

Bedford Regional Water Authority
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SMALL GRINDER PUMP (SGP) CUSTOMER INFORMATION PACKAGE

CONTENTS

- 1. SMALL GRINDER PUMP STATION INSTALLATION CHECKLIST**
- 2. PRESSURE SEWER POLICY**
- 3. SMALL GRINDER PUMP AGREEMENT**
- 4. USER INSTRUCTIONS FOR THE ENVIRONMENT ONE GRINDER PUMP (Applicable for all pump manufacturers)**
- 5. BEDFORD COUNTY CODE EXCERPT – PRETREATMENT ORDINANCE**
- 6. PRIMARY CONTACT INFORMATION**
 - a. DISTRIBUTOR INFORMATION
 - b. SUPPLIER INFORMATION
 - c. MAINTENANCE DEPARTMENT INFORMATION
 - d. CUSTOMER SERVICE DEPARTMENT INFORMATION
 - e. ENGINEERING DEPARTMENT INFORMATION
- 7. APPROVED CONTRACTOR LIST FOR SMALL GRINDER PUMP STATION INSTALLATION**
- 8. INSTALLATION DIAGRAM (GP-8)**
- 9. STANDARD DETAILS (CO-2; GP-2; GP-3; GP-4)**

BEFORE BEGINNING CONSTRUCTION, PLEASE CONTACT:

SHANNELL DADE
CONSTRUCTION ÙWÚÒÛXØUR
(540) 586-7679 EXT. 135
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SMALL GRINDER PUMP INSTALLATION CHECKLIST

Section 1. PURPOSE

This policy is to explain the requirements of the Bedford Regional Water Authority (“Authority”) for installing residential and commercial small grinder pump stations (“SGP”) as they relate to Authority infrastructure located outside of Authority property.

Section 2. SMALL GRINDER PUMP INSTALLATION CHECKLIST

The checklist that will be utilized by the Authority for the installation will be similar to that which is shown below.

PHASE 1 – CUSTOMER SIGN-UP

1.	<p>IS PRESSURE SEWER SERVICE AVAILABLE?</p> <p><input checked="" type="checkbox"/> Customer inquires to Customer Service Department if pressure sewer service is available via a Small Grinder Pump (SGP) station. The Engineering Department may determine if such service is available.</p>
2.	<p>SGP USER AGREEMENT</p> <p><input checked="" type="checkbox"/> Customer Service provides the Small Grinder Pump (SGP) Information Package to potential SGP Customers connecting to pressure sewer systems. The package includes the following documents:</p> <ul style="list-style-type: none"> • Small Grinder Pump Station Installation Checklist • Pressure Sewer Policy • Small Grinder Pump Agreement • User Instructions for the Environment One Grinder Pump • Bedford County Code - Pretreatment Ordinance (Excerpt) • Primary Contact Information • Approved Contractor List For Small Grinder Pump Station Installation • Installation Diagram (GP-8) • Standard Details (CO-2; GP-2; GP-3E and GP-3L; GP-4) <p><input checked="" type="checkbox"/> Customer executes the Small Grinder Pump (SGP) Agreement (Customer may elect for private maintenance contract.)</p> <ul style="list-style-type: none"> • If opting out of contract maintenance with the Authority, Authority specifications must still be followed in the installation of the SGP.
3.	<p>FEES</p> <p><input checked="" type="checkbox"/> Customer submits applicable fees including water/sewer facility fees, small grinder pump station review and inspection fee, account setup fee, deposit, etc. to the Customer Service Department. This allows for building permits to be issued on new construction projects.</p>
4.	<p>CONTRACTOR SELECTION</p> <p><input checked="" type="checkbox"/> Customer selects approved contractor to install the small grinder pump station. (See Approved Contractor List.)</p>

SMALL GRINDER PUMP INSTALLATION CHECKLIST

5.	<p>SEWER TIE-IN LOCATION ESTABLISHED</p> <p><input checked="" type="checkbox"/> If lateral connection to the sewer main has not been installed, the Authority (Maintenance Department) schedules an appointment with the Customer or contractor to review where the sewer lateral will be located on the property.</p>
6.	<p>PUMP VERIFICATION</p> <p><input checked="" type="checkbox"/> Customer selects small grinder pump system from approved manufacturer and model.</p> <p><input checked="" type="checkbox"/> Selected pump is verified to be suitable for the receiving sewer system based on pumping rate of flow and system capacity by the Engineering Department.</p>
7.	<p>SUPPLIER INFORMATION</p> <p><input checked="" type="checkbox"/> Customer provides contractor with supplier information (see Contact List.)</p> <p><input checked="" type="checkbox"/> Supplier will ship the small grinder pump station to the customer / contractor on-site and the Authority requires that the supplier hold the pump for installation at a later date by the Authority.</p>

PHASE 2 – SGP STATION CONSTRUCTION / INSTALLATION

8.	<p>SEWER TAP INSTALLATION</p> <p><input checked="" type="checkbox"/> Maintenance Department or Authority Authorized Contractor installs the sewer connection from the main line to the property line (see Standard Detail GP-2 and Master Diagram GP-8).</p>
9.	<p>PUMP STATION INSTALLATION AND CONNECTION</p> <p><input checked="" type="checkbox"/> The grinder pump station installation and connection to the sewer lateral will not be performed by the Authority (see Installation Diagram). Payment for the small grinder pump station and installation, including lines connecting to the residence and to the Authority's sewer main, will be the responsibility of the customer. This work shall only be performed by an approved contractor. (See Step 4 above.)</p> <p><input checked="" type="checkbox"/> Contractor constructs the small grinder pump station using approved materials. Contractors listed on the Approved Contractor List shall have the listing of approved parts and materials.</p>
10.	<p>CONSTRUCTION APPROVAL – ENGINEERING</p> <p><input checked="" type="checkbox"/> The Construction Technician and Contractor will meet to choose a location for the SGP wet well that meets minimum distance requirements from existing and/or proposed structures.</p> <p><input checked="" type="checkbox"/> Contractor leaves excavation around the outside of basin open, and contacts Engineering Department for field review.</p> <p><input checked="" type="checkbox"/> Engineering personnel verifies the presence of a proper stone base beneath the basin, approved materials used in construction, the presence and operability of the pinch valve on the residence side of the basin, and proper general installation of the pump station and control panel.</p>

SMALL GRINDER PUMP INSTALLATION CHECKLIST

	<input checked="" type="checkbox"/> Pinch valve is verified to be closed. <input checked="" type="checkbox"/> Engineering Department notifies the Customer Service and Maintenance Department of construction approval.
11.	INSTALLATION APPROVAL – MAINTENANCE <input checked="" type="checkbox"/> Maintenance Department reviews the unit installation to verify the electrical and plumbing are properly installed and completed to residence. <input checked="" type="checkbox"/> Unit is verified to be graded properly with ground cover not exceeding the bury line of the wet well. <ul style="list-style-type: none"> • If grading is determined to be improper, it is the owner’s responsibility to correct the grading and schedule a re-inspection of the unit before the pump installation scheduling can occur. <input checked="" type="checkbox"/> Vehicular accessibility to the wet well through property being served is verified.

PHASE 3 – ESTABLISHING SERVICE

12.	CONTRACTOR REQUESTS INSTALLATION <input checked="" type="checkbox"/> Customer / Contractor makes verbal request to Customer Service to schedule pump installation and water meter installation. <input checked="" type="checkbox"/> Customer Service issues a work order for a pump installation with the Maintenance Department and meter installation with the Customer Service Field Representatives.
13.	PUMP INSTALLATION <input checked="" type="checkbox"/> Upon 72 hour notice and after verifying the pump station installation is satisfactory, the Maintenance Department schedules the pump installation. <input checked="" type="checkbox"/> If liquid is found in the wet well upon installation, Customer / Contractor will be responsible for having the wet well pumped out or will be charged for this service. <input checked="" type="checkbox"/> If liquid is found in the wet well due to the pinch valve being turned on by someone other than Authority personnel, an Unauthorized Connection Fee will be charged to the account.

