

Summer Village of Grandview Wastewater Project

Pump Installation Details

Introduction

Phase 1 (mainline installation) and Phase 2 (on-lot tanks, insulation, and service connections) of our project is essentially completed, and we are now ready to proceed with Phase 3, the installation of the pumps and commissioning of the system. This phase is scheduled to start in June of this year. The following is an outline of the plan and associated costs.

Homeowner Responsibilities

Each homeowner is responsible for providing two electrical circuits to the tank location: one 20-amp circuit for the pump and one 15-amp circuit for the floats, control panel, and an electrical socket. The homeowner will also need to install a 4x4 post with a minimum of 3 feet above ground (usually adjacent to the second chamber of the holding tank). This post is for mounting the control panel and an electrical socket. This installation will require some trenching to run the wires from your cottage to the post. The post should be 6" away from the pump basin (secondary side of the holding tank).

If you prefer to have your post and control mounted next to your cottage or some other location, you will need to have underground conduit (1½" or 2") trenched in from the post to the tank. This conduit will enclose the wiring from the control panel to the holding tank for the pump, floats, and electrical socket. The control panel should not be installed directly on your house as the vibration of the pump activation will be disturbing.

It is recommended that an electrical socket be placed on a post adjacent to the holding tank riser for use if freezing ever becomes an issue with the tanks.

Under the provisions of Bylaw 272, every wastewater-producing lot must be connected to the Summer Villages wastewater system within one year of the commencement of operations of the system. This will put the connection deadline in June of 2020.

Pump Supply and Costs

Arrangements have been made for the bulk purchase of the pump packages, which include the pump, the bio-tube and filter assembly, the internal piping, and the control panel. The cost of this package is \$2978.85 (including GST). The Hamblin Trust will be funding the total cost of this pump package. Residents will own this equipment and be responsible for its care and maintenance. These pumps have a 10-year warranty and a good reputation for running trouble free.

As per the conditions of the windup of the Hamblin Trust, owners of undeveloped lots (including non-wastewater producing lots) will be entitled to the same share of the Trust as other residents received (\$2978.85 each). This amount will be credited to their tax account in 5 years (2024) unless development occurs prior to that date.

Installation of Pumps and Control Panel

A proposal has been received from a contractor for the installation of the pumps and connections to the control panel. This company is THS Septic and Civil Solutions from Rocky Mountain House. The proposal includes the supply of a check valve and a frost plug, the installation of the pump and floats, the mounting of the control panel to the owner-installed 4x4 post, connection of the panel to the two owner-provided electrical circuits, electrical connections between the panel and the tank components, calibration of the control panel and floats, and start-up of the system. It also includes the plumbing permit and the supply and

installation of an electrical socket. For reasons explained below, it does not include the electrical permit. There is a one-year warranty on this installation. THS's proposal is attached.

The cost to the homeowner for this pump and control panel installation work is \$2020 plus GST. The contractor will be invoicing the homeowner directly for the work. Should the homeowner agree to this proposal, a work order will be completed and provided at the same time as the Utility Service Agreement is signed. Under this arrangement, the installer will not have to track down the homeowner to get the required information for permits, etc. The homeowner will have to be available to switch on the circuit breakers after the control panel is installed; other than that, there should be no requirement for the homeowner to be on site. If any extra work is requested by the homeowner, these costs will be added to the invoice.

The proposal from THS includes electrical connections between the panel and the tank, which will be done by TKO Electrical from Wetaskiwin. Upon request by the homeowner, TKO will also complete the installation of the two required circuits. TKO can be contacted at 780-362-1471 for an estimate.

The costing of the THS proposal assumes that the property owner will provide the permit for the electrical work. Since most homeowners will need some wiring done inside their residence to provide the two required electrical circuits to the control panel, it would be cost efficient to include this indoor work and the outdoor system hookup under a single electrical permit.

