Northern Village of Inukjuak

Community Master Plan 2025-2045

A COMPREHENSIVE COMMUNITY APPROACH
TO LAND USE PLANNING

ADOPTED APRIL 1, 2025
BY-LAW NO. 2025-02

CERTIFIED TRUE COP

Signature

April 1,202

NORTHERN VILLAGE OF INUKJUAK

By-law No. 2025 - 02

Concerning the adoption of a new Master Plan for the municipal territory.

Whereas pursuant to subsection 176 (1) of *An Act respecting Northern villages and the Kativik Regional Government* (CQLR, c. V-6.1; hereinafter the Kativik Act), the Municipal Council (hereinafter the Council) may adopt a by-law for the making of a Master Plan for the municipal territory, specifying the purposes for which each portion of the territory included in the plan may be used, and to enact that such a Master Plan become obligatory;

Whereas pursuant to section 167 of the Kativik Act, the Council may provide for the issuing of permits or certificates in relation to the application of a by-law contemplated in section 176 of the Kativik Act;

Whereas pursuant to By-law No. 2007-02 concerning the adoption of the Master Plan for the municipal territory, the Council has adopted a Master Plan for the municipality;

Whereas the continued development and subsequent expansion of the Northern Village within municipal boundaries requires that a new Master Plan be adopted in order to account for the numerous changes that have taken place since the adoption of the previous Master Plan;

Whereas a new Master Plan has been drafted, a copy of which has been appended to and forms an integral part of the present by-law;

Whereas the appended Master Plan is the result of comprehensive community planning exercise, initiated in 2016, aimed at providing the community with a roadmap to achieve its desired vision for the future;

Whereas the Council has reviewed the new Master Plan and deems it necessary to adopt it in order to update the orientations that will guide the harmonious development of the community;

Whereas a notice of motion for this by-law was duly given during the preceding sitting of the Council held on March 4, 2025.

THEREFORE, the Council of the Northern Village of Inukjuak, by this by-law, enacts and decrees as follow:

1. the preamble is an integral part of this by-law;
2. the appended Master Plan for the municipal territory be adopted;
3. the appended Master Plan replaces any previous Master Plan adopted by the Council;
3. this by-law shall come into effect the date of its publication in accordance with section 138 of the Kativik Act;
4. once published, the Secretary-Treasurer shall transmit a copy of the present by-law without delay to the Kativik Regional Government as per section 160 of the Kativik Act.

IN FAVOUR: 6 (six)

Inukjuak Council By-law No. 2025-02, page 2

OPPOSED: 0 (zero)
ABSTENTIONS: 0 (zero)
ABSENTEES: 1 (one)
DATE OF ADOPTION: April 1, 2025
MAYOR'S SIGNATURE: (S)
SECRETARY-TREASURER'S SIGNATURE: (S)
DATE OF PUBLICATION: April 1, 2025

By-law number	Date of Adoption
2025-02	April 1, 2025

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List of Acronyms

CLSC	CENTRE LOCAL DE SERVICES COMMUNAUTAIRES
CEN	CENTRE D'ÉTUDES NORDIQUES (CENTRE OF NORTHERN STUDIES)
FCNQ	FÉDÉRATION DES COOPÉRATIVES DU NOUVEAU-QUÉBEC
ISQ	INSTITUT DE LA STATISTIQUE DU QUÉBEC
JBNQA	JAMES BAY AND NORTHERN QUEBEC AGREEMENT
KI	KATIVIK ILISARNILIRINIQ
KRG	KATIVIK REGIONAL GOVERNMENT
LHC	LANDHOLDING CORPORATION
LIDAR	LIGHT DETECTION AND RANGING
MELCCFP	MINISTÈRE DE L'ENVIRONNEMENT, DE LA LUTTE CONTRE LES CHANGEMENTS CLIMATIQUES, DE LA FAUNE ET DES PARCS
MRNF	MINISTÈRE DES RESSOURCES NATURELLES ET DES FORÊTS
MTMD	MINISTÈRE DES TRANSPORTS ET DE LA MOBILITÉ DURABLE
NAICS	NATIONAL AMERICAN INDUSTRY CLASSIFICATION SYSTEM
NHB	NUNAVIK HOUSING BUREAU (FORMERLY KMHB KATIVIK MUNICIPAL HOUSING BUREAU)
NRBHSS	NUNAVIK REGIONAL BOARD OF HEALTH AND SOCIAL SERVICES
NV	NORTHERN VILLAGE
SHQ	SOCIÉTÉ D'HABITATION DU QUÉBEC

Statement From the Council

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We are pleased to present our long-awaited 2025 Inukjuak Community Master Plan.

This document is an update to our previous Master Plan. As a holistic planning tool, the Community Master Plan will help us guide and manage development projects with a vision for the next 20 years.

The Land Use Plan and proposed new development areas reflect the community needs and wishes expressed during the community consultations. At the same time, we want future projects to respect Inuit values and cultural traditions. The Northern Village is responsible for making sure we, as a community, follow and put into action the new Master Plan. We are committed to work in the best interest of our Inukjuak community.

We dedicate this Community Master Plan to:

all our ancestors and Elders for holding and sharing historical and cultural knowledge so we may continue to preserve and pass on Inuit ways of living ; to our youth who embody the hopes and dreams for our collective future ; and to all Nunavimmiut, near and afar.

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Introduction

This document represents a new edition of the Master Plan of the northern village of Inukjuak, replacing the last master plan adopted by the northern village council in 2009.

As Inukjuak's population continues to increase and the village expands, it is important that land use planning tools support the development of an economically, environmentally, and socially resilient community that meets the needs of current and future generations. The Master Plan represents a contemporary planning approach for the village of Inukjuak. Rooted in consultation and a holistic understanding of the community's context, this Master Plan outlines the preferred direction for growth and development for Inukjuak.

The Master Plan incorporates elements from the 2016 Master Plan and Background Report, providing updates where necessary and when data was available. This Master Plan is applicable only within the municipal boundaries of the northern village of Inukjuak.

To facilitate the use of the document, the Master Plan is divided in two main sections. The first section provides a comprehensive overview of the Inukjuak community context and needs, while the second section defines policies, processes and how they will be implemented. This section also includes the land use map, which summarizes the constraints and potential for community development on a 20-year horizon.

Image 1 — Photograph of the Village of Inukjuak From Across the River[1]

1 Unless otherwise cited, photographs in the master plan were sourced from the KRG

PLANNING APPROACH

The planning approach used for this Master Plan is based on a comprehensive community planning approach, a holistic process that enables a community to build a roadmap to achieve its desired community vision. It is an important tool on the path to sustainable growth. This approach leads to community-driven documents which are adapted to their local contexts. Furthermore, this approach addresses a range of important aspects of community life. These elements are presented in Graph 1. The Community Master Plan is a planning tool used to integrate these elements into a cohesive planning approach and set objectives for concrete actions. These objectives are presented in detail in Chapter 5.

This Community Master Plan was developed collaboratively with the Kativik Regional Government (KRG)'s land use planning section and the Northern Village (NV) of Inukjuak to ensure that the community's needs are reflected, and that objectives set are feasible. The Master Plan represents not only a planning vision, but a working document that can be adapted to the community's evolving circumstances as new projects and initiatives continue to evolve.

Graph 1 — Elements of the Community Master Plan

Inspired by the Comprehensive Community Planning wheel from Indigenous Services Canada

PURPOSE

- To build a community that is safe, accessible, and vibrant, and where community traditions and culture are respected.
- To identify opportunities for improvement of services and amenities.
- To determine objectives for policy and program interventions to support community well-being.
- To adopt a land use planning approach that is adapted to the community's needs and context.
- To give Council a tool for making the best use of the space available in the village.
- To identify appropriate areas for different land uses to ensure that they improve community life and do not conflict with other land uses.
- To protect significant (cultural or environmental) areas from development and to protect access to the land, the water, and the sea ice.
- To guide Council in designing, locating, and timing the building of new infrastructure.
- To allocate sufficient land for different land uses in the community and accomodate population growth.
- To create new neighbourhoods for housing, businesses, and community uses.
- To encourage construction on existing vacant or underutilized lots within the village core.
- To identify natural hazards in the village (flood, avalanche zones, erosion, and unstable grounds).

DOCUMENT STRUCTURE

SECTION A - BACKGROUND INFORMATION

1. **Community Context**
   Provides a brief overview of the community.
2. **Cultural Context**
   Discusses the cultural ties that exist between community members and the land, pointing to the importance of a land management approach that responds to cultural needs and perspectives.
3. **Existing Conditions**
   Details the existing conditions of the community, from environmental to infrastructural.
4. **Community Perspectives and Needs**
   Provides a brief overview of recent community consultations, as well as a needs assessment.

SECTION B - LAND USE POLICIES

5. **Land Use Plan**
   Presents an impact-based (flexible) zoning approach to planning for the village, and a Development Strategy.
6. **Implementation**
   Provides an overview of the process to implement and amend the Community Master Plan.

Image 2 — Photograph Captured in the Village, Near the Waterfront

Section A
Background Information

01

Community Context

Map 1 — Location of Inukjuak within its Regional Context

1.1 LOCATION

The northern village of Inukjuak is located in the Nunavik region of the province of Quebec, north of the 55th parallel. It is one of fourteen villages in the region. Inukjuak represents a regional centre along the Hudson coast. It is one of the largest villages in Nunavik and is connected to the south via year-round air transportation. Inukjuak's geographical coordinates are 58°27' N and 78°06'W. The community of Inukjuak occupies a total land area of 55.63 square kilometres.

Inukjuak is situated at the mouth of the Innuksuak River on the Hudson Bay. At present, the community is largely concentrated along the northern bank of the river. Inukjuak is directly across from Saugartalik Island and is in close proximity to Bluff and Patterson Islands. The surrounding area is characterized by gentle rolling hills, expansive open lands, turquoise waters and turbulent rapids (Makivvik Corporation, 2023).

Map 2 — Aerial Imagery of Inukjuak

Source: (Google Earth, 2023).

1.2 HISTORY

The area surrounding Inukjuak – along the meandering Innuksuak River – holds various archeological sites, evidence of Inuit presence in the region for thousands of years. (Nunavik Tourism Association, n.d.). Various sites in close proximity have been identified and explored in recent years. Findings include terraced dwelling podiums, shale arrows, and ulus from the 12th century. Archeological studies at other sites demonstrate the presence of European trading posts in the early 20th century (Avataq Cultural Institute, n.d.).

Table 1 presents recent history of Inukjuak in how it relates to changes and development in the community. It should be noted that this table focuses on the steps that led to the creation of the village of Inukjuak as we know it today.

Image 3 — Drone Photograph of Inukjuak

Table 1 — Historical Timeline of Inukjuak

2000 BCE	Indigenous occupation of the site as a camp for hunting, fishing, and trapping.
1909	The Revillon Frères company establishes a fur trading post in the community, which at that time was called Port Harrison.
1920	The Hudson Bay Company establishes a post to compete with the Revillon Frères Company.
1922	Nanook of the North is filmed by Robert Flaherty in Inukjuak.
1927	An Anglican mission is established.
1935	The Canadian Government stations a Royal Canadian Mounted Police detachment in the community.
1936	The Hudson Bay Company buys out the Revillon Frères.
1937	A nursing station is established.
1951	The first school is opened.
1953 - 1955	Between 1953 and 1955, the Canadian Government forcibly relocates 17 Inuit families from Inukjuak and surrounding area to Resolute Bay and Grise Fiord (then in the Northwest Territories, now part of Nunavut) to establish a Canadian presence in the High Arctic.
1962	A Cooperative store is opened.
1967	The Fédération des Coopératives du Nouveau-Québec (FCNQ) is formally created and the Cooperative of “Inoucdjouac” is incorporated.
1975	The James Bay and Northern Quebec Agreement (JBNQA) is signed.
1978	In accordance with the JBNQA, the Kativik Regional Government (KRG) is formed to provide public services and technical assistance to the NVs.
1979	The Pituvik Landholding Corporation (LHC) of Inukjuak is incorporated.
1980	Avataq Cultural Institute is created at the request of Inuit elders in Nunavik to specifically protect, promote, and preserve Inuit culture and the Inuktitut language. Makivvik assists in the establishment of the Avataq Cultural Institute in Inukjuak.
1980	Inukjuak is legally established as a municipality.
1980 - 1982	The Société d’habitation du Québec (SHQ) takes responsibility for housing in the NVs and starts implementing a major social housing program with an emphasis on larger and higher quality units.
1992	The Daniel Weetaluktuk Museum is created in Inukjuak.
1996	After 10 years of research, consultation, government lobbying and negotiations, Makivvik – on behalf of the High Arctic relocatees – signs a compensatory agree- ment with Canada which establishes the High Arctic Relocatee Trust.
1996	10 kilometers of roads in Inukjuak are paved under the Public Roads Paving Program and marine infrastructure work is completed under the Marine Infrastructure Program, including breakwaters, a sheltered anchoring basin and access ramps.
2009	Major improvements to drinking water infrastructure are made.
2010	In Inukjuak, Minister John Duncan offers a full apology, on behalf of the Government of Canada and all Canadians, to Inuit for the relocation of families from Inukjuak and Pond Inlet to Grise Fiord and Resolute Bay during the 1950s.
2010	The fire hall and public transit garage are constructed.
2011	The Truth and Reconciliation Commission of Canada (TRC) holds hearings in Inukjuak. The TRC flowed from the 2007 Indian Residential Schools Settlement Agreement, which called for an independent commission to hear from survivors and contribute to the healing process. Statements gathered will become part of the collective memory of Canada’s residential school legacy and will be archived in a national centre.
2013	Consultations are held in Inukjuak for the Parnasimautik Report.
2014	A new childcare centre is constructed. Improvements are made to the municipal landfill.
2017	The airport terminal building is renovated and a new landfill site is developed as as the former site is restored.
2024	The Innavik Hydroelectric clean power project is constructed to replace the diesel generators and reduce greenhouse gas emissions.

Source: KRG, “Inukjuak 1993 Master Plan”; Makivvik, “Inukjuak”; Canadian Encyclopedia, “Nanook of the North”; MC et al., “Parnasimautik 2014 Consultation report”; SHQ, “Housing in Nunavik”; KRG, “2009 Annual Report”; KRG, “2010 Annual Report”; KRG, “2017 Annual Report”; National Observer, “Hydroelectric clean power project brings sweet sounds of silence to high Arctic”

1.2.1 Historical Monuments

There are two monuments in Inukjuak that memorialize significant events for the community. Inaugurated in 2011, the High Arctic Memorial (Image 4), depicts an Inuk looking out to sea. Designed by Siasi Smiler, whose family was relocated to Resolute Bay, the memorial memorializes the forced relocation of Inuit from Inukjuak to the High Arctic in the 1950s by the federal government. The families were relocated to Grise Fiord and Resolute Bay, both in what was then the Northwest Territories and is now Nunavut, over 1,000 kilometres north of Inukjuak.

The Inuit families who were relocated were given no choice in the matter, and were told that they would be allowed to return to Inukjuak if they wanted. This was not true, however, and the displaced Inukjuamiut were forced to adapt to a much harsher climate. Despite being promised food and shelter by the federal government, the amount received was insufficient. Moreover, they were unfamiliar with the best hunting or fishing areas, and were not accustomed to the climate, nor phenomena such as the polar night and the midnight sun.

Eventually, they learned the migration routes of beluga whales, and were able to survive due to their ability to adapt. The High Artic Memorial pays tribute to those who were displaced from their communities as well as those who were left behind (Rogers, 2011). In celebration of the 100th anniversary of the release of the documentary film by Robert Flaherty, Nanook of the North, a sculpture of Allakkariallak, the man who played Nanook, created by Patrick Thompson, was unveiled in 2022.

Image 4 — Photograph of the High Arctic Memorial in Inukjuak

Image 5 — Photograph of the Nanook of the North Statue in Inukjuak

1.3 GOVERNANCE

1.3.1 Territorial Framework of the Kativik Region

The *James Bay and Northern Quebec Agreement* (1975, JBNQA) established the first modern land claims settlement for Inuit communities north of the 55th parallel within the province of Quebec (the Kativik region)[2] . Section 7 of the JBNQA divides the territory into land categories and defines ownership and hunting, fishing, and trapping exclusivity for each category.

- **Category I lands** are under the ownership of the Landholding Corporation of each Inuit community, except for subsurface rights, which belong to the Quebec Government.
- **Category II lands** refers to lands in the public domain on which Inuit retain exclusive hunting, fishing, and trapping rights, and the right to establish and operate outfitting facilities.
- **Category III lands** are publicly owned lands, on which Inuit, Naskapi, Cree, and non-Indigenous people share uses.

Beyond the establishment of land categories, the JBNQA includes provisions for environmental and social impact assessments and review procedures applicable in the Kativik region for projects under the jurisdiction of Quebec and Canadian governments. Section 23 of the Agreement further outlines a series of guiding principles that must be taken into consideration during project planning and analysis. These are responsive to the need for protecting Indigenous societies and economies, mitigating impacts on Indigenous peoples, protecting hunting, fishing, and trapping rights, and ensuring the participation of Indigenous peoples and regional residents.

Furthermore, the JBNQA (Section 12) and the Act respecting Northern Villages and the Kativik Regional Government (Kativik Act, 1978) (Section 13) permitted the establishment of a municipal system in the Kativik Region. Today, the 14 villages (except for the village of Puvirnituq) are located within Category I lands. Map 3 illustrates the municipal boundaries of the village of Inukjuak in relation to Category lands.

1.3.2 Kativik Regional Government

The Kativik Regional Government (KRG) was created in 1978 pursuant to the James Bay and Northern Québec Agreement to deliver public services to Nunavimmiut. Many of the KRG's responsibilities are stipulated in the Act respecting Northern Villages and the Kativik Regional Government (Kativik Act), such as transportation, police, sustainable employment, renewable resources, municipal public works and civil security. Other mandates have been delegated to the KRG by the region's municipalities and the Québec government. The KRG is also mandated to provide technical assistance on land use planning matters for the region's 14 northern villages. This role includes the production of maps and the creation of planning decision-making tools for the villages (master plan, zoning by-law, basemaps, etc.)

1.3.3 Northern Villages

Nunavik's 14 northern villages operate as municipalities, each being governed by an elected Mayor and Municipal Council. The powers and responsibilities of the NVs are stipulated in the *Kativik Act*. Pursuant to Section 176 of the *Kativik Act*, the roles and responsibilities of the NV include the following:

- The creation and adoption of a Master Plan and zoning bylaw covering the municipal territory.
- Regulating land use within the municipal territory.
- Granting permits for development.
- Review permit applications for development

1.3.4 Landholding Corporations

Landholding Corporations (LHCs) are governed by the Act respecting the Land Regime in the James Bay and New Québec Territories. LHCs are non-profit entities which, pursuant to this Act, receive and hold Category I lands. LHCs are composed of the Inuit beneficiaries affiliated to their respective community.

The purpose of LHCs is to administer lands on behalf of community members and promote the cultural, environmental, and social well-being of beneficiaries. In Inukjuak, Category I lands are held by the Pituvik LHC. It is governed by a Board of Directors

As landowners, LHC responsibilities include the following:

- Establish and administer policies and guidelines for the development of Category I lands.
- Identify and allocate Category I lands for use and occupancy purposes.
- Grant easements, usufruct rights, leases, as well as other use and occupancy rights, on Category I lands.

1.3.5 Nunavik Housing Bureau

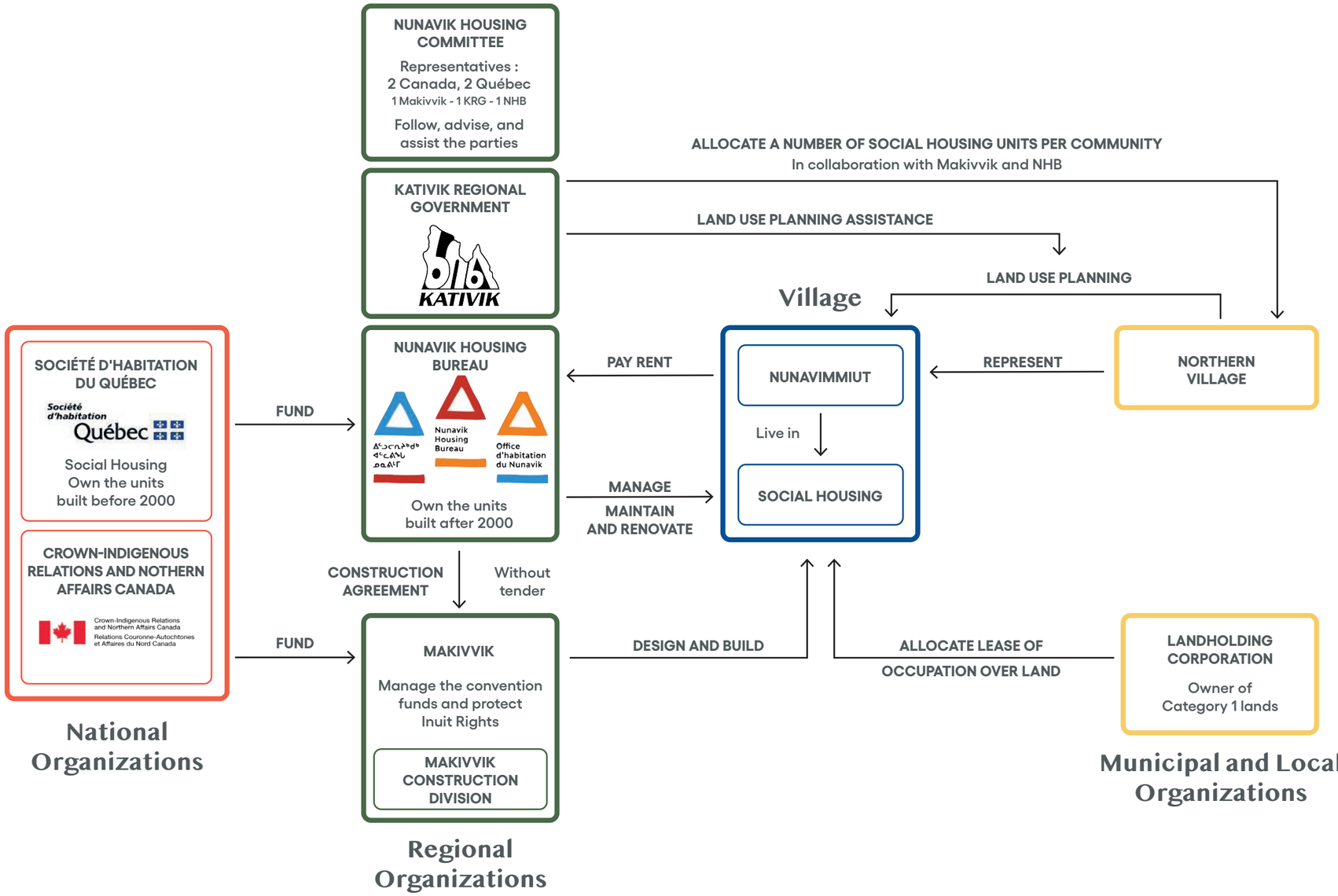
The Nunavik Housing Bureau (NHB), established under Article 57 of the SHQ Act (S-8 – Act respecting the Société d'habitation du Québec), was created in 1999 at the request of the Kativik Regional Government to manage and maintain the social housing in the Northern Villages of the Kativik region. It became operational in 2000. Today, the NHB acts as the designated representative of the Société d'habitation du Québec to ensure the management of the social housing stock and its maintenance. Housing stock consists of 3550 housing units spread over the 14 communities of Nunavik. NHB houses 98% of the population of Nunavik, a total of nearly 14,000 people.

The NHB is managed by a board of directors. It has seven members, three selected by the KRG, two by NHB tenants and two by the Québec Minister of Municipal Affairs and Land Occupancy.

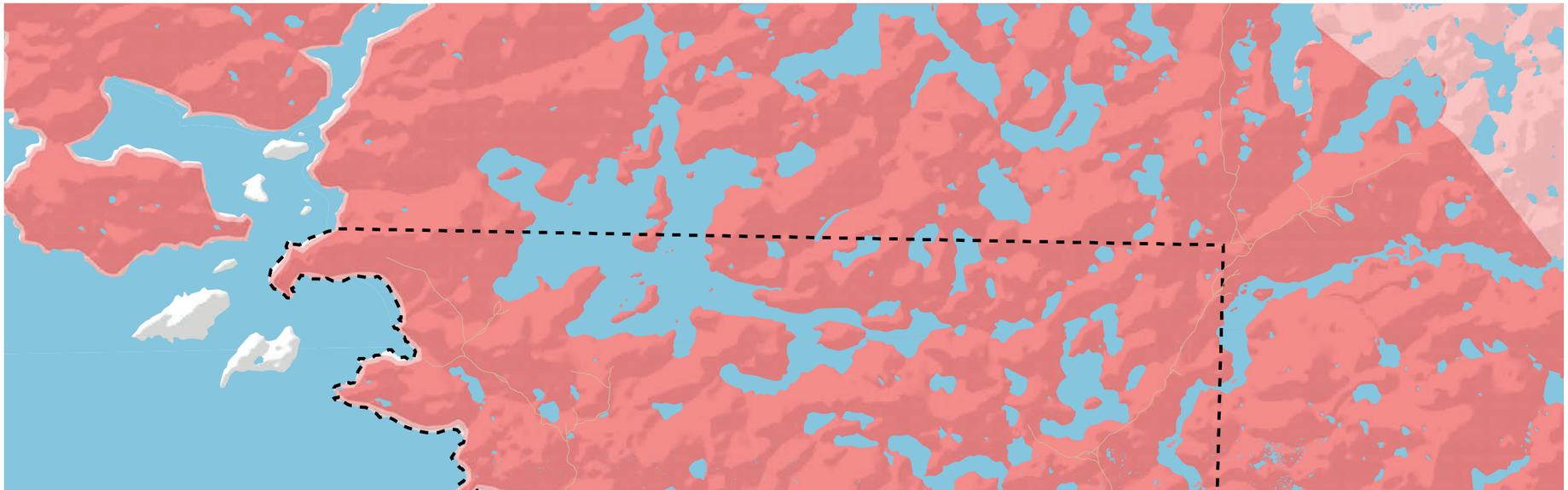
The organisation also manages a Program Promoting Home Ownership and Residential renovation in the Kativik region that allow Inuit families to benefit from a Québec government subsidy covering 75% of the cost of building a private home (non social-housing).

