



**City of Iqaluit**

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# **Design and Development of Walking Trails**

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### Maps Included:

1. Potential Trail Routes
2. Major Pedestrian Traffic Flow



### 1.1 Introduction

The City of Iqaluit, in response to the concerns and interests of residents is improving and enhancing the quality of life in the community. Over the last few years, through a number of meetings and reports a consistent message has been heard. In the secondary planning document, **Iqaluit, Capital of Nunavut** written in 1998, discusses many pedestrian related subjects and talks about the need for parks and opens space as well as improved pedestrian access throughout the community. It specifically mentions the need for handicapped access over obstacle such as utilidors.

Other more recent reports echo these concerns and interests; the Iqaluit Community Economic Development Plan (CED) 2001 written by RT & Associates says, "There is a need to create an environment that meets residents quality of life expectations."

It goes on to recommend, "beautification of the community through improved roads, creation of parks and sidewalks, and finding ways of addressing health issues arising from dusty roads are all viewed as concrete steps that would improve quality of life in Iqaluit. Improving quality of life would also create new opportunities for enhanced tourism development - for example a more attractive community with improved and expanded recreation facilities would attract more conventions." The last point emphasizes the economic benefits of tourism; trail development increases opportunities for tourists to participate and interact with in the community. The Recreation Masterplan makes similar observations and recommendations.

The CED plan indicates the need for "More 'no-cost' and accessible activities such as walking trails and 'green spaces' and improving access to land based activities". While these non-essential developments may appear to be added capital and maintenance costs that the City cannot afford, in reality they are important infrastructure and planning initiative that do contribute to the economy of the community; sometimes this contribution is direct through increased tourism and sometimes the contribution is indirect in terms of the pride and care the residents take improving the visual quality and maintaining the physical environment of their community.

The CED states, "Iqaluit is currently unbalanced in its development. Unless this is addressed the situation will worsen leading to a fractured, chaotic community with poor quality of life." The end result of a fractured chaotic community is increase vandalism, violence, and general disregard for private and personal property by an increasing number of individuals. And the solution is relatively simple as recommended by the CED "improve the range of recreational activities available."



From the CED plan, Seven Priority Projects were chosen by participants in a joint CED committee/City Council Workshop as part for the guiding principles governing the City. One of these priority projects is Trails and Green Spaces; the section below lists the six guiding principles and briefly outlines the ways to the Walking Trail Study responds to these principles:

1. Build on local resources:  
Preserve, restore and enhance natural environment within community,  
Construct using local materials and labour.
2. Support and strengthen Inuit Culture:  
Provides access routes to areas outside community,  
Addresses the need for safe, healthy “transportation” corridors.
3. Increase Appeal of Iqaluit:  
Improve and upgrade visual and physical environment within community,  
Provide facilities that address the needs and interest of the tourist sector.
4. Improve Quality of life:  
Provide places for recreation, for commuting, for tourism.
5. Improve Community Infrastructure:  
Establish defined and legislated parks and green spaces, and recreation corridors with trails and outdoor furnishings.
6. Increase income opportunities and options:  
Increase recreational activities and travel to points of interest/ destination.



## 2.1 Questionnaire

In the initial phase of the project a series of consultations were conducted with City Council and Administration as well as members representing the Inuit organizations, public interest groups and individual stakeholders in the community. A list of seven questions guided the consultation process by directing and stimulating participant's response to the main subjects of interest. However, consultation was not limited to just the questionnaire and the interviewees were encouraged to voice their opinion on issues related to walking trails in general. A variety of responses were recorded and certain themes recurred regularly and these are: safety, ease of use and trail definition. A list of comments appears in the section below.

Contacts: a complete list of contacts is available in the appendix.

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The overall objective of the questionnaire was to determine the level and the type of interest in the community for the walking trails, investing interests in recreation, commuting, and tourism activities.

### **Recreational Interests**

Main recreation interests appears to be in town for general use for walking for enjoyment, however connecting to recreational features at the edge of the community, such as the small lake on the Road to No-where and as well as access the surrounding natural environment, such as the Tarr Inlet Trail was also indicated.

### **Commuting Interests**

The results of the survey indicate the main interest in the walking trails will be a combination of commuting and recreational use. Commuting will include walking to work, school and shopping and recreational use will be for activities as walking dogs and leisure walking.

Trails will encourage people to walk and people want to have the option of walking or driving. But it is apparent that the use of walking trails will not replace the use of vehicles, especially for residents who live furthest away from downtown. Many reasons were given for wanting to continue driving including inclement weather, being 'in a hurry', long distances to travel and having many errands/stops in the day. The main reasons for walking include: lack of parking spaces in the downtown, high volumes of traffic during the day and life style interest or desire to exercise.





When asked if people would use the trail system as a recreational activity in itself or more as an access route to connect to recreation areas outside the community, most respondents said as a connection to areas outside of Iqaluit.

### **Tourism Interests**

While visitors to the community were not interviewed, a number of local residents indicated that importance of including visitor and tourist activities in the design of the overall trails system.

