# VILLAGE OF PORT ALICE COUNCIL MEETING AGENDA



# TO BE HELD WEDNESDAY FEBRUARY 9, 2022, at 7:00 pm AT SEA VIEW ACTIVTY CENTRE

#### (1) CALL TO ORDER

We are privileged to acknowledge that this meeting is being held on the traditional territory of the Quatsino First Nations.

#### (2) RESOLUTION TO PROCEED TO CLOSED MEETING (6:30 pm)

THAT the meeting be closed to the public to consider matters pursuant to the following sections of the Community Charter:

(c) labour relations or other employee relations;

#### (3) ADOPTION OF AGENDA:

THAT the Agenda for the Meeting of the Village of Port Alice for February 9, 2022, be approved; AND THAT all delegations, reports, correspondence, and other information set to the agenda be received for information.

- (4) DELEGATIONS:
- (5) MINUTES:

Pg 3-4

Pg 5

Pg 11-90

Pg 91

a.) THAT the Minutes from the Regular Meeting of January 26, 2022, be approved

- (6) COMMUNICATIONS:
  - a.) <u>Letter re Arena</u>
    January 27, 2022, Letter from Maddison Frank, Port Alice Resident
- (6.) REPORTS:
- Pg 7-10 a.) Accounts Payable Listing for December 2021

February 1, 2022, Report from Bonnie Danyk, CAO\CFO

b.) ICIP Environmental Quality Program
February 2, 2022, Report from Bonnie Danyk, CAO\CFO

c.) Fire Chief's Report for January 2022
February 1, 2022, Report from Jerry Rose, Fire Chief

- (7.) BYLAWS:
- (8.) QUESTION PERIOD:
- (9.) ADJOURNMENT:

THAT the meeting of the Village of Port Alice Council held February 9, 2022, be adjourned

#### **INFORMATION ITEMS**

- a.) January 28, 2022, Letter re BC Wildfires Petition Letter of support from Mayor Gina McKay, District of Stewart
- b.) January 31, 2022, Letter re Guiding Lights Across BC February 22, 2022, from Isabella Lee, Girl Guides Canada

# VILLAGE OF PORT ALICE COUNCIL REGULAR MEETING MINUTES

WEDNESDAY JANUARY 26, 2022 AT SEA VIEW ACTIVITY CENTRE



Present

Mayor Kevin Cameron Councillor Holly Aldis

Councillor Bruce Lloyd Councillor Sean Watson Councillor Angela Yunker

Staff

Bonnie Danyk CAO / CFO

Ryan Nicholson, Ec Dev Officer

Tanya Spafford, Administrative Assistant

Call to Order: 7:00pm

08/22 Adoption of **ADOPTION OF AGENDA:** 

Adoption of Agenda Moved, Seconded and CARRIED

**THAT** the Agenda for the Meeting of the Village of Port Alice for January 26, 2022, be approved; AND **THAT** all delegations, reports, correspondence, and other information set to the agenda be received for information.

#### **DELEGATION:**

Port Alice Volunteer Fire Department – Chief Rose update

09/22

**MINUTES:** 

Minutes
January 12,
2022

Moved, Seconded and CARRIED

**THAT** the Minutes from the Regular Meeting of January 12, 2022, be approved.

#### **COMMUNICATIONS:**

**REPORTS:** 

2022 Election Report

10/22 Election Officers January 19, 2022, Report by Bonnie Danyk, CAO/CFO

Moved, Seconded and CARRIED

THAT Bonnie Danyk be appointed as the Chief Election Officer and FURTHER THAT Tanya Spafford be appointed as Deputy Chief Election Officer.

THAT the Chief Election Officer be paid \$2,000 and the Deputy Chief Election Officer be paid \$1,500 to perform their statutory duties related to the 2022 Local Government Election in Port Alice.

#### Regular CAO Report

January 21, 2022, Report from Bonnie Danyk, CAO/CFO

Moved, Seconded and CARRIED

### **QUESTION PERIOD:**

#### ADJOURNMENT:

Moved, Seconded and CARRIED

| HAT the Regular meeting of the Village of Port Alice held January 26, 2022, be adjourned at 7:44 pm |   |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|
| I hereby certify the preceding to be a true and Village of Port Alice Council held January 26, 2    | I correct account of the Regular meeting of the 2022. |  |  |  |  |  |  |
| Mayor   | Chief Administrative Officer                          |  |  |  |  |  |  |

RECEIVED

Dear the village council and Mayor,

My name is Maddison Frank, I am 15 years old. I saw an old photo of me leading out the

Canucks and I got this idea of trying to get the Canucks to help fundraise for our arena, by doing

a fan meet and greet. The lady on the phone said that was a lovely idea and gave me their email.

All I need is your approval and we can do it! I truly believe we can raise enough money to make

it happen or more, with the help of the canucks. This arena was a big part of my childhood. I

loved hockey practice and with all the now parents driving back and forth for hockey that must

be costing them plenty of money. All I need is your support and your word. If this works out,

new comers will arrive and our town will be lively yet again.

Yours Truly,

Maddison Frank

Email: maddisonfrank@icloud.com

Phone: 250 209 8265

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# VILLAGE OF PORT ALICE ACCOUNTS PAYABLE LISTING FOR DECEMBER 2021

Total Payment of Accounts: \$40,702.69

Wages Payable: \$36,111.72

**Total Accounts Payable Listing** 

If you have any questions regarding the cheques on this month's Accounts Payable Listing, please ask me.

Respectfully submitted

Bonnie Danyk CAO / CFO \$76,814.41

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# VILLAGE OF PORT ALICE AP CHEQUE LISTING Payment Date From 01/12/2021 To 31/12/2021 ALL Payments BY Pay Date

Page: 1 of 2 Date: 01/02/2022 Time: 12:44:57

| Chague # | ł Bani | k Pay Date  | Vendor# | Vendor Name        | Invoice #  | Description  | Invoice Amount   | Hold Amount | Daid Amount             | Void |
|----------|--------|-------------|---------|--------------------|--|--|--|-------------|-------------------------|------|
| 000484   | -      | 02/12/202   |         | NORTH ISLAND WASTE | Nov 2021   | Description November Garbage p   | 7,000.36   | Hold Amount | Paid Amount<br>7,000.36 | Void |
| 000485   |        | 2 08/12/202 |         | ORACH ENTERPRISES  | 4431   | Port-a-Potty Renta   | 422.10   |             | 422,10                  |      |
| 000486   | . 003  | 2 08/12/202 | 1 A-045 | ALSCO UNIFORM & LI | LNAN813951   | PW Coveralls   | 70,72  |             | 70.72                   |      |
|          |        |             |         |                    |  |  |  |             |                         |      |
| 000487   | 002    | 2 08/12/202 | 1 A-071 | ACE COURIER SERVIC | 404503   | Courier Charges  | 193.13   |             | 193.13                  |      |
| 000488   | 002    | 08/12/202   | 1 C-203 | CLINT CONRAD and\o | Tax Overpay  | Tax Overpay reimbu   | 620.61   |             | 620.61                  |      |
| 000489   | 002    | . 08/12/202 | 1 F-004 | FOX'S DISPOSAL SER | 1121300103<br>36179<br>36178<br>36180  | Blue Bin Rental an<br>Wood Bin rental an<br>Sludge Bin and Rem<br>Metal Bin Rental   | 443.22<br>215.03<br>443.22<br>443.22                     |             | 1,544.69                |      |
| 000490   | 002    | 08/12/2021  | G-060   | GREGG DISTRIBUTORS | 011-851828   | Pipe Cutter, blade   | 237.79   |             | 237,79                  |      |
| 000491   | 002    | 08/12/2021  | H-006   | HOME HARDWARE      | 355221   | Public Works suppl   | 184.63   |             | 184.63                  |      |
| 000492   | 002    | 08/12/2021  | I-101   | INNOV8 DIGITAL SOL | IN312618   | Copy Charges Oct 2   | 144.61   |             | 144.61                  |      |
| 000493   | 002    | 08/12/2021  | L-038   | LLOYD, BRUCE       | 27112021   | Loss of Wage reimb   | 114.00   |             | 114.00                  |      |
| 000506   | 002    | 08/12/2021  | Z-001   | ZEP SALES AND SERV | 9006854476   | Cleaning Supplies  | 817.47   |             | 817,47                  |      |
| 000505   | 002    | 08/12/2021  | V-033   | VANCOUVER ISLAND E | 2517   | Economic Report  | 24.35  |             | 24.35                   |      |
| 000504   | 002    | 08/12/2021  | T-616   | TAMBURINI, AUDIE   | 104-RP   | Final Contract Pay   | 1,250.00   |             | 1,250.00                |      |
| 000503   | 002    | 08/12/2021  | P-101   | PORT ALICE PETROLE | 6213   | PW & FD Fuel   | 1,322.68   |             | 1,322.68                |      |
| 000502   | 002    | 08/12/2021  | P-093   | PROGRESSIVE DIESEL | 74238  | Filter   | 59.83  |             | 59.83                   |      |
| 000501   | 002    | 08/12/2021  | P-090   | PORT ALICE GAS INC | Nov 2021 Aren  | Arena Propane  | 15.01  |             | 15.01                   |      |
| 000500   | 002    | 08/12/2021  | P-009   | PORT MCNEILL ENTER | 41829  | Crush for Liftstat   | 785,40   |             | 785.40                  |      |
| 000499   | 002    | 08/12/2021  | P-007   | PORT ALICE VOLUNTE | 02122021   | Promo Budget towar   | 2,000.00   |             | 2,000.00                |      |
| 000498   | 002    | 08/12/2021  | N-102   | RYAN NICHOLSON     | Travel 11\21   | 2 x Meeting Travel   | 90,72  |             | 90.72                   |      |
| 000497   | 002    | 08/12/2021  | N-089   | N.I. INDUSTRIAL AU | 942-449966<br>942-450600<br>942-451009<br>942-451969<br>942-451953<br>942-452059     | Profomer Battery<br>Powerstart<br>Returns<br>Bumper Sight Gaurd<br>Airfilter & Emery<br>Air Filter                               | 524.59<br>222.53<br>32.82-<br>138.66<br>87.36<br>61.79   |             | 1,002.11                |      |
| 000496   | 002    | 08/12/2021  | M-153   | BUREAU VERITAS CAN | VA10369104   | Water Samples  | 520.80   |             | 520.80                  |      |
| 000495   | 002    | 08/12/2021  | M-011   | MINISTER OF FINANC | 94835413   | Courier Service -  | 131.22   |             | 131.22                  |      |
| 000494   | 002    | 08/12/2021  | L-078   | MOORE, LOUISA      | CC Supp 12\21  | CC Christmas Suppl   | 515.25   |             | 515.25                  |      |
| 000513   | 002    | 14/12/2021  | L-084   | LADY FAER DESIGNS  | INV0285  | Village Janitorial   | 600,00   |             | 600.00                  |      |
| 000514   | 002    | 17/12/2021  | F-005   | F.P. FOODS LIMITED | Xmas Prize 12<br>291514<br>VO FP Sept-De<br>Sept-Dec 2021<br>PW July-Dec 2<br>319092 | Xmas prizes Gift C<br>Janitorial Supplie<br>VO Coffee Supplies<br>CC Programming Sup<br>Pw Coffee & Cleani<br>Xmas Gift Certific | 300.00<br>10.86<br>21.27<br>891.52<br>157.33<br>1,600.00 |             | 2,980.98                |      |
| 000515   | 002 2  | 23/12/2021  | L-084 I | LADY FAER DESIGNS  | Dec 2021   | December Janitoria   | 600.00   |             | 600.00                  |      |
| 000516   | 002 2  | 23/12/2021  | L-090 I | IME DESIGNS INC    | 21 12 05   | Sign Project Nov 1   | 7,875.00   |             | 7,875.00                |      |
| 000517   | 002 2  | 23/12/2021  | M-001   | MACANDALES         | 35844  | Jumping Jack repai   | 193.28   |             | 193.28                  |      |
| 000518   | 002 2  | 23/12/2021  | P-090 F | PORT ALICE GAS INC | Nov Gas 2021   | Nov CC Propane   | 1,139.17   |             | 1,139.17                |      |
| 000519   | 002 2  | 3/12/2021   | P-093 F | PROGRESSIVE DIESEL | 73244  | Genset Pressure Sw   | 489.89   |             | 489.89                  | 9    |

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VILLAGE OF PORT ALICE

AP CHEQUE LISTING
Payment Date From 01/12/2021 To 31/12/2021 ALL Payments BY Pay Date

Page: 2 of 2 Date: 01/02/2022 Time: 12:45:00

| Cheque # | Bank | Pay Date   | Vendor# | Vendor Name        | Invoice #     | Description        |        | nvoice Amount | Hold Amount | Paid Amount | Void |
|----------|------|------------|---------|--------------------|---------------|--------------------|--------|---------------|-------------|-------------|------|
| 000520   | 002  | 23/12/2021 | R-003   | REGIONAL DISTRICT  | 2857          | Sewer Tipping Fees |        | 982.08        |             | 982.08      | _    |
| 000521   | 002  | 23/12/2021 | R-058   | ROCKY MOUNTAIN PHE | IN0132861     | Stealth Cylinder   |        | 3,570.56      |             | 3,570.56    |      |
| 000522   | 002  | 23/12/2021 | W-069   | WFR WHOLESALE FIRE | INV/2021/4175 | Turnout Gear       |        | 3,204.25      |             | 3,204.25    |      |
|          |      |            |         |                    |               | ī                  | Total: | 40,702.69     | 0.00        | 40,702.69   |      |

|                | Payment | Summary |           |
|----------------|---------|---------|-----------|
| Description    |         | Qty     | Amount    |
| Cheque         |         | 33      | 40,702.69 |
| EFT            |         | 0       | 0.00      |
| Direct Deposit |         | 0       | 0.00      |
| Credit Card    |         | 0       | 0.00      |
| Void           |         | 0       | 0.00      |
|                | Total:  | 33      | 40,702.69 |

\*\*\* End of Report \*\*\*



# VILLAGE OF PORT ALICE REPORT TO COUNCIL

To:

Mayor & Council

From:

Bonnie Danyk, CAO / CFO

Date:

February 2, 2022

Subject:

**ICIP Environmental Quality Program** 

In October 2021 applications opened for the third intake of the Investing in Canada Infrastructure Program -Environmental Quality.

This grant program is 40% Federally funded, 33.33% Provincially funded and 26.67% is required from the Village of Port Alice. The closing date for applications is February 23, 2022 and the grants will be awarded in the fall of 2022.

Eligible projects under this grant program include wastewater, stormwater, potable water, the remediation of solid waste pollutants or the remediation of soil pollutants. Projects are required to be green and must include a preliminary design report prepared by a Professional.

Attached to this report is the Sanitary Sewer Replacement Planning report from Mark DeGagne of McElnney Ltd. One of the recommendations in the report is trenchless pipe repair and chemical grouting which would be eligible for this grant.

The grant application requires a resolution from the Village of Port Alice Council.

#### **RECOMMENDATION:**

**THAT** the Village of Port Alice apply to Investing in Canada Infrastructure Program -Environmental Quality stream for funding for trenchless pipe repair and chemical grouting for a cost of \$1,500,000, and FURTHER THAT the Village of Port Alice Council supports the project and understands that the Village of Port Alice will be responsible for any costs in excess of the grant funding.

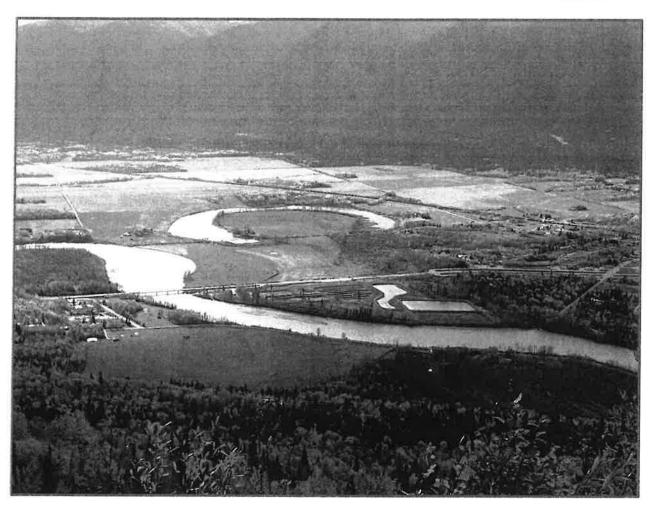
Respectfully submitted,

Bonnie Danyk

CAO / CFO

# Canadä





Canada-British Columbia
Investing in Canada Infrastructure Program

Green Infrastructure – Environmental Quality Sub-Stream
Program Guide

#### Foreword

This Program Guide provides an overview of the Investing in Canada Infrastructure Program (ICIP) Green Infrastructure – Environmental Quality (EQ) Sub-Stream requirements (ICIP-EQ). This Guide will illustrate how to fill out an application, what the Ministry is looking for in a project, provide a walk-through of the application process and additional helpful information to assist in preparing and submitting an application under ICIP-EQ.

