



Feasibility Study

PHASE ONE REPORT • UPDATED • APRIL 2023

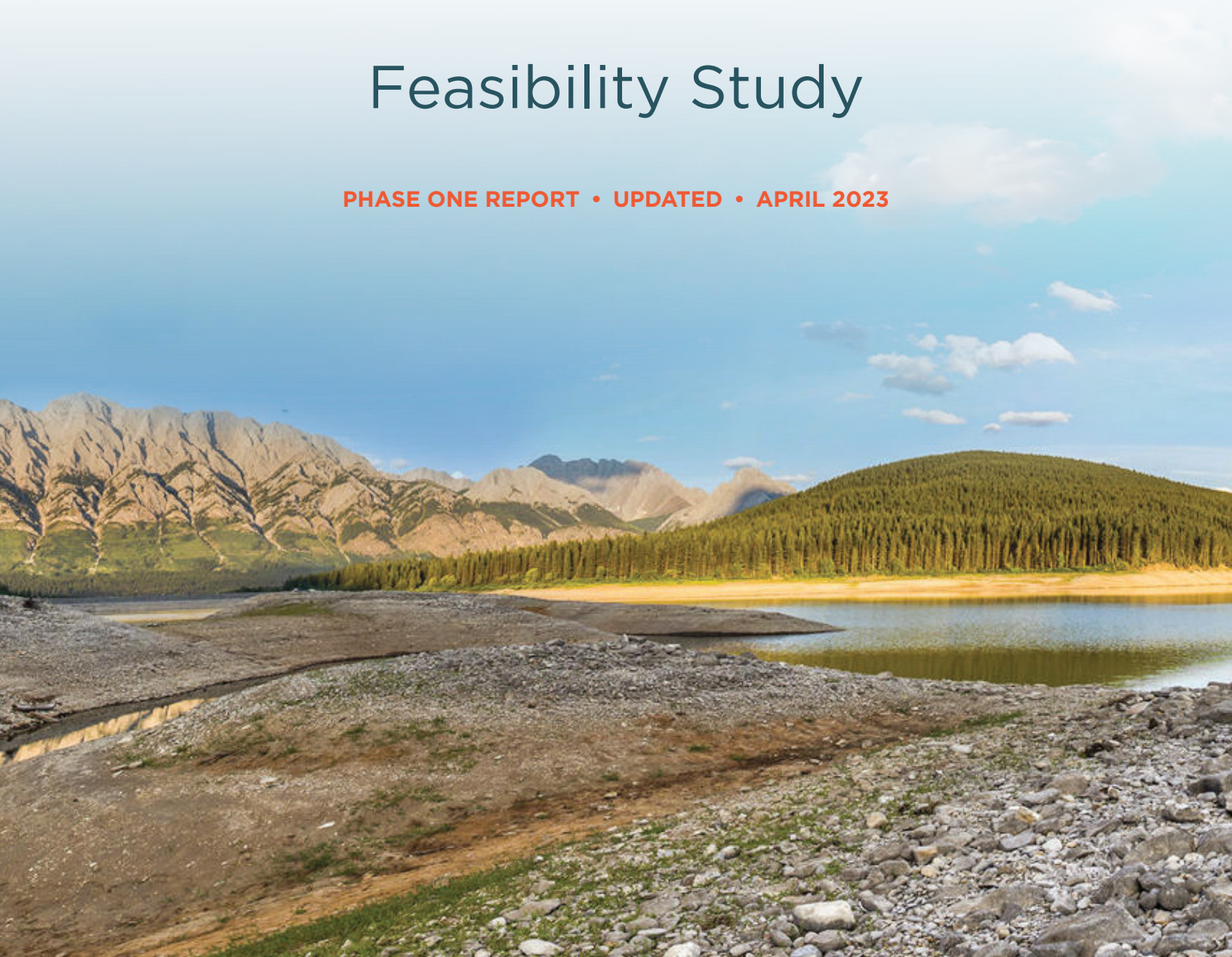


Table of Contents

EXECUTIVE SUMMARY	4
SECTION 1: INTRODUCTION & CONTEXT	6
1.1 Project Overview [Approach]	7
<i>Purpose of Feasibility Study</i>	7
<i>Project Initiation Process</i>	7
<i>Engagement Approach</i>	8
<i>Summary of Engagement Activities</i>	10
1.2 NND Context	11
<i>Community Overview and Path to a Cultural Centre</i>	11
<i>Community Vision and Purpose</i>	12
<i>Integration of Doòli</i>	13
1.3 Cultural Centres in Context	14
<i>Models of Cultural Centres</i>	14
<i>Comparative Regional Cultural Centres</i>	14
1.4 Identification of Community Need	16
SECTION 2: DEFINING	17
2.1 Defining Direction	18
<i>Essential Elements</i>	18
2.2 Activities & Programming	20
<i>Prioritization</i>	21
<i>Partnerships</i>	22
2.3 Functional Program	24
<i>Key Interior Spaces</i>	27

SECTION 3: SITE & CONCEPT	30
3.1 Site Analysis & Recommendations	31
<i>Site Context</i>	31
<i>Site Selection</i>	31
<i>Location and Site Description</i>	32
<i>Site Strategies</i>	34
<i>Geotechnical Assessment</i>	35
3.2 Concept Option Layout	36
<i>Community Priorities</i>	36
3.3 Design Guidelines & Standards	38
<i>Zero Carbon Building Design Standard</i>	38
<i>Regenerative Design and Living Building Challenge</i>	40
<i>Accessibility</i>	41
3.4 Cost Estimate & Funding Strategy	42
<i>Cost Estimate</i>	42
<i>Funding Strategy</i>	43
SECTION 4: CONCLUSION & NEXT STEPS	45

Executive Summary

This report outlines the feasibility of constructing a new Cultural Centre building for the First Nation of Na-Cho Nyak Dun (FNNND) in Mayo, Yukon. This is a project that has taken many years to define and develop, and is now moving into the design stage. This report will continue to be updated until the completion of schematic design (June 2023), at which point it will be considered a static document to inform the remainder of the design process.

The report identifies the necessary steps that must be taken to ensure the building aligns with NND's vision, values, and culture. The proposed timeline and funding strategy are realistic and achievable and will help to ensure the successful completion of this important project.

COMMUNITY VISION AND PURPOSE

The vision for the project is: *“Provide the community with a gathering place that we take pride in which instills the appreciation of the rich, long history and reflects our diverse cultural backgrounds. The cultural center will be a place for citizens to learn traditional skills and knowledge to live their lives in a good way. It will be a welcoming place for the broader community to learn about our heritage and culture. We acknowledge our past while moving forward as a community.”*

Dän Laachewdäw Kú, which means “a place where people gather”, aims to fulfill Na-Cho Nyak Dun's vision and dream of having a welcoming and accessible place to celebrate, learn and practice their culture and ensure that it is passed onto future generations. It is intended to be a catalyst to heal relationships across communities and cultures through lands and heritage programming.

CULTURAL CENTRES IN CONTEXT

Cultural Centres and hubs offer cultural programming that is accessible to everyone and are well-integrated into community needs across community bounds, promoting cultural understanding and fostering community cohesion.

In the Yukon, Cultural Centres have been recognized early on in the land claims and self-governance process as crucial for preserving and promoting the cultural practices and beliefs of Yukon First Nations. DLK will join eleven existing Cultural Centres in communities across the Yukon.

COMMUNITY NEED

The First Nation of NND has faced multiple overwhelming tragedies in recent years, including shootings, overdoses, and youth suicide. These issues have been compounded by mental health



and addiction crises, which were further exacerbated by the COVID-19 pandemic. The project has adapted to this context and listened to what the community is asking for: space to make together, learn together and be together through the good times and the tough times. Though there are some existing community resources, they are insufficient, booked frequently, and unable to accommodate all the uses envisioned for the new building.

ACTIVITIES & PROGRAM

To best serve the community, Dän Laachewdäw Kú will prioritize providing accessible and multifunctional space for various cultural practices, events, workshops, and community gatherings. The building will also include ample storage and bright, accessible office space to support the operations and administrative requirements of the heritage and lands departments, which are currently overcrowded and lacking in space in the current administration building. This approach not only meets the desires of the community for the building, but also addresses clear needs within the wider community.

SITE

The site for the Cultural Centre is located in the C-6 parcel on the stable sand cliffs just outside of the community of Mayo, Yukon. This site has been allocated via Council resolution, and follows the direction provided in 2002 by Chief & Council that NND would focus its infrastructure within

the C-6 settlement land parcel. This site has a strong relationship with the existing Administration building, enables connection to existing trails and the views and has plenty of space for outdoor activities to support the building.

DESIGN GUIDELINES

The NND Cultural Centre should be a passively designed building to work with northern climate and site conditions. In order to achieve the values of NND through Dooli, a key value that the project team would like to see instilled in the building is regenerative design. One of the ways in which this could be achieved is through Zero Carbon building design and aspiring towards Petal Status of the Living Building Challenge.

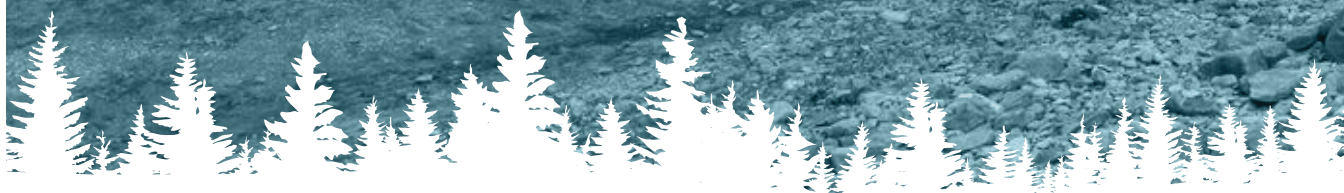
COST ESTIMATE & TIMELINE

Taylor Architecture Group provided a cost / square foot estimate for the construction of the FNNND Cultural Centre. This has been estimated at approximately \$29 million dollars. The timeline envisions an operational Cultural Centre building in the community by 2028. The proposed funding strategy includes a commitment from NND to provide 10 million dollars, with additional funding expected from government and other sources.



SECTION 1:

Introduction & Context



How to read this document

This document outlines the process for creating the Nacho Nyak Dun Dän Laachewdäw Kú Cultural Centre, including how the path was determined through community engagement, stakeholder interviews, and collaboration with the FNNND Heritage Department. The process also involved a technical review of similar facilities throughout the Yukon Territory.

This document is structured into four sections:

Section 1 provides background and context.

Section 2 defines the intended audience for the Cultural Centre and outlines both its purpose and the activities that will happen in it.

Section 3 includes an analysis of the chosen building site, along with design guidelines and standards to ensure the building is aligned with the vision and purpose set out in the previous sections.

Finally, **Section 4** outlines the next steps and the path forward.

1.1 PROJECT OVERVIEW [APPROACH]

Purpose of Feasibility Study

The purpose of this document is to assess and understand the feasibility of constructing Dän Laachewdäw Kú, a new multipurpose cultural building for the First Nation of NND in Mayo, Yukon Territory, and to lay out the path forward for its construction that aligns with this feasibility assessment. The document outlines the community engagement and technical analysis processes undertaken to determine a feasible path for the project, and provides foundational information necessary for building design.

This report includes a review of background work, supporting services and provides a proposal for the work moving forward.

Project Initiation Process

The NND Cultural Centre is an initiative that stems from NND's obligations under its final and self-government agreements, as well as the 2004 Five-Year Strategic and Implementation Plan.

The NND Heritage Department's mandate is to safeguard and promote the traditional knowledge, culture, governance, and language of the Northern Tutchone people, and the First Nation of Na-Cho Nyak Dun has envisioned a Cultural Centre in the community for many years.

Starting in 2018, when Chief and Council pledged 1 million dollars to initiate the investigation and planning process for such a facility, the concept of a Cultural Centre has gradually taken shape through extensive community engagement, commitments from council, and integration into various community and nation-wide plans.

Regenerative Design has been involved in supporting the NND Heritage Department with realizing this project since the fall of 2016, with pre-planning activities and the first draft of this feasibility report. In 2019 Regenerative's role was formalized to provide project management, community

The development of Dän Laachewdäw Kú has been supported and guided by the Community Advisory Committee, the Heritage and Lands Departments of NND, and the broader FNNND community through community design events. These efforts prioritize cultural humility and aim to develop ownership of the project outcome. The NND Heritage Department staff, elders, youth, citizens, and leadership have all contributed and will continue to provide input into the project from its conception to completion.

This engagement process involves four circles of engagement:

1. Community & Design Advisory Committee

In 2018, a community working group was established to serve as a link between citizens and the project management team. The working group's role is to guide the process from feasibility through schematic design as an advisory committee whose work is guided by a terms of reference. This group serves as the eyes and ears of the community, communicating progress and updates about the building to others, and acting as the project's community champions.