### **Trail Features**

Respondents had many suggestions for features that would enhance a trail system for Iqaluit. The following features are placed in order of most number of mentions to least. Trails should:

- be well maintained in summer and winter- graveled and ploughed where reasonable, maintained frequently and be equipped with garbage receptacles
- be easy to use and lead to places one wants to go
- be safe- free of dogs, trespassing, obstacles (ditches) and lit where reasonable
- be well signed, marked and mapped including warnings regarding terrain, bugs and dog teams, snow machines and ATV's.
- be equipped with benches and rest spots
- have points of interest, i.e. sculptures and interpretational signage
- be 'looping' where possible (example- Apex via beach then up Apex Creek to road to Nowhere)
- be rated for difficulty
- be marked for length (km and time)
- cater to walkers only
- tie into common carving spots/shacks
- incorporate established "look out points"
- land trails marked with Inuksuit, cairns and other unobtrusive markers
- be equipped with bonfire spots with wood provided where reasonable
- mapping should include a description of our 'special tides' and trail design should be made to take advantage of tides
- be suitable for cross country skiing
- be equipped with places to leave personal notes
- connect to proposed bus system, (park and ride area)
- respondents mostly feel that no matter what features trails will have, residents are not likely to leave their car at home and opt to walk because there are trails.
- Notice board – place to leave notes, messages, announcements and advertisements



## Destinations (Key areas in town)

Respondents indicated that the following place in and out of town as key destinations and places they would like to access by the walking trails. While this list represents community interest, the scope of the trail project is limited to trail development within the Municipal boundary and with emphasis on the most densely populated areas of the community.

### Urban core

- schools, business sector, galleries
- post office
- Visitor Center, Museum
- Brown Building to Arctic Ventures
- Legislature/ Federal Building
- Joamie School Lookout
- playgrounds
- hospital
- City Hall
- Arnaitok and AWG Arenas,
- Curling Rink,
- Churches,
- Banks,
- other destinations include:

### Toward edge of town

- Road to No-where
- Airport connected to shopping areas
- Beach/Breakwater
- Up behind DJ'S convenience
- NTPC, Hospital Hill
- Ball diamond
- End of runway
- Happy Valley to Cemetery
- Crystal 2 site/ Causeway
- Upper Base and hinterland beyond
- Causeway golf course
- Apex Creek
- Lakes and streams (in and around community)



## Out of Town

- Sylvia Grinnell Park
- Pagnirtung Trail
- Qaummaarviit
- Burton River Valley
- Apex, Apex Hill, Tar Inlet, Rotary Park
- Kimmirut Trail
- Boy scout cabin
- Fishing sites,  
Camping sites



## CBC Radio Show

CBC Radio took an interest in the City of Iqaluit Walking Trail project and conducted a noon-hour interview in English and Inuktitut. It was an opportunity to explain the scope of the project and the Council's interest in improving the community environment from a visual and physical standpoint as well as upgrading the quality of life in Iqaluit in general.

## Open House

An Open House was held at the Elder's Centre, an afternoon and evening session for the public to view the maps of the potential trail routes that could be developed a phased program in Iqaluit.

There was a small turnout due to the uncertain weather conditions. Efforts had been made to schedule the Open House so it could be attended by the members of Council, however, blizzard conditions that week resulted in the Council meeting being rescheduled to the night of the Open House!

Participants at the Open House stressed the importance of following existing walking routes wherever possible and to avoid disrupting the privacy and security of neighbourhoods. This is an important comment and has been addressed in section 6.0 Partnerships.





## 2.2 Conclusion

Interviewees agree with and support the concept of trail systems within Iqaluit for commuter and recreational use as well as marked trails outside of Iqaluit for recreational use. They feel it would improve the appeal of the City and increase recreational opportunities. Overall the, quality of life would be raised a notch. Furthermore, indirect benefits of developing a trail system include:

- spin-off economic opportunities such as bicycle rentals, hotdog/hamburger stands, arts and crafts sales opportunities,
- job opportunities of maintenance, guiding and interpreting
- volunteer opportunities of fundraising, maintaining, adopting and cleaning

Very few negative comments were made. However, one widely mentioned issue was the concern for cost of trail development and maintenance and the source of funding. Success of the project will be dependent on how well the trails are promoted by the City and community organizations. Respondents feel residents and tourists must be heavily encouraged to use the trails. Promotion to residents can include incorporating trails to host open markets, games, events, the Terry Fox run, marathons and school fitness activities. Tourists can be encouraged to use the trails through high-quality mapping, self-guided tours, incorporation of photo opportunities, directional and interpretational signage and cleanliness.



**3.1 Topography**

In general, the topography is a combination of gently rolling hills with steep slopes and relatively flats areas that descend in a series of benches to the ocean. In some locations, such as around the Brown Building slopes are very steep and will require special design consideration, like ramps to ensure that people of all ages and physical abilities can access the trail.

Many of the Open Areas, the green spaces, found throughout town have significant slopes for at least a portion of the area. The land from Happy Valley to Tundra Valley is one of the steeper grades that must be negotiated. Ideally the steepest grade for the trail development within these locations will be 10% and 12% for short distances.

**3.2 Hydrology**

Throughout the community there are a number of drainage channels that are made up of streams, creeks and small lakes that flow from the highest elevations down to the Bay. Over the years both industrial and residential developments have occurred within a number of these drainage channels resulting in varying degrees of damage to the stream channel and the surrounding vegetation. Efforts by the City need to be made to revitalize these areas and to protect the remaining drainage areas from damage due to development.



One of the most significant drainage areas is from the reservoir, past the power plant, Brown Building, White Row and on down to the Breakwater. This is an important open space in the community and a number of residents indicated they would like to see this site preserved. The Rotary Club has expressed an interest in the construction of a trail along a section of the creek as part of their efforts to support a community

campaign to encourage business to take an interest in improving the physical and visual character of the community. Refer to section 2.1 for more comments.