The ICIP's main goal is to create long-term economic growth, build inclusive, sustainable communities and support a low carbon, green economy. The EQ Sub-Stream is focused on infrastructure that will support quality and management improvements for drinking water, wastewater, and stormwater, as well as reductions to soil and/or air pollutants through solid waste diversion and remediation. Projects must meet related outcomes to be eligible. Eligible projects will support public infrastructure, defined as tangible capital assets primarily for public use and benefit.

The Program Guide contains references to the Canada – British Columbia ICIP Integrated Bilateral Agreement which can be found at <a href="http://www.infrastructure.gc.ca/prog/agreements-ententes/2018/2018-bc-eng.html">http://www.infrastructure.gc.ca/prog/agreements-ententes/2018/2018-bc-eng.html</a>.

In the event of a conflict between the Program Guide and the ICIP Integrated Bilateral Agreement, the Agreement prevails.

It is important for applicants to familiarize themselves with the requirements described in this guide prior to preparing their application.

The Program Guide has been revised for the Third Intake and published on October 08, 2021.

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## 1. INTRODUCTION

#### 1.1 PROGRAM GOAL AND OBJECTIVES

Canada and British Columbia governments are investing up to \$270 million in the third intake of the ICIP Environmental Quality Program (ICIP-EQ) to support infrastructure projects in communities across the province. Funding under the first and second intake, which represents a commitment of \$399 million by the Canadian and British Columbian governments, is fully allocated.

The ICIP-EQ program will assist communities in developing well planned community infrastructure that will protect public health and environment, promote climate change resilience, and support broad public benefits and service sustainability.

A project must meet at least one of the following outcomes to be eligible:

- increase the capacity to treat and/or manage wastewater;
- increase the capacity to treat and/or manage stormwater;
- increase access to potable water;
- increase the capacity to divert or manage solid waste (including landfill gases);
- increase capacity to reduce and/or remediate soil and/or air pollutants through remediation.

<u>Guidance on Aligning Projects with Outcomes</u> is available on the <u>Environmental Quality Program Website</u>.

The Program encourages applicants to consider infrastructure to capture added value as described in Section 5.3. Projects that support more than one of the following program goals have a better chance of success:

- improve services to existing residents;
- provide clean drinking water;
- reduce air, soil and water pollution;
- reduce resource consumption;
- increase adaptation and mitigation to climate change;
- enhance natural systems and ecological services; and
- support resource recovery and reuse.

Some example projects are provided for your reference on the Program Website.

Eligible projects will be subject to technical evaluation and ranked according to the extent to which they meet the program's eligibility criteria and program goals. Funding programs are highly competitive, and it is anticipated that there will be more projects that qualify for funding than the allocated program funds. The amount of funding requests should be reasonable in comparison to the allocated funding. Wherever feasible, applicants are encouraged to phase

their project to reduce funding ask, while ensuring the phased project independently meets the program outcome.

Projects with total estimated eligible expenditures of \$10 million or more will be subject to <a href="climate lens assessments">climate lens assessments</a> (including a greenhouse gas emissions assessment that includes a cost-per-ton calculation and a climate change resilience assessment) to be completed to British Columbia and Canada's satisfaction prior to Canada's approval of a project for funding.

The approved projects will be subject to <u>reporting requirements</u> as the projects progress. Details are provided in Section 8.6. The program targets projects that can be completed within three years following approval. An Oversight Committee consisting of representatives from the federal and provincial governments will be responsible for administration of the Agreement.

Local Governments\* and Indigenous applicants are eligible ultimate recipients for this merit-based funding.

\*Local government refers to Regional Districts and Municipalities throughout this Guide. See Section 2.1 on Eligible Applicants for details.

#### 1.3 APPLICATION DEADLINE

The deadline for the application intake is **February 23, 2022 (4:00 pm PST).** 

Applicants must follow a two-step process to obtain access to Local Government Information System (LGIS) to submit online application.

- A Business BCeID credential and password are required to access the online application. The deadline to submit your BCeID credentials is three weeks prior to the submission deadline (February 02, 2022).
- After obtaining a BCeID you are required to request access to the Local Government Information System (LGIS). It is essential to have access to LGIS to be able to submit your <u>online application</u>. We strongly encourage you to apply for BCeID access as soon as you can so that access to LGIS can be received in a timely manner.

See <u>Accessing the Online Application</u> for more details.

#### 1.4 LIMIT ON NUMBER OF APPLICATIONS

Municipalities may submit one application per intake.

Regional Districts may submit **one** application for each community\* in their area. A community is defined as a settlement area within a regional district electoral area or an established or proposed service area.

Indigenous Ultimate Recipients may submit one application per intake.

Applications not approved from an earlier intake may be revised and submitted as a new application. This will count towards the limit on the number of applications submitted. Prior to revising the previous application, applicants are encouraged to contact program staff for feedback on unsuccessful application and advice on how to improve their application.

\*A community is considered as a settlement area within a regional district electoral area which may coincide with a service area boundary

# 1.5 COST-SHARING, STACKING AND LIMITS TO FUNDING AWARD

The funding provided by the federal government towards infrastructure projects is costshared by other partners, such as provinces, municipalities, regional districts, and Indigenous groups. The levels of federal and provincial contribution are:

| Ultimate Recipient                    | Government of<br>Canada Contribution<br>(up to) | Province of British<br>Columbia Contribution<br>(up to) | Total Senior<br>Government<br>Contribution (up<br>to) |
|---------------------------------------|---|---|---|
| Local government                      | 40%   | 33.33%  | 73.33%  |
| Indigenous (off-<br>reserve projects) | 75%   | 15%   | 90%   |
| Indigenous (on-<br>reserve* projects) | 75%   | -   | 75%   |

<sup>\*</sup>Application must demonstrate benefits and services extended beyond the reserve community for projects partially or fully located on reserve lands.

The remaining eligible project costs, ineligible projects costs and cost overruns are the responsibility of the applicant.

Where applicants plan to use or have applied for funds from other federal or provincial programs, the source of these funds must be indicated on the application form. The disclosure of other funding sources must be provided by the successful recipient up to the completion of the project. The same project will not be considered for funding under more than one ICIP sub-stream.

Applicants who have other senior government funding or grants in place for their project should note that the program is subject to stacking rules\*. Total senior government funding will be reduced to the maximum commitments under this program or may affect funding under other senior government funding programs. Note that Canada Community-Building Funds are a federal contribution for these purposes and cannot be utilized for the ultimate recipient's funding contribution to the project.

Indigenous ultimate recipients may be eligible to access additional funding from federal sources subject to approval from Canada.

\* Federal stacking rules are subject to Canada's interpretation.

#### 2. APPLICANTS

# 2.1 ELIGIBLE APPLICANTS

A local or regional government established by or under British Columbia statute (*municipality* or regional district for the purposes of this funding).

 Applications from improvement districts, water utilities, societies or private water systems must be made by the sponsoring regional district or municipality. Such an application will count towards the limit on number of applications described in section 1.4. If the application is successful in obtaining program funding, the ownership of the infrastructure and associated assets must be transferred to the sponsoring regional district or municipality.

Supporting documents about intent to transfer ownership should be provided with the application. An Improvement District Conversion Guide can be found here: <a href="http://www.cscd.gov.bc.ca/lgd/gov\_structure/library/improvement\_district\_conversion\_guide.pdf">http://www.cscd.gov.bc.ca/lgd/gov\_structure/library/improvement\_district\_conversion\_guide.pdf</a>

#### Indigenous Ultimate Recipients:

- A band council within the meaning of Section 2 of the *Indian Act*.
- A First Nation, Inuit or Métis government or authority established pursuant to a selfgovernment agreement or a comprehensive land claim agreement between Her Majesty the Queen in Right of Canada and an Indigenous people of Canada, that has been approved, given effect, and declared valid by federal legislation;
- A First Nation, Inuit or Métis government that is established by or under legislation whether federal or provincial that incorporates a governance structure; and
- An Indigenous development corporation.

# 2.2 INELIGIBLE APPLICANTS

- o Federal entities, including federal Crown Corporations.
- o Applicants not defined in Section 2.1.
- o Applicants not established within the Province of British Columbia.

#### 3. PROJECTS

#### 3.1 PROGRAM OUTCOMES

The Program supports an outcome-based rather than a project category-based approach. In addition to meeting regulatory requirements and demonstrating public benefit an eligible project must meet following <u>outcomes</u> set out by Infrastructure Canada:

- Increased capacity to treat and/or manage wastewater.
- Increased capacity to treat and/or manage stormwater.
- Increased access to potable water.
- Increased capacity to reduce and/or remediate solid waste pollutants (including landfill gases).
- o Increased capacity to reduce and/or remediate soil and/or air pollutants.

## 3.2 ELIGIBLE PROJECTS

The Program supports primarily public infrastructure, which is defined as "tangible capital assets in British Columbia primarily for public use and/or benefit".

To be eligible for funding, a Project must:

- a) be put forward by an eligible applicant who demonstrates that they will own and be able to operate and maintain the resulting infrastructure over the long term;
- b) meet one or more of the Program outcomes (see Section 3.1);
- c) be for the construction, renewal, rehabilitation, or material enhancement of infrastructure, excluding normal maintenance or operation;
- d) be supported by all requirements set out in Section 5;
- e) stipulate project completion date of no later than December 31, 2026;
- f) be duly authorized or endorsed by, as applicable:
  - in the case of a local government applicant, a resolution from its council/board; or in the case of an Indigenous applicant, a resolution from its band council; or council/board;
- g) be for broad public use or benefit and clearly demonstrate this within the application;
- h) meet or exceed any applicable energy efficiency standards for buildings outlined as below:

- exceed by 25% the energy efficiency requirements of the National Energy Code of Canada for Buildings; or
- the building will rank in the equivalent of top 25% of its building type under ENERGY STAR;
- i) for publicly accessible buildings, meet or exceed the requirement of the highest published accessibility standard in a jurisdiction;
- j) for First Nations applicants, a project must demonstrate that direct benefits extend beyond the reserve community and result in services being delivered to land off-reserve; and,
- k) be located in the Province of British Columbia.

In addition, projects must meet these requirements:

- a) Wastewater Projects must result in wastewater effluent that meets the Wastewater Systems Effluent Regulations, or provincial regulations where there is a federal equivalency agreement in place.
- b) Drinking water projects must meet or exceed provincial requirements and standards.
- c) Solid waste diversion Projects must result in an increase in the quantity of material diverted from disposal as measured against a baseline using the Generally Accepted Principles for Calculating Municipal Solid Waste System Flow.
- d) Projects that reduce or remediate soil pollutants must be undertaken on properties that are contaminated, as confirmed by a Phase II Environmental Site Assessment.

# 3.3 INELIGIBLE PROJECTS

A project will be deemed ineligible if:

- a) the construction began or a tender has been awarded prior to the final project approval;
- b) the estimated project start date is more than 2 years after the date of application;
- c) the project will be completed after December 31, 2026;
- d) the project deals with assets owned by the Government of Canada including federal Crown Corporations;
- e) it is eligible under the federal Low Carbon Economy Fund;

- f) it is an energy retrofit project, unless the energy retrofit project is on an asset that would be considered eligible for funding under the ICIP IBA or under the National Housing Strategy;
- g) it includes investment in emergency services infrastructure;
- h) it involves relocation of whole communities; or
- i) it relates to seismic risks.

Projects may not be funded if they present risks to program funders, for example if any of the following are deemed likely:

- a high probability of the project not being able to be completed within the program timeline;
- o potential for the project to not proceed due to applicant funding difficulties;
- a high probability that the project will require a significant change in scope to proceed due to limited planning being undertaken prior to application;
- the project may not provide the level of service identified;
- o the project does not have public support;
- First Nations within 5 km\* of the project site haven't been identified;
- o the project has the potential to cause environmental or social issues;
- the applicant does not demonstrate they are able to manage, maintain and finance the project over the long term;
- Projects that has not considered climate change and its consequences such as flood, fire, drought, etc.;
- Project has a class C or D cost estimate and does not include sufficient contingency costs; and
- The application does not demonstrate that risks related to the project have been considered and mitigation measures are identified. Risk associated with implementation of value-added components in the project will not be viewed negatively.

## 3.5 PROJECT SIZE AND PHASING PROJECTS

Applicants should be aware that there are <u>reporting requirements</u> for this Program that must be met (see Section 9.6 for requirements).

There is no cap on the maximum allowable funding amount per project; however, consideration will be given to a fair distribution of funding. Applicants should consider whether phasing is an option where project funding would represent more than 10% of

<sup>\*</sup>Applicants should use Aboriginal and Treaty Rights Information System (ATRIS) website to locate indigenous communities within 5 km of the project site.

the total funding available for the intake. Applicants should submit the project that will give them the best value for the given cost.

Where a phase is submitted for funding consideration, the phase should independently meet program outcomes.

If applying for a phase of a larger project, identify how the project will be phased. This should be demonstrated in the accompanying <u>Detailed Cost Estimate Template</u>, and the project descriptions must be organized to easily describe each of the distinct phases of the project, highlighting which phase is the subject of the funding request.

It is important to note that the approval of one phase of a project does not guarantee that other phases will receive funding.

#### 4. COSTS

See Appendix B for examples of eligible and ineligible costs.

#### 4.1 ELIGIBLE COSTS

Eligible costs will include the following:

- a) all costs considered to be direct and necessary for the successful implementation of an eligible project, in the opinion of Canada and British Columbia, excluding those identified under Section 4.2 (Ineligible Costs).
- b) the capital costs of constructing or renovating a tangible asset, as defined, and determined according to generally accepted accounting principles in Canada.
- c) all planning (including plans and specifications), assessment and design costs specified in the agreement such as the costs of environmental planning, surveying, engineering, architectural supervision, testing and management consulting services, to a maximum of 15% of total funding award.
- d) costs related to meeting specific Program requirements, including completing climate lens assessments (as outlined in Section 6) and creating community employment benefit plans (costs for climate lens assessments can be incurred prior to project approval, but can only be paid if and when a project is approved by both the Province and Canada for contribution funding).
- e) the costs of engineering and environmental reviews, including environmental assessments and follow-up programs and the costs of remedial activities, mitigation measures and follow-up identified in any environmental assessment.
- f) the costs of Indigenous consultation, and where appropriate, accommodation.
- g) the costs directly associated with joint federal and provincial communication activities (press releases, press conferences, translation, etc.) and with federal and provincial project signage.
- h) the incremental costs of the eligible recipient's employees related to construction of the project may be included as eligible costs under the following conditions:
  - i. The recipient is able to demonstrate that it is not economically feasible to tender a contract;
  - ii. The employee or equipment is engaged directly in respect of the work that would have been the subject of the contract; and
  - iii. The arrangement is approved in advance and in writing by the Province and by Canada.

Eligible costs are limited to the following:

a) costs incurred between the project approval date and the project completion date set out in the Shared Cost Agreement, except for costs associated with completing climate lens assessments and creating community employment benefit plans, which are eligible before project approval, but can only be paid if and when a project is

approved by the Province and Canada and a signed Shared Cost Agreement is in place.

