

## Chapter 13.06

### SIDE SEWERS

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#### **13.06.010 Purpose.**

#### **13.06.020 Definitions of Terms**

**AS-BUILT DRAWING** - A drawing prepared by the Contractor and checked by the District Inspector in conjunction with the Permit, and shall show the "As Built" location of the side sewer installation.

**COMMERCIAL STRUCTURE** - All structures other than Residential. Each Commercial Structure connected by canopy, breezeway, or other type cover shall be classed as a separate commercial structure.

**DISTRICT** - The Tenino Water & Sewer Utility, a municipal corporation, the Manager of the District, or the Manager's authorized representatives.

**DOWNSPOUT** - The leader or pipe above ground which is installed to conduct storm water from the roof gutter or any structure.

**INDUSTRIAL WASTE** - Any liquid, solid, or gaseous substance or combination thereof resulting from any process of industry, manufacturing, commercial food processing, business, trade, research, or development.

**LICENSED SIDE SEWER CONTRACTOR** - Any person, partnership, corporation or association duly qualified and competent to do work incidental to the construction or repair of side sewers under permits issued under these regulations and who shall have been duly licensed

and bonded with the State of Washington and the District.

OCCUPANT - Any Person or Owner in physical possession of a structure to which Sewer Service is available.

PERMIT - An application for and the printed serially numbered form issued in triplicate by the District prior to construction or repair of any side sewer.

PERSON OR OWNER - See TMC 18.20.190 "Person"

PRIVATE SEWER - A sewer, exclusive of Side Sewers, which are neither owned nor operated by the District.

PUBLIC SEWER - A Sewer, exclusive of Side Sewers, owned or operated by the District.

RESIDENTIAL STRUCTURE - A single family structure or a multiple family structure.

SEWAGE OR DOMESTIC WASTES - Water carrying waste discharged from the sanitary facilities of structures occupied or used by people.

SEWER - A conduit designed or used to transport Wastewater, and into which Storm Water, surface and ground waters are not intentionally admitted.

SEWER SERVICE - The continuing acceptance by the District of the sewage or wastewater from a structure in the public sewer.

SIDE SEWER - A conduit system (pressure or gravity) extending from the plumbing system of a structure(s) to and connecting with a Public or Private Sewer Main.

STORM DRAIN - A conduit designed or used to transport storm water.

STORM WATER - Rainfall or waters on the surface of the ground or underground resulting from rainfall or other natural precipitation.

WASTEWATER - Water-carrying wastes containing either or both sewage and industrial waste.

### **13.06.030 Use Of Sewers**

- A. Responsibility for Repairs and Maintenance. The limit of responsibility of the District shall be maintenance of the public sewer. Side sewers shall be maintained by the property owners served. When, and if, the District is required to maintain and/or repair a side sewer or private sewer in order to protect the operation of the public sewer, the cost for such maintenance/repair shall be charged to the Owner of the property(ies) served by the side sewer.
- B. Wastes Other Than Domestic Or Industrial. The discharge into any sewer by direct or indirect means of any of the following is hereby prohibited:
  1. Subsoil Foundation Drains;
  2. Footing Drains;
  3. Window Well Drains;
  4. Door Well Drains;
  5. Yard Drains;
  6. Unroofed Basement Floor Drains;
  7. Overflows from unpolluted water storage facilities
  8. Clear water from refrigeration, reverse-cycle heat pumps and cooling or air-conditioning equipment, except for the periodic draining and cleaning of such Systems;
  9. Roof drains or downspouts from areas exposed to rainfall or other precipitation;
  10. Surface or underground waters;
  11. Any liquid or vapor having a temperature higher than 150 degrees Fahrenheit;
  12. Any waste that contains more than 100 parts per million by weight of fat, oil, or