Another area mentioned is the small lake at the beginning of the Road to Nowhere (opposite the subdivision). This lake has been as a swimming “hole” for Iqaluit youth for a number of years and inspite of the recent swimming accident, it will continue to be a popular summer gathering area. Increased development pressure and uncontrolled motor vehicle traffic around the lake continue to threaten the natural environment and the future deterioration of the habitat around the lake. There is public interest in develop a park area with picnic tables and benches, trails, and parking. This is location is close to town and is ideal for people without vehicle to enjoy outdoor Iqaluit.

### 3.3 Soils

A thin soil cover spreads over granite bedrock and is often interrupted by rock outcrops. Soils are mostly glacial till, consisting of sand or sandy-clay material. Gravel beds also occur especially along eskers. The lack of soil depth and structure as well as the limited amount of soil makes it challenging to transplant and re-vegetate large areas. However, it has been observed, that plant material will return on its own, beginning with moss species, if soils can remain free from compaction and abrasion, which mean eliminating vehicle and pedestrian traffic. Directing and encouraging people to use the trails are the objectives of the trail system.

### 3.4 Geology

General a combination of bedrock and tundra vegetation, with bedrock predominant on slopes and hilly areas, bedrock/boulder slopes

- Bedrock granite – Cumberland batholith
- Granite-tonalite, charnockite-enderbit plutons
- Metamorphosed supracrustal sequences
- Gneisses
- Basal quartzite-marble overlaid by
- Thick sandstone-shale basinal turbidite layers
- Local iron formations
- Archean rock, aphebian intrusions

### 3.5 Vegetation

Vegetation or the lack of it is an interesting subject of conversation in Iqaluit; the elders often mention their concern for the destruction of the tundra within the community and their desire to see the natural vegetation, the tundra plants and wildflowers cover the land around their homes and other buildings. Vegetation cover varies in the different parts of Iqaluit.





### **Downtown Core**

There is a significant lack of vegetation in the heavily developed downtown core of Iqaluit, most sites are predominantly gravel or sand and often the entire space between buildings is cover with granular material.

### **Residential Areas**

In residential areas the undeveloped land between houses, streets or subdivisions is predominantly covered in tundra, with the exception of bedrock outcrops. Some of these areas experience greater use, through pedestrian and ATV traffic which cause wear and a reduction in plant life in heavy use areas. For example the ridge in tundra valley overlooking the bay, has areas where heavy use has depleted the vegetation. A defined route in these areas will channel traffic along the trail and will preserve and restore the surrounding tundra.

Throughout the older residential areas, such as lower base and the cemetery area, there is a lack of vegetation around the housing but not in adjacent open spaces.

### **Industrial Areas**

The land surrounding the north forty and the west forty is well vegetated away from the roads and industrial buildings.

### **Municipal Reserve**

The hinterland or the municipal reserve surrounding the built-up area is covered in tundra with the exception of rock out crops and boulder fields. Two areas that have suffered damage are the quarry pits along and at the end of the Road to No-where and the "road" beyond the north-west of the runway which has become a favourite site for off road vehicle. The tundra is being destroyed at an alarming rate in the area in particular, although recreational ATV traffic is also taking a toll on the tundra within the community as well.



### Tundra Plants

The tundra typical plants in the Iqaluit area are varieties related to the following groups:

- Sedges
- Grasses
- Heathers
- Lichens
- Ferns
- Mosses
- Horse-tail
- Sorrels
- Club-moss
- Berries (variety)
- Saxifrages
- Buttercup
- Roses
- Poppies
- Willow
- Birch



### 3.6 Pedestrian or Non-motorized Traffic Patterns

A large number of people in Iqaluit walk to work, to visit friends and to shop. It is a very people oriented city at the moment and future develop needs to encourage this trend in order to preserve the character of the community and to minimize traffic congestions (which is rapidly becoming a problem). This section provides brief outline of the most popular pedestrian traffic routes in use today.



The study of human use (non-motorized) traffic patterns focused on pedestrian traffic that crossed through open areas and undeveloped land throughout the community. The majority of routes used by pedestrians cross land that is privately leased or owned but is accessible to the public, such as around the Brown Building or is public green space which has been zoned open areas for recreation and public use. The trail study included areas that would connect to the

proposed sidewalk system but it did not take into account the walking area alongside roads where sidewalks will be located eventually.



Apex to Town, most pedestrian traffic appears to walk along the road until past the AWG Complex, then cuts across the tundra to walk downhill into Happy Valley and to downtown.

From Tundra Valley to Happy Valley (near the road connecting to Happy Valley)  
Happy Valley over the rock to behind DJ's sensation and across to green space adjacent to White Row – very heavily used crossing

Happy Valley up hill to Joamie School

One-way road across tundra to Joamie School

Apex Road (near hospital) to the Ring Road Snow machine crossing to the RCMP/  
Northwest Tel warehouse.

Green Row (various locations)/City Hall to High School and Astro Hill Complex.

Astro Hill Complex radiating to the Hospital, Inukshuk High School, Arctic College, City Hall, North Mart, Arctic Ventures, Post Office, Banks

Nakasuk School/Anglican to Green Row/Northern Store/Post office/Banks

Within the heart of downtown core, the high density development and road system require that the trail system use the streets, in some areas, to connect to the outside areas of the community. The existing trail follows the utilidor in a number of areas and consideration can be given to extending these routes. At the moment, pedestrians are also crossing undeveloped leased lots which in time will be occupied by buildings or parking areas that may restrict or eliminate the walking route in the future. On the Ring Road, opposite the North Mart, the undeveloped land between "the Dome" and the Coman Arctic Building (former Baffin Chamber of Commerce, now Urban Bunker Clothing) is an example of a space where utilidor trail bring pedestrians onto private land. In this instance one of the parcels is Inuit Owned Land.

