

## **Village of Carmacks Council**

*Respectfully acknowledges that we are meeting on the traditional territory of the Little Salmon Carmacks First Nation.*

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### **Agenda 26-02**

#### **Regular Meeting of the Council of the Village of Carmacks, Yukon**

To be held in the **Council Chambers** of the Carmacks Municipal Building at **7:00 PM**  
on **Tuesday, January 20<sup>th</sup>, 2026**

**Zoom Information:** Meeting ID: 899 6857 0020 Passcode: 662543

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#### **Agenda**

1. **Call to Order**  
1.1 Swearing-in Ceremony
2. **Adoption of Agenda** *Motion to Approve*
3. **Adoption of Minutes**  
3.1 Regular Meeting of January 6<sup>th</sup>, 2026, *Motion to Approve*
4. **Delegation**  
4.1 RCMP Monthly Report  
4.2 Jane K. & Mark W. Regarding CMHC updates
5. **Correspondence**  
5.1 Carmacks DMAF Notice Letter & Agreement from David Eastland
6. **Reports**  
6.1 Council Activity Reports  
6.2 Mayor's Report  
6.3 CAO Report  
6.4 Association of Yukon Communities (AYC)
7. **Bylaws**  
7.1 CAO Appointment Bylaw *(First & Second Reading)*
8. **New and Unfinished Business**  
8.1 Tax Lien Summary TL1 *Motion to Approve*
9. **Question Period**
10. **In-Camera Session** *(Motion to go in and out of session with recorded times)*
11. **Adjournment**



**MINUTES FROM THE REGULAR MEETING OF THE COUNCIL FOR THE  
VILLAGE OF CARMACKS ON January 6th, 2026, IN THE MUNICIPAL COUNCIL  
CHAMBERS**

**PRESENT:** Mayor: J. Lachance

Councillors: D. Mitchell, D. Hansen, T. Wheeler

Staff: CAO P. Singh, A. Wylimczyk

Regrets: None

Delegation: None

- 1. CALL TO ORDER:** Mayor J. Lachance called the meeting to order at 7:00 PM.

Mayor Lachance wished everyone a Happy New Year.

- 2. AGENDA:** Council reviewed the agenda.

Mayor Lachance added an In-camera session to the agenda.

**26-01-01 M/S Councillors D. Hansen/T. Wheeler motioned that the agenda be accepted as amended.**

**CARRIED**

- 3. MINUTES:**

3.1 From the regular council meeting on December 16<sup>th</sup>, 2025

**26-01-02 M/S Councillors D. Hansen/D. Mitchell motioned that the minutes be accepted as presented.**

**CARRIED**

- 4. DELEGATION**

None

- 5. CORRESPONDENCE**

**5.1 Community Advisor Arbor Webster regarding Vehicle Disposal**

CAO P. Singh explained to Council that Vehicle Disposal need to be added to the Landfill Services and Fees Bylaw as a separate line. He requested a quote for vehicle



disposal from Urban Recycling in Whitehorse. Once he hears back from them, he will update council and add the fees to the bylaw. No EV's and Hybrid vehicles are accepted.

## **6. Reports**

### **6.1 Council Activity Reports**

Councillor D. Hansen thoroughly enjoyed the New Year's fireworks and thanked Viren from VR North to make it more visible with his drone. She is looking forward to new things with council and CAO.

Councillor D. Mitchell has nothing to report.

Councillor T. Wheeler did not enjoy the recent cold snap but the fireworks and is looking forward to the new year.

### **6.2 Mayor's Report**

Mayor Lachance thanked the community for their efforts during the cold snap helping people in need and thinking of neighbors, family and friends. He attended and helped with the new year's fireworks. Mayor Lachance also helped the fire department team organize the new gear and is looking forward to a great new year.

### **6.3 CAO Report**

CAO P. Singh provided Council with a written report and presented a verbal overview. He updated Council on the HAF Funding Initiative, noting that Bonus Grants payments have been issued to residents who successfully completed all program and policy requirements.

The weigh scale project is currently on hold and still awaiting electrical connection. Once completed, the Village will proceed with the installation of computer hardware, internet connection, and scale software, following staff training.

The FireSmart RFP will be awarded to a local contractor.

The Advance poll for the by-election was held on January 2<sup>nd</sup>, and the regular poll will be held on January 8th.



#### **6.4. Finance Report**

Finance Officer A. Wylimczyk provided council with written report and broke it down verbally. Council reviewed the attached income statement and expenditure summary report.

**26-02-03 M/S Councillors T. Wheeler/D. Hansen motioned to accept the expenditure summary report.**

**CARRIED**

#### **6.5. PW Report**

Mayor Lachance read report and thanked the PW department for their continued efforts to run all operations efficiently during the cold snap.

#### **6.6. Recreation Report**

Mayor Lachance read report to council. There are a lot of issues with the heat and freeze up in the arena. Mayor Lachance thanked staff for their efforts and hopes to get the issues resolved soon.

#### **6.7. Association of Yukon Communities Report**

Councillor T. Wheeler has nothing to report.

### **7. Bylaws**

None

### **8. New and Unfinished Business**

None

### **9. QUESTION PERIOD**

None.

### **10. IN-CAMERA**

Motion to move into Closed Meeting in accordance with the Yukon Municipal Act, Section 213 (3) (a) if in the case of a council, the council decides during the meeting to meet as a council committee to discuss a matter.



**26-01-04 M/S Councillors T. Wheeler/D. Hansen motioned to go into In-Camera at 7:20 PM.**

**26-01-05 M/S Councillor D. Hansen motioned to go out of In-Camera at 7:28 PM.**

## **11. ADJOURNMENT**

**26-01-06 M/S Councillor T. Wheeler motioned to adjourn the meeting at 7:28 PM.**

Mayor J. Lachance adjourned the meeting at 7:28 PM.

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Mayor J. Lachance

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CAO Parminder Singh (Interim)

**MONTHLY  
MAYOR'S / CHIEF'S  
POLICING REPORT  
December 2025**

**Carmacks Detachment  
“M” Division Yukon**

**Canada**



Royal Canadian Mounted Police Gendarmerie royale du Canada

OCCURRENCES	<u>December 2025</u>	<u>Year to Date 2025</u>	<u>December 2024</u>	<u>Year to Date 2024</u>
Assaults (All Categories)	3	30	4	41
Assistance/Suspicious Occurrence	7	68	5	54
Break and Enters	3	14	0	7
Cause Disturbance / Mischief/Breach of Peace	8	97	5	72
Drugs (all categories)	2	9	0	3
Fail to comply with conditions	0	4	2	10
False Alarms	1	10	2	37
Impaired Driving	0	29	0	17
Liquor Act	0	10	0	7
Mental Health Act	5	31	2	22
Missing Persons/Requests to Locate	4	9	0	4
Sexual Assault	0	3	0	3
Thefts (all categories)	1	21	2	26
Traffic (Speeding/Prohibited driver/etc.)	2	61	3	68
Uttering Threats	0	6	1	21
Vehicle Collisions	3	23	2	22
Wellbeing check	7	41	1	31
Other	6	83	5	92
<b>Total Calls for Service</b>	<b>52</b>	<b>595</b>	<b>34</b>	<b>537</b>

Service Calls Involving Alcohol	15	209	12	180
Prisoners held locally	0	16	1	13



# Alternative Housing Development Options

## DISCUSSION PAPER

Submitted by  
Across the River Consulting

to



OCTOBER 2025

## 1.0 Introduction

Under its current Housing Accelerator Fund Contribution Agreement, the Village of Carmacks committed to undertake high-level business case research on alternative/prefab/modular housing forms that may be applicable to the Carmacks context. The goal of this research is to evaluate the suitability of deploying prefab/modular forms for a 4-8 home development on Lot 127, a Village owned property, in the downtown core as a pilot project as an alternative to conventional stick-framed construction.



This research considers and compares a range of manufacturer options with conventional construction for:

- costs;
- timetables;
- contractor availability;
- project management capacity;
- design flexibility and energy use; and
- local socio-economic benefits.

This paper concludes with recommendations for Council's consideration.

## 2.0 Site Assessments

Two standard pre-requisite site assessments were undertaken to evaluate the suitability of Lot 127 for any proposed housing form. These assessment reports are available for review separately as required.

### Phase One Environmental Assessment

The assessment discovers no evidence of environmental contamination, risks or concerns regarding residential development at Lot 127. No further assessment is recommended.

### Geotechnical Assessment

Lot 127 is suitable for shallow foundation systems for simple National Building Code Part 9 buildings (typically smaller single-residential or duplexes). Sub-excavations can be limited to 150mm with frost protection.

Manufactured homes that comply with CSA code A277 or Z240 are classed as deformation resistant homes, reducing the site preparation requirements.

## 3.0 Reference Cases

Three reference cases of potential alternative development forms were researched, reviewed and compared against a recent Carmacks development of conventional construction. Each form underwent desktop review of brochures, standard designs and services and interviews with company representatives.

### 3.1 Conventional Construction

Little Salmon/Carmacks First Nation completed conventional construction of two 4-plexes in 2025. Total costs were approximately \$525/ft<sup>2</sup>. This is considered very efficient compared to recent public tender pricing of multiplex developments which have approached \$1,000/ft<sup>2</sup> for reference cases in Dawson and Watson Lake.

Allowing for inflation and market conditions, the 4-plexes provide a conservative cost estimate of a minimum of \$600/ft<sup>2</sup> in Carmacks for any new building which may well require the services of larger out-of-town contractors.

The 4-plexes are highly energy efficient and of good size, quality and amenities for this cost.

### 3.2 Modular Package – Built on Site

[Tamlan International Homes](#) of Coquitlam, BC is focussed on timber frame modular packages, which can be customized to need, although conventional 'stick' construction can also be supplied. Packages can be provided to match designs provided in the [CMHC Housing Design Catalogue](#) which is intended to speed up the design and local permitting process.

In this form, while there are some materials supply and construction speed efficiencies, the Village still needs to engage a willing, qualified General Contractor with suitable experience. Roofing materials and much of the interior work is not included. Costs are similar with conventional methods and design flexibility is reduced

compared to a full architectural design process. Overall, the benefits are limited, and it may just introduce extra complexities with multiple partners and ambiguity over responsibilities such as for warranties.

### 3.3 Modular – Factory Built

[Anhart Construction](#) of Hope, BC, provides modular homes with designs that can be customized. These homes are prebuilt in the factory to sizes that can be shipped as whole homes on trucks and installed at the site.

As ready-built homes, these require little work or project management by the Village after the design stage. They provide some design flexibility to adapt further from templates for energy efficiency. However, cost and timetable advantages were not as significant as would be hoped given the sacrifice of full design control, energy efficiency and local economic benefits of construction work. The supplier has no Yukon dealer or partner.

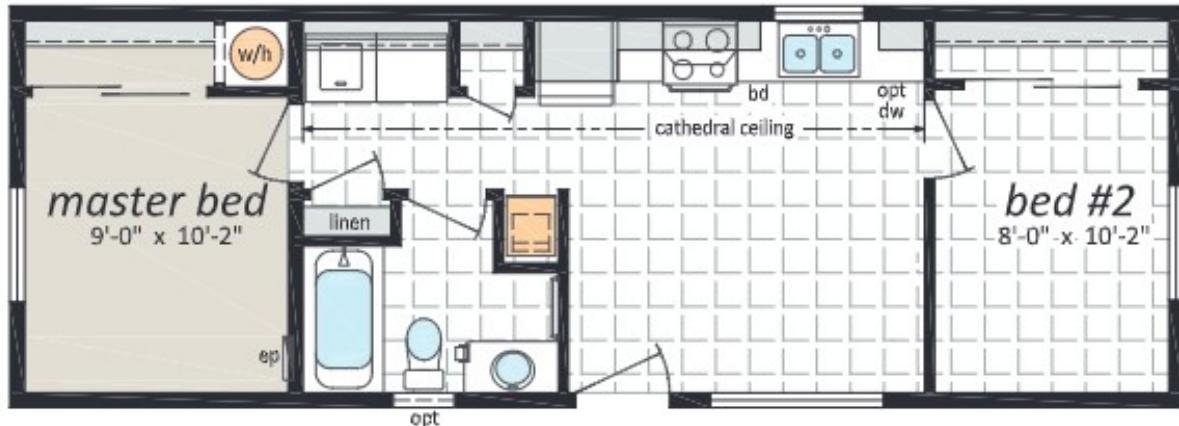
### 3.4 Manufactured Homes

[All Ready Homes](#) of Carcross, Yukon is a supplier of standardized, deformation-resistant manufactured homes that meet CSA Z240 codes required by the Yukon Building Safety and Inspections Branch. Factory built and delivered occupancy-ready to the site within 6 months, such homes are a rapid and efficient development methodology. Key advantages are a much lower relative cost (approx. \$350/ft<sup>2</sup>) and very little project management demand upon the Village's limited capacity. No general contractor is required, but the option does require a small amount of work to build a water house and plumbing and electrical connections. These homes can be installed with only surface clearing required.

