# GERMAN TOWNSHIP SEWER AUTHORITY FAYETTE COUNTY, PENNSYLVANIA

## SEWER SYSTEM RULES AND REGULATIONS

DECEMBER 14, 2004 (REVISED NOVEMBER, 2013)

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## GERMAN TOWNSHIP SEWER AUTHORITY SEWER SYSTEM RULES AND REGULATIONS

#### **TABLE OF CONTENTS**

	Page
Article I – General	1
Article II – Definitions	2
Article III – Discharge of Sanitary Sewage to Public Sewage System Required	5
Article IV – Exclusion of Storm Water Runoff, Surface Water, and Subsurface Water	6
Article V – General Requirements for Admission of Industrial Waste to the Sewerage System	7
Article VI – Prohibitions and Limits for Waste Discharges	10
Article VII – Sewage Collection, Transportation and Treatment Charges	13
Article VIII – Surcharge for Certain Compatible Constituents of Industrial Wastes	15
Article IX – Billing and Collection	17
Article X – Connection to the Public Sanitary Sewage System	18
Article XI – Proposed Extensions of System by Developers	21
Article XII – Delinquencies, Violations and Remedies	25
Article XIII – Validity	26
Appendix A – Specifications for Installation of Sanitary Sewers and Appurtenances	
Appendix B - Detail and Specifications for the Installation of Sewer Service Laterals	5
Appendix C - Agreements	
Appendix D – Sewer Rate Resolution	

#### RESOLUTION NO. 11122013

AN RESOLUTION OF THE GERMAN TOWNSHIP SEWER AUTHORITY, FAYETTE COUNTY, PENNSYLVANIA, ESTABLISHING RULES AND REGULATIONS FOR CONNECTION TO, DISCHARGE INTO, CONSTRUCTION AND EXTENSION OF THE EXISTING SANITARY SEWER SYSTEM, AND PROVIDING FOR SURCHARGES AND PENALTIES ASSOCIATED THEREWITH.

WHEREAS, the German Township Sewer Authority is desirous of regulating connections to, discharge into, and construction and extension of the existing sanitary sewer system by establishing Sewer System Rules and Regulations; and

WHEREAS, the German Township Sewer Authority is desirous of providing for surcharges and penalties associated with violations of the Sewer System Rules and Regulations.

NOW, THEREFORE, BE IT RESOLVED AND ENACTED by the Board of the German Township Sewer Authority, Fayette County, Pennsylvania, as follows:

#### ARTICLE I GENERAL

Section 101. The German Township Sewer Authority reserves the right to refuse connection into the sanitary sewer system; to compel discontinuance of use of a sewer; or to compel pretreatment of industrial waste by any industry in order to prevent a discharge into the German Township Sewer Authority Sanitary Sewer System deemed to be harmful to the sanitary sewer system, or deemed to have a deleterious effect on the sewage treatment or sludge handling process.

Section 102. No discharges or activities in conflict with the Sewer System Rules and Regulations shall be permitted by the German Township Sewer Authority.

## ARTICLE II DEFINITIONS

Unless the context specifically indicates otherwise, the following words and terms used in these Rules and Regulations shall have the following meanings:

Section 201. <u>Authority</u> shall mean the German Township Sewer Authority, Fayette County, Pennsylvania.

Section 202. <u>Board</u> shall mean the appointed members of the German Township Sewer Authority, Fayette County, Pennsylvania, as now or hereafter constituted, and its duly authorized agents or representatives.

Section 203. <u>Abnormal Industrial Waste</u> shall mean any industrial waste having a suspended solid content or a B.O.D. appreciably in excess of that normally found in municipal sewage. For the purposes of these regulations any industrial waste containing more than 350 milligrams per liter of suspended solids, or having a B.O.D. in excess of 300 milligrams per liter, shall be considered an abnormal industrial waste regardless of whether or not it contains other substances in concentrations differing appreciably from those normally found in municipal sewage.

Section 204. <u>B.O.D.</u> of <u>Sewage or Industrial Waste</u> shall designate its Biochemical Oxygen Demand and shall mean the quantity of oxygen utilized in the biochemical oxidation of the organic matter in said sewage or industrial waste under standard laboratory procedure in 5 days at 20°C. (under aerobic conditions), expressed in milligrams per liter by weight. It shall be determined by one of the acceptable methods described in the latest edition of "Standard Methods for the Examination of Water and Wastewater," published jointly by the American Public Health Association, the American Water Works Association, and the Water Environment Federation.

Section 205. An <u>Equivalent Domestic Unit (EDU)</u> with regard to Residential Customers shall be defined as any room, group of rooms or enclosure, occupied or intended for occupancy as separate living quarters for a family or other group of persons living together or by persons living alone.

An Equivalent Domestic Unit (EDU) with regard to Commercial Customers shall be defined as any building or complex of buildings selling a product or rendering a service, or any religious or fraternal or governmental establishment, and any motels, hotels and schools. An Equivalent Domestic Unit (EDU) for Commercial Customers shall be defined as each 60,000 gallons or less of water used per year therein. However, under no condition will any commercial establishment be considered less than one (1) EDU, regardless of the calculated or measured water usage.

An Equivalent Domestic Unit (EDU) with regard to Industrial Customers shall be defined as each 60,000 gallons or less of water used per year, at any industrial establishment. However, under no condition will any industrial establishment be considered less than one (1) EDU, regardless of the calculated or measured water usage.

Section 206. <u>Garbage</u> shall mean solid wastes from the preparation, cooking and dispensing of food and from the handling, storage and sale of produce.

- Section 207. <u>Industrial Wastes</u> shall mean any liquid, gaseous or water-borne wastes from industrial processes or commercial establishments, as distinct from sanitary sewage.
- Section 208. Occupied Building shall mean any structure erected and intended for continuous or periodic habitation, occupancy or use by human beings or animals, and from which structure sanitary sewage and industrial wastes, or either thereof, is or may be discharged.
- Section 209. Oil and Grease shall mean either immiscible or emulsified substances as measured by the petroleum ether (or Freon) extraction gravimetric method of oil analysis as described in the latest edition of "Standard Methods for the Examination of Water and Wastewater."
- Section 210. <u>Person</u> shall include natural persons, partnerships, associations and corporations, public or private.
- Section 211. <u>pH</u> shall mean the logarithm to the base 10 of the reciprocal of the hydrogen ion concentration expressed in moles per liter. It shall be determined by one of the acceptable methods described in the latest edition of "Standard Methods for the Examination of Water and Wastewater."
- Section 212. <u>Premises Accessible to the Public Sanitary Sewage System</u> shall mean any real estate abutting on or adjoining or having access to any street, alley or right-of-way in which a sewer is located which ultimately connects to the public sanitary sewage system.
- Section 213. <u>Properly Shredded Garbage</u> shall mean wastes from the preparation, cooking and dispensing of food and from the handling, storage and sale of produce that have been shredded to such degree that all particles will be carried freely under the flow conditions normally prevailing in public sewers, with no particle greater than one-half inch (½") in any dimension.
- Section 214. <u>Public Sanitary Sewage System</u> ("Sewer System") shall mean all sanitary sewers, pumping stations, inverted siphons, force mains, sewage treatment works, and other sewerage facilities owned or leased and operated by the Authority for the collection, transportation and treatment of sanitary sewage and industrial wastes, together with their appurtenances, and any additions, extensions or improvements thereto. It shall also include sewers within the Authority's service area which serve one or more person and discharge into the public sanitary sewerage system even though those sewers may not have been constructed by the Authority and are not owned or maintained by the Authority. It does not include separate storm sewers or culverts which have been constructed for the sole purpose of carrying storm and surface runoff, the discharge from which is not and does not become tributary to the sewage treatment facilities.
- Section 215. <u>Sanitary Sewage</u> shall mean the normal water-carried household and toilet wastes from residences, business buildings, institutions, industrial and commercial establishments, exclusive of storm water runoff, surface water or ground water.
- Section 216. <u>Sanitary Sewer</u> shall mean a pipe or conduit which carries sewage or industrial wastewater and to which storm, surface and ground waters are not intentionally admitted.

- Section 217. <u>Sewage</u> shall mean a combination of water-carried wastes from residences, business buildings, institutions, industrial and commercial establishments, together with such ground, surface or storm water as may be present.
  - Section 218. "Shall" is mandatory; "may" is permissive.
- Section 219. <u>Slug</u> shall mean any discharge of water, sewage, or industrial waste which, in concentration of any given constituent or in quantity of flow, exceeds for any period of duration longer than fifteen (15) minutes more than five (5) times the average twenty-four (24) hour concentration or flows during normal operation.
- Section 220. <u>Storm Sewer</u> shall mean a sewer which is intended to carry storm water runoff, surface waters, ground water drainage, etc., but which is not intended to carry any sanitary sewage or industrial waste.
- Section 221. <u>Storm Water Runoff</u> shall mean that portion of the rainfall which reaches a channel, trench, sewer or sink.
- Section 222. <u>Suspended Solids</u> shall mean solids that either float on the surface or are in suspension in water, sewage, industrial waste or other liquids, and which are removable by laboratory filtration. The quantity of suspended solids shall be determined by one of the acceptable methods described in the latest edition of "Standard Methods for the Examination of Water and Wastewater."
- Section 223. <u>Unpolluted Water or Waste</u> shall mean any water or waste containing none of the following: free or emulsified grease or oil; pH less than 6.0 or greater than 9.0; phenols or other substances imparting taste and odor to receiving waters; toxic or poisonous substances in suspension, colloidal state or solution; obnoxious or odorous gases. It shall contain not more than 750 milligrams per liter by weight of dissolved solids of which not more than 250 milligrams per liter shall be as chloride and not more than 10 milligrams per liter each of suspended solids and B.O.D. The color shall not exceed 5 color units. Analyses for any of the above mentioned substances shall be made in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater," cited above.
- Section 224. <u>Water Authority</u> shall mean any publicly or privately owned duly authorized agency, corporation or organization which is the approved purveyor of the public water supply within the limits of the Authority's service area.

## ARTICLE III DISCHARGE OF SANITARY SEWAGE TO PUBLIC SANITARY SEWAGE SYSTEM REQUIRED

Section 301. All persons owning property within the Authority's service area whose existing occupied building is within one hundred fifty feet (150') from the public sanitary sewage system shall, at their own expense, make connection with the public sanitary sewage system, if they are not presently so connected.

Section 302. All persons owning property within the Authority's service area upon which an occupied building is subsequently erected which is within one hundred fifty feet (150') from the public sanitary sewage system shall, at their own expense, make connection with the public sanitary sewage system.

Section 303. All persons owning any occupied building within the Authority's service area upon premises which subsequently become accessible to the public sanitary sewage system, and, if said building is within one hundred fifty feet (150') from such sewage system, shall, at their own expense, make connection with the public sanitary sewage system within the time period stipulated after proper notice to do so has been given in accordance with applicable law.

Section 304. All connections to the public sanitary sewage system shall be made in accordance with Article X hereof.

Section 305. No privy vault, cesspool, septic tank, mine hole or similar receptacle for human excrement shall presently or at any time hereafter be connected with the public sanitary sewage system.

## ARTICLE IV EXCLUSION OF STORM WATER RUNOFF, SURFACE WATER, AND SUBSURFACE WATER

Section 401. The discharge of storm water runoff, surface water, and subsurface water to sanitary sewers is prohibited.

Section 402. All persons connecting to the public sanitary sewage system shall provide adequate means for excluding storm water runoff, surface water, and subsurface water in the event the connection is made to the sanitary sewer.

Section 403. No person connected to a sanitary sewer shall connect any roof drain or foundation drain or cellar drain thereto or permit any such drains to remain connected thereto, nor shall he permit, allow or cause to enter into any sanitary sewer, any spring water, surface water, or subsurface water from any other source.

Section 404. The provisions of these Rules and Regulations do not prohibit the present or future discharge of storm water runoff to storm sewers or to natural water courses within the Authority's service area.

## ARTICLE V GENERAL REQUIREMENTS FOR ADMISSION OF INDUSTRIAL WASTE TO THE SEWERAGE SYSTEM

Section 501. The economy and desirability of the combined treatment of industrial wastes and sanitary sewage are recognized. It is the intent of these Rules and Regulations to accommodate the waste disposal needs of industries within the service area of the Authority to the extent that the industrial discharges do not inhibit or interfere with the public sanitary sewage system's intended and required functions, cause physical damage to the structures of the public sanitary sewage system, or cause hazard to those responsible for the operation and maintenance of the public sanitary sewage system or to the general public. In addition, the industrial discharges must be limited in amounts of specific contaminants of a toxic or polluting nature which may pass through the treatment system in objectionable levels as effluent constituents and/or as a residue constituent of the sludge.

These Rules and Regulations are intended to provide the basis for this required control and protection of Authority property and responsibility. It should be further understood that the Authority and all industries are subject to the "Toxic and Pretreatment Effluent Standards," Section 307 of Public Law 92-500. The Federal regulations pertaining to these Federal requirements were developed by the Federal Environmental Protection Agency (EPA) in 40 CFR, Parts 129 and 403. The EPA regulations on Pretreatment Standards control the prerogatives of the Authority in the control of industrial discharges, and will always supersede the requirements of these Rules and Regulations, where discrepancies exist.

Section 502. In general, an industrial waste shall be considered harmful to the public sanitary sewage system if it may cause any of the following damaging effects:

- A. Chemical reaction either directly or indirectly with the materials of construction of the public sanitary sewage system in such a manner as to impair the strength or durability of any sewerage structures.
- B. Mechanical action that will destroy any sewerage structures.
- C. Restriction of the hydraulic capacity of any sewerage structures.
- D. Restriction of the normal inspection or maintenance of any sewerage structure.
- E. Danger to public health and safety.
- F. Obnoxious conditions inimical to the public interest.
- G. Interference with the sewage treatment process.

All such wastes shall be prohibited from discharge to the public sanitary sewage system.

Section 503. For all industrial waste constituents which are not compatible with the treatment systems and/or will persist through the treatment systems as a pollutant or toxic substance, pretreatment will be required to the extent the objectionable constituents are reduced to acceptable levels. It is the current intent of EPA to promulgate pretreatment standards for all known toxin and polluting substances on an industrial classification basis. As these standards are developed, they will become applicable to all industries according to a schedule also to be developed by EPA. EPA standards are minimum standards which can be further altered to meet local conditions. Until these pretreatment standards become effective, the prohibition and limits of Article VI hereof will govern.

Section 504. The variability of the rate of discharge from an industrial establishment is an important consideration of the compatibility of the industrial waste with the public sanitary sewage system, and is also subject to regulation. When the variability is considered excessive by Authority review or by EPA regulation, the industry shall employ methods and means to reduce the flow rate variability to acceptable levels.

Section 505. For waste constituents compatible with the public sanitary sewage treatment system and for which the public sanitary sewage treatment system is to provide specific removal capability, the industrial waste shall be subject to surcharge for such constituent concentration in excess of the average influent value upon which the plant design was based. The constituents to which surcharges are applicable include BOD<sub>5</sub>, suspended solids, ammonia nitrogen, phosphorous, ABS, and oils, fats and greases. The allowable concentrations and surcharge formula are given in Article VIII.

Section 506. A special industrial waste discharge permit is required for all industrial establishments discharging industrial process waters to the public sanitary sewage system. No industrial waste discharges from existing industrial connections will be permitted to be made to the public sanitary sewage system without a Permit from the Authority. For all new industrial discharges to be made after the date of approval of these Rules and Regulations, permit application and approval is required prior to any actual discharge being made to the public sanitary sewage system.

Each said application shall be submitted to the Authority and shall contain the following information:

- A. Description of process(es) producing the wastes.
- B. Description of any pretreatment facilities being or to be utilized.
- C. Description of waste being or to be discharged to the public sanitary sewage system in terms of quantity and quality. Complete information regarding flow variability and chemical/physical/ biological constituency is required. Analysis and flow records will also be required for existing installations or for situations where similar installations exist at some other site of the requesting industrial establishment.

Upon review of the application, the Authority will advise the applicant in writing of its approval or disapproval. If disapproval is indicated, full explanation of the reason for disapproval will be given, as will be an opportunity for the applicant to have a hearing before the Authority for reconsideration, if so requested by the applicant within 30 days of the Authority's notice of disapproval.

All permits will be granted subject to cancellation by the Authority in the event that the industrial discharge becomes adversely different from the conditions upon which approval was originally granted.

All permittees are required to obtain amended permits for all new or different industrial discharges from those described in the original or last amended permit.

