

Hamlet of Fort Liard

FIVE YEAR CAPITAL PLAN

Years 2021-2026

**Approved: February 25, 2021
Council Motion 2021-18**

Hamlet of Fort Liard

FIVE YEAR CAPITAL PLAN

Years 2021-2026

Projects



PROJECT BRIEF

CEMETERY UPGRADES

850105

PROJECT DESCRIPTION

Completion of *Cemetery Upgrades* from 2020.

Legal Survey of the site and expansion area. Reconstruct fencing and erect new signage and an access road throughout the site. Unsafe and fallen trees to be removed. Site plan to be formatted electronically and bylaw rewritten.

BACKGROUND

A store shed was completed in 2020.

The fencing has been irreparably damaged by the bison and sections need to be replaced and new sections erected. Improved signage is required. There are trees that have fallen or are damaged and create unsafe conditions. These trees must be removed.

The Hamlet is in the process of obtaining land tenure for the site. This tenure would be territorial lands reserved for a municipal cemetery. GNWT Lands is requiring a legal survey of the site by 2021.

When the proposed expansion was developed the location of the graves was identified. This information needs to be reformatted in a useable electronic document so that new graves can be added.

SUSTANTIATION

To obtain municipal land tenure to the original and expansion sites the area must be legally surveyed. Grave sites must be protected from damage by the bison. Fallen and damaged trees create a liability for the hamlet.

LAND TENURE

Lot 1001 Quad Q95B/3 – Territorial Land – Municipal reserve pending.

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Plan and Survey	\$ 25,000				
Construction		\$ 45, 000			
Total	\$ 25,000	\$ 45,000			

PROJECT BRIEF
Page 2 of 2

PROCUREMENT PROCEEDURE

Invitational tender to a local contractor. This would provide local employment.

ONGOING OPERATIONAL COSTS

Brush cutting, brush removal, fence repairs, and removal of unsafe trees.





PROJECT BRIEF

PREPARATION EMERGENCY PLAN

895300

PROJECT DESCRIPTION:

Preparation of an Emergency Response Plan issued under the authority of the Emergency Management Act R.S.N.W.T. 2018 c.17.

BACKGROUND:

The purpose of this Emergency Response Plan is to outline the procedures, to be followed by local government to provide a prompt and coordinated response to an emergency, and for all activities that support emergency preparedness.

Specifically, it provides a framework for extraordinary measures that can be taken to provide for the health, safety, and welfare of the residents, prevent or minimize property damage or loss, protect the environment, and minimize economic disruption when face with a civil emergency.

Council responsibility to provide funding and appointing an Emergency Coordinator who shall be responsible for is the implementation, maintenance, and execution of the municipal emergency management program. At a minimum, there must be an annual discussion-based exercise to be commenced not later than one year after approval of the plan.

The Emergency Response Plan was last reviewed in 2012. A review and rewrite of the Plan was commenced in February 2017 but has yet to be completed or approved by council.

SUBSTANTIATION:

The Emergency Management Act Section 10 states that the local authority shall establish and maintain a local emergency management organization to develop and implement a local emergency response plan.

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Plan Development	\$ 25,000				
Implementation		\$ 5,000			
Total	\$ 25,000	\$ 5,000			

PROCUREMENT PROCESS:

Plan Preparation – Request for Proposal



PROJECT BRIEF

Engineering Services

891100

PROJECT DESCRIPTION:

Provision of Municipal Engineering Consulting Services on an as needed basis.

BACKGROUND:

The Hamlet will require the service of an engineering firm to provide profession engineering and consulting services during the planning, design, and execution of capital projects and the proponent will be a resource for Hamlet staff on engineering issues.

The engineering firm needs to be able to provide timely response and services, and cost effective, sustainable solutions that meet the needs of the Hamlet. The firm will need to become familiar with Hamlet infrastructure. A contract would be for five years.

1. Engineering consulting services will focus on civil engineering, but other engineering disciplines may be required. Services will include but limited to -:
2. Preparation of reports and advice to council regarding issues that arise that include but not limited to legislation, regulations, feasibility, designs, and specifications of projects.
3. Assist with asset management, and capital budget development.
4. Preparation of feasibility, plans, designs, specifications, and cost estimates and tender documents.
5. Engineering from preliminary design through detailed design, to the construction and inspection of projects. Includes the application for permits and preparation of tender documents.
6. Assist with contract resolution that may take place because one party may breach a contract in some manner to prevent legal action against the Hamlet.

SUBSTANTIATION:

The Hamlet does not have a qualified engineer which they require for the planning, design, and execution of public works projects. Most projects legally require sign off by a licenced engineer.

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Procurement	\$ 5,000				
Professional Services	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Total	\$ 15,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000

PROCUREMENT PROCESS:

Engineering Services – Request for Proposals

Years 2021-2026



PROJECT BRIEF

EQUIPMENT REPLACEMENT - LOADER

820501

PROJECT DESCRIPTION:

The purchase of a 160 horsepower 2 -3 cu yard front end Loader with attachments.

BACKGROUND:

The Hamlet owns a fleet of mobile equipment that requires replacement after their useful life have been realized and lifecycle costs are excessive.

The mobile equipment fleet consists of –

2012	Motor Grader [Cat 140M]	Replacement Value \$190,000
1995	Tool Carrier [Cat IT28F]	Replacement Value \$102,000
2012	Backhoe [Cat 430E]	Replacement Value \$105,000

Each piece of equipment should have a useful life of thirty years with reasonable lifecycle costs.

The 1995 Tool Carrier (Loader) will have reached its lifecycle of thirty years in 2025 and will require replacement. Repairs are more frequent resulting in extended down time. This machine has a 2.8 cu.yd. bucket and is rated at 159 hp. It is well suited for the Hamlet’s municipal operations.

It is noted that the Caterpillar IT28F model is no longer manufactured. Comparable models would include Cat 930G, JCB 426HT or 426ZX. This will need the replacement of all attachments. Consideration should be given to a Caterpillar replacement so that the entire fleet is one manufacturer.

Accessories will include a blade, forks, and a bucket.

Note that long delivery times will require the order to be placed mid 2024 for delivery in 2025.

SUBSTANTIATION:

The loader is a very versatile and several work tools enable it to perform a wide variety of public works operations. Work tools can be changed quickly and easily with a quick coupler. The loader is essential for waste site maintenance. A 160 hp machine is the correct size for the Hamlets needs.

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning					
Purchase			\$ 190,000.00		
Post Purchase				\$ 1,000.00	
Total			\$190,000.00	\$ 1,000.00	

PROJECT BRIEF
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PROCUREMENT PROCEEDURE

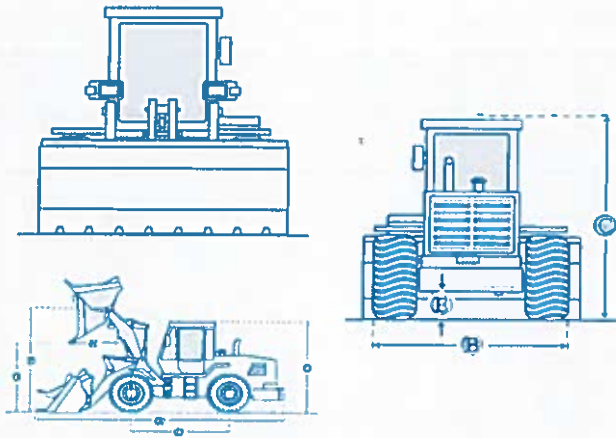
Sole source Finning Caterpillar

ONGOING OPERATIONAL COSTS:

New models have extended service levels and lower fuel consumption. Tires are the largest maintenance cost since this machine is used at the land fill. Optional tires should be considered.

GENERAL SPECIFICATIONS

Caterpillar 930G Wheel Loader



Dimensions

E	Ground Clearance	1.39 ft in
A	Length with Bucket on Ground	25.85 ft in
D	Wheelbase	9.52 ft in

Specifications

Engines

Number of Cylinders	1
Engine Make	Caterpillar
Engine Model	3056E DIT
Net Power	150.2 hp
Gross Power	161 hp
Power Measured @	2300 rpm
Max Torque	80
Displacement	366.2 cu in
Bore	4 in
Stroke	5 in

Operational

Operating Weight 29,039.3 lb.

Fuel Capacity	59.5 gal
Hydraulic System Fluid Capacity	33.1 gal
Cooling System Fluid Capacity	10.6 gal
Transmission Fluid Capacity	9.2 gal
Front Axle / Diff Fluid Capacity	6.9 gal
Rear Axle / Diff Fluid Capacity	6.7 gal
Turning Radius	17.3 ft in

Transmission

Number of Forward Gears	4
Number of Reverse Gears	3
Max Speed – Forward	38 mph
Max Speed – Reverse	24 mph



PROJECT BRIEF

FACILITY REPLACEMENT – HAY LAKE

850103

PROJECT DESCRIPTION:

Facility/Infrastructure Replacement – Hay Lake recreation area.

BACKGROUND:

The infrastructure at the Hay Lake recreation area is beyond economical repair and requires replacement.

Water/Wood Shelter 12 ft x 30 ft – concrete perimeter foundation

Campground Shelter 25 ft x 22 ft (550 sq. ft.) - structural concrete slab

Outhouses (2) Wood frame on concrete septic tank

New structures will be designed for the physical site parameters and built for a minimum capital cost with a low life cycle. Structures must be safe and durable yet stylistically proper for the area. Structures must follow GNWT Department of Health – Environmental Health – Building Standards

SUBSTANTIATION:

All structures create a liability for the Hamlet as they are not safe. The outhouses do not meet current code and health requirements.

LAND TENURE

Lot 1005 Quade 9B/3 Plan 1900 – Reserve for the municipality

BUDGET: CPI/NWT Parks and Recreation

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning					
Construction	\$ 75,000				
Post Construction					
Total	\$ 75,000				

PROCUREMENT PROCESS:

Invitational Tender – this project can be completed by a local contractor using local labour.

ONGOING OPERATIONAL COSTS:

Life cycle costs will be low with added costs due to vandals.

Years 2021-2026



PROJECT BRIEF

FIRE EQUIPMENT

830507

PROJECT DESCRIPTION:

Purchase of new fire hose, self contained breathing apparatus, and water pump.

BACKGROUND:

Most of the fire hose on the fire truck is now twenty-five years old and must be replaced as it is no longer certifiable and dependable.

The self-contained breathing apparatus are no longer certified and must be replaced along with spare air bottles.

The fire department will have to pump water from the river during repairs to the water plant cells during the summer of 2021. Rental of such a pump would almost exceed the cost of a new pump. A new pump will continue to be fire department equipment.

