SANITARY SEWER

RULES AND REGULATIONS

RUSH TOWNSHIP

SCHUYLKILL COUNTY, PENNSYLVANIA







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Exhibit A Application

RUSH TOWNSHIP

Schuylkill County, Pennsylvania

RULES AND REGULATIONS GOVERNING USE OF PUBLIC SANITARY SEWER SYSTEM

I. DEFINITIONS

Unless the context specifically and clearly indicates otherwise, the meaning of the terms and phrases used in this Ordinance shall be as follows:

- "Ammonia Nitrogen as N" shall mean ammonia nitrogen as determined pursuant to the procedure set forth in the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by American Public Health Association, Inc.
- "Applicant" The person or entity that makes an application for sanitary sewer service. The Applicant may either be the intended Customer or a person on behalf of a Customer or prospective Customer.
- "Application for Sanitary Sewer Lateral" shall be defined as a document which is made a part of this specification and shall be completed when the installation of a sanitary sewer lateral is proposed.
- "ASTM" The latest edition of the specification published by the American Society of Testing and Materials.
- "Billing Unit" shall mean and include, as applicable, each of the following: a "Commercial Establishment", "Commercial Building", a "Dwelling Unit". and "Industrial Establishment", and an "Institutional Establishment".
- "Board of Supervisors" shall mean the Board of Supervisors of the Township of Rush, Schuylkill County, Pennsylvania.
- "B.O.D." (Biochemical Oxygen Demand) shall mean the quantity of oxygen, expressed in ppm by weight, utilized in the biochemical oxidation of organic matter under standard laboratory procedure for five (5) days at twenty (20) degrees Centigrade. The standard laboratory procedure shall be that found in the latest edition of "Standard Methods for the Examination of Water and Sewage" published by the American Public Health Association, Inc.

"Builder or Developer" shall mean any person firm, or corporation who propose to install sanitary sewer collection facilities in Rush Township.

"Building Sewer" shall mean the sewage drainage system from a building constructed on any Improved Property to the Lateral serving such Improved Property, including any grinder pump or pressure sewer or similar apparatus or facilities installed by the Owner and which are located on such Improved Property.

"Clean-out" an access opening in the drainage system utilized for the removal of obstruction.

"Commercial Establishment" shall mean any room, group of rooms, building or enclosure, or group thereof, connected, directly or indirectly, to the Sewer System and used or intended for use in the operation of a business enterprise for the sale and distribution of any product, commodity, article or service, which maintains separate toilet, sink or other plumbing facilities in the room or group of rooms utilized for such business enterprise.

"Consumer" - Any person, partnership, association or corporation, and shall mean anyone to whom sewer service is supplied by the Township, whether as owner or tenant and contracting for the use of sewer service as hereinafter limited and classified.

- 1. A building under roof and occupied as one business or residence, or
- 2. A combination of buildings in one common enclosure occupied by one family or business, or
- 3. One side of a double house having a solid vertical partition wall, or
- 4. One side or part of a house occupied by one family even though the closet and/or other fixtures are to be used in common, or
- 5. Any room or group of rooms in a building occupied or intended for occupancy as a separate business or as separate living quarters by a family or other group of persons living together or by a person living alone, the water fixtures of which are not used in common.
- 6. Each apartment, office and/or suite of offices and/or business in the building or house, several such apartments, offices and/or suites of offices and/or business and using in common one or more hallways and one or more means of entrance.

- 7. An industrial, institutional, or commercial, or manufacturing establishment
- 8. Any house trailer.
- "Customer Service Line" The service line between the curb stop at main building shall include pipe valves and appurtenances. The customer service line shall be installed, owned and maintained by the customer.
- "Commonwealth" shall mean the Commonwealth of Pennsylvania.
- "Connection" The sewer service pipe between the main and the curb stop installed, owned and maintained by Township.
- **"Connection Fees"** and "Tapping Fee" shall mean fees against the owner of any Improved Property in the area served by the Sewer System which actually connects or is required to be connected pursuant to the Connection Ordinance then in effect requiring such connection or which otherwise connects to the Sewer System per the Second Class Township Code.
- "Contractor" shall be defined as the person, firm or corporation who, on behalf of the Owner, developer or builder, is responsible for the installation of the proposed sanitary sewer collection facilities.
- "Connection Ordinance" shall mean the ordinance enacted by the Rush Township requiring all Owners of any Improved Property located in the Township, which is adjoining or adjacent to a Sewer, to connect to such Sewer and use the same in such manner as the Townships may ordain.
- "**Domestic Sanitary Sewage**" shall mean normal water-carried household and toilet wastes discharged from any Improved Property.
- "**Drainage**" shall be defined to mean the work of constructing any structure's sewage line and connecting the same to the sanitary sewer lateral.
- "Dwelling Unit" shall mean any room, group of rooms, house trailer, apartment, condominium, cooperative or other enclosure connected, directly or indirectly, to the Sewer System and occupied or intended for occupancy as living quarters by an individual, a single family or other discrete group of persons, excluding institutional dormitories.

- "Educational Establishment" shall mean any room, group of rooms, building or other enclosure connected, directly or indirectly, to the Sewer System and used or intended for use, in whole or in part, for educational purposes, including both public and private schools or colleges.
- "EPA" shall mean the Environmental Protection Agency of the United States of America.
- **"Escrow Account" account** created by the Township and funded by the applicant to cover professional and legal review fees, document preparation and inspection costs.
- "Equivalent Dwelling Unit" or "EDU" shall mean the unit of measure by which the User Charge and the Tapping Fee shall be imposed upon each Improved Property, as determined by the Township by Ordinance, which shall be deemed to constitute the estimated, equivalent amount of Domestic Sanitary Sewage discharged by a single-family Dwelling Unit.
- "Garbage" shall mean solid wastes resulting from preparation, cooking and dispensing of food from handling, storage and sale of produce.
- "Grinder Pump Unit" is a device used to effectuate the flow of sewage discharged from a structure to a sewage collection system, and consists of a tank, the grinder pump, a control panel, a check valve, a curb stop, a valve box and a wet tap saddle.
- "Grinder Pump Unit Discharge Line" is the pipe running from the tank of the Grinder Pump Unit through the check valve, the curb stop and the wet tap saddle to the sewage collection system main.
- "Improved Property" shall mean any property within the sewered area of the Township upon which there is erected a structure intended for continuous or periodic habitation, occupancy or use by human beings or animals and from which structure Sanitary Sewage and/or Industrial Wastes shall be or may be discharged and is subject to the Connection Ordinance.
- "Individual Family Unit" shall be defined to mean an "Individual Unit" as herein defined, devoted to family residential use.
- "Individual Unit" shall be defined to mean each and every single residential, industrial or commercial structure or establishment devoted to a single family or business use including the separate structures comprising a Multiple Unit Structure.

"Internal Sewage Line", or "Internal Sewage System", or "Internal Plumbing" shall be defined to mean all pipes, connections and fittings within the interior walls of any structure used for the transmission of waste or other sewage matter.

"Industrial Establishment" shall mean any Improved Property located in the sewered area of the Township, used or intended for use, wholly or in part, for the manufacturing, processing, cleaning, laundering or assembling of any product, commodity or article, or any other Improved Property from which wastes, in addition to or other than Sanitary Sewage, shall be discharged.

"Industrial Wastes" shall mean any and all wastes discharged from an Industrial Establishment, and/or wastewater having characteristics which may have the potential to be detrimental to the Sewer System.

"Inspector" shall mean the person, firm or corporation designated by the Township as its representative.

"Institutional Establishment" shall mean any room, group of rooms, building or other enclosure connected, directly or indirectly, to the Sewer System, including institutional dormitories and Educational Establishments, which do not constitute a Commercial Establishment, a Dwelling Unit or an Industrial Establishment.

"Large Consumer" shall mean a Person whose metered or estimated consumption of water is in excess of 22,500 gallons per calendar quarter in the case of a Dwelling Unit, or any Commercial Establishment, Educational Establishment, Institutional Establishment or Industrial Establishment, regardless of water consumption or volume of Domestic Sanitary Sewage or Industrial Wastes discharged.

"Lateral" shall mean that part of the Sewer System extending from a Sewer main to the curb line or if there shall be no curb line, to the property line or right-of-way line, or if no such extension is provided, then "Lateral" shall mean that portion of, or place in, a Sewer that is provided for connection of any building sewer, and which line is typically but not under all circumstances, owned by the Township.

"Low Pressure Sewer Service Areas" are areas within the total sewer service area that are served by individual grinder pumps and low pressure sewer mains.

"Main Sewer Line" sometimes used interchangeably with "Sewer System" shall be defined to mean only the main lines constructed and owned by Rush Township, its successors or assigns.

- "Multiple Unit" or "Multiple Unit Structure" shall mean any Improved Property in which shall be located more than one Billing Unit.
- "Multiple Unit Structure" shall be defined to mean one physical structure, comprised of two or more separate units possessed of separate inside or outside entrances, whether designed for individual unit ownership, or collective ownership, or rental.
- "Multiple Use Improved Property" shall mean any Improved Property upon which there shall exist any combination of a Dwelling Unit, Commercial Establishment, Industrial Establishment. Educational Establishment or Institutional Establishment.
- "Owner" Any person, firm, corporation or association in whose name any property being supplied or about to be supplied sewer service by the Township is recorded in the Office for Recording of Deeds in and for the County of Schuylkill, Pennsylvania.
- "Person" shall mean any individual, partnership, company, association, society, trust, corporation or other group or entity, including municipalities, municipality authorities, school districts and other units of government.
- "pH" shall mean the logarithm of the reciprocal of the concentration of hydrogen ions, expressed in grams per liter of solution, indicating the degree of acidity or alkalinity of a substance.
- "ppm" shall mean parts per million, parts water, by weight.
- "Properly Chopped Garbage" shall mean Garbage that has been chopped to such a degree that all of its particles will be carried freely under normal gravity sewer flow conditions, with no particle greater than one-half (1/2) inch in any dimension.
- "Running Trap" a fitting or device which provides a liquid seal to prevent the emission of sewer gases without materially affecting the flow of sewage or waste water through the trap.
- "Sanitary Sewage" shall mean the normal water-carried household and toilet wastes discharged from any Improved Property.
- "Sewered Area" shall mean that geographic area of the Township served by the Sewer System and designated, from time to time, by the Board of Supervisors.

"Sewer" shall mean any pipe or conduit constituting a part of the Sewer System used or usable for collection Domestic Sanitary Sewage and/or Industrial Wastes.

"Sewer System" shall mean all sanitary sewer facilities owned or operated by the Township, as of any particular time, for collecting and transmitting Sanitary Sewage and/or Industrial Wastes discharged by an Improved Property within the Sewered Area of the Township.

"Street" shall mean and shall include any street, road, lane, court, cul-de-sac, alley, public way or public square, including such streets as are dedicated to public use and such streets as may be owned by private Persons.

"Sump" a pit at lowest point into which water is drained in order to be pumped out of the facility.

"**Tapping Fee**" and "Connection Fee" shall mean fees against the owner of any Improved Property in the area served by the Sewer System which actually connects or is required to be connected pursuant to the Connection Ordinance then in effect requiring such connection or which otherwise connects to the Sewer System per the Second Class Township Code.

"Total Phosphorus as P" shall mean total phosphorus as determined pursuant to the procedure set forth in the latest edition of "Standards Methods for the Examination of Water and Wastewater", published by the American Public Health Association, Inc.

"Total Solids" shall mean solids determined by evaporating at one hundred degrees Centigrade (100°C) a mixed sample of wastewater as determined pursuant to the procedure set forth in the latest edition of "Standard Methods for the Examination of Water and Wastewater", published by the American Public Health Association, Inc. Total solids include floating solids, Suspended Solids, Settleable Solids and Dissolved Solids, as defined below:

- a. "Suspended Solids" shall mean solids determined by standard laboratory procedure in the waste.
- b. "Settleable Solids" shall mean solids that settle in an imhoff cone from a standard sample of waste.
- c. "Dissolved Solids" shall mean solids that are dissolved in the waste and cannot be removed by filtration but can be determined by evaporation.

"Toxic Substance" shall mean any poisonous substance, including copper, cyanide, chromium, beryllium, cadmium, lead, nickel, tin and zinc irons, and any phenolic bodies or radioactive isotopes.

"Township" shall mean the Township of Rush, Schuylkill County, Pennsylvania, political subdivision of the Commonwealth of Pennsylvania acting by and through its Board of Supervisors or, in appropriate cases, acting by and through its authorized representatives.

"Treatment Plant" shall mean the Sewage treatment and disposal system facilities acquired and / or constructed by Rush Township, Schuylkill County, Pennsylvania, together with all appurtenant facilities and properties, and together with any additions, improvements, enlargements and/or modifications thereto from time to time acquired or constructed.

"Utilities" shall mean all underground utilities such as electric power lines, cables, conduits, lighting cables, telecommunication, alarm, signal lines, conduits, natural gas, oil, steam, petroleum, gaseous flammable natural gas, oil, steam, petroleum, sewers and drain lines, drinking water, reclaimed water, irrigation, slurry lines and or any service that travel underground or Overhead.

"User" shall mean any person who contributes causes or permits the contribution of wastewater into the Sewer System or the Treatment Plant from an Improved Property.

"User Charge" shall mean the monthly rental or charge imposed by the Township, as amended from time to time, against the Owner of each Improved Property, for the use or availability of use of the Sewer System.

"Vent" and "Vent Pipes" a pipe installed to vent a sewage drainage system.

II. <u>APPLICABILITY</u>

A. SERVICE CONNECTION

- 1. Any Owner desiring the connection of sewer service from the Township's main to his or her premises, must first make written application on the form furnished by the Township, a minimum of two weeks before service is required. The application shall state the exact time and date when the trench from main to the right-of-way will be ready for inspection and the name of the contractor who will complete the Service Connection. The Township reserves the right to deny the application if the selected contractor does not receive Township approval.
- 2. The application must be signed by the Owner, or a duly authorized agent, who shall, together with the Rules and Regulations of the Township regulate and control the service to such premises.
- 3. The application must be accompanied by a fee for each sewer Service Connection established by Resolution of the Township and as hereinafter provided. The fee shall be comprised of two parts:
 - (a) The Tapping Fee Sewer flat fee for each EDU to be served.
- 4. The Sewer Connections may only be installed after approval of the Township is granted. The Township will only approve the application after determining that a main with adequate available capacity does exist in the public street or on a private right-of-way along or through the property to be served, and said main must extend across the total frontage of the deeded property. In instances where the required main or mains do not exist, the Applicant shall enter into an extension agreement with the Township as defined in the "Standard Specifications for Sewer System Additions and Improvements in Developments in Rush Township".
- 5. All connections to the public sewer system are made upon the express understanding and agreement of the property owner that: (a) The Township shall not be liable for any damage or expense resulting from leaks, stoppages, or defective plumbing or from any other cause occurring to any premises or within any house or structure when such damage or expense is found to have resulted from stoppages, damages or defects in any house connection nor shall the Township be liable for a deficiency or failure of service when occasioned by an emergency, required repairs, or failure from any cause beyond its control. (b) The Township reserves the right to restrict the use of sewer service whenever the public welfare may require it. (c) Upon due notice, the Township shall have the right of access at all reasonable hours to all parts of any premises connected with the sewer system for the purpose of examining and

inspecting the connection and fixtures, or for disconnecting service, or for any proper cause. (d) The owner must give written notice to the Township upon any change in ownership of any improved property.

B. CHANGES IN OWNERSHIP

- 1. A new application for service shall be made to and approved by the Township or its duly authorized Township upon any change in ownership of the property or for any change in service from that described in the previous application. The Township shall have the right to discontinue service upon five (5) days' notice until such new application has been made and approved
- 2. Applications may be disapproved by the Township for any cause deemed proper by the Township. In such event, applicants will be notified within five (5) days from the decision by the Township to disapprove the application.

C. PAST DUE CHARGES

No application for service will be approved by the Township or its agents until all arrearages and past due charges accrued on said property shall have been paid or satisfactory arrangements made in regard thereto.

D. DEPOSITS

The Township may require a deposit with the application of an amount equal to the minimum charge for the type of service purposed to be rendered for one year. The deposit, if required, shall be refunded upon payment without default of all charges for twelve consecutive months. The deposit will be refunded without interest.

E. INVESTIGATION OF BILLS OF DOUBTFUL ACCURACY

Any consumer, upon receipt of bill, having reason to doubt its accuracy, shall bring or mail the bill, within five days to the office of the Township for investigation. In the event of a dispute, the customer will be required to pay at least the undisputed portion of the bill within the allotted times for payment. The failure of a customer to notify the Township within five (5) days shall signify the customer's acceptance of their bill as being accurate.