SMALL GRINDER PUMP INSTALLATION CHECKLIST

14.	<p>PUMP START-UP</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Maintenance Department performs pump start-up procedures. <ul style="list-style-type: none"> • PLEASE NOTE: The pump station contractor and/or plumber and Authority Representative are required to be present during the pump start-up. • If pump station installation does not meet Authority standards, Customer / Contractor will have the option to make the corrections to meet standards, or to have pump delivered to the Contractor directly for the Contractor's installation and be ineligible for maintenance under the Authority's SGP Maintenance Agreement. The Authority will not install a pump in a station that has not been constructed to Authority standards. <input checked="" type="checkbox"/> Maintenance Department provides the pump serial number to Customer Service upon pump installation.
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Section 3. REVISIONS

- A. This policy was approved and adopted by the Authority's Executive Director on July 15, 2014, effective July 16, 2014.
- B. This policy was modified as follows:
 - 1. Approved October 4, 2022, effective October 4, 2022:
 - a. Section 2, Phase 1 – Customer Sign-up was updated with clarification provided to establishing the sewer tie-in location and supplier information.
 - b. Section 2, Phase 2 – SGP Station Construction / Installation was updated with references to field reviews clarified, and acknowledgement of vehicular access included under Installation Approval – Maintenance.
 - c. Section 2, Phase 3 – Establishing Service was updated with clarification to the procedures for installation requests and pump start-up.

PRESSURE SEWER SYSTEM

Section 1. PURPOSE

The Bedford Regional Water Authority (“Authority”) has customers that need sewer service in areas where gravity sewer service is not practical, possible, or feasible. With a Pressure Sewer System (“PSS”), many of the parcels of land that previously could not have sewer service are able to access to the public sewer system. As a means to provide a consistent approach to serving these parcels, and as an additional level of service for those customers that require the pumps (“USERS”), the Authority has adopted this policy to govern the requirements and stipulations related to these pressure sewer systems that are located in the Authority’s service area.

Section 2. POLICY

- A. USERS that are connected to a PSS have the option of maintaining their Small Grinder Pump (“SGP”) at their own expense, or they may enter into an SGP Agreement (“AGREEMENT”) with the Authority to maintain the SGP.
- B. When sewer service is provided through a PSS, prior to initiating the sewer service the USER must either accept or decline the Small Grinder Pump (“SGP”) Agreement (“AGREEMENT”) with the Authority. This AGREEMENT stipulates the USER’s responsibility, the Authority’s responsibility, and the proper steps that need to be taken towards the installation and maintenance of the SGP. If the USER does not sign to accept the AGREEMENT, then the USER will be responsible for every aspect of maintaining the SGP.
- C. In order for an SGP to be maintained by the Authority, the USER must follow the procedures outlined in the Authority’s Small Grinder Pump Installation Checklist Policy.
- D. The USER must pay all applicable fees as stipulated in the Authority’s current Rates policy 2.00.
- E. The construction of the system must be in accordance with the Chapter 4 (System Development) and Chapter 6 (Wastewater System) of the Authority’s Operating Policy Manual.
- F. If a USER has an SGP that has not been under an AGREEMENT with the Authority, the USER may option in to having the SGP under an AGREEMENT per the terms outlined in the reinstatement section of the AGREEMENT.

Section 3. REVISIONS

- A. This policy was approved and adopted by the Authority’s Executive Director on April 23, 2013, effective July 1, 2013.
- B. This policy was modified as follows:
 - 1. Approved March 14, 2018, effective April 2, 2018:
 - a. Section 2. was completely rewritten to clarify the terms of the AGREEMENT.

SMALL GRINDER PUMP AGREEMENT

Section 1. PURPOSE

This policy is for the customers of the Bedford Regional Water Authority (“AUTHORITY”) who would like to have the AUTHORITY provide maintenance assistance for a small grinder pump (“SGP”) which enables sewer service to the property served by the AUTHORITY. In order for this SGP service to be provided, an agreement must be executed between the AUTHORITY and the homeowner, business, property owner, developer, and/or user of the small grinder pump system, hereinafter called the “USER.” It does not create any third party contract or third party beneficiary rights, and it is not intended to do so. This Users Agreement (“AGREEMENT”) must be fully executed in order to obtain service as per the requirements in the AUTHORITY’s Pressure Sewer System policy (“POLICY”).

Section 2. AGREEMENT**A. General:**

1. Being that the USER desires to purchase sewer service from the AUTHORITY, and that a pump is necessary to receive this service, the USER is choosing to enter into this AGREEMENT. Under the terms of the POLICY, a small grinder pump (“SGP”) will be necessary to provide sewer service to the USER; the USER agrees that the SGP will be installed on their property at a location that is accessible by the AUTHORITY. Included as part of the SGP is the grinder pump station (which includes the pump, motor, wetwell storage tank, controls system, and appurtenances) as well as the associated valves and wiring.
2. The SGP will operate automatically to convey the sewage from the USER to the AUTHORITY’s collection system. Should the SGP fail to operate correctly, a warning light will alert the USER of the failure and the USER must then in turn contact the AUTHORITY immediately to prevent a sewage discharge on or in the USER’s property.
3. USERS eligible for entering into a SGP Agreement with the Authority are limited to the following:
 - a. USER served with public water from the Authority by a water meter no larger than 5/8-inch.
 - b. Residential USER serving no more than one single residence and which are served with public water from the Authority.

B. USER’s Responsibility: Under this agreement, the USER has responsibilities related to the installation and maintenance of the SGP; failure to follow any of the USER responsibilities may cause this agreement to become null and void. Upon approval of this agreement, the USER agrees to:

1. Execute this AGREEMENT by signing this document.
2. Pay all applicable Deposits, Capital Recovery Fees, Tap Fees, and Charges, as well as the Reoccurring Fixed Charges and Volume Charges, and Small Grinder Pump Maintenance Fees, as documented in the AUTHORITY’s Rates Policy.
3. The USER shall obtain all necessary permits for the work to be performed.
4. Allow AUTHORITY personnel full and unrestricted right of ingress and egress onto and through the property where the SGP is located for the purpose of inspecting and maintaining

