



Summer Village of Grandview

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October 16, 2017

To: Residents of the Summer Village of Grandview

Re: Wastewater System Update and Request for Information

This letter includes the latest update to our wastewater project, a summary of the system we are installing, and a request that all lot owners provide information for the next phase of the project. Your continued cooperation is appreciated as we strive to keep the costs of this project at a minimum.

As previously announced on our website (www.grandview.ca), construction work has started on the local wastewater line through the summer villages of Poplar Bay and Grandview. This work has commenced at the north end of Poplar Bay and will progress to the south end of Grandview. As part of this project, a pipeline segment will also be constructed from the Poplar Bay line to the new regional pump station, which will be located adjacent to Hwy 771. The construction of the local lines is anticipated to be completed by mid-November. The regional line from the Village at Pigeon Lake to the new pump station (Regional Line Phase 2) has been designed, and the work will soon be tendered with a completion date in 2018.

This winter, the engineering design and tender package will be completed for the service connections to each lot. In Grandview, our current plans are for the service line to be taken to each holding tank. The location of the CC valve, whether in the road allowance or at each holding tank, is still under consideration. In any event, the service connection to the holding tank will be constructed and owned by the Summer Village. This design is different from that found in most municipal utilities, where the CC valve is located at the property line and the lines on each lot are owned and installed by the residents. As we have discussed previously, we have chosen this alternate design for several reasons:

1. It will be easier and cheaper for one contractor to make all the service connections than for each resident to hire a contractor individually.
2. There will be less construction activity in the summer village as this method greatly reduces the total number of excavations required.
3. The construction work will be done in a timely and organized fashion, limiting the disruption to the residents.
4. With the service connection owned by the summer village, grant funding will cover two-thirds of the cost; otherwise, residents would be responsible for 100% of the cost.
5. If repairs are ever required on the service connection line, the summer village—and not the resident—will be responsible for the costs, unless caused by negligence.

The contractor will directionally drill the service line (wherever feasible) from the local wastewater line to the holding tank. The connection will be made to the tank at this time, along with any required tank or riser insulation work.

The excavations will be filled in and a layer of topsoil and seeded with grass applied. Any additional landscaping, fence repairs, tree replacement, etc. will be the responsibility of each resident. We have decided to take this approach in order to minimize the costs for all residents as experience in other municipalities has shown that when the contractor is responsible for landscaping, the costs go up considerably.

The cost for the service connection for each resident will depend on the results of the tendering process, but it will be affected by the distance from the property line to the holding tank and by the difficulty in accessing the holding tank. Hence, we cannot give you exact numbers yet, but we are trying to minimize the connection costs for each resident. Our costs for the segments already bid have so far been lower than expected, so we are expecting the overall cost of the project to be lower than the original estimate.

All infrastructure from the holding tank to the cottage, including the pump assembly paid for by the Hamblin Trust, will belong to the owner. You will be responsible for the cost of providing electrical power to your tank (if the tank is not already wired), installation costs for your pump, the cost of the control panel to be installed adjacent to your tank, the cost of a secondary tank (if required), and tank insulation costs (if required). We will be providing lists of electrical contractors for any work to be done by the owners. Again, depending on the results of the bid package, the service connection fee charged to each resident will be determined depending on the length of the service line and the difficulty of the service connection.

Holding Tank Requirements

The Summer Village of Grandview will be using a low-pressure system with a septic tank effluent pump (referred to as a STEP system). This system was recommended by the design engineers based on its success at other locations in Alberta and elsewhere. A two-chamber tank is required to provide for bacterial processing of the sewage into clear effluent and solids. The effluent will be pumped to the municipal system for ultimate disposal at the Mulhurst lagoon. The solids will remain in the first chamber and need to be cleaned out every five to ten years, depending on usage. The main advantages of a STEP system are the low costs of the pump, long pump life, and low maintenance for the collection lines since they carry only fluid and not sediment.

The system requires that each residential connection operate through a two-chamber tank. If you already have a functioning two-chamber tank with a minimum capacity of 1200 gallons and two risers, it will probably be satisfactory for our system.