Moving forward, a sub-committee of this group will offer design advice and provide an opportunity for community members who wish to be more fully involved in the design process. This involvement includes working with the design team on materials, aesthetics, program relationships, cultural aspects, and other related matters.

2. Internal Working Group & FNNND Leadership

An internal working group serves as a connection between the FNNND government and the project management team. They review and provide feedback on the process and steps forward. The working group includes representatives

from the operational side of the FNNND government, providing governance and financial oversight, as well as approvals. Ultimately, Chief and Council will be responsible for making the final decisions on the design and construction of the Cultural Centre.

3. Community Events & Surveys

The Community Design Events serve as an inclusive platform for the wider community to actively participate in the design process of the Cultural Centre. These events are open to everyone in the community and are held at significant stages of the design process. In addition to in-person events, the engagement process will include online surveys and other forms of virtual engagement to ensure that FNNND citizens who are not currently living in the area can also provide their input on the Cultural Centre's design.

4. Technical Advisors & Partnership Interviews

Technical advisory interviews involve seeking advice regarding the technical and programmatic aspects of Dän Laachewdäw Kú's design and construction. In addition, current partnerships of FNNND that could use or be connected to the new building are also consulted and integrated into the design and program confirmation process.

The process of establishing the feasibility and conceptualizing the Dän Laachewdäw Kú building has been a gradual progression, moving from broad to cohesive, specific ideas through a process of slowly narrowing concentric circles. Initially, a review of heritage facilities in northern Indigenous communities was conducted to provide context and initiate discussions with the community to determine their cultural needs and activities. This information was then synthesized, refined and reviewed through multiple feedback loops with community members, departmental staff

and stakeholders, resulting in a clearer understanding of the gaps and needs that the building will aim to address. This ongoing process has led to the development of this feasibility document, which outlines the direction of what Dän Laachewdäw Kú will become.

Summary of Engagement Activities

During the COVID-19 pandemic, community engagement activities were put on hold due to the challenges of wider and specific engagement while community members focused on dealing with the ongoing epidemic. Prior to the pandemic, engagement activities were conducted at different levels, as illustrated in the following diagram.

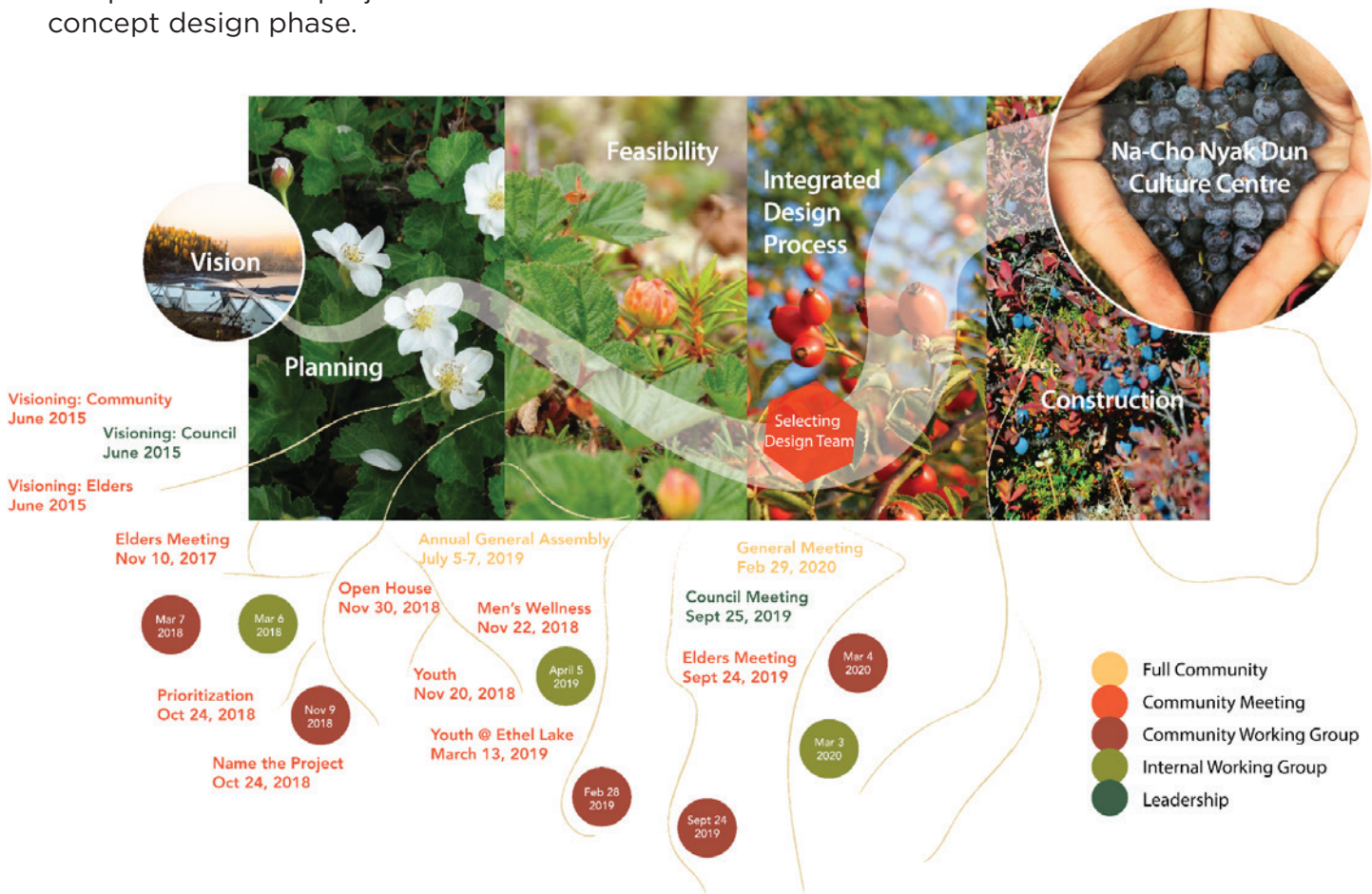
In the spring of 2015, meetings were held with the community and elders to establish the vision for the project. Since then, there have been additional meetings with elders and the community to provide updates and gather feedback as the feasibility study is completed and the project moves into the concept design phase.

In the fall of 2018, a program prioritization exercise was conducted with elders, community members, youth, and staff to understand what should be included in the Cultural Centre. A preliminary space analysis was done with the building program, and three ideas were presented to the community at the General Assembly to solicit input on key organizational relationships within the Cultural Centre. Community members were given the opportunity to provide feedback, add to, and vote on preferred gathering space relationships, administrative strategies, materiality, and indoor/outdoor connections.

The following diagram illustrates the pre-COVID engagement timeline for DLK:

Starting in Spring 2023, the engagement process with the community is being resumed concurrently with the schematic design phase.

IMAGE: DLK engagement timeline



1.2 NND CONTEXT

Community Overview and Path to a Cultural Centre

Historically, Na-Cho Nyàk Dun lived and trapped throughout the area surrounding Mayo, Yukon in the Stewart River (“Na-Cho Nyak” or “Big River” in Northern Tutchone) watershed. The First Nation is the most northern community of the Northern Tutchone language and culture group and is closely affiliated with adjacent Northern Tutchone First Nations of Selkirk at Pelly Crossing and the Little Salmon Carmacks First Nation at Carmacks.

The First Nation of Nacho Nyak Dun currently has 602 members and the average population of its largest community, Mayo, is 450. Those who live in and around Mayo, make up about half the total FNNND population. Mayo is located on the Silver Trail Highway (or Highway #2), which is 2.5 hrs from Dawson and 4.5 hrs to Whitehorse.



In 1993, the First Nation of Na Cho Nyak Dun (FNNND) was among the first four First Nations in Yukon to sign self-government and land claims agreements. Over the past 21 years, FNNND has been implementing these agreements.

According to Chapter 13 of the final agreement, there is a commitment for the First Nation, in collaboration with other signatory governments, to promote public awareness of heritage. This includes “recording and preservation of traditional languages/legends/histories, to manage heritage assets, facilitate public access and research, incorporate traditional knowledge into other aspects of government and ensure that the distinct culture of the First Nation be preserved and shared.” Additionally, Chapter 13 contains provisions regarding the development and management of public records related to heritage, as well as a commitment to promoting economic opportunities related to heritage resources, such as training, employment, and contracts at designated heritage sites and cultural centers.

The early history of Na Cho Nyak Dun documents the people as transitory and migratory within the Stewart River watershed until the turn of the 20th century when the mining booms transformed the confluence of the Mayo and Stewart Rivers into a transportation hub. The First Nations people then became sedentary and built their own village across the river from Mayo in 1915, becoming part of the town’s monied economy. However, in the early 1950s, the federal government intervened, requiring an enforced move from what is now known as the “Old Village” to the east side of Mayo.

From 1950-2000 a new village grew up on the boggy flats in this east side area with homes, offices, and government facilities being built at various times and to varying degrees of competency. The land provided was on discontinuous permafrost and the buildings were in a constant state of upheaval requiring costly maintenance and stabilizing efforts.

The federal government required the move to this particular land, but elders tell us that the people’s intention was to move, when possible, to the clay cliffs that are on the Mayo side of the river. The ancestral burial grounds are here, the land is sacred and the topography stable.

A decision was made at a General Assembly in 2002 to plan a move to this high ground which was identified in the agreements as the C-6 selection. Plans were drawn up for a new Government House and sub-division that would use the geothermal resources on this site. A core area for future development was identified. A cultural centre and elders housing complex were envisioned but no planning specific to this complex was undertaken at the time.

The new Government House at C-6 opened its doors in 2010, complemented by a service building housing the geothermal and water delivery system, and a subdivision of 12 new family homes. The completion of the Government House meant that now all government services were able to come together under one roof in the traditional area dreamed of by the ancestors.

Since that time, the housing subdivision has expanded and planning for a community services complex adjacent to the government house has occurred. The Site for the Cultural Centre was allocated via Chief and Council resolution in 2020 after extensive community engagement.

Community Vision and Purpose

Dän Laachewdäw Kú, which means “a place where people gather”, is currently being developed to provide a cultural hub and healing space for the FNNND. Its aim is to serve as a focal point for the transmission of FNNND beliefs, culture, language, and inter-generational knowledge among the northern Indigenous people. The building aims to fulfill Na-Cho Nyäk Dun’s vision and dream of having a welcoming and accessible place to celebrate, learn and practice their culture and ensure that it is passed onto future generations. It is intended to be a catalyst to heal relationships across communities and cultures through lands and heritage programming.

The building, once constructed, will be open to everyone and will provide access to

living and learning culture, healing resources and on-the-land skills. It will include spaces such as a commercial kitchen, large workshop space, multipurpose room, ceremonial round room, an integrated gallery and circulation space showcasing FNNND history, craft and land connection. Additionally, it will provide offices for the Lands and Heritage departments to support programming and the operation of the building. It will be a place where artifacts are displayed and stored, where hunting, fishing and gathering practices are shared and taught, where language is discovered, drumming and dancing takes place, where traditional practices (such as food preparation, fish and meat drying) occur, a place where genealogy is restored and recorded, workshops are held, stories are told and events hosted.

The Heritage and Lands departments will support the operation of the building and its programming, and their integrated approach aims to shift the narrative of what cultural hubs can be for remote northern First Nations communities and their adjacent municipalities. The NND Cultural Centre Vision Statement was created during a community workshop in the spring of 2015 and reflects the overall purpose of the centre, including the kinds of activities and facilities that the community wants to see happen.

“Provide the community with a gathering place that we take pride in which instills the appreciation of the rich, long history and reflects our diverse cultural backgrounds. The cultural center will be a place for citizens to learn traditional skills and knowledge to live their lives in a good way. It will be a welcoming place for the broader community to learn about our heritage and culture. We acknowledge our past while moving forward as a community.”

The NND Heritage Department is responsible for overseeing the planning, design and future operation of the NND Cultural Centre.

The mission of the First Nation Na-Cho Nyak Dun's Heritage Department is to preserve, protect and promote the traditional knowledge, culture, governance, language of the Northern Tutchone people.

Integration of Doòli

Doòli are unwritten Northern Tutchone laws, customs, and teachings that cover every aspect of life to be passed down to future generations. The Northern Tutchone Doòli Project (Doòli Dän K'i) has developed materials and revitalized traditional laws and principals.

As part of Doòli Dän K'i - Hude Hudän K'i Hats'adän (Lessons, Teachings and Laws from our Northern Tutchone Traditional Ways) project, there is a book entitled Beaver Teaches Man to Build a House. Teachings shared at the end of this book are shared in the image below.

