



**SMITHS WATER & SEWER AUTHORITY  
RULES AND REGULATIONS for  
DEVELOPERS  
AND  
WATER/SEWER CUSTOMERS**

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# SMITHS WATER & SEWER AUTHORITY

[www.smithswater.com](http://www.smithswater.com)  
WATER AND SEWER REGULATIONS FOR DEVELOPERS

*THE AUTHORITY RESERVES THE RIGHT TO MAKE CHANGES TO THESE RULES AND REGULATIONS WITHOUT PRIOR NOTICE.*

## Visit us on the Web [www.smithswater.com](http://www.smithswater.com)

Smiths Water & Sewer Authority invites you to visit us on the web. You will find important information such as our annual water quality report, rules and regulations, and certain forms that are required for various transactions. Go paperless! Click on our Web Pay link to make your bill payment online and have your bill e-mailed to you by clicking on the E-Bill link. Web Pay and E-Bill are convenient, secure and FREE! Enroll today!

### Purpose

The purpose of these Regulations is to establish standards for the new developments or adding to existing developments within the jurisdiction of the Smiths Water & Sewer Authority for water and sewer service.

### Background

The Smiths Water & Sewer Authority has been chartered by the Lee County Commission to provide water and sewer service in the geographical area described in Attachment A. Services are not provided to every section of the jurisdiction but is provided as needed. Water and/or Sewer services are provided primarily by one of the following methods:

- In certain instances, the Authority may expand the system into un-served areas. This is normally done to reach low/moderate income areas through grants or low interest loans available through government agencies. It may also be done to support industrial development which will provide an economic boost to the economy through job creation. Normally, the Authority will not fund expansions to serve residential developments.
- The primary vehicle by which services are expanded is through private development. Developers who desire to have water and/or sewer service brought to their site, will pay all costs associated with installing water distribution or sewer collection systems. The Authority

may participate in cost of expansion in order to increase the capacity or the proposed improvements over that required to support the development itself.

**All improvements made shall meet the requirements of this regulation.**

### Fees

Developers shall pay an application fee to the Authority prior to final approval of construction plans by the Authority. This fee will be 2.5% of the estimated cost of the construction of the water and/or sewer system. The estimated cost shall include labor, equipment, and material and shall be prepared by the engineer of record based on the cost of the project. It is understood that each developer will have different cost factors and that the actual cost of installation may vary from the estimate. The minimum application fee shall be \$500.00.

### Preparation of Plans and Specifications

Plans and specifications shall be prepared by a Professional Engineer registered in the state of Alabama or Georgia and shall incorporate acceptable engineering practices and the Authority's specifications as spelled out in Attachments B and C. **Plans shall be submitted to the Authority at least 45 days prior to the desired startup date. Prior to start up, a pre-construction meeting, to be held at the Authority office, shall be scheduled with the SWSA Utilities Director. Smiths Water & Sewer Authority reserves the right to require the developer/contractor to make changes in new construction if warranted. During construction, if any cost is incurred by changes in existing water or sewer mains this cost will be the responsibility of the developer/contractor. The Authority reserves the right to halt construction if it determines the specifications are not being followed during construction.**

**The contractor hired to install water lines and appurtenances must hold a state license for water projects or water line installation issued by the appropriate state.**

Prior to construction plans being approved, the engineer of record shall provide a letter to the Authority, to the attention of the Utilities Director, certifying the name, address and telephone number of the licensed contractor, as well as the contact information for his previously three (3) completed projects.

### Acceptance of the Improvements

During construction, the developer shall retain a Professional Engineer registered in the state of Alabama or Georgia to provide inspection and to certify installation and all required tests. Upon completion of the improvements, the developer shall provide to the Authority a statement from the Engineer of Record that all improvements were made in accordance with the plans approved by the Authority and that all tests were observed and the results certified. **Any changes to approved construction plans must be approved by the Authority before work is done.** The Authority

reserves the right to require the developer/contractor to make changes in new construction if warranted. The Authority will provide its own inspection of the work but this shall be only to provide confidence to the Authority that the work is in compliance with these regulations.

**The Authority shall be notified by the engineer of record a minimum of 72 hours prior to the following events:**

- Pressure test of water lines
- Air testing of sewer lines
- Mandrel tests of sewer lines
- Manhole tests
- Video Taping of Sewer Lines

**As-built drawings shall be furnished by the Engineer of Record to the Authority prior to placing the lines in service.**

*All water and sewer facilities; including all mechanical, plumbing, and electrical equipment; and related appurtenances that are provided and/or installed shall be manufactured, tested, and installed in accordance with all applicable standards (latest version). These standards include but are not limited to:*

- i. American Water Works Association*
- ii. National Sanitation Foundation*
- iii. Environmental Protection Agency*
- iv. International Building Code (or Southern Building Code as applicable)*
- v. International Plumbing Code*
- vi. International Mechanical Code*
- vii. International Fuel Gas Code*
- viii. International Fire Code*
- ix. National Electric Code*
- x. International Energy Conservation Code*
- xi. American National Standards Institute*
- xii. American Society for Testing and Materials*
- xiii. Alabama Department of Transportation*

*Certification shall be provided to the Authority that all facilities provided to the Authority or connected to the Authority's system(s) meet or exceed the Authority's standards and specifications*

*and codes referenced above. Where a conflict exists between codes or regulations, the most stringent shall prevail as determined by the Authority.*

*Copies of all test reports shall be provided to the Authority and certification letter that all facilities have sufficiently passed such tests. Tests include but are not limited to those listed below:*

- ❖ *Smiths Water & Sewer Authority; Specifications for Water Facilities Sections A, General; P, Pressure Testing; Q, Disinfection ;S, Inspections*
- ❖ *Smiths Water & Sewer Authority; Specifications for Sanitary Sewer Facilities Paragraphs A, General; K, Televised Inspection; M, Infiltration; N, Air Testing; O, Mandrel Testing; P, Manhole Testing Q, Force Mains; U, Inspections*

*Specified tests, inspections, and related actions do not limit the Developer's other quality assurance and control procedures that facilitate facility provision/installation. Upon completion of testing, inspecting, sample taking, and similar services, proper repairs or corrections shall be taken. Repair and protection are the Developer/Contractor's responsibility.*

## Warranty

**The developer shall provide to the Authority a maintenance bond for 5% of the full amount of the Authority's estimate of cost. The bond shall be underwritten by a company normally engaged in this type of business and acceptable to the Authority. The bond shall be non-cancelable and good for a period of 3 years from the date of acceptance by the Authority.**

Should maintenance or repairs be required during the 3-year warranty period on any part of the system installed by the developer, the Authority will attempt to notify the developer and request that the required action be taken. If the developer fails to respond within a reasonable time, the Authority will notify the bonding company.

If the situation requires immediate response, the Authority reserves the right to take corrective action and to be reimbursed by the developer.

## Industrial Customers

Industrial customers connecting to the sewer shall comply with any Pre-treatment requirements established by the Authority or by any other agency of authority which ultimately treats the discharge. Pre-treatment standards may also be imposed by ADEM or the EPA. Prior to connecting to the Authorities lines, pre treatment plans shall be approved by the Authority.

## Easements

**(If approved by the Authority)** The developer shall grant (or if crossing land not owned by the developer shall obtain) a deeded utility easement 10ft. wide, on each side, a total of 20ft. dedicated to

SWSA on all installed water and sewer lines. The deeded easement shall list that there will be no structures, fences, trails or anything whatsoever constructed on the easement deeded to the Authority. Before acceptance of the easement by the Authority, it shall be cleared of all trees. The Authority's legal department shall review and approve all phases of easement documentation.

## Attachment A

**5/18/2000  
Amended 11/20/2017**

### **Exhibit "I"**

Commence at a point where the Western boundary of Section 5, Township 18 North, Range 30 East, Lee County, Alabama intersects with the Chattahoochee River, said point being the POINT OF BEGINNING of Smiths Water & Sewer Authority service area herein described, from said POINT OF BEGINNING; thence South along said Section Line running between Sections 5, and 6, between Sections 7, and 8, between Sections 17, and 18, and between Sections 19, and 20, to a point which is the Southeast corner of Section 19, Township 18, North, Range 30 East, Lee County, Alabama; thence in an Easterly direction along the South boundary of Section 20, for a distance of 3,960 feet to a point; thence South a distance of 2,643 feet to a point; thence South 87 degrees 57 minutes 36 seconds West for a distance of 372.66 feet to point; thence South 02 degrees 19 minutes 28 seconds East for a distance of 1,600 feet more or less to a point; thence in a Westerly direction a distance of 1,035 feet more or less to a point which is the Northeast corner of Lot # 2 Block "B" Rusco Estates Subdivision Section 29, 32 Township 18 North, Range 30 East, Lee County, Alabama; thence Southerly along East property lines of Lot #2, and 1 Block "B", Section 29, Township 18 North, Range 30 East, Lee County, Alabama a distance of 200 feet more or less to a point in the North Right-of-way of "A" Street; thence East along said right-of-way a distance of 25 feet more or less to a point; thence South along the East property line of "A" Street, Lot #10, 9, 8, 7, 6, 5, 4, 3, 2, 1 Block "A", Street "B", and Lot #6, 5, 4, 3, 2, 1, Block "C" said Rusco Estates Subdivision, Section 29, 32, Township 18 North, Range 30 East, Lee County, Alabama a distance of 1,735 feet more or less to a point; thence West along the South property line of Lot #1 Block "C" Rusco Estates Subdivision, Section 29, 32, Township 18 North, Range 30 East, Lee County, Alabama, a distance of 225 feet more or less to a point in the East margin of Lee Road 307 (Glover Road); thence South along said margin a distance of 190 feet more or less to a point on the center line of Holland Creek; leaving said margin thence Southeasterly along the centerline of said creek a distance of 1,885 feet more or less to a point on the North margin of Lee Road 427(Pierce Road); thence Northeasterly along said margin a distance of 545 feet more or less to a point; thence South 00 degrees 43 minutes 00 seconds West a distance of 1000 feet more or less to a point on the Lee/Russell county line; thence in a westerly direction along said County Line a distance of 3987 feet more or less to a point; thence continuing along said County Line in a southerly direction a distance of 13,195 feet more or less to a point which is the southeast corner of Section 7, Township 17 North, Range 30 East, run thence Westerly along the South section line of said Section 7 also being said County Line a distance of 3967 feet more or less to an iron pin; leaving said section line run thence Northerly along the centerline of a creek a distance of 1330 feet to a point; leaving said creek run thence N81°03'25"E a distance of 200.00 feet to an iron pin; ; run thence N49°31'31"E a distance of 540.61 feet to an iron pin; thence N33°30'01"E a distance of 359.09 feet to an iron pin;; thence S87°57'13"E a distance of 1476.80 feet to a point; run thence N02°02'15"E a distance of 617.07 feet to an iron pin; run thence S88°13'45"E a distance of 41 feet more or less to an iron pin, run thence

N01°13'43"E a distance of 887 feet more or less to an iron pin; run thence in an Easterly direction a distance of 337 feet more or less to a an iron located at the southwest corner of Lot # 2 Block "G" Aumont Park Subdivision; run thence Northerly along the West property lines of Lots # 1 and 2 Block "G", Lots #1 thru 8 Block "C", and Lots #4 and 5 Block "A" of Aumont Park Subdivision a distance of 1366 feet more or less to an iron pin; run thence Easterly along the North property line of Lot # 4 Block "A" of Aumont Park Subdivision a distance of 230 feet more less to point located in the centerline of Lee Road 450 (Aumont Drive); run thence Northeasterly along said centerline a distance of 350 feet more or less to a point on the centerline of Lee Road 236 (Auburn Road); leaving said centerline run thence Northwesterly along the centerline of Lee Road 236 (Auburn Road) a distance of 1190 feet more or less to a point where the centerline of Lee Road 236 (Auburn Road) intersects the centerline of Fredrick Drive; leaving the said centerline run thence Southerly along the centerline Fredrick Drive a distance of 506 feet more or less to a point where said center line intersect the center line Madison Drive; leaving said centerline run thence Southwesterly along the centerline of Madison Drive a distance of 1025 feet to a point where Madison Drive dead ends; run thence in a Southwesterly direction along the end of said drive and along the South property lines of Lots # 1 thru 9 Block "B" of Auburn Terrace Subdivision a distance of 845 feet more or less to a point; run thence in a Southwesterly direction along South property line of Lot # 10 Block "B" of Auburn Terrace Subdivision a distance of 75.6 feet to a point; run thence in a Southwesterly direction along Southeast property line of Lot # 11 thru 13 Block "B" Lots #1 thru 10 Block "C" of Auburn Terrace Subdivision a distance of 1370feet more or less to a point; run thence in a Westerly direction along South property line of Lot # 10 Block "C" of Auburn Terrace Subdivision a distance of 173.2 feet to a point; ; run thence in a Southerly direction along East property line of Lot # 11 Block "C" of Auburn Terrace Subdivision a distance of 200 feet to a point; run thence Southeasterly along an Unnamed Street a distance of 75 feet more or less to a point; run thence South a distance of 200 feet more ore less to a point on the North property line of Lot # 8 Block "A" Mill Pond Phase One Section One; run thence in a Westerly direction along the South property line of Lot #35 Block "J" of Crouch Subdivision of Canterbury Hills a distance of 450.03 feet more or less to a point being the Southwest corner of Lot # 35 Block "J" of Crouch Subdivision of Canterbury Hills and on the West section line of Section 7, Township 17 North, Range 30 East, Lee County, Alabama; thence run in a westerly direction 10,560 feet more or less to a point on the west section line of Section 11, Township 17 North, Range 29 East; thence south along said section line a distance of 3000 feet more or less to a point which is the Southeast corner of Section 10, Township 17 North, Range 29 east and the Lee Russell County Line; thence westerly along the Lee/Russell County Line, to a point which is the southwest corner of Section 7, Township 17 North, Range 28 East; thence in a Northerly direction along the West margin of Section 7, 6, Township 17 North, Range 28 East, and Sections 31, 30, 19, 18, 7, and 6, Township 18 North, Range 28 East, to the Northwest corner of Section 6, Township 18 North, Range 28 East, to a point; thence commencing Westerly along the South margin of Section 36 and 35 of Township 19 North Range 27 East, to the Southwest corner of Section 35, Township 19 North, Range 27 East to a point; thence Northerly along the West margin of Section 35, 26, 23, and 14, Township 19 North, Range 27 East to the Southwest corner of Section 11, Township 19 North, Range 27 East to a point; thence Easterly along the Northern margin of Section 14, to the Southwest corner of Section 12, to point; thence commencing Northerly along the West margin of Section 12, for 4,220 feet to a point; thence commencing in an Easterly direction to a point on the East margin of Section 12, to a point; thence commencing in an Easterly direction to a point on the East margin of Section 7, Township 19 North, Range 28 East, thence commencing in an Easterly direction for 1,717 feet more or less to a point at the intersection of Lee Road 158 and Lee County Road 183; thence commencing in an