All permits are also subject to amendment by the Authority in the event that pretreatment requirements of EPA as originally promulgated or amended differ from the requirements upon which the prevailing permit was based.

All permits when granted by the Authority will describe in detail the specific monitoring requirements of the discharge(s).

All new industrial establishments desiring to make physical connection to the public sanitary sewage system shall be required to apply for and obtain a connection permit as described in Article X, in addition to the industrial waste permit described in this Article V.

Section 507. When required by the Authority, any person discharging to the public sanitary sewage system any industrial wastes, or industrial wastes and sanitary sewage together, shall install a suitable manhole or manholes or metering chamber on his connecting sewer or sewers to facilitate observation, sampling and measurement of the combined flow of wastes from his premises. Such manhole or manholes or metering chamber shall be accessible and safely located and shall be constructed in accordance with plans approved by the Authority or its designated representative. The manhole or manholes or metering chamber shall be installed by such person at his expense and shall be maintained by him so as to be safe and accessible to the Authority or its designated representative at all times.

Section 508. All industrial establishments shall install fine screens to remove husk, hull, vegetable skins and peelings, threads, lint, grease, and any and all materials considered by the Authority to overload, impair the efficiency of, or cause difficulties in the operation of the sewers, sewage treatment plant, or other sewer facilities.

Section 509. Although the specific monitoring requirements will be established for each permit at the time of application review, the general guidelines for establishing these requirements, based on EPA Pretreatment Standards (40 CFR 403), latest revision, are hereby incorporated. The categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 405-571, latest revision, are hereby incorporated.

## ARTICLE VI PROHIBITIONS AND LIMITS FOR WASTE DISCHARGES

Section 601. The discharge of unpolluted water or waste to a sanitary sewer is expressly prohibited. The Authority reserves the right to define the amount it deems excessive in each particular instance.

Section 602. The discharge of garbage to the public sanitary sewage system is expressly prohibited unless the garbage is first properly shredded.

Section 603. The discharge of sewage or other wastes directly to a sanitary sewer manhole without the express written permission of the German Township Sewer Authority is expressly prohibited.

Section 604. No sanitary sewage or industrial waste from any property other than that for which a connection permit has been issued as provided in Article X hereof shall be discharged to the public sanitary sewage system. No industrial waste shall be discharged to the public sanitary sewage system by an industry without a special industrial waste discharge Permit obtained in accordance with Article V hereof.

Section 605. No person shall discharge to the public sanitary sewage system any sanitary sewage or industrial wastes having any of the following characteristics:

- A. Wastes containing liquids, solids or gases which by reason of their nature or quality may cause fire, explosions, or be in any other way injurious to persons, the structures of the public sanitary sewage system or its operation.
- B. Wastes having a temperature in excess of 150°F or less than 32°F.
- C. Wastes having a pH lower than 6.0 or higher than 9.0 or having any corrosive properties capable of causing damage or hazards to structures, equipment or personnel of the public sanitary sewage system. Where the Authority deems it advisable, it may require any person discharging industrial wastes to install and maintain, at his own expense, in a manner approved by the Authority or its designated representative, a suitable device to continuously measure and record pH of the wastes so discharged.
- D. Wastes containing any noxious or malodorous gas or substance which either singly or by interaction with sewage or other wastes is, in the opinion of the Authority, likely to create a public nuisance or hazard to life, or prevent entry to sewerage structures for their maintenance and repair.
- E. Wastes containing ashes, cinders, sand, mud, straw, shavings, metal, glass, rags, feathers, tar, plastics, wood, hair, chemical or paint residues, greases, lime slurry or viscose materials of such character or in such quantity that, in the opinion of the Authority, they may cause an obstruction to the flow in the sewers or otherwise interfere with the proper operations of the public sanitary sewage system. Attention is called to the fact that the maximum permissible concentration will vary throughout the public sanitary sewage system depending upon the size of the particular interceptor sewer receiving the same and the flows therein.

- F. Wastes containing insoluble, non-flocculent substances having a specific gravity in excess of 2.65.
- G. Wastes containing soluble substances in such concentration as to cause the specific gravity of the waste to be greater than 1.1.
- H. Wastes containing any of the following substances in solution or in suspension in concentrations exceeding those shown in the following table:

Substance	Maximum Permissible Concentration
Phenolic Compounds as C <sub>5</sub> H <sub>6</sub> 0H	1.0 mg./L.
Cyanide as CN	0.0 mg./L.
Cyanate as CNO	0.0 mg./L.
Antimony as Sb	1.0 mg./L.
Arsenic as As	1.0 mg./L.
Barium as Ba	100.0 mg./L.
Beryllium as Be	0.5 mg./L.
Boron as B	5.0 mg./L.
Cadmium as Cd	1.0 mg./L
Trivalent Chromium as Cr <sup>+3</sup>	0.5 mg./L.
Hexavalent Chromium as Cr <sup>+6</sup>	0.5 mg./L.
Copper as Cu	0.03 mg./L.
Iron as Fe	4.0 mg./L.
Lead as Pb	0.5 mg./L.
Manganese as Mn	0.05 mg./L.
Mercury as Hg	0.1 mg./L.
Molybdenum as Mo	1.0 mg./L.
Nickel as Ni	1.0 mg./L.
Selenium as Se	1.0 mg./L.
Silver as Ag	0.5 mg./L.
Thallium as Tl	0.5 mg./L.
Tin as Sn	1.0 mg./L.
Zinc as Zn	0.15 mg./L.
Total Toxic Organics (TTO)*	0.75 mg./L.

<sup>\*\*</sup> TTO is defined as the sum of all priority organic pollutants found in concentrations greater than 0.01 mg./L.

When the waste volume is less than 1,000 gallons per day, the Authority may permit higher concentration limits.

- I. Wastes containing more than 100 mg./L. by weight of fat, oil, and grease.
- J. Wastes containing more than 10 mg./L. of any of the following gases: Hydrogen sulfide, sulfur dioxide, nitrous oxide, or any of the halogens.
- K. Wastes containing gases or vapors, either free or occluded, in concentrations toxic or dangerous to humans or animals.
- L. Wastes containing toxic substances in quantities sufficient to interfere with the biochemical processes of the sewage treatment works or that will pass through the treatment process and still exceed the state and federal requirements for the receiving stream.
- M. Wastes containing toxic radioactive isotopes without a special permit.
- N. Wastes at a flow rate and/or pollutant discharge rate which is excessive over relatively short time periods.

## ARTICLE VII SEWAGE COLLECTION, TRANSPORTATION AND TREATMENT CHARGES

Section 701. There is imposed upon the owners of, or the users of water in or on, all properties served by the public sanitary sewage system, sewage collection, transportation and treatment charges for the use of said system, payable in the amounts and as provided in the Sewer Rate Resolution heretofore adopted by the Authority and as it is hereinafter from time to time amended and modified. Said owners and users will be jointly and severally liable for the payment of said sewage collection, transportation and treatment charges and, the penalties therein prescribed for delinquent payments thereof.

Section 702. All bills for sewage collection, transportation and treatment charges shall be due when rendered and shall be subject to the penalty provisions set forth in the Authority's Sewer Rate Resolution. Owners, and where adequate arrangements have been made with the Authority, users will be billed periodically for the sewage collection, transportation and treatment charges in accordance with the billing practices of the Authority.

Section 703. The Authority's initial sewage collection, transportation and treatment charges shall be on a flat rate basis in accordance with the Authority's Sewer Rate Resolution. The Authority may, if it deems it advisable, elect at some time in the future to impose, in whole or in part, the sewage collection, transportation and treatment charges on such other basis as it may determine. When water usage is used as the basis for said charges, the volume of water to be used for billing purposes shall be based upon water meter readings of the Water Authority or, in the absence of such readings, upon estimates made by the Authority or flat rate charges.

Section 704. When water usage is used as the basis of charges, then if an owner or user obtains part or all of the water used in or on a property from sources other than the Water Authority, such owner or user may, after written approval from the Authority, at no expense to the Authority or the Water Authority, install and maintain a water meter or meters satisfactory to the Authority and the Water Authority for measuring all water used other than that obtained from the Water Authority, and the quantity of water used to determine the sewage collection, transportation and treatment charges shall be the quantity of water measured by all such meters plus the quantity of water obtained from the Water Authority. In lieu of such additional meters, the Authority may establish under the Sewer Rate Resolution, a flat rate charge which shall be applicable to such non-metered water usage.

Section 705. When water usage is used as the basis of charges, then if it is established to the satisfaction of the Authority that a portion of the water used in or on any property served by the public sanitary sewage system does not and cannot enter said system, and in the event that the total water used in or on said property exceeds 100,000 gallons per quarter, the Authority may determine, in such manner and by such method as it may deem practical, the percentage of the water entering the public sanitary sewage system, or the Authority may require or permit the installation of additional meters in such manner as to determine either the quantity of water excluded from the public sanitary sewage system or the quantity of water, sewage or industrial waste actually entering the public sanitary sewage system. In such case, the sewage collection, transportation and treatment charge shall be based upon the quantity of water estimated, measured or computed by the Authority to be actually entering the public sanitary sewage system.

Section 706. When water usage is used as the basis of charges, then any person requesting consideration for a reduction of the amount of the sewage collection, transportation and treatment charges because of water not entering the public sanitary sewage system shall make written application to the Authority for such consideration, giving the name of such person, his address and setting forth supporting data fully describing other sources of water, if any, as well as the disposition of water alleged not to be entering the public sanitary sewage system. The application shall be accompanied by a sketch to approximate scale showing the plan of the property, the water distribution system, sewer layout, existing meters, and proposed meters in the scheme to determine the quantity of flow entering, or not entering, the public sanitary sewage system. The cost of furnishing, installing and maintaining any meters other than those utilized to measure water purchased from the Water Authority shall be borne by the applicant. The type, size, location, arrangement and maintenance of such meters shall be subject to the approval of the Authority and the Water Authority.

## ARTICLE VIII SURCHARGE FOR CERTAIN COMPATIBLE CONSTITUENTS OF INDUSTRIAL WASTES

Section 801. Although the sewage treatment works will be capable of treating certain abnormal industrial wastes as heretofore defined in Article I, the actual treatment of such wastes may increase the cost of operating and maintaining the public sanitary sewage system. Therefore, there will be imposed upon each person discharging such industrial waste into the public sanitary sewage system a surcharge, or surcharges, which are intended to cover such additional cost. Such surcharge shall be in addition to the regular sewage collection, transportation and treatment charges set forth in the Sewer Rate Resolution of the Authority, and shall be payable as therein provided.

Section 802. The strength of any industrial waste, the discharge of which is to be subject to surcharge, shall be determined monthly, or more frequently as the Authority shall determine, from samples taken either at the manhole or metering chamber referred to in Article IV hereof, or at any other sampling point mutually agreed upon by the Authority and the producer of such waste. The frequency and duration of the sampling period shall be such as, in the opinion of the Authority, will permit a reasonably reliable determination of the average composition of such waste. Samples shall be collected or their collection supervised by a representative of the Authority and shall be in proportion to the flow of waste, and composited for analysis in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", cited above. Except as hereinafter provided, the strength of the waste so found by analysis shall be used for establishing the surcharge or surcharges. However, the Authority may, if it so elects, accept the results of routine sampling and analyses by the producer of such wastes in lieu of making its own samplings and analyses.

Section 803. In the event any industrial waste is found, by the Authority, to have a BOD in excess of 300 milligrams per liter, the producer of said waste shall be surcharged an amount equal to the product of the actual volume of wastes in thousand gallons per billing period discharged to the public sanitary sewage system and the "BOD surcharge rate". The "BOD surcharge rate" shall be determined by the following formula:

Rc = 0.00834 P (C - 300)

Where Rc = The BOD surcharge rate in cents per 1,000 gallons of waste discharged.

P = The average annual fixed, operating and maintenance cost of secondary treatment processes per pound of BOD received at the treatment works. (Prior to completion of the first year of operation the value of "P" shall be assumed to be four (4) cents.)

C = The average BOD of the industrial waste expressed in milligrams per liter as determined in accordance with Section 702 of this Article.

The figure 300 appearing in the above formula corresponds to the maximum BOD permissible without surcharge. The figure 0.00834 is the factor to convert milligrams per liter to pounds per 1,000 gallons. No discount will be permitted for sewage or industrial wastes having a BOD less than 300 milligrams per liter.

Section 804. In the event any industrial waste is found, by the Authority, to have an average suspended solids concentration in excess of 350 milligrams per liter, the producer of such waste shall be surcharged an amount equal to the product of the actual volume of wastes in thousand gallons per billing period discharged to the public sanitary sewage system and the "suspended solids surcharge rate". The "suspended solids surcharged rate" shall be determined by the following formula:

 $R = 0.00834 \times B (S - 350)$ 

Where R = The suspended solids surcharge rate in cents per 1,000 gallons of waste discharged.

B = The average annual fixed, operating and maintenance cost of the sludge digestion, sludge drying and sludge disposal operations per pound of suspended solids received at the treatment works. (Prior to completion of the first year of operation the value of "B" shall be assumed to be four (4) cents.)

The average suspended solids concentration of the abnormal industrial waste expressed in milligrams per liter as determined in accordance with Section 702 of this Article.

The figure 350 appearing in the above formula corresponds to the maximum suspended solids concentration permissible without surcharge. The figure 0.00834 is the factor to convert milligrams per liter to pounds per 1,000 gallons. No discount will be permitted for sewage or industrial wastes having a suspended solids concentration less than 350 milligrams per liter.

Section 805. The surcharges provided for in this Article shall be added to the sewage collection, transportation and treatment charges imposed by the Authority under the Sewer Rate Resolution.

## ARTICLE IX BILLING AND COLLECTION

Section 901. Bills and notices relating to the sewage collection, transportation and treatment charges and surcharges will be mailed or delivered to the property owner's last address, or where proper arrangements have been made with the Authority, to the user's last address, as shown on the billing books of the Authority.

Section 902. Landlord/Tenant properties - the property owner of record shall be responsible for the bill. Notice of change of ownership must correspond to title in the Recorder of Deeds office and be given to the Authority in writing.

Section 903. Vacant properties- there will be no abatement of charges for vacancy unless water service is terminated and proper evidence of such termination is provided to the Authority. Proper documentation must be provided by the water company establishing the termination of service. In addition, there will be a \$250.00 sewage shut-off fee assessed when the water services is terminated. The property owner must also execute a notarized affidavit, promising to notify the Authority when and if water service is reinstated to the subject property. If the property is not serviced by public water, the pump must be removed and certification of removal must be received from the plumber who removes it, in the form of notarized affidavit.

Section 904. Demolition of Structure - property owner is required to file a notarized affidavit stating there is no longer a structure on the property. An inspector from the Authority will inspect the property to verify demolition. Additionally the property owner must provide the authority with a copy of the Final Inspection Report provided by the Building Code Official who is required to perform an inspection of the demolished structure to ensure compliance with the UCC and the BCO.

Section 905. Lien for sewer charges- All accounts that are six months or more behind shall be liened for unpaid sewer charges. Failure to lien promptly shall not bar imposition of a lien. Payoff of one lien shall not bar imposition of a subsequent lien if a new period of delinquency in excess of six months should occur.

Section 906. Miscellaneous Charges - the Authority imposes the following charges for the actions set opposite the descriptions:

Lien Letters	\$25.00
Returned Checks for all reasons	\$35.00
Posting notices on property	\$30.00
Water Shut off fee	\$50.00
Water turn on fee	\$50.00
Sewage Disconnect Fee	\$250.00
Filing fees to be added at face when a lien is filed in a public office	

Filing fees to be added at face when a lien is filed in a public office.

Attorney fees when legal counsel must act for the Authority in a matter \$120.00 per hour directly related to a single customer.

### ARTICLE X CONNECTION TO THE PUBLIC SANITARY SEWAGE SYSTEM

Section 1001. Application for connection to the public sanitary sewage system shall be made to the Authority upon the permit form to be formulated and furnished by the Authority.

Section 1002. All information requested on said form shall be furnished by the applicant, including the character and use of each structure located upon the property.

Section 1003. Any required service connection and inspection fees shall be paid at the time of making application for permission to make a connection.

Section 1004. Individuals seeking new building permits and or zoning certificates must have a letter from the German Township Sewer Authority stating that the tap fee and all connection fees have been paid prior to issuing any permits by the zoning officer or building codes official

Section 1005. No work shall commence before the payment of any aforementioned service connection and inspection fees and issuance of the aforementioned connection permit. The Authority may refuse service to any customer failing to satisfy the above requirements.