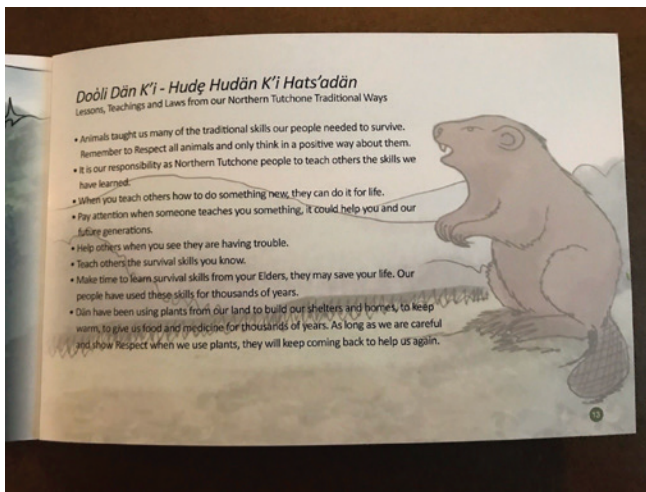


IMAGE: Beaver Teaches Man to Build a House.¹

These teachings and laws can help to ground the Cultural Centre in the Northern Tutchone way.

¹ <https://mappingtheway.ca/stories/do%C3%B2li-d%C3%A4n-k%E2%80%99i-hats%E2%80%99ad%C3%A4n-%E2%80%93-revitalizing-northern-tutchone-teachings-future-generations>



1.3 CULTURAL CENTRES IN CONTEXT

Cultural Centres can offer a wide range of services that cater to the specific needs of the communities they serve. To provide a better understanding of the context in which Dän Laachewdäw Kú will operate and support its community, this section provides a brief overview of the existing Cultural Centres, Museums, Programs, and Activities in and around Na-cho Nyak Dun Territory.

Models of Cultural Centres

Cultural Centres and spaces are becoming increasingly prevalent in Indigenous communities throughout Canada, reflecting the resurgence of Indigenous languages, cultures, and communities in the country. Unlike traditional museums and heritage parks, these Centres prioritize the ongoing development and transmission of Indigenous culture and are primarily intended as spaces for communities to practice and live their culture, rather than merely displaying it for a non-Indigenous audience.

Cultural Centres and hubs offer cultural programming that is accessible to everyone and are well-integrated into community needs across community bounds, promoting cultural understanding and fostering community cohesion. These Centres prioritize the continuation of Indigenous culture and provide a space for communities to come together, learn from one another, and share their traditions with the wider community.

As described by First Nations Confederacy of Cultural Education Centres²:

“For community, they develop and deliver community related programs and services covering a broad spectrum of activities such as summer camps, traditional sweat lodges and ceremonies, outdoor skills, cultural tourism, community language classes, traditional healing, protection of Elders teachings and traditional knowledge,

adult language lessons, ceremonial and cultural celebrations, link contemporary technologies to traditional skills, and deliver cultural awareness programs to the public.

Cultural Centres function as ambassadors through the transmission of accurate accounts of First Nation history which nurtures bi-cultural awareness and addresses racism at its root. This is critical in an education and community context particularly in the age of technology and telecommunications.

In addition, Cultural Centres have been instrumental in utilizing technology to make First Nations language and culture current, dynamic and relevant to the children and youth of their communities. This is essential in a world of competing technology and social media.”

Comparative Regional Cultural Centres

In the Yukon, Cultural Centres have been recognized early on in the land claims and self-governance process as crucial for preserving and promoting the cultural practices and beliefs of Yukon First Nations. These Centres often serve multiple purposes, including hosting visitors and sharing culture and history, providing space for artists to sell their work as an active part of the Yukon’s Aboriginal tourism industry, and offering programming space for community members to practice and share traditional knowledge and living culture.

Cultural Centres expand upon the idea of passive interpretation of First Nations history by sharing traditional skills and knowledge through the practice of culture and learning centre programming. Currently, there are eleven First Nations Cultural and Interpretive facilities in the Yukon, serving these needs to varying degrees. Since the Umbrella Final Agreement in 1993, First Nations Cultural Centres have expanded

² <https://www.fnccec.ca/>

their scope and continue to evolve, offering not only interpretation of cultural history and gift shops, but also interactive cultural programming and educational opportunities for teaching and sharing traditional practices with citizens and the larger Aboriginal tourism industry.

Out of these Cultural Centres, four are particularly relevant to DLK: the Teslin Tlingit Heritage Centre, Dänojà Zho Cultural Centre, Carcross/Tagish First Nation Learning Centre, and Kwanlin Dun Cultural Centre. The following sections provide summaries of these projects.

The Teslin Tlingit Heritage Centre, Teslin -Teslin Tlingit Council

The Teslin Tlingit Heritage Centre was opened in 2003, on the shores of Teslin Lake. The Hall has a small gift shop, general performance/meeting hall, program room and Elders meeting room, offices and a kitchen. The Heritage Centre does not have a permanent collection of objects; the centre receives a small display of repatriated artifacts each year from the Canadian Museum of Civilization and works loaned from artists and others during the designated public season (May to September). Visitors pay a small admission fee of \$1 - \$2. The rest of the year the centre focuses on community programming.

The Dänojà Zho Cultural Centre, Dawson City - Tr'ondëk Hëwch'in First Nation

The Dänojà Zho Cultural Centre in Dawson City is open year round with visitor programs and activities occurring in the summer season. It is housed in an award winning building located on the banks of the Yukon River. The Centre hosts exhibits, films, many visitor activities, as well as a well stocked gift shop with handmade clothing items, jewellery and various books, music and other items celebrating First Nations culture.

Carcross/Tagish First Nation Learning Centre, Carcross - Carcross Tagish First Nation

The Carcross / Tagish First Nation Learning Centre was opened in June 2017 and overlooks Nares Lake in Carcross. The building provides a much needed large hall for hosting community events for up to 500 people. It also provides an elders lounge, kitchen, green room, and eventually the Nation hopes to add archives and a youth and elders wing.

Kwanlin Dun Cultural Centre, Whitehorse - Kwanlin Dun First Nation

The Kwanlin Dun Cultural Centre was opened in 2012 and is now considered Yukon's premier conference and convention centre. KDCC also currently houses the Whitehorse Public Library and a repository of Kwanlin Dün cultural artifacts, some of which are on display. As well as the standing exhibit, the KDCC offers programs and workshops year round and hosts larger gatherings such as the Adaka Cultural Festival, Frostbite Music Festival and National Indigenous Peoples Day celebrations. On a day to day basis, visitors must otherwise book in advance any interpretive tours of the Centre. During certain times of the year such as National Aboriginal Day, the Centre opens to the public to share their culture through dance and storytelling.

1.4 IDENTIFICATION OF COMMUNITY NEED

The First Nation of NND has faced multiple overwhelming tragedies in recent years, including shootings, overdoses, and youth suicide. These issues have been compounded by mental health and addiction crises, which were further exacerbated by the COVID-19 pandemic. This tragedy, layered on intergenerational trauma via persistent colonialism and ongoing effects MMIWG, Indian Act legacy and many other factors including ongoing systemic racism has created the community need for a place of cultural resurgence and healing pressing. The project has adapted to this context and listened to what the community is asking for: space to make together, learn together and be together through the good time and the tough times.

Though there are some existing community resources, they are insufficient, booked frequently, and unable to accommodate all the uses envisioned for the new building. A larger, dedicated space is needed to properly support community programming, cultural display, and the work of the Heritage and Lands departments in developing, continuing, and sharing cultural and land based knowledge. Dän Laachewdäw Kú will provide accessible community and programming while also actively supporting existing partnerships and welcoming in the wider Mayo community. In this way, the NND Cultural Centre will add value to the Village of Mayo, contribute to Mayo's tourism infrastructure, and fill critical service gaps in the community.

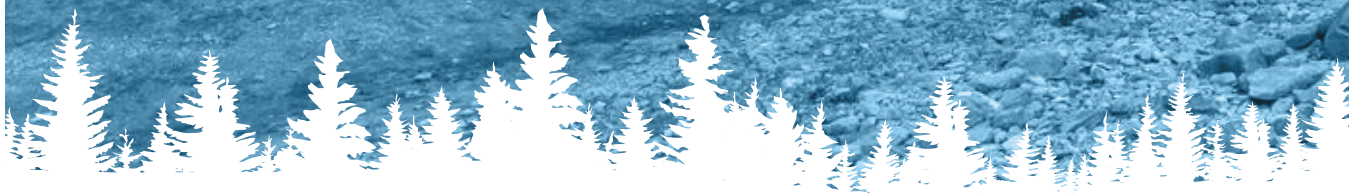
Currently there is only one certified community kitchen in the entire Silver Trail region around Mayo. It alone must serve the whole community's needs, including space for food service preparation, catering, workshops and other food programming. As such, it is in critical demand and often unavailable for cultural workshops, food programs, and other community events.

The community is also lacking in workshop space. For larger projects, the only workshop is at the Mayo school; it is woodworking focused and therefore not able to be used for processing hides or other such activities. Furthermore, it is not fully accessible to the entire FNNND community, as not all community members are permitted on school grounds. At present, heritage related programming relies on short-term, non use-specific space found throughout the Village of Mayo, and there is no cohesive and dedicated use space with a cultural focus. This means that heritage staff have to constantly problem solve and adapt to provide programming, while dealing with inadequate storage for materials that are located in scattered storage areas across multiple buildings and require transportation depending on where they are able to retain space to fulfill programming needs.

The goal of the new building is to instill pride in the community and provide a place where youth, elders, and all community members can access and interact with the history and culture of FNNND, both past and present.



SECTION 2: Defining



This section outlines how Dän Laachewdäw Kú has been developed in response to community needs and what was heard through the engagement process, and describes the functional program that has been developed accordingly.

Following this is an outline of the core elements guiding the Cultural Centre's development and how what was heard has been translated into a program and key interior and exterior spaces.

A separate Feasibility Report will examine the relationship between the Cultural Centre and Mayo Legion Hall (and other NND programs) to ensure that planning for the cultural centre is integrated to the best degree possible with operational and capital planning for the organization as a whole.

2.1 DEFINING DIRECTION

During the initial planning phase, various options were evaluated for incorporating the cultural centre with other NND programs such as an elder's facility, daycare, and youth/ community centre. However, after careful consideration, it was decided that the Cultural Centre will solely focus on the cultural activities and include office space for NND Departments, such as Heritage and Lands.

We have received feedback indicating that while Dän Laachewdäw Kú should be open to all, its primary focus will be on serving the needs of FNNND citizens and members of the local community. While ensuring the building is financially sustainable is important, it will not be designed to cater specifically to tourists in the area. The Legion Hall will be used as a hub for public-facing programs, while the Cultural Centre will be primarily community-oriented.

To best serve the community, Dän Laachewdäw Kú will prioritize providing accessible and multifunctional space for various cultural practices, events, workshops, and community gatherings. The building will also include ample storage and bright, accessible office space to support the operations and administrative requirements of the heritage and lands departments, which are currently overcrowded and lacking in space in the current administration building. This approach not only meets the desires of the community for the building, but also addresses clear needs within the wider community.

Essential Elements

Living Culture, Learning Skills

People want to see culture being lived and practiced at the cultural centre. We heard through engagement that people want Dän Laachewdäw Kú to be a place to bring old ways to life, and to foster the pride and joy that comes with them. Skills like sewing, working with hides, making medicines, drumming and singing, and making tools will all be taught and learned at the centre. In this way, the focus of the centre is on serving the community's cultural growth.

Telling Our Stories

The community wants to make sure that the cultural centre includes the stories of the Na-Cho Nyak Dun. These stories start from the legends of the long-ago time, to the stories of life on the land and in the Old Village, through residential schools and land claims, and right up to modern self-government. These stories are to ensure that everyone who visits Dän Laachewdäw Kú can visually learn about the history of the community and understand the importance of the land and the culture to the Na-Cho Nyak Dun.

Self-Sustaining

While NND has a thriving industry in its territory which generates consistent and reliable financials, it is important to acknowledge that these funds are not limitless. The construction of the new cultural centre in NND presents a need for the centre to cover its own operations and maintenance (O&M) costs. To achieve this, there are various options, but it is likely that facility rentals of office spaces, workshop spaces, and learning spaces to partner organizations will be the best solution. The Village of Mayo, YESAB, Carleton University, and the Yukon Government are among the potential partners for facility rentals, and supplementing learning space at Yukon

University may also be an option. These partnership discussions have already started to identify partner needs and realistic financial opportunities.

It is worth noting that, unlike other cultural centers in larger areas, relying on entry fees from tourists is not feasible due to the low level of tourist activity in Mayo. Mayo is a small community with a population of fewer than 500 people, which means that there is not enough tourist infrastructure to support a thriving tourist industry. Additionally, Mayo is located in a relatively remote part of the Yukon, making it less accessible for tourists who may prefer to visit more popular destinations with better transportation links. While the new cultural centre being built may attract some visitors, it may not be enough to sustain a strong tourist industry in the area.

