

December 30, 2021

To: All Lot Owners within the Summer Village of Ross Haven

RE: Proposed Sewer Project for the Summer Village of Ross Haven

In the August council meeting, we presented our plan to reach a decision on the sewer project. This included collecting questions from you, seeking answers, completing benchmarking, and addressing concerns. Next steps include providing you with this information, seeking your input via a survey, and making a "Go" or "No Go" decision. It is council's intent to make this decision during the February council meeting. If we proceed with the project, next steps include re-tendering the project, confirming grant money and financing costs. We can still say "no" if costs to the village increase. For additional information about the sewer project, including next steps, and the written responses from Stantec and the North 43 Lagoon commission, please visit our Ross Haven website.

Council is recommending that if we proceed with the project:

 Lots that connect to the system will be charged a higher fee than those that are not connected. The more people that connect, the lower the connected fees will be. This fee will replace the \$175 annual fee that was on your Property Taxes for the Water / Sewer Fund. Scenarios for monthly costs are:

| Percentage of Lot Owners that Connect | 30% | 45% | 60% |
|---|------|------|------|
| Monthly Fees for those that Connect | \$62 | \$50 | \$44 |
| Monthly Fees for those that DO NOT Connect | \$25 | \$25 | \$25 |

- 2) The village will use \$785,000 from our reserves to pay for a portion of the amount that the village is responsible for. For the remaining \$316,000, a loan from the North 43 lagoon commission will be utilized.
- 3) The fees identified in point 1 will be annualized and assessed on the property tax bill. They will be reviewed and adjusted on an annual basis.

<u>We are seeking your input.</u> Please review the information provided and complete this survey by <u>5:00pm on February 2</u>. It is preferred that you complete the survey via a computer or a smartphone. The link is available on our Ross Haven website, or by scanning the QR code below. However, if you do not have access to a computer or smartphone, please fill out the survey on the last page, and return it via mail back to the village. Please ensure that that we receive it by February 2.

Thank You.

Ray Hutscal, Lolita Chadd, Dieter Brandt, Tony Sonnleitner



Sewer Project Questions and Answers

Benefits of a Sewer System for the Summer Village of Ross Haven

- The Summer Village of Ross Haven is benefitting from a grant of 69%, or \$2,474,984 for infrastructure.
- If a high number of lot owners tie into the system, the benefits to the village include reduced smells while vacuum trucks are in the village, a safer community given fewer large trucks travelling in the village, and reduced maintenance costs on our village roads and Range Road 34.
- For lot owners that create a higher volume of effluent, this will be more economical than utilizing vacuum trucks. Emergency pump outs will not be an ongoing concern.
- For lot owners that do not immediately connect to the system, your annual fees payable to the village will only increase by \$125 annually (\$10.42 per month). You can choose to connect to the system at some point in the future.
- Access to a sewer system should reduce illegal dumping of grey or black water into water bodies or surrounding areas.
- Having access to a sewer system makes your property and the village more attractive to potential purchasers.

Provincial / Federal Government Questions

1. What are the current requirements for dealing with sewer in a Summer Village around a body of water? Is the provincial or federal government considering changes to this?

{There are no current Provincial/Federal requirements mandating the installation of municipal wastewater collection/transmission systems for rural communities or summer villages. However, Alberta Environment and Parks fully supports the collection and transmission of domestic wastewater to an approved wastewatertreatment facility. AEP has indicated that they are reviewing their policy on the requirement for collection of wastewaters around lakes in Alberta.}

2. Confirm grants available to the village, or Lagoon Commission, and requirements for those grants to be provided. *{At this time, only the Detailed Design and Tendering of the Project are receiving a Water for Life (W4L) Grant in the amount of 69.22% of eligible costs. If the Project is re-tendered and firm prices received from a qualified contractor, the Commission will then apply to Alberta Transportation for an additional W4L Grant for the construction of the Project. Approval is required from Alberta Transportation for any increase to the W4L Grant.}*

Engineering Questions

 The proposed system will have maintenance on the lines, check valves, and pumps. In addition, homeowners will need to invest money to tie into the system. If everyone tied into the system, the homeowner investment will likely exceed \$2,270,000 (227 lots at \$10,000 each). What is the total cost of the system, broken out into homeowner and village costs? Please include and breakout forecasted annual maintenance, based on experiences from other villages.