F. SEWER CONSTRUCTION ESCROW

Each applicant shall pay to the Township an amount equal to \$1,000.00 per EDU for residential service for residential services in excess of one EDU and \$5,000.00 for non-residential service (regardless of EDU's), to be deposited in an Escrow account to be created by the Township to pay all eligible professional fees associated with the review of the application. The escrow account shall be funded with cash, certified check or other draft acceptable to the Township and / or its Solicitor. Professional review fees shall be paid from the Escrow Account by voucher and shall include engineer and legal review fees, document preparation fees and inspection fees. If required by the Township, additional deposits into the Escrow Account shall be made by the applicant to meet professional review expenses within fifteen (15) days of the date of the request by the Township. The application review process will not continue until such requirement is met. The applicant is responsible for all eligible costs incurred by the Township on the applicant's project.

III. APPLICATION PROCEEDURES

- 1. Applicant/Developer submits the following packet to the Township containing:
 - a) Complete "Application for review of a Sewer Lateral/Extension Plan"
 - b) Two copies of the plan prepared by a Professional Engineer registered in the Commonwealth of Pennsylvania for applications involving Sanitary Sewer Extensions, Sewer Laterals for non-residential structures or residential structures in excess of one EDU.
 - c) Current Preliminary Application Fee (See Township Fee Schedule Resolution for current rates)
- 2. Revised Plans that are resubmitted for further review may require that additional fees be submitted, as required.
- 3. Township then submits the plan to the Township Engineer for review.
- 4. Township Engineer reviews the plan and makes the necessary recommendation to the Township and Applicant/Developer.
- 5. If necessary, Applicant/Developer must follow the Township Engineer's recommendations to make any revisions.
- 6. Revised plans are then resubmitted for further review. When Engineer informs the Township that the plans are acceptable, Applicant/Developer must provide the Township with four sets of final plans. If a Water Quality Management Permit (WQM) is required, additional sets of plan are required for submittal to D.E.P.
- 7. Township acts on the plan after any and all revisions have been made in accordance with the Engineer's recommendations.
- 8. In addition to actual cost incurred for engineering legal, and/or special handling, the Applicant/Developer will pay the Township a 10% administrative fee.

- 9. If required, a fee of \$500.00 is charged for processing a postcard for Planning Module Exemption.
- 10. The fee for the review of all other Planning Modules require a \$1,000.00 deposit and the developer to pay all excess review fees prior to release of the Planning Module to PADEP.
- 11. Applicant/Developer completes the D.E.P. "Sewerage Permit Application: and submits it to the Township along with the appropriate D.E.P. permit application fee, for submission to D.E.P.

Note: Planning modules and/or WQM permit must be approved by D.E.P. prior the plans for a new subdivision or sewer line extension being approved by the Township.

12. Prior to Township giving the approval to start construction, an Improvements Agreement and financial guarantee shall be provided by Applicant/Developer for the installation of sanitary sewer extension in accordance with the Municipalities Planning Code, in a form suitable to the Township Solicitor. Costs shall include the cost of legal, engineering, and administrative services. The property owner also pays to Rush Township the current tapping fee for each EDU (Equivalent Dwelling Unit) of sewer capacity, the current permit fee and a current fee for inspection of each connection that the property owner needs to reserve. Please refer to Rush Township Sanitary Sewer Fee Schedule for current costs.

Note: Engineer can base escrow amount on a bona fide itemized bid from a reputable contractor, if submitted in writing form Developer.

- 13. If there is to be construction on a Township road, a Township Road Occupancy Permit shall be obtained. Copy of said permit to be submitted to the Township/Township Engineer prior to start of construction. All associated professional / administration fees shall be paid by the property owner to the Township. If there is to be construction on a State road/highway, a PennDOT permit shall be obtained. The permit application will be prepared by the Township Engineer in the Township's name. The cost of the preparation of the application is the responsibility of the Owner and is to be paid by the property owner to the Township. Any PennDOT inspection fees, if required, shall be paid by the property owner to the Township.
- 14. Upon the main line and laterals construction being completed, tested, and televised and a letter from the engineer stating the project is approved for flow, a sewer permit may be obtained from the Township for each lot to connect to each lateral that has been installed. The property owner must obtain a plumbing permit from the Township UCC Building Code Official. The UCC Building Code Official is required to inspect the construction of the building sewer. Fees and procedures for this service are as established by the applicable Township, in accordance with Pennsylvania Uniform Construction Code.

Building Permits are also to be obtained from the Township.

- 15. Sewer user fees, (current cost per EDU per month), begin on the date of connection of the building sewer to the lateral.
- 16. All work shall be in accordance with the Rules and Regulations of the Township as most recently amended.

For additional information or assistance, please contact:

Rush Township	570-668-2938
Township Engineer (Currently ARRO Consulting, Inc)	570-366-9534

IV. MATERIALS AND WORKMANSHIP

In all new construction, materials must be free from defects, be of good quality and have the producers' certification as to grade, weight, gauge and quality. It must meet the standards as set forth in these regulations. The construction, assembling, repairs and alterations of sewage work must be executed in a thorough workmanlike manner with proper regard to alignment, uniform grades, and security of fastenings and supports. All joint and connections shall be uniform and well made, using fittings of such type and angle to avoid distortion and strain. They shall be watertight and gas tight. All materials used shall be new. No male joint shall be used which is too small or too large a diameter. All connections to the sanitary sewer laterals shall be made using a properly fitted premolded donut as manufactured by Fernco Joint Sealer Co., or approved equal.

V. CONSTRUCTION AND PROJECT OBSERVATION

All construction of sewers shall be inspected throughout construction by the Township's appointed inspector. Part-time or full-time inspections shall be performed as deemed necessary by the Township. The Owner/Developer shall be responsible for all costs.

- A. <u>Physical Inspection</u>. Any person, firm or corporation undertaking to make a connection to Rush Township sewage system shall:
 - 1. Notify Rush Township, the date and time on which he proposes to start work on each and every connection.
 - 2. The inspection shall include but not be limited to: inspection of pipe installation, check of line and grade, witness backfilling, inspection of

manhole construction prior to backfilling, witness air testing and witness deflection test.

- 2. No work shall be covered until it has been inspected and approved by the Inspector or Township representative.
- 3. Give the Inspector at least twenty-four (24) hour notice in advance of any requested inspection.

In the event any person, firm or corporation covers any work without first having the same inspected and approved, it shall be uncovered to afford inspection. The Owner of the Improved Property shall be responsible for all costs and expenses involved in uncovering the facilities to permit inspection.

- B. <u>Posting</u>. Any person, firm or corporation doing work on or connecting in any fashion to Rush Township sanitary sewer system shall post a sign on the premises on which the installation is being made or repaired. The sign shall:
 - 1. Be visible from a public street serving the premises;
 - 2. Not have dimensions less than 2' X 1 1/2';
 - 3. Have lettering not less than 4" in height;
 - 4. Shall identify by name, address and telephone number the person, persons, firm or corporation doing the work; and
 - 5. Shall list the Certificate of Permit number. All signs shall be removed on completion of the work, inspection and acceptance.

VI. BLASTING

All Blasting shall be performed in accordance with the most current rules and regulations of the Commonwealth. If at any time, it becomes apparent through complaints or otherwise, that blasting shocks are severe, the contractor shall furnish, at his expense, seismograph to gauge shock wave density.

VII. <u>SEWER PIPE & CONNECTIONS</u>

All lateral lines (main sewer line to right-of-way line) shall be 6 inches in diameter or larger, and as shown on ARRO Consulting, Inc. Details, as most recently amended. This line shall contain a cleanout at the right-of-way line to allow for cleaning and sealing.

The sewer connections from and including all cleanouts must be PVC. PVC pipe and fitting shall meet the requirements of the most recent ASTM specification D3034 and SDR 35. PVC pipe shall comply with the drop impact test ASTM D2444, Pipe Stiffness ASTM D2412 and joint tightness ASTM D3212 and shall meet or exceed the manufacturer's recommendations in regard to same. The sewer connection from all structures to the cleanout shall consist of pipe and fittings as required by the Pennsylvania Uniform Construction Code.

All plastic pipe shall be marked for in ground identification as a sewer pipe by a quality control agency recognized in duly authenticated reports as approved by the inspector or designated person.

Structure sewage lines shall have a minimum grade of 1/4" per foot. Where possible a uniform grade shall be maintained.

Joints for pipes shall consist of pipe and fittings as required by the Pennsylvania Uniform Construction Code.

All building sewers shall be tested with ten (10) foot head of water per the requirements of the Pennsylvania Uniform Construction Code.

Structure sewage lines shall be installed below recorded frost penetration or not less than three feet (3'-0") below grade, whichever is greater.

Drainage from structures shall, wherever the sewer lateral is of sufficient depth, be kept at a depth of at least twelve (12) inches below the basement or cellar floor for a distance of five (5) feet inside the exterior wall.

All underground sewer pipes shall have metallic tape laid (12) inches below ground. This tape shall be green in color and have the words "CAUTION SANITARY SEWER" printed on it and shall be in accordance with the latest ASTM, D2103, D882, D2578, D792, D 671 standards.

A. Clean-Out Plugs

Any clean-out connection shall not be less than 4 inches in diameter. Any clean-out connection shall be installed in accordance with the applicable ARRO Consulting, Inc. Detail(s) incorporated in these regulations.

Clean-outs shall be installed in the structure sewage line in such manner, number and position as to permit cleaning such lines in their entire length. In no case shall there be less than two clean-outs in each structure sewage line if it exceeds 50 feet in length, nor shall they be spaced more than fifty feet apart if its length exceeds 100 feet.

Brass screw caps for clean-outs when provided shall be extra heavy and not less than one-eighth (1/8) inch thick. The screw cap must have a solid square nut, not less than one (1) inch thick or where flush with floor an approved recessed means of removal. The body of clean-out ferrule shall at least equal in weight and thickness the caulking ferrule for the same size pipe.

VIII. LOW PRESSURE SEWER SYTEMS AND GRINDER PUMPS

All structures which cannot be drained to the main sewage line by gravity flow shall be discharged into a grinder pump.

All property owners wishing to connect a drainage system which is below sewer grade and / or located within the Low Pressure Sewer Service Area shall meet the requirements as stated in these regulations.

- 1. Low-pressure sewer system areas are of the pressurized type. In order to assure the proper operation of the system it is necessary to install, below grade, a standard grinder-pump unit for each building or buildings serviced, between the building and the point of connection at the street sewer. This unit consists of a cylindrical encasement within which there is the grinder, motor, pump, tank, manway and all ancillary items. Piping from the building to the grinder inlet must permit gravity flow. The unit outlet to the point of connection at the street sewer must be compatible with the street sewer and accommodate flow under pressure generated by the unit.
- 2. All new and renovation connections constructed will be served in the following manner:
 - a) The property owners must enter into an Easement and Operations Agreement with Rush Township Board of Supervisors.
 - b) The Grinder Pump shall be as manufactured by Environment One Corporation (EOne), Model 071 or Model DH152 (Duplex) or approved equivalent. No such grinder pump, apparatus or any other equipment shall be used by the

- property owner to connect to the sewer without prior approval from the Township.
- c) The property owner will be charged a connection fee in accordance with the Township Ordinances and a grinder pump unit fee dependent on the grinder pump depth and number of pumps asrequired.
- d) The owner/developer must, at their expense, install such unit and connecting services. The installation shall include, without limitation, excavation of the pit for the grinder pump unit, excavation of trenches for piping between the building and the unit and between the unit and the street sewer, the laying of a six (6) inch gravel pad at the base of the unit pit, on which pad the unit must be leveled, the pouring of a concrete encasement around the bottom perimeter of the unit, a minimum of one (1) foot wide, and one (1) foot high, the laying of requisite piping between the building and the unit and between the unit and the street sewer, all electrical connection and wiring.
- 3. The grinder-pump unit shall be located in a convenient location accessible to the Township at all times. The property owners shall convey to the Township a Permanent Easement and Easement and Operation Agreement for maintenance purposes. The Township will allow the location of the unit as close to the single or two family residential dwelling as the Owner desires, provided however, that the Owner shall first grant the Township, in a form satisfactory to the Township, an easement for location and future maintenance of the unit and piping, between the unit and the street sewer.
- 4. The piping between the single or two-family residential dwelling and the grinder pump unit and between such unit and the street sewer, the concrete anti-flotation base and the electrical power connection facilities shall comply with the detailed technical specifications in respect thereof set forth in these regulations and the manufacturer's specifications. Installation shall be performed only by a qualified licensed contractor, who shall be named in the application for the connection permit.
- 5. Each separate lot shall be required to have a separate pump unless it is specifically exempted from this requirement by the Township. Exemptions may be granted if the separate lots are merged prior to the installation of the pump. The Township may require a larger pump or multiple pumps with a greater capacity, if such a pump is necessary for the number of buildings, and facilities to be serviced. The Township may also require a duplex pump based on the number of buildings and facilities to be serviced, based on the Township's sole discretion. If due to, the topography, the location of existing buildings, soil type and presence of ledge, it is not feasible in an engineering sense to install separate pumps, the Township may allow use of a single

pump with a larger capacity. If there is a residential and business usage within the same building, the Township may require the use of two separate pumps, to individually service the residence and the business. If there is a single building containing dwelling units under separate ownership, the Township may allow the use of a single pump with a larger capacity. For any single building with three or more dwelling units under separate ownership, separate pumps will be required for each dwelling unit.

- 6. Every building connection must be inspected and approved by the Township before the trench is backfilled. The Township may, at his discretion, permit the utilization of existing piping between the building and the grinder-pump unit, providing an inspection discloses that it is reasonably true to grade and that the pipe is in good condition. In the case of any such existing piping the Township shall have the right to require the owner to uncover the full extent of such pipe to determine its condition and require its replacement with approved pipe, if the inspection discloses the existing pipe to be crushed or damaged in any manner. The cost of such an inspection including the cost of uncovering and replacing the pipe where necessary shall be the sole responsibility of the owner.
- 7. The installation of the grinder-pump unit, the connecting pipe and related facilities from the building to the unit and the pipe and related facilities from the unit to the street sewer shall be made in accordance with the detailed specifications as set forth in these regulations and manufacturer's specifications. Should any aspect of such specifications be unclear to the property owner he should seek further instruction from the Township.
- 8. All sanitary drains from the house must be connected into one 4" diameter PVC plastic grinder-pump unit. Other connections to this line shall be made with the approved transition fittings resulting in an infiltration free construction. All joints and connections shall be made gastight and watertight in a manner approved by the Township. Approved plastic pipe joints shall be fully chemically welded with plastic solvent in strict accordance with pipe manufacturer's recommendations. Other joining materials and methods may be used only with prior written approval of the Township. All excavations required for the installation of a building sewer shall be open trench unless otherwise approved by the Township. Pipe laying and backfill shall be performed in accordance with ASTM specification (C12-19) except that no backfill shall be placed until the work has been inspected. Building connections must be provided with adequate cover to protect the pipe from crushing or frost action. Each building structure must be provided with a clean-out and vent. The property owner is in all cases responsible for the continued maintenance of the building connection.

- 9. Excavation for the grinder-pump unit shall be to a depth to properly accommodate the grinder pump unit. The bottom of the excavation shall be level and all loose material removed by hand shoveling. Minimum diameter of the base of the excavation shall be large enough to accommodate the grinder pump unit. A six-inch deep layer of gravel or crushed stone shall be placed under the grinder pump unit. 16 The grinder-pump unit shall be leveled on the gravel base and rotated into proper alignment with the house sewer and discharge line. The inlet shall be solvent welded to the tank connection and extended towards the house sewer. Unless the concrete collar is precast, the grinder-pump tank shall be partially filled with water, and then the required concrete collar shall be placed around the unit. After completing electrical and piping connections, the Township shall be notified for inspection of the installation. After approval by the Township, the excavation for the grinder pump unit shall be backfilled. Each layer shall be "Hand tamped" to minimize future settling. No stones, sticks or other debris shall be placed adjacent to the fiberglass tank, wiring or pipes.
- 10. Electrical service shall be provided to the grinder-pump control panel by the homeowner. Electrical installation shall meet the requirements of all local, state and National Electrical Codes and the grinder pump manufacturer's specifications. Each unit shall be provided with a 240 VAC, three conductor, plus ground single phase power circuit direct from the house service panel. This circuit shall be protected with a 2 pole 30 amp circuit breaker. Wire sizes shall be as follows: Total Length of Wire Required Minimum Wire Size 1-50 feet #10 50-75 feet #10 75-100 feet #8 Beyond 100 feet Consult Township. Each grinder-pump unit shall be provided with an approved unfused lockable 3 pole disconnect switch in a 3-R weatherproof enclosure control panel. The switch shall be located outside the residence or place of business at a height of 4'-0" from the bottom of the enclosure to the ground. The switch shall be located not more than 50' in front and in sight of, the grinder-pump unit. Easy access to the switch shall be maintained at all times. Any National Electric Code approved wiring method may be used. The grinder-pump unit shall have a warning light and an audible alarm in the event of a pump failure. The Installation Manual for grinder pump shall be controlling and in the event there are any inconsistencies between these regulations and the requirements contained in the Installation Manual, the requirements in the Installation Manual shall be governed.
- 11. The discharge line shall include the piping and appurtenances supplied by the property owner with hookup labor and a Township supplied redundant check valve, if necessary. This valve shall be attached to the curb stop. Discharge piping shall be 1-1/4" SDR 26 PVC pipe, buried a minimum of forty eight (48") inches deep. Pipe shall be laid in a 4-inch bed of sand and covered with 6 inches of sand.
- 12. Following installation and dependent on the structure served, the Township may will periodically inspect the grinder pump unit at the Townships expense on installations,

provided, however, that any damage caused to the unit as a result of the discharge into the same of prohibited substances or other misuse by the property owner or caused by the physical collision or impact with the unit shall be repaired by the Township at the property owner's expense. The property owner shall, in all events, be responsible for the maintenance and repair of all sewer piping from the house to the pump, and the electric power service facilities, from the house to the electrical control panel.