There are limits to the energy efficiency upgrades that can be added to such factory homes. However, the modest home sizes planned (e.g. 560 ft<sup>2</sup>) already greatly reduce consumption for space heating such that any upgrades are of much lower benefit anyway. The greatest downside is the deficit of local economic and employment impacts. However, given the amount of residential building already planned over the next 1-2 years there is likely a shortage of local skilled tradespeople and no shortage of opportunities.



All Ready Homes two bedroom ranch house exterior rendering



All Ready Homes two bedroom ranch house blueprint

## 4.0 Review Matrix

The matrix below reviews each alternative building form against the base case of conventional construction as seen in the 4-plexes built by LCSFN in 2024-2025. Each form is provided a graduated negative or positive score for improvements or benefits relative to the base case.

Each form is evaluated by each of the criteria on a -3 to +3 score relative to the conventional construction base case.

Modular/ Manufactured Option	Cost Savings	Construction Timetable	Contractor Availability	Project Management Capacity	Design Flexibility (Energy Use)	Local Economic Benefits	Score
Modular – Package (Tamlin)	None (0)	Only moderate improvement (+1)	Similar (0)	Similar (0)	Less (-1)	Similar (0)	0
Modular – Built (Anhart)	Small (+1)	Moderate improvement (+2)	Almost zero need (+3)	Limited need (+2)	Less (-1)	Less (-2)	+5
Manufactured Home (All Ready Homes)	High (+3)	Significantly faster (+3)	Almost zero need (+3)	Almost zero need (+3)	Low (-2)	Low (-2)	+8

In the Carmacks context, deployment of standardized, factory manufactured homes are indicated to offer significant potential to increase housing supply faster, and at much lower cost, than conventional construction. This overcomes the significant challenges presented to low-capacity proponents such as the Village in a community with a limited residential development industry. The Village's piloting of factory manufactured homes

on Lot 127, a highly visible site in the heart of downtown, may inspire individual property owners to explore this option as well.

## 5.0 Conclusion and Recommendations

The conclusion of this high-level review is that factory manufactured homes are likely suitable as an important solution to overcoming short-term housing shortages in Carmacks. Lot 127 is a viable site for a pilot project to implement these homes.

Lot 127 is a modest but significant property in the Carmacks context. It has potential to host up to eight homes with good design. Site planning for the Lot 127 pilot should enable Council to consider advancing the factory modular home pilot to proceed with a limited number of homes (e.g. only two) during the initial stage. This will retain options for the remainder of the site to be developed with a conventional 4-6 plex if the pilot does not validate repetition.

Per the Housing Accelerator Fund work plan, the recommended next step is to undertake site planning, utility servicing and schematic designs for a Development Permit. Next steps should be based on the All Ready Homes proposal (confidential) prior to going to final tender for a home supplier. Work should include:

- Site plan to determine unit layouts and desired density;
- Landscaping and parking plan for aesthetic & lifestyle quality;
- Final unit specifications inc. heat source and insulations;
- Confirmation of building code compliance requirements;
- Utility services (power, sewer & potable water delivery shed); and
- Engagement with potential development partners.



## Village of Carmacks

P.O. Box 113

Carmacks, YT Y0B 1C0

### Village of Carmacks Staff Housing Policy

**Purpose:** The Village of Carmacks has periodically experienced challenges recruiting and retaining staff from outside the community due to the shortage of adequate, affordable housing in the community. The Village has developed a small portfolio of employee housing to proactively meet these challenges but may not always require all its units for Village employees; in this case, other organizations requiring housing in Carmacks could also benefit. Furthermore, the Village has limited capacity to manage and maintain its housing stock portfolio and may need to access third party resources.

The purpose of this policy is to:

- a) Provide guidance on the provision of housing to Village of Carmacks employees and other residents of Carmacks;
- b) Facilitate consistent, fair, and transparent decision-making about the provision of Village of Carmacks employee housing stock;
- c) Provide direction for utilizing third parties to assist with the ongoing operations and maintenance of Village employee housing stock.

#### Definitions:

- **Employee:** means an employee and/or contractor of the Village of Carmacks or a Village housing partner.
- **Housing benefit:** means a good or service given, or arranged for a third party to give, to an employee in relation to employee housing administered by the Village and/or its representatives under this policy.
- **Housing partners:** means organizations entered into a formal agreement with the Village of Carmacks to manage, maintain, or fund Village-owned housing units, or to utilize those housing units for their own staff, clients, or other purposes.
- **Market-based rent:** means the rent established by the Village for a housing unit taking into consideration the local or territorial market.
- **Premises:** a development of a single-detached dwelling, a secondary suite, or “missing-middle” housing (2-4 homes in one building with shared walls) that does not exceed 4 homes on one property.
- **Spouse:** refers to a person to whom the employee is legally married, or with whom the employee has cohabitated as a couple for the previous twelve (12) months at a minimum.
- **Tenant:** means a tenant’s right to possession of a rental unit under a tenancy agreement.
- **Tenancy agreement:** means an agreement between a tenant and Village respecting possession of a

rental unit.

## **1.0 Principles**

- 1.1 Access to employee housing is not an entitlement of, or benefit owing to, Village of Carmacks employees. Village employees are normally expected to provide for their own housing.
- 1.2 The Village's role in providing employee housing is to help address a lack of affordable, adequate housing options in Carmacks, and that may hinder the recruitment and retention of employees.
- 1.3 The Village should endeavour to construct, manage and maintain its housing stock in an efficient, cost-effective manner, utilizing external resources where available and strategic.

## **2.0 Application**

- 2.1 This policy applies to the Village of Carmacks Council and staff; tenants of Village-owned housing who are not employed by the Village; and housing partners of the Village of Carmacks.
- 2.2 The Village of Carmacks and/or its representatives and employees receiving housing under this policy are subject to the *Residential Landlord and Tenant Act* as well as any applicable legislation administered by the Canada Revenue Agency.

## **3.0 Eligibility**

- 3.1 An employee of the Village of Carmacks or housing partner is eligible for Village-owned housing under this policy if:
  - a) the employee is hired from outside of their community of employment;
  - b) the employee, either by themselves or with their spouse or others, does not have a legal interest in a residential dwelling in Carmacks; and
  - c) the employee has no tenant arrears or evictions within the three years preceding the date of application to the Village for housing.
- 3.2 Despite Section 3.1, and on the recommendation of the Chief Administrative Officer, the Village Council may elect to deem an employee eligible for housing based on special circumstances.
- 3.3 The decision of the Council is final and binding.

## **4.0 Scope of Housing Partnerships**

- 4.1 The Village may enter one or more partnerships with organizations that can help the Village best achieve the principles set out in Section 1.0 of this policy.
- 4.2 A partnership requires a formal agreement outlining, at a minimum:
  - a) Roles and responsibilities of the Village and housing partner;
  - b) The timeframe of the agreement;
  - c) Any financial details where funding and/or payments are involved;
  - d) The terms of access to and/or benefits from Village of Carmacks owned housing units, including whether that access and/or benefit is exclusive;
  - e) Clarity around how any pre-existing partnerships impact the agreement;

- f) The terms of agreement review, renewal, withdrawal or termination; and
- g) Any other matters pertinent to a cooperative working relationship based on fairness, clarity, and consistency.

4.3 A partnership may be negotiated by the Chief Administrative Officer but requires Village of Carmacks Council approval.

4.4 The terms of any partnerships should ensure that:

- a) This policy is adhered to;
- b) The Village can meet its own employee housing needs; and
- c) The Village and its partners receive fair value for services and/or resources provided.

## **5.0 Assignment of Housing**

- 5.1 The Village and/or its housing partners are responsible for the assignment of employees to available housing units from within its available units.
- 5.2 Where housing units are allocated to a housing partner, the partner's housing assignment policies may apply; otherwise, this policy will be followed.
- 5.3 The Village will determine the availability of housing units and may define the purpose for which the units may be utilized (e.g., short-term, family, single, shared). This may include setting aside specific housing units for a specific need (e.g., non-resident workers employed on a major capital project within Carmacks).
- 5.4 Shared housing may only be provided to Village employee(s) who consent, in writing to Village, to sharing the premises with one or more Village employees.
- 5.5 Village employees eligible for housing will be prioritized for the next available, suitably-sized vacant housing unit in accordance with the process set out in Annex 1 to this policy.
- 5.6 Village employees shall first be given the option to accept or decline a Village offer of housing that exceeds the type and size of housing that would typically be provided based on employee family size and other factors, as determined by the Village. Such offers shall include notice of the provision of Section 4.x.
- 5.7 Subject to all other eligibility requirements, a Village employee who declines an offer of housing that exceeds the type and size of housing that would typically be provided based on employee family size and other factors, as determined by the Village, remains eligible to later receive from the Village an offer of suitably sized housing.
- 5.8 The Village may, at its discretion, relocate over-housed Village employees upon suitably sized housing becoming available.
- 5.9 A tenant will not be required to vacate their premises for the sole purpose of providing housing to another employee in need of housing whose position is categorized in Annex 1 as having a higher priority housing rating.

## **6.0 Establishment and Application of Rents**

- 6.1 The Village will establish and charge market-based rents for all housing in Yukon communities to its employees and housing partners, unless a housing partnership agreement states otherwise.
- 6.2 Rents will be reviewed annually by the Village and may be adjusted.

6.3 Utilities are charged separately from rent and are the responsibility of the tenant and/or housing partner.

## **7.0 Tenancy Agreements**

- 7.1 Prior to occupying housing, a Village employee and the Village must enter into a written tenancy agreement that complies with the requirements of the *Residential Landlord and Tenant Act* and that contains all the terms and conditions of the tenancy.
- 7.2 The requirement set out in 7.1 also applies to any housing partners who house their own employees or clients in Village-owned units.

## **8.0 Duration of Employee Housing**

- 8.1 Housing may be provided to eligible Village employees for a maximum of three consecutive years, subject to section 8.2.
- 8.2 Where special circumstances exist, the Chief Administrative Officer may request an extension of a tenancy duration limit for a Village employee. The request must:
  - a) be presented to Village of Carmacks Council not later than sixty days prior to the date upon which the employee's tenancy will end; and
  - b) provide a detailed description of the special circumstances for requesting the extension.
- 8.3 Council may authorize an extension to a tenancy duration limit.
- 8.4 In determining whether an extension is warranted, Council will be guided by the principles set out in Section 1.0 and the best interests of the community. Council may, in addition to the reasons put forward under Section 8.2, consider any other information it determines is appropriate in the circumstances.
- 8.5 Council's decision to approve or deny the Chief Administrative Officer's request, including reasons, will be provided to the Chief Administrative Officer.
- 8.6 The decision of Council is final and binding.

### **Enactment:**

This policy is effective immediately upon adoption by the Village of Carmacks Council.

### **Approval:**

This policy was approved by the Village of Carmacks Council on xxxx, 20xx.