Section 1006. Sewage collection, transportation and treatment charges, and connection fees will be charged for each building unit connected or to be connected to the Sewer System. Unless written permission is obtained from the Authority, separate connections, and corresponding service connection and inspection fees, will be required for each Equivalent Domestic Unit, whether constructed as a separate building or detached unit or as one of a pair or row, but a single connection with payment of the service connection and inspection fees for the appropriate number of actual EDU's served will be permitted to serve a school, factory, apartment house or other permanent multiple unit structure whose individual apartments or units may not be subject to separate ownership. The Authority, however, does not assume any obligation or responsibility for damages caused by or resulting from any permitted single connection for multiple units.

Section 1007. For existing occupied buildings, the owner or owners of property shall pay all fees and connect to the public sewer system within sixty (60) days after receipt of proper notice by the Authority. If the owner or owners of the property fail to do so, the Authority will install the connection and file a lien against the property for all costs, including connection fees. For new and proposed buildings, the connection permit shall expire one year after the date of issuance. The permit may be renewed, prior to expiration, for another period of one year upon payment of any fees. Fees paid for a connection permit that is allowed to expire shall be forfeited.

Section 1008. All connections to the sanitary or combined sewers shall be subject to certain restrictions as to unacceptable sanitary sewage which are set forth herein in Article VI.

Section 1009. The Inspector, designated by the Authority, shall be given at least 72 hours notice before any connection is made to the system so that the Inspector can be present to inspect and approve the work of building the sewer and connection. The Inspector shall signify his approval to the connection by endorsing his name and the date of approval on the aforementioned connection permit in the possession of the permittee. The Inspector shall be permitted to enter upon all properties receiving

sewer service for the purpose of inspection, observation, measurement, sampling and testing; such entries to be made during reasonable daylight hours with prior notification to the customer.

Section 1010. At the time of inspection of the connection, the owner or owners of properties shall permit the Inspector full and complete access to all sanitary and drainage arrangements and facilities in each building and in and about all parts of the property. No building sewer line shall be covered over, or in any manner concealed, until after it is inspected and approved by said Inspector.

Section 1011. It is the intention of these Rules and Regulations that the entire connection be inspected at one time; however, if the property owner feels that special conditions warrant more than one inspection, he may request the same subject to such additional inspection fees as the Authority shall determine.

Section 1012. All pipe installed shall be either:

- A. Polyvinyl chloride (PVC) sewer pipe, Schedule 40, with glued joints, conforming to ASTM D1784.
- B. Other pipe materials must be approved by the Authority, in writing, before they may be used. Where different pipe materials are joined, a watertight rubber coupling or doughnut connection must be used. In no case will concrete encasement be permitted in lieu of such proper transition fittings.

All pipe installed shall be at least six (6) inches inside diameter and shall be installed as shown on the "Sewer Connection Detail." Four (4) inch inside diameter pipe may be used if sufficient slope is available. Six (6) inch inside diameter pipe must be utilized to serve all duplex residential structures requesting a single service connection.

Section 1013. All sewer pipe shall be installed in strict accord with the manufacturer's recommendations. If rock is encountered in the trench bottom, a minimum of 4" of AASHTO #57 bedding is required.

Section 1014. All pipe shall be installed with the following minimum slope

4" diameter 1/4" per Foot (2%) 6" diameter 1/8" per Foot (1%)

All pipe shall be laid to an even grade and straight alignment to the public sanitary sewer. All pipe shall be laid with full and even bearing and no block supports will be allowed. Bell holes shall be dug to allow sufficient space to properly make each joint. Backfill shall be tamped uniformly around the pipe. All work shall be done in a workmanlike manner and shall provide a durable installation.

Section 1015. The use of outside traps with vent is required. Traps must be installed as shown on the "Sewer Connection Detail." All vents must have a commercially manufactured vent cap to keep out leaves, debris, and animals. Trap vents must be laterally supported with properly compacted backfill and must not be installed in driveways or other areas where they would be subject to damage from vehicular traffic and/or used as an area drain for surface water. Establishments which discharge grease

or oil must install a grease trap approved by the Authority's Engineer.

Section 1016. The use of cleanouts is required. Cleanouts must be installed as shown on the "Sewer Connection Detail." Cleanouts must be laterally supported with properly compacted backfill and must not be installed in driveways or other areas where they would be subject to damage from vehicular traffic and/or used as an area drain for surface water.

Section 1017. The use of an inspection port is required. Inspection ports must be installed as shown on the "Sewer Connection Detail." The inspection port must be laterally supported with properly compacted backfill and must not be installed in areas where they would be used as an area drain for surface water.

Section 1018. Commercial installations must also comply with all local construction regulations.

Section 1019. Maintenance and repair of all building sewers shall be the responsibility of the property owner.

Section 1020. Existing building sewers may not be used to connect existing buildings to the sewer system unless the property owner can verify that the pipe conforms to Section 1013 and can demonstrate by the use of tests, which are acceptable to the Authority, that the existing sewer is in an acceptable condition. Even if the existing sewer is found to be acceptable, a trap and vent as shown on the "Sewer Connection Detail" must be installed. If the existing building sewer is rejected, the owner of the property shall install a new building sewer to comply with these Rules and Regulations.

Section 1021. In buildings that are too low to permit gravity flow to the public sewer, the property owner shall install a pump, approved by the Authority, to convey the building's sewage to the public sewer system. Maintenance of the pump is the responsibility of the property owner. The private service grinder pump manufacturer shall provide information to each user regarding proper use of the pump.

The only exception to this requirement applies to the private service grinder pumps installed as part of Project(s) that are funded by the United States Department of Agriculture Rural Utilities Service (RUS) and shall be purchased and installed by the Authority as part of the Project. Maintenance of grinder pumps installed by the Authority will be the responsibility of the Authority for the term of the RUS loan, provided that the user of the pump is not found to be negligent in it's use. Should the Authority determine that the user is negligent in his/her use of the pump, all costs associated with the repair and/or replacement of the damaged pump and appurtenances and all damage claims resulting there from shall be borne by the property owner. Private service grinder pumps installed after completion of the original Project shall be purchased, installed, and maintained by the property owner in accordance with the Authority's Rules and Regulations.

Section 1022. Any owner of a structure that is connected to the Authority's sewer system who intends to demolish such structure must provide to the Authority seven (7) days notice prior to the demolition date. Prior to the actual demolition of the structure, the Authority will inspect the property to determine the method and location for the capping of the sewage line. The cost of the inspection and the costs associated with capping the line shall be the responsibility of the property owner. Property owners who do not comply with these requirements regarding the demolition of structures that are connected to the Authority's sewer system shall be subject to prosecution as provided for in the Rules and Regulations of the Authority. In addition, the property owners will be responsible for any damages that may occur to the sewer system caused as a result of the demolition of the subject structure.

### ARTICLE XI PROPOSED EXTENSIONS OF SYSTEM BY DEVELOPERS

Section 1101. Five (5) copies of plans for proposed extensions shall be submitted to the Authority on 24"x36" sheets showing plan views to a scale no smaller than 1"=50' and profiles to a scale of 1"=10' vertically and no smaller than 1"=50' horizontally, a north arrow, a title block, date and the name of the engineer or surveyor and imprint of his registration seal. Sheet sizes and scales may differ from the aforementioned, with prior written approval of the Authority.

Section 1102. All sewers and appurtenances shall be designed in accordance with the Sewerage Manual of the Pennsylvania Department of Environmental Protection and these Rules and Regulations.

Section 1103. Construction of sewers and appurtenances shall not be permitted until the proper State and Local Permits have been obtained. The total projects costs shall be at the sole expense of the person applying for said sewer extension.

Section 1104. Prior to final acceptance of any sewer extensions by the Authority, it shall be necessary for the developer to furnish to the Authority "as built plans" showing the angle and distance between manholes, the top and invert elevation of each manhole and the exact location of all house sewer connections relative to the nearest manhole both downstream and upstream.

Section 1105. Easements shall be recorded in the name of the German Township Sewer Authority for all sewers to be constructed outside of dedicated street rights-of-way.

Section 1106. Requirements for pipe and installation procedures shall be as detailed in the Specifications for Installation of Sanitary Sewers and Appurtenances, and any amendments thereto, which can be obtained from the Authority. These specifications must be strictly followed.

Section 1107. The Developer shall file all necessary connection Permits and pay the applicable service connection and inspection fees for each house or building to the Authority which shall become due and payable prior to construction for each representative house service sewer. All applicable fees are as set forth in the Authority's Sewer Rate Resolution.

Section 1108. The Developer shall also reimburse the Authority in full for all costs of legal reviews, engineering reviews, and inspection of construction of all sanitary sewers. The amount and type of inspection required shall be determined by the Authority during construction.

Section 1109. No sewer extensions constructed by a Developer shall be approved for use and acceptance by the Authority until said sewers are formally approved by the Authority, all building service connection and inspection fees have been paid for each building connected to the system, and the Authority has been reimbursed in full for all legal, engineering, and inspection costs incurred during construction, testing and approval and all permits acquired and all related costs paid in full.

Section 1110. Responsibility for Cost - the entire cost of all work shall be borne by the applicant except, if approved, for the difference in the cost of facilities required for the proposed use and the cost of more adequate facilities which will permit additional service for other areas.

Section 1111. The applicant shall deposit with the Authority, in advance, the estimated cost of each month's work; the amount will be adjusted at the end of each month, in connection with resident engineering, legal and/or inspection services.

Section 1112. Agreement - the applicant shall enter into an agreement with the Authority, prior to the execution of any work. The agreement will contain such pertinent conditions as the following:

- A. The cost of all work to be borne by the owner, except as otherwise indicated.
- B. The highways, streets, alleys, and lanes in which sewer extensions are to be located must be dedicated to public use; the lines and grades thereof established, and the rough grading completed.
- C. The ownership title to all installations to be conveyed to and vested in the Authority, except as otherwise indicated.
- D. The Authority shall have the right to make further extensions beyond or laterally from the main extensions, and to enlarge or improve sewage treatment facilities.

Section 1113. General Plans - the applicant shall submit a general plan covering the entire area of the municipality or sewer district in the case of a new sewer system, and of any extension or modification of any sewer system, unless such a general plan of the entire area of the municipality has already been submitted.

- A. These plans must show the boundary line of the municipality or sewer district to be provided sewers, all existing and proposed streets, watercourses, and other salient topographic features; contour lines with intervals of not less than two (2) feet, and the surface elevations at street intersections and at points where changes of slope occur. The plans must show clearly the locations of all existing sanitary and combined sewers and all other utilities.
- B. In all cases the plans must clearly show the size of the sewer, the character of the sewer material, the slope, the elevation at the location of all points of change of slope, the direction of flow, the location of all manholes, flushing manholes, inverted siphons, pumping stations, the elevations of all stream beds, the direction of stream flow, the high and low water elevations of all water surfaces, and such other data.

Section 1114. Detailed Plans - the applicant shall submit detailed plans accompanying the general plans.

A. Profiles shall be prepared with the horizontal scale at least as large as the scale of the corresponding plans, the vertical scale not smaller than 10 feet to 1 inch; the scales are to be indicated on the plans. The profiles shall indicate all the applicable details as set forth relative to the general plans.

B. Detailed plans shall include plans of all sewers and regular and special sewer appurtenances, pumping stations, structures of all types and such other features.

Section 1115. Report - the application shall be accompanied by an engineer's report giving a full description of the proposed system and setting forth the basis of design, prepared in accordance with the Pennsylvania Department of Environmental Protection requirements. This report may be in the form of a "Sewage Facilities Planning Module" as submitted to the Pennsylvania Department of Environmental Protection.

- A. The report must include a statement and description of the extent of area which it is proposed to include within the system at the present time and in the future, the estimated per capita rates or volume of sewage to be provided for, the general character of the sewage and the proportion and nature of any industrial wastes, and such other data and information.
- B. Industrial Waste Report All applications for service, regardless of location of the premises, where industrial wastes are involved must be accompanied by a detailed report setting forth the quantities and character of the wastes, the proposed rates of discharge, and such other facts as required.

Section 1116. Maintenance Bond Requirements - prior to acceptance of any portion of any line or lines from a developer, the developer must provide the Authority with a maintenance bond supplied by a bonding company licensed to do business within the Commonwealth of Pennsylvania wherein the bonding company as surety will be firmly bound to the German Township Sewer Authority to remedy, without cost to the Authority, any defect which may develop in the line during a period of eighteen (18) months from the date of acceptance of the lines, including the work and material utilized by the developer in installing the lines that the Authority will accept. The maintenance bond must guarantee that any defect caused by defective or inferior material or workmanship will be remedied without cost to the German Township Sewer Authority during a period of eighteen (18) months from the date of acceptance of the lines.

The maintenance bond shall be in the amount of fifteen percent (15%) of the actual cost of installation of the lines to be accepted by the Authority. The cost of installation is to be determined by the Authority's engineer, and the developer must submit to the Authority all reasonable documentation requested by the Authority or its engineers so as to allow the Authority to set the amount of the bond.

No connection may be made into the lines and no sewer service connection permits will be issued by the Authority until the Authority has accepted the line or any portion of the lines constructed by a developer.

The Authority's acceptance shall be in writing and delivered to the developer indicating the exact date of acceptance. No acceptance of the lines will be performed until all work is performed in compete satisfaction to the Authority's engineers and the maintenance bond is posted with the Authority.

Section 1117. The developer shall not commence work until he has obtained all insurance required under this paragraph and such insurance has been reviewed and approved by the Authority, and the developer shall not allow any subcontractor to commence work on the project until all similar insurance required of said subcontractor has been so obtained and approved by the Authority and a Certificate of

Insurance has been approved and provided to the Authority. Said insurance cannot be cancelled during the term of said work and the contractor and developer must both notify the Authority of the completion of said work before final cancellation of the enumerated insurances.

Worker's Compensation Comprehensive Liability Bodily Injury Personal Property

Statutory Limits
Minimum Limits
\$3,000,000/\$3,000,000
\$3,000,000/\$3,000,000

The Authority and its agents shall be named as insureds on all policies.

Section 1118. Performance Bond Requirements:

A. If any line or any part thereof is to provide service to a parcel of property that is part of a subdivision, or a subdivision plan, the developer must cause to be filed and posted with the German Township Sewer Authority, an initial deposit as determined by the German Township Sewer Authority to guarantee that the Authority will be reimbursed for all costs of engineering fees, inspection of construction, and/or legal expenses incurred in review and/or right-of-way acquisition for the proposed extension of the system by the developer.

The developer must also cause to be posted with the German Township Sewer Authority, prior to recording of any subdivision or subdivision plan served by the proposed extension, a performance bond in the amount of 110%, of the engineers estimate of the cost of construction of all interceptor and/or internal lines that will serve the subdivision.

The developer acknowledges that the Laws of the German Township Sewer Authority require the developer cause sanitary sewers to be constructed and installed prior to the approval of a plat.

The developer may elect in writing, with notice to the German Township Sewer Authority, to file financial security, in a form acceptable to the Authority, in accordance with applicable Laws and the subdivision and land development ordinance of German Township, Fayette County. Any financial security filed in accordance with applicable Laws must name the German Township Sewer Authority as a named oblige.

### ARTICLE XII DELINQUENCIES, VIOLATIONS AND REMEDIES

Section 1201. Each sewage collection, transportation and treatment charge, surcharge and penalty imposed by the Sewer Rate Resolution of the Authority shall be a debt due the Authority and shall be a lien on the property served, and if not paid within the period prescribed in the Sewer Rate Resolution after the date of the bill shall be deemed delinquent. In such an event, the Authority shall proceed to file a lien in the office of the Prothonotary of Fayette County and collect the same in the manner provided by law for the filing and collection of municipal claims. In the event of failure to pay the sewage collection, transportation and treatment charge or surcharge or penalty after they become delinquent, the Authority may also authorize the appropriate personnel to shut off water service to said property, or to remove or close the sewer connection and to take such steps as may be necessary to accomplish such shut off or removal or closing. The expense of such shut off or removal or closing, as well as the expense of restoring any such service, shall likewise be a debt due the Authority and a lien on the property served and may be filed and collected as hereinabove provided. Such sewage service shall not be restored until all sewage collection, transportation and treatment charges, surcharges and penalties, including the expense of removal, closing and restoration shall have been paid or adequate provisions for their payment shall have been made.

Section 1202. Any person found to be violating any provision of these Rules and Regulations shall be served by the Authority with written notice stating the nature of the violation and providing a reasonable time limit for the satisfactory correction thereof. The offender shall, within the period of time stated in such notice, permanently cease all violations.