IX. EXCAVATION AND BACKFILL IN THE TOWNSHIP RIGHT-OF-WAY

A. Excavation.

The trench for PVC pipe shall be excavated to give uniform bearing along the full length of each pipe section. The ditch shall be wide enough to allow for proper placement of select materials in the hunching and initial backfill area.

Sheeting and boxes shall be used in a manner as not to disturb the embedment material within two (2) pipe diameter on each side of the pipe.

B. Trench Foundation.

When in rock or under unstable soil, the trench foundation shall be prepared to support the pipe without causing loss or grade or flexural breaking of pipe. Any soft or weak areas shall be removed and replaced with suitable material.

C. Bedding

Bedding directly beneath the pipe shall provide uniform longitudinal support for the pipe. Pipe bedding material shall be crushed stone of six (6) inch thickness and shall be properly placed so that pipe will not settle and lose grade. Bedding material shall be PennDOT 1B stone. Blocking to bring the pipe to grade is not allowed. Provide bell holes at each joint to permit the joint to be assembled properly while maintain uniform pipe support.

D. Haunching and initial backfill.

The haunching area as measured from bottom of pipe to springline shall be carefully placed to eliminate voids under or around the pipe and shall have a minimum of 90% standard proctor density. Haunching material shall be PennDOT 1B stone. After material haunching is placed, the initial backfill material shall be placed to a minimum of 90% standard proctor density, beginning at springline and extending eighteen (18) inches above the pipe. Install backfill material shall be PennDOT 1B stone.

E. Final backfill.

After haunching and initial backfill, the balance of selected material backfill, the balance of selected materials backfill shall be placed in accordance with the Rush Township requirements.

Compaction shall be accomplished by vibratory trench equipment to obtain required proctor density. Contractor to pay for compaction test, if required by Township "No" hydro hammers allowed.

X. <u>LATERALS</u>

A. General

No laterals shall be constructed at less than ¼" per foot except by written permission of the Township. Lateral construction shall be as shows in the ARRO Details.

B. No vertical laterals stack shall be permitted

C. Tap-in

The connection at the main sewer line shall be made by installing a PVC saddle fitting. Care shall be taken not to damage the sewer pipe when cutting the hole to install saddle. The contractor shall excavate carefully and by hand around sewer main, tap required hole, and install the saddle fitting. Taps made into clay or asbestos cement pipe shall be stabilized by encasing the entire joint, including the exposed portion of the main with not less than six (6) inches thick 3000 psi concrete all around.

D. Saddles

All saddles shall have an outside collar with an O-ring water tight seal to prevent penetration into the pipe beyond the inside surface and shall be secured to the sewer main with stainless steel strap. Saddle shall be Sealtitte Tupe "UH" by the General Engineering Company or approved equal.

E. Connection from building sewer.

Connection from building sewer shall be inserted into a lateral and a watertight seal provided by using a doughnut adapter of flexible coupling by Fernco or approved equal.

XI. MANHOLES

Manhole shall consist of precast reinforced round riser and eccentric cone or flat slab top sections, as required, with a precast concrete base. Manhole shall be equipped with cast iron frames and covers, polypropylene steps and shall have a minimum inside diameter of four (4) feet. Manholes shall conform to ASTM C-478 or latest revision, and details.

A. Precast Concrete Manholes

Opening in precast concrete shall accommodate the connection of sewer piping and shall be custom preformed for each manhole at the time of manufacture.

Connection of PVC pipe to precast concrete manhole bases shall be made by means of molded rubber "boot" gasket cast directly into the concrete of the wall at the manufacturer plant. The gasket shall meet the lasted ASTM Specification C443 or C361 and shall be Model Dual-Seal Gaskets or approved equal.

The manhole base shall be placed on a minimum of six (6) inches in PennDOT 1B Stone. Sub-base shall be as determined by the inspector depending on the site conditions. If concrete is required for stabilization, cleaned crushed stone for sub water drainage may be required for concrete sub-base foundations.

B. Modified Manhole Openings

Manhole modified to receive pipe shall have a concrete manhole adapter (waterstop) installed and grouted into wall. Adapter by Fernco or approved equal. Refer to ARRO details. Grouting cement shall include a bonding agent Type Duraweld-C for concrete repairs.

C. Industrial Effluent Sampling

Industrial effluent sampling manhole shall be constructed so that discharge from building sewer can be sampled without dilution of flow from other source.

Detailed drawings shall be furnished to the Township for approval showing location and elevation prior to construction.

D. Manhole Frame and Covers

Manhole frames and covers shall be of type and design as shown on the drawings.

ASTM A48 Class 35B gray iron suitable for H-25 loading with one (1) coat black asphalt cover. Manhole inserts shall be installed in all new manholes to prevent inflow through manholes covers. Inserts shall be manufactured by Preco Industries LTD, Plainview, New York or approved equal.

XII. TESTING

After the sewer pipe has been laid and backfilled, each section of pipe between manholes shall be tested.

A. Air testing (PVC Pipe)

The recommended minimum time required for the .5 psig pressure drop pf 3.5 psig to 3.0 psig, shall not be less than the time shown below.

Should any test on any section of pipe line disclose an air loss rate greater than permitted, the contractor shall, at his own expense, locate and repair the defective joints or pipe sections. After repairs are completed, the line shall be retested until the air loss rate is within the specific allowance-ie., the pipe line holds the pressure within the allowance pressure drop of .5 psig for a minimum time equal to the time(s) shown in the table below.

Pipe Size (Inches)	<u>Time</u>
4	2 min. 32 sec.
6	3 min. 50 sec
8	5 min. 6 sec
10	6 min. 22 sec
12	7 min, 29 sec

B. Allowable infiltration

When high ground water exists and infiltration test is permitted, the Inspector shall give explicit instruction for conducting the test. The maximum allowable amount of infiltration rate measured by the test shall be fifty (50) gallons per inch of pipe diameter per mile per 24 hours.

Should any test on any section of pipe line disclose an infiltration rate greater than permitted, the contractor shall, at his own expense, locate and repair defective joint or pipe sections. After repairs are completed, the lines shall be retested until the infiltration is within specified allowance.

C. Manhole Testing

All manholes shall be tested for leakage before acceptance by the Township.

- 1. Manholes shall be tested by the exfiltration method. The manhole to be tested shall have sewer opening plugged and then filled to the top with water. After the concrete has absorbed enough water for stabilized condition, the water level in the manhole shall be maintained for one (1) hour without more than 2" drop. If the excavation surrounding the manhole is full of water it shall be dewatered and maintained in a dry condition during the test.
- 2. When large systems are to be tested, vacuum testing of the manholes will be accepted. Vacuum test apparatus shall be approved by the Township or the engineer and the tests shall be performed to the following criteria:
 - a. The manhole shall be tested at 10" Hg vacuum with an allowable drop of 1" Hg during the test period.
 - b. Test time shall be 30 seconds per four (4) feet of depth with a minimum of 1 minute.
- 3. Manhole inserts shall be tested after installation. The seal and values shall be water tested and shall not allow more than (1) gallon of inflow during a period of 24 hours.

D. <u>Deflection Testing</u>

Allowable Deflection - Maximum long term deflection of the PVC pipe shall not exceed five (5) percent.

A rigid "Go-No-Go" device shall be used. It is recommended that the design of the "Go-No-Go" device be such that it will allow small obstructions, such as gravel, to pass through.

The following steps shall be followed:

- A. The line to be tested shall be clean and free of debris that might cause the device to jam. The line shall be cleaned with a hydro-cleaner washing in the direction of flow.
- B. Next pull a line through the pipe with which to pull the "Go-No-Go" device. This can be done several ways:
 - 1. If a hydro-cleaner is being used, attach the pull line to the nozzle end before the actual cleaning cycle starts. As the hose is pulled through the line, it will carry the

pull line with it. When the hose nozzle reaches the manhole, disconnect the pull line and tie if off.

- 2. A parachute device can be blown through the line with a lightweight string attached. Detach the string, and attach the pull line. Manually drag the pull line through the pipe. Tie off at each manhole.
- 3. If a sewer line is in service, a string can be floated through the manhole run. When the string reaches the next manhole, attach it to the pull line and drag through. Tie the pull line at each manhole.
- C. Pulling of the gauge shall be done by hand. The pulling motion shall be smooth and easy to avoid jamming the gauge if an obstruction is encountered in the line. The gauge shall have a line on each end to facilitate removal should the gauge become obstructed in the direction of pull. If the gauge stops lightly, pull on it to see if it will clear the obstruction. When it appears that the gauge will not go forward, record the distance from the manhole at which the gauge is struck and then pull the gauge back out.

<u>Do not use</u> mechanical equipment to force the gauge through. This may result in a broken pull line.

E. All new sanitary sewers shall be televised in the presence of the Township Engineer. Such televising shall be recorded and a copy provided to the Township. All televising and on-site inspection costs shall be the responsibility of the Owner/Developer.

XIII. PIPE REPAIRS

Defective pipe shall be removed and replaced with similar material fitted to eliminate gapping. Pipe shall be aligned to maintain similar grade. If similar pipe material is unavailable, PVC pipe may be substituted upon approval of the Township Inspector. Joints and gaps shall be secured with a repair coupling manufactured by Vassal, Inc. or a full circle repair clamp. See ARRO details. Flexible couplings made by Fernco, Inc. or approved equal may be used if approved by the Township Inspector.

Sewer line breaks shall be repaired using a full circle repair clamp manufactured by Rockwell, Inc. or approved equal. See ARRO details Detail Number 34.

XIV. <u>SURFACE RESTORATION</u>

A. State Highway

Where state highways are to be cut, a Highway Occupancy Permit must be obtained from PennDOT for the work. The permit will be obtained in the name of the Township. The Owner shall pay all costs. All PennDOT inspection costs billed to the Township (if any) shall be paid by the Owner prior to acceptance of the lines for flow.

All work on state highways shall be in accordance with the project drawings and permit requirements.

Maintenance of trench shall be in accordance with PennDOT regulations.

B. Township Roads

Where Township roads are to be cut, a Township Road Opening Permit must be obtained from Rush Township. Restoration shall be per Township requirements and in accordance with Project Drawings and/or ARRO details.

XV. <u>STREAM CROSSINGS</u>

Shall conform to all the rules and regulations by the regulatory agencies having jurisdiction.

Ductile iron pipe shall be installed between manholes on either side of stream.

Pipe protection shall be by concrete capping to extend ten (10) feet beyond stream banks.

XVI. INSTALLATION THROUGH CASING

When required, installation through a casing is acceptable with the following restrictions:

- 1- The pipe must not rest on the joints.
- 2- The pipe must be braced and anchored in a manner that prevents movement in any direction.
- 3- The pipe must be installed in a manner that will permit its removal with reasonable ease should this be required at a future date.

XVII. <u>DEPTH AND LOCATION OF SEWER MAINS AND LATERALS</u>

The Township shall furnish available information to the Contractor upon request.

XVIII. <u>AS-BULT DRAWINGS</u>

The owner/developer shall furnish the Township with drawings for all installations or repairs including but not limited to laterals, mains and manholes. The developer and/or the Developer's engineer shall provide the Township Engineer with a CD-Rom or other acceptable memory device in AutoCAD format containing the as-built sanitary sewer information for use in updating sewer index plans.

Drawings/CD-Rom as approved and/or recorded shall include streets, lot layouts, easements, locations of manholes, laterals, distances, depths, elevations, stationing and material. Drawings shall be submitted thirty (30) days upon completion of installations and repairs unless otherwise stipulated by the Township.

XIX. <u>SAFETY</u>

The Contractor is responsible for all safety regulations typical of such work and regulations by other regulatory agencies.

XX. <u>INSURANCE REQUIREMENTS</u>

The Contractor shall submit to the Township certificates of insurance satisfactory to the Township. Certificates of insurance must have the following minimum limits:

Workman's Compensation Insurance Proof of Coverage

Bodily Injury and Liability \$1,000,000

Property Damage Liability \$1,000,000

Automobile Liability \$1,000,000

The required certificates of insurance shall name "Rush Township, its Engineer and Consultants" as additional insured's "with respect to any and all claims arising out of the

work being performed by the Contractor". The certificates of insurance must be approved as to form and content by the Township consultants.

The Township may waive the requirement for Automobile Liability and/or Workman's Compensation if the Contractor demonstrates to the satisfaction of the Township [that such coverage is not needed. At their discretion, the Township may require that such insurance coverage be provided by any subcontractors if applicable

XXI. <u>HOLD HARMLESS</u>

To the fullest extent permitted by law, Contractor will indemnify and hold harmless Owner, their officers, directors, partners, representatives, Townships and employees from and against any and all claims, suits, liens, judgments, damages, losses and expenses, including legal fees and all court costs and liability (including statutory liability) arising in whole or in part and in any manner from injury and/or death of person or damage to or loss of any property resulting from the acts, omissions, breach or default of contractor, its officers, directors, Townships, employees and subcontractors, in connection with the performance of any work by or for contractor pursuant to any contract Purchase Order and/or related Proceed Order, except these claims, suits, liens, judgments, damages, losses and expenses caused by the negligence of (name of owner). Contractor will defend and bear all costs of defending any actions or proceeding brought against Owner, their officers, directors, Townships and employees, arising in whole or in part our of any such acts, omission, breach or default. The foregoing indemnity shall include injury, death or disability of any employee of the Contractor and shall not be limited in any way by an amount or type of damage, compensation, or benefits payable under any applicable workers compensation, disability benefits or other similar employees benefit act.

XXII. <u>ACCEPTANCE</u>

Flow shall be permitted upon completion of testing by the Contractor and acceptance of testing by the Township. During the one (1) year maintenance guarantee period the Contractor shall, upon notification and at his own expense, make all necessary repairs.

XXIII. <u>CONSTRUCTION DETAILS</u>

- 1. Precast Concrete Manhole Detail 48" diameter.
- 2. Standard Manhole Frame and Cover (with grade rings).
- 3. Standard Manhole Frame and Cover (without grade rings).
- 4. Manhole, Pipe Adapter Installation
- 5. Channel Layout for Sewer Manhole Bases.
- 6. Building Sewer Double Vented Running Trap.
- 7. Alternate #1 Building Sewer Double Vented Running Trap.

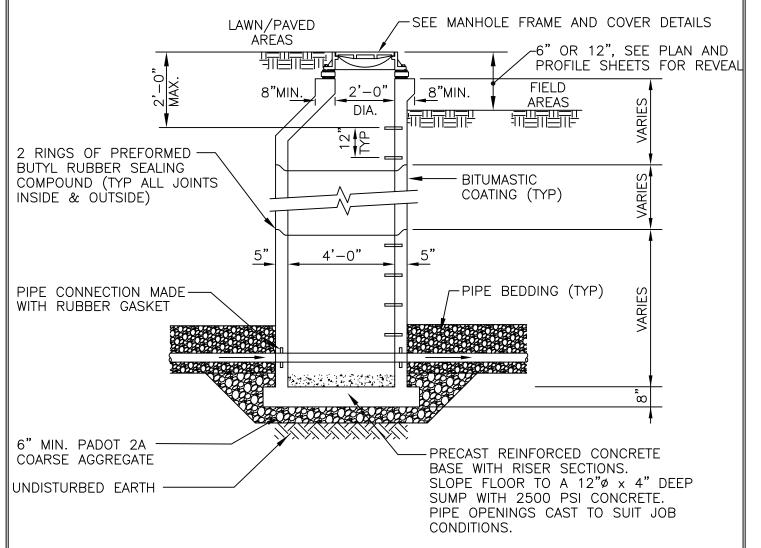
- 8. Alternate #2 Building Sewer Double Vented Running Trap
- 9. Concrete Pad for Cleanout.
- 10. Building Sewer Trench in Lawn Areas.
- 11. Building Sewer Trench in Paved Areas.
- 12. Bolt-Down/Watertight Manhole Frame and Cover.
- 13. Method of Anchoring Watertight Frames to Precast Manholes.
- 14. Shallow/Flat Top Manhole.
- 15. Method of Adjusting Manhole Frame to match Final Grade in Paved Areas.
- 16. Drop Manhole.
- 17. "Splash" Manhole Detail.
- 18. Sewer Manhole Vent.
- 19. Sewer Manhole Vent (Alternate)
- 20. Typical Trench for Sewer Lines.
- 21. Water and Sewer Line Crossing.
- 22. Concrete Encasement Cradles and Cap.
- 23. Casing for PVC Main under Highways and Railroads.
- 24. Concrete Anchors for Pipe Installed on Grades 20% or More.
- 25. Lateral Connection to Existing Main.
- 26. Casing for D.I.P. Main under Highways and Railroads.
- 27. Drop Lateral Connections.
- 28. Saddle for Lateral Connection on Existing Main.
- 29. Standard Garage Intercepting Pit.
- 30. Low-Flow Metering Manhole.
- 31. Lamphole.
- 32. Typical House Connection where House Utilizes Grinder Pump.
- 33. Residential Lot Utility Connections.
- 34. Installation of Full Circle Clamp.
- 35. Repair Coupling.
- 36. Grinder Pump
- 37. Grinder Pump (Duplex)

EFFECTIVE DATE

These rules and regulations shall be in full force and effect immediately following their passage, approval, and publication, as provided by law.