#### 4.2 INELIGIBLE COSTS

The following are deemed ineligible costs:

- a) costs incurred prior to the approval of the project, except for expenditures associated with completing climate lens assessments and creating community employment benefit plans as required (but can only be paid if and when a project is approved by the Province and Canada and a signed Shared Cost Agreement is in place);
- b) costs incurred after the project completion date set out in the Shared Cost Agreement with the exception of expenditures related to audit and evaluation requirements pursuant to the agreement;
- c) costs related to developing a funding application and application supporting documentation;
- d) costs incurred for cancelled projects;
- e) costs of relocating entire communities;
- f) land acquisition;
- g) real estate and other fees related to purchasing land and buildings;
- h) financing charges, legal fees, and interest payments on loans, including those related to easements (e.g., associated surveys);
- i) costs associated with operating expenses and regularly scheduled maintenance work;
- j) leasing land, buildings and other facilities;
- k) leasing of equipment other than equipment directly related to the construction of the project;
- overhead costs, including salaries and other employments benefits, direct or indirect costs associated with operating expenses, administration and regularly scheduled maintenance work, and more specifically any costs related to planning, engineering, architecture, supervision, management and other activities normally carried out by staff, except those indicated in Eligible Expenditures;
- m) costs related to furnishing and non-fixed assets which are not essential for the operation of the asset/project;
- n) any goods and services costs which are received through donations or in kind;
- o) taxes for which the ultimate recipient is eligible for a tax rebate and all other costs eligible for rebates;
- p) all capital costs, including site preparation, vegetation removal and construction costs, until Canada has been satisfied that the federal requirements under the *Impact Assessment Act*, 2019 (IAA, 2019), other applicable federal environmental assessment legislation that is or may come into force during the term of the Agreement, and other applicable agreements between Canada and Indigenous groups have been met to the extent possible and continue to be met; and

q) all capital costs, including site preparation, vegetation removal and construction costs, until Canada is satisfied that any legal duty to consult, and where appropriate, to accommodate Indigenous groups or other federal consultation requirement, has been met and continues to be met.

## 5. GENERAL REQUIREMENTS

#### 5.1 FUNDING

The applicant must demonstrate that their share of funding has been, or is being secured, and that a plan is in place to recover any cost overruns beyond budgeted contingencies. Further, the application must demonstrate that funds have been committed to operate, maintain, and plan for replacement. Also see the "Evidence of Secured Funds", "Confirmation of Funds" and "Council/Board Resolution" sub-sections under Section 6.

#### **Local Government Recipients**

- If a local government has accumulated funds in a statutory reserve to finance a share of project costs, please submit evidence of these funds as at application date and supporting information directing the use of reserve funds.
- If a local government intends to borrow a share of costs, a bylaw to authorize the borrowing of funds should receive third reading by a local government prior to submitting an application to the program. A copy of that bylaw should accompany the application.
- Municipalities that intend to borrow should also submit a Liability <u>Servicing Limit Certificate</u> for the amount authorized in the bylaw. Please also submit information about any sources of applicant share of project costs other than reserves or borrowing. Please note that submission of a loan authorization bylaw and supporting information as evidence under the program is separate from submission for approval by the Inspector of Municipalities. That is a separate process that must be completed when approval by the Inspector is desired. A preference may be given to projects that demonstrate secured funding.
- A financial analysis will be completed as part of the application review. Local government applicants should recognize that the success of applications may reflect the extent to which applicants have met financial criteria such as having:
  - met the deadlines for legislated financial reporting, including the financial plan, audited financial statements, Local Government Data Entry (LGDE) forms and Statement of Financial Information (SOFI);
  - submitted the financial plan to the Ministry to meet requirements of s 165 of the Community Charter for municipalities and Section 374 of the Local Government Act for regional districts; and
  - measures of financial stability and sustainability which may include property tax structures and development costs charge structure.

#### **Indigenous Ultimate Recipients**

- On-reserve applicants must demonstrate that their share of the funding is secured, and there is a plan in place to cover any cost overruns, ineligible costs and also for operation and maintenance.
- The applicant must provide source and amount of funding if funding from senior government is going to be used for the project.
- Off-reserve Indigenous ultimate recipients must show the "Evidence of Secured Funds", "Confirmation of Funds" and "Council/Band Resolution" and demonstrate that their share of funding has been secured and there is a plan in place to cover any cost overruns, ineligible costs and also for operation and maintenance.

#### 5.2 APPLICATION PROCESS

All proponents must complete and submit an <u>online application</u> via the Local Government Information System (LGIS). <u>Sample application questions</u> are available on the <u>program</u> website.

A Business BCeID is required to set up access in LGIS. This can take up to 15 business days. New users are encouraged to start the process of requesting a BCeID as early as possible. See <u>Accessing the Online Application</u> for more details.

### 5.3 SELECTION PROCESS AND CRITERIA

The Program is merit based and projects are subject to a comprehensive technical ranking assessment and internal provincial review, with a list provided to the Oversight Committee and recommendations submitted to Canada for final approval.

Applicants must ensure that their application demonstrates:

- how the project will be eligible for funding (Section 3.2);
- how the project benefits align with one or more of the outcomes (Section 3.1);
- how the project is supported by community's long-term planning and management;
- how the project provides value for money during lifecycle of the infrastructure; and
- how the project is supported by sustainable management and planning.

Projects that support more than one program goals have a better chance of success; program goals are:

- Improve services to existing residents;
- provide clean drinking water;
- reduce air, soil, and water pollution;
- reduce resource consumption;

- increase adaptation and mitigation to climate change;
- enhance natural systems and ecological services; and
- support resource recovery and reuse.

The following will be considered for added value:

#### Environmental Protection:

Protecting the environment is reducing the impact or damage caused by human activity.

# Enhancing the environment - support for natural systems and ecological services:

Natural assets, such as wetlands, forests and streams can provide ecological benefits that serve the community and support the environment, by storing rainwater and reducing flooding. Supporting, enhancing, and accounting for natural systems will support sustainable infrastructure delivery. It is important to undertake urban and industrial development in a way that does not negatively impact the environment, such as freshwater ecosystems and air and soil quality.

Natural assets can also provide opportunities to increase community resilience to the impacts of climate change and carbon storage to mitigate the changing climate. The BC Framework Primer on Climate Change and Asset Management (AMBC Primer) introduces an approach for integrating climate change considerations throughout the asset management process.

#### Resource Recovery and Reuse:

Rather than losing valuable resources to the landfill or flushing them towards the ocean, resources should be recovered and reused. For example, solid and liquid waste can be reused to conserve water, recover nutrients, capture, and reuse heat (please see <u>Closing the Loop</u> document for further information).

#### Energy Generation and Reuse:

Renewable energy supports a sustainable community and includes energy generated from waste as well as other sources such as hydropower, sunlight, wind, rain, tides, waves, etc.

#### Climate Change Adaptation:

Adaptation solutions can be incorporated into a project to lessen the impacts and potential damages of expected climate effects, or to benefit from opportunities associated with such effects, making a community or ecosystem more resilient to climate change. For example, an adaptation solution could be to use stormwater to restore and protect a wetland area, incorporate flood defense into a wastewater facility, or modify a drinking water intake for drought conditions.

#### Climate Change Mitigation - Reduce greenhouse gases:

To reduce causal sources and the rate and depth of climate change effects, the amount and concentration of greenhouse gases released to the atmosphere must be decreased. Efforts to reduce emissions and enhance sinks are referred to as "mitigation".

Internal provincial review may include consideration of factors such as regional distribution of funding, previous funding, communities in need, and unmitigated project risks.

#### 5.4 APPROVAL IN PRINCIPLE - REQUIREMENTS

Shortlisted projects will be given initial 'approval in principle' by the Province, which provides some assurance to applicants that funding will be received prior to having to complete these additional requirements

The following will be required to be completed to BC and Canada's satisfaction prior to Canada's approval of a project into the program:

- For all projects with total estimated eligible expenditures of \$10 million or more, a <u>climate lens</u> - greenhouse gas emissions assessment that includes a cost-per-tonne calculation as required by Canada.\*
- For all projects with total estimated eligible expenditures of \$10 million or more, a
   climate lens climate change resilience assessment.\*\*
- A federal form to determine if there are any federal environmental assessment requirements that could apply to the project and if there is a requirement to consult with Indigenous Groups.
- For all projects with total estimated eligible expenditures of \$25 million or more, the expected results for community employment benefits as required by Canada, unless waived at the discretion of British Columbia (see Section 8.6 for additional information).\*\*\*

The following may be required on a case-by-case basis at the discretion of British Columbia:

 For projects with total estimated eligible expenditures of \$15 million or more and a sufficiently complex nature, a Value Engineering assessment

Projects that request a contribution of more than \$50 million from federal sources, involve federal assets, or involve sole source contracting (construction contracts over \$40,000 or, for the acquisition of architectural and/or engineering services, over

\$100,000), if shortlisted, will be subject to a request for further information to support a federal Treasury Board submission.

\*Note that costs associated with greenhouse gas emissions and climate change resilience climate lens assessments will be considered as eligible as part of the funding.

\*\*Information on the requirements for climate lens assessments can be found at: <a href="https://www.infrastructure.gc.ca/pub/other-autre/cl-occ-eng.html">https://www.infrastructure.gc.ca/pub/other-autre/cl-occ-eng.html</a>.

\*\*\*Information on the requirements for community employment benefits reporting can be found at: <a href="http://www.infrastructure.gc.ca/pub/other-autre/ceb-ace-eng.html">http://www.infrastructure.gc.ca/pub/other-autre/ceb-ace-eng.html</a>.

## 5.5 FINAL APPROVAL REQUIREMENTS

- Projects with total estimated eligible expenditures of \$10 million or more will be subject to climate lens assessments (including a greenhouse gas emissions assessment that includes a cost-per-ton calculation and a climate change resilience assessment) to be completed to British Columbia and Canada's satisfaction prior to Canada's approval of a project for funding.
- Canada will determine requirements for Environmental/Impact Assessment and Indigenous Consultation. After Approval in Principle, proponent will be required to fill out a form to provide necessary information.
- Projects with total eligible costs of \$25 million or more are expected to provide community employment benefit as required by Canada. Rationale will be required for consideration of waiver at the discretion of the Province.

#### 6. MANDATORY DOCUMENTS

The following **mandatory documents** (15 MB limit per document) must be clearly labeled and uploaded to LGIS as part of your <u>online application</u> by the application deadline:

- a) Council/Board/Band Council Resolution
- b) Project Location .KML file
- c) Detailed Cost Estimate
- d) Site Plan / Map
- e) Feasibility Study/Preliminary Design Report
- f) List and status of required licenses, permits and approvals (or indicate if not applicable); All applicable legislative or regulatory requirements will or have been met:
  - a. This includes requirements for:
    - 1. Federal Environmental Assessment (FEA) process, provincial Environmental Assessment process; and
    - 2. Requirements for Indigenous Consultation.
- g) Evidence of Secured Funds
- h) For all projects related to drinking water or wastewater: Water Conservation Plan and a copy of Council/Board/Band Council endorsement for the plan

Where attachments are longer in length, specific reference should be made to the sections of documents you wish to be included in the review.

Applicants are responsible for ensuring full and accurate information is submitted. **Applications will not be reviewed** unless all necessary information has been submitted, including mandatory documents.

The following documents may be used to support the application; however, the relevant information should be referenced within the application:

- Partnership agreement/Letter of Support/MOU between project partners if applicable
- Options Assessment
- o Business Plan
- Cost Benefit Analysis or Other Study
- Design Drawings or Details
- Letters of Support
- Record of consultation with indigenous communities if applicable

Letters of support, partnership agreements, or memorandums of understanding from the other partners are recommended for projects done in partnership with others or that will have joint ownership. Letters from health officers are useful for projects that support public health objectives.

Applicants should use <u>Aboriginal and Treaty Rights Information System</u> (ATRIS) website to locate indigenous communities within 5 km of the project site and determine the consultation needs.

Where a project is excluded from a review under the *Impact Assessment Act*, it may require permits or approvals from local, regional, or provincial government agencies. It is the applicant's responsibility to ensure that any additional approvals and permits are identified and/or obtained.

- The energy efficiency requirements of the <u>National Energy Code of Canada for Buildings 2017</u> will be met for newly constructed or materially rehabilitated infrastructure intended for use by the public, where applicable (describe the variances and plans to achieve compliance).
- For newly constructed or materially rehabilitated infrastructure intended for use by the public, the project will provide appropriate access for persons with disabilities.

Projects that are selected for funding will be required to provide additional information as outlined in Section 5.4 to British Columbia and Canada's satisfaction prior to Canada's approval of a project.

#### 6.1 COUNCIL/BOARD/BAND COUNCIL RESOLUTION

A <u>council/board/band council resolution</u> or by-law, committing the proponent to contribute its share of the eligible project costs and all the ineligible costs, is required.

The resolution/bylaw must identify the source of the proponent's share of the project's costs. The resolution should show support for the project from a municipality's Council, a regional district Board, or an Indigenous applicant's band council (or other appropriate authorized body).

Where possible, the resolution should be submitted as part of the application package. Where the applicant is unable to submit the resolution with the application (e.g., due to timing considerations with when the Council/Board meets), it must be submitted within one month after the submission deadline. Please indicate on the application form when submission of the resolution will be expected to occur.

Projects not supported by an appropriate resolution will not be considered.

# **6.2 EVIDENCE OF SECURED FUNDS**

Evidence that the applicant's full share of funding has been or will be secured is required. This evidence may be in the form of:

- o recent bank statements showing that the amount is on hand;
- o a line of credit letter of approval (for non-local government entities);
- staff reports and/or resolutions of board/council directing the use of reserve funds.

Local governments who are recovering their share of funding through borrowing, this evidence may be in the form of:

- a Liability Servicing Limit Certificate indicating that borrowing is within a local government's assent free borrowing limit;
- o a loan authorization bylaw that has received third reading; and/or
- o a date that borrowing has been approved through a formal public approval process and a copy of the related bylaw.

Other evidence may be accepted at the discretion of the Director or Program Lead.

A confirmation of secured funds template is available on the Program Website.

#### **6.3 DETAILED COST ESTIMATE**

A detailed cost estimate template has been provided on the Environmental Quality Program website and submission of a completed cost estimate is a mandatory document. Detailed costs estimates must include but are not limited to: an itemized description, cost per unit of measure, number of units, as well as design, engineering, contingency costs, and tax rebate breakdowns. Applicants are to identify which costs are eligible and which are ineligible and to state what class or confidence level the estimates are (e.g., class B or the level of confidence of the proposed cost). Cost estimates must be dated.

The preference is that submitted projects are planned to the degree that required works are identified, generally represented by a cost estimate of Class C (representing +/- 25-40% variability in costs) or better (Class A or B). A Class A or B cost estimate creates more certainty of the estimated costs involved.

Applicants are advised to ensure that plans are in place to cover potential cost overruns and that adequate contingencies are included within the cost estimate. Otherwise, there may be additional risk linked to the proposed project given the potential cost uncertainties

If the project is part of a larger project, the detailed cost estimate should only include the costs for the project being applied for. If a project can be broken into phases, while still meeting a program outcome, each distinct phase should be clearly broken out in the detailed cost estimate that is submitted.

It is important to note that projects will be reviewed in the context of the *Impact Assessment Act* (IAA) 2019 and regulations as discussed in Section 7. Where applicable, project cost estimates should include costs to conduct an IAA study.

Projects requiring climate lens assessments as outlined in Section 5.4 should include costs to complete these and have them attested to by a qualified assessor.

**IMPORTANT:** It is necessary to provide **up-to-date**, **detailed**, **and complete cost estimates** and identify and account for inflation, increasing construction costs and possible delays in start and completion dates. Factors that may delay construction include: the timing of the grant announcement date, fisheries window, public consent, weather and construction seasons, delays in the IAA process, right of way negotiations, regulatory applications, Indigenous consultation, etc. It is important to plan your project to start following final project approvals which are anticipated in Spring 2023.

# 6.4 SITE PLAN/MAP

A site plan/map should include the location and the general layout of the works to be included in the proposed project.

# 6.5 PRELIMINARY DESIGN REPORT

This report should be completed by a professional with expertise relevant to the subject area (i.e., an engineer, architect, etc.) and should identify what the solution is, why it is it being recommended and should address capital and lifecycle expenditures, annual operating costs, emerging technologies, environmental considerations, and societal impacts.

# 6.6 LIST OF REQUIRED LICENSES, PERMITS AND APPROVALS

All applicants are required to investigate and submit a list of licenses, permits and approvals which are required for the project to proceed and they must advise on the status of any that have been applied for. This demonstrates that a project is on track and/or that the proponent has considered and commenced applications for these required items.

Note that there is now a requirement under the *Water Sustainability Act* for a water license for all users who divert and use **groundwater** from a well or dugout for non-domestic purposes. The Ministry of Environment & Climate Change's brochure provides information: <a href="https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/laws-rules/gw\_licensing\_brochure.pdf">https://www2.gov.bc.ca/assets/gov/environment/air-land-water/water/laws-rules/gw\_licensing\_brochure.pdf</a>.

# 6.7 WATER CONSERVATION PLAN

A current, Council, Board, or Band Council endorsed Water Conservation Plan will be required for any project application related to Drinking Water or Wastewater. To meet the requirement, the plan will need to have been updated within the last five years. Please attach or provide a link to the plan and provide a copy of the Council or Board endorsement of the plan. The plan should be relevant to the area which will be served by the project.