### **Signatures:**

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Justin Lachance – Mayor

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TBD – Chief Administrative Officer

## Annex 1

### Administrative Procedures for the Assignment of Housing December 2025

#### A. Prioritization of Critical Positions

1. The assignment of housing will be based on the prioritization of positions considered critical by the Village and/or its housing partners to the delivery of programs and services in Carmacks and where residency in the community is determined to be essential to effective program delivery.

#### B. Allocation Process

1. The Village and/or its housing partners will assign suitably sized employee housing on a first come, first served basis, to eligible employees, subject to paragraph D3, and in accordance with the following priorities:

Priority Level	Village of Carmacks	Village Housing Partners Housing Employees
1	<ul style="list-style-type: none"><li>• Chief Administrative Officer</li><li>• Manager positions</li></ul>	Full-time, year-round staff working in any of the following roles: <ul style="list-style-type: none"><li>• Community justice and/or victim services</li><li>• Counseling or addictions treatment</li><li>• Manager positions</li><li>• Nursing or other medical professions</li><li>• Social work</li></ul>
2	All other year-round, full-time positions	All other year-round, full-time positions
3	All other seasonal, full-time positions	All other seasonal, full-time positions

2. Only when there is no demand for employee housing from an employee in a Priority 1 position will an employee in a Priority 2 position be considered.
3. Housing partners providing housing for clients (versus employees) are not subject to the allocation process set out above.

#### C. Waitlists

1. There will be two waitlists – one for employees occupying Priority 1 positions and one for employees occupying Priority 2 positions.
2. If housing is not available at the time an application for housing is made, the Village and/or its representatives will place the employee on the appropriate waitlist in accordance with the time and date their application was received (i.e., the first application received is first on the applicable waitlist).

3. Where a request for housing is received in respect of two or more employees occupying positions with the same priority level, the Chief Administrative Officer or its representative may direct that housing be offered to their employee who is lower on the waitlist. In this circumstance the higher-ranked employee will exchange places on the waitlist with the lower-ranked employee who will then be offered housing. There should be no adverse impact to the overall ranking of employees who are on the waitlist.

DRAFT

**Date:** January 16, 2026

**To:** Mayor and Council, Village of Carmacks

**From:** Jane Koepke, Principal of Groundswell Planning

**Subject:** Recommendations Arising from the Alternative Housing Development Options Research Paper

Mayor and Council,

As per the Housing Action Plan commitments made by the Village under its Contribution Agreement with Canada Mortgage and Housing Corporation, high-level research was undertaken to consider the merits of alternative prefab/modular/factory-built housing forms to overcome long-standing barriers to increasing the housing supply in Carmacks.

Research included the suitability of prefab/modular/factory-built forms for a 4-8 plex development on a Village owned property (Lot 127) in the downtown core as a pilot project and recommendations of which approach to take to this pilot project.

The following briefing note and motion is intended as a follow-up to inform Council of the findings in the report and first steps in proactively responding to it.

### Considerations

Research reviewed 3 different alternative building forms against the base case of conventional construction as seen in the 4-plexes built by LCSFN in 2024-2025:

- Modular package (shipped as parts and built on site in Carmacks)
- Modular pre-built (shipped 80% built with finishing required in Carmacks)
- Factory-built (shipped occupancy ready – only utility connections required)

Each form was evaluated by each of the following criteria on a -3 to +3 score relative to the conventional construction base case:

<ul style="list-style-type: none"><li>• Cost Savings</li><li>• Construction Timetable</li><li>• Contractor Availability</li></ul>	<ul style="list-style-type: none"><li>• Project Management Capacity</li><li>• Design Flexibility (Energy Use)</li><li>• Local Economic Benefits</li></ul>
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### Key Findings

Factory built manufactured homes were found to have the strongest case to overcome the critical barriers to faster and cheaper housing supply development in Carmacks.

Factory built ready to occupy homes offer:

- Significant cost savings (up to 40%)
- Fast, expedited completion and occupancy (e.g. 6 homes ready by summer 2026)
- Not dependent on local contractor availability (likely busy with many other homes)
- Almost no project management capacity required from Village staff

There are downsides in design flexibility and local economic (employment) benefits.

Nevertheless, the conclusion of this high-level review is that factory manufactured homes are likely suitable as an important solution to overcoming short-term housing shortages in Carmacks, and the case for a pilot project is supported if funding can be secured.

#### Key Recommendations

Lot 127 is a viable site for a pilot project to implement these homes. Per the Housing Accelerator Fund work plan, the recommended next step is to undertake site planning, utility servicing and schematic designs for a Development Permit. Next steps prior to going to final tender for a home supplier should include:

- Site plan to determine unit layouts and desired density
- Landscaping and parking plan for aesthetic & lifestyle quality
- Final unit specifications inc. heat source and insulations
- Confirmation of building code compliance requirements
- Utility services (power, sewer & potable water delivery shed)
- Engagement with potential development partners

Lot 127 is a modest but significant property in the Carmacks context. It has the potential to host 6-8 homes.

Site planning for the Lot 127 pilot should enable Council to consider advancing the factory modular home pilot to proceed with a limited number of homes e.g. only two, during the initial stage. This will retain options for the remainder of the site to be developed with a conventional 4-6 plex if the pilot does not validate repetition.

#### **Draft Motion (for the minutes)**

**THAT** Council accepts the recommendations of the ***Alternative Housing Development Options Review***; **AND FURTHER THAT** Council authorizes staff to work with the consultants to undertake the recommended next planning steps only for a pilot project of factory-manufactured homes at Lot 127; **AND FURTHER THAT** Housing Accelerator Fund monies be utilized for this purpose as needed; **AND FURTHER THAT** No capital budget spending or funding or financing applications will be advanced for the pilot project prior to further review by Council; **AND FURTHER THAT** Council be provided with an update by March 2026.



# **Village of Carmacks**

## **High Density Servicing Review**

PREPARED FOR

Groundswell Planning

19 Donjek Road, Whitehorse, YT Y1A 3P8

PREPARED BY

Greenwood Engineering Solutions

Suite 203, 100 Main Street, Whitehorse, YT Y1A 2A8



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**APPENDIX A:** Supporting Drawings

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## 1 Introduction

To address the shortage of housing in Carmacks, there is ongoing interest in pursuing both market and community housing developments. The Village of Carmacks (VoC) has identified several sites for potential development and is exploring ways to support higher-density housing **and** within the main townsite, located on the south bank of the Yukon River. Past residential development assessments have **focuses** on evaluating future growth areas outside of the main VoC townsite, all of which present challenges, and the focus of this assessment is to understand if there are any servicing constraints to developing the vacant areas that are within the main townsite. Three lots in particular, lots 15, 127 and 1133, shown on drawings C100, are good candidates for development and this assessment evaluates the constraints to servicing these lots.

Greenwood Engineering Solutions (GES) has been retained by Groundswell Planning to complete this servicing capacity assessment in support of a review of additional residential developments within the VoC. The findings of this assessment are presented in this report, including how increasing residential density within the serviced portion of the community may impact existing municipal infrastructure, and to identify any constraints or requirements that could influence future development planning.

## 2 Existing Water and Wastewater Systems

Within the VoC main townsite, there is a wastewater sewer collection and treatment system, but a water distribution system does not exist. An overview of the existing water and wastewater servicing in Carmacks is discussed below.

### 2.1 Existing Wastewater System

The VoC operates a gravity collection sewer and treatment system that services the main townsite. Wastewater is collected and conveyed to a central lift station, which pumps flows to the mechanical wastewater treatment plant (WWTP). Refer to drawings C100 in Appendix A for an overview of the existing wastewater system. The WWTP has a treatment capacity of 150 m<sup>3</sup>/day (~1.74 L/s) with treated effluent discharged to the Yukon River under a water license allowing for up to 477 m<sup>3</sup>/day. During high river levels, the system experiences significant inflow and infiltration (I&I), where excess groundwater and surface water enter the sewer network. This has resulted in flows exceeding the WWTP's capacity, necessitating emergency discharge of untreated wastewater directly to the Yukon River to prevent system overload, most notably during the flooding events of 2021 and 2022. Historical flows to the WWTP are shown in Appendix B. As outlined in the historical flows, the WWTP is able to treat the wastewater flows generated from the VoC main townsite, and exceedances of the WWTP only occur when the Yukon River is experiencing a flooding event.

Properties located outside the VoC main townsite area rely on individual septic fields or pump-out tanks. Waste from these individual systems is trucked to an unlicensed sewage pit north of the community. Since 2016, the VoC and



LSCFN has been working with YG to develop a long-term wastewater management strategy to manage wastewater from the Carmacks community. In 2018, following a review of the options for a long term wastewater strategy, VoC and LSCFN supported the replacement of the existing WWTP and unlicensed pit with a lagoon system located along Freegold Road. The new lagoon will be able to manage the wastewater for the full build out of the VoC main townsite. An upgraded lift station to replace the existing lift station will be included as part of the lagoon construction to pump the wastewater flows from the VoC main townsite to the new lagoon. GES completed the preliminary design of the lagoon in 2025 and the detailed design and construction phases are expected to be undertaken in the coming years.

The existing gravity collection system will continue to be relied upon for any development within the VoC main townsite even after the lagoon is installed. An overview of the existing gravity collection system and lift station are discussed below.

### **2.1.1 Sanitary Sewer Main**

The capacity of the existing sewer system is approximately 19 L/s (200mm sewermain installed at a grade of 0.35%). The current service population contributes a peak design flow of approximately 6.9 L/s, indicating there is significant additional capacity in the collection system to support additional development. In reviewing the flows during the 2022 flooding event, the maximum daily flow recorded was 322.19 m<sup>3</sup>/day on June 13, 2022. This translates into a maximum day flow of approximately 3.7 L/s which is much lower than the capacity of the sewer system. Therefore, although the capacity of the WWTP was exceeded and an emergency discharge to the river was required, the capacity of the sewer system was not exceeded and there is a lot of additional capacity in the collection system to support development.

As part of the lagoon preliminary design, the capacity of the existing gravity collection sewer infrastructure was assessed to consider the future service population in Carmacks. This assessment identified that when the VoC main townsite is fully developed (population increases from 163 people to 849 people), only 250m of the sewermain between Prospector Road and the existing lift station needs to be upgraded.

### **2.1.2 Lift Station**

The existing lift station, constructed in 2008, is located within the VoC main townsite serviced and conveys the wastewater from the gravity collection system to the WWTP for treatment. The capacity of the lift station is approximately 10.6 L/s, however, larger pumps can be installed in the existing lift station to increase the capacity. Therefore, from a capacity perspective, the existing lift station has capacity to accommodate additional development.

The lift station is generally in good structural condition and is located above the 200-year flood elevation. As part of the lagoon preliminary design, it was identified that the existing lift station could potentially be upgraded with a larger pump to pump the wastewater flows to the proposed lagoon system when they are constructed. However, the lift



station does not meet current electrical code requirements, primarily due to the electrical panels being housed in the same room as the wet well. If the lift station is upgraded to convey wastewater flows to the lagoon, in addition to moving the electrical panel, the electrical components will need to be upgraded to include enhanced ventilation and lighting, and compliance with NFPA 280 air exchange requirements. Emergency backup power, including a dedicated generator and manual transfer switch, is also recommended to be included as part of a future lift station upgrade.

## 2.2 Existing Water Supply System

The majority of Carmacks utilizes private wells, however, trucked water servicing is available from the water treatment plant operated by the Little Salmon/Carmacks First Nation (LSCFN). Refer to drawing C200 in Appendix A for the location of the existing water treatment plant and the well data that was reviewed in the discussion below.

### 2.2.1 LSCFN Water Treatment Plant

LSCFN operates an independent water treatment plant (WTP) and distribution system within the LSCFN Village on the other side of the Yukon River from the VoC main townsite. Constructed in 2010, the LSCFN WTP is supplied by a 200 mm-diameter well drilled to a depth of 47 m, with an estimated sustainable yield of approximately 150 gpm or 9.7 L/s. The WTP has a treatment capacity of 3.0 L/s and supplies an overhead fill line for trucked water deliveries as well as a small piped distribution system. The piped water distribution system currently services several LSCFN community buildings, including the Health and Social Services Building, the daycare, and the Administration Building, as well as one residence. In addition, approximately 10 residences receive regular trucked water delivery.