Flexibility

There are many different types of activities that citizens can envision going on in Dän Laachewdäw Kú, and it will be important for all the spaces to be designed to support those varying needs. This means that all spaces should be supported by storage and technological needs to ensure they can adapt over time and to various needs.



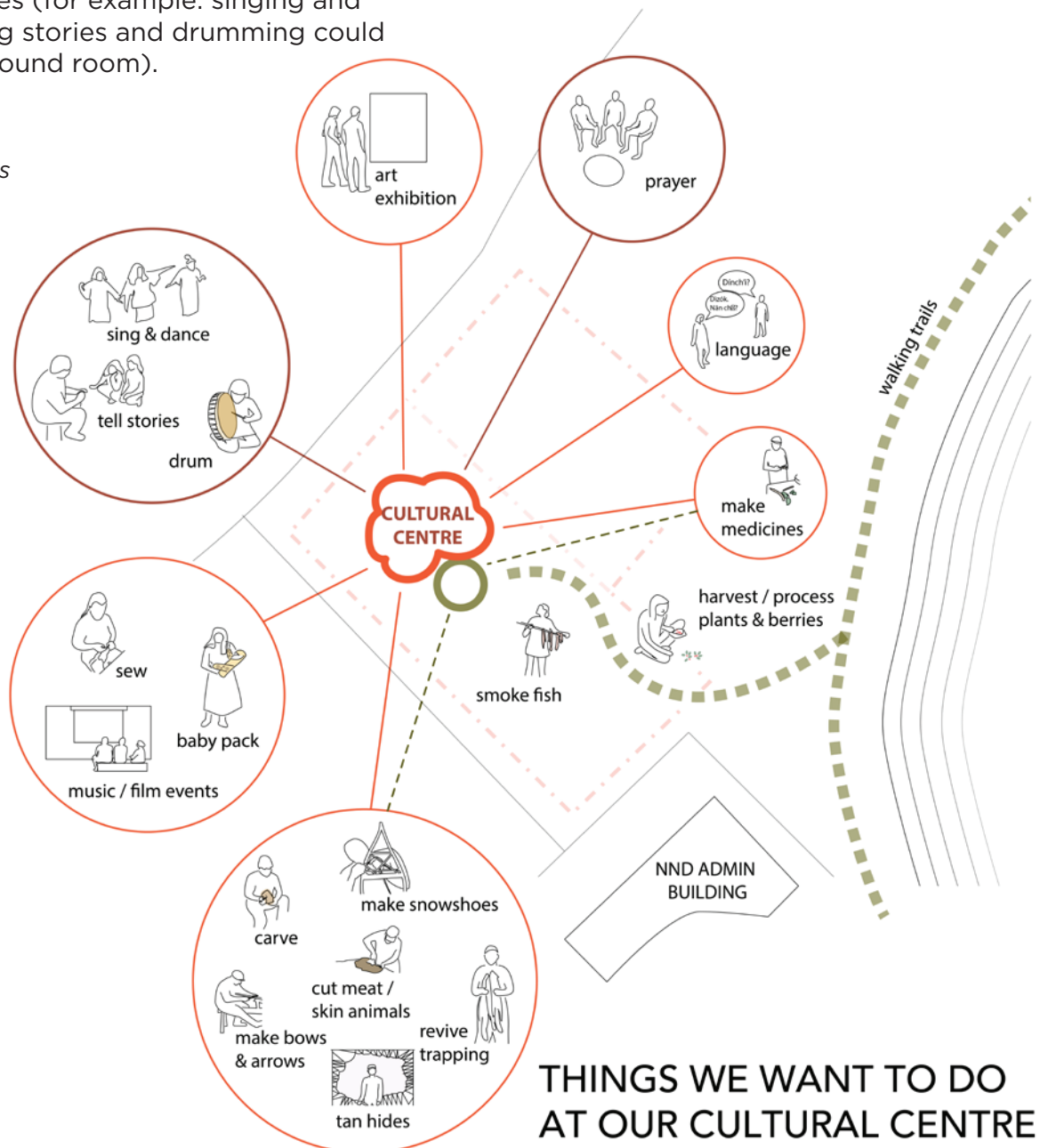
2.2 ACTIVITIES & PROGRAMMING

In order to understand the space and facility requirements from a community perspective, community members were asked what activities they wanted to do at the Cultural Centre, and what spaces they would need to facilitate those activities.

Initial visioning sessions made clear the large breadth of activities that community members want to be able to practice within the Cultural Centre. The diagram below illustrates these activities, and groups those that can be facilitated within similar program spaces (for example: singing and dancing, telling stories and drumming could all occur in a round room).

Some activities require strong indoor - outdoor connections and the ability to use both indoor and outdoor spaces. Therefore, some program elements must be directly adjacent to and have a strong connection with covered outdoor space. In particular, it was noted by community members that the commercial kitchen must be connected to an adjacent outdoor kitchen and the workshop must be able to open via large garage doors to an adjacent covered outdoor space.

IMAGE: Cultural Centre Activities

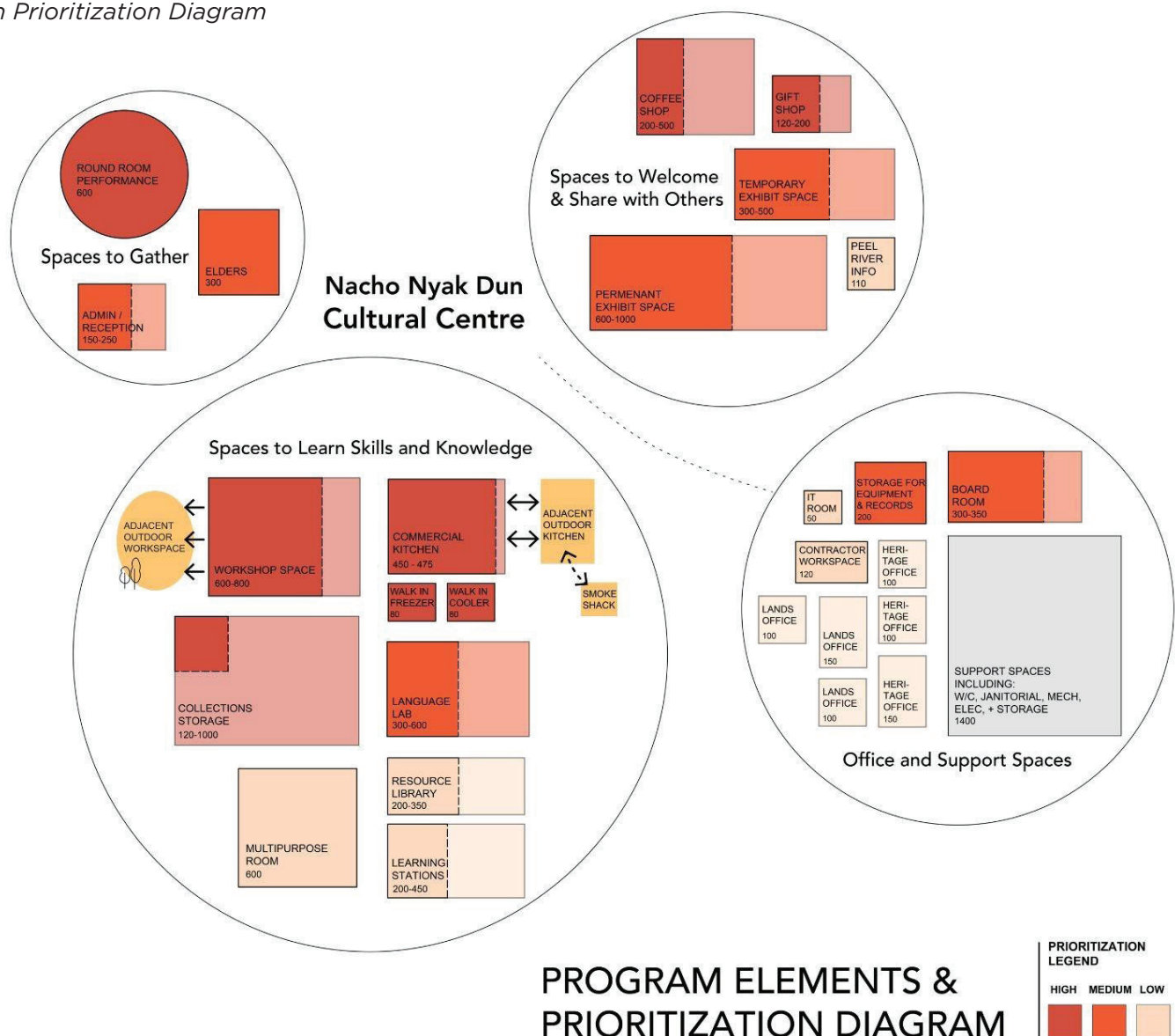


Prioritization

In the fall of 2018, a program prioritization exercise was done with Elders, community members, youth and staff in order to understand what was most important to include in the Cultural Centre.

The results of the prioritization exercise, along with additional feedback from working groups and technical interviews were together used to develop the building program presented in the following section. A diagram illustrating the prioritization that came from the community process is outlined below.

IMAGE: Program Elements with Prioritization Diagram



Partnerships

NND currently partners with various organizations that have space needs within the cultural centre as well. The key partners include Yukon University, Carleton University, the Village of Mayo, Yukon Government, and local industry partners, particularly mining operations.

Through a series of interviews conducted in early 2023 (and which are still ongoing), the partners have identified how the Cultural Centre could support their existing programs and how different Cultural Centre program spaces could provide opportunities to provide additional programming to the wider Mayo and FNNND. Where appropriate, these considerations have been integrated into the FNNND DLK functional program

Yukon University

Among the community training options offered by Yukon University, the Cultural Art Program stands out as the most successful program in Mayo.

Yukon University requires large, open multi-use space with plenty of secure storage for their Cultural Arts Program. The space should include a shop for selling materials and teaching skills, a storefront for displaying products, industrial areas for metal and woodwork, and areas for sewing, fur, and hides. The space should be designed with year-round use in mind, and should accommodate remote learning on platforms such as Zoom. Adequate audio and proper drainage are also important considerations.

Yukon University also identified the need for a commercial kitchen with good storage facilities, including fridges, freezers, fryers, ovens, and a cleaning/storage room. Outdoor space with storage and tables would also be well used for workshops and other outdoor programming.

Carleton University

Carleton University runs interdisciplinary courses in Mayo in collaboration with NND

with a focus on students in the fields of business, industrial design, food science, and neuroscience. These projects are usually year-long capstone projects, and the students spend the first term developing ideas on how to address an issue in the community. They then go on a 1-2 week field trip to work in the community, conducting focus groups, prototyping, and getting community input.

Some of the projects that Carleton University has worked on in Mayo include designing an outdoor classroom for the school, a skateboard entrepreneurship project, a display system for the new Makerspace, and a project related to Holopresence technology. The latter project involves projecting a 3D image of a person or object into a room. This project has many potential use cases, and has already been used to record Elders oral history. They are currently working on expanding it through the development of a 3D avatar language pedagogy system to engage students who may prefer it to traditional language learning methods. Additionally, Carleton University is working on a project related to substance abuse rehabilitation, where individuals can make an appointment to converse with a 3D therapist in a safe room.

Carleton University is also involved in water treatment projects at mining sites, with other researchers from the Northern studies department involved as well. Overall, Carleton University focuses on designing physical systems to address various community issues, involving students from different fields and disciplines.

With this scope of activities, Carleton University would ideally like to neutral and welcoming space for presenting projects to community members and gaining their feedback and input on the design of projects that are physically prototyped in the shop at the school. The ideal space could also function as a learning and brainstorming space, and would contain a table space, a space to sit in a circle,

and places to project the graphics and interactive whiteboards used to showcase their ideas.

Other Partners

The other partners that may be involved or rent / use space in the NND Cultural Centre will primarily require only office space and meeting space. Industry partners such as mining operations may also need access to lab space, but their primary focus will likely be on providing office and meeting space for their organizations. The Cultural Centre's facilities will enable them to collaborate and network with NND on projects in order to ensure they meet Lands and Heritage requirements, helping to foster an environment of innovation and creativity and strengthening the trust and relationship between the organizations.





2.3 FUNCTIONAL PROGRAM

The building program describes which rooms and spaces are required / desired within NND Cultural Centre and their approximate sizes (or range). This program has been developed based on the space and facility requirements developed in community workshops and working groups. The building program aims to create a Cultural Centre inclusive of all the activities desired by NND, and the budget and operational costing is currently being developed to ensure financial sustainability to support the building and its programming.