SMALL GRINDER PUMP AGREEMENT

- the SGP. Said right of entry is hereby granted as a part of this AGREEMENT, and no further easement is therefore required.
5. The installation of the SGP will be performed for the USER by a licensed plumber or licensed contractor (“installer”) with successful experience installing similar systems. The selection of the installer is the responsibility of the USER; the installer’s qualifications must be reviewed by the AUTHORITY to ensure that the installer is capable of adequately performing the work. The USER will contract directly with the installer, and the USER will pay all costs associated with this installation directly to the installer.
 6. Construction of the SGP system must be in accordance with the latest addition of the AUTHORITY’s master specifications and the Small Grinder Pump Installation Checklist. A copy of the master specification must be kept onsite at all times during the construction of the SGP system.
 7. Provide material submittals to the AUTHORITY at least two (2) full weeks prior to the commencement of any construction.
 8. Notify the AUTHORITY at least three (3) full working days prior to the commencement of any construction taking place.
 9. Install and maintain all gravity laterals from the house or facility to the pinch valve located at the pump station.
 10. Install and maintain the pressure lateral from the pump station to the public connection point as identified in the AUTHORITY’s Standard Detail GP-8.
 11. Minimize the construction of any improvement around the SGP and service line; this includes, but is not limited to, trees, shrubs, fences, landscaping, driveways, and other permanent structures. The AUTHORITY should be contacted prior to the construction of these improvements to ensure that there is no conflict with the SGP. A minimum clearance of ten (10) feet shall be maintained in all directions around the SGP for proper maintenance; if the AUTHORITY finds it necessary to remove any improvements around the SGP, they may do so without warning and they will not be held responsible for the replacement or reimbursement of the removed improvements.
 12. USER shall provide, and pay for, proper current and voltage electrical power to the pump station at all times. During power outages, the USER must reduce the wastewater flow to the SGP to an absolute minimum. An electrical disconnect switch shall be provided within sight of the pump station, and in a location that is accessible at all times.
 13. Maintain proper grading around the pump station to ensure runoff does not collect around the station, as well as not covering the station’s access cover, vents, bypass box, or other controls.
 14. Care shall be taken to prevent items that may damage the pump station from being transferred to the pump station through the lateral. Such items include any petroleum based products, cleaning solvents, paint thinners, egg shells, seafood shells, grease, gravel, glass, metal objects, or other sharp and hard objects.
 15. The USER is responsible for all damage to the SGP resulting from negligence; this includes, but is not limited to, lawn care equipment, vehicular traffic, unauthorized excavation, the transfer of damaging items into the SGP through the service lateral, or any willful damage.
 16. USER shall ensure that all sewage being transmitted to the AUTHORITY shall be in conformance with the current Pretreatment Ordinance as adopted by Bedford County.

SMALL GRINDER PUMP AGREEMENT

17. The USER shall notify the AUTHORITY immediately of any failure or alarming of the SGP, and the AUTHORITY is indemnified for any damages that may arise due to failure of such notification.
18. USER shall provide the AUTHORITY with a letter of warranty from the installer, guaranteeing the work for a period of one year after the installation, as well as documentation that all payments have been made to the installer by the USER.

C. AUTHORITY's Responsibility: Under this agreement, the AUTHORITY has the following responsibilities related to the installation and maintenance of the SGP:

1. Aid the USER in the design of the SGP, including choosing the best location for the pump station and determining the connection point.
2. Verify capacity in the public sewer system to accept the additional flows from the installation of this SGP.
3. Review the qualification of the installer, as selected by the USER, and notify the USER if there are any reasons to believe that any installer is not capable of properly performing the work.
4. Review and approve the material submittals as provided by the USER.
5. Before the facilities are accepted for connection into the public sewer system, the AUTHORITY has the right to observe the construction and installation of the SGP. A final site review may be conducted, and this agreement may be terminated if the SGP does not meet the standards and requirements as set forth in the policies and specifications.
6. Make any repairs to the SGP related to routine wear and tear; these repairs include the parts and labor necessary to make such repairs.
7. Respond promptly to any emergencies related to the SGP, twenty four (24) hours a day, seven (7) days a week.
8. Restore the site of any repair work to the condition that existed prior to the repair being made. Any improvements that are removed within five (5) feet of the SGP will not be replaced.
9. Prepare record drawings showing the location of the SGP facilities as constructed.

D. In Case of Emergency: Should the warning light become lit at the pump station, or should sewer service get interrupted to the USER in any way, the AUTHORITY must be contacted immediately by using the following procedure:

1. Contact the AUTHORITY's regular office phone number, day or night, at 540-586-7679.
2. If the call is placed during regular office hours (8:30am to 5:00pm Monday through Friday), you can reach a Customer Service Representative by dialing extension 4 after the greeting.
3. If the call is placed outside of regular office hours, you can reach the AUTHORITY's dispatch personnel by dialing extension 9 after the greeting, and following the directions on the outgoing message.

Section 3. REINSTATEMENT

- A. General:** When a USER has declined the AGREEMENT in the past, or new USERS take ownership of an SGP that was not formerly under AGREEMENT, the USER may enter into an AGREEMENT per the terms outlined in this section of this policy.

SMALL GRINDER PUMP AGREEMENT

B. Requirements:

1. **Waiting Period:** USERS who have cancelled or declined the AGREEMENT may not execute an AGREEMENT with the AUTHORITY for a period of 24 months after cancelling or declining the AGREEMENT. If a property served by an SGP changes ownership, the new owner is not subject to the above stated waiting period, and they may immediately request to execute an AGREEMENT under this section of this policy.
2. **Initial Reinstatement Period:** If the SGP requires repair or replacement within 12 months of reinstatement, the USER will be responsible for the full cost of the parts, materials, and labor needed to make the repairs (less any SGP maintenance fees already paid by the USER to the AUTHORITY).
3. **Initial Period:** Any USER executing an AGREEMENT under this policy will be responsible for paying the Small Grinder Pump Maintenance Fee for the equivalent of 48 months from the date of the execution of the AGREEMENT.
 - a. If the USER stays under AGREEMENT for at least the initial 48 months, the SGP maintenance fee will be charged monthly for each of the 48 months.
 - b. If the USER cancels this agreement prior to the initial 48 months after executing the AGREEMENT, and any repairs have been made to the SGP by the AUTHORITY while under agreement, the USER will be responsible for paying an early termination fee. The early termination fee is an amount equal to the SGP maintenance fee times the number of months remaining to complete the initial 48 month period.
4. **Inspection:** Customers may be eligible for reinstatement as a USER under this AGREEMENT if the station was initially installed under the inspection of AUTHORITY personnel and if the SGP was constructed to AUTHORITY standards at the time of construction.
 - a. Prior to reinstatement, the customer will pay a nonrefundable Small Grinder Pump Station Review and Inspection fee for AUTHORITY personnel to evaluate the station and determine if it is suitable for AUTHORITY maintenance.
 - i. Properties developed with newly constructed structures within six (6) months of the initial pump installation, which was inspected by AUTHORITY personnel, may be exempt from the Review and Inspection Fee.
 - b. A list of deficiencies will be generated to identify any improvements needed to the SGP before reinstatement of the AGREEMENT can occur; this list will be provided to the customer.
5. Items to be taken into consideration by the AUTHORITY for the reinstatement of the SGP Agreement may include, but not be limited to, the following:
 - a. **Model of SGP**
 - i. The AUTHORITY only offers maintenance agreements on select models by the following manufacturers:
 - a. Environment One
 - b. Liberty
 - b. **Condition of SGP:**
 - i. **Pump:** The pump will be removed from the wetwell to verify age and visually inspect the pump condition. The pump will be field tested for proper working condition. If the pump has been in service for more than 6 years, or if the pump is in poor condition and/or determined likely to fail, the AUTHORITY may require the pump to

SMALL GRINDER PUMP AGREEMENT

- be replaced with a new (not used or reconditioned) pump prior to allowing reinstatement into this AGREEMENT.
- ii. Wet well: The wet well will be checked for damage, overflow, or signs of grease, sand, grit, etc. Any necessary cleaning will be required to be completed by the Customer prior to acceptance.
 - iii. Control Panel: The Control Panel must be as supplied by the pump manufacturer. The distance will be measured from the wet well to the control panel; distances over 10 feet, resulting in longer control wiring, may not be accepted. Access to the control panel will be verified, with panel preferably located on a post near the wetwell. The panel must be in a location that is accessible at all times.
 - iv. Use of proper amperage breaker and wiring will be verified to be in accordance with manufacturer's specifications.
- c. Valves: A pinch valve and cleanout are required on the house gravity lateral at a location not further than 10 feet from the wet well; the pinch valve will be the delineating point of responsibility separation between the USER and the AUTHORITY for maintenance under the Agreement. A shutoff valve and check valve located in an accessible valve box are required on the forcemain lateral near the property line adjacent to the AUTHORITY's collection system.
- d. Accessibility:
- i. Location of SGP: In order to ensure access, the SGP must be located a minimum of 10' from any structure. A ten foot (10') radius around the wet well will be required for maintenance for drivable access for Authority vehicles.
 - ii. No landscaping, including trees, shrubs, etc., are to be located within 10' (ten feet) of the structure. The top of the pump station shall not be covered with dirt, mulch, or other material which would prohibit easy access to the inside of the SGP structure and/or make it difficult to locate the structure.
 - iii. The site must provide unrestricted drivable access from the road to the SGP location.