NOTES:

- 1. ADJUST TO GRADE WITH CONC GRADE RINGS (MAX. VERT. ADJUST. 6")
 SEE FRAME & COVER DETAILS
- 2. MECHANICALLY VIBRATED PRECAST CONC SHALL CONFORM TO A.S.T.M. SPEC. C-478.
- 3. IF INFLOW INVERT IS GREATER THAN OR EQUAL TO 6", SEE INSIDE SPLASH/INSIDE DROP MANHOLE DETAILS.
- 4. FOR MANHOLES WHERE TOP OF RIM TO INVERT DISTANCE IS LESS THAN 5'-O", USE FLAT TOP MANHOLE IN LIEU OF CONE TOP.
- 5. FILL ALL LIFTING HOLES WITH NON-SHRINK GROUT.
- 6. FOR ALL MANHOLES IN FIELD AREAS, PROVIDE MARKER POSTS AS SPECIFIED.



SECTION/ELEVATION (N.T.S.)



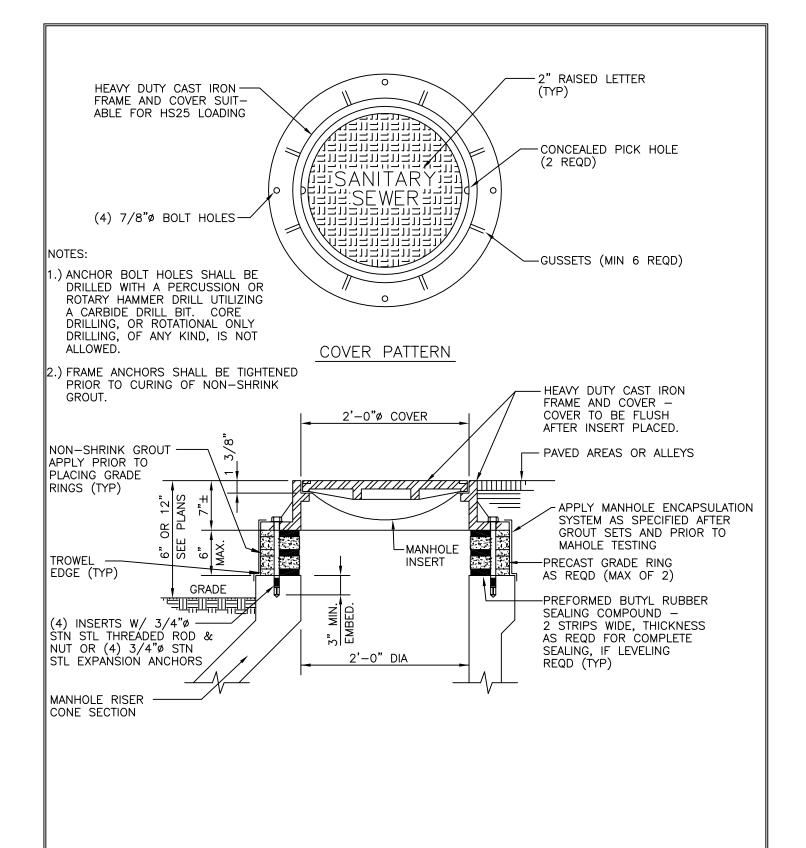
1239 CENTRE TUNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534 **RUSH TOWNSHIP**

PRECAST REINFORCED CONCRETE MANHOLE 48" DIAMETER

DETAIL NO.

1

DATE 4/17



SECTION/ELEVATION (N.T.S.)

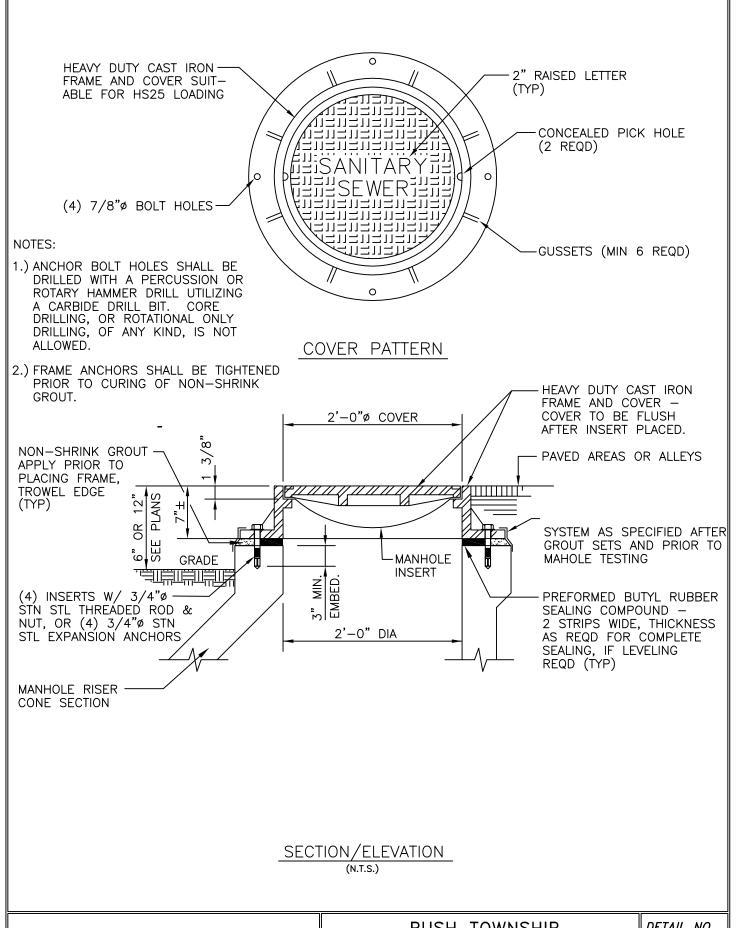


RUSH TOWNSHIP
STANDARD MANHOLE
FRAME AND COVER
WITH GRADE RINGS

DETAIL NO.

2

DATE 4/12



RUSH TOWNSHIP

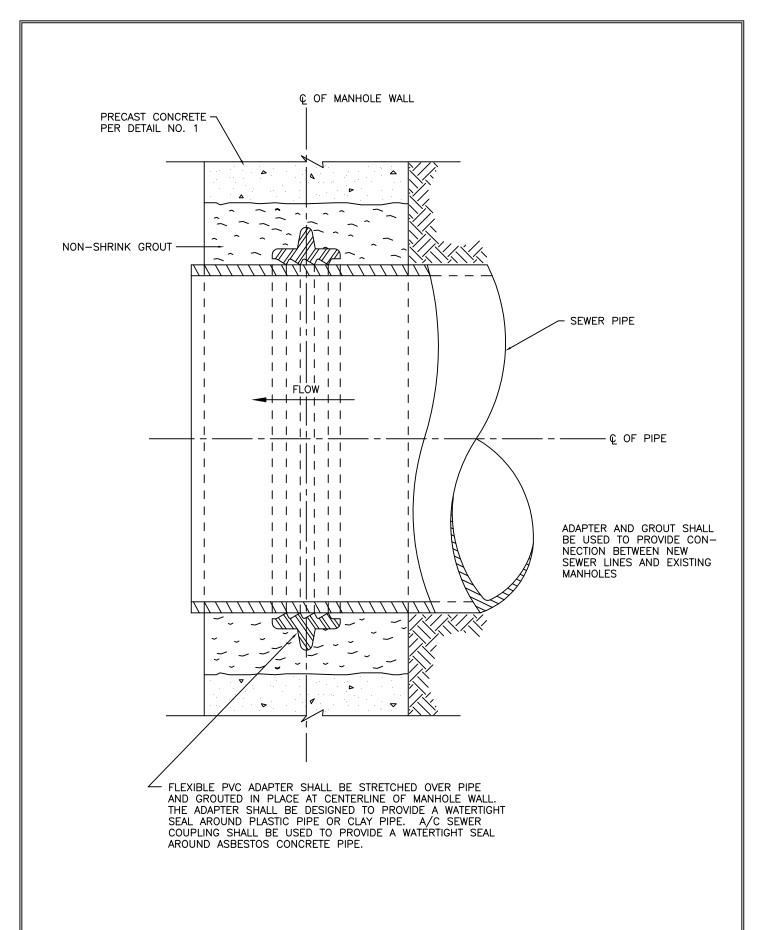
1239 CENTRE TUNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534

RUSH TOWNSHIP

STANDARD MANHOLE FRAME AND COVER W/O GRADE RINGS

DATE

4/12





1239 CENTRE TUNPIKE ORWIGSBURG, PA 17961

TEL 570.366.9534

RUSH TOWNSHIP

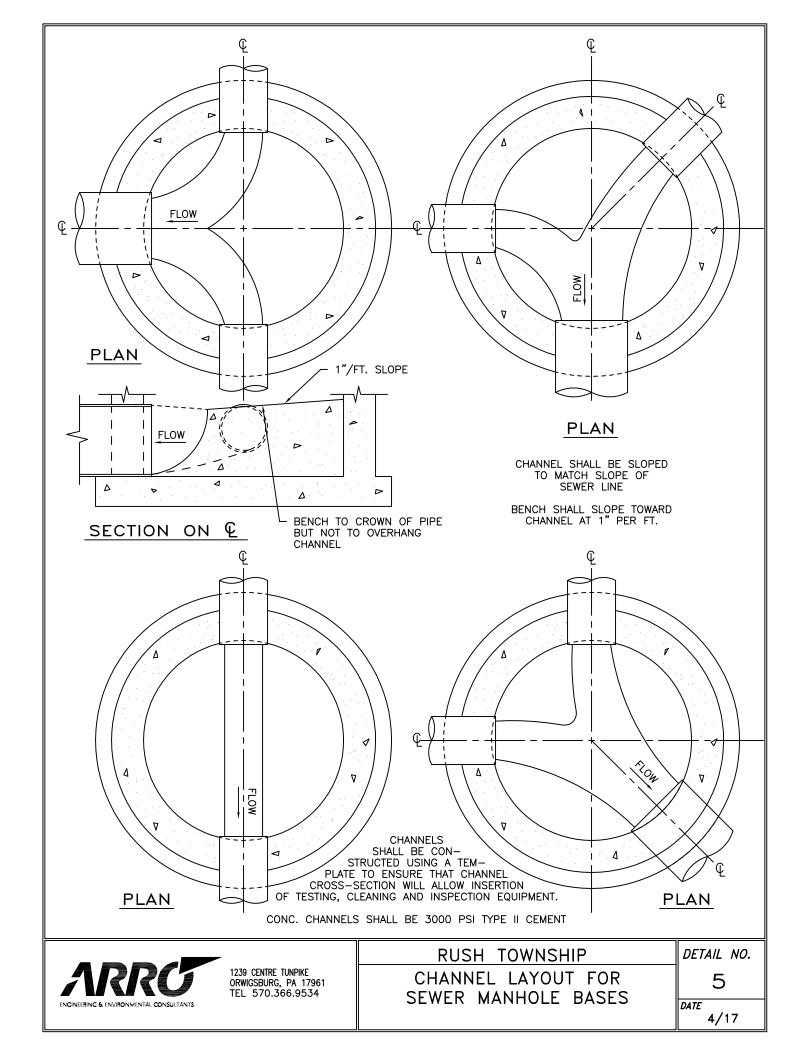
MANHOLE / PIPE

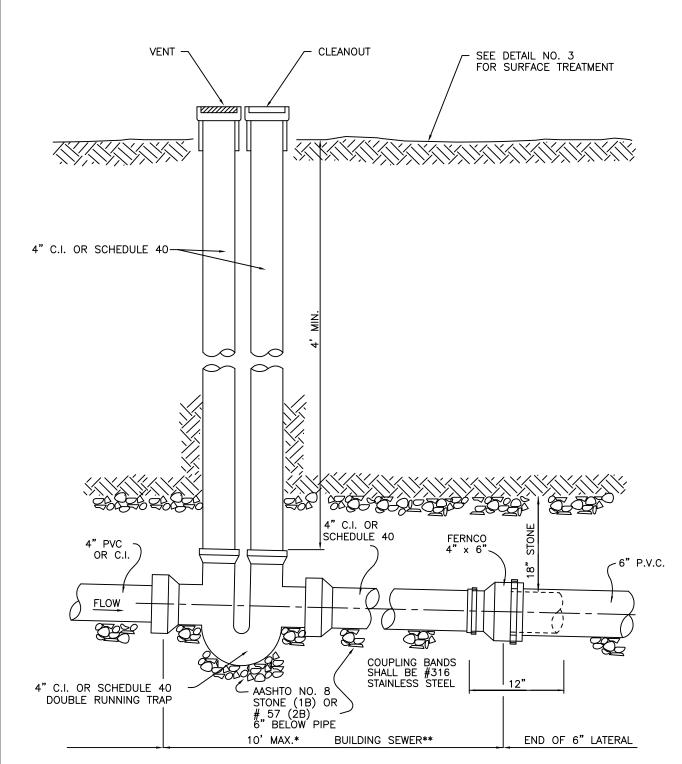
ADAPTOR INSTALLATION

DETAIL NO.

4

DATE 4/12





*NOTE: TRAP ASSEMBLY SHOULD BE DISTANCED FROM THE STRUCTURE THE MAXIMUM AS PERMITTED BY SITE CONSTRAINTS AND A MAXIMUM OF 10' FROM THE 6" LATERAL CONNECTION POINT.

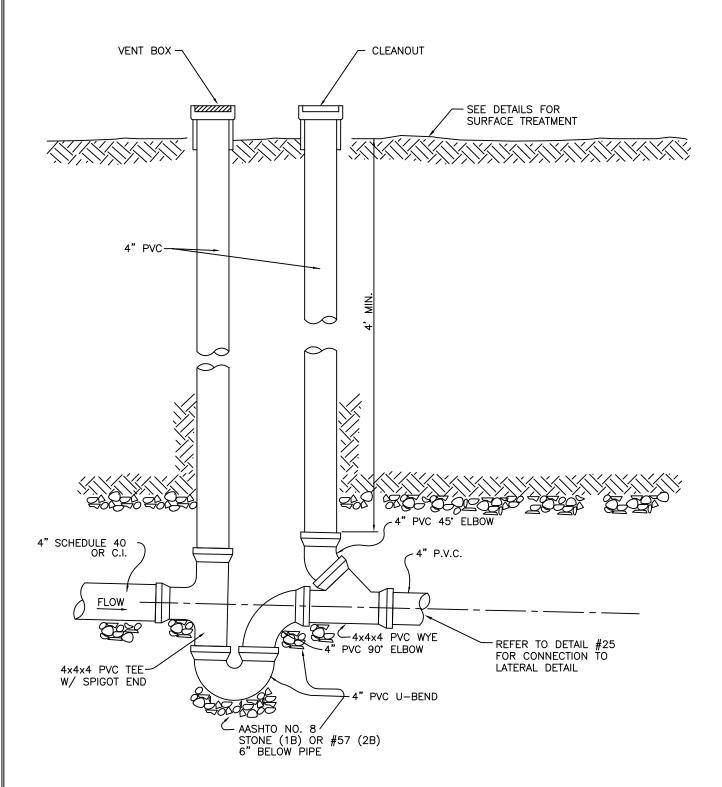
**NOTE: MINIMUM BUILDING SEWER GRADE = 1/4" PER FT.



1239 CENTRE TUNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534

BUILDING SEWER DOUBLE VENTED RUNNING TRAP DETAIL NO.

6



NOTE: TRAP ASSEMBLY SHOULD BE DISTANCED FROM THE STRUCTURE THE MAXIMUM AS PERMITTED BY SITE CONSTRAINTS AND A MAXIMUM OF 10' FROM THE 6" LATERAL CONNECTION POINT.