- grease;
13. Any gasoline, benzene, naphtha, oil, or other flammable or explosive liquid, solid, or gas;
  14. Any garbage that has not been properly shredded and diluted with water;
  15. Any ashes, cinders, sand, mud, straw, hair, shavings, metal, glass, rags, feathers, tar, plastics, wood, or any other solid or substance capable of causing obstruction to the flow in sewers or improper operation of the sewage works;
  16. Any waste having a pH lower than 5.5 and higher than 8.5 or having any other corrosive property capable of causing damage or hazard to the structures, equipment or personnel of the District;
  17. Any waste containing a toxic or poisonous substance in sufficient quantity to injure or interfere with any sewage treatment process;
  18. Any waste containing suspended solids of such character and quantity that unusual attention or expense is required to handle such materials in the public sewer system or at the sewage treatment plant;
  19. Any obnoxious or malodorous gas or substance capable of creating a public nuisance; or
  20. Septic tank effluent or sludge, except from District approved systems.
  21. Connection of Cesspools, Septic Tanks Traps, and Interceptors
    - a. Direct connection from the plumbing fixtures in the structure to the public or private sewer is required;
    - b. Any connection to a cesspool or septic tank will be removed, and proper connection directly made to the new side sewer. Cesspools or septic tanks shall be abandoned as per Thurston County Environmental Health Department;
    - c. A District approved grit and oil trap located in the side sewer line shall be required for vehicle washing and vehicle service facilities; or
    - d. A District approved grease trap or grease interceptor shall be installed where it is necessary to protect the District's sewer system. All non-residential facilities must meet the requirements of the District or the Thurston County Environmental Health Department, Industrial Waste Program for legal fats, oil and grease discharge to sewers, whichever is more stringent. All commercial or industrial facilities, schools, churches, or other non-single family residential facilities that have food service facilities or car washes shall be equipped with 1,000-gallon (minimum) grease interceptors. Submit sizing calculations for District review. All commercial building pads with unidentified or potentially variable uses must be provided with a grease interceptor at the time of initial construction. Provide graywater plumbing to building pad(s).
- C. The Owner Desiring to Extend, Repair, Replace or Make Connection to Existing Sewers or Pressure Side Sewers Inside Property Lines. No person shall extend, repair, replace or make connections to a public, private or side sewer within the property lines without first obtaining a permit from the District, calling for utility locates, and requesting proper inspection of the work by the District as herein authorized.
- D. Additional Work - New Permit Required. When an existing structure is removed and a new structure is constructed, or an alteration affecting the side sewer is made, a new permit is required. Any existing side sewer that does not meet the current existing Regulations shall be replaced. No work shall be done without approval and inspection of

the District as herein required.

#### **13.06.040 Obtaining Side Sewer Permit**

- A. When Permit must be Obtained. A Side Sewer Permit shall be applied for and issued by the District prior to any work being constructed, addition to or repair of a side sewer either on private property or within public rights-of-way. Applications for Side Sewer Permits must be submitted at least 24 hours prior to side sewer installation. If any portion of the installation is within Right-of-Way, allow time for issuance of City of Tenino or WSDOT right-of-way permit, whichever entity has jurisdiction.
- B. All information regarding the installation of a side sewer shall be obtained from the District. Any information on the installation relayed by the Owner to the Contractor shall be in writing or on a plan, and such information shall be presented at the time application for a permit is made.
- C. Person Who Must Apply For Permits. Application for a Side Sewer Permit will be made personally by the owner of the property to be served, or the Owner's authorized agent.
- D. Material Required For The Permit Application. In making an application for a Side Sewer Permit, the Owner or authorized agent shall furnish a site plan showing the size and location of structures on the property, the Owner's name, address, and legal description of the property to be served. The full course of the proposed side sewer from the public sewer in the street to the structure shall be shown on the plan. Where easements are required, they shall be obtained at the Owner's expense and filed with the Thurston County Auditor. Prior to issuance of the permit, a copy of the recorded easements shall be given to the District.
- E. Permit Fees. Prior to the issuance of any permit, all fees identified on the application shall be paid to the City.
- F. Work in a Public Right-of-Way. A permit that includes side sewer work in a public right-of-way may be issued only to a licensed side sewer contractor. The Owner shall reimburse the District for all costs of City, County, and State permits and inspections. Side sewer contractors shall contact One-Call for utility locations. The phone number is available at the City.
- G. Unauthorized Work. No work shall be started on any private or side sewer without a permit. No Licensed Side Sewer Contractor shall do any side sewer work under any other person's permit. No person shall do any side sewer work under a Licensed Side Sewer Contractor's Permit, except as may be otherwise authorized by the District. If work is started on any private or side sewer without a permit or authorization from the District, a \$1,000 fine can be levied against violators.
- H. Time of Issuing Permit. No permit will be issued for a side sewer connection before the District has accepted the public or private sewer.
- I. Posting of Permit. The Contractor's copy of the Side Sewer Permit and side sewer plan shall be readily available on the job to the Inspector of the District. No inspection will be made unless such permit and plan is readily available on the job site. The contractor shall be responsible for all additional costs incurred for additional inspections.
- J. Responsibility of Side Sewer Contractor. The licensed side sewer contractor shall be responsible for abiding by all the requirements of Section 13.10.050.
- K. Failure to Comply with Permit Provisions. If any work done under a Side Sewer Permit is not in accordance with provisions of these Regulations, and if the Contractor or person