{Any project, after it is built, has cost to Operate and Maintain the project. There are now 2 components to the project that need to be operated and maintained. There is the portion on PRIVATE PROPERTY (holding tank, pump, pump controls/electrical, piping/valving/back-flow prevention, service line to property line, etc. on private property) and this is the responsibility of individual lot owner. The amount spent each year by the resident is up to the resident. Some residents will have a specific level of O&M and some residents will be less specific. It is up to the individual lot owner to determine the level of annual O&M, based on the amount and type of wastewater that is permitted to enter your holding tank.

The second component of Operation & Maintenance is the responsibility of the Commission for the Wastewater Collection and Transmission Lines and the Wastewater Lagoon System. If the Project was to proceed the Commission would prepare an Annual O&M Budget for the North 43 Collection and Transmission System and Lagoon System that would include the SV of Ross Haven. At this time, this proposed Annual O&M Budget is based on O&M costs from installations that occurred in previous installations, The O&M Costs directly associated with the SV of Ross Haven are expected to be \$80,000 per year.

In addition to the Annual O&M Costs, the residents are also responsible for any improvements on their private property and the SV of Ross Haven is responsible for any Capital Cost of the Collection and Transmission System over the W4L Grant received for the Project.}

2. With the total cost of the system in mind, have alternate systems been considered?

{A low-pressure sewer system is often used in retrofit situations where construction of a gravity sanitary sewer is considered not viable due to factors that may include available space for sewer trenches, potential impact on roads/pavement, topography disruption to residents or capital cost. Though a full design and cost projection was not developed for a gravity sewer system in this instance, a similar exercise was completed for other Alberta communities and revealed costs for a retrofit gravity collection system to be 2-3 times the cost of a low-pressure sewer system.}

3. Has the head pressure from the top of the hill to Parkins Avenue been considered? Will a pump installed in a homeowner's tank be able to exceed the head pressure? Will several homeowners' pumps need to pump to exceed the head pressure?

{The design of low-pressure sewer systems recognizes that homes are at different elevations and as such, the elevation of the line will vary throughout the system. It is important to both standardize pumps and ensure that air does not get locked in the system. As not all pumps are compatible and with the variation in pumping elevation, there is a risk of locking out lower elevation pumps for a period. Therefore, the North 43 Lagoon Commission has standardized pump type and size in addition to requiring tanks sized to have sufficient storage, so backups will not occur if pumps are impeded by those at higher elevations. These considerations led to the selection of Orenco pumps for this system during the Preliminary Design. Air release valves are also planned to be installed at the highest points of the system to automatically release air that can build up.}

4. Will a lift station be required in the future?

{There is no need for a lift station to serve the Summer Village of Ross Haven given that the recommended system will be a "low pressure wastewater system". This low-pressure system can be expanded to allow for additional development and/or developments in the Ross Haven and Gunn areas. The overall system is designed to handle approximately double the number of current lots in Castle Island, Yellowstone, Ross Haven, and Gunn area.}

5. Was an engineering review completed by an alternate engineer?

{To date, the following Engineering Consultants have been engaged for the various Phases of the Project: Study and Conceptual Design – DCL Siemens Engineering Ltd; Pre-Design - MPE Engineering Ltd.; Detailed Design/Construction Services (Gunn Area) – OPUS Stewart Weir Ltd.; Detailed Design/Construction Services (Ross Haven) – Stantec Ltd.; Construction of the Gunn Area Project was completed by Tyschuk Construction Ltd.}

6. If the system does not work as intended, does the engineering firm have insurance to cover the additional costs needed to make the solution workable?

{A requirement for the selection of an Engineering Consultant is the need for Errors and Omissions Insurance (EOI) and all Consultants engaged for this project have EOI. If there are concerns with the project the Commission can review the situation with the Engineering Consultant and if an amicable solution cannot be found, the Commission has the option of legal action.}

7. What warranty period exists with respect to the engineering?

{There is no specific time outlined in any contract with the Consultant, but this is a matter that can be decided by the courts.}

8. Was installation of water lines at the same time considered? What would those expected costs be? (*The Summer Village of Ross Haven has received questions from residents regarding the potential for installation of a water distribution system. While a water distribution system has not been contemplated as part of this project, it is expected that such a system, not sized for fire protection would have a similar cost to the sewer system. However, it would also require a potable water storage reservoir and pumping station. At this time no consideration has been made for a water distribution system.}*

Homeowner Questions

1. At what point is the equipment a homeowner's responsibility versus others?

{The homeowner will own and maintain the system on private property, including the service line, tank, and pump (a design-compliant tank and pump system standard was previously provided to the Summer Village as part of a public information package). While the service life of tanks and pumps will vary based on usage, pumps will often last for approximately 10 years, and new tanks may last for 50-75 years or longer.