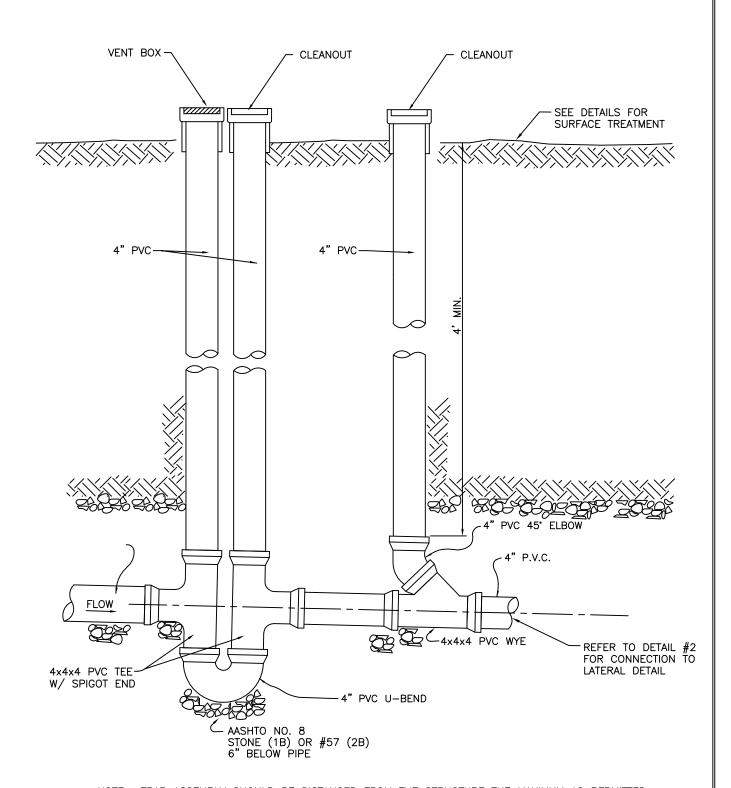
*NOTE: MINIMUM BUILDING SEWER GRADE = 1/4" PER FT.



1239 CENTRE TUNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534 ALTERNATE #1 BUILDING SEWER
DOUBLE VENTED
RUNNING TRAP

DETAIL NO.

7



NOTE: TRAP ASSEMBLY SHOULD BE DISTANCED FROM THE STRUCTURE THE MAXIMUM AS PERMITTED BY SITE CONSTRAINTS AND A MAXIMUM OF 10' FROM THE 6" LATERAL CONNECTION POINT.

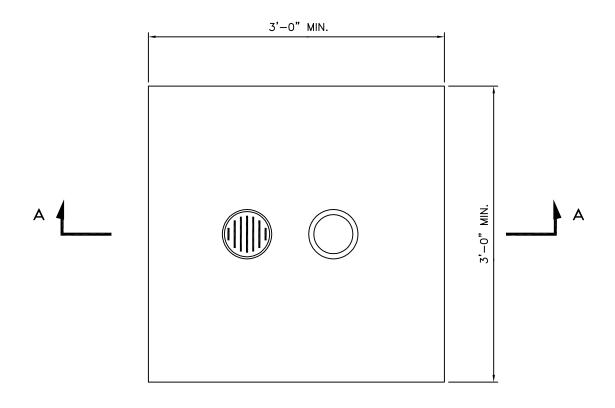
*NOTE: MINIMUM BUILDING SEWER GRADE = 1/4" PER FT.



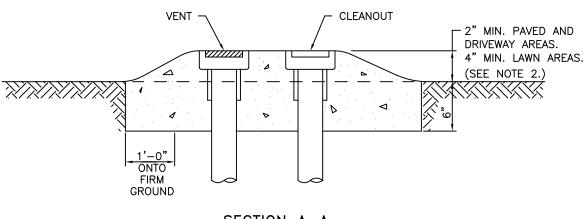
1239 CENTRE TUNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534 ALTERNATE #2 BUILDING SEWER
DOUBLE VENTED
RUNNING TRAP

DETAIL NO.

8



PLAN

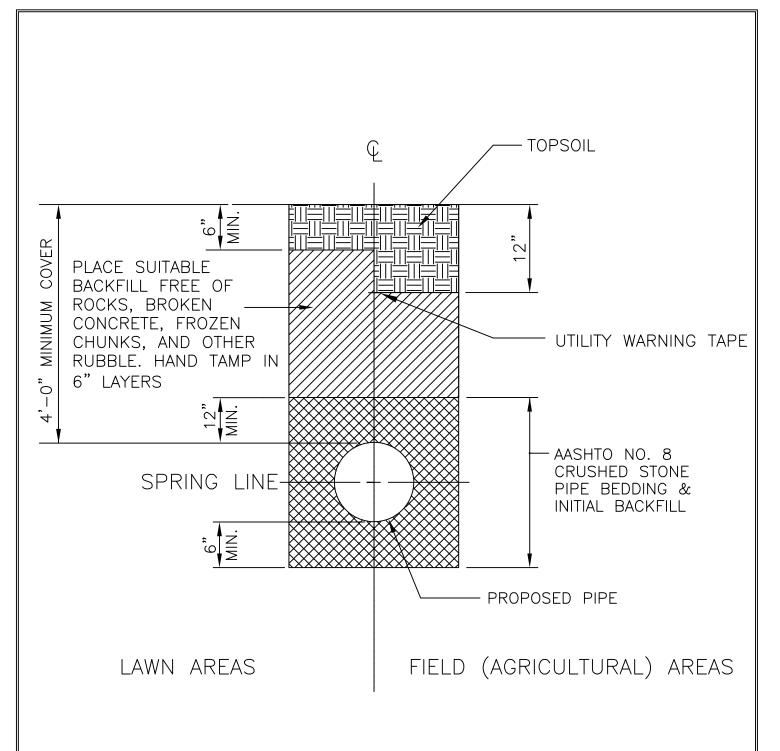


SECTION A-A

NOTES:

- 1. PROVIDE CONCRETE PAD IF CLEANOUT/VENT ARE LOCATED IN PAVED AREA OR UNPAVED DRIVEWAY.
- 2. CLEANOUT/VENT SHALL BE INSTALLED A MINIMUM OF 2" ABOVE FINAL GRADE IN PAVED AND DRIVEWAY AREAS. CLEANOUT/VENT SHALL BE INSTALLED A MINIMUM OF 4" ABOVE FINAL GRADE IN LAWN/LANDSCAPED AREAS. CLEANOUT/VENT SHALL BE INSTALLED FLUSH WITH SIDEWALK SURFACES, WHEN NO OTHER OPTIONS AVAILABLE.
- 3. CLEANOUT/VENT SHALL NOT BE LOCATED IN DRAINAGE SWALES.





ALL SOLID ROCK SHALL BE REMOVED FROM WITHIN THE 6" BELOW THE PIPE INCLUDING THE BELLS

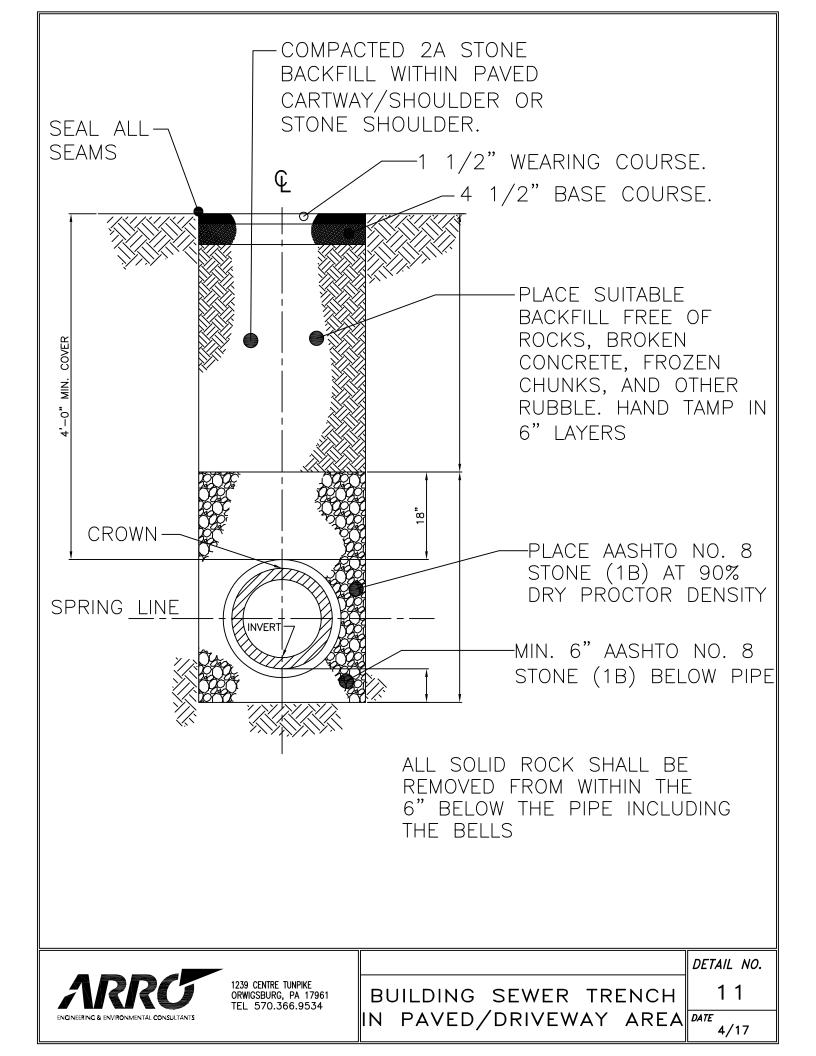


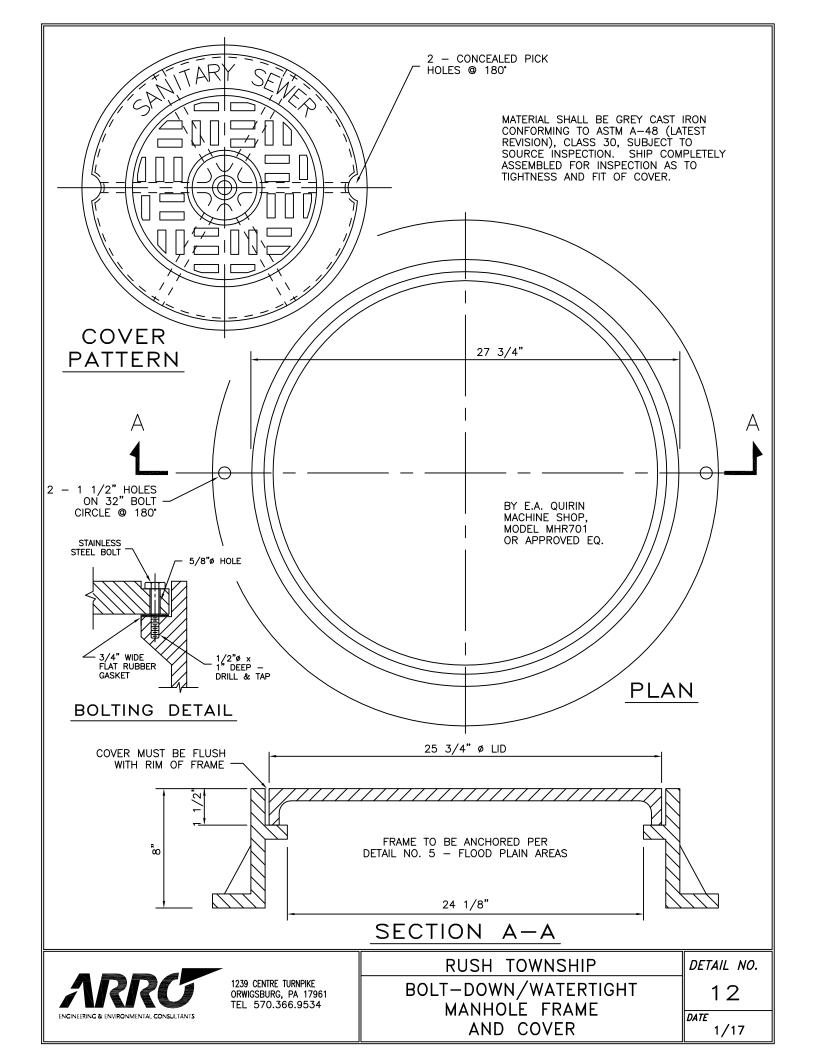
TRENCH RESTORATION IN LAWN/FIELD AREAS

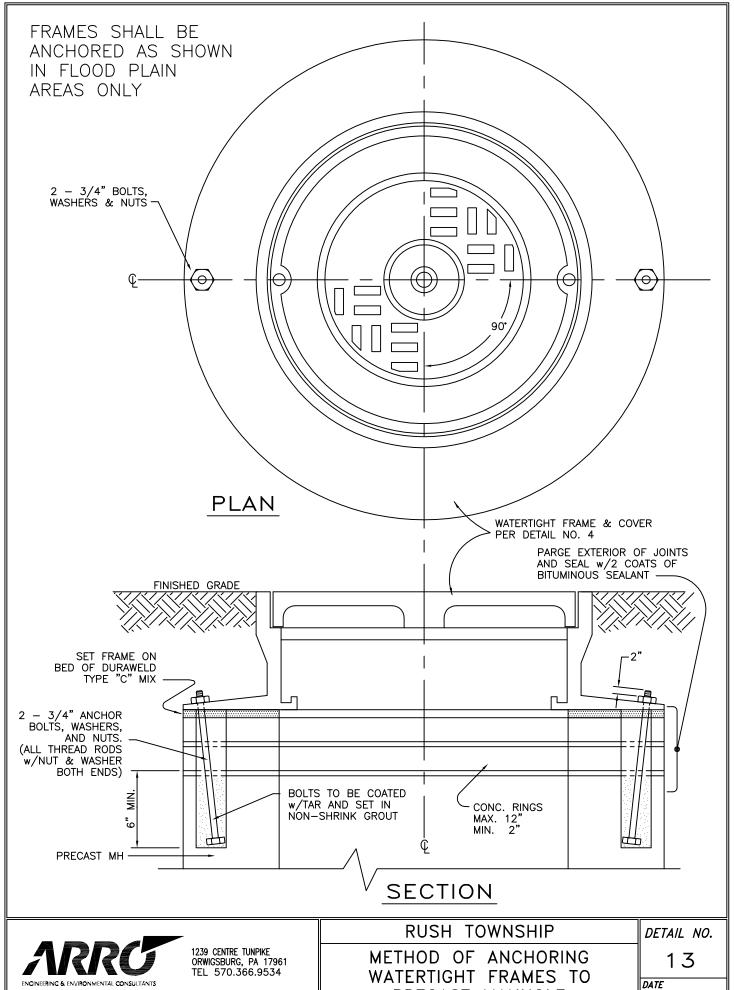
DETAIL NO.

1 O

DATE
4/17

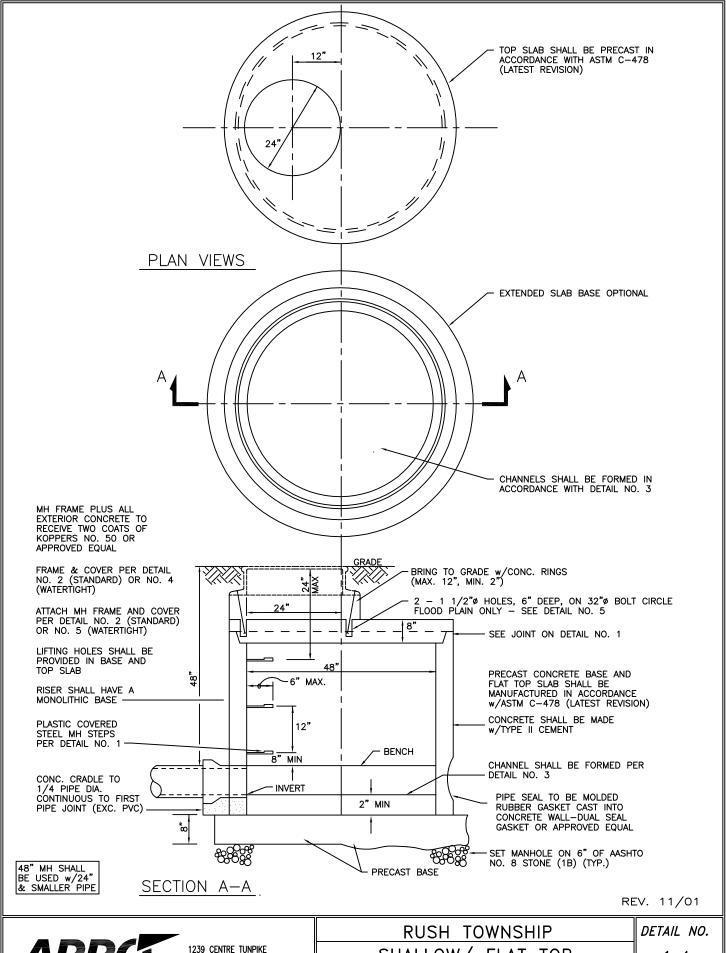






PRECAST MANHOLE

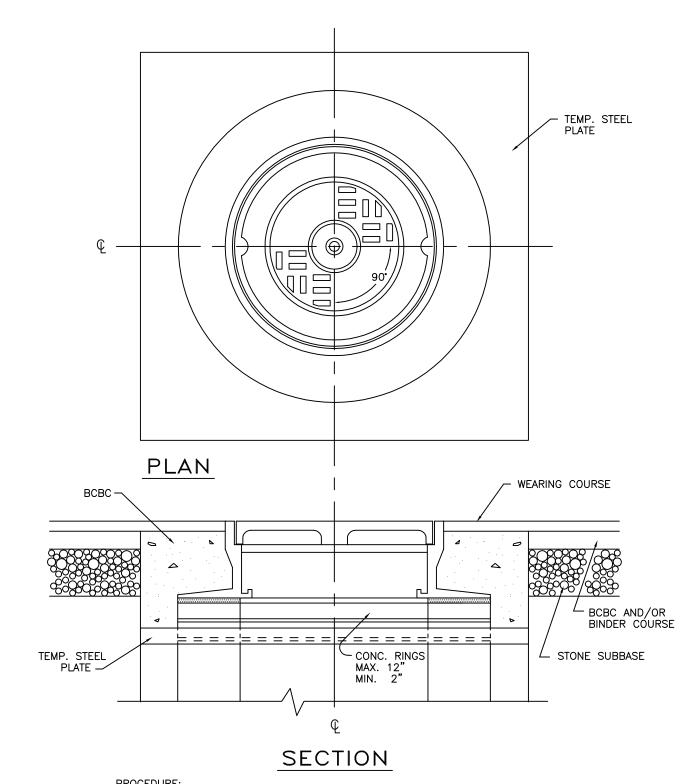
1/17





SHALLOW/ FLAT TOP MANHOLE

14



PROCEDURE:

- 1. INSTALL MANHOLE.
- 2. PLACE STEEL PLATE.
 3. PLACE STONE SUBBASE, BCBC AND/OR BINDER AROUND STEEL PLATE.
- 4. REMOVE STEEL PLATE.
- 5. PLACE FRAME AND COVER; ADJUST W/CONCRETE RINGS TO MATCH FINAL GRADE. 6. BACKFILL W/BCBC TO MATCH TOP OF BCBC/BINDER.
- 7. APPLY WEARING COURSE.