Section 4. REVISIONS

- A. This policy was approved and adopted by the Authority's Executive Director on April 23, 2013, effective July 1, 2013.
- B. This policy was modified as follows:
 1. Approved May 31, 2018, effective June 1, 2018:
 - a. Substantially modified portions of Section 1 and 2 for clarity
 - b. Added Section 3 to allow for reinstatements
 - c. Moved the acknowledgements to Section 5
 2. Approved October 4, 2022; effective October 4, 2022.
 - a. Section 2.B.2: 'Connection Fees' was replaced with 'Tap Fees'
 - b. Section 2.A.3 was added.

SMALL GRINDER PUMP AGREEMENT

Section 5. ACKNOWLEDGEMENT**A. USER Acceptance:**

The USER agrees to the terms of this AGREEMENT, and thus executes this agreement with the following signatures and seals:

Date of Signature

Service Address or Location

City, State, Zip

Premise ID

Printed USER Name

USER Signature**B. USER Declines Agreement:**

The USER does not agree to the terms of this AGREEMENT, and thus declines this agreement with the following signature and seals thereby relieving the Bedford Regional Water Authority of all maintenance responsibility to their small grinder pump station. The USER accepts full responsibility for meeting all applicable regulatory agency requirements regarding maintenance and operation service arrangements for their small grinder pump station.

Date of Signature

Service Address or Location

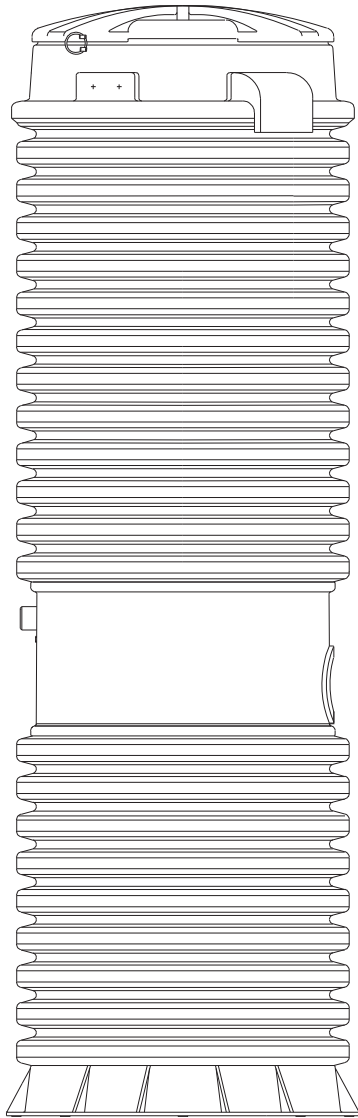
City, State, Zip

Premise ID

Printed USER Name

USER Signature

User Instructions for the Environment One Grinder Pump



General Information

In order to provide you with suitable wastewater disposal, your home is served by a low pressure sewer system. The key element in this system is an Environment One grinder pump. The tank collects all solid materials and effluent from the house. The solid materials are then ground to a small size suitable for pumping as a slurry with the effluent water. The grinder pump generates sufficient pressure to pump this slurry from your home to the wastewater treatment receiving line and/or disposal plant.

Congratulations on your Environment One grinder pump investment. With proper care and by following a few guidelines, your grinder pump will give you years of dependable service.

Care and Use of your Grinder Pump

The Environment One grinder pump is capable of accepting and pumping a wide range of materials. Regulatory agencies advise that the following items should not be introduced into any sewer, either directly or through a kitchen waste disposal unit:

Glass	Diapers, socks, rags or cloth
Metal	Plastic objects (toys, utensils, etc.)
Seafood shells	Sanitary napkins or tampons
Goldfish stone	Kitty litter

In addition, you must **never** introduce into any sewer:

Explosives	Strong chemicals
Flammable material	Gasoline
Lubricating oil and/or grease	

Periods of Disuse

If your home or building is left unoccupied for longer than a couple of weeks, perform the following procedure:

Purge the System. Run clean water into the unit until the pump activates. Immediately turn off the water and allow the grinder pump to run until it shuts off automatically.

Duplex Units. Special attention must be taken to ensure that both pumps turn on when clean water is added to the tank.

Caution: Do not disconnect power to the unit

Power Failure

Your grinder pump cannot dispose of wastewater without electrical power. If electrical power service is interrupted, keep water usage to a minimum.

Pump Failure Alarm

Your Environment One grinder pump has been manufactured to produce an alarm signal (120 volt) in the event of a high water level in the basin. The installer must see that the alarm signal provided is connected to an audible and/or visual alarm in such a manner as to provide adequate warning to the user that service is required. During the interim prior to the arrival of an authorized service technician, water usage must be limited to the reserve capacity of the tank.

For service, please call your local distributor:



BEDFORD COUNTY CODE – PRETREATMENT ORDINANCE (EXCERPT)

Definition.

Publicly owned treatment works or *POTW*: A "treatment works," as defined by section 212 of the act (33 U.S.C. § 1292). This article will affect discharges into several different treatments works having different owners. Local limits will be defined elsewhere in this article and may differ from site to site. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances which convey wastewater to a treatment plant.

Sec. 18-44. Prohibited discharge standards.

- (a) *General prohibitions.* No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of POTW(s) whether or not they are subject to categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements.
- (b) *Specific prohibitions.* No user shall introduce or cause to be introduced into the POTW(s) the following pollutants, substances, or wastewater:
 - (1) Pollutants which create a fire or explosive hazard in the POTW, including, but not limited to, wastestreams with a closed-cup flashpoint of less than one hundred forty (140) degrees Fahrenheit (60°C) using the test methods specified in 40 CFR 261.21;
 - (2) Wastewater having a pH which is outside the limits established at the POTW receiving the wastewater, or otherwise causing corrosive structural damage to the POTW or equipment;
 - (3) Solid or viscous substances in quantities or sizes which will cause obstruction of the flow in the POTW resulting in interference.
 - (4) Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the POTW(s);
 - (5) Wastewater having a temperature greater than one hundred fifty (150) degrees Fahrenheit (65°C), or which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed one hundred four (104) degrees Fahrenheit (40°C);
 - (6) Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through;
 - (7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
 - (8) Trucked or hauled pollutants, except at discharge points designated by the administrator in accordance with this article;
 - (9) Noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;

- (10) Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent, thereby violating the plants VPDES permit;
- (11) Wastewater containing any radioactive wastes or isotopes except in compliance with applicable state or federal regulations;

(12) Storm water, surface water, ground water, artesian well water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water, and unpolluted wastewater, unless specifically authorized by the administrator;

(13) Sludges, screenings, or other residues from the pretreatment of industrial wastes;

(14) Medical wastes, except as specifically authorized by the administrator in a wastewater discharge permit;

(15) Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test;

(16) Detergents, surface-active agents, or other substances which may cause excessive foaming in the POTW;

(17) Fats, oils, or greases of animal or vegetable origin in concentrations greater than the limits specified in Appendix A.