Easterly direction to a point on the West margin of Section 9, Township 19 North, Range 28 East; thence commencing in a Southerly direction to the Southwest corner of Section 9, to a point thence commencing Easterly along the Northern margin of Section 16, 15, 14, 13 Township 19 North, Range 28 East, and Section 18, 17, 16, 15, and 14, Township 19 North, Range 29 East, to a point on the Western bank of the Chattahoochee River being in Section 14, Township 19 North, Range 29 East; thence Southeasterly along the Western bank of the Chattahoochee River to the POINT OF BEGINNING being the point where the Western Boundary of Section 5, Township 18 North, Range 30 East, Lee County, Alabama intersects with the Chattahoochee River, the Area encompassed within these boundaries shall be considered the Smiths Water & Sewer Authority service area.

And also a tract or parcel of land located in Section 21 Township 18 North, Range 30 East, Lee County, being more particularly described as follows:

Commence from a point where the North margin of Lee Road 248 (Summerville Road) intersects the Northwest margin of Lee Road 315 (Lake Oliver Road) said point being the POINT OF BEGINNING; run thence Northeasterly along the margin of Lee Road 315 (Lake Oliver Road) a distance of 113 feet more or less to a point; continue along said margin Northeasterly a distance of 1049 feet more or less to a point; leaving said margin run thence West a distance of 673.25 feet to a point on the East margin of an Unnamed Road; run thence Southerly along said margin a distance of 945 feet more or less to a point on the North margin of Lee Road 248 (Summerville Road); run thence South Easterly along the North margin of Lee Road 248 (Summerville Road) a distance of 336 more or less to a point being the POINT OF BEGINNING; said tract of land contains 12 acres more or less property tax # 43-05-21-0-000-015.000 and being the location of the Water Treatment Plants for Smiths Water & Sewer Authority.

## Attachment B

### **SPECIFICATIONS FOR WATER FACILITIES**

#### **A. General**

- a. Water mains on thoroughfares which are considered main streets or have the potential to be extended for future developments shall be a minimum of 8 inches in diameter.
- b. The Authority may require a 24 hour/7day recorded pressure reading taken from the nearest hydrant. The chart must include a continuous pressure reading, date, location of hydrant and must be signed.
- c. Water systems shall meet Alabama Department of Environmental Management criteria.
- d. Developer/contractor shall flush and chlorinate the system per C651 of AWWA specifications. Acceptable bacterial tests shall be required.

## B. Piping

- a. All pipes shall be polyvinyl chloride (PVC) or ductile iron. Ductile iron pipe shall be installed under all pavement, on all easements and at all road crossings for a minimum distance of 10 feet in each direction and at other locations deemed necessary by the Authority.

### 1. Ductile Iron Pipe

- a. Ductile iron pipe shall be Pressure Class 350 unless otherwise noted in the proposal, and shall be manufactured and marked in accordance with AWWA C151. Unless otherwise noted in the proposal, the pipe shall have single gasket push on joints manufactured in accordance with AWWA C111, an interior cement mortar lining manufactured in accordance with AWWA C104, and an exterior asphaltic coating of not less than 1 mil. thickness. Flanged pipe shall conform to AWWA C115.

### 2. Polyvinyl Chloride (PVC) Pipe

- a. Polyvinyl chloride (PVC) pipe shall be supplied in 20 foot lengths unless otherwise specified and shall be furnished with integral bell and spigot push on joints. Gaskets shall be locked in. Any couplings jointed to the pipe by the solvent weld process must be applied at the factory. The pipe and the coupling must both be manufactured by the same company.
  - Class 200 pipe shall conform to SDR 21
  - Class 250 pipe shall conform to SDR 17
  - Class 315 pipe shall conform to SDR 13.5
- b. The pipe shall comply with ASTM D1784 for PVC compounds, ASTM 2241 Product Standard 22 for PVC pipe, and ASTM D3139 and F 477 for gaskets and joints. **No pipe or fittings shall be accepted that is more than 120 days old.**
- c. Marker wire shall be installed on all PVC pipe. The wire shall be 14 gauge insulated copper, installed with electrically continuous joints. The marker wire shall be brought up into all valve and meter boxes so as to be readily accessible to water system operators. All wire splices and connections shall be tied and tightly taped with insulated electrical tape.

### 3. Restrained Joints

- a. Where restrained joint pipe and fittings are required, flexible push on restrained joint ductile iron pipe and fittings shall be used. All

restrained joints shall be suitable for a 350 PSIG working pressure. Ductile iron locking segments, inserted through slots in the bell face, shall provide a positive axial lock between the bell interior and a retainer weldment on the spigot end of the pipe.

- b. Restrained joints shall be US TR-Flex, McWayne Fastite, American Flex Ring, or other Authority approved equal. Mechanical joints with Megalug assemblies, or Authority approved equal, will also be considered.

### **C. Casing Pipe**

- a. Where water mains are to be installed under railroad tracks and under paved highways, they shall be laid inside a casing pipe. Carrier pipe shall be installed with casing spacers.
- b. The casing pipe shall be new and made of steel in accordance with API 5L standard weight line pipe and be provided with continuous welded joints. The casing pipe shall be jacked through a hole of the proper size that has been previously bored for the purpose or be installed by excavating and installed liner plates as the hole is advanced. It may also be installed by the continuous boring and jacking method.
- c. The wall thickness of the steel casing pipe shall be 0.25" for all sizes 20" and smaller, 0.375 for sizes 24" through 36" and shall conform to ALDOT Section 862 for larger diameter.

### **D. Fittings**

- a. Ductile iron fittings with retainer glands shall be provided. Ductile iron fittings 12" and smaller shall be rated for 250 psi working pressure and fittings larger than 12" shall be rated for 150 psi working pressure. Fittings shall be manufactured in accordance with AWWA C153 and provided with mechanical joints. All fittings shall be provided with a thin cement lining in accordance with AWWA C104.
- b. All fittings shall be wrapped in 6 mil polyethylene encasement extending 6" beyond connection in accordance with AWWA C105.
- c. Thrust restraints shall be 2500 psi concrete poured in place against undisturbed soil.

### **E. Valves**

- a. All valves shall be furnished with a valve box and a concrete collar in accordance with Paragraph 6.
- b. All valves shall be attached to the main using an anchor tee or anchor coupling.

- c. Valves for use with ductile iron pipe shall have mechanical joint end connections unless otherwise shown. Valves used with PVC pipe shall be equipped with end connections and transition gaskets especially made for this type of pipe.
- d. Gate valves shall be iron body, brass mounted, epoxy coated interior and exterior, and be of the resilient seat type. Gate valves shall have a non-rising stem. "O ring" stem seal, a square operating nut (2") and shall open by turning counterclockwise. Gate valves to 12" diameter shall be manufactured in accordance with AWWA C509. Gate valves smaller than 12" shall be suitable for a working pressure of 200 psig and shall be tested to 400 psig.
- e. All valves 12" and larger shall be Butterfly Mueller Linesal XP (Class 250) or Authority approved equal.
- f. Valves 2" and smaller shall be "Ball Valve" type made by Ford.
- g. Tapping valves and sleeves may be of the mechanical joint or hub end type. Mueller H-615 and H-667, or approved equal. Tapping valves shall be non-rising stem. Working pressure of 2"-12" valves shall be 200 psi with 400 psi test pressure. For valves greater than 12", the working pressure shall be 150 psi with test pressure of 300 psi. Valves and sleeves shall be cast tapping SCV's and valves shall be water tested for duration of 15 minutes at 50 psi.
- h. Valves shall be manufactured by American, M & H, Clow, Mueller, or approved equal by the Authority.
- i. Air Release Valves (ARV's), if approved by Authority, shall be 1" ball type valves to be field located at high points in the water main. The valve shall operate through a compound lever system and shall have a 5/64" orifice with valve sealing faces of an adjustable BUNA-N rubber valve and stainless steel or PVC and shall operate at 150 psig. The valve shall be 1" NPT screwed of ANSI Class (125,250) flanged inlet connection and shall be cast iron body, top and inlet flange (where required), stainless steel float and trim. **Valves which use a needle valve to seal to orifice will not be acceptable.** The valve shall be CRISPIN Model AR10, Pressure Air Valve, Type N (PVC seat and BUNA-N rubber valve) or Authority approved equal.

**A SOLID CONCRETE BLOCK SHALL BE  
PLACED UNDER THE VALVE.**

## F. Valve Boxes

- a. Valve boxes shall be made of cast iron and be of the two piece adjustable heavy roadway type. They shall have an inside diameter not less than 5 ¼ inches and be of the screwed type. They shall be provided with a cast iron cover on which the word “WATER” is embossed and shall be suitable for installation on mains laid at the depths specified.
- b. Valve boxes shall be set vertically over the valve and centered above the operating nut. **The cover shall be flush with the street or ground surface.** Backfill shall be carefully tamped around the box to prevent it from being moved out of position. The bottom flared edge of the box shall not rest directly on the valves or pipe. After the valve box has been set correctly, a round concrete collar shall be centered around the top of the valve box and grouted. The collar shall be approximately 18 inches in diameter, 4 inches thick with the surface 1-2 inches above the surrounding ground surfaces. The concrete shall be Class C 2500 pound mix.

## G. Hydrants

- a. Hydrants shall be placed where deemed necessary by the Authority and on all dead end lines including cul-de-sacs. There shall be no hydrants placed on private property.
- b. Hydrants shall be manufactured in accordance with AWWA C502. The main valve shall open against the water pressure and all operating threads shall be isolated from the water. Hydrants shall be American-Darling, Mueller Centurion, or Authority approved equal.
- c. Hydrants shall have a main valve opening of not less than 5 ¼ inches, two 2 ½ inch hose connections and one 4 ½ inch pumper connection. Hydrants shall be provided with a permanent lubricating device and “O ring” packing seals. Hydrants shall open by turning counterclockwise. Operating nuts shall be of the National Standard pentagon type, 1½ inches point to flat Hydrants shall be provided with a 6 inch mechanical joint shoe and shall be equipped with a retainer gland follower.
- d. Hydrants shall be sized to connect with pipelines laid with a minimum cover of 36 inches. In cases where the standard length of hydrant is not sufficient to leave a distance between 16in. minimum and 18in. maximum between the ground surface and the bottom of the lowest connection, an extension shall be provided and installed.

- e. Hydrants shall be set perfectly plumb on the pre-cast slab, using a spirit level on two sides of the barrel. The gravel shall be placed around the base to permit drainage from the waste opening.
- f. The hydrant lead shall be made with ductile iron pipe extending from a mechanical joint anchor tee with an isolation valve attached to the anchor tee. The isolation valve must be in open position after installation.
- g. Hydrants shall be factory painted red.
- h. **All hydrants shall be covered with heavy duty Block plastic until accepted by the Authority**

## H. Service Connections

- a. Corporation stops shall be  $\frac{3}{4}$  inch size minimum, manufactured by Ford (F-1000) and shall comply with AWWA C800-66, Ford, Mueller, or Authority approved equal. Corporation stops shall be compatible with type of service pipe specified.
- b. Curb stops shall be  $\frac{3}{4}$  inch size minimum and shall comply with AWWA C800, Ford B-43-232W complete with lock out wing, or other Authority approved equal. A full  $\frac{3}{4}$ " opening curb stop shall be provided.
- c. Saddles shall be used when connecting to water mains, and shall be Ford Bronze, especially designed for use on PVC/DI pipe and provided with a corporation cock thread.