SUBSTANTIATION:

Firefighters cannot be expected to fight a fire with substandard equipment that would put their lives at risk. All equipment must have ULC/NFPC certification. The pump is needed to provide adequate water for a fire.

EQUIPMENT

10 fire hose 38 MMX 15m

12 fire hose 65 MMX 15 m

10 forestry hose 30 m

1 hard suction hose 65 mm x 3M

Wastewater Trash Pump – 4" inlet and 4" outlet hose – compressor assisted – cart mount

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Purchase	\$50,000				
Post Purchase		\$ 1,000			
Total	\$50,000	\$ 1,000			

PROCUREMENT PROCESS:

Public Tender



PROJECT BRIEF

ROAD CONSTRUCTION – HAY LAKE

840404

PROJECT DESCRIPTION

Construction of a Fair-Weather Road to access the Hay Lake Recreation Area

BACKGROUND:

A fair-weather access road would provide year-round access to the Hay Lake ski and recreation site except in extreme weather conditions. Part on the road is over muskeg.

The road is seven hundred meters long and should be three meters wide so that the loader could access the side.

The first step would be clear any encroaching tree and brush.

The earthworks would supply a firm, stable foundation. This would involve ditching, leveling, placing of suitable base material. A geotextile layer would reinforce the soil by adding tensile strength and supplying a rapid de-watering layer in the roadbed. The geotextile would be needed to preserve its permeability. The last step would be placing a level of gravel on the bed. Signage would be erected.

Note: Permission would be needed to access a public highway before construction could begin.

SUBSTANTIATION:

This road would supply fair weather access to another recreation area for the community.

LAND TENURE

Lot 1005 Quade 9B/3 Plan 1900 – Reserve for the municipality.

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning					
Construction		\$ 50,000 *			
Post Construction					
Total		\$ 50,000			

* In conjunction with other road works and requirements to access public highway.

PROCUREMENT PROCESS

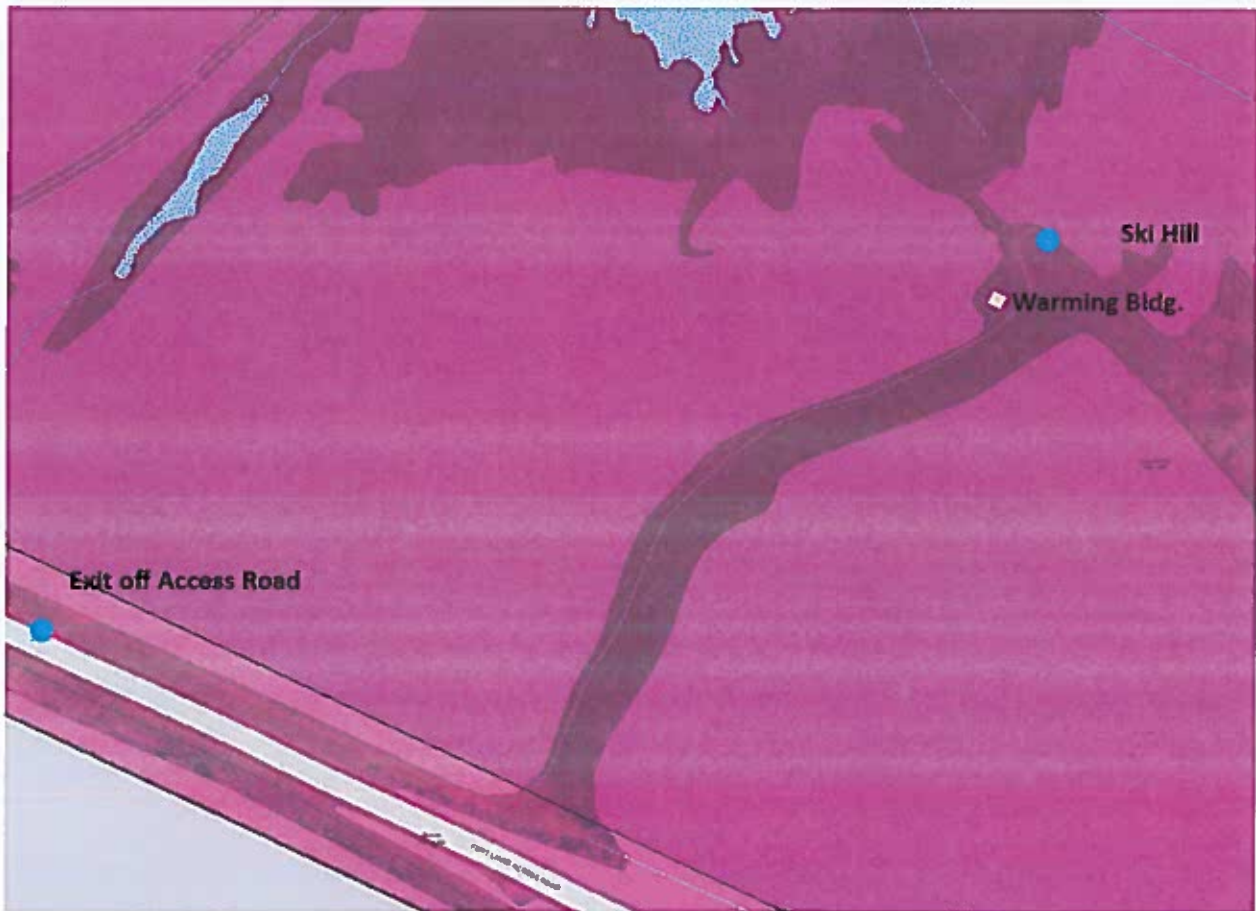
To make this work possible it would have to be done in conjunction of other road works.

Years 2021-2026

PROJECT BRIEF
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ONGOING OPERATIONAL COSTS:

Maintenance would include regular grading to keep the road in good, drivable condition, ensuring safety. Common maintenance tasks would include reshaping the road, clearing the drainage system of foliage and rubble, and periodically adding gravel to the surface.





PROJECT BRIEF

LAND USE PLAN-ZONING BYLAW

895100

PROJECT DESCRIPTION:

Completion of a Land Use Plan – Zoning Bylaw – Land Administration Bylaw

BACKGROUND:

A revised Land Use Plan (Plan) was prepared in 2018. This replaces the 1989 Community Plan. The Plan has had public review and consultation and was given first and second reading in January 2019. This Bylaw was then sent to the Minister of Municipal and Community Affairs for approval.

The GNWT is committed to indigenous consultation and after consultation with Acho Dene Koe First Nation (ADK) received their response in November 2019.

In 2018, a revised Zoning Bylaw (Bylaw); used to regulate and control the development of land, was drafted and after public review and consultation received first and second reading in January 2019.

In December 2020 council again reviewed the Plan and Bylaw. Council replied to ADK seeking their support to have the Plan and Bylaw approved committing to ongoing consultation and open to consider amendments. MACA has agreed that if the Hamlet receives a letter agreeing to ongoing consultation, they will approve the Plan.

The next steps

1. Receiving ministerial approval of the Land Use Plan
2. Third and final reading of the Land Use Plan
3. Third and final reading of the Zoning Bylaw *[needed within six months of approving the Plan]*
4. Drafting and passing of a Land Administration Bylaw

SUBSTANTIATION:

Council must complete a review of the Community Plan/Zoning Bylaw within eight years after its first adopted, and thereafter no later than eight years after the completion of each earlier review. Both are due for review. A Land Administration Bylaw is needed.

Hamlets Act SNWT (2003) and the Community Planning and Development Act SNWT (2011).

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning	\$ 10,000				
Document Preparation	\$ 5,000				
Staff Training	\$ 5,000				
Total	\$ 10,000				

Years 2021-2026

PROJECT BRIEF
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PROCUREMENT PROCESS:

Sole Source – Dillon Consulting was awarded the contract after a call for proposals in 2018 and will continue to complete the process.

ONGOING OPERATIONAL COSTS:

Staff administration expenses.



PROJECT BRIEF

MUNICIPAL YARD FENCE & ELECTRICITY

850115

PROJECT DESCRIPTION:

Fence the Municipal Works Yard and Instal Power a Power Line

BACKGROUND:

The Municipal Works Yard does not have electrical power and there is no perimeter fence.

A Power line would be installed so that electricity could be provided to all buildings.

A perimeter galvanized steel fence would be erected to protect valuable equipment, vehicles, and materials that are stored at this yard. A large gate with man door would provide access to Bypass Road and a vehicle gate would provide rear access.

SUBSTANTIATION:

Valuable vehicles, equipment, and materials need to be protected from thief and vandalism.

LAND TENURE

Lot 319 LTO 4882 – Territorial Land – Municipal Reserve Pending

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning/Design	\$ 5,000				
Construction					
Post Construction		\$75,000	\$ 5,000		
Total	\$5,000	\$75,000	\$ 5,000		

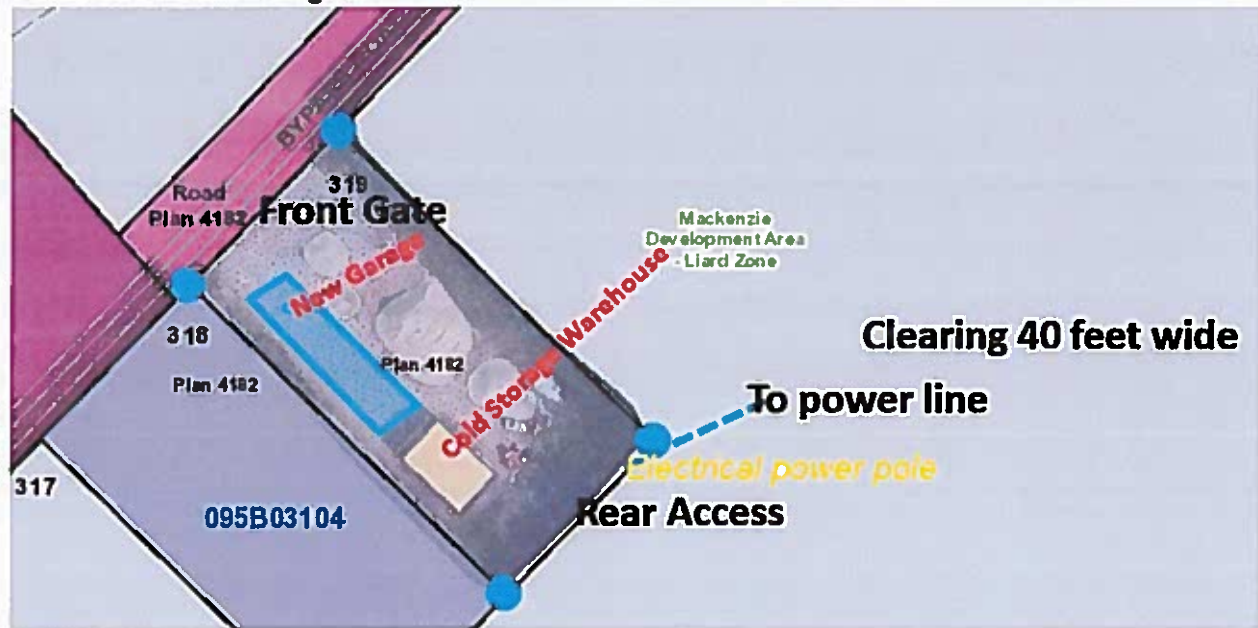
PROCUREMENT PROCESS:

Price Quotes for Materials/Local Installation

ONGOING MAINTENANCE

Galvanized fence should require no maintenance other than from damage or vandals.