Based on historical water use at the WTP, the existing demand on the system is approximately 0.074 L/s, or roughly 2.5% of the WTP's treatment design capacity. This indicates that the existing WTP is operating well below capacity and therefore there is a significant amount of additional capacity.

### 2.2.2 Private Wells in Main Townsite

There is no community water treatment or distribution system within the VoC main townsite. Water servicing within the community relies primarily on private groundwater wells installed and maintained by individual property owners. The borehole logs available on the Yukon Water Well Registry indicate that the wells within the VoC main townsite have yields ranging between 5 gpm and 30 gpm, with an average yield of 22.4 gpm, indicating that groundwater availability in the area is generally favourable for supporting individual residential water demands. A summary of well characteristics obtained from the registry, including estimated yield, static water level, depth to bedrock, and other construction details, is provided in Appendix C. Borehole logs of the wells are also included in Appendix D.

While individual wells appear to provide adequate yield, there is a risk that the groundwater can be contaminated. The wells are generally very shallow and, based on the available borehole logs, there is no confining layer indicating that the groundwater from the wells in the VoC main townsite have a strong connection with the river water. Although no known



formal review of the groundwater in Carmacks has been completed, the groundwater from the wells can be defined as Groundwater Under the Direct Influence of Surface Water (GUDI). As outlined in the Canadian Drinking Water Guidelines, additional treatment is required to treat for pathogens (viruses, bacteria and protozoa) to ensure safe drinking water. Some of the institutional buildings, such as the pool and recreational centre, include this treatment, however, it is not sure if the private wells have the same level of treatment.

Along with the risk of pathogens, hydrocarbons and other chemicals that are spilled and infiltrate into the ground can contaminate the groundwater. Oil and chemicals are much harder to treat, and water contaminated by either of these are generally not suitable for public consumption. The commercial operations, including fueling stations along the highway, are upgradient of some of the wells in Carmacks and present a risk of contaminating the groundwater. There are two registered contaminated sites in the VoC main townsite, discussed further in Section 2.1.3, which highlight the risk to the groundwater currently being used to meet the water needs of the community. At this time, there are no reports of the groundwater being contaminated, however, as the density of the development increases, the risk of the GUDI wells being contaminated also increases. Once the groundwater is contaminated, it is challenging to remediate and can lead to the groundwater not being a suitable source of drinking water.

Given the risk of contamination, a source water protection plan of the existing wells in Carmacks, and implementation of this plan, would be helpful in reducing the risk of the groundwater wells being contaminated. Alternatively, as a community continue to grow and densify, a public drinking water distribution system typically gets established to maintain safe drinking water for the community. For the long term, to support denser development within the VoC main townsite, it is recommended that the VoC review the feasibility of developing a drinking water system as opposed to the individual wells currently used to provide drinking water to the community.

### **2.2.3 Contaminated Sites**

As identified through the Yukon Contaminated Sites Registry and supporting environmental reports, two sites within the municipal boundary are currently classified as contaminated due to petroleum hydrocarbon (PHC) impacts and other associated substances.

- Royal Canadian Mounted Police (RCMP) Detachment Site**

The Carmacks RCMP Detachment site, located on Parcel B, Lot 12, is a known contaminated site stemming from a diesel spill in October 2008, when approximately 1,100 L of fuel was released due to overfilling an above-ground storage tank. Initial remediation included the removal and off-site disposal of about 40 m<sup>3</sup> of contaminated soil and 1 m<sup>3</sup> of snow and ice; however, confirmatory sampling indicated residual contamination remained beneath the tank, under the building, and north of the excavation area. Concerns were raised about potential soil vapor intrusion and indoor air quality, prompting recommendations for further remediation and a



soil vapor extraction system. While the site's groundwater well showed no signs of contamination, the site remains classified as contaminated as per the applicable standards for commercial land use in the Yukon Contaminated Sites Regulation, with PHCs identified as the primary concern.

- **Carmacks Highway Maintenance Camp (Lot 1133)**

The Carmacks Highway Maintenance Camp, in use since the 1950s for residential and industrial purposes, is another major contaminated site within the community. Environmental investigations by Core6 Environmental Ltd., including Supplemental Phase II and III Environmental Site Assessments (2021) and a Human Health and Ecological Risk Assessment (HHERA, 2023), identified multiple contamination issues related to historic fuel and oil storage, road salt application, and equipment maintenance. Drawing C300 in Appendix A provides an overview of the extents of the existing contamination. Key concerns include an estimated 9,200 m<sup>3</sup> of petroleum hydrocarbon-impacted soil near the former garage, and groundwater samples showing elevated levels of dissolved hydrocarbons, iron, manganese, chloride, and sodium. While a hydrocarbon plume was initially observed, monitoring suggests natural attenuation, with no confirmed migration toward the Yukon River. Soil vapor results, assessed using the British Columbia Contaminated Sites Regulation (BC CSR) standards due to the lack of Yukon-specific guidelines, indicated no immediate risk under assumed residential land use, though further seasonal sampling is recommended. Localized arsenic exceedances were also found in two areas. The HHERA concluded that use of groundwater for potable purposes poses unacceptable health risks unless managed, and further assessment is required to support site closure and potential transfer of the land to the Village for redevelopment.

Lot 1133 is one of the lots the VoC is assessing for residential development and based on the known contamination, it is clear that a well cannot be developed on the site for use as a drinking water source. For this reason, this lot would either need to rely on trucked water delivery or utilise a service connection from a piped water system.

## 3 Population Overview

This section provides an overview of the existing serviced population within the main townsite area and projected populations for three potential development sites Lot 127, Lot 15, and the Village Hub Site. Together, these estimates establish a basis for evaluating future servicing capacity and infrastructure requirements under potential high density development scenarios.

### 3.1 Existing Serviced Population

The existing gravity collection sewer system in the VoC main townsite area is currently servicing approximately 74 residential lots. Assuming an average density of 2.2 people/unit, these serviced lots are estimated to represent a



population of roughly 163 people. This existing serviced population provides a baseline for understanding current system demands and evaluating increase demands associated with new development.

### **3.2 Potential Population for New Development Sites**

To support this assessment, population estimates have been developed using an occupancy rate of 2.2 persons per residential unit, consistent with previous servicing reports for Carmacks. Recent examples of multi-unit residential development within the VoC illustrate the range of densities typically achieved. For instance, Lot 16 (0.75 ha) contains 12 units in two six-plex buildings, representing approximately 16 units/ha, while a conceptual layout for Lot 15 (1.01 ha) proposed 32 units, or 32 units/ha. Together, these examples indicate a local density range between 16 and 32 units per hectare, which was used to inform the site-specific population estimates described below.

- **Lot 127**

Designated as Commercial under the Village of Carmacks Zoning Bylaw, Lot 127 allows for a range of mixed-use developments, including residential. The site is approximately 0.43 ha and while the final design remains to be confirmed, VoC has indicated that residential use is anticipated. Given its potential for higher density housing, a density of 32 units/ha has been applied, resulting in approximately 14 residential units. Using the standard occupancy rate of 2.2 person per unit, the projected residential population is 31 people.

- **Lot 15**

Designated Urban Residential, Lot 15 (1.01 ha) is intended for higher-density housing and has been the subject of a recent conceptual test-fit layout proposing 32 residential units, representing a density of 32 units/ha. This value has been adopted for the high-density servicing review, and results in population of 70 people based on 2.2 persons per unit.

- **Proposed Village Hub Site (Lot 1133; formerly the Carmacks Highway Maintenance Camp)**

Designated as Village Hub, this 1.84 ha site is intended for a range of uses, including residential, community, commercial, and recreational activities. The inclusion of public amenities and green space is expected to reduce the proportion of land available for housing compared to fully residential parcels. For this reason, a medium-high density assumption of 20 units/ha has been applied, resulting in approximately 37 residential units and a projected population of 81 people.

A summary of the estimated population for each site is provided in Table 1.



Table 1. Summary of Estimated Population for Development Sites

Site	Number of Units	Population Potential(People)
Lot 127	14	31
Lot 15	32	70
Proposed Village Hub (Lot 1133)	37	81
<b>Total</b>	<b>83</b>	<b>182</b>

### 3.3 Combined Growth Outlook

When combined with the estimated population from the three potential development sites, the total serviced population in Carmacks could more than double. A summary of the estimated population for each site and the total combined population within the VoC main townsite is outlined in Table 2.

Table 2 - Total Estimated Population (Existing + Development Sites)

Scenario	Number of Units	Population
Existing	74	163
Lots 15, 127 and Lot 1133	83	182
<b>Total</b>	<b>157</b>	<b>345</b>

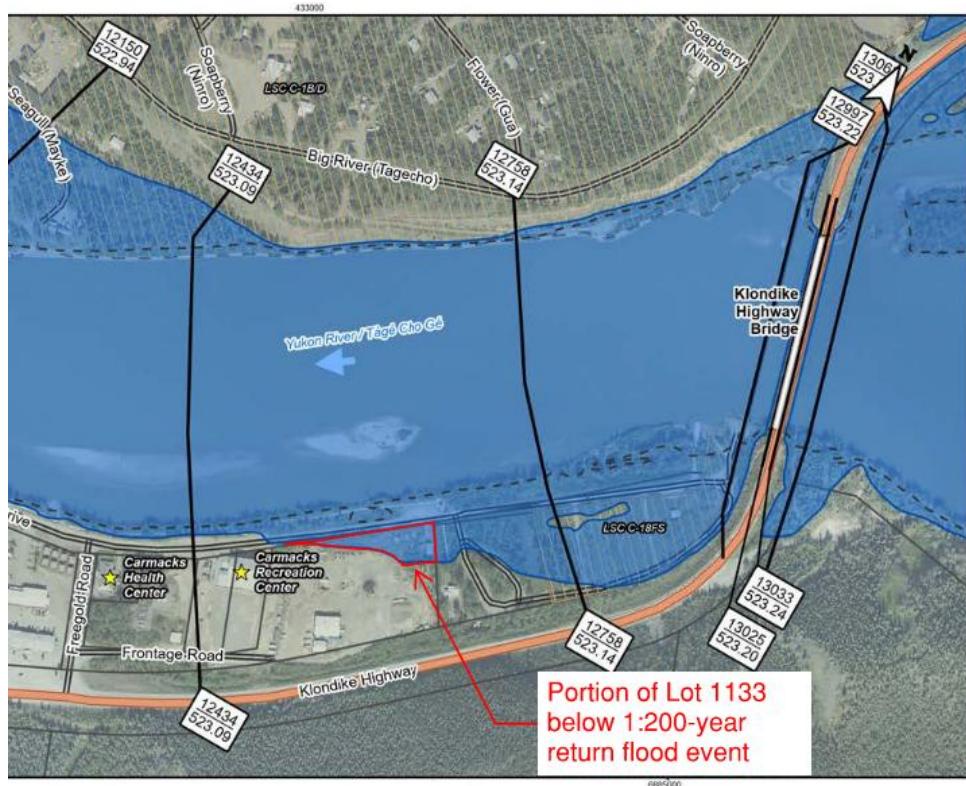
## 4 Servicing Capacity Review

This section identifies key servicing constraints and considerations, evaluates the capacity of existing systems, and outlines feasible short, medium, and long-term strategies to support the anticipated growth.

### 4.1 Flood Risk

Based on the May 21, 2014 flood hazard mapping for Carmacks, the majority of the VoC main townsite is above the 1:200-year return flood events. Both lots 15 and 127 are located above the flood hazard for a 1:200-year return flood events and are considered safe for development. A small portion of the proposed Village Hub site (Lot 1133) is within the 1:200-year return period flood event as outlined in Figure 1 below and therefore this area will be avoided as part of the development, or the site raised. Furthermore, the main access to Lot 1133 is River Drive and River Drive is currently below the 1:200-year flood event and was inundated during recent flooding events. The section of River Drive along Lot 1133 frontage is planned to be raised as part of LSCFN's 6-plex development east of Lot 1133. Once River Drive is raised, the risk of flooding event affecting access to Lot 1133 will be addressed.