(18) Discharges containing toxic or poisonous solids, liquids or gases in sufficient quantity, singly or by interaction with other wastes, to injure or cause interference with any waste treatment process, constitute a hazard to humans or animals, or create any hazard in the receiving waters of the wastewater facilities.

(19) Any wastewaters containing elements, heavy metals, cyanide, hydrocarbons, insecticides, herbicides, fungicides, or containing materials in excess of the maximum limits as established by the control authority.

(20) Quantities of flow and/or concentrations which constitute "slug" as defined in these regulations.

(21) Waters or wastes which contain substances which cannot be treated by an individual wastewater facility to such degree that they would cause that particular wastewater facility to violate its effluent discharge limits.

(22) Hazardous wastes as defined in 40 CFR Part 261 and not listed elsewhere in this article.

Pollutants, wastewater, and any other specific substances prohibited with respect to each POTW or by this section shall not be processed or stored in such a manner that they could be discharged to the POTW.

(Ord. of 8-28-00, § 2.1)

Bedford Regional Water Authority
1723 Falling Creek Road
Bedford, Virginia 24523
Phone: 540-586-7679
Fax: 540-586-5805
Email: brwa@brwa.com



PRIMARY CONTACT INFORMATION

BRWA CUSTOMER SERVICE DEPARTMENT

Office: (540) 586-7679 ext. 309

Contact for inspections, pump installations, or service needed under the Small Grinder Pump ("SGP") Agreement during office hours, Monday through Friday, 8:30 am – 5:00 pm

AFTER HOURS EMERGENCIES:

BRWA MAINTENANCE DEPARTMENT

Office: (540) 586-7679 ext. 9

Contact outside of office hours for emergency service needs under the SGP Agreement

E-ONE PUMP DISTRIBUTOR (VA)

Commonwealth Engineering & Sales, Inc.

Sales Representative: Mike Oden

303 Ashcake Road, Suite G

Ashland, VA 23005

Bus: (804) 752-2959

Fax: (804) 752-2116

Cell: (804) 350-0679

Email: mikeo@commengsales.com

SMALL GRINDER PUMP SUPPLIER – E-ONE, LIBERTY

Ferguson Enterprises Inc.

Sales Representative: Chris Rigas

2010 Graves Mill Road

Forest, VA 24551

Bus: (434) 385-6600

Fax: (434) 385-9861

Cell: (434) 942-9815

Email: Chris.Rigas@ferguson.com

Liberty Pumps must be specially approved for use in each proposed location by the BRWA Engineering Department

CMC Supply Inc.

Sales Representative: Rick Sells

2510 Johnson Avenue NW

Roanoke, VA 24017

Bus: (540) 982-1095

Fax: (540) 982-8219

Cell: (540) 797-8857

Email: rsells@cmcsupply.com

BRWA ENGINEERING DEPARTMENT

Office: (540) 586-7679 ext. 5



BRWA
LIST OF APPROVED CONTRACTORS
FOR LOW PRESSURE SEWER (LPS) PUMP INSTALLATION

The following is a list of utility contractors that are pre-approved for LPS Pump Station installations. This list will be revised as necessary by adding or removing contractors based on job performance and experience.

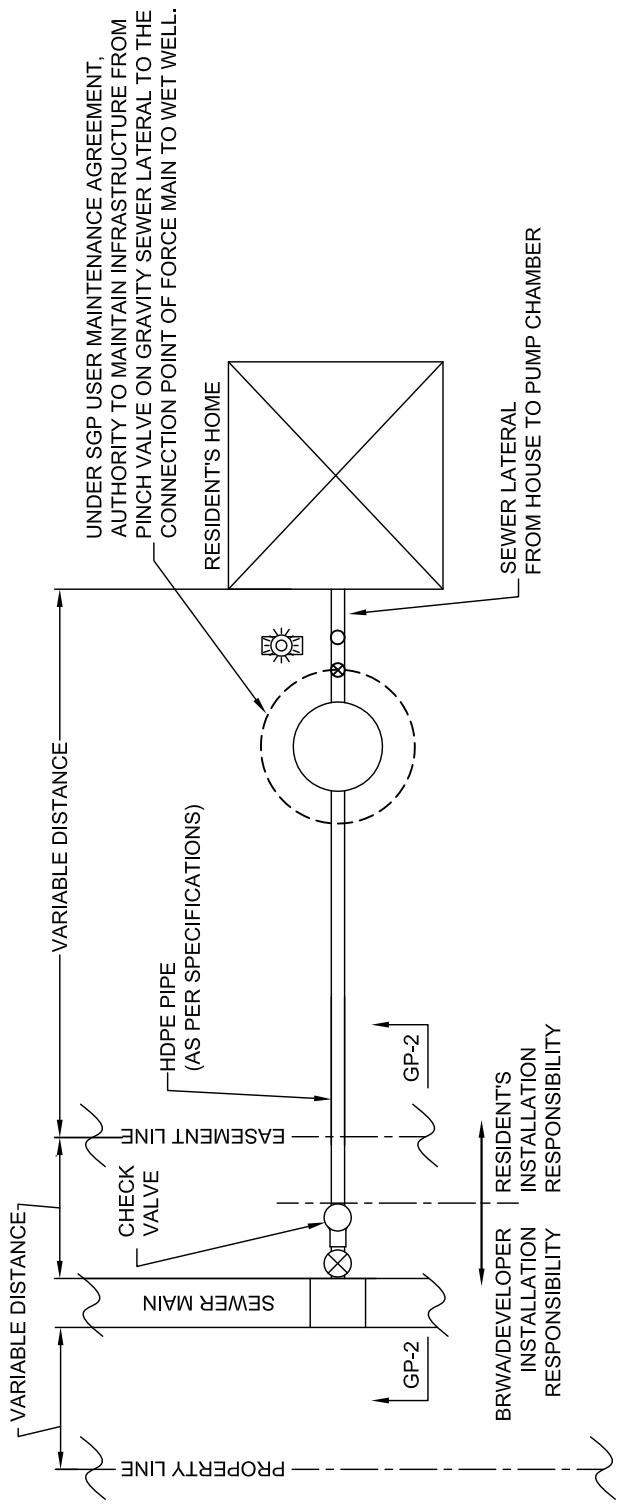
CONTRACTOR	ADDRESS	PHONE	FAX	Date Added
J & W Hauling & Grading, LLC	10045 Leesville Road Evington, VA 24550	434-821-1920		9/8/2005
Falwell Corporation	3195 Campbell Avenue Lynchburg, VA 24501	434-846-2739		1/1/2006
Bill Gillespie Gillespie Plumbing*	P.O. Box 24502 Lynchburg, VA 24502	434-525-9440		12/7/2007
Johnny on the Spot, LLC	2094 Wheatland Road Bedford, VA 24523	540-871-0058		4/29/2021
Blue Ride Pro Services, LLC	P.O. Box 258 Copper Hill, VA 24079	540-797-9322		4/29/2021

