



ENVIRONMENT ONE (E/ONE) GRINDER PUMPS – DH071 & DR 071 MODELS

Preamble: The developer of Wolf Creek Villages has selected the E/ONE GRINDER PUMP as the preferred equipment for handling sewer requirements for all home owners in the development. The pump and its associated equipment is well engineered and a proven product. To ensure optimum reliability it is imperative that these pumps be installed by competent personnel who will adhere to detailed installation, commissioning and start up procedures. Failure to follow these procedures may lead to warranty issues and system unreliability.

The developer of Wolf Creek Villages has a preferred contractor in place with trained personnel to install commission and start up the E/ONE GRINDER PUMPS for the home owners.

The following two procedures will be utilized by the Contractor:

- 1. Installation Procedure**
- 2. Grinder Contractor installation and Costs**
- 3. Commissioning and Start up Procedure**

Additionally it is highly recommended that the home owner consider utilizing the Yearly Maintenance (system inspection test, flush) Program offered by the Contractor. For details refer to Yearly Maintenance Program.



TANK & PUMP INSTALLATION PROCEDURE

1. The home owner and Wolf Creek Villages (Contractor) will agree on a suitable location for Tank & Pump installation considering proximity of inbound and outbound services, driveway slabs, grade/slope etc. (Building grade certificate will suggest easiest and best location for mechanical room for house, this could avoid extra expense to home owner and builder.)
2. Upon purchase and delivery of the E/ONE GRINDER PUMP the Contactor shall inspect unit for any shipping damage and provide adequate storage until both parties agree on installation timing.
3. The Contractor will ensure all pump vendor supplied hardware and necessary civil, mechanical and electrical materials are purchased and ready for installation purposes.
4. Prior to any excavation the Contractor in consultation with the home owner are responsible for ensuring all underground services are located. **Call Alberta One Call.**
5. The contractor will ensure installation of mechanical and electrical work requirements are carried out by qualified personnel and in accordance with plumbing and electrical code requirements.
6. Once all preparation and planning requirements are met the Contractor will commence with the installation of the unit. **The Contactor will follow the pump vendors detailed installation procedures. These procedures are supplied with the pump. Refer to DH071 & DR071 Installation Instructions Manual**
7. The Contractor will advise the home owner of the commissioning and start up procedure requirements for the unit.
8. Upon completion of unit installation and commissioning/start up procedures the Contractor will ensure the home owner's site is left in a satisfactory condition whereby excavation area is groomed to home owners satisfaction and all surplus/leftover materials are removed.
9. The Contractor will ensure the E/ONE GRINDER PUMP MANUAL is turned over to the home owner ensuring sufficient understanding of the contents.
10. Wolf Creek Villages (Contractor) shall advise the home owner the importance of a Yearly Maintenance Program along with Spare Pump availability. A copy of the program will be left with the home owner. If in agreement the home owner and Wolf Creek Villages can then set up

a yearly maintenance program. (It is highly suggested as a home owner to clean and flush your tank and e-one grinder at least once a year.)

Grinder Contractor responsibilities & Costs

Thompsons Ditching out of Lacombe has been qualified to install and maintain e-one grinder pumps. The estimated cost for 2014 is \$13,500 + GST per home. This estimate is based on the following parameters:

- Installation of piping from house to vault (up to 20 ft.)
- The vault installed as per manufactured specifications with standard panel.
- Discharge line from vault to tie in point at property to house (up to 60 ft. With 40 ft. Hose inside house)
- Vault flushed and checked for debris before grinder install
- Grinder installed and flow tested
- Service agreement

Not covered by warranty:

- High level alarms caused by unsuitable material in vault. (Refer to owners guide)
- Extensions for adding onto vaults to correct grades.
- Service calls to pull pumps to be sent in for repairs or warranty
- Water turned on before service agreement and grinder test by plumber, home owner or contractor.
- Damages to curb stops before installation.