The outcome has been based on the work done through engagement over the past 8 years and has been further developed and modified in collaboration with Taylor Architecture Group based on engagement with community, partners, and FNNND staff.

Dän Laachewdäw Kú is being proposed as a two storey building with the administrative portion of the building on the 2nd floor. One area that is still in question is a large gathering space. This was initially added to the program during the 2019 GA, but the need and its relation to the building is still being developed. This space is currently not included in the building program, however the project team remains in the process of investigating whether it will be a part of the building, and if so, what its size and intent will be.

Refer to the program sheet below for square footage requirements of all the identified program areas. Key interior and exterior spaces have been described in further detail in the following pages.

PROGRAM AREAS					
FNNND DLK					
Room Number	Room Name	Program Area (m2)	Use	Adjacency	Specifications
Community Spaces					
C1	Commercial Kitchen	42.0	- Workshops - Processing wild gamem plants / berries for distribution, making medicines - Catering for events	Gathering Space Outdoor Kitchen	- Commercial style kitchen - EH coordination required for food processing facilities (food safe surfaces) - Yukon University collaboration - Teaching area for 10 people
C2	Walk-in Freezer	7.5	- Community food security storage.	Kitchen Outdoor Kitchen	
C3	Walk-in Cooler	7.5	- Consider also having a cold room type storage for community food security.	Kitchen Outdoor Kitchen	
C4	Elders Area	28.0	- Storytelling - Hangout space to see coming and going.	Reception Main Entry Vestibule Contiguous with Circulation	- the heart of the building, where all the activity is - shouldn't be a separate room but part of the circulation. - cosy log cabin like feel, ideally with a fireplace. - centre of everything - can be integrated in circulation / entry
C5	Round Room	56.0	- prayer, talking, sharing, - singing, dancing, storytelling, language - performance space	Elders Area Language Lab?	- Audio system and lighting systems - Flooring with dancing and acoustics in mind
C6	Workshop Space	74.0	- Carving, Knife Making, weaving, bow and arrow making. - snowshoes, making baby pack. - moose hanging, cutting meat, skinning animals, tanning	Outdoor space Kitchen	- ventilation separate, dust collection, messy space - with concrete or other durable floor, ample ceiling height. - acoustics for sound dampening, garage doors open to the outdoors. - wet room - easily washable conc floor with drain
C7	Multi-purpose	56.0	- hosting workshops, sewing, language lessons - hosting music / film events - Less messy activities	Workshop	
C8	General Storage for Workshop/MP	14.0		Workshop Multipurpose Room	- ample storage for different activity uses
C9	Language Lab	37.0		Resource Library Learning Stations Recording Booth	- Enable online learning - Digital/in person language learning
C10	Recording Booth	9.0		Language Lab Resource Library Learning Stations	- AV recording equipment - Seating area
C11	Resource Library	19.0		Language Lab Learning Stations	- Book and audio resources
C12	Learning Stations	19.0	Workstations for online learning	Language Lab Resource Library	
	Total Net Area	369.0			

Public Spaces					
P1	Main Entry Vestibule	15.0		Admin Reception Elders Area	
P2	Permanent Exhibit Space	56.0		Admin/Reception Gift shop	- Well lit, northern exposure Environmental controls for exhibition space - Community facing space - Floor map
P3	Temporary Exhibit Space	28.0		Admin/Reception Gift shop	- Well lit, northern exposure Environmental controls for exhibition space - For community shows
P4	Admin/Reception	14.0		Main Entry Vestibule Elders Area Temporary Exhibit Space	- Serves entry to public areas and office spaces. - Office entry must be lockable
P5	Coffee Shop	19.0		Admin/Reception Elders Area	- For coffee/treats, small scale
P6	Gift Shop	11.0		Temporary Exhibit Space	
P7	Peel River Info	10.2		Admin/Reception	- Information board/exhibit alcove
	Total Net Area	153.2			

Office Spaces					
O1	Office Entry	15			Separate from main building entrance.
O2	Office Lounge	6		Heritage & Language Offices Conservation Area Offices Lands Offices Meeting spaces	- Contiguous with office entry and circulation.
O3	Print Copy Area	10			
O4	Board Room	33		Office Entry	- Seating for ~15 people
O5	Small Meeting Room	18		Heritage & Language Offices Conservation Area Offices Lands Offices Meeting spaces	- Seating for 4-6 people - Videoconference suite
O6	Equip/Record Storage	18.5		Office areas	
O7	Contractor Workspace	11		Office Entry	- Hot desk - Enclosed Office
O8	Language Office/Resource Space	9		Office Entry	
O9	Heritage & Language Offices	125		Office Entry	- 10-12 fully enclosed offices. - Team meeting space. - Laminator
O10	Videographer/IT Offices	9		Office Entry Server room	
O11	Conservation Area Office	9		Office Entry	
O12	Laboratory	20		Conservation Area Offices Lands Offices	Permafrost and environmental monitoring, in collaboration with university.
O13	Lands Offices	150		Heritage Offices Print Copy Area	- 10 offices + 6 touchdown stations positions - Mix of touch down and enclosed offices. - Common meeting area - Storage space - Views and natural light
	Total Net Area	433.5			

Collections					
CO1	Collections	50			- Anticipating 2hr fire separation requirements.
CO2	Conservancy Area	20		Collections	- Area for restoration/maintenance
	Total Net Area	70			

Support Spaces					
S1	Janitorial	9		Public Spaces Gathering Spaces	
S2	IT Support	5		Office Spaces	
S3	WC/Women	25		Public Spaces Gathering Spaces	11 stalls (7 female + 4 male) required
S4	W/C Men	20		Public Spaces Gathering Spaces	
S5	W/C Officees	20		Office Spaces	
S6	Mech/Elec	100			Fire pump and storage tanks expected
S7	Storage			Public Spaces Gathering Spaces Office Spaces	
	Total Net Area	179			

	Total Net Area Before Circulation	1204.7			
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	Circulation (12%)	145	Gallery spaces used for main floor circulation - 28% aggregate		
	Vertical Circulation	40			
	Total Floor Area	1389.3			
	Gross Up (10%)	181			
	Gross Area	1570			

Outdoor Spaces					
	Gathering Space				
	General Outdoor Storage				
	Kitchen Spill Out				

Key Interior Spaces

Examples of these spaces include a commercial kitchen, workshop, multipurpose space, round room and integrated gallery space; the opportunities that these spaces will provide to the community are summarized in the following paragraphs.

Circulation

The circulation space of Dän Laachewdäw Kú is conceptualized as showcasing the living history and culture of the community as well as providing an accessible and welcoming area for the community to be together. Areas integrated into the circulation space include a gallery, Elders area, gift area and admin/reception.

Gallery Space

A public gallery showcasing artists, cultural dioramas and cultural artifacts will be integrated through the public circulation areas of the building. Items will be displayed for use to tell stories and share history. All gallery items will be properly secured or in locked cases to ensure their safety.

Elders Area

Elders are an integral part of the sharing of the culture and therefore the Elder's area should be at the heart of this building, where all the activity is. In the current administration building, Elders like to sit in the foyer and have a chat with community members as they come into the building. This space should have a cozy feel, and be a space to hang out and observe who is coming and going. There should be an easily accessible space to have tea and snacks.

Admin / Reception & Gift Shop

This area needs to be central in the building so that it can fulfill multiple roles and be shared between the public, community and office areas of the building.

Integrated into the admin/reception area will be space provided for makers to sell their crafts, bringing traditional skills and crafts back to life and into the community.

Workshop Space / Outdoor Workspace

The Workshop space at the Cultural Centre must be able to facilitate activities such as making snowshoes, carving, making bows and arrows, tanning hides, skinning animals. This space must have garage doors (in order to open to an outdoor workspace), ample lockable storage on all sides (to facilitate the tools and materials for its use as a woodshop, carving space, and animal processing / hide tanning space) and adequate ventilation and dust collection. This space requires ample ceiling height to facilitate all its intended uses. It will be designed to ensure it can be used for "wet" activities such as butchering and hide tanning - with integrated drains.

This space is envisioned as one where it can be reorganized for many different activities, with workbenches setup that can be movable, and integrated locked storage so materials and tools can be taken out, used, and then returned to their place so that another activity can set up and use the space.

It is also important for the workshop space to have integrated technology such as a smart board for video and teaching and integrated audio (roof microphones).

Connected outdoor space should have tables and benches for activities such as willow basket weaving and space for stations to be set up for a wide range of outdoor cultural activities.

Performance Space / Round Room

This room is envisioned to be a place for storytelling, prayer, drumming and singing, dancing, and passing cultural knowledge and language on to future generations. This space must be equipped with proper sound and lighting systems. Flooring options should be considered with dancing in mind.

The round room will provide culturally relevant space for elders circles, healing circles, storytelling, space for visiting counselors, drumming and dance.

Multi-purpose Room

The multipurpose room will enable NND to hold workshops for various cultural activities such as sewing, beading, making baby packs, as well as hosting music and film events. It should be fully equipped with AV and have ample storage to enable craft materials and tools to be safely tucked away between use.

The multipurpose room will also be able to be utilized by community and university partners for presentations and distance learning. Ideally, we have heard that it should be able to hold 30 people.

Commercial Kitchen / Walk-in Freezer and Cooler / Outdoor Kitchen

The commercial kitchen must be well laid out so it can be used for catering, teaching workshops and the preparation of traditional feasts and medicines. It should enable community members to butcher and process game meat on site, and it should be connected to an outdoor kitchen for hosting community events. Having lockable refrigerated storage and freezer storage will be very important for community food programs and more general food security.

Currently the only kitchen that has passed Health and Safety inspections in the community is the kitchen at the Village of Mayo. Therefore this kitchen is very busy and most often booked.

Language Lab

The language lab should have full technological capacity and be able to hold 12-15 people at a time.

Resource Library

The resource library will hold photos, copies of books, reports, transcripts from citizens, community members and researchers to come and look. Learning stations need to be fully equipped with technological capability to facilitate online, distance learning as well as other computer oriented uses.

Peel River Info Centre (potential)

This has been initiated as a partnership opportunity. A large portion of visitors to the area come to paddle in the Peel watershed. At this point in time, they travel through the community without stopping. Initial discussions with tour operators indicated that they would love more cultural content and would stop at a cultural centre on their way through. The Peel information centre can showcase NND's quest for rights and sovereignty in their territory as well as providing interpretation about the Peel Land Use Plan. At this point it is undetermined if this Info Centre would be in the DLK Cultural Centre or at the associated Legion Hall in downtown Mayo.

Collections Storage

In order to create an effective collections storage system at the NND Cultural Centre, it will be essential to provide culturally appropriate space that ensures the protection of NND items.

Artifacts located within the community:

There are currently a large number of cultural objects located within the community: in member's treasure chests, closets, basements, attics, and within the storage of Na-Cho Nyak Dun Government House itself. These artifacts comprise not only older pieces but also a collection of more recently made tools and objects crafted by community members.

Collections and the Cultural Centre: NND's Heritage Department is intricately involved in the Cultural Centre and collections as it is responsible for promoting culture and language for NND citizens. As stated above, there are currently existing cultural collections within the NaCho Nyak Dun community. The creation of DLK will provide a place for these new and old cultural artifacts to be shared, and help to inform and inspire both NND citizens and visitors.

Existing documents such as the NND Heritage Department's Archives & Collection Policy (2013) provide clear

guidance and will determine the approach and management of collections within the Cultural Centre.

General Storage Space

It is easy to underestimate the amount of storage space needed, especially as NND offices are involved. Additionally, it is crucial to account for the diverse storage requirements of items such as artifacts, archival materials, camping gear, wall tents, Christmas decorations, or merchandise.

Large Gathering Space (CURRENTLY NOT INCLUDED IN FUNCTIONAL PROGRAM)

The possibility of adding a large gathering space to the program was first suggested at the 2019 GA. We have been informed that the NND community currently lacks a dedicated venue for events like funerals, community feasts, consultations, assemblies, or performances by guests. We have also heard that the size of the space would need to accommodate anywhere between 75 to 350 people, although further investigation is required to confirm this. In terms of equipment, the space should feature a pull-out stage, full AV, good acoustics, and flexible furniture that can be arranged for open space or seating. Additionally, it should be easily accessible from the kitchen

and have a connection to the outdoors.

This space is not included in the current program until further conversation has been had, as it is not yet clear if it should exist as part of the Cultural centre - or if this need can be satisfied elsewhere.