The power line access will need to be kept clear of trees and shrubs.





PROJECT BRIEF

PICKUP TRUCK REPLACEMENT

820601

PROJECT DESCRIPTION:

Purchase a replacement of the four-wheel drive three quarter ton *Pickup Truck*.

BACKGROUND:

The Public Works department uses two Ford F250 pickup trucks. These vehicles have a life expectancy of ten years after which they become unreliable and expensive to use.

The 2011 will be ten years old in 2021 and require replacement.

The 2011 will be used to replace the Ford F150 and used only for special projects. The F150 will be sold by public tender.

The Hamlet will sole source a new Ford vehicle. This vehicle will be serviced and maintained by Hay River Truck Sales Ltd.

SUBSTANTIATION:

The Hamlet cannot repair newer vehicles and must have qualified technicians make repairs. While waiting for repairs the vehicle is out of service.

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning					
Purchase		\$50,000			
Post Purchase					
Total		\$50,000			

PROCUREMENT PROCEEDURE

Sole source from Hay River Ford Sales Ltd.- a NWT Ford dealership.

ONGOING OPERATIONAL COSTS:

One pickup will be taken out of service therefore the operation costs will only increase with the cost of fuel and mechanical maintenance.

PROJECT BRIEF

Page 2 of 2

GENERAL SPECIFICATIONS

- Ford F250 - Crew Cab –six-foot box
- 6.2 L gasoline engine
- Six speed automatic transmission
- 4 x 4 – electric locking rear axle – single rear wheel
- Heavy duty front suspension
- Heavy duty mud flaps front and rear
- Spray in bed liner
- Roof marker clearance lamps
- LT245/75Rx17E BSW A/T Tires
- Low profile amber/white light bar
- Steel painted headache rack and side rails
- Steel running boards



PROJECT BRIEF

CEMETERY UPGRADES

820601

PROJECT DESCRIPTION:

This is the continuation of the work completed in 2020.

Legal survey the site and expansion area. Reconstruct fencing and erect new signage. Unsafe and felled trees would require removal.

A site plan and location of the graves has been completed. This would be transferred to an electronic format. The bylaw would be updated.

BACKGROUND:

A storage shed was constructed in 2020.

The fencing has been irreparably damaged by the bison and sections need to be replaced and new sections erected. Improved signage is required. There are trees that have fallen or are damaged and provide unsafe conditions and must be removed.

The Hamlet is in the process of obtaining land tenure for this site. It would be Territorial Lands reserved for municipal use as a cemetery. A requirement of this process is to have legal survey done in 2021.

When the proposed expansion plan was developed the location of graves was identified. This should be transferred to an electronic format so that future graves and be shown.

SUBSTANTIATION:

To obtain municipal land tenure the site; including the expansion area must be legally surveyed. Grave sites must be protected from damage by the bison. Fallen or damaged trees provide a liability for the hamlet.

LAND TENURE

Lot 1001 Quad Q95B/3 Plan 2385 – Territorial Land – Municipal land reserve pending

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning/Survey	\$ 25,000				
Construction		\$ 25,000			
Post Construction					
Total	\$ 25,000	\$ 25,000			

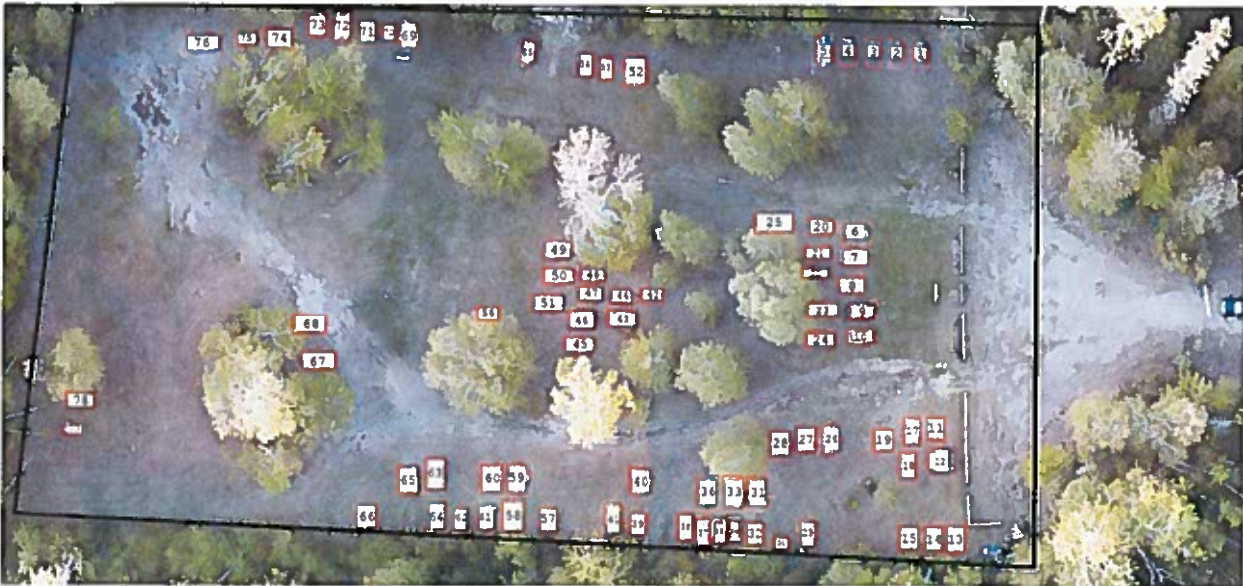
PROJECT BRIEF
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PROCUREMENT PROCEEDURE

Invitational tender to local contractor. This is work that would provide local employment.

ONGOING OPERATIONAL COSTS:

Brush cutting, brush removal, fence repairs, and removal of unsafe trees.





PROJECT BRIEF

RECREATION CENTER UPGRADES

830403

PROJECT DESCRIPTION

Revitalization of the Fort Liard Community Recreation Center. Planning for new services that can be offered and construction of infrastructure needed. An engineering study to look at opportunities to extend the life expectancy and reduce life cycle costs. Retrofits necessary for safety and to meet building codes.

BACKGROUND:

Community recreation centers hold the key to a number of benefits that enhance the quality of life in the community and for citizens reaping the benefits of having a health community. The community center provides an opportunity for residents to be active and to interact with other residents.

What key factors does council to consider when developing the strategy for the next 10-20 years?

The Recreation Complex consists of an arena, seasonal pool, and community hall that provides activities for all citizens.

Arena	1989
Community Hall	1996
Swimming Pool	2002

A complete engineer assessment of the building would decide if there are any structural, mechanical, or electrical upgrades required to comply with code or that could improve efficiency. The objective is increasing the life expediency of the vital infrastructure, reducing lifecycle costs, and providing a safe environment.

With community input and a planning study council would be able to investigate the opportunity for further utilization of the facility and increased utilization.

One idea from the community was to have a Fitness Center located in the complex. The idea was to have it located in the present hall storage room. Preliminary planning indicated that after code requirements, and the installation of washroom there would be little space for the actual fitness equipment.

The building has little space for the storage of recreation equipment. A sea can was purchased and was located on the south side of the arena. It is unheated. This is not practical for easy access.

The front office space must be resigned to provide and controlled access point and office space for the facility operator.

Code and Structural Issues Identified:

The fuel storage system is noncompliant with updated codes and must be replaced. The tank from the municipal garage can be used (larger than the present tank) and new piping installed.

The floor structure in the pool and arena area must be examined for deterioration due to extensive moisture. Replacement may be necessary.

After the designs and appraisals are complete council will then be able to examine options, budgets, and review design options and determine the scope and plan for the work to be completed.

Years 2021-2026

PROJECT BRIEF
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SUBSTANTIATION:

To realize the full life cycle of this facility, comply with building codes, and further utilize this facility there must be an assessment and design/planning study so that modifications can be completed cost effectively and achieving the goals of the project.

LAND TENURE

Lot 327 LTO 4425 - Municipal Reserve

PROCUREMENT PROCESS:

The planning and the resulting project would be advertised as a Public Tender.

BUDGET: CPI

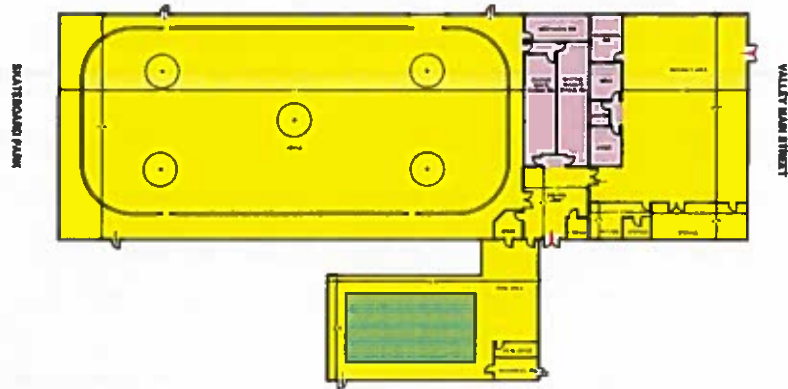
TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning	\$50,000				
Construction		\$700,000 *			
Post Construction			\$5,000		
Total	\$50,000	\$700,000	\$5,000		

- *To be revised after plan developed and approved.*

ONGOING OPERATIONAL COSTS:

On going operational costs could be realized if any operational efficiencies are incorporated in the project. The operation of the Recreation Complex is funded by the Hamlets GNWT Operational Funding Transfer.