## I. Residential Meters

- a. Meters shall conform to AWWA C700-90, NSF/ANSI 61 certified, ANNEX F, and ANNEX G compliant. shall be a first line meter and shall have a hermetically sealed and magnetically driven register. All meters shall be manufactured and assembled in the United States, and shall be of the positive displacement type. Each meter shall be provided with a leak detector separate from the sweep hand, and shall be calibrated in gallons. Meters shall be Neptune, (  $\frac{3}{4}$ " x  $\frac{5}{8}$ " ) T-10, with e-coder (R900i) pit set with lead free high copper alloy main case and lead free high copper alloy bottom cap.
- b. Backflow preventers shall be  $\frac{3}{4}$ in. minimum Ford Model HHS-31-323, Watts No.7 dual check valve, rated for 150 psig, or Authority approved equal, as required by the latest ADEM regulations.
- c. Water meters shall be located in the center of the lot on the ROW line or as specified by the Authority.

- d. Meter boxes are developer's/contractor's responsibility until meter is set. Grade and landscape must not cover meter box. If the Authority must locate or replace meter box, the developer/contractor is responsible for all cost.
- e. Meter boxes shall be approximately 12 inches x 17 inches x 12 inches (minimum) rectangular in shape, complete with plastic top and hinged metal reading lid. The plastic shall be of the fiber reinforced polyolefin type. The box and cover shall be Carson Brooks, or approved equal. Boxes shall be set so that the top 1 to 2 inches are exposed above ground.
- f. **All services shall be marked by driving a metal stake into the ground at least 16 inches with 24 inches above ground level painted blue.**

#### **J. Commercial Meters**

- a. Please contact the Smiths Water & Sewer Authority office for specifications for commercial meters.
- b. The hydrant meter fees are as follows: \$300.00 Deposit/ \$50.00 per month rental plus usage.

#### **K. Service Pipe**

- a. Service Pipe shall be copper and connected, without any repair couplings, to the corporation stop.
- b. All service lines under asphalt or concrete (including driveways) shall be ran in Schedule 40 PVC encasement. ¾" service-1 ½" PVC 1" service- 2" PVC
- c. Copper tubing shall conform to Federal Specification WW-T-799, Type K. Service Pipe shall be minimum ¾ inch in diameter.
- d. Service pipe shall be laid with a cover not less than 24 inches, and the requirements for trenching and backfilling shall be the same as specified for water mains. Where the service pipe crosses a paved street or sidewalk it shall be laid by means of pushing or boring. **The cutting of pavements or sidewalks will not be permitted.** The requirement for a cover of 24 inches over the pipe shall be maintained under side ditches and at the highpoint of the curve in the pipe where it connects to the main. On Highway rights-of-way the minimum cover shall be as specified by the Highway Department but in no case less than 30 inches.

- e. When the service pipe is connected to ductile iron pipe 3 inches or larger, the connection at the main shall consist of a ¾ inch (minimum) approved saddle and a corporation stop.
- f. Where taps larger than 1 inch diameter are to be installed on ductile iron pipe, a split stainless steel tapping sleeve or brass tapping saddle shall be provided and a disc shall be cut from the pipe wall by a special tapping machine.
- g. The tap in the main shall be made at an angle of not more than 30 degrees to the horizontal in order to keep service pipe adjacent to the main at the required depth.
- h. The curb stop shall be installed inside the meter box immediately adjacent to the inlet side of the meter.
- i. Where service taps are installed on ductile iron pipe, the brass corporation stop and not less than three feet of connected copper service tubing shall be wrapped with two wraps of Tapecoat dielectric insulating tape to prevent corrosion.
- j. The maximum length for a service line is 100 feet.

#### **L. Valve Markers**

- a. The location of pipe and valves shall be marked with concrete markers (5 inches x 5 inches x 5 feet) with a 1 ½ inch aluminum disc in the top for marking distance from the marker to the valve. The marker posts shall be six feet long and set to stand approximately 40 inches above ground. The markers shall be inscribed “*WATER VALVE*” or “*WATER LINE CROSSING*” as appropriate. Markers shall be installed for all type valves including isolation valves, air release valves, electric control valves, etc. Markers shall also be set at all locations where pipeline crosses streets and highways.

#### **M. Permits and Bonds**

- a. In the event the Department of Transportation requires a bond or certified check to guarantee the replacement of highway paving, the Developer shall furnish this security at his own expense.

#### **N. Installing Pipe**

- a. All pipe shall be laid in accordance with procedures outlined by the Ductile Iron Pipe Research Association or Uni-Bell PVC Pipe Association. A copy of these procedures shall be kept the Contractor on the job site at all times that pipe laying operations are occurring.

- b. Before the pipe is lowered into place, the bottom of the trench shall be uniformly graded so that the pipe will have a bearing on earth for its full length. Where the excavation is in rock or other hard material, sufficient loose earth (6 inches above and below and 18 inches on each side) shall be shoveled into the trench to form a bed for the pipe. Each section of pipe shall be carefully examined for defects and the inside cleaned to remove all dirt and mud before it is installed.
- c. At each joint there shall be excavated a hole sufficiently large enough to receive the bell or coupling so that the pipe barrel will rest uniformly in its bed of loose earth. Where pipe equipped with joints of the push or type utilizing a rubber ring is used, the bell shall be wiped clean before the ring is fitted into position, following which the spigot shall be coated with a thin film of lubricant, if so required by the manufacturer, and then pushed home.
- d. On iron pipe equipped with mechanical type joints, before the section of pipe is pushed home, the bell into which it fits shall be wiped clean, the end of the pipe being placed shall be wiped with a soapy water solution and the cast iron gland and rubber ring slipped on. After the section of pipe is in its final position, the rubber ring and gland shall be slid up to the joint, bolts inserted and the nuts torqued according to specifications.
- e. **Where pipe laying is suspended at the lunch hour, at night, during inclement weather or any other time, the open end of the pipeline shall be provided with a plug in order to prevent the entrance of dirt, mud and animals.**
- f. All fittings installed in the mains and the ends of all dead end lines shall be restrained by pouring a concrete block at the point where it will resist the pressure. Thrust blocks will be sized in accordance with the Uni-Bell Handbook of PVC Pipe: Design & Construction or Thrust Restraint for Ductile Iron Pipe published by the Ductile Iron Pipe Research Association.
- g. Water lines must be installed no closer than 24 inches from any other utility (except where utilities cross).

## **O. Installing Appurtenances**

- a. Valves, fittings, hydrants, and other appurtenances shall be placed in the locations shown on the construction plans or in the manner designated by the Authority. All valves and hydrants shall be carefully examined to see that the working parts are in good order

and that no grit or dirt is present in the valve or seats before they are placed in position.

- b. Over each valve less than 16 inches in size shall be placed a valve box, and over valves 16” and larger shall be provided a valve box both for the main valve and the bypass valve. Valve boxes shall be set concentrically around the valve operating nut and the top of the box shall be 1-2 inches above finished ground surface or paved surface.

**P. Pressure Testing**

- a. After the mains and appurtenances have been installed, they shall be subjected to a hydrostatic pressure test. The pressure shall be applied by a motor driven test pump and an accurate recording pressure gauge shall be provided at a suitable point on the main. The test shall be conducted at 150% of the working pressure or the rated pressure of the pipe, whichever is greater. The test pressure shall be applied for not less than eight hours on covered pipe. The test pressure must be maintained at a constant pressure and continuously recorded by a chart recorder. The results shall be dated with the location indicated and supplied to SWSA. All pressure testing shall be performed prior to the paving of roads. **A letter to the Director of the Authority from the engineer of record confirming test results shall be provided prior to the paving of roads.**

- b. The allowable leakage for water mains shall be measured in gallons per hour per one thousand feet of pipe. Allowable leakage shall not exceed the following formula:

$$L = \frac{SD\sqrt{P}}{133,200}$$

when L = Allowable Leakage, GPH  
 S = Length of Pipeline Section, LF  
 D = Diameter of Pipe (Nominal), Inches  
 P = Average Test Pressure, psig

- c. The allowable leakage rates per 1000 linear feet of typical pipe sizes shall not exceed the following values:

<u>Pipe Size</u>	<u>Test Pressure</u>	<u>Maximum Leak Rate/1000'</u>
<u>Class 250 Pipe</u>		
<b>8 inch</b>	250 PSIG	0.95 GPH
<b>6 inch</b>	250 PSIG	0.71 GPH
<u>Class 200 Pipe</u>		
<b>8 inch</b>	200 PSIG	0.85 GPH
<b>6 inch</b>	200 PSIG	0.64 GPH

- d. The Engineer of Record shall be responsible for maintaining accurate records of each pressure test. The date, time, length of line tested, a recording of the test pressure, the times and amounts of make-up water required, and a comparison of actual leakage versus allowable shall be compiled in a neat and organized format, certified by the Engineer of Record for the Developer, and delivered to the Authority in duplicate. All pressure testing must be witnessed by the Engineer of Record or the Authority and recorded by a continuous automatic chart recorder.
- e. All breaks, leaks or defects in the main and appurtenances, dripping valve glands and hydrant gaskets shall be repaired, following which the test pressure shall be again applied.

#### **Q. Disinfection**

- a. After the pipelines, valves, fittings and appurtenances have been installed and tested, they shall be disinfected in accordance with the method set forth in the latest edition of AWWA C651, and all applicable ADEM regulations.
- b. Water samples shall be taken in the presence of a representative of the Authority. All bacterial testing shall be done at an ADEM approved laboratory.

#### **R. Backfilling and Cleanup**

- a. After the pipe has been installed and tested, the trench shall be immediately backfilled. However, the Developer may backfill the trenches prior to testing if he so desires but in this case he will comply with the requirement for testing the mains as specified elsewhere.
- b. In places where the trench has been excavated along the side of a paved street not provided with curb and gutter or where construction operations or the weather have spread the excavated material over the surfaces of unpaved streets, the Developer/Contractor shall employ a heavy duty motor grader to clean out the side ditches, shape the shoulders and restore the smoothness of the street surface to as good a condition as existed before the work was started. In the event that excavations on the shoulders of streets indicate that washouts or collapse of the shoulder are liable to occur, the backfill shall be carefully tamped and any earth washed out prior to the date of final acceptance shall be replaced.

- c. Before final acceptance of the work all surfaces shall be returned to as good condition as before the work started.
- d. All excavated material shall be cleared from adjacent street surfaces, gutters, sidewalks, parkways, railroads, grass plots, etc., using hand labor where necessary to achieve a satisfactory result, and the work area is left in a tidy and acceptable condition.
- e. The Developer shall at all times keep the backfilled trenches, particularly those across streets and driveways, filled to grade, and shall make a daily inspection to see that those needing additional fill are attended to. He shall maintain them in a good and safe condition and will be held responsible for any connection up to the date of final acceptance of the work by the Authority.

## S. Inspections

- a. It is the responsibility of the engineer of record to perform all inspections.
- b. A detailed written inspection report is required on all work performed and shall be submitted to the Authority on a weekly basis for review.

(Attachment C)

## **SPECIFICATIONS FOR SANITARY SEWER FACILITIES**

### A. General

- a. All subdivisions developed within the Smiths Water & Sewer Authority (Authority) service area shall have a complete sewer collection system installed by the Developer, as the development is phased, to serve each lot prior to the acceptance of said development by the Authority, and tied to the existing Authority's sewer lines. All sewer improvements shall comply with the latest policies and standards of the Alabama Department of Environmental Management and the Authority. **All newly constructed sewer lines shall be televised by the developer/contractor and identified. A representative of the Authority shall be present during all televising. A DVD copy is to be provided to the Authority.**
- b. Where a public sanitary sewer is not accessible within thirteen (1300) hundred feet of a subdivision, an alternate method of sewage disposal for each lot, or a community sewage disposal

system, may be used when in compliance with the standards of the County Health Department.

### Public Sanitary Sewer Facilities

- a. Where a public sanitary sewer is available as determined above, sanitary sewer facilities shall connect with public sanitary sewer facilities.
- b. Sanitary sewer plans shall be designed by a professional engineer registered in the State of Alabama or Georgia in accordance with an acceptable method of design using good engineering practices as approved by the Authority.
- c. All sanitary sewer lines shall be designed to handle the fully developed ultimate tributary population.
- d. **Sewer shall be installed to serve each lot and service connection laterals shall be installed to the property line, future right-of-way or easement line. All laterals must be installed by a licensed plumber/contractor authorized by the Authority and must pass inspection by Lee County and State of Alabama codes. The connection must be inspected by a SWSA representative. Failure to do so will result in unearthing the connection point by the installer for inspection.**
- e. Installation of sanitary sewer facilities to be maintained by the Authority shall be constructed within dedicated rights-of-way and utility and drainage easements shown on the subdivision plat as recorded by the County. As-constructed drawings shall be furnished to the Authority by the Engineer of Record.