- **Installation Costs as described - \$13,500 + GST**
- **Service Calls \$150.00**
- **Service Calls with pump being sent away \$250.00**

- **Contacts : Thompsons Ditching Lacombe – 403-782-5911**
- **Emergency Calls- Steve Thompson – 403-588-0615**



PUMP COMMISSIONING/START UP PROCEDURE

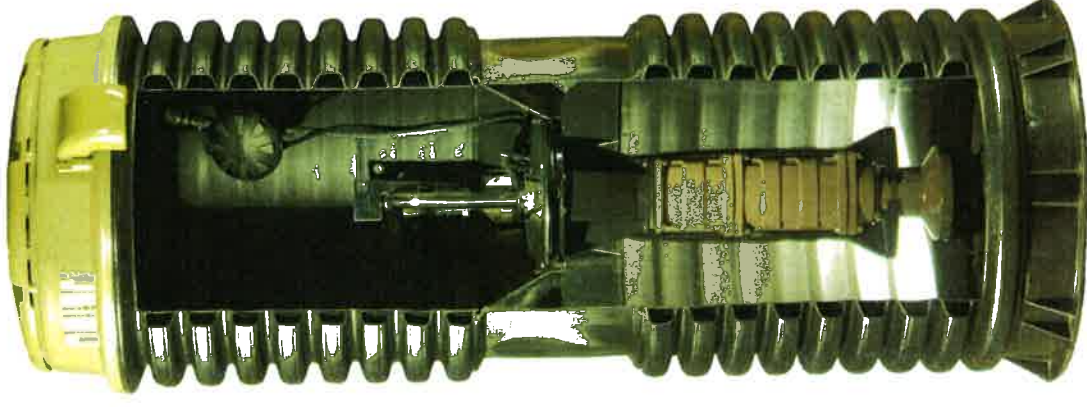
1. Prior to connecting the 4 inch DWV (House main) to the pump/column a thorough flush from all house fixture drains must be carried out ensuring all construction debris has been removed. This activity will be carried out during installation procedure
2. With all connections complete, specifically, 4 inch inlet, 1 ¼ inch outlet, electrical (quick connect) the unit can now be fully commissioned.
3. The contractor will open both curb stop valves (Potable water, Sewer)
4. The contractor will fully open the E/ONE GRINDER PUMP discharge valve (2 inch valve bottom at bottom of dry chamber). **Note: This valve must never be closed while pump is operating**
5. **MODEL- DH071** Turn on ALARM circuit breaker at E/ONE GRINDER PUMP Panel.
6. Allow approximately 40 – 50 gallons of potable water to enter the bottom chamber from the house connection until alarm activates then shut off water.
7. Record/confirm Alarm functioning - auditable/red light (Yes _____ No _____)
8. Turn on E/ONE GRINDER PUMP circuit breaker and the pump will start immediately. Monitor the pump for unusual noise etc.
9. Connect Amp meter to red wire (pump power) in E/ONE GRINDER PUMP circuit panel box. Ideal pump Amp draw should be 5.2 – 5.4 amps under pump load.
10. Record Amp draw (_____).
11. After approximately one minute the alarm will shut off and the pump will run a further 3 – 4 minutes then shut down on low level
12. Repeat this procedure to ensure alarm and pump activate again.
13. Record Amp draw (_____). Alarm functioning (Yes _____ No _____)
14. **MODEL DR071** Allow approximately 40 – 50 gallons of potable water to enter the bottom chamber from the house connection.
15. Turn on the Pump and Alarm power circuit breakers. The pump and alarm will come on immediately. Monitor the pump and alarm until both shut down.
16. After approximately one minute the alarm will shut off and the pump will run a further 3 – 4 minutes then shut down on low level
17. Record Amp draw (_____). Alarm functioning (Yes _____ No _____).
18. The contractor should include the home owner in the above activity – awareness and understanding for the customer is paramount. As well **reiterate** the need to read and fully

The Pressure Sewer System

Owners Guide

e one

Environment One Corporation
A Precision Castparts Company



The Pressure Sewer System

A pressure sewer system is used in certain areas because of the unsuitability and/or cost of a conventional sewer system.

The pressure sewer system consists of a pumping unit installed on your property which is connected to a network of pipes from other pumping units in your area.