2 The Kativik Region refers specifically to the Territory made of portions of the Nunavik region within the Province of Quebec, as defined in the *Kativik Act* (Section 2(v)). It excludes all offshore areas, islands, and the land areas under the jurisdiction of Nations, the Government of Canada, the Government of Nunavut or the Government of Newfoundland and Labrador.

Image 6 — Inuit Housing Governance Schematics



Map 3 — Inukjuak Category Lands



LEGEND

- Municipal Limits
- Category I
- Category II
- Land Outside of the Kativik Region

NOTES

1:60 000
0 1 250 2 500 3 750 m

02

Cultural Context

2.1 APPROACH

Cultural perspectives in Nunavik's communities are highly intertwined with the land, water, and local ecosystems. In this way, the land forms the cultural foundation of village communities. To plan land uses of these communities, it is essential to have a firm understanding of local perspectives of the land and how these intersect with community well-being.

To this extent, the KRG worked closely with two communities (Ivujivik and Kangiqsujuaq) to better understand the cultural context of the land. Detailed Interviews with Inukjuak community members were not possible at the time of writing. It is important to note that cultural practices and traditions vary across villages; However, the information provided by community members from Ivujivik and Kangiqsujuaq can serve to illustrate the broad cultural context of Nunavik's villages and inform the direction the Community Master Plan of Inukjuak. In order to conduct cultural context interviews, the northern villages were approached to identify appropriate interview participants. Potential participants received information relating to the master plan and examples of questions they would be asked. Selected interviewees were compensated for their time and knowledge. Interviews took place in person where a representative from the KRG confirmed the interview details with all participants before proceeding with the formal interview. Interviews were recorded and transcribed; the following summarizes the information shared by interview participants.

2.2 UNDERSTANDING OF COMMUNITY AND WELL-BEING

Interviewees spoke of the important role of elders in community life, as well as the role that younger generations play in supporting elders as they participate in traditional activities. Caring for the needs of elders is a priority. In turn, elders share important traditional knowledge and stories with younger generations. Furthermore, when discussing community wellbeing, interview participants emphasized that traditional food plays a role in strengthening the wellness of community members.

When leveraged appropriately, land use planning tools have the potential to support community well-being, including their efforts to preserve their traditional knowledge and cultural practices as the villages continue to grow. Traditional knowledge, cultural practices, and cultural understandings of the land should be central considerations in the land use planning process.

Photograph of a Community Member Preparing Birds

Photograph of an Inukjuak Community Member Building a Boat

Map 4 — Map of Cultural Heritage Sites in Inukjuak

LEGEND

- Municipal Boundary
- Archaeological Site

1:20 000

0 420 840 1 260 m

03

Existing Conditions

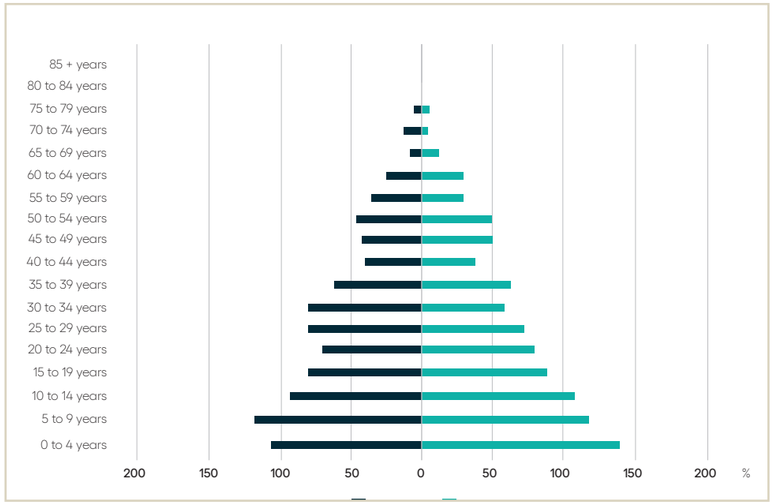
3.1 DEMOGRAPHICS

3.1.1 Population Overview

According to the latest data provided by Statistics Canada in 2021, Inukjuak's population is comprised of approximately 1,821 people. As shown in Graph 2, the population of Inukjuak is relatively young, with the majority of the population being under the age of 25 and more than a third of the population being under the age of 15. The median age of Inukjuak, 22.2, is significantly lower than the median age of the Province of Quebec, 43.2 (Statistics Canada, 2021b). The median age for Inukjuak is in line with the median age of other villages, such as Quaqtaq (22), Ivujivik (23), and Kangiqsujuaq (23.9). This presents important considerations for housing and age-appropriate facilities and services. While these statistics illustrate the village's relatively young population, projections conducted at the regional level show a significant increase in the senior population of the Kativik Region (Ministère de l'Économie, de l'Innovation et de l'Énergie, 2022). This is further discussed in Section 4.2.

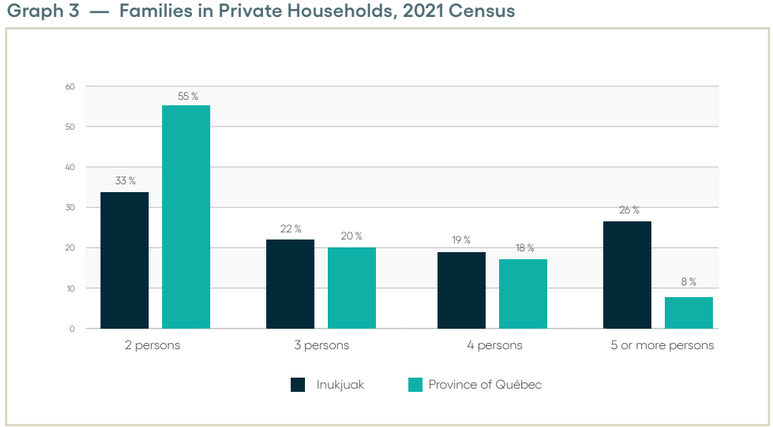
As illustrated in Graph 3, most families in Inukjuak are two-person families, with the second most common being families of five or more persons. Inukjuak, however, has a relatively constant distribution between two-person families to five or more person families compared to the province of Quebec, which has a much higher distribution of two to three-person families. The average size of census families in Inukjuak in 2021 is 3.6 persons.

Graph 2 — Population Pyramid, 2021 Census



Source: (Statistics Canada, 2021a)

Graph 3 — Families in Private Households, 2021 Census

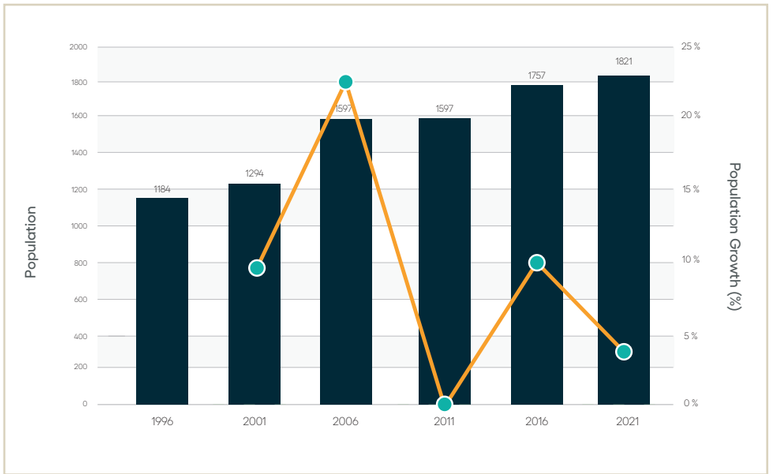


Source: (Statistics Canada, 2021a, 2021b)

3.1.2 Population Growth

Between 1996 and 2021, the population of Inukjuak has grown by 54%. This is significantly higher than the rate of growth for the province of Quebec during that same period (18.7%) (Institut de la statistique du Québec, 2022). However, the rate is slightly lower than that of Nunavik as a whole (61.2%). As illustrated in Graph 3, growth in the community has been fairly constant since the 1996 census, with a more significant increase observed between 2001 and 2006.

Graph 4 — Population Growth, 1996 to 2021



Sources: (Statistics Canada, 2001a, 2006, 2011, 2016, 2021a)

3.2 URBAN DEVELOPMENT

3.2.1 Evolution of the Local Urban Context

The aerial imagery in Figure 15 illustrates the evolution and expansion of Inukjuak's built-up areas between the 1955 and 2016.

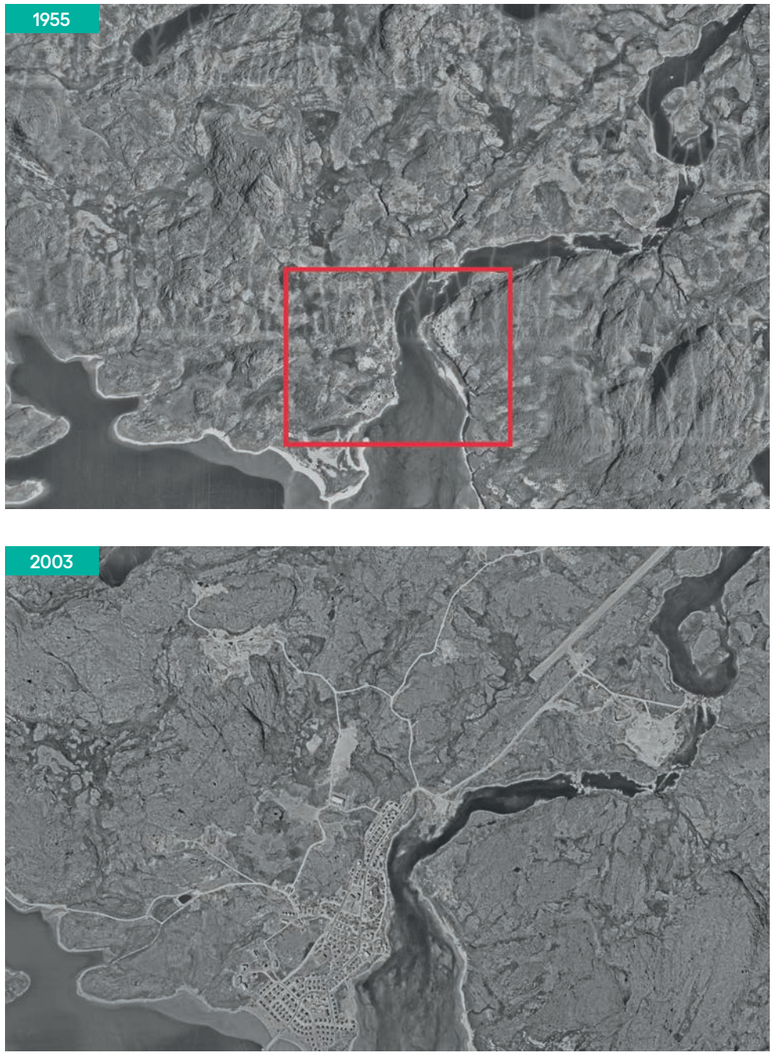
3.2.2 History of Master Planning in Inukjuak

Master planning exercises have been ongoing in Inukjuak for several decades, with Master Plans having been produced in 1980, 2001, and 2009. These documents have sought to formalize the development of the community, in an effort to plan for future needs and capacities that may arise. Inukjuak's various Master Plans reflect planning perspectives and approaches of their time. Previous Master Plans allow for a better understanding of how a community has changed throughout the years.

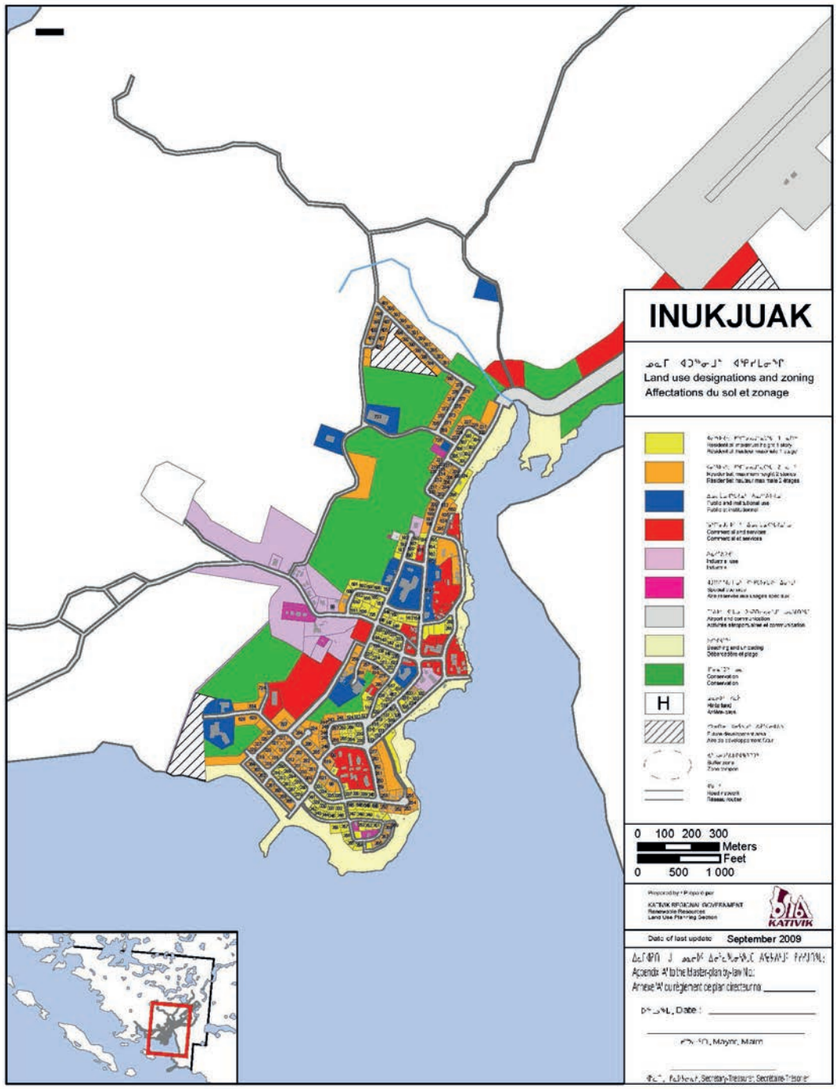
The map shown in Map 6 (from the 2009 Master Plan) reflects the built form of Inukjuak from 2009. The 2009 Master Plan map displays a traditional land use planning approach, with permitted uses being defined for each land use designation. Additionally, a draft master plan, shown in Map 7, was developed in 2016, although it was never adopted.

The 2016 draft master plan also followed a traditional land use planning approach. However, it did introduce more flexibility, with the addition of the "village core" land use. The present 2025 Community Master Plan introduces a new approach to land use planning for Inukjuak, as outlined in Section B, Chapter 5.

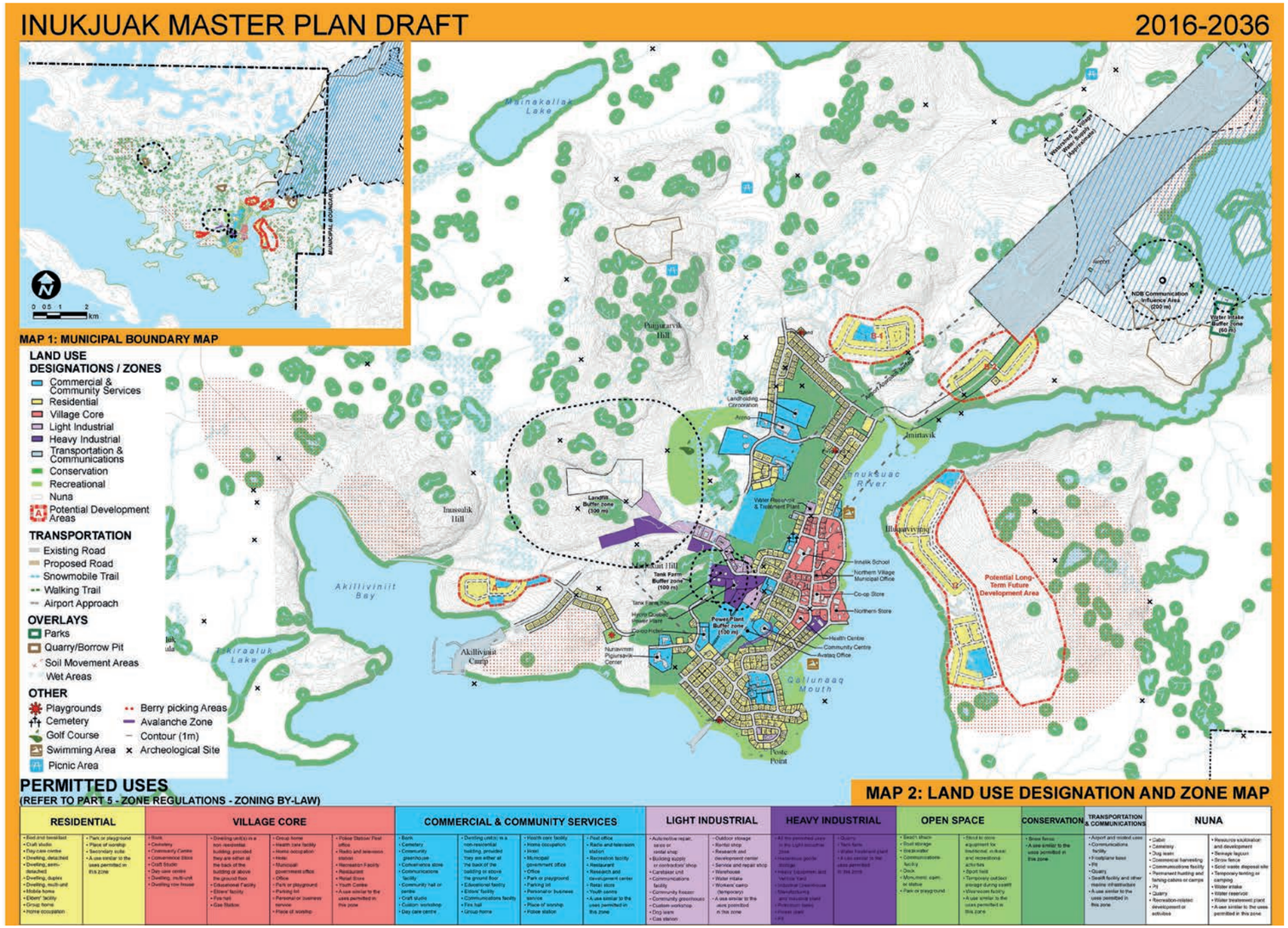
Map 5 — Aerial Imagery of Inukjuak, 1955-2016



Map 6 — 2009 Master Plan Map



Map 7 — 2016 Draft Master Plan Map



3.2.3 Key Stakeholders in Urban Development

In addition to the NV and the KRG, several other stakeholders play a role in development and construction in Nunavik's communities. These organizations and their typical construction activities are summarized in Table 2. Note that this list is not exhaustive.

3.3 HOUSING

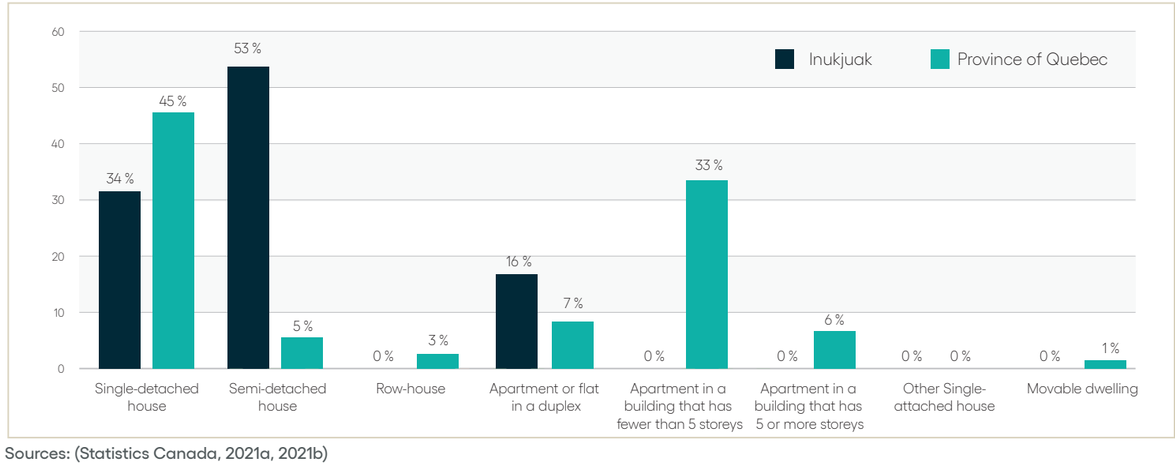
The 2021 Census reported a total of 588 dwellings and an average household size of 3.8. The vast majority, 53%, of the dwellings are semi-detached, while 31% of the dwelling stock is comprised of single-family detached, and 16% is comprised of apartments. There is a much higher distribution of lower-density housing types in Inukjuak in comparison to the Province of Quebec, as shown in Graph 5. A significant portion of the housing stock in Inukjuak was built between 1981 and 1990. It was also recorded that 18% of total occupied private dwellings need major repairs, which is triple that of the percentage for the province of Quebec 6%). Lack of appropriate housing is one of the biggest challenges facing the Inuit population in Nunavik (Société d'habitation du Québec, 2014).

Table 2 — Overview of Key Organizations and Typical Construction Activities, Inukjuak

KRG	› Municipal service infrastructure › Other community facilities	› Offices and warehouses › Staff housing
MAKIVIK CORPORATION	› Social housing › Construction camps	› Offices
PITUVIK LANDHOLDING CORPORATION	› Office	› Hotels
NUNAVIK HOUSING BUREAU	› Warehouses	
KATIVIK ILISARNILIRINIQ (KI) SCHOOL BOARD	› Education facilities, residences, and administrative buildings	› Warehouses › Staff housing
NUNAVIK REGIONAL BOARD OF HEALTH AND SOCIAL SERVICES	› Health and well-being facilities (ex. CLSC)	› Staff housing
FÉDÉRATION DES CO-OPÉRATIVES DU NOUVEAU QUÉBEC (FCNQ)	› Hotels › Stores	› Warehouses › Construction camps › Tank farms
MINISTÈRE DES TRANSPORTS ET DE LA MOBILITÉ DURABLE	› Airport terminal infrastructure and buildings › Airport roads	
HYDRO-QUÉBEC	› Power plants and energy infrastructure	› Staff housing › Transit house
OTHER	› Office buildings	› Other community assets

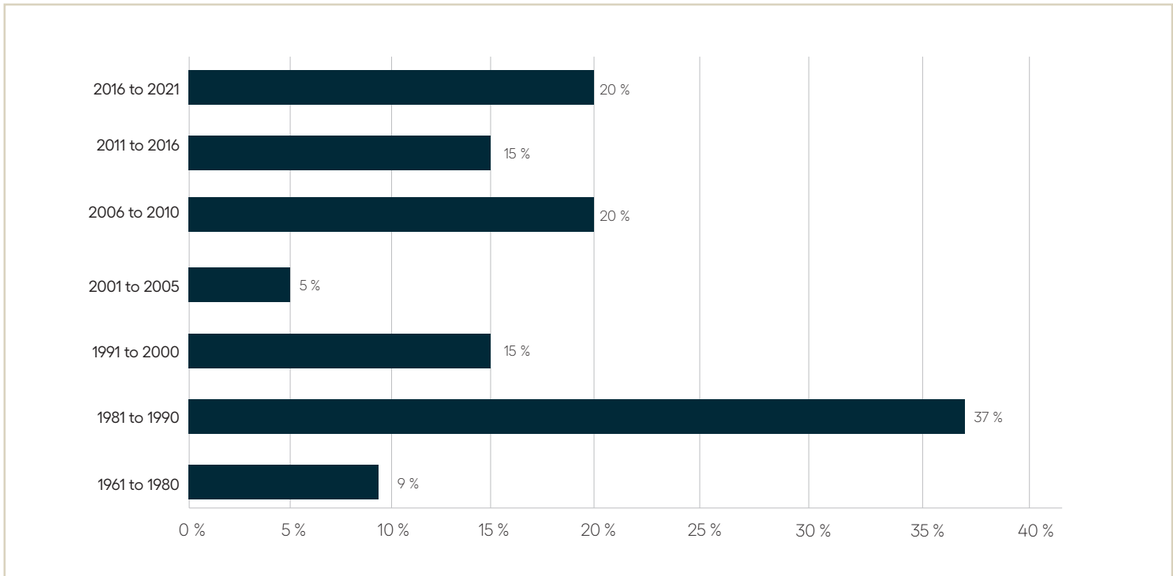
Source: (Allard et al., 2023).