(Subdivisions with Incomplete Sewer Collection Systems)

**BE IT RESOLVED BY THE SMITHS WATER & SEWER AUTHORITY  
SMITHS STATION, AL AS FOLLOWS:**

*Board Approved January 22, 2008*

All subdivisions in the service area of Smiths Water & Sewer Authority that are properly and legally filed for record in the office of the Judge of Probate of Lee County, Alabama, as of February 1, 2009, and are within thirteen hundred (1,300) feet of a public sanitary sewer, that do not have a complete sewer collection system may construct and install, at their cost, a complete sewer collection system through a legal entity representing all property owners in said subdivision without sewer service, and the construction and installation shall be subject to the same rules, regulations, and specifications which are applicable to developers as set out in the Smiths Water & Sewer Authority, Water and Sewer Regulations for Developers.

**2. Criteria Sanitary Sewer Design**

Specific design requirements for sanitary sewer are as follows:

- a. Single-family use zoning shall be based on seven (7) people per acre, three hundred (300) gallons per person per twenty-four (24) hour day peak flow.
- b. Multi-family use/zoning shall be based on eleven (11) units per acre, three (3) people per unit, three hundred (300) gallons per person per twenty-four (24) hour day peak flow.
- c. Commercial use/zoning shall be based on twenty (20) people per acre, fifty (50) gallons per person per sixteen (16) hour day.
- d. Sewer lateral assumed flowing two-thirds (2/3) full at design flow.
- e. Minimum velocity shall be based on two (2) feet per second.
- f. Minimum sewer mains size shall be eight (8) inches.
- g. Minimum grades for sewer mains shall be 8in.- 0.4%; 10in. – 0.3%; 12in. – 0.22%.
- h. Laterals shall be a minimum of four (4) diameter inches at one (1%) percent.

### 3. Traps, Separators, and Interceptors

*Board Approved 05/21/2007*

- a. **Where required:** Traps, separators and/or interceptors shall be installed where necessary to prevent the discharge of oil, grease, sand and other substances harmful or hazardous to the public sewer system or treatment plant process.
- b. **Design and Installation:** The size, type and location of each trap, separator and interceptor shall be designed and installed in accordance with the manufacturer's instructions and the requirements of the Authority. The design shall be based on the anticipated conditions of use and shall be approved by the Authority's engineering department. Wastes that do not require separation or pre-treatment shall not be discharged into any trap, separator or interceptor.
- c. **Grease Traps and Grease Interceptors:** shall comply with the following:  
A grease trap or grease interceptor shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas such as restaurants, hotel kitchens, hospitals, school kitchens, bars, cafeterias, and other areas as specified by the Authority and appropriate Health Department.

Where food waste grinders connect to grease traps, a solids interceptor shall separate the discharge before connecting to the grease trap. Solid interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder.

Grease traps and interceptors shall conform to PDI G101, ASME A112 and shall be installed in accordance with the manufacturer's instructions.

Grease Traps and Interceptors shall not be required for individual dwelling units or any private living quarters.

Grease Traps shall have capacity to retain twice the amount of grease in pounds for the flow through rating in gallons per minute. For example, a grease trap rated for a flow through of 6 gpm shall be capable of retaining 12 pounds of grease.

Grease Traps shall be equipped with devices to control the rate of water flow so that the water flow does not exceed the rated flow.

- d. **Oil Separators:** shall be installed as required by the Authority and specifically at repair garages, car washing facilities with engine or undercarriage cleaning capability and at factories or other locations where oily and/or flammable liquid wastes are produced. All wastes containing or having the potential to contain oil, grease, or flammable wastes shall be discharged into the separator prior to emptying into the building sewage system.

Separators shall be designed for the intended use in accordance with the following:

Oil Separators shall have a depth of not less than two (2) feet below the invert of the discharge drain. The outlet opening of the separator shall have not less than an 18 inch water seal.

Where automobiles are serviced, greased, repaired or washed or where gasoline is dispensed, oil separators shall have a minimum capacity of six (6) cubic feet for the first 100 square feet of area to be drained, plus one cubic foot for each additional 100 square feet of area to be drained into the separator.

- e. **Sand interceptors:** shall be installed in any commercial establishment where heavy solids have the potential to enter the sewage system. The interceptor shall have ready access for cleaning and shall have a water seal of not less than 6 inches.
- f. **Commercial Laundries:** shall be equipped with an interceptor with a wire basket or similar device, removable for cleaning, that prevents passage into the waste system of solids 0.5inch or larger in size, strings, rags, buttons or other materials detrimental to the sewage system. This is in addition to any other requirement for traps and interceptors.
- g. **Industries dealing with plastic and glass:** shall discharge process wastes into an interceptor designed for the purpose of preventing glass or plastic from entering into the waste stream.  
Slaughterhouses shall be equipped with approved separators which shall prevent the discharge into the waste stream of feathers, entrails or other materials which could cause clogging of the sewer system or affect the sewage treatment process.

Interceptors and Separators shall be designed so as not to become air bound where tight covers are utilized. Each interceptor or separator shall be vented where subject to a loss of trap seal.

- h. Access shall be provided to each trap, interceptor and separator for inspection, maintenance and service. Units shall be maintained by periodic removal of accumulated grease, scum, oil, or other floating substances and solids. The Smiths Water & Sewer Authority shall be allowed the opportunity to inspect the units on a regular basis. Any unit found not preventing the discharges necessary shall be repaired immediately by the owner. Failure to make immediate repairs may result in the discontinuance of water and sewer service to the owner until repairs are made.
- i. As provided by County Health Department regulations, upon periodic inspection by the County Health Department, SWSA shall be furnished with a copy of the inspection report.

#### 4. Sanitary Sewer Plans

Sanitary sewer plans shall be prepared according to the following specifications:

- a. Sanitary sewer plans shall use the following scales: plan-one (1) inch equals fifty (50) feet; profile – one (1) inch equals ten (10) feet vertical and one (1) inch equals fifty (50) feet horizontal.
- b. Show land tie of the sewer centerline to an appropriate section corner on each set of plans.
- c. The plan view and profile view for a particular segment shall be on the same sheet.
- d. The section, township and range in which the sewer is located shall be indicated in the title block.
- e. Plans shall indicate benchmarks, U.S.G.A. datum.
- f. Adjacent streets, lots and blocks shall be shown.
- g. Existing and proposed utilities shall be shown
- h. Show storm drainage structures/facilities crossing and/or running parallel with the proposed sanitary sewer.
- i. Show all proposed and existing easements. Minimum easement width shall be twenty (20) feet. Easements shall extend ten (10) feet beyond last manhole, if applicable.

- j. Maximum distance between manholes shall be four hundred (400) feet. Show deflection angles at manholes. Show grades between manholes in percent. Show flow line elevations in and out of manholes and invert elevations along the sewer at fifty (50) foot intervals.
- k. Indicate all drop manholes. Drop manholes with drops equal to or greater than two (2) feet shall be designated as Memphis tees. Drop manholes with drops equal to or less than two (2) feet shall have one joint of ductile iron pipe on the upstream side of the manhole.
- l. Ductile iron pipe shall be required at all storm drain crossings, creek or ditch crossings, fill sections, sewer grades greater than fourteen (14) percent, and at depths greater than twelve (12) feet and less than three (3) feet. **Additionally, when ductile iron pipe is required, it shall extend from manhole to manhole.**
- m. Ditch checks may be required on sewer grades greater than fourteen (14) percent.
- n. Capped sewers shall be so noted on each sheet. A four (4) inch drain to the nearest storm sewer or ditch shall be installed near the top of the last manhole in the system. This connection shall be removed after the system is connected to a live sewer system.
- o. Pipe material used shall be Schedule 40 PVC or ductile iron.
- p. Manholes shall be pre-cast concrete. Sanitary sewer manholes over eighteen (18) feet shall require a special design approved by the Authority's engineering department.
- q. All manholes shall be stacked and lined up vertically. Not more than sixteen (16) inches at top of manhole shall be adjusted with brick on pre-cast manholes.
- r. All steps in manholes shall line up vertically.
- s. A minimum of four (4) inches of stone bedding is required under all sanitary sewer lines. Stone backfill is required up to the top of every pipe.
- t. Service connections shall have a minimum pipe size of four (4) inches and a minimum slope of one (1%) percent.
- u. The sanitary sewer plan shall provide an overall plan view of the development and the proposed sanitary sewer system.

## B. Polyvinyl Chloride (PVC) Pipe

- a. PVC pipe and fittings for gravity sewers shall be manufactured in accordance with ASTM D 3034 and shall be minimum SDR 26 wall thickness. Gaskets shall be locked in, NAPCO or approved equal.
- b. Pipe shall be manufactured of PVC having a cell classification of 12454-B, 11364-A, or 13364-B as defined in ASTM D 1784. Additives and fillers including but not limited to stabilizers, antioxidants, lubricants, colorants, etc. shall not exceed 10 parts by weight per 100 parts of PVC resin in the compound.
- c. All pipe and fittings shall be clearly marked as to size, ASTM, Company, SDR, and date of manufacture. **No pipe or fittings shall be accepted that is more than 120 days old.**
- d. Joints shall be of rubber gasket slip on type conforming to ASTM D 3212.
- e. PVC pipe for force mains shall be SDR 26 and shall comply with ASTM D 1784 for PVC compounds, ASTM D 2241, and Product Standard 22 for PVC pipe. Gaskets shall be locked in H and W or Authority approved equal.
- f. **Marker wire shall be installed on all PVC force mains.** The wire shall be 14 gauge insulated copper, installed with electronically continuous joints. The marker wire shall be brought up to all laterals at right of way clean outs so as to be readily accessible to system operators. All wire connections and splices shall be tied and tightly taped with insulated electrical tape.

## C. Ductile and Iron Pipe

- a. Where ductile iron pipe is specified for use in the construction of gravity sewers, it shall be Pressure Class 350 ductile iron manufactured in accordance with requirements of AWWA C151/A21.51 complete with a cement mortar lining.
- b. Where flexible joint iron pipe is called for on the construction plans, it shall conform to the same specifications as ductile iron. The joints shall be of the ball and socket type either bolted or keyed and, if of bolted type, the bolts and nuts shall be made of stainless steel. The trench in which this pipe is installed shall be excavated to a depth that will provide a cover of not less than 3 feet over the top of the pipe when it is in place.

## 1. Steel Casing Pipe

- a. Where sewers are to be installed under railroad tracks or highways, they shall be laid inside a casing pipe. The precise location, length, and depth of the encasement will be specified in the permit issued by the Railroad or Highway department involved. Carrier pipe shall be installed with casing spacers.
- b. The casing pipe shall be made of steel in accordance with API Specifications 5-L for standard weight line pipe and be provided with welded joints. Where installed under roads and railroads it shall have a wall thickness of 0.25 inch or as required by the railroad.

## D. Manholes

- a. Manholes shall be constructed of pre-cast concrete in the locations and to the dimensions shown on the plans. The excavation shall be sufficiently large to permit the construction to be performed in a workmanlike manner, and in no event shall manhole building lag behind the pipe laying to the extent of more than two manholes.
- b. Pre-cast concrete manholes shall consist of pre-cast reinforced concrete riser sections, an eccentric cone of flat slab top section and a base section conforming with the typical manhole details as shown on the plans. All pre-cast reinforced concrete manhole sections shall conform to the latest revision of ASTM C478. The manholes shall be four feet internal diameter minimum with a minimum 5" wall thickness.
- c. Joints between manhole sections shall be provided with a double joint sealant. An O ring rubber gasket meeting all requirements of ASTM C443 shall be installed. A flexible plastic butyl sealant in rope form, Sherman M-30 Flex Tyte, shall also be installed as recommended by the manufacturer and Butyl-Tite joint wrap shall be applied. The Butyl-Tite joint wrap shall meet or exceed requirements of ASTM C877-01, Type III and C990-OLR.
- d. Manhole bottom sections shall be pre-cast by the manufacturer and shall be supplied with a rubber gasket joint by which the base section is connected to the slab or the manhole bottom may be cast monolithically with the base section. Manhole steps shall be provided as shown, M.A. Industries PSI-PF reinforced plastic meeting ASTM 478, paragraph 11.
- e. All manholes shall be provided with a flexible sleeve through which all pipe connections are made into the manhole. Each flexible sleeve

shall consist of a high quality synthetic rubber terminating in a flange cast into the manhole walls or by a compression joint made in the manhole wall. The flexible sleeves shall protrude out from the manhole and shall be of adequate size to accommodate the sewer pipe. After installation of the pipe within the sleeve, a watertight joint shall be made by securing the sleeve over the pipe with a stainless steel strap, clamp, draw bolt and nuts. The flexible sleeves shall be as manufactured by Fernco, or approved equal. The banded boot connections shall be installed to provide compliance with ASTM C923. the couplings shall be tightened by use of a 60 in./lb. torque wrench.