DJ's Sensation (grocery store) – green space adjacent to White Row

Downtown to Airport (along the roads)

Downtown/Arctic College to Arctic College Student Residence, Baffin Correctional Centre (mostly beside the roads)

One of the objectives/results of the pedestrian paths is to keep pedestrian and vehicular traffic apart from one another, thereby improving pedestrian enjoyment and improving public safety. As well, the walking trails benefit the vehicle traffic by reducing pedestrian traffic and the related congestion on road surfaces.

In the downtown core, the trail system will link to the proposed sidewalk system, that is in the planned for downtown. In most locations the walking trails will avoid running trails parallel to sidewalks. Instead, the trails will supplement the higher-traffic sidewalks, by connecting sidewalks on different streets, providing "short cuts" to pedestrian "destinations", such as schools and shopping areas.



Throughout the community of Iqaluit roads, housing and industrial infrastructure are interspersed with undeveloped land. On the zoning map this undeveloped land is labeled as Open Space, OR which can be termed outdoor recreation or green space. The Open Space is found in areas which have steep hills and rock outcrops as well as stream valleys and drainage areas. These areas are often difficult places to construct roads or housing and many of these locations make excellent open spaces for green (park) spaces and recreation corridors.

Land has been set aside by the planning department for a parks and open space system that runs throughout the community. One corridor runs from downtown out through Happy Valley and Tundra Valley along the water front connecting to Apex. Another corridor runs from the power plant down past the hospital and Astro Hill Complex to the Breakwater. A third corridor connects downtown, via the beach, to Sylvia Grinnell Park and the adjacent peninsula of land near the causeway which is a favourite place for camping and golfing.

These recreational landscapes are ideal for hiking, walking, enjoying the view of Frobisher Bay, as well as camping, fishing and other activities. These spaces also provide an oasis of green vegetation within the expanse of gravel which has come to represent so much of Iqaluit. In addition to all the physical benefits provided by these green areas there is also a sense of visual and physiological relief which cannot be measured in terms of dollars and cents or development potential. The value of these lands lies in the potential for “no development”. In the future, the “no development value” of these lands will only increase as more roads, houses and buildings are added to the community and the amount of green space continues to decrease.

Community-wellness and the desire to create clean healthy communities in the north is a theme we hear repeatedly from Government and politicians. Iqaluit has a series of special places, small yet, relatively intact within the heart of the community. Green space or Park land that other cities cannot create is found in its natural form within the downtown core of Iqaluit. The hospital corridor, land between the hospital and Arctic College, is an example of an unique space, with a stream and waterfall flowing through the central part of the community. It is an ideal setting to promote a healthy life for Iqaluit residents. The hospital corridor is part of a larger green space/stream system that continues past the Brown Building, White Row and DJ Sensation to the breakwater. One of the key planning objectives of the City is to avoid piecemeal development, and to aim for a unified and integrated system of green spaces and recreations corridors which serve the needs and interests of a wide range of people.





#### **4.1 Hospital Hill Site**

The hospital site is a major drainage corridor with a stream running down the length of the site; it consists of a sloping topography, covered in tundra. This is one of the most significant sites in the community and is viewed by a large number of people daily because of its prominence relative to the Apex Road and adjacent government buildings, hospital and schools. Retaining the visual integrity as well as the physical integrity of this area is an essential part of maintaining the quality of life and character of the community of Iqaluit. To allow development on this site will result in the complete destruction of this open space and will contribute to the continued erosion of both the quality of life and character of the community, not to mention the physical deterioration of the tundra and natural drainage system. These qualities are already under stress from the effect of development and growth that we find elsewhere in Iqaluit.

The value of this space is based on retaining the integrity of the landscape as a complete unit. Development within the open space will have negative effect on the overall quality of the environment. A road will divide the site into two small and completely separate sites, and will obliterate a portion of the tundra within the corridor. For example a 20 foot road may require a base 50 to 60 feet wide depending on its height above the existing grade, and the road beside Arctic College is very high above the tundra green space. It is impossible to exchange this unified piece of tundra for a series of small spaces criss-crossed by roads and still retain the quality of experience and integrity of the site that exists at the moment.

Connecting the sites by a culvert is unsatisfactory as all the unpleasant qualities we are attempting to mitigate will now be introduced into the middle of the green space. Traffic, noise, dust and gravel will now flow through the middle of the area, causing a degradation of the sense of health and well-being that the site contributes to the community fabricate at the moment.





It is recommended to:

- Preserve the site intact, and make it accessible by trails to the community and the hospital users. Part of the site, adjacent to the hospital, is an ideal location for a seating area, picnic tables, and benches so that visitors and patients can connect to the tundra, rocks and stream in a natural and healthy environment.
- Maintain the wide expanse of tundra in order to preserve the physical and visual benefits this site offers to the City of Iqaluit. Wildflowers can flourish in the summer months.
- Avoid encroachment on the stream channel in order to maintain the drainage course, which is wide during spring run-off, in a natural state.

This site has already experienced number of small scale developments, e.g. utility corridor, dam, rock pile supports, however the magnitude of adding a road is far beyond all these items and will have an overwhelming effect on the total physical appearance and quality of experience within this area.

If the City is seriously committed to improving the quality of life for the residents and visitors of Iqaluit, then it will ensure that these natural opens spaces and other recreation corridors are preserved along with the streams, ponds and lakes that make up the natural landscape of the community.



### 5.1 Options for Trail Routes

The trails routes indicated on the map of Iqaluit were obtained from interviews and conversations with individuals and groups in Iqaluit. These routes represent the most frequently used trails by people in Iqaluit as well as new routes or walking systems that people would like to see developed.