PROJECT BRIEF
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— TO PUBLIC LIBRARY —

HAMLET OF FORT LIARD RECREATION COMPLEX
327 VALLEY MAIN STREET



PROJECT BRIEF
Page 4 of 4

BUILDING DETAILS

REPLACEMENT VALUE	\$ 9,184,700 plus contents \$350k.
FOOT & FOUND	reinforced concrete
FRAME	steel
FLOOR(S)	2,223 sf 4" reinforced concrete; 176 sf reinforced concrete slab; 9,328 sf wood joist; 13,611 sf gravel
FLOOR COVERING	416 hardener & sealer; 6,800 sf linoleum; 1,808 sf rubber
CEILING	4,760 sf mineral tile; 1,312 fs gypsum board; 1,604 sf plywood
INTERIOR CONSTRUCTION	100% wood frame; 116 lf base cabinet; 75 lf wall cabinet; 136 lf countertop; 300 st bleachers
PLUMBING	1 eye wash; 4 kitchen sinks; 1 janitor sink; 10 sinks; 13 toilets; 4 showers; 2 30-gallon water heater; 3 wall hung urinal
SAFETY SYSTEMS	5 bell; sf bylaw, safety sprinklers; 13 double emergency light; 1 fire alarm panel, Edwards, 6616; 6 pull boxes; 9 exit light; 10 heat detectors
HEAT, COOL, VENT	1 80 mbtu forced air; 2 750 mbtu boiler; 2 ceiling fans
ELECTRICAL/COMMUNIC	400-amp service, cond., BX, NM, breakers
WALLS	14,912 sf metal
ROOF	27,374 sf steel on steel
ROOF COVERING	27,374 sf metal
BASEMENT	532 sf reinforced concrete wall; 240 sf 4" reinforced concrete floor
OTHER	2 horizontal pump; 2 1,000-gallon plastic tank; rink boards; 1,200 sf swimming pool; 1,000-gal tank; 1 tank, steel, fuel 250 IG
FIRE EXTINGUISHERS	2 2A 10BC; 3 4A 60BC; 12 6A 80 BC
SOLAR	solar system for swimming pool
COOKING	16 lf cooking hood; 4 head fire protection system



PROJECT BRIEF

REMOVAL HAZARDOUS WASTE

850101

PROJECT DESCRIPTION:

Removal of Hazardous Waste and Scrap Metal for the from the municipal dump site.

BACKGROUND:

Hazardous waste: mostly automotive, and scrap metal that accumulated at the solid waste site must be shipped out for disposal. This project would also include the purchase of new disposal containers.

Municipal and Community Affairs [MACA] will be applying for ICIP funding under the Community Solid Waste Site Program. It is proposed that this clean up be done on a regional basis to reduce costs. It is expected that due to logistics this project would take three to four years.

The Federal Government would supply seventy five percent of the cost for each community. Based on a cost of \$180,000 for Fort Liard the hamlet would have to fund \$50.00.

SUBSTANTIATION:

This project will ensure both the protection of the environment as well as increase the availability of space and extend the life of the municipal land fill.

LAND TENURE

Municipal Land Fill

BUDGET: Gas Tax

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning	\$ 5,000				
Project Contribution	\$ 100,000				
Post Project Costs					
Total	\$ 100,000				

PROCUREMENT PROCEEDURE

Regional project with Deh Cho communities.

ONGOING OPERATIONAL COSTS:

No added cost.

Years 2021-2026



PROJECT BRIEF

ROAD DRAINAGE BASE WORKS

840404

PROJECT DESCRIPTION:

Road base work, stabilization, and drainage Birch Street in two areas.

Section 1. Base material would be removed, and new material placed. This will be then topped with crushed gravel. Resurfacing will be completed when the Hamlet streets are resurfaced.

Section 2. An application of base material will be needed to raise the elevation. Geotextile can then be placed, and the road topped with crushed gravel. Ditches will then need to be reconstructed to remove the water from the road and its surroundings. Driveway culverts will require replacement

Total Distance - 225 meters

BACKGROUND:

The first section has sub surface water, and the asphalt is always breaking up and requiring expensive repairs. During the construction of Section 2 permanent repairs could be made

The elevation of the second section slopes from the airport reserve down towards this section of road. The elevation of the Liard access road is higher, and water drains south towards this section of road. The elevation of the roadbed needs to be raised to an elevation of 214 to supply adequate drainage. A layer of geotextile will reinforce the soil by adding tensile strength to it and creating a rapid de-watering layer in the roadbed.

This project would be three phases. Year one – engineering and design and finding a solution to drain water away from the road base. Year two- suitable base material and allowed to pack for a year. Year three- geotextile would be placed and topped by suitable base material. The road would then further topped with crushed gravel before an application of chip seal.

SUBSTANTIATION:

To supply a safe public road major road works are required to and a new surface material applied.

LAND TENURE

Public Road Plan 3621

PROCUREMENT PROCEDURE

Planning Engineering – Invitational Tender

Construction – Invitational Tender

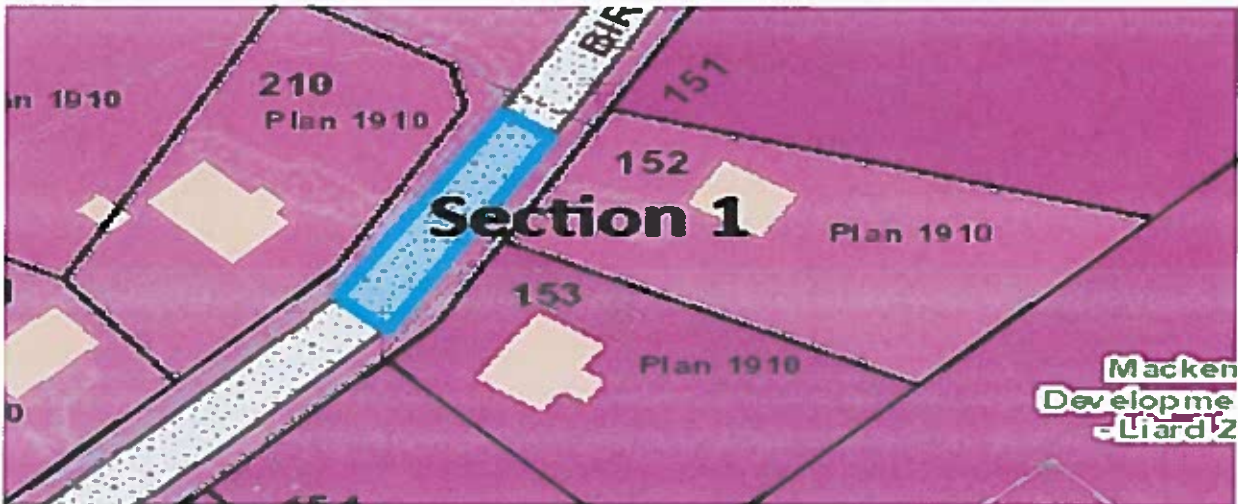
PROJECT BRIEF
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BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning/Design	\$ 50,000.00				
Construction		\$ 100,000.00	\$50,000		
Post Construction				\$ 25,000	
Total	\$50,000.00	\$ 100,000.00	\$50,000.00	\$ 25,000	

ONGOING OPERATIONAL COSTS:

Correcting drainage problems and with a proper base for chip seal ongoing maintenance costs would be lower.





PROJECT BRIEF

ROAD RESURFACING – CHIP SEAL

840407

PROJECT DESCRIPTION:

Chip seal Hamlet Streets and Lanes. Place on more coat on Valley Main Street and Blackwater River Road chip sealed surface. Place two coats on Birch Street and two coats on Birch Street where repairs are made and there have been elevation changes. Roads not yet sealed will require two coatings.

<u>ROAD/LANE</u>	<u>Total Meters</u>	<u>One Coat Meters</u>	<u>Two Coats Meters</u>
Road – 8-meter width	8,300	4,650	3,650
Lane – 6-meter width	1,210		1,210

BACKGROUND:

Chip sealing is a process of covering a gravel road with a layer of liquid asphalt and then a layer of small rocks embedded in the asphalt. The purpose of this procedure is to extend the useful life of the road by providing a wearing course. Chip sealing is a cost-effective procedure that prevents water from penetrating the road surface, improves skid resistance and suppresses road dust. Chip seal projects typically last seven to ten years.

In the past chip seal has been applied in conjunction with sealing of NWT Highway 7. This reduces mobilization costs.

A big disadvantage of tar-and-chip paving for driveways is that complications can be encountered during the removal of snow or ice.

SUBSTANTIATION:

Resurfacing roads that already have an application of chip seal will extend their life cycle and reduce costs. Roads not yet surfaced will benefit from dust control and approved drainage.

LAND TENURE

Public roads and lanes

BUDGET: Gas Tax/Small Community

<u>TASK/FISCAL YEAR</u>	<u>2021/22</u>	<u>2022/23</u>	<u>2023/24</u>	<u>2024/25</u>	<u>2025/26</u>
Planning					
Construction			\$ 800,000 *		
Post Construction				\$ 5,000	
Total			\$800,000	\$ 5,000	

* This does not include increased mobilization cost if project cannot be completed with road sealing on highway 7.

Years 2021-2026

PROJECT BRIEF
Page 2 of 2

PROCUREMENT PROCEEDURE

Project will be sole sourced so work can be completed on conjunction with GNWT to reduce mobilization costs.

ONGOING OPERATIONAL COSTS:

No increased costs. Breaks can occur from water, frost, or vehicle damage. Breaks in the road surface will require sealing as required to prevent water penetration to the roadbed.



PROJECT BRIEF

STAFF HOUSING FENCING

850114

PROJECT DESCRIPTION:

Construction of Fencing around staff house lot 255

BACKGROUND:

Two staff housing units are located on Lot 255 and the lot is not fenced. The lot is set back from Valley Main Street and it is used as a short cut from Birch Street.

A four-hundred-foot four-foot-high wood fence would prevent access across the lot.

Some brush clearing will be required behind the modular staff unit.

SUBSTANTIATION:

Staff staying in the Hamlet housing must feel safe. This fence would limit access across the lot.

