Elkhart County
Regional Sewer District

Heaton Lake
District Wastewater Collection
System

Rules and Regulations for
Building Sewer Construction

Rules and Regulations for Building Sewer Construction

Elkhart County Regional Sewer District, Elkhart County, Indiana

The following guidelines shall apply for all commercial, industrial and institutional users connecting to the Elkhart County Regional Sewer District (ECRSD) Heaton Lake District Wastewater Collection System. These guidelines cover the administrative procedure and the construction of gravity sewer lateral, pressure sewer lateral, and low pressure sewer lateral from any serviced structure to an existing pressure main within the jurisdiction of the Elkhart County Regional Sewer District and the service area of theHeaton Lake District Wastewater Collection System.

The provisions of this document are intended to retire existing septic systems and to implement uniform sewer connection procedures to prevent

1. Administrative

1.1 Forms

The following documents shall be executed during the building sewer application process and are included as attachments herein

1.1.A Rules and Regulations

1.1.B Building Sewer Connection Agreement

1.1.C Application for Building Sewer Connection Permit.

1.1.D Table of Pollutants

1.1.E Baseline Monitoring Report

1.1.F Building Sewer and Sewer Lateral Location Sketch and Septic Tank Inspection and Internal Piping Verification

1.1.G Standard Details Figures 1 through 9

1.1.H Protocol for Onsite Sewage System Abandonment

1.1.I Easement (if necessary).

1.2 Submittals

Property owners seeking connection to the ECRSD sanitary sewer system are required to submit the following prior to start of any building sewer connection work:

1.2.A Fully executed Building Sewer Connection Agreement

1.2.B Fully executed Application for Building Sewer Connection permit.

1.2.C Building Sewer Lateral (gravity or pressure) location sketch with dimensions and Septic Tank Inspection with Internal Piping Verification.

1.2.D Payment of a connection charge at the rate stipulated in the Sewer Rate Ordinance.

1.2.E Payment of the inspection fee at the rate stipulated in the Sewer Rate Ordinance

2. Standard Conditions

2.1 Codes, Standards and Ordinances

The following codes, standards and ordinances are all applicable to the work herein described, either in part or entirety, except that where more stringent requirements are set forth under codes, laws and ordinances of federal, state and/or local governing bodies having jurisdiction, those more stringent requirements take precedence.

2.1.A Sewer Use Ordinance No. 06-06-07, as adopted by the ECRSD.

2.1.B Sewer Rate Ordinance No. 1-2014-0001, as adopted by the ECRSD.

2.1.C BOCA National Plumbing Code, current edition, with Indiana amendments.

2.1.D NFPA 70 National Electrical Code, current edition, with Indiana amendments.

2.1.E Indiana State Department of Health, Bulletin S.E. 13 "On Site Water Supply and Wastewater Disposal for Public and Commercial Establishments, current edition.

2.1.F Indiana Administrative Code 410 IAC 6-8.2 "Residential Onsite Sewage Systems".

2.1.G Indiana Administrative Code 410 IAC 6-10 "Commercial Onsite Wastewater Disposal Administrative Code 410 IAC 6-8.2 "Residential Onsite Sewage Systems disposal".

2.2 Insurance

Prior to execution of the work, all contractors must procure and maintain insurance of the types and limits specified by the Board from a carrier licensed to do business in the State of Indiana. All such insurance must be evidenced by a "Certificate of Insurance" to be submitted with the "Application for Building Sewer Connection Permit".

Certificate of Insurance Requirements:

Before the ECRSD will accept the *"Application for Building Sewer Connection Permit"* the contractor shall show one of the following proofs of insurance when filing the application.

2.2.A. Public Liability and Property Damage Insurance in an amount not less than one million dollars ($1,000,000.00) in the case of damage or injury to one or more persons.

2.2.B Public Liability and Property Damage Insurance filed with and in the amounts specified and required by the County in which the Contractor is engaged in the business of sewer construction or other ancillary work related to construction in the Elkhart County Regional Sewer District within that County. Insurance filed with said County shall list the Elkhart County Regional Sewer District as an additional insured.

2.2.C Business and home owners completing work without a contractor shall either present a Property Owner's policy amended, or obtain a separate policy, to cover damages to the public sewer system from their operations. Such coverage shall be issued in the amount of $10,000 and be evidenced by a *"Certificate of Insurance"* to be submitted with the *"Application for Building Sewer Connection Permit"*.

2.3 Bonds

In addition to Insurance, all contractors and their subcontractors engaged in providing all or any part of the work of connecting a building or buildings to the main sewer system with a building sewer must furnish guaranteed surety to the Elkhart County Regional Sewer District in the form of a permit bond in the amount of $5,000, in the event that the contractor or subcontractor damages any part of the public sewer system for which corrective action must be taken by the ECRSD.

2.4 Contractor County Registration

Contractor shall obtain and maintain a current Contractor Registration if required in the County in which the Contractor plans on engaging in the business of sewer construction or other ancillary work related to the sewer construction within the Elkhart County Regional Sewer District within that County.

3. Materials

The building sewer shall consist of the following minimum items: gravity and/or pressure sewer laterals, septic/trash tank, aeration tank and aeration equipment, effluent pump and filter, and pressure sewer connection to mainline force main. The following sections describe the minimum requirements for each of the above mentioned items.

3.1 Building Sewers, Gravity Sewer and Pressure Sewer Laterals

3.1.A Sewer laterals 50' or more from water wells (public or private): Any new building sewer gravity laterals, installed between the structure and the grinder station, shall be SDR 35 Polyvinyl Chloride (PVC) pipe or Schedule 40 Polyvinyl Chloride (PVC) pipe with gasket, push on joints. Glued-joint pipe is not acceptable. Existing lateral pipe conforming to current Elkhart County Health Department standards may continue to be utilized, provided all other applicable standards herein are maintain.

3.1.B Sewer laterals within 50' of water wells (public or private): In instances where the proposed gravity sewer laterals must be constructed within a distance of fifty (50) feet of a potable public or private water well, or ten (10) feet of a water main, pipe shall be of waterworks grade, with gasket, pressure grade push on joints e.g., SDR 21 PVC, Class 52 ductile(iron pipe, etc.) in accordance with 327 IAC 8- 3.2.8.

3.1.C Sewer lateral size and scope:

3.1.C.1 All sanitary service laterals shall be four (4) inches in diameter.

3.1.C.2 Sanitary service laterals shall be laid with a minimum slope of 1.33% and a maximum slope of 12.0%.

3.1.C.3 6” inch diameter laterals (if approved) shall be laid at a minimum slope of 0.67%and a maximum slope of 12.0% and will require a reducer to connect to a grinder station. (Minimum and maximum slopes taken directly from 410 IAC 6-8.2-62)

3.1.D In instances where pressure sewer laterals must be constructed due to inadequate or negative slope between Building and the trash tank (pt.3.2), the following special provisions will apply:

3.1.D.1 Pipe shall be of waterworks grade, with gasket, pressure grade push on joints (i.e., SDR 21 PVC or Class 52 ductile iron pipe).

3.1.D.2 The ejector pit shall be located greater than 50 feet of potable water wells (public or private).

3.1.D.3 The pump a/o ejector pit shall not be capable of exceeding a flow rate of 14 gallons per minute, and shall not pump waste in intervals exceeding 24 gallons (sometimes referred to as "slugs").

3.1.D.4 The ECRSD reserves the right to require anyone obtaining a permit for this type of connection to also provide pump curve performance data and shop drawings for the pump and ejector pit they are proposing to use.

3.2 Septic Trash Tank

3.2.A. The septic/trash tank shall be designed, constructed and installed in accordance with the requirements of 410 IAC 6-8 and 410 IAC 6-10 and Elkhart County Health Department requirements. Tank sizing shall be based on actual or estimated flow using criteria as determined by the District's adopted Use and Rate Ordinance Schedule of Residential Equivalents.

3.2.B. Septic/trash tank(s) shall be sized to provide a minimum of 24-hour in tank detention time at average design flows based upon the above referenced guidelines.

3.2.C. It may be necessary to install multiple septic/trash tanks in a parallel configuration in order to provide the necessary in-tank retention. In this scenario, careful consideration must be given to insure that uniform distribution of wastewater to the various septic/trash tanks occurs.

3.2.D. Septic tanks shall be watertight and resistant to intrusion of ground or surface water. They shall include an effluent filter on the outlet of the septic/trash tank. The effluent filter shall be rated for a minimum, the average daily flow as determined by the system designer. Outlet Filter shall have a current product listing showing conformance with ANSI/NSF standard 46. Each outlet filter shall include a gas baffle assembly. Effluent filters shall be Polylok PL Series or approved equal.

3.3 Aeration Tank and Equipment

3.3.A. A watertight aeration tank shall be installed by each customer or service after the septic/trash tank.

3.3.B. Aeration system shall have a minimum volume required to provide 24-hour in-tank detention. This may require multiple tanks.

3.3.C. Aeration equipment shall be installed to provide continuous aeration of the tank and increase the dissolved oxygen concentration to a minimum of 4 mg/L before being discharged to the effluent pump. Aeration tank and equipment shall be manufactured by Orenco Systems Inc., Aero-Tech or approved equal."

3.4 Effluent Pumps, Filters & Chamber

3.4.A Effluent pump(s), filter(s), controls, and appurtenances shall be contained in a separate chamber from the septic/trash or aeration tanks and shall meet the specific requirements of the pressure sewer system design and the standards of the ECRSD, as well as any applicable federal, state or local authority.

3.4.B System design is based on the use of Orenco Systems, Inc. Any deviation from the specified pump, basin, controls, and appurtenances shall require prior written approval by the ECRSD. Effluent pumps shall be of the high-head type and shall discharge an average of 10 gallons per minute (gpm) at a total dynamic head (TDH) of at least 180 feet. It may be necessary for the effluent pumps to overcome additional total dynamic head due to extended pressure connection lengths from the effluent pump(s) to the main line pressure sewer. Multiple effluent pumps, filters and chambers may be necessary for larger users.

3.4.C Each effluent pump shall be supplied with an influent filter to restrict the passage of small solids that were not removed through the sedimentation process in the septic/trash`tank. Filter shall be removable and cleanable and/or replaceable onsite.

3.4.D Effluent pump chamber(s) shall be provided with a level control assembly consisting of either float switches or pressure transducer. Level control assembly shall include an alarm notification feature to be triggered in the event of a high water level within the effluent pump chamber(s).