The trail design team followed up the interviews with site visits to inventory and ground-truth the location and accessibility of the routes. The routes are shown on the map labeled Potential Trail Routes and the routes are described in detail in the following section.

### 5.2 Trail Users

From the trail research it is apparent there are basically three main uses for the trail; commuting, recreation and tourism. All trails are used for a combination of activities but the most frequent users amongst Iqaluit residents are the commuter traveling to work and shopping and the recreational users who is walking in town or hiking out of town. Visitors or tourists to the community are another group who will use the trails for recreational activity.

**Commuters** walk to work, to shop or for some other form of business related activities as well walking to visit friends and family around the town. Commuters will potential be the largest number of trails users, especially amongst the segment of the population that does not have a motorized vehicle.

**Recreational Users** will use the walking trails for enjoyment and for exercise to access the open spaces and natural areas both inside and outside the build-up or developed environment of the community.

**Visitors and Tourists** include people from Nunavut as well as people from outside the territory. They can also be divided into two groups, the business visitors and the tourist and they will use the trails to commute around the community from hotels to places of business as well as getting out to sight-see in town and the area surrounding Iqaluit.

### 5.3 Development Phasing

Three options for trail development are illustrated on the Iqaluit Walking Trail Map titled Potential Walking Trails. The routes shown on the map represent the trail that would best serve the communities interests and needs.



In general, the routes provide access to different parts of the city without walking along roads and the busy vehicle traffic areas of the city. The only exception may be the downtown core where some of the trails must follow along roads in order to connect places such as the post office to the legislative assembly. In these locations sidewalks may be built in the future and they would take over the role of the trail. In the downtown core, most of the trail will travel between businesses and schools along the most popular routes that people now use.



It is recommended that development of the trail system be phased over a number of years, perhaps a ten year period. This network shown on the map can be broken down into a number of routes which offers the City flexibility in the development of the trail system. Each route will be complete in itself traveling to a specific destination and linking different part of the community together. Some of these routes will be linear, traveling to a specific destination; others will be loops that bring walkers back to their starting point.

Not all routes shown on the trail map need to be developed or will be developed in order for the trail system to work successful. However, if these routes connect all parts of the community together and have a strong emphasis on connecting to the downtown core. The potential trail plan also provides the residents with a number of routes to easily access the undeveloped areas surrounding the community.

## 5.4 Core System of Trails

The potential trail network has been divided into three types of routes, each with a different focus. Primary Trails, shown in red are the main commuter routes connecting the different parts of the community. Secondary trails, shown in green will have a strong in-town recreational focus and Tertiary trails, shown in blue are focused on recreational activities outside of the community.

The routes are predominately located in the business and residential areas of town where there are lots of people. Trails tend to go around or by-pass the industrial areas, the west and north forties as these are areas of heavy use or storage which are not as interesting or as heavily populated as other parts of town.



In selecting and developing trails for development it is best to pick routes that will access different areas of the city and routes that will reach as many people as possible. Suggested routes are downtown to Apex, which will reach a great number of people and will both commuter and recreation interest.

Another route is hospital hill, from the power plant to the breakwater as this is a recreation trail which connects two interesting parts of the community along an attractive creek. This can become a popular walking trail for local people.

Another complete trail is connecting downtown to Sylvia Grinnel Park and the Crystal 2 Peninsula where the golf course is located. Many people enjoy walking to Sylvia Grinnel Park and providing an attractive walking trail to this location will allow people to access the area and stay off the roads. In time, hopefully sooner than later, the sewage lagoon and the dump will be closed or relocated and a trail can be developed around the shore of the bay to access the camping and golf areas which are popular summer destination in the community.

A core system of trails will be selected from the network of routes shown on the City map for the initial phase of development, such as the series of routes that occur within the ring road area or alternatively selecting a route that connects the downtown area with the residential areas and Apex.

#### **Primary Trail (pink)**

Most frequently used by people in Iqaluit – mostly for walking to work, shopping or visiting other people in town. Visitors will also use these trails to connect to businesses and shopping areas in town.

Main users: commuter (residents) and visitor

#### **Secondary Trail (green)**

Used by Iqaluit residence and tourist to access scenic areas within the community, such as view points, green open spaces and streams.

These will also be favourite exercise routes for joggers and walkers within the community who want to be within the safe, familiar bounds of the community but away from the busy places and in the less intensively used open areas. This system connects streams and lakes found throughout the community.

Main users: walkers, joggers (residents) and tourists.

#### **Tertiary Trail (blue)**

Most frequently, trail users will travel destinations outside the build-up area of the community or head out onto the tundra. There are number of routes outside the community to Tarr Inlet, Crazy Lake, and up the Sylvia Grinnell River that will be the connections for the Tertiary Trails

Main users: hikers (residents and visitors) heading out of the community.



## 5.5 Trail development methods

Trail development will vary throughout the community, with most extensive development being focused on the down town cores, where gravel trail, some lined with boulders will be built. Wooden bridges, and occasionally boardwalks will be installed in



wet area. A sign system will identify the trail and provide direction for trail users who are not familiar with the community.

Away from the downtown core there will be a signage system to identify the trail, but it is anticipated that there will be no actual construction other than in a few wet areas where bridges are an obvious requirement.

This will occur along the trail connection Iqaluit to Apex.

The proposed trail design is a simple, low cost, low maintenance form of development that will last and be used by the community over the years to come. Maintenance will be one of the biggest challenges with which the municipality must deal.