Graph 5 — Occupied Private Dwellings by Structural Type of Dwelling



Sources: (Statistics Canada, 2021a, 2021b)

Graph 6 — Percentage of Total Occupied Private Dwellings by Period of Construction



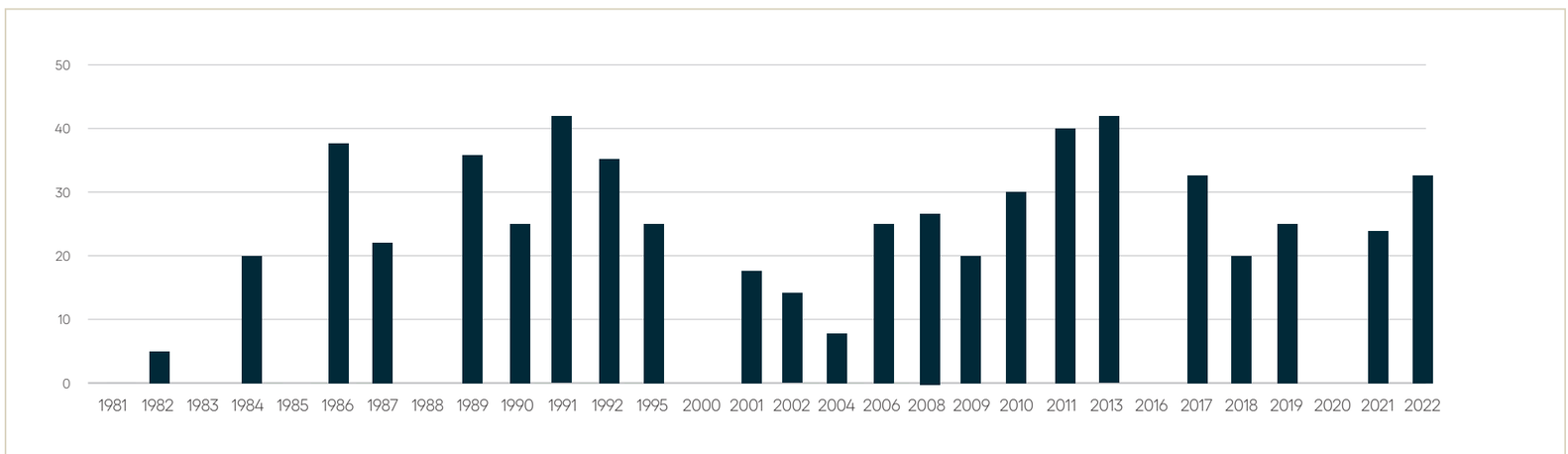
Source: (Statistics Canada, 2016)

3.3.1 Housing System

The Société d'habitation du Québec has been responsible for providing social housing services in Nunavik since 1981. Makivvik Corporation's construction division has built all social housing in Nunavik since 2000, funded by the Government of Quebec or Canada. The property rights are then transferred to the Nunavik Housing Bureau (NHB) once the units are built. The NHB's mandate is to manage and maintain the social housing in all Nunavik communities.

NHB and KRG have an annual selection process to determine which communities get allocated social housing, and how much. This process is based on a survey on social housing needs conducted every two or three years. As of 2021, there were 483 occupied housing units in Inukjuak, which is approximately 87% of the total dwelling count in 2021. The construction of social housing units in Inukjuak has occurred at fairly regular intervals, reflecting the funding distributed and the enactment of agreements by the federal, provincial, and regional governments. Graph 7 illustrates the number of social housing units constructed between 1981 and 2023.

Graph 7 — Social Housing by Year of Construction, Inukjuak, 1981 to 2023



Source: (Société d'habitation du Québec, 2014)

These are the officially recorded numbers by the SHQ. Several housing units have since been allocated to Inukjuak, according to internal documents by the KRG:

- 2017: 32 units;
- 2018: 20 units;
- 2019: 24 units;
- 2021: 24 units;
- 2022: 32 units; and
- 2024: 20 units.

Households not in social housing live in housing provided by an employer or privately owned dwellings. The very low home ownership rate is explained by a combination of several factors: high construction costs, a higher cost of living, fairly low rent payments for the most fortunate households in low-rent housing, and the difficulty of maintaining one's home due to lack of material or specialized resources. The private rental housing market is therefore virtually non-existent in the Kativik Region.

3.3.2 Projected Staff Housing

As mentioned, residential development by the Makivvik Corporation is currently underway.

In addition, number of staff housing units will be developed by the Kativik Ilisarniliriniq (KI) School Board across Nunavik's communities in coming years. The following is planned for Inukjuak:

- 2025: two fourplex developments (eight units total);
- 2026: two fourplex developments (eight units total); and
- 2029: two fourplex developments (eight units total).

Image 7 — Photographs of Housing in Inukjuak

Map 8 — Community Assets in Inukjuak

LEGEND

- Cultural
- Recreational and Leisure
- Educational
- Institutional
- Health and Well-Being
- Work, Commerce, and Food Services
- Security and Emergency Response
- Accomodation
- Other Buildings
- Cemetery
- Playgrounds

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:10 000
0 210 420 630 m

3.4 COMMUNITY ASSETS

The community assets and infrastructure in Inukjuak include roads, community and institutional buildings, marine infrastructure, drinking water, wastewater, solid waste, etc. The Isurruutiit Program is a partnership between KRG and the province of Quebec around building and upgrading infrastructure related in Nunavik communities. Phase I of the program started in 1999, Phase II in 2006, Phase III in 2011, Phase IV in 2016, and Phase V in 2023.

The three components of the Isurruutiit Program are as follows:

- infrastructure upgrading work;
- buildings and other municipal facility construction and renovations (offices, garages, and outdoor recreation infrastructure); and
- vehicle and heavy equipment purchases and overhauls (for drinking water, wastewater, solid waste, and roads).

The Phase V agreement will allow the KRG to continue to invest in municipal infrastructure and to conduct studies.

3.4.1 Community Facilities

Among other community facilities, Inukjuak has an NV office, a fire hall, a community centre, a community arena, a youth centre, a greenhouse, a community freezer, a library, and three daycare centres. The community centre was renovated in 2015. A new fire hall and public transit garage were constructed in 2010. In terms of outdoor recreation, four playgrounds are available – three NV playgrounds and one playground at Innalik School. Inukjuak also has a recently constructed skatepark. Investments in upgraded community facilities are ongoing and plans for several new amenities are in the works, including an arena, a swimming pool, and a new NV office.

3.4.2 Cultural Facilities

Inukjuak is home to two cultural facilities, the headquarters of the Avataq Cultural Institute and the Daniel Weetaluktuk Museum. The Avataq Cultural Institute, founded in 1980, is dedicated to protecting and promoting the language and culture of Inuit in Nunavik. The head office of the organization is in Inukjuak, and they have an administrative office in Westmount, Quebec. The Daniel Weetaluktuk Museum, built in 1992, was entirely renovated and reopened at the end of 2005. It is the only recognized museum in Nunavik. The museum exhibits a collection of Inuit arts and crafts as well as traditional tools, hunting, and fishing gear. It also displays over 200 archeological and historical artifacts depicting the rich culture of the North stretching back thousands of years. Plans for a new cultural centre for the community are ongoing, with various potential locations being considered.

3.4.3 Education Facilities

The KI School Board was created under the JBNQA (1975) and is responsible for educational services in Nunavik. The School Board is authorized to deliver education in Nunavik at the pre-kindergarten, primary, secondary, and adult education levels. It is also responsible for designing programs and teaching material in Inuktitut, French, and English; training Inuit teachers; and organizing and supervising postsecondary education. The Board is non-ethnic and manages at least one school in each of Nunavik's 14 communities. Given the size of most schools, the limited number of pupils, and the trilingual nature of programs and staff, most classes encompass more two or three grades.

Inukjuak has three educational facilities:

- Innalik School (Primary and Secondary);
- Uquutaq High School;
- Nunavimmi Pigiursavik Vocational and Technical Training Centre.

According to analysis published by KI in 2021, school space available in Inukjuak is insufficient to meet the current and future needs of the student population. This analysis shows that the percentage of existing school space, relative to the required capacity, is at 59%. As a result, projects to expand both Innalik School and Uquutaq High School are planned, targeting a 2030-2031 timeframe.

Image 8 — Photograph of Inukjuak's Community Center

Image 9 — Photograph of Inukjuak's Skatepark

Image 10 — Photograph of the Daniel Weetaluktuk Museum

Innalik School

Innalik School was built in 1985 and has approximately 29 classrooms supported by special education classrooms, a gymnasium, a library, and administrative offices and spaces. The school accommodates primary and secondary students. It is one of the schools in Nunavik that offers Land Survival pilot classes to secondary students.

Uqqutaq High School

To address the issue of overcrowding at the Innalik School, a new high school was constructed. It has been operational since 2022 and can accommodate over 130 students.

Nunavimmi Pigiursavik Centre

Nunavimmi Pigiursavik Centre opened in 2013 and provides vocational and technical training. Participants develop personal and professional skills through coursework and activities, exploratory visits, and individual counselling. The Centre is affiliated with the Ivirtivik Centre in Montreal.

The Centre has two large multi-purpose working areas, classrooms, a computer room, a daycare centre, a gathering space, a television studio, offices, and storage rooms. The Residence comprises 26 housing units, a cafeteria for 80, a study hall, and a playroom. In addition to preparing food for students and visitors, the kitchen also serves as a training lab for students of professional cooking. The Residence can accommodate single students and students with one or two children.

Image 11 — Photograph of Uqqutaq High School

Image 12 — Photograph of a Playground in Inukjuak

Table 3 — Inukjuak's Community Assets

COMMUNITY ASSETS		INFRASTRUCTURE	
CULTURAL	**INSTITUTIONAL**	**STORAGE**	**WASTE MANAGEMENT**
Cemetery	NV Office	Garage	Landfill
Church	KRG Office	Warehouse	Wastewater treatment pond
Community centre	LHC Office	**ENERGY**	**COMMUNICATIONS**
Community freezer	Employment centre	Gas station	Satellite dishes/ communications tower
Museum	**HEALTH AND WELL-BEING**	Power plant	FM radio
Sewing centre	CLSC (health clinic)	Tank farm	**WATER TREATMENT**
RECREATIONAL AND LEISURE	Elder's residence	**MARINE**	Reservoir
Arena	Reintegration centre	Boat launch	Water treatment plant/ aqueduct
Playground	**SECURITY AND EMERGENCY RESPONSE**	Boat storage	**GRANULAR RESOURCES**
Green house	Fire station	Port and breakwater	Pits and quarries (2)
Skate park	Police station	**AIR**	
EDUCATIONAL	Rescue boat and shelter	Airport	
Schools	**WORK, COMMERCE, AND FOOD SERVICES**		
Daycare	Auto repair shop		
Adult education / learning centre	Coffee shop		
Student residence	Convenience store		
ACOMMODATION	Co-op stores		
Hotels			

3.4.4 Health and Well-Being Facilities

The NRBHSS is responsible for the delivery of health services in the Nunavik region. Services are organized locally and by sub-region — Hudson and Ungava.

Inukjuak has a local health care clinic (CLSC), a regional rehabilitation centre (Inukjuak Reintegration Centre), a youth rehabilitation centre (for girls), a women's shelter (Ajapirvik), a reintegration and rehabilitation centre for men (Unaaq Men's Association), and an elders' home (Ajagutaq).

Inukjuak's CLSC provides a range of health care and social services to the population. Other health and well-being services include the following:

- The Inukjuak Reintegration Centre provides mental health services to the regional population. The Centre provides residential care (24 hours a day) and external services to people who have been diagnosed with severe, chronic mental health problems and/or intellectual handicaps. Services provided at the Centre include vocational training, behavioural management, and training in the activities of daily living.
- The Ajapirvik Women's Shelter opened in 2010 and offers five bedrooms to shelter women and children. The majority of women who use the centre are local or from neighbouring Puvirnituq, although women from Akulivik and Umiujaq have also used the centre. The shelter is funded by the NRBHSS, and Nunavik's Ungaluk or Safer Communities program.
- The Unaaq Men's Association supports young men requiring social rehabilitation and reintegration. This facility promotes Inuit culture in the community and bridges the gap between generations of men through knowledge and skills sharing.
- The Youth Rehabilitation Centre for Girls opened in 2015. It is a treatment facility for girls ages 12 to 18. The Centre has two wings: an administrative wing, and a residential wing which can accomodate 10 girls. Visiting families can also stay onsite, in an adjacent duplex.

Broader health services are delivered through two multi-purpose facilities, the Inuulitsivik Health Centre in Puvirnituq and the Ungava Tulattavik Health Centre in Kuujjuaq. These institutions provide general hospital services and specialized care as well as long-term hospital care. Both centres also offer midwife care services and child and youth protection services.

The use of resources outside of the region is the norm for almost all specialized examinations and treatments. Some services are offered by the two health centres through visiting specialists such as gynaecologists, psychiatrists, orthopaedic specialists, etc. In circumstances where ultra-specialized care is needed, community members will often need to be referred to healthcare resources in the South.

A new CLSC is will be constructed in Inukjuak in the next few years in order to increase the village's access to care. In a 2017 survey conducted by the NRBHSS, access to reliable and consistent health services was highlighted as a community need. Mental health services in particular were mentioned as a priority.

The survey also highlighted country food as an important resource for the community (Lyonnais et al., 2017). The community of Inukjuak has access to several resources to support food security, such as a community green house, freezer, and soup kitchen. Planning for the expansions of the village should also include strategies to promote access to high-quality and nutritious food.

3.5 INFRASTRUCTURE

3.5.1 Transportation Infrastructure

Inukjuak's transportation network consists of land, marine, and air-based infrastructure.

3.5.1.1 Ground

Inukjuak's road network consists principally of an organic street grid that responds to the natural structure and constrains of the region. This urban network has evolved based on the needs of the community and the distribution of soil types that could accommodate development.

Ground-based transportation networks have benefited from the Road Paving Program, in place since 2002. This program was created through an agreement between the KRG and the Ministère des Transports et de la Mobilité durable (MTMD). It aims to improve the quality of life of Northern residents by lowering the proportion of dust generated by vehicles travelling along sand and gravel roads. This program has the added benefit of increasing the service life of vehicles, which reduces the burden of maintenance fees on residents and local organizations. This program has led to the paving of 11.4 kilometres of roads in Inukjuak. The Road Paving Program is set to start again in 2025. In addition, the following infrastructure projects are planned for Inukjuak:

- A new road leading to the new Co-op building;
- A new bridge is projected (location to be determined).

Public transit was introduced to Inukjuak in 2011. KRG operates Usijiit public transit and paratransit services. The latter service was introduced for elders and people with disabilities in 2005. Combined public and paratransit services exist in most communities throughout Nunavik. While KRG provides technical assistance for this service, villages are tasked with the operations and maintenance of the system.

Map 9 — Infrastructure in Inukjuak

LEGEND

- Airport Takeoff & Landing Zone
- Constraints Buffers
- Quarry and Borrow Pit
- Fuel Pipeline
- Water Pipeline

Water Intake Protection Areas

- Nearby
- Intermediate
- Remote

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-20

1:20 000
0 420 840 1 260 m

3.5.1.2 Marine

Since 1998, Makivvik and the Quebec Government have been funding improvements to marine infrastructure facilities via an agreement on the matter. The first phase of funding of $91.5 million was released from 1999 to 2011. In this phase, Makivvik was tasked with coordinating projects in each village. These projects have had a net positive impact on communities by improving the safety of marine access and creating greater efficiency for harvesters and sealift operations. This agreement is currently in its second phase of funding, which led to investments to improve access ramps and service areas in a majority of northern villages. The second phase of this agreement also includes investments in docking facilities for community vessels as well emergency response vehicles, such as sealift and search and rescue boats (KRG, 2014).

Marine infrastructure in Inukjuak is varied and including the following:

- A protected harbour for small craft operation, west of the village at Akilliviniit Camp.
- A larger area appropriate for sealift operations, also in the western Akilliviniit Camp area.
- A breakwater, located in closer proximity to the village centre.

The principal pier was constructed by the MTMD in 1987. This structure is approximately 65 metres in length and 20 metres in width, with a tidal range of 0.4 metres. The pier allows for convenient access to marine-based resources year-round. A wooden dock structure attached to the pier is regularly used by local fishing craft. The community of Inukjuak has identified the need for a new deepwater wharf.

3.5.1.3 Air

At present, the Inukjuak airport is the third busiest airport in Nunavik with 2,732 total aircraft movements in 2019 (KRG, 2019).

Many improvements have been made to the Inukjuak airport in recent years. 2014 saw the expansion of the airport apron, and the installation of an automated weather observation system (KRG, 2014). A new terminal building was opened to circulation in 2016. Additionally, upgrades to the airfield were completed in 2022.

The community of Inukjuak has noted several challenges with airport infrastructure due to its location on unstable grounds characterized by ice-rich permafrost. The NV has expressed interest in relocating airport facilities in the long-term, the planning of which is beyond the scope of this Master Plan.

Photograph of the Waterfront in the Village

3.5.2 Municipal Service Infrastructure

3.5.2.1 Water Supply, Storage & Treatment

Water for Inukjuak is obtained from the Innuksuak River. A water intake is located in proximity to the airport lands, approximately two kilometres upriver from the settlement. Water reservoir and treatment facilities are located within the village. Potable water is then delivered to each residence/ building and is stored in a specialized tank. In 2014, drinking water treatment systems were improved with the installation of overhaul control systems and an upgraded ultraviolet disinfection system (KRG, 2014). Municipal wastewater is collected from building via trucks which then transport all sewage to a disposal and treatment facility approximately five kilometres north-west of the municipality. This facility consists of a two-celled aerated wastewater lagoon, which discharges towards Hudson Bay.

Water supply and wastewater management are challenges in the community of Inukjuak and across Nunavik more broadly. In Inukjuak specifically, challenges include the reliability of water management infrastructure and services, including the capacity of the current delivery trucks.

Collaborative research projects are underway throughout Nunavik examining water quality, access, climate change impacts, as well as future opportunities for water management. Preliminary reports indicate that while water quality from source to tank is mostly acceptable, some opportunities for contamination exist due to lower chlorine levels and higher storage temperatures. Additionally, many families throughout the region have indicated that they supplement water from their home tanks with other sources due to fears of contamination. It has also become apparent that certain households suffer from limited access due to weather or truck conditions. Future phases of this work will continue to monitor water quality while exploring opportunities for grey/brown water reuse.

3.5.2.2 Solid Waste

Historically in Inukjuak, solid waste has been stored in a landfill site immediately to the north of the village. While this site had the capacity to remain in operation, residential development has recently begun to encroach upon it, as a result of urban development. While proximity concerns had been discussed as early as the 1980s, it was not until 2013 that a new residential neighbourhood was developed near the landfill. Residents of this new development spoke of the significant visual and olfactory impact of being in close proximity to the landfill.

Following these concerns, and a series of comprehensive studies, a 13.5-hectare site for a new landfill was selected roughly 4.5 kilometres from the community, adjacent to the wastewater treatment facility. The new landfill site is 5.7 kilometres from the existing water intake, and as such poses no threat to potable water resources of the community. Based on previously conducted population projections, this site is expected to be able to respond to the projected demand for landfill space beyond the 20-year study period (KRG, 2014). The new landfill has started to be used. The preparation of the site closure and remediation plan of the existing landfill are ongoing (Kativik Regional Government, 2023).

Waste management is a challenge for Inukjuak, along with other villages. In consultations with the Government of Quebec, several of Nunavik's communities expressed concerns with the environmental and health impacts of ground burning practices in proximity to villages (Duhamel, 2022). Several measures for reducing waste and improving waste management methods are listed in the Nunavik Residual Materials Management Plan (2021-2017), including exploring alternatives to the open-air burning of waste. A composting pilot project is currently underway in Inukjuak (See section 5 for the location of the project).

3.5.2.3 Granular Resources

Various granular resource extraction pits are in operation in the Inukjuak area. The village's quarry and borrow pits are identified in Map 10. The village's gravel pit is currently in good condition and is expected to be operational for years to come. However, according to a document published by the Kativik Regional Government, the availability of natural granular material has become restricted in Nunavik's communities (including Inukjuak), which creates limitations in terms of new construction (Kativik Regional Government, 2022).

3.5.2.4 Energy

Energy is provided by means of a diesel-powered generating facility operated by Hydro-Québec. Tanks adjacent to this facility store and provide the fuel required for power generation. The Fédération des Coopératives du Nouveau-Québec (FCNQ) is responsible for the operations of the tank farm as well as for the distribution of petroleum fuel products. The community has identified the need to relocate the tank farm facility.

Inukjuak has recently transitioning to hydroelectricity with the Innavik Hydro Electric Project (Léveillé, 2023). This project involves the establishment of a run-of-river power plant facility approximately 10 kilometres from the mouth of the Innuksuak River, which has the capacity to generate 7.5 megawatts of hydroelectricity for the area. This will reduce the community's dependence on carbon fuels for power generation and will lead to a reduction of emissions of approximately 15,000 tonnes of carbon dioxide annually. This project is also expected to bring economic benefits to the region, as it is majority-owned by Pituvik LHC. The construction of a 25 kilovolt substation was completed in 2022.

3.5.2.5 Snow Removal

Map 10 shows snow disposal sites in Inukjuak, as identified in a 2012 study of the village (Barrett et. al, 2012). The study recommends new potential sites for snow disposal, and identifies sensitive areas where snow disposal should be prohibited. A new study of snow removal in Inukjuak could provide up to date information on snow disposal sites and best practices.

Photograph of the Innuksuak River

Map 10 — Snow Disposal Sites in Inukjuak (2012 Report)

LEGEND

- Snow disposal sites
- Potential snow disposal sites
- Snow disposal prohibited

1:13 000

0 275 550 825 m

Data source:(Barrette et al., 2012).

3.6 ECONOMY

As with all northern communities, Inukjuak's economic activities can be divided into the informal sector and the formal economic sector.

The informal economic sector is centred around subsistence and non-monetized activities such as fishing, hunting, and trapping. This sector is supported by programming funded by the KRG through the Inuit Hunting, Fishing and Trapping Support Program. Graph 8 illustrates the main formal economic activities of the village, based on data from the 2021 census. These are classified using the North American Industry Classification System (NAICS). The primary industries employing the population of Inukjuak are health care and social assistance (22.3%), public administration (18.2%), and educational services (15.7%).

Some of the principal employers in the community of Inukjuak include:

- the KRG;
- Pituvik LHC;
- the NV;
- the community's childcare centres;
- the community's educational facilities; and
- the Reintegration Centre.

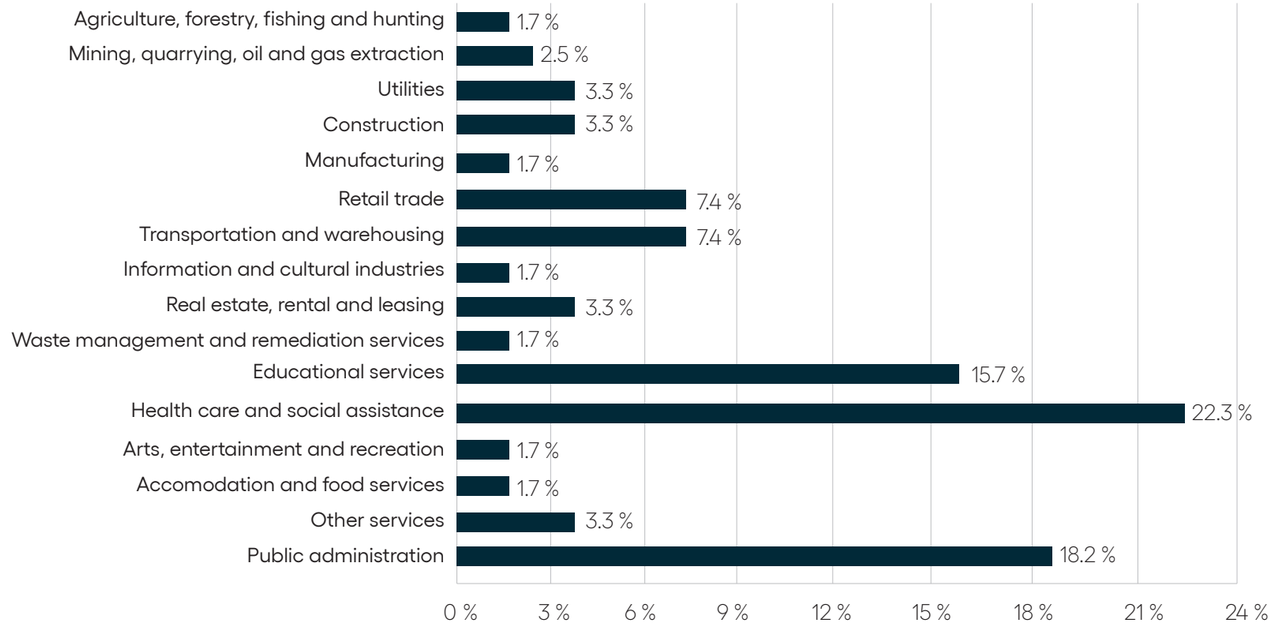
While the formal economy remains smaller than the informal economy, certain larger organizations do exist in the community. Of note is the Pituvik LHC which was incorporated in 1979 and holds title of 521 square kilometres of Category I lands in Inukjuak. The LHC holds these lands on behalf of the Inukjuamiut beneficiaries as defined in the JBNQA. Under this agreement, lands may not be sold or ceded to entities other than the Crown. However, the LHC holds the right to lease the lands to individuals and organizations. Pituvik LHC may also enter into business partnerships, so long as they remain majority owner.