* Does not do individual residential installations

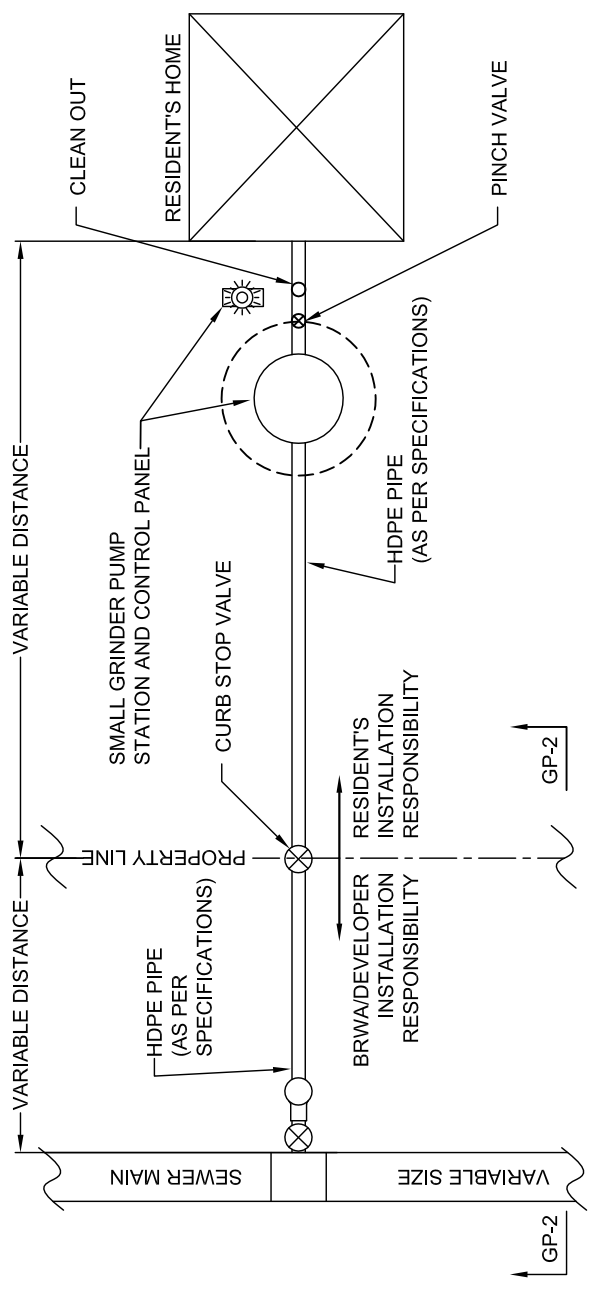
All work related to the LPS Pump Station, including but not limited to the installation of the Station itself, the electrical and plumbing connections from the Station to the Control Panel and residence, must be performed by a pre-approved contractor. Pre-approved contractors will be given an approved list of materials for the LPS pump station installation.

If the Developer desires to use a Contractor which has not been pre-approved by the BRWA, a letter must be presented to the BRWA requesting the subject Contractor be reviewed for approval and placement on this pre-approved list. Approval may be denied by the BRWA during the review of the Contractor's qualifications without further explanation.

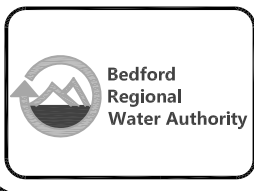
Training and successful experience in the installation and maintenance is required in order for a contractor to be added to this list.



PRESSURE SEWER FORCE MAIN IN EASEMENT



PRESSURE SEWER FORCE MAIN IN RIGHT-OF-WAY



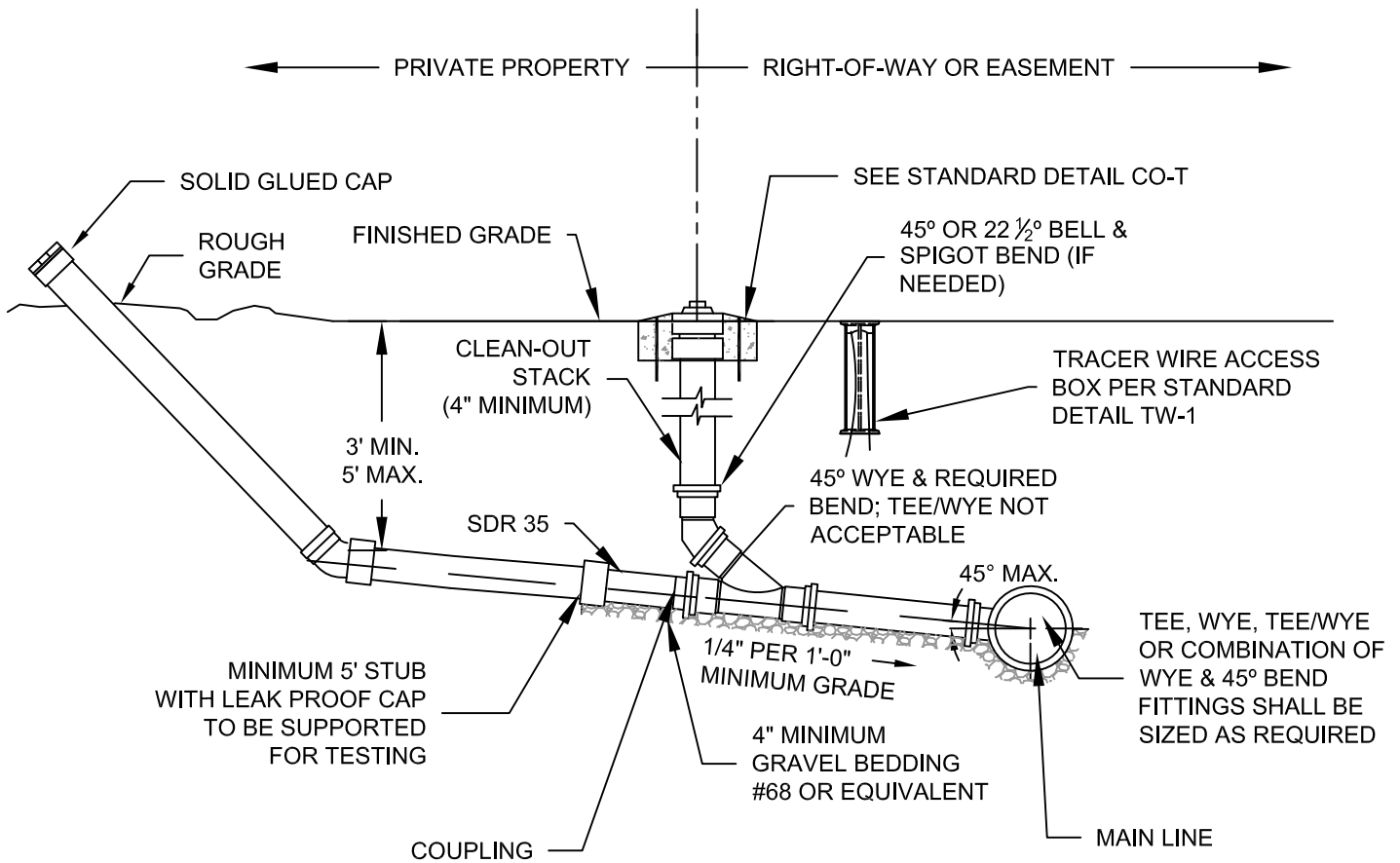
No.	Date
1	December 22, 2014
2	October 6, 2017
3	
4	

DIVISION OF PRESSURE SEWER/
SMALL GRINDER PUMP (SGP)
INSTALLATION DIAGRAM

Detail:
GP-8

NOTES:

1. TRAFFIC BEARING BOX AND LID REQUIRED IN TRAFFIC AREAS.
2. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL.
3. ALL PIPE SHALL BE OF SAME SIZE.
4. NO BENDS ARE ALLOWED IN THE LATERAL FROM THE MAIN TO THE CLEANOUT STACK WYE (EXCEPT AS NOTED).
5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY UTILITY OWNER.
6. PIPING ON PRIVATE SIDE OF CLEANOUT TO BE INSTALLED PER GOVERNING JURISDICTION REQUIREMENTS.
7. MINIMUM LATERAL SIZE SHALL BE 4" FOR RESIDENTIAL, 6" FOR COMMERCIAL.
8. MINIMUM COVER FOR ALL SEWER LATERALS SHALL BE THREE (3') FEET.
9. LOWEST FINISHED FLOOR ELEVATION TO BE SERVICED BY GRAVITY SHALL BE A MINIMUM OF THREE FEET (3') ABOVE THE TOP OF THE MAIN AT THE POINT WHERE THE SERVICE LATERAL CONNECTS TO THE MAIN; IF FINISHED FLOOR ELEVATION FALLS BELOW THE MAIN, PROPERTY OWNER IS RESPONSIBLE FOR ANY NECESSARY FORCE MAIN CONNECTIONS ON THE PRIVATE SIDE OF THE PROVIDED CLEANOUT.
10. WHERE REQUIRED, CHECK VALVES SHALL BE INSTALLED ON THE PRIVATE SIDE OF THE CLEANOUT. CHECK VALVES SHALL BE CLEAN CHECK® EXTENDABLE BACKWATER VALVES AS MANUFACTURED BY RECTORSEAL OR APPROVED EQUAL.