Section 1203. Any person who shall continue any violation beyond the time limit provided for in Section 1202 shall be guilty of a misdemeanor, and on conviction thereof shall be fined in an amount not to exceed \$7,500 per violation plus remedial costs incurred by the German Township Sewer Authority. Each day in which any such violation shall continue shall be deemed a separate offense.

Section 1204. Any person violating any of the provisions of these Rules and Regulations shall become liable to the Authority for any expense, loss or damage occasioned the Authority by reason of such violation.

## ARTICLE XIII VALIDITY

Section 1301. All ordinances and resolutions or parts of ordinances and resolutions which are in conflict with any Article or Section of this Resolution shall be deemed to be repealed to the extent of such conflict. Further, the invalidity of any section, clause, sentence, or provision of this Resolution shall not affect the validity of any other part of this Resolution which can be given effect without such invalid parts or parts, and if any one or more of the provisions of this Resolution shall for any reasons be held to be illegal or invalid or otherwise contrary to law, then such provisions shall be null and void and shall be deemed separable from the remaining provisions hereof, but shall in no way otherwise affect the validity of this Resolution.

Section 1302. This Resolution is effective immediately upon its adoption by the German Township Sewer Authority.

RESOLVED by the Board of the German Township Sewer Authority, Fayette County, Pennsylvania.

ATTEST:

Secretary Capza

Robert Belch, Chairman

German Township Sewer Authority

(SEAL)

#### **APPENDIX 'A'**

SPECIFICATIONS FOR INSTALLATION OF SANITARY SEWERS AND APPURTENANCES

#### SPECIFICATIONS FOR INSTALLATION OF SANITARY SEWERS AND APPURTENANCES

#### **TABLE OF CONTENTS**

	Section	Page
1.01	Scope of Work	1
1.02	Excavation and Backfill – General	1 1 2 3 3 3 4 6 7 7 7 7 8
1.03	Trench Excavation	1
1.04	Explosives and Blasting	2
1.05	Sheeting, Shoring and Bracing	3
1.06	Pumping	3
1.07	Preparation of Trench Foundation	3
1.08	Backfilling Trenches	3
1.09	Pipe Materials	4
1.10	Laying of Pipe	6
1.11	Service Connections	7
1.12	Concrete Anchors and Encasement	7
1.13	Drop Connections	7
1.14	End of Pipe to be Protected	7
1.15	Connections to Existing Manholes	8
1.16	Manholes	8
1.17	Testing of Gravity Sewers	10
1.18	Accommodation of Traffic	11
1.19	Accommodation of Drainage	11
1.20	Stream Crossings and/or Encroachments	12
1.21	Restoration of Private Property	12
1.22	Temporary Paving and Restoration of Unpaved Traveled Areas	13
1.23	Responsibility for Condition of Excavation	14
1.24	Protection of Property and Structures	14
1.25	Restoration of Paved Surfaces	15

### INSTALLATION OF SANITARY SEWERS AND APPURTENANCES

#### 1.01 SCOPE OF WORK

The installation of sanitary sewers, and appurtenances shall be done in accordance with these specifications.

#### 1.02 EXCAVATION AND BACKFILL – GENERAL

The Developer shall excavate, protect and backfill all foundations, trenches, and other excavations that may be necessary for completing the work to be done. All excavation shall be in open cuts, except where and to such extent as the Authority may authorize or direct that the same be done by boring or jacking. Trenches may be, in general, excavated and backfilled either by machinery, or by hand as the Developer may elect; provided, however, that the Authority is empowered wherever it shall decide that such necessity exists, to direct that hand excavation be employed; and provided further, that backfilling by hand shall be done to the extent hereinafter specified.

#### 1.03 TRENCH EXCAVATION

The Authority shall have the right to limit the amount of trench opened in advance of backfilling. Generally, a length of 100 feet of open trench will be permitted.

Side walls of trenches shall be kept as nearly vertical as possible, and the trenches shall be not less than twelve inches (12"), nor more than twenty-four inches (24"), wider than the nominal inside pipe diameter. Should the use of trench boxes be required, the trench shall not be less than forty-two inches (42") wider than the nominal inside pipe diameter. The trenches shall be excavated true to line so that a clear space not less than six inches (6"), nor more than eight inches (8"), in width is provided on each side of the pipe to a height not less than the top of the pipe. If sheeting is required, the foregoing dimensions shall be applicable to the inside faces of the sheeting.

Except for locations where excavation of rock or unsuitable material is required, care shall be taken not to excavate below the depths specified. Where rock is encountered, it shall be removed to a depth six inches (6") below the bottom of the pipe. When the material encountered at subgrade is unstable, it shall be removed from under the pipe and on each side of the pipe for a distance of one (1) diameter of the pipe. Such rock or unstable material excavation below subgrade shall be backfilled with crushed stone cradle, compacted to the satisfaction of the Authority, and the bed thus formed shaped as required above.

Excavation for manholes, and other accessories shall have a twelve inch (12") minimum and twenty-four inch (24") maximum clearance on all sides. All manholes shall be set on special bedding material a minimum of four inches (4") in depth. Bedding shall be AASHTO #57 aggregate, or other material approved by the Authority.

For excavation in paved areas, the paving shall be removed for a width equal to the trench width plus twelve inches (12") on each side of the trench. In case the Developer removes or disturbs the pavement on account of settlement, slides, blasting, or caveins, the Developer is required to replace all such pavement removed or disturbed. Pavement shall be cut to neat lines using equipment suitable for such work and the edges of the pavement shall be protected and maintained by the Developer until the repaving is completed.

#### 1.04 EXPLOSIVES AND BLASTING

Blasting is not permitted unless authorized by the Authority. The Authority shall be empowered to regulate the character and strength of explosives used, and the manner of their use and storage. Only small amounts of explosives shall be kept at any place and shall be kept under lock, the key to be only in the hands of a trustworthy person. Great care shall be take in handling dynamite and similar explosives during freezing weather. Caps and exploders shall not be kept in the same place as explosives. Blasts shall be properly matted and securely covered.

The Developer shall be solely responsible for injury to persons or property that may result from his use of explosives, and the exercise of, or failure to exercise control on the part of the Engineer shall in no way relieve him of responsibility for injury or damage resulting from their use.

All blasting shall be done under the supervision of a competent blasting expert and subject to the Commonwealth, county, or local regulations for blasting. Whenever any pipe main or conduit is encountered in the trench, the right is reserved to direct that all rock within five feet (5') of the same be removed by some method other than blasting.

A copy of the blaster's log will be submitted to the Authority for each day's blasting. This copy is to be submitted at the end of the day's work. It will indicate the time of the shot, number of holes, depth of holes, size of charge in each hole, and type of detonator used. Results of each shot will be noted, along with any reports of damage, either on the right-of-way or to surrounding properties.

Where there is any possibility of damage from ground waves occurring to adjoining properties, the Developer will provide for the use of a recording seismograph at his own expense if so requested by the Authority. Records taken from the machine will be attached to the reports of the shots and submitted to the Authority if required.

#### 1.05 SHEETING, SHORING AND BRACING

Sheeting, bracing and shoring shall be furnished and driven or set in place by the Developer in accordance with the current regulations of the Pennsylvania Department of Labor and Industry for excavations and construction, or wherever required by the Authority to protect the workers and the public or to maintain the maximum trench widths, regardless of whether the same is or is not considered necessary by the Developer. Any and all lights, signs, barricades shall be provided by the Developer at not cost to the Authority.

#### 1.06 PUMPING

The Developer shall keep all excavations free from water, while installation work is in progress, and to such extent as may be necessary while excavation work alone is being carried on. The Developer shall build all dams and other devices necessary for this purpose, including lowering the water table below trench bottom by well points and pumping, and provide and operate pumps of sufficient capacity for dewatering the excavations in such manner as shall not cause injury to the public health, to public or private property, to the work of other contractors, to any portion of the work complete or in progress, or provide any impediment to the use of the highways, roads, lanes, and streets by the public.

#### 1.07 PREPARATION OF TRENCH FOUNDATION

All pipe shall be laid on special bedding material that has been properly leveled. Bedding shall be a minimum of four inches (4") in depth for the width of the trench bottom and shall be AASHTO #57 aggregate, run of bank gravel, or other material approved by the Authority. Materials not acceptable as bedding include sharp edged aggregate, earth, wet granulated slag, and open hearth slag. Bell holes shall be properly formed in the bedding to provide free support of the pipe barrel.

#### 1.08 BACKFILLING TRENCHES

After the pipelines and its appurtenances have been laid, all trenches shall be backfilled in four inch (4") layers with AASHTO #57 aggregate or other approved material to a height of at least two feet (2') above the top of the pipe and solidly rammed down and tamped around the pipe and under it, with mechanical tampers and proper tools made for this purpose. Unless the pipe line is located along, within or across roadways, thoroughfares or driveways, the remainder of the trench shall be backfilled with clean earth to the required height in layers not exceeding one foot (1') in thickness. Mechanical tampers shall be used so as to obtain maximum compaction of the material.

If the material excavated from the trench is not clean earth and is not suitable for backfilling, as determined by the Authority, the Developer shall provide suitable material

from other sections of the work or from borrow and shall properly dispose of unused material.

For backfilling trenches located within, along or across all paved and unpaved roadways, thoroughfares, driveways and parking areas, the following procedure shall be used. The trench shall be completely backfilled with AASHTO #57 aggregate or other approved material. The first two feet (2') above the pipe shall be installed in four inch (4") layers and shall be solidly tamped with mechanical tampers. The remainder of the trench shall be backfilled in layers not to exceed one foot (1') in thickness and shall be compacted with mechanical tampers.

All backfilled surfaces shall be maintained flush with the adjacent undisturbed surfaces.

As the trenches are filled in and the work completed, the Developer shall remove and dispose of all surplus earth, stone, slag, or other material from the work in such manner and at such point or points, as he may select or provide, subject to the approval of the Authority, and shall leave all roads, sidewalks and other places free, clear and in good order.

#### 1.09 PIPE MATERIALS

#### A. Sanitary Sewers

The type of pipe to be used for gravity sanitary sewers is Polyvinyl Chloride (PVC) pipe. The pipe must be of the class as specified herein. Only one type of pipe shall be used throughout the work unless specified otherwise. Manufacturer's test certificates shall be furnished for all pipe delivered to the site.

PVC pipe shall conform to the requirements of ASTM 3034, (SDR 35). The pipe shall be installed in strict accordance with the manufacturer's recommendations and ASTM D2321. All fittings shall conform to the required ASTM D1784 cell classification. Adaptors designed for the specific purpose shall be used to connect pipes of different materials. A manhole water stop gasket and clamp assembly shall be installed around the pipe when entering and leaving a manhole. Special attention shall be given to bedding and side fill material and placement of same in order to develop optimum pipe support.

#### 1. Polyvinyl Chloride (PVC)

PVC pipe shall conform to the requirements of AWWA C900 specifications for Polyvinyl Chloride Pressure Pipe and shall be Class 150, D.R. 18 pipe, with bell and spigot push-on type joints with elastomeric type gaskets.

The pipe shall be suitable for use as pressure conduit. Provisions must be made for expansion and contraction at each joint with an elastomeric ring. The bell shall consist of an integral wall section with a locked-in, solid cross section elastomeric ring which meets the requirements of ASTM F-477. The bell section shall be designed to be at least as hydrostatically strong as the pipe wall and meet the requirements of AWWA C900.

Standard laying lengths shall be 200 feet ( $\pm$  1") for all sizes. At least 85% of the total footage of pipe of any class and size shall be furnished in standard lengths. The remaining 15% can be furnished in random lengths. Random lengths shall not be less than 10 feet long. Each standard and random length of pipe shall be tested to four times the class pressure of the pipe for a minimum of 5 seconds. The integral bell shall be tested with the pipe.

All fittings, bends, tees, etc., shall be ductile iron with mechanical joints conforming to the requirements of AWWA C110 (ASNI A21.10) with cement lining in accordance with AWWA C140 and with an outside asphaltic coating. All fittings shall have a pressure rating of 250 psi.

#### 2. <u>Ductile Iron Pipe</u>

Ductile Iron Pipe shall be Class 50 and shall conform to the requirements of ASNI A21.51 (AWWA C151). Pipe shall have an ultimate tensile strength of 60,000 pounds per square inch minimum, a yield point of 42,000 pounds per square inch minimum and an elongation of 10 percent minimum.

All pipe shall be of the bell and spigot type with rubber gasket push-on-joints conforming to ASNI A21.11; shall be double cement lined and bituminous seal coated in accordance with ANSI A21.4; and the exterior shall be tar coated.

All fittings, bends, tees, etc., shall be ductile iron with mechanical joints conforming to the requirements of AWWA C110 (ASNI A21.10) with cement lining in accordance with AWWA C140 and with an outside asphaltic coating. All fittings shall have a pressure rating of 250 psi.

#### 1.10 LAYING OF PIPE

Following the trench preparation, pipe laying shall proceed upgrade with the pipe laid carefully, hubs upgrade, spigot ends fully entered into adjacent hubs, and true to lines and grades given. Every pipe shall be carefully inspected before laying and any containing cracks or defects shall not be used. Extreme care must be exercised to prevent breakage when the pipe is handled. Sockets shall be carefully cleansed before pipes are lowered into trenches. Each section of pipe shall rest upon the pipe bed for the full length of its barrel with recesses excavated to accommodate bells and joints. Each pipe shall be firmly held in position so that the invert forms a continuous grade with the invert of the pipe previously placed. The interior of all pipe and the inside of the bell and outside of the spigot shall be thoroughly cleaned of all foreign matter before being lowered into the trench, and shall be kept clean during laying operations, by means of plugs or other approved devices. Under no conditions, shall pipe be laid when trench conditions are unsuitable for such work. In all cases water shall be kept out of trench until concrete cradles or supports, where used, and materials in the joints have hardened.

Walking or working on the completed pipe line, except as may be necessary in backfilling or tamping, shall not be permitted until the trench has been backfilled to a height of at least two feet (2') over the top of the pipe.

Developer must use a laser beam instrument to set the line and grade, or, with approval of the Engineer, may provide grade boards at intervals not exceeding 50 feet.

When cutting of pipe is necessary to suit actual distances between the manholes, cuts shall be made with sharp and proper tools at right angles to the axis of pipe. The ends shall be smoothed and all burrs shall be removed.

All pipes shall be joined in strict conformance with the manufacturer's written specifications so that all joints will be watertight.

Maximum deflections for mechanical joint and push-on joints shall be as specified in AWWA 6-0-64.

The pipe, fittings and other accessories shall be hauled to the site from the point of delivery, and unloaded by means that will not result in any damage to the pipe, and under no circumstances, shall the pipe be dropped from the truck.

#### 1.11 SERVICE CONNECTIONS

In general, connections to mains will be made with commercially manufactured wye branches. In cases where connections are made to existing sewers, commercially manufactured saddles shall be used.

Service connections shall be installed in accordance with the Standards in Attachment "B" of the Rules and Regulations.

The free end of all service lines, whether it be the end of a wye, bend or straight piece, shall be provided with a stopper of the same material as the pipe and having a joint of the same type as that on the pipe and pipe fittings, such that the stopper will be securely placed and the connection between the pipe and the stopper will be watertight. The stopper shall be installed with the last section of service pipe or fitting placed.

#### 1.12 CONCRETE ANCHORS, AND ENCASEMENT

Where required by the Authority, pipes shall be placed on a concrete cradle, or concrete shall be placed around pipes for anchors, bedding and encasement. Concrete anchors or cradles shall consist of structures composed of concrete built-in trenches to support pipes and to the dimensions furnished by the Authority, and <u>requiring</u> forms. Concrete bedding and encasement shall be composed of concrete placed in trenches without forms as pipe bedding, or encased around pipes, to the dimensions and in the locations directed by the Authority.

#### 1.13 DROP CONNECTIONS

The Developer shall build drop connections, where drop in the invert is 2.0 feet or more, or as directed by the Authority, and in conformity as specified herein.

#### 1.14 END OF PIPE TO BE PROTECTED

In all cases the mouth of the pipe shall be provided with a board or stopper carefully fitted to the pipe, to prevent earth or other substances from washing into the pipe.

Developer shall cut neat openings into the manholes, reconstruct the bottoms to form proper inverts, eliminate connections no longer needed, properly plug and make watertight all openings and repair the manholes. The final connections shall be delayed until sewage flows can be conducted to proper points of discharge.

