based on an analysis of the average selling price of similar land parcels in the base year.

- *Whitehorse*: Assessed value is 100% of typical market values based on comparative private market sales of similar land for a base year of 2010.

In all three jurisdictions, the assessment of improvements, such as homes, garages, commercial buildings, etc., is based on the cost of construction or replacement costs taking into account depreciation of the asset. Once again however, there are major differences in the application of this principle in each case:

- *Iqaluit*: Improvements are assessed at two-thirds of the replacement costs for a similar building in the City of Edmonton using *Alberta Assessment Manuals*.
- *Yellowknife*: Improvements are assessed at the depreciated value of replacement costs in Yellowknife, using a base year of 2005.
- *Whitehorse*: Improvements are assessed at the depreciated value of replacement costs for Whitehorse, using a base year of 2010.

These differing applications of the principles and formulas for property assessment need to be carefully considered when doing a comparison of property taxes of Iqaluit with other northern, and indeed southern municipalities. In particular, the assessment of the value of improvements in Iqaluit, based on two-thirds of the replacement value in Edmonton which has significantly lower material, shipping and labour costs, provides much lower assessed values that underlie, at least to some extent, the higher mill rates applicable in Iqaluit.

During the business planning in Phase 2, projections of the potential impact of capital financing and operations and maintenance expenses for the planned facilities on property taxes will be developed, based on finalization of projections for capital and O&M costs and proposed funding scenarios. An important part of this analysis will be consideration of what acceptable and affordable increases in the levels of property tax may be for the City of Iqaluit. Determination and comparison of actual taxation levels in other northern municipalities will play an important role in the analysis. It will also provide a valuable frame of reference that could be an important feature of information provided to ratepayers in Iqaluit as part of a future referendum process.

### 6.1.3 Initial Review of Financing Practices from Other Municipalities

In this section, two models for the financing of public infrastructure projects are outlined, which may be of interest for possible applicability to the development of infrastructure currently contemplated by the City or Iqaluit. The first is a general model currently attracting much interest within Canada and within Nunavut – Public Private Partnerships.

The second model is a somewhat unique and innovative model for design and construction of the Legislative Assembly Building in the City of Yellowknife, which may possibly have application to infrastructure development in Iqaluit.

### 6.1.4 Public Private Partnerships (P3)

There has been increasing interest recently within Nunavut in Public Private Partnership approaches (also known as PPP or P3) to the development, funding and operation of public infrastructure. This approach has been used by numerous municipalities in Canada, as well as by other levels of government.

The P3 approach to infrastructure project development and operation has been applied in Canada since the 1970s. In many cases the results for P3 projects have been mixed, particularly with older initiatives. For example, a review of municipal projects in British Columbia found that

early P3 projects from the 1970s and 1980s were often unsuccessful, while more recent examples have been much more positive.<sup>4</sup>

At the general level, a municipal P3 involves a performance-based contract between a municipality and a private developer to provide aspects of a public service and through which the private partner assumes the associated financial, operational and other types of risk<sup>5</sup>.

In practical terms this could involve assumption by the private partner of one or more of the following functions related to the particular infrastructure, with the private sector partner compensated based by the public body on the basis of performance:

- Design of the infrastructure
- Building of the infrastructure
- Financing of the infrastructure
- Operating of the Infrastructure
- Maintaining of the infrastructure

While the capital or operating costs for the infrastructure may be financed partially by government grants or contributions, the private partner is responsible for financing the portion not covered by these contributions. The private operator may receive user fees, and/or the municipality may make “availability payments” to the private partner based on provision to the municipality of the required services at required performance standards specified within the contractual agreement. Contracts involving operations and maintenance are generally long-term (twenty to thirty years) at the end of which, responsibility may be handed back to the municipality.

Selection of a private developer would normally take place through a competitive process, but it is noted that there are Inuit-owned corporations such as Qikiqtaaluk Corporation and the NCC Investment Group that are locally based and who would likely have an interest in being considered as a P3 Developer in this case,

Some of the benefits that have been identified for the public partner such as a municipality in a P3 include:

- Access to financial resources and sources of financing beyond those obtainable by the municipality on its own;
- Transfer of risk to the private partner and insulation of the municipality from the risks associated with the project;
- Access to specialized experience and economies of scale;
- Budget certainty.