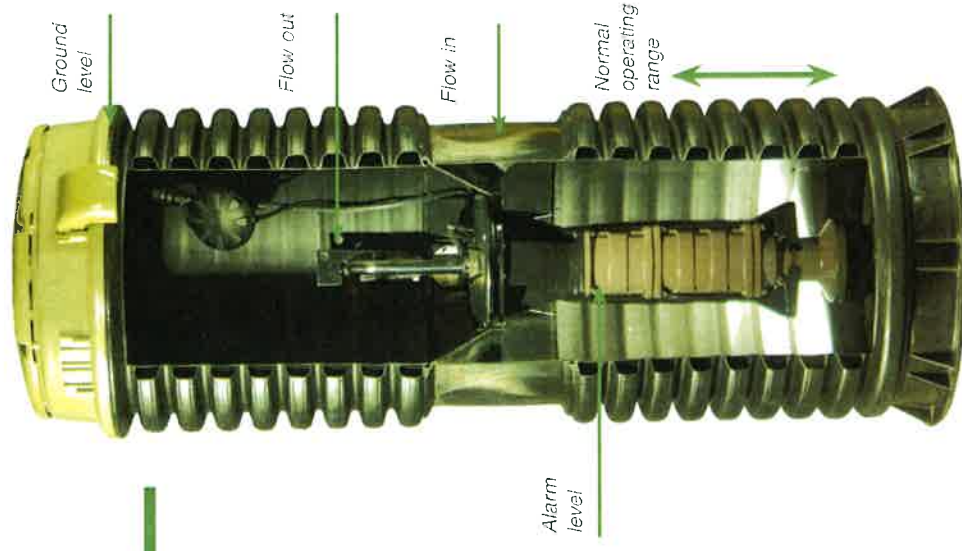
These pipes transfer wastewater to the sewer system or treatment plant that processes the wastewater into reclaimed water suitable for re-use or recycling.

The systems installed are E/One grinder pump stations and are very reliable and robust.

There is not much you need to do and very little that can go wrong. The diagram opposite shows how it works.

You have approximately 24 hours of storage depending on water usage.

** Your grinder pump station may be different than model shown.*



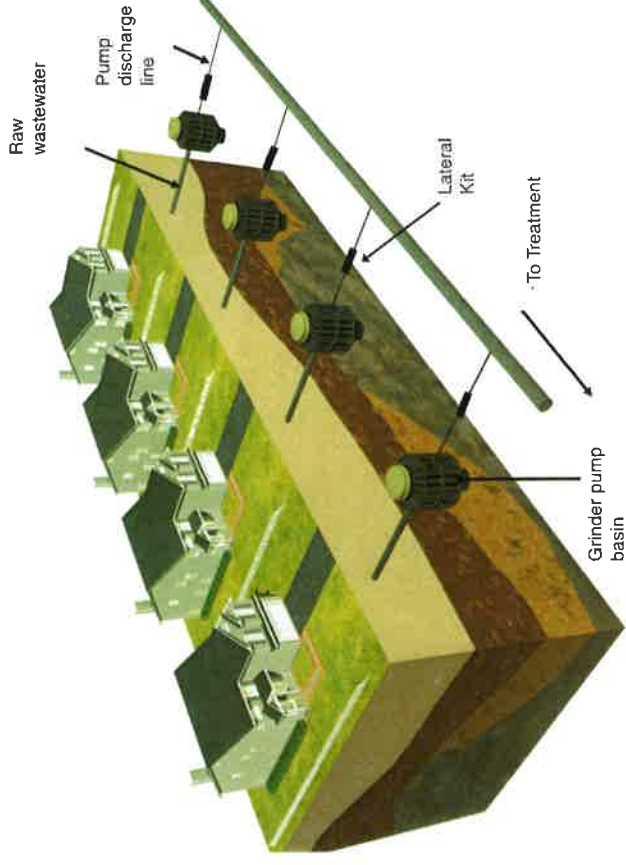
Using the System

There are a few things you need to know to ensure the system runs smoothly.

The system operates like a normal sewer system, taking waste liquids from your toilet, sink, shower, bath, dishwasher and washing machine and transferring it to the sewer system or treatment plant.