{Council Commentary: The cost for the homeowner to install and connect the pump, including electrical will vary by household. Estimates that have been received in the village have ranged between \$7,000 and \$15,000 per lot. If we proceed with the project, the village will work with those desiring to connect and vendors to leverage volume discounts and reduce overhead.}

- 2. Are there any limitations to what types of tanks are needed to be used with this system?
 - a. Plastic tanks? {Any CSA Approved Tank is acceptable.}
 - b. Minimum tank capacity? {A minimum 500 gallons storage capacity is required.}
 - c. Minimum number of access points to the tank? {One}

3. What are the approved installation methods for tanks?

{The North 43 Lagoon Commission has accepted three methods of installation of the pumping system:

- a. Two compartment tank with pumping system installed in second tank (recommended).
- b. One compartment tank with pumping system installed in tank (recommended with filter sleeve which requires more homeowner maintenance).
- c. One compartment tank with pumping system adjacent to tank in a manufacturer supplied pumping cylinder. Storage is handled by the one compartment tank.}

4. In winter months, if the system is not used frequently by a homeowner, does the pump need to be pulled? {The homeowner should undertake a Risk Assessment and undertake whatever activities they are confident with. Some homeowners have not taken any specific actions; some have just used the pump in the holding tank and pumped down to the lowest level. Each installation and each homeowner is unique and there is no hard and fast rule.}

5. How often does the pump need to be cleaned or serviced?

{The homeowner will own and maintain the system on private property, including the service line, tank, and pump (a design-compliant tank and pump system standard was previously provided to the Summer Village as part of a public information package). While the service life of tanks and pumps will vary based on usage, pumps will often last for approximately 10 years, and new tanks may last for 50-75 years or longer.

The homeowner must ensure that no deleterious materials go down their drains, as they can damage and/or clog the pump or clog the check valve at the end of the pump, and potentially cause sewer backups. Items such as wet wipes, sanitary napkins, floss, and other hygiene products are known to clog and damage pumps, with repair costs often potentially exceeding \$2,000, and pump replacement costs being in the order of \$5,000. A two-compartment holding tank is recommended so that these or other materials have the chance to settle out prior to entering the pump, thereby reducing the risk of pump failure.}

6. How many check valves are recommended to be installed and where? What is the maintenance and frequency for these check valves?

{One double check value after the pump and prior to service shut-off value at property line. It should be checked yearly as per the guidelines provided by the check value manufacturer.}

7. If there is more than one check valve to ensure no backups, how do you know if one check valve has failed? *{Failure is recognized by wastewater back flowing into tank.}*

8. Can items such as dental floss, sanitary napkins (not supposed to be in the system) or other items cause a check valve to fail? *{See answer to question 4.}*

9. Does homeowner insurance cover sewer backup from this type of system? Are there limitations to this coverage? *[Each resident should check with their Insurance Provider as to coverage].*

10. In the event of a power failure, what are the impacts (if any) on the system.

{In the matter of a power failure the pumps in the various holding tanks will not be able to operate, unless each individual lot owner has a back-up power supply. Therefore, the amount of wastewater that can be accepted by the holding tanks is dependent on the level in the holding tank at the time of power failure and the duration of the power failure. Each homeowner should do a Risk Assessment at the time of the power failure; check level in holding tank, minimize wastewater generation, etc. It should be noted that if there is a power failure in the area, this will also stop a water pump from pumping water and generation of wastewater.}

11. How often is it recommended that the septic tank be pumped out to remove built up solids. *{This is dependent on the wastewater generated by the homeowner; size of tank; type of tank – 1 compartment vs 2 compartment. Tank solids build up should be monitored by the homeowner and pumped out as required and when the homeowner decides.}*

12. Will there by a mechanism or checks in place to ensure that homeowner's septic tanks are not leaking? *{Council Commentary: Homeowners are responsible to ensure their holding tanks are operating correctly. Council reserves the right to inspect holding tanks on personal property if there are concerns with their operation.}*

13. What is the lifespan or replacement schedule of the homeowner components? {See question 4 above.}

14. If a lot is sold or transferred to new owners, will the village place a lien on property forcing future owners to tie into the system.