1239 CENTRE TURNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534

RUSH TOWNSHIP

METHOD OF ADJUSTING MANHOLE FRAME TO MATCH FINAL GRADE IN PAVED AREA

DETAIL NO.

15

STANDARD FRAME & COVER AND WATERTIGHT INSERT, SEE DETAIL MH FRAME TO BE SUFFICIENTLY MORTARED IN PLACE WITH "DURAWELD-C" BONDING AGENT — WATERTIGHT MH FRAME & COVER WHERE REQUIRED, SEE DETAIL PARGE INTERIOR AND EXTERIOR WITH CEMENT, WATERPROOF EXTERIOR WITH BITUMASTIC SEAL WITH BONDING AGENT AND WATERPROOFING PRECAST REINFORCED CONCRETE ECCENTRIC MANHOLE CONE SECTION Ζ AS PER SPECS. PRECAST REINFORCED CONCRETE MANHOLE RISER SECTION, AS PER SPÉCS. Σ̈́ MIN. 6" . |-CONCRETE **ENCASEMENT** 'n TOP OF PAD PRECAST BASE -90° BEND CEMENT GROUT -**VARIABLE**

*NOTE: SEE PRECAST MANHOLE DETAIL FOR DIMENSIONS, MATERIALS, AND CONSTRUCTION SPECIFICATIONS NOT SHOWN HEREON.

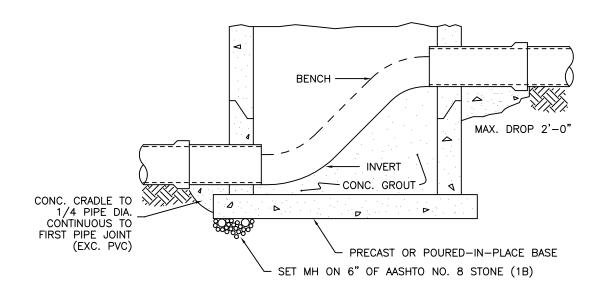
NOTE: WHERE NEW MANHOLE IS TO BE CONSTRUCTED OVER AN EXISTING SEWER LINE — USE "DOG HOUSE" TYPE LOWER RISER SECTION ON POURED IN PLACE CONCRETE BASE.

1239 CENTRE TURNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534

DROP MANHOLE

DETAIL NO.

16



VENT TOP SHALL BE 1 FT. ABOVE 100—YEAR FLOOD ELEV. OR AT ELEV. SHOWN ON CONTRACT DOCUMENTS. ALUM. BIRD SCREEN 4" SCH. 40 GALV. STEEL PIPE (N.P.T.) MH FRAME & COVER PER DETAIL DRAWING (STANDARD) OR (WATERTÍGHT) FINISHED GRADE TO SLOPE AWAY FROM MH ALTERNATE:
PROVIDE EXTENSION TO
LOCATION SHOWN ON
CONTRACT DOCUMENTS STD. MH PER DETAIL NO. 1 12<u>"</u> Ϋ́ φ. NON-SHRINK **GROUT** 5"ø HOLE BY MH MFR. LEAD OR PLASTIC ANCHOR FOR $1/2^{\circ}$ x 3 $^{\circ}$ BOLT SET BY MH MFG. 4" SCH. 40 GALV. STEEL PIPE Ĭ 1/8" x 3" GALV. STEEL STRAP (1 PER MH RISER) CREOSOTED OAK BLOCK STEEL PIPE TO BE HOT DIPPED GALVANIZED AFTER THREADS ARE CUT. PIPE TO BE COATED WITH TAR PRIOR TO BACKFILLING. ENLARGED SECTIONAL VIEW

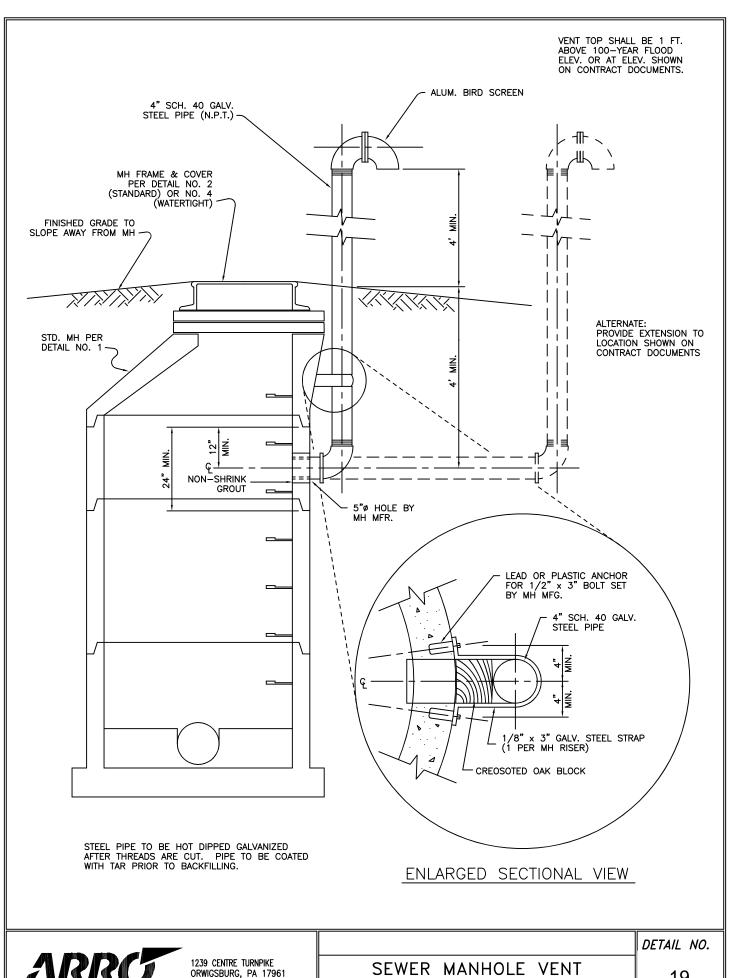


1239 CENTRE TURNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534

SEWER MANHOLE VENT

DETAIL NO.

18

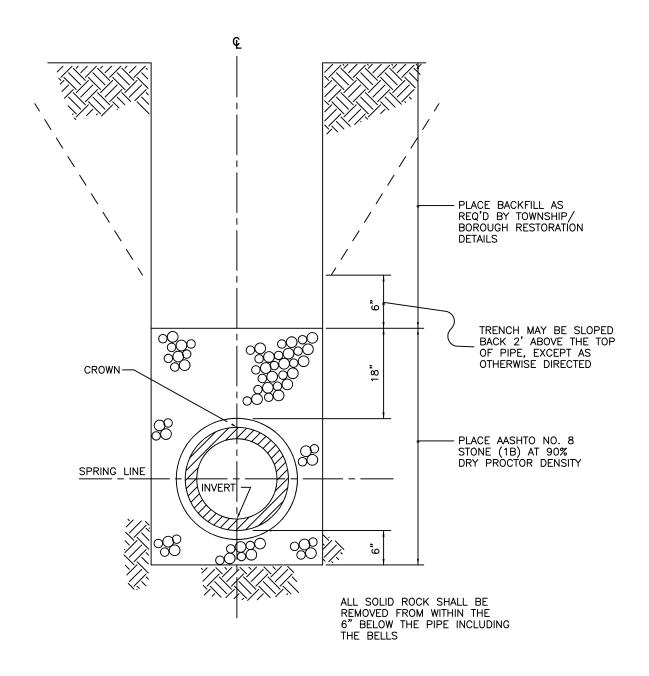




ORWIGSBURG, PA 17961 TEL 570.366.9534

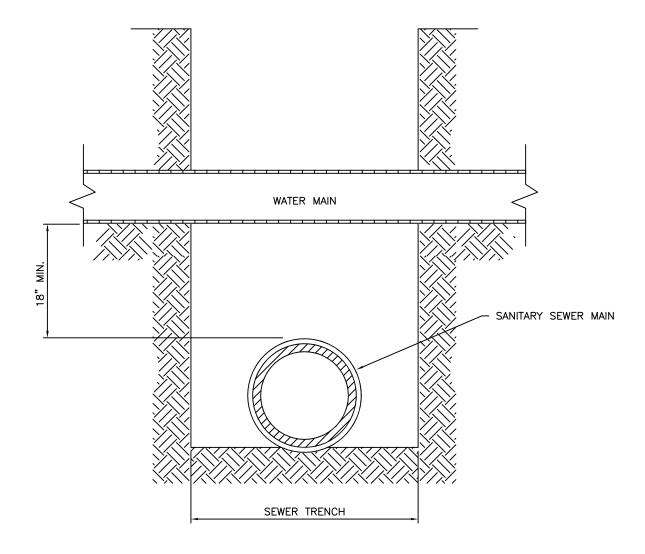
19 DATE

1/17





TYPICAL TRENCH FOR SEWER LINE DETAIL NO. 20



WHEN IT IS IMPOSSIBLE TO MEET THE ABOVE CONDITION, THE FOLLOWING ADDITIONAL REQUIREMENTS SHALL BE MET:

- 1. IF CLEARANCE IS LESS THAN 18", SEWER LINE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
- 2. IF WATER LINE MUST CROSS BENEATH SANITARY SEWER LINE:
 - A. THE BOTTOM OF THE SEWER LINE SHALL BE A MINIMUM OF 18" ABOVE THE TOP OF THE WATER LINE. B. A PIPE SECTION OF WATER LINE SHALL BE CENTERED OVER THE SEWER LINE.
 C. THE SEWER LINE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.

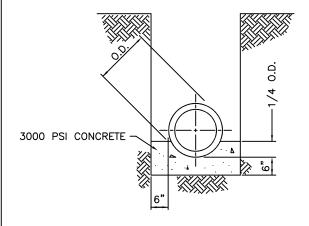


1239 CEENTRE TURNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534

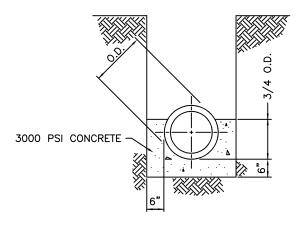
WATER AND SEWER LINE CROSSING

DETAIL NO.

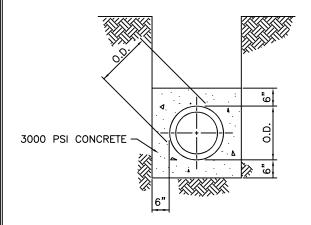
21



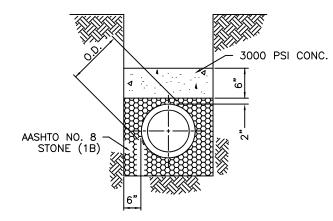
CONCRETE LOW CRADLE (N.T.S.)



CONCRETE HIGH CRADLE (N.T.S.)



CONCRETE ENCASEMENT
(N.T.S.)



CONCRETE CAP
(N.T.S.)

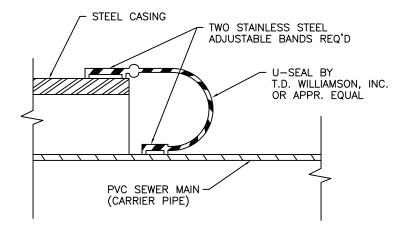
NOTES:

- 1. CONCRETE CAP SHALL BE USED FOR STREAM CROSSINGS; EXTEND 10' BEYOND STREAM BANKS.
- 2. DUCTILE IRON PIPE SHALL BE INSTALLED BETWEEN MANHOLES ON EITHER SIDE OF STREAM.
- 3. ALL CONCRETE SHALL BE 3000 PSI.
- 4. POUR CONCRETE AGAINST UNDISTURBED EARTH. REMOVE SHEETING BEFORE POURING CONCRETE OR PULL SHEETING UP ABOVE THE POURED CONCRETE.
- 5. ANCHOR ALL PIPE PRIOR TO POURING CONCRETE TO INSURE THAT THE PIPE DOES NOT FLOAT.

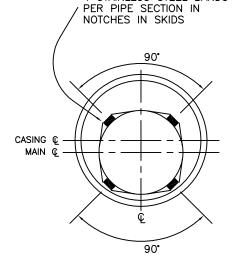


CONCRETE ENCASAMENT CARDLES AND CAP

DETAIL NO. 22



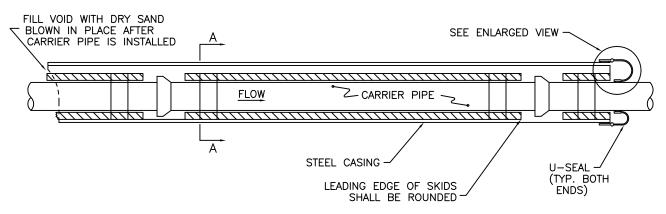
ENLARGED VIEW OF END SEAL INSTALLATION



4 STAINLESS STEEL BANDS

SECTION A-A

WOOD SKIDS SHOULD EXTEND THE FULL LENGTH OF PIPE EXCEPT FOR THE BELL AND SPIGOT END NECESSARY FOR ASSEMBLY



ELEVATION VIEW

MAIN	CASING	
4	10	
6	12	
8	16	
10	18	
12 15	20	
15	24 26	
18	26	
21	30	
24	33	
27	36	
NOMINAL DIAME IN INCHES	TERS	

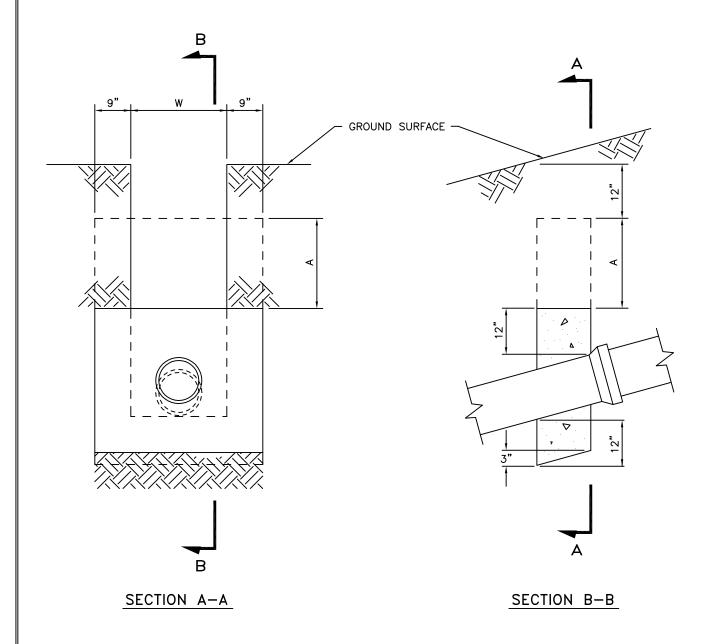
NOTES:

- 1. CASING SHALL CONFORM TO AWWA C-200
- PVC CARRIER PIPE SHALL CONFORM TO ASTM D3034, SDR35, & ASTM F679, SDR35.
- 3. THE FOUR TREATED OAK SKIDS SHOULD BE HIGH ENOUGH TO ALLOW FOR CLEARANCE BETWEEN THE BELL AND CASING BOTTOM. MIN. SIZE OF SKIDS TO BE 2' \times 4' (NOM.).
- 4. THE INSIDE SURFACE OF THE CASING AND/OR THE SKIDS SHALL BE LUBRICATED WITH DRILL MUD OR FLEXSOAP TO FACILITATE THE SLIDING OF THE CARRIER PIPE.