- f. A cast iron frame and cover shall be furnished and installed in a full bed of mortar at the top of each manhole. Where the manhole is located in a street, the top shall be set to conform with the finished street surface. The frame and cover shall be of standard heavy duty traffic design, Vulcan pattern V-1358, Neenah pattern R1723 or other equal, and shall have a combined weight of not less than 400 pounds and a clear opening of not less than 23.5 inches. The casting shall be constructed of ASTM Class 30 gray iron as classified by ANSI/ASTM A48-76, with all horizontal bearing surfaces machine ground and seated so that the frame and cover fit accurately in any position to provide a non-rocking fit. The cover shall be provided with two pick holes.
- g. Beneath the manhole frame shall be installed a flexible plastic butyl gasket meeting all requirements of AASHTO-M198. The butyl gasket shall be in rope form, Sherman M-30 Flex Tyte, or approved equal.
- h. Cast into the top of the manhole cover shall be the words “ “SWSA SANITARY SEWER”, and the year of installation.
- i. The invert of each manhole shall be constructed on top of the pre-cast concrete slab with the channels formed of split pipe and the benches of 2500 pound concrete, or grouted polystyrene filler pieces, Fernco or approved equal. The surface of the benches shall be sloped to the inverts and where manholes are constructed at junctions the different sizes of pipe shall be flared or molded to provide a uniform transition into one another. Where future connections are to be provided, the inverts for them shall be constructed and one section of pipe of the proper size laid through the manhole wall and lightly plugged with a stopped and cement mortar.
- j. All elevation differences of two (2') or more where the pipe enters the manhole shall require an outside drop manhole. Drop connections shall be constructed as required and consist of a

“Memphis” tee, or tee with a spigot on the branch, drop pipe extending from the sewer to the invert of the manhole, and an elbow at the base. The drop connection shall be encased in concrete or in a brick box filled with sand.

- k. All manholes shall be vacuum tested prior to backfill. After a satisfactory vacuum test has been completed, the manhole shall be backfilled. Another visual inspection of the manhole shall then be conducted to verify that no damage occurred during the backfilling.

**All tops of manholes shall be set above 100 year flood plain elevations.**

## **E. Service Connections**

- a. Sanitary sewer service connections shall consist of a monolithic tee with a minimum 4” branch outlet and its main run the size of the sewer line being installed. The tee shall conform to the same specifications as used for the sewer pipe, shall have the same type of joint and shall be slightly tilted to accommodate service pipe laid on a grade of 1%. Service pipe shall be a minimum of 4” PVC and shall be ASTM D 3034 SDR 26 provided with rubber gasket joints.
- b. Where the main sewer is more than 8’ deep, the tee shall be set at an angle of 45 degrees with the vertical and 4” riser pipe installed to a point four feet below the ground. A 45 degree bend shall then be installed on the end of the pipe. Where the service pipe is to be installed it shall extend under normal conditions to the approximate property line.
- c. The end of the service pipe shall be furnished with a stopper lightly cemented in place. It shall be marked by driving a 2” x 4” stake into the ground at least 12” with 24” above ground visible and marked “sewer lateral”.
- d. The sanitary sewer line, from lateral to structure, shall meet all local codes and ordinances as required by local jurisdiction for plumbing installations. **The connection to the sewer lateral must be inspected by a SWSA representative. Failure to do so will result in installer unearthing connection point for inspection. Before sewer service is provided, the Authority shall be provided an approved inspection report from the appropriate Inspector’s office.**

- e. A four inch (4") clean out with a **BRASS** cap shall be installed with no less than one inch (1") exposed above ground level at property/easement line. The clean out shall be maintained by the property owner. Failure to maintain clean out may result in interruption of water service.

## **F. Permits**

- a. Permit applications from State or County Highway Departments, Municipal Street Departments, Railroads, and Utility Companies shall be prepared by the Developer. Permit applications shall be prepared by the Developer even though the permanent contract agreement is made between Controlling Authority and the Authority.
- b. The Developer will be required under the terms of this contract to furnish the performance bond, insurance coverage, and any other security required by the Controlling Authority, either directly from him or indirectly from the Authority.

## **G. Backfill**

- a. All trenches shall be backfilled immediately after the pipe has been laid and inspected. Backfill material shall be approved in all cases by the Engineer and shall be free of objectionable debris. Backfilling shall include the refilling and compaction of the fills in the trenches or excavation to the existing ground surface or to the existing road sub grade.
- b. Following the laying of the pipe, the pipe shall be centered in the trench, adjusted to line and grade and the initial bedding material shall be carefully placed on both sides of the pipe so as not to disturb the alignment and grade of the pipeline. The bedding material shall be sliced under the haunches of the pipe and compacted to fill all voids. The slicing shall be performed when the bedding material is no higher than one-fourth (1//4) of the pipe diameter. Where excavated trench material is used, for backfill within the pipe zone, such material shall be free of rubbish, frozen material, broken pavement, other debris, rocks greater than that indicated in the sieve analysis for granular material, fine-grained soils as defined by ASTM 2487, or other material considered deleterious.
- c. The remaining portion of the trench from the pipe zone to the existing ground level or road sub grade shall be backfilled with material excavated from the trench. The backfill material shall be free of rubbish, frozen material, broken pavement, other debris, stone greater than six (6) inches in diameter, organic mulch, or other material considered deleterious.

## H. Pipe Zone

- a. Flexible pipe systems such as PE pipe or PVC pipe used for gravity sewer lines shall be laid with a stone foundation and also compacted stone backfill within the Pipe Zone
- b. PIPE FOUNDATION shall be defined as that portion of the pipe zone which extends from the bottom of the pipe barrel to a point four inches below the pipe barrel and 9 inches on each side of the pipe barrel.
- c. The sub foundation on which the pipe foundation material is to be placed shall be finished accurately to the dimensions shown on the plans. No boulders shall be left projecting within the trench excavation lines as shown on the plans.
- d. The foundation material shall be angular stone as defined below. Prior to laying the pipe the foundation material shall be trimmed to grade, bell holes dug, such that each pipe section is fully supported along its entire length.
- e. **PIPE BEDDING** shall be defined as that portion of the pipe zone which extends from the bottom of the pipe to the top of the pipe. The materials to be used in this zone shall be the same angular stone specified below. The stone shall be sliced under the haunches of the pipe to remove all voids and to achieve through compaction of the stone surrounding the pipe barrel. The first layer of stone bedding shall extend to one quarter of the pipe diameter, sliced to remove all voids, and then the remaining stone to the top of the pipe placed and sliced once again.
- f. Angular stone used for foundation and bedding material as specified above shall be No. 67 Coarse Aggregate as defined by the following gradation standards and the latest AHD specifications:

Percent Passing	Sieve No.
100	1
90-100	3/4 inch
20-55	3/8 inch
0-10	#4
0-5	#8

## I. Pipes Under Pavement

- a. Piping under all pavement shall be ductile iron pressure class 350 in accordance with AWWA C-151. In the event of the State Highway Department requiring a bond or certified check to guarantee the replacement of highway paving, the Developer shall furnish this security at his own expense.

## **J. Laser Beam**

- a. All gravity sewer pipe shall be installed utilizing a laser beam device to ensure correct horizontal and vertical alignment. The laser beam shall be of a type approved by the Authority. Each laser beam shall be calibrated at the factory before being used for this work. At 30 day intervals, each laser beam device shall be field checked and recalibrated if necessary by the manufacturer and a certificate authenticating its accuracy provided to the Authority.

## **K. Televised Inspection**

- a. All new sanitary sewer lines shall be cleaned and televised at the expense of the developer/contractor. A representative of the Authority shall be present during all televising. A DVD copy shall be supplied to the Authority.

## **L. Laying Pipe**

- a. All pipe shall be installed in strict accordance with the latest published recommendations of the manufacturer, with particular regard to the preparation of the trench bottom, making of joints, and backfill material, placement and compaction.
- b. Before the pipe is placed in position, the bottom of the trench shall be uniformly graded so that the pipe will have a bearing for its full length. As each section of pipe is set in place, a small excavation shall be made to provide a place for the bell.
- c. Each section of pipe shall be inspected and cleaned before being placed in position and it shall be arranged so that any permissible defects are at the top. Earth shall be scraped and tamped under the pipe where necessary to bring it to correct line and grade. Pipe shall be laid with the bell up-grade.
- d. The bell of each joint shall be wiped clean before the gasket is inserted in it and the gasket covered with lubricant before the pipe sections are jointed together.
- e. Where pipe laying is suspended at the lunch hour, at night, during inclement weather or at any other time, the open end of the pipe line

shall be provided with a tight fitting plug in order to prevent the entrance of dirt, mud and animals.

- f. Wye-branches shall be installed in the line opposite every lot, and in other locations if so directed by the Authority. The Developer/Contractor shall maintain a complete and accurate record showing the location of each wye-branch installed. The locations will be given as a distance upgrade from each manhole. The record shall state whether the wye-branch is facing right or left when looking up grade and if riser pipe is installed, the amount shall be recorded.

## **M. Infiltration**

- a. When construction of the sewer has been completed, it shall be to all intents and purposes substantially clean and dry and there shall be no visible infiltration.

## **N. Air Testing**

- a. All gravity sewers shall be tested using low pressure. The Authority shall be notified 48 hours prior to the test.
- b. The air tests shall be conducted after a section of line is completed and backfilled. The equipment used for conducting the test shall be specifically designed for this purpose.
- c. All pneumatic plugs shall be seal tested before used in the actual test installation. One length of pipe shall be laid on the ground and sealed at both ends with the pneumatic plugs to be checked. Air shall be introduced into the plugs to 25 psig. The sealed pipe shall be pressurized to 5 psig. The plugs shall hold against this pressure without bracing and without movement of the plugs out of the pipe.
- d. After a manhole reach of pipe has been backfilled and cleaned, and the pneumatic plugs are checked by the above procedure, the plugs shall be placed in the line at each manhole and inflated to 25 psig. Low pressure air shall be introduced into this sealed line until the internal air pressure reached 4 psig greater than the average back pressure of any ground water that may be over the pipe. At least two minutes shall be allowed for the air pressure to stabilize.
- e. After the stabilization period (3.5 psig minimum pressure in the pipe), the air hose from the control panel to the air supply shall be disconnected. The portion of line being tested shall be termed "Acceptable" if the time required in minutes for the pressure to decrease from 3.5 to 3.0 psig (greater than the average back pressure

of any ground water that may be over the pipe) shall not be less than the time shown for the given diameters in the following table:

**MINIMUM TIME FOR LENGTH SHOWN**

PIPE SIZE	100 FT.	200 FT.	300 FT.	400 FT.	SECONDS PER ADDITIONAL LENGTH
4 inch	1.53	1.53	1.53	1.53	.190
6 inch	2.50	2.50	2.50	2.51	.427
8 inch	3.47	3.47	3.48	5.04	.760
10 inch	4.43	4.43	5.56	7.54	1.187
12 inch	5.40	5.42	8.33	11.24	1.709
15 inch	7.05	8.54	13.21	18.48	2.673
18 inch	8.30	12.49	19.14	25.38	3.846
21 inch	9.55	17.27	26.11	34.54	5.235
24 inch	11.24	22.48	34.11	45.35	6.837
27 inch	14.25	28.51	43.16	57.42	8.653

**MINIMUM PRESSURE SHALL BE 3.5 PSIG AND .4329 PSIG ADDED FOR EACH FOOT OF GROUND WATER ABOVE THE PIPE INVERT. MAXIMUM PRESSURE SHALL BE 9.0 PSIG.**

- f. In areas where ground water is known to exist, the Developer shall install a one-half inch diameter capped pipe nipple, approximately 10” long, through the manhole wall on top of one of the sewer lines entering the manhole. This shall be done at the time the sewer line is installed. Immediately prior to the performance of the Line Acceptance Test, the ground water shall be determined by removing the pipe cap, blowing air through the pipe nipple into the ground so as to clear it, and then connecting a clear plastic tube to the nipple. The hose shall be held vertically and a measurement of the height in feet of water over the invert of the pipe shall be taken after the water has stopped rising in this plastic tube. The height in feet shall be divided by 2.3 to establish the pounds of pressure that will be added to all readings. (For example, if the height of water is 11 ½ feet, then the added pressure will be 5 psig. This increases the 3.5 psig to 8.5 psig, and the 2.5 psig to 7.5 psig. The allowable drop of one pound and the timing remain the same.)

**O. Mandrel Testing**

- a. A nine-armed mandrel shall be hand pulled through all PE and PVC gravity sewer pipe after the pipe has been backfilled for at least sixty

(60) days. The maximum allowable deflection of the pipe shall be not more than 5% of the base diameter. Any pipe that deflects in excess of 5% shall be corrected and relayed at the contractor's expense.

