



Developers Manual

2018

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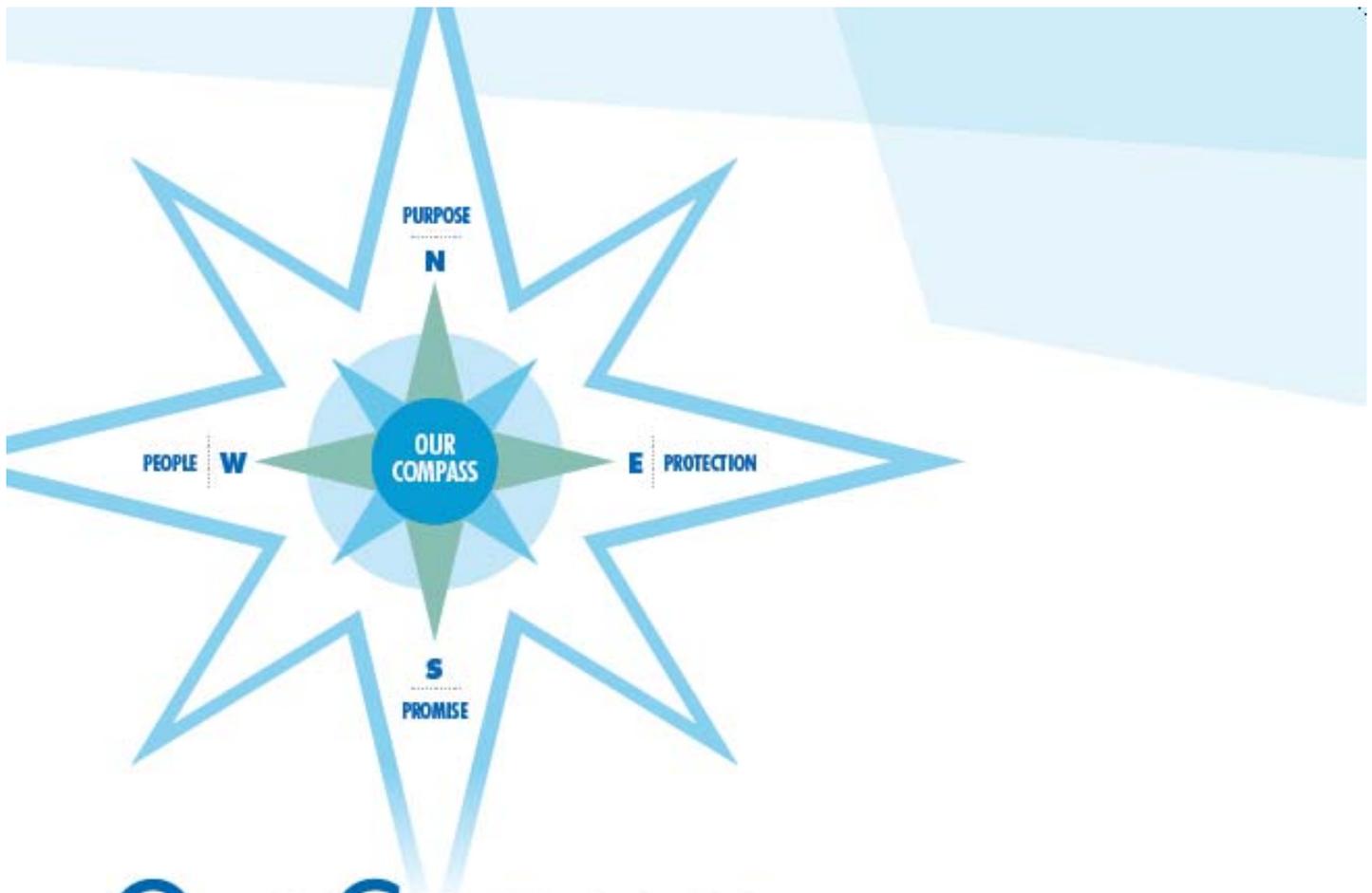
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Our Compass

AT SPARTANBURG WATER, WE ARE ON A JOURNEY TO EXCELLENCE. WE ARE GUIDED BY OUR COMPASS: A navigational tool that helps us in our quest to provide the very best quality and service to our customers, our community and our coworkers. Our Compass supports our Mission and it is a lens that sharpens our Vision. Each of the points on Our Compass—Purpose, Protection, Promise and People—steers us to continued excellence.

PURPOSE is our true north. Our purpose encourages innovation and creativity as a team and with an ethical approach to overcome challenges and find opportunities to excel.

PROTECTION is our pledge to be accountable. We assure the safety of our water, employees, customers and resources while protecting our watershed and returning clean water to the environment.

PROMISE is our commitment to provide quality service and water. We embrace industry advancements and strive to exceed the needs of our customers, coworkers and community with exemplary service in all our interactions.

PEOPLE are the path to our success. We strive to create and strengthen an inclusive work environment by recruiting and retaining the necessary talent. We look for the best and expect the best in our workforce, and for our community.





Our Vision

Our Vision is accessible, clean water for the citizens, visitors, and businesses in our community.



Our Mission

Our mission is to provide quality water and wastewater services to our region in a reliable manner.



I. INTRODUCTION

Spartanburg Water is two entities, Spartanburg Water System and Spartanburg Sanitary Sewer District, operating under one name.

The purpose of this manual is to provide, in concise form, a guidance document for individuals or businesses considering residential and commercial development within the Spartanburg Water jurisdictional areas. For current maps of the Spartanburg Water service area, please visit our web site, www.spartanburgwater.org, and click on “About the Company”.

All water and sewer design must be completed by an engineer licensed to practice engineering in the state of South Carolina. All water and sewer construction must be completed by utility contractors licensed in South Carolina and approved by Spartanburg Water.

Upon completion and final acceptance by Spartanburg Water of all facilities constructed under the following policies and guidelines, said facilities shall become the property of Spartanburg Water and Spartanburg Water shall be responsible for operation and maintenance. However, for a period of one year from the date of final acceptance of the facility, the contractor shall be responsible for any repairs needed that are a result of improper or inadequate construction practices.

For questions or submittals please use the addresses and phone numbers below:

Spartanburg Water Engineering physical address:

175 N. Liberty Street
Spartanburg, SC 29306

Spartanburg Water Engineering mailing address:

P. O. Box 251
Spartanburg, SC 29304

Phone Number: (864) 585-9142

Fax Number: (864) 596-4930

II. SPARTANBURG WATER EXTENSION POLICIES

A. Purpose

The purpose of the following policies is to establish the methods to be used in the extensions of the water and sewer systems.

B. Water Main Extensions

The developer is responsible for 100% of the cost to install the water distribution system within the development.

However, if the property to be developed fronts a road where there is not a water main or where the existing water main is inadequately sized (typically smaller than 6-inch), SWS will share in the cost to extend the water main along the existing road. The developer will bear the full cost to extend the water main to the development with SWS reimbursing the developer upon project completion and acceptance.

Below are the policies describing the SWS's cost sharing for the extension of water mains inside and outside the City of Spartanburg.

1. Water Line Extension Policy

SWS shall prepare an estimate of the construction cost of the proposed water main to be extended along the existing road to the entrance of the subdivision.

- a. If a water main needs to be oversized for anticipated future system needs (not within the development), all of the costs associated with the oversized portion shall be incurred by SWS based upon the SWS's estimate.
- b. **Within** the City of Spartanburg limits, SWS agrees to share in the cost based upon \$800 per sub-divided lot up to 100% of the aforesaid total estimated cost for the project. **Outside** the City of Spartanburg limits, SWS agrees to share in the cost based upon \$800 per subdivided lot up to 50% of the aforesaid total estimated cost.
- c. SWS and the developer shall execute a water main extension agreement that will detail the costs and amount of reimbursement.

- d. The number of lots will be based upon the plat that is provided to and approved by Spartanburg County Planning, a copy of which will be delivered to SWS.
- e. SWS reimbursement shall be paid upon project completion and acceptance of all of the lines within the development. In order to receive the reimbursement, the developer must submit a letter requesting the reimbursement and documentation of the actual costs incurred by the developer for the water main installation to reach the development.

C. Sewer Line Extensions

The developer shall incur the total cost for sewer line extensions to serve new developments. However, if the development meets the SSSD's criteria established in item b. in the Sewer Line Extension Policy below, SSSD will share in the construction cost of the gravity sewer line extension from the existing sewer line to the boundary of the development. The developer shall be responsible for all costs associated with the sewer collection system within the development.

1. Sewer Line Extension Policy

- a. The extension is defined as that portion of the project that is from the SSSD's existing sewer line to the boundary of the development site. SSSD will not share in the cost of the sewer line construction within the development. In addition, the developer will be required to locate the sewer line at a point most readily accessible to all contiguous drainage areas
- b. SSSD will reimburse up to 50% of the construction cost of the sewer line extension, provided the drainage basin will yield capacity fees greater than 50% of the cost of the extension. In addition, the development itself must generate sufficient capacity fees to generate 25% of the cost of the extension for projects costing up to \$250,000. For extensions exceeding \$250,000, development must generate at least 35% of project costs from capacity fees to be able to utilize the drainage basin policy.
- c. If a sewer line needs to be oversized for anticipated future system needs (not within the development), all of the costs associated with the oversized portion shall be incurred by the SSSD based on the SSSD estimate.

- d. This policy will apply towards commercial as well as residential developments.
- e. Reimbursement shall be paid upon project completion and the release of the project for the sale of taps. In order to receive the reimbursement, the developer must request the reimbursement in writing.

III. SEWER PROJECT DESIGN AND PERMITTING

SSSD has a delegated review program (DRP) status with SCDHEC for sewer permitting. This program facilitates a quicker permitting process at the State level by delegating the majority of the project review responsibilities to the local entity. Usually, the design and permit for construction are prepared under the DRP process; however, if desired by the developer, a construction permit for a sewer line may be applied for directly to DHEC provided all the requirements and guidelines of this permit process are followed. Due to the great infrequency of applying for a construction permit directly through DHEC, the instructions below apply to the DRP process.

The design of any sewer facility that is to be owned and maintained by SSSD, shall be completed by a South Carolina Licensed Professional Engineer. Upon receipt of the preliminary review package, one of the staff engineers will be assigned to manage the project until its completion and the release of taps. If the overall project includes a water distribution system, typically the same engineer will be assigned to manage the water project as well.

A. Project Submittal

1. Preliminary Project Review

SSSD has found through experience that most submittals usually require some minor revision. Therefore, SSSD offers that developers have their engineers submit a preliminary project package in an attempt to avoid unnecessary waste of materials. SSSD has standard specifications which include all sewer detail drawings (approved April 1998) on file with SCDHEC and encourage all developers to utilize these specifications. Copies are available on request.

The following are the items that should be included in a preliminary project package:

- a. 2 sets of construction plans on plan/profile paper;
- b. 1 SCDHEC construction permit application (not necessarily executed);
- c. 1 copy of the location map on 8½" x 11" paper; and
- d. 1 copy of the design notes and calculations; and

- e. 1 electronic copy of the overall plan view of the project (dwg format in State Plane Coordinate System)

The SSSD shall review the package and return any requested revisions to the consulting engineer. At this time, the SSSD shall prepare and submit the Council of Governments (COG) application. After the consulting engineer has completed the revisions, the project submittal package can be prepared and forwarded to SSSD.

2. Project Review and Submittal

The final project submittal package should include the following items:

- a. 4 sets of construction plans on plan/profile paper at minimum scale and stamped by registered professional engineer (2 copies for SSSD's use and review and 2 copies for SCDHEC);
- b. 3 copies of each off site right-of-way plat, and 3 copies of on site right-of-way plats and agreements;
- c. 3 copies of the fully executed SCDHEC construction permit application (1 original and 2 copies);
- d. 3 copies of the location map;
- e. 3 copies of the design notes and calculations, signed and stamped by the design engineer; and
- f. A check in the amount of \$75.00 made payable to SCDHEC Bureau of Finance.
- g. 1 copy of each approved county road and/or state highway encroachment permit issued for the project or a copy of the submitted application.
- h. 1 copy of the Appalachian Council of Governments 208 Water Quality Certification

With the above package and the certification from the COG in hand, SSSD will submit the package to SCDHEC on behalf of the developer. Provided that DHEC has not requested any revisions to the DRP package, SCDHEC will issue a "Permit to Construct". The Developer or his designated representative shall then contact the

SSSD Engineer to schedule a pre-construction conference not less than 72 hours prior to construction.

3. Minimum Sewer Plan Requirements

The following standards shall be required for sewer line construction drawings that are submitted to SSSD:

SITE PLAN

- ❑ Plan view of the entire site at not greater than 1"=200' scale, showing the entire sewer system
- ❑ 24" x 36" or smaller sheet size
- ❑ Show tie-in to the existing system; include name of existing lines and upstream and downstream rim and invert elevations. Contact Engineering Department for record drawing information on the tie-in point. From record drawing include date and engineer.
- ❑ Label all manholes, air release valves on force mains and pump stations
- ❑ Show limits of wetlands, floodplains and steep slopes
- ❑ Show project phasing
- ❑ North arrow
- ❑ Spartanburg County GIS grid number where the project is located
- ❑ Names of adjacent property owners, if applicable
- ❑ Location map, max scale 1"=1000', north arrow
- ❑ Index of sheets
- ❑ Title block
 - Names, mailing addresses and telephone numbers of the owner of the property, the land developer, the engineer or consultant and the applicant
 - Name of the development
 - Tax map number of the property
 - Scale
 - Date (also include revision dates)
- ❑ Legend for all symbols
- ❑ Engineer's stamp

PLAN AND PROFILE SHEETS

- ❑ 24" x 36" or smaller sheet size
- ❑ North arrow, scale (max. 1"=50' horizontal and 1"=10' vertical)
- ❑ Date (also include revision dates)
- ❑ Provide plan and profile of the entire system complete to tie-in to the existing system.

- ❑ SSSD encourages but does not require, that the plan and profile be on the same sheet for the section of the line shown.
- ❑ Engineer's stamp

The **plan** view shall at a minimum show:

- ❑ Street names with R/W limits
- ❑ Lot lines and number
- ❑ Easements labeled and dimensioned
- ❑ Manholes and/or force main air release valves with stationing for specifying location
- ❑ Pipe layout
- ❑ Bearings on all lines (acute flow angles are not acceptable except at drop manholes on a case-by-case basis) Flow angle or bearings shall also be provided at the tie-in of the proposed system to the existing system
- ❑ All utilities including storm drainage
- ❑ Sewer service locations for all lots and buildings
- ❑ Stream crossings identified
- ❑ Aerial crossings identified
- ❑ Pipe anchorage locations identified
- ❑ Fittings, air release valves, thrust blocking and all other necessary information for force mains

The **profile** view shall at a minimum show:

- ❑ Existing grade
- ❑ Proposed grade
- ❑ Stationing to match with the plan view
- ❑ Manholes with the following information:
 - Stations
 - Types of manholes (i.e. drop manhole)
 - Rim elevations (for manholes in unpaved areas, the rim elevation shall be at least 24" higher than the proposed ground and in floodplains above the fifty (50) year flood elevation or else specify watertight manhole covers)
 - Invert elevations
- ❑ Pipes with the following data:
 - Length (max 400' between manholes – 15" lines or less)
 - Diameter
 - Type of pipe
 - Slope of pipe in %

- All sewers shall have at least 3' of cover. Cover less than 3' shall be DIP.
- All utilities and storm drains crossing the sewers
- Stream crossings identified
- Aerial crossings identified
- Fittings, air release valves, thrust blocking and all other necessary information for force mains

Detail Sheets

Provide the following details from the SSSD specifications if applicable to the project:

- Standard Precast Manhole
- Standard Manhole Frame and Cover
- Typical Plan Standard Manhole
- Typical Outside Drop Manhole
- Typical Outside Drop Manhole – Alternate
- Typical Inside Drop Manhole
- Precast Manhole Over Existing Sewer
- Sewer Air Release Valve Manhole
- Force Main Discharge Detail
- Improved Ditch Bedding Detail
- Sanitary Sewer and Water Line/Storm Drain Crossing Detail
- Typical Sewer Service Connection
- Service Line Tap to Manhole
- Service Line Tap to Existing Sewer Line
- Stream Crossing Detail
- Aerial Crossing and Supports Detail
- Casing Pipe Bore and Jack Detail
- Casing Pipe Installation In Casing to include spider details
- Concrete Thrust Block Detail

Pump Station Plans

Provide the following information/details for pump stations:

- A vertical and horizontal cross-section of each pump station shall at a minimum include:
 - Influent line elevation and location
 - High water alarm elevation
 - Lead, lag pump-on elevations and pump-off elevation
 - Wetwell diameter, bottom, ground and top elevations
 - Location of pumps, guide brackets, chain hooks, and lifting chains

- Location and elevation of discharge piping
 - Location and dimensions of wetwell entrance
 - Location of control panel
- A site plan of the pump station site at a minimum shall include:
- Identification of the fenced or secure locked building/enclosure
 - Identification of a weather durable sign with a 24-hour emergency telephone number
 - Location of wetwell, valve pit, and control panel
 - Generator (if specified) or generator hook-up location
 - Identification of an all-weather access road
 - All weather access road

IV. WATER PROJECT DESIGN AND PERMITTING

A. Available Design Options

SWS provides water distribution system design services free of charge based on a first come, first served basis. An uncomplicated subdivision or commercial layout can be completed within 60 days of receipt of the County-approved electronic plat from the developer or his representative. Should this period, not be acceptable, the developer may retain the services of a South Carolina licensed professional engineer to design the project and SWS will provide review services and assist with the applicable SCDHEC permitting process.

In order to obtain this service from SWS, the developer or his representative shall submit one copy of the project layout plat previously provided to the Spartanburg County Planning Commission, and a copy of the drawing in digital form via a computer diskette or e-mail using AutoCAD R14 or higher. **Submittal of the preliminary plat to the County does not initiate this service at SWS.** This layout plat should include lots, lot numbers, roads, road names, sanitary and storm sewer layout so that the water line design may take potential conflicts into consideration. If the overall project includes a sewer collection system, typically the same engineer will be assigned to manage the sewer project as well.

B. SWS Design Process

Upon receiving the electronic version of the County-approved project layout plat from the developer, the SWS Engineering Department will begin the design process, which includes survey for utility conflicts, hydrant flow testing, hydraulic calculations, preparation of construction drawings, and obtaining permits. As previously stated, the design, drawings and permits can normally be delivered in 60 days.

Once the construction drawings have been completed and the Water Main Extension Agreement (Refer to Section V) executed, SWS will forward two sets of construction drawings and a copy of the Agreement to the developer. The developer is responsible for any encroachment permits and/or land disturbance permits. Spartanburg Water will provide copies of plans, if needed, for the permitting. It is at this point that the developer or his representative should contact the SWS Engineer to set up a pre-construction conference, provided all permits have been obtained.

C. Consulting Engineer Design Process

The design of any water line that is to be owned and maintained by the SWS shall be completed by a South Carolina Licensed Professional

Engineer. SWS has a delegated review status with SCDHEC and will provide design review and permitting assistance for projects designed by a consulting engineer. Upon request by the Developer, SWS will conduct the necessary flow tests and provide the information to the Design Engineer.

1. Preliminary Project Review

SWS has found through experience that most submittals usually require minor revisions. Therefore, SWS proposes that developers have their engineers submit a preliminary project package in an effort to avoid unnecessary effort.

The following are the items that should be included in a preliminary project package:

- a. 2 sets of construction plans (minimum scale allowed is 1" = 100')
- b. 1 SCDHEC construction permit application (not necessarily executed)
- c. 1 copy of the location map on 8 ½" x 11" paper
- d. 1 copy of the design notes, calculations and hydraulic model
- e. 1 electronic copy of overall plan view of the project (dwg format in State Plane Coordinate System)

2. Project Review

SWS shall review the package and return it to the consulting engineer should any revision(s) be required. After the consulting engineer has completed the revision(s), the project submittal package can be prepared and forwarded to the SCDHEC. The project submittal package should include the following items:

- a. 4 sets of construction plans at minimum scale and stamped by registered professional engineer; (2 copies for SWS's use and review and 2 copies for SCDHEC);
- b. 3 copies of each off site right-of-way plat, if applicable;
- c. 3 copies of the fully executed SCDHEC construction permit application (1 original and 2 copies);
- d. 3 copies of the location map; and

- e. 3 copies of the design notes and calculations and hydraulic model, stamped and signed by the design engineer
- f. A check in the amount of \$75.00 made payable to SCDHEC Bureau of Finance
- g. 1 copy of each approved county road and/or state highway encroachment permit issued for the project or a copy of the submitted application.

With the above package in hand, SWS will submit the entire package to SCDHEC on behalf of the developers. Provided that SCDHEC has not requested any revisions to the DRP package, SCDHEC will issue a "Permit to Construct". The Developer or his designated representative shall then contact the SWS Engineer to schedule a pre-construction conference 72 hours prior to the start of construction.

3. Minimum Water Plan Requirements

The following standard shall be required for water line construction drawings that are submitted to SWS:

- ❑ Plan not greater than 1"=100' scale, showing the entire water system
- ❑ Show match lines as appropriate
- ❑ Show project phasing
- ❑ North arrow and scale
- ❑ Stationing of tees, hydrants, valves, plugs and size or material changes and reducers
- ❑ Index of sheets
- ❑ Title block
 - Names, mailing addresses and telephone numbers of the owner of the property, the land developer, the engineer or consultant and the applicant
 - Name of the development
 - Scale
 - Date (also include revision dates)
- ❑ Street names with R/W limits
- ❑ Lot lines and number
- ❑ Easements labeled and dimensioned
- ❑ Pipe layout, material and size (diameter)
- ❑ Show sewer and storm drainage layout, if applicable
- ❑ Stream crossings identified and detailed if needed
- ❑ Aerial crossings identified
- ❑ Fittings, thrust blocking, blow-off taps and all other

- necessary information relating to water lines
- ❑ Show tie-in to the existing system with details
 - ❑ Show limits of wetlands, floodplains and steep slopes
 - ❑ Project notes consistent with SWS standard specifications
 - ❑ Appropriate details consistent with SWS standard specification
 - ❑ Jumper connection detail if existing line has meter services beyond valve
 - ❑ Hydrant detail showing main 6' off of curb with hydrant towards curb.

V. WATER AND SEWER ADMINISTRATIVE REQUIREMENTS

A. Sewer System Ownership Agreements

During the review and preparation of the permitting package, SSSD will prepare the Ownership Agreement (See Appendix A) and forward it to the developer for execution. This document is the legal agreement that explains the terms and conditions under which the sewer project will be constructed and transfers the ownership of the new facilities to SSSD for future operation and maintenance. It is within this document that the SSSD establishes the amount of reimbursement is established and should meet the criteria for Spartanburg Water's Sewer Line Extension Policy. (See Section II C.) Once executed, the developer shall return the agreement to SSSD for presentation to its Commission. Please note that this agreement must be properly executed, witnessed and returned prior to beginning construction.

B. Water Main Extension Agreements

1. SWS Designed Project

The Transfer of Ownership for Water Mains Outside the City agreement will be prepared by SWS after completion of the construction drawings (See Appendix B) explaining the terms and conditions under which the water line project will be constructed and turned over to SWS. It is within this document that the means of reimbursement is established and should meet the criteria for the Spartanburg Water's Line Extension Policy. (See Section II B.) Once it is prepared, the agreement will be forwarded to the developer for execution. Once executed, the developer shall return the agreement to SWS for presentation to the Spartanburg Water Commission. Please note that this agreement must be properly executed, witnessed and returned prior to the distribution of construction drawings.

2. Consulting Engineer Designed Project

Once the package has been submitted to DHEC, SWS will prepare the Water Main Extension Agreement (See Appendix B) and forward to the developer for execution. Once executed, the developer shall forward the Agreement for presentation to the City of Spartanburg Commissioners of Public Works. Please note that this Agreement must be properly executed, witnessed and returned prior to beginning construction.

C. Right of Way and Easement Agreements

Prior to any off-site construction taking place, the applicable right of way and easement agreement must be prepared, properly executed and delivered to Spartanburg Water for recordation. Prior to the release of the project for the sale of taps, any and all on-site right of way and easement instruments must be prepared, properly executed and delivered to Spartanburg Water for recordation. **NO TAPS WILL BE ISSUED** prior to any outstanding right of way issue being resolved.

In order to prepare the standard right of way and easement agreement, surveyed plat(s) and the title opinion of the property on which the right of way traverses must be in hand.

1. Plats

A formal surveyed plat prepared, signed and crimped by a South Carolina licensed surveyor is required for each off-site and on-site right of way. **A copy of the recorded final subdivision plat may be used for the on-site right of way plat.**

All right of way plats for sewer lines must contain somewhere on it the following language:

Notice: The area included in the SSSD Right-of-way shall not be filled over, filled in, or cut down in any manner which would cause the raising or lowering of the ground grade level beyond the elevation(s) which exist at the time of the conveyance of the right-of-way and no building(s) or structure(s) of any kind either temporary or permanent, shall at any time be placed or constructed within the area of the SSSD right-of-way shown. SSSD shall clear and grub the entire width of the right-of-way and easement along its entire length as shown.

All right of way plats for water lines must contain somewhere on it the following language:

Notice: The area included in SWS's Right-of-way shall not be filled over, filled in, or cut down in any manner which would cause the raising or lowering of the ground grade level beyond the elevation(s) which exist at the time of the conveyance of the right-of-way and no building(s) or structure(s) of any kind either temporary or permanent, shall at any time be placed or constructed within the area of the SWS right-of-way shown. SWS shall clear and grub the

entire width of the right-of-way and easement along its entire length as shown.

2. Title Search Information

The developer should have his/her attorney conduct a title search on any right-of-way plats in accordance with the following procedure:

- a. Mortgages: (List mortgagor, mortgagee, amount secured, date of execution, date of recording, place of recording, any assignments and the mailing address of the holder of the mortgage. If none, so state);
- b. Lis Pendens: (List parties and the date and place of filing. If none, so state);
- c. Judgments: (List judgment holder, amount and date and place of filing. If none, so state);
- d. Federal and/or State tax liens: (List taxing entity, taxpayer, amount, date and place of filing. If none, so state);
- e. Mechanics liens: (List);
- f. Other Exceptions: (List any other exceptions from your certification that affect the property over, under and through which the right-of-way and easement runs such as other easements, restrictions, encroachments, adverse conveyances, assessments or charges, violation of any restrictions or governmental requirements, etc.);
- g. Spartanburg County property taxes have been paid through the year (list year). Taxes for (list year) in the amount of (insert amount) are now due and owing. (If none, so state); and
- h. The real property over, under and through which the right-of-way and easement runs is described as follows: (Insert complete legal descriptions, making reference to any current plats that describe the property and giving derivation clause for title transfer to present owner). Example derivation clause:

The property over which said right-of-way and easement crosses is that property conveyed to the Grantor(s) herein by deed of _____ (insert name of Grantor(s)), dated _____ (insert date of deed), recorded _____ (insert date recorded), in Deed Book _____ (insert deed book volume), page _____ (insert page number of first page of deed), Office of the Register of Deeds for Spartanburg County.

While the above format does not have to be followed precisely, all information should be included in the attorney's title opinion. When the attorney delivers his title opinion to Spartanburg Water, it should be dated as of the date of the opinion. Once the title search has been completed, the Spartanburg Water project manager shall prepare the right-of-way agreement(s) and forward the agreement(s) to the developer for execution. See Appendix C for the standard right-of-way agreement.

Any and all off site right of way and easement documents must be drafted, executed and returned to Spartanburg Water prior to any construction taking place on the property. If the right-of-way is across property owned by the developer, the right-of-way agreement does not need to be executed prior to construction, but it shall be executed prior to releasing the project for the sale of service taps. Developers should understand that rights-of-ways and easements will be executed and recorded prior to conveying any lots from the subdivision.

Once Spartanburg Water receives the executed right-of-way agreements, the agreements will be reviewed both for proper form and execution. If approved, they will be recorded in the Office of the Registrar of Deeds. Spartanburg Water will not be responsible for updating the title examination at the time of recording and will not be responsible for checking for mortgage subordination and releases.

VI. WATER AND SEWER CONSTRUCTION AND INSPECTION, ACCEPTANCE AND RELEASE OF TAPS

A. Pre-construction Conference

When the SCDHEC permit to construct and all other applicable permits have been issued, the ownership or extension agreement has been executed and returned, and any off-site right of ways and easements executed and delivered to Spartanburg Water, the Developer or his designated representative shall then contact the Spartanburg Water engineer to schedule a pre-construction conference not less than 72 hours in advance of the start of construction.

The following personnel are required to attend the conference:

- a. Spartanburg Water Project Manager / Staff Engineer;
- b. Spartanburg Water Field Technician;
- c. Design engineer; and
- d. Contractor and any Sub-contractors.

For water and sewer DRP projects, the design engineer shall provide four sets of plans stamped "**Issued for Construction,**" prior to the conference. These plans shall not deviate from the plans submitted to and permitted by SCDHEC. Also, the design engineer shall provide the project cut sheets and any applicable shop drawings prior to starting construction.

At the Pre-Construction Conference, general construction requirements and Spartanburg Water standards will be reviewed. All applicable permits will be reviewed and distributed if necessary. Any right of way issues will be discussed.

B. General Construction Requirements

The following are general construction requirements.

1. The contractor shall notify the Engineering Department at least two full working days in advance of beginning construction;
2. The contractor shall notify the Engineering Department by 8:30 a.m. each day if work will not be done due to inclement weather or any other reason;
3. Working hours are from 8:00 a.m. to 5:00 p.m. with one hour for lunch. Overtime work requests must be made to the Engineering Department by noon of the day such work is

anticipated. Overtime work will not be authorized if the contractor is not on the job site and working by 8:30 a.m. of the day overtime is anticipated.

4. The contractor shall notify the Engineering Department of the date and time of delivery of materials to the job site for inspection.
5. All work on State Highways shall conform to the SCDOT encroachment permit and the latest issue of the SCDOT Traffic Control Manual. The contractor shall notify SCDOT 24 hours before beginning work on State Highway rights-of-way. Failure to comply with the permit may result in the job being shut down and any expenses incurred by Spartanburg Water to comply with requirements will be charged to the contractor.
6. The contractor shall have the following on the job site before work commences:
 - a. necessary permits (i.e., highway, railroad, etc.);
 - b. rights-of-way plats;
 - c. approved plans and shop drawings, and
 - d. necessary equipment, in working order, and materials for job
7. The contractor shall have a foreman or designated replacement fluent in the English language on the job site at all times. Work shall be suspended in the absence of the foreman or his replacement.

C. Construction Procedures

Spartanburg Water standard specifications shall be followed for all construction, in addition:

1. All applicable safety precautions shall comply with OSHA standards with particular emphasis to ditch safety. Trench jacks, boxes, hard hats, etc. shall be required. Safety precautions shall remain in effect throughout pipeline laying and backfilling.
2. The contractor shall have all conflicting utilities located before pipe laying begins.
3. Centerline stakes, right-of-way stakes and easement or property lines must be placed by surveyor before the work is started.

This staking work is at the expense of the developer or the contractor. The contractor shall have offset hubs placed and cut sheets prepared before sewer pipe laying begins. The Spartanburg Water field technician shall be provided with copies of all cut sheets for his / her approval before pipe laying begins. The contractor shall maintain all offset hubs in serviceable condition until the project is complete and the field technician makes a final punch list.

4. Rights-of-way shall be cleared in accordance with rights-of-way plats. Complete width of permanent rights-of-way shall be cleared; only those trees whose entire trunk is within the rights-of-way shall be cut. All clearing and grubbing shall be completed prior to pipe laying. All vehicular access to rights-of-way that cross private property shall be by written permission of the property owner with copy of same provided to the Spartanburg Water field technician.
5. For water distribution systems, all roads, rights-of-way or easements must be graded within 0.2 of final grade. Where curbs and gutters are to be used, either the curb and gutter on at least one side of the road must be installed prior to beginning any work concerning the water main construction or the roadway must be at final sub-grade elevation with centerline station clearly marked. In this case, developer agrees, that if the sub-grade elevation is changed after installation of water line or if the road location itself is changed, the line may have to be removed and re-laid at the developer's sole expense.
6. All materials and appurtenances shall be in accordance with the latest edition of the SSSD or SWS Standard Specifications.
7. If blasting is required, it must be performed by a licensed person and a copy of the blasting permit given to the Spartanburg Water field technician prior to blasting.
8. The contractor shall record sewer service connection locations with the following measurements:
 - a. distance from downstream manhole;
 - b. distance from "wye" / main to end of service line; and
 - c. depth of end of service.

All service lines shall be backfilled and plugged prior to air testing. Ends of services shall be marked with a pipe marker which shall extend above ground level and should remain intact

until the plumber makes the connection. A copy of Spartanburg Water's service stub information form is attached as Appendix E.

D. Inspection and Acceptance

Prior to accepting the project into Spartanburg Water's system, the following minimum requirements must be completed to Spartanburg Water's satisfaction..

1. All sewer and water lines must pass the required tests as outlined in the SSSD or SWS standard specifications. A Spartanburg Water field technician must be present for all testing.
2. All lines shall have passed all applicable air, deflection, hydrostatic, vacuum, drawdown and bacteriological tests;
3. All necessary paving completed;
4. Ring and covers reset if disturbed or set to different elevations as required by the field technician;
5. All test taps plugged and all open holes properly backfilled and compacted;
6. All hydrants plumb and properly operating;
7. All valve boxes set to grade and centered over valve operating unit
8. Any compaction/concrete test successfully completed; and
9. All rights-of-way and clean-up items complete.

E. Release of Project for Sale of Taps

Upon successful completion of the items listed below, Spartanburg Water will draft a letter of project acceptance to SCDHEC. When the final construction approval is issued by SCDHEC, Spartanburg Water will release the project for the sale of taps and concurrently notify the Spartanburg County Planning Office.

1. Consulting engineer provides Spartanburg Water a copy of project construction certification letter to SCDHEC and requests SCDHEC final inspection. If an inspection is conducted, the Spartanburg

Water Project Manager, Field Technician, Contractor and Design Engineer shall attend.

2. On-site right of way and easement document(s) is executed and provided to the SSSD.
3. Record Drawings, marked as such, are submitted and approved and electronic copy of record drawings is received (dwg format in State Plane Coordinate System). A copy of Spartanburg Water's Sewer as-built checklist is attached as Appendix D.
4. Electronic copy of the County-approved subdivision Final Plat is received.

VII. SERVICE CONNECTION APPLICATION AND FEES

A. General

Any customer desiring water or sewer service is required to make application for service and pay all applicable fees and/or charges at the time application is made.

B. Water Service Connections

Once the appropriate fees have been paid, all water service connections 5/8-inch through 2-inch in size will be installed by Spartanburg Water. For all irrigation service connections, all commercial/industrial meters and any water meter 1-inch or larger, a cross connection prevention device may have to be installed by the customer in accordance with the Spartanburg Water Cross Connection Control Manual. This manual is available upon request. No service connections will be made by Spartanburg Water prior to payment of the appropriate fees.

1. Water Service Fees/Charges

Customers applying for a new water service connection are subject to one or more of the following fees:

- a. **Connection fee:** This is the cost associated with the materials and labor required to actually make the service connection.
- b. **Capacity Fee:** These fees are a method of partially financing new facilities required to maintain adequate treatment and storage facilities as well as transmission mains to the distribution system. As the present capacity of the system is "bought up", revenues in the form of capacity fees must be generated to offset the cost of future capital improvements. Therefore, capacity fees are directly related to water usage.
- c. **Privilege Fees:** Previously, in certain circumstances, water mains were extended by individuals/developers and Commission policy allowed privilege charges to be collected by the individuals/developers for new connections. Thus, prior to installing a service connection, privilege charges had to be paid in full to the developer and correspondence acknowledging payment of privilege charges signed and forwarded to Spartanburg Water. In conjunction with the implementation of capacity fees on April 1, 1988, these

privilege charges are now collected in addition to the capacity fee, if applicable.

- d. **Participation Fee:** This fee applies to any water main in which Spartanburg Water has a financial investment. If the fee is collected prior to the construction of the new water main, the fee shall be \$1,200 for extensions outside the city limits or \$800 for extensions inside the city limits. If the fee is collected after construction has begun on a new water main, the fee shall be \$1,500 and \$1000, respectively.
- e. Call the Spartanburg Water Customer Service/New Services Department at (864)-582-6375 for applicable fees, pricing and rates. Current water usage rates also are posted on our web site, www.spartanburgwater.org, click on “For Your Home”.

C. Sewer Service Connections

Once the appropriate fees have been paid, all sewer service connections shall be made by the applicant's licensed plumber. All sewer service connections must be made in accordance with SSSD's Technical Specifications, copies of which can be made available upon request. No service connection shall be made prior to payment of the appropriate fees.

Connection to an installed sewer service connection or “stub out” will not require an inspection; however, the applicant is responsible for notifying Customer Service when the connection is made. It is the plumber's responsibility to make certain that the service line has sufficient slope to flow into the sewer line at the time the connection is made. New service connections on existing active sewer lines and manholes must be inspected prior to backfilling. In this situation, no discharge shall be allowed through the service connection until inspection has been conducted and subsequently, the service connection has been approved.

1. Sewer Service Fees/Charges

Customers applying for a new sewer service connection are subject to one or more of the following fees:

- a. **Application Processing/Inspection Fee:** This cost is associated with Spartanburg Water's processing the application and making an inspection of the service connection. This fee is \$35.00.
- b. **Capacity Fee:** Sewer capacity fees exist for basically the same reason as water capacity fees; except, that instead of

partially financing water treatment plants and transmission mains, sewer capacity fees partially finance wastewater treatment facilities and sewer system extensions in areas of substantial growth. Capacity fees are based on the anticipated discharge volume; an explanation of how that volume is calculated is in item 2. below.

- c. **Privilege Fees:** Previously, in certain circumstances sewer lines were extended by individuals / developers, and Commission policy allowed privilege charges to be collected by the individuals / developers. Thus, prior to installing a service connection, these charges were required to be paid in full and letters of confirmation signed and forwarded to the Spartanburg Water. These privilege charges shall be collected in addition to the capacity fee, if applicable. In conjunction with the implementation of capacity fees on April 1, 1988, these privilege charges are now collected in addition to the capacity fee, if applicable.
- d. Call Spartanburg Water's Customer Service/ New Services Department at (864)-582-6375 for applicable fees, pricing and rates. Current sewer discharge rates also are posted on our web site, www.spartanburgwater.org, click on "For Your Home".

2. Calculation of Wastewater Discharge Volume

The wastewater discharge volume to be used for calculating capacity fees shall be determined as follows:

- a. **Residential and Commercial Connections:** The wastewater discharge volume from residential and commercial customers shall be calculated using SCDHEC's "Standard for Wastewater Facility Construction: R.61-67 Appendix A".
- b. **Industrial Connections:** The volume of discharge from industrial connections will be evaluated by the appropriate Spartanburg Water department on a case by case basis.

VIII. CHECKLISTS

A. Developer Checklist for SWS Designed Projects

- _____ 1. Contact Joel Watson, Engineering Operations Manager, with Spartanburg Water Engineering Department at 864-580-5681 for information about utility availability.
- _____ 2. Submit electronic copy of County-approved subdivision plat to Engineering Department and request water distribution system design (jwatson@spartanburgwater.org). A Spartanburg Water Project Manager will be assigned to work with you.
- _____ 3. Receive Construction plans and Ownership Agreement for Water Mains
- _____ 4. Execute and Return and Ownership Agreement.
- _____ 5. Forward copy of road encroachment permit and any applicable land disturbance permit to Spartanburg Water.
- _____ 6. Schedule a pre-construction conference with Spartanburg Water. This conference should be scheduled with Project Manager after above steps have been accomplished, but at least 72 hours before the anticipated initiation of construction.
- _____ 7. Upon construction completion submit to Spartanburg Water
 - County-approved final subdivision plat for mapping
 - County-approved final subdivision plat for on-site right of ways and applicable title information, if applicable
 - Receive, execute and return on-site right of way document, if applicable

B. Developer Delegated Review Program Water Extension Project Checklist

The purpose of this checklist is to assist developers planning to extend water to projects within the Spartanburg Water service area. A detailed presentation of the entire SCDHEC Water DRP process, as conducted by Spartanburg Water, can be found in Section V of the Developer's Manual. The information below is provided with the goal of ensuring a smooth and successful project.

The requirements of this checklist apply only to Spartanburg Water's Water DRP process. It is the responsibility of the customer or his agent to receive any necessary permits and approvals from the local Planning Agency, City of Spartanburg, Spartanburg County, SCDOT, or other entity with authority over other aspects of the project.

- _____ 1. Contact Joel Watson, Engineering Operations Manager, with Spartanburg Water Engineering Department at 864-580-5681. A Spartanburg Water Project Manager will be assigned to work with you.
- _____ 2. The Developer's Engineer submits the **Preliminary Project Package** for review to include:
 - 2 sets of construction plans
 - 1 SCDHEC construction permit application (not executed)
 - 1 copy of the location map on 8 ½" x 11" paper
 - 1 copy of the design notes and calculations
 - 1 electronic copy of overall plan view of the project
- _____ 3. Receive comments from Spartanburg Water Project Manager and make revisions, as needed.
- _____ 4. The Developer's Engineer submits **Final Project Package** to include:
 - 4 sets of construction plans (signed and stamped by a Registered Professional Engineer)
 - 3 copies of the executed SCDHEC construction permit application (1 original, 2 copies)
 - 3 copies of the location map on 8 ½" x 11" paper
 - 3 copies of the design notes and calculations and hydraulic model (signed and stamped by a Registered Professional Engineer)
 - 3 copies of each off-site right-of-way plat (if applicable)
 - A check in the amount of \$75 made payable to the SCDHEC Bureau of Finance
 - 1 copy of encroachment permits or encroachment permit application (if applicable)
- _____ 5. Receive, execute, and return **Ownership Agreement**.
- _____ 6. Receive SCDHEC Construction Permit.
- _____ 7. Schedule a pre-construction conference with Spartanburg Water. This conference should be scheduled with Project Manager after above steps have been accomplished, but at least 72 hours before the anticipated initiation of construction.
- _____ 8. The following must attend the Pre-Construction Conference:
 - The Engineer responsible for the design

- The Contractor and Sub-contractor (if any) who will be installing the sewer system
- _____
9. Copies of all necessary encroachment permits shall be provided to Spartanburg Water prior to scheduling pre-construction conference.
- _____
10. Spartanburg Water's Engineering Field Technician (EFT) inspects construction. Testing must be completed and all "punch list" items must be addressed to the satisfaction of the EFT.
- _____
11. The Developer's Engineer submits the following closeout documentation:
 - Final Plat
 - As-built Drawings
 - Engineer's Certification
 - On-site Right-of-Way Plat and Executed Agreement (if applicable)
- _____
12. The PM prepares on-site Right-of-Way documents and forwards to the owner for execution.
- _____
13. On-site Right-of-Way Plat and Executed Agreement (if applicable)
- _____
14. The PM reviews the closeout documentation and requests revisions if necessary.
- _____
15. The PM submits the closeout package to SCDHEC.
- _____
16. SCDHEC issues the Final Construction Approval.
- _____
17. The PM releases the project for water taps.

C. Developer Delegated Review Program Sewer Extension Project Checklist

The purpose of this checklist is to assist developers planning to extend sewer to projects within the Spartanburg Water service area. A detailed presentation of the entire SCDHEC Sewer DRP process, as conducted by Spartanburg Water, can be found in Section III of the Developers Manual. The information below is provided with the goal of ensuring a smooth and successful project.

The requirements of this checklist apply only to Spartanburg Water's Sewer DRP process. It is the responsibility of the customer or his agent to receive any necessary permits and approvals from the local Planning Agency, City of Spartanburg, Spartanburg County, SCDOT, or other entity with authority over other aspects of the project.

- _____ 1) Contact Joel Watson, Engineering Operations Manager, with Spartanburg Water Engineering Department at 864-580-5681. A Spartanburg Water Project Manager will be assigned to work with you.

- _____ 2) The Developer's Engineer submits the **Preliminary Project Package** for review to include:
 - 2 sets of construction plans on plan/profile paper
 - 1 SCDHEC construction permit application
 - 1 copy of the location map on 8 ½' x 11" paper
 - 1 copy of the design notes and calculations
 - 1 electronic copy of overall plan view of the project

- _____ 3) Receive comments from Spartanburg Water Project Manager and make revisions, as needed.

- _____ 4) The Developer's Engineer submits **Final Project Package** to include:
 - 4 sets of construction plans on plan/profile paper (signed and stamped by a Registered Professional Engineer)
 - 3 copies of the executed SCDHEC construction permit application (1 original, 2 copies)
 - 3 copies of the location map on 8 ½' x 11" paper
 - 3 copies of the design notes and calculations (signed and stamped by a Registered Professional Engineer)
 - 3 copies of each off-site right-of-way plat (if applicable)
 - A check in the amount of \$75 made payable to the SCDHEC Bureau of Finance
 - 1 copy of encroachment permits or encroachment permit application (if applicable)
 - 1 copy of the Appalachian Council of Governments 208 Water Quality Certification

- _____ 5) Receive, execute, and return **Ownership Agreement**.

- _____ 6) Receive SCDHEC Construction Permit.

- _____ 7) Schedule a pre-construction conference with Spartanburg Water. This conference should be scheduled with Project Manager after above steps have been accomplished, but at least 72 hours before the anticipated initiation of construction.

- _____ 8) The following must attend the Pre-Construction Conference:
 - The Engineer responsible for the design
 - The Contractor and Sub-contractor (if any) who will be installing the sewer system

- _____ 9) Copies of all necessary encroachment permits shall be provided to Spartanburg Water prior to scheduling pre-construction conference.

- _____ 10) Spartanburg Water Engineering Field Technician (EFT) inspects construction. Testing must be completed and all "punch list" items must be addressed to the satisfaction of the EFT.

- _____ 11) The Developer's Engineer submits the following closeout documentation:
 - Final Plat
 - As-built Drawings
 - Engineer's Certification
 - On-site Right-of-Way Plat and Executed Agreement (if applicable)

- _____ 12) The PM prepares on-site Right-of-Way documents and forwards to the owner for execution.

- _____ 13) On-site Right-of-Way Plat and Executed Agreement (if applicable)

- _____ 14) The PM reviews the closeout documentation and requests revisions if necessary.

- _____ 15) The PM submits the closeout package to SCDHEC.

- _____ 16) SCDHEC issues the Final Construction Approval.

- _____ 17) The PM releases the project for sewer taps.

IX. APPENDICES

Appendix A

Ownership Agreement for the Development and Conveyance of Sewer Mains

3. The Owner may not begin construction of the Sewer Main until all required Right-of-Way Agreements have been executed and recorded, with recorded copies provided to SSSD. Documentation of other rights-of-way and easements necessary or desirable to accommodate the infrastructure installation on the Project may be completed as part of the Project completion and acceptance process.

4. The Owner will comply with all federal, state and local laws, statutes, codes and ordinances.

5. The Owner will engage a licensed utility contractor acceptable to SSSD to construct the Sewer Main. The Owner will obtain any encroachment or other permits necessary to complete the Project and will comply in every respect with the terms and conditions of such permits.

6. Upon completion of the Project and acceptance by SSSD of the Sewer Main, ownership and control of the Sewer Main will automatically vest in SSSD. SSSD will not issue any tap permits or accept for treatment any effluent from the Sewer Main until all SSSD requirements have been met to the sole satisfaction of SSSD and the transfer of ownership is complete.

7. The Owner agrees to execute any transfer documents, subordination agreements or other instruments necessary or desirable to convey unencumbered title to the Sewer Main and associated rights-of-way to SSSD. The Owner warrants and represents that it is the lawful owner of the Property and the Sewer Main and all rights-of-way and appurtenances relating thereto. The Owner represents and warrants that the Sewer Main, once conveyed, will be free and clear of any and all claims, liens or encumbrances of any kind or nature, and further represents and warrants that the Owner has or will have good right, title and authority to transfer and convey the same and will warrant and forever defend the same against all claimants whomsoever.

8. The Owner will provide SSSD with a paper and an electronic version of (1) the “As-built” drawings for Project including the Sewer Main and (2) the final plat recorded on the public record relative to the Project in accordance with current SSSD guidelines.

9. **INSERT SPECIAL PROVISIONS IF REQUIRED.**

10. Upon acceptance of the Sewer Main, SSSD will accept and treat effluent from the Sewer Main and will assume responsibility for the operation, maintenance and repair thereof, together with all appurtenances related thereto.

11. The Owner agrees to indemnify and hold SSSD harmless from and against any and all loss, liability, damage, injury and expense (including, without limitation, attorney's fees) which SSSD may suffer or sustain as a result of or arising out of this Ownership Agreement, the Owner's performance hereunder, the construction of the Sewer Main, or any other matters contemplated herein.

12. No tap or connection of any type to the Sewer Main, or any extensions thereof will be allowed without the prior written consent and authorization of SSSD and the payment of all applicable charges and fees.

13. A separate tap and service line is required for each separate structure to be served. The Owner's costs for installation of the Sewer Main are not related to or considered payment for any SSSD tap, capacity or other fees which may apply to the Project. After acceptance, SSSD may extend or expand the Sewer Main at its sole and absolute discretion and without compensation to the Owner.

14. The Owner must begin construction of the Sewer Main within one year of the date of this Ownership Agreement. If construction is not started within that time frame, the Ownership Agreement will become null, void and of no further force or effect.

15. SSSD has no ownership, operation or maintenance responsibilities for any service lines between the Sewer Main and any structure or property.

16. The Owner warrants and agrees that all the work performed in connection with the construction of the Sewer Main and all materials furnished and installed in connection therewith will be in accordance with (a) the Plans and Specifications as approved by SSSD and (b) all applicable professional or engineering standards. The Owner warrants that the Sewer Main, including any appurtenances thereto, is or will be at the time of transfer to SSSD free from any liens arising out of the construction of the Project or the provision of labor and materials in connection therewith. The Owner further warrants that the Sewer Main is and will remain free from faults and defects of design, material and workmanship for a period of one year from the date of its acceptance by SSSD. The Owner agrees that, upon receipt of written notice from SSSD, it will repair, correct or replace, at its own cost and expense, any defect in the Sewer Main, including, without limitation, any materials or equipment, which prove not to be new, of good quality, free from defects in workmanship and materials, or not constructed in accordance with the Plans and Specifications and applicable engineering standards.

17. The Owner warrants that it is capable of complying with the terms and conditions of this Ownership Agreement and that it is not bound or encumbered by any other agreements which may prevent or adversely affect its compliance with this Ownership Agreement

18. This Ownership Agreement is governed by the laws of the State of South Carolina, excluding its conflicts of law principles. This Ownership Agreement is binding upon the parties' and their respective, heirs, successors and assigns. The Owner may not assign its interest in or its duties under this Ownership Agreement without the prior written consent of SSSD. This Ownership Agreement may be executed in multiple counterparts, which together shall constitute one original document. This Ownership Agreement may not be amended or modified except by an agreement in writing and signed by both parties.

19. This Ownership Agreement constitutes the entire agreement between the parties as to the subject matter hereof and no prior negotiations, discussions, statements, proposals, statements or representations of any kind or nature, whether written or oral, shall modify the express terms hereof.

20. In the event SSSD is party to any Intergovernmental Agreement applicable to the Sewer Main, the Property or the Project, the Owner and its heirs, successors and assigns expressly agree to comply with SSSD's obligations under such agreement(s).

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

LEGAL DOCUMENT – PLEASE EXECUTE IN BLUE INK.

Signed, Sealed and Delivered

(1st Witness)

(2nd Witness)

(1st Witness)

(2nd Witness)

OWNER

By: _____(SEAL)

(Printed Name)

Its: _____

**SPARTANBURG SANITARY SEWER
DISTRICT**

By: _____(SEAL)

Sue G. Schneider
Chief Executive Officer

Attest: _____(SEAL)

G. Newton Pressley
Chief Financial Officer

APPENDIX A

Appendix B

Ownership Agreement for the Development and Conveyance of Water Mains

3. The Owner may not begin construction of the Water Main until all required Right-of-Way Agreements have been executed and recorded, with recorded copies provided to SWS. Documentation of other rights-of-way and easements necessary or desirable to accommodate the infrastructure installation on the Project may be completed as part of the Project completion and acceptance process.

4. The Owner will comply with all federal, state and local laws, statutes, codes and ordinances, including fire protection and fire hydrant spacing requirements.

5. The Owner will engage a licensed utility contractor acceptable to SWS to construct the Water Main. The Owner will obtain any encroachment or other permits necessary to complete the Project and will comply in every respect with the terms and conditions of such permits.

6. Upon completion of the Project and acceptance by SWS of the Water Main, ownership and control of the Water Main will automatically vest in SWS. SWS will not issue any tap permits or supply water to the Water Main until all SWS requirements have been met to the sole satisfaction of SWS and the transfer of ownership is complete.

7. The Owner agrees to execute any transfer documents, subordination agreements or other instruments necessary or desirable to convey unencumbered title to the Water Main and associated rights-of-way to SWS. The Owner warrants and represents that it is the lawful owner of the Property and the Water Main and all rights-of-way and appurtenances relating thereto. The Owner represents and warrants that the Water Main, once conveyed, will be free and clear of any and all claims, liens or encumbrances of any kind or nature, and further represents and warrants that the Owner has or will have good right, title and authority to transfer and convey the same and will warrant and forever defend the same against all claimants whomsoever.

8. The Owner will provide SWS with a paper and an electronic version of (1) the “As-built” drawings for the Water Main and (2) the final plat recorded on the public record relative to the Project in accordance with current SWS guidelines.

9. **INSERT SPECIAL PROVISIONS IF REQUIRED.**

10. Upon acceptance of the Water Main, SWS will supply potable water to the Water Main and assume responsibility for the operation, maintenance and repair thereof, together with all appurtenances related thereto.

11. The Owner agrees to indemnify and hold SWS harmless from and against any and all loss, liability, damage, injury and expense (including, without limitation, attorney's fees) which SWS may suffer or sustain as a result of or arising out of this Ownership Agreement, the Owner's performance hereunder, the construction of the Water Main, or any other matters contemplated herein.

12. No tap or connection of any type to the Water Main, or any extensions thereof will be allowed without the prior written consent and authorization of SWS and the payment of all applicable charges and fees.

13. A separate tap, service line and meter is required for each house, mobile home, building, swimming pool or other separate structure to be served. The Owner's costs for installation of the Water Main are not related to or considered payment for any SWS tap, capacity or other fees which may apply to the Project. After acceptance, SWS may extend or expand the Water Main at its sole and absolute discretion and without compensation to the Owner.

14. The Owner must begin construction of the Water Main within one year of the date of this Ownership Agreement. If construction is not started within that time frame, the Ownership Agreement will become null, void and of no further force or effect.

15. SWS has no ownership, operation or maintenance responsibilities for any service lines between the Water Main and associated water meter and any structure or property.

16. The Owner warrants and agrees that all the work performed in connection with the construction of the Water Main and all materials furnished and installed in connection therewith will be in accordance with (a) the Plans and Specifications as approved by SWS and (b) any applicable professional or engineering standards. The Owner warrants that the Water Main, including any appurtenances thereto, is or will be at the time of transfer to SWS free from any liens arising out of the construction of the Project or the provision of labor and materials in connection therewith. The Owner further warrants that the Water Main is and will remain free from faults and defects of design, material and workmanship for a period of one year from the date of its acceptance by SWS. The Owner agrees that, upon receipt of written notice from SWS, it will repair, correct or replace, at its own cost and expense, any defect in the Water Main, including, without limitation, any materials or equipment, which prove not to be new, of good

quality, free from defects in workmanship and materials, or not constructed in accordance with the Plans and Specifications or applicable engineering standards.

17. The Owner warrants that it is capable of complying with the terms and conditions of this Ownership Agreement and that it is not bound or encumbered by any other agreements which may prevent or adversely affect its compliance with this Ownership Agreement

18. This Ownership Agreement is governed by the laws of the State of South Carolina, excluding its conflicts of law principles. This Ownership Agreement is binding upon the parties' and their respective, heirs, successors and assigns. The Owner may not assign its interest in or its duties under this Ownership Agreement without the prior written consent of SWS. This Ownership Agreement may be executed in multiple counterparts, which together shall constitute one original document. This Ownership Agreement may not be amended or modified except by an agreement in writing and signed by both parties.

19. This Ownership Agreement constitutes the entire agreement between the parties as to the subject matter hereof and no prior negotiations, discussions, statements, proposals, statements or representations of any kind or nature, whether written or oral, shall modify the express terms hereof.

20. In the event SWS is party to any Intergovernmental Agreement applicable to the Water Main, the Property or the Project, the Owner and its heirs, successors and assigns expressly agree to comply with SWS's obligations under such agreement(s).

[Signatures on following page]

IN WITNESS WHEREOF, the parties hereto have hereunto set their hands and seals the day and year first above written.

LEGAL DOCUMENT – PLEASE EXECUTE IN BLUE INK.

Signed, Sealed and Delivered

(1st Witness)

(2nd Witness)

(1st Witness)

(2nd Witness)

OWNER

By: _____(SEAL)

(Printed Name)

Its: _____

**COMMISSION OF PUBLIC WORKS
OF THE CITY OF SPARTANBURG,
SOUTH CAROLINA**

By: _____(SEAL)

Sue G. Schneider
Chief Executive Officer

Attest: _____(SEAL)

G. Newton Pressley
Chief Financial Officer

Appendix B

Appendix C

Right-of-Way Agreements (Water and Sewer)

STATE OF SOUTH CAROLINA)
)
COUNTY OF SPARTANBURG)

**SEWER
RIGHT-OF-WAY AND EASEMENT
AGREEMENT**

KNOW ALL MEN BY THESE PRESENTS THAT THE UNDERSIGNED,
_____ (Grantor), of the County of Spartanburg, State of South Carolina, for
and in consideration of the sum of _____ (\$_____) Dollars to it in hand
paid at and before the sealing of these presents by the Spartanburg Sanitary Sewer District
(District), (the receipt whereof is hereby acknowledged), have granted, bargained, sold and released
and by these presents do grant, bargain, sell and release unto the Spartanburg Sanitary Sewer
District, its successors and assigns forever:

A PERPETUAL AND EXCLUSIVE RIGHT-OF-WAY & EASEMENT, 25 feet in
width, over, upon, under and across certain property owned by the Grantor herein located in the
County of Spartanburg, State of South Carolina.

Said Right-of-way and Easement is shown on a plat made for the Spartanburg Sanitary Sewer
District by _____, dated _____, a copy of which is attached hereto
and made a part hereof and attached as Exhibit A.

For a more full and particular description, reference is hereby specifically made to the above
referenced plat and records thereof. Derivation: Deed Book

The District shall clear and grub the entire width of said right-of-way and easement along its
entire length.

1. Said Right-of-way and Easement is granted for the purpose of enabling the
Spartanburg Sanitary Sewer District to construct, lay, maintain, operate, renew, enlarge, replace,
repair and remove a line or lines of underground and/or above ground sewer pipe or pipes,
including individual sewer service line or lines together with all necessary appurtenances, which
pipe line or lines shall be used in the transmission of sewage, with the right at any and all times to
enter upon the strip of land included within the above described for any purpose in connection with
the inspection, maintenance, operation, renewal, enlargement, replacement or repairing of the said
pipe or lines or any appurtenances or any of them and with the right to do all necessary excavation,
installation, construction and maintenance work. Said right is also granted to install or permit to be
installed individual sewer service line or lines within said right-of-way and easement.

2. The Grantor hereby covenants and agrees for himself and his heirs and assigns, which
covenant shall run with the property over which said Right-of-way and Easement is granted, that
(a.) Grantor will not engage in, and will not permit the engaging in, any activities or uses of the
right-of-way and easement (e.g. excavation, blasting, use of explosives, landscaping such as
planting of trees or large shrubs whose root systems may damage sewer lines) that would damage,
tend to damage, injure or obstruct sewer lines, service lines or the other appurtenances installed in

connection therewith, or that may in any way interrupt or interfere with the normal and usual service of said installations; (b.) Grantor will not alter or permit the alteration of the ground grade level within the limits of the right-of-way and easement beyond the elevation or elevations existing at the time of completion of construction of the underground and/or above-ground sewer line(s) within the right-of-way and easement; (c.) Grantor will not within the right-of-way and easement erect, or permit to be erected, any permanent or temporary building or structure; provided however, the installation of paved asphalt or concrete driveways, sidewalks, patios or other hardscape features shall not be specifically prohibited;

3. If the District must remove an encroachment prohibited by Section 2, the District shall not be responsible for any restoration or replacement costs for damage to the Grantor's property that Grantor may sustain. If the District must remove pavement or other hardscape features for any reason, the District will make efforts to properly repair and patch the area within reason. The District will not be responsible for replacing any "specialty" type of hardscape as this will be considered a permanent or temporary structure which is prohibited.

INSERT SPECIAL PROVISIONS IF REQUIRED

4. Miscellaneous

a. Pronouns. The term Grantor as used in this instrument and all pronouns associated with Grantor shall be deemed to include all genders, singular and plural and persons or corporations.

b. Successors and Assigns. This instrument is binding upon and shall inure to the benefit of the parties hereto, their successors and assigns.

Grantor does hereby bind himself, his heirs, executors, and administrators, to warrant and forever defend all and singular said premises to the District, its successors and assigns, against himself and his heirs and against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

(a.) Grantor will not engage in, and will not permit the engaging in, any activities or uses of the right-of-way and easement (e.g. excavation, blasting, use of explosives, landscaping such as planting of trees or large shrubs whose root systems may damage water lines) that would damage, tend to damage, injure or obstruct water lines, service lines or the other appurtenances installed in connection therewith, or that may in any way interrupt or interfere with the normal and usual service of said installations; (b.) Grantor will not alter or permit the alteration of the ground grade level within the limits of the right-of-way and easement beyond the elevation or elevations existing at the time of completion of construction of the underground and/or above-ground water line(s) within the right-of-way and easement; (c.) Grantor will not within the right-of-way and easement erect, or permit to be erected, any permanent or temporary building or structure; provided however, the installation of paved asphalt or concrete driveways, sidewalks, patios or other hardscape features shall not be specifically prohibited;

4. If the Commission must remove an encroachment prohibited by this Section 3, the Commission shall not be responsible for any restoration or replacement costs for damage to the Grantor's property that Grantor may sustain. If the Commission must remove pavement or other hardscape features for any reason, the Commission will make efforts to properly repair and patch the area within reason. The Commission will not be responsible for replacing any "specialty" type of hardscape as this will be considered a permanent or temporary structure which is prohibited.

INSERT SPECIAL PROVISIONS IF REQUIRED

5. Miscellaneous

a. Pronouns. The term Grantor as used in this Agreement and all pronouns associated with Grantor shall be deemed to include all genders, singular and plural and persons or corporations.

b. Successors and Assigns. This Agreement is binding upon and shall inure to the benefit of the parties hereto, their successors and assigns.

To have and to hold all and singular the rights, privileges and easements before mentioned unto the Commission, its successors and assigns, forever.

Grantor does hereby bind himself, his heirs, executors, and administrators, to warrant and forever defend all and singular said premises to the Commission, its successors and assigns, against himself and his heirs and against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

Appendix D

Sewer As-built Checklist



SEWER AS-BUILT CHECKLIST

AS-BUILT DRAWING REQUIREMENTS

SITE PLAN

- Plan view of the entire site at not greater than 1"=200' scale, showing the entire sewer system
- 24" x 36" or smaller sheet size
- Show tie-in to the existing system; include name of existing lines and upstream and downstream rim and invert elevations
- Show labeling of all manholes, air release valves on force mains and pump station numbers
- Show limits of wetlands, floodplains and steep slopes
- Show project phasing
- North arrow
- Spartanburg County GIS grid number where the project is located
- Names of adjacent property owners
- Location map, max scale 1"=1000', north arrow
- Index of sheets
- Title block
 - Names, mailing addresses and telephone numbers of the owner of the property, the land developer, the engineer or consultant and the applicant
 - Name of the development
 - Tax map number of the property
 - Scale
 - Date (also include revision dates)
- Legend for all symbols

PLAN AND PROFILE SHEETS

- 24" x 36" or smaller sheet size
- North arrow, scale (max. 1"=100' horizontal and 1"=10' vertical)
- Date (also include revision dates)
- Provide plan and profile of the entire system complete to tie-in to the existing system.
- SSSD prefers, but does not require, that the plan and profile be on the same sheet for the section of the line shown.

The **plan** view shall at a minimum show:

- Street names with R/W limits
- Lot lines and number
- Easements labeled and dimensioned
- Manholes and/or forcemain air release valves with stationing for specifying location
- Pipe layout
- Bearings on all lines. Flow angle or bearings shall also be provided at the tie-in of the proposed system to the existing system
- Any known conflicting utilities
- Storm drainage location
- Sewer service locations for all lots and buildings (see attached service location form for field use). Contact SSSD for an AutoCAD block to be used on the plan view.
- Stream crossings identified
- Aerial crossings identified

- ❑ Pipe anchorage locations identified
- ❑ Fittings, air release valves, thrust blocking and all other necessary information for forcemains

The **profile** view shall at a minimum show:

- ❑ Constructed grade
- ❑ Stationing to match with the plan view
- ❑ Manholes with the following information:
 - Stations
 - Types of manholes (i.e. drop manhole)
 - Rim elevations (as-built)
 - Invert elevations (as-built)
- ❑ Pipes with the following data:
 - Length
 - Diameter
 - Type of pipe
 - Slope of pipe in %
- ❑ Any know conflicting utilities
- ❑ Storm drainage crossing the sewer lines
- ❑ Stream crossings identified
- ❑ Aerial crossings identified
- ❑ Fittings, air release valves, thrust blocking and all other necessary information for forcemains

DETAIL SHEETS

Provide the following **as-built** details for pump stations:

- ❑ A vertical and horizontal cross-section of each pump station shall at a minimum include:
 - Influent line elevation and location
 - High water alarm elevation
 - Lead, lag pump-on elevations and pump-off elevation
 - Wetwell diameter, bottom, ground and top elevations
 - Location of pumps, guide brackets, chain hooks, and lifting chains
 - Location and elevation of discharge piping
 - Location and dimensions of wetwell entrance
 - Location of control panel
- ❑ An as-built site plan of the pump station site at a minimum shall include:
 - Identification of the fenced or secure locked building/enclosure
 - Identification of a weather durable sign with a 24-hour emergency telephone number
 - Location of wetwell, valve pit, and control panel
 - Generator (if specified) or generator hook-up location
 - Identification of an all-weather access road

Appendix E

Table of Sanitary Sewer Tap Locations