doing the work fails and/or refuses to properly construct and complete such work, notice of such failure or refusal shall be given to the Owner or Occupant of the property. The District may cause said work to be stopped. The Owner and/or Contractor shall be responsible for all additional costs incurred by the District related to Owner's and/or Contractor's failure to properly complete the work. If the District incurs costs, it will be billed out for time, material and 15% administration charges.

If the work in the opinion of the District constitutes a hazard to public safety, health, or the public sewer, the District may complete such work. The cost of such work and any materials necessary therefore shall be charged to the Owner and/or Contractor and shall be payable by the Owner and/or Contractor immediately upon written notice given by the District of the amount or by posting a notice on the premises.

- L. Completion of Work in a Public Right-of-Way. All work within the limits of any public right-of-way shall be completed promptly and in compliance with City, County, or State requirements. If such work is not in compliance with governing agency's Right-of-Way requirements (City of Tenino, Thurston County, or WSDOT), any costs incurred to bring such work into compliance and to restore the right of way, shall be charged to the Licensed Side Sewer Contractor in charge of such work, and shall be payable immediately to the District upon written notification to the Contractor.

**13.06.050 Side Sewer Contractor Licensing**

- A. Introduction. Any side sewer contractor intending to do business within the District shall meet the following requirements.
- B. General Qualification. A side sewer contractor must be licensed and bonded with the State of Washington and the District, to conform with the nature of the work. A side sewer contractor must provide the District with proof of these licenses and bonds as per **Article 4.06, Continuous Performance Bond.**
- C. Licensing Fees. As required by District, a business licensing fee shall be charged as required by the adopted Fee Schedule to the Contractor at the time of Licensing with the District. This licensing fee is good for the calendar year ending December 31. A yearly renewal fee is required as required by the adopted Fee Schedule.
- D. Insurance. A Side Sewer Contractor must have an insurance certificate naming as additional insured the City of Tenino. The insurance certificate must include the provision that such insurance shall not be canceled without at least forty-five (45) days written advance notice to the District. This insurance certificate must be in the amount of:

Property damage liability	\$500,000 each occurrence
	\$1,000,000 each aggregates

Bodily injury liability	\$500,000 each person
	\$1,000,000 each occurrence

OR

Combined Single Limit of	\$1,000,000 per occurrence/aggregate
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- E. Hold Harmless. A Side Sewer Contractor shall execute a document whereby they shall hold harmless, indemnify and defend the District from any and all claims against the District as a result of their work done within the District pursuant to these regulations.
- F. Continuous Performance Bond. A Side Sewer Contractor shall supply the District with a continuous performance bond in the amount of \$2,500.00 in order to work on side sewer installations within the District. A sample approved form is available at the District office. The bond is to protect the District in its obtaining road opening permits from the County and for other jurisdictional agencies, and to guarantee the completion of the side sewer installation. The bond shall include in its terms a certification that it will not be canceled without at least forty-five (45) days written advance notice to the District.
- G. Responsibility of Licensed Side Sewer Contractor for Their Employees. The Licensed Side Sewer Contractor shall be responsible for any and all actions of their employees. The Contractor's absence or any misunderstanding of their orders by such employees shall not relieve the contractor of such responsibility.
- H. Revoking Of License. If the licensed Side Sewer Contractor has not complied with the provisions in following the rules and regulations established herein or any amendments hereto, the District shall have the right to revoke the license and privileges of said contractor.