#### 1.15 CONNECTIONS TO EXISTING MANHOLES

When making pipe connections to existing manholes, the Developer shall cut neat openings into the manholes, reconstruct the bottoms to form proper inverts, eliminate connections no longer needed, properly plug and make watertight all openings and repair the manhole. The final connections shall be delayed until sewage flows can be conveyed to proper points of discharge.

#### 1.16 MANHOLES

#### A. General

Manholes shall be constructed promptly as the sections of the sewer between them are completed. If this is not done, the Authority shall have the authority to stop further trenching and pipe laying until manhole construction is brought up properly.

#### B. <u>Precast Reinforced Concrete Sections</u>

Walls of manholes shall be 48-inch diameter reinforced concrete ring sections. The risers and tops sections shall be manufactured in compliance with the requirements of Tentative Specifications for Pre-Cast Reinforced Concrete Manhole Risers and Tops, ASTM Designation C478-61T. Top sections shall have a top width of such design and dimensions as to properly support the required manhole frame and cover and the lower joint shall be of the tongue and groove design.

#### C. Manhole Frame and Covers

Frames and covers shall be roadway non-rocking type with machined surfaces. Frame shall have a clear opening of 27-inch diameter. Material used in manufacture of frame and lid shall conform to ASTM A-48 for Class No. 30. The cover shall have two (2) rectangular openings for removal, and be inscribed with the words "SANITARY SEWER". The castings shall be sound, true to form and thickness, cleaned by means of sand blasting and neatly finished. Castings shall receive one (1) coat of black asphaltic paint at the factory. At the locations directed by the Authority, watertight manhole frames and covers shall be installed. The manufacturer and catalog number which is acceptable, or equal, is: Neenah Foundry Model No. R-1753-A.

#### D. Manhole Steps

Steps shall be reinforced polypropylene plastic conforming to the requirements of ASTM D2146-68, Type II Grade 49108. Reinforcing shall be 3/8" Grade 60 deformed steel bar conforming to the requirements of ASTM A615.

#### E. Concrete

Cement concrete work shall be in accordance with the requirements of PennDOT Form 408 Specifications, Section 1001. All concrete shall be Class A.

#### F. Mortar

The mortar for use between manhole sections shall consist of one part cement, two parts sand, water and two pounds of Medusa integral waterproofing powder per bag of cement.

#### G. Construction Methods

- 1. <u>Excavation and Backfill</u> Shall conform to the applicable requirements stated herein.
- 2. <u>Concrete Bases</u> Bases may be either poured-in-place concrete or precast concrete. Where precast bases are used they shall be constructed from monolithically poured concrete and shall be provided with an integral rubber boot coupling, such as the Interpace Lock Joint Flexible Manhole Sleeve. Poured-in-place bases shall conform to the details. Manhole inverts shall be formed with concrete and shall be smooth and accurately shaped to a semicircular bottom conforming to the inside of the adjacent sewer sections. Inverts shall conform to the details. All manhole bases shall be laid on a minimum of six inches (6") of crushed stone bedding.
- 3. <u>Manhole Sections All precast concrete ring sections and top</u> sections shall fit together readily to permit effective jointing. Particular care shall be taken to obtain a watertight joint between the riser sections. Rubber "O" rings shall be used in the joints between manhole sections.
- 4. <u>Frames and Covers</u> Frames and covers shall be set to correct elevation on a full bed of cement mortar. Where required, final adjustment of frame to elevation shall be by means of brick masonry; no more than three courses of brick shall be used.

- 5. <u>Manhole Steps</u> Steps shall be cast into the walls of the riser and conical top sections and be aligned vertically and spaced so as to be on equal centers in the assembled manhole at a maximum distance apart of twelve inches (12").
- 6. <u>Waterproofing</u> The exterior of concrete manholes shall be waterproofed prior to backfilling. Waterproofing material shall consist of two coats of an emulsified asphalt compound designed for exterior surfaces below grade such as Hydrocide 600 or equal, and shall be applied in accordance with manufacturer's specifications.
- 7. <u>Testing of Manholes</u> Manholes shall be tested using a vacuum test acceptable to the Authority.

#### 1.17 <u>TESTING OF GRAVITY SEWERS</u>

Each section of sewer between manholes shall be cleaned and tested by the Developer in the presence of an Authority representative.

Each section of sewer between manholes shall show a full circle of light.

#### A. <u>Deflection Test</u>

The Contractor shall perform a deflection test on all flexible pipe. The test shall be performed not less than thirty (30) days after final backfill has been placed.

The test shall be run using a rigid ball or mandrel having a diameter equal to ninety-five percent (95%) of the inside diameter of the pipe. The ball or mandrel shall be pulled through the pipeline, from manhole to manhole, without the use of mechanical pulling devices.

#### B. Air Test

Each section of sewer between manholes shall be air tested by the Contractor. The air testing shall be done in accordance with the requirements of ASTM C828-86, entitled "Standard Practice for Low-Pressure Air Test of Vitrified Clay Pipe Lines".

All repairs shown necessary by tests and inspection are to be made by the Contractor, all broken or cracked pipe is to be replaced, all deposits in the sewer are to be removed, and the sewer left true to line and grade and entirely clean.

#### 1.18 ACCOMMODATION OF TRAFFIC

Streets shall not be unnecessarily obstructed, and unless the Authority, in writing, shall authorize the complete closing of the street, the Developer shall take such measures, as may be necessary to keep the street or road open and safe for traffic.

The Developer shall construct and maintain adequate and proper bridges over excavation as may be necessary or as directed for the safe accommodations of pedestrians and vehicles. The Developer shall furnish and erect substantial barricades at crossings of trenches, or along the trench, to protect the traveling public.

The Developer shall not obstruct fire hydrants.

The roadway on one side of the line of work shall be kept open at all time.

The streets, crosswalks, and sidewalks shall be kept clean and free for the passage of vehicles or pedestrians, unless otherwise authorized in writing by the Authority. A straight and continuous passageway on sidewalks and over crosswalks, at least three feet in width, shall be preserved free from all obstructions.

Where deemed necessary, such additional passageway as may be directed shall be maintained free of obstructions.

In narrow or congested streets or alleys, when so directed, the Developer shall complete his work up to a point designated by the Authority before opening the work ahead, in order to give access to garages and other places. The Developer shall in all cases so arrange his work as to cause the least inconvenience to property owners, consistent with the proper prosecution of the work as determined by the Authority.

#### 1.19 ACCOMMODATION OF DRAINAGE

Gutters, sewers, drains and ditches shall be kept open at all times for surface drainage. No damming or ponding of water in gutters or other waterways will be permitted, except where stream crossings are necessary and then only to an extent which the Authority shall consider necessary. The Developer shall not direct any flow or water across or over pavements except through approved pipes or properly constructed troughs; and he shall, when so required provide pipes or troughs of such sizes and lengths as may be required and place the same as directed. The grading in the vicinity of pipe trenches shall be controlled so that the ground surface is properly pitched to prevent water running into the trenches.

#### 1.20 STREAM CROSSINGS AND/OR ENCROACHMENTS

Developer shall take sufficient care to prevent silting of streams and pollution of streams at stream crossings and/or encroachments. The following actions shall be avoided:

- 1. Operation of heavy equipment in the stream.
- 2. Changing the course of the stream during construction.
- 3. Pumping of muddy or silt-laden water into the stream.
- 4. Dumping of spoil or surplus excavated materials into the stream or on the banks from where it may slide into the stream.
- 5. Leaving cofferdams or similar structures in the stream to be carried away by high water.
- 6. All stream crossings shall be made in accordance with the requirements of the Pennsylvania Department of Environmental Protection.

#### 1.21 RESTORATION OF PRIVATE PROPERTY

Upon completion of all compacted backfilling of non-topsoil excavation, the topsoil previously removed and stored shall be replaced and mounded over the backfilled area. Immediately upon backfilling of the trench for the entire length of each individual property, the entire disturbed area of the property shall be cleaned of all debris, graded and fine-raked. Thereafter, all shrubbery, hedges, trees, fences, walkways, etc., shall be replaced to a condition of equal to that before construction. Reseeding of the backfilled area within the reasonable limits of the construction is required. However, the careful replacement of the topsoil, the prompt cleanup and racking of the construction area on each property, the complete replacement of all removed surface items and the continued maintenance of the top surface of the trench shall be strictly enforced. In the event that the trench surface compacts in some places lower than the original grade, these areas shall be refilled with topsoil, whether or not available on the property upon which the depression occurs. The Developer shall be required to periodically inspect all mounded areas of backfill and repair and maintain these areas as necessary until no further compaction results. Re-seeding and mulching must be done within thirty (30) days of backfilling, weather permitting. Hydro-seeding methods are acceptable.

Before seeding, the topsoil shall be loosened to a depth of at least two inches (2") and raked to removal all large stones. Lime shall be applied to the surface at the rate of 100 lbs. Per 1,000 square feet of area; lime shall be raw, finely ground limestone. At

least one full week after the lime has been applied, fertilizer shall be applied at the rate of 50 lbs. Per 1,000 square feet; fertilizer shall be a complete commercial fertilizer with analysis of 5-10-2. Seed mix shall be as follows:

38.5%	Kentucky Bluegrass
24.75%	Creeping Red Fescue
10.80%	Perennial Rye
10.30%	Annual Rye
2.05%	Red Top
10.60%	Inert Matter

Seed shall be equal to those manufactured by Seaboard Seed Company or Standford Seed Company. Seed shall be applied at the rate of 1 lb. Per 200 square feet. The seed shall be raked or brushed in the area covered with 1/4" of peat moss. The Developer shall be responsible for a good stand of grass and shall do the required watering and reseeding.

Any pavement disturbed shall be replaced in accordance with the requirements of Article 1.25.

# 1.22 <u>TEMPORARY PAVING AND RESTORATION OF UNPAVED TRAVELED AREAS</u>

In all paved areas other than state highways and in all unpaved areas used as thoroughfares, road shoulders, driveways or parking areas, the Developer shall provide over all backfilled excavations a temporary paving consisting of a layer of crushed stone conforming in grading requirements to three inches (3") of coarse aggregate, which shall be eight inches (8") in depth after approved compaction.

The stone shall be spread on a thoroughly tamped subgrade and shall be rolled with a 10-ton roller until there is no evidence of further compaction or settlement. There shall then be spread over the coarse material successive layers of fine material conforming to the following gradations:

Passing #100 Screen	-	10-30%
Passing #4 Screen	-	85-100%
Passing 3/8" Screen	-	100%

Each layer shall be broomed in and rolled until all voids are filled. Following the application of the fine material, the surface shall be sprinkled with water and re-rolled thoroughly, additional fines being added as needed to fill all voids. The complete surface shall be flush with or slightly crowned above the adjacent pavement as directed.

The Developer shall also continuously maintain these temporary pavings to the satisfaction of the Authority, from the time of temporary paving operations, until permanent pavement is placed thereon.

The Developer shall be responsible for any injury or damage resulting from lack of required trench maintenance.

#### 1.23 RESPONSIBILITY FOR CONDITION OF EXCAVATION

The Developer shall be responsible for the condition of all excavation made by him. All slides and cave-ins shall be removed regardless of what circumstances caused such slide or cave-in.

The neglect, failure, or refusal of the Authority to order the use of bracing or sheeting, or a better quality, grade, or section, or larger sizes of steel or timber, or to order sheeting, bracing, struts, or shoring to be left in place, or the giving or failing to give orders or directions as to the manner or method of placing or driving sheeting, bracing, jacks, wales, rangers, etc., shall not in any way or to any extent relieve the Developer of any responsibility concerning the condition of excavation.

#### 1.24 PROTECTION OF PROPERTY AND STRUCTURES

The Developer shall sustain in their places, and protect from direct or indirect injury, all pipes, tracks, walls, buildings, and other structures or property in the vicinity of his work, whether above or below the ground, or that may appear in the trench. He shall at all time have a sufficient quantity of timber and plank, chains, ropes, etc., on the ground and shall use them as necessary for sheeting his excavations and for sustaining or supporting any structures that are uncovered, undermined, endangered, threatened, or weakened.

The Developer shall take all risks attending the presence or proximity of pipes, poles, tracks, walls, building and other structures and property, of every kind and description, in or over his trenches, or in the vicinity of his work. Whether above or below the surface of the ground; and he shall be responsible for all damages and assume all expense for direct or indirect injury, caused by his work to any of them, or to any person or property by reason of injury to them.

The Authority reserves the right under such conditions to stop the excavation or any other part of the work, and to require the Developer to complete the pipeline and the backfilling up to such a point as the Authority may direct before proceeding further with the excavation.

#### 1.25 RESTORATION OF PAVED SURFACES

Street paving, sidewalks, driveways, gutters, inlets and concrete curbing, where broken into, shall be restored by the Developer and shall be repaved or rebuilt using the same type of construction as was in the original, except as otherwise specified herein. The Developer shall be responsible for restoring all such work, including subgrade, and base courses where present. The Developer shall satisfy himself as to any requirements other than those herein set forth which may affect the type, quality and manner of carrying on the restoration of surfaces by reason of the jurisdiction of local or other governmental bodies.

#### A. Materials

All paving materials used in work covered by this section of the specifications shall conform to the current edition of the Pennsylvania Department of Transportation Specification Form 408. All other materials used in work covered by this section of the specifications shall be of a quality at least equal to that of the present construction. Before use, when required by the Engineer, samples of materials shall be submitted for test, and no material shall be used until approval is granted.

No permanent paving shall be placed within less than thirty (30) days after backfilling, unless approved by the Authority.

# B. <u>Paving all Township Roads and Driveways Having</u> <u>Bituminous Surfaces</u>

The following procedure shall be followed when paving any non-state roads and driveways having bituminous surfaces: an 8" base of No. 3 crushed stone or slag compacted with 10-ton roller, successive layers on No. 2A crushed stone or slag broomed in and rolled until all voids in the coarser material are filled, and 4-1/2 inches (after compaction) of superpave bituminous material surface course consisting of a 3-inch thick binder course and 1-1/2 inch thick wearing surface.

The Developer shall comply with all Local/Township requirements regarding permitting and restoration of local roadways.

#### C. State Roads

The Developer shall comply with all Pennsylvania Department of Transportation requirements regarding replacement of State road pavement.

# D. <u>Unpaved Streets, Roads, Lanes or Other Unpaved Areas</u> <u>Used as Streets, Driveways, or Walks and Traveled Portions of Berms of All Street</u>

For all unpaved streets, roads, lanes or other unpaved areas used as streets, driveways, or walks and traveled portions of berms of all streets through which excavation has been made, the choked, crushed stone base required as temporary paving shall be considered as final surface. It is however, further required that the <a href="entire">entire</a> roadway or traveled area for the distance that any port of it has been effected by excavation shall be graded to original surface and oil treated, unless specifically waived by the Authority.

All joints between existing pavements and repaving work, the edges of the existing pavements shall be cut back parallel with the trench in straight lines and right angles, neatly trimmed and as approved by the Authority. In all cases, pavement and replacement shall be extended to at least 12" beyond the edge of the trench onto undisturbed base.