## 5.6 View Points

At various places along the trails – view points will be set up with benches and interpretive information. These sites will be within the more heavily used areas of the community and will encourage visitor as well as local people to get out to enjoy the community.

## 5.7 Preliminary Trails Design Options

The main design elements that make up the trail system are the types of trail, the development of the trail site and the trail signage system. In this section, these options for designing these items are described in detail. Two preliminary design options for the trails, structures, landscape and signage will be explored.

Design Motif

Rock

There are two options for creating a distinctive design motif for the trail system, one option would use wood as the motif and the second option would use stone.



### Wood Motif

The wood motif is based on large rough cut lumber, creating a distinctive visual impact from the large timbers and rough-hewn appearance of the timbers. In addition the timbers can be stained incorporating the City colours into the wood. Wood will be used for the construction of trail makers, signs, bridges and boardwalks.

### Rock Motif



The rock motif use local stone to accent the trail elements. Stone is not a flexible a building medium as wood and it will still be necessary to use wood in the construction of bridges and boardwalks. The stone motif, which is distinctive of Iqaluit, will be used in construction of trail makers and signs as well as to define the trail in some locations. In addition, other furnishing, such as benches and interpretive signage can be designed in stone and

stone paving (flagstone) can be laid in special locations such as around benches, interpretive areas and locations that connect to the asphalt side-walk paving.

## 5.8 Trails

As indicated above, the three main uses for trails will be commuting, recreation, and to a lesser extent for tourism and the different types of trails have been designed with these uses in mind.

### Non-Motorized/Motorized Trails

It is recommended that the trails will be used for only non-motorized traffic for pedestrians and bicycles. The study did take into consideration motorized vehicle traffic in relation to the trails, specifically the skidoo traffic and All Terrain Vehicles (ATV). However, a number of the people interviewed, including the elders indicated a concern for their personal safety when confronted with snow machines and ATV and for this reason, the recommendation to separate non-motorized from motorized traffic is put forward. This presents a few challenges as some of the trail routes proposed are also routes used by snow machines and in some instances, there is limited space to physically separate these uses. There may be certain locations where the two uses may need to share the same trail surface, these zones will require special attention when being designed to ensure safe use by all. Signage will be installed along the trail routes indicating the restricted use.



## ATV Trails



ATV traffic in combination with pedestrian use was explored briefly as there is a need for developing specific routes for ATV's to access the tundra outside the community. One option is to designate some routes for ATV traffic and pedestrian users will need to use these trails with caution. The advantage of designating ATV routes is the reduction in uncontrolled motorized vehicle traffic which is increasing destroying the tundra within the Municipal boundary. The working

ATV, those used for hunting and camping are not the main concern, rather the increasing number of recreational users that “race” around the community and “do doughnuts” on the tundra are rapidly becoming a safety issue, as well as a major source of destruction to the environment.

The challenge of restricting or controlling motorized vehicles will be a major drain on the Cities' by-law personal and will require policing in areas of town that may not always be in close proximity to the road system.

## Pedestrian and Bicycle Trails



The ideal trail system is one with each use separate from the other, in other words, pedestrian and bicycle traffic have their own routes. However, the practicalities of space and costs do not make this possible and pedestrian and bicycle users have learned to co-exist on a shared trail system. Numerous examples of this type of system come to mind, and the National Capital Bicycle Trail Routes is one of the best examples in the country. Multiple-use requires that trail routes be wide enough to accommodate the

traffic; in heavy use areas, such as some parts of the downtown core trails may be up to 3 to 3.6 metres wide. In less busy areas trails can be 1.5 to 1.8 metres in width. When designing the trail system in detail consideration must be given to the combined usage.



## Materials

### Gravel and Natural Surfaces

As indicated earlier in this report, the trails will be constructed with gravel or will be on “existing grade” which means, the tundra or sand or gravel surface that are found throughout different parts of the community. In areas where gravel has already been placed, efforts will be made to make use of this material.

### Trail Edge

Two easy options to install trail edging are wood edging (2X4/4x4) or rock edging 300 mm + diameter. The rock is readily available and provides a natural finish to the trail, wood provides a clean, distinct edge. Both edges will require maintenance and in time the wood will deteriorate and need to be replaced.

### Paving or Flag Stones

Paving Stones or flags stones may be used in high traffic areas, however these will be associated with special features such as benches or lookout or signage to created a unique “dressed-up” quality to the place. An example of flagstone paving is the stone patios installed in the Elder’s park near the Elder’s centre. Alternatively, interlocking pavers, a uniform flat and smooth edge manufactured stone can be used on these locations.

### Trail Dimensions

Trail dimensions, recommended minimum widths for trails will vary depending on use:

- Pedestrian low use 1.5-1.8 metres
- Pedestrian high use 2.0 metres
- Pedestrian/bicycle 3-3.6 metres

These dimensions may vary by 300 mm, however the final width must be sufficient to accommodate small machines such as a bob cat, and in some locations where large quantities of gravel are require, then the trail will need to be wide enough to accommodate a gravel truck. Alternatively, an ATV with a trailer can be used to make numerous trips to haul gravel to a secluded and fragile site.

## 5.9 Trail Structures

In wet locations and at stream crossings there will be a requirement for boardwalks or bridges, however, these types of structures will be kept to a minimum to reduce maintenance costs. These structures will be constructed from pressure treated lumber.