#### **13.06.060 Side Sewer Contract with Owner**

- A. Tenino Water & Sewer District Regulations. Contracts between property owners and licensed Side Sewer Contractors shall provide that such licensed Side Sewer Contractor will comply with all District regulations.
- B. Release from Material and Labor Liens. The Contractor shall furnish the property owner with a release of lien from both labor and material or an affidavit stating same has been paid, before payment is accepted by the contractor for such labor and material.
- C. Special Releases and Agreements:
  - 1. If the grade of the side sewer is to be less than 1/4 inch per foot (2%), the property owner shall sign and acknowledge a grade release waiver in a form approved by the District. The effect of said release waiver shall be to release the District from all future claims for damages due to the installation of said side sewer. If there is doubt about the grade, such grade release shall be executed before the pipe is laid. If upon inspection, the grade is determined to be inadequate; the District shall record the grade release in the office of the County Recorder before acceptance.
  - 2. When two or more structures not in common ownership are to be connected on one side sewer, easements running with the land must be executed and recorded with the County Recorder. Said easements shall be approved by the District, and shall insure that all properties involved shall have perpetual use of the side sewer. Said easements shall contain provisions for joint responsibility for costs of maintenance, repair, and access, and shall be signed by the owners of the properties subject to the easement.
  - 3. The easement shall be acknowledged, and must be recorded by the property owners with the County Recorder and a copy given to the District before a permit will be issued for construction. The owner or owners of properties affected shall pay for the recording fees due to grade releases and easements.
  - 4. Where physical conditions render compliance with the provisions of these

Regulations impracticable, the District may issue a special permit for installation of a side sewer. This special permit shall require compliance with said provisions insofar as is reasonably possible, but shall be issued only upon the condition that the property owner execute and deliver to the District an instrument, in a form furnished by the District, agreeing to save harmless and indemnify the District for any damage or injury resulting from such substandard installation.

- D. Grinder Pump Service Agreement. Any property that connects into the sewer system with a District approved grinder pump system must sign a Grinder Pump Service Agreement with the District at the time of the side sewer application.

#### **13.06.070 Location of Main Sewer Wyes**

- A. Connection to Designated Wye or Tee. Connection of the side sewer shall be made to the wye or tee designated at the time the side sewer permit is issued, unless written permission to do otherwise is obtained from the District.
- B. Excavation. Excavation shall be made at the measurements furnished by the District, to the best of their records, for the location of the wye or tee. The locations of existing wyes or tees are usually shown on as-built drawings furnished to the District by others. The District makes no warranty, express or implied, about the accuracy or completeness of such As Built drawings.
- C. Prospecting For Wye. If the wye or riser cannot be located with the measurements as furnished by the District, the licensed side sewer contractor shall prospect four feet in all directions from the distance and depth given. If such prospecting fails to disclose the wye the Contractor shall immediately contact the District and report the circumstances.

#### **13.06.080 Minimum Requirements and Installation for Side Sewers - Gravity**

- A. Grade. All side sewers shall be laid on a grade of not less than % inch per foot (2%).
- B. Foundation. Side sewers parallel to the foundation wall of any building shall be laid not less than thirty (30) inches therefrom.
- C. Diameter of Pipe. No side sewer less than six (6) inches in diameter shall be laid in public right-of-ways or in easements.
- D. Single Residence Connection. Side sewers serving a single residential structure shall be a minimum of six (6) inches in diameter from the sewer main to the property line and a minimum of four (4) inches in diameter to the residence. Side sewers serving a non-single family residential structure shall be a minimum of six (6) inches from the tee to the building.
- E. Joint Side Sewers. If a side sewer serves two single-family residential structures, a minimum diameter of six (6) inch pipe shall be used from the sewer main to the wye/tee at the confluence of the separate side sewers. A side sewer that serves two residential structures shall also be a minimum of six (6) inches in diameter from the wye to the property line and the property line to the residence. Joint side sewers for non-single family structures are not allowed.
- F. Joint Side Sewer Cleanout. If a side sewer serves three or four single-family residential structures, a minimum of six (6) inch diameter pipe shall be used to the last (upper) wye. A six (6) inch cleanout extending to the ground surface will be required at the wye where the upper connection is made (refer to District standard detail). The District may require a forty-eight (48) inch manhole at the upper terminus of such lines on both residential and

commercial tracts in-lieu of cleanouts. For single-family residential structures located in a panhandle, no more than four single-family residential structures may be connected to a single side sewer.