## P. Manhole Testing

- a. All manholes shall be tested by one (1) of the following methods:
- b. **Manhole Exfiltration test:** All manholes constructed shall be watertight and show no visible sign of infiltration, and shall be tested in accordance with this Specification. The test shall be conducted by the Developer in coordination with and at the direction of his Engineer. All Incoming and outgoing sewer lines shall be plugged and the manhole filled with water to a level above the highest section joint. If the water level drop exceeds 1/8" per vertical foot of manhole depth in five (5) minutes, the manhole shall have failed the test.
- c. **Manhole Vacuum Test:** The test shall be conducted by the Developer in coordination with and at the direction of his Engineer. The manhole shall be tested, after assembly, as follows: All pipe openings shall be sealed by installing suitable plugs that completely isolate the manhole structure: any other openings, such as lifting holes, shall be permanently sealed. A suitable vacuum pump shall be connected to the manhole, and a vacuum of 10" of Hg drawn. The pump shall then be isolated from the manhole by valving, and the test period begun.
- d. The test shall be successful if the vacuum remains at 9" of Hg or greater according to the following table:

Manhole Diameter	Time Minimum
48 inches	60
60 inches	75
72 inches	90

## Q. Force Mains

- a. Pressure mains shall be laid with a cover of at least 36" or as shown on the drawings. After they have been completed they shall be subjected to a hydrostatic pressure test of 50 psi for a duration of not

less than two hours, with allowable leakage not exceeding the requirements of AWWA C600.

## **R. Air Vacuum Valves**

- a. Air vacuum valves are specified for installation on sewage force mains located at the high points of the force mains. The precise locations will be determined after the force main has been installed.
- b. The air release valve shall be Crispin 2” Model SL-20, or other approved equal. The air/vacuum valve shall be provided with a 2” cut off valve, stainless steel trim, and all standard accessories. The air valve shall be connected to the top of the force main by means of a tap in the pipe. The manhole in which the valve assembly is located shall be provided with a concrete or brick wall footing and an earth bottom on which is provided a layer of sand about 6” thick. The top of the sand bottom shall be approximately 12” below the bottom of the force main.
- c. The air release valve shall be connected to the force main by a threaded 2” connection on the top of the force main and, if necessary, a tapped tee shall be used for this connection.
- d. Between the main connection and the air release valve a 2” shut off valve and 1” blow off valve shall be furnished and installed.

## **S. Water Main Crossings**

- a. At any location where the sanitary sewer line must cross a potable water line, the sanitary sewer line shall be three feet below the water main. If the distance between the sanitary sewer line and the potable water line is less than three feet, the sanitary sewer line shall be constructed of ductile iron pipe or encased for a distance of 5 feet on each side of the crossing.

## **T. Permits and Bonds**

- a. The Developer is responsible for all costs related to surveys, sketches, and drawings, completing permit applications, providing bonds, insurance and other security as required by the State Highway Department, Railroads, Pipelines, and the County Engineering Department in connection with permits for installing pipelines.
- b. The Developer will not be required to pay any annual rental charges levied by a Railroad but will pay the cost of any supervision by the Railroad’s inspectors if such is stipulated in the permit and will provide the performance bond or other security required by the Railroad.

## **U. Inspections**

- a. **It is the responsibility of the engineer of record to perform all inspections.** A detailed written inspection report is required on all work performed and shall be submitted to the Authority on a weekly basis.

**SMITHS WATER & SEWER AUTHORITY**

**GENERAL RULES**

*(Attachment D)*

The purpose of the utility is to provide water and sanitary sewer service (where available) to the customers within its service area. The supplying and taking of water and sewer shall be in conformance with EPA, ADEM, State and Local Health Departments and policies of SWSA.

Each customer of the utility shall be eligible to receive service from the utility only after a User's Agreement has been executed between the customer and the utility. If a customer requires service at more than one point of use, a separate Water User's Agreement shall be executed for each additional point of use.

- A. The Utility agrees to provide service to the point of delivery, and install and maintain at its expense, one metered service connection for water for each customer point of use, based on a valid User's Agreement.
- B. The customer will install and maintain at his own expense, service lines from the point of delivery to the point of use, a Utility approved dual check valve (backflow preventer) and hand valve. **Both must be located within the meter box or in a separate box located within two feet of the existing meter box. A sewer clean out plug with a brass top shall be installed at the property line/R.O.W./easement.** The customer will make repairs on a timely basis as necessary. The customer will also insure that the meter locations and clean out plugs are accessible to the Authority personnel at all times by keeping brush, fences, automobiles and any other materials away from meter and clean out sites.
- C. A metered service connection is for the sole use of the applicant or customer. Customers shall not permit the extension of pipes for the purpose of transferring water or sewer from one property to another, from one point of use to another, nor share, resell, or sub-meter water to any other person or entity.
- D. **At no time shall any customer or individual connect a non-system water source to any service line or water line that is also connected to the system. Any connection made to the system without a meter or backflow preventer will automatically carry a penalty of \$100.00 on 1<sup>st</sup> offense, \$250.00 on the 2<sup>nd</sup> offense, \$500.00 on the 3<sup>rd</sup> offense to be paid before a meter will be set. The 4<sup>th</sup> offense will be cause for refusal of service.**
- E. **In case of a change in occupancy, no less than three days notice must be given in person or in writing, at the Authority office, to discontinue service or to change occupancy. The outgoing customer shall be required to complete a "Request for Final" form and shall be responsible for all water consumed up to the time of termination or transfer of service.**
- F. Customers agree to pay the established fees for water and sewer service in accordance with applicable rate schedules at the time service is provided by the Utility.
- G. Representatives of the Utility shall have the right at all reasonable hours to enter the customer's property in order to read water meters, inspect piping, and to perform other duties for the proper maintenance and operation of service, or to remove its meters and equipment upon discontinuance of service by either the customer or the Utility.

- H. The Utility will make all reasonable efforts to supply continuous, uninterrupted service. However, it shall have the right to interrupt service for the purpose of making repairs, connections, extensions, or for other necessary work. Efforts will be made to notify customers, who may be affected by such interruptions, but the utility will not accept responsibility for losses which might occur due to such necessary interruptions, nor does the Utility accept responsibility for losses due to interruptions of service caused by storms, floods, or other causes beyond its control. Due to main breaks, fire department use of hydrants, and operating of pumps, Smiths Water & Sewer Authority will not accept responsibility for clothes damaged during washing due to discoloration of water when service is restored.
- I. The customer, members of his household, and employees shall use water furnished by the Authority for consumption only. Water shall not be used for irrigation, fire protection, or other purposes, except when water is available in sufficient quantity without interfering with the regular domestic consumption in the area served. Disregarding for this rule shall be sufficient cause for refusal or discontinuance of service.
- J. The Authority reserves the right to discontinue its service without notice for the following additional reasons:
- Consumers willful disregard of the Authority’s rules
  - Emergency repairs
  - Insufficient water supply due to circumstances beyond the Authority’s control
  - Legal processes
  - Direction of Public Authorities
  - Strike, riot, fire, floods, accident or any unavoidable cause.
- K. **The Authority may in addition to prosecution by law permanently refuse service to any customer who tampers with a meter or measuring device.**
- L. **If the Authority installs a lock on a meter service, any damage to said lock will be paid by customer and all water consumed as evidenced by the meter serving said customer shall be paid for by said customer.**

### **Identity Theft Prevention Program and Policy**

Pursuant to the provisions of the Fair and Accurate Credit Transactions Act (“FACTA”), and the “Red Flag Rules” contained therein, see 15 U.S.C. §1681m(e), Smiths Water & Sewer Authority (“SWSA”) has adopted the following written program and policy aimed to protect SWSA’s customers from identity theft, effective November 1, 2008.

### **Identifications of Relevant “Red Flags”:**

“Red flags” are specific activities, patterns, or practices that indicate the possible existence of identity theft in connection with a covered account. Customer accounts at SWSA may be covered accounts under the FACTA Red Flag Rules. SWSA will seek to identify “red flags” of identity theft. Examples of such “red flags” may include, but are not limited to:

1. Documents provided for identification that appear to have been altered or forged;
2. An application for service that appears to have been forged, altered, or destroyed and reassembled;
3. A photograph or physical description on a customer identification source that is not consistent with the appearance of the applicant or customer presenting the identification;
4. Other information on the identification source that is not consistent with information provided by the customer opening the account, or other information on file with SWSA, such as a signature card or recent check;
5. Suspicious personal identifying information is provided, such as an address, date of birth, or social security number that does not match the personal identifying information on file at SWSA;
6. Suspicious personal identifying information is provided of a type commonly associated with fraudulent activity, such as an address that is fictitious, a mail drop, or a prison, or a phone number that is invalid, or associated with a pager or answering service;
7. A social security number, telephone number or address is provided that is the same as that submitted by other persons opening an account or other customers;
8. An applicant or customer opening an account or accessing an account fails to provide all required personal identifying information on an application or in response to notification that the application or account access request is incomplete;
9. Personal identifying information is provided that is not consistent with the personal identifying information on file with SWSA for the customer;
10. A customer fails to make the first payment on the account or makes an initial payment but no subsequent payments;
11. An account is used in a manner that is not consistent with the established patterns of activity on the account, such as nonpayment where there is no history of late or missed payments, or a material change in use on the account inconsistent with past use;
12. An account is used that has been inactive for a reasonably lengthy period of time (taking into account other relevant factors);
13. Mail sent to the customer is returned repeatedly as undeliverable although water or sewer service continues to be used;
14. SWSA becomes notified that the customer is not receiving account statements; or
15. SWSA is notified by a customer, a victim of identity theft, a law enforcement authority, or any other person that it has opened a fraudulent account for a person engaged in identity theft.

### **Detection of “Red Flags”**

SWSA rules and regulations require, at the time an application for service is submitted, the customer must provide his or her social security number to be kept confidentially on file at SWSA. Additionally, at least one, valid form of government issued photo identification must be submitted, such as a driver’s license, military identification or a passport. When establishing an account each customer must present documentary evidence of ownership or leasehold interest in the property for which a water and/or sewer account is requested, such as a deed, settlement statement or lease.

SWSA rules and regulations also require, with respect to changes to or inquiries regarding an account as follows: (1) marriage certificate or valid driver’s license must be produced to establish a name

change; (2) death certificate must be produced to remove a customer from an account for reason of death; (3) for walk-in account changes or inquiry, customers must produce valid photo identification such as a driver's license, military identification or a passport matching the identification on file at SWSA, or the customer must give the last four digits of his or her social security number; and other verbal confirmation of identity matching the information on file at SWSA. SWSA does not allow changes to be made to any account, and does not discuss any account with anyone other than the listed account owner who provides the substantiation information listed above.

SWSA regularly reviews accounts and account activity to ensure that the relevant red flags are not present. SWSA employees are required to follow these rules before providing any account information to any person.

### **Responding to "Red Flags"**

SWSA will respond to detected red flags in a manner commensurate with the degree of risk posed. This may include heightened monitoring of an identified or suspect account, contacting the customer to notify the customer of suspicious activity or of the red flag(s), changing account numbers, or notifying law enforcement. In some situations it may be appropriate that no response is necessary.

### **Ensuring the Identity Theft Prevention Program and Policy is Updated Periodically**

It is important to SWSA to periodically update this program to reflect changes in risks. SWSA will keep current with changes in identity theft as is practicable and, as necessary; utilize new methods of combating identity theft. Customers are encouraged to contact SWSA with any questions or concerns they have.

## **Obtaining Water Service**

### **Residential Service**

**The following is required at the time of application for water service:**

- For Homeowners: A legal document proving ownership of property such as a settlement statement, warranty deed, or property tax valuation notice
- For Renters: A signed, dated, lease agreement listing property address
- Payment of applicable fees
- A valid state or federal government issued photo identification

**Property with No Existing Service:** The residential applicant shall apply for water service in person at the Authority office. A fee of \$1,850.00 (standard 3/4" x 5/8" service) is payable at the time of application. This fee includes a water tap fee, a water impact fee, and a \*\$100.00 non-refundable account set-up fee. All service taps require an approved dual check backflow preventer valve and an Authority approved hand valve placed within two (2) feet of the meter. For your convenience, these valves are available for purchase at the Authority office at current cost. The valves may be purchased

from an outside vendor, but must be Authority approved. **NO PLASTIC VALVES ARE ALLOWED.**

**Please refer to the section of this manual entitled *TAP ON FEES* for service taps other than standard size.**

**Property with Existing Service:** Where there is an existing service tap, the applicant shall establish a water account with Smiths Water & Sewer Authority. The applicant shall apply in person at the Authority office. The applicant shall pay a non-refundable account set-up fee of \*\$100.00.

\*The \$100.00 non-refundable account set-up fee shall increase to \$200.00 for customers who have previously left a delinquent balance outstanding. In this event, the customer shall pay all delinquent balances and charges associated with the previous account(s) prior to re-establishing service.

### **Commercial Service**

The same regulations and application process applies for commercial service as for residential service (*see Residential Service above*). A\* \$100.00 non-refundable account set-up fee is payable for commercial service at the time of application.