Past critics of P3s have suggested that there is no reason that the public sector cannot do whatever the private sector can do.<sup>6</sup> This has led to increased emphasis on the assessment of P3 projects in terms of the value for money received by the public body. In their Public-Private Partnership Policy, the Department of Finance of the Government of Nunavut set out specific provisions for assessing potential P3 projects. Some of the key provisions of this policy are:

<sup>4</sup> Johnston, Brian L. Public Private Partnerships in *Parks and Recreation BC*, July 2002.

<sup>5</sup> Canadian council for Public-Private Partnership defines P3s as cooperative ventures between the public and private sectors, built on the expertise of each partner that best meet clearly defined public needs through the appropriate allocation of resources, risks and rewards.

<sup>6</sup> See Johnston, Brian L., *op. cit.*

- The project must be of a sufficient size and/or complexity for a P3 to be a viable option;
- The execution of a P3 requires a private sector market that is capable of responding to the identified needs of the government;
- Benefits: when evaluating proposal, the highest benefit for the lowest cost represents value for money, and resulting programs, services or infrastructure must meet or exceed identified standards and respond to the needs of Nunavummiut;
- The transfer of risks to the private sector through a P3 has a value because it eliminates those risks for Nunavut and Nunavummiut;
- A due diligence process is important to ensure the integrity of the project review process, and procurement processes must be open, fair, transparent and objective.

The applicability and benefits of utilizing a Public Private Partnership approach to the development and/or operation of some or all of the City of Iqaluit infrastructure will be examined during Phase 2 planning.

### 6.1.5 Government of Northwest Territories Legislative Assembly

The current building housing the Northwest Territories Legislative Assembly in Yellowknife was completed in 1993. The building was the first specifically built for the needs of the Assembly since the Territorial Administration Building in Regina built around 1882. The new building was designed with themes from the local native populations that inhabit the territories and was designed for a 100-year-plus life span.

During planning for the Legislative Assembly Building, it was determined that few conventional sources were available to finance the project. As a result, an innovative approach was established based on incorporation of a private society with the ability to issue bonds to underwrite the project costs.

On June 15, 1990, the NWT Legislative Assembly Building Society was incorporated as a not-for-profit society under the Societies Act of the NWT. The Building Society then entered into an agreement with the Speaker of the Assembly for the finance, design and construction of the Legislative Assembly building. Financing for the project consisted of a temporary loan for construction financing, followed by a permanent debt consisting of a first mortgage and the proceeds of a bond issue. Any project costs in excess of \$14,900,000 were the responsibility of the Speaker.

The Society entered into a Land Lease with the Commissioner of the NWT, with the Society as tenant of the lands on which the Assembly Building was to be constructed. The lease was for a period of 23 years commencing on September 1, 1990, with rent of \$250 per year payable by the Society. The Society then entered into a building lease with the Speaker as tenant and the Society as landlord for a similar 23-year term. The lease payments to the Society were established at the outset and allowed for sufficient revenues to pay down a long-term (twenty-year) mortgage with CIBC and to have additional funds for payment of returns to bond holders.

The Financial Concept Group was engaged to manage the sale of four classes of bonds, which were made available for a limited time in 1993 to residents of the NWT. At the time interest rates had spiked and the return on the bonds was set at 13% per annum, compounded semi-annually. Currently only Series "A" Bonds remain outstanding as the other classes have previously matured, and the series "A" will mature on August 1, 2013. A second mortgage on the building was provided as collateral. The bonds are eligible to be held in a RRSP.



The Lease Agreement provides that if the Base Rent is inadequate to meet the cash flow requirements, it shall be adjusted accordingly, but no adjustment shall occur more frequently than once every five years. Increases in the Base Rent have taken place over the past 18 years. The mortgage will be paid out on August 1, 2013 when the bonds mature, and when the mortgage is paid in full ownership of the building reverts to the Government of the Northwest Territories.

The Legislative Assembly is responsible for the operation and maintenance costs of the Building and the Society is not involved in any way in the day-to-day management of facilities.

The Bondholders elect three members of Board of the Society, and the Members of the Legislative Assembly Building Society elect 3 members of the Board of the Society. At the AGM of the Society the Members appoint one member to the nominating committee. The Board of the Society appoints one member of the nominating committee, and the Clerk of the Legislative Assembly is a Member of the Nominating Committee. The Chairperson is appointed by the Speaker of the Legislative Assembly upon approval by the GNWT Management and Services Board.

The applicability of a model of this type to the infrastructure requirements of the City of Iqaluit will be to be explored further in Phase 2, including consideration of whether the approach would be allowed under current Government of Nunavut legislation and any special mechanisms that may or may not be required.