Source: Carmacks Flood Mapping Study, 0.5% Annual Exceedance Probability, Stantec, May 21, 2024

In addition to surface flood exposure, as outlined in Section 2.2, recent high-water conditions on the Yukon River have demonstrated the existing wastewater system is susceptible I&I flow. When groundwater and river water entered the sewer network during the 2021 and 2022 flood events, flows exceeded the mechanical WWTP's treatment capacity, resulting in emergency discharges of untreated wastewater to the Yukon River. Based on our review of the annual reports, emergency discharges occurred in July 2021, June 2022, and December 2022. These incidents show that even if development areas are not directly inundated, elevated river levels can result in the wastewater flows exceeding the capacity of the existing WWTP.

Given the limited reserve capacity and high sensitivity to I&I, future development should be supported by improved monitoring during high water periods, such as installing temporary or permanent flow meters at key manholes to determine if there are locations within the sewer systems where large amount of groundwater are entering the sewer system. Abandoned services, holes in manholes/sewer mains and sumps on private property that pump into the sewer system are typically sources of increases to sanitary flows and should be addressed. The results of the sewer monitoring can help identify the feasibility of reducing I&I flows (if specific locations/areas experience significant change in I&I flows) or if attempting to mitigate/reduce I&I flows is unfeasible (if I&I flows are distributed across the entire sewer system it is often too costly to attempt to reduce I&I flows).



Ultimately, once the proposed lagoon is operational, the I&I flows will not result in capacity issues, as the gravity collection system, lift station and lagoon will be sized to treat the higher flows and therefore, the main risk of emergency discharge only remains while the existing WWTP is relied upon to treat the VoC main townsite's wastewater flows.

## 4.2 Water Servicing

Table 3 summarizes the estimated water demand for the three lots based on an Average Day Demand (ADD) of 300 L/person/day and a Maximum Day Demand (MDD) of 600 L/person/day were used.

*Table 3 - Summary of Estimated Water Demands*

Water Demand	Lot 127	Lot 15	Village Hub Site (Lot 1133)	TOTAL	Units
Population	31	70	81	182	people
Maximum Day Demand (MDD)	18,600	21,000	48,600	109,200	L/day
	0.22	0.49	0.56	1.26	L/s
	<b>3.41</b>	<b>7.70</b>	<b>8.92</b>	<b>20</b>	<b>gpm</b>

Servicing high-density developments like Lot 15, Lot 127, and the Village Hub site requires both a reliable water source and a practical delivery strategy. As outlined in Section 2.1.2, the existing wells in the main townsite have an average yield of around 22 gpm which would be able to meet the water demands of developments on Lot 15 and Lot 127. As outlined in Section 2.1.2, wells supplying multi-unit developments would require dedicated treatment equipment and ongoing maintenance to meet the Canadian Drinking water Guidelines. Alternative, there is sufficient capacity at the LSCFN WTP to service the new developments at all three lots using trucked water; only about 50% of the capacity of the existing LSCFN WTP will be used. Trucked water is more expensive over the long term compared to utilising an onsite well, however, there is a higher risk of contamination of the water source using well compared to trucked water.

As for the Village Hub site (Lot 1133), as outlined in Section 2.1.3, the lot is contaminated from historic use as a highway maintenance camp and a groundwater well cannot be developed on this lot for use as a water source and therefore the only viable option is to use trucked water. Alternatively, the lot can be serviced with a piped water system. Since a piped water systems does not currently exist in the VoC main townsite, developing a piped system will have a much higher capital cost. That said, over the long term, trucked water is typically more expensive compared to a piped water system. Piped water systems are also a more efficient way to meet water demands compared to trucked water which depends on a water truck an operator, which can at times be disrupted due to road/weather conditions and/or truck maintenance/repair.



Given some of the challenges of providing reliable and safe water servicing to support higher density developments, it is recommended that the VoC review the feasibility of developing a piped water system. Along with supporting more dense development, a piped water system can also service the existing developments and reduce the risk of contamination of the existing shallow GUDI wells discussed in Section 2.1.2. Furthermore, there are several existing water treatment systems currently managed by the VoC, such as at the Recreation Centre and at the pool, and these treatment systems will no longer be required if a piped water system is developed. The feasibility assessment of a piped water system to service the VoC main townsite should consider whether there is an opportunity to utilize the existing LSCFN WTP as the water source for the piped water system or if there are other opportunities to share water operating and maintenance requirements with LSCFN. One of the main challenges of operating and maintaining a water system is having skilled operators. LSCFN's staff have extensive experience operating their WTP and they should be engaged to determine what makes the most sense for water servicing for the broader Carmacks community. There are obvious barriers in sharing water infrastructure, such as a river crossing, however, this barrier, along with others, should be reviewed as part of the feasibility assessment of developing a piped water system to service the VoC main townsite.

In the short term, water servicing to these properties can be provided through truck water delivery, with the option of transitioning to a piped connection in the future as servicing plans evolve. The LSCFN WTP currently operates at only 2.5% of its 3.0 L/s design capacity; even with all three development sites included (1.26 L/s MDD, 1.33 L/s including existing users), demand would remain below 50% of capacity. Further discussions with LSCFN should be undertaken to ensure this makes sense and takes into consideration the ability for the water truck to deliver the water needs of the proposed developments.

### 4.3 Wastewater Servicing

An overview of the capacity of the existing wastewater system to support development is discussed below. The capacity review considers the capacity of the gravity collection system, capacity of the existing lift station and the capacity of the wastewater treatment plant.

#### 4.3.1 Gravity Collection System Capacity

Wastewater flows under existing and future development conditions within the main townsite were calculated to evaluate how additional growth may impact the capacity of the existing sanitary system. The calculations are based on the design criteria used in the Carmacks lagoon preliminary design and follow the MMCD sanitary sewer design guidelines as follows:

- Average Dry Weather Flow (ADWF): 500 L/person/day
- Peaking Factor: 4
- Infiltration and Inflow (I&I): 0.12 L/s/ha



Table 4 and Table 5 summarize the calculated ADWF and the corresponding Peak Day Dry Weather Flow (PDDWF) for the existing system and the proposed development sites.

*Table 4 - Existing Serviced Area Estimated Wastewater Flows*

Scenario	Population	ADWF (L/s)	PDDWF (L/s)
Existing Serviced Population	163	0.94	<b>3.77</b>

*Table 5 - Estimated Wastewater Flows for New Development Sites*

Scenario	Population	ADWF (L/s)	PDDWF (L/s)
Lot 127	31	0.18	0.72
Lot 15	70	0.41	1.62
Village Hub	81	0.47	1.88
<b>TOTAL</b>	<b>182</b>	<b>1.05</b>	<b>4.21</b>

To assess how future development affects overall sanitary flows in the main townsite, Table 6 presents the Peak Wet Weather Flows (PWWF) for both the existing system and the combined condition with all three development sites.

*Table 6 – Combined Wastewater Flows for Existing and New Development*

Scenario	Population	PDDWF (L/s)	I&I (L/s)	PWWF (L/s)
Existing Serviced Area	163	3.77	3.60	7.37
Existing + Three Development Site	345	7.98	3.60	11.58

*Note: The I&I allowance was derived from the design rate of 0.12 L/s/ha applied to an estimated 30 ha catchment*

As outlined in Table 6, the sanitary design flows (PWWF) increases from approximately 7.4 L/s to 11.6 L/s, which remains below the 200 mm sanitary main's design capacity of roughly 19 L/s as outlined in Section 2.2.1. This indicates that the existing gravity collection system can accommodate the proposed development sites without requiring any upgrades. As outlined in drawing C100, there are existing sewer mains that Lot 127 and Lot 15 can connect to. For the Village Hub (Lot 1133), the gravity collection system can be extended to service this property as outlined in drawing C300. There are portions of Lot 1133 that will need to be raised to connect to a gravity service connection, however, it is possible.

As outlined in Section 2.2, when the VoC main townsite is fully built-out, approximately 250m of sewer main will need to be upsized, however, these upgrades will not be triggered by the proposed development areas. Furthermore, it should be noted that although there are concerns with high I&I flows as a result of high river levels during flooding events, there is no indication that these I&I flows are resulting in the sanitary flows exceeding the capacity of the gravity collection system.



#### **4.3.2 Lift Station Capacity**

The existing River Drive lift station currently serves the Carmacks main townsite and conveys flows to the mechanical wastewater treatment plant. The station is generally in good structural condition, however, its pumping configuration and forcemain capacity will limit the system's ability to accommodate future flow increases. With the addition of the three high density development sites, the combined PWWF of approximately 11.6 L/s is expected to approach the lift station's current operating capacity of approximately 10.6 L/s. Under normal operating conditions, the system will be able to manage the flows from the proposed development areas, however, it is recommended that the pumps within the lift station be upgraded to increase the pumping capacity. Since the lift station will be upgraded as part of the proposed lagoon project, upgrading the lift station's pumping capacity to the WWTP is only required if the development of the proposed lots proceeds in advance of the lagoon project. As part of the lift station upgrade, we recommend that the capacity of the existing lift station be confirmed and a replacement pump be selected based on the operational conditions of the existing lift station and forcemain operations. Additional considerations that should be reviewed as part of the lift station upgrade are discussed in section 2.2.2.

#### **4.3.3 Wastewater Treatment Capacity**

As outlined in Section 2.2, the existing WWTP has an treatment capacity of 150 m<sup>3</sup>/day (1.74 L/s). Under normal operating conditions, there is additional capacity at the WWTP, however, at high river water levels during flooding events, the capacity of the WWTP is exceeded and an emergency discharge of untreated wastewater is required to avoid exceeding the WWTP's capacity. The exceedance of the WWTP's treatment capacity in flooding conditions is the main reason for the VoC to pursue a lagoon treatment system.

As outlined in Table 4 and Table 5, the Average Dry Weather Flow (ADWF) is currently approximately 0.94 L/s and the proposed development could contribute an ADWF of up to approximately 1.05 L/s. Combined, the ADWF would be approximately 2 L/s which would exceed the capacity of the WWTP. This highlights that the existing WWTP cannot service the three proposed development areas, even without considering the wet weather conditions. Typically the capacity of the WWTP considers the wet weather flows and therefore the VoC should use caution when considering what additional development areas to service. Ultimately, once the lagoon is constructed, there will be sufficient treatment to treat all development in the VoC main townsite, however, until then the VoC should know that any additional development connected to the existing wastewater system will contribute to an emergency discharge during flooding conditions. Transitioning to the planned lagoon system is therefore essential to support development in Carmacks and ensure long term treatment reliability, regulatory compliance, and protection against flood related emergency discharges of untreated wastewater into the river.



#### 4.4 Access Roads

Reliable access is a key requirement for all proposed developments to ensure safe movement of residents, service vehicles, and emergency responders. The following subsections describe the current access conditions and any anticipated improvements or design considerations needed to support development at each location.

- **Lot 127:** Located at the intersection of Tantalus Crescent and Nansen Road. Access to the site can be readily achieved using the existing roadway infrastructure, with no new connections or upgrades required. The lot's position along two established roads makes it straightforward to provide safe and reliable vehicle access, including for emergency services.
- **Village Hub Site (Lot 1133):** The Village Hub site is zoned to support a comprehensive mixed-use node including residential, commercial, visitor services, recreation, and other community functions. This land use intent requires a safe and reliable access route capable of serving a broad mix of public users as well as emergency and service vehicles.

The existing frontage road parallel to the Klondike Highway is constrained in width and does not appear to satisfy a typical 20m municipal road right-of-way requirement, which is the standard used for new public roadways in the Village of Carmacks and other Yukon communities (to allow for two-way traffic, utilities, drainage, snow storage, and future upgrades). The new Carmacks Recreation Centre footprint further encroaches into this corridor, limiting opportunities for improvement. While it may continue to function as a limited use or secondary access, the corridor does not meet the access expectations associated with the site's zoning. A secondary alignment connecting to River Drive behind the Recreation Centre provides a more feasible option for supporting development. With upgrades such as grading, surfacing, drainage improvements and formal establishment as a legal ROW, this connection could serve as the primary access to the Village Hub site.