\*The \$100.00 non-refundable account set up fee shall increase to \$200.00 for customers who have previously left a delinquent balance outstanding. In this event, the customer shall pay all delinquent balances and charges associated with the previous account(s) prior to re-establishing service.

### **Contractors**

Contractors holding current documentation from the Alabama Home Builders Licensure Board may set up a water account for new construction by posting a \$100.00 refundable deposit.

### **Special Water Service**

#### **Private Fire Protection**

The Authority, where available, will provide business customers standby water service for private fire protection. All tap fees and associated costs shall be paid by the business owner. This service shall be offered only upon the following conditions:

- (1) The fire flow line is metered and shall be available to the Authority for inspection
- (2) There are no cross-connections between fire protection and potable water system within the establishment

(3) An approved backflow preventer is installed in the fire flow supply line entering the establishment

The Authority will charge a monthly fee for the availability of private fire protection. The fee shall be charged in accordance with the following table:

Connection Size	Monthly Fee
6" or less	\$ 25.00
8"	\$ 50.00
10"	\$ 75.00
12"	\$100.00

Water usage for fire protection meters will be billed at a rate of \$4.20/1,000 gallons.

### **Obtaining Sewer Service**

When applicable, in areas where sewer service is available, the customer shall sign up for sewer service at the same time as for water service. The sewer rates are based on the water consumption and billed on the same statement with the monthly charges for water. A tap and impact fee is payable at the time of application for sewer service. The tap fee is a minimum of \$750.00 (4" short side lateral) and the impact fee is \$2,500.00. Please refer to attachment E and attachment F for particulars on impact fees and rate structure for charges for service.

The service line which runs from the residence or business to the lateral shall be installed by a licensed plumber and shall meet all local codes and ordinances as required by local jurisdictions. **The connection to the sewer lateral must be inspected by a SWSA representative. Failure to do so will result in installer unearthing connection point for inspection. When notice of approval is received from the county inspector's office, then and only then, shall the service line be connected to the lateral.** Please refer to *page 34, section E (Service Connections), paragraphs d. and e.* of this manual for additional information.

### **Special Accommodation for Landlords/Realtors**

#### **Landlords**

Landlords may establish an account for rental property by posting a non-refundable fee of \$100.00. This fee will be kept on account and may be rolled from one rental unit to another but may only be used for **one service address at a time**. Landlords will be billed for any usage or minimum charges while the account is between tenants, provided the landlord has re-established service in his/her name. Established landlord accounts will be charged a \$30.00 service fee each time the service is turned on and off.

#### **Realtors**

Realtors may establish an account with a non-refundable fee of \$100.00 which will roll from one service address to another as needed. **Only one service address at a time** will be covered by this fee. Realtors will be billed for any usage or minimum charges while the account is between tenants/owners, provided the realtor has established service in his/her name. Realtor accounts will incur a \$30.00 service fee each time the service is turned on and off.

### **Service for Home Inspection**

Customers may establish a water account for home inspection by posting a deposit of \$100.00. The home inspection account will remain active for 3 business days. The account will automatically be closed after the third business day. The account will be billed a \$30.00 service fee and for any water usage. The balance of these charges will be deducted from the deposit and the difference will be refunded or billed accordingly.

### **Customer Billing**

1. Customers will be billed monthly in accordance with the rate structure of the Utility.
2. Bills for water will be computed in accordance with the Authority's rate schedule and will be based on the amount consumed for the period covered by the meter readings, except where a customer orders turn-off less than one month after turn-on, and usage is less than the minimum. To such customer for such period, the charge for usage shall be equal to the minimum charge for one full month's service.
3. Readings from different meters will not be combined for billing.

### **Payment Terms**

1. All bills are due and payable upon receipt. However, we do allow a 10-day grace period before we apply a late penalty to your account. Your bill will show the amount due both before and after the grace period. Full payment must be received in the Smiths Water & Sewer Authority office by 5:00 p.m. Eastern time on the "pay after date" to avoid a penalty. A 15% penalty will apply after 5:00 p.m. Eastern time on the "pay after" date and thereafter.
2. **Postmarks on mailed bills will not be considered.**
3. Smiths Water & Sewer Authority reserves the right to process checks electronically by transmitting the amount of the check, the routing number, account number and check number to your financial institution. By submitting a check for payment, you authorize us to initiate an electronic debit from your bank or asset account. If we process your check electronically, your payment may be debited from your account the day we receive the check. In addition, if we process your check electronically, you will not receive that cancelled check with your account statement but the payment will be reflected on your statement which serves as proof of payment. If we cannot collect the funds electronically, we may issue a draft against your bank account for the amount of the check. In the event that a payment is dishonored for any reason, you authorize us to electronically re-present the item to collect the check amount and to initiate an electronic debit from your bank account for any taxes and fees as permitted by Alabama state law. Smiths Water & Sewer Authority reserves the right to use a third party

for collection of both dishonored checks and/or fees in connection with the dishonored transaction.

4. As a convenience to our customers, payments by phone may be made using your credit/debit card by utilizing our free automated payment system. The web ID located on your billing statement is required to utilize this service. Phone payments initiated by 5:00 p.m. eastern time will post to your Smiths Water & Sewer Authority account the following business day. Phone payments will not post to your account on weekends or observed holidays. To make a payment by phone, please call 1-334-378-3633.
5. Any meter re-read requested by the customer will result in a \$55.00 service fee charged to the customer's account unless determined that the previous meter reading is incorrect.
6. Requests for service to the meter may be called in during regular office hours. Any service call processed as a leak or other problem located on the customer's side of the water meter will be billed at the rate of \$55.00/call.
7. In the event an item for payment is returned by the customer's financial institution, Smiths Water & Sewer Authority will charge a returned item fee up to the maximum amount allowed by law
8. As a convenience, customer payments can be made at [www.smithswater.com](http://www.smithswater.com) by clicking on the "Pay Bill" link and setting up a customer portal account. The web ID located on your monthly bill will be required. Payments made through the customer portal do not immediately post to your SWSA account. Payments initiated by 5:00 p.m. eastern time will post to your SWSA account the following business day. Online payments initiated after 5:00 p.m. eastern time will **NOT** post the following business day. Customer payments are not considered received until the payment posts to your SWSA account. Please read all disclaimers on our web site before making a web pay. If your account is subject to disconnect due to a delinquent balance, please call our office for instructions on how to pay to avoid disconnection or restore service.

### **Termination of Water Service**

1. Bills are considered late if not paid in full by the "pay after" date indicated on your statement. Any bill with a past due balance that is not paid in full by 5:00 PM Eastern time by the "pay after" date indicated on the monthly bill is subject to be disconnected at any time thereafter and will accrue a nonrefundable delinquent fee of \$50.00 at 5:00 PM Eastern time on the day before disconnect occurs. All fees for reconnection must be paid in the office prior to 5:00 pm eastern time. Reconnect technicians will not be allowed to collect payments.
2. Failure to receive bills shall not prevent such bills from becoming delinquent nor relieve the customer from payment.
3. Past due balances not paid prior to the following month's billing will result in interruption of water service. Customers may avoid termination of service by (1) paying the amount due during normal business hours at the Utility office before the scheduled disconnect date; or (2) receiving a hardship deferment and signing a deferred (time) pay plan specifying payment terms before the scheduled disconnect date.
4. Customers may appeal a notice of termination of water service. The Office Manager is designated as the Utility representative for hearing customer appeals of termination of water service. The representative is authorized to correct errors of the Utility and adjust the amount due the Utility, receive payment to satisfy the amount in arrears, and negotiate deferred

payment plans. Requests for special consideration shall be made PRIOR to the customer losing service.

5. A written hearing record (of the customer appeal) will be prepared and maintained on file by the utility representative.
6. The Board will hear appeals at regularly scheduled Board meetings only after the customer has followed the above administrative procedure. Service will be disconnected as scheduled regardless of a customer's intent to appeal to the Board.

### **Deferred Payment Plan for Hardship Cases**

1. A customer may apply for deferred payment before the disconnect date by going to the Utility office and filing a statement of hardship with the office manager. If the hardship qualifies, the customer will sign a deferred payment plan.
2. The maximum length of a deferred payment plan shall be 90 days unless the approved plan specifies otherwise.
3. Minimum monthly payment amounts shall be not less than one-third of the total amount due unless the approved plan specifies otherwise.
4. Deferred payment amounts shall be in addition to regular service bill amount.
5. The customer will lose his deferred status if the contract is not maintained as agreed upon.

### **Meters**

1. Meters will be owned, installed, inspected, tested and kept in proper operating condition by the Utility without cost to the customer. Meter tests will be made according to methods of the American Water Works Association by the Utility as often as deemed necessary.
2. Service meters whose errors do not exceed 2% AWWA standard fast or slow shall be considered as being within the allowable limits of accuracy for billing purposes.
3. Meters shall be set in an accessible location on the outside of buildings, fences, driveways, etc. Meters shall be placed in a meter box, and at the Authority's discretion, installed within three feet on or off the applicant's property line. **Meters will not be placed inside fenced area.**
4. If a customer feels their meter is reading incorrectly, the customer may request a meter test to test for accuracy. A Water Meter Test Request form shall be completed by the customer before the meter is removed and shipped to the testing facility. The cost for each meter tested is a deposit of \$125.00 which must be paid in advance and shall be paid in guaranteed funds. If the results of the test show the meter is within the American Water Works Association (AWWA) tolerance of +/- 2% (98%-102%) , the meter is considered accurate; the customer's account will not be credited the deposit and the outstanding account balance is due in full. If the test shows the meter is less than 98% accurate, the Authority shall keep the deposit and a certified meter shall be installed. If the test results show the meter is over 102% accurate, the customer's bill will be adjusted accordingly for a period not to exceed 6 months prior billing periods from the date of the written request; the deposit will be credited to the customer's account and a certified meter shall be installed.

5. **The customer shall be responsible for any damage caused by other than normal wear and tear to the meter and box installed for his/her service.**

### **Applicants Having Excessive Needs**

1. In the event an applicant whose water requirements are found to exceed the Utility's ability to supply it from the existing plant without adversely affecting service to other customers to an unreasonable extent, the Utility will not be obligated to render such service.

### **Water and Sewer Main Extensions and Areas Where Existing Water /Sewer Main Doesn't Run Parallel to Property to be Served**

1. The Authority will run a service line or lateral from its distribution/sewer line to the property line where the distribution/sewer line exists, or is to be constructed and runs immediately adjacent and parallel to the property to be served.
2. The Authority may make connections to service other properties not adjacent to its lines upon payment of reasonable costs (as set forth by the Board of Directors) for the extensions of its distribution/sewer lines as may be required to render such service.
3. All service taps require a tap fee be paid. The only exception from this requirement would be water main replacement due to inability to meet ADEM requirements for minimum allowable pressures, or replacement due to excessive breaks and leaks due to age of the water/sewer main.

### **Availability of Records for Public Inspection**

1. Utility records, including minutes of meetings and financial records, are available for inspection by the public Tuesday-Friday between the hours of 10:00 AM and 3:00 PM eastern time, with a prior working day notice for scheduling and preparation. Request forms for this scheduling may be completed in the office during normal business hours.

### **Notice of Meetings of the Board**

1. The Board meets in regular session on Mondays the 3<sup>rd</sup> week of each month at 1:00 p.m. Eastern time at the SWSA office. Notices of special meetings are posted at the Utility office at least 48 hours prior to the meeting.
2. Anyone wishing to appear before the Board must have their name and nature of their request placed on the agenda at least one (1) week prior to the meeting.

### **Policy Changes**

1. These policies are subject to change as required and voted on by the Board without notification. The Board shall establish rates and fees for service as necessary to operate and maintain the Utility.

**Schedule of Tap - On Fees, Water and Sewer Rates, and Other Fees**

**Tap on Fees**

***Rates Effective January 1, 2015***

All	SIZE TAP	TAP FEE	IMPACT FEE	SET UP FEE	TOTAL
	¾"	\$750.00	\$1,000.00	\$100.00	\$1,850.00
	1"	\$925.00	\$1,500.00	\$100.00	\$2,525.00
	1 ½"	CURRENT MATERIAL	\$2,000.00	\$100.00	
	2"	CURRENT MATERIAL	\$2,500.00	\$100.00	
	3"	CURRENT MATERIAL	\$5,150.00	\$100.00	
	4"	CURRENT MATERIAL COST	\$7,800.00	\$100.00	
	6"	CURRENT MATERIAL COST	\$15,600.00	\$100.00	
	8"	CURRENT MATERIAL COST	\$27,735.00	\$100.00	

service installations 1 ½" and larger shall be furnished and installed per SWSA specifications by the Owner at their expense. Owner shall furnish and install all materials as required. All materials shall conform to SWSA specifications. Prior to the installation of any material Owner shall furnish a copy of the submittal data. Submittals will be reviewed and approved with required changes noted. Only upon approval of submittals shall any materials be installed within the SWSA distribution system.