3.5 Low Pressure Sewer Laterals

3.5.A Pressure sewer laterals, installed between the effluent pump unit and the pressure sewer main, shall be DR 11,200 psi, high density polyethylene (HDPE) pipe, joined by the butt fusion or socket fusion method. All pipe shall be one and one quarter inches (1-1/4") in diameter, unless wastewater flows and pumping rates require larger lateral sizing, and it is specifically approved by the ECRSD.

3.5.B Regardless of the number of effluent pumps required by an individual user, the effluent pump discharge pipes shall be routed together to a single point of connection with the main line pressure sewer.

3.5.C Tapping saddles, check valves, curb stops, curb boxes, and fittings shall conform to the requirements of the ECRSD. Refer to Figure 1 for material requirements for pressure lateral taps. Taps to the mainline pressure sewer shall only be made by contractors prequalified for such work by the ECRSD and experienced in such connections.

3.5.D Tapping saddles shall be HDPE and of the side-fusion type. Connection to the main line pressure sewer shall be of the wet or hot type, meaning that the main line pressure sewer will remain in service while a connection is being made. A corporation cock valve shall be provided and fused to the tapping saddle prior to tapping the main line pressure sewer. The contractor shall pressure test the assembled tapping saddle and corporation cock to insure a watertight connection prior to tapping the main line pressure sewer.

3.5.E A curb stop assembly shall be installed at the approximate right-of-way line, but on the service owner's property. The curb stop assembly shall include a curb stop ball valve with curb box and a check valve. The curb box lid shall be stamped "Sewer"

4. Installation

4.1.A Building sewers should be installed using the shortest and most direct route. Interior plumbing modifications are suggested rather than excessive changes of direction in the building sewer. Any new plumbing done inside the building to within 5 feet of the building must be performed by a licensed plumber, unless the property owner performs this work. See Figures 2, 3, and 4 for typical details of installation.

4.1.B All fittings shall be installed to guide sewage in the direction of flow. There shall be no elbows or bends greater than 45 degrees.

4.1.C When connecting gravity lateral pipes of differing material, a Fernco connection (or approved equivalent) shall be used. This is the only location such connector shall be used.

4.1.D Any open trench lateral construction shall be bedded in a minimum of 3" granular material conforming to Indiana Department of Transportation (INDOT) No. 53 or No. 8 gradations. Native soils may be used only if they consist of sand or other similar materials. Native materials that include vegetable or other organic matter, all types of refuse, large pieces or fragments of concrete, large stones, boulders, or other similar materials shall not be used. Bedding shall be carefully placed up to the spring line of the pipe making sure that the lower quadrants of the pipe are firmly bedded and supported. The trench section from the spring line of the pipe to a point 3 feet above the pipe shall be carefully backfilled with suitable excavated material. Suitable excavated material used for backfill shall consist of loam, sand, or other similar materials. Backfill materials that include vegetable or other organic matter, all types of refuse, large pieces or fragments of concrete, large stones, boulders, or other similar materials shall not be used. At all times during the work, proper care must be taken to keep the trench and any other excavation free from any ground and surface water. Such equipment must be supplied and maintained to keep excavations dry until the sewer pipe bedding and backfill are complete. Drain or pump water away from the work to a suitable location without interference to adjoining property. Refer to Figure 6 for pipe bedding and backfill requirements.

4.1.E A sewer cleanout shall be installed a minimum of 18 inches and a maximum of 4 feet from the building.

4.1.F Sewer cleanouts shall be installed a maximum of every 100 feet along any gravity type building sewer. Accessible cleanouts shall also be installed at every change of direction.

4.1.G Cleanouts shall be extended to grade, pipe liners (frost sleeves) are recommended to be placed around the cleanout extension to grade. The cleanout shall be a "Y" fitting installed in the direction of sewer flow with a 45 degree fitting directed to grade. See Figure 3 for a detail of cleanout construction.

4.1.H Cleanouts shall be the same diameter as the sewer lateral pipe.

4.1.I Cleanout access shall not be covered and shall be readily accessible. Cleanouts shall be plugged or capped with an approved watertight lid.

4.1.J Existing septic tanks and/or holding tanks may be repurposed to serve as either septic/trash or aeration tanks provided they are of sound construction and shown to be watertight.

4.1.K Those existing sewer lines presently connecting the building sanitary drain to the septic tank may remain provided they are of an acceptable material and can be shown to be watertight.

4.1.L When it is required to tap an active pressure sewer main for a new pressure sewer lateral, every effort shall be made to prevent wastewater discharge from the system. This may be accomplished through tapping the active sewer in accordance with Figure 4.

4.1.M The ECRSD shall be notified a minimum of 48 hours prior to the tapping of any active sewer. The completed tap shall be approved by the ECRSD prior to being backfilled. Tapping an active low pressure sewer main shall only be performed by a contractor prequalified by the ECRSD. Connection to an active pressure sewer main shall only be performed by a qualified contractor, approved and authorized by the ECRSD.

4.1.N The property owner shall make every effort necessary to avoid prohibited connections, which include but may not be limited to the following: rain, surface or subsurface water, sump pumps collecting rain and/or ground water, septic tanks, holding tanks, dry wells, and field drains. Internal piping shall be verified and inspected by the ECRSD before any connections are made. All piping and fixtures on the property of the customer are assumed to be in satisfactory condition at the time the sewer connection is made and sewer service furnished. The ECRSD reserves the right to require the correction of any unsatisfactory plumbing condition that may affect the integrity of the ECRSD sewer system if, during the inspection, such condition is found to exist. The ECRSD reserves the right to make any necessary repairs, if the customer refuses to do so, and shall bill the customer for the cost of said repairs.

4.1.O The sewer lateral for all non-residential properties engaged in food service or food processing including facilities with an on-site cafeteria must include an acceptable self-contained grease trap.

5. Inspections

5.1.A All building sewers and sewer laterals shall be inspected by the ECRSD to ensure compliance with these standards. A 72-hour notice for inspections is recommended.

5.1.B The entire installation and final hookup shall be inspected prior to backfilling in order to verify materials and installation. Any building sewer lateral backfilled prior to an Inspection approval shall be re-excavated at the owner's expense for inspection. In instances where service laterals are installed by directional drilling, the owner shall retain a sample of the piping material for verification by the inspector.

5.1.C Building sewers and service laterals shall be pressure tested in the presence of the ECRSD's inspector to verify that no leaks are present. The contractor and/or property owner must make all arrangements to conduct the test, as well as furnish all labor, materials, tools, equipment, and apparatus. Gravity building sewers shall be tested by a low-pressure air test at 4.0 psig for durations as listed in Table 5-1. Pressure sewer laterals shall be air tested at maximum operating pressure for 15 minutes based upon pipe Manufacturer's specifications prior to connection to District sewer. All laterals shall be tested from the first cleanout near the building to the ECRSD connection point.

TABLE 5-1

Low Pressure Air Test Minimum Time required for 0.5 PSIA pressure drop

Length (Ft.)	Time (min:sec)
Up to 597	1:53
Greater than 597	0.190 * L

L= Length of Pipe (ft.)

5.1.D If it is to remain in place, the existing septic tank must be inspected

5.1.E No building sewer or sewer lateral installation or excavation of the lateral connection shall be allowed prior to completion of the ECRSD's main sewer collection treatment system.

6. Special Connections

6.1.A Any condition where the property owner must provide a new tie into the main sewer line with a lateral connection or where multiple connections are necessary will be considered on an individual basis by the ECRSD for required materials, inspections and tests.

Elkhart County Regional Sewer District

Building Sewer Connection Agreement

I (we)_____ am (are) Owner(s) of real property, within the boundaries of the Elkhart County Regional Sewer District Heaton Lake Wastewater Collection System, located at:

_____
Property Address

It is my (our) understanding that I (we) am (are) asking to connect my (our) business/residence (occupied structure) to the sanitary sewer collection system that has been constructed by the Elkhart County Regional Sewer District. The subject property to be connected to the sanitary sewer collection system is more particularly described as follows: (tax code or legal description. Attach current deed or other documents).

I (we) hereby agree to grant the Elkhart County Regional Sewer District the right to inspect, test, measure flows or otherwise monitor each underground building sanitary service to confirm all grey water drains are connected to the ECRSD sewer and any natural precipitation or groundwater is not connected to the ECRSD sewer pursuant to sections 5.4, 5.8, 5.9 of Ordinance No.2016-2 by other Ordinances of the Elkhart County Regional Sewer District in effect as of the date of this agreement and as subsequently amended from time to time.

I (we) hereby agree that the above-mentioned property shall be connected to the sanitary sewer collection system operated by the Elkhart County Regional Sewer District. I (we) further agree that in connecting to the aforementioned sanitary sewer system, I (we) have paid the required fees associated with the connection of the property to the sanitary sewer system. Furthermore, I (we) agree to pay the monthly sewer service charge currently assessed by the ECRSD. It is also understood that this commitment runs with the premises and therefore will be binding upon any subsequent landowner or successor in interest to said property.

It is further my (our) understanding that upon execution of this agreement pursuant to the terms and conditions stated above and upon sending the required sewer connection tap-on charge with this agreement to the office of Elkhart County Regional Sewer District, I (we) agree to connect to the Elkhart County Regional Sewer District.

This AGREEMENT and commitment is entered into this_____day of _____ 20_____.

_____ _____

Mailing Address Signature of Owner

_____ _____ _____ _____

City State Zip Signature of Owner

Elkhart County Regional Sewer District

Application for Building Sewer Connection Permit

Date:_____ Phone Number:_____ Mailing Address:_____

Name of Property Owner:_____Installing Contractor: _____

Contractor Address: _____ Contractor Phone #: _____

Contractor License Information: _____ *(If required, Contractor County Registration enclosed)*

Property Address *(if different from mailing address):* _____

Proposed Date of Connection: _____ Permit fee enclosed: ☐ Y or N ☐

Certificate of Insurance enclosed: ☐ Y or N ☐ Permit Bond Enclosed: ☐ Y or N ☐

Before sewer excavation or construction begins, the owner or installing contractor must apply for a building sewer connection permit, submit all required insurance and bond information, and pay all applicable fees, charges, and costs payable to the Elkhart County Regional Sewer District. Before a building sewer or sewer lateral may be buried or put into use, **it must be inspected and approved** by a District Inspector as to be in compliance with minimum requirements for design, materials and workmanship.

A **COMPLETED SKETCH** must be included with this application form upon its return for approval.