G. Minimum Surface Cover For Pipe:

1. Minimum cover for side sewers on private property shall be eighteen (18) inches;
2. Minimum cover for side sewers at property line shall be three (3) feet;
3. Minimum cover for side sewers crossing a ditch in the public right of way except as otherwise provided herein, shall be three (3) feet.

H. Water Line Crossings. Parallel water and sewer lines shall be laid at least ten horizontal feet apart wherever possible. Where it is necessary for sewer and water lines to cross, the crossing shall be made at an angle of ninety (90) degrees and the sewer shall be located eighteen (18) inches or more below the water line if possible. Where side sewers must cross over water mains, the side sewer shall be constructed of ductile iron with mechanical joints for a distance of at least five (5) feet each way from the center of the water main. The side sewer must also be encased with cement.

I. Other Underground Facilities. No other underground facilities shall be installed closer than three (3) feet horizontally to the side sewer line as installed.

J. Pipe. Unless otherwise called for, side sewer pipe shall be PVC or ductile iron and meet the following specifications:

1. Plastic Pipe;
2. P.V.C.=Type PSM-SDR-33.5 or SDR-35-ASTM 3033-3034 (standard gasket joints);
3. ASTM D 3034, SDR 35, ASS conforming to ASTM D 2680;
4. Ductile Iron Class 52 AWWA C151 with mortar lining conforming to AWWA C104 (with mechanical or push-on type rubber joints), and polywrapped with a material conforming to AWWA C-600;
5. Bedding, laying and jointing to be done in accordance with the manufacturer's recommendations and as approved by the District.

K. Fittings. All changes in directions shall be made with 1/8 bends (45 degrees), 1/16 bends (22 1/2 degrees) or wye branches with straight through opening plugged for a cleanout. Not more than two bends shall be installed between cleanouts. Cleanouts, including those for commercial property, shall be installed at locations designated by the District in accordance with District standards. A test tee shall be provided at the point of connection to the sewer main, and at any other required point or points in order to insure that all portions of the side sewer or private sewer can be tested. All uncompleted risers, cleanouts, castings and concrete blocks shall be installed by the licensed side sewer contractor and raised to grade after final paving.

L. Laying of Pipe. All sewers shall be laid true to grade with the bells up grade. Pipe shall be cradled in the prepared trench bottom. Pipe shall be carefully centered prior to jointing. The licensed side sewer contractor shall over-excavate and prepare bedding in accordance with District Standards. Backfilling of trenches shall be carefully performed by hand to a depth of six (6) inches above the pipe with bedding material to avoid damaging the pipe. All backfill in the public right-of-way shall be mechanically compacted in a manner approved by the District unless otherwise required by the agency that has jurisdiction over the public right-of-way.