LAND TENURE

Lot 255 Plan 2789 – Commission's Land – Reserved for the Hamlet

BUDGET: CPI

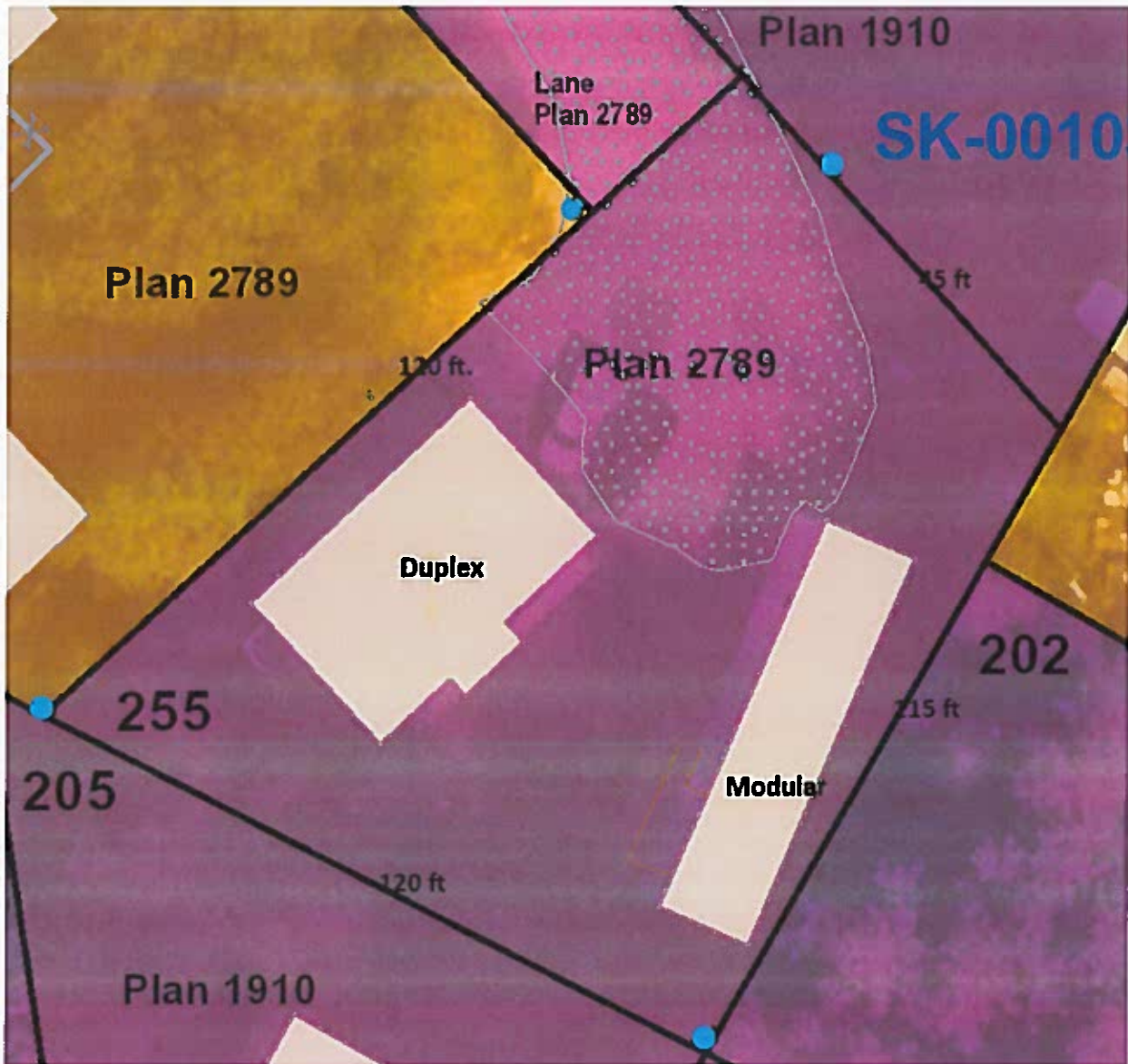
TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning					
Construction	\$ 50,000				
Post Construction					
Total	\$ 50,000				

PROCUREMENT PROCESS:

Local Invitational Tender – construction can be done locally and provide local employment.

ONGOING MAINTENANCE

Fence will be constructed of treated lumber and require no ongoing maintenance.





PROJECT BRIEF

THREE BAY GARAGE CONSTRUCTION

830407

PROJECT DESCRIPTION:

Construction of a 50 ft. x 60 ft. Pre-engineered Steel Garage on structural slab on grade.

BACKGROUND:

A three-bay pre-engineered steel garage would be constructed at the Municipal Works Yard. Structural steel framed garages are economical, durable, minimal maintenance, and provide open column free spaces. There are deduced foundation requirements from a lighter structure.

The Hamlet has a heated six-bay parking and maintenance garage on Valley Main Street that is used to store the Hamlets service trucks and equipment. Five service vehicles are parked in separate bays, the loader is parked in around the front of a service truck, the grader is parked outside, the backhoe/loader is parked in the cold storage warehouse. and the dump truck is parked in the last bay and is filled with gravel. There is limited space for heated storage and no room for maintenance.

The new garage would supply heated storage space for all mobile equipment (grader, loader, backhoe, dump truck) so that it is available when needed. This garage would provide suitable safe working space for mechanics and the storage of parts and tools. To comply with legislation a washroom and worker room would be needed.

The sixth bay would be converted to heated storage space and a facility maintenance shop. This change would require no structural changes to the building.

A geotechnical investigation will be necessary to determine structural capacity and recommended a foundation.

SUBSTANTIATION:

A Hamlet requires heated garage space park the mobile equipment. Presently two pieces of mobile equipment must be parked outside and during servicing an additional vehicle must be pulled outside. An additional vehicle must be parked outside when the mechanics are performing vehicle maintenance.

The worker area in the Valley Main Street garage is not large enough for municipal workers, maintenance workers, and summer work crews. This has become very evident during COVID 19 and led to unsafe working conditions for essential workers.

Proper space for hamlet facility maintenance and adequate heated storage space is necessary and this could be achieved at little cost for modifications to the building.

In the event of a fire the Hamlet would have alternate garage space from which to provide essential municipal services

LAND TENURE

Lot 319 LTO 4182 – Municipal Reserve “Pending”

Years 2021-2026

PROJECT BRIEF
Page 2 of 3

GENERAL BUILDING SPECIFICATIONS

The objective would be to achieve a minimum capital cost consistent with lowest life cycle cost and provide ongoing economical service. The planning and layout of the building will provide for ample space for equipment maintenance, ample storage for tools and spare parts and convenient access to mechanical and electrical components. The building will allow for expansion as simply and fast as possible.

In interest of maintenance equipment will be compatible with existing systems. And incorporate technology for local resources. Installations will be designed to facilitate quick repairs.

The heating, ventilation will be designed to be dependable for local weather conditions. Air quality must meet reasonable standards for basic worker needs. Heating will provide the best occupant comfort with efficient mechanical systems.

Energy efficiency is of prime importance but must strike a balance between the ability to build and maintain easily. Operational efficiency is the post construction goal.

Fire systems will ensure occupants alerted and can stop localized fires quickly with systems dependable as simple as possible

Lighting will be adequate for visual tasks to be performed and incorporate energy efficient fixtures. Flood lights at the building access will provide for safety and security. Emergency lights will be required for safety and if necessary, repairs. There will be connections for emergency generators.

Water Sewage Systems – meet NWT health standards – and extra water to wash vehicles

WiFi Service – necessary for modern equipment maintenance technology

Equipment Measurements:

- Dump Truck 30 ft. long x 10 feet wide.
- Grader 33 ft long x 13 feet wide
- Backhoe 26 ft. long x 9 feet wide
- Loader 22 ft. long x 9 feet wide

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning		\$ 50,000			
Geotech	\$ 50,000				
Construction		\$ 1,000,000			
Post Construction			\$ 10,000		
Total	\$ 50,000	\$1,050,000	\$ 10,000		

PROJECT BRIEF
Page 3 of 3

POCUREMENT PROCEEDURE

An *Invitational Tender* would be advertised to complete the Geotechnical study of Lot 319. A *Request for Proposal* would be developed for the construction project and publicly advertised.

ONGOING OPERATIONAL COSTS:

The building structure should require little maintenance and the ongoing costs would be for fuel, electricity, and maintenance services.





PROJECT BRIEF

SERVICE TRUCK REPLACEMENT - VACUUM **810304**

PROJECT DESCRIPTION:

Replacement of the 2017 Freightliner Vacuum Sewage Truck

BACKGROUND:

The Hamlet uses two 2500-gallon Vacuum Sewage Truck to supply community sewage pump out services.

These trucks have a life cycle of eight years after which they are subject to engine and transmission failure due to the long climb fuller loaded.

Two service trucks are needed to supply adequate services.

A sole source purchase will be made from Hay River Truck Sales Ltd. as they are the only NWT supplier of these vehicles. The 2017 truck will be sold by public tender.

Hay River Truck Sales Ltd. will supply service and maintenance.

SUBSTANTIATION:

These vehicles are essential for the provision of sewage pump out services and the Hamlet must always have two in service. Delivery times can be up to ten months and the Hamlet must schedule the purchase accordingly.

Rental of replacement truck is expensive and essential if a truck is out of service.

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning					
Purchase					\$195,000.00
Post Purchase					
Total					\$195,000.00

PROCUREMENT PROCEEDURE

Sole Source – Hay River Truck Sales Ltd.

ONGOING OPERATIONAL COSTS:

The new truck will be a replacement vehicle and will have insignificant impact on operational costs.

PROJECT BRIEF
Page 2 of 2

GENERAL SPECIFICATIONS

- New Freightliner M2106 Chassis
- 2500-gallon steel vacuum sewage tank
- Five hundred Fruitland Pump
- Heated valves
- Required hoses
- 34-inch rear door
- Backup TV



PROJECT BRIEF

Waste Site Planning Study

895400

PROJECT DESCRIPTION

Waste Site Planning Study to project life expectancy of the present site, expected annual maintenance costs and liability for closure.

BACKGROUND:

- Solid waste [garbage] management is the collecting, treating, and disposing of solid material that is discarded because it has served its purpose or is no longer useful.
- Liquid waste [sewage] management is the collection and transporting of sewage to an off-site by means other than discharge to a sanitary sewer.

Waste management planning, with meaningful community engagement, is important in improving practices and meeting the challenge of waste disposal.

Two principles applied in the effort to manage waste in an environmentally responsible manner are:

1. Taking a risk-based approach to waste management. This means prioritizing infrastructure, operational activities, and waste types to reduce the risks to human health and the: and,
2. Committing to continuous improvement to the waste management system over time.

A good waste management plan is valuable as it can help guide decisions, including financial planning, over the long term. It can also help keep the focus on identified priorities and reduce risks and future liabilities.

A waste site planning study would include but not be limited to:

- ✓ Review of present practices
- ✓ Environmental Issues
- ✓ Liability Issues with the operation of the site.
- ✓ Compliance with Legislation
- ✓ Life expediency of the present solid and liquid waste site
- ✓ Estimate of Site Closure Costs
- ✓ On going cost for the removal of Hazardous, electronic, and end of vehicle waste and metals
- ✓ Maintenance costs of cell operations and schedule and cost for development of new cells.
- ✓ Related capital infrastructure requirements

SUBSTANTIATION:

The tasks of waste management present complex technical challenges. They also pose a wide variety of administrative, economic, and social problems that must be managed and solved

Responsible waste management needs careful planning and management, and the Hamlet must identify liabilities; short and long term and adhere to all legislative and environmental requirements.