Any property owner who occupies a dwelling can obtain an Owner-type electrical permit for approximately \$100. Under an Owner permit, the owner takes responsibility for the completion of the work but can still hire one or more contractors to do it. If applying for an Owner permit, indicate that the work includes installing one 20A circuit and one 15A circuit from the residence to the septic tank; hooking up the pump, floats, alarms, and control panel; and installing one outdoor receptacle.

Electrical permits for Grandview are issued by Superior Safety Codes, Red Deer. Phone 1-866-999-4777. Website: www.superiorsafetycodes.com Application forms are available online. A sample is attached.

If you would rather let the contractor obtain the permit, two permits will be required if segments of the work are done by different electricians as each will be then responsible for their portion of the work and will work only under their own permit.

The proposal being presented was obtained to take advantage of the economies of scale and to allow for an organized and cost effective installation program. THS has experience in installing this package at Pigeon Lake and has a good reputation for quality workmanship, as does TKO. Should the homeowner wish to make different arrangements for this installation, a pump package will be available for pickup in Edmonton. It should be noted that the pump and piping must be installed by a certified installer and the electrical hookup must be done by a qualified electrician. All work must be duly permitted and inspected.

It is strongly recommended that all residents use the services of THS for the pump package installation and control panel connection to ensure a consistent installation process and ease in future servicing.

Utility Services Agreement

In order to obtain wastewater services, property owners must sign a Utility Services Agreement and submit it to the Summer Village office. This document will also include a work order the property owner may optionally sign. The work order authorizes the recommended installer to install the pump package, make the electrical connections to the control panel, commission the pump, and provide the Summer Village Office with the pertinent information concerning the installation. Should the property owner decide to select another installer, then the property owner will need to provide a certificate of completion to the SV Office before the system can be activated.

Please note that under the terms of the Utility Services Agreement, any unpaid service connection fees or costs for on-lot services must be cleared before installation and connection can proceed.

System Start-up

In order to calibrate the floats and control panel, the holding tank will need sufficient fluid to cover the pump. THS will be advising on procedures for this start-up.

Hamblin Trust Wind-up

By signing the Utility Services Agreement, residents will be acknowledging that they have received their individual share from the Hamblin Trust and that they will have no further claim to any further benefit. Any residual amounts remaining in the Trust after each resident receives a share equivalent to \$2978.85, either in the form of the pump package as described below or, in the case of non-wastewater producing lots, as a credit on their tax roll, will be allocated to the Summer Village for the wastewater system. This is being done in accordance with the Court Order for winding up of the Hamblin Trust.

Summary

1. Costs for Phase 3

- Pump package with control panel: \$2978.85 (paid by the Hamblin Trust)
- Pump installation & electrical hookup: \$2020 plus GST (billed directly to owner by THS)
- Installation of two electrical circuits: to be arranged by homeowner

2. Homeowner actions

- Arrange for provision of the two required electrical circuits and installation of a 4x4 post adjacent to the holding tank or next to the cottage. This post is to be installed 6" from secondary riser. Discuss details of wiring installation with your qualified electrician.
- If control panel is to be mounted away from holding tank, then a 1½" or 2" electrical conduit must be installed underground between the holding tank secondary riser and the control panel location. In addition, a 4x4 post must be installed 6" away from the secondary riser for the electrical socket.
- Sign Utility Service Agreement with Summer Village
- Sign Work Order if accepting THS proposal for pump installation.
- Provide an electrical permit (either by applying directly for an Owner permit or by asking your electrician to obtain a Contractor permit).
- When installing the required wiring, ensure that sufficient surplus wiring is available both at the holding tank and the location of the control panel for connections. It is recommended that 30 inches be available at each end for the required connections.
- If undertaking the trenching for the electrical circuits yourself, be sure to contact Alberta One Call to have the utilities marked.
- Homeowner will be contacted by THS for information concerning details of system commissioning.
- Homeowner will need to turn on power after circuits are connected.

Need Help? Don't hesitate to contact Don Davidson (403-860-1050) if any help or clarification is required.