1. Chemicals and compounds used (include MSDS for each)

_____

2. Hours of process discharge into the sewer system per day:

_____

3. List any environmental control permits held by or for the facility (including a discharge permit issued by the city). Please include all applications presently being reviewed by any regulatory agency. Please include all associated permit numbers.

_____

4. List all products manufactured or services provided by your facility along with the corresponding SIC number according to the Standard Industrial Classification Manual, Bureau of Budget, 1972 as amended:

_____

Product or Services	SIC Code
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

5. List intake water sources and volume:

Municipal Water Service	_____	gallons/day
Private Well	_____	gallons/day
Surface Water	_____	gallons/day
Other	_____	gallons/day
Total:	_____	gallons/day

Waste Hauler _____ gallons/day

Evaporation Contained in _____ gallons/day

Product Other: _____ gallons/day

Est. 30 Minute Peak _____ gallons/day

Flow Total: _____ gallons/day

6. List average water usage within the facility:

Process waste stream #1	_____	gallons/day	metered ☐ Yes ☐ No
Process waste stream #2	_____	gallons/day	metered ☐ Yes ☐ No
Process waste stream #3	_____	gallons/day	metered ☐ Yes ☐ No
Process waste stream #4	_____	gallons/day	metered ☐ Yes ☐ No
Contact cooling water	_____	gallons/day	metered ☐ Yes ☐ No
Non-contact cooling water	_____	gallons/day	metered ☐ Yes ☐ No
Sanitary water	_____	gallons/day	metered ☐ Yes ☐ No
Boiler/Air Conditioner	_____	gallons/day	metered ☐ Yes ☐ No

7. Describe how each waste stream listed above is generated:

#1 _____

#2 _____

#3 _____

#4 _____

Contact Cooling

8. Is discharge to the sewer? ☐ Yes ☐ No

Continuous: ☐ Yes ☐ No Batch: ☐ Yes ☐ No

Time and Duration of discharge to the sewer: _____ Times per day / mo. / yr.

Circle days of the week: S M T W TH F S

_____ AM to _____ PM Volume: _____ gallons per batch

9. Attach a detailed schematic process diagram of the facility showing the locations of sewers referenced in #7. The application will **NOT** be accepted if the diagram is not included.

Please identify the following in your diagram:

- ☐ Production Steps
- ☐ Stages where water and chemicals are added and where discharges to the sewer system occur.
- ☐ Source(s) of water supply.
- ☐ Existing pretreatment systems, if any.
- ☐ Continuous and batch discharge stages.
- ☐ Location of meter(s), identify sampling and monitoring points.
- ☐ Number and location(s) of sanitary and storm sewer connections.

10. List plant sewer outlets, size and flow (assign sequential reference number to each sewer starting with number 1; identify these on the schematic) plant sewer outlets, size and flow (assign sequential reference number to each sewer starting with number 1; identify these on the schematic)

Reference Number	**Sewer Size (inches)**	**Description of Sewer Location**	**Average Flow (GPD)**
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

11. Do you have any of the following currently in use or in future plans?

	Current	**Planned**
Flow Metering	☐ Yes ☐ No	☐ Yes ☐ No
Sampling Equipment:	☐ Yes ☐ No	☐ Yes ☐ No
Monitoring Equipment: (pH, Temp., TOG, etc.)	☐ Yes ☐ No	☐ Yes ☐ No

12. List all potable water metering devices including manufacturer, model, and locations:

13. List all wastewater metering devices including manufacturer, model and locations:

Pretreatment

14. If applicable, describe all Federal Categorical Pretreatment Standards that apply to all processes in your facility (40CFR Part 403):

15. If any Federal Pretreatment Standards apply to your facility for its processes, and such standards are not yet being met, please include a compliance schedule according to 40 CFR Part 403.12(b)(7).

16. Describe any wastewater treatment equipment or process in use and identify its location on the schematic.

17. Describe any additional pretreatment facilities and processes under consideration. Include a specific timetable for completion.

18. Do you have a spill prevention, containment and control plan (SPCC) or RCRA contingency plan for your facility? ☐ Yes ☐ No If yes, please, include a copy.

19. Do you utilize the city sewer to dispose solvents, sludges or hazardous materials? ☐ Yes ☐ No

20. If yes, describe the materials and provide an estimate for annual frequency and quantity disposed.

21. Are solvents, sludges or hazardous materials transported and disposed off-site? ☐ Yes ☐ No

22.. If yes, explain.

23. Please indicate on **Table 1 Pollutants** which, if any, may be found in your wastewater discharge as a result of a direct discharge from your pretreatment facility, process operation or from an accidental spill.

24. Please list names of Certified Operators currently employed by your facility. Include Certification Number, Classification, and Expiration Date of Certification.

Name: _____ Certification Number: _____

Class: _____ Expiration Date: _____

Name: _____ Certification Number: _____

Class: _____ Expiration Date: _____

Wastewater Characteristics

Attach the most recent laboratory data, which characterize the facility discharge to the sewer system. Indicate the sampling location, time and date of sample collection, and type of sample collected (grab or composite). All sampling and analysis shall be performed in accordance with

If no sampling data are available, testing **MUST** be performed on the discharge for any pollutant that may be present. The sample must be taken during normal production activity and be representative of typical wastewater flows and constituents. The parameters analyzed shall include all pollutants indicated on Table 1 that may be present in your waste stream (conventional, nonconventional and priority pollutants).

The ECRSD reserves the right to require additional testing to characterize the facility discharge.

I certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief such information is true, complete and accurate.

Printed Name	Title
Signature	Date

Before sewer excavation or construction begins, the owner or installing contractor must apply for a building sewer connection permit, submit all required insurance and bond information, and pay all applicable fees, charges, and costs payable to the Elkhart County Regional Sewer District. Before a building sewer or sewer lateral may be buried or put into use, it must be inspected and approved by a District inspector as to be in compliance with minimum requirements for design, materials and workmanship.

A COMPLETED SKETCH must be included with this application form upon its return for approval. **Form C,** listing required information, is attached for your use.

Approved by: _____ Date: _____

---------- OFFICE USE ONLY----------

This certifies that the building sewer and appurtenances for the above building has passed final inspection and the building is accepted for service by the Elkhart County Regional Sewer District.

This approval is subject to any applicable laws, rules and regulations. Total user charges are due and payable commencing _____, 20_____.

1. Received Building Sewer Connection Agreement INITIAL: _____
2. Received Application for Building Sewer Connection Permit INITIAL: _____
3. Received Building Sewer and Sewer Lateral Location Sketch INITIAL: _____
4. Received Septic Tank & Piping Inspection & Verification INITIAL: _____
5. Inspection Fee Paid INITIAL: _____
6. Application Fee Paid INITIAL: _____
7. Connection Charge Paid INITIAL: _____
8. Easement (if required) INITIAL: _____

Approved By:_____ **Date:**_____

Table 1 - Pollutants

Section 1 Priority Pollutants

A. Metals and Inorganics

- ☐ Antimony; Sb
- ☐ Arsenic; As
- ☐ Asbestos
- ☐ Beryllium; Be
- ☐ Cadmium; Cd
- ☐ Chromium; Cr
- ☐ Copper; Cu
- ☐ Cyanides; CN
- ☐ Lead; Pb
- ☐ Mercury; Hg
- ☐ Nickel; Ni
- ☐ Selenium; Se
- ☐ Silver; Ag
- ☐ Thallium; Tl
- ☐ Zinc; Zn

B. Toxic Organics: Ethers

- ☐ Ether, bis(2-chloroethyl)
- ☐ Ether, bis(2-chloroisopropyl)
- ☐ Ether, 2-chloroethyl vinyl
- ☐ Ether, 4-chlorophenyl phenyl
- ☐ Ether, 4-bromophenyl phenyl
- ☐ Bis (2-chloroethoxy) methane

C. Toxic Organics: Phthalates

- ☐ Phthalate, dimethyl; DMP
- ☐ Phthalate, diethyl; DEP
- ☐ Phthalate, di-n-butyl; DBP
- ☐ Phthalate, di-n-octyl; DOP
- ☐ Phthalate, bis (2-ethylhexyl); DEHP
- ☐ Phthalate, butyl benzyl; BBP

D. Toxic Organics: Nitrogen Compounds

- ☐ Nitrosamine, dimethyl
- ☐ Nitrosamine, diphenyl
- ☐ Nitrosamine, di-n-propyl
- ☐ Benzidine
- ☐ Benzidine, 3, 3'-dicholoro
- ☐ Hydrazine, 1,2-diphenyl
- ☐ Acrylonitrile

E. Toxic Organics: Phenols

- ☐ Phenol
- ☐ Phenol, 2-chloro
- ☐ Phenol, 2,4-dichloro; 2,4-DCP
- ☐ Phenol, 2,4,6-trichloro
- ☐ Phenol, pentachloro; PCP
- ☐ Phenol, 2-nitro
- ☐ Phenol, 4-nitro
- ☐ Phenol, 2,4-dinitro; 2,4-DNP
- ☐ Phenol, 2,4-dimethyl
- ☐ m-Cresol, p-chloro
- ☐ o-Cresol, 4,6-dinitro; DNOC

F. Toxic Organics: Aromatics

- ☐ Benzene
- ☐ Benzene, chloro
- ☐ Benzene, 1,2-dichloro
- ☐ Benzene, 1,3-dichloro
- ☐ Benzene, 1,4-dichloro
- ☐ Benzene, 1,2,4-trichloro
- ☐ Benzene, 1,2,3,4-tetrachloro
- ☐ Benzene, 1,2,4,5-tetrachloro
- ☐ Benzene, hexachloro; HCB
- ☐ Benzene, pentachloro
- ☐ Benzene, ethyl
- ☐ Benzene, nitro
- ☐ Toluene
- ☐ Toluene, 2,4-dinitro; DNT
- ☐ Toluene, 2,6-dinitro

G. Toxic Organics: Polynuclear Aromatic Hydrocarbons

- ☐ 2-Chloronaphthalene
- ☐ Benzo (a) anthracene
- ☐ Benzo (b) fluoranthene; B(b)F
- ☐ Benzo (k) fluoranthene; B(k)F
- ☐ Benzo (a) pyrene; BaP
- ☐ Ideno (1,2,3-cd) pyrene; IP
- ☐ Dibenzo (a,b) anthracene; DBA
- ☐ Acenaphthene
- ☐ Acenaphythylene
- ☐ Anthracene
- ☐ Chrysene
- ☐ Fluoranthene
- ☐ Fluorene
- ☐ Naphthalene
- ☐ Octochlorostyrene
- ☐ Phenanthrene
- ☐ Pyrene