Years 2021-2026

PROJECT BRIEF
Page 2 of 2

BUDGET: ICIP (Federal)

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning		\$50,000			
Post Planning					
Total		\$50,000			

PROCUREMENT PROCEEDURE

Planning Site Study – Request for Proposal



PROJECT BRIEF

WATER PLANT – CELL RESTORATION

830511

PROJECT DESCRIPTION:

Water plant cell restoration including the application of epoxy coating to cell walls, installation of two new valves, installation of a new level control, and installation of new stainless-steel ladders.

BACKGROUND:

Three water reservoirs need cleaning and resealing of their interior surfaces. Walls of cells #1 and #2 have never been recoated with sealer since being added in 1990. Cell #3 has not been recoated since being added in 1995. In 2007 a breakdown of the original sealer used was evident.

During the cell fluid exchange procedure in 2015 the transfer valve failed and seized in the partially open position. This is due to age and chemical reaction.

The reservoir level control has small holes and near failure. The float chamber for cell fluid level measurement and auto control of the system refill needs to be removed and a new electro-meter installed to perform functions automatically.

This is specialized work and RO H2O Water Systems Inc will be contracted to complete this work. They have had 30 years of experience in the installation and set up of water systems. The company is familiar with the Hamlet's plant and has supplied systems support and maintenance.

It will be necessary to be able to supply ample potable water to the community during this project however, due to slower potable water generation adjustment to schedules will be required.

An adequate supply of water for fire protection will not be possible and the firefighters will have to be prepared to draw water from the river.

Due to COVID-19 restrictions plans will be developed by the Hamlet and the Contractor so that workers and community residents will be safe.

SUBSTANTIATION:

Failure of these components would put the supply of portable water risk. Consistent operation of the water plant is imperative for an adequate supply of water. Sufficient water for fire protection must also be available.

SITE/LAND TENURE:

Lot 249 LTO 2159 – Municipal Reserve

PROJECT BRIEF
Page 2 of 2

BUDGET – Gas Tax

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning					
Design					
Construction	\$1,300,000				
Post Construction		\$10,000			
Total	\$1,300,000	\$10,000			

PROCUREMENT PROCEEDURE

Sole Source – ROH₂O

ONGOING OPERATIONAL COSTS:

There will be no increase in operational costs of supplying portable water. Cleaning of the cells will be necessary in 15-20 years.





PROJECT BRIEF

WATER PLANT – ACCESS STAIRS

830411

PROJECT DESCRIPTION:

Installation of Truck Access Stairs at the Water Treatment Plant

BACKGROUND:

The WSCC now mandates that safer truck access be installed at the Water Plant Three options are available –

- Rails on the Truck - truck become too high for power line clearance
- Under Truck Filling - easy water contamination
- Truck Access Stairs - most practical while supplying safe access

Aluminum stairs with deep stair treads and rails would enable access to platform at the top. A gangway would enable the driver to access a platform suspended above the truck. Both would have safety cages. Adjustments could be made to suit the truck height.

Modifications will have to be made to the truck fill line and adequate lighting installed.

SUBSTANTIATION:

WSCC is making safe truck access mandatory since the death of a water truck driver when he fell from a water truck while refilling.

LAND TENURE

Lot 249 LTO 2159

BUDGET: CPI

TASK/FISCAL YEAR	2021/22	2022/23	2023/24	2024/25	2025/26
Planning	\$ 25,000				
Construction	\$100,000				
Post Construction		\$ 2,000.00			
Total	\$125,000	\$ 2,000.00			

PROCUREMENT PROCEEDURE

Public Tender

ONGOING OPERATIONAL COSTS:

No costs other than clearing snow and debris from stairs.

Years 2021-2026

PROJECT BRIEF

Page 2 of 2

GENERAL SPECIFICATIONS

STAIRS

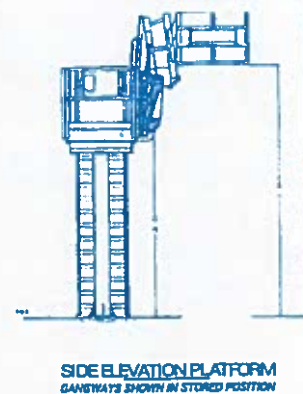
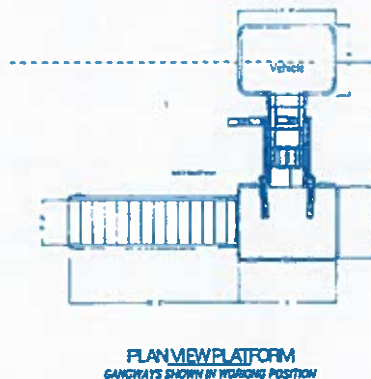
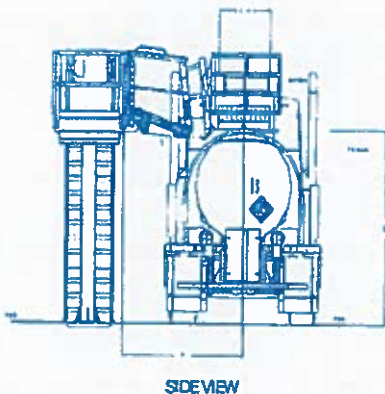
- ✓ Oversized 11" (279 mm) deep stair treads.
- ✓ Elongated last tread (Operator Tread) to provide a large 22" x 24" (558 mm x 609 mm) working area.
- ✓ Two (2) Oversized 1" diameter solid stainless steel pivot rods with pivoting bushings at all load bearing pivots.
- ✓ High strength spring counterbalance mechanism.
- ✓ Over-travel stops with rubber bumpers.
- ✓ Outboard gangway uprights are 2" x 4" tube.
- ✓ Base tread uprights with hot dipped galvanized steel construction.
- ✓ Laser keyed upright chains to keep chains untangled around foot lock.
- ✓ Five-hundred-pound (226 kg) load capacity

SAFETY CAGE

- ✓ 4'-0" (1219 mm) x 6'-0" (1828 mm)
- ✓ Four rails deep (38" / 965 mm) for minimizing gaps to vehicles
- ✓ 1-1/2- and 2-inch Sch 10 Pipe
- ✓ 2" square tubing
- ✓ Designed to resist a load of 50 plf. applied in any direction and a single concentrated load of 200 # applied in any direction
- ✓ Handrails galvanized steel construction
- ✓ Universal Swing Gate
- ✓ Adjustable from 16" to 36" (406mm to 914mm)
- ✓ Adjustable swing direction (right or left-hand swing)
- ✓ Inline mounting adjusts from 19.75" to 36.5" (502mm to 927mm)
- ✓ Perpendicular mounting adjusts from 16" to 33.75" (406 mm to 857mm)
- ✓ Powder-coated Aluminum construction

STAIR UNIT

- ✓ 10'-6" (3,200 mm) high stair unit – 2'-6" wide (762 mm)
- ✓ OSHA Compliant 9/9 rise and run
- ✓ 2" square tubing handrail
- ✓ Designed to carry safely removing concentrated load of 1000 #, a concentrated load of 300 # (164 kg) on a 4 sq/ in (101 sq/ mm) area of stair and a uniform load of 100 psf.
- ✓ Galvanized Steel Construction
- ✓ Gate at the bottom of the stairs



Hamlet of Fort Liard

FIVE YEAR CAPITAL PLAN

Years 2021-2026

Presentation

TANGIBLE CAPITAL ASSETS

Tangible capital assets (TCA) are a significant economic resource of municipalities and a key component in the delivery of many municipal government programs.

These include roads, buildings, the recreation centre, works equipment, vehicles, and computers and other such economic resources that have a useful economic life of more than one year.

Capital Assets allow the Hamlet to deliver services.

RECOGNITION OF CAPITAL ASSETS

**Municipal Financial reforms
give recognition to the fact
that substantial wealth is tied
to municipal tangible assets.**

ACCOUNTING

- **Capital asset accounting requires that the Hamlet:**
- **value these assets at cost, and,**
- **recognize a part of that cost in our financial statements each year over the life of the asset. This is referred to as amortization of the asset. It allows us to expense the asset over its useful life rather than as and when it is paid for.**



CAPITAL A COMMUNITY RESPONSIBILITY

Community infrastructure funded by funding transfers from the GNWT [MACA] GNWT no longer approves individual projects.

Communities are responsible to forecast, plan, construct, and maintain community infrastructure.

This gives the Hamlet more control over infrastructure puts more responsibility on council to ensure they can meet the infrastructure needs of the community.



OBLIGATIONS FOR CARE CUSTODY AND CONTROL OF COMMUNITY PUBLIC INFRASTRUCTURE

- a) operate the CPI to preserve the integrity of all structures and safeguard public access and keep structures in good repair.**
- b) operate the CPI to deliver municipal programs and services to all the residents.**
- c) arrange for and pay all electrical utilities, heating fuel, telephone and cable services, water and sewage removal and garbage disposal as required for the CPI.**
- d) arrange and pay for all mechanical, heating, electrical, gas and boiler and pressure vessels maintenance, as required for the CPI.**
- e) arrange and pay for all snow and ice removal, and security and supervision for the CPI, as necessary to maintain the CPI.**
- f) insure the CPI for their full replacement cost.**



INFRASTRUCTURE FUNDS

GNWT will no longer consider requests from individual communities for funding.

Community Public Infrastructure Fund

Balance Forward	\$3,992,461
GNWT Transfers	\$1,683,000
Interest Earned	\$5,423
Transfer from W/S	\$108,000
Proceed from sale	\$10,000
Investment in T.C.A.	\$651,739
Planning	\$8,341
Balance in Fund	\$5,138,804

Gas Tax Fund

Balance Forward	\$1,515,621
GNWT Transfers	\$298,000
Interest Earned	\$5,236
Balance in Fund	\$1,520,364



FINANCIAL OBLIGATIONS

The Hamlet shall keep proper accounts and records of the revenues and expenditures including all working papers and all original invoices, receipts, vouchers, and proof of payment, and provide copies of them to the GNWT on request or allow the GNWT, at any reasonable hour, to carry out an audit or inspections of the accounts and records for a period of seven (7) years after the termination of this Agreement.



OTHER FUNDING SOURCES

Building Canada-

- **project specific**
- **separate accounting**
- **hamlet contribution required to project cost**
- **restrictive time frame**

Other very specific funding from Federal Government.