- **Lot 15:** Access to Lot 15 can be provided through the existing access road that serves the adjacent six-plex development on neighbouring Lot 16. The concept for a 32-unit development on this lot included an internal road network that connects to the existing access from River Drive and has been reviewed for emergency access, including a appropriately designed turnaround to comply with the National Building Code (NBC) requirement for access roads longer than 90 m.

#### 4.5 Power Servicing

ATCO Electric Yukon supplies power to Carmacks through the territorial power grid, with backup systems in place for reliability during outages. Electrical infrastructure in Carmacks primarily supports existing residential, commercial, and institutional users in the VoC main townsite area, with limited capacity for large-scale expansion.



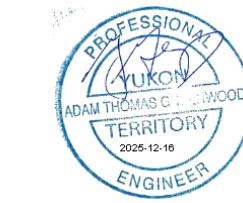
Preliminary discussions with ATCO indicate that the current electrical system is not expected to have sufficient capacity to support 83 new residential units (182 people) without upgrades to the distribution network. ATCO has been asked to provide a planning-level assessment to confirm available capacity and identify required upgrades. However, detailed information on capacity limitations and servicing thresholds has not yet been provided. Further coordination with ATCO will be required to determine the extent to which new development can progress.

## 5 Closing

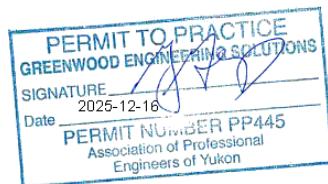
The VoC is committed to supporting development in Carmacks. As outlined in this servicing assessment, it is possible to service some of the denser developments proposed in the VoC main townsite, however, there are risks to servicing these developments with the existing WWTP and using onsite wells. The main ways to reduce these risks to the VoC are to transition to a wastewater treatment lagoon and to develop a piped water system. There are substantial costs to both of these servicing upgrades, however, they are required to create reliable, cost-effective servicing over the long term. There is limited information about the feasibility of developing a piped water system, and the completion of a feasibility study, in consultation with LSCFN, should be undertaken to better understand the implications of developing a piped water system capable of supporting additional development.

Please contact the undersigned if you have any questions or would like to discuss the content of this report in more detail.

  
Carolina Cardona Abad  
Designer



Adam Greenwood, P. Eng  
Project Manager and Senior Review



## Appendix A: Supporting Drawings



**Notes:**

1. The Contractor is Responsible For Locating All Existing Structures And Utilities Prior To Construction.
2. Any Deviation Or Inconsistencies From This Plan Shall Be Reported To The Engineer Immediately.
3. The Dimensions Shown On This Plan Take Precedence Over Scaled Dimensions.
4. All Dimensions Are In Meters, And Decimals Thereof Unless Otherwise Noted.
5. All Contours are Displayed in 1.0m Minor and 5.0m Major Intervals.

**Data Sources:**

Site Contours - Lidar Yukon. Survey Date: 2019-06-10. Project Area: Carmacks, YT

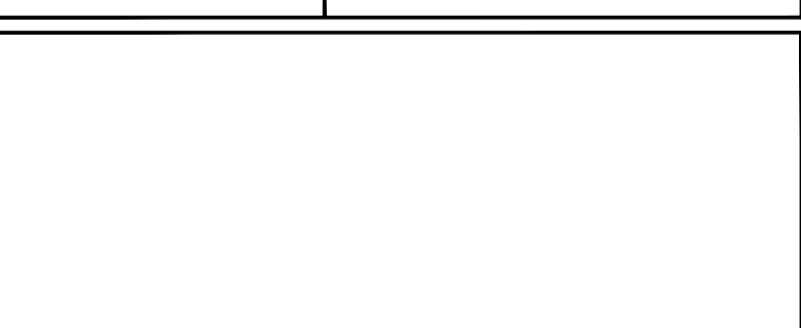
**Legend:**

- Existing Fence
- Existing Gravel Road
- Existing Asphalt Road
- Existing Sanitary Sewer
- Existing Overhead Powerline
- Existing Sanitary Manhole
- Existing Powerpole
- Study Area
- Sanitary Sewer Sections not Capable of Managing High Density Development Flows

**PRELIMINARY**  
NOT FOR CONSTRUCTION

1 2025-12-16	ISSUED FOR REVIEW
YYYY-MM-DD	SUBMISSION INFORMATION

STAMP	PERMIT TO PRACTICE
-------	--------------------



PROJECT VILLAGE OF CARMACKS HIGH DENSITY SERVICING REVIEW

DRAWING SITE PLAN AND EXISTING WASTEWATER INFRASTRUCTURE

DESIGN CCA	DATE 2025-12-16	SCALE AS NOTED
DRAWN CCA	PROJECT NO. 04-19	
CHECKED CM	DRAWING NO. C100	VERSION 1
APPROVED AG		



## Notes:

1. The Contractor Is Responsible For Locating All Existing Structures And Utilities Prior To Construction.
2. Any Deviation Or Inconsistencies From This Plan Shall Be Reported To The Engineer Immediately.
3. The Dimensions Shown On This Plan Take Precedence Over Scaled Dimensions.
4. All Dimensions Are In Meters, And Decimals Thereof Unless Otherwise Noted.
5. All Contours are Displayed in 1.0m Minor and 5.0m Major Intervals.

## Data Sources:

Site Contours - Lidar Yukon. Survey Date:2019-06-10. Project Area: Carmacks, YT

### Legend:

—X—X—X—X—	Existing Fence
*** *** ***	Existing Gravel Road
_____	Existing Asphalt Road
—S—	Existing Sanitary Sewer
—OH—	Existing Overhead Powerline
	Existing Sanitary Manhole
	Existing Powerpole
	Study Area
	Existing Water Well

# PRELIMINARY

## NOT FOR CONSTRUCTION

1	2025-12-16	ISSUED FOR REVIEW
	YYYY-MM-DD	SUBMISSION INFORMATION
STAMP		PERMIT TO PRACTICE



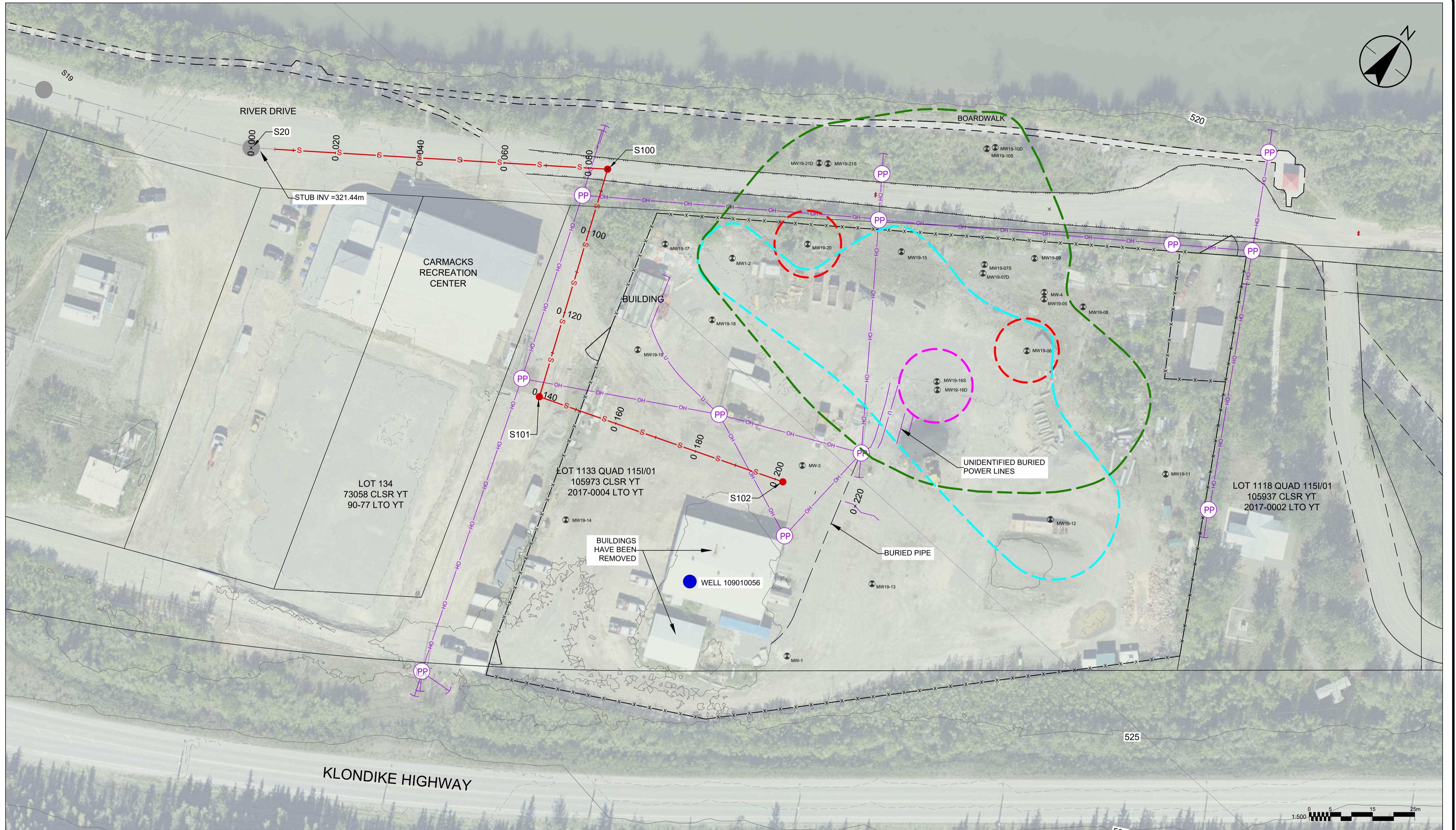
PROJECT

# VILLAGE OF CARMACKS HIGH DENSITY SERVICING REVIEW

DRAWING

# EXISTING WATER INFRASTRUCTURE

DESIGN CCA	DATE 2025-12-16	SCALE AS NOTED
DRAWN CCA	PROJECT NO. 04-19	
CHECKED CM	DRAWING NO C200	VERSION 1
APPROVED AG		



**Notes:**

- The Contractor is Responsible For Locating All Existing Structures And Utilities Prior To Construction.
- Any Deviation Or Inconsistencies From This Plan Shall Be Reported To The Engineer Immediately.
- The Dimensions Shown On This Plan Take Precedence Over Scaled Dimensions.
- All Dimensions Are In Meters, And Decimals Thereof Unless Otherwise Noted.
- All Contours Are Displayed in 1.0m Minor and 5.0m Major Intervals.