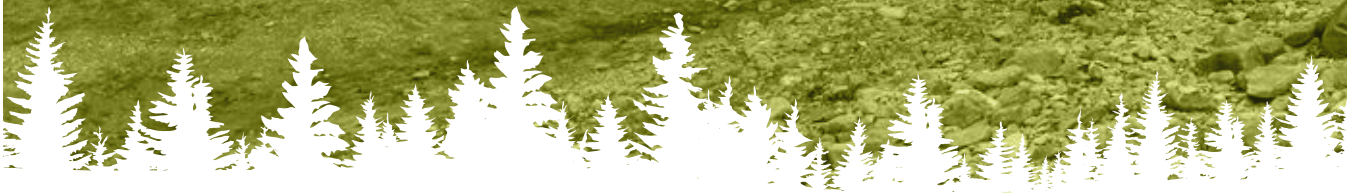
Lands and Heritage Offices

The offices for Lands and Heritage should be situated in close proximity to each other, featuring individual workspaces that are well-lit and spacious, with adjoining areas for coffee, seating, and easily accessible equipment for all staff. The office layout should be well-designed with ample space for storage and organization. Additionally, there should be a designated meeting area for departmental meetings and updates intended for citizens and elders. It has also been proposed that these areas should showcase a large display for a high-quality map of the traditional territory that will not fade or deteriorate over time, serving as the centerpiece for the Lands and Heritage offices. Co-locating lands and heritage (language) within the same building would foster team harmony while enabling greater programming and operational efficiencies.'



SECTION 3:

Site & Concept



3.1 SITE ANALYSIS & RECOMMENDATIONS

The following site analysis includes relevant site context and a rationale for the chosen site location, access and adjacencies, and a review of servicing and relevant environmental factors. A site survey and geotechnical report have been completed and a council resolution has confirmed the site location of the building.

Site Context

In 2002, Chief & Council set a policy direction that NND would focus its infrastructure within the

C-6 settlement land parcel. There have been rampant challenges with permafrost in the floodplain of the Stewart River in downtown Mayo, and as part of future risk management and planning the decision was made that all new infrastructure would be developed on the stable sandy cliffs adjacent to town. This started with building several houses there, and most recently the NND Government House.

Site Selection

Originally, three site options for the Cultural Centre were proposed and considered (refer to diagram below). The following paragraphs will explain the pros and cons of each site option and describe the preferred site.

Site Option C had been identified as a location for a future Cultural Centre in a draft preliminary community plan that was created during the planning for the Administration Building. Through consultation with Elders however, it became clear that the proposed site is too close to an old graveyard and therefore unsuitable for the Cultural Centre. Additionally, Site Option C has little visibility from the public entry to the site and would require significant relocation of many items that have collected in the area connected to public works and infrastructure. Also, since the time it was made, this plan has not been followed and the area has turned into an industrial and public works staging area for the community.



Site Option B was considered for its proximity to infrastructure and location in the centre of the community zone. Through analysis of site conditions and the needs of the Cultural Centre it was determined that this location would better suit the needs of a building such as the Elders Facility as it doesn't connect to trails and is stranded between three roads, which doesn't provide the access and space required for various outdoor cultural activities such as

IMAGE: Preferred Site Options



hanging moose, or having a smoke shack and outdoor workshop space.

Site Option A has been chosen as the location for the NND Cultural Centre. This site enables connection to existing trails and the views from the cliff, has a strong relationship with the existing Administration building, is highly visible from public access, and has plenty of space for outdoor activities and the ability to firmly ground the building with the landscape. It is also adjacent to the 'Future Development Zone', which has been recently acquired through a land swap. This ensures the Cultural Centre has room to expand outdoor activities and connect to any new development to the northeast.

Location and Site Description

The building site is in the road accessible, but remote, community of Mayo, Yukon. Mayo is a high sub-arctic community with average winter temperatures of -20°C and seasonal low periods of -40°C , with only 5-6 hours of sun. The project site is well oriented for passive solar gain strategies and connections to existing infrastructure. A geotechnical investigation undertaken by Tetra Tech in 2021 showed the site soils to be suitable and stable for development of this type.

The site for the NND Cultural Centre sits within the Community Zone on NND Settlement Land. The continuation and proposed opening of a road (that is currently restricted due to an active gravel pit) past the site to the highway would become the public and Mayo community access point. The diagram below shows the site location in reference to these features.

On the site, there are a number of environmental factors to consider in terms of how the Cultural Centre will be oriented and where it can sit on the site. For the most part, summer winds cross the site east / west and in the winter the area gets strong northerlies. The current site is currently treed, with Black Spruce and Black Poplar being the dominant species. See below diagram of site conditions.



IMAGE: Large Scale Site Analysis

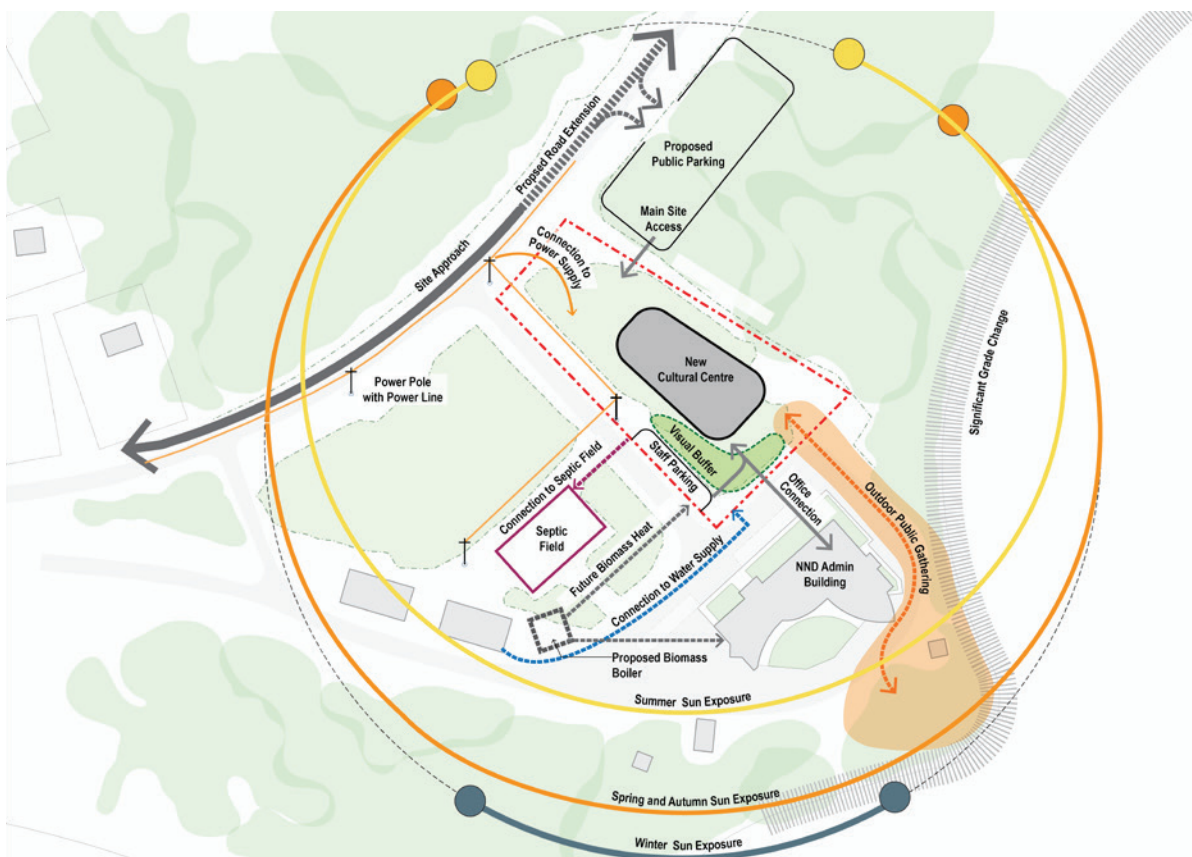


IMAGE: Site Relationships

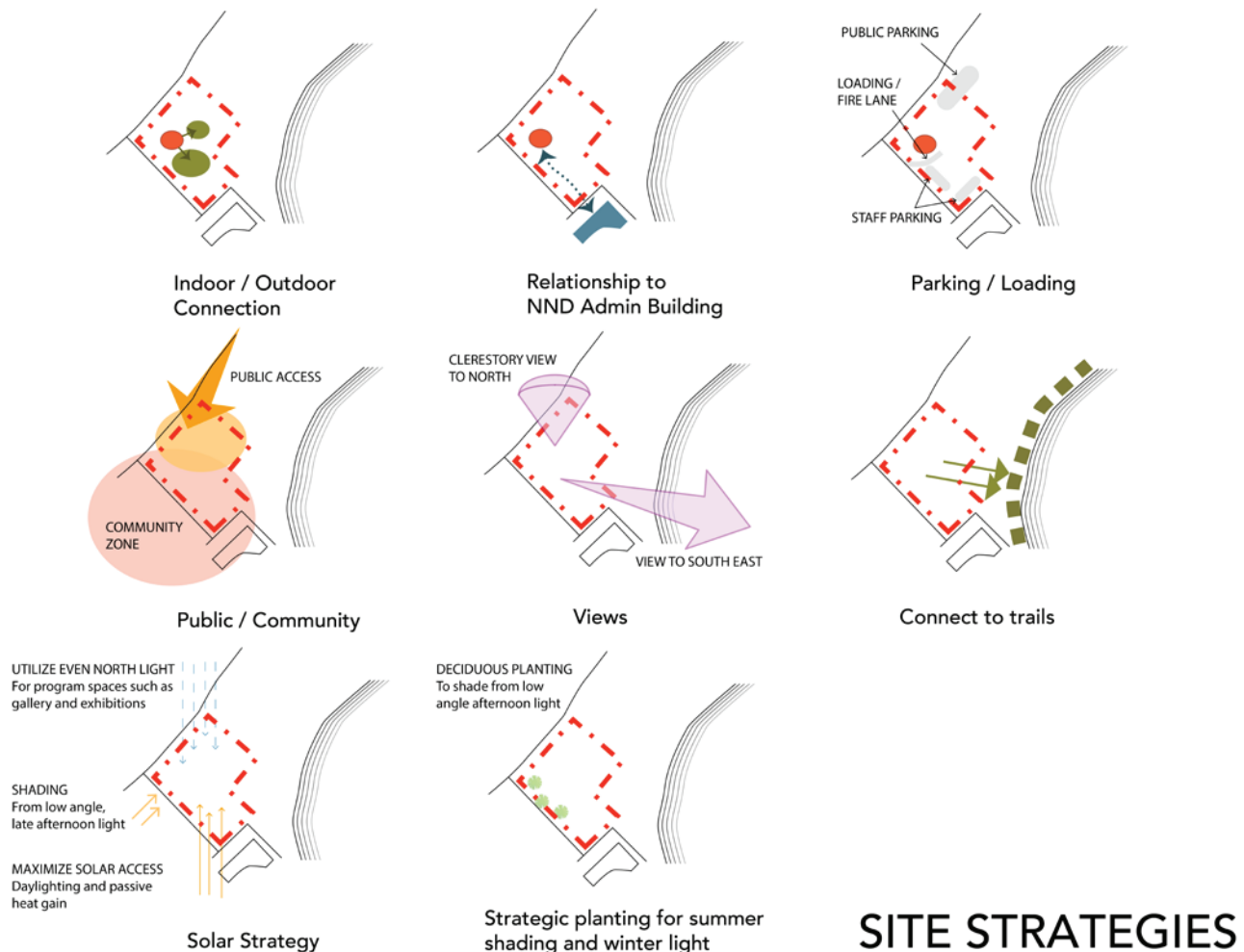


IMAGE: Site Strategies Diagram

Part of the site analysis that was done includes compiling a list of site strategies (illustrated above) that will help to guide how the Cultural Centre can relate to the site.

Some of these strategies include:

- **Strong Indoor / Outdoor Connection:** It is important for the Cultural Centre to be able to connect to the land via strong indoor / outdoor connections. Program spaces such as the workshop, kitchen and multipurpose space should be able to connect seamlessly to exterior space to enable activities to flow between the two and facilitate indoor / outdoor learning. We have also heard desires for the

Gathering Space and Elder's area to have some sort of (if not physical then visual) connection to the land.

- **Relationship to NND Admin Building:** The Cultural Centre's program currently includes office spaces. Since the majority of the offices and administrative capacity will still exist within the current Admin Building, it is important the Cultural Centre maintains a relationship to that building so that some services (such as mail) can still be accessed by staff working in the Cultural Centre.
- **Parking / Loading:** Building programs such as the workshop and commercial kitchen require loading access so that

materials and/or food supplies can be dropped off / picked up in an easy and efficient manner. Public as well as staff parking will be required for the building, with staff parking easily added to existing parking areas for the Admin building and public parking facilitated along the entry road on the north end of the site.