M. Cut-In Connection:

1. Where a wye or tee is not available, a saddle tee shall be used in accordance with

- District Standard. The pipe cut-in shall be carefully made with a hole-saw of appropriate size, and the bottom half shall be filed smooth. The hole must be inspected by District personnel before the saddle is installed. If the pipe becomes cracked during the cut-in, the damaged section shall be replaced to the satisfaction of the District. If the type of wye or tee provided in the sewer does not match the proposed side sewer pipe joint detail, a short transition piece shall be joined to the wye branch or tee by means of a transition gasket of the type used in the sewer. The balance of the side sewer shall then be constructed with compression type flexible gaskets up to the point of connection with the house plumbing;
2. Connection to the house soil pipe shall be made by means of flexible clamp-type coupling or other method approved by the District;
  3. All connections must be clean and visible during inspection.
- N. Impossibility Of Gravity Flow Minimum Elevation:
1. In any structure in which the plumbing drain is too low to permit gravity flow to the sewer, the sewage shall be lifted by artificial means and discharged into the sewer;
  2. Wherever a situation exists involving an unusual danger of backup, the District may prescribe the minimum elevation at which the structure drain may be discharged to the sewer. Sewers below such minimum elevation shall be lifted by artificial means, or if approved by the District, a backwater sewage valve may be installed. The effective operation and maintenance of the backwater sewage valve shall be the sole responsibility of the owner of the side sewer;
  3. Before any installation of this nature is made, the owner will be required to comply with provisions of **Section 5.03 (d), *Special Releases and Agreements***, concerning the agreement to save the District harmless from damage or injury.
- O. Minimum Requirements And Installation Of Side Sewer - Pressure. All pump installations must meet all building, plumbing, and electrical codes, and shall have the District's approval prior to installation. Please refer to Standard Grinder Pump Details for minimum requirements located at the back of these Regulations.
- P. Pipe. Unless otherwise called for, side sewer pipe shall be high-density polyethylene plastic pipe (HDPE SDR 11) and meet the following specifications:
1. Base Resin: Conform to all requirements of ASTM D 48, Type III, Class C, Category 5, Grade P34, with a PPI rating of PE 3408;
  2. Melt Index: Less than 0.25 grams/10 min. as determined by ASTM D 1238, Condition E;
  3. Environmental Stress Check Resistance: No cracks after 192 hours at 100 C as determined by ASTM D 1693, Condition C;
  4. Rating: Long-term hydrostatic strength of 1450 psi and hydrostatic design stress of 730 psi as determined by ASTM D 2837;
  5. Working Pressure Rating: 145 psi;
  6. Laboratory Test Requirements: Withstand without failure a minimum burst pressure of 560 psi when applied in 60 to 70 seconds with water at 730 F. Test in accordance with ASTM D 1599. Test one percent but not more than three lengths;
- Q. Fittings and Joints. Joints shall be flanged, or thermal fusion butt-welded. Joints, in pipes with a diameter of 2-inch or less, shall be made only at pump basins, valves, fittings and changes in pipe diameter. For pipes larger than 2-inch in diameter, joints between pipe sections shall be thermal fusion butt-welded. All flanges and fittings shall be thermal

fusion butt welded to the pipe. Internal beads from welding at flanges and fittings of 2-inch and smaller diameter pipes shall be removed. Operators of fusion welding equipment shall be trained by the pipe manufacturer, who shall certify that operators are qualified. All fittings will be HDPE SDR 11 or SCH 80 PVC where noted on District Standards.

- R. Laying Of Pipe between Grinder Tank and Street Connection Box. A pressure side sewer from the grinder valve box to the collector valve box shall have a minimum cover of 24-inches and shall be HDPE SDR 11 Pipe and shall be equipped with tracer wire for locating purposes. Tracer wire shall be insulated 12-gauge wire (solid core) wrapped around the pipe and looped through the valve box from the collector valve to the grinder cleanout. Refer to **District Standards** for current details. Unless otherwise indicated, it is unnecessary to bed this side sewer.
- S. Cut-In Connection. Where a collector valve box is not available at the property line an HDPE SDR 11 tee shall be cut in to the existing pressure sewer main and thermal fusion butt-welded. A collector valve box assembly shall be placed at the property line. The Side Sewer Contractor doing this type of connection shall be certified in thermal fusion butt welding techniques.
- T. Connection into Gravity Line. Where an HDPE pressure side sewer is connecting into a PVC side sewer, the side sewer contractor shall install a collector valve box assembly at the property line and then make a connection into the gravity side sewer according to District standards.
- U. Connection into Gravity Manhole. Where an HDPE pressure side sewer is connecting into a gravity manhole, the side sewer contractor shall install an inside drop connection on those manholes deeper than 6 feet. In manholes less than 6 feet deep, the connection must match the crown elevation of the outfall pipe.
- V. Backfilling around Vaults and Valve Boxes. Vaults and Valve Boxes shall be placed on backfill that has been compacted to a minimum of 90% of maximum theoretical density. Backfilling shall be performed carefully so that no damage is done to pipe entering or exiting the vault or valve or to the vault or valve box. The District may direct the contractor to use special backfill techniques when it deems necessary.
- W. Grinder Pump Installation. The grinder sewer pump shall be an **Environment One Model 2010** as supplied by Correct Equipment, Inc., 14576 NE 95<sup>th</sup> Street, Redmond, WA 98052. Contact Howard Taub at (425) 869-1233. Contact the District for a pre-construction meeting for pump tank and control panel locations before any installation. Contractor shall determine the depth of the existing building sewer discharge before any installation, to determine if a 58-inch or 74-inch deep tank will be suitable. The grinder pump lift station package shall include the following items:
  - 1. Sewage grinder pumps, semi-positive displacement type, equal to Environment One progressive cavity with a 1 HP, 1800 RPM motor;
  - 2. Corrugated HDPE tank with single complete pump unit, ready for installation. The tank will have a 1-1/4 NPT discharge connection and a 4-inch inlet grommet for DWV (Drain Waste and Vent) pipe;
  - 3. The tank shall include an internal check valve assembly;
  - 4. A breaker panel as supplied by Environment One, with two 15 amp breakers for pump operations, one 15 amp breaker for the alarm system, a *Push to Run* button, an audible alarm with *Silence Button*, and a red light alarm. All wires and connectors are