## 5.10 Operation and Maintenance Requirements

A maintenance program is an essential element to the successful operation of the trail system. We will explore maintenance requirements for the trails and present the information in a brief report. These maintenance requirements will have a direct bearing on the design of the trails, for example, low maintenance concepts and simple trail designs often work well together. We will strive to achieve these objectives while producing an attractive and functional trail system. Items to be taken into consideration include:

### **Summer/winter**

Summer maintenance will consist mainly of maintain the surface and edging of the trails as well as repairs and upgrading furnishing, this can be an ongoing program within the cities' budget

A frequent question asked in interviews was whether trail will be maintained in the winter. Snow removal is an expensive and time consuming activities, therefore snow clearing will be limited to a few of the major trails within the most heavily used walking areas in town.

### **Low maintenance options**

As mentioned earlier, in an effort to reduce construction and maintenance costs, not all trails will be surfaced with granular material and the majority of the routes will be natural tundra surface. In time, as the City expands and there is more wear and tear on trails and there are more funds for maintenance, then more trail surfacing may be completed.

### **Garbage**

Installation of garbage containers require regular pick-up by the city staff, this program will help maintain the city's environment in clean and reduce the amount of litter. However, as with trail development, installation of garbage containers can be phased in over time, keeping pace with the cities' capability to maintain this service.

### **Trail Control and By-laws**

Safe use of trails is essential to the success of the trail system – by-laws and traffic enforcement to prevent motorized vehicles from using the trails must be a major part of the trail maintenance program, especially in the early stages of development when people will need constant reminders that the trails are for the use of non-motorized traffic only, principally pedestrians.



Section

6.0

## *Partnerships*

Funding partnerships are available from various Government organizations, such as Environment Canada's Community Greening Program. In addition, organizations in Iqaluit, such as the Iqaluit Rotary have volunteered to "adopt" a section of the trail and fund the development or actually construction sections of the trail.

Section

7.0

## *Class D Cost Estimate*

Cost of trail construction will vary depending on the location of the trail and the surface and sub surface conditions. The most expensive construction will be in wet areas where it is difficult to access the trail and large quantities of gravel will be required to create a firm base for the walking surface. Other expensive areas will be trail locations that are distant from roads, where gravel trucks will be too heavy for the tundra to support the heavy loads. Hauling of gravel material will require small equipment that must make frequent trips to construct the trail. Rates for construction of one metre of trail in these conditions may be fifty to sixty dollars (1.8 metres wide).