#### 6.1.6 Initial Overview of External Funding Sources

This section presents initial information on key sources of infrastructure funding from the territorial and federal governments beyond what is available internally to the City of Iqaluit through its own taxation and borrowing powers.

##### Government of Nunavut

Infrastructure funding for the City of Iqaluit from the Government Nunavut is provided through the Department of Community and Government Services (CGS), and operates within a five-year planning cycle. Through its planning, the City identifies specific infrastructure initiatives at the beginning of the five-year [capital block funding contribution](#) agreement cycle, and these are included in the annual forward planning cycle of the Government of Nunavut. Each year the identified projects from the City are considered along with projects identified by other communities, so there is no guarantee that any specific project listed within the five-year framework will be financed.

The current capital block funding contribution agreement ends in 2013, with a new five-year plan to be developed starting in 2013-14 and included in the [GN 2013-14 to 2017-18 GN Five-Year Capital Plan](#). The City will be negotiating new infrastructure initiatives to be included in this GN planning cycle and therefore will have an opportunity to obtain financing. Given that under the current schedule, design of the new City Hall, Emergency Services Centre and Recreation Facilities will commence only in the fourth quarter of 2012, this may provide an opportunity for the City to make a case for application of GN infrastructure moneys to this initiative commencing with the 2013-14 fiscal year.

## Government of Canada

### **Infrastructure Funds Previously Obtained by the City**

The Government of Canada, through its Gas Tax Fund, committed a total of \$97 million to Nunavut. Gas Tax Funds are designated for environmental projects such as clean air, clean water, and wastewater. Under an agreement with the City of Iqaluit, the City already received \$5.6 million in Gas Tax funds, and is receiving an additional \$9 million from 2010 to 2015, along with some smaller contributions for capacity building and administration.

There are no funds remaining for allocation from the current Gas Tax funding, and the next distribution of Gas Tax Fund contributions is projected for 2013-14. The criteria will remain generally the same, but may have some applicability to energy efficiency and other environmental aspects of the City Hall, Emergency Services and Recreation infrastructure projects.

The City also received \$1.5 million from the Infrastructure Stimulus fund, matched by \$733,000 in Government of Nunavut funding for repairs on the Arctic Winter Games Area in Iqaluit, along with \$12 million from the Building Canada Fund, \$3 million of which were contributed by the Government of Nunavut, for paving of roads in Iqaluit.

### **Infrastructure Canada**

Infrastructure Canada, under their Provincial/Territorial (P/T) Base Fund, which is drawn from the Building Canada Fund (BCF), has allocated funds for investment in Nunavut infrastructure. The Funding is administered entirely by the Government of Nunavut Department of Community and Government Services (CGS) for projects approved under their Capital Plan, with 75% of total project costs contributed from the P/T Base Fund, and 25% by the Government of Nunavut. Under The GN will receive approximately \$75 million from Canada from 2011-12 to 2013-14, to which the GN must contribute approximately \$25 million.

To date, the GN has a list of projects for consideration for the program in excess of \$250 million.

The GN will bring forward a list of projects for consideration by the GN and Canada within the next four to five weeks. Nothing is being considered for Iqaluit at this time. While the Iqaluit projects can be included in the future Annual BCF Capital Plans for consideration, it is likely that these projects may be ranked low compared to other GN critical infrastructure needs. Any financial support through Building Canada Territorial Base Fund is subject to approval of the GN Financial Management Board and the Legislative Assembly.

The City Hall and Emergency Service facilities would both be eligible for consideration under this Fund, with total project costs that may correspond to the amount of annual funding potentially available given the high level of competition for available funding. It is important to note that capital funds from this source may not be “stacked” with any other federal funding source such as the P3 Canada funding described in the next section. For this reason, while the Recreation facilities would be eligible for Base Fund financing, it may make more sense to consider other sources of federal funding for these initiatives because of the larger capital costs projected.

### **PPP Canada**

PPP Canada is a federal crown corporation established in 2009 to provide funding and advisory support services to encourage the development of the Canadian P3 market, in part by providing financial contributions to merit-worthy P3 projects.

The agency was originally provided with a \$1.2 billion fund, and is able to contribute up to 25% of the planning and construction costs of eligible P3 projects to public entities such as municipalities. Eligible categories of P3 projects include sports infrastructure, so that the City of Iqaluit Recreation facilities would certainly qualify. While the City Hall and Emergency Services Centre do not fall under any eligible category for contribution funding, PPP Canada could still provide expert advice and information if the City wished to frame these into P3 projects.