Due to this pathway, multiple businesses have been created and are currently in operation in Inukjuak. These include Inutsuligaatiuk Excavation Inc., a local construction and granular resource enterprise, and the Inutsu Garage, a heavy machinery and equipment garage in the community.

Inukjuak is an early member of the FCNQ, having joined shortly after its founding. The FCNQ represents a robust cooperative network with experience in development and project management in remote communities. As such, the FCNQ remains the most significant private economic employer in villages throughout Nunavik.

FCNQ operates various services in Inukjuak including the Co-op Hotel, Co-op Store, cable television broadcasting, the petroleum tanks farms and the wider distribution of petroleum products. In cooperation with the Caisse d'Économie Solidaire Desjardins, the FCNQ has created the Nunavik Financial Services Cooperative. This entity seeks to provide comprehensive banking services to individuals, institutions and enterprises throughout the Nunavik region by means of their network of service counters. By means of these services the FCNQ's cooperative ownership structure has a direct positive impact on the Nunavik economy.

Graph 8 — Labour Force Aged 15 Years and Over by Industry



Source: (Statistics Canada, 2021a)

Map 11 — Topography of Inukjuak

Data source : (Carbonneau et al., 2018e)

3.7 GEOPHYSICAL PROFILE

3.7.1 Topography and Watershed

Inukjuak is located midway along the Hudson Bay Coast. This section of the coastline extends to Ivujivik and is comprised of low rocky outcrops, small islands and discontinuous beaches. The tidal range along the Hudson Bay coast is small at generally less than 1.5 metres. However, the strong winds generate large storm waves. The coastal ice cover lasts for about six months every year (from December to May).

The village of Inukjuak developed in a north by northeast direction along the east bank of the Innuksuak River. The site of the village is hilly with numerous rocky outcrops. Over 6,500 years ago, this area was covered by the sea up to an altitude of 105 metres. The existing village is located on deposits that were left there when the sea was 30 metres higher than its present level.

The general topography of the lands within the boundary of the built-up Inukjuak village is between zero and 148 metres above sea level, with the highest point being Ujjuquaq Hill located slightly to the west of the centre of the territory. The developed part of the village is generally no higher than 22 metres above sea level. The topography of the village is illustrated in Map 11.

3.7.2 Geology and Terrain

The Centre d'études nordiques (CEN) produced a series of maps for Inukjuak in 2018 based on a 2010 air photo and old photo interpretation, LiDAR data used to create a digital elevation model, and field work to validate the data. The field work includes a limited amount of terrain observations, probing and drill holes in the permafrost. From this, a Surface Deposits Map (Map 12), a Natural Hazards Map (Map 13) and a Permafrost Conditions Map (Map 14) were created.

In addition, a Construction Potential Map (Map 15) was also created to provide direction on suitable lands for development based on permafrost conditions, slope conditions, and foundation types in different areas of Inukjuak. Maps 11-15 are adapted versions of the maps produced by the CEN. These maps focus on the village core and do not show the entirety of the CEN's original datasets, which represent a wider geographical scale. As a result, certain elements are not shown in the legends of Maps 11-15.

3.7.2.1 Surficial Geology

As the surface deposits map (Map 12) indicates, the majority of the existing village of Inukjuak is located on marine sediments (Mn). The second most evident surface deposit in Inukjuak is bedrock (R), followed by fluvio-glacial sediments (GFf). A description of each type of sediment is included in Table 4 and is directly sourced from the map created by the CEN.

3.7.2.2 Natural Hazard Areas

The Natural Hazards Map identifies flood risk zones and areas of coastal erosion (among other hazards identified by the CEN). The southernmost portion of the village, lands around the marina, and a portion of the road leading to the airport are located in a flood risk zone which is subject to coastal erosion (see "storm surge" blue area in Map 13).

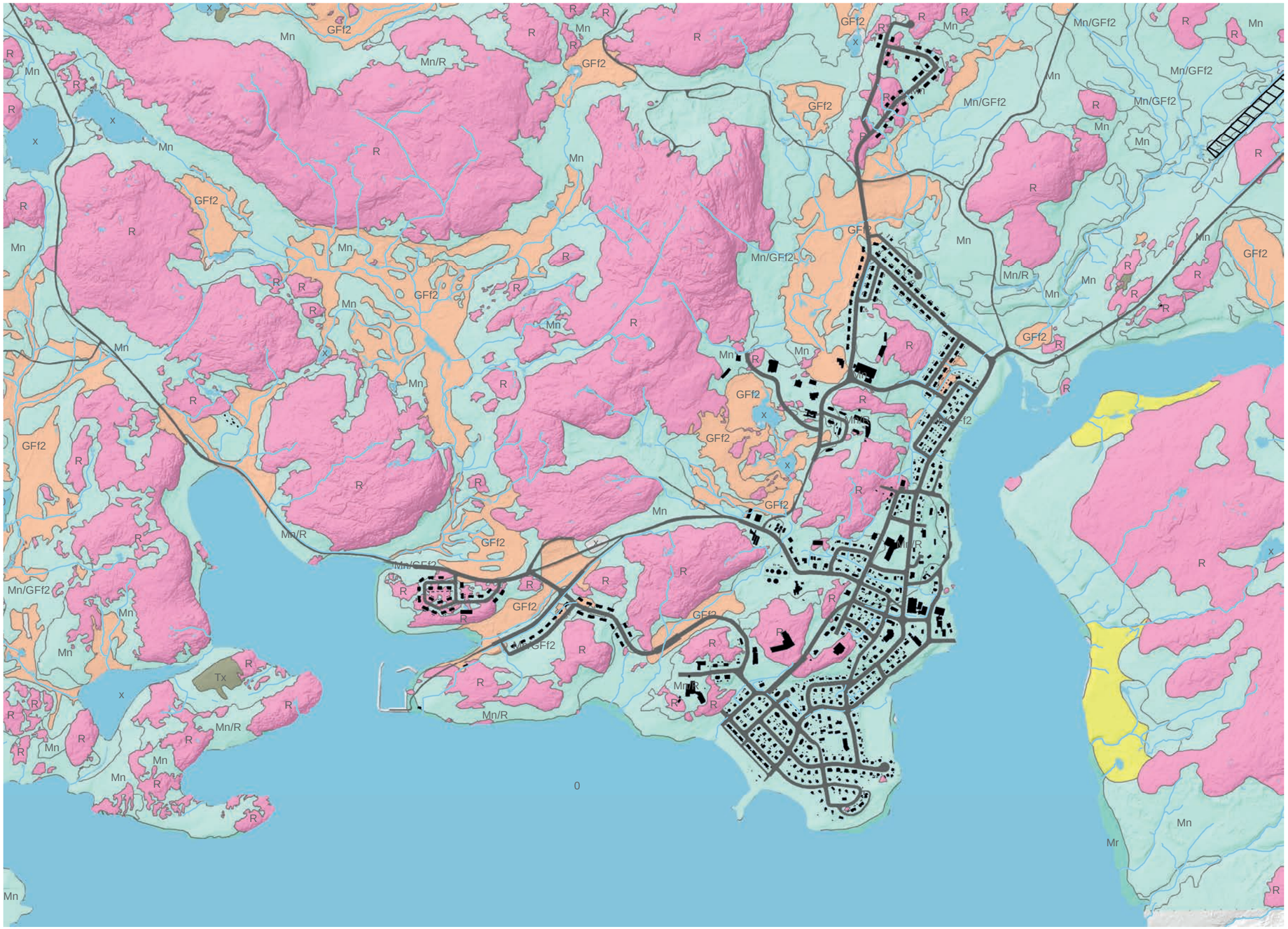
All the identified natural hazards in Map 13 should be avoided when considering new buildings and infrastructure such as roads and power lines. If there are situations where these areas cannot be avoided for roads and other infrastructure, measures to reduce risks should be studied and implemented. Further information about natural hazard risks can be found in the development constraints table in Section 2

Table 4 — Description of Surface Deposit Types in the Surface Deposits Map

SOIL TYPE	DESCRIPTION
At – Alluvial sediments – Terraced	Sand, sandy silt, gravelly sand, and gravel occasionally containing organic matter, surface generally marked by alluvial bars and levees and sometimes reshaped by wind action.
GFf – Glaciofluvial sediments – Outwash fan sediments	Silt, silty sand, sand with minor gravel, interstratified sand and silt, 2-8 m thick, deposited as outwash fans in postglacial sea at or near the retreating ice front by meltwater turbidity currents or by sub - or englacial meltwater streams. Poorly drained deposits, affected by periglacial processes such as frost boils, hummocks, and frost blisters.
L – Lacustrine sediments – Veneer	Gravel, sand, silty sand, and silt deposited in a laucstrine environment over marine sediments.
Mn – Marine sediments - Littoral and Nearshore	Brown-grayish sand, minor silt and gravel, locally fossileferous, deposited over glaciofluvial fan sediments or bedrock, charac-terized by raised beaches and marine terraces scarp, localized lag concentrations of ice pushed boulders og 0.5 to 3 m thick. Ice wedges occasionally present in the new surface permafrost.
Mr – Beach sediments	Gravel and sand, commonly bouldery, forming raised beach ridges, swales and beach ridges.
R – Bedrock	May include thin patches of sediment.
Tx – Glacial sediments – Weathered till	Diamicton below the marine limit, variable thickness, reworked by postglacial sea leaving local concentrations of boulders, gravel, sand or silt, and gravel, sand or silt, and subdued or era sed glacial landforms. Affected by periglacial processes such as gelifluction lobes and frost boils.

Source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018c)

Map 12 — Surface Deposits in Inukjuak



LEGEND

Surface Deposit

- At: Alluvial sediments - Terraced sediments
- GFf: Glaciofluvial sediments - Outwash fan sediments
- Lv: Lacustrine sediments - Veneer
- Mn: Marine sediments - Littoral and nearshore sediments
- Mr: Marine sediments - Beach sediments
- R: Bedrock - Undifferentiated
- Tx: Glacial sediments - Weathered till

NOTES

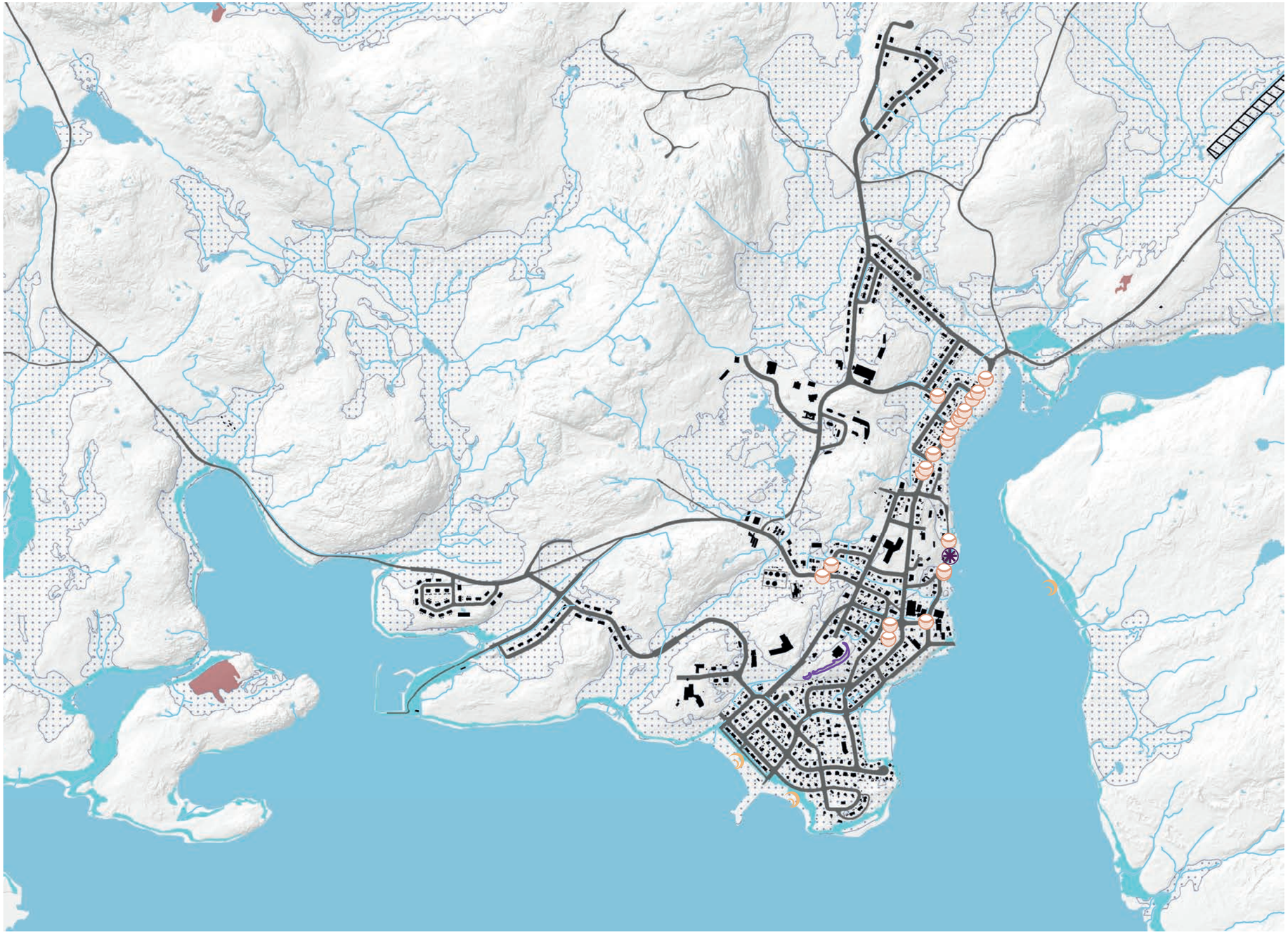
Data Source: CEN (2018), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-20

1:14 000

0 300 600 900 m

Data source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018c)

Map 13 — Natural Hazards Risks in Inukjuak



LEGEND

- Coastal Erosion
- Icing
- Thermokarst Subsidence
- Ice-rich Permafrost
- Gelifluction
- Storm Surge
- Avalanche Risk

NOTES

Data Source: CEN (2018), NGI (1999), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:14 000

0 300 600 900 m

Data source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018a)

3.7.2.3 Permafrost Conditions

Three broad terrain types are illustrated in the permafrost conditions map (Map 15):

- Thaw-stable ground (1a, 1b, 1c): bedrock and superficial deposits with no or little ice content.
- Thaw-unstable ground (2a, 2b, 2c, 2d): ice-rich permafrost in superficial deposits.
- Severe limitations (3): dynamic active periglacial and slope processes, littoral zone or flood risk areas.

Each category is further described in Table 5. These descriptions are directly sourced from the CEN (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018b). Most of the village of Inukjuak is built on marine soils (see "2d" in Figure 36) where ice content generally exceeds 30% and can be as high as 100%. These soils are particularly vulnerable to melting permafrost and can become unstable in thaw conditions. The significant presence of marine soils in and around the community indicates future challenges with village expansion. Innalik School and some of the surrounding lands are located on much more stable grounds that feature sand and gravel less than two metres deep and with an ice content generally less than 10%.

3.7.2.4 Construction Potential

The Construction Potential Map (Map 15) is a composite of the information in three of the four previous maps (Maps 11, 13, and 14). The map compiles the slope, permafrost conditions, and natural hazards to categorize all lands into three categories for development potential: Good, Fair and Poor. The areas in green represent lands suitable for development, the yellow colour represents lands manageable for development but where significant site work may be required prior to development, and the red colour represents lands generally unsuitable for development, unless adaptive foundation design is used. These categories are further described in Table 5. This content is also directly sourced from the CEN (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018b). Map 15 shows that there is construction potential across the river to the east of the village, and to the west and northeast of the village core. The construction of a new bridge is planned for the village (though not included in the map), which would connect the existing built-up area to the green areas across the river.

The typical foundation design for housing in Nunavik is a surface foundation (ie. blocks, space frame, adjustable post and pads) on a gravel pad. However, this construction method poses issues given the particular context of the north. For one, the limited access to granular resources impedes the construction of new housing. Secondly, the gravel pads have been found to accelerate the thawing of permafrost, resulting in buildings shifting and cracking due to the unstable foundation. Therefore, it is recommended to transition toward pile foundations for all new construction.

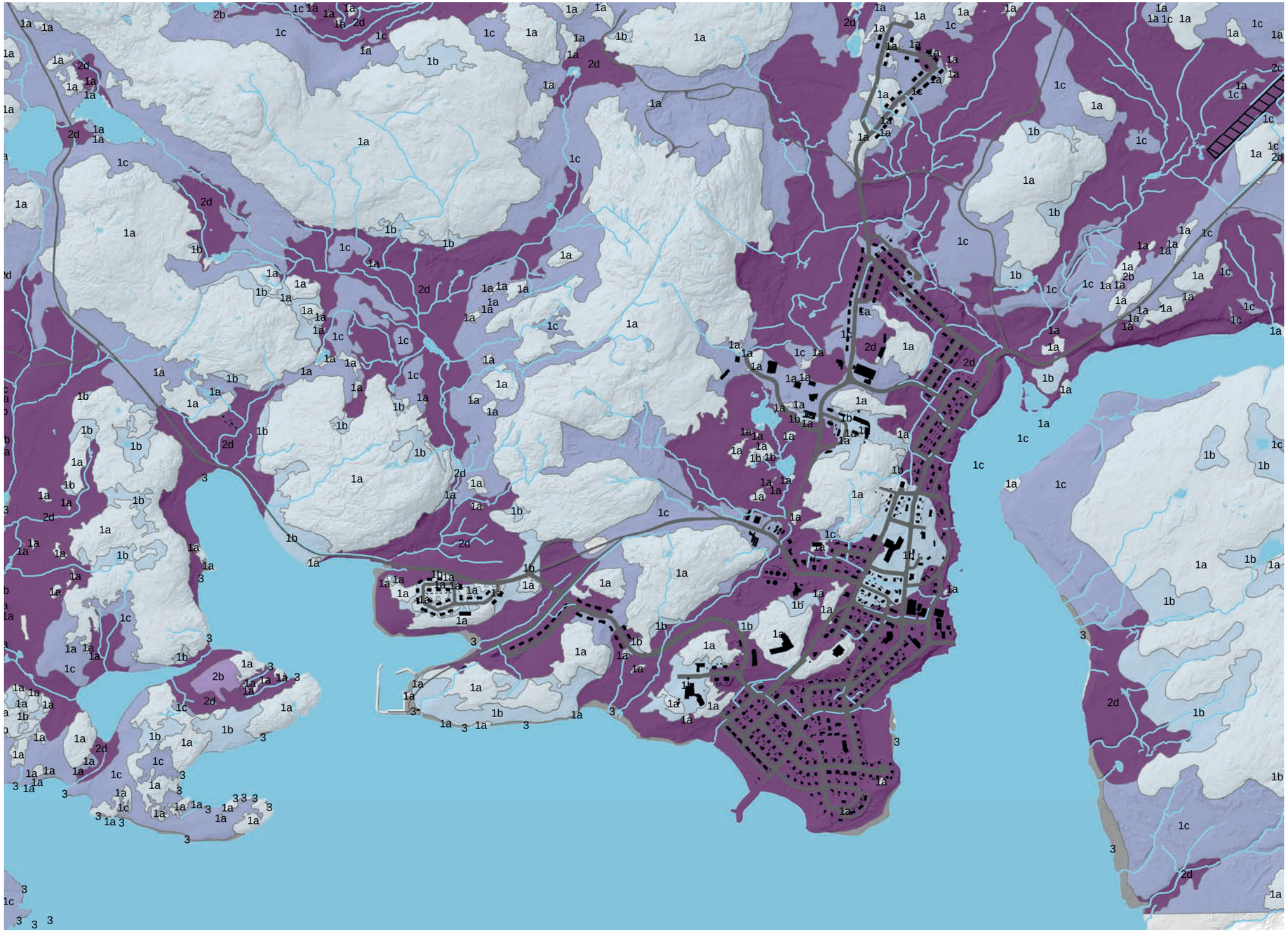
The information in Map 15 is used to identify potential areas for future development, which are identified in Section 5 of the Master Plan. In any case of development, considerations must be made regarding road extensions, as well as appropriate setbacks from the airport, landfill, power plant, and areas with significant natural hazard risks.

Table 5 — Description of Categories in the Permafrost Conditions Map

CATEGORY	PERMAFROST CONDITIONS	DESCRIPTION
THAW-STABLE GROUNDS	1a : Bedrock	Active layer thickness is generally ranging from 4.5 to 6 m. Rock joints may contain a small amount of ice.
	1b: Thin-cover sand and gravel over bedrock	The thickness of the deposit is generally less than 2 m and the topography is controlled by bedrock. Presence of scattered rock outcrops. The active layer thickness is generally ranging from 1.5 to 2.5 m. Contains pore ice whose volume is generally less than 10%.
	1c: Thick layered sand and gravel deposit	The thickness of the deposit is generally greater than 2 m. The active layer thickness is generally ranging from 1.5 to 2.5 m. Contains pore ice and occasional ice lenses may be present in finegrained material layers. Possibility of ice wedges occurrence.
THAW-UNSTABLE GROUNDS	2a: Thin cover of heterogeneous deposit (till) over bedrock	The thickness of the deposit is generally less than 2 m and the topography is controlled by bedrock. The active layer thickness is generally ranging from 2.5 to 3 m. Contains pore ice and ice lenses in fine-grained material layers. The volumetric ice content is generally less than 30%. Occurrence of mudboils and gelifluction lobes on slopes. Creep and differential settlements may occur upon thawing but are limited due to the shallow thickness of the deposit.
	2b: Thick cover of heterogeneous deposit (till) over bedrock.	The thickness of the deposit is generally more than 2 m with occasional bedrock outcrop. The active layer thickness is generally ranging from 2.5 to 3 m. Contains pore ice and ice lenses in fine-grained material layers. The volumetric ice content is generally less than 30%. Occurrence of mudboils and gelifluction lobes on slopes. Creep and differential settlements may occur upon thawing.
	2c: Thin cover of fine-grained deposit of marine or lacustrine origin over bedrock or a thick layered sand and gravel deposit	The thickness of the deposit is generally less than 2 m. The active layer thickness is ranging from 0.5 to 1.5 m. Contains ice lenses. The volumetric ice content regularly exceeds 30% and may reach almost 100%. Surface often marcked by mudboils. Material subject to minimal differential settlements because of its shallow depth. Material subject to failure on slopes upon thawing.
	2d: Fine-grained deposit of marine origin sometimes covered with a thin layer of organic, alluvial, or coastal sediments.	Poorly drained. The active layer thickness is ranging from 0.5 to 1.5 m. Contains ice lenses. The volumetric ice content regularly exceeds 30% and may reach almost 100%. Material subject to significant differential settlements and failure on slopes upon thawing.
SEVERE LIMITATIONS	3: Contemporary deposit affected by current and dynamic geomorphological processes.	Contemporary deposit affected by current and dynamic geomorphological processes. Subjects to erosion, flooding and slope movements.