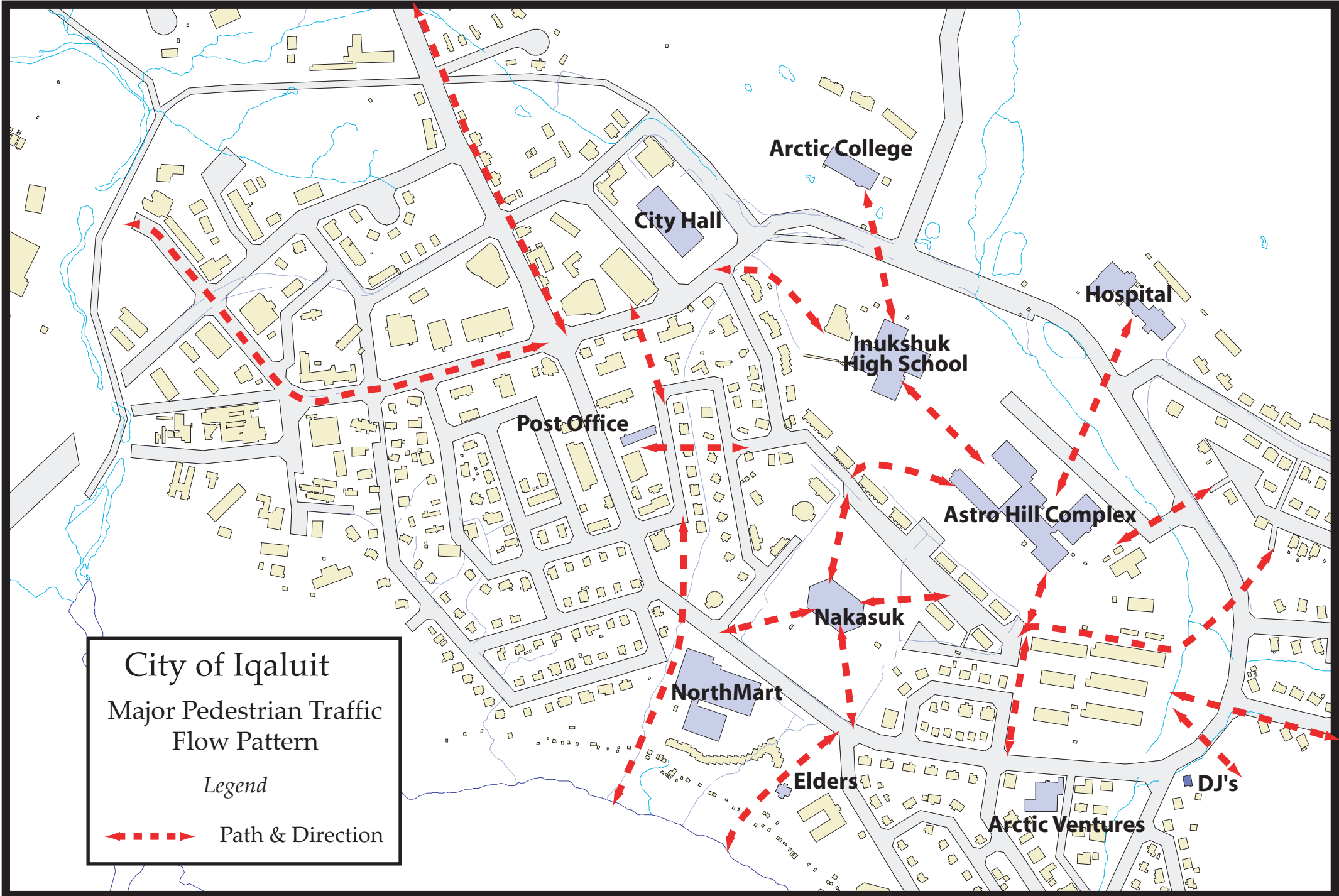


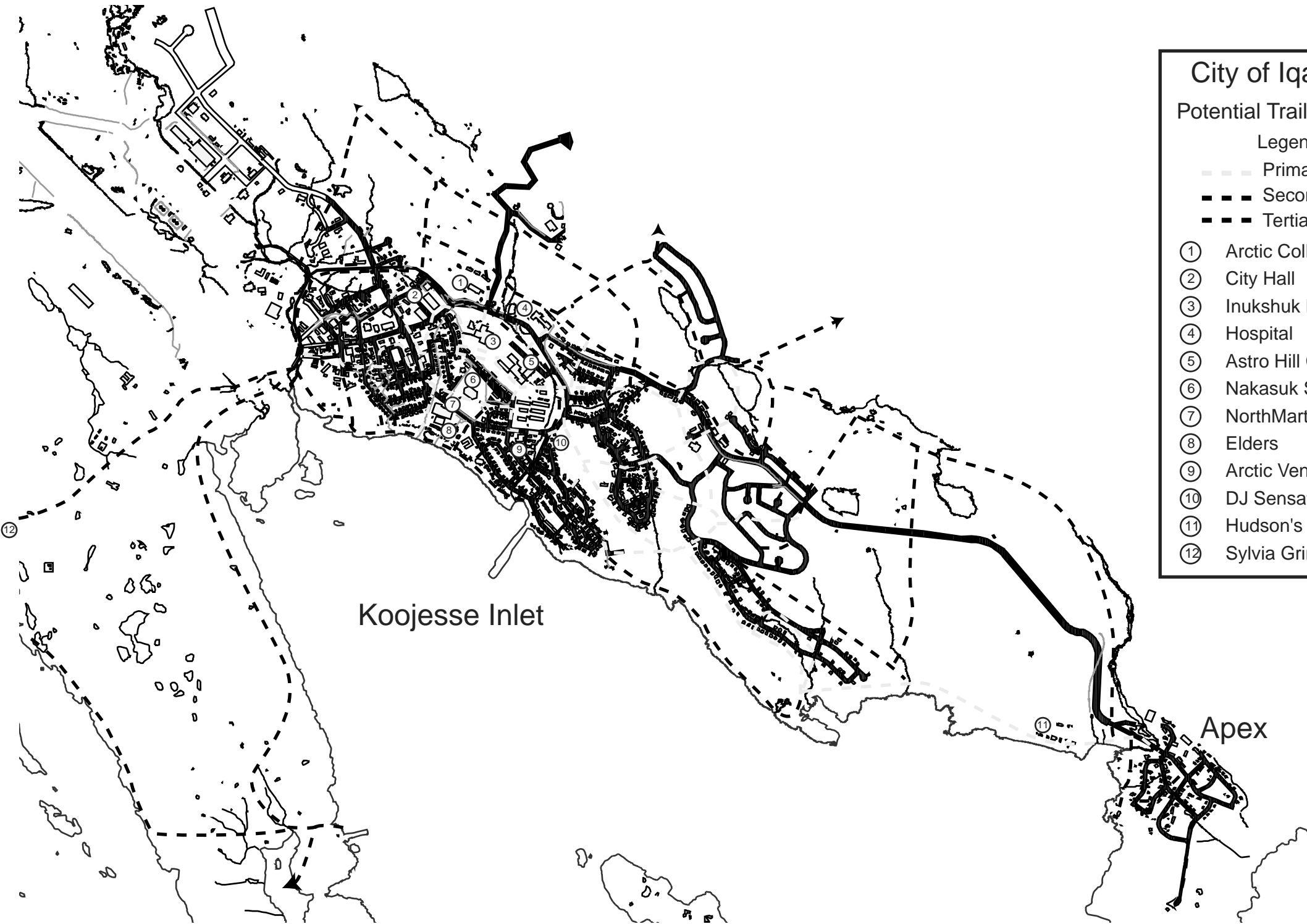
## Appendix

### Interviewee List

David St. Louis, Director of Recreation, City of Iqaluit  
Paul Smith, Crazy Caribou Bed and Breakfast  
Tanya Smith, Crazy Caribou Bed and Breakfast; Iqaluit Tourism Business Association  
Eric Leuthold, Polynya Adventure and Coordination LTD.  
Elizabeth Pinter, Manager Capital Suites, Iqaluit tourism Business Association  
Greg Logan, Nunavut Tourism  
Chris Wilson, Councilor, City of Iqaluit  
Kirk Ejesiak, Inuit Sea Kayaking; Councilor, City of Iqaluit







### City of Iqaluit

#### Potential Trail Routes

Legend

- ⋯ Primary Trails
- - - Secondary Trails
- Tertiary Trails

- ① Arctic College
- ② City Hall
- ③ Inukshuk High School
- ④ Hospital
- ⑤ Astro Hill Complex
- ⑥ Nakasuk School
- ⑦ NorthMart
- ⑧ Elders
- ⑨ Arctic Ventures
- ⑩ DJ Sensations
- ⑪ Hudson's Bay Bldgs.
- ⑫ Sylvia Grinnell Park