INFRASTRUCTURE AS AN INVESTMENT

ASSESSMENT

- Condition of current infrastructure
- Changing needs
- Population growth

DETERMINATION OF NEW REQUIREMENTS

PRIORITIZATION

REALISTIC TIMETABLE

- Long term urgency vs. Fiscal pressures

GOOD ASSET MANAGEMENT PRACTICES TO PRESERVE AND ACHIEVE SERVICE LIFE

FORECASTING and PLANNING

The Hamlets planning process consists of two parts

- 1. Five year capital plan**
- 2. Fifteen year capital forecasting plan**

The five year capital plan lists projects to be completed over a five year period – some projects taking more than one year to complete.

The capital forecasting plan lists anticipated projects over a fifteen year period so that council can ensure that it can meet infrastructure needs.



INFRASTRUCTURE PLANNING

ASSESS CURRENT INFRASTRUCTURE

- ✓ **CONSIDER CURRENT CONDITION**
- ✓ **GROWTH NEEDS**

PRIORITIZE & SEQUENCE PROJECTS

- ✓ **PROTECTION OF PEOPLE**
- ✓ **PROGRAM NEED OR
REQUIREMENT**

ABILITY TO FINANCE PROJECTS

ABILITY TO OPERATE AND MAINTAIN INFRASTRUCTURE



ASSET MANAGEMENT PLAN

**AN ASSET MANAGEMENT
PLAN IS HOW ASSETS ARE TO
BE MANAGED OVER THEIR FULL
LIFE CYCLES TO DELIVER AN
AGREED STANDARD OF
SERVICE**

**ENABLES THE HAMLET TO
MAXIMIZE THE VALUE OF
INFRASTRUCTURE THAT
DELIVERS CORE COMMUNITY
SERVICES**



ASSET MANAGEMENT PLAN

- **ASSET MANAGEMENT IS ESSENTIAL SO THAT THE LIFE CYCLE OF INFRASTRUCTURE CAN BE FULLY REALIZED -----**
- **A TOOL TO ENSURE INFRASTRUCTURE STABILITY**
- **WILL REDUCE NUMBER OF EXPENSIVE UNSCHEDULED REPAIRS**
- **ALLOW FOR SOUND FINANCIAL PLANNING**



FORT LIARD ASSET MANAGEMENT

**THE HAMLET MUST DEVELOP
AN ASSET MANAGEMENT
POLICY AND ADHERE TO IT IF
THE FULL LIFE CYCLE OF EACH
ASSET IS TO BE REALISED**



ASSET MANAGEMENT PLAN ELEMENTS

What does the Hamlet own ?	→	Inventory
What is it worth?	→	Valuation
What is its condition ?	→	Remaining Life
What needs to be done ?	→	List of Work
When do you need to do it ?	→	Set a schedule
How much will it cost ?	→	Revenue Requirements
How will you pay for it ?	→	Financing Plan



FORT LIARD ASSET MANAGEMENT

- 1. LISTING OF ALL ASSETS**
- 2. EACH YEAR AN APPRAISER
CALCULATES THE REPLACEMENT
COST OF EACH ASSET**
- 3. A PHYSICAL INSPECTION IS DONE
ON ALTERNATE YEARS**
- 4. SCHEDULE OF REPAIRS FOR LIFE
CYCLE OF ASSET**
- 5. COST IS EVALUATED**
- 6. SCHEDULE HAS BEEN DEVELOPED
FOR EACH ASSETS LISTING
FUNDING REQUIREMENTS**



LAND DEVELOPMENT

The GNWT does not fund land development!

- Developer would fund development by borrowing for development costs.
- Developer would the sell lots and use proceeds to pay back loan.
- Developer could be private company or the community.

ISSUE - LOTS IN FORT LIARD CANNOT BE SOLD QUICKLY AND A DEVELOPER WOULD HAVE TO WAIT TO LONG TO RECOVER INVESTMENT.



PROJECTS

SERVICE TRUCK REPLACEMENT – VACUUM

EQUIPMENT REPLACEMENT – LOADER

TRUCK REPLACEMENT – F250

RECREATION CENTER UPGRADE

STAFF HOUSE FENCING

GARAGE CONSTRUCTION – THREE BAY

WATER PLANT ACCESS STAIRS

WATER PLANT CELL RESTORATION

ROAD DRAINAGE BASE WORKS



PROJECTS

ROAD CONSTRUCTION – HAY LAKE

ROAD RESURFACING – CHIP SEAL

REMOVAL HAZARDOUS WASTE

FACILITY REPLACEMENT – HAY LAKE

CEMETRAY UPGRADES

ENGINEERING SERVICES

LAND USE PLAN – ZONING BYLAW

EMERGENCY PLAN

WASTE SITE PLAN

PLAYGROUND UPGRADES [5]

Hamlet of Fort Liard

FIVE YEAR CAPITAL PLAN

Years 2021-2026

Asset Management Policy

PURPOSE

This Policy articulates the Hamlet of Fort Liard commitment to the effective asset management. The purpose of this Policy is to:

- Deliver infrastructure services in a way that meets established levels of services;
- Provide direction to help our community make decisions and prioritize core infrastructure needs;
- Provide direction for the consistent application of asset management by Council and staff, and;
- Reflect the organization's strategic goals with respect to managing infrastructure.

Asset management enables the protection of the community-owned assets that deliver core community services, including water system, sewer system, roads and drainage, recreation buildings, vehicles, and heavy mobile equipment.

ASSETS MANAGEMENT POLICY STATEMENTS

Assets management is an organization-wide approach for managing infrastructure assets to enable the provision of the community service. The tangible assets of the Hamlet of Fort Liard are managed in accordance with the following principals and the policy statements that supports them:

Levels of Services	The Hamlet of Fort Liard has established and strives to deliver levels of service that: <ul style="list-style-type: none">• Comply with all legislated requirements;• Protect and uphold public safety, community well-being and the environment; and• Reliably meet the informed expectations of stakeholders and the public.
Informed Decision-Making	Assets management decisions are based on sufficient, reliable, and current inventory information. A consistent approach has been adopted for decision making, including data management, risk analysis, evaluating trade-offs, and record keeping. Decisions that guide capital planning are made with a holistic view of systems needs across all assets categories, integrated with existing policies, and balanced according to community priorities. Opportunities for regional collaboration are identified and leveraged.
Minimum Sustainable Cost	The Hamlet of Fort Liard strives to uphold service levels at the minimum sustainable cost by minimizing expenditures on capital and operational costs, without deferring or under-funding maintenance or renewal. An initiative-taking approach has been taken, enabled through long-term financial planning that considers the full lifecycle cost of assets.

ASSET MANAGEMENT POLICY

Page 2 of 2

Continuous Improvement The Asset Management Policy and Plans are developed, implemented, evaluated, and renewed on an ongoing cycle. Adequate resources are provided for implementation and training to enable the management of municipal assets according to current best practices.

CONTEXT AND INTREGATION

The context and integration of asset management throughout the organization is formalized through references and linkage between corporate documents. Where possible and appropriate, Council and staff will consider this Policy and integrated it in the development or updating of the corporate documents.

KEY RESPONSIBILITIES FOR MANAGING THE ASSET MANAGEMENT POLICY

The performance of asset management is organization specific. Reflective of knowledge, technologies, and available tools, and will evolve over time. Council has the authority to approve, update, amend, or rescind this Policy. Council has the authority to delegate implementation responsibilities to staff, while providing the resources necessary to support staff in performing delegated responsibilities.

A full list of responsibilities for implanting the Assets Management Policy is outlined below:

Area of Responsibility	Body Responsible
Ongoing review of policies, updating where needed	Council
Exercise stewardship of assets	Council
Establish a budget for asset management	Council, SAO
Monitor and review infrastructure standards at established intervals	Council, SAO
Report the citizens on status of the community's assets and asset management program	Council, SAO
Manage infrastructure-related risks	Council, SAO
Document and regularly re-evaluate levels of service	Council, SAO
Develop and maintain guidelines and practices	SAO
Develop and maintain infrastructure strategies and service plans	SAO
Develop and maintain asset inventories	SAO
Assess infrastructure conditions and service levels	SAO
Establish and monitor infrastructure replacement levels using full lifecycle costing principals	SAO
Develop and maintain financial plans for the appropriate level of maintenance, rehabilitation, extension and decommission of assets.	SAO

Hamlet of Fort Liard

FIVE YEAR CAPITAL PLAN

Years 2021-2026

Council Responsibilities

Funding Policies

FUNDING POLICY
And
COUNCIL RESPONSIBILITIES

COUNCIL RESPONSIBILITIES FOR PUBLIC INFRASTRUCTURE FUNDING

11. The Recipient shall have care and custody for the CPI, including but not limited to, the following obligations:
- a) operate the CPI to preserve the integrity of all structures and safeguard public access and keep structures in good repair;
 - b) operate the CPI to deliver municipal programs and services to all of the residents;
 - c) arrange for and pay all electrical utilities, heating fuel, telephone and cable services, water and sewage removal and garbage disposal as required for the CPI;
 - d) arrange and pay for all mechanical, heating, electrical, gas and boiler and pressure vessels maintenance, as required for the CPI;
 - e) arrange and pay for all snow and ice removal, and security and supervision for the CPI, as necessary to maintain the CPI; and
 - f) insure the CPI for their full replacement cost.

Financial accountability and reporting

12. The Recipient shall keep proper accounts and records of the revenues and expenditures related to this Agreement, including all working papers and all original invoices, receipts, vouchers, and proof of payment, and provide copies of them to the GNWT on request or allow the GNWT, at any reasonable hour, to carry out an audit or inspections of the accounts and records for a period of seven (7) years after the termination of this Agreement.



Community Public Infrastructure Funding Policy

1. Statement of Policy

The Department of Municipal and Community Affairs (MACA) may provide funding to support community governments with the provision of community public infrastructure required to support community government programs and services.

2. Principles

The Department of Municipal and Community Affairs will adhere to the principles of the Government of the Northwest Territories' *Community Government Funding Policy* and the following principles when implementing this policy:

- (1) Community governments should plan for the sustainable development of their communities, to assess their needs, consider the feasibility of all new community public infrastructure and set priorities for community public infrastructure.
- (2) Community governments should exercise full authority and responsibility for the provision of community public infrastructure in their communities.
- (3) Community governments must use the Capital Planning Tool and develop Capital Investment Plans to provide for the community public infrastructure required to deliver community government programs and services.
- (4) Community governments should leverage funding from a variety of both internal and external sources.
- (5) Community governments should use a prudent and reasonable approach to operations and maintenance of community public infrastructure to maximize the useful life of community public infrastructure.
- (6) Community governments should develop an asset management plan to formalize the operation and maintenance of community government infrastructure.
- (7) Community governments should ensure community public infrastructure that protects public health and safety such as water treatment plants, sewage and solid waste sites and fire protection services is given priority when planning for community public infrastructure.
- (8) Community governments must ensure that all applicable federal and territorial statutes and regulations are met with regard to community public infrastructure.