Source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018b)

Map 14 — Permafrost Conditions in Inukjuak



LEGEND

Permafrost Conditions

- 1a - Bedrock
- 1b - Thin cover of sand and gravel (< 2 m) over bedrock
- 1c - Thick layered sand and gravel deposit (> 2 m)
- 2b - Thick cover (> 2 m) of heterogeneous deposit (till) over bedrock
- 2c - Thin cover (< 2 m) of fine-grained deposit of marine or lacustrine origin over
- 2d - Fine-grained deposit of marine origin sometimes covered with a thin layer
- 3 - Contemporary deposit

NOTES

Data Source: CEN (2018), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-28

1:14 000

0 300 600 900 m

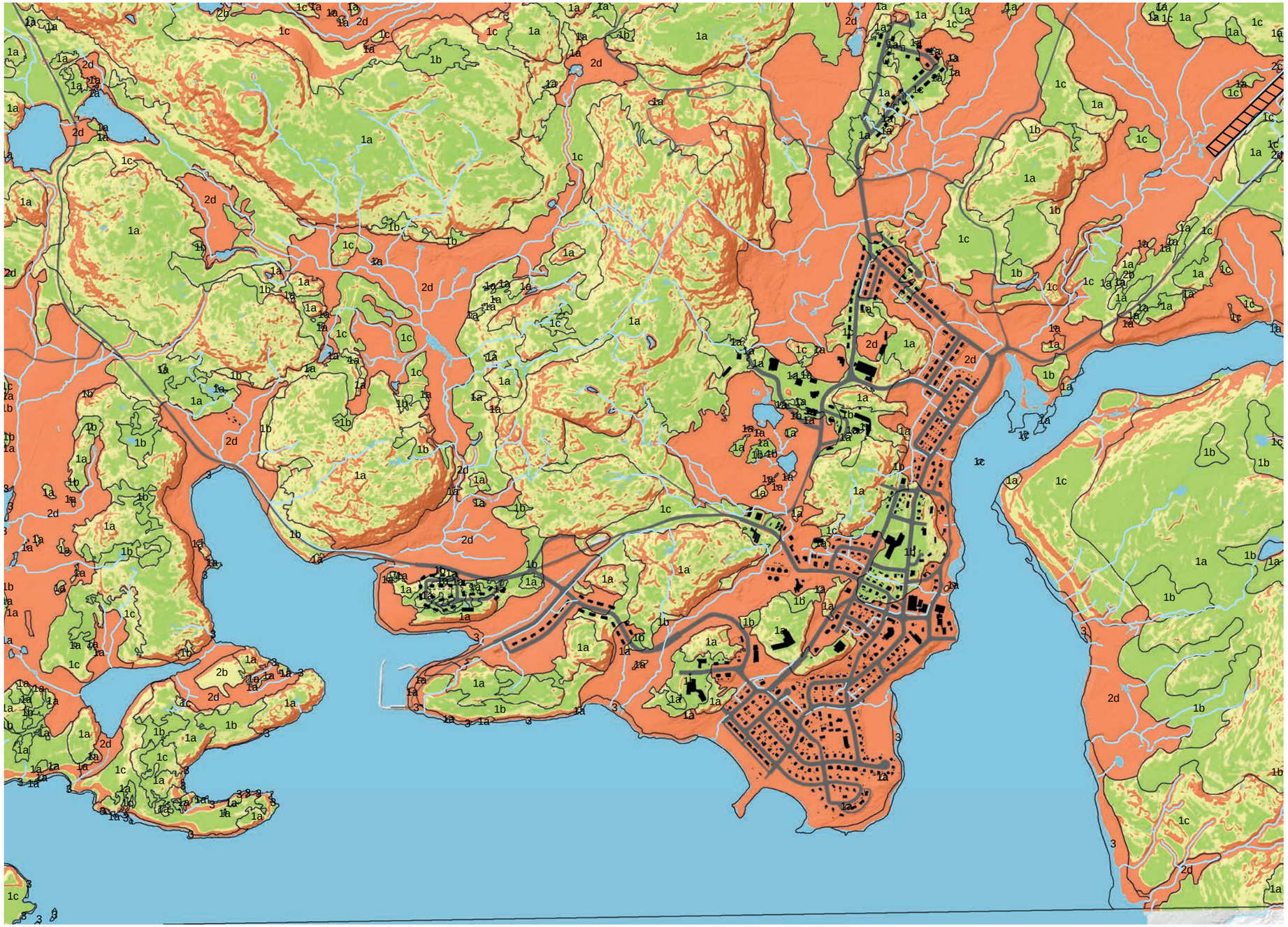
Data source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018b)

Table 6 — Description of Construction Potential Categories

CATEGORY	PERMAFROST CONDITIONS	CONSTRUCTION POTENTIAL	DESCRIPTION APPROPRIATE TYPE(S) OF FOUNDATION(S)
THAW-STABLE GROUNDS	1a : Bedrock	**Good:** Terrain manageable for construction (slope < 7.5°).	All types of northern foundations. Adaptations to rugged topography are often necessary.
		Fair: Terrain manageable for construction but may require significant earthwork (slope between 7.5 and 15°).	
		Poor: Terrain unsuitable for construction (slope > 15°).	
	1b: Thin-cover sand and gravel over bedrock	**Good:** Terrain manageable for construction (slope < 7.5°).	Deep northern foundations on the underlying bedrock applicable (ex.: pile foundations). Adjustable post and pad foundations also feasible. Buildings with slab on grade foundations need elaborated techniques of terrain preparation (ex.: removal or pre-thaw of frozen sediments and consolidation.
		Fair: Terrain manageable for construction but may require significant earthwork (slope between 7.5 and 15°).	
		Poor: Terrain unsuitable for construction (slope > 15°).	
	1c: Thick layered sand and gravel deposit	**Good:** Terrain manageable for construction (slope < 5°).	Northern foundations on adjustable post and pad or on piles. Buildings with slab on grade foundations might need elaborated techniques to retain permafrost in its frozen state (ex.: thermosyphons).
		Fair: Terrain manageable for construction but may require significant earthwork (slope between 5 and 10°).	
		Poor: Terrain unsuitable for construction (slope > 10°).	
THAW-UNSTABLE GROUNDS	2a: Thin cover of heterogeneous deposit (till) over bedrock	**Good:** Terrain manageable for construction (slope < 4°).	Deep northern foundations on the underlying bedrock applicable (ex.: pile foundations). Adjustable post and pad foundations also feasible. Buildings with slab on grade foundations need elaborated techniques of terrain preparation (ex.: removal or pre-thaw of frozen sediments and consolidation.
		Fair: Terrain manageable for construction but may require significant earthwork (slope between 4 and 8°).	
		Poor: Terrain unsuitable for construction (slope > 8°).	
	2b: Thick cover of heterogeneous deposit (till) over bedrock.	**Fair:** Terrain manageable for construction, but caution is needed (slope < 8°).	Pile foundations feasible but require deeper drill-holes for pile driving. Adjustable post and pad foundations also feasible. Buildings with slab-on-grade foundations need elaborated techniques to retain permafrost in its frozen state (ex.: thermosyphons). Steeper slope sections may be affected by gelifluction and may require specific foundation design. Excavation shall be avoided.
		Poor: Terrain unsuitable for construction (slope > 8°).	
	2c: Thin cover of fine-grained deposit of marine or lacustrine origin over bedrock or a thick layered sand and gravel deposit	**Fair:** Terrain manageable for construction, but caution is needed (slope < 2°).	Deep northern foundations on the underlying bedrock applicable (ex.: pile foundations). Adjustable post and pad foundations also feasible. Buildings with slab on grade foundations need elaborated techniques of terrain preparation (ex.: removal or pre-thaw of frozen sediments and consolidation).
		Poor: Terrain unsuitable for construction (slope > 2°).	
	2d: Fine-grained deposit of marine origin sometimes covered with a thin layer of organic, alluvial, or coastal sediments.	**Poor:** Terrain unsuitable for construction.	Adjustable post and pad foundations. Buildings with slab-on-grade foundations need elaborated techniques to retain permafrost in its frozen state (ex.: thermosyphons). Excavation shall be avoided.
SEVERE LIMITATIONS	3: Contemporary deposit affected by current and dynamic geomorphological processes.	**Poor:** Problematic terrain unsuitable for construction.	Problematic terrains to be avoided.

Source: (Carbonneau et al., 2018c).

Map 15 — Construction Potential in Inukjuak



LEGEND

Construction Potential

- Good
- Fair
- Poor

NOTES

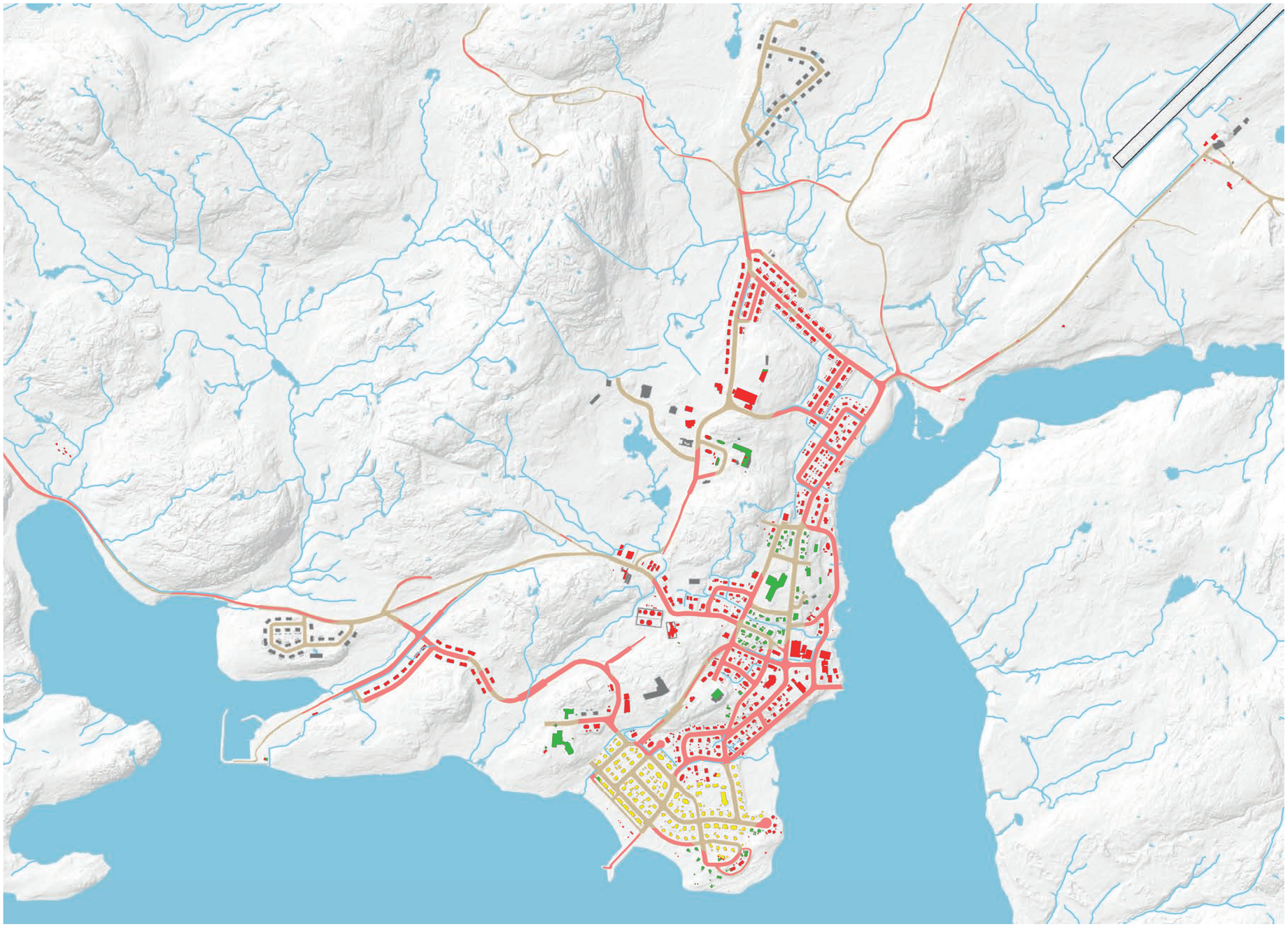
Data Source: CEN (2018), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:14 000

0 300 600 900 m

Data source:(Carbonneau et al., 2018c).

Map 16 — Buildings Constructed on Unstable or Thaw-Stable Grounds



LEGEND

- Stable Building
- Building to Monitor
- Building on Unstable Grounds
- Road on Unstable Grounds

NOTES

Data Source: CEN (2018), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:13 000
0 275 550 825 m

Data source: (Centre d'études nordiques, n.d.)

3.8 CLIMATE

Inukjuak is located in the tundra. As is the case across Nunavik, winters are generally long, cold, and dry, whereas summers are short, cool, and wet. Winds are strong year-round, and temperatures are low. Table 7 provides some key climate facts for Inukjuak based on historical data published by Environment Canada.

3.8.1 Climate Change

The impacts of climate change are being felt around the globe in a variety of ways. Multiple studies have suggested that Northern regions will be highly impacted by climate change, with accelerated warming expected during the 21st century. In addition to increases to air temperature, climate change is expected to impact precipitation, snow cover, wind, lake and sea-ice cover throughout Nunavik. In the period between 1987 and 2016, the region has displayed winter temperature increases by approximately 2 degrees Celsius per decade and summer increases of 0.5 degree Celsius per decade. This aligns with further evidence of the poleward amplification of climate change impacts. Current models suggest that mean annual temperatures will increase by 2-8 degrees Celsius by the end of this century, with most pronounced impacts occurring in the winter months. Precipitation in the region is expected to increase by 20-30%, which is expected to have significant impacts on coastal regions and related transportation infrastructure. Nunavik is expected to see a significant decline of winter sea ice concentration, with concentrations reaching 10% by 2040-2070, in contrast to the current 60-80% concentrations. Improved management of snow removal, analysis of the effect of warming on the existing and planned infrastructure as well as training on maintenance and overall education on the topic is required in the short term in order to properly address the situation.

Community perspectives on climate change in the region have been recorded through various workshops and interviews with community members from several villages. Among many concerns and observations noted were changes in berry and animal distribution, fish abundance, ice coverage, as well as shifts in weather patterns and a lower abundance of snow.

Environmental changes have direct implications for Nunavik's communities and their communities' way of life. For instance, as weather patterns become more unpredictable and difficult to discern, local travel can become more challenging. Climate-related shifts are linked to increased risks for winter season travel in particular, as the ice thickness and snow amounts become less stable. This often results in a shorter hunting season and may have implications for other subsistence activities.

Communities in Nunavik have noted the impacts of climatic changes on their food security. Certain important food sources are particularly vulnerable. Artic char, for instance, prefer cold water conditions, and could change their migration patterns due to warming temperatures. Changes in weather have also reported negative effects on berry growth and distribution patterns. Furthermore, shifts in certain mammal population levels and migration patterns are also an issue of particular concern. For example, a decline in the population of caribou in Nunavik has been observed since the 1990s. This could have negative social and economic effects in the long term, as many communities rely on caribou as a food source. These changes have increased communities' reliance on store-bought foods, which are often costly and less nutrient dense.

Community members from the villages have noted numerous adaptive behaviours arising as a response to environmental changes, such as shifts in meat drying practices due to weather changes; a greater emphasis on local food exchanges due to the decreasing availability of country foods; increasing sun protection methods; and changes in hunting and travel routes. In the coming years, it will be essential for the village of Inukjuak to identify and understand the potential impacts of climate change and prepare to respond quickly and effectively. Information on impacts specific to Inukjuak will be essential to inform decisions and build adaptive capacity. Furthermore, the village must assess how it can adapt to climate change. Adaptive capacity is the ability of a community to cope with or adjust to the impacts and risks of climate change. By building adaptive capacity, communities develop practical ways to cope with climate uncertainty and reduce their vulnerability.

In 2013, the KRG published a study which issued recommendations for climate change adaptation across Nunavik (Barett et al., 2012). This includes best practices for snow removal, road construction and maintenance, drainage and water management, and other infrastructure design and maintenance. These recommendations should be integrated into planning and development in Inukjuak.

Table 7 — Key Climate Indicators for Inukjuak, 1971 - 2000

Daily mean temperature	- 7.0 °C
Warmest month	July (9.4 °C)
Coldest month	February (-25.8 °C)
Average annual precipitation	560 mm
Driest month on average	February (12mm)
Rainiest month on average	September (70 mm)
Annual snowfall	306 cm
Proportion of annual precipitation falling as snow	About 53 %
Annual snow cover duration	221 days
Dominant winds	Variable
Windiest month on average	May (29 km/h)
Least windy month on average	January (14 km/h)

Source for temperature and precipitation: (Environment Canada Climate Normals 1971-2000).

04

Community Perspectives and Needs

4.1 COMMUNITY CONSULTATION SUMMARY

A series of community consultation sessions have taken place in Inukjuak to better understand the needs and perspectives of community members. Overall, these sessions have been productive in allowing for the community to collectively define development priorities. For instance, the relocation of diesel tank farms, the establishment of new granular resource extraction pits, and the need for greater community amenities have been made apparent. These sessions have also led to the community identifying risks associated with industrial and municipal infrastructure uses and subsequently mobilizing to ensure the maintenance of such facilities. Of note is the observation of a leak from the sewage lagoon, for which the community requested support from KRG to investigate and remediate. This is a pressing concern for the community, potential health and environmental impacts are cited recurringly throughout engagement sessions.

A common theme in these sessions has been the community's desire to expand housing options and make repairs to existing structures that have been impacted by melting permafrost. While development is a major concern for the community, certain members have expressed the need to conserve natural environments and resources alongside the growth of the community. With regards to community development, there is a lots of community support for the development of parcels on the southern shore of the river in order to accommodate the growing population. The construction of the bridge and a new road network is required in order to be able to develop residential units on the stable soil conditions of the southern shore.

In addition to the concerns raised by community members during consultations, other community needs have also been noted by NV staff, including the following needs:

- A new bridge and a new quarry;
- Sufficient lots for housing and other land uses;
- New cultural areas;
- Sewage infrastructure improvements;
- A new deepwater wharf;
- Designated locations for containers of construction and materials;
- Road widening and sidewalks.

4.2 POPULATION GROWTH

4.2.1 Population Projections

The following analysis utilizes a population projection to provide a general estimate of development needs.

4.2.1.1 Kativik Region

Based on L'institut de la statistique du Québec (ISQ)'s population projection between 2021 and 2041, the total population for the Kativik region is anticipated to increase by 22.7%. Graph 9 illustrates the growth in population per age category. The growth in each age category highlights the need for age-appropriate design and facilities. While the population of Inukjuak is relatively young, Graph 9 shows a significant increase in the population aged 65 years and over for the Kativik region as a whole. Although this group is projected to undergo the largest percent change, the proportion of the population at this age will remain relatively small in 2041. The proportion of population aged 65 years and over in Kativik is expected to reach 7.8% in 2041, compared to 4.8% in 2021.

4.2.1.2 Inukjuak

Three population projection scenarios were developed to present a range of population growth scenarios for Inukjuak in the long-term.

- The Low projection is based on the historical five-year rate of population growth for Inukjuak, between 2016 and 2021
- The Medium projection is based on the ISQ projected rate for the Kativik Region between 2021 and 2041 (22.7%), divided by four to arrive at a five-year incremental rate.
- The High projection is based on the historical rate of population growth between 1996 and 2021 divided five to arrive at a five-year incremental rate.

Note that these projections are for general estimate purposes and provide a range given the various data available. Basing estimates off historical rates assumes that similar rates will occur in the future. However, this may not be the case.

Table 8 — Population Projections for Inukjuak, 2021-2041

	YEAR	LOW	MEDIUM	HIGH
5 YEAR RATES	ISQ 2021-2041		5.68%	
	2016 - 2021	4%		
	1996 - 2021			11%
POPULATION PROJECTION	2021	1821	1821	1821
	2026	1887	1924	2017
	2031	1956	2034	2234
	2036	2027	2149	2474
	2041	2101	2271	2741

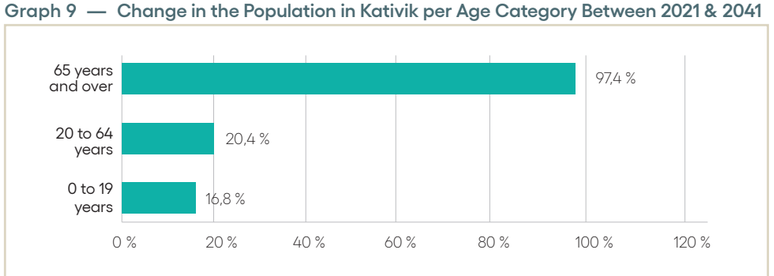
Source: (Institut de la statistique du Québec, 2022; Statistics Canada, 2021a, 2001b)

4.3 LAND NEEDS ASSESSMENT

4.3.1 Housing Need

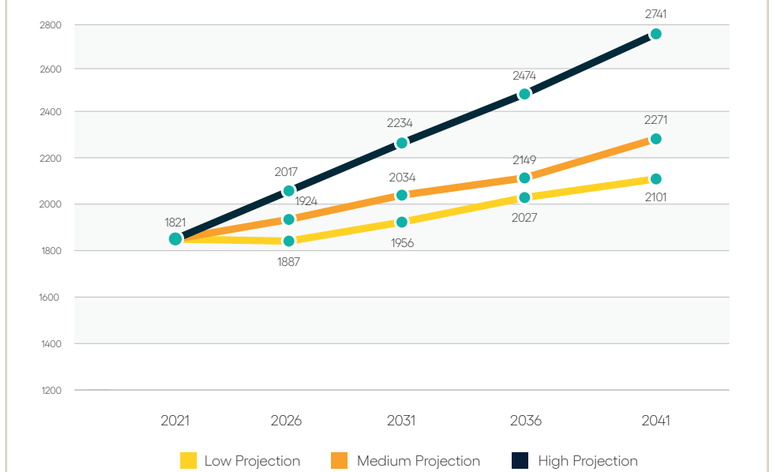
Based on the previous section, a detailed analysis was conducted to determine how many housing units are currently needed, and will be needed in the future. A housing survey carried out by the NHB in 2021 reported that overcrowding is felt more intensely in some communities – Inukjuak being one of the three communities with the greatest housing needs (Nunavik Housing Bureau, 2021). Graph 11 illustrates the distribution of the number of people reached by the 2021 survey that live in the same dwelling in Inukjuak. The majority (54%) live in households of four to six persons. Based on the most recent data available for the distribution of the number of bedrooms per household, the majority (55%) live in a two-bedroom dwelling (Statistics Canada, 2021). This suggests that there is potentially a mismatch in the number of bedrooms within occupied dwellings vs. the number of bedrooms needed, consistent with the reporting of overcrowding.

Graph 9 — Change in the Population in Kativik per Age Category Between 2021 & 2041

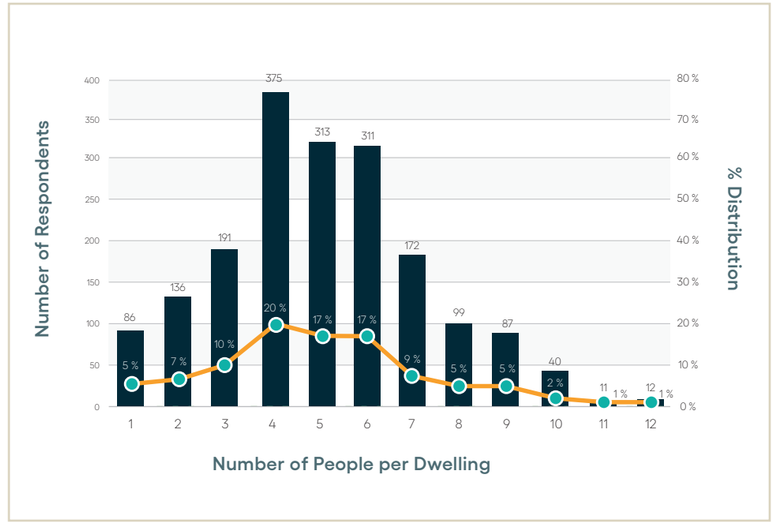


Source: (Société d'habitation du Québec, 2014, p. 36)

Graph 10 — Population Projections for Inukjuak, 2021-2041



Graph 11 — Number of People Living in the Same Dwelling Based on Total Survey Respondents, 2021



Source: (Nunavik Housing Bureau, 2021)

Table 9 — Inukjuak Housing Needs Analysis from 2021 Housing Survey

	INUKJUAK
Number of housing units	483
Number of families	565
Ratios (%)	0.85
Housing needs	82

Source: (Nunavik Housing Bureau, 2021)

Table 10 — Number of Dwellings that Meet the Needs, in a Surplus, or in a Deficit

EXISTING	NUMBER OF DWELLINGS			NUMBER OF BEDROOMS	
Total number of dwellings	Deficit	Balance	Surplus	Deficit	Surplus
483	205	153	125	359	152

Source: (Nunavik Housing Bureau, 2021)

By incorporating predicted population growth over the next 20 years, Table 11 includes estimates for housing units needed in the long-term. These calculations are based on two average household sizes: the average number of people per dwelling reported in the 2021 NHB housing survey (3.83), and the average persons per dwelling based on the 2021 Census data on average household size (3.8). Two data sets for the number of occupied dwellings were also used; the 2021 NHB survey figure of 483 and the 2021 Census value of 481. The various scenarios point to a wide range of housing needs into 2041, suggesting that anywhere between 66 and 240 additional units will be needed. This Plan leverages the average of the four medium growth scenarios (116 additional units) to perform a Land Needs Assessment in Section 4.3.2.

It is important to note that there may be additional housing needs not reflected in this assessment. With new projects being implemented by various organizations in the community, additional housing may be required for staff. This should also be taken into account when planning for future development.

Table 11 — Long-Term (2041) Housing Needs Estimate for Inukjuak

	Proj. population 2041	Avg. number of people/dwelling	Projected need 2041	Total inhabited housing unit count (2021 Housing Survey)	Add. units needed by 2041
Low	2101	3.83	549	483	66
Medium	2271	3.83	593	483	110
High	2741	3.83	716	483	233

	Proj. population 2041	Household Size (2021 census)	Projected need 2041	Total inhabited housing unit count (2021 Housing Survey)	Add. units needed by 2041
Low	2101	3.8	553	483	70
Medium	2271	3.8	598	483	114
High	2741	3.8	721	483	238

	Proj. population 2041	Avg. number of people/dwelling	Projected need 2041	Total - Occupied private dwellings (2021 Census)	Add. units needed by 2041
Low	2101	3.83	549	481	68
Medium	2271	3.83	593	481	112
High	2741	3.83	716	481	235

	Proj. population 2041	Household Size (2021 census)	Projected need 2041	Total - Occupied private dwellings (2021 Census)	Add. units needed by 2041
Low	2101	3.8	553	481	72
Medium	2271	3.8	598	481	117
High	2741	3.8	721	481	240

4.3.1.1 Units in Need of Replacement

As per Graph 6 (Section 3.3), 46% of dwellings in Inukjuak were built before 1990. Housing greater than 30 years old is more likely to require major repairs or replacement. Therefore, the total housing units needed in the long-term is likely greater than the estimates calculated, given the probable need of replacing the significant portion of the housing stock that was built before 1990.

4.3.2 Projected Land Needs

Building on Sections 4.2.1 and 4.3.1, an analysis of other land uses was conducted. This is a general estimate based on anticipated population growth rates and assumes that increasing land needs are in proportion to population growth. For the purpose of the land needs analysis, the medium scenario for population growth was used. For the number of additional dwelling units needed by 2041, an average of the four medium estimates was used, equal to 116 new dwelling units. The amount of land needed for each permitted use was taken into consideration in Section 5.3 when determining the proposed zoning of the land use planning framework. In this way, the master plan includes sufficient land to meet the needs of the community into 2041.