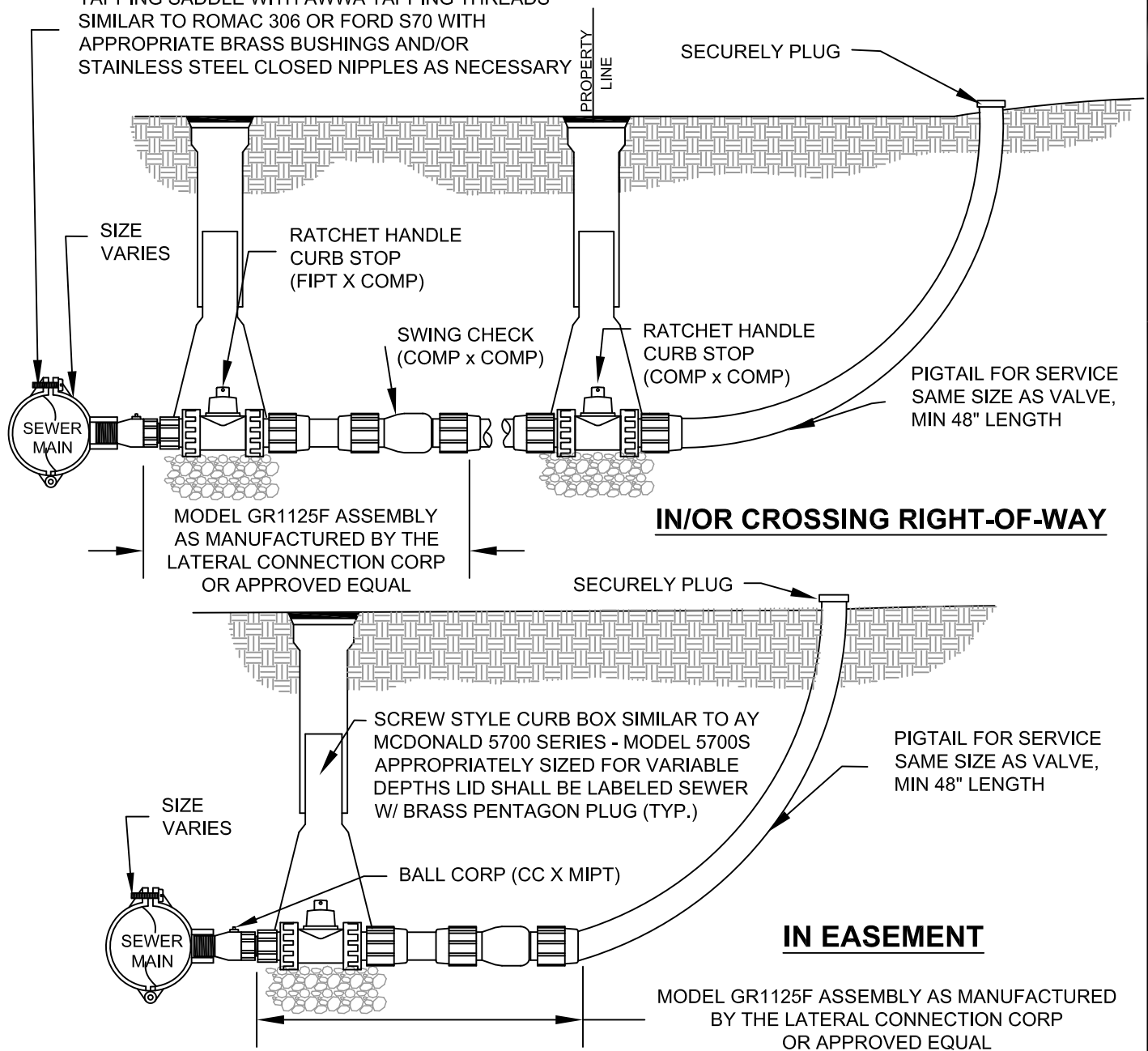
No.	Date
1	August 20, 2012
2	October 6, 2017
3	
4	

SINGLE SANITARY SEWER CLEANOUT

Detail:

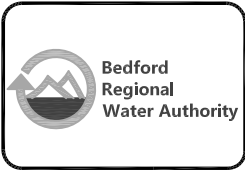
CO-2

TAPPING SADDLE WITH AWWA TAPPING THREADS
SIMILAR TO ROMAC 306 OR FORD S70 WITH
APPROPRIATE BRASS BUSHINGS AND/OR
STAINLESS STEEL CLOSED NIPPLES AS NECESSARY



NOTES:

1. ALL PIPING BETWEEN THE PUMP STATION AND THE SEWER FORCE MAIN SHALL BE SDR 9 OR SDR 11 HDPE PIPE RATED TO 200 PSI MIN.
2. ALL FITTINGS SHALL BE SPECIFIED AS HDPE FITTINGS, AND SHALL BE SIMILAR TO "THE LATERAL CONNECTION CORPORATION" PRODUCTS.
3. FOR STANDARD RESIDENTIAL APPLICATIONS, ALL HDPE PIPE AND FITTINGS SHALL BE 1 1/4" DIAMETER, AND SHALL BE IRON PIPE SIZES (IPS).
4. WHEN FORCE MAIN IS INSTALLED ALONG RIGHT-OF-WAY, THE VALVE ASSEMBLY SHALL BE LOCATED BEHIND THE DITCH LINE.
5. TRACER WIRE IS REQUIRED TO BE INSTALLED WITH THE HDPE PIPE, TRAVELING FROM THE PUMP STATION TO THE SEWER MAIN CONNECTION.