H. Toxic Organics: PCB's

- ☐ PCB-1016; Arochlor 1016
- ☐ PCB-1221; Arochlor 1221
- ☐ PCB-1232; Arochlor 1232
- ☐ PCB-1242; Arochlor 1242
- ☐ PCB-1248; Arochlor 1248
- ☐ PCB-1254; Arochlor 1254
- ☐ PCB-1260; Arochlor 1260

I. Toxic Organics: Halogenated Hydrocarbons Halogenated Aliphatics

- ☐ Methane Chloro; Methyl chloride
- ☐ Methane, Dichloro; Methylene chloride
- ☐ Methane, trichloro; Chloroform
- ☐ Methane, tetrachloro; Carbon tetrachloride
- ☐ Ethane, chloro
- ☐ Ethane, 1,1-dichloro
- ☐ Ethane, 1,2-dichloro
- ☐ Ethane, 1,1,1-trichloro
- ☐ Ethane, 1,1,2-trichloro
- ☐ Ethane, 1,1,2,2-tetrachloro
- ☐ Ethane, hexachloro
- ☐ Ethene, chloro; Vinyl chloride
- ☐ Propane, 1,2-dichloro
- ☐ Propene, 1,3-dichloro
- ☐ Butadiene, hexachloro; HCBD
- ☐ Cyclopentadiene, hexachloro; HCCPD
- ☐ Methane, bromo; Methyl bromide
- ☐ Methane, dichlorobromo
- ☐ Methane, chlorodibromo
- ☐ Methane, Tribromo; Bromoform
- ☐ Ethene, trichloro
- ☐ Ethene, 1,1-dichloro; 1,1-DCE
- ☐ Ethene, 1,2-trans-dichloro
- ☐ Ethene, tetrachloro

J. Toxic Organics: Pesticides

- ☐ alpha-Endosulfan
- ☐ Endosulfan sulfate
- ☐ beta-Endosulfan

Hexachlorocyclohexanes:

- ☐ BHC
- ☐ alpha-BHC
- ☐ beta-BHC
- ☐ delta-BHC
- ☐ gamma-BHC; Lindane
- ☐ Aldrin; HHDN
- ☐ Dieldrin; HEOD
- ☐ 4,4'-DDE
- ☐ 4,4'-DDT; p,p'-DDT
- ☐ 4,4-DDD; p,p'-DDD; p,p'-TDE
- ☐ Endrin
- ☐ Endrin aldehyde
- ☐ Heptachlor
- ☐ Heptachlor epoxide
- ☐ Chlordane
- ☐ Mirex
- ☐ *Photomirex*
- ☐ Toxaphene

K. Toxic Organics: Oxygenated Compounds

- ☐ Acrolein

L. Toxic Organics: Miscellaneous

- ☐ Isophorone
- ☐ 2,3,7,8-tetrachlorodibenzo-p-dioxin; TCDD; dioxin

Section 2 Conventional Pollutants

- ☐ Carbonaceous Biochemical Oxygen ($cBOD_5$) > 250 mg/L
- ☐ 10 units < pH < 5 units
- ☐ Total Suspended Solids (TSS) > 250 mg/L
- ☐ Oil and Grease (O & G)

Section 3 Nonconventional Pollutants

- ☐ Ammonia (NH_3-N)
- ☐ Surfactants
- ☐ Phosphorus, Total

Elkhart County Regional Sewer District

Industrial Pretreatment Program Survey Baseline Monitoring Report

SECTION 1 - GENERAL INFORMATION

1. Parent Company:_____ Address:_____

2. Rate Payor/Facility Name: _____ Address:_____

3. Authorized Contact Person:

   Name:_____ Title:_____ Phone: _____

4. Nature of Business:_____

   _____

   _____

5. Standard Industrial Classification (SIC) Codes:_____

   _____

6. What type of waste(s) do you propose to discharge:
   - A. Sanitary _____
   - B. Contact Cooling _____
   - C. Non-contact Cooling _____
   - D. Storm Water _____
   - E. Onsite Wastewater Pretreatment _____
   - F. Air Pollution Control _____
   - G. Groundwater Remediation _____
   - H. Process _____
   - I. Cafeteria _____
   - J. Photo Lab _____
   - K. Others, describe: _____

7. Will you use, store, or discharge any acids priority pollutants as established by the U.S. EPA? ☐ Yes ☐ No

8. Schedule of Operation
   - A . Number of Employees: _____
   - B. Hours/Day Shift/Day: _____
   - C. Days/Week: _____
   - D. Days/Year: _____

9. Size: Square Feet:_____

10. Source of Water Supply:
    A. Municipal — Quantity(max) gpd:_____
    B. Private, Well — Quantity(max) gpd:_____
    C. Other, describe:_____ — Quantity(max) gpd:_____

11. Facility Water Usage
    A. Process — Quantity(max) gpd:_____
    B. Noncontact Cooling — Quantity(max) gpd:_____
    C. Sanitary — Quantity(max) gpd:_____
    D. Other, describe:_____ — Quantity(max) gpd:_____

12. Description:

Provide a brief description of the water flow through your facility or proposed facility from intake to discharge briefly describe all operations contributing wastewater,including process and production areas sanitary flows, cooling water, and stormwater. Describe all significant losses of water to products, atmosphere, and discharge

_____
_____
_____
_____
_____
_____
_____
_____

13. Include a complete set of blueprints and a site plan for your facility.

SECTION 2 - PROCESS AND PRODUCTS

1. Flow Program:
Provide a line diagram of the water flow through your facility or proposed facility from intake to discharge. Show all operations contributing wastewater, including process and production areas, sanitary flows, cooling water, and storm water. Show all significant losses of water to products, atmosphere, and discharge.

2. Process Streams Contributing to Uris Discharge:
For each separate process provide that following information (flow estimates appropriate for new sources):

PROCESS 1

A. Name of process contributing to discharge:_____
B. Process Schedule (yearly average):_____

Hours/Day:_____ Days/Year:_____

Total Yearly: _____

C. Process Volume Flow
Rate: _____
Daily Min:_____ Daily Max.:_____
D. Type of Discharge: Batch_____
E. Process production rate:_____
F. U.S. EPA Regulated Category/Subpart:_____
G. SIC Code: _____

PROCESS 2

A Name of Process contributing to discharge: _____

B. Process Schedule (yearly average):_____

Hours/Day:_____ Days/Year:_____

Total Yearly:_____

C. Process Volume Flow
Rate:_____
Daily Min. _____ Daily Max.:_____
D. Type of Discharge: Batch_____
E. Process production rate:_____
F. U.S. EPA Regulated Category/Subpart:_____
G. SIC Code: _____

PROCESS 3

A Name of Process contributing to discharge: _____

B. Process Schedule (yearly average):_____

Hours/Day:_____ Days/Year:_____

Total Yearly:_____

C. Process Volume Flow

Rate:_____

Daily Min. _____ Daily Max.:_____

D. Type of Discharge: Batch_____

E. Process production rate:_____

F. U.S. EPA Regulated Category/Subpart:_____

G. SIC Code: _____

Briefly describe the wastewater pretreatment system (if any):

_____

_____

_____

_____

_____

SECTION 3 - EXPECTED WASTEWATER CHARACTERISTICS

1. Expected Wastewater Characteristics:

Conventional Parameters:

Concentration (mg/L)

PARAMETER	Average	Maximum	No. of Analyses	Sample Type
BODs				
COD				
TOC				
TOX				
Ammonia Nitrogen (as N)				
Total Suspended Solids				
Total Phosphorus as P				

PH minimum:_____ Maximum: _____

Other Characteristics (Specify):_____

Concentration (mg/ L)

PARAMETER	Average	Maximum	No. of Analyses	Sample Type
Total Toxic Organics				

2. Explain the following regarding the concentrations indicated in Section III:
Time, Date and Place of Sampling:

_____

_____

Name(s) of Person(s) obtaining samples (attach statement from laboratory performing the analysis certifying the results):

_____

_____

3. Report all pollutants or materials contained in the U.S. EPA Priority Pollutant Listing that are used, manufactured, or stored that may be present in the discharge from your facility.

Name of Substance	Name of Substance

4. Report any other pollutants or materials that may be present in the discharge from your facility not listed in parts 1 or 3, above:

Name of Substance	Name of Substance

SECTION 4 - RESIDUALS, SLUDGES AND RESIDUES

1. Are sludges, residuals, or critical materials produced as a result of treatment or control of

2. Is the sludge treated before disposal? ☐ Yes ☐ No

3. If yes, indicate type of treatment: _____

4. Amount of sludge produced: _____
Amount Units/Time

5. Indicate type of residual storage, if any: _____

6. Is the sludge considered to be hazardous? ☐ Yes ☐ No

7. Physical Characteristics: _____

8. Does your facility dispose of the sludge itself? ☐ Yes ☐ No

9. List name(s) and address(es) of all public and private landfills or land application sites where you dispose of the sludge.

_____
_____
_____
_____

10. List name(s) and address(es) of all commercial waste hauler(s) who transport the sludge:

_____
_____
_____
_____

SECTION 5 - SPILL PREVENTION AND CONTAINMENT

1. Does your facility have a Spill Prevention Control and Counter Measures Program (SPCC) as required by Title 40 Code of Federal Regulations Part 112 or a Pollutant Incident Prevention Plan (PIPP)?

☐ Yes ☐ No

If yes, please list the date of completion: _____

2. Has your SPC or PIPP been approved?

Yes ☐ No ☐

If yes, please list the date of completion: _____

3. List Bulk Material stored on site (liquid and solid):

Material	Description of Containment Structure	Volume Stored

Is separate containment provided for each bulk material?

☐ Yes ☐ No

4. Has separate storage been provided for those chemicals which cause hazardous reactions (i.e. acids with Cyanide or acids and bases)?

☐ Yes ☐ No

SECTION 6 - ENVIRONMENTAL CONTROL PERMITS

1. Please list all existing and pending environmental control permits in effect at this facility. Give Permit number and reason for permit.