Where a water or wastewater system is being transferred to a local government, a commitment should be included to extend the water conservation activities to the transferred system.

Drinking Water or Wastewater projects which create new infrastructure should consider how water can be used efficiently or reduced as part of the project design. Advice on creating a water conservation plan can be found here: <a href="http://www.obwb.ca/water-conservation-guide-for-bc-now-available/">http://www.obwb.ca/water-conservation-guide-for-bc-now-available/</a>. An additional tool for exploring water conservation options is: <a href="http://waterconservationcalculator.ca">http://waterconservationcalculator.ca</a>.

BC landscape water calculator tool is: https://bcwatercalculator.ca/landscape/irrigation

# **6.8 CONTACT INFORMATION**

Applications and mandatory documents will be submitted through the online LGIS application. Questions can be directed to:

**Ministry of Municipal Affairs** 

Phone: 250-387-4060 Email: infra@gov.bc.ca

# 6.9 IMPACT ASSESSMENT ACT, 2019 REQUIREMENTS

The *Impact Assessment Act 2019* (the Act) and its regulations are the legislative basis for the federal practice of environmental assessment. A Federal Environmental Assessment (FEA) is a process to evaluate the environmental effects and identify measures to mitigate potential adverse effects of a proposed project. The Act ensures that the environmental effects of a project are carefully reviewed before a federal department/agency decides to allow the proposed project to proceed.

Detailed information on the *Impact Assessment Act* and regulations can be found at the Impact Assessment Agency of Canada's website: <a href="www.canada.ca/en/impact-assessment-agency.html">www.canada.ca/en/impact-assessment-agency.html</a>

All projects that receive funding through the Agreement must comply with the Act. However, since not all projects are on federal lands or affect the environment in a significant way, many projects may not require an environmental assessment under the Act. It is the responsibility of the Proponent to determine the FEA requirements and contact the relevant Federal departments, as indicated below.

# 6.10. How to determine if a Federal Environmental Assessment (FEA) is required

An FEA will be required under *Impact Assessment Act* 2019 if the project meets the definition of a designated project and or it is located on federal lands.

# Is it a designated project?

The Project List (Also known as the *Physical Activities Regulation*) identifies types of projects that may require an assessment under the Act: <a href="http://laws-lois.justice.gc.ca/eng/regulations/SOR-2012-147/page-1.html#docCont">http://laws-lois.justice.gc.ca/eng/regulations/SOR-2012-147/page-1.html#docCont</a>.

Only projects on the designated project list require FEA or projects designated by the Minister due to potential for environmental effects or public concerns. Should the Project meet the definition of a designated project, proponents must provide to the Impact Assessment Agency of Canada a description of their proposed project to initiate the process.

# Is the project on federal lands?

Projects on federal lands are subject to an assessment of environmental effects. Information must be provided to program staff on whether the project will be located on federal lands. Proponents must engage with the federal lands' owner to establish the process and requirements to meet the *Impact Assessment Act*, 2019.

For more information refer to the Impact Assessment Process Overview:

https://www.canada.ca/en/impact-assessment-agency/services/policy-guidance/impact-assessment-process-overview.html

# 6.11 TIME AND COST CONSIDERATIONS

Time and Costs involved in completing the FEA and associated studies will depend on site accessibility and the availability of local expertise, the nature and complexity of the project, potential environmental implications, and the level of public/First Nations interest. When developing the project cost estimates, please consider the potential expenses involved in preparing a FEA.

# 6.12 DIALOGUE WITH ENVIRONMENTAL AGENCIES

For projects that require a FEA, proponents are encouraged to contact relevant federal departments or provincial ministries (e.g., Fisheries & Oceans Canada, Environment Canada - Canadian Wildlife Service or BC Ministry of Environment). A proactive discussion with such agencies during the project-planning phase will assist in identifying potential environmental impacts and necessary mitigation measures.

# **IMPORTANT NOTE:**

- Where necessary, ICIP funding is conditional upon completion of an environmental assessment review of the project under the Act with a satisfactory outcome.
- Starting BC and Canada environmental assessments early in the planning of a
  project will assist British Columbia and the Government of Canada in discharging
  the legal duty to consult and, if appropriate, accommodate Indigenous peoples
  when the Crown contemplates conduct that might adversely impact established or
  potential Indigenous or Treaty rights.
- Successful applicants must agree to adhere to mitigation requirements as may be specified in the FEA and/or recommended by federal departments and agencies participating in the review process.
- Any changes to the scope of the project while it is underway could re-open the FEA
  review and cause the project to have construction delays. In addition, project scope
  changes need to be brought to the ICIP program staff immediately as they need the
  Province's approval prior to going forward with any changes to the original approved
  scope.

# **6.13 OTHER REGULATORY CONSIDERATIONS**

Projects must meet all applicable federal and provincial environmental legislation and standards. Even though a project is excluded from a review under the *Impact*Assessment Act, it may require permits or approvals from local, regional, or provincial government agencies. It is the applicant's responsibility to ensure that any additional approvals and permits are obtained.

# 6.14 B.C. Environmental Assessment Process

Proposed projects or modifications to existing projects that are subject to the *British Columbia Environmental Assessment Act* (BCEAA) are specified in the Environmental Assessment Reviewable Project Regulations by project type, design capacity, and diversion or extraction rate. All applicants should review a copy of the regulations for information on projects that may be subject to the BCEAA. Information must be provided to EQ program staff on whether the project will be subject to BC Environmental Assessment.

Refer to BC Environmental Assessment Office's website at <a href="www.eao.gov.bc.ca">www.eao.gov.bc.ca</a> or contact their office at:

2nd Floor 836 Yates Street PO Box 9426 Stn Prov Govt Victoria, BC V8W 9V1 Email: eaoinfo@gov.bc.ca

# 7. INDIGENOUS CONSULTATION

Proponents may be required to consult with Indigenous groups if the project is located in an area where Indigenous communities have potential or established Indigenous or Treaty rights. It is the responsibility of the Proponent to determine whether or not the project requires consultation with Indigenous groups. Applicants should check the <u>Aboriginal and Treaty Rights Information System</u> (ATRIS) to determine the presence of Indigenous communities withing 5 km of the project site.

Information must be provided to program staff on whether or not the project will be subject to Indigenous Consultation. If required, Canada must be satisfied that for each Project:

- a) Indigenous groups have been notified and, if applicable, consulted;
- b) If applicable, a summary of consultation or engagement activities has been provided, including a list of Indigenous groups consulted, concerns raised, and how each of the concerns have been addressed, or if not addressed, an explanation as to why not;
- c) Accommodation measures, where appropriate, are being carried out by British Columbia or Ultimate Recipient at their own cost; and
- d) Any other information such as consultation records has been provided that Canada may deem appropriate.

No site preparation, vegetation removal or construction will occur for a Project and Canada has no obligation to pay any Eligible Expenditures that are capital costs, as determined by Canada, until Canada is satisfied that any legal duty to consult, or other federal consultation requirement, and where appropriate, to accommodate Indigenous groups has been met and continues to be met.

For more information on British Columbia's consultation resources and consultation policy:

https://www2.gov.bc.ca/gov/content/environment/natural-resource-stewardship/consulting-with-first-nations

https://www2.gov.bc.ca/assets/gov/environment/natural-resource-stewardship/consulting-with-first-nations/first-nations/legal obligations when consulting with first nations.pdf

# 8. APPROVED APPLICATIONS

Successful recipients will be notified in writing if their application is approved.

The Province of British Columbia will provide a Shared Cost Agreement\* to those proponents approved for funding. The Shared Cost Agreement will outline the terms and conditions associated with the funding. Funding is conditional upon the recipient signing a Shared Cost Agreement with the Province.

Shared Cost Agreements will be prepared only after the requirements described in Section 5.4 have been deemed as met by Canada.

All projects will be expected to be substantially complete within the dates set out in their Shared Cost Agreement. The third intake of the Program will support projects that can be completed within three years of the approval. Where extenuating circumstances outside the proponent's control cause project delays, an approval for extension may be considered (with projects ultimately having to be completed before December 31, 2026).

\*Shared Cost Agreement or "Ultimate Recipient Agreement" means an agreement between British Columbia and the Ultimate Recipient under the ICIP.

\*\*"Ultimate Recipient" means an entity identified under sections A.1 a) of Schedule A in Canada – British Columbia ICIP Integrated Bilateral Agreement and identified within this guide as an eligible applicant.

# 8.1 ASSETS

Within the Shared Cost Agreement, ultimate recipients will need to maintain ongoing operations and retain title to and ownership of an asset for at least five years after substantial completion, except to Canada, British Columbia or a municipal or regional government, or with Canada and the Province's consent.

# **8.2 SHARED COST AGREEMENT**

"Shared Cost Agreement" means an agreement between the Province of British Columbia and a Recipient whereby the Province agrees to contribute financially to an approved project.

# 8.3 CONTRACT PROCEDURES AND PROVISIONS

"Contract" means a Contract between a Recipient and a Third Party whereby the latter agrees to contribute a product or service to a project in return for financial consideration which may be claimed as an Eligible Cost.

# All contracts will be awarded in a way that is fair, transparent, competitive, and consistent with value for money principles.

The following objectives for procurement activity for goods, services and construction are based on the principles of fair and open public sector procurement competition, demand aggregation, value for money, transparency, and accountability:

- proponents receive the best value for money spent on contracts;
- vendors have fair access to information on procurement opportunities, processes and results:
- acquisition opportunities are competed, wherever practical;
- o proponents only engage in a competitive process with the full intent to award a contract at the end of that process;
- o proponents are accountable for the results of their procurement decisions and the appropriateness of the processes followed;
- the cost of the procurement process, to both vendors and proponents, is appropriate
  in relation to the value and complexity of each procurement;
- o contracts are awarded in accordance with the Canadian Free Trade Agreement and international trade agreements if applicable; and
- acquisitions are managed consistent with the policy of the Province of British Columbia (The Province of British Columbia Policies can be accessed at: <a href="https://www2.gov.bc.ca/gov/content/governments/policies-for-government/core-policy/policies/procurement">https://www2.gov.bc.ca/gov/content/governments/policies-for-government/core-policy/policies/procurement</a>).

# **Proponents are responsible for:**

- o planning, managing and fully documenting the process to acquire goods, services and construction;
- managing solicitation and contract award processes in a prudent and unbiased manner that fairly treats all potential vendors and bidders;
- ensuring that contracts for goods, services and construction are designed to provide the best value; and
- o ensuring that all acquisitions are consistent with policy and applicable legislation.

It is expected that all contracts for works associated with projects that are approved for funding will be publicly tendered. Where this is not feasible or practicable, recipients must inform, in writing, the Ministry for approval before proceeding with the project.

The Province reserves the right to review a Recipient's procurement and tendering policies relating to contracts for works associated with projects funded through this program at any time from project approval to a date three years after project completion.

Two resources are available to help applicants to achieve excellence in the awarding of contracts in a way that is transparent, competitive, and consistent with value for money principles:

- The Master Municipal Construction Documents Association (MMCD) provides its members with standardized contract documents and training programs to maximize the benefits of the documents. The Province of British Columbia encourages British Columbia Municipalities to use the Master Municipal Construction Documents for the construction of municipal services. Many B.C. local governments have been, and continue to, subscribe to the MMCD documents, certification, training, and procedures. For further information about MMCD access its website at: www.mmcd.net/.
- BC Bid, the e-Procurement site of the Province of British Columbia can be accessed at: <a href="https://www.bcbid.gov.bc.ca/open.dl/welcome">www.bcbid.gov.bc.ca/open.dl/welcome</a>.

# 8.4 CHANGES OR VARIATIONS TO AN APPROVED PROJECT

Applicants need to advise the Ministry, **in writing**, of any variation from the approved project. **Before** any changes are implemented, they must be approved by the Ministry. Changes that require written approval are those that deviate from the Shared Cost Agreement, general project description/scope or project completion date. Costs that are outside of the current terms of the contract may not be able to be reimbursed.

Program staff will adjust future claims and/or require the provincial government to be reimbursed if any costs that have been reimbursed are subsequently found to be ineligible.

# **8.5 COST OVERRUNS**

The Program will be fully allocated and oversubscribed. Recipients of grant funding will be responsible for managing project risks, including cost increases, as the Program is not designed to deal with cost overruns. Any project cost increases will be the responsibility of the Ultimate Recipient.

# 8.6 REPORTING

Successful applicants will be required to submit the following reporting documents:

- Periodic Progress Report
- Budget Forecast Report
- Claim
- Final report

A Periodic Progress Report will be required quarterly, and a Budget Forecast Report will be required monthly or upon request by the Province. These reports update the federal and provincial agencies regarding timelines, percentage completion, milestones, forecasting and other information regarding the project.

These reports must be completed and submitted online using the Local Government Information System (LGIS). To access the online reporting users must have a Business BCeID credential and password.

For more information on BCeID access requirements, see <u>Accessing the Online</u> Application.

Conditions will be included in the Shared Cost Agreement which will require the Ultimate Recipient of the grant to conduct activities or prepare documentation related to best practice and sustainable infrastructure management. Claim payments will be conditional on meeting these requirements.

Examples of condition requirements that have been included in past programs include\*:

- Confirmation that required permits have been received and/or that the design and construction meets associated regulatory requirements;
- o A list of energy efficient features and equipment used in the project;
- For projects that develop a new groundwater source, use of best practices as detailed in the Province's Well Head Protection Toolkit, including a Wellhead Protection Plan;
- A summary of the state of asset management practice within the organization in reference to the Asset Management BC Roadmap and/or AssetSMART 2.0
- Confirmation that the system and operators are or will be certified under the BCEOCP;
- o Completion of a council or board endorsed Water Conservation Plan;
- A plan demonstrating how the community is working towards and planning for sustainable wastewater management;
- Confirmation that a new building exceeds the energy requirements under the National Energy Code for Buildings by at least 25%;
- Confirmation that bylaws are in place regarding the decommissioning of on-site sewage on properties connected to the community sewage collection system and requiring community sewer for smaller properties or a Liquid Waste Management Plan that identifies decentralized wastewater management;
- A plan or strategy to manage stormwater/rainwater;
- o An asset renewal profile for the asset group related to the project.

<sup>\*</sup> This is not a comprehensive list of all potential condition requirements and others may be added or substituted at the discretion of the Province.

Applicants will be required to report on the following federal targets which are applicable to the project:

- Reduce by forty percent (40%) the number of long-term drinking water advisories in non-reserve communities
- o Increase the number of wastewater systems achieving compliance with federal effluent regulations: from ninety-eight percent (98%) to one hundred percent (100%) for high-risk wastewater systems, and from ninety percent (90%) to one hundred percent (100%) for medium-risk wastewater systems
- Contribute to a national ten mega-tonne (10 mT) reduction of greenhouse gas emissions

Projects with total estimated eligible expenditures of \$25 million or more will need to report on community employment benefits provided to at least three (3) federal target groups (apprentices, Indigenous peoples, women, persons with disabilities, veterans, youth, new Canadians, or small-medium-sized enterprises and social enterprises). This requirement may be waived at the discretion of British Columbia for applicants with lower capacity to capture this information with specific rationale.

Applicants must ensure that they collect and are able to provide data on the applicable performance indicators related to Outcomes and associated Targets (listed in Appendix A).

A Final Report detailing project performance must be completed and submitted with the final claim upon project completion.

# 8.7 CLAIMS

To receive both the federal and provincial governments' contributions for approved projects, claims must be submitted for eligible costs to the Ministry. Only costs incurred, paid and consistent with and comparable to those identified in the signed shared cost agreement are eligible for reimbursement. Where multiple projects are ongoing (e.g., through different grant funding programs or through a phased approach), please ensure that claims are specific to the approved project only.

Claims must be completed and submitted online using the Local Government Information System (LGIS). The online claim form requires summary of expenditures information, including name of payee, date paid, work rendered start/end dates, invoice number, invoice date, etc. Current progress reports must be submitted online to the Ministry via LGIS for claim reimbursement. All projects are subject to site visits and audit at any time during the project and up to the later of the end date of the Integrated Bilateral Agreement for ICIP between Canada and British Columbia or up to three years after the final settlement of accounts.

To access LGIS, users must have a Business BCeID credential and password. For more information on BCeID access requirements, see <u>Accessing the Online Application</u>.