1239 CENTRE TURNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534 CASING FOR PVC MAIN UNDER HIGHWAYS AND RAILROADS DETAIL NO.

23



- A EXTENSION OF ANCHOR TO 12" BELOW GROUND SURFACE, WHEN NECESSARY TO PREVENT WASHOUT OF BACKFILL BY SURFACE WATER
- B 12" FOR PIPES 10" OR LESS, 18" FOR PIPES 10" TO 18" NOMINAL DIAMETER
- W O.D. + 18"

NOTES:

- 1. ANCHORS NOT REQUIRED ON GRADES LESS THAN 20% UNLESS NOTED.
 2. PROVIDE ANCHORS 36' CTR. TO CTR. ON GRADES BETWEEN 20% AND 34%.
 3. PROVIDE ANCHORS 24' CTR. TO CTR. ON GRADES BETWEEN 34% AND 50%.
 4. PROVIDE ANCHORS 16' CTR. TO CTR. ON GRADES BETWEEN 50% AND 70%.
- 5. ALL ANCHORS TO BE 3000 PSI CONCRETE, PLACED DOWNGRADE OF BELL AS SHOWN.



1239 CENTRE TURNPIKE ORWIGSBURG, PA 17961 TEL 570.366.9534

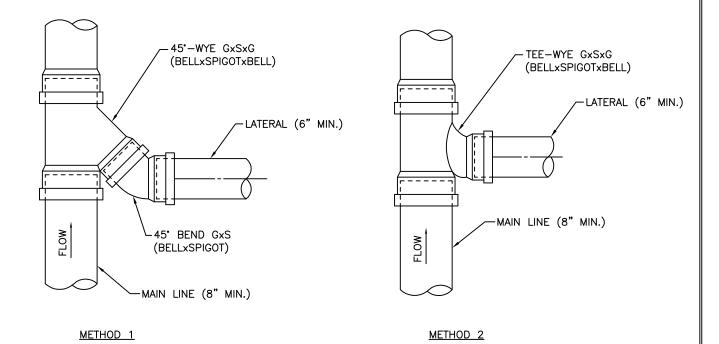
CONCRETE ANCHORS FOR PIPE INSTALLED ON GRADES 20% OR MORE

DETAIL NO.

24

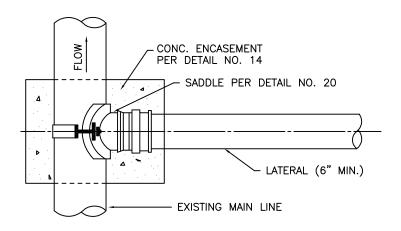
DATE

1/17



 $\underline{\text{NOTE:}}$ BOTH METHODS (1 & 2) LISTED ABOVE ARE ACCEPTABLE LATERAL CONNECTIONS TO THE MAIN DURING NEW CONSTRUCTION.

NEW CONSTRUCTION (N.T.S.)



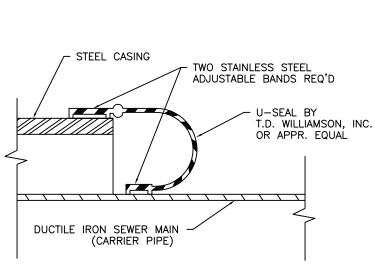
ADDING LATERAL TO MAIN (N.T.S.)

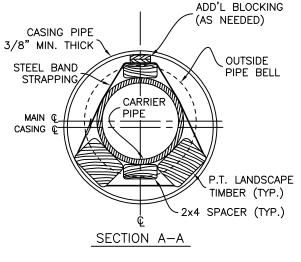


LATERAL CONECTION TO MAIN

DETAIL NO.

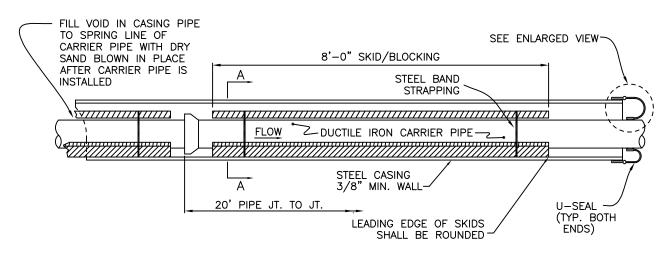
25





ENLARGED VIEW OF END SEAL INSTALLATION

MAIN	CASING
8	16
12	24
NOMINAL DIAME	TERS



ELEVATION VIEW

NOTES:

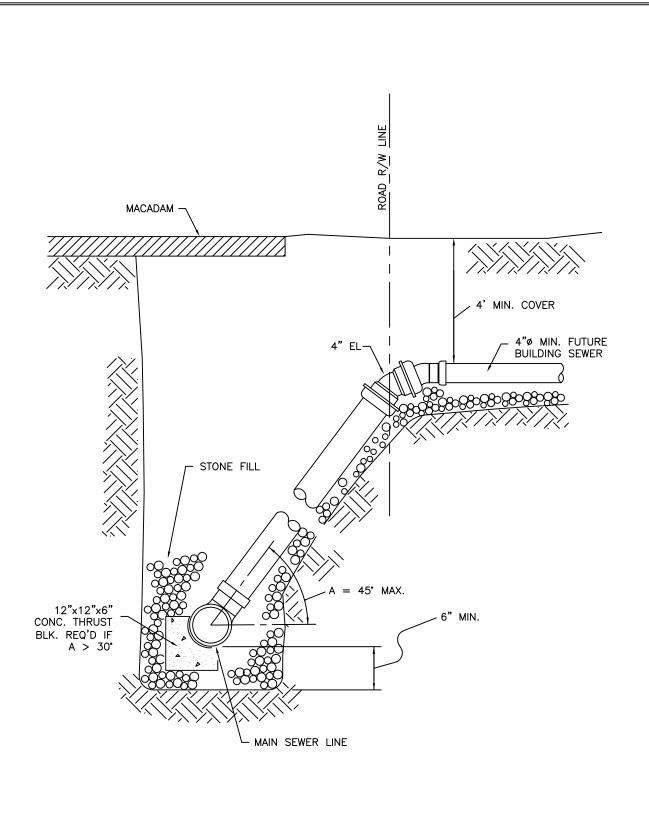
- 1. THE INSIDE SURFACE OF THE CASING AND/OR THE SKIDS SHALL BE LUBRICATED WITH DRILL MUD OR FLEXSOAP TO FACILITATE THE SLIDING OF THE CARRIER PIPE.
- 2. WOOD SKIDS SHOULD EXTEND THE FULL LENGTH OF PIPE EXCEPT FOR THE BELL AND SPIGOT END NECESSARY FOR ASSEMBLY.



CASING FOR D.I.P MAIN UNDER HIGHWAYS AND RAILROADS

DETAIL NO.

26

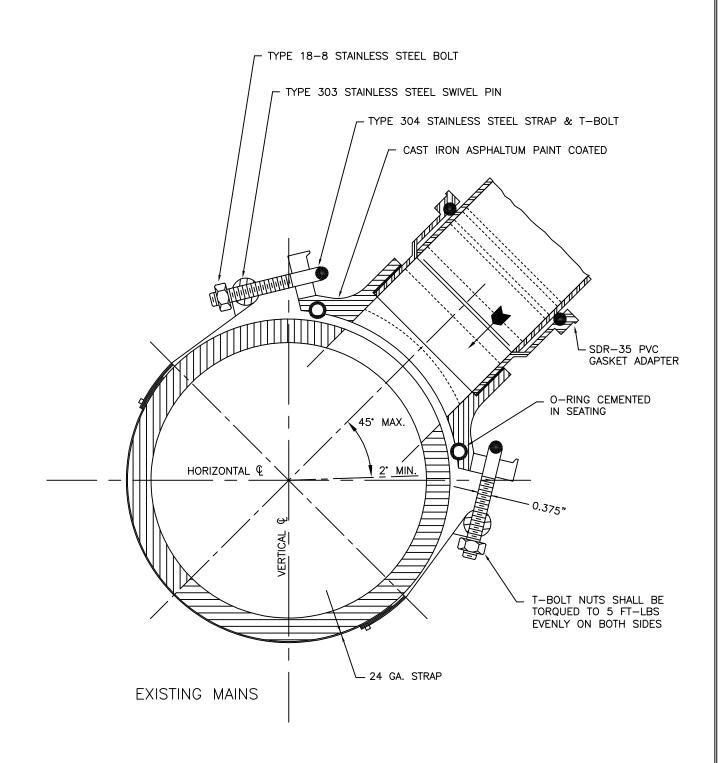




DROP LATERAL CONNECTION

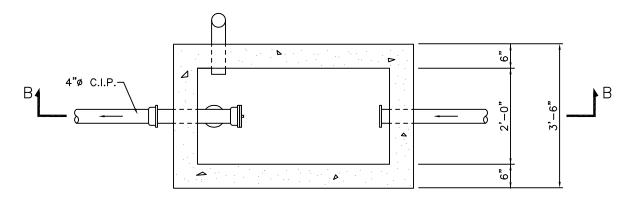
DETAIL NO.

27

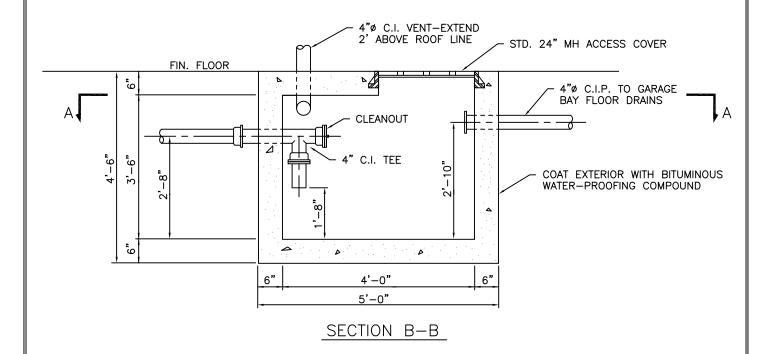




DETAIL NO.



SECTION A-A



NOTE:

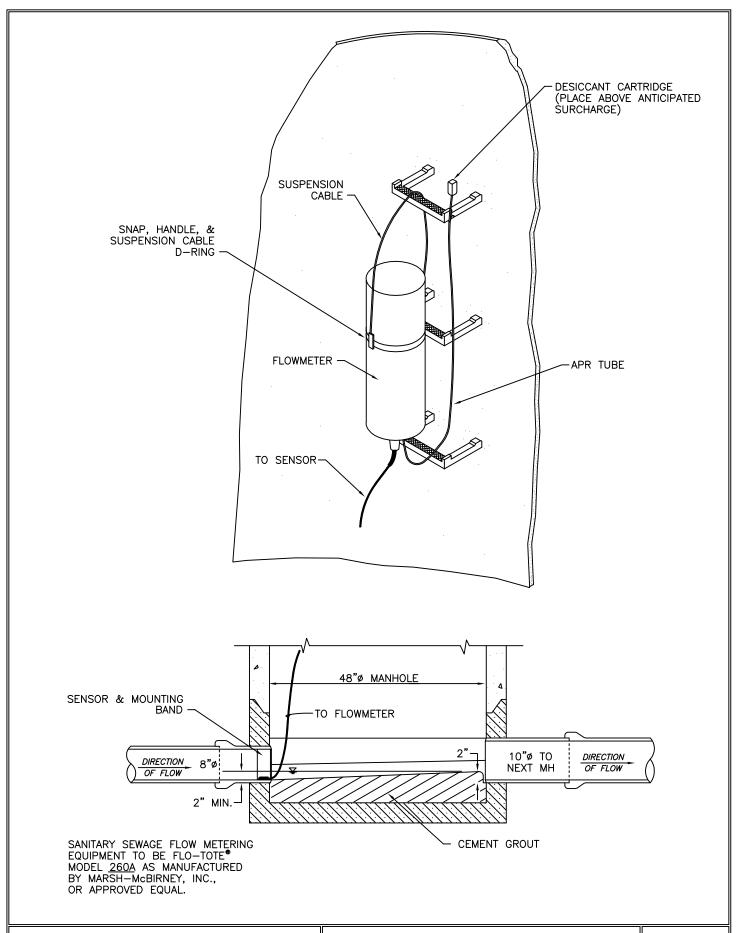
4"Ø C.I.P. TO STREET SEWER WITH 4" DOUBLE VENT AT CURB. PROVIDE AN ADDITIONAL CLEANOUT IN LINE IF DISTANCE FROM CURB TO BLDG. EXCEEDS 30'. USE MEDUIM WT. C.I. PIPE. USE 3000 PSI CONCRETE.



STANDARD GARAGE INTERCEPTING PIT

DETAIL NO.

29

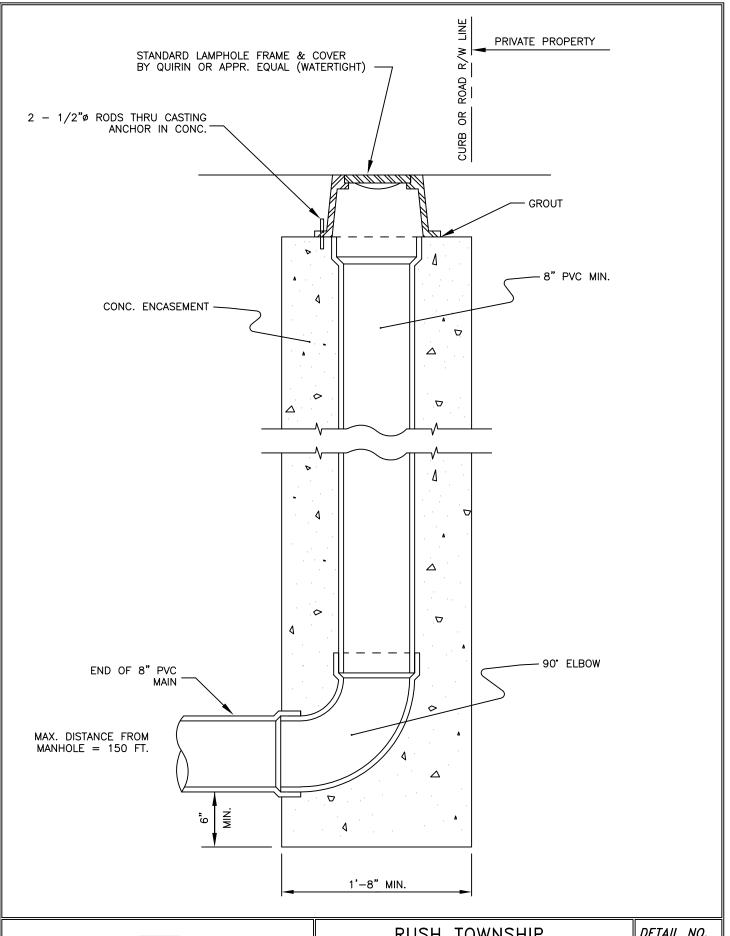




RUSH TOWNSHIP
METERING MANHOLE

DETAIL NO.

30

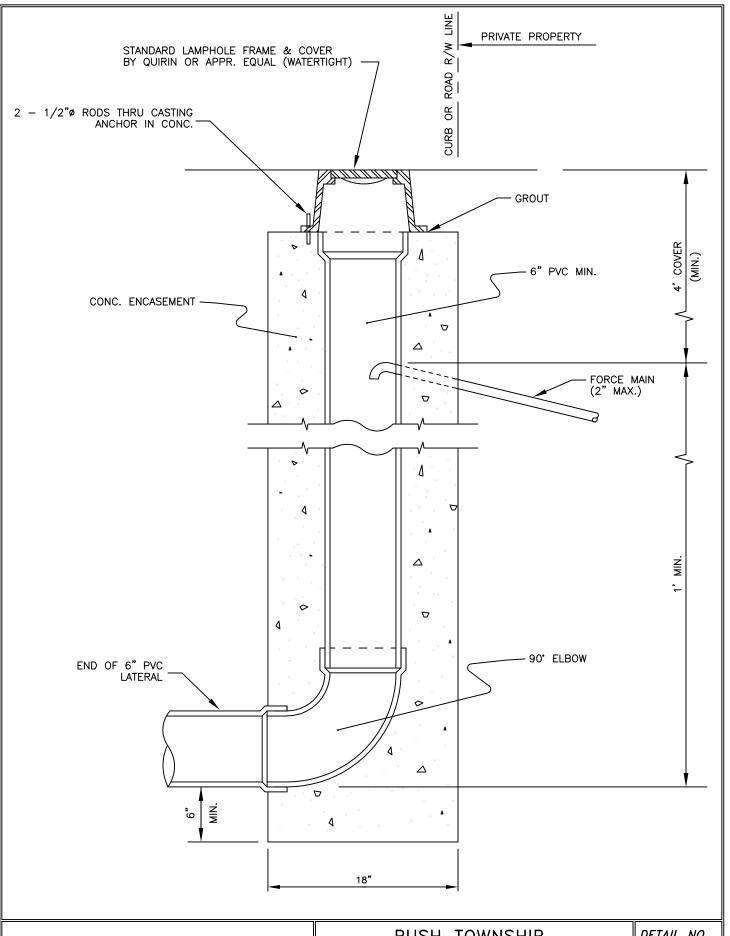




RUSH TOWNSHIP **LAMPHOLE**

DETAIL NO.