*To avoid blockages and damage to the pump, the following items should **NOT** be placed into the system:*

- **Glass**
- **Metal**
- **Gravel, sand (including aquarium stone), and coffee grinds**
- **Seafood shells**
- **Socks, rags or cloths**
- **Plastic**
- **Sanitary napkins or tampons**
- **Disposable diapers**
- **Kitty litter**
- **Explosives**
- **Flammable materials**
- **Lubricating oil, grease, cooking oil, paint**
- **Strong chemicals**
- **Gasoline or diesel**
- **Stormwater runoff**



What to do if the alarm sounds

Turn off the sound of the alarm by pressing the silence button underneath the alarm panel.

If the alarm light is still active after an hour, then call the phone number located on the back of this pamphlet. If the alarm sounded and the system subsequently cleared itself, you should consider what caused this to happen.

The system has a 24-hour emergency storage capacity, depending on water usage, so any repairs will be carried out within the 24-hour period. At these times, you should try to minimize the amount of wastewater going into the system.

If you notice any irregularity with the unit, such as the alarm sounding frequently, then contact the phone number located on the back of this pamphlet.



Press the button

located under the alarm panel. This will turn off the sound of the alarm. However, the alarm light will continue to be lit.

Wait an hour

and then check to see if the light on the alarm panel is still on. If the light is off, the panel is no longer in alarm; no further action is required.

if the light on the alarm panel is still lit, then call the phone number on the back

Give your name, address and telephone number.

DO NOT ATTEMPT TO REPAIR THE UNIT YOURSELF

What to do if the alarm sounds

Troubleshooting

The system is damaged and needs repair

(example: a pipeline breaks)

- If the alarm sounds, follow the alarm procedure on the previous page.
- If there is a break in the discharge pipe, turn off the power to the pump and **report the damage by calling the phone number located on the back of this pamphlet** and minimize water usage until it is repaired. **Make sure the service person has easy and safe access to the pump for repair.**
- If it is a water supply pipe, **turn off your water supply and contact a plumber for repair.**

The unit becomes smelly?

- When operating normally there should be no noticeable odors coming from the unit. If it gets smelly, the unit may need flushing. Just run clean water down your kitchen, laundry or bathroom sink for about 10 minutes. **If the unit remains smelly, call the phone number located on the back of this pamphlet.**

You notice wet spots around the pumping unit or the discharge pipe?

- The pumping unit and discharge pipe are totally sealed. If you notice wet spots around the unit or pipe and there has not been any recent rain, **call the phone number located on the back of this pamphlet.**

The alarm keeps going off when it rains?

- It means rainwater may be getting into your system and overloading it. **Contact your plumber to investigate.**

The neighbor's alarm goes off and they are away?

- **Call the phone number located on the back of this pamphlet immediately and report the problem.** Do not investigate the problem yourself.

There is a power failure?

- If there is a power failure, reduce water use where possible. The alarm may activate until the unit clears itself. If the alarm remains on for over an hour after the power has been restored, **call the phone number located on the back of this pamphlet.**



On your property

Be aware ...

- *Do not walk or put heavy weights on the lid as it is plastic*
- *Do not touch the valves*
- *Do not turn off the power to the pump unless in response to a broken discharge pipe*
- *Do not block the vent on the pump station*
- *Do not cover the pump station lid*

Contact E/One or your local distributor if you are making modifications to your home which may affect the system, such as installing a spa or swimming pool or extending the house over or near the unit or discharge pipe.

Ensure access is available to the pump station at all times. Keep plant growth and other debris away from the unit.

If you go on vacation for a length of time, you will need to flush the system before you go away. This is to avoid the possibility of the system becoming smelly in your absence. You can flush the system by running water in a sink, etc. for about 10 minutes.

Take care when **digging in the yard near the pump station** or the discharge pipe. If you do accidentally break any pipeline, call the phone number located on the back of this pamphlet immediately and minimize use of water in the house. Do not attempt to repair the system yourself. You will be responsible for the cost of these repairs.

If you have a pool or want to install a pool or spa, **contact your local distributor for further information.**



If you require further information about the pressure sewer system ...



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