If you have a functioning single-chamber tank with a minimum capacity of 1000 gallons, you will be able to continue using it if you add a small secondary chamber beside it to serve as the pump vault (see Figure 1). For this purpose, our engineering consultants have recommended a polymer riser (30" diameter) with a crossover pipe to allow the effluent to overflow from the existing tank to the new secondary chamber. (A 750 gal tank is satisfactory but may require a 500 gal concrete pump vault in order to satisfy storage requirements.) At the same time as the service connection is made, the contractor will be able to install this secondary chamber, connect the two tanks (under a rate schedule), and then backfill the

excavation. We plan to arrange for the purchase a supply of these secondary chambers in bulk (either through the contractor or the Summer Village) to reduce the costs to residents.

If you will be installing a new tank, it must have a minimum capacity of 1200 gallons with two chambers and two risers (to allow for the installation of the pump assembly). We are also planning for a bulk purchase of suitable tanks to obtain discount prices. If you have a two-chamber tank with only one riser, you will need to install a secondary chamber for use as the pump vault, as is required for a single-chamber tank.

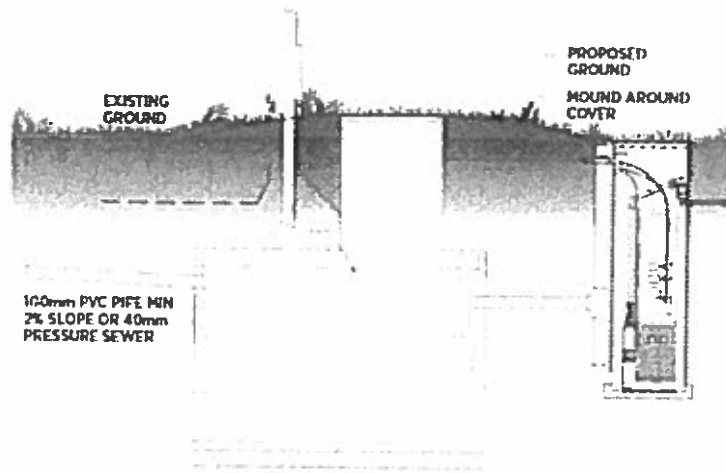


Figure 1. Retrofit of a single chamber tank with a secondary “pump vault”

Undeveloped Lots

For owners of undeveloped lots, the service connection will go only as far as the property line or else be drilled to a predetermined location on the lot to facilitate future connection. If and when the property is developed, the owner will be responsible for installing a new two-chamber tank and getting it connected to the CC valve to obtain wastewater service. If you are in this situation, you need to decide on the best location of the service connection on your property so future connection will be easy. If you wish, you can choose to have the service connection pipe brought to some point within the boundary of the lot where you are planning for a future tank to be installed. This would be a wise choice if, for example, you wish to preserve trees along your property line. If you are planning to develop your property in the near future, you may wish to consider installing a holding tank at the time of construction of the service connection in order to take advantage of the opportunity to coordinate the two installations.

Information Request from Residents

Any information we are able to supply to the contractor regarding on-site locations of tanks and potential impediments will reduce overall costs since it will eliminate the need for the engineering consultants to survey each property. You can help by providing some information about your property.

Attached is a form we are asking each resident to complete to show the location of the tank relative to the front property line and the type and capacity of the existing holding tank. For undeveloped lots, the

sketch will show the proposed approximate location of the service connection (on the property line or at some point on the property) and whether a new tank is to be installed. We have also included an example sketch of what we are expecting for each lot.

This information will allow for project planning and give an indication of the number of tanks required. As previously mentioned, we want to bulk purchase both new holding tanks and secondary pump vaults (either through the contractor or the Summer Village) to achieve lower costs for our residents. **Please be assured that this information is only for preliminary design purposes and you may modify this information a later date. A firm commitment must be made prior to the start of the construction period next year.**

If you have an existing tank nearing the end of its service life or in a location which may inhibit future development, it may be opportune to install a new holding tank now rather than later. This would also apply to tanks that do not meet the plumbing code or are known to be failing (leaking). Replacement now may reduce your costs in the long run and also have an impact on your property values as having a non-compliant tank may affect the future selling price.

On the attached sheet, please provide a sketch of the holding tank location including a distance from the property line. Include any buildings, trees, fences, etc. in the vicinity of the holding tank that may affect the construction. The sheet also provides space for you to indicate the type of holding tank you have and its capacity. This information will be used to determine the need of the secondary pump vault and for cost estimating by the contractor. If you wish to install a new tank, please indicate this intention and show its desired location.