Existing Permits

State	Local	US EPA

Pending Permits

State	Local	US EPA

2. Is there any of the enclosed information considered to be confidential?

☐ Yes ☐ No

3. If yes, explain what and why (all requested for confidentiality will be processed according to 40 CFR 2.302 and 40 CFR 403.12):

Elkhart County Regional Sewer District

Certified Report of Rate Payor Units

This Certified Report is being completed in compliance with Elkhart County Regional Sewer District Ordinance No. 2014-0001, as amended. I understand that this Certified Report must be completed for each Rate Payor (each connection) separately as each Rate Payor will be billed separately and will be independently responsible for any fees attributed to the Rate Payor. I further understand that Ordinance No. 2014-0001 uses each Rate Payor's total number of REUs to compute the Rate Payor's monthly Rates and Charges. In calculating our total number of REUs, Ordinance No. 2014-0001 uses the flow calculation factor shown in Table 11-1 of 327 IAC 3-6-11. I understand that the information contained in this Certified Report will be used to calculate our total number of REUs. I have personal knowledge of the information contained in this Certified Report and I have authority on behalf of the Rate Payor identified below to execute this report.

Company Name : _____

Connection/Rate Payor Name (*Facility/Plant Name*): _____

Complete this line if one company has multiple connections:_____

Service Connection Description (*type of business*): _____

Rate Payor's Connection Flow Calculations Factor:_____

Please mark and complete each of the following that apply to this application and complete each of the following:

□ Rate Payor has an existing facility in the Heaton Lake area, but has never connected to the Elkhart County Regional Sewer Districts Heaton Lake sewage disposal system. The highest number of employees (Rate Payor Units) maintained by Rate Payor in the prior twelve months is_____.

□ Rate Payor has an existing facility in Heaton Lake area, has a connection to the Elkhart County Regional Sewer District's Heaton Lake sewage disposal system and is completing this Baseline Monitoring Report as a result of Rate Payor's actions (e.g. adding a new building) that are likely to cause an increase in the amount of daily sewage entering the current connection. The total number of REUs used to compute all Capacity Estimated Usage Fees already paid by the Rate Payor was _____ .The action of Rate Payor likely resulting in increased daily sewage is _____. The highest number of employees (Rate Payor Units) maintained by Rate Payor in the prior twelve months is _____. The highest number of additional employees (Rate Payor Units) anticipated by Rate Payor in the next twelve months as a result of (Rate Payor's action) is _____.This will bring the highest number of total Rate Payor Units, following _____ (Rate Payor's action) to: _____.

□ Rate Payor does not have an existing facility in the Heaton Lake area, but intends to build a facility that will need to connect to the Elkhart County Regional Sewer District's Heaton Lake sewage disposal system. The highest number of employees (Rate Payor Units) anticipated by Rate Payor in the next twelve months as a result of its facility/business on Heaton Lake is_____.

Updated Total Number of REUs:_____Rate

Multiply the Highest Number of Total Rate Payor Units by the Rate Payor's Flow Calculation Factor and then divide the total by 210 to obtain your number of REUs (always round up to the next whole number)

I understand and agree that the Elkhart County Regional Sewer District will use the updated total number of REUs to calculate our monthly Rates and Charges. I understand that this means that the monthly Rates and Charges for us will increase based upon the total number of REUs used for the additional Treatment Capacity. I understand that this approach is necessary for the Elkhart County Regional Sewer District to comply with Indiana Code 13-26-11-9 and to produce sufficient revenue to pay all expenses to operate the collection system, including, but not limited to, the user charges issued by the City of Elkhart for treatment of wastewater.

I affirm under the penalties of perjury that the above information is true and accurate as of this _____day of_____ 20____.

_____

Name (Print) Signature Title Date

Additional Certification and Representation

A. Qualified Professional Certification:
I hereby certify under penalty of law that this information was obtained in accordance with the applicable procedure and requirements as specified in the General Pretreatment Regulations and ammendements there to. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

_____

Name (Print) Signature Title Date

B. Authorized Representative Statement:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who managed the system, or those persons directly responsible for gathering information, the information submitted is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Name (Print)	Signature	Title	Date

OFFICE USE ONLY

Date Received: _____ In compliance? ☐ Yes ☐ No

Follow-up action necessary:

- ☐ Letter
- ☐ Sampling
- ☐ Inspection
- ☐ Phone Contact
- ☐ Technical Meeting

Received by:_____ Date: _____

Elkhart County Regional Sewer District

Building Sewer and Sewer Lateral Location Sketch

(Please type or print clearly)

Name:_____

Property Address:_____

SHOW ON SKETCH:

- ☐ Indicate North direction with arrow.
- ☐ Locate streets and alleys.
- ☐ Locate any potable wells on the property.
- ☐ Locate building on lot.
- ☐ Show lot size.
- ☐ Sketch a scaled drawing of the location of proposed building sewer from the building to the grinder station, location of the grinder station, and location of the sewer lateral to the sewer main. (see figure 2)
- ☐ If applicable, sketch the location of the building sewer from the building to the private ejector pit. Sketch the pressure sewer lateral, including size, from ejector pit to the trash tank.
- ☐ Indicate proposed location of cleanouts.
- ☐ Indicate length and pipe material of any gravity or pressure sewer runs.
- ☐ Approximate depth of the gravity, force main and low pressure pipe runs.

Elkhart County Regional Sewer District

Trash Tank & Piping Inspection/Verification

[Please type or print clearly)

Name(s) of Property Owner:_____

Address of Property:_____

Contact Phone Number: _____

Name of Resident/Occupant if different than above: _____

Check if complete:

- ☐ Trash Tank condition and construction (attach documentation)
- ☐ Clean out installed
- ☐ Internal grey water lines re-routed to sewer
- ☐ Surface and groundwater lines re-routed elsewhere
- ☐ Bedding material under laterals
- ☐ Piping and fixtures are in satisfactory condition or have been corrected to meet the rules and regulations of the ECRSD
- ☐ Lateral & gasket installed
- ☐ Flexible coupling on the outlet
- ☐ Results of piping pressure tests attached
- ☐ Material used for lateral if not installed by Contractor:

This verification does not release the contractor or property owner from any responsibility or liability of workmanship or performance.

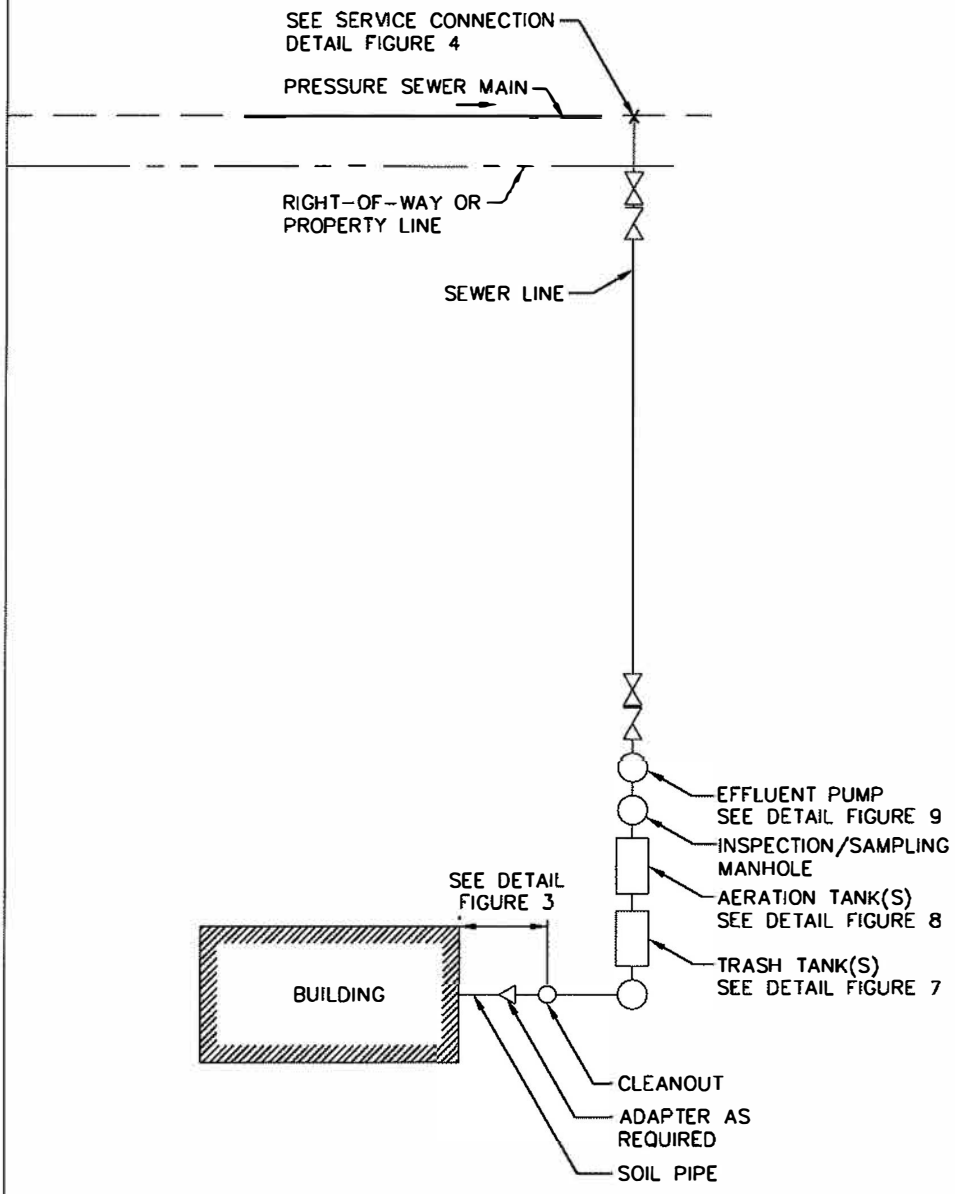
NOTES: _____

_____

Name of Contractor:_____

Name of Inspector: _____

ELKHART COUNTY REGIONAL SEWER DISTRICT STANDARD DETAILS



NOTES:

1. MAXIMUM DISTANCE BETWEEN THE EXTERIOR WALL AND THE CLEANOUT WYE SHALL BE 7'.
2. NO 90° ELBOW OR TURN IS PERMITTED IN BUILDING SEWER.
3. MINIMUM SLOPE OF BUILDING SEWER SHALL BE 0.62% FOR 6" OR 2.00% FOR 4".
4. BUILDING SEWER LINE SHALL BE INSPECTED AND APPROVED BEFORE EXCAVATION IS BACKFILLED.