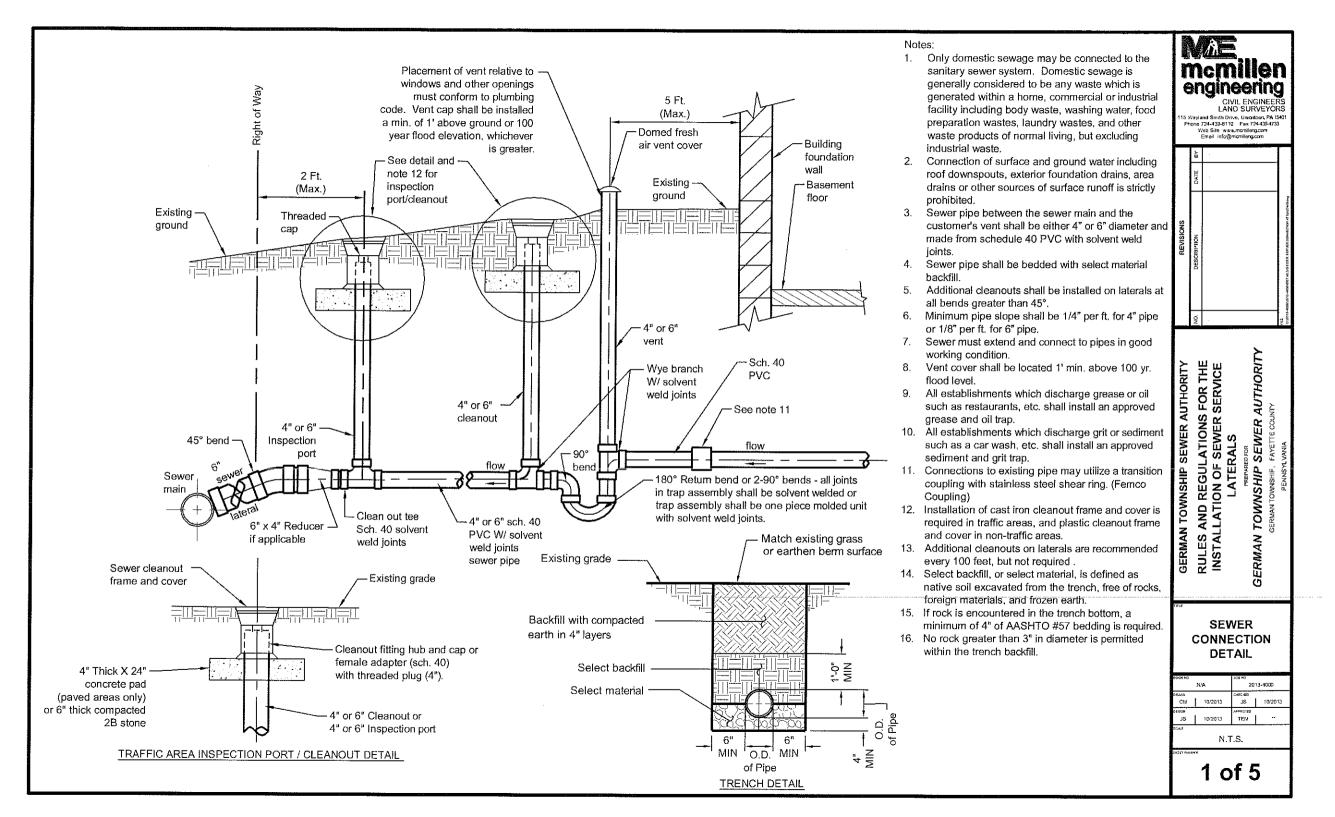
To the extent that the temporary paving does not provide a base course conforming in all ways to the requirements of the permanent pavement replacement, the temporary paving shall be removed. If satisfactory to and approved by the Authority, the Developer may provide a different type of temporary paving surface than that specified which will conform to the base course requirements of the permanent pavement replacement.

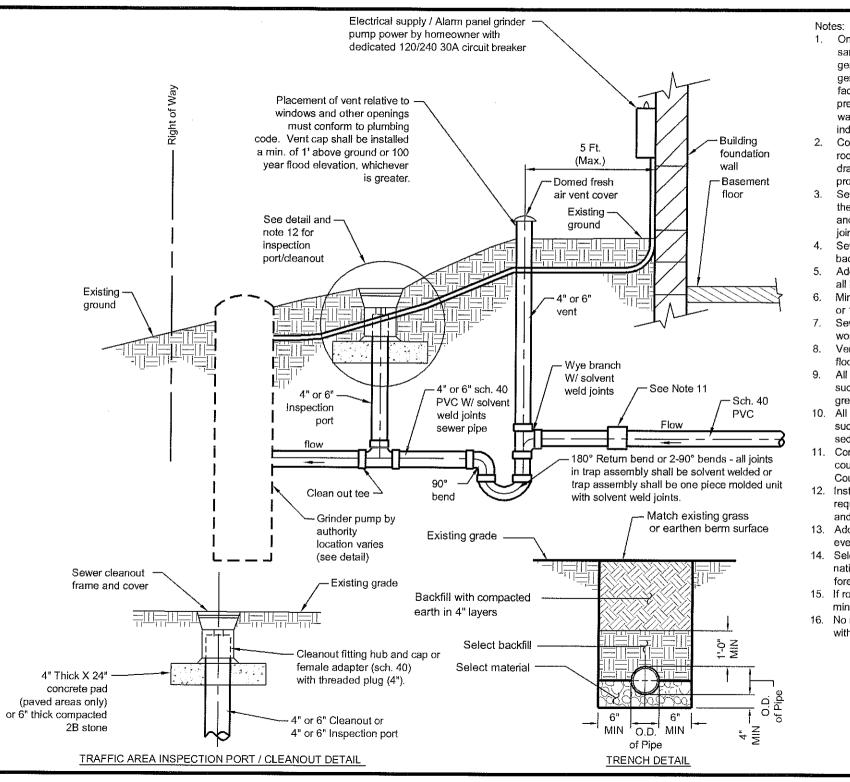
#### E. Cleanup

It shall be the responsibility of the Developer to keep the site neat and clean as work progresses, and upon completion of the work to spend special effort so as to remove all debris, trash, excess material and unsightly facilities. Prior to final acceptance, the structure, machinery, and appurtenant materials, as well as the site on which the pipeline is located, shall be thoroughly cleaned and made pleasing in appearance. Should the Developer fail to keep cleanup current, the Authority is authorized to shut down all parts of the job until cleanup is current.

# **APPENDIX 'B'**

DETAIL AND SPECIFICATIONS FOR THE INSTALLATION OF SEWER SERVICE LATERALS



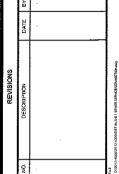


- Only domestic sewage may be connected to the sanitary sewer system. Domestic sewage is generally considered to be any waste which is generated within a home, commercial or industrial facility including body waste, washing water, food preparation wastes, laundry wastes, and other waste products of normal living, but excluding industrial waste.
- Connection of surface and ground water including roof downspouts, exterior foundation drains, area drains or other sources of surface runoff is strictly prohibited.
- Sewer pipe between the grinder pump station and the customer's vent shall be either 4" or 6" diameter and made from schedule 40 PVC with solvent weld joints.
- Sewer pipe shall be bedded with select material backfill.
- Additional cleanouts shall be installed on laterals at all bends greater than 45°.
- Minimum pipe stope shall be 1/4" per ft. for 4" pipe or 1/8" per ft. for 6" pipe.
- Sewer must extend and connect to pipes in good working condition.
- Vent cover shall be located 1' min. above 100 yr. flood level.
- All establishments which discharge grease or oil such as restaurants, etc. shall install an approved grease and oil trap.
- All establishments which discharge grit or sediment such as a car wash, etc. shall install an approved sediment and grit trap.
- Connections to existing pipe may utilize a transition coupling with stainless steel shear ring. (Femco Coupling)
- Installation of cast iron cleanout frame and cover is required in traffic areas, and plastic cleanout frame and cover in non-traffic areas.
- Additional cleanouts on laterals are recommended every 100 feet, but not required.
- Select backfill, or select material, is defined as native soil excavated from the trench, free of rocks, foreign materials, and frozen earth.
- If rock is encountered in the trench bottom, a minimum of 4" of AASHTO #57 bedding is required.
- No rock greater than 3" in diameter is permitted within the trench backfill.

#### MAE mcmillen engineering

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AND REGULATIONS FOR THE
LATION OF SEWER SERVICE
LATERALS
REFUREDFOR
TOWNSHIP SEWER AUTHORITY
DERMAN TOWNSHIP, FAVETTE COUNTY

SEWER AUTHORITY

GERMAN TOWNSHIP

RULES AND FINSTALLATION

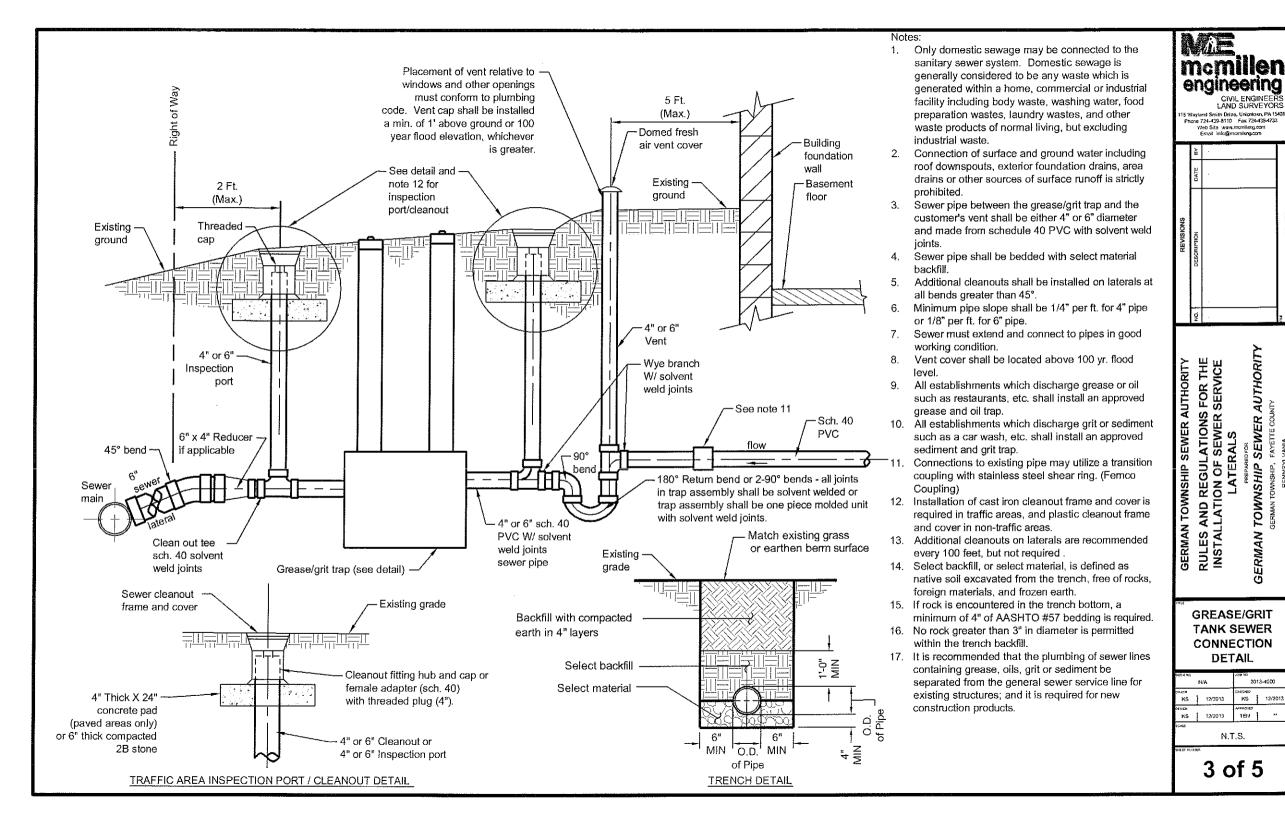
GRINDER PUMP SEWER CONNECTION DETAIL

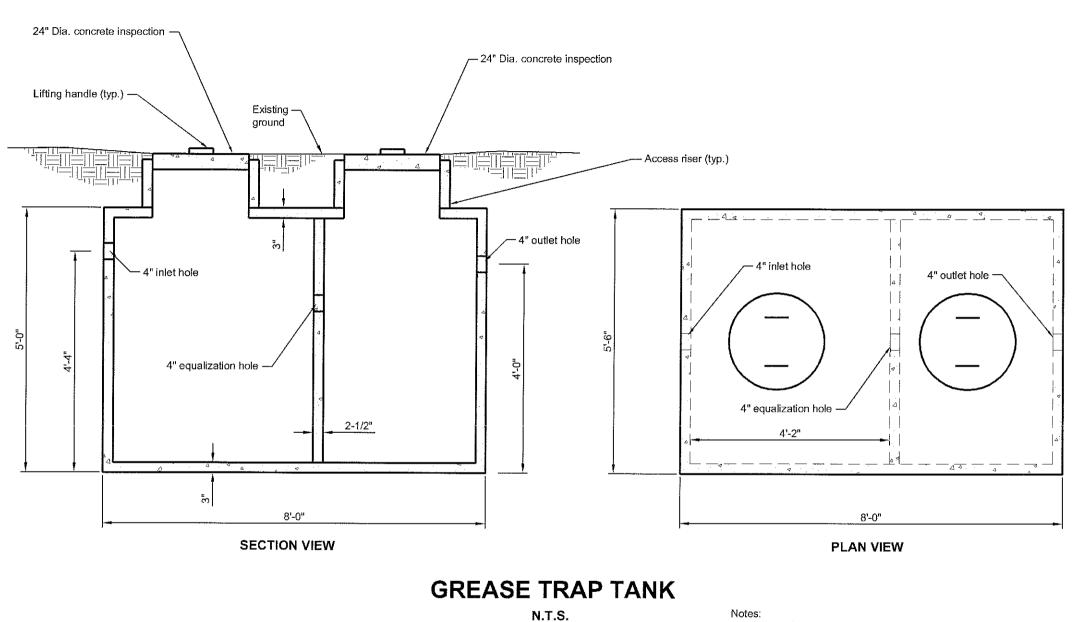
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- Inlet and outlet hole measurements to center of 4" hole.
- 2. 4000psi concrete @ 28 days.
- Tanks must be pumped as needed, and at a minumin on an annual basis.
- Access covers should have risers to bring cover access to grade.
- Access covers, risers and tank lids should be traffic load bearing in travel areas.
- 6. Grease trap tank shall have a 1000 gal. capacity.

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RULES AND REGULATIONS FOR THE SEWER SERVICE GREASE TRAP

PREPARED FOR THE GERMAN TOWNSHIP SEWER AUTHORITY

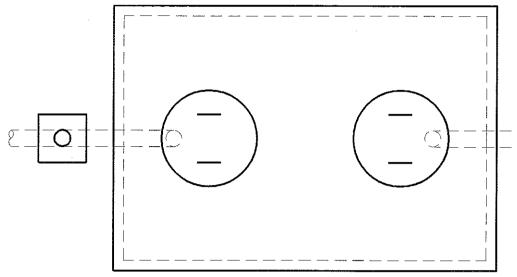
GERMAN TOWNSHIP, FAYETTE COUNTY

SEWER GREASE TRAP

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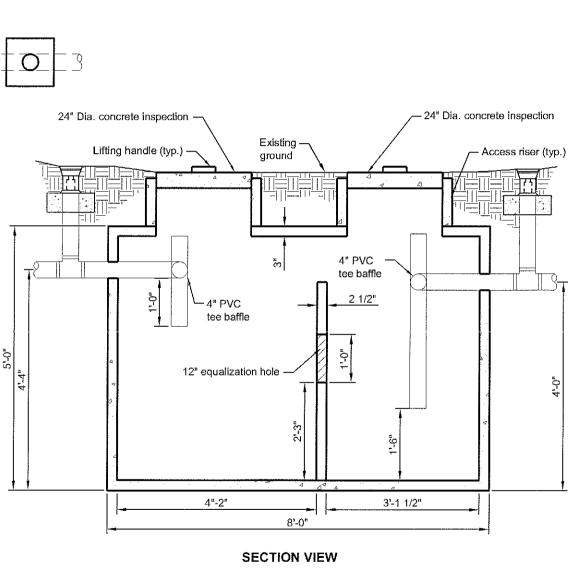


#### **PLAN VIEW**

- 1. Inlet and outlet hole measurements to center of 4" hole.
- 2. 4000psi concrete @ 28 days.
- Tanks must be pumped as needed, and at a minumin on an annual basis.
- 4. Access covers should have risers to bring cover access to grade.
- Access covers, risers and tank lids should be traffic load bearing in travel areas.
- 6. Grit trap tank shall have a 1000 gal. capacity.

#### **GRIT TRAP TANK**

N.T.S.



engineering

EAND SORVE FORD

EAND SORVE FORD

Those 724-433-8110 Fax 724-433-4733

Vieb Site www.mornlleng.com

Email info@mornleang.com

PREPARED FOR SEWER AUTHORITY GERNAN TOWNSHIP, FAYETTE COUNTY RULES AND REGULATIONS FOR THE SEWER SERVICE GREASE TRAP

> SEWER **GRIT TRAP**

2013-4000 KS | 12/2013 TEM \*\* JS 12/2013 N.T.S.

5 of 5

#### German Township Sewage Authority

Rules and Regulations for the Installation of Sewer Service Laterals

1. General: Only domestic sewage may be connected to the sanitary sewer system. Domestic sewage is generally considered to be any waste which is generated within a home, commercial or industrial facility including body waste, washing water, food preparation wastes, laundry wastes, and other waste products of normal living, but excluding industrial waste. Some examples include toilets, washing machines, dish washers, utility tubs, bath tubs, showers and ect. Connection of surface and ground water including roof downspouts, exterior foundation drains, area drains or other sources of surface runoff is strictly prohibited.