# 8.8 ACCOUNTING RECORDS

Applicants must maintain acceptable accounting records that clearly disclose the nature and amounts of the different items of cost pertaining to the project. These records should include both the records of original entry and supporting documents of the applicant, divisions, or related parties, and any third party, named in the application or contract, as appropriate to the project. Applicants must retain accounting records for a minimum of six years after the end date of the Integrated Bilateral Agreement for ICIP between Canada and British Columbia.

Failure to keep acceptable accounting records and tender documents may result in a cessation or interruption in funding and impact future funding.

The Province can require applicants to provide details of the types and amounts of all fees for consultants and contractors.

# 8.9 COMMUNICATIONS

#### **Procedures for Communications**

An important aspect of the program is to communicate its impact in helping improve the quality of life in British Columbia communities. The purpose of joint communications activities is to provide information on the Program to the public in a well-planned, appropriate, timely and consistent manner that recognizes the benefits of the initiative and the contribution of all parties.

A <u>communications protocol</u> will be set out within the Shared Cost Agreement. Signage recognizing funding contributions should be prepared according to <u>ICIP</u> <u>signage guidelines</u>.

#### **Timeline for Public Events**

Please contact the provincial Ministry for your project at least **20 working days** prior to any scheduled public events. The federal and provincial Ministers, or their designated representatives, regularly participate in the events, thus need time to schedule for such an occasion.

# **APPENDIX A – Federal Program Outcomes & Targets**

Ultimate recipients are required to report on outcomes and associated targets through the Province to Canada for the ICIP – Green Infrastructure – Environmental Quality Sub-Stream projects completed in BC. Below are the federal outcomes and targets that are associated with this program for ease of reference.

# **Environmental Quality Outcomes:**

Increased capacity to treat and/or manage wastewater

Increased capacity to treat and/or manage stormwater

Increased access to potable water

Increased capacity to divert or manage solid waste (including landfill gases)

Increased capacity to reduce and/or remediate soil and/or air pollutants

# **Targets** Relevant to the Environmental Quality Sub-Stream\*:

Reduce by forty percent (40%) the number of long-term drinking water advisories in non-reserve communities.

Increase the number of wastewater systems achieving compliance with federal effluent regulations: from ninety-eight percent (98%) to one hundred percent (100%) for high-risk wastewater systems, and from ninety percent (90%) to one hundred percent (100%) for medium-risk wastewater systems.

Contribute to a national ten mega-tonne (10 mT) reduction of greenhouse gas emissions.

Ensure one hundred percent (100%) of federally funded public-facing infrastructure meets the highest published applicable accessibility standard in a respective jurisdiction.

\*Not all targets will be applicable to every project. Some projects that are eligible under the program outcomes may not have a corresponding target (i.e., soil remediation).

# APPENDIX B – Examples of Eligible Costs and Ineligible Costs

<u>Please note:</u> The following are examples only and are based on staff knowledge of past federal-provincial programs and program criteria. The determination of whether costs are eligible will ultimately rest with program staff. If a cost is not listed below, contact program staff prior to undertaking associated work. (See Section 6.8 for contact information)

#### General

| ELIGIBLE   | INELIGIBLE  |  |  |  |
|--|---|--|--|--|
| Costs paid under contract for goods or<br>services considered to be direct and<br>necessary to implement the project   | <ul> <li>Any unpaid costs including invoices or holdbacks</li> <li>Accrued costs</li> <li>Any goods or services costs which are received through donations or in kind</li> </ul>  |  |  |  |
| Costs incurred after approval and on<br>or before the project completion date<br>stipulated in the Shared Cost<br>Agreement and deemed properly and<br>reasonably incurred | Costs incurred prior to approval date and after project completion date as stipulated in the Shared Cost Agreement (with the exception of costs to complete climate lens assessments which are eligible prior to grant award if the project is successful in obtaining funding through the program)   |  |  |  |
| Capital costs as defined by Generally Accepted Accounting Principles (except capital costs included in INELIGIBLE COSTS)   | Services or works normally provided by the Recipient, including: overhead costs salaries and other employment benefits of any employees of the Recipient unless pre-approved by the Ministry and specifically related to the project leasing of equipment except that directly related to the construction of the project purchasing equipment accounting fees incurred in the normal course of operation auditing fees incurred in the normal course of operation operating expenses and regularly scheduled maintenance |  |  |  |
|  | Land acquisition and real estate fees:     leasing land, buildings and other facilities and related costs   |  |  |  |

| ELIGIBLE | INELIGIBLE  |  |  |
|----------|---|--|--|
|          | <ul> <li>Financing charges, loan interest<br/>payments legal fees (including those<br/>related to easements)</li> </ul> |  |  |
|          | Taxes for which the Recipient is eligible for a tax rebate and all other costs eligible for rebates                     |  |  |

# **Environmental Assessment/Indigenous Consultation Costs**

|   | ELIGIBLE                | INELIGIBLE |
|---|-------------------------|------------|
|   | Environmental reviews   |            |
|   | Environmental costs     |            |
|   | Remedial activities     |            |
|   | Mitigation measures     |            |
| • | Indigenous consultation |            |

# **Climate Change Lens Assessment Costs**

|   | ELIGIBLE                               | INELIGIBLE |
|---|--|------------|
| • | Greenhouse Gas Emissions               |            |
|   | Assessment when indicated required     |            |
|   | in Section 5 of the Guide              |            |
| • | Climate Resilience Assessment when     |            |
|   | indicated required in Section 5 of the |            |
|   | Guide                                  |            |

# **Design / Engineering Costs**

|   | ELIGIBLE  |   | INELIGIBLE  |
|---|---|---|---|
| • | Fees paid to professionals, technical personnel, consultants, and contractors specifically engaged to undertake the surveying, design, and engineering of a project |   |   |
| • | Accommodation costs included in consulting fees or disbursement for out of town/province professionals  | • | Any legal fees including those for land transfers (easements, Right of Way) |

# **Construction/Materials Costs**

|   | ELIGIBLE INELIGIBLE   |   |   |  |  |  |
|---|---|---|---|--|--|--|
|   |   | • | Cost of purchasing land and associated real estate and other fees Value of donated land Interim financing and interest costs Appraisal fees Land title fees Leasing of land or facilities  Building permit charged by proponent to itself  Development cost charges |  |  |  |
| • | Insurance related to construction   | • | Liability insurance for directors   |  |  |  |
| • | Project management fees   |   |   |  |  |  |
| • | Material testing necessary to prove suitability of soils and specified structural elements  |   |   |  |  |  |
| • | Fencing for the construction site Permanent fencing   |   |   |  |  |  |
| • | Towing heavy equipment to and from the construction site  | • | Towing vehicles   |  |  |  |
| • | Security guard & First Aid attendant (contracted for construction project)  | • | Ambulance for workplace accidents First aid courses   |  |  |  |
| • | Furniture and/or equipment essential for operation of the project   | • | Tools (e.g. hammer, saw, shovel, rakes, gloves) Furnishing and non-fixed assets which are not essential for the operation of the asset/project  |  |  |  |
| • | Utility, electrical, sanitary sewer, and storm sewer set-up/connection services to the site property line   | • | General repairs and maintenance of a project and related structures   |  |  |  |
| • | Safety equipment to be kept at the project site (e.g., safety goggles, beakers, eye wash bottles, latex gloves, UV lamp, vacuum hand pump, forceps, etc.) |   |   |  |  |  |
| • | Fire protection equipment as required by the fire department  |   |   |  |  |  |
| • | Third party (contractor) rental of a trailer/site office  |   |   |  |  |  |
| • | Permanently installed 2-way radios, phone system for facility   | ٠ | Monthly bills for utilities and phone/internet  |  |  |  |
|   | Eugl costs for routal aguing and  | • | Contributions in kind   |  |  |  |
| • | Fuel costs for rental equipment   | • | Vehicle maintenance and fuel costs  |  |  |  |

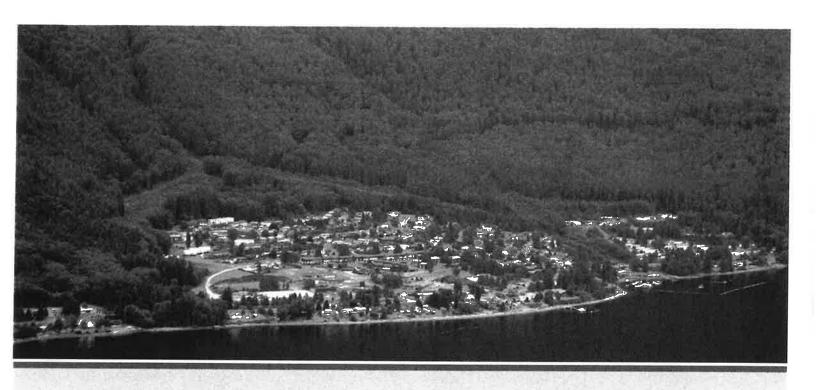
|   | ELIGIBLE  |   | INELIGIBLE   |
|---|---|---|--|
| • | Temporary construction or permanent signage, specific to the project  | • | General construction signs (e.g., detour, street closed)     |
| • | Relocation/renovation kiosk signs for public information  | • | Temporary "Hours of Business" signs                          |
| • | Surveys necessary to determine the site's suitability for the intended purpose  |   | Any other surveys except to determine the site's suitability |
| • | Demolition of unwanted structures from the site   |   |  |
| • | Landscaping to restore construction site to original state following construction Installation of landscaping   |   | Maintaining landscaping                                      |
| • | Newspaper/radio ads related to contract tenders and contract award notifications; or public safety, road closure or service interruption notices related to the project |   |  |
| • | Printing and distribution costs for public information materials regarding the project  |   |  |
| • | Printing costs for preparing contract documents or tenders, blueprints, plans/drawings  |   |  |
| • | Courier services, specific to project e.g., delivering drawings/designs   |   |  |
| • | Paving of access and curb cuts  |   |  |

# **Communication Activities Costs**

| ELIGIBLE   | INELIGIBLE  |
|--|---|
| <ul> <li>Any costs reasonably incurred to undertake joint federal and provincial communication activities, such as, but not limited to:         <ul> <li>federal or provincial funding recognition signage</li> <li>permanent commemorative plaques</li> <li>A/V rental and set up costs</li> <li>event equipment rental and set up costs, such as stage and podium for joint events</li> <li>event photography</li> </ul> </li> </ul> | <ul> <li>Media consultant</li> <li>Event planners</li> <li>Gifts</li> <li>Hospitality costs, such as, but not limited to: <ul> <li>food/beverages</li> <li>liquor</li> <li>entertainment</li> </ul> </li> </ul> |







# SANITARY SEWER REPLACEMENT PLANNING REPORT

February 12, 2021 | Final Report

Submitted to: Village of Port Alice Prepared by McElhanney

Contact

Mark DeGagne Project Manager 250-287-7799

mdegagne@mcelhanney.com

Address

1196 Dogwood Street, Campbell River, BC, V9W 3A2

Our file: 2221-49288-00

# Your Challenge. Our Passion.

Our File: 2221-49288-00

February 12, 2021 Village of Port Alice 1061 Marine Drive Port Alice, BC, V0N 2N0

Attention:

Bonnie Danyk, CAO / CFO

# SANITARY SEWER REPLACEMENT PLANNING REPORT

Please find enclosed a digital copy of the final sanitary sewer replacement planning report, which is intended to be a guiding document for the current sanitary sewer asset condition and assessment report, with recommendations for required and future maintenance. The report includes the most recent comments from the Village staff, and we trust that the submission of the report concludes our engagement with you for this contract.

We are always available to consult on the report content and assist the Village with moving forward on the recommendations, whether that is assistance with seeking government grant funding or project implementation. Please contact the undersigned should you need further assistance.

Sincerely,

McElhanney Ltd.

Mark DeGagné, PEng., Branch Manager / Senior Municipal Engineer

mdegagne@mcelhanney.com | 250-287-7799

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# 1. INTRODUCTION

#### 1.1. INTENT OF REPORT

McElhanney has completed a review and assessment of the Village of Port Alice's sanitary sewer collection system, with the intent of identifying areas of needed repairs and/or upgrades and to quantify the estimated costs to repair/replace those deficient areas. The study area focused on the main townsite area from Copper Coast to the south and the Industrial area in the north as shown on Figure 1 below.

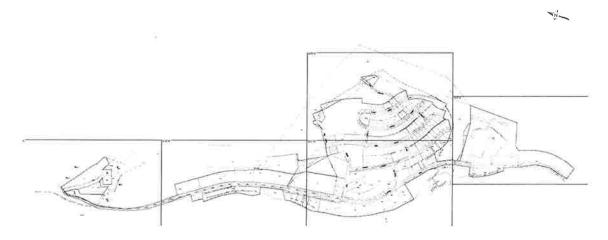
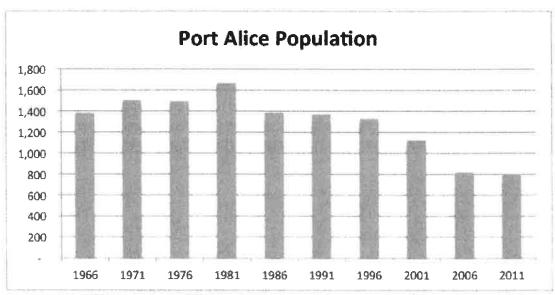


Figure 1: Study Area

The report summarizes the assessment undertaken, which includes a review of the existing sewer system inventory, excluding the Village's sewer treatment plant. Focussing on the collection system, the report provides a summary of the assessed inventory and condition of the sewer (Sections 2.0 and 3.0), which is followed by an analysis the risks in the system. The report concludes with a recommended implementation strategy and a summary of costs for work to be completed to investigate, repair and upgrade the system.

#### 1.2. VILLAGE HISTORY

Port Alice, (Port Alice is located) within the Quatsino First Nations territories of the Huyalas (Hoyalas) and Gusgimukw (Koskimo) within Quatsino Sound., has a resource-based economy that is primarily sustained by the forestry sector. Following its establishment in the late 1917, the settlement incorporated into the Village of Port Alice on June 16, 1965, before reaching a peak population of 1668 in year 1981. According to Statistics Canada, the population of the Village of Port Alice has since declined to an estimated 664 (2016). Figure 2 provides a summary of the Village's population between 1966 and 2011. the Village of Port Alice experienced most of its growth in the 1930s, a significant portion of the sanitary sewer infrastructure being constructed in the 1960s. Therefore, the average age of the system is about 60 years old and it is starting to near the end of its functional lifespan.



Sources: 1966-1986 Port Alice 2010 OCP: 1991-2011 Statistics Canada Census Profiles 1996-2011

Figure 2: Port Alice Population (Source - Port Alice OCP)

Reference materials for the sanitary sewer assessments include:

- Record Drawings and Reports;
- CCTV pipeline inspections and reports completed by Coast TV Pipeline and Inspection Ltd. in January 2002;
- MMCD Design Guidelines for Sanitary Sewers (2014);Lift station and sewerage pump information provided by the Town's public works staff; and
- Sewerage treatment plant record information.

# 2. INVENTORY ASSESSMENT

## 2.1. GRAVITY SEWERS

The Village of Port Alice sanitary sewer collection system is comprised of various pipe materials and sizes. The record data provided shows that the vast majority of sewer mains within the Village are made of asbestos concrete (AC) pipe. **Table 1**, below, shows the inventory of gravity and forcemain sewer lengths by pipe size.

#### 2.1.1.SEWER INVENTORY

The gravity sewer inventory was derived from existing computer linework that was constructed for the Village during previous inventory assessments and compilations. As there is insufficient pipe material data to cover the entire Village catchment, estimation of each type of sewer materials are not provided.



However, it is known that the gravity sewers in the Village area are mostly 150mm in diameter and are constructed out of asbestos concrete (AC). It is also known that the Village's forcemains are not constructed out of AC pipe and utilized more modern and less hazardous materials, such as PVC, HDPE and ductile iron.

Table 1: Composition of Sanitary Sewer Collection System by Pipe Size

| Pipe Size     | Total Length in Collection System |
|---------------|-----------------------------------|
| Gravity Sewe  | er Lengths by Diameter            |
| 100mm (4")    | 251 m                             |
| 150mm (6")    | 4207 m                            |
| 200mm (8")    | 3169 m                            |
| 250mm (10")   | 443 m                             |
| 300mm (12")   | 299 m                             |
| Forcemain Sev | ver Lengths by Diameter           |
| 50mm (2")     | 807 m                             |
| 100mm (4")    | 356 m                             |
| 150mm (6")    | 701 m                             |
|               |                                   |

The total gravity sewer pipe length in the Village is thereby estimated to be about 8.4 km and the total forcemain length is estimated to be about 1.8 km.