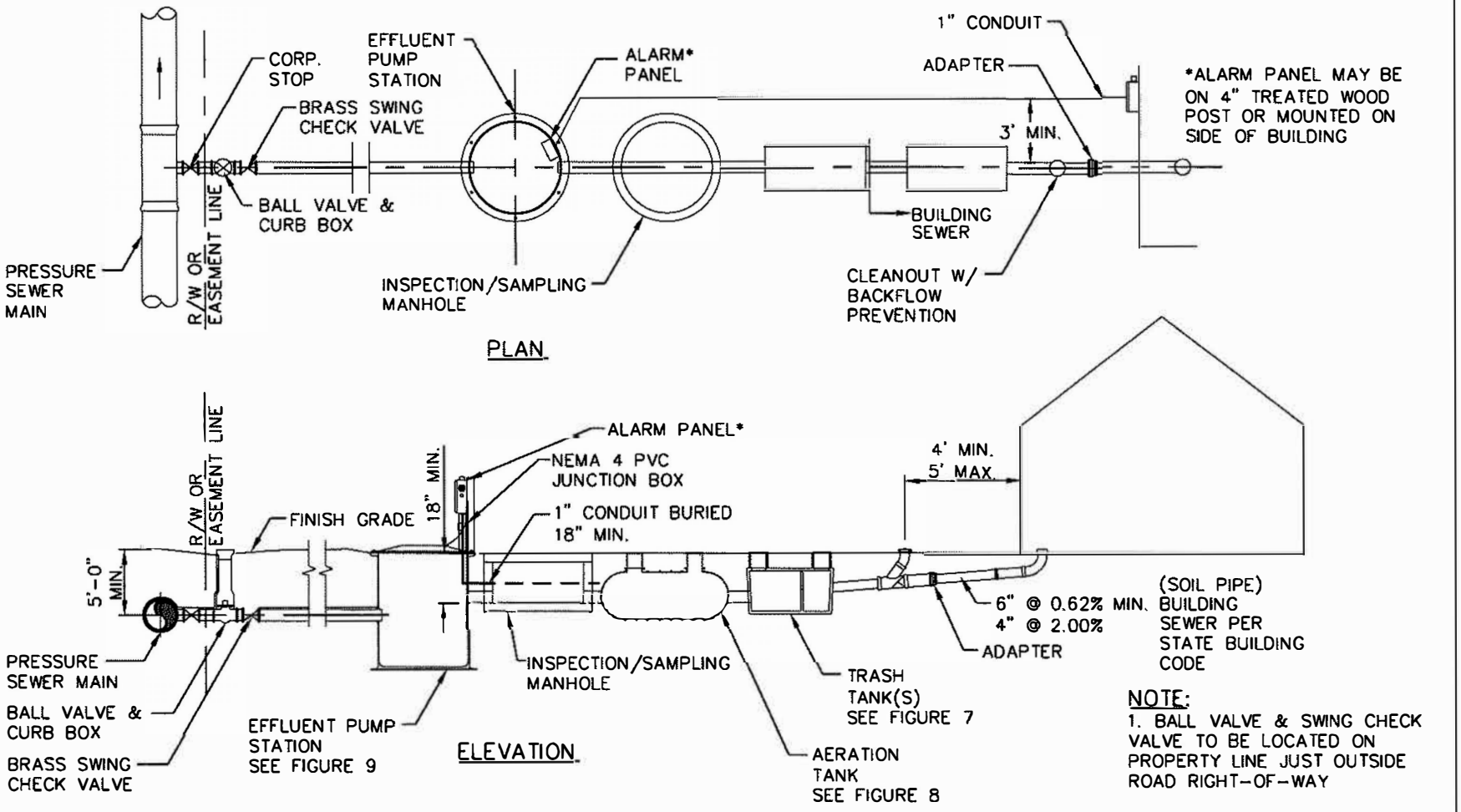
REV.	DATE:
--	

PRESSURE SEWER CONNECTION DETAIL

FIGURE 1

G:\2015_Projects\2015-2070\Eng\Building Sewer Connection\FIGURE-1.dwg, 11/10/2016 2:26:46 PM

ELKHART COUNTY REGIONAL SEWER DISTRICT STANDARD DETAILS



NOTE:

1. BALL VALVE & SWING CHECK VALVE TO BE LOCATED ON PROPERTY LINE JUST OUTSIDE ROAD RIGHT-OF-WAY

2. ELECTRIC CONDUIT SHOULD NOT BE WITHIN 3 FOOT OF SEWER LINE EXCEPT TO CROSS.

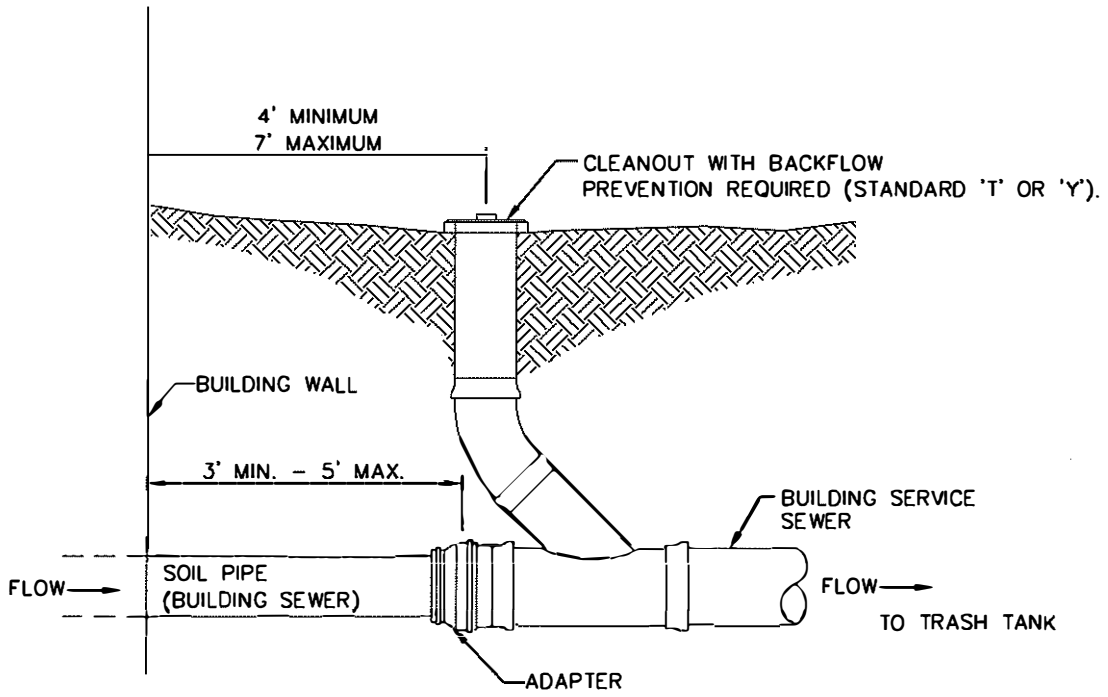
REV.	DATE:
--	

TYPICAL EFFLUENT PUMP STATION INSTALLATION CONFIGURATION

FIGURE 2

G:\2015 Projects\2015-0070\Eng\Building Sewer Connection\FIGURE-2.dwg, 11/14/2016 2:26:48 PM

ELKHART COUNTY REGIONAL SEWER DISTRICT STANDARD DETAILS



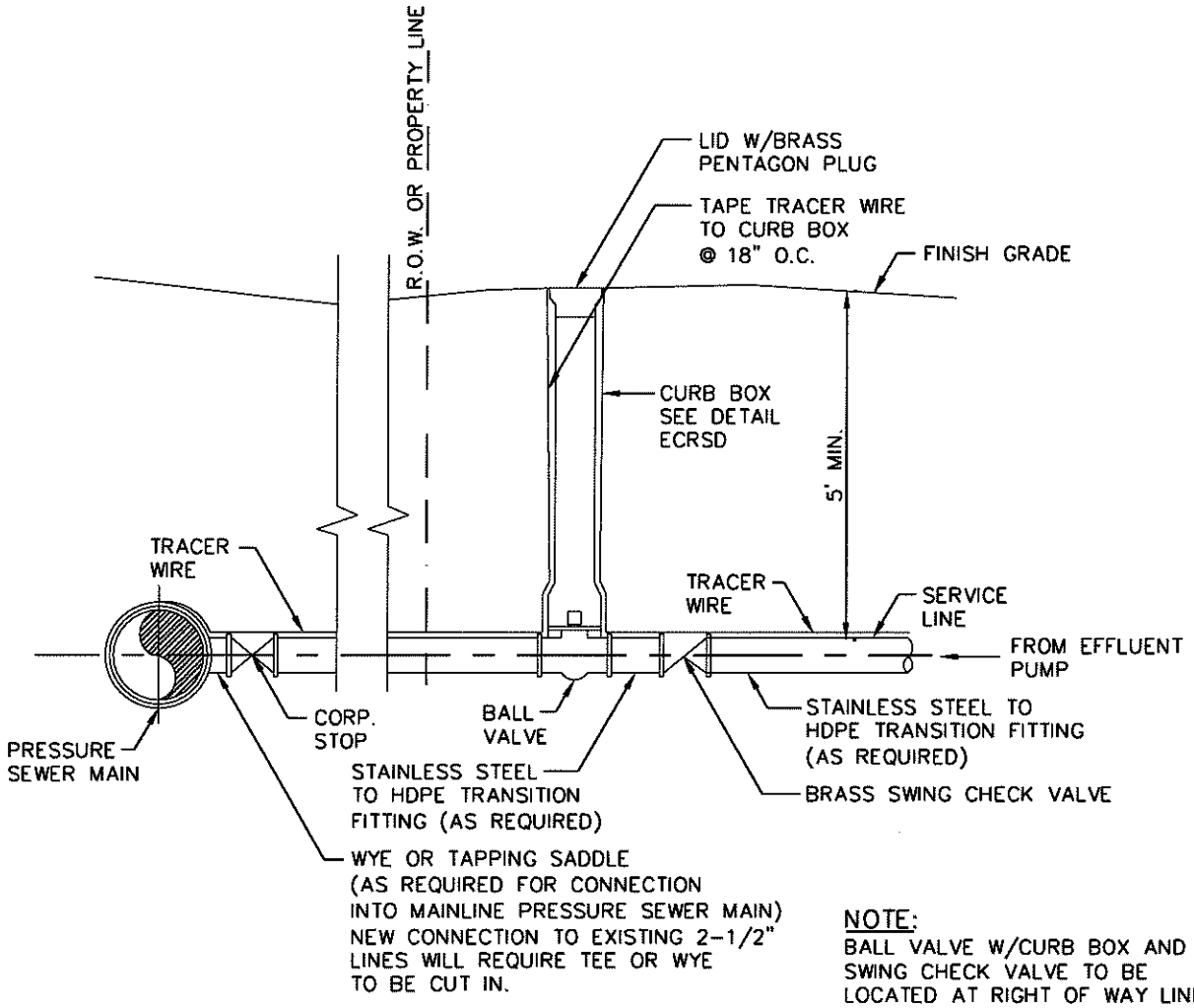
REV.	DATE:
--	

BUILDING ADAPTOR AND CLEANOUT DETAIL

FIGURE 3

G:\2015_Projects\2015-0070\Eng\Building Sewer Connection\FIGURE-3.dwg, 11/10/2016 2:26:49 PM