**Data Sources:**

- Supplemental Data - Government of Yukon LiDAR. Acquisition Date: 2019-09-28. Project Area: Whitehorse
- Site Survey - Challenger Geomatics, Survey Date: 2019-08-21. Project Area: Maintenance Compound, DWG No: 19-37566-001
- Site Contours - Lidar Yukon, Survey Date: 2019-06-10. Project Area: Carmacks, YT
- Groundwater Contamination Map - Core6 Environmental. Date: January 2021, Project No: 00423

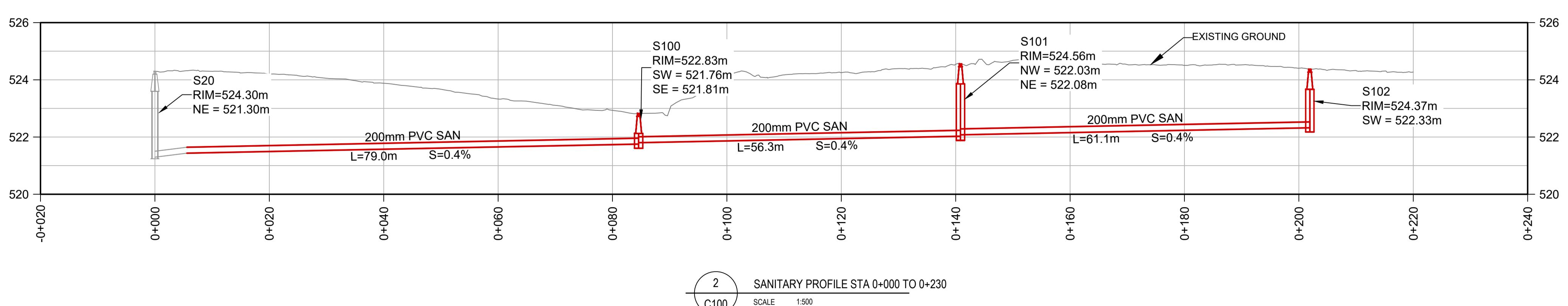
**Legend:**

- Existing Fence
- Existing Gravel Road
- Existing Asphalt Road
- Existing Sanitary Sewer
- Proposed Sanitary Sewer
- Existing Overhead Powerline
- Existing Boardwalk
- Extents of LEPH Contamination
- Extents of Chloride Contamination
- Extents of Sodium Contamination
- Extents of Iron Contamination
- Existing Sanitary Manhole
- Proposed Sanitary Manhole
- Existing Guy Wire
- Existing Powerpole
- Existing Borehole

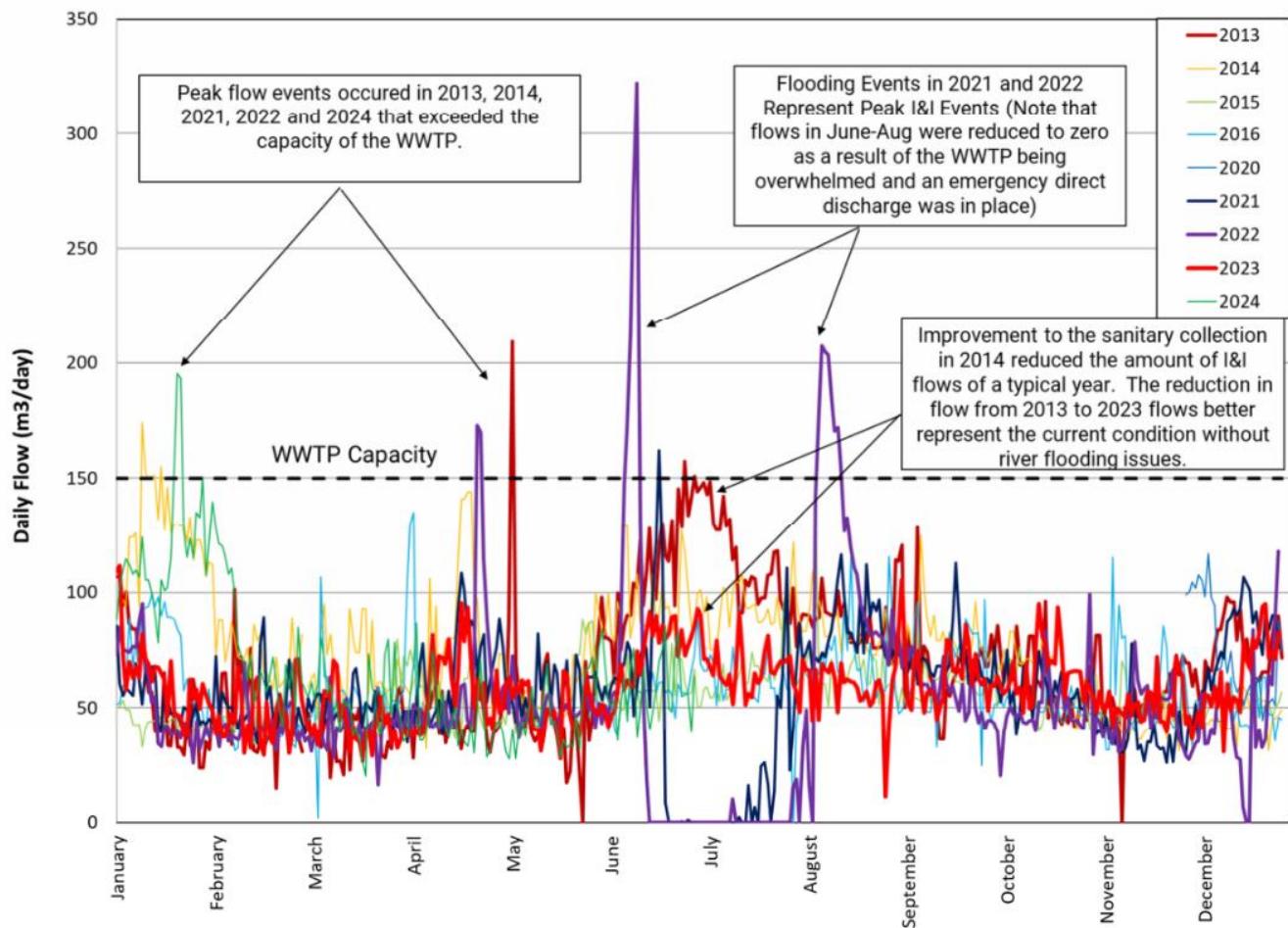
1 2025-12-16	ISSUED FOR REVIEW
YYYY-MM-DD	SUBMISSION INFORMATION
STAMP	
PERMIT TO PRACTICE	

**GREENWOOD  
ENGINEERING  
SOLUTIONS**

PROJECT	VILLAGE OF CARMACKS HIGH DENSITY SERVICING REVIEW	
DRAWING	VILLAGE HUB SERVICING	
DESIGN	DATE 2025-12-16	SCALE
DRAWN	CCA	PROJECT NO. 04-19
CHECKED	CM	DRAWING NO.
APPROVED	AG	VERSION C300
		1



## Appendix B: Historical Wastewater Flows



## Appendix C: Well Registry Summary

Borehole ID	Well Name	Purpose	Well Depth (ft bgs)	Depth To Bedrock (ft bgs)	Estimated Yield (gal/min)	Static Water Level (ft btoc)	Year Drilled	Month Drilled	Day Drilled	Casing Outside Diameter (in)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)
109010067	Forestry District Office	Public Supply Well - Small	40	>40	30	15.2	1974	7	12	5	29	34
109010048	Carmacks Campground (1975) Well	Public Supply Well - Small	30	>30	25	13.5	1975	9	3	6	15	20
109010049	Carmacks School Well	Public Supply Well - Small	61	>61	30	13.5	1991	8	9	6	58	61
109010052	Saint George's Rectory Well	Private Domestic	38	>38	12	14	1985	9	21	6	33	38
109010058	Carmacks Community Club	Public Supply Well - Small	45	>45	20	12	1976	9	1	5	18	22
109010061	Lot 33 (+32)	Private Domestic	42	>42	27	8.5	1973	8	9	No Data	25	30
109010072	Sunrise Service Centre (Carmacks)	Other/Unknown	46	>46	5	19	2003	8	12	6	42	46
900000005	260 River Drive	Private Domestic	84	>84	28	No Data	2015	8	24	4.5	No Data	84
109010056	Carmacks Grader Station, Well 6512	Public Supply Well - Small	180	>180	5	31	1979	9	16	No Data	49	52
109010021	Well #4, Lot 47	Private Domestic	40	>40	25	No Data	1973	10	29	No Data	No Data	No Data
109010024	Lot 59	Private Domestic	40	>40	30	No Data	1973	10	27	5	23	28
109010025	Well #2, Lot 60	Private Domestic	40	>40	25	No Data	1973	10	27	5	23	28
109010026	Well #3, Lot 61	Private Domestic	40	>40	30	No Data	1973	10	28	5	23	28
109010091	Carmacks Hotel	Private Domestic	75	>75	29	17	2002	7	17	5.5	No Data	No Data
109010093	Carlen's Service	Other/Unknown	165	>165	15	No Data	1971	6	7	No Data	No Data	No Data

**Date:** December 15, 2025

**To:** Mayor and Council, Village of Carmacks

**From:** Jane Koepke, Principal of Groundswell Planning

**Subject:** Recommendations Arising from the Municipal Servicing Review for Higher Density

Mayor and Council,

As per the Housing Action Plan commitments made by the Village under its Contribution Agreement with Canada Mortgage and Housing Corporation, Greenwood Engineering Solutions completed a High Density Servicing Review in Fall 2025 to:

- identify current or future municipal servicing constraints to increased residential density in the main townsite area of the municipal boundary; and
- advise on any development guidelines and/or other actions that Council should take to ensure that Village infrastructure is adequately prepared for increasing densification of the main townsite.

The following briefing note and motion is intended as a follow-up to inform Council of the findings in the Greenwood report and first step in proactively responding to it.

#### Report Assumptions

The Greenwood report reviewed the capacity and functioning of the existing Village-owned and operated municipal infrastructure and commented on the potential implications of increasing the population in the main townsite by developing the “Village Hub” site, Lot 127, and Lot 15. Based on density assumptions, these three developments were estimated to house 182 people in 83 dwelling units. This would represent an over doubling of the current estimated population of 163 people living in 74 dwelling units.

#### Key Findings

- While the individual wells within the main townsite are supported by favourable groundwater availability, there is risk of groundwater contamination due to the shallow depth of the wells and absence of a confining soil layer to limit connectivity to the Yukon River. As such, these wells are considered Groundwater Under the Direct Influence of Surface Water (GUDI) and additional treatment is required to address pathogens. While some institutional buildings (e.g., pool, Recreation Centre) have this treatment, the status of private residences is unknown or suspected to be inadequate.

- The potential development of high density forms in the main townsite will trigger the need for a public drinking water distribution system or water delivery. The Village Hub site's former industrial use will rule out the use of an onsite well and either piped water or water delivery will be required.
- The current demand on Little Salmon Carmacks First Nation (LSCFN)'s Water Treatment Plant is about 2.5% of its design capacity (note: this is strictly the water supply capacity, not distribution). If the townsite increased by 182 people with development of the three lots, demand would remain under 50% of capacity. However, trucked water is more expensive over the long-term compared to utilizing an onsite well.
- The VoC gravity collection sewer system services the main townsite and is conveyed to a central lift station, which then pumps flows to the mechanical Wastewater Treatment Plant (WWTP) on River Drive. The WWTP has a treatment capacity of 150 m<sup>3</sup>/day with treated effluent discharged to the Yukon River under a water license that allows for up to 477 m<sup>3</sup>/day.
- During high river levels, the system experiences significant inflow and infiltration (I&I), where excess groundwater and surface water enters the sewer network. This has resulted in flows exceeding the WWTP's capacity, necessitating discharge of untreated wastewater directly to the Yukon River to prevent system overload, most notably during the flooding events of 2021 and 2022.
- An additional 182 people in the main townsite would generate more wastewater than the WWTP is designed to treat, even under non-flood conditions. There is enough additional capacity to accommodate Lot 127 (and/or other miscellaneous infill) and higher density development at either Lot 15 or the Village Hub. Until there is a lagoon and gravity system connection to it, only one of these larger developments could proceed to full build-out.
- Even without crossing the WWTP design threshold, any additional development connected to the existing gravity collection system will contribute to an emergency discharge during flood conditions. Only when a lagoon is constructed AND tied into the gravity collection system will this cease to be the case; the lagoon in isolation does nothing to improve the situation.
- The capacity of the existing gravity collection sewer infrastructure is sufficient to accommodate new high density development in the main townsite; modeling showed that 250m of the sewer main would need to be upsized when the townsite population increases to 849 people (from the current 163). The lift station also has

sufficient capacity to accommodate additional development, although some upgrades may be required.

- Little Salmon Carmacks First Nation, VoC and the Government of Yukon are working jointly to develop a new lagoon along the Freegold Road. The first phase of development, anticipated to occur in the next few years, will see the lagoon constructed. A future phase will see the gravity sewer system extended to connect to the lagoon, but there are no timeline commitments.
- The current electrical distribution network in Carmacks will also require upgrades to accommodate a theoretical additional 182 people. ATCO was asked to provide a planning-level assessment to confirm available capacity and identify required upgrades but was unable to provide further information during the study timeframe.