#### 2.2. LIFT STATIONS AND FORCEMAINS

The Village is responsible for 5 sanitary lift stations. Currently there are no automatic backup generators or supervisory control and data acquisition (SCADA) systems on the pump systems. SCADA is a control system architecture comprising computers, networked data communications and graphical user interfaces for high-level process supervisory management that is often used in municipal infrastructure systems such as the monitoring and operation of sewerage lift stations.

#### 2.2.1. LIFT STATION #1 (TV LAND)

Lift Station #1, commonly known as "TV Land", is the largest lift station that the Village operates. This station was constructed in 1995/6. The lift station is fitted with 2-10 HP Flygt pumps. The pumps discharge into a 150mm diameter ductile iron forcemain, approximately 410m long, which is tied directly into the Village's STP.

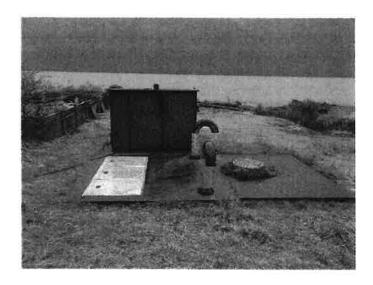


Figure 3: Lift Station #1

Lift Station #1 is a replacement for the original lift station (previously named pump station No.2). The original lift station at this location, which now has been decommissioned, was constructed in 1972 and was fitted with a separate wet well and pumping chambers. The current lift station is connected to the Village's original outfall as an emergency overflow.

# 2.2.2.LIFT STATION #2 (TRAILER PARK)

Lift station #2 services the south end of the Village, including the Alderwood Acres trailer park area. Alderwood Acres was previously directed to an onsite lift station; however, this lift station and it's corresponding forcemain have now been decommissioned and it are no longer in use. Lift Station #2 is fitted with 2-6 HP pumps connected to a 285m long, 100mm diameter, Class 150 PVC forcemain.



Figure 4: Lift Station #2



Based on anecdotal reports from the Village's public works staff, this station is subject to significant amounts of inflow and infiltration. This may be due to cross connections or poor condition pipe within the trailer park area.

## 2.2.3.LIFT STATION #3 (OUTFALL)

Lift station #3 (previously known as Lift Station #2) services sewerage from the north end of the Village and receives flows from the Industrial Way Lift Station. Constructed in 1995/6, Lift Station #3 is fitted with duplex pumping system and is fitted with an approximately 290m long, 150mm diameter PVC forcemain.



Figure 5: Lift Station #3

Based on anecdotal reports from the Village's public works staff, the mechanical equipment in this station is in poor condition with piping connections that are leaking and require repair. This results in decreased pumping performance and a waste of electrical energy more than what would normally be expected for this station. This station is likely due for some significant upgrades

#### 2.2.4.INDUSTRIAL WAY LIFT STATION

The Industrial Way Lift Station located at the far north end of the Village has a small sewerage lift station to service the industrial area. The lift station is fitted with 2 Barnes SGVF2022 L Grinder pumps that are controlled via a control panel onsite. This sanitary Lift Station is still relatively new (constructed in 2005) and is in relatively good operating condition.

The Lift Station wet well was constructed from cast-in-place concrete and is reported to be in relatively good condition.



Figure 6: Industrial Lift Station

The Industrial Way Lift Station discharges into a 50 mm HDPE forcemain the runs south along the Highway (Marine Drive) and is about 808m in length. The effluent from this forcemain then discharges into a gravity sewer along Marine Drive which eventually discharges into the Outfall Lift Station.

## 2.2.5. COPPER COAST

The Copper Coast subdivision located at the south end of the Village also has a small pre-packaged sewage Lift Stations that is currently being operated and maintained by the Village. This lift station is fitted with 2 - 2 HP Omnivore Grinder pumps (LSG200-Series) that are control via a duplex pump controller. This sanitary Lift Station is still relatively new (constructed around 2010) and is in good operating condition.



Figure 7: Copper Coast Lift Station



The Copper Coast pumps into a forcemain, which travels north to the nearby gravity sewer system, which is apart of the Lift Station #2 catchment area. As the Copper Coast development is the furthest point south in the Villages sanitary catchment area, and a significant increase in density over the initial subdivision plan is not expected at any time in the future, the pre-package grinder pump lift station is suitable of the intended use and does not require any upgrades. With proper maintenance, this station should service the area for an extended period of time.

# 3. CONDITION ASSESSMENT

#### 3.1. CCTV REPORTS

In 2002, the Village commissioned a CCTV study of part of their gravity sewer system. Although these reports are approximately 18 years old, they still provide useful insights to the general condition of the pipes in the Village area. All pipes contained within the CCTV study were comprised of AC material and were located in the Rumble Beach area. In total, approximately 1.1 kms of pipes were reviewed during the 2002 program. In general, the pipes inspected in 2002 show an ageing system in poor to fair condition, with specific comments provided in the following sections.

#### 3.2. SYSTEM INFLOW AND INFILTRATION

Sewerage treatment plant outflow data for 2019 was provided by the Village of Port Alice with data for the observed output volumes and daily measured rainfall being recorded. The data showed a clear correlation between the wet season and total flow to and from the plant. The difference between the dry season flow and the wet season flow was then analyzed to derive the average Inflow and Infiltration (I&I) value for the Village.

#### 3.2.1. Rainfall Statistics

There is a significant amount of rainfall in the Port Alice region. Being on the western side of Vancouver Island, long duration, low intensity storms are frequent particularly throughout the winter season. As it is known that there are significantly higher output volumes at the STP during the winter months, it is important to understand the rainfall frequency, intensity, and duration of rainfall events. To understand the expected rainfall in the area, 2 Environment and Climate Change Canada Short Duration Rainfall Intensity-Duration-Frequency (IDF) Data sets were analyzed. These are:

- Port Hardy Airport BC Station ID 1026270 Revision date 2019/02/27
- Estevan Point BC Station ID 1032730 Revision date 2019/02/27



Table 2: Nearby IDF Stations

| Return Period<br>(24 Hour Design<br>Storm Event in<br>mm) | 2    | 5     | 10    | 25    | <b>50</b> | 100   | Years of<br>Data | Average<br>Yearly<br>Rainfall<br>(mm) |
|---|------|-------|-------|-------|-----------|-------|------------------|---------------------------------------|
| Estevan Point   | 131  | 168   | 192   | 224   | 247       | 270   | 10               | 3174                                  |
| Port Hardy<br>Airport                                     | 80.7 | 101.7 | 115.6 | 133.2 | 146.2     | 159.1 | 29               | 1866                                  |

Based on Environment and Climate Change Canada's Climatic Normals for the Port Alice region, the Village receives 3399 mm of Rain on Average every year and even though Port Hardy is significantly closer geographically, the longitudinal correlation between Estevan Point and Port Alice plays a more significant role as proximity to the western front of Vancouver Island typically results in significantly more rainfall than the eastern front. Therefore, it is determined that the Estevan Point IDF curve more appropriately represents the rainfall at Port Alice.

This IDF curve was then compared against the rainfall data provided by the Village, which was limited to just the month of December in 2019, and the largest rainfall event recorded during this time was 60mm in 24 hr. This is significantly less that a 2-year return period storm for the area (80.7mm in 24 hours) and therefore the data provided by the Village can be utilized to determine infiltration rates during typical winter storm events.

#### 3.2.2.STP Observations, Design Flow and I&I Estimates

In order to determine the overall system inflow and infiltration (I&I), observations from the Village's STP and dry weather flow estimates need to be considered. Total outflow and rainfall data from the 2019 dry and wet seasons were provided to McElhanney by the Village to aid in the quantification of total system I&I. In addition to the STP data, the Village's 2016 census data and overall sanitary catchment area was also evaluated. The census data is used to determine an estimated dry weather flow rate, meaning the flow that would be expected just from the active users on the system.

The difference between the observed daily flow volumes and the estimated daily flow volumes can then be classified as system I&I. I&I can be attributed to multiple factors such as cross connections (building roof and/or footing drains connected to sanitary sewer), leaky mains and services, as well as leaky fixtures inside dwellings. The I&I for various conditions can then be divided by the total sanitary catchment area to determine an average rate across the sewershed. These calculations and estimates are shown in **Table** 3 below.

Table 3: Sanitary Catchment Parameters

| Parameter   | Value         |
|---|---------------|
| Sanitary Catchment Area                                       | 63 ha         |
| Population  | 664           |
| Daily Average Dry Weather Flow - Estimated                    | 250 L/Cap/day |
| Estimated Daily Dry Weather Volume                            | 166 Cu.M/day  |
| Observed Daily Dry Weather Season Volume                      | 282 Cu.M/day  |
| Estimated Dry Weather I&I Rate                                | 0.02 L/s/ha   |
| Observed Average Daily Wet Weather Season Volume <sup>1</sup> | 591 Cu.M/day  |
| Observed Average Wet Weather I&I Rate                         | 0.08 L/s/ha   |
| Observed Maximum Daily Wet Weather Season Volume <sup>2</sup> | 1199 Cu.M/day |
| Observed Maximum Wet Weather I&I Rate                         | 0.19 L/s/ha   |

The estimated dry, average wet, and maximum wet weather I&I rates are then combined with the calculated rates from multiple other STP flow observations to derive an estimated rainfall depth to I&I relationship. This relationship is shown on **Figure 8**.

<sup>&</sup>lt;sup>2</sup> Maximum daily wet weather I&I rate based on largest daily reading at STP during the month of December 2019.



<sup>&</sup>lt;sup>1</sup> The average daily wet weather I&I rate is based on the daily readings at the STP during the months of December 2019, January 2020 and February 2020.

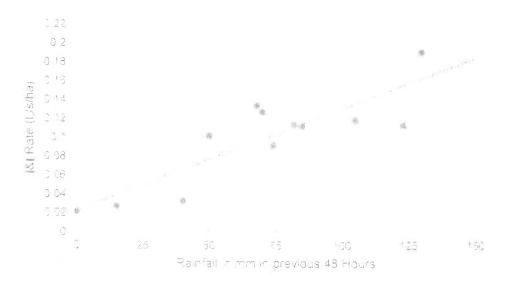


Figure 8: Rainfall to 1&I Relationship

The correlation from this relationship can then be applied with respect to the rainfall statistics discussed in the previous section to determine an approximant outflow to rainfall relationship. The I&I rate is plotted against rainfall in the previous 48 hours to allow for the transmission of rainwater through the ground prior to infiltration into the system. It also allows for the assumption that during these rainfall events, that the ground has become fully saturated and the infiltration condition in the ground is at its highest potential. The greatest 48 hour rainfall event recorded in December 2019 was 130 mm. This depth reasonably represents the largest rainfall event on an average year and can therefore be utilized to determine the peak wet weather I&I (0.19 L/s/ha). Extrapolating the best fit liner trendline, as shown in **Figure 8**, also results in an I&I rate of 0.19 L/s/ha near 150mm of rainfall (in previous 48 hrs).

This is higher than the typical I&I values for municipal sewer systems, and this is attributed to the age and condition of the overall systems. This is also supported by the anecdotal and CCTV evidence provided. Where some municipalities have grown slowly over long periods of time, which creates a range of sewer ages and conditions, the Village's system was primarily constructed over 40 years ago. This also lends that the I&I across the system to be somewhat uniform. If specific catchment area I&I delineation is required, it is recommended to complete a flow monitoring program at the Village's sewerage pumping stations. It would also be expected that the condition of the sewers would deteriorate at a similar rate, thereby increasing the overall I&I over time. This is higher than the typical I&I values for municipal sewer systems, and this is attributed to the age and condition of the overall systems. This conclusion provides additional evidence that the sanitary sewer system as a whole is in poor condition and concurs with the findings of the 2002 CCTV reports. This is also supported by the anecdotal evidence provided by Village Public Works staff.

# 4. RISK ANALYSIS

#### 4.1. SYSTEM DEFICIENCIES

The record drawings for the system were compiled and updated to known current conditions. The drawing set, appended herewith, highlights the known pipe deficiencies in the sewer shed, which is based on the CCTV videos and reports provided, observations of which are supported by staff observations. These reports did not cover the whole Village sewer network, however, similar conditions can be expected throughout the catchment.

#### 4.2. NUISANCE AREAS

Based on discussion with the Village Staff there are multiple nuisance areas across the sewershed. Nuisance areas are zones in which public works staff have noted operational issues such as:

- Flushing required to alleviate plugged sewers;
- Excessive I&I;
- Excessive grease build-up; and
- Odour issues.

These conditions can occur for multiple reasons which may include:

- Insufficient sewer capacity;
- Localized pipe settlement, which creates sags;
- Poorly graded sewers;
- Age and material of sewers and manholes;
- Cross connections of roof leaders; and
- Commercial Areas, with higher discharges of greasy sewage.

Known nuisance areas include the following:

- Maquinna Ave. to the north of Taylor Way
- Maquinna Terrace
- The Outfall Lift Station (Station #3)
- TV Land Lift Stations (Station #1)

# 5. CAPITAL PLANNING AND IMPLEMENTATION PLAN

#### 5.1. CAPITAL PLANNING

To facilitate an orderly and systematic program to address the known and unknown issues with the sewer system, the Village will need to appropriate funds within their capital planning process. Given limited financial resources with a decreasing population, the following plan should be completed in stages, subject to available funds from normal revenues, or provided through the application and receipt of government grants.

#### 5.2. IMPLEMENTATION PLAN

The recommended implementation plan follows a simple premise, Investigate, identify, repair where possible, replace as needed.

- Investigate through smoke and/or dye testing and CCTV inspections
- Repair sewer mains with less invasive and more cost-efficient processes like trenchless pipe repair (TPR) and chemical grouting
- Replace existing sewer lines with new pipe systems where necessary due to the complete failure of a pipe segments.

#### 5.2.1. Smoke and Dye Testing

Smoke and/or dye testing of sanitary sewers helps identify possible service cross connections and leaky inspection chambers and services. Smoke test can identify locations of significant inflow in areas that cannot be captured by CCTV (as will be discussed in the next section).

Smoke and/or dye testing is a relatively simple and non-destructive process that consists of blowing smoke mixed with large volumes of air into the sanitary sewer line, typically generated through the manhole. The smoke travels the path of least resistance and quickly shows up at sites that allow surface water inflow. Smoke will identify broken manholes, illegal connections including roof leaders and footing drains, sump pumps and yard drains, uncapped lines. Smoke testing can even show cracked mains and laterals, providing there is a passageway for the smoke to travel to the surface.

Smoke testing can cause some public anxiousness, as smoke can sometimes be seen around private dwellings when storm leaders are connected to the sewer system. However, the smoke used in the testing process is non-toxic, safe and a low-cost option to identify system deficiencies. An example of smoke testing is shown in **Figure 9**.





Figure 9: Smoke from Sanitary Service Cleanout

Alternatively, sewer flows can be investigated using special dyes introduced at suspected source locations. Dye testing usually follows smoke testing where confirmation of sources needs to be made for certainty of where the I&I may be originating from.

## 5.2.2.CCTV

Closed-circuit television (CCTV) inspection of sanitary sewers is an effective way to identify system deficiencies and locations of building services. CCTV investigations are typically limited to the mainline sewers and manholes; however, service lateral inspections can be completed with specialized equipment. CCTV companies are required to be certified by a governing body and there is a standardized reporting system that is in place across the industry. CCTV inspections can be completed at the same time as smoke tests and the parallel testing procedures ensure a comprehensive investigation into the present condition of the system, leading to a prioritization of repairs beyond what can be accomplished within the scope of this desk top study. It is important that effort is made to access backyard sewers during the CCTV inspection process to ensure the completeness of the review.



Figure 10: Typical CCTV Deficiency Recording from another Municipality

CCTV operations are typically limited to gravity sewers as there are no easily assessable points on forcemains. CCTV of sanitary sewers are effective and cost options that provide detailed reports that allow for effective decision making. Deficiencies can be designated for removal and replacement or can be noted as a possible trenchless repair option.