All water service taps require dual check backflow preventer valves and hand valves. Both valves must be placed within two (2) feet of the meter.

Smiths Water & Sewer Authority sells the ¾" and 1" dual check backflow preventer and hand valves at current cost for your convenience or you may purchase them elsewhere.

Hydrant Installation -----Current cost

**Residential Water Rate Schedule**

*Effective July 1, 2011*

<b>First 1,000 Gallons</b>	<b>\$19.75 (monthly minimum)</b>
<b>Next 2,500 Gallons</b>	<b>\$ 4.65/1,000 Gallons</b>
<b>Next 5,000 Gallons</b>	<b>\$ 4.85/1,000 Gallons</b>
<b>All Over 8,500 Gallons</b>	<b>\$ 5.25/1,000 Gallons</b>

**Commercial Water Rate Schedule**

*Effective August 1, 2010  
Rates are subject to change without notice*

<b>First 20,000 Gallons</b>	<b>\$ 90.00 (monthly minimum)</b>
<b>All Over 20,000 Gallons</b>	<b>\$ 4.20/1,000 Gallons</b>

**Hydrant Meters**

<b>Monthly Rental Fee</b>	<b>\$ 50.00</b>
<b>Water Rate</b>	<b>\$ 4.20/1,000 Gallons</b>

**Attachment E**  
Resolution

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**(Sewer Assessment and Impact Fees)**

**BE IT RESOLVED BY THE SMITHS WATER & SEWER AUTHORITY SMITHS STATION, AL AS FOLLOWS:**

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- a) It is hereby determined and declared that the Authority is entitled to impose a reasonable impact fee upon any person tapping, cutting or connecting onto its sanitary sewer lines within the service limits of the Authority for any structure, building, dumping station or other use for the cost of impacting the reserve capacity of sewer lines or treatment facilities. Such Impact Fee shall be Two Thousand, Five Hundred Dollars ( \$2,500.00) for each average equivalent connection. An average equivalent connection shall be considered to be usage of approximately 9,000 gallons of water or less per month and shall be applied according to the following table:

<b>Single Family Homes and Manufactured housing</b>	<b>one(1)equivalent average connection</b>
<b>Multi-family homes:</b>	
<b>Duplex</b>	two (2) average equivalent connections
<b>Triplex</b>	two and one half (2 ½) average equivalent connections
<b>Quadraplex</b>	three (3) average equivalent connections
<b>More than 4 units</b>	two-thirds (2/3) average equivalent connection <b>PER UNIT</b>
<b>Retail Sales</b>	one (1) average equivalent connection per restroom
<b>Motels and Hotel</b>	one-third (1/3) average equivalent connection per room
<b>Restaurants</b>	one (1) average equivalent connection plus one (1) average equivalent connection for each twenty (20) seats over forty (40)
<b>General Business</b>	one (1) average equivalent connection per restroom plus one (1) average equivalent connection for each ten (10) employees over twenty (20)
<b>Industry</b>	same as general business if water not used in industrial process, otherwise registered engineer must certify water usage
<b>Hospitals, Nursing Homes, and other Institutions</b>	One-third (1/3) average equivalent connection per bed
<b>Auto Service Stations</b>	two (2) average equivalent connections per restroom
<b>Trailer Camps or Recreation Vehicle Parks</b>	One (1) average equivalent connection for each three (3) spaces served by on-site sewer connection or one (1) average equivalent connection per each six (6) spaces served by dump station
<b>Schools, Kindergartens, Day Care Centers, and/or Preschools</b>	One (1) average equivalent connection per each fifteen (15) students design capacity

**Churches**

One (1) equivalent connection per restroom or pair of restrooms

- b) Any or all of the above fees may be waived for connection to sewer lines constructed in whole or part with Community Development Block Grant (CDBG) Funds provided by the Federal Government where such connection is made to the home or dwelling of lower income persons as defined in the grant application or documents.
- c) There will be a minimum sewer tap fee of seven hundred & fifty (\$750.00) imposed for each standard 4” (short side lateral) sewer connection. All other sewer connection tap fees shall be equivalent to the cost of material and installation. Sewer tap and impact fee shall be paid to the Authority prior to the installation of the sewer connection.

*THIS RESOLUTION SHALL BECOME EFFECTIVE IMMEDIATELY UPON ITS PASSAGE AS PROVIDED BY LAW.*

**Attachment F**

*Resolution*

**(Rate Structure)**

**BE IT RESOLVED BY THE SMITHS WATER & SEWER AUTHORITY SMITHS STATION, ALABAMA AS FOLLOWS:**

Any residence, business industry, commercial operation or other structure which is connected to the Public Sewer Collection System owned by the Smiths Water & Sewer Authority, or delivering sewage by any means into said lines, owned shall pay for the service according to the following schedule:

**Residential Sewer Rate:**

*Rates Effective April 1, 2019*

	Monthly Usage
<b>First 1,000 Gallons</b>	<b>\$ 17.97 (monthly minimum)</b>
<b>All over 1,000 Gallons</b>	<b>\$ 5.34/1,000 Gallons</b>

**Commercial/Industrial Sewer Rate:**

*Rates Effective April 1, 2019*

<u>Monthly Usage</u>	
<b>First 20,000 Gallons</b>	<b>\$ 133.53 (monthly minimum)</b>
<b>All over 20,000 Gallons</b>	<b>\$ 4.71/1,000 Gallons</b>

Sewer usage for billing purposes shall be based on and equal to the amount of water metered for the month.

Sewer Charges shall be billed simultaneously with water. Failure of the customer to pay entire water and sewer bill by the due date may result in the termination of water service. Reconnection fee shall be as described in the water rate schedule.

Rates are subject to change without notice

**EXCERPTS OF THE MINUTES OF A REGULAR MEETING OF THE BOARD OF DIRECTORS OF SMITHS WATER & SEWER AUTHORITY**

The Board of Directors of Smiths Water & Sewer Authority held a regular meeting at its offices in the community of Smiths Station, Alabama at 7:30 o'clock p.m. on the 21<sup>st</sup> day of August, 2000.

The meeting was called to order by the Chairman and the roll was called with the following results:

Present:

- J. Randolph Osborne
- Kenneth Vann
- Mary P. Henry
- William Brewer

Absent

The Chairman stated that a quorum was present and that the meeting was open for the transaction of business.

The Chairman stated that the following item of business should be brought before the board. The Authority should adopt rules and regulations pertaining to the operation of sewer facilities by the Authority. After discussion, motions were made and seconded to accept the impact

fees and rate schedule as written with a review scheduled in one year. The motions were approved unanimously by the board members.

**This manual last updated  
March 14, 2024**

## ***The Emergency Water Conservation Plan of the Smiths Water & Sewer Authority***

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Summary of the Emergency Water Conservation Plan

**SMITHS WATER & SEWER AUTHORITY**

Upon recommendation of the Smiths Water & Sewer Authority, an Emergency Water Conservation Plan has been approved that allows for quick imposition of mandatory water conservation measures in a drought or other emergency situation of reduced water supply.

Different phases of the Plan can be implemented depending on the severity of the water supply shortage as set out below:

- A. Phase I: Prohibits any outside watering during restricted hours and the service of water in restaurants except on request.
- B. Phase II: Includes Phase I restrictions and makes a ten percent (10%) water use reduction by all water users mandatory.
- C. Phase III: Increases mandatory reduction to fifteen percent (15%).
- D. Phase IV: Increases mandatory reduction to twenty-five percent (25%).

**Customers who violate provisions of the Plan are subject to penalties, surcharges, and fines; and in some cases, service disconnection.**

**Section 100.00 Scope:** There is hereby established an Emergency Water conservation Plan to be placed in effect fully, or any part thereof, when needed, as determined by the Smiths Water & Sewer Authority Board (hereinafter SWSA).

**Section 100.01 Declaration of Policy:** It is hereby declared that, because of the conditions prevailing in the SWSA water supply, the general welfare requires that the water resources available to the SWSA be put to a maximum beneficial use to the extent practicable, and that the waste or unreasonable use, or unreasonable method of use of water be prevented, and the conservation of such water is to be exercised for the reasonable and beneficial use thereof in the interest of the customers of SWSA, and for public welfare.

**Section 100.02 Declaration of Purpose:** The purpose of this Plan is to provide a mandatory water conservation plan to minimize the effect of a shortage of water to customers of SWSA.

**Section 100.03 Application:** The provisions of this Plan shall apply to all customers and property served by SWSA wherever situated.

**Section 100.04 Phase Change Initiation:** The SWSA shall monitor and evaluate the projected supply and demand for water by its customers monthly, and shall determine the extent of water conservation required by the customers of SWSA in order for SWSA to prudently plan for and supply water to its customers. The SWSA may order the appropriate phase of water conservation be implemented in accordance with the provisions of this Plan. Said order shall be made by public proclamation, and shall be published one time only in a daily newspaper of general circulation, and shall become effective immediately upon such publication.

**Section 100.05 Water Conservation Phases:** No customer of SWSA shall make, cause, use or permit the use of water from SWSA for residential, commercial, industrial, agricultural, governmental or any other purpose in a manner contrary to any provisions of this Plan, or in an amount in excess of that use permitted by the conservation phase then in effect pursuant to actions taken by the SWSA in accordance with the provisions of this plan.

**A. Phase I**

**Prohibited Uses Applicable to All Customers:**

1. There shall be no hose washing of sidewalks, walkways, driveways, or parking areas, except that flammable or other dangerous substances may be disposed of by direct hose flushing for the benefit of public health and safety.
2. No water shall be used to clean, fill, or maintain levels in swimming pools or decorative fountains unless such water is part of a recycling system.
3. No restaurant, hotel, cafeteria, or other public place where food is sold, served, or offered for sale, shall serve drinking water to any customer unless expressly requested.

4. No customer of SWSA shall permit water to leak from any facility on his premises; and a failure to yield a timely repair of any leak shall subject said customer to all penalties provided herein for waste of water.
5. No lawn, landscape, or other turf areas including vegetable or flower gardens shall be watered or irrigated using water from SWSA until adequate water supplies are available.
6. No washing of automobiles, trucks, tractors, trailers, or any other vehicle or part thereof will be permitted while this phase is in effect.

**B. Phase II**

1. **Prohibited Uses Applicable to All Customers:** No use of water may be made contrary to the provisions of Phase I.
2. **Customer Percentage Curtailment:** No customer shall make, cause, use, or permit the use of water from SWSA for any purpose in any amount in excess of ninety percent (90%) of the amount used by that customer during the same billing period of the previous year.\*

**C. Phase III**

1. **Prohibited Uses Applicable to All Customers:** No use of water may be made contrary to the provisions of Phase of Phase II.
2. **Customer Percentage Curtailment:** No customer shall make, cause, use or permit the use of water from SWSA for any purpose in any amount in excess of eighty-five percent (85%) of the amount used by that customer during the same billing period of the previous year.\*

**D. Phase IV**

1. **Prohibited Uses Applicable to All Customers:** No use of water may be made contrary to the provisions of Phase III.
2. **Customer Percentage Curtailment:** No customer shall make, cause, use or permit the use of water from SWSA for any purpose in any amount in excess of eighty percent (80%) of the amount used by that customer during the same billing period of the previous year.\*

**E. Phase V**

1. **Prohibited Uses Applicable to All Customers:** No use of water may be made contrary to the provisions of Phase IV.
2. **Customer Percentage Curtailment:** No customer shall make, cause, use, or permit the use of water from SWSA for any purpose in any amount in excess of seventy-five percent (75%) of the amount used by that customer during the same billing period of the previous year. \*

Any customer who was not a customer on the premises being billed in the same month of the previous year shall be assigned an amount of usage for the previous year consistent with other similar premises.

- F. **Exceptions:** The prohibited uses of water from SWSA provided for in Phases I through V are not applicable to that use of water necessary for public health, safety, or for essential government services such as police, fire, and other similar emergency services.

**Section 100.06 Failure to Comply:**

- A. **Over-usage charges and discontinuations of service:** The penalties for failure to comply with any provision of this plan shall be as follows:
1. For the first violation of any provision of the Plan, an over-usage charge will be imposed in an amount equal to twenty-five percent (25%) of the water bill.
  2. For a second violation of any provision of this Plan occurring within twelve (12) months of the first violation an over-usage charge will be imposed in an amount equal to forty percent (40%) of the water bill.
  3. For any subsequent violation of any of the provisions of this Plan within twelve (12) months of the first violation, the SWSA shall discontinue water service for that customer at the premises where the violation occurred. The charge for reconnection and restoration of normal service shall be one hundred dollars (\$100.00).
- B. **Notices:** SWSA shall give notice of each violation to the customer committing such violation by written notice delivered to the customer personally, or sent by regular mail to the customer's billing address.

**Section 100.07 Public Health and Safety Not to be Affected:** Nothing contained in this Plan shall be construed to require the SWSA to curtail the supply of water to any customer when the SWSA shall determine that such water is required by that customer to maintain an adequate level for public health and safety.

**This manual last updated  
March 14, 2024**