PPP Canada calls for proposals occur on an annual basis, generally in the spring or early summer in each of five years. Two proposal calls have been carried out to date, and the next funding call will be over a six-week period in the spring of 2011. For Nunavut projects, the PPP Canada interlocutor is the Deputy Minister of CGS, Kathleen Lausman, and all Nunavut projects must be submitted through her office, or must receive the support of her office. The Government of Nunavut is currently interested in developing some its current infrastructure projects for submission to PPP Canada; however, there is no restriction on the number of projects supported in a particular jurisdiction, as all proposals are assessed on the basis of merit, independent of geographic location. Financial support from PPP Canada for Nunavut projects must receive approval from the GN Financial Management Board and the Legislative Assembly.

Prior to submission of a proposal, the proponent must have a feasibility study completed that outlines all relevant aspects of the proposed project. The subsequent submission to PPP Canada must include a comparative analysis of traditional versus P3 procurements, a procurement strategy and a detailed P3 business case. The business case must be prepared by experts with extensive P3 experience, either identified by the proponent or chosen from a roster maintained by PPP Canada. Seed funding can be obtained from PPP Canada for development of the feasibility and business case.

All applications are reviewed on the basis of merit, and the assessment of applications focuses on four key areas:

- The nature and extent of public benefits;
- Whether procurement is structured as a P3 with a defined private partner;
- Value for money by engaging in a P3, including transfer of risk to the private partner;
- Need for PPP funding, which may be provided as a non-repayable contribution, or possible as a contribution repayable from revenues.

In terms of specific P3 models, PPP Canada prefers applicants to utilize models that place responsibility for all elements of Design, Build, Finance, Operate and Maintain (DBFOM) with the private developer, since this provides the greatest level of transfer of risk from the public body to the private partner. While it is possible for an applicant to retain some aspects of operations, specifically programming, justification must be provided to support this approach. The focus of PPP Canada is on the operation and maintenance of the building envelope falling under the contractual obligations of the private developer; however applicants transferring the greatest level of responsibility to the private developer will generally receive a higher rating in the assessment of proposals.

#### **PPP Canada program criteria**

If the City of Iqaluit is interested in considering a P3 model for its Recreation facilities, support by PPP Canada could possibly provide a contribution of between \$18 and \$20 million, based on current project estimates and depending on the specific planning option decided upon during Phase 2 planning.

### Green Municipal Fund

The Government of Canada has provided \$550 million to the Federation of Canadian Municipalities for establishment of a fund to support municipal initiatives in the environmental area. The Green Municipal Fund can provide up to 50% of the costs for sustainable community planning and feasibility studies to a maximum of \$350,000. The Fund can also provide loans and grants for capital projects up to a maximum of \$10 million for loans and up to 20% of the loan amount, or \$1 million, as a grant.

One of the objectives for use of the funds is for energy conservation or efficiency measures and the reduction of energy consumption. There may be a possibility of obtaining funding from the Green Municipal Fund for energy efficiency aspects of the construction of the City Hall, Emergency Services and Recreation facilities.

#### 6.1.7 Initial Summary of Financing Options

This initial review of potential funding sources for the City of Iqaluit City Hall, Emergency Services and Recreation infrastructure is preliminary in nature, focusing on an examination of the key internal resources of the City and critical external sources, primarily of the Government of Nunavut and the Government of Canada. Subsequent business planning, which will be carried out as part of Phase 2 of the planning project, will undertake detailed analysis of potential project financing.

The two primary internal sources of the City of Iqaluit for project financing, outside of user fees, are increases in property taxes, and loans from a registered financial institution or from territorial and federal governments. A third funding source may be available to the City through the Federation of Canadian Municipalities' Green Fund, but this avenue will require further investigation and analysis. This FCM initiative is funded by the Government of Canada. A critical element of the future analysis in Phase 2 business planning will be examination of the potential impact of proposed project financing on property tax levels in Iqaluit. This analysis will be complemented by a detailed comparison of property tax levels in other northern municipalities, and where possible southern municipalities. This comparison must be based not only on a comparison of property tax mill rates but also on the differing property value assessment systems used in each case, as well as other critical factors determining the overall tax burden on municipal residents.

Currently, municipalities in Nunavut do not have the power to issue municipal bonds. Investigation of the potential for this as a future financing option will be pursued in Phase 2. At the same time, the innovative approach utilized in the financing of the NWT Legislative Assembly building in Yellowknife, under which bonds were issued by a privately incorporated society, may have applicability in Iqaluit, depending on whether this is permissible under Nunavut territorial legislation.