- to be color coded and labeled for ease of installation;
5. A minimum of 25-feet of direct bury cable (Supply Cable) between the tank and breaker panel;
  6. The pump system operates on two pressure switches. One switch operates the pump on/off and the second operates the alarm;
  7. The package system shall meet the requirements of the Washington State Department of Labor & Industries, Division for Residential, grinder pump systems;
  8. The electrical supply to the breaker panel shall be 240-volt single-phase power;
  9. The tank location shall be accessible for maintenance and repair. The tank cover shall be approximately 3 inches above finished grade. Finish grade shall slope away from the station and the station shall not be installed within a "pothole." No plants are to be located within 5 feet of the tank and the property owner shall maintain a 3 foot clear zone around the tank;
  10. The location of the breaker panel shall be:
    - a. Accessible for maintenance and repair;
    - b. In sight of the tank;
    - c. The bottom of the Panel must be 5 feet from finished grade; and
    - d. The Alarm light shall be visible from 50 feet and must be visible in a 180-degree radius.
  11. The maximum distance between the Breaker Panel and the grinder tank shall be 25 feet, and with sight and easy access.
  12. The Breaker Panel shall be equipped with a knife-type lock out switch. The lockout switch shall be visible from the tank.
  13. Fences, bushes, or any other object shall not hide the alarm light or hinder in the maintenance and/or repair of the system.
  14. There shall be no additional junction boxes or splices made once the system has been installed and inspected by District personnel. Anyone tampering with the approved system shall be liable to the District for any expense, loss, damage, cost of inspection or cost of correction incurred by the District, plus a penalty of \$1,000.00.

### **13.06.090 Inspection and Testing of Side Sewer Installations - Gravity**

- A. Call for Inspection. Arrangements for inspection of a side sewer installation shall be made with the District 24 hours in advance. The District reserves the right to set the time for inspections. Side sewer permits must be obtained from the District prior to scheduling an inspection. All inspections will be performed during normal working hours. Cancellations must be made a minimum of one hour before the scheduled appointment. Additional inspection may result in additional fees.
- B. Testing of Final Installation - Gravity Side Sewer.
  1. Side sewers shall be tested their entire length from the cleanout at the lower end of the line by testing for visible leakage before backfilling by inserting a removable plumber's plug in the cleanout at the lower end of the line and filling the line with water to six (6) feet above its highest point. The contractor shall make this test before calling for inspection so that the inspector can observe and approve the installation in one visit. The licensed side sewer contractor or job foreman must be present at the job during the inspections.
  2. Testing apparatus and water shall be furnished by the licensed side sewer contractor.

Visible leakage shall be corrected and the line shall be retested. All side sewer trenches must be maintained in a safe condition according to the regulations and requirements.

- C. Rate of Leakage. No loss allowed.
- D. As-Built Drawings. As-built drawing shall be prepared by the Contractor and checked by the District Inspector in conjunction with the Permit, and shall show the as-built location of the side sewer installation.

#### **13.06.100 Inspection and Testing Of Side Sewer - Pressure**

- A. Call for Inspection. Arrangements for inspection of a Grinder Pump installation shall be made with the District 24 hours in advance. The District reserves the right to set the time for inspections. Side sewer permits must be obtained from the District prior to scheduling an inspection. All inspections will be performed during normal working hours. Cancellations must be made a minimum of one hour before the scheduled appointment. Additional inspection may result in additional fees.
- B. Testing Of Final Installation - Grinder Pump. Side sewers using pump systems shall be tested at 120 psig (twice the pressure rating of the pump system). Following is the procedure used for testing the discharge line:
  - 1. Close the in-line ball valve in the grinder valve box.
  - 2. Open the riser ball valve in the grinder valve box.
  - 3. Close the ball valve at the collector valve box for the street connection
  - 4. Using hand pump, pressurize with air.
  - 5. Hold the required pressure for ten minutes. Allowable leakage = 0
- C. As-Built Drawings. As-built drawings shall be prepared by the Contractor and checked by the District Inspector in conjunction with the Permit, and shall show the as-built location of the side sewer installation.