31



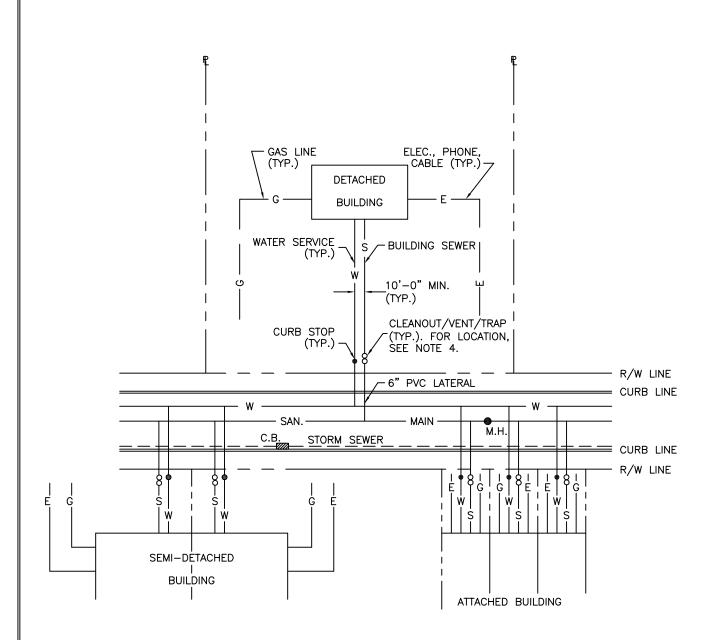


RUSH TOWNSHIP

TYPICAL HOUSE CONNECTION
WHERE HOUSE UTILIZES
GRINDER PUMP

DETAIL NO.

32



NOTES:

- 1. DETACHED BUILDING LATERAL SHOULD BE LOCATED AT CENTER OF PROPOSED LOT, OR AS CLOSE AS POSSIBLE.
- 2. ALTERNATE LOCATIONS MAY BE APPROVED BY INSPECTOR IF STREET GRADE EXCEEDS 5%.
- 3. WATER SERVICE SHALL BE LOCATED IN A SEPARATE TRENCH FROM THE SEWER LATERAL.
- 4. CLEANOUT/VENT SHALL BE LOCATED WITHIN 10 FEET BEYOND THE CURB OR RIGHT-OF-WAY LINE.
- 5. ALTERNATE UTILITY LOCATIONS MAY BE APPROVED BY INSPECTOR, BUT UNDER NO CONDITIONS SHALL ANY UTILITY CROSS UNDER OR OVER THE BUILDING SEWER OUTSIDE THE ROAD RIGHT-OF-WAY.
- 6. ATTACHED BUILDINGS SHOULD RECEIVE ELECTRICAL AND GAS SERVICE AT THE BUILDING REAR IF POSSIBLE.
- 7. LATERALS ON SEMI-DETACHED AND ATTACHED BUILDINGS SHALL BE 10'-0" MIN. APART.

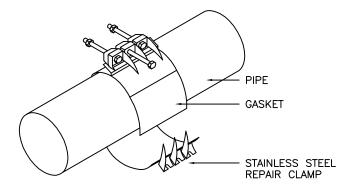
REV. 09/01



RUSH TOWNSHIP
RESIDENTIAL LOT UTILITY
CONNECTIONS

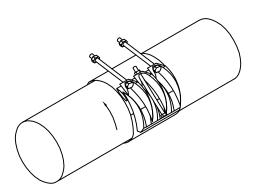
DETAIL NO.

33



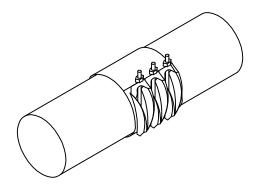
CLEAN PIPE AND MARK FOR POSITION WHERE REPAIR CLAMP IS TO BE INSTALLED, CENTERING OVER BREAK.

CENTER CLAMP OVER DAMAGED AREA.



TUCK TAPERED GASKET FLAP IN PLACE AND MESH LUG FINGERS. THEN ENGAGE CENTER BOLT AND TIGHTEN FINGER TIGHT.

ROTATE CLAMP ON PIPE IN THE DIRECTION INDICATED BY ARROW TO SEAT GASKET FLAP SMOOTHLY ON THE PIPE.



ENGAGE REMAINING BOLTS AND TIGHTED ALL EVENLY WITH A TORQUE WRENCH. ALL 5/8" BOLTS SHALL BE TORQUED TO 60-65 FT/LB. AND ALL 3/4" BOLTS SHALL BE TORQUED TO 80-85 FT/LB.

ON MULTI-BAND UNITS, EQUALIZE GAPS BETWEEN BANDS.

CONTRACTOR SHALL PROVIDE ROCKWELL FULL CIRCLE REPAIR CLAMP NOS. 226 OR 228, OR APPROVED EQUAL.

APPROVAL OF THIS TYPE REPAIR MUST BE GRANTED BY AUTHORITY PRIOR TO START OF INSTALLATION



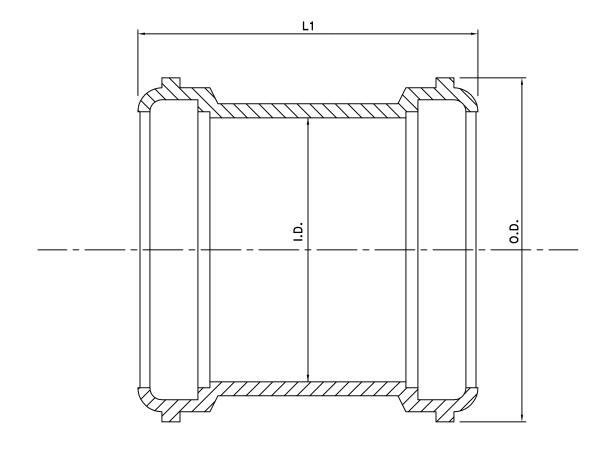
RUSH TOWNSHIP
INSTALLATION OF FULL CIRCLE
CLAMP

DETAIL NO.

34

DATE

4/17



REPAIR COUPLING G x G				
PART NO.	SIZE	L1	O.D.	I.D.
52661	4"	5.750	5.237	4.235
52662	6"	8.250	7.439	6.305
52663	8"	10.000	9.804	8.424

REPAIR COUPLING TO BE MANUFACTURED BY VASSALO, INC., OR APPROVED EQUAL AND SHALL MEET ASTM D-1784, D-3034, F-477, AND D-3212-81.

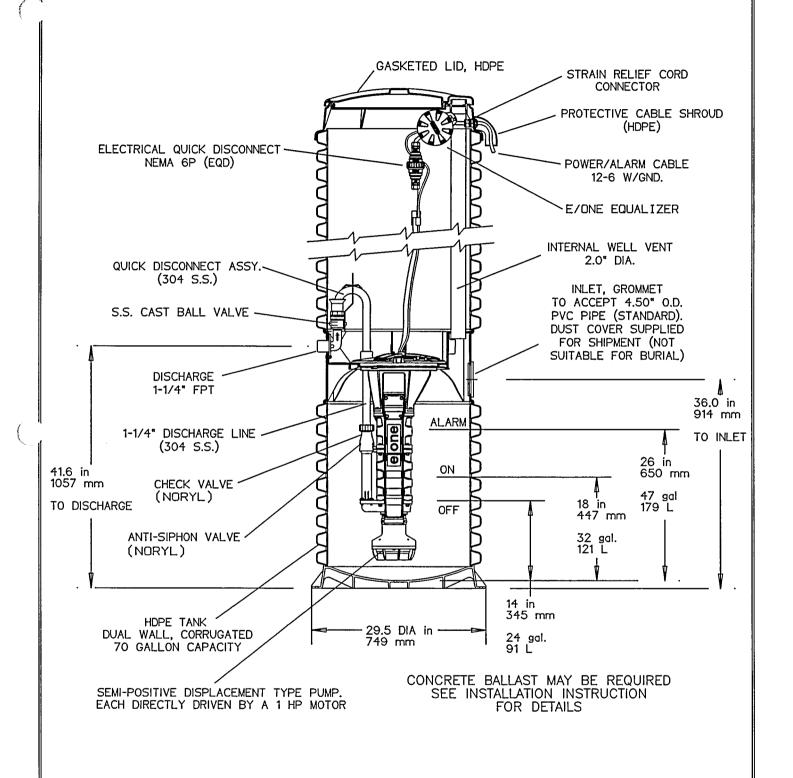


RUSH TOWNSHIP

REPAIR COUPLING

DETAIL NO.

35



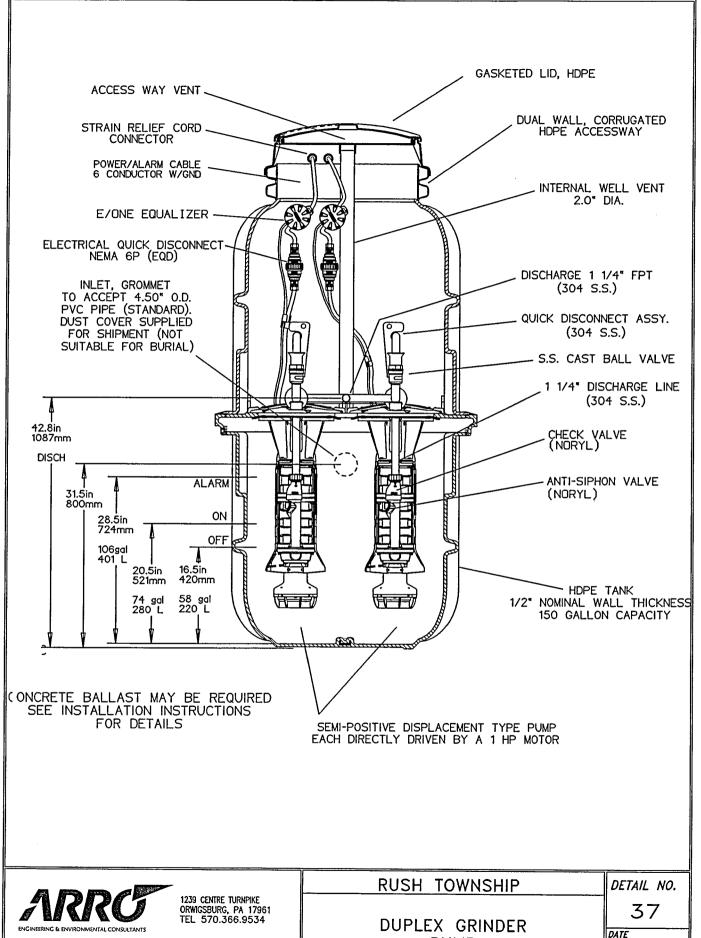


RUSH TOWNSHIP

GRINDER PUMP

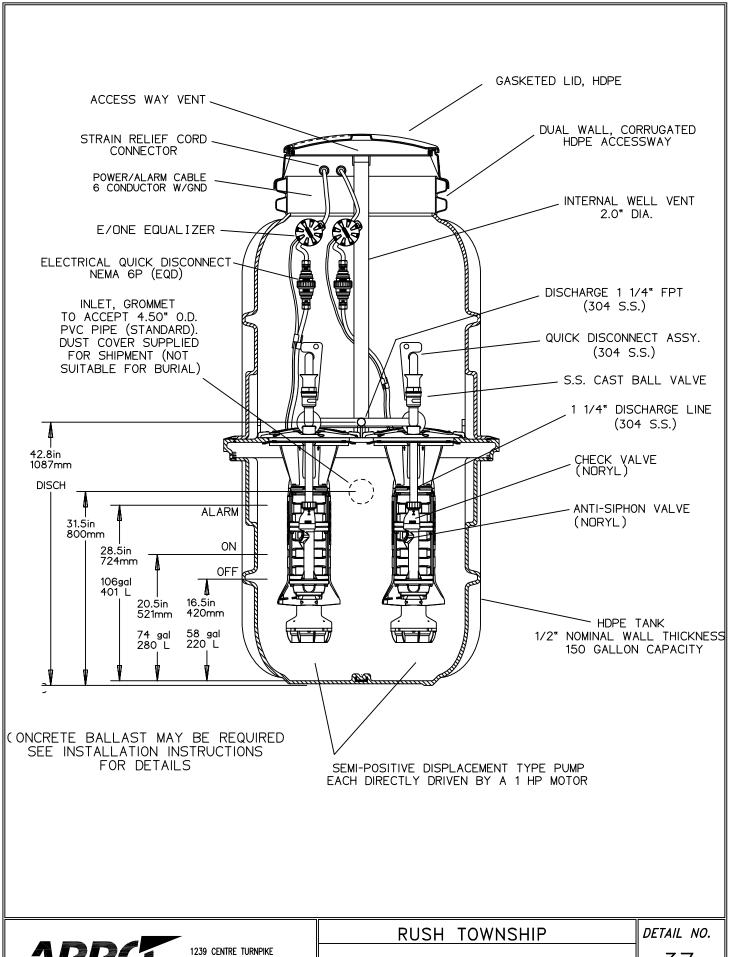
DETAIL NO.

36



PUMP

4/17



DUPLEX GRINDER PUMP 37

APPLICATION FOR SEWER PERMIT

Application #	Date of Application
Rush Township Board of Supervi 104 Mahanoy Avenue Tamaqua PA 18252	
T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ax (570)668-3129
The undersigned hereby makes application for permission to construct the sanitary set for connection to the sewage collection system.	on to the Rush Township Board of Supervisors ewer facilities of the below described property ystem of the Township.
Property Location (street address or other	: identification):
Property Owner(s):	
Address of Owner(s):	
Telephone (home)(Work)	(cell)
Multiple Family Do a. Number of Commercial Store, shop, etc Office	elling Unit
Signature of Owner(s):	Date:
Signature of Authorized Agent:	
THIS SPACE FOR	TOWNSHIP USE ONLY
cash () check () or money order ().	chedule:is hereby acknowledged by means of: GENT RECEIVING FEE
	Date:

RESOLUTION 2017 - 21

A RESOLUTION OF THE RUSH TOWNSHIP BOARD OF SUPERVISORS, SCHUYLKILL COUNTY, PENNSYLVANIA, ADOPTING RULES AND REGULATIONS FOR THE USE OF THE SANITARY SEWER SYSTEMS OWNED, MAINTAINED AND OPERATED BY SAID BOARD OF SUPERVISORS

WHEREAS, The Board of Supervisors of Rush Township, Schuylkill County (hereinafter simply referred to as "Rush Township") owns, maintains and operates sanitary sewage collection systems, and transmission systems, for rendering sewage service in and for areas of Rush Township; and

WHEREAS, Rush Township in accordance with authority vested in it by law, desires to establish Rules and Regulations governing the installation, connection to, repairs and use of Rush Township facilities; and

NOW, THEREFORE, BE IT RESOLVED by the by the Rush Township Board of Supervisors, Schuylkill County, Pennsylvania that the document attached hereto as Exhibit 1 and the Appendices attached thereto is hereby adopted and shall be known as the Rush Township Board of Supervisors Sanitary Sewer System Rules and Regulations.

FURTHER RESOLVED, that this Resolution and the Rules and Regulations adopted hereby shall take effect immediately, or as soon as legally permissible thereafter.

FURTHER RESOLVED, that nothing in this Resolution or the Rules and Regulations hereby adopted shall be constructed to affect any suit or proceeding pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any Resolution or Rule or Regulations as repealed by this Resolution; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this Resolution.

FURTHER RESOLVED, that if any provision, sentence, clause, section, or part of this Resolution shall for any reason be found to be unconstitutional, illegal or invalid, such determination shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts of this Resolution, and it is hereby declared to be the intent of the Board of Directors of Rush Township Board of Supervisors that this Resolution would have been adopted had such unconstitutional, illegal or invalid provision, sentence, clause, section, or part not been included herein.

FURTHER RESOLVED, that all resolutions or parts of resolutions including but not limited to rules and regulations previously adopted that are inconsistent with this Resolution are hereby superseded.

IN WITNESS WHEREOF, the Rush Township Board of Supervisors has adopted this Resolution in lawful session this 21^{st} day of **December**, 2017.

RUSH TOWNSHIP BOARD OF SUPERVISORS
SCHUYLKILL COUNTY, PENNSYLKANIA
By: When les Millor
Chairman 1/0
Chillian
Member
Member

CERTIFICATE

I hereby certify that the foregoing is a true and accurate copy of a Resolution of the RUSH TOWNSHIP BOARD OF SUPERVISORS, Schuylkill County, Pennsylvania, which was fully adopted at a public meeting held pursuant to notice as required by law on the 21st day of December, 2017.

Secretary of Rush Township Board of Supervisors

Dated: December 21, 2017

(Seal)