#### 5.2.3. Trenchless Repairs

There are multiple different types of trenchless pipe repairs. Features that all these types of trenchless repairs have in common is that the existing operation of the sewer system can be maintained, either by flow through technology or by temporary bypass pumping. The intent of all trenchless repairs is to be less intrusive than the open cut equivalent options as typically is significantly less expensive than pipe replacement. Trenchless repairs to typically reduced the overall flow capacity of the sewers that require the repairs, however, based on the Village's current population and growth trench, slight reductions in current sewer capacities should not affect the system operation. However, these repairs could involve significant input from public works as a large percentage of the sewers are in the rear yard easements of private dwellings. They can also be limited based on the type of deficiency as trenchless repairs are not typically good solutions for pipe sags or major failure (pipe collapse) areas. Details of the various methods are described in the following sections.

#### 5.2.3.1. Joint Grouting

Chemical grouting of sewer mains is an effective way to control groundwater infiltration to the sewer system. The process involves pressure testing joints along the sewer main and inserting a chemical grouting mixture at the joints that fail. These mixtures are required to set very rapidly (within seconds) and can be completed in a completely saturated soil/pipe condition. Specialized equipment is also available if pressures testing and grouting of service laterals is required. The air pressure test is completed by inflating 2 rubber bladders on the opposite sides of a joint and then pumping air in between these bladders. The joint is required to hold this pressure, and if it cannot, it would indicate that the joint is not watertight and therefore requires chemical grouting. An illustration of this apparatus is shown in **Figure 11** below.



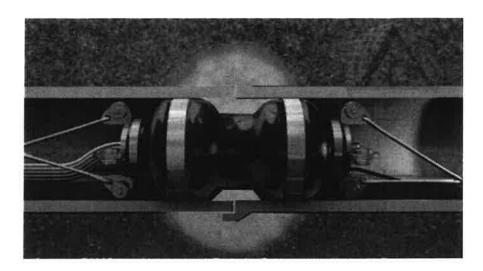


Figure 11: Typical Chemical Grouting Cross Section

#### 5.2.3.2. Trenchless Point Repair (TPR)

TPRs are localized structural repairs on short sections of pipe. TPRs are useful if the remainder of the gravity sewer in the segment is not structurally comprised. TPRs can be completed at a variety of lengths and diameters and can also cover existing services (which are then reinstated after the repair has fully cured). TPR repairs can be completed in conjunction with chemical grouting repairs to improve the overall I&I. Figure 12 below shows a recent TPR completed within the Village of Tahsis. As can be seen, the TRP creates a smooth transition, but does slightly decrease the inside diameter of the host pipe.



Figure 12: Typical TPR inside AC Pipe

#### 5.2.3.3. Cast in Place Pipe (CIPP)

A cured-in-place pipe (CIPP) is a trenchless rehabilitation method used to repair existing pipelines. It is a jointless, seamless pipe lining within an existing pipe. A CIPP is similar to a TPR, except is typically is placed throughout the entire length of a gravity sewer segment (from manhole to manhole). CIPP are



typically used in areas where the structural integrity of the existing pipe is failing and can be completed in conjunction with chemical grouting repairs to improve the overall I&I.

The process of CIPP involves inserting and running an epoxy impregnated geotextile lining into a pre-existing pipe that is the subject of repair. Resin within the liner is then exposed to a curing element to make it attach to the inner walls of the pipe. Once fully cured, the lining now acts as a new pipeline. The liners are typically cured using hot water or stream; however, these processes can sometimes produce short term odour disturbances considered a nuisance by the public. The odours are not a health and safety risk but can cause some unrest with the public. Some processes utilize UV light to cure the liner when fiberglass liners are being installed. Selection of the type of CIPP process may be dictated by contractor availability as qualified contractor's usually need to come from the lower mainland.

#### 5.2.4. Removal and Replacement

The removal and replacement of sanitary sewers is the costliest option for rectifying sewer deficiencies. This is typically completed using the standard open trench construction practices, that is utilized for the installation of new sewer systems. The process is destructive, but more familiar as it is not as specialized as the trenchless repairs, and therefore more contractors are available to complete this work. The availability of contractors can become a factor if scheduling becomes a significant issue for the Village.

As most of the gravity sewer system is comprised of asbestos concrete (AC) pipe, any removal work of the AC pipe would need to follow the proper work safe and disposal procedures. It is recommended that any newly installed sanitary gravity sewers by a minimum 200mm (8") in diameter. This is the standard minimum sewer size and provides the most flexibility for future repairs or inspections.

Table 5: Cost Estimate Summary - Assuming Removal and Replacement of All Existing AC Pipe

| Parameter               | Value       |
|-------------------------|-------------|
| Removal and Replacement | \$7,181,000 |
| Lift Station #1         | \$60,000    |
| Lift Station #2         | \$50,000    |
| Lift Station #3         | \$150,000   |
| Total                   | \$7,441,000 |

As part of an annual investment strategy an expenditure per year outlook has also been provided. For the purpose of this report, year 1 is labeled as 2021 and a 40-year outlook is provided. Shown on **Figure 13**, the annual expenditure can be expected to vary greatly over time with an annual average expenditure of approximately \$170,000. Although this average expenditure appears to be quite high, it does include the major rehabilitation works and replacement works that are expected to be identified if a full CCTV program is completed in year 1. A list of assumptions for the yearly cost estimates are as follows:

- Year 1 (2021) CCTV Program and Upgrades to LS #3;
- Years 2-5 (2022-2025) Pipe replacement and rehabilitation programs averaged over 4 years.
   The total value of this work is based on 25% of the sewers being removed and replaced as per Table 5 and 75% of the sewers being rehabilitated as per Table 4.;
- Year 5 (2025) Upgrades to LS #1 and #2;
- Years 6-15 (2026 2035) General Allowance for repairs;
- Year 15 (2035) Upgrades to LS #3 (assuming pump replacement for each lift station for every 15 years); and
- A repeating pattern after 2035.

It can be expected that the actual expenditure would vary greatly from this estimate as repairs and upgrades will depend significantly on additional sources of funding such as provincial and federal grant applications.

## 6. COST ESTIMATES

Capital Costs of recommended upgrades were estimated based on a unit price per meter for the specified repair or replacement method. In consideration of sewer replacement, the following items as reincluded in

- Mobilization and demobilization;
- Excavation and trenching;
- Purchasing and installation of materials;
- Backfilling and compaction; and
- Surface restoration.

Details of the Class D cost estimates are provided in Appendix A and include contingencies in accordance with this level of estimate and assessment. The cost estimates assume that all manholes in a designated upgrade area are required to be replaced in addition to the pipe capacity upgrades. Services connections were also taken into consideration for the cost estimates. Due to the uncertain nature of the underground sanitary sewer network and other associated municipal infrastructure (i.e. storm and water lines), these estimates may vary significantly from the actual required costs. In addition to the system upgrades required, a cost estimate for the provision of a CCTV and smoke testing inspection program is also included. Further analysis should be completed to refine the estimates prior to construction. Based on anecdotal evidence from Public Works staff, Lift Station #3 requires significant mechanical repairs and would require significant effort to repair. Automatic diesel-powered generating systems were allowed for in the cost estimate for all 3 of the Village's main lift stations. **Table 4** below summarizes the estimated costs for each upgrade.

Table 4° Cost Estimate Summary – Assuming Trenchless Technologies Can be Utilized for the Majority of Current Sewer Issues

| Parameter  | Value       |
|--|-------------|
| Smoke Testing And CCTV Inspection                                | \$129,000   |
| <b>Trenchless Point Repair and Grouting</b>                      | \$1,032,000 |
| Removal and Replacement (25% of all pipes assumed to be removed) | \$1,795,250 |
| Lift Station #1  | \$60,000    |
| Lift Station #2  | \$50,000    |
| Lift Station #3  | \$150,000   |
| Total  | \$3,216,250 |



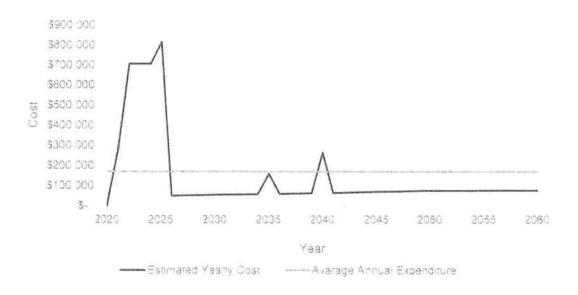


Figure 13: Yearly Cost Estimates

### 7. CONCLUSIONS AND RECOMMENDATIONS

- A CCTV and smoke testing program should be implemented by the Village to fully assess the
  condition of the sewer collection system, including the determination of where higher Inflow and
  Infiltration (I&I) problems may exist. A budget of \$129,000 is suggested to implement the
  program.
- 2. The results from the CCTV inspection program can then be used to develop a phased trenchless point repair program. Trenchless repairs have many benefits including cost, repair time and lack of disruption, however, could involve significant input from public works as a large percentage of the sewers are in the rear yard of private dwellings. Trenchless repairs can also slightly decrease the inside diameter of a sewer, decreasing existing capacity, so respect to demands needs to be considered when selecting possible repairs. Possible trenchless repair opportunities include:
  - Chemical Grouting of mainline joints and services;
  - Point repairs in areas of structural failures:
  - Cured In-Place Pipe (CIPP) for complete relining of sewers; and
  - Pipe bursting.
- 3. The implementation plan, as outlined in Section 5, should be followed as a general guideline, and used as a tool to help determine future upgrades. Anecdotal evidence from Village staff when considering which upgrades are appropriate and when those upgrades should be undertaken.
- 4. Based on the review of available information the Village should be budgeting for Trenchless Repair Program (\$500,000) and some sewer renewal of (\$1,000,000), after confirming the state of the sewer system with new CCTV and smoke testing assessments.
- 5. In review of the lift station data, photos and inspections completed for this project, the Village should budget approximately \$260,000 for the necessary improvements to LS #1, LS #2 and LS #3 to bring the mechanical infrastructure up to date.
- Any new pipes being constructed within the Village should be at least 200mm in diameter, except in cul-de-sacs where no future upstream connections will occur, in which case 150mm diameter mains are acceptable. All new sewer main construction should follow the most recent edition of the MMCD standards.
- 7. Upgrades should be completed on a priority basis with the failed pipes being rectified first followed by those of imminent failure to those that are of lessor concern.

# MAPS

VILLAGE OF PORT ALICE

CLIENT:

DESCRIPTION: SANITARY SEWER ASSESSMENT COMPOSITE PLANS

Cost National

Sport Autor

Front Autor

PROJECT LOCATION

2221-49288

McElhanney Project No.:

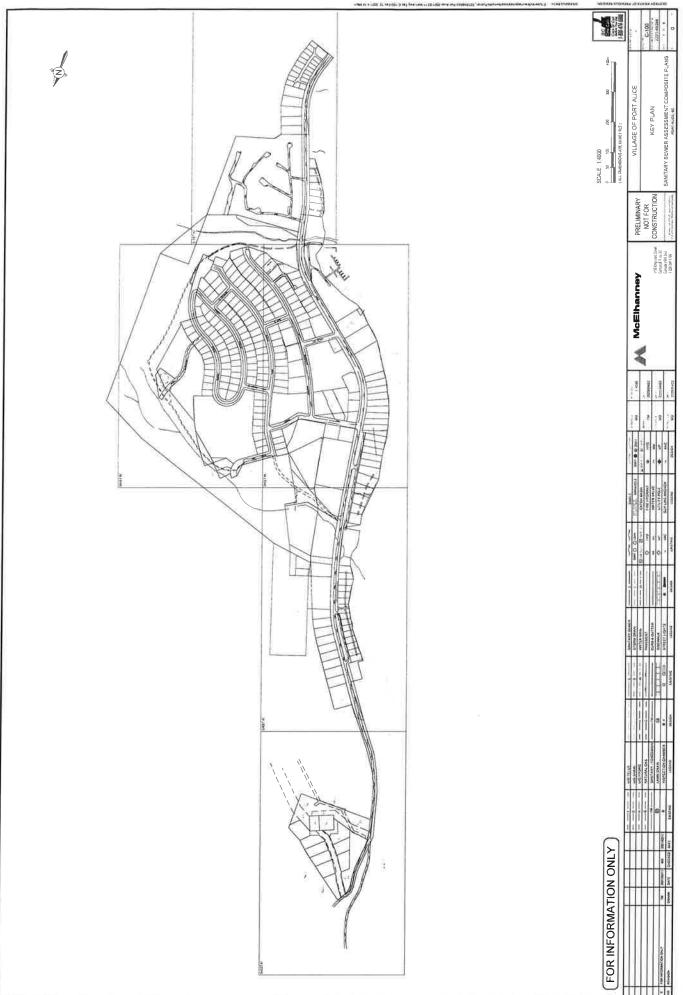
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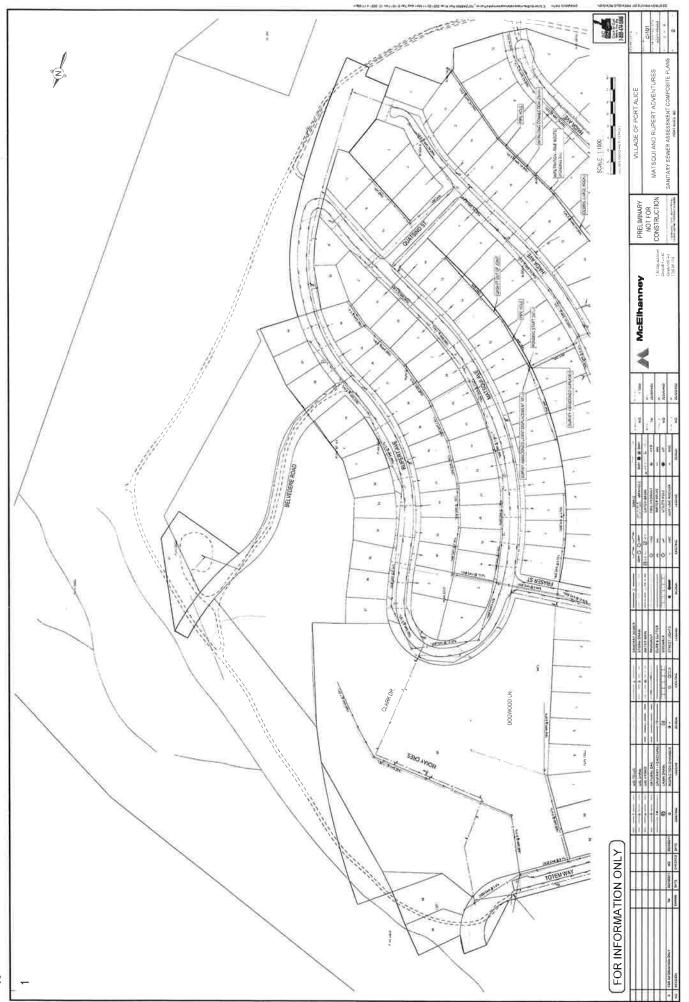
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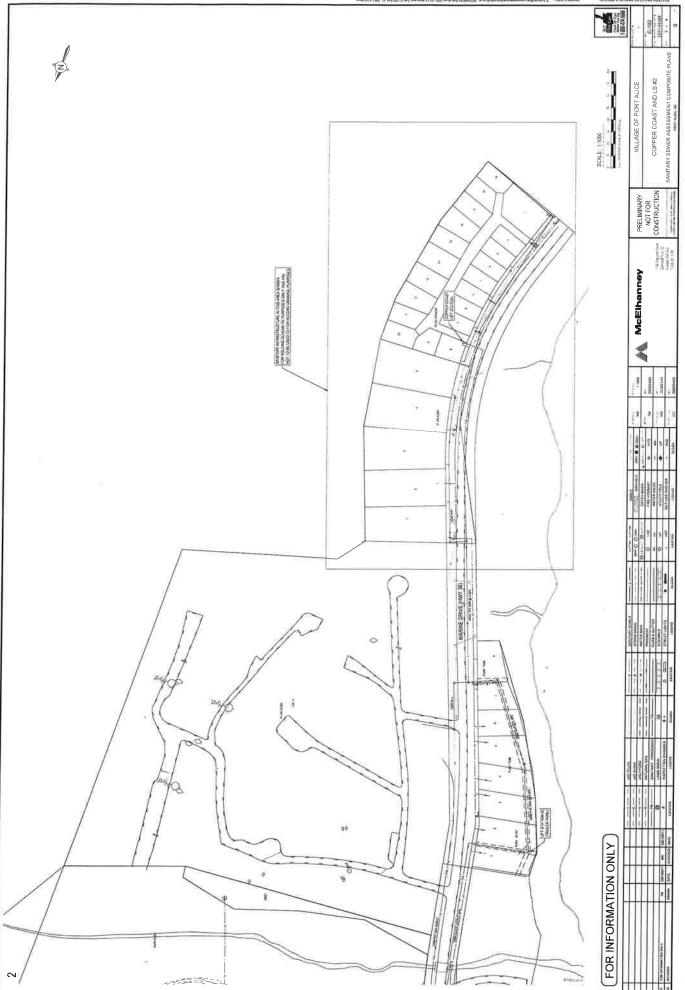
**McElhanney** 