There will be a \$250.00 re-inspection fee for any failed inspection.

German Township Sewage Authority reserves the right to perform additional testing and inspection of sewer service in the future. If deficiencies are found in the future, it is the landowner's responsibility to remedy the deficiencies.

- 2. <u>Procedure</u>: The general procedures required in the installation of private sewer service laterals, which shall be in accordance with the Authority's Rules and Regulations for Sewer Service, are shown on the attached Drawing and summarized as follows:
  - (a) Locate and uncover the end of the Authority's service wye and the building drain at the point connections are proposed prior to any further excavation. Determine the elevation of and the required grade between the two points, to assure that the minimum allowed grade of 1/4-inch per foot (2%) for four inch pipe and 1/8-inch per foot (1%) for six inch pipe can be met. If grade cannot be met immediately contact the German Township Sewage Authority.
  - (b) Perform the required inspection of the existing house plumbing to assure that no sump pumps that pump ground or surface water (sump pumps that pump only domestic sewage are permitted), depressed driveway drains, outside cellar stairwell drains, outside window wells, downspouts, foundation drains, or any facility conducting storm water, surface and ground water are connected to the existing plumbing. If prohibited connections exist, they shall be removed and the existing plumbing reinspected.
  - (c) Proceed with further excavation between these two points.
  - (d) Lay pipe from lateral or service wye, or if none exists, from an approved saddle or other service connection installed by Authority personnel, including inspection port near property line upgrade to near the point of

connection to the building sewer. The Authority Inspector shall be notified of the scheduled connection at least 72-hours in advance. Do not connect to the Authority's sewer without the Authority Inspector observing. As part of the building sewer, cleanouts and a visual inspection port shall be installed. In traffic areas, a cast iron frame and cover shall be installed over the inspection port and cleanouts a plastic frame and cover shall be used in non-traffic areas. Care shall be taken to keep the inspection port vertical so that visual inspection may be completed.

- (e) Perform the required testing of the building sewer. Testing shall be in accordance with Section 10 of this Document.
- (f) After approval has been given by the Authority Inspector, the Contractor/Installer shall make the connection at the tap with the Authority Inspector present. Connections to the tap shall be made with an adapter, coupling, reducer fitting or combination thereof. The Contractor/Installer must provide all ditch pumps or whatever is necessary to assure no water, mud, dirt or rock is allowed to enter the tap or lateral. The temporary lateral cap or plug must be removed with the Inspector present.
- (g) For both new and existing buildings, no backfill shall be made on the sewer service lateral; it shall be visible for inspection. If the trench has been backfilled, the sewer service lateral will be plugged until the trench has been re-excavated and the pipe is visible.
- (h) Request inspection by Authority of exposed piping, in which particular attention will be given to:
  - Installation of a suitable trap or traps on the building facilities. A vented trap/cleanout must be installed within five feet (5') of the building.
  - (2) Facilities for conducting roof drainage away from the building and away from the sanitary sewer and the foundation.
  - (3) Facilities for draining the foundation drain away from the building and the sanitary sewer.
  - (4) Connection of prohibited facilities to the sanitary sewer. Included in these facilities are sump pumps that pump ground or surface water (sump pumps that pump only sanitary sewage or gray water are permitted), depressed driveway drains, outside cellar stairwell drains, outside window wells, downspouts, foundation drains, or any facility conducting storm water into the sanitary sewer by any means.

- (5) The slope of the sewer service lateral to the tee at the inspection port, which shall be 1/4-inch per foot or more for four-inch pipe or 1/8-inch per foot or more for six-inch pipe.
- (6) Conformance of materials used in the construction of the sewer service lateral.
- (7) Tightness of joints in pipes and use of mortar or other prohibited materials in joints.
- (8) Testing of sewer line in accordance with Authority standards. Refer to Section 10 of this Document for the Authority Standard.

The property owner shall correct any deficiencies noted by the Authority Inspector in accordance with these requirements.

- (i) Upon inspection and approval by the Authority, make final connection to the building sewer, this work being accomplished in the presence of the Authority Inspector.
- (j) Backfill
- Type And Strength Of Pipe: All pipe installed shall be Schedule 40 PVC solid wall gravity sewer pipe and of at least four (4) inches inside diameter with glued joints. PVC Cellular Core (Foam Core) Pipe is not permitted.

The gravity PVC pipe must conform to ASTMD-1784 Schedule 40. Proper construction and installation methods must be strictly followed.

- 4. Minimum Pipe Slope: Minimum pipe slope shall be 1/4-inch per foot (2%) for four inch pipe or 1/8-inch per foot (1%) for six inch pipe.
- 5. Cleanouts and Traps: The installation of an outside trap with a vent/cleanout and an inspection port on the new service lateral is required. Additional cleanouts are permitted for special conditions of alignment, as may be desired by the property owner. All cleanouts and the inspection port must be installed flush with the finished ground and have a cast iron cleanout frame and cover (Vestal Sewer Cleanout Model No. LH-6 for 4" and LH-10 for 6" or equal) for traffic areas or a plastic frame and cover (NDS 10-in W Round Irrigation Valve Box or equal) for non-traffic area, to protect the cleanout/inspection port from damage.

The use of grease traps on all establishments which discharge grease or oil, such as restaurants, etc, is required. Such facilities must have grease and oil trap(s) installed in accordance with the International Plumbing Code. The grease and oil traps must be approved in writing by the Authority before installation.

6. Pipe laying and backfilling: Following the trench preparation, pipe laying shall proceed upgrade with the pipes laid carefully, hubs upgrade, spigot ends fully entered into adjacent hubs and true to line and grade. Each section of pipe shall rest upon the pipe bedding for the full length of its barrel with recesses excavated to accommodate bells or couplings. Bedding shall be a minimum of four inches of select material. Each pipe shall be firmly held in position so that it forms a continuous grade with the invert of the pipe previously placed. The interior of all pipe and the inside of the bell and outside of the spigot shall be thoroughly cleaned of all foreign matter before being lowered into the trench and shall be kept clean during laving operations by means of watertight plugs or other approved devices. Under no conditions, shall pipe be laid in water or on subgrade containing frost, and no pipe shall be laid when trench conditions are unsuitable for such work. After the sewer has been installed, inspected and approved, and proper connections made, the area around the pipe shall be carefully backfilled by the contractor with select backfill to a point twelve inches above the pipe and the remaining trench may be backfilled with clean earth and compacted in four inch layers.

#### 7. Connection to Existing Sewer:

- (a) Connection to both the house plumbing and the end of the service wye shall be with a proper fitting specially manufactured for such use. Under no conditions is it permitted to make a direct connection to the main sewer. In the event there is not a service connection available at the required point of connection to the public sewer, the Authority Inspector must be notified to provide the wye saddle connection. Replacement of all wye fittings broken by the property owners or their private contractors shall also only be by the Authority with the costs of such replacement being borne by the property owner.
- (b) Connection shall not be made directly into a manhole.
- (c) Connection to an existing private sewage system, which uses a septic tank or other such sewage disposal system, must be made between the occupied building and the septic tank or other such sewage disposal system.
- (d) Cutting of existing sanitary sewer pipe for installation of the saddle will be performed by Authority personnel only. The property owner will be responsible for excavation prior to cutting of the existing sewer for the saddle. The property owner must contact the Authority office prior to excavation to confirm that the above procedure is understood and to schedule Authority personnel to cut the existing sewer.

- 8. The use of existing exterior building sewer is strictly prohibited.
- 9. <u>Protection of Construction</u>: All excavations for sewer service lateral installation shall be adequately guarded to protect the public from hazard.
- 10. <u>Testing</u>: The gravity sewer test to be performed by the landowner or his contractor in the presence of the Authority's Inspector. The test shall consist of a method utilizing water or air that conforms to the following standards.
  - a. Water test. Each section shall be filled with water to a point not less than 10 feet (3048 mm) above the highest fitting connection in that section, or to the highest point in the completed system. Water shall be held in the section under test for a period of 5 minutes. The system shall prove leak free by visual inspection.
  - b. Air test. The portion under test shall be maintained at a gauge pressure of 5 pounds per square inch (psi) (34kPa) or 10 inches of mercury column (34 kPa). This pressure shall be held without introduction of additional air for a period of 5 minutes.

In addition to the water and air testing, routine dye testing of the service line will be required. The landowner's contractor shall perform the test in the presence of the Authority's Inspector. The test shall conform to the following standards.

- a. Dye Test. The contractor shall introduce dyed water onto and around the structure, grounds, storm sewers, storm piping, and down spouts. The dyed water shall contain fluorescent dye with a minimum concentration of 1PPM. Sewer lateral shall be observed to see if groundwater or rainwater is infiltrating into the sewer lateral.
- 11. <u>Special Connections</u>: In the event an unusual or difficult type of sewer connection is proposed, the property owner shall submit to the Authority for their approval, a detailed sketch showing type of connection and method of construction. Such connection shall not be made prior to its approval by the Authority.
- 12. <u>Rights of Way</u>: The Property Owner is responsible to acquire any Rights of Way needed across private property of others to provide sewer service to the building.

# APPENDIX 'C'

**AGREEMENTS** 

# German Township Sewer Authority Service Agreement Summary

TYPE OF PROPERTY	SERVICE 1 ATER ALS	CONNECTION (TAP-IN) FFF(S)	MONTHLY USER CHARGE(S)	NOTES
Single Family Residence	1	1		
				Property owner pays actual cost of construction of sewer tap.     Future capacity is not guaranteed.
Service to Vacant Lots (during initial construction)	-	1 (see Note 3)	1 (see Note 4)	3. If capacity is available when the property owner applies to the Authority for a connection permit, he will be required to pay the full connection fee as stated in the Rules and Regulations at the time of activation.
				4. Monthly user fees will start when the connection permit is issued and the tap is activated.
Vacant Structure (Vacant Structure no potable water	0	0	0	<ol> <li>If the structure becomes occupied and has potable water service at some future date, the property owner will then have to install a sewer service connection and pay for all of the costs and fees required for the installation.</li> </ol>
service)				<ol><li>The structure will then be covered under the corresponding property type.</li></ol>
Vacant Structure which is				1. Reduced monthly service charge can only be used for structures that will be vacant for at least three (3) months.
connected to the Authority's	-	1 or Business	Reduced Rate	2. Potable water service must be shut off to property, and owner is
system				required to notify the Authority when the vacant structure becomes occupied.
Sewaoe Service for only First				1. Owner requests that sewage service be provided to serve only the first floor and higher levels of building and certifies that presently there are no
Floor and Higher Levels for a building scheduled to receive a	1	1 or Business	Varies	discharged to the public sewage system.  7 The owner agrees that in the event that they want sewage service for any
grinder pump(s).				areas of the building located below the first floor level, they will pay all
				costs required to provide the sewage service.
Refusal of service for a				1. No sewer tap will be installed.  2. If the property owner wishes to connect to the system at some future
structure located more than 150	0	0	0	date, the property owner will then have to install a sewer service
reet from public sewer line				connection and pay for all of the costs and fees required for the
(connection is not manditory).				installation.

# German Township Sewer Authority Service Agreement Summary

TYPE OF PROPERTY	SERVICE LATERALS	CONNECTION (TAP-IN) FEES	MONTHLY USER CHARGE	NOTES
Accept service for a structure located more than 150 feet from public sewer line (connection is not manditory).	1	Varies	Varies	1. Once the sewer lateral is installed, the property owner will be bound by the Authority's Rules and Regulations, Rate Resolution, and all other applicable regulations of the Authority.  2. A sewer tap will be installed, and the cost of the installation of the sewer service lateral to the property line will be paid by the Authority. This is only available during the construction of the sewer project.
Duplex residential structure with two owners and two Sewage Service Lines	l per side	1	1	1. Each side of the duplex will receive it's own Sewage Service Lateral and each owner will be responsible for payment of a connection (tap-in) fee and a monthly user charge as set forth in the current Rate Resolution of the German Township Sewer Authority
Former duplex that has been converted to a single family residence served by a Single Sewage Service Line.			-	1. Owner must certify that the property has been converted into a single family residence 2.At some later date a representative from the Sewer Authority will inspect the interior of the dwelling to verify that it has been converted into a single family residence. If at that time it is found to not meet the criteria established by the Authority defining a "single family residence", the residence will be considered a Duplex Residential Structure with a single service line. Consequently, the owner of record will be responsible for payment of two (2) connection (tap-in) fees and two (2) monthly user charges as set forth in the current Rate Resolution of the German Township Sewer Authority.  3. If at some future date, the residence is converted into multiple dwelling units, the owner of record will be responsible for payment of any connection (tap-in) fees and monthly user charges in addition to those previously assessed set forth in the current Rate Resolution of the German Township Sewer Authority.
Duplex residential structure served by a Single Sewage Service Line (One person owns both sides of a duplex which are both habitable).	-	2	2	1. Owner is responsible for payment of two (2) connection (tap-in) fees and two (2) monthly user charges as set forth in the current Rate Resolution of the German Township Sewer Authority.
Duplex residential structure served by a Single Sewage Service Line (Two owners).	1	7	2	1. Each owner will be responsible for payment of a connection (tap-in) fee and a monthly user charge as set forth in the current Rate Resolution of the German Township Sewer Authority

# SERVICE TO VACANT LOTS DURING THE CONSTRUCTION OF THE ORIGINAL USDA SEWER PROJECT

Property Owner:

Property Address (vacant lot):	
On the date listed below, the above-listed propinstalled for his vacant lot.	perty owner requested that a sewer tap be
The property owner agrees to pay the actual cost receives a bill from the Authority. The property of that future system capacity is not guaranteed. If applies to the Authority for a connection permit, fee as stated in the Rules and Regulations at the when the connection permit is issued and the tap	owner also acknowledges that he understands capacity is available when the property owner he will be required to pay the full connection time of activation. Monthly user fees will start
Owner	Owner
Date:	Date:
GERMAN TOWNSHIP SEWER AUTHORITY	
Ву:	
Title:	
Date:	

#### **VACANT STRUCTURE AGREEMENT**

Ι,	certify that I own the
Owner	
located at	
and I hereby notify the German Township Sewer	Authority that the structure is vacant and has
no potable water service. I therefore request the	at no sewer service line be installed to serve
the vacant structure. I understand and agree that	at if the structure becomes occupied and has
potable water service at some future date, I will the	nen have to install a sewer service connection,
including a grinder pump if required, and I will p	pay all of the costs and fees required for the
installation. This agreement shall release the G	German Township Sewer Authority from any
liabilities or expenses that may result from not cu	rrently installing a sewage service line for the
vacant structure described above. This agreeme	ent shall be binding on both the present and
future owners of the above-listed property.	
Owner	
	Sworn to and subscribed
Date:	Before me this day of
GERMAN TOWNSHIP SEWER AUTHORITY	, 20
By:	
Title:	NOTARY PUBLIC
Date:	MY COMMISSION EXPIRES:
Date.	