Government of Nunavut funding for City of Iqaluit infrastructure is provided through the GN five-year capital planning process. A key element of GN capital funds are those provided by Infrastructure Canada under the Provincial/Territorial Base Fund of the Building Canada Program, which is administered as an integral part of the GN capital planning. Project funding of 75% is provided by the federal program, with the remaining 25% provided by the Government of Nunavut. At this time, the list of territorial projects to be considered for Building Canada funding for the fiscal years 2011-12 to 2013-14 does not include the proposed City of Iqaluit infrastructure. The City of Iqaluit can request that the GN include the City Hall, Emergency

Services and Recreation infrastructure in subsequent Building Canada capital plans, but it appears that these projects may be ranked low in comparison with other GN critical infrastructure needs. The Phase 2 business planning will have to address the need for project support from both the federal and territorial governments.

The final major current source of infrastructure funding is the PPP Canada funds which can provide capital financing for Public Private Partnership (P3) projects. Funding proposals are assessed on a merit basis, and if accepted can provide capital contributions of up to 25% of project costs. Under the program's eligibility criteria, only the City of Iqaluit's Recreation facilities would be eligible for capital contributions, although planning support could be provided by PPP Canada for the City Hall and Emergency services infrastructure if the City decided to pursue these through a P3 approach. The overall applicability of the P3 approach will be examined and assessed as part of the Phase 2 business planning.

## 7 Schedule Update & Next Steps

### 7.1 ORDER OF MAGNITUDE CONSTRUCTION COSTING

Based on the facility programming developed during this phase of the project, Hanscomb completed order of magnitude cost estimates.

Pricing reflects probable construction costs obtainable in the Iqaluit area on the effective date of this report. This estimate is a determination of fair market value for the construction of this project. It is not a prediction of low bid. Pricing assumes competitive bidding for every portion of the work.

The estimates show probable construction costs for the following facility programs as well as overall costs for projects based on the Recreation Facility options. The following identifies the options being evaluated.

- Recreation Facilities – Option A (\$28,363,600 + \$42,594,400) = \$70,958,000
- Recreation Facilities – Option B (\$20,117,400 + \$62,341,700) = \$82,459,100
- Recreation Facilities – Option C (\$33,278,500 + \$42,970,300) = \$76,248,800
- Emergency & Protective Services Centre = \$10,263,000
- City Hall = \$18,197,500

The above numbers provide for the following overall construction project cost options.

	Option A	Option B	Option C
\$	70,958,000.00	\$ 82,459,100.00	\$ 76,248,800.00
\$	10,623,000.00	\$ 10,623,000.00	\$ 10,623,000.00
\$	18,197,500.00	\$ 18,197,500.00	\$ 18,197,500.00
<b>\$</b>	<b>99,778,500.00</b>	<b>\$ 111,279,600.00</b>	<b>\$ 105,069,300.00</b>

The costing report can be found in Appendix E of this report for full details.

### 7.2 PRELIMINARY PROJECT BUDGET

Based on order of magnitude construction estimates above, the overall construction budget for the project, utilizing the highest cost option for this part of the study is estimated at approximately **\$111,279,600.00**. It is noted that these estimates exclude what is typically referred to as soft costs, many of which are noted in section 1.6 of the Hanscomb report.

Estimates for soft costs will be established in the business plan to be completed in the next phase of the project. For this phase of the work we recommend an additional 35% (\$38,947,896.00) of the construction estimate be carried to cover soft costs to provide for an overall project budget of **\$150,227,460.00**.

### 7.3 GO FORWARD PLANNING - CONSTRUCTION

Using the Aquatic Centre as the priority to start preliminarily project scheduling and the intent that all project financing would be in place as of November 2011, project implementation schedules have been completed and included in the appendices.

Two approaches have been reviewed during this phase for initial analysis; Traditional Design-Bid-Build as well as a PPP or Design-Build approach.



Both scenarios presently do not show that the new Aquatic Centre can be realized prior to the end of the current lease with the Iqaluit Swimming Pool with Nunastar, scheduled to end March 31<sup>st</sup>, 2013. Approaches to expedite the design and construction will be brought forth during the Phase 2 Implementation and Business Planning.