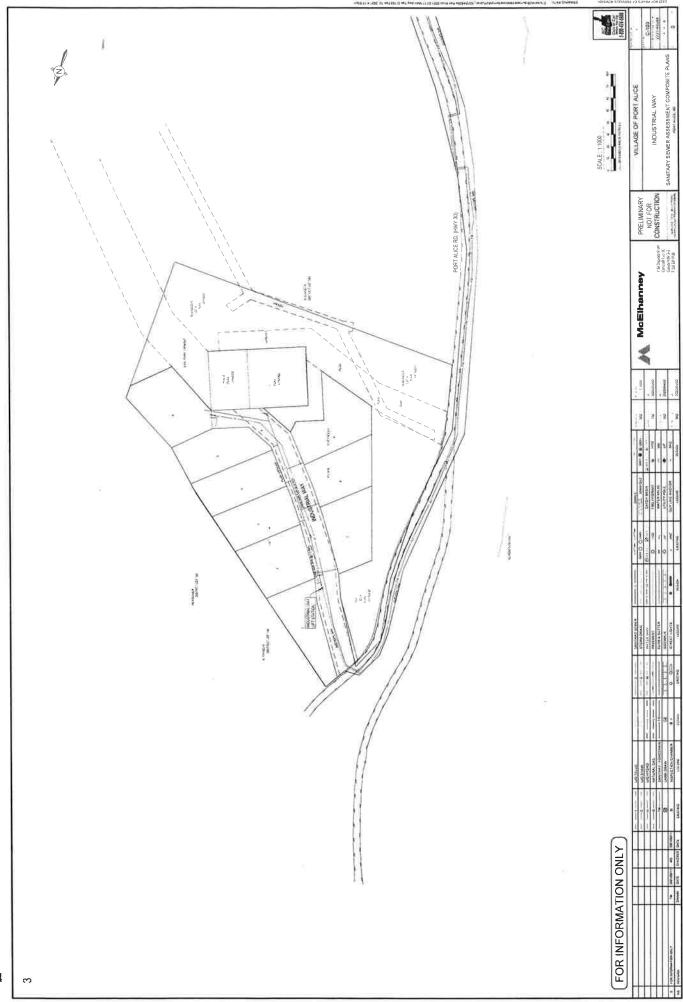
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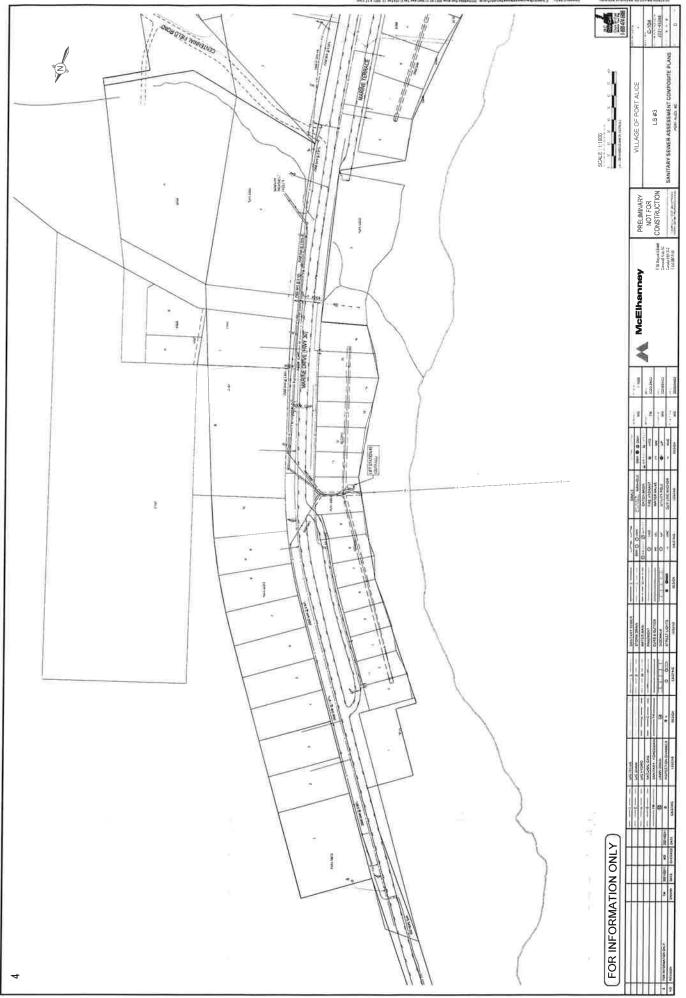
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# APPENDIX A – CLASS D COST ESTIMATES



Date: February 12, 2021

Project No: 2221-49288-00

# Village of Port Alice Class D Construction Cost Estimate Sanitary Sewer Investigation, Repair and Replacement

| Sanitary Sewer Investigation, Repair and Replacement | Quantity | Unit | Un         | it Cost         |    | Estimate   |
|--|----------|------|------------|-----------------|----|------------|
| 1-Smoke Testing and CCTV Inspection                  |          |      |            |                 |    |            |
| Mobilization and Demobilization                      | 1        | LS   | \$         | 10,000          | \$ | 10,000     |
| Smoke Testing  | 8369     | LM   | \$         | 5               | \$ | 41,845     |
| CCTV Inspection                                      | 8369     | LM   | \$         | 5               | \$ | 41,845     |
| Manhole  | 150      | EA   | \$         | 100             | \$ | 15,000     |
| Concluding Report and Repair Implementation Plan     | 1        | LS   | \$         | 20,000          | \$ | 20,000     |
|  | -        |      | Subtotal   |                 | \$ | 129,000    |
| 2-Trenchless Point Repair and Grout Testing          |          |      |            |                 |    |            |
| Mobilization and Demobilization                      | 1        | LS   | \$         | 20,000          | \$ | 20,000     |
| Pre Inspection CCTV (All Sewers)                     | 8369     | LM   | \$         | 5               | \$ | 41,845     |
| Cleaning of Sewers                                   | 8369     | LM   | \$         | 5               | \$ | 41,845     |
| Air Test   | 2092     | EA   | \$         | 65              | \$ | 135,996    |
| Grout  | 2092     | EA   | \$         | 15              | \$ | 31,384     |
| Trenchless Point Repair                              | 159      | EA   | \$         | 4,000           | \$ | 635,278    |
| Residual Grout Removal                               | 8369     | LM   | \$         | 5               | \$ | 41,845     |
| Post Installation Cleaning                           | 8369     | LM   | \$         | 5               | \$ | 41,845     |
| Post Installation CCTV                               | 8369     | LM   | \$         | 5               | \$ | 41,845     |
|  |          |      | Subtotal   |                 | \$ | 1,032,000  |
| 3-Removal and Replacement of Sanitary Sewers         |          |      |            |                 |    |            |
| Mobilization and Demobilization                      | 1        | LS   | \$         | 50,000          | \$ | 50,000     |
| Removal of Existing AC Sewers (Including Asbestos    | '        | LO   | Ψ          | 30,000          | Ψ  | 50,000     |
| Disposal)  | 7627     | LM   | \$         | 200             | \$ | 1,525,400  |
| Pipe Reinstatement (200mm PVC Assumed) Including     | 1027     | LIVI | Ψ          | 200             | Ψ  | 1,020,100  |
| Surface Restoration                                  | 7627     | LM   | \$         | 600             | \$ | 4,576,200  |
| Manhole  | 150      | EA   | \$         | 5,000           | \$ | 750,000    |
| Service Reinstatement                                | 559      | EA   | \$         | 500             | \$ | 279,500    |
| Solvido Nometato ment                                |          |      | Subtotal   |                 | \$ | 7,181,000  |
|  |          |      |            |                 |    |            |
|  |          |      | Subtotal   | 1+2+25% of 3    | \$ | 2,956,250  |
|  |          | Allo | owance for | Inflation (10%) | \$ | 296,000    |
|  | Eng., l  |      |            | owance (30%)    |    | 887,000    |
|  |          |      |            | Total 1+2a      | \$ | 4,139,250  |
|  |          |      |            | Subtotal 3      | \$ | 7,181,000  |
|  |          | Allo | owance for | Inflation (10%) | \$ | 718,000    |
|  | Eng., i  |      |            | owance (30%)    |    | 2,154,000  |
|  |          |      |            | Total 1+2b      | \$ | 10,053,000 |



Date: February 12, 2021

Project No: 2221-49288-00

#### Village of Port Alice **Class D Construction Cost Estimate Lift Station Upgrades**

|  | Quantity    | Unit      | Unit Cost      |            | Estimate |         |
|--|-------------|-----------|----------------|------------|----------|---------|
| Lift Station #1 Backup Generator including Contol Panel Upgrades | 1           | LS        | \$             | 60,000     | \$       | 60,000  |
|  | <del></del> |           | Subtotal       |            | \$       | 60,000  |
| Lift Station #2  |             |           |                |            |          |         |
| Backup Generator including Contol Panel Upgrades                 | 1           | LS        | \$             | 50,000     | \$       | 50,000  |
|  |             |           | Subtotal       |            | \$       | 50,000  |
| Lift Station #3  |             |           |                |            |          |         |
| Backup Generator including Contol Panel Upgrades                 | 1           | LS        | \$             | 50,000     | \$       | 50,000  |
| Mechanical Upgrades including Bypass Pumping                     | 1           | LS        | \$             | 100,000    | \$       | 100,000 |
|  |             |           | Subtotal       |            | \$       | 150,000 |
|  |             |           | Subtotal       |            | \$       | 260,000 |
|  |             |           | wance for Infl | , ,        |          | 26,000  |
|  | Eng₊, L     | egal, and | d Admin Allow  | ance (30%) | \$       | 78,000  |
|  |             |           |                | Total      | \$       | 364,000 |

Contact
Mark DeGagne
250 287 7799





# VILLAGE OF PORT ALICE

# Port Alice Volunteer Fire Department

# Fire Chief's Monthly Report For the month of January 2022

| Active Members | 9 | Number Of False Alarms |   |
|----------------|---|------------------------|---|
| On Leave       | 2 | Mutual Aid Calls       |   |
| Rescue Calls   |   | Lift Assist Calls      | 3 |
| Fire Calls     | 4 | Public Relation Events | 1 |

# **Practices / Events:**

| Date    | Attendance | Purpose  |
|---------|------------|--|
| 01Jan22 | 5          | Chimney Fire                                   |
| 04Jan22 | 4          | Practice – Donning and doffing bunker gear     |
| 08Jan22 | 5          | Lift Assist                                    |
| 11Jan22 | 4          | Practice – Run Trucks 1, 2 &3                  |
| 15Jan22 | 6          | Tsunami Advisory                               |
| 15Jan22 | 5          | Fire 901                                       |
| 18Jan22 | 3          | Practice – Truck #3 town inspection            |
| 21Jan22 | 5          | Chimney Fire                                   |
| 23Jan22 | 3          | 1083 – Electrical Structure Issues             |
| 24Jan22 | 5          | Lift Assist                                    |
| 25Jan22 | 5          | Practice – Truck Checks, Month end inspections |
| 26Jan22 | 4          | Lift Assist – Rupert Ave                       |
|         |            |  |

Situation Responses:

Fire Chief:

Administrator:

**Public Relations Events:** 



# INFORMATION ITEMS



# **DISTRICT OF STEWART**

Office of the Mayor

January 28, 2022

Mr. Taylor Bachrach, MP for Skeena-Bulkley Valley House of Commons Ottawa, Ontario K1A 0A6

sent via email to: Taylor.Bachrach@parl.gc.ca

Dear Mr. Bachrach,

# Re: BC Wildfires Petition - Letter of Support

Council considered correspondence from the District of Lillooet at the January 24, 2022 Regular Council Meeting, and made a resolution to support the community's BC Wildfires Petition.

The BC Wildfires petition that was previously sent to BC Municipalities from the District of Lillooet, is addressed to the Government of Canada and asks for the Government of BC and Canada to empower local persons, those working with licensees, industry and contractors, Indigenous communities, ranchers and workers such as fire fighters, forestry workers, and all those that see the day-to-day issues and have front line knowledge to provide feedback on the inconsistencies and shortcomings with regard to forest management and wildfire prevention in order to help bring about much-needed change.

Inspired by the Ontario government who assembled an 'All Hazards Agency' that employs people to manage fire, flood and slides, we believe that BC needs this type of agency as well.

We support the District of Lillooet's belief that impacts to lumber prices and job availability, mill closures, current and future mudslides, damage to critical habitat, and house insurance increases are trickle effects that will continue to have detrimental effects on BC's future if we do not make necessary changes to current forest practice procedures.

Consequently, the District of Stewart calls upon the Provincial and Federal Governments to provide better forest management and wildfire protection by assessing the current policies and guidelines to enhance those that are working to re-evaluate and change those that are not.

We respectfully request that you present our letter supporting the District of Lillooet's BC Wildfires petition to the Clerk of Petitions and upon receiving certification, to the House of Commons.

On behalf of Council, thank you for your consideration of this request.

Sincerely,

Gina McKay

Mayor

District of Stewart

Cc:

Hon. Nathan Cullen, MLA for Stikine

District of Lillooet

Councils of BC Communities

## Tanya

From:

BC PR & Communications Adviser <bc-prcomm@girlguides.ca>

Sent:

Monday, January 31, 2022 2:50 AM

To:

info@portalice.ca

Subject:

Guiding Lights Across BC - Feb 22, 2022

Hello Mayor and Council,

I am following up on my previous email in January. On behalf of Girl Guides of Canada's British Columbia Council, I am writing to ask for your support for girl empowerment in BC this February 22, by lighting up your building(s) with exterior lighting or interior window lights in the colour blue. Blue is the well-known colour of Girl Guides and girls/women in BC have worn their blue Girl Guide uniforms with pride for many generations. We currently have over 50 landmarks across the province lighting up blue!

Every year on February 22, Girl Guides celebrate World Thinking Day, a day of international friendship. It is an opportunity to speak out on issues that affect girls and young women, celebrate the founding of Girl Guides, and be connected to the 10 million members around the world who are part of the Guiding movement.

Here in British Columbia, we have thousands of girls and women who are members of Girl Guides of Canada. We have Girl Guide programs in nearly every community in BC, and our girls/volunteers light up their communities year-round through leadership, community service, and efforts to create a better world, by girls. Girls typically participate in annual Thinking Day activities held on/around February 22. Due to the continuing effects of COVID-19, our usual large gatherings, campfire singalongs, community events, special camps, and other activities are impacted, and so this year will again look different than usual.

For Thinking Day 2022, we will be celebrating in a way that is COVID-friendly, keeps our communities safe, and brings a smile to the faces of girls, families, volunteers, and the public: **Guiding Lights Across British Columbia**. This community initiative will light up outdoor landmarks, bridges, buildings, stadiums, and other illuminated locations, with blue lights, in celebration of the sisterhood of Guiding across BC and beyond, on February 22. participating locations and the Guiding Lights Poster can be found at: <a href="https://www.girlguides.ca/guidinglightsacrossbc">www.girlguides.ca/guidinglightsacrossbc</a>

We will be mobilizing our members to admire these lit-up sites in ways that comply with COVID-19 rules (both from public health authorities and Girl Guides' own member safety protocols) in effect at that time, posting photos on social media, emailing our members with info about how to participate, and more. We are excited for this open-air opportunity that will enable everyone to safely celebrate.

Our Girl Guide members and broader network of supporters would be thrilled to have your landmarks lit up as part of Guiding Lights Across British Columbia, and to highlight your participation as part of this province-wide event. Please contact us at <a href="mailto:bc-prcomm@girlguides.ca">bc-prcomm@girlguides.ca</a> to confirm your ability to participate in this February 22, 2022, activity.

Thank you for your support for Guiding in BC!

Isabella Lee (She/Her) | BC Public Relations and Communications Adviser BC Council, Girl Guides of Canada bc-prcomm@girlguides.ca / (cell) 778-677-6452

I respectfully acknowledge that I live and work within the ancestral, traditional, and unceded territory of the Songhees, Esquimalt, and WSANEĆ Nations.



Everything she wants to be.