ELKHART COUNTY REGIONAL SEWER DISTRICT STANDARD DETAILS



NOTE:
BALL VALVE W/CURB BOX AND SWING CHECK VALVE TO BE LOCATED AT RIGHT OF WAY LINE OR EASEMENT UNLESS OTHERWISE APPROVED

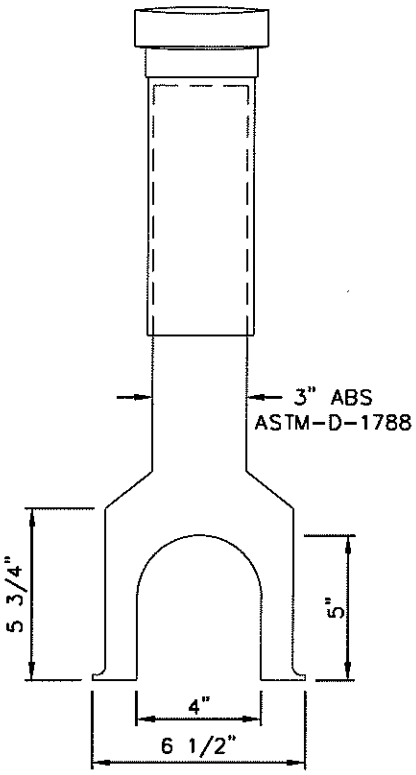
REV. DATE:	
--	

PRESSURE SEWER SERVICE CONNECTION DETAIL

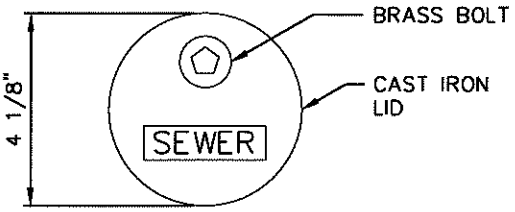
FIGURE 4

G:\2015_Projects\2015-0070\Eng\Building Sewer Connection\FIGURE-4.dwg, 11/10/2016 2:26:50 PM

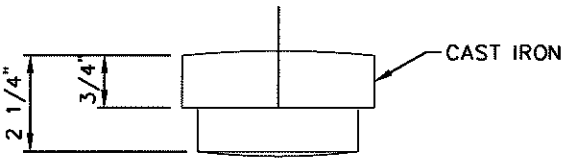
ELKHART COUNTY REGIONAL SEWER DISTRICT STANDARD DETAILS



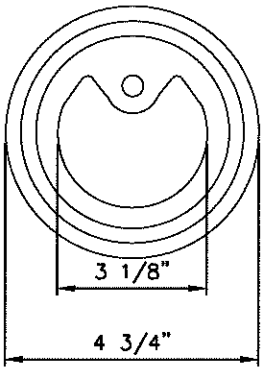
ELEVATION
(5' MIN. COVER)



LID TOP VIEW



COLLAR SIDE VIEW



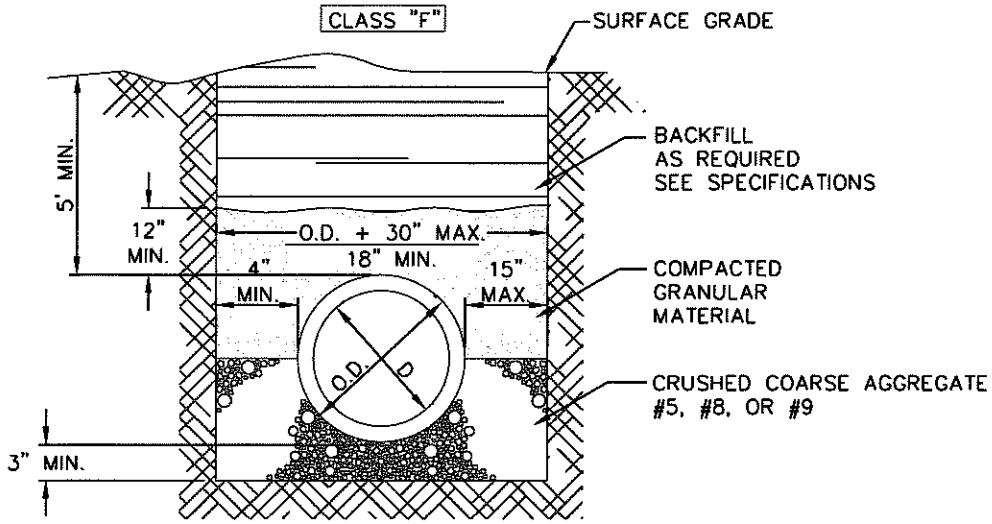
COLLAR TOP VIEW

REV. DATE:	
--	

CURB BOX DETAIL

FIGURE 5

G:\2015_Projects\2015-0070\Eng\Building Sewer Connection\FIGURE-5.dwg, 11/10/2016 2:26:52 PM



NOTE: FOR ROCK OR OTHER NON-COMPRESSIBLE MATERIALS: THE TRENCH SHOULD BE OVER-EXCAVATED A MINIMUM OF 4" & REFILLED WITH COMPACTED GRANULAR MATERIALS.

LEGEND:
O.D. = OUTSIDE DIAMETER
D. = INSIDE DIAMETER

-FLEXIBLE CONDUITS ARE CONSIDERED THE FOLLOWING PIPES: SOLID WALL PVC AND HDPE

SIZE OF COARSE AGGREGATES (CRUSHED STONE) AS PER INDIANA DEPARTMENT OF HIGHWAY STANDARDS AND SPECIFICATIONS - LATEST EDITION			
SIEVE SIZES	COARSE AGGREGATES SIZES (PERCENTS PASSING SIEVE)		
	#5	#8	#9
1 1/2'	100	100	100
1"	85-98	100	100
3/4"	60-85	75-95	100
1/2"	30-60	40-70	60-85
3/8"	15-45	20-50	30-60
NO. 4	0-15	0-15	0-15
NO. 8	0-10	0-10	0-10

NOTE: STONE CHIPS ARE PERMITTED IN LIEU OF CRUSHED AGGREGATE PROVIDED THAT NO MORE THAN 20% OF STONE CHIPS PASS THE NO. 4 SIEVE.

REV. DATE:	
--	

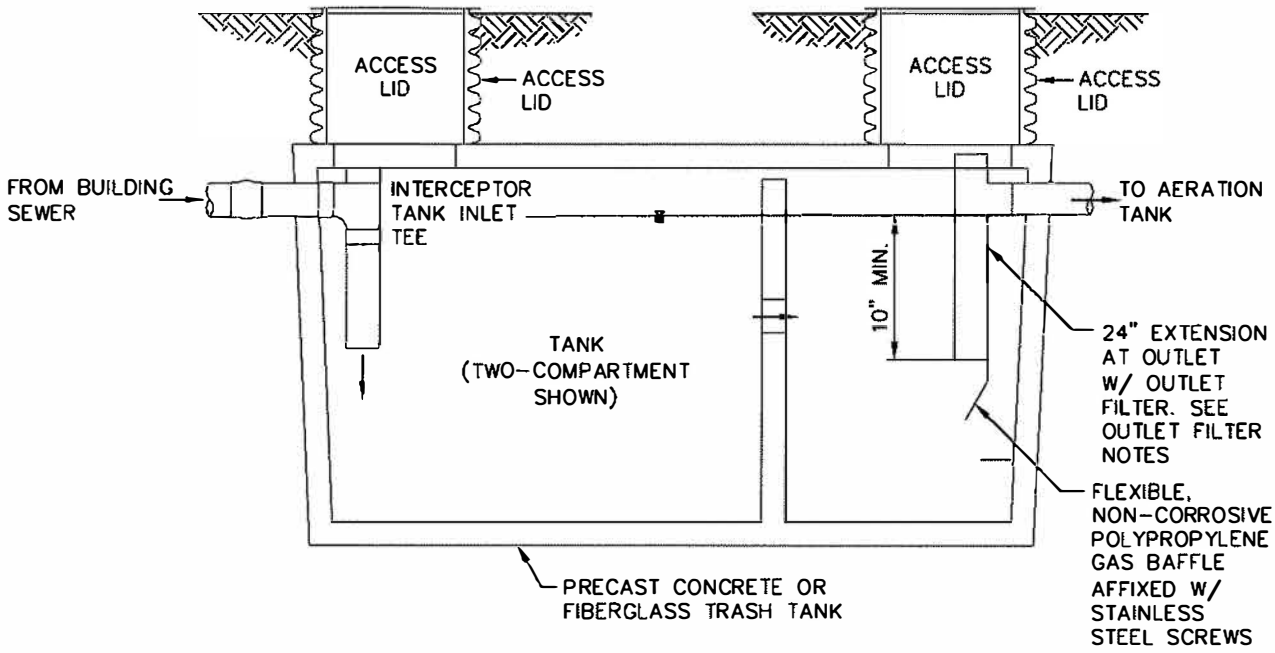
PRESSURE SEWER PIPE BEDDING DETAIL (FLEXIBLE CONDUIT)

FIGURE 6

G:\2015_Projects\2015-0070\Eng\Building Sewer Connection\FIGURE-6.dwg, 11/10/2016 2:26:53 PM

NOTES:
1. TRASH TANK STORAGE VOLUME TO BE DETERMINED ACCORDING TO 410 IAC 6-8-2 OR 410 IAC 6-10 AS APPROPRIATE.

2. TRASH TANK REQUIRED VOLUME MAY NECESSITATE MORE THAN ONE TANK



SEPTIC TANK OUTLET FILTER NOTES:
SEPTIC TANK OUTLET FILTERS SHALL BE RATED FOR A MINIMUM OF THE ESTIMATED AVERAGE DAILY FLOW RATE AS DETERMINED BY THE SYSTEM DESIGNER. THE OUTLET FILTERS TO BE INSTALLED SHALL BE POLYLOK PL SERIES OR APPROVED EQUAL.