Community Public Infrastructure Funding Policy

- (9) Infrastructure through Community Public Infrastructure should be used for the provision of municipal services. Deviations from this will have financial, legal, and/or risk management implications.

3. Scope

This policy guides the allocation of funding to eligible community governments to assist with the provision of community public infrastructure that is required to support community government programs and services.

4. Definitions

The following terms apply to this policy:

Asset management plan - sets out how physical infrastructure assets will be managed over a period of time to achieve level of service objectives. It uses an integrated approach involving planning, finance, engineering and operations to effectively manage existing and new infrastructure to maximize benefits, reduce risks and provide satisfactory levels of service to community users in a socially, environmentally, and economically sustainable manner.

Betterments - Costs of betterments are considered to be part of the cost of a tangible capital asset. A betterment is a cost incurred to enhance the service potential of a tangible capital asset. In general, for tangible capital assets other than complex network systems, service potential may be enhanced when there is an increase in the previously assessed physical output or service capacity, where associated operating costs are lowered, the useful life of the property is extended or the quality of the output is improved.

The following basic distinctions can be used to identify maintenance and betterments:

- a) Maintenance and repairs maintain the predetermined service potential of a tangible capital asset for a given useful life. Such expenditures are charged in the accounting period in which they are made.
- b) Betterments increase service potential (and may or may not increase the remaining useful life of the tangible capital asset). Such expenditures would be included in the cost of the related asset.



Community Public Infrastructure Funding Policy

Capital Investment Plan – A document created through a public and administrative process, with approval from locally-elected officials, providing a detailed understanding and documentation of the condition of existing Community Public Infrastructure and the anticipated investments into Community Public Infrastructure that are considered priorities along with a rationale for those priorities.

Capital Lease - Transfers substantially all of the benefits and risks of ownership to the lessee. Capital leases are considered assets of the organization which must be depreciated and lease payments are considered debt. A lease is considered capital if it meets one or more of the following criteria:

- (ii) lease term is greater than 75% of the asset's estimated economic life,
- (iii) the lease contains an option to purchase the asset for less than fair market value,
- (iv) ownership of the asset is transferred to the lessee at the end of the lease term, or
- (v) the present value or the lease payments exceeds 90 percent of the fair market value on an asset.

Community Public Infrastructure (CPI) – non-financial assets having physical substance that meet all of the following criteria:

- (ii) are in the care and custody of the community government or society, exclusive of a development corporation;
- (iii) are held for use in the production or supply of goods and services,
- (iv) have useful economic lives extending beyond an accounting period,
- (v) have been acquired to be used on a continuing basis, and
- (vi) are necessary to support community government programs and services and do not include inventory for regular operations and maintenance.

Community Government – A corporation established under or continued by the *Charter Communities Act*, the *Cities, Towns and Villages Act*, and the *Hamlets Act*, *Tłı̄chǫ Community Government Act*, or any Recognized First Nations Council.



Community Public Infrastructure Funding Policy

Community Public Infrastructure Funding – A contribution, as defined by the Financial Administration Manual Directive 1901, which provides funding to community governments to assist with the capital costs of community public infrastructure.

Percentage of Population (POP) – The community's rolling average population over a period of five years expressed as a percentage of the rolling average of the total population of the Northwest Territories (NWT) over a period of five years, as determined by NWT Bureau of Statistics estimates, rounded to four decimal places.

5. Authority and Accountability

(1) General

This policy is issued in accordance with Financial Management Board direction to delegate to Ministers authority to establish grants and contribution programs. Authority and accountability is further defined in Financial Administration Manual Directives 805 and 810, and as follows:

(a) Minister

The Minister of Municipal and Community Affairs (the Minister) is accountable to the Financial Management Board for the implementation of this policy.

(b) Deputy Minister

The Deputy Minister of Municipal and Community Affairs (the Deputy Minister) is accountable to the Minister and responsible to the Minister for the administration of this policy.

(2) Specific

(a) The Minister may:

- (i) approve and/or withhold grants and contributions according to the terms and conditions outlined in this policy;**
- (ii) withhold all or a portion of grants under this policy, or a contribution the Minister would otherwise have made, if a community government fails to comply with the precepts of this policy or other contribution and/or funding agreements;**



Community Public Infrastructure Funding Policy

- (iii) take other action as allowed for under the Government of the Northwest Territories' municipal legislation if a community government fails to comply with the precepts of this policy or other contribution and/or funding agreements;
 - (iv) approve changes to this policy; and
 - (v) delegate the authority to approve and/or withhold all or a portion of grants and contributions to the Deputy Minister;
- (b) The Deputy Minister has the following authority and accountability, which they may delegate to a Director or a Regional Superintendent:
- (i) approve grants and contributions in accordance with the terms and conditions outlined in this policy; and
 - (ii) make recommendations to the Minister respecting those activities and assets that are considered Community Public Infrastructure projects.

6. Provisions

(1) Funding Calculations

The funding allocated to eligible community governments under this policy is calculated using a base-plus approach. Each eligible community government will receive 2 per cent of MACA's total Community Public Infrastructure budget as a base amount and the remainder of the funding is allocated through a formula.

The formula used to allocate the remaining funding calculates the current replacement value of the community's public infrastructure relative to the community's population. The formula calculates the community's points which are then used to calculate the community's funding amount (or proportionate share) by dividing the community's points by the total of all communities' points.

Detailed funding calculations can be found in Schedule A of this policy.



Community Public Infrastructure Funding Policy

(2) Eligibility and Funding Criteria

All of the community governments that meet the definition of 'Eligible Community Government' in the Community Government Funding Policy are eligible for funding under this policy.

The funding provided under this policy is intended to assist with the acquisition of community public infrastructure, which is required to support community government programs and services.

(a) Payment

Funds will flow on April 1 of each year according and subject to the terms of the contribution agreement.

(b) Use of Funds

The funding provided under this policy must be used for expenditures that meet the definition of Community Public Infrastructure. The following expenditures are considered permitted under this policy:

- i) up to 10 percent of Community Public Infrastructure funding may be used to support asset management, subject to approval by the Deputy Minister;
- ii) project management costs that are incremental and directly associated with specific community public infrastructure;
- iii) crushing and stockpiling of granular material;
- iv) capital leases made in accordance with the community government's capital leasing policy;
- v) community land use planning;
- vi) paying principal and/or interest on capital loans;
- vii) feasibility, engineering or planning studies for community public infrastructure;



Community Public Infrastructure Funding Policy

- viii) the portion of water and sewer service contract costs that is directly attributable to the purchase costs of the water and sewer vehicles to a maximum of the number of vehicles accounted for in the funding model of the *Water and Sewer Services Policy*.
- ix) land development projects including subdivision planning and legal survey (proceeds from the sale of land must go back into the capital fund up to the value of the land development), and
- x) water licenses.

(3) Operational Considerations

The funding provided under this policy is intended to assist with the provision of community public infrastructure, which is required to support community government programs and services. The funding provided under this policy is not intended to provide for permanent community government staff positions.

- (a) Community governments must ensure that all applicable federal and territorial statutes and regulations are met with regard to community public infrastructure.
- (b) It is the responsibility of all community governments to ensure land tenure has been secured in the community government's name, or the name of the society established to hold assets on their behalf in the case of designated authorities, for all community public infrastructure, during and after completion of construction.
- (c) Community governments may borrow to fund community public infrastructure projects. Community governments must follow the debt management regulations pursuant to the legislation under which the community government has been established.
- (d) Community governments must have a council-approved procurement process.

(4) Accounting Requirements

- (a) Community governments must record unspent CPI funds as deferred revenue.



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- (b) The deferred revenue balance must have a corresponding, separate, verifiable and restricted cash equivalent with an approved financial institution, unless exempted by the Deputy Minister.
 - (c) If any CPI asset paid for through this policy is sold within ten years of its purchase date, the resulting funds are to be returned to the fund listed under 6(3)(a).
 - (d) All funding received under this policy and associated interest earned must be expended on eligible expenses outlined in this policy.
- (5) **Reporting Requirements**
- (a) Community governments must prepare and review annually a 5-year capital investment plan. The 5-year capital investment plan must be approved by motion of council and must be submitted to MACA with the community government's annual operating budget.
 - (b) Community governments should develop a feasibility plan, as part of the capital plan, for all acquisitions and development of new community public infrastructure that have a project cost of more than \$1,000,000, which demonstrates the community's ability to sustain on-going operations and maintenance costs.
 - (c) Community governments must report on funds in accordance with their funding agreement.
- (6) **Review and appeal**
- (a) Contributions under this policy are not application-based; community governments are allocated their percentage of total available funds according to the formulae in this policy.
 - (b) There is no appeal mechanism to calculations made according to the formulae in this policy; however, community governments may appeal perceived inconsistencies in the variable values to the Deputy Minister in writing.



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7. Financial Resources

Financial resources required under this policy are conditional on approval of funds in the Main Estimates by the Legislative Assembly and there being a sufficient unencumbered balance in the appropriate activity for the fiscal year for which the funds would be required.

8. Prerogative of the Minister

Nothing in this policy shall in any way be construed to limit the prerogative of the Minister to make decisions or take actions respecting grants or contributions. In this regard, the Minister may make a special exception to the rules set out in this policy. Any exception will require substantiation in writing and must be recorded with the Department of Municipal and Community Affairs.

Caroline Cochrane
Minister

Date



Community Public Infrastructure Funding Policy

Schedule A

Calculation of Community Public Infrastructure Funding

Calculation of the community public infrastructure funding amounts:

To determine the base funding amount for each community:

$$\text{Base Amount} = 2\% \times \text{MACA's CPI Budget}$$

To determine the Community Points for each community:

$$\text{Community Points} = \frac{90,000,000 (\text{POP})^{-0.4612}}{20} \times \text{POP}$$

To determine the community's proportionate share:

Community's

$$\text{Proportionate} = \frac{\text{Community Points}}{\text{Sum of All Communities' Points}}$$

Share

Sum of All Communities' Points

To determine the community public infrastructure funding amount:

$$\text{Community's CPI Funding Amount} = \text{Community's Proportionate Share} \times [(\text{MACA's Budget} - (\text{Base Amount} \times \text{Total \# of communities})) + \text{Base Amount}]$$