{Council Commentary: If the project proceeds, the SV of Ross Haven council will not pass a bylaw that forces new homeowners to tie into the system.}

Sewer Main Questions

1. After the system is installed, who is the owner of the system – the village or the lagoon commission? *{The low-pressure sewer system is being developed by, and will be owned and maintained by, the North 43 Lagoon Commission. Presently, the Commission has contracted Lac Ste Anne County for system operations for items such as monitoring, reporting, routine maintenance, and response to issues where they arise.}*

2. If there is a leak in the system, that is NOT the responsibility of the homeowner, who is responsible for this? *{The North 43 Lagoon Commission of which the SV of Ross Haven is a member.}*

3. Does the owner require insurance to cover potential future issues? If so, what is the cost of insurance. *{Each resident should check with their Insurance Provider as to coverage.}*

4. What are the maintenance requirements and costs of the sewer main components? Valves, clamps, pipe, etc. {*The North 43 Lagoon Commission prepares an Annual O&M Budget that provides yearly Small Repairs Budget item, Major Line Repairs, etc.*}

5. What is the lifespan or replacement schedule of various components? {*Wastewater transmission lines situated in the municipal right-of- ways have an expected life of 75 to 100 years. Pumps and electrical systems on private property have life expectancy of 15 to 25 years.*}

6. Is there an opportunity for the system to be run like a utility? For example, the utility company gets the grant money and other funding, installs the sewer main, is responsible for it, etc. Homeowners only pay if they choose to join.

{The North 43 Lagoon Commission operates the system as a Utility and allocates the financial responsibility of the operation among its members on a proportional basis. To meet the financial obligations the members must ensure that they meet their assessments. A Utility cannot operate without revenue.}

Lagoon Questions

Currently, all residents are paying an annual amount of \$175 for the Water / Sewer fund. Is that money being collected for future use? If so, how much money has been saved. If this money is being spent, what is it spent on? {Council Commentary: If the project proceeds, the SV of Ross Haven council will allocate 100% of all money that was previously collected from this Water Sewer fund towards the initial cost of this project.}

2. What communities, villages, or other municipalities are currently using the lagoon? {Low pressure sewer systems service hundreds of thousands of homes across North America in many communities. Locally, low pressure systems are present in the Hamlets of Rochfort Bridge, Greencourt, Cherhill, Glenevis and Darwell. All these systems are operating reliably and have been for years.}

3. Are dumping fees expected to increase?

{The North 43 Lagoon Commission currently charges septage truck haulers \$55.00 per legal load. The 2022 legal truck load rate will be increased to \$65.00 on January 1, 2022. It is anticipated that truck haul rates will continue to increase in 2023.}

4. How long will the lagoon fees remain the same? What variables will cause the lagoon fees to increase? {The Commission prepares Annual O&M Budgets for the Lagoon and the Collection and Transmission System. Currently the only significate variable in the preparation of the budgets has been inflation.} 5. Will the lagoon run out of capacity? If so, when is it expected to need more capacity?

{The existing North 43 Lagoon System is the treatment facility where the wastewater from the SV of Ross Haven is treated. The wastewater currently enters the facility via septage trucks and low-pressure system currently connected to the Summer Villages of Yellowstone, Castle Island and Gunn. If the Ross Haven collection/transmission system is constructed, wastewater from the SV will be conveyed by the same pressure pipe system. The current users of the North 43 Lagoon System are the members of the Commission: SV of Yellowstone, SV of Castle Island, SV of Ross Haven, and Lac Ste. Anne County (Gunn Area).

The capacity of the Lagoon System is such that it can accommodate about double the amount of wastewater that currently is being hauled or piped to the facility. This doubling of flow will only occur if more Summer Village residents become "full time" residents and additional land development occurs in the collection/transmission system. This growth of "full time" residents and land development will be over several years. There are no immediate concerns that the lagoon facility needs to be upgraded.}

- 6. As more people tie into the system, more fluids may enter the lagoon than are entering from septic trucks. For example, homeowners may not be as concerned about water conservation, or perhaps grey water that is handled differently may be diverted into this system. Has this been considered when reviewing lagoon capacity? {Yes}
- 7. Can anything be done to minimize future cost increases? Are there alternate ways to treat the sewage that could minimize required expansion?