OUTLET FILTERS SHALL HAVE:
1. A CURRENT PRODUCT LISTING SHOWING CONFORMANCE WITH ANSI/NSF STANDARD 46.

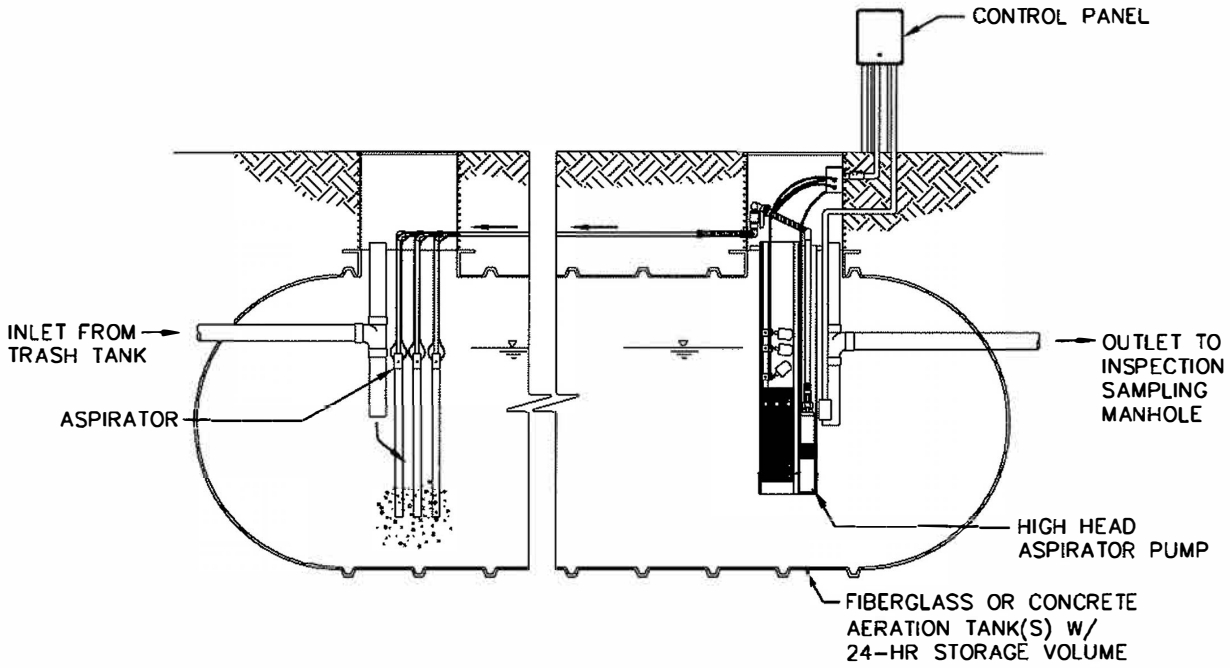
2. A GAS DEFLECTION BAFFLE.

3. AN OUTLET FILTER HOUSING THAT PROVIDES A MINIMUM SCUM SPACE OF SIX (6) INCHES, AND THAT EXTENDS BELOW THE LIQUID LEVEL AT LEAST TEN (10) INCHES, BUT NOT MORE THAN FORTY PERCENT (40%) OF THE TANK LIQUID DEPTH.

REV. DATE:		SEPTIC/TRASH TANK	
--			
			FIGURE 7

G:\2015_Projects\2015-0070\Eng\Building Sewer Connection\FIGURE-7.dwg, 11/16/2016 2:26:54 PM

ELKHART COUNTY REGIONAL SEWER DISTRICT STANDARD DETAILS



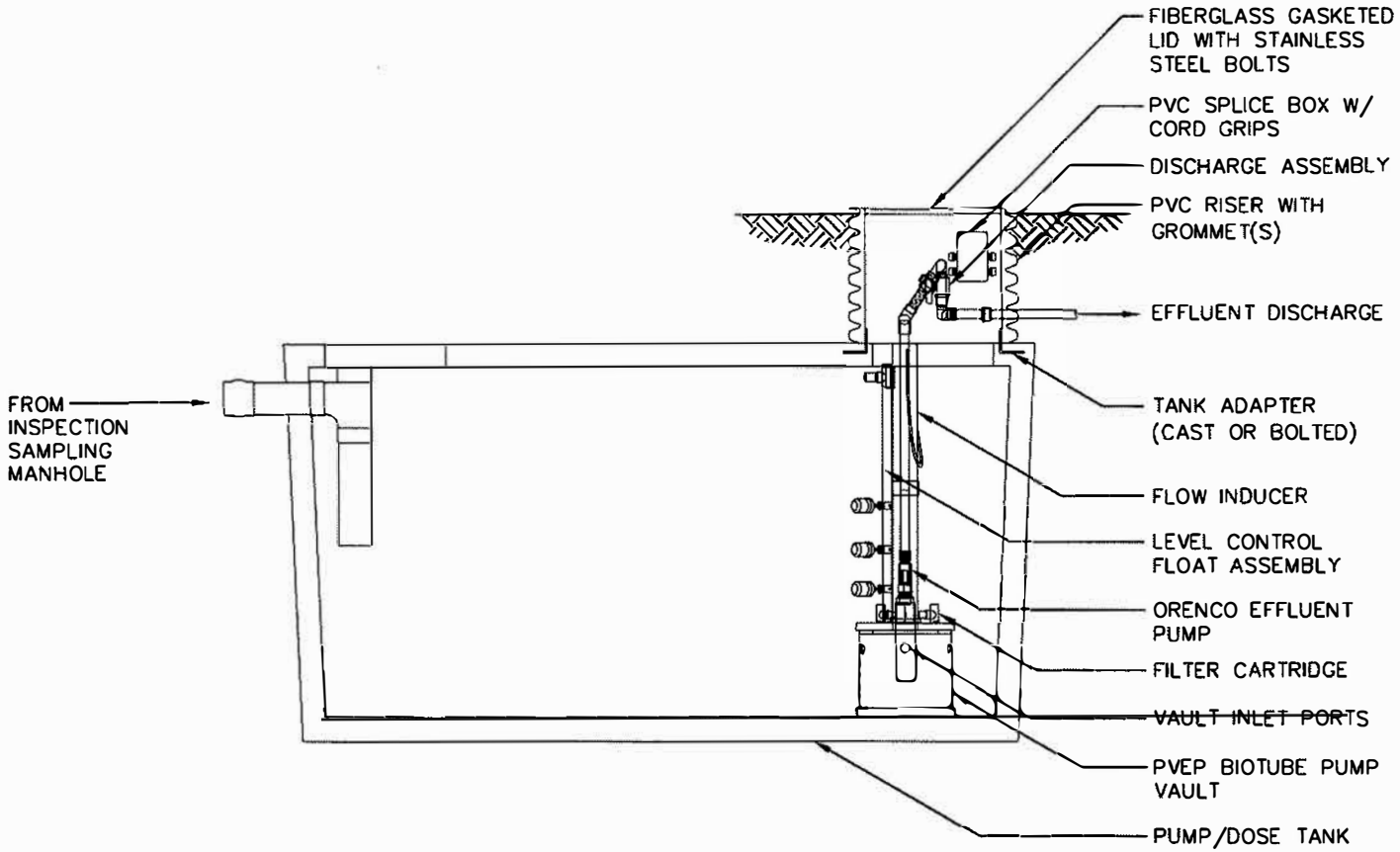
REV. DATE:	
--	

ONSITE AERATION UNIT

FIGURE 8

G:\2015_Projects\2015-0070\Eng\Building Sewer Connection\FIGURE-8.dwg, 11/10/2016 2:26:56 PM

ELKHART COUNTY REGIONAL SEWER DISTRICT STANDARD DETAILS



REV.	DATE:
--	

EFFLUENT PUMP & DOSING TANK

FIGURE 9

G:\2015_Projects\2115-0070\Eng\Building Sewer Connection\FIGURE-9.dwg, 11/10/2016 2:26:57 PM

Protocol for Onsite Sewage System Abandonment

When the use of an onsite septic system or any component is discontinued, proper abandonment or removal procedures must be followed. All tanks must be properly abandoned to prevent future safety hazards due to unsecured tank openings or from tank collapse. The owner may desire to remove other components for aesthetic or practical reasons. The owner is responsible for the abandonment and removal process. It is important to make sure that the abandonment or removal process is not a health or safety threat to those conducting the procedure, to other owners or to others in the community.

To reduce the risk from an abandoned onsite septic system, the following steps must be followed. We recommend that the persons involved in these procedures wear personal protective gear and take necessary occupational safety precautions. Do not reuse any of the materials removed from the abandoned septic system other than specified herein.

Procedures

A Tanks:

1) Disconnect power at the source to all electrical controls and remove all controls and panels. Remove all electrical lines (including buried service lines) that will not be used for other purposes.

2) Have licensed septic tank cleaner pump the contents from all tanks (septic and dosing chamber) in the system.

3) Either,

a) Remove the tank riser and tanks, or

b) crush the lids and risers into the tanks and punch a hole in the bottom of the tank.

4) Backfill the holes or tanks with free sand, flowable fill, or other granular material, concrete, or soil material (no organic fill) that can be compacted to prevent settling. If an elevated sand mound or at-grade system is being abandoned, sand, aggregate and soil cover from the system may be used for filling the tank(s). When materials are used for filling tank(s), the procedures in Section C (below) must be followed except for C. 3. d.

5) Properly grade.

6) If the Building Sewer is being routed through the existing tank, the tank walls must be crushed.

B Drywells:

1) Have a licensed septic tank cleaner pump all contents from the drywell(s)

2) Remove or crush the lid into the drywell(s).

3) Backfill the hole with sand, concrete, flowable fill or granular soil material.

4) Re-establish cover to the desired level.

C Absorption Fields:

1) The components of the absorption field may be left intact if there are no plans to use the area for other purposes. Maintain vegetative cover.

2) If effluent has surfaced, cover those areas with hydrated lime.

3) If components of the absorption field are to be removed:

a) Allow sufficient time after the system is taken out of service and the tanks have been properly abandoned to assure that the entire absorption field is completely dry.

b) Have a contractor remove the distribution network (pipes), aggregate and sand (if any) from the site.

c) The contractor must dispose of the system components and soil removed at a licensed landfill.

d) Properly grade.