- **Public / Community:** Capitalizing on access points and orientation, a site strategy would be to keep the more public programming on the north end of the site and building, and more community oriented programming facing the community to the south of the site.
- **Views:** Due to the number of trees on the site there currently isn't too much of a viewscape. However, the proximity to the ridge suggests that with selective tree removal and siting, the building could have access to southeastern views out over the ridgeline.
- **Connect to Trails:** There is an existing often used trail along the ridgeline to the southeast of the building site. Community members have expressed how important it is for the building to be able to be connected to these trails with some elders expressing desire for more seating opportunities and intention spots for pause along the ridge to allow storytelling with a view.
- **Solar Strategy:** Utilize even north light for program spaces such as galleries and exhibitions where non-direct light is ideal. Maximize solar access on the south side of the building for daylighting and passive heat gain.
- **Strategic planting for summer shading and winter light:** Maintain adequate tree cover in order to provide shading from low angle western light, and also clear selective trees to provide light for program spaces as required.

Geotechnical Assessment

A summary of the geotechnical findings have been outlined below. The full report can be found attached to this feasibility.

The proposed development site is located within the NND community (within the C-6B and C-55 parcels) on the north side of Mayo, Yukon. The site is on a glaciofluvial terrace which overlooks the Stewart and Mayo rivers. The terrace is approximately flat and is at least 35 m above the surrounding areas near the rivers. Surficial soil is expected to consist of eolian (wind-blown) sandy SILT and organic materials. The site is vegetated with a mixed stand of deciduous and coniferous trees and is accessed by a gravel road. Evidence of previous site clearing was not observed in any air photo imagery, which dates as early as 1984.

The following site preparation will include all surficial SILT should be removed from within the footprint of the building, extending outward at least 1.0 m on all sides. The excavation depth is expected to be up to 400 mm.

Suitable foundation types for the proposed cultural centre include a thickened slab-on-grade or shallow footings. We understand that there is presently no preferred foundation type.

3.2 CONCEPT OPTION LAYOUT

FNNND currently has an ongoing contract with Taylor Architecture Group to complete schematic design for the Cultural Centre building. The intent is to provide Schematic Design alternatives to the community by end of June 2023, and complete revisions by the end of the summer (August 2023).

A diagram outlining program relationships and how they could interact with the site has been put together by Taylor Architecture Group and is shown below.

Community Priorities

Gathering Space

The central gathering space, which includes a round room and an Elder's area, can be approached in a few different ways. No matter where it is located, the gathering

space will be the metaphorical “heart” of the building.

Community members were asked to vote on the importance of the location of the gathering space in the building and key relationships. What we heard was that the majority of community members wanted the gathering space to be front and centre in the building, close to the entry but also connected to the outdoors. For many community members the ability for the gathering space to be visually connected to the land was important, as well as having the Elder's at the centre of activity.

Administration Strategy

The Cultural Centre and Office areas will both require some level of administration within the Cultural Centre building. The Admin strategy options were looking at if

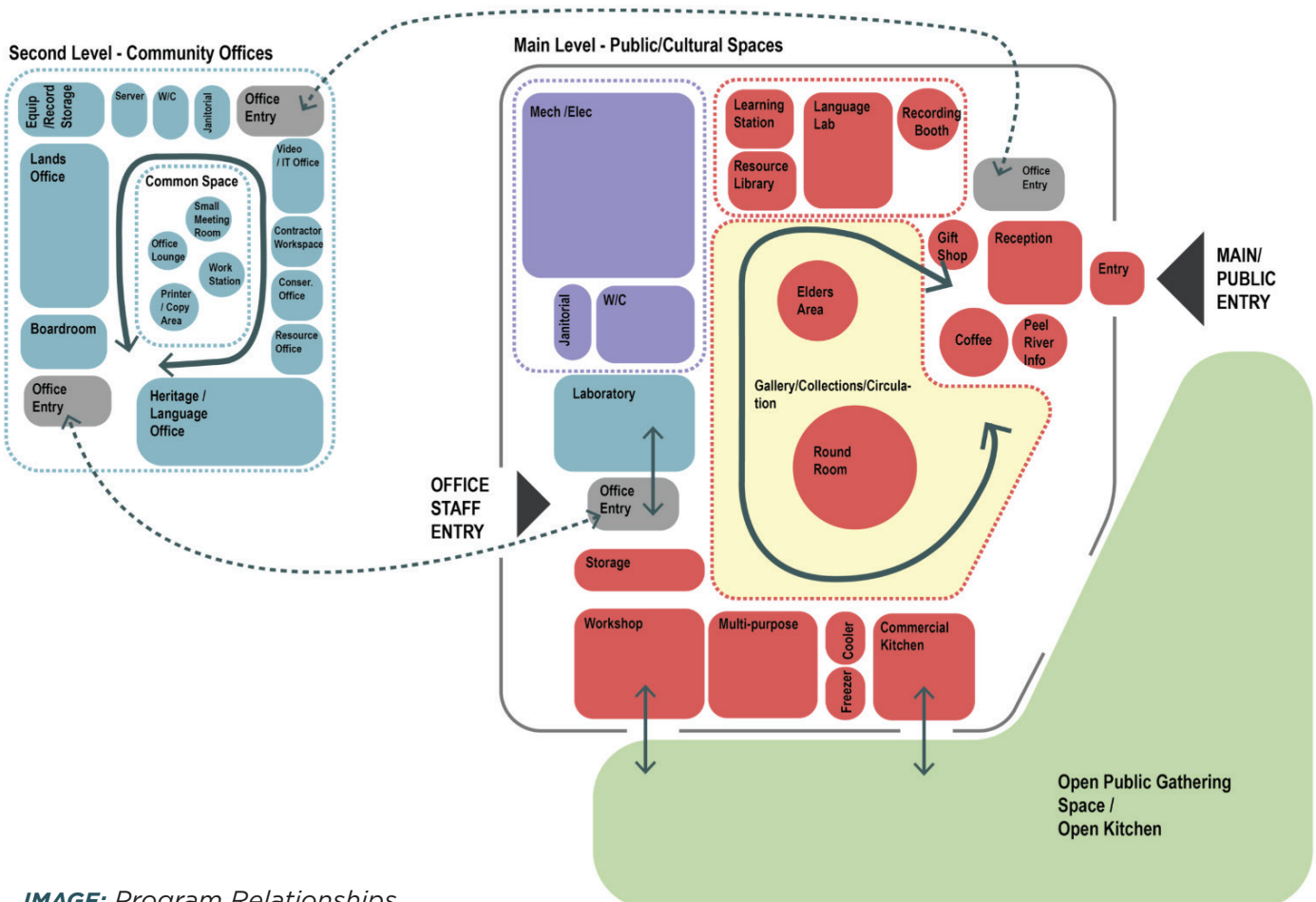


IMAGE: Program Relationships

these spaces were desired to be separate or together and if it is important for the spaces to be able to be separated (aka locked off) in non-working hours.

It was very clear that community members think it is important that the building is organized such that the administration area can be shared between the office and cultural centre spaces. This idea also includes the ability to lock up office spaces during non-office hours. This idea was preferred by the majority of the community who came to give feedback. Being able to lock the office areas in non-office hours while the cultural centre was still in use was preferable.

Materiality

A core idea that has come up from workshops with NND members is the desire for part of the cultural centre to be a cozy gathering space, to emulate the log cabin style with a wood stove and be a place to bring people together in conversation. Another core idea was to build program spaces that were modern and full of light. This section explored the different ways these two ideas can be expressed in a building.

Most community members liked the idea of a cozy log cabin gathering (Elders Area and Round Room) and learning spaces (Workshop and Language spaces) with light and airy offices, and a welcome area. Given the unique program requirements of different spaces, the expression of this feeling could happen in many different ways.

Indoor / Outdoor Connections

What the community wants when it comes to indoor / outdoor connections is a little less clear. There is a desire for visual connection to the outdoors throughout the building. It was very clear how important the connection is between indoor and outdoor workshop, kitchen and multipurpose spaces. The community has a very strong desire for community oriented outdoor working spaces attached to these rooms in order to facilitate the many activities that are desired to go on in these spaces.

There is also some type of outdoor gathering space desired. Where this space could be and how it would be designed is yet to be determined.



3.3 DESIGN GUIDELINES & STANDARDS

Design Guidelines and standards have been developed in order to provide a framework so that the values and intent for the building can be operationalized through the design.

As per previous sections, the siting of the building will adhere to the location designated in the Resolution #132-2020 which set aside the site for the Cultural Centre and ensured that this site decision was implemented into community planning of the C-6 subdivision. The design and massing of DLK should create identity for the building and also connection in a visual way to culture and place.

A key consideration within the cultural centre project is how to build a building that not only considers NND's vision and culture in the programmatic sense, but also in its design, construction and operation. The NND Cultural Centre should be a passively designed building to work with northern climate and site conditions. In order to achieve the values of NND through Dooli, a key value that the project team would like to see instilled in the building is regenerative design. One of the ways in which this could be achieved is through Zero Carbon building design and aspiring towards Petal Status of the Living Building Challenge.

Zero Carbon Building Design Standard

The design process planned for this project will be an "integrated design process" involving the Architectural and Engineering team, project management team, and the FNNND. The community is adamant that the project meets the above sustainability requirements and will be involved to ensure compliance with the Net Zero Carbon Building Standard is maintained.

The building will follow the Zero Carbon Building Design Standard and follow the ZCB-Design V2 Workbook to demonstrate compliance. They will incorporate the planned district biomass heating system which will serve both the existing First

Nation of Na-Cho Nyak Dun Administration Centre and the new Cultural Centre.

1. Operational GHG Emissions and Energy Use Reduction Strategies

The project will follow the ZCB Workbook to ensure a net zero carbon balance annually. Through energy modelling, a PV system will be provided to address emissions factors in the grid to meet the ZCB standard, as well as additional requirements noted in item 7. TAG is proposing the following systems and strategies to meet these requirements:

- High thermal performance wall, floor and roof assemblies, as well as fenestration and door assemblies.
- Fully adhered air and vapour barrier system.
- Passive design including daylighting, cooling and dehumidification: due to the dry climate during much of the year in Mayo, the facility will be able to use outdoor air and free cooling to manage both the heat and humidity levels. Low altitude angle daylight through the year allows natural light deep into interior spaces. The provision of vestibules at building entries reduces heat and air loss throughout the year.
- Biomass heating: the primary heating source will be a district biomass heating system planned for the cultural and administration campus, which is sized to provide 100% of the heating load for the building all year. This new district system will also allow the existing Administrations Building's oil boiler to be decommissioned. Significant burn areas present around Mayo offer a significant local supply of biomass heating fuel.
- Air Source Heat Pump: secondary heating system for shoulder seasons and to provide redundancy for the Biomass system.
- Solar hot water ready: The building will be designed (structurally, mechanically,

and electrically) to incorporate a large solar hot water heating array on the roof.

- Energy Recovery of all exhaust air streams: all exhaust air from the facility will go through a minimum 85% enthalpy (energy) recovery ventilator.
- Ventilation set back: At night the main AHU can be set back from operationally required air changes per hour to 4. This reduces re-heating and other losses from the main AHU. The office and admin areas will be shut down.
- LED type lighting throughout the facility with high luminous efficiency and LED type Dark-Sky-Approved fixtures used for exterior of the building with full cut off distribution.
- A PV system will be provided based on energy modelling to meet a project target of 105% operational energy production by on-site renewables.

All energy savings strategies will be validated through energy modelling by EnerSys Analytics. All final systems selections will furthermore be validated with FNNND maintenance staff to ensure local capacity exists to operate and maintain the building.

2. Reducing Embodied Carbon in Construction Materials

Material selection and transportation are two aspects to the design of this project that will impact the Embodied Carbon for the project, both of which present challenges to achieving Net Zero Carbon status due to extended Northern supply chains.

- **Material Selection:** Working with respect to the NZCBS, the following key material selection strategies will be employed:
 - TAG proposes using a mass/heavy timber structure. TAG's review of the 2020 NBC shows this to be a suitable option, since the building will be sprinklered.
 - Availability of reduced carbon concrete mixes for foundations will be explored.

- Local community saw-milling capacity will be used to supply interior finishes and materials throughout the building.
- The use of petroleum foam insulations, as well as hazardous or Near-term Climate Forcing materials will be limited in the building envelope and systems in favour of materials such as mineral and glass fibres, however envelope durability in the extreme climate will be the primary criteria for material selection.

- **Transportation:** The community of Mayo is located approximately 2,000km north of major centres of building material distribution and manufacture, therefore material selection will be undertaken to maximize possible locally available materials (logs for instance), as well as other manufacturers based in the Yukon (Northern Windows, for example). Where systems and material will by necessity have to be transported to Mayo, the design team will develop means by which to offset the carbon (through reduced operational carbon and avoided emissions).
- **Constructability and Efficiency on Site:** An additional challenge presented by the remoteness of the project site is the travel and accommodation of construction crews. The design will incorporate repeated and prefabricated elements, coordinate building systems to limit inter-trade coordination, and limit site time and travel required of the construction crew.