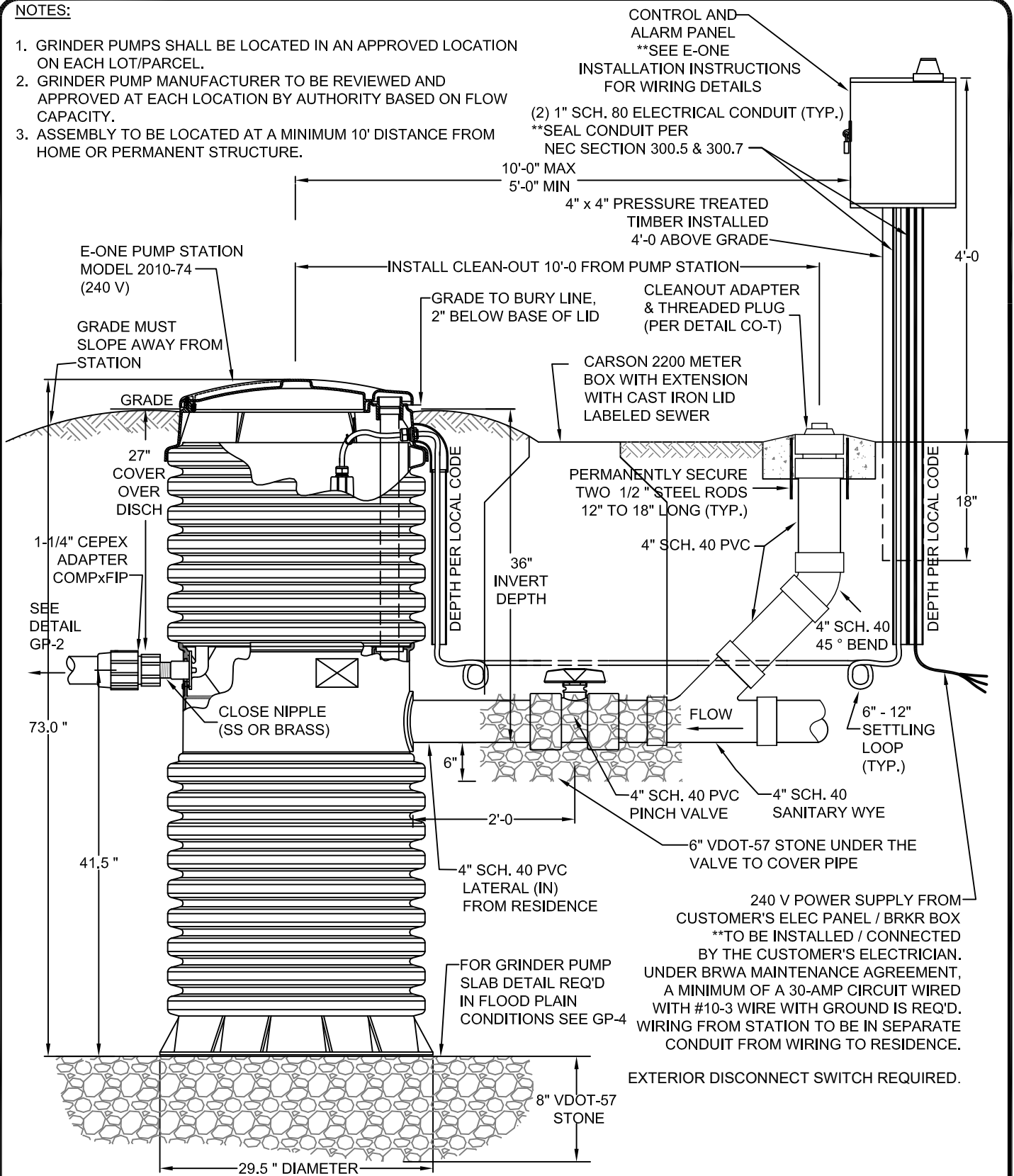
No.	Date
1	August 20, 2012
2	October 6, 2017
3	
4	

**LOW PRESSURE SEWER
FORCE MAIN CONNECTION
(1 1/4" TO 2")**

Detail:
GP-2

NOTES:

1. GRINDER PUMPS SHALL BE LOCATED IN AN APPROVED LOCATION ON EACH LOT/PARCEL.
2. GRINDER PUMP MANUFACTURER TO BE REVIEWED AND APPROVED AT EACH LOCATION BY AUTHORITY BASED ON FLOW CAPACITY.
3. ASSEMBLY TO BE LOCATED AT A MINIMUM 10' DISTANCE FROM HOME OR PERMANENT STRUCTURE.

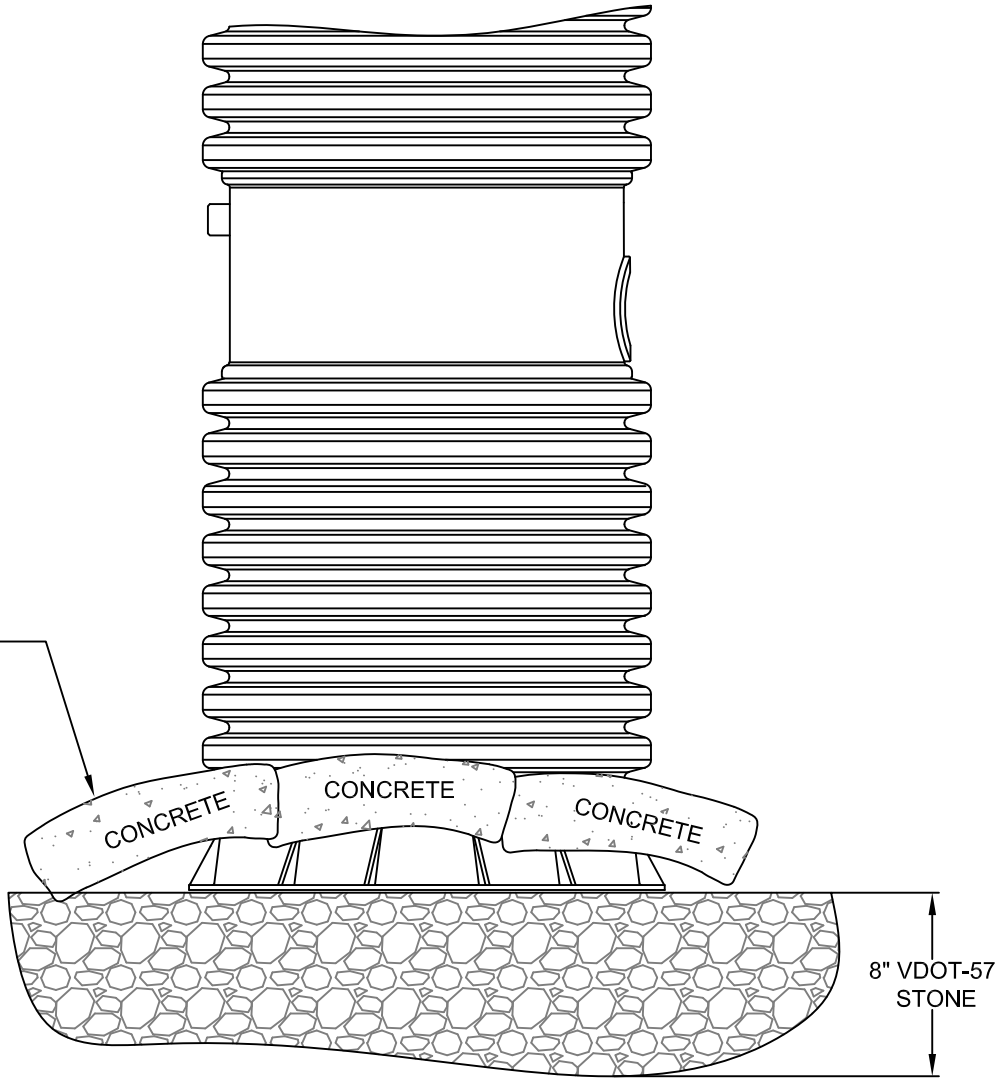


No.	Date
1	July 19, 2013
2	October 6, 2017
3	February 15, 2018
4	January 4, 2023

**RESIDENTIAL E-ONE
MODEL 2010-074 PUMP STATION
INSTALLATION**

Detail:
GP-3E

5 (80 #) BAGS OF
"READY TO MIX
CONCRETE" EVENLY
PLACED (UNOPENED)
AROUND BASE
FLANGE



NOTE:

1. CONCRETE BAGS ARE REQUIRED TO PREVENT FLOATING IN FLOOD PLAIN CONDITIONS.



No.	Date
1	July 19, 2013
2	October 6, 2017
3	
4	

PUMP STATION SLAB
MOUNTING DETAIL

Detail:
GP-4