Table 12 — Land Needs Assessment

Existing population (2021)	1821
Projected population (2041) - medium scenario	2271
% projected increase in population 2021-2041	24.7%
Existing dwelling units (2021) - estimate	481
Existing density of development (units/ha) - 2021	12.5
Additional dwelling units needed by 2041	116
Assumed density of development (units/ha) - 2041	20
Existing residential land (ha) - 2021	38.4
Additional dwelling units needed by 2041	116
Assumed density of development (units/ha) - 2041	20
Additional residential land needed (ha) - 2021-2041	**5.8**
Existing commercial land (ha) - 2021	7.9
% projected increase in population 2021-2041	24.7%
Projected commercial land needed (ha) - 2041	9.9
Additional commercial land needed (ha) - 2021-2041	**2.0**
Existing industrial land (ha) - 2021	7.4
% projected increase in population 2021-2041	24.7%
Projected industrial land needed (ha) - 2041	9.2
Additional industrial land needed (ha) - 2021-2041	**1.8**
Existing community services/institutional land (ha) - 2021	11.5
% projected increase in population 2021-2041	24.7%
Projected public/institutional land needed (ha) - 2041	14.3
Additional community services/institutional land needed (ha) - 2021-2041	**3.5**
Additional residential land needed (ha) - 2021-2041	5.8
Additional commercial land needed (ha) - 2021-2041	2.0
Additional industrial land needed (ha) - 2021-2041	1.8
Additional community services/institutional land needed (ha) - 2021-2041	3.5
TOTAL LAND REQUIREMENT (ha)	**13.1**

Section B
Land Use Policies

05

Land Use Plan

This section presents the core elements of the Land Use Plan, outlining how the community envisions the management and development of land within the village. It provides land use designations, policies, construction potential and constraints mapping, development processes, and implementation strategies. This framework is designed to ensure that the land use plan and map aligns with the community's goals by respecting its context and promoting sustainable growth.

LAND USE PLANNING OBJECTIVES

Based on the 5 aspects of community planning presented in the introduction and below, objectives have been identified to ensure the sustainable development of the village of Inukjuak for the next 20 years. These objectives have guided the design of this present section of the Community Master Plan, but they are also objectives to keep in mind when making land-use planning decisions.

Inspired by the Comprehensive Community Planning wheel from Indigenous Services Canada

INFRASTRUCTURE DEVELOPMENT

Ensure that best practices, standards, and local knowledge are applied for all new infrastructure, renovations, demolitions etc. (Standard CAN/BNQ 9701-500, Housing Construction in Nunavik Guide to Good Practices, CSA S503, etc)

Adapt construction techniques to the specific location, surface deposits, permafrost conditions, topography, wetlands, and snow accumulation

Provide civil infrastructure guidelines to take into consideration the existing natural and built environment

Promote and share community knowledge on land-use planning practices

Require environmental and geological assessments to be completed and verified before the approval of any new development project.

Optimize year-round comfort by using adequate building orientation and configuration

GOVERNANCE

Ensure the adoption and application of planning tools to help guide and manage the realization of the Master Plan.

Identify in advance a sufficient number of buildable lots to accommodate the projected needs for all the different uses

Reserve specific areas for snow dumps, paths, parks, and playgrounds in new development areas

Maximize the use of already developed areas to increase housing in the village centre (near services)

Encourage the use of repurposed contaminated lots or soils for new uses or buildings

Plan development to reduce nuisances for residents and provide a quiet, safe environment.

Maximize slopes as opportunities to offer views on valued elements of the landscape

LAND AND RESOURCES

Ensure a sustainable use of natural resources, like granular resources and water

Minimize the impact of development on local vegetation and wildlife

Adapt civil infrastructure to take into consideration the existing natural and built environment (slopes and drainage)

Encourage scientific research on climate change and keep decision-makers up to date

Promote energy conservation awareness and develop energy-saving strategies and encourage renewable energy (solar panels on buildings)

Protect hunting grounds, fishing spots and berry picking areas around the village

CULTURAL

Ensure the identification and protection of cemeteries and archeological sites

Plan spaces for equipment storage in new development areas

Include gathering spaces designed specifically to respond to needs and interests of the youth in the planning process

Protect access to and views of the waterfront

Integrate cultural heritage knowledge into the process of identifying potential conservation areas of value to Inuit.

Protect existing hunting routes and improve access points to the land and water from the village centre.

SOCIAL

Encourage creation and conservation of recreational trails

Ensure sufficient space around buildings for hunting equipment and vehicles for hunters' families

Encourage adaptation of buildings to the local community context (typology, spaces around buildings)

Maintain communication with the community regarding upcoming/proposed projects in the village.

Ensure the design and construction of quality, multi-use outdoor spaces, especially to serve children and youth.

Encourage self-building initiatives and renovation

Graph 12 — Criteria for impact level evaluation

	Low Impact				High Impact
Traffic	○	○	○	○	○
Dust	○	○	○	○	○
Pollution (smoke)	○	○	○	○	○
Permafrost deterioration	○	○	○	○	○
Noise	○	○	○	○	○
Potential soil contamination	○	○	○	○	○
View	○	○	○	○	○
Safety risks	○	○	○	○	○
Wildlife	○	○	○	○	○

5.1 IMPACT-BASED ZONING CONCEPT

The Land Use Plan is inspired by the impact zoning concept. Impact zoning designates areas to include specific types of land uses (example: residential, commercial, industrial, etc.) based on their anticipated impact on the local environment. For applicability in Nunavik's northern villages, the anticipated impact considers certain environmental conditions and risks unique to the North, such as permafrost, icing/flooding, avalanches, unstable soils, and storm surges.

The main objective of the impact zoning approach is to allow for more flexibility in the planning and development of the village, while ensuring the safety and well-being of residents. The zones presented consist of three main categories structured by anticipated impact level (low, medium, and high), plus two additional zoning categories: Conservation, and Nuna.

Although each zoning category (low, medium, high) corresponds with recommended uses, impact zoning allows for more flexibility by allowing a greater variety of types of uses in each zone, assuming the proposed use meets certain compatibility criteria. Impact zoning, therefore, gives the NV more discretion to act in the interest of the community.

However, it is understood that residential neighbourhoods must be protected from nuisances generated by certain land uses, specifically those situated near high-impact zones. The Land Use Plan reflects the need to protect residents from potential nuisances and environmental risks. It is therefore recommended that residential areas remain separated from high-impact, industrial use zones. Conservation areas consist of areas identified by the community as holding significant cultural heritage value as well as areas which pose significant environmental risk or fragility. These areas within the municipal boundary of the village are not intended for development in the next 20 years.

NV council members may select which approved land use designation is most appropriate for a certain site, based on community needs and criteria to evaluate the impact level of each use (see Graph 12 on the previous page). This approach directly responds to the unique contexts of Nunavik's northern villages where topography, climate, and community needs are not adequately addressed by the rigid land use designations used in conventional land use planning.

Table 13 — Impact Zones and Their Permitted Uses

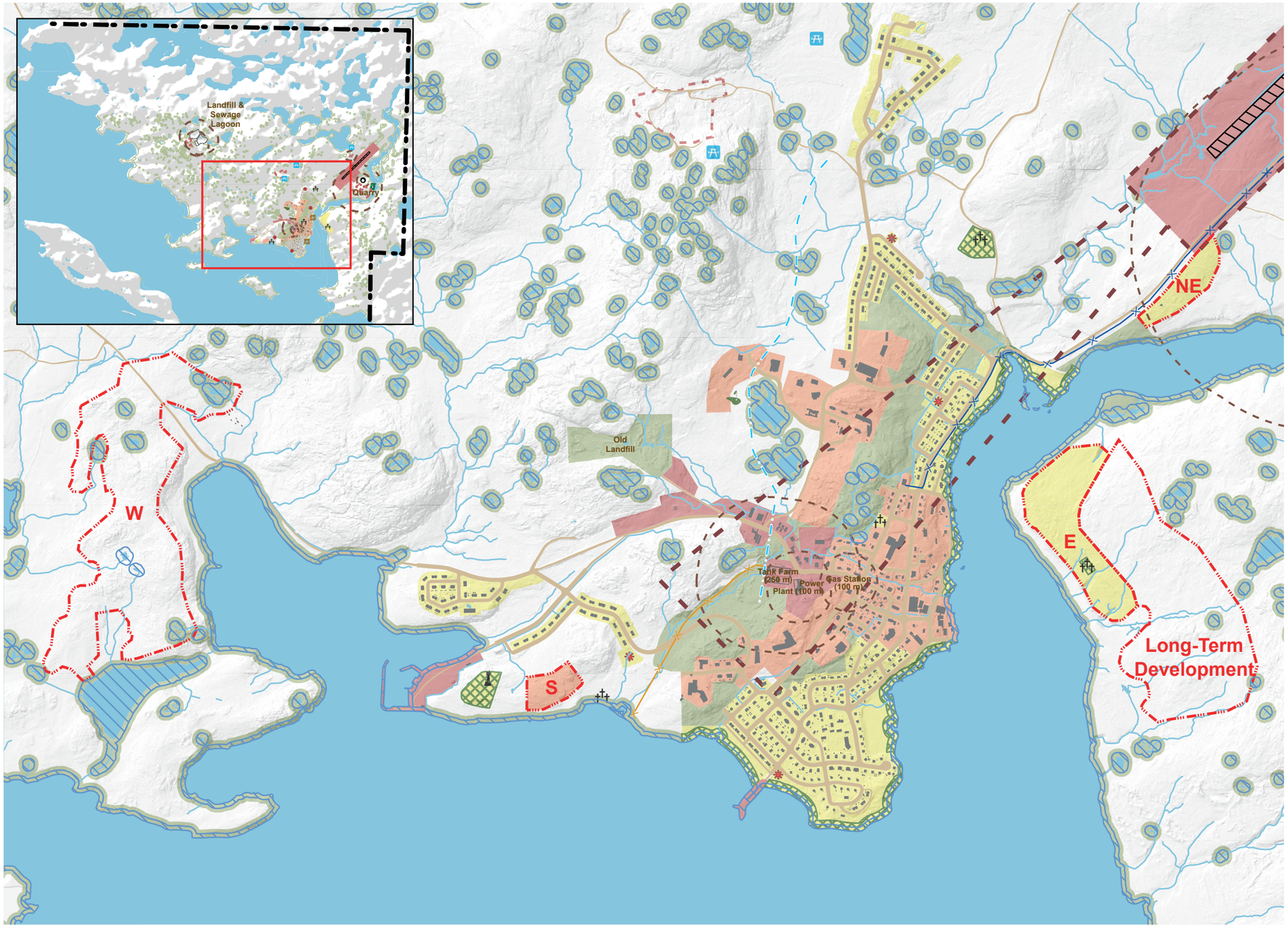
ZONING DESIGNATION	RESIDENTIAL LOW IMPACT	VILLAGE CORE & MEDIUM IMPACT ACTIVITIES		INDUSTRIAL & HIGH IMPACT ACTIVITIES	NUNA	CONSERVATION

Permitted Uses	› Residential/Housing
	  › Single-family, duplex, multiplex
	› Light Commercial/Retail
	  › Convenience stores, small shop, restaurant, laundro-mat, hairdresser
	› Small Community Amenities
	  › Small workshop, community freezer
	  › Library, daycare, FM radio
	  › Youth house, Elder house, sewing centre
	  › Museum
		› Residential/Housing
		  › Single-Family, Duplex, multiplex
		› Small Community Amenities
		  › Small workshop, community freezer
		  › Library, daycare, FM radio
		  › Youth house, Elder house, sewing centre
		  › Museum
		› Medium Commercial/ Retail
		  › Co-op, Northern store
		  › Hotel
		  › Office
		› Large Community Amenities
		  › Schools
		  › Health centre; hospital
		  › Arena; recreation centre
		  › Church
		  › Building Office
		  › Church
			› Light Industrial
			  › Boat Storage
			  › Water treatment plant storage
			  › Construction camp, transit house
			  › Warehouse
			  › Community freezer, Green house
			  › Workshop, Garage
			  › Firehall
			  › Gas Station
			› Telecommunications
			  › Satellite, equipment buildings
			› Light Commercial/ Retail
			  › Convenience stores, small shop, restau-rant, laundromat, hairdres-ser
				› Medium Commercial/Retail
				  › Co-op, Northern store
				  › Hotel
				  › Office
				› Light Industrial
				  › Boat Storage
				  › Water treatment plant storage
				  › Construction camp, transit house
				  › Warehouse
				  › Community freezer, Green house
				  › Workshop, Garage
				  › Firehall
				  › Gas Station
				› Heavy Industrial
				  › Quarry, sandpit
				  › Land fill
				  › Wastewater treatment
				  › Tank farm
				  › Power plant
				  › Windmill
				  › Transportation
				  › Airport, Marina
				› Telecommunications
				  › Satellite, equipment buildings
					› Community Activities
					  › Dog team
					  › Cabins and camps
					  › Harvesting
					  › Berry picking
					  › Shooting range
						› Protected Natural Areas
						  › Cultural heritage sites identified by community
						  › Ecologically sen-sitive areas
						  › Zones for natural hazard risk mitigation and management

USE PERMITTED IN ALL ZONES **OPEN SPACE (PARK, HOCKEY RINK, BEACH, PLAYGROUND, GOLF COURSE, PICNIC AREA, CEMETERY, MONUMENT, SPORTS FIELD, GATHERING AREAS)**						

IMPORTANT TO NOTE: To ensure the safety and security of village residents and to protect the environment, certain land uses, such as playgrounds, industrial uses, and dog teams, must adhere to additional, specific constraints that will limit the uses to particular sites. See the zoning bylaw for specifications.

Map 17 — Community Master Plan - Inukjuak Land Use Plan 2025-2045



LEGEND

LAND USE DESIGNATIONS (impact-based)

- High Impact (Industrial)
- Medium Impact (Village Core)
- Low Impact (Residential)
- Conservation
- Nuna

CONSTRUCTION PROHIBITED ZONES

- Shore Protection Strip
- Quarry and Borrow Pit
- Constraints Buffers
- Water Pipeline
- Fuel Pipeline

TRANSPORTATION

- Airport Takeoff & Landing Zone
- Existing Road
- Snowmobile Trail

OTHER

- Municipal Limits
- Expansion Zone
- Open Space
- Cemetery
- Golf Courses
- NDB Communication Site
- Picnic Area
- Playgrounds
- Swimming Area
- Monument

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-05-22

Adoption Date: 2025-04-01
Modification Date:

1:14 000
0 300 600 900 m

5.2 LAND USE DESIGNATIONS AND DESCRIPTIONS OF TYPES OF USES

5.2.1 Land Use Designations

5.2.2 Low

The Low Impact land use designation, comparable to a Residential land use designation in conventional master plans, refers to areas that pose relatively minor impacts on the environment and generate minimal nuisances or potential hazards for residents. The Low Impact zones indicate residential neighbourhoods which may be comprised of a variety of housing types (single-family, duplexes, or multi-family). Some small retail and community amenities intended to support daily activities of residents, such as corner stores and daycares, are also permitted. Areas dedicated to Open Space are also allowed in the Low Impact zones as they facilitate outdoor recreation, communal gathering, and contribute to the quality of life of residents.

5.2.3 Medium

The Medium Impact land use designation, comparable to a Village Core land use designation in conventional master plans, refers to areas that pose moderate impacts on the environment and generate some nuisances or potential hazards for residents. Medium Impact zones are characterized by the co-occupation of residential and commercial spaces, plus the significant activity stemming from the density and diversity of buildings and their associated uses. These zones favour increased density of housing development (multiplexes of 8 units or more), greater intensity and variety of commercial activities, and the installation of large community facilities, such as an arena or community centre, that tend to generate a lot of activity. Medium Impact zones can also accommodate some light industrial uses, such as warehouses, as well as telecommunication installations. The zoning bylaw will outline regulations to ensure the harmonious co-habitation of various uses in these areas.

5.2.4 High

The High Impact land use designation, comparable to an Industrial land use designation in conventional master plans, refers to areas that pose significant impacts on the environment and generate elevated nuisances or potentially dangerous hazards for residents. High Impact zones are characterized by large sites, excessive noise and dust pollution, and the frequent circulation of heavy trucks. The associated activities could also pose a more elevated risk for residents and the environment, including potential chemical or fuel spills and the risk of fire or explosion. Therefore, High Impact zones are not compatible with residential, commercial, or community uses. It is recommended that future developments maintain a significant buffer between High Impact zones and other uses. However, some Medium Impact uses, such as Light Industrial occupation, could be situated within a High Impact zone, thereby creating a buffer from residential neighbourhoods and community facilities.

5.2.5 Nuna

The Nuna land use designation applies to all unsurveyed land within the municipal boundary that does not already hold another land use designation. The intention of the Nuna land use designation is to protect the natural beauty, integrity, and cultural resources of the land – 'Nuna' – while enabling access for traditional, recreational, and community activities. The Nuna designation generally permits community and passive recreational uses. Permitted uses also include the presence of dog teams as well as local community activities, such as berry picking, harvesting, and camping and cabins. Over time, the community may decide to extend development projects into the areas currently zoned Nuna. This could be for granular resource extraction (quarries); installation of telecommunications equipment; or future expansion zones. At that moment, the community can amend the Community Master Plan to change the allocated land use designation to reflect their needs and desires. It is the responsibility of the NV council to ensure that future development minimizes the negative impact on wildlife, habitat, and harvesting.

5.2.6 Conservation

The Conservation land use designation identifies specific areas to protect from development. The allocation of this land use designation for a certain area may be due to a notable environmental risk present, such as flooding, erosion, or an avalanche, in which protection from development serves as a mitigation measure. A Conservation zone may also include areas that hold ecological importance and/or cultural heritage value, which necessitates its preservation for future generations. Complementary low-impact installations may be allowed if they align with the community's interests. These include formalized walking trails, snowmobile trails, interpretive signage, and picnic amenities. In general, all development is prohibited in areas zoned Conservation. However, some small developments, such as snow fences or public utilities may be required to ensure an essential service. If this is the case, the NV may consider it as an exception and allow the construction of such installations if certain protective measures are respected.

5.2.7 Types of Land Uses

HOUSING

Housing is a fundamental element of the Land Use Plan. Types of housing allowed in the Low Impact zone include single-family homes; duplexes; and multi-family homes. The social housing allotments include space for parking and a storage unit for each housing unit. Staff housing is also permitted in this zone. Details regarding the size of buildings, number of units, and spatial organization for housing lots will be addressed in the zoning bylaw.

LIGHT COMMERCIAL & RETAIL

Light Commercial refers to small-scale businesses, such as local retail and restaurants, which have a minimal impact on the environment and generate minimal nuisance for residents in the area. Small businesses, such as corner stores and cafes, are allowed in both Low and Medium Impact zones. It is favourable to situate a variety of small businesses near one another to create social and economic activity nodes within the village that serve the community and are easily accessible year-round for residents.

SMALL COMMUNITY AMENITIES

Community Amenities in the Low Impact zone encompass all small-scale community buildings that generate minimal nuisances and improve the quality of community life for residents. Examples of acceptable occupation include a workshop, sewing centre, community freezer, library, daycare, Youth houses, and Elder houses. This occupation is also permitted in Medium Impact zones

MIXED USE

The Mixed-Use component refers to a variety of complementary uses (residential, commercial, and community) concentrated in a particular area to create a neighbourhood that favours social and economic exchanges. Mixed-Use developments may constitute several individual lots, each with a distinct use, situated near each other. A village centre is an example of mixed-use area, where the co-op, hotel, and housing are all located in the same area, ideally within walking distance. Alternatively, a mixed-use development may also refer to a single building on one lot which accommodates more than one type of occupation. An example would be an apartment building with commercial spaces on the ground floor and housing on the upper floors or a hotel with a cultural centre or museum integrated into the built form. It is favourable to promote mix-use development in the village core where infill developments could improve the accessibility of many services while increasing the amount of available housing for residents.

MEDIUM COMMERCIAL

Medium Commercial constitutes business that require more space and generate significant activity, such as offices, hotels, retail spaces, and restaurants. Given the size and activity around these establishments, they have a greater impact on their surrounding environment, which could pose a nuisance to residents. It is favourable to prioritize future Medium Commercial occupation within the village core where a variety of uses is already in place. The zoning bylaw will specify regulations to ensure a compatibility of uses to mitigate potential nuisances for residents.

LARGE COMMUNITY AMENITIES

Large Community Amenities refers to buildings that contribute to essential community services and require substantial space and utilities to function. Examples include a fire hall, community centre, arena, health centre, hospital, school, etc. These amenities also tend to generate significant activity, whether as a destination for many people at once, like an arena during a scheduled event, or as a site that results in the circulation of heavy trucks, as is the case with the fire hall and water storage.

These community amenities can generate conflicts in the area where they are located. The zoning bylaw will specify the space required around such amenities to mitigate associated nuisances for neighbourhood residents and ensure a compatibility of use.

LIGHT INDUSTRIAL

Light Industrial occupation includes buildings and/or sites that generate minor industrial activities. Such activities, though they tend to require significant space, have a relatively minor environmental impact, and pose a low safety risk in terms of fire, explosion, vibrations, noise, dust, smoke, or odour. They do tend to generate heavy truck traffic and could create some nuisances related to noise, dust, or odor, which may impact the quality of life of residents. Potential occupations include repair garages, warehouses, construction camps, workshops, and research and development centres. The zoning bylaw will specify regulations to ensure potential risks and nuisances are mitigated in the location and operations of such facilities.

TELECOMMUNICATIONS

The Telecommunications category encompasses all infrastructure and equipment to accommodate the distribution of phone and internet services. To ensure the provision of digital telecommunication services, certain interventions may be required within the village. These include the installation of cellular towers, satellites, and linear infrastructure.

HEAVY INDUSTRIAL

Heavy Industrial occupation poses a significant risk and impact on the environment and quality of life of residents. Due to the level of noise, heavy truck traffic and dust generated by heavy industrial facilities, it conflicts with other land uses and activities in the village. However, Light Industrial occupation is compatible with this type of use and therefore can be situated within the Heavy Impact zone. Examples of Heavy Industrial uses include heavy equipment maintenance and storage; waste management and recycling facilities; wastewater treatment and sewage lagoons; quarries or pits; storage of potentially dangerous substances; tank farms; and power plants.

TRANSPORTATION

Transportation infrastructure provides essential services for the village. Examples of Transportation occupation within the village include the airport and marine facilities, such as the breakwater, boat ramp, and sealift staging area on the waterfront. Categorizing Transportation within the Heavy Impact designation ensures the safe operation of the airport and marine facilities. Some of the key uses needed for operating the airport include a terminal building, communications facilities (such as towers and the small building used to shelter equipment), weather-monitoring equipment, garages, storage warehouses and structures for fuel delivery. A quarry or pit for the purpose of airport or marine facility maintenance or improvements is also permitted within the Heavy Impact zone.

OPEN SPACE

The Open Space use refers to outdoor space dedicated to communal use. Areas with the Open Space occupation may be completely natural and free of installations, or they may contain equipment to support that use, such as playground equipment, picnic tables, a basketball court, or washroom facilities. Examples of Open Space occupations include parks, playgrounds, ball fields, beaches, and cemeteries. Open Space areas may also include waterfront areas where small docks, boat storage, temporary material storage, and sheds may be located. Open Space areas tend to be located within the built-up areas of the village, contributing to the quality of life of residents, with a special emphasis on recreation for children and youth.