### 7.3.1 Next Steps – Phase 2 Planning Schedule Update

This report builds a solid foundation for the City of Iqaluit's requirements for new facilities. It provides a stepping-stone toward their construction. Phase 2 of this process will develop this work while completing conceptual designs for the facilities, defining full project costing and developing business planning to support the construction.

We have updated the project schedule, included in the appendices to show the advancement strategy towards Fall 2011 completion with an approach to implementation of the project.

## 7.4 PHASE TWO START-UP

Phase 2 work will begin prior to final approval of Phase One. However, the City should be aware that authorization to proceed with a particular aspect of the project implies approval of same.

Following are a series of tasks that can be initiated at any time:

### 7.4.1 Review P3 Application Requirements

FSC, Aarluk and City representatives attend a P3 Canada briefing in Iqaluit in early April to look at opportunities in this approach. This will be evaluated during the Phase Two work.

### 7.4.2 Initiate Aquatic Centre Design

The detailed conceptual design of the Aquatic Centre can begin with blocking diagrams. The general intent is to design a facility to the east of the existing City Complex, possibly creating a north south 'passage' between the two to allow pedestrian access from Site 20 as well as the front of the lot.

The design should include the entire complex but a decision is required on whether or not to proceed with the preferred Option.

### 7.4.3 City Hall: Legislative Assembly

The re-purposing of the Legislative Assembly Building, owned by NCC, as a new city hall is identified in the Phase One Report as the preferred option for this component of the project. In order to establish the viability of this objective, initial tasks must be complete to prove the basic viability of the repurposing:

#### Design

- Prepare Block Diagrams to confirm City Hall program fit;

#### Report

- Conduct preliminary technical status evaluation (due diligence);

#### Legislative Assembly Purchasing Arrangement Options

- Purchase with financing;
- Purchase outright – mortgage;
- Lease to own;

- Factor mid- term leasing of 3<sup>rd</sup> floor;

#### Purchase vs. Build Analysis

Prepare a comparative analysis to determine the costs associated with the purchase the Legislative Assembly against building a new City Hall

- **Operating and Capital Costs:** In order to move forward with any of these options, the City needs to know what the costs would be to upgrade the Leg. for our purposes (capital plan, renovations) as well as the operating costs.
- **Timing:** The timing of the availability of acquiring the Leg. needs to be confirmed. A cut-off date for knowing the availability needs to be determined and a cut-off date as to when it would not be feasible for the City to pursue the Leg. needs to be set.
- **Interim Solution for City Hall:** If there is a considerable amount of time before we can acquire the Leg, an interim solution for City Hall needs to be set up. The cost of the interim solution needs to be accounted for in the Purchase vs. Build analysis.
- **Purchasing Options:** Purchasing options need to be explored: mortgage rates, financing rates, lease to own rates.

#### 7.4.4 Emergency and Protective Services Federal Road Site – QIA

Identified as a top site for the Emergency and Protective Services Centre.

##### Inuit Owned Land Feasibility Study

A joint study was planned by to determine the best use of the lot. Economic development was to be the focus. The City of Iqaluit and QIA partnered for the purpose of the study.

A meeting was held with QC and QIA to discuss this portion of land as well as other opportunities. This project needs to be considered within the study and it should be recognized that the site may need to be developed quickly before the study is finished.

##### Submit Proposal (City)

If this site proves to be superior to the Road to Nowhere site, then we need to move forward to acquire the land. The feasibility study to determine land use is pending; QIA has invited the City to submit a proposal for the land to be evaluated by their land-use committee. More information on the study and its purpose is needed. A proposal needs to be written and submitted for consideration to QIA.

#### 7.4.5 Frosty's Site – Brian Soucey

Identified as a key parking site for the downtown recreation facilities and Aquatic Centre as well as an interim solution for City staff currently working out of building #2425, a leased facility securing this property will provide a number of options for the City: future downtown parking, potential E&PSC site or investment.

##### Acquire Appraisal of Property

City met with Brian Soucey and John Matthews and viewed the site. Brian is interested in selling and would consider long-term payments over an outright purchase. An appraisal has been done of the property. John Matthews will provide City with appraisal.

##### Prepare to make an Offer

City to consider budget implications. Identify interim use to benefit the City while planning for the long term. Acquire information regarding renovation of buildings and operating costs.

**Negotiate Walkway Agreement**

The space between Tom Webster's buildings has been identified as an important walkway for pedestrians to access the Aquatic Centre and Recreation Centre. It will also be an important walkway for those parking at the Frosty site and walking to the Aquatic Centre/Recreation Centre.