{The North 43 Lagoon Commission will be required to meet all Provincial Requirements.}

Benchmarking

1. Please identify the villages that have tied into the system and the following data from each:

a. Number of lots within village

{All lots within SV of Yellowstone, SV of Castle Island, and County lots adjacent to the collection and transmission lines are provided with a service connection. Connection to the system is not mandatory but financial obligations have been imposed by the Summer Villages on their serviced lots. The Summer Villages of Yellowstone and Castle Island, and Lac Ste Anne County have accepted their financial responsibility and it is not dependent on the number of connections made to the system.}

b. Number of lots connected to date on system:

{Castle Island 16/19 lots (84%), Yellowstone 45/165 lots (27%), Lac Ste Anne County 41, Waters edge 86/132 (65%) are connected}

c. Number who have tied in. Provide comments as to this number compared to the number of lots. *{Number of lots connected may be a function to number of permanent residents.}*

d. List known issues from the sewer main or from homeowners. We have heard rumors of pumps needing to be replaced numerous times, basements filled with sewage, and problems with the sewer main lines within our neighboring villages.

{There have been a small number of issues regarding the connection and operation of the new system, but they have been minor connections issues to the overall system.}

e. Provide list of similar municipalities that have this system. Provide similar data as identified in the previous point.

{Low pressure sewer systems service hundreds of thousands of homes across North America in many communities. Locally, low pressure systems are present in the Hamlets of Rochfort Bridge, Greencourt, Cherhill, Glenevis and Darwell. All these systems are operating reliably and have been for years.}

Newspaper Articles

{Council Commentary: Hundreds of thousands of homes have tied into low pressure systems across North America. We do not hear about all these success stories in the news.

The summer village of Ma-Me-O Beach on Pigeon Lake, as identified in various press releases, has had issues with its sewer installation and operation. It was forced to use a shallow sewer line system because that village is located on 7 to 10 meters of sand. Ma-Me-O Beach's issues can be attributed to the fact that its sewer distribution lines could not be buried below the frost line due to topography, and although heat trace lines were specified for this design, the contractors either did not install heat trace, or it was installed incorrectly. This issue is being rectified. The neighbouring villages of Crystal Springs and Grandview have wastewater systems like the one proposed for Ross Haven. Conversations with the mayor/deputy mayors of those villages reveal that they had good experiences with the installations of their systems. Over 2 years have passed, and they claim their people are very happy with how things are working.

Numerous other villages around Pigeon Lake, and villages around Sylvan Lake and Lac Ste Anne, have installed a lowpressure system without significant issues. Locally, low pressure systems are present in the Hamlets of Rochfort Bridge, Greencourt, Cherhill, Glenevis and Darwell. All these systems are operating reliably and have been for years.}

Summer Village of Ross Haven - Input on Sewer Project

It is preferred if you complete this survey by using the QR Code below, or by following the link available on the Ross Haven web page.



Please ensure you fill out both sides of this sheet and return to the Summer Village of Ross Haven. Mailed responses must be received by February 2.

Your responses should be representative of all title owners for your lot. All <u>individual</u> information and responses will be kept confidential.

Personal Information

| 1. | First and Last Name | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
| 2. | Ross Haven Street Address: | | | | | | | | |
| 3. | Is your Ross Haven dwelling your permanent residence? Yes No | | | | | | | | |
| Please provide your response to each of the following statements. Comments are optional. | | | | | | | | | |
| 4. | 4. The information provided in the "Sewer Project Questions and Answers" is clear. | | | | | | | | |
| $\left(\right)$ | Strongly AgreeAgreeNeither Agree Nor DisagreeDisagreeStrongly Disagree | | | | | | | | |
| С | omments | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

<< continued next page >>

5. Enough information has been provided to allow an informed decision on the sewer project.

| \bigcirc | Strongly Agree | \bigcirc | Agree | \bigcirc | Neither Agree Nor Disagree | Disagree | \bigcirc | Strongly Disagee | |
|--|-------------------|------------|-------|------------|-------------------------------|----------|------------|---------------------|--|
| Com | ments | | | | | | | | |
| | | | | | | | | | |
| Proceeding with the sewer project is in the best interest of the village. | | | | | | | | | |
| \bigcirc | Strongly Agree | \bigcirc | Agree | \bigcirc | Neither Agree Nor Disagree | Disagree | \bigcirc | Strongly Disagee | |
| Com | ments | | | | | | | | |
| | | | | | | | | | |
| 7. If the sewer project proceeded, and given the proposed fees to connect, you are intending to connect to the sewer system. | | | | | | | | | |
| \bigcirc | Strongly Agree | \bigcirc | Agree | \bigcirc | Neither Agree Nor Disagree | Disagree | \bigcirc | Strongly Disagee | |
| Com | ments | | | | | | | | |
| | | | | | | | | | |