Table 14 — Main Construction Constraints

PERMAFROST AND TERRAIN CONDITIONS	The construction potential map, created by the CEN, classifies lands according to whether they are favourable or unfavourable for development depending on the selected building foundation. Thaw stable lands are generally good for pad or pile foundation types whereas thaw unstable lands should only be constructed on when pile foundation pinned to bedrock is feasible.
WATERSHED PROTECTION	The watershed of the potable water source and intake should be protected from incompatible land uses (such as industrial and commercial) in order to minimize the chances of contamination. A minimum distance of 60 metres must be respected around a potable water source. This distance must be calculated from the perimeter (high watermark)
WASTEWATER LAGOON AND LANDFILL	The wastewater lagoon and landfill facilities are located at a distance from the village. However, appropriate buffers should be applied to ensure no incompatible development occurs within proximity to these facilities. No land use other than industrial is allowed inside the 300-metre buffer zone of an existing solid waste disposal site and a sewage lagoon. Solid waste disposal sites and sewage lagoons must be located at least one 150 metres from all streams and lakes and at least 500 metres from any drinking-water intake point. Solid waste disposal sites must respect the Regulation respecting the landfilling and incineration of residual materials (CQLR Q-2, r.19) and the Environment Quality Act.
AIRPORT	Land use in the vicinity of airports is governed by Transport Canada Aerodrome Standards and Recommended Practices and Transport Canada publication TP1247 (Land Use in the Vicinity of Airports). Both documents describe the approach surfaces and other obstacle limitations that must be respected to ensure the continued functioning of any airport (landfill, building height, etc.). Mitigation measures should also be put into place to limit negative impacts on surrounding uses due to the noise, dust and pollution produced by the airport.
PROTECTION OF NATURAL FEATURES	The village council can identify natural elements to be protected and maintained for ongoing community use. Easy access, view and preservation of the waterfront should be kept in mind when expansion options are being considered.
ARCHEOLOGICAL AND HISTORICAL SITES	Several archaeological sites have been identified within Inukjuak's municipal boundaries in recent decades. Most of these sites are listed in the Inventaire des sites archéologiques du Québec (ISAQ) at the Ministère de la Culture et des Communications. When a listed or/and known archaeological site is located in a new development or expansion zone, a study must be carried out by Avataq Cultural Institute to propose a conservation status and recommend preservation measures, when necessary. This study will then be presented to the village council and the Landholding corporation board members for a decision on applicable preservation measures.
QUARRY, GRAVEL, AND SAND PITS	Any quarry must be located a minimum 600 metre distance from any Residential, Commercial or Community amenities uses. Any new pit (ie. gravel or sand) must be located a minimum 150 metre distance from any Residential, Commercial or Community amenities uses. Quarries and borrow pits must respect the Regulation respecting pits and quarries (CQLR Q-2, r.7.1) and must have a certificate of authorization from the Ministere du Developpement durable, de l'Environnement, de la Lutte contre les changements climatiques (MDDELCC). The 600 metre distance can be reduced if an third-party impact study proves the absence of nuisance, based on CQLR Q-2, r.7.1
TANK FARMS	In order to reduce potential nuisances (odours, traffic, fumes, spills, etc.) associated with oil deposit activities (tank farms), a minimum distance of 250 metres must be maintained around the installations. This distance must be calculated from the outer perimeter of all tanks. Tank farms must be located at least 100 metres away from streams, lakes and any drinking water intake point.
SHORE PROTECTION STRIPS	In accordance with provincial regulations and in order to ensure an adequate protection of the shoreline, a minimum of 15-metre buffer is required between the shoreline (high water mark) and any construction, works (including pad foundation and roads), excavations, land cutting and filling
NBD (NON-DIRECTIONAL BEACONS) COMMUNICATION ANTENNA	Based on the TP1247E (Transport Canada), Section 2.4.2, all proposed structures or buildings within 200 m of an NDB antenna should be assessed prior to construction to determine the potential impact on navigation signals from an NDB. NDB antenna are usually use for airport activities and communications. All construction projects within this perimeter must therefore be analyzed by Transport Canada.
POWER PLANT (HYDRO-QUÉBEC)	No residential, community and commercial uses are allowed within 100 metres of a power plant to reduce nuisances (noise, odour, smoke or incidents) or a greater distance where maximum noise levels as established by the «Note d'instructions 98-01 (2006) sur le bruit» based on the LRQ (c. Q-2), articles 20 and 22, are exceeded for the proposed use. Every effort should be made to design and upgrade power plants in a way that minimizes impacts on surrounding uses and reduces the need to set back sensitive land uses (eg. residential uses) more than 100 metres. This distance must be calculated from the power station's building perimeter. This distance must be increased when the power plant is enlarged, or its power is increased (eg. additional generator).
WATER AND GAS PIPES	Drinking water and gas distribution pipes must be kept clear to allow repairs and reduce the risk of accidents. A distance of 8 metres on each side must be respected for all constructions.
GAS STATION	To reduce traffic and odour nuisances, a distance of 100 metres must be maintained between a gas station and any building used for residential or small and large community amenities purposes (daycare, elders' home, school, etc.).

5.3 DEVELOPMENT STRATEGY

5.3.1 Development Guidelines

Proponents should consult the KRG's Guide for Construction in Nunavik, the SHQ's Housing Construction in Nunavik (Guide to Good Practices), and other reports published by the KRG regarding climate change adaptation. New development projects should also take local construction constraints into consideration. These are outlined in Table 14. While this table provides an overview of construction constraints, it is important to bear in mind that other constraints can exist, even if they are not in the table. Additionally, the constraints, regulations, and laws detailed in Table 14 are subject to change. As such, it is important to verify existing constraints before undertaking any construction projects.

5.3.2 Ongoing or Upcoming Community Projects

Table 15 outlines ongoing and upcoming projects within the community. These projects have been considered and integrated into the updated community zoning concept as described in Section 5.2.

5.3.3 Applicable Zones for Land Use Needs

Section 4.3.2 calculated a general estimate for the hectares needed by 2041 for permitted land uses to match the growth of Inukjuak. Table 14 outlines key development constraints in Inukjuak. Table 16 summarizes which zones apply to each of the permitted land uses. .

Table 15 — List of Ongoing or Upcoming Community Projects

PROJECT NAME & PROPONENT	ESTIMATED COMPLETION	IMPACTS
New housing development road	2025	Increase in the number of lots that can be used for housing
Improve the treatment of wastewater	2025	Improved environmental outcomes
New police office	TBD	Expanded facilities for the Nunavik Police Service
New housing (KI)	2023-2029	Increase in housing units.
New housing (NRBHSS)	TBD	Increase in housing units.
New housing (NHB)	TBD	Increase in housing units.
Composting pilot project	TBD	Improved waste management facilities.
KI office and transit	2026	Improved and expanded facilities for KI.
Workshop enlargement (KI)	2029	Improved and expanded facilities for KI.
School enlargement projects (KI)	2031	Increase in capacity for KI. Improved facilities and ability to accommodate more students.
New cultural centre	TBD	Increase in cultural facilities for the community.
New arena	TBD	Improved and expanded facilities for the community.
New swimming pool	TBD	Improved and expanded facilities for the community.
New NV office	TBD	Improved and expanded facilities for NV staff.
New CLSC	TBD	Improved access to health services and increase in capacity.
New bridge	TBD	Improved circulation & access. Will allow for development to occur on the other side of the river.
New road	TBD	Improved circulation and access.

Table 16 — Land Needs and Applicable Zones (hectares)[3]

		APPLICABLE ZONES		
Land Use	**Land Need**	**Low Impact Zone**	**Medium Impact Zone**	**High Impact Zone**
Residential	5.8	X	X (mixed-use)	
Commercial	2.0	X (small-scale)	X (medium scale)	
Industrial	1.8		X (light)	X(heavy)
Community Services (Institutional)	3.5	X (small-scale)	X (medium scale)	
TOTAL LAND REQUIREMENT	**13.1**	N/A	N/A	N/A

3 The hectare count includes the total number of hectares. For example, for a residential site, this number includes the lots, as well as the space needed for streets, pipes, and other necessary infrastructure.

5.3.4 Existing Available Areas in the Village

Existing available lots in the village are mostly zoned low and medium impact. In the short- and medium-term, these areas should be targeted for planned projects. Community projects planned for the short to medium horizon such as the arena, swimming pool, new NV office, cultural centre, and KI buildings (not including housing), should be directed to these areas to promote a mix of uses in the village core and ensure that services are easily accessible to community members. As previously mentioned, development in existing areas of the village presents challenges, given that many areas are located on thaw-unstable grounds. However, portions of the village are also located in areas deemed suitable for construction (per the map developed by CEN, Map 16 in Section 3.7 of this Plan). As stated, soil and permafrost conditions studies will be required for new construction projects and built form should be adapted accordingly.

5.3.5 Future Expansion Areas (Short and Medium Term)

Three areas have been identified for short- and medium-term development, based on community consultations and other analysis presented in this plan. These areas are the Northeastern, Southern, Eastern, and Western sectors. The number of hectares available in each site is illustrated in Map 21. Each of these areas have been zoned low or medium impact. Proposed uses for each of the sectors are presented in the following pages of the master plan.

5.3.5.1 Northeaastern Sector

The Northeastern sector is located in proximity to existing conservation uses to the south, near the shoreline, and to high impact uses to the north. The sector offers approximately 3.4 hectares of buildable land. Road extensions would not be required, as the road connecting the airport to the village already runs through this area.

The Northeastern sector has been zoned low impact. Plans for this area are currently being developed. Residential development will likely be prioritized given the housing needs of Inukjuak. Other uses compatible with a low-impact zoning designation may also be considered. A preliminary concept for the Northeastern sector is provided in Map 23. Planning for this sector is currently underway.

5.3.5.2 Southern Sector

The Southern sector is located at the southwest edge of Inukjuak, near the waterfront. It is situated just east of the community's marine infrastructure, and south of an existing residential area. The Southern sector offers approximately 2.2 hectares of buildable land. It is recommended that it be zoned medium impact.

The sector potentially houses berry-picking areas, according to consultations. It is located in proximity to the High Arctic exiles memorial. The memorial has not been included in the development area to preserve its peaceful surroundings, which have been zoned low impact and reserved for open space purposes. It is recommended to create a park surrounding the memorial, with facilities and installations to highlight its importance as a site for gathering and remembrance.

Given the Southern sector's location in proximity to the memorial, it is recommended to dedicate this site to cultural uses. This could include, for example, the planned development of a new cultural centre. Road extensions would be required to improve the Sector's connectivity to the rest of the village. A significant portion of the berry-picking area should also be retained for ongoing use. A map of the Southern sector is shown in Map 24.

5.3.5.3 Eastern Sector

The Eastern sector is located on the south shore of the Innuksuak River, opposite the existing village core. As noted, this was the historic location of the village of Inukjuak. The sector currently houses a small cemetery. This sector offers 11.1 hectares of buildable area. As mentioned, the construction of a bridge would be required to provide access to this area.

Additionally, new roads and trails would need to be established in this area. It is recommended to zone this area as low impact and prioritize residential development; However, other uses compatible with low impact can also be located in this area to complement residential development and promote a mix of uses. Additionally, open space could be added surrounding the cemetery. A map of the Eastern sector is shown in Map 25.

5.3.5.4 Western Sector

The Western sector is located west of the existing village. The southern portion of this sector borders Tikiraaluk lake and the Innuksuak river. There is currently a road running through the northern portion of this sector, which connects it to the existing village. This sector offers approximately 36.6 hectares of buildable land.

It is recommended to zone most of this area as low impact, in order to respond to the need for housing. However, it is also recommended to zone the portion of the area located near the existing road as medium impact. Although residential development is a priority, the distance of this sector from the rest of the village means that it will be important to offer community services in the sector, such as a convenience store or a daycare.

5.3.6 Potential Long-Term Future Development Area

This area is adjacent to the Eastern Sector and has been identified for potential future expansion to meet long-term growth needs. As such, this area has not yet been zoned. This area should be further assessed in future Plans for the community of Inukjuak.

Map 18 — Potential Expansion Areas and their Surface Areas (in Hectares)

LEGEND

LAND USE DESIGNATIONS / ZONES

Expansion zones

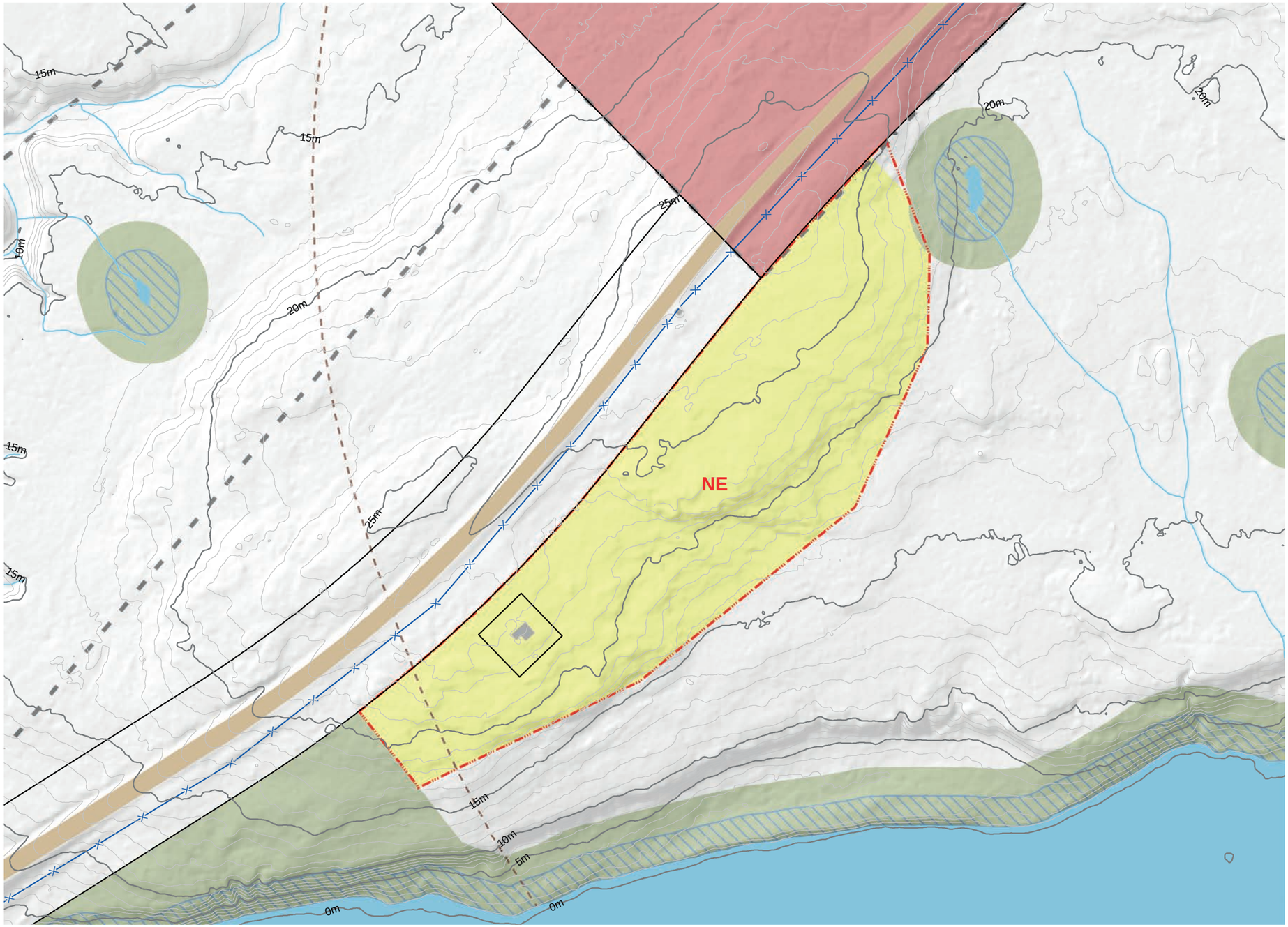
NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-28

1:14 000

0 300 600 900 m

Map 19 — Northeastern Sector Potential Expansion Area



LEGEND

LAND USE DESIGNATIONS (impact-based)

- High Impact (Industrial)
- Medium Impact (Village Core)
- Low Impact (Residential)
- Conservation
- Nuna

CONSTRUCTION PROHIBITED ZONES

- Shore Protection Strip
- Quarry and Borrow Pit
- Constraints Buffers
- Water Pipeline
- Fuel Pipeline

TRANSPORTATION

- Airport Takeoff & Landing Zone
- Existing Road
- Snowmobile Trail

OTHER

- Municipal Limits
- Expansion Zone
- Open Space
- Cemetery
- Golf Courses
- NDB Communication Site
- Picnic Area
- Playgrounds
- Swimming Area
- Monument

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:2 000
0 40 80 120 m

Map 20 — Southern Sector Potential Expansion Area

LEGEND

LAND USE DESIGNATIONS (impact-based)

- High Impact (Industrial)
- Medium Impact (Village Core)
- Low Impact (Residential)
- Conservation
- Nuna

CONSTRUCTION PROHIBITED ZONES

- Shore Protection Strip
- Quarry and Borrow Pit
- Constraints Buffers
- Water Pipeline
- Fuel Pipeline

TRANSPORTATION

- Airport Takeoff & Landing Zone
- Existing Road
- Snowmobile Trail

OTHER

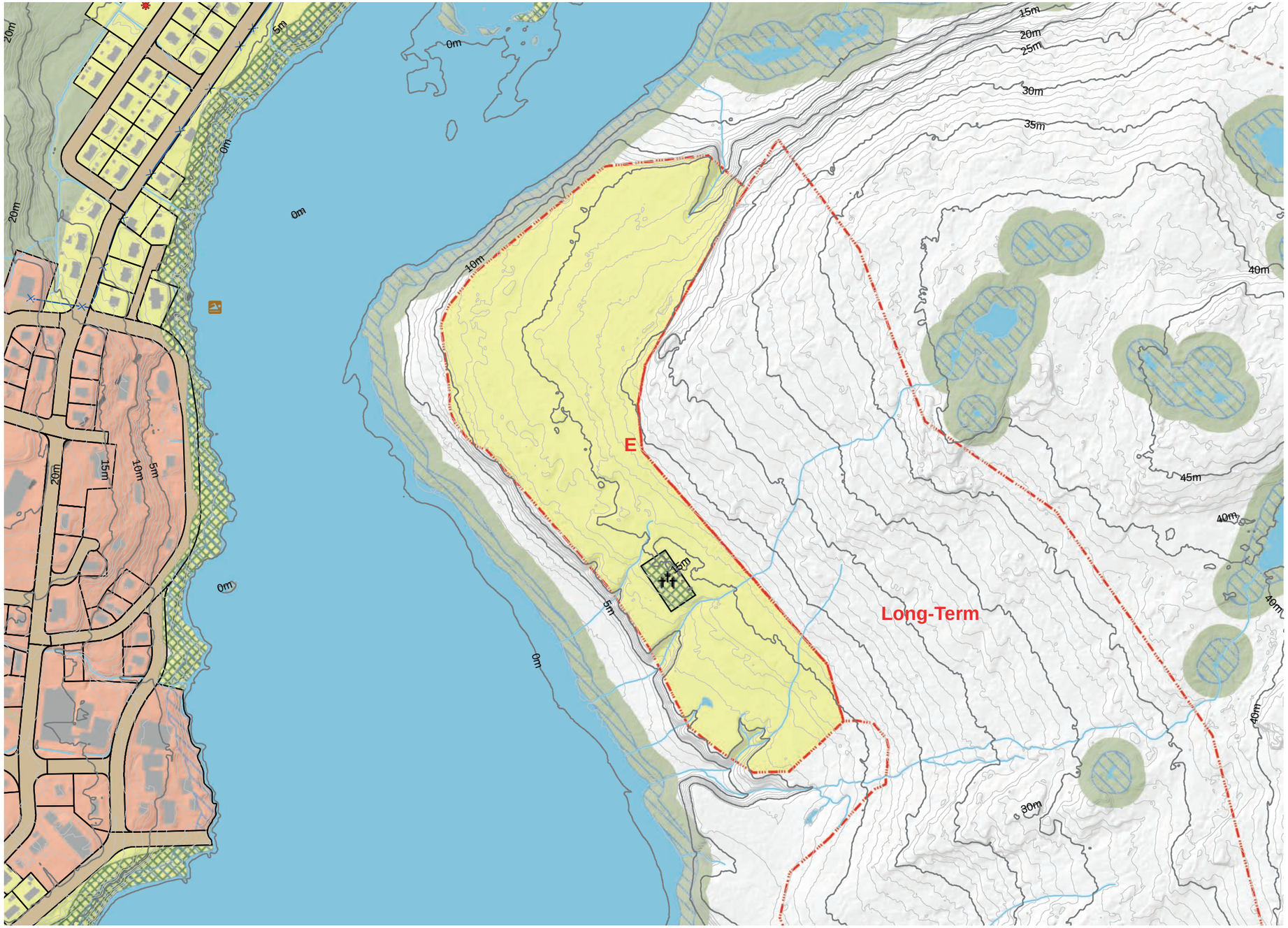
- Municipal Limits
- Expansion Zone
- Open Space
- Cemetery
- Golf Courses
- NDB Communication Site
- Picnic Area
- Playgrounds
- Swimming Area
- Monument

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:2 000
0 40 80 120 m

Map 21 — Eastern Sector Potential Expansion Area



LEGEND

LAND USE DESIGNATIONS (impact-based)

- High Impact (Industrial)
- Medium Impact (Village Core)
- Low Impact (Residential)
- Conservation
- Nuna

CONSTRUCTION PROHIBITED ZONES

- Shore Protection Strip
- Quarry and Borrow Pit
- Constraints Buffers
- Water Pipeline
- Fuel Pipeline

TRANSPORTATION

- Airport Takeoff & Landing Zone
- Existing Road
- Snowmobile Trail

OTHER

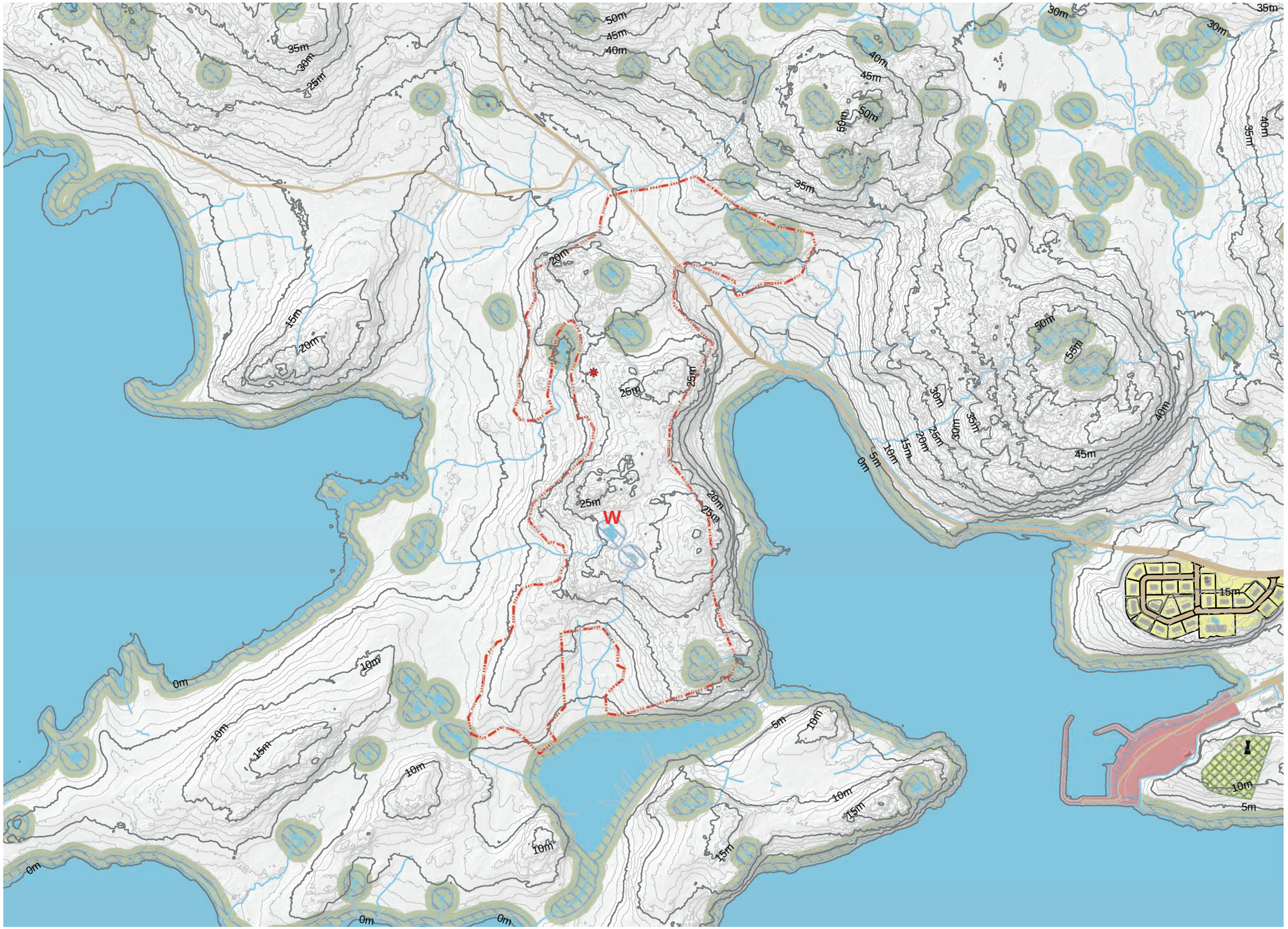
- Municipal Limits
- Expansion Zone
- Open Space
- Cemetery
- Golf Courses
- NDB Communication Site
- Picnic Area
- Playgrounds
- Swimming Area
- Monument

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:4 000
0 80 160 240 m

Map 22 — Westhern Sector Potential Expansion Area



LEGEND

LAND USE DESIGNATIONS (impact-based)

- High Impact (Industrial)
- Medium Impact (Village Core)
- Low Impact (Residential)
- Conservation
- Nuna

CONSTRUCTION PROHIBITED ZONES

- Shore Protection Strip
- Quarry and Borrow Pit
- Constraints Buffers
- Water Pipeline
- Fuel Pipeline