# VACANT STRUCTURE AGREEMENT FOR A STRUCTURE WHICH IS CONNECTED TO THE AUTHORITY'S SEWER SYSTEM

I,	certify that I own the
Owner	
located at	
and I hereby notify the German Township Sewer	Authority that the structure is now vacant or
will be vacant as of	, 20 and will remain vacant
until, 20	(This agreement and the reduced
monthly service charge can only be used for struc	tures that will be vacant for at least three (3)
months.)	
I therefore request a reduced monthly	sewer service charge for my property. I
understand and agree that I must have the potab	le water service shut off for my property, and
that I am required to notify the Authority when the	e vacant structure becomes occupied.
Owner	— Course to and subscribed
Date:	Sworn to and subscribed
Dute.	Before me this day of
GERMAN TOWNSHIP SEWER AUTHORITY	, 20
D	
Ву:	NOTARY PUBLIC
Title:	MY COMMISSION EXPIRES:
Date:	

# REQUEST FOR SEWAGE SERVICE FOR ONLY THE FIRST FLOOR AND HIGHER LEVELS OF A BUILDING SCHEDULED TO RECEIVE A GRINDER PUMP SYSTEM

Ι,	, am the owner of a building located at
(Owner's Name)	
and I request that sewage service be provided to	
my building. I certify that I do not presently ha	ave any facilities below my first floor level that
produce wastewater that must be discharged to	the public sewage system. I agree that in the
even that I want sewage service for any areas of	f my building located below the first floor level,
I will pay all costs required to provide the sewage	e service.
Owner	
Date:	Sworn to and subscribed
Date.	Before me this day of
GERMAN TOWNSHIP SEWER AUTHORITY	, 20
Ву:	LIOTARY BURLES
Title:	NOTARY PUBLIC
Date:	MY COMMISSION EXPIRES:

# SERVICE TO EXISTING STRUCTURES WHICH ARE OVER 150 FT FROM THE PUBLIC SEWER

Property Owner:	
Property Address:	
On the date listed below, the above-listed proper located more than 150 feet from the public sewer to the public sewer. The property owner informed to select the following option:	r line, and it is not mandatory that he connect
1. I am not going to connect to the pu	ublic sewer
If this option is selected, no sewer tap w	rill be installed.
2. I intend to connect to the public s Rules and Regulations	sewer in accordance with the Authority's
If this option is selected, a sewer tap will the sewer service lateral to the property li only available during the construction of property owner will receive a Notice to system is placed into operation. The pro- Rules and Regulations, Rate Resolution,	be installed, and the cost of the installation of ne will be paid by the Authority. This option is the original RUS funded sewer project. The Connect from the Authority when the sewer perty owner will be bound by the Authority's and all other applicable regulations of the
Authority.	
Owner	Owner
Date:	Date:
GERMAN TOWNSHIP SEWER AUTHORITY	
By:	
Title:	
Date:	

# REQUEST FOR A SINGLE SEWAGE SERVICE LINE TO SERVE A FORMER DUPLEX RESIDENTIAL STRUCTURE

1,	certify that I own the
Owner	
located at	
and I request permission to use only one (1) service line to	serve this property. I further certify that the above-cited
property has been converted into a single family residence. I	indemnify and release German Township Sewer Authority
from any liabilities or expenses that may result from my use	of a single sewage line for this property. I also understand
and agree that if, at some future date, the residence is convert	ed into multiple dwelling units, the owner of record will be
responsible for payment of any connection (tap-in) fees and m	onthly user charges in addition to those previously assessed
set forth in the current Rate Resolution of the German Town	nship Sewer Authority. I further agree to pay the cost of
installation and future maintenance of the single service line.	
I also understand that at some later date a representative from	m the German Township Sewer Authority will inspect the
interior of the above-cited dwelling to verify that it has been of	converted into a single family residence. If at that time it is
found to not meet the criteria established by the Authority d	lefining a "single family residence" this agreement will be
voided and the residence will be considered a Duplex Resider	atial Structure with a single service line. Consequently, the
owner of record will be responsible for payment of two (2) co	onnection (tap-in) fees and two (2) monthly user charges as
set forth in the current Rate Resolution of the German Townsh	ip Sewer Authority.
This agreement shall be binding upon the said parties and to	their respective heirs, executors, administrators, successors,
and assigns.	
- Company	
Owner	Sworn to and subscribed
Date:	Before me this day of
GERMAN TOWNSHIP SEWER AUTHORITY	, 20
Ву:	NOTARY PUBLIC
Title:	MY COMMISSION EXPIRES:
Date:	

# REQUEST FOR A SINGLE SEWAGE SERVICE LINE TO SERVE A DUPLEX RESIDENTIAL STRUCTURE

(COMMON OWNERSHIP)

I.	certify that I own both sides of the
Owner	
duplex located at	
and I request permission to use only (1) service	e line to serve my duplex. I indemnify and
release the German Township Sewer Authority fro	om any liabilities or expenses that may result
from my use of a single sewage line for my duple:	x. I also understand and agree that although
there will be only a single sewage line serving my	duplex, I am still responsible for payment of
two (2) connection (tap-in) fees and two (2) more	nthly user charges as set forth in the current
Rate Resolution of the German Township Sewer	Authority. I further agree to pay the cost of
installation and future maintenance of the single	service line. This agreement shall be binding
upon the said parties and to their respective heir	rs, executors, successors, administrators, and
assigns.	
Outro.	
Owner	Sworn to and subscribed
Date:	Before me this day of
GERMAN TOWNSHIP SEWER AUTHORITY	, 20
By:	
Title:	NOTARY PUBLIC
Date:	MY COMMISSION EXPIRES:

# REQUEST FOR A SINGLE SEWAGE SERVICE LINE TO SERVE A DUPLEX RESIDENTIAL STRUCTURE

(SEPARATE OWNERSHIP)

We,	and
certify that we are each owners of one (1) side	of the duplex residential structure located at
and we request permission to use only (1) service	te line to serve the above referenced duplex.
We indemnify and release the German Towns	ship Sewer Authority from any liabilities or
expenses that may result from our use of a si	ingle sewage line for our duplex. We also
understand and agree that although there will be	only a single sewage line serving our duplex,
each owner is still responsible for payment of a	connection (tap-in) fee and a monthly user
charge as set forth in the current Rate Resolution	on of the German Township Sewer Authority.
We further agree to pay the cost of installation an	d future maintenance of the single service line
will be shared equally by the owners. This agre	ement shall be binding upon the said parties
and to their respective heirs, executors, successor	s, administrators, and assigns.
Owner	Owner
Date:	Date:
GERMAN TOWNSHIP SEWER AUTHORITY	Sworn to and subscribed
	Before me this day of
Ву:	, 20
Title:	
Date:	NOTARY PUBLIC
	MY COMMISSION EXPIRES:

# APPENDIX 'D'

SEWER RATE RESOLUTION

#### **RESOLUTION NO. 11122013-1**

# GERMAN TOWNSHIP SEWER AUTHORITY SEWER RATE RESOLUTION

WHEREAS, under the terms of its financing arrangements, the German Township Sewer Authority (the "Authority") has agreed that it will adopt and will charge, maintain and collect reasonable sanitary sewage collection, transportation and treatment charges, and connection fees within the Authority's service area for the sanitary sewage collection and transportation, and the sewage treatment disposal services rendered by the Sewer System as operated and maintained by the Authority.

NOW, THEREFORE, BE AND IT HEREBY IS RESOLVED:

SECTION A. The schedule of sanitary sewage collection, transportation and treatment charges for the sewer service, and connection fees that is set forth in Schedule "A" attached hereto and made a part thereof be and it is hereby adopted by the Authority.

SECTION B. All bills for sanitary sewage collection, transportation and treatment charges shall be computed in accordance herewith and shall be rendered to the owner of record of the premises to which the sewer service is furnished; the owner of record of the premises shall in all such cases be ultimately liable for payment of such bills. All bills for connection fees shall be computed in accordance herewith and shall be rendered to the owner of record of the premises to which the sewer service is furnished.

SECTION C. The Authority shall have charge and management of the Sewer System and has issued Rules and Regulations governing the use, operation and maintenance of said Sewer System. The Authority reserves the right to refuse permission to connect directly or indirectly to the Sewer System, to compel discontinuance of use of the Sewer System, or to compel pretreatment of sewage and industrial wastes by any establishment in order to prevent discharges deemed harmful or to have a deleterious effect upon any portion of the Sewer System or treatment facilities. Non-residential establishments having large variations in rates of waste discharge may be required to install such devices at their own expense as may be required and approved by the Authority for equalizing waste discharge rates. The Authority's representatives shall have access at all reasonable times to both residential and non-residential establishments for the purpose of establishing, determining or checking water consumption and employees, wastewaters discharged to or excluded from the Sewer System, inspection of water meter or meters, and the character of discharges to the Sewer System.

SECTION D. All bills imposed hereunder shall be due for sanitary sewage collection, transportation and treatment charges and payable immediately upon receipt of the bill by the owner and/or tenant and shall be paid no later than the due date appearing on the individual bills. Said charges shall be subject to a ten percent (10%) penalty if not paid within twenty (20) days from their due date. A ten (10%) percent penalty shall be added for each month or portion thereof that the bill remains unpaid.

SECTION E. Any required connection fees shall be due at the earlier of (a) at the time of making application for permission to connect to the system or (b) on a date sixty (60) days after notice to connect to the system is given. Said charges shall be subject to a ten percent (10%) penalty if not paid within twenty (20) days of their due date. A ten (10%) percent penalty shall be added for each month or portion thereof in which said charges remain unpaid.

SECTION F. All sanitary sewage collection, transportation and treatment charges, and connection fees received by the Authority shall be promptly deposited to the appropriate Authority account established under its financing arrangements and shall be used solely for the Sewer System's operation, maintenance and debt service retirement.

SECTION G. The sanitary sewage collection, transportation and treatment charges, and connection fees imposed hereunder shall become effective as set forth hereinafter in "Schedule A" attached hereto. Appropriate billings by the Authority shall commence promptly thereafter.

SECTION H. The Authority agrees to alter its rates to the extent necessary to meet its obligations regarding operation and maintenance of the system, and to meet all necessary financing and debt service payments.

SECTION I. All resolutions or parts of resolutions of this Authority not in accord with this Resolution are hereby repealed insofar as they affect this Resolution.

GERMAN TOWNSHIP SEWER AUTHORITY

By: Robert Belch, Chairman

#### "SCHEDULE A"

ARTICLE I. The monthly sanitary sewage collection, transportation and treatment charges, and the connection fees to be charged for sanitary sewage collection, transportation and treatment services to be furnished by the sewer system of the Sewer Authority to customers in the Authority's service area which shall take effect and begin to accrue with respect to any owner and/or users connecting directly or indirectly to the Sewer System of the Authority or any extensions thereto from and after the earlier of (a) when the owners, users and/or Authority connects owner during construction to the Sewer system or (b) on a date sixty (60) days after notice to connect to the Sewer System is given, shall be as follows:

#### SECTION A. CHARGES:

Connection fees and monthly sanitary sewage collection, transportation and treatment service charges will be charged for each Equivalent Dwelling Unit ("EDU"), as hereinafter defined, connected or to be connected to the Sewer System. Unless written permission is obtained from the Authority, separate connection, and corresponding connection fee and monthly sanitary sewage collection, transportation and treatment service charges, will be required for each individual occupied building unit, whether constructed as a detached unit or as one of a pair (duplex) or row, but a single connection, with payment of the connection fee, and monthly sanitary sewage collection, transportation and treatment service charges for the appropriate number of actual EDU's served, will be permitted to serve a school, factory, mobile home park, apartment house or other multiple unit structure whose individual apartments or units may not be subject to separate ownership.

The charges for sewer service rendered to sewered premises in the Authority's service area shall be as follows:

#### Connection Fees

- (a) For each Equivalent Dwelling Unit (EDU) connected to the Sewer System, a connection fee of \$1500.00 (with a \$300.00 discount per EDU to be given if voluntary payment in full is made to the Authority on or before the date specified in a letter sent to each property owner served by the initial United States Department of Agriculture Rural Utilities Service (RUS) sewage project of 2013-2014) for each EDU on each property connected to the Sewer System shall be payable.
- 2. <u>Monthly Sanitary Sewage Collection, Transportation and Treatment Service</u>
  Charges.
  - (a) For each Equivalent Dwelling Unit (EDU), a monthly service charge of \$48.00 for each EDU on each property connected to the Sewer System shall be payable.
  - (b) A reduced monthly service charge equal to seventy-five percent (75%) of the monthly service charge per EDU required in paragraph 2 (a) above shall be available to owners of vacant structures which are connected to the sewer system. To be eligible for the reduced monthly service charge, a property owner must complete the Vacant Structure Agreement and must comply with the following requirements:

- i) The reduced monthly service charge is only available for structures that will be vacant for at least three (3) months.
- ii) The potable water service for the structure must be shut off.

Upon receipt of the Vacant Structure Agreement, the Authority will verify the vacancy, and will then, at the beginning of the following month, start billing at the reduced rate. The property owner is responsible for notifying the Authority when the vacant structure becomes occupied. The Authority will then bill the owner at the standard rate per EDU as provided in paragraph 2 (a) above. The Authority reserves the right to inspect the structure, at any time, to verify that the structure is still vacant.

3. Equivalent Dwelling Units (EDU's)

(a) An Equivalent Dwelling Unit (EDU) for Residential Customers shall be as defined in the following schedule.

Type of Use	EDU's
Single Family Residence (including Mobi	le Homes) 1.0
Duplex	2.0
Triplex	3.0
Apartments:	
Efficiency and one bedroom Two or more bedrooms	Number of Units x 0.75 Number of Units x 1.0

(b) An Equivalent Dwelling Unit (EDU) for Commercial and Industrial Customers which includes offices, stores, shops, restaurants, clubs, taverns, barber and beauty shops, service stations, car washes, laundromats, funeral homes, motels, hotels, nursing homes, personal care homes, professional buildings, schools, churches, factories and any other commercial or industrial facilities shall be defined as each 60,000 gallons or less of water used per year therein. Therefore, to determine the EDU for a particular commercial or industrial facility, the annual water usage of the facility is divided by 60,000 gallons. No facility shall be rated as less than 1.0 EDU. The Authority reserves the right to review, at the beginning of each year, the annual water usage of any commercial or industrial customer and to recalculate the number of EDU's, and to then revise the monthly sanitary sewage collection, transportation and treatment charges.

Until annual water usage can be determined an Equivalent Dwelling Unit (EDU) for commercial customers shall be as defined in the following schedule:

Type of Use	EDU's
Nursing homes/ personal care homes	Number of Beds x 0.25
Hotels/ Motels	Number of Rooms x 0.25
Car wash	1.5 EDU's per Bay

In multi-unit commercial facilities, no individual unit, regardless of consumption, shall be, billed for less than 1.0 EDU. The facility as a whole must be billed for at least 1.0 EDU for each unit with the total billing being derived under the foregoing terms and conditions with the total amount billed to be no less than 1.0 EDU times the number of units in the facility. A discrete business entity or office shall constitute a unit.

4. Cost of Construction of a New Service Lateral

The entire cost of the construction of a new service lateral, including connection to the Authority's main line, to serve an occupied structure, a vacant structure<sup>(1)</sup>, or a vacant lot shall be paid by the property owner who requests service. (The only exception to this requirement is for occupied structures included in the initial RUS sewage project of 2013-2014. Under the RUS project, the Authority will install, at its cost, a service lateral from the main public sewer to the property line.)

(1) A vacant structure is a building that has no occupants and that has no potable water service.

The construction of the service lateral from the Authority's main line to the property line shall be done by the Authority. The Authority will collect the cost of such construction in advance form the property owner for the actual cost of the construction. The construction of the remainder of the service lateral from the property line to the structure to be served shall, in all instances, be done by the property owner.

5. <u>Special Requirements for the Installation of Service Laterals for Vacant Lots During the Initial RUS sewage project of 2013-2014</u>

Persons who own vacant lots located adjacent to the public sewers being constructed under the initial RUS sewage project of 2013-2014 can request in writing to the Authority that the Authority's contractor install a service lateral from the main line to the property line of the vacant lot. The request must be made before the contractor installs the main line adjacent to the vacant lot, and the property owner must agree to pay the Authority for the entire cost of construction of the lateral for the vacant lot. The Authority assumes no responsibility for notifying individual property owners of vacant lots regarding the installation of service laterals for their vacant lots.

6. Special Billing for the Installation of Service Laterals for Vacant Lots After the Initial RUS sewage project of 2013-2014

Persons who own vacant lots located adjacent to the public sewers being constructed or currently in existence may request, in writing, to the Authority that the Authority's contractor install a service lateral from the main line to the property line of the vacant lot. The property owner must agree to pay the Authority the entire cost of construction of the lateral for the vacant lot. This is a construction cost and is not the Connection Fee which will be invoiced separately. The property owner will be charged the full Connection Fee at the time service is requested. The Connection Fee will be the standard Connection Fee as of this fee resolution at the rate in effect on the date of actual connection

and not the fee in effect on the date of construction of the lateral. The Property Owner will not be charged the monthly sewer rate until service is requested and a connection permit is obtained from the Authority.

SECTION B. SURCHARGES APPLICABLE TO COMMERCIAL AND INDUSTRIAL USERS: In any case in which commercial or industrial user's wastes have an unusually high strength, the Monthly Service Charges, calculated as hereinabove provided, shall be increased with appropriate surcharges according to the provisions of this Authority's Sewer System Rules and Regulations then in effect.

#### SECTION C. INSPECTIONS:

The costs of all inspections required to facilitate operation under these rules shall be borne by the property owner. If the Authority is required to advance any costs for inspections, such costs will be billed to the property owner. Non-payment to the Authority for any inspections shall be treated in the same manner as a charge for sewerage.

#### SECTION D. ANNUAL RATE REVIEW:

The Authority specifically covenants and provides herein that it shall review the User Charges provided for in this "Schedule A" annually and revise them as necessary to reflect actual sanitary sewage collection, transportation and treatment service operation and maintenance and debt service costs.