#### Key GES Recommendations

- Develop a source water protection plan for the existing wells in Carmacks.
- Review the feasibility of a piped water distribution system for Carmacks.
- Monitor the gravity collection system for potential I&I issues during the next high water period to identify the feasibility of reducing unnecessary flows into the WWTP.
- Further coordinate with ATCO to identify electrical grid system capacity issues.

#### Follow-up Groundswell /Across the River Recommendations

- Share the GES report with YG Community Services and YG Infrastructure Development Branch and request assistance, including potential funding, to fulfill its recommendations.
- Share the GES report with LSCFN and explore areas for cooperation in advocating for a firmer commitment from YG to lagoon connection and exploring options for piped water in Carmacks.

#### **Draft Motion (for the minutes)**

**THAT** Council accept the recommendations of the **High Density Servicing Review**, as well as the follow-up recommendations of Groundwell Planning/Across the River Consulting, and authorize staff to work with the consultants to implement them; **AND FURTHER THAT** Housing Accelerator Fund monies be utilized for this purpose as needed; **AND FURTHER THAT** Council be provided with an update in Spring 2026.



January 08, 2026

Village of Carmacks  
Parminder Singh  
Chief Administration Officer (Interim)  
Box 113  
Carmacks, YT, Y0B 1C0

VIA EMAIL

Dear Mr. Singh

**Re: Carmacks Disaster Mitigation Project – Disaster Mitigation and Adaption Fund (DMAF)**

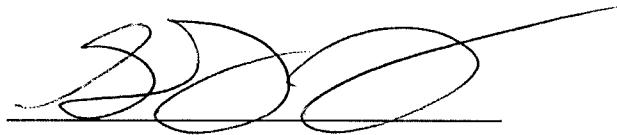
As a follow up to the attached email dated April 11, 2025, it is my pleasure to inform you of the approval of \$38,475,392 in funding for the Carmacks Disaster Mitigation Project through Housing, Infrastructure and Communities Canada (HICC) under the Disaster Mitigation and Adaptation Fund (DMAF).

Engagement with the community is a foundational priority for this initiative. As such, no project scope or timeline has been finalized, and these elements will be developed in close consultation with the Village of Carmacks prior to implementation. Keeping in mind that Canada requires the general scope intent outlined in the DMAF application and the final signed agreement to be maintained.

The Government of Yukon will prepare a formal Service Agreement with the Village of Carmacks to ensure clarity around project implementation, community engagement, and the transfer of assets upon project completion. This agreement will outline the funding parameters, reporting obligations, and a communications protocol to guide our collaboration. Officials from the Department of Community Services will be reaching out to your staff to initiate discussions on the Service Agreement and to coordinate public announcements of this important project. In the meantime, please review the attached updated Conceptual Design Advancement (Stantec) based on Option 2 of the Schedule 'G' as well as Contribution Agreement between the Government of Canada and the Government of Yukon outlining responsibilities that apply to your role in the project as the 'Ultimate Recipient'.

We look forward to collaborating with the Village of Carmacks to advance this meaningful and important flood mitigation initiative for the community.

Thank you,

A handwritten signature in black ink, appearing to read "Shelby Workman". The signature is fluid and cursive, with a prominent 'S' at the beginning.

**Shelby Workman**  
Director, Infrastructure Development Branch,  
Community Services, Government of Yukon

## Micheal.Ukrainetz

---

**From:** David.Eastland  
**Sent:** April 11, 2025 2:25 PM  
**To:** cao; kelly.skookum; jeremy.lheureux  
**Cc:** Micheal.Ukrainetz; Arbor.Webster  
**Subject:** RE: Update - DMAF(HICC) for Flood Mitigation in Carmacks(\$38+million)  
**Attachments:** Conceptual\_Design\_Advancement.pdf

Hello All,

This email serves to update everyone regarding the Disaster Mitigation and Adaptation Fund(DMAF) for \$38+ million for flood mitigation in Carmacks. We are pleased to inform everyone that this funding was secured in the final days before the federal governments imposed a signing deadline. See below a list of latest accomplishments to date and next steps on this funding/project.

### Accomplishments:

- Stantec was retained to complete the ~~Schedule 'B'~~ of the DMAF Contribution Agreement(CA) with Canada. This was based on the original application that they assisted with in outlining the scope of the project. The CA needed to stay in line with the original scope within the application but there were some additions to the CA to capture any changes based on more recent flood studies and mapping. We didn't want to leave any potential vulnerabilities that weren't captured originally but had to be crafty with wording to not deviate from the original scope. It was identified that the bridge over the Nordenskjold R would be impacted potentially, so this was negotiated with Canada to include in the agreement for upgrades. See attached Drawing for reference on what the scope of the project/funding includes at a very high level.
- Contribution Agreement(CA) signed with Canada(HICC), funding secured.
- It was then approved by the minister through YG to incorporate into the 5-year capitol plan and start spending dollars(for 100% recovery) on regulatory/planning/design.
- It is required under the funding agreement to form an Oversight Committee(OC), This includes Micheal and I with members of Canada – first meeting will be in May with periodic meetings going forward
- Stantec is still retained to further assist with updating the conceptual design/costing of the project as well as completing the Greenhouse Gas(GHG) analysis requirement of the funding agreement. This is ongoing
- Ausenco has been approached to provide a proposal to identify a regulatory roadmap and facilitate the regulatory requirement scope for the overall project.
- Met with LSCFN and their project Reps. to discuss the project at the end of River rd. (Transition Housing Project). This was to discuss the project and its relationship/connection with the scope of the DMAF project that includes the raising of River Road already. It was a good discussion on the current situation, general timelines and possible funding efficiencies and where the DMAF can contribute. It would be great to have continued discussions on this going forward to stay coordinated on projects and maximize funds.

### Next Steps:

- Finish Conceptual Design and start regulatory roadmap(YESAA, Water licenses, DFO).
- Put out an RFP for design. Scope of RFP TBD based on how we want to break out the overall project scope into separate sub-projects
- Engage further with YG – HPW regarding the Hwy raising portion of the project and determine the level of direct involvement in this project
- There are 3 ultimate recipients of this fund/project in terms of ownership of assets. Broken down roughly by % of \$ value as follows: LSCFN portion of work constitutes approx.. 66.4%, the Village of Carmacks work constitutes approx.. 26%, and the HPW portion constitutes approx.. 7.6%. We will need to complete

ultimate recipient agreements with all 3 parties in order to claim for recoveries. These agreements will need to be developed.

- Set up joint periodic VOC/LSCFN/YG meetings would be a great idea moving forward

It would be great to have an initial kick-off meeting with all stakeholders soon in order to coordinate on other community projects and timelines in relation to the DMAF funding. I am thinking early May when Mike is back, and we have had a first OC meeting with Canada. If you feel there is more urgency to coordinate, then let me know and we can plan accordingly.

Have a great weekend.

Kind Regards,



**David Eastland**

Project Manager

Community Services | Infrastructure Development Branch

T: 867-471-0353 | C: 867-332-9490 | [Yukon.ca](http://Yukon.ca)



Village of Carmacks  
P.O. Box 113  
Carmacks, YT Y0B 1C0

**TO:** Mayor and Council  
**FROM:** Parminder Singh, Interim CAO  
**DATE:** January 20, 2026  
**SUBJECT:** CAO Report

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### Important Dates / Events

- **Next Regular Council Meeting:** February 3rd, 2026

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### Project Updates

#### **Housing Accelerator Fund (HAF) – Housing Development Grant**

Building on this milestone, administration is now completing the **2025 annual reporting requirements to CMHC**. With the assistance of Jane and Mark, staff are reviewing program milestones, compiling required documentation, and ensuring compliance with CMHC reporting and accountability requirements.

This work supports ongoing program oversight and positions the Village to remain in good standing under the Housing Accelerator Fund while advancing future housing initiatives.

#### **Scale Project**

ATCO has completed the electrical connection to the facility. The building is now fully powered. The project is currently awaiting final inspection from the Building Inspector. Once the final inspection is completed and approval is received, the project can proceed to the next stage toward completion.

#### **Joint Council Meeting – Disaster Mitigation Fund (DMF)**

Administration is working to identify potential joint council meeting dates to discuss the Disaster Mitigation Fund (DMF) project. The meeting will include both Councils and the Government of Yukon Project Manager to review project status, coordination requirements, and next steps.



**Village of Carmacks  
BY-LAW #323-26**

**A by-law to establish the position of Chief Administrative Officer and to make provision for appointments.**

---

**Whereas** pursuant to section 183 of the Municipal Act, Chapter 154, RSY 2002, the council of the Village of Carmacks must establish by bylaw the position of Chief Administrative Officer and must appoint a person or persons to that position; and

**Whereas** the council of the municipality deems it proper and expedient to appoint a chief administrative officer and to enter into a contract of employment with that person;

**Now Therefore**, the Council of the Village of Carmacks, in open meeting assembled, hereby **ENACTS AS FOLLOWS:**

1. This bylaw may be cited as the 'Chief Administrative Officer Bylaw'.
2. The position of Chief Administrative Officer of the Village of Carmacks is hereby established.
3. The Chief Administrative Officer shall be appointed by bylaw and shall hold the office at the pleasure of the council.
4. The Council of the Village of Carmacks appoints **Blake Rogers** as the Chief Administrative Officer for the Village of Carmacks.
5. This appointment is effective on passing this Bylaw.
6. The Chief Administrative Officer shall have signing authority on behalf of the Village of Carmacks.

**BY-LAW #320-25 shall be repealed on passing of this Bylaw.**

Read for the first time this 20<sup>th</sup> Day of January 2026.

Read for the second time this 20<sup>th</sup> Day of January 2026.

Read for the third and final time this 3<sup>rd</sup> Day of February 2026.

---

Justin Lachance  
Mayor

---

Parminder Singh  
Municipal Clerk

YUKON TERRITORY ASSESSMENT AND TAXATION ACT  
 SECTION 82 (1)  
**Form TL1**

TAX LIEN SUMMARY  
 VILLAGE OF CARMACKS

Roll#	Title Holder	Location	Legal Description	Certificate of Title	Arrears of Property Tax at December 31,					
					2025	Penalty	Interest	Balance		
C5000001002050	Horst Kahl	Carmacks	Lot 2 Plan 19125	84Y131	\$ 1,084.84	\$ 108.48	\$ 29.40	\$ 1,222.72		
C5040000156030	Eric C. Marchment	Carmacks	Lot 156 Plan 93-111	100085891	\$ 1,060.43	\$ 106.04	\$ 28.74	\$ 1,195.21		
C5020001131050	Bogaard, Tiffany	Carmacks	Lot 1131 Plan 12-113	100014365	\$ 400.00	\$ 40.00	\$ 6.50	\$ 446.50		
C5040000155040	Linossier, A. & Ulrich, M.	Carmacks	Lot 155 Plan 93-111	100347780	\$ 400.00	\$ 40.00	\$ 6.50	\$ 446.50		
C5000000203040	Fitzgerald, Philip J.	Carmacks	Lot 203 Plan 100044278	#2024-3360	\$ 400.00	\$ 40.00	\$ 6.50	\$ 446.50		
C5000000052060	Fredericks, M. Dalton	Carmacks	Lot 52, Plan 31862	100171910	\$ 400.00	\$ 40.00	\$ 6.50	\$ 446.50		
C5040000149030	Hleck, Michael	Carmacks	Lot 149, Plan 92-107	2019Y0593	\$ 507.80	\$ 50.78	\$ 8.25	\$ 566.83		
C5000000128060	Weber, Sascha	Carmacks	Lot 128, Plan 82435	100357589	\$ 400.00	\$ 40.00	\$ 6.50	\$ 446.50		

Dated this 14th day of January 2026

Annette Wylimczyk  
 Collector of Taxes