TRANSPORTATION

- Airport Takeoff & Landing Zone
- Existing Road
- Snowmobile Trail

OTHER

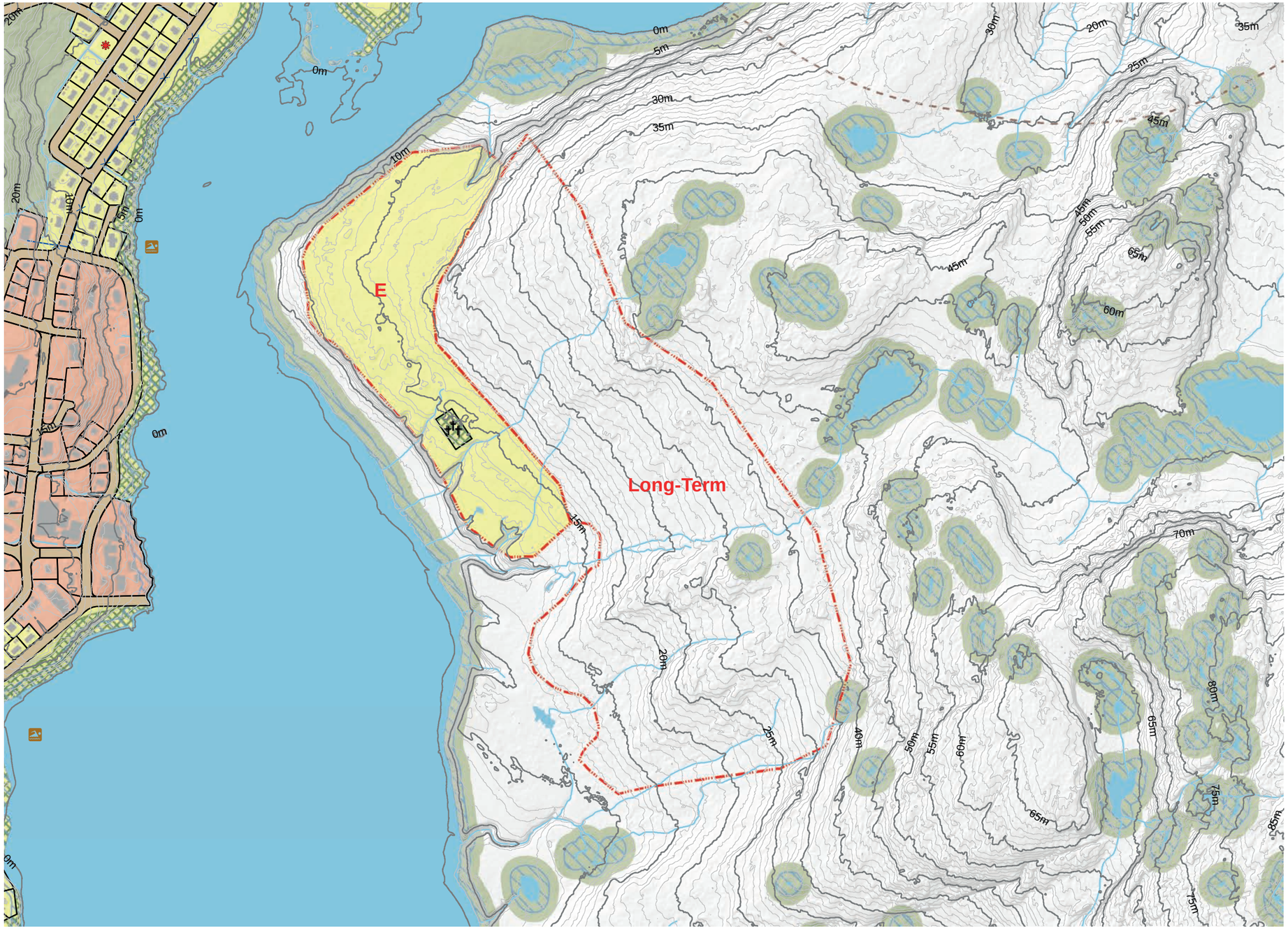
- Municipal Limits
- Expansion Zone
- Open Space
- Cemetery
- Golf Courses
- NDB Communication Site
- Picnic Area
- Playgrounds
- Swimming Area
- Monument

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:8 000
0 170 340 510 m

Map 23 — Long-Term Potential Expansion Area



LEGEND

LAND USE DESIGNATIONS (impact-based)

- High Impact (Industrial)
- Medium Impact (Village Core)
- Low Impact (Residential)
- Conservation
- Nuna

CONSTRUCTION PROHIBITED ZONES

- Shore Protection Strip
- Quarry and Borrow Pit
- Constraints Buffers
- Water Pipeline
- Fuel Pipeline

TRANSPORTATION

- Airport Takeoff & Landing Zone
- Existing Road
- Snowmobile Trail

OTHER

- Municipal Limits
- Expansion Zone
- Open Space
- Cemetery
- Golf Courses
- NDB Communication Site
- Picnic Area
- Playgrounds
- Swimming Area
- Monument

NOTES

Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:6 000
0 125 250 375 m

06
Implementation

The following chapter outlines the next steps that are necessary to implement and enforce the Community Master Plan and, if needed, amend the Community Master Plan. It also explains the difference between the Community Master Plan and the zoning bylaw, as well as the role that each document plays in the community's development. The specific roles of each document are stipulated in the Act Respecting Northern Villages and the Kativik Regional Government from 1976.

6.1 IMPLEMENTING THE COMMUNITY MASTER PLAN

6.1.1 Who is responsible for implementing and enforcing the Community Master Plan?

The municipal Council (NV) is responsible for implementing and enforcing the Community Master Plan. For the Community Master Plan to be effective, it must be followed by all parties: municipal council and staff, the LHC, organisations, companies, and residents. However, the council is ultimately responsible for enforcing the Community Master Plan. The NV will do this by granting permissions, through permits or authorizations, only for projects that respect the Community Master Plan and the zoning bylaw.

6.1.2 How does the enforcement process work?

Although the municipal council makes the decisions and grants the permissions, they need the assistance of their employees to review projects and draft recommendations to Council. When the council adopts a zoning bylaw, council members must appoint one or more staff members to help enforce the rules and review projects. The staff member appointed to enforce the Community Master Plan and the zoning bylaw is the Development officer. The Development officer receives permit requests from applicants seeking Council's permission to construct on a lot, renovate, move a building or change the use of a building. They will review the applications and submit recommendation to the Council that indicate whether the proposed projects meet the guidelines and regulations of the Community Master Plan and the Zoning bylaw or not.

The role of the Development officer and the process for issuing development permits is clearly outlined in the zoning bylaw. However, for informational purposes, a diagram of the development permit issuing process is also appended to this document. In the absence of a Development officer, the secretary-treasurer assumes the role.

In order for a project to obtain approval from the municipality, it must satisfy the policies and directions established by both Community Master Plan and Zoning bylaw documents.

6.1.3 What is the difference between the Community Master Plan and the Zoning Bylaw?

When a northern village council decides to adopt a Community Master Plan it must also adopt a zoning bylaw. Based on community consultations, the Community Master Plan provides a general direction for the development and growth of the community as it continues to evolve for the next 20 years. However, it is not intended to enforce specific regulations. A zoning bylaw, on the other hand, lays out parameters for restrictive provisions such as permitted land uses, road dimensions, building height, density, setbacks, buffer zones, etc. A zoning bylaw outlines specific norms that community members and/or project promoters must respect throughout the development process. Inspections can be carried out by identified municipal employees to ensure compliance with the regulations, and in the case of non-compliance with the rules, the Council can issue fines.

Thus, the Community Master Plan defines the vision for the community, while the zoning bylaw serves as a complementary regulatory mechanism that makes the vision defined in the Community Master Plan a reality. These two documents work together toward the same vision, and must therefore be conform with each other. The Community Master Plan and zoning bylaw are both adopted by Council bylaw. However, only the adoption of the zoning bylaw requires the vote of the electors in order to come into force.

6.2 AMENDING THE COMMUNITY MASTER PLAN

6.2.1 Why amend the Community Master Plan?

The Community Master Plan shows how the village of Inukjuak will continue to evolve over the next 20 years, based on its present situation and expected population growth. The views of the Council and residents may change over time as new information becomes available. Council should carry out regular updates and amendments to the Community Master Plan as new data becomes available, so that it continues to meet the needs of a changing community. It may also happen that a proposed project does not meet one or more criteria of the Community Master Plan, yet the Council and the community believe that it is a good project. In such cases, the Community Master Plan must be amended by bylaw before the project can be approved.

6.2.2 How to amend the Community Master Plan?

In general, it is recommended that the Community Master Plan be reviewed, and if necessary, amended, every five years.

Amendments to the Community Master Plan shall follow the amendment process as described in the appendix. An Amendment to the Community Master Plan does not require a Vote of the Electors. If the Community Master Plan is amended, for compliance purposes, the zoning bylaw must also be amended in order to incorporate the modifications

It is recommended that the northern village council create an action plan to outline priority projects over the short-, medium-, and long-term. Although this is not mandatory, it is recommended as a way to enable the northern village council to track and enforce the Community Master Plan.

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Appendix

Map 11 — Topography of Inukjuak

LEGEND

Contour (5m)

Value

High : 108,09

Low : -0,57

NOTES

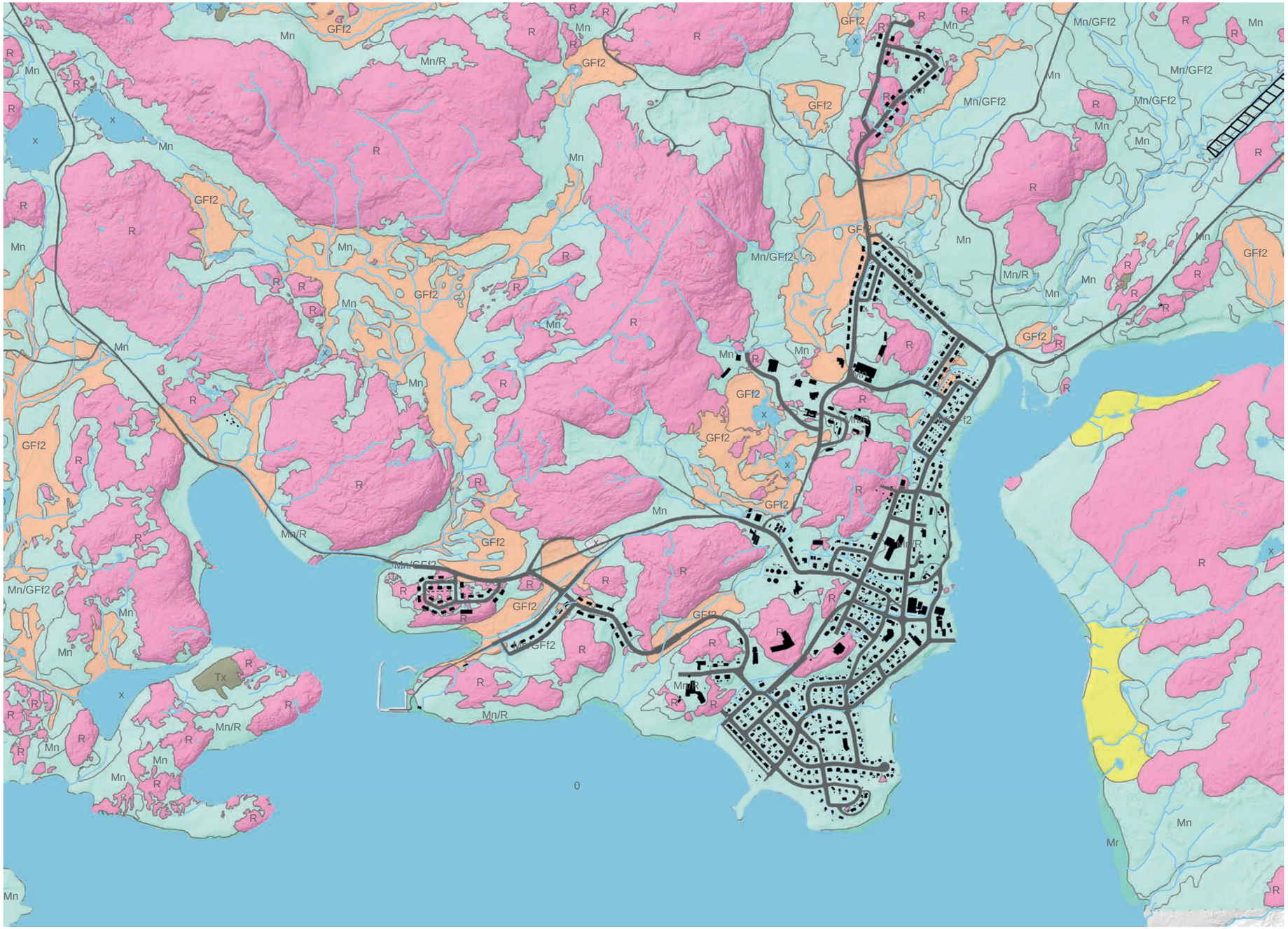
Data Source: KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-20

1:14 000

0 300 600 900 m

Data source : (Carbonneau et al., 2018e)

Map 12 — Surface Deposits in Inukjuak



LEGEND

Surface Deposit

- At: Alluvial sediments - Terraced sediments
- GFf: Glaciofluvial sediments - Outwash fan sediments
- Lv: Lacustrine sediments - Veneer
- Mn: Marine sediments - Littoral and nearshore sediments
- Mr: Marine sediments - Beach sediments
- R: Bedrock - Undifferentiated
- Tx: Glacial sediments - Weathered till

NOTES

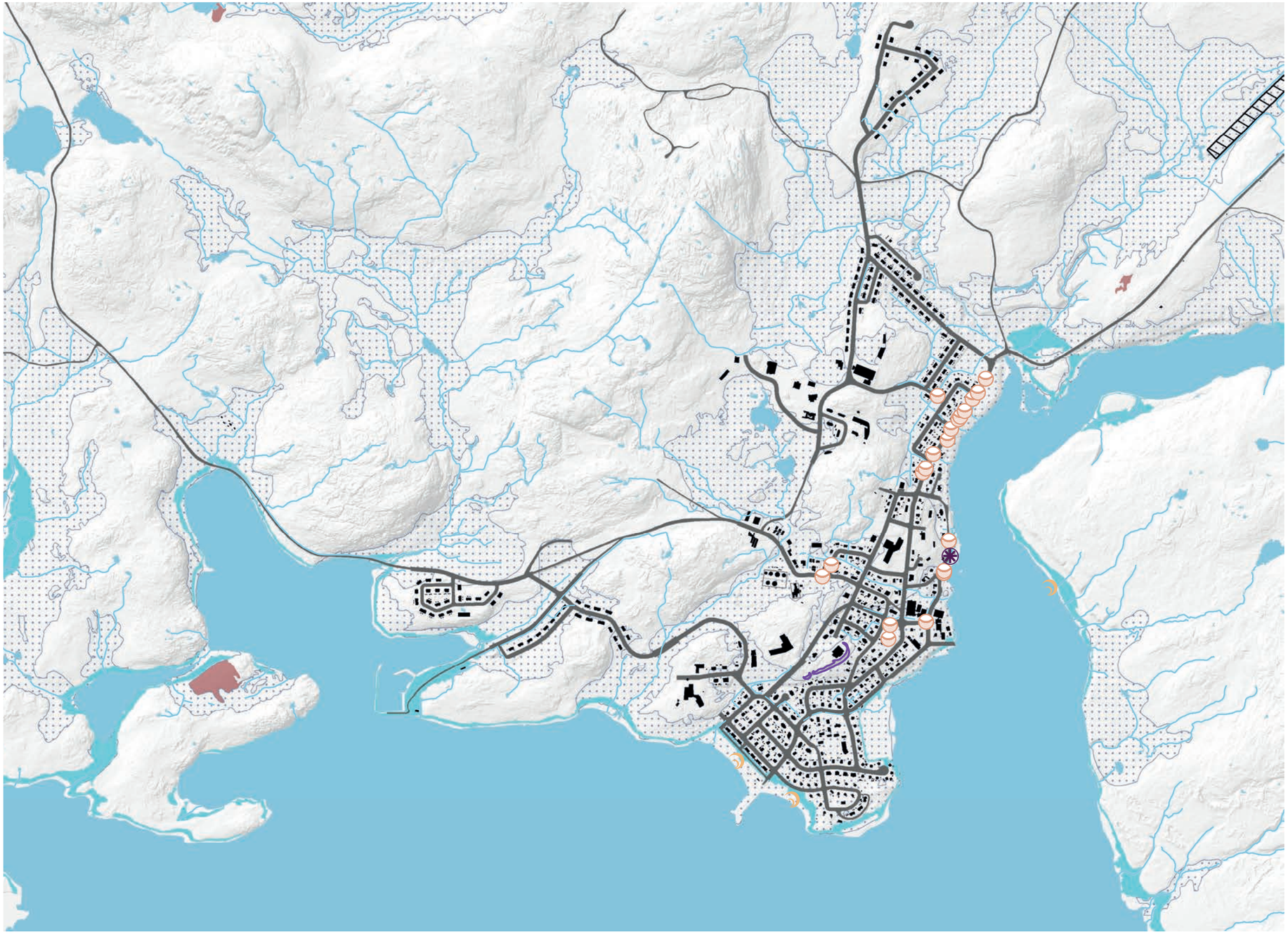
Data Source: CEN (2018), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-20

1:14 000

0 300 600 900 m

Data source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018c)

Map 13 — Natural Hazards Risk in Inukjuak



LEGEND

- Coastal Erosion
- Icing
- Thermokarst Subsidence
- Ice-rich Permafrost
- Gelifluction
- Storm Surge
- Avalanche Risk

NOTES

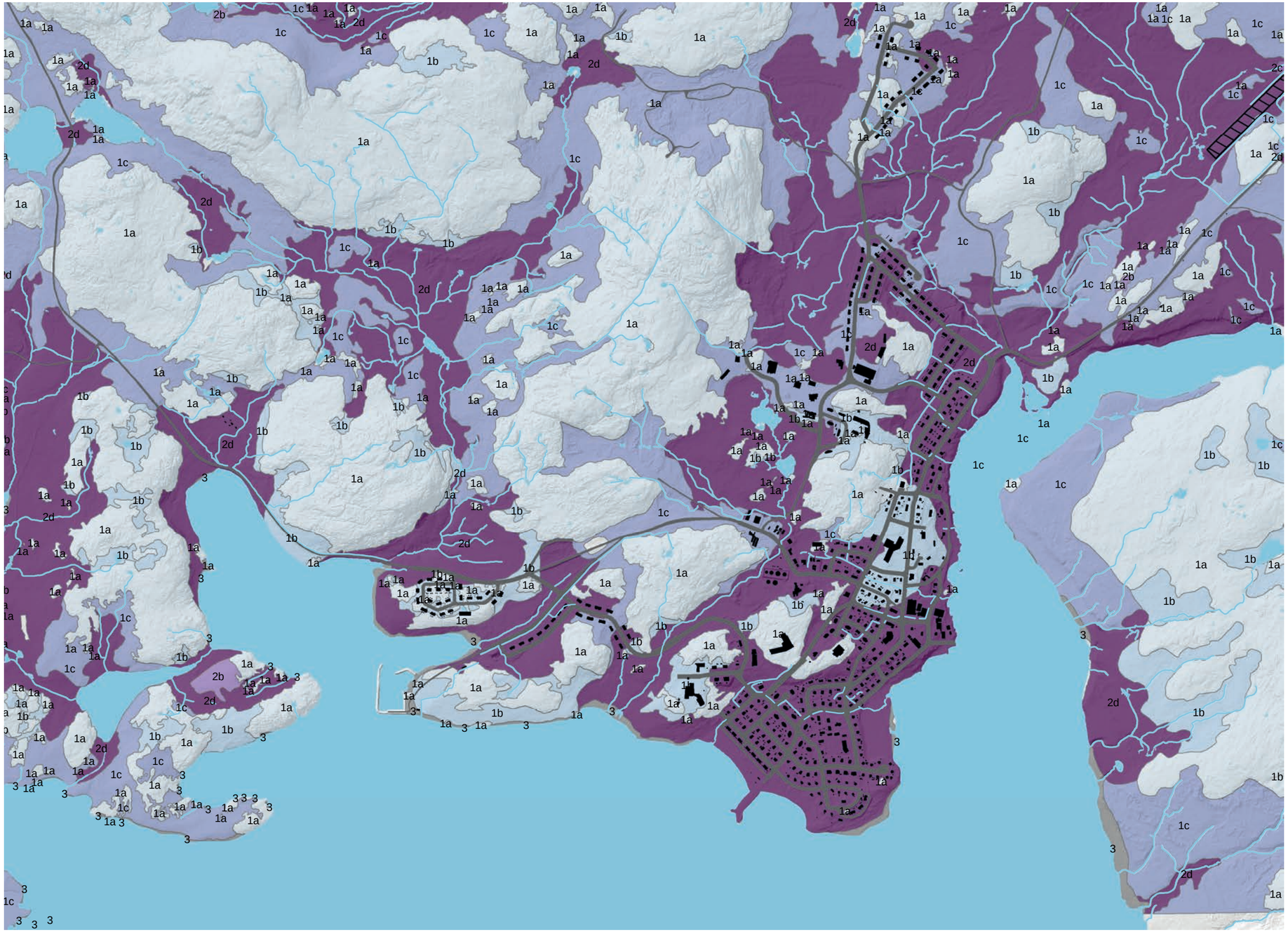
Data Source: CEN (2018), NGI (1999), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:14 000

0 300 600 900 m

Data source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018c)

Map 14 — Permafrost Conditions in Inukjuak



LEGEND

Permafrost Conditions

- 1a - Bedrock
- 1b - Thin cover of sand and gravel (< 2 m) over bedrock
- 1c - Thick layered sand and gravel deposit (> 2 m)
- 2b - Thick cover (> 2 m) of heterogeneous deposit (till) over bedrock
- 2c - Thin cover (< 2 m) of fine-grained deposit of marine or lacustrine origin over
- 2d - Fine-grained deposit of marine origin sometimes covered with a thin layer
- 3 - Contemporary deposit

NOTES

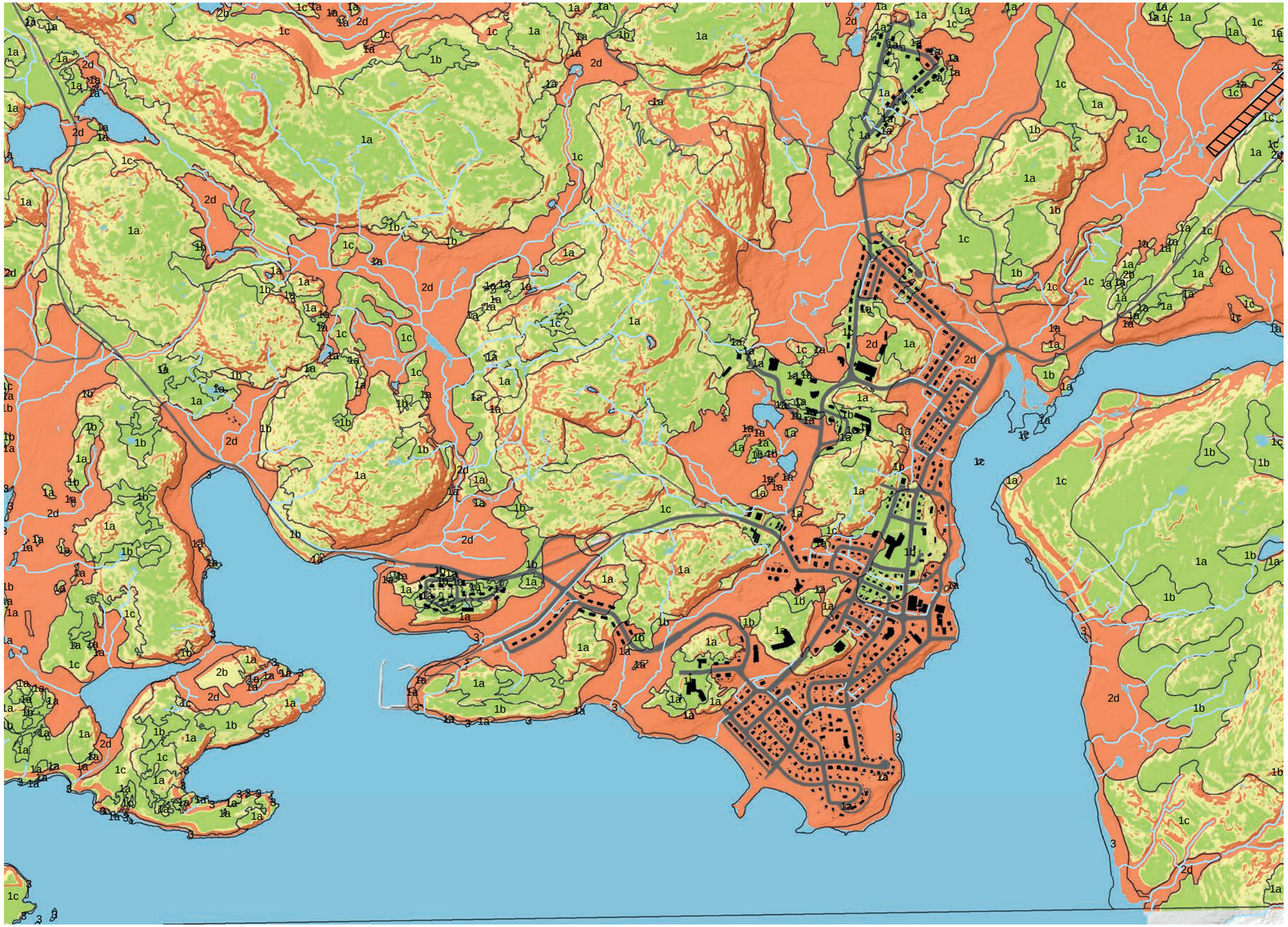
Data Source: CEN (2018), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-28

1:14 000

0 300 600 900 m

Data source: (Carbonneau, L'Hérault, Aubé-Michel, et al., 2018b)

Map 15 — Construction Potential in Inukjuak



LEGEND

Construction Potential

- Good
- Fair
- Poor

NOTES

Data Source: CEN (2018), KRG (2024), CRGH AG(2024), MERN (2021)
Date: 2025-02-21

1:14 000

0 300 600 900 m

Data source:(Carbonneau et al., 2018c).