3. Off-site carbon Offsets and Renewable Energy Production

Off-site carbon offsets and an on-building PV system will be reviewed as the project proceeds and the full net emission calculations are developed. The Avoided Emissions strategy will be required to address the increased embodied carbon during construction due to the remote location, and once building operational energy requirements are known.



Regenerative Design and Living Building Challenge

The Living Building Challenge is a regenerative design framework that creates spaces that, through design and construction, give back and contribute more than they take. It takes a stewardship model and transforms it into the built world.

The project is pursuing Petal Status of the Living Building Challenge (LBC). The LBC certification includes net zero carbon as a requirement and furthermore demands net positive water use, ecological conservation, accessibility, and community well being for certification. The following ecological and sustainability targets will be incorporated:

- Net positive site water use through precipitation capture, permeable site design, high efficiency equipment, wastewater filtration and tie-in to existing septic field infrastructure.
- Net positive carbon through addition of renewable energy systems.
- Net positive energy use through production of 105% of annual building energy consumption with a PV array.
- Incorporate biophilic design principles.

The LBC consists of seven performance categories, or 'petals', which are place, water, energy, health + happiness, materials, equity and beauty. Petal Certification requires that all core imperatives are met, plus the remaining imperatives to complete either the Water, Energy or Materials Petal.

Petals that are relevant and should be considered through the design of the Cultural Centre are Water, Health and Happiness, and Equity.

- **Water:** The intent of the water petal is to realign how water is valued, both by addressing the energy and chemicals involved in transporting, purifying and pumping water, and also by redefining wastewater as a precious nutrient and resource. Even where freshwater is in

abundance, it is also at risk through the impacts of climate change, resource extraction and highly unsustainable water use patterns. This petal advocates for closed loop systems based on the resources available with localized treatment, in order to help mitigate these issues and create a more resilient water future.

- **Health and Happiness:** The intent of this petal is to create healthy spaces that connect people to nature and ensure that our indoor spaces have healthy air and natural daylight. NND values a strong connection to the land, and having a healthy built environment where everyone has fresh air, daylight, and views to the forest and land ensures that while inside the Cultural Centre, the land is still present and close at heart.
- **Equity:** The intent of the equity petal is to ensure that the building fosters a just and inclusive community that enables all people to participate, prosper and reach full potential. This means that the building should be accessible and welcoming to all, celebrating cultural richness while ensuring equitable access to fresh air, sunlight and clean water and soil. The process of designing, building and operating the building should also provide jobs and opportunities for community members to learn and grow and feel included in the process of the building's creation.

The Living Building Challenge is an aspirational goal providing guidance towards operationalizing Dooli, and finding concrete ways to ensure the building itself contributes to the health of the land and Northern Tutchone people in a positive and enduring way.

Accessibility

It is a core and essential value for the FNNND that DLK pushes the bounds of accessibility for all potential user communities. The schematic design and

massing of the building places all public spaces and facilities at the ground level, with all interior and exterior facilities, for both the public and buildings staff complying with the CAN/CSA B651-18 standard. The primary goal of the project is to provide accessible space for the practice and teaching of culture to the entire FNNND community. The following additional accessibility and inclusivity considerations are being included:

- Gender neutral/universal public washroom facilities.
- Barrier free landscaping that encourages public use by all community members.
- The second storey will be provided with barrier free lift access, and all circulation, communal areas and required washroom facilities will be designed to the CSA B651 Standard.
- Barrier free workstations and offices will be provided in consultation with the community.

From an allergen and human health perspective, all operational emissions and material choices will be free of Red List items and therefore ensure that persistent bioaccumulative toxicants, and known or suspect carcinogenic, mutagenic and reprotoxic chemicals do not have a place in the building.

In addition, technological capabilities in the multipurpose and workshop spaces will ensure that participants can understand and learn through multiple avenues of sensory input. Spaces will be equipped so that a current test use case with Carleton University utilizing Holopresence for remote counseling and education in the community could be integrated and utilized in DLK in the future. Thinking about future use and ensuring that the facility is set up to provide a wide range of technology for the community is another layer of accessibility that FNNND is committed to providing through this building.

3.4 COST ESTIMATE & FUNDING STRATEGY

Cost Estimate

Taylor Architecture Group has put together a +/- 30% cost per square foot estimate based on the current program and the design guidelines for the Cultural Centre building.

JUNE 2021		2023	
<i>Per sq. ft.</i>	<i>Per sq. m.</i>	<i>Per sq. ft.</i>	<i>Per sq. m.</i>
\$1200	\$12,900	\$1720	\$18,500

Based on these numbers, Regenerative Design has developed a budget to help to provide a better financial picture of what it will take to turn the Cultural Centre from an idea into a full building. This rough, Class D budget is below.

FNNND Cultural Centre			
March 28, 2023			
Calculated from Class D Estimate based on program area			\$48,864,301.50
1 Design			\$4,272,528.26
1.1 Schematic Design Contract	Taylor Architecture Group - Schematic Design services		\$156,015.00
1.1 Design & Build Consultant fees (15-20%)	Taylor Architecture Group & Design / Specialist services		\$4,243,985.00
1.3 Geotechnical and survey services			\$10,100.00
1.5 Environmental Assessment	Allowance for Phase 1 ESA & specialized consultant support if needed.		\$18,443.26
2 Project Management			\$6,252,373.24
2.1 Overall Project Escalation Allowance	5% overall project cost escalation allowance.		\$2,139,124.41
2.2 Design & Construction Project Management	Support for FNNND, the project manager acts on behalf of the client to facilitate the design and construction processes and liaise with all aspects of construction and design		\$1,100,000.00
3 Construction			\$37,409,960.00
3.1 Schematic Design Construction Cost- Cultural & Support portion	64% of total built area (refer to program)		\$18,588,800.00
3.12 Schematic Design Construction Cost - Admin portion	36% of total built area (refer to program)		\$10,456,200.00
3.6 Construction Management Fee	**This has not been confirmed yet, but we are operating under the assumption that construction management would greatly benefit the project and reduce risks as identified in the project application.		\$2,788,320.00
3.8 Construction Contingency	30%		\$5,576,640.00
4 Post Construction			\$929,440.00
4.1 FF&E & Occupancy	Deficiency review. Includes procurement and installation of FF&E, IT & Other Equipment. Calculated at 5% of construction cost		\$929,440.00
6 Total Budget			\$48,864,301.50
FNNND Cultural Centre			
FUNDING SOURCES			
As of March 28th, 2023			\$36,456,200.00
1 Own Source Revenue & Financing			\$11,456,200.00
1.1 FNNND	Design Capital Cost Contribution (committed via resolution)		1,000,000
1.2 FNNND	Admin offices contribution (potentially financed)		10,456,200
1.3 FNNND	Budget overage (seek other funding or finance)		12,408,101
2 Additional sources of funds			\$25,000,000.00
2.1 GICB			25,000,000

Funding Strategy

To finance the capital costs of the cultural centre, the NND government is pursuing a funding strategy that prioritizes attaining the majority of needed capital funding via grants. Additional capital funds will be secured by pursuing partnerships with industry, particularly mining operations, operating on their territory to secure additional funds. Finally, NND will also commit \$10 million of their own funds towards the project.

The focus of the grants will be federal and territorial funds offered to help heal intergenerational trauma through reconciliation. These funding options include but are not limited to:

- **The Green and Inclusive Community Buildings program (GICB)³** - This is a Canadian federal government initiative that provides funding to support community buildings that promote sustainability, accessibility, and inclusivity. The program aims to reduce greenhouse gas emissions, improve energy efficiency, and promote green infrastructure in community buildings such as community centers, libraries, and arenas. The program also supports initiatives that promote social inclusion, diversity, and accessibility in community buildings. The GICB program provides funding to support energy efficiency retrofits, renewable energy projects, and accessibility upgrades in community buildings, with a focus on projects that benefit marginalized communities.
- **Canadian Heritage⁴** - The Department of Canadian Heritage offers various programs and funding opportunities to support the development of Indigenous cultural infrastructure, such as the

Cultural Spaces Fund and the Aboriginal Languages Initiative.

- **Indigenous Community Infrastructure Fund⁵** - This federal program provides funding for First Nations to support the construction, repair, and renovation of community infrastructure, including cultural centres.
- **Community Economic Development Program** - This program from the provincial government provides funding to support economic development projects that benefit Indigenous communities, including the development of cultural centres.
- **Indigenous Language and Cultures Program⁶** - This federal program provides funding for projects that support the revitalization and preservation of Indigenous languages and cultures, including the development of cultural centres.
- **Indigenous Services Canada (ISC)⁷** - ISC provides funding for community infrastructure projects that support the well being of First Nations communities, including cultural centers, through the Community Opportunity Readiness Program (CORP) and the First Nations Infrastructure Fund (FNIF).
- **Canada Infrastructure Bank (CIB)⁸** - The CIB is a federal Crown corporation that partners with the public and private sectors to invest in revenue-generating infrastructure projects. If the cultural center pursues revenue-generating components, it may be eligible for funding through the CIB.
- **Yukon Government⁹** - The Yukon government offers funding through the Community Development Fund, which

3 <https://www.infrastructure.gc.ca/gicb-bcvi/index-eng.html>

4 <https://www.canada.ca/en/canadian-heritage.html>

5 <https://www.sac-isc.gc.ca/eng/1628172767569/1628172789746>

6 <https://www.canada.ca/en/canadian-heritage/services/funding/aboriginal-peoples/languages.html>

7 <https://www.sac-isc.gc.ca/eng>

8 <https://cib-bic.ca/en/>

9 <https://yukon.ca/en/arts-and-culture/apply-community-development-fund>

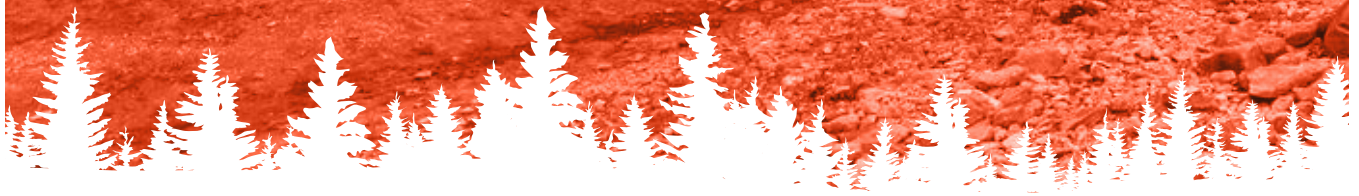


supports projects that contribute to the social, cultural, and economic well-being of Yukon communities.

- **Foundations and philanthropic organizations** - Many foundations and philanthropic organizations provide funding for Indigenous cultural initiatives, such as the McConnell Foundation, the Vancouver Foundation, and the Gordon Foundation.

SECTION 4:

Conclusion & Next Steps



Dän Laachewdäw Kú has been developed with and by NND, the community and its partners in alignment with cultural healing, and will provide a focal point for the portrayal, communication and transference of Na-cho Nyak Dun beliefs, culture, language and intergenerational knowledge as northern Indigenous people. The building will provide space for artifacts to be stored and shown, hunting, fishing and gathering practices to be shared and taught, drumming and dancing to take place, traditional practices (such as food preparation, fish and meat drying) to occur, stories to be told and language re-discovered. This focus on cultural resurgence and healing reconnects people to the vibrancy and strengths of their shared culture, and in doing so, will enhance and strengthen the larger community's health and wellness.

This feasibility study provides rationale for a path forward towards the building of Dän Laachewdäw Kú. This centre will be a place to celebrate and live our culture, and to ensure that it is passed onto future generations.

NND has now completed the RFQ and RFP process to acquire an architect, and Taylor Architecture Group is currently working

with Regenerative Design to re-engage the community during Schematic Design. This engagement process will also provide further rationale for how the DLK ties into NND's concurrent Capital Planning process and will add value to the community and NND itself.

Regenerative Design is working in collaboration with NND to move forward the funding strategy as outlined in section 3.4, with a focus on grant proposals and partnership conversations alongside the Na-Cho Nyäk Dun Development Corporation (NNDDC) to ensure all required capital costs are fully funded, and O&M costs, once built, are self-sustaining due to rental potential of spaces to other partners in the community.

Taylor Architecture Group continues to work towards Schematic design and has provided the following timeline and envisioned path towards an operational Cultural Centre building in the community.

- SD Alternatives – ending June 2023
- SD Revisions – June 2023 – August 2023
- DD – August to December 2023
- CD – December 2023 – September 2024
- Tender – Autumn 2024
- Construction – Spring 2025-2027