#### **13.06.110 Restoration**

- A. Restoration within a City, County, or State Right-of-Way. It shall be the responsibility of the Licensed Side Sewer Contractor to restore the roadway surfacing within the limits of any public thoroughfare or right-of-way. Such work shall be conducted in strict accordance with the rules and regulations of the agency having jurisdiction of said thoroughfare or right-of-way.
- B. Restoration Where Not Prescribed by City, County, or State. The Licensed Side Sewer Contractor shall follow Tenino Specifications
- C. Clean Up. The Licensed Side Sewer Contractor shall remove all debris and excess excavation and shall notify the District of any damage and shall repair such damage, in public or private property, in kind immediately after backfilling.

**13.06.120 Safety Equipment.** The licensed side sewer contractor, before beginning excavation in a public area, shall have at the site sufficient barricades to properly protect the work. The barricades shall be illuminated during the night-time hours in accordance with Right-of-Way regulations and requirements. During the pipe laying operation, a ditch pump shall be readily available on-site for immediate use. The Contractor shall install Trench Safety Systems as required by State and Federal Regulations.

### **13.06.130 Maintenance and/or Repair of Side Sewer Installation**

- A. Side Sewer Cleaning. All side sewer cleaning contractors and/or plumbers, licensed side sewer contractors and/or owners, prior to or while actually engaged in cleaning existing side sewers (as distinguished from plumbing and septic tank facilities), shall notify the District of such operations which are located within the service area of the District.
- B. Excavation and/Or Modification of Side Sewer Installations. No side sewer cleaning contractor, plumbers, licensed side sewer contractors, or owners shall excavate for the purpose of exposing a side sewer and such persons shall make no repair or modification to an existing side sewer (including the cutting of holes in the pipe line and/or installation of additional fittings) until notification has been given to the District and a permit has been obtained from the District.
- C. Demolished Or Removed Buildings. The property owner or their contractor engaged in demolishing or removing any structure connected to the public sewer shall notify the District of such work and shall expose and plug the side sewer connection of such structure at the property line in accordance with the requirements of the District with this Regulation. A District Inspector must observe such plugging.

### **13.06.140 Penalties**

- A. Violators. Any person who shall violate any provision of this Regulation shall be liable to the District for any expense, loss, damage, cost of inspection or cost of correction incurred by the District, plus a penalty not to exceed \$1,000.00.
- B. Notice of Violation. Any person violating any provision of this Ordinance shall be notified by written notice of such violation and shall respond within ten (10) working days of the date of the written notice for the satisfactory correction thereof.
- C. Validity Savings Clause. If any section or portion of this Regulation or any application thereof is adjudged invalid, such adjudication shall not affect the validity of the remaining portion of this Regulation or other application thereof.

**WATER AND SEWER DISTRICT SIDE SEWER REGULATIONS  
APPENDIX "A" STANDARD GRINDER PUMP DETAILS AND NOTES**

<b>DETAIL</b>	<b>REVISION DATE</b>
Grinder Pump Installation Detail	5/14/01
E-One Model 2010 - 58" Grinder Pump Systems	5/14/01
E-One Model 2010 - 74" Grinder Pump System	5/14/01
Grinder Pump Plan	5/14/01
Typical Circuit Diagram	5/14/01
Grinder Pump Cleanout Detail	5/14/01
Collection <i>Valve</i> Box	5/14/01
Pressure Line Connection to Gravity Sanitary Sewer Detail	5/14/01
Pressure Line Connection Detail	3/23/01
Type I Low Pressure Cleanout Detail (Non Traffic Areas Only)	5/14/01
Type II Low Pressure Cleanout Detail (Traffic Areas Only)	5/14/01
Low Pressure Cleanout Notes and Materials list	5/14/01
Pressure Sewer Drop Connection	5/14/01