If you are uncertain about some of the required information, please fill in whatever information you know and return the form to the Summer Village Office. We can arrange for someone to look at your lot and provide the missing information.

Hamblin Trust

We have previously announced that permission to wind up the Hamblin Trust has been granted. The funds will be used to fund the summer village's share of the local wastewater system and to purchase the pump assembly for each resident. We are all grateful for Mayor Hamblin for his generosity in providing this legacy to us. As a result, the cost burden to each resident will be significantly reduced. If, as a result of a low bid, any of the Hamblin Trust funds are not required for the municipal costs of the project, the available funds will be used to further reduce the costs to residents for such items as the pump installation costs or the purchase of the control panel. In any event, each lot—including undeveloped lots—will receive equal benefit from this trust.

Please return your completed form by mail or scanned copy by email (information@svofficepl.com) no later than the end of November so that we can complete the bid preparation process. If you require further information on this project, please do not hesitate to contact the Summer Village Office (780-586-2494) or Mayor Don Davidson (403-860-1050).

Thank you for your continued support for this project. We can look forward to a functioning wastewater system in the near future. Be sure to watch our summer village website for updates on this project.

Yours truly,

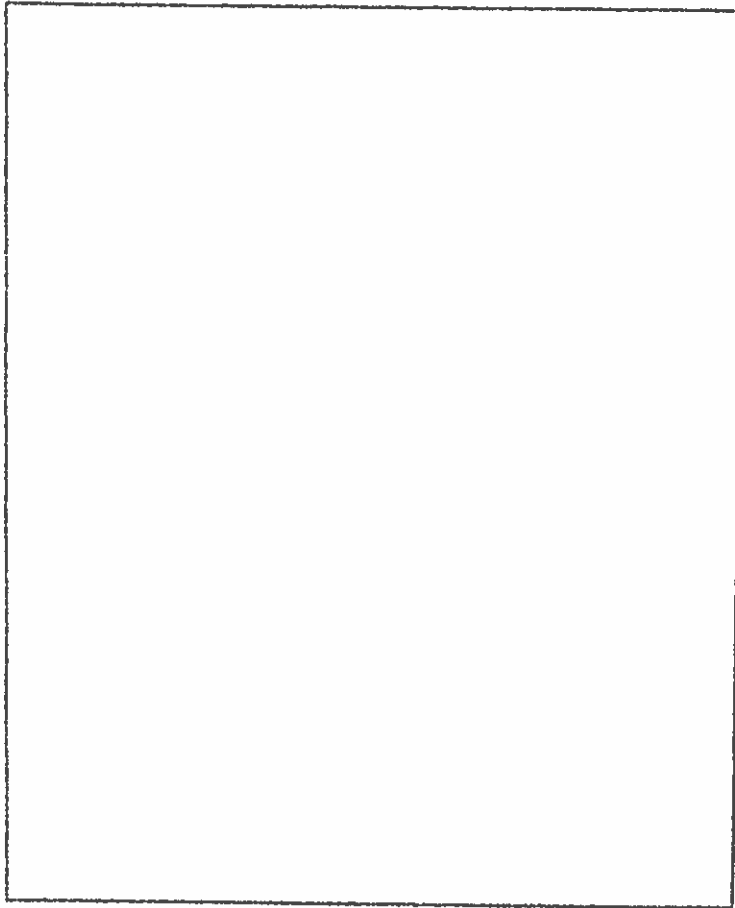
Your Summer Village Council and Administration Staff

Grandview Wastewater Project

Service Connection Information

Name: _____ Phone: _____

Grandview Address: _____



Sketch tank location showing distance from front property line. Also show location of driveway and any trees or buildings near holding tank.



Holding Tank Information: (Check all appropriate boxes)

- No holding tank now (undeveloped lot)
- Existing tank unusable—will be decommissioned
- Existing septic field (will be decommissioned)
- Existing single-chamber tank
- Existing two-chamber tank with one riser
- Existing two-chamber tank with two risers

NOTE: For a single-chamber tank or for a two-chamber tank with only one riser, a secondary tank will need to be added.

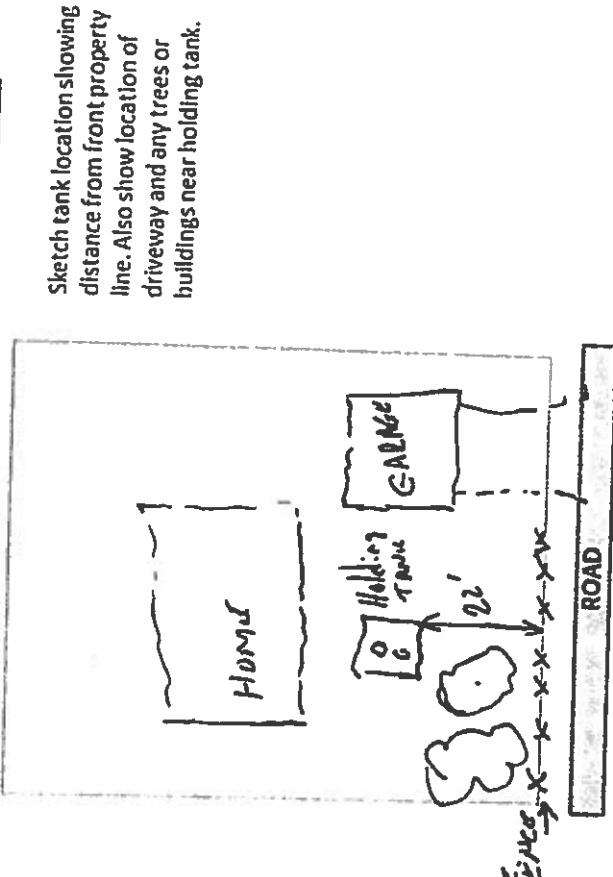
Size of existing tank if applicable: _____ gallons

New tank wanted

Additional Comments: (use back if necessary)

Grandview Wastewater Project
Service Connection Information

Name: EXAMPLE 1 Phone: 780-586-XXXX
Grandview Address: 333 LAKESHORE DR.



Sketch tank location showing distance from front property line. Also show location of driveway and any trees or buildings near holding tank.

Holding Tank Information: (check all appropriate boxes)

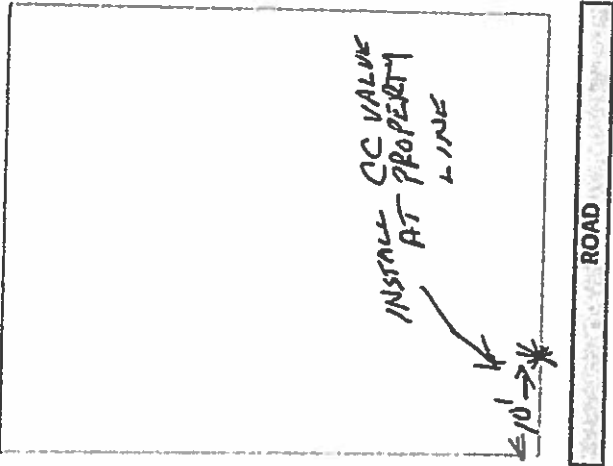
- No holding tank now (undeveloped lot)
 - Existing tank unusable—will be decommissioned
 - Existing septic field (will be decommissioned)
 - Existing single-chamber tank
 - Existing two-chamber tank with one riser
 - Existing two-chamber tank with two risers
- Size of existing tank if applicable: 1600 gallons
- New tank wanted

NOTE: For a single chamber tank or for a two chamber tank with only one riser, a secondary tank will need to be added.

Additional Comments: (use back if necessary)
FENCES AND TREES ON PROPERTY LINE

Grandview Wastewater Project
Service Connection Information

Name: EXAMPLE 2 Phone: 780-XXX-XXXX
Grandview Address: 444 LAKESHORE DR.



Sketch tank location showing distance from front property line. Also show location of driveway and any trees or buildings near holding tank.

Holding Tank Information: (check all appropriate boxes)

- No holding tank now (undeveloped lot)
 - Existing tank unusable—will be decommissioned
 - Existing septic field (will be decommissioned)
 - Existing single-chamber tank
 - Existing two-chamber tank with one riser
 - Existing two-chamber tank with two risers
- Size of existing tank if applicable: _____ gallons
- New tank wanted

NOTE: For a single chamber tank or for a two chamber tank with only one riser, a secondary tank will need to be added.

Additional Comments: (use back if necessary)
UNDEVELOPED LOT.

NO TANK WILL BE INSTALLED AT THIS TIME