

ORDINANCE 24-09

AN ORDINANCE TO AMEND TITLE 18, CHAPTER 1, SECTION 18-108 WATER CONNECTION CHARGE, SPRING HILL CODE OF ORDINANCES

WHEREAS, the Board of Mayor and Aldermen adopted Ordinance 86-42 that governed requests for connections to the City of Spring Hill Water and Sewer Systems; and

WHEREAS, the Board of Mayor and Aldermen subsequently amended the Spring Hill Code of Ordinances and associated charges for water and sewer connections referenced therein with the adoption of Ordinance 96-11, Ordinance 97-20, Resolution 02-17, Ordinance 07-29, Ordinance 07-48, Ordinance 10-16, Ordinance 12-20, and Resolution 19-78; and

WHEREAS, Title 18, Chapter 1, Section 18-108, Water Connection Charge, established as amended from time to time charges for each connection made to the City of Spring Hill water system based upon the size of the water meter; and

WHEREAS, the Board of Mayor and Aldermen adopted Ordinance 03-03 and Ordinance 03-40 relative to the installation requirements and construction standards for the installation of a fire sprinkler system in residential and non-residential structures; and

WHEREAS, the Board of Mayor and Aldermen adopted Ordinance 11-11 to amend Title 7, Chapter 2, Section 7-205 relative to fees charged for Owner/Developer and City-installed fire sprinkler system connections; and

WHEREAS, the City of Spring Hill engaged Jackson Thornton to prepare a Utility Cost of Service and System Development Fees study that was completed in 2019 and presented to the Board of Mayor and Aldermen; and

WHEREAS, a contribution of capital towards existing or planned future plant and distribution system facilities is necessary to meet the service needs of new customers to which such fees apply; and

WHEREAS, charges are intended to provide funds to be used to finance all or part of capital improvements necessary to serve new customers; and

WHEREAS, Jackson Thornton utilized an Incremental Cost Method for determining water system development fees in which an Equivalent Residential Unit (ERU) using 12 months of financial data was calculated along with the number of ERU's of capacity being added based upon approved capital improvement projects to determine an incremental cost reflecting the average investment per ERU on the additional capacity to the water system being added; and

WHEREAS, Raftelis worked with City staff to update established methodology from 2019 to generate a new Average Investment per Equivalent Residential Unit calculation as the basis for recommended adjustments in the water system development charges; and

WHEREAS, it is recommended that charges be adjusted in a phased, multi-year increase; and

WHEREAS, the charges will be structured and increased per the schedule noted below;

BE IT THEREFORE ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF SPRING HILL, TENNESSEE, that the following water connection charges be established and take effect as follows.

Section 1. Amend the Water System Development Charge Table in Title 18, Chapter 1, Section 18-108 Water Connection Charge as follows. These charges will increase on July 1, 2024 as follows:

Water System Development Charges			
Average Investment/ERU		\$ 1,554.00	
Meter Size	Multiplier	System Development Charge	
5/8" M25	1.00	\$	1,554.00
3/4" M25	1.20	\$	1,864.80
1" M170	1.60	\$	2,486.40
1.5" M120	2.40	\$	3,729.60
2" Turbo Series	3.20	\$	4,972.80
2" Compound	3.20	\$	4,972.80
3" Turbo Series	4.80	\$	7,459.20
3" Compound	4.80	\$	7,459.20
4" Turbo Series	6.40	\$	9,945.60
4" Compound	6.40	\$	9,945.60
6" Turbo Series	9.60	\$	14,918.40
6" Compound	9.60	\$	14,918.40
8" Combo	12.80	\$	19,891.20
10" Turbo Series	16.00	\$	24,864.00
12" Turbo Series	19.20	\$	29,836.80

Section 2. Amend the Water System Development Charge Table in Title 18, Chapter 1, Section 18-108 Water Connection Charge as follows. These charges will increase on July 1, 2025 as follows:

Water System Development Charges			
Average Investment/ERU		\$ 2,020.00	
Meter Size	Multiplier	System Development Charge	
5/8" M25	1.00	\$	2,020.00
3/4" M25	1.20	\$	2,424.00
1" M170	1.60	\$	3,232.00
1.5" M120	2.40	\$	4,848.00
2" Turbo Series	3.20	\$	6,464.00
2" Compound	3.20	\$	6,464.00
3" Turbo Series	4.80	\$	9,696.00
3" Compound	4.80	\$	9,696.00
4" Turbo Series	6.40	\$	12,928.00
4" Compound	6.40	\$	12,928.00
6" Turbo Series	9.60	\$	19,392.00
6" Compound	9.60	\$	19,392.00
8" Combo	12.80	\$	25,856.00
10" Turbo Series	16.00	\$	32,320.00
12" Turbo Series	19.20	\$	38,784.00

Section 3. Amend the Water System Development Charge Table in Title 18, Chapter 1, Section 18-108 Water Connection Charge as follows. These charges will increase on July 1, 2026 as follows:

Water System Development Charges		
Average Investment/ERU		\$ 2,230.00
Meter Size	Multiplier	System Development Charge
5/8" M25	1.00	\$ 2,230.00
3/4" M25	1.20	\$ 2,676.00
1" M170	1.60	\$ 3,568.00
1.5" M120	2.40	\$ 5,352.00
2" Turbo Series	3.20	\$ 7,136.00
2" Compound	3.20	\$ 7,136.00
3" Turbo Series	4.80	\$ 10,704.00
3" Compound	4.80	\$ 10,704.00
4" Turbo Series	6.40	\$ 14,272.00
4" Compound	6.40	\$ 14,272.00
6" Turbo Series	9.60	\$ 21,408.00
6" Compound	9.60	\$ 21,408.00
8" Combo	12.80	\$ 28,544.00
10" Turbo Series	16.00	\$ 35,680.00
12" Turbo Series	19.20	\$ 42,816.00

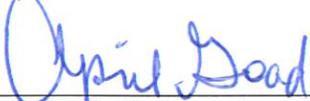
Section 4. The charges will increase annually starting on July 1, 2027 by the greater percentage of either three percent or the percent increase in the Consumer Price Index.

Section 5. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval and are under construction prior to the effective dates noted above in this Ordinance will pay the water system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on this 3rd day of June, 2024.


Jim Hagaman, Mayor

ATTEST:


April Goad, City Recorder

LEGAL FORM APPROVED:


Patrick Carter, City Attorney

PASSED ON 1ST READING: May 20th, 2024

PASSED ON 2ND READING: June 3rd, 2024

City of Spring Hill TN

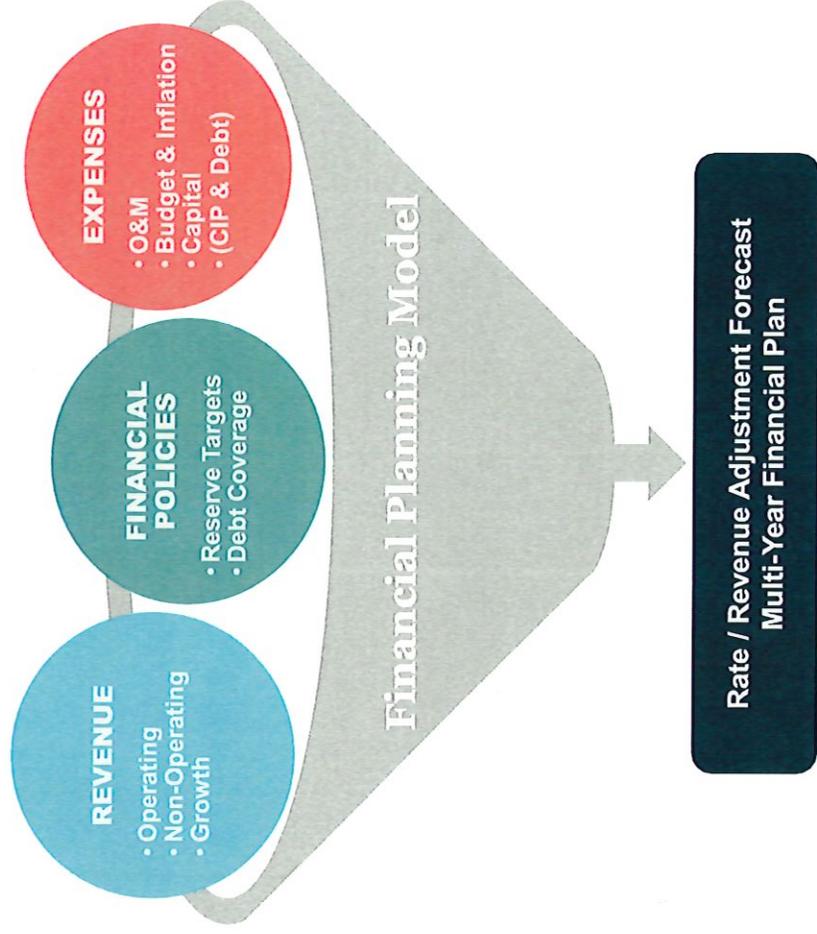
Water and Sewer Rate Study – Staff Recommendation

April 9, 2024



Financial Plan

- Goal is to model yearly cash flow and reserve balances and calculate rates
- Key Cost Drivers
 - › Cost Escalation
 - › CIP / Capital Needs
- Revenue Drivers
 - › Customers and usage
 - › Rate increases
- Financial policies are the balancing mechanism



5-Year Capital Plan: FY25-29

CIP (\$ Millions)



- 5-Year CIP includes \$249.2 million in expenditures
 - > Average annual spending of \$50 million/year
 - > Funded through debt and cash/reserves
 - \$215.8M Debt Financing
 - \$33.4M Cash/Reserves

85%

Debt Capital ■ Cash Capital

- Currently have \$22.3 million budgeted in FY 2024 for capital projects, not included in the 5-year CIP

Large Capital Projects

- Assumed GO Bond funding for larger projects
- GO Bonds have a 25-year term at 4.5% interest rate.
- Water Projects
 - > \$75.0M – Water Tanks/Reservoir
 - > \$74.8M – Advanced Purification Project
 - > \$23.0M - WTP Treatment Upgrades and Capacity Upgrade
- Sewer Projects
 - > \$28.0 – WWTP Expansion Phase I
 - > \$15.0 – WWTP Expansion Phase II

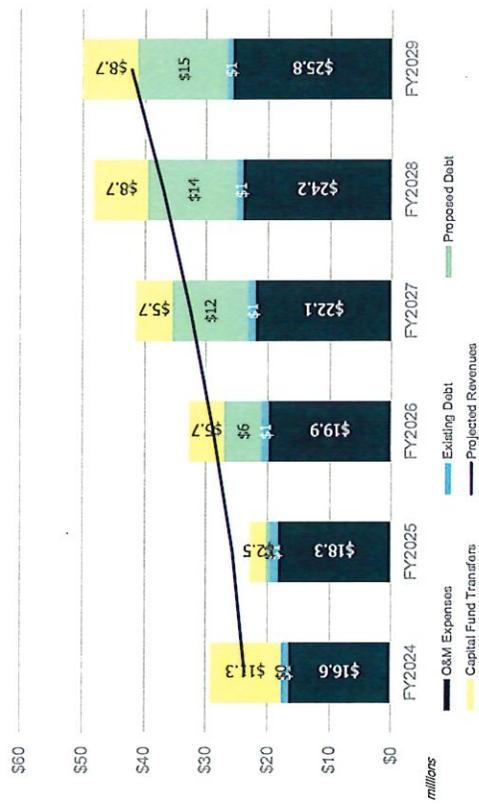
15% Increases Across the Board

City of Spring Hill, TN

KEY FINANCIAL DATA

	2024	2025	2026	2027	2028	2029
Water Rate Increases						
Base Charges	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Volumetric Rate	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Sewer Rate Increases						
Fixed Rate	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Base Charges	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Volumetric Rate	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Residential Volume	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%
Non-Residential Volume	0.00%	15.00%	15.00%	15.00%	15.00%	15.00%

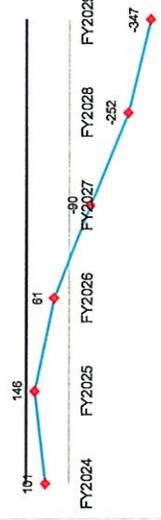
Operating Financial Plan



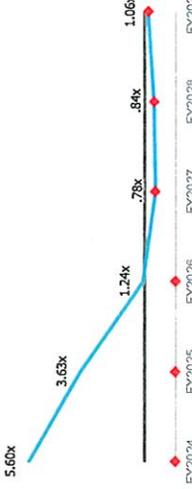
Total Debt Coverage (w/o Development Fees)



Operating Days Cash on Hand



Total Debt Coverage



Typical Customer Bill (4 Kgal) Water & Sewer



Staff Recommendation

(25% increase in year 1)



25% Increase First

City of Spring Hill, TN

KEY FINANCIAL DATA

Water Rate Increases

	2024	2025	2026	2027	2028	2029
Base Charges	0.00%	25.00%	30.00%	30.00%	10.00%	10.00%
Volumetric Rate	0.00%	25.00%	30.00%	30.00%	10.00%	10.00%

Sewer Rate Increases

	2024	2025	2026	2027	2028	2029
Fixed Rate	0.00%	25.00%	30.00%	30.00%	10.00%	10.00%

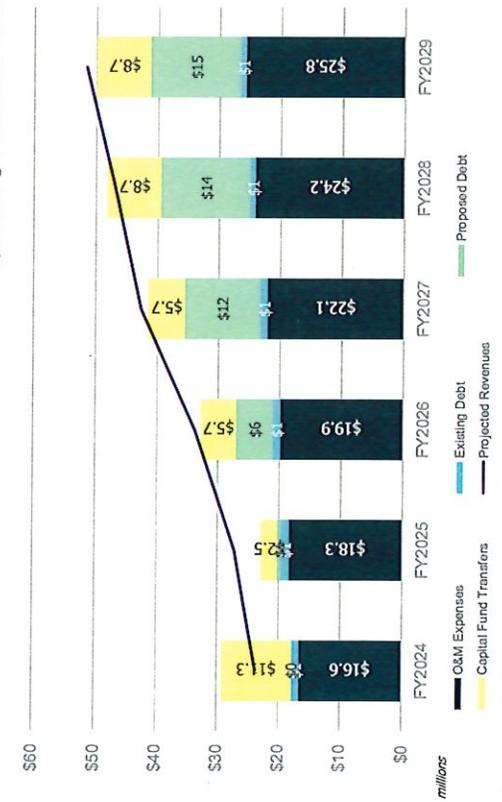
Base Charges

	2024	2025	2026	2027	2028	2029
Volumetric Rate	0.00%	25.00%	30.00%	30.00%	10.00%	10.00%

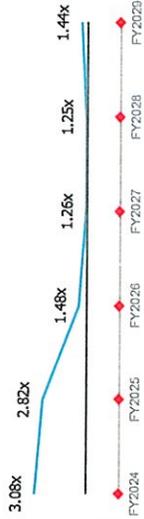
Residential Volume

	2024	2025	2026	2027	2028	2029
Non-Residential Volume	0.00%	25.00%	30.00%	30.00%	10.00%	10.00%

Operating Financial Plan



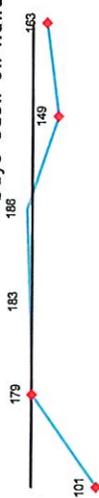
Total Debt Coverage (w/o Development Fees)



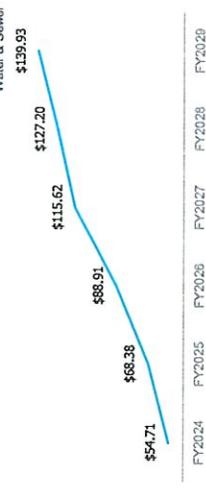
Total Debt Coverage



Operating Days Cash on Hand



Typical Customer Bill (4 Kgal) Water & Sewer



Rates & Rate Structure Options

Water

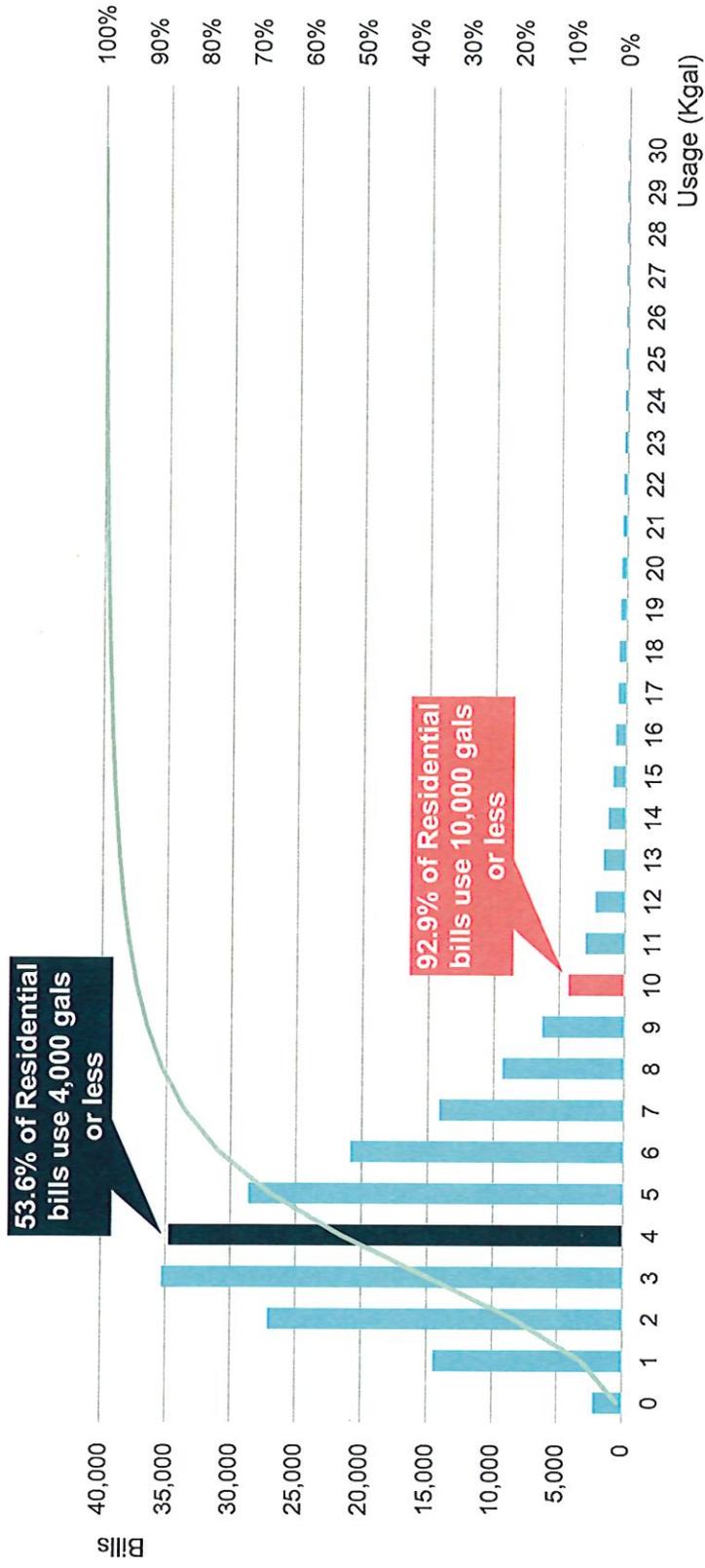
- Across-the-Board Increases
 - > Base Charges (25%)
 - > Volume Charges (25%)
- Volumetric Rate Changes
 - > Base Charges (25%)
 - > Volume Charges
 - Residential 3-Tiered Structure
 - All Irrigation charged at Tier 3 Residential rate
 - Non-residential (25%)

Sewer

- Across-the-Board Increases
 - > Base Charges (25%)
 - > Volume Charges (25%)

Both water rate scenarios produce revenues equivalent to 25% increase in user revenue.

Bill Frequency Analysis - Residential



User Rates – Increases (25% first)

Water Base Charge	Existing	FY 2025	FY 2026	FY 2027
Inside	\$ 9.80	\$ 12.25	\$ 15.93	\$ 20.71
Outside	\$ 18.47	\$ 23.09	\$ 30.02	\$ 39.03
1 Inch	\$ 43.23	\$ 54.04	\$ 70.25	\$ 91.33
1-1/4 or 1-1/2 Inch	\$ 57.60	\$ 72.00	\$ 93.60	\$ 121.68
2 Inch	\$ 71.98	\$ 89.98	\$ 116.97	\$ 152.06
3 Inch	\$ 92.10	\$ 115.13	\$ 149.67	\$ 194.57
4 Inch	\$ -	\$ -	\$ -	\$ -
8 Inch	\$ 646.98	\$ 808.73	\$1,051.35	\$1,366.76
33 Minimums	\$ 486.33	\$ 607.91	\$ 790.28	\$1,027.39
Water Volume Charge (per kgal)	\$ 3.69	\$ 4.61	\$ 5.99	\$ 7.79

Sewer Charges				
Base Charge (all customers)	\$ 12.07	\$ 15.09	\$ 19.62	\$ 25.51
Volume Charge (per kgal)	\$ 4.52	\$ 5.65	\$ 7.35	\$ 9.56

Water Base Charges apply to irrigation meters as well. Multi-Unit rate same as inside charge.

Rate Increases & Structure Change

Additional increases anticipated for 5-year forecast period.

Water Base Charge	Existing	FY 2025	FY 2026	FY 2027
Inside (Same as Slide Before with 25%)	\$ 9.80	\$ 12.25	\$ 15.93	\$ 20.71
Water Volume Charge (per kgal)				
Residential				
Tier 1 (0-4 Kgal)	\$ 3.69	\$ 4.13	\$ 5.37	\$ 6.98
Tier 2 (4-10 Kgal)	\$ 3.69	\$ 5.16	\$ 6.71	\$ 8.72
Tier 3 (10+ Kgal)	\$ 3.69	\$ 6.19	\$ 8.05	\$ 10.47
Non-Residential	\$ 3.69	\$ 4.61	\$ 5.99	\$ 7.79
Irrigation	\$ 3.69	\$ 6.19	\$ 8.05	\$ 10.47

Sewer Charges				
Base Charge (all customers)	\$ 12.07	\$ 15.09	\$ 19.62	\$ 25.51
Volume Charge (per kgal)	\$ 4.52	\$ 5.65	\$ 7.35	\$ 9.56

Rate Increases & Structure Change

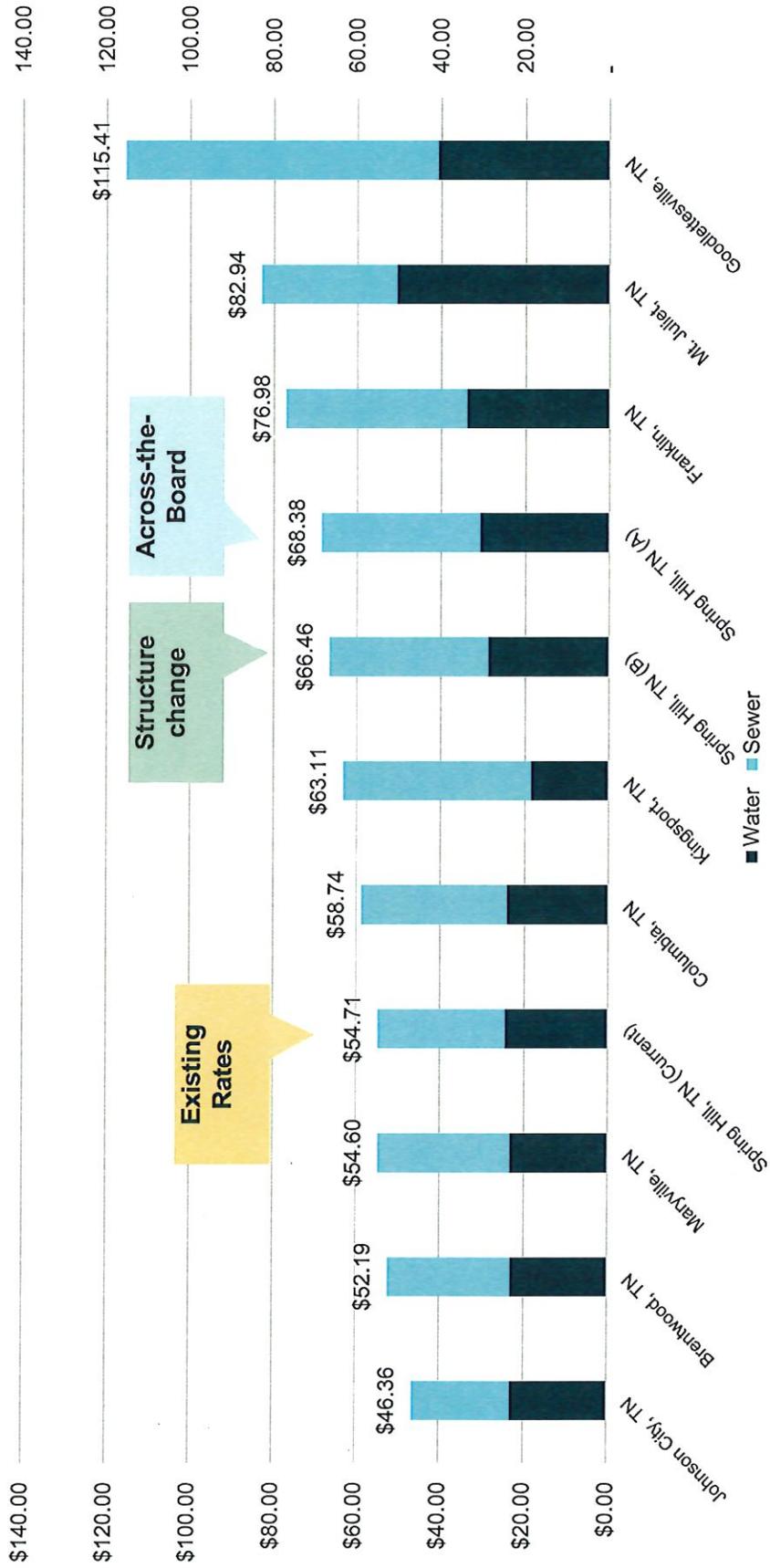
Water Base Charge	Existing	FY 2025	\$ Change	% Change
Inside (Same as Slide Before with 25%)	\$ 9.80	\$ 12.25	\$ 2.45	25%
Water Volume Charge (per kgal)				
Residential				
Tier 1 (0-4 Kgal)	\$ 3.69	\$ 4.13	\$ 0.44	11.9%
Tier 2 (4-10 Kgal)	\$ 3.69	\$ 5.16	\$ 1.47	39.8%
Tier 3 (10+ Kgal)	\$ 3.69	\$ 6.19	\$ 2.50	67.8%
Non-Residential	\$ 3.69	\$ 4.61	\$ 0.92	25%
Irrigation	\$ 3.69	\$ 6.19	\$ 2.50	67.8%

Additional increases anticipated for 5-year forecast period.

% Bills	% Usage
53.6%	63.3%
39.3%	26.6%
7.1%	10.1%

Sewer Charges	Existing	FY 2025	\$ Change	% Change
Base Charge (all customers)	\$ 12.07	\$ 15.09	\$ 3.02	25%
Volume Charge (per kgal)	\$ 4.52	\$ 5.65	\$ 1.13	25%

Bill Comparison for Typical Users (5/8" 4-kgal)



System Development Fees

- One-time charge assessed to new development to pay for capacity in the water and sewer systems
 - › “*Growth pays for growth*”
- Fees have to be put aside in a separate fund and used to pay for growth related projects or debt service associated with growth projects
- Fees need to be based on existing fixed asset information and/or on an approved capital improvement plan
- Existing fees for one ERU of service or 5/8” meter
 - › Current water fee - \$1,243
 - › Current sewer fee - \$1,692

System Development Fees

- Maximum Cost Justified Fees for 5/8" meter or one ERU
 - › Water fee - \$2,230
 - › Sewer fee - \$3,748
- Staff proposes the following increases

Water	Existing	FY 25	FY 26	FY 27
5/8" Meter Charge (one ERU)	\$ 1,243	\$ 1,554	\$ 2,020	\$ 2,230
% Increase		25%	30%	10.3%

Sewer	Existing	FY 25	FY 26	FY 27
5/8" Meter Charge (one ERU)	\$ 1,692	\$ 2,115	\$ 2,750	\$ 3,035
% Increase		25%	30%	30%

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ORDINANCE NO. 19-32

**AN ORDINANCE TO AMEND TITLE 18, CHAPTER 1, SECTION 18-108
WATER CONNECTION CHARGE, AND TITLE 7, CHAPTER 2, SECTION
7-205, SPRING HILL CODE OF ORDINANCES**

WHEREAS, the Board of Mayor and Aldermen adopted Ordinance 86-42 that governed requests for connections to the City of Spring Hill Water and Sewer Systems; and

WHEREAS, the Board of Mayor and Aldermen subsequently amended the Spring Hill Code of Ordinances and associated charges for water and sewer connections referenced therein with the adoption of Ordinance 96-11, Ordinance 97-20, Resolution 02-17, Ordinance 07-29, Ordinance 07-48, Ordinance 10-16, Ordinance 12-20, and Resolution 19-78; and

WHEREAS, Title 18, Chapter 1, Section 18-108, Water Connection Charge, established as amended from time to time charges for each connection made to the City of Spring Hill water system based upon the size of the water meter; and

WHEREAS, the Board of Mayor and Aldermen adopted Ordinance 03-03 and Ordinance 03-40 relative to the installation requirements and construction standards for the installation of a fire sprinkler system in residential and non-residential structures; and

WHEREAS, the Board of Mayor and Aldermen adopted Ordinance 11-11 to amend Title 7, Chapter 2, Section 7-205 relative to fees charged for Owner/Developer and City-installed fire sprinkler system connections; and

WHEREAS, the City of Spring Hill engaged Jackson Thornton to prepare a Utility Cost of Service and System Development Fees study that was completed in 2019 and presented to the Board of Mayor and Aldermen; and

WHEREAS, a contribution of capital towards existing or planned future plant and distribution system facilities is necessary to meet the service needs of new customers to which such fees apply; and

WHEREAS, charges are intended to provide funds to be used to finance all or part of capital improvements necessary to serve new customers; and

WHEREAS, Jackson Thornton utilized an Incremental Cost Method for determining water system development fees in which an Equivalent Residential Unit (ERU) using 12 months of financial data was calculated along with the number of ERU's of capacity being added based upon approved capital improvement projects to determine an incremental cost reflecting the average investment per ERU on the additional capacity to the water system being added; and

WHEREAS, utilizing the Incremental Approach the following calculations were provided by Jackson Thornton to determine the Average Investment/ERU utilized as the basis for recommended adjustments in water system development charges.

Annual Residential Sales (Gals)	814,368,403
Annual Residential Billings	172,688
Monthly Volume/Customer (Gals)	4,716
Annual Volume/Customer (Gals)	56,590
1.5 MGD Additional Capacity	547,500,000
Equivalent Residential Units (ERU)	9,675
Projected Investment in Water System	\$12,023,000
Net Investment in Water System	\$12,023,000
Average Investment/ERU	\$1,243

WHEREAS, it has been determined that a phased, multi-year adjustment approach is desirable for the implementation of amendments to system development charges.

BE IT THEREFORE ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF SPRING HILL, TENNESSEE, that the following is hereby adopted.

1. Amend Title 18, Chapter 1, Section 18-108 Water Connection Charge, (A) through (C) as follows:

§ 18-108 WATER CONNECTION CHARGE.

(A) There is hereby imposed the following charges for each connection made to the water system maintained by the city for all non-irrigation water meter based upon the size of water meter. Water meters installed to serve an irrigation system will be charged the same system development charge as provided for non-irrigation system meters.

Water System Development Charges						
Average Investment/ERU		\$1,243				
Meter Size	Multiplier	Proposed System Development Charge Fee	Phased Implementation - Jan. 1, 2020	Phased Implementation - January 1, 2021	Tapping Fee (Adopted by Resolution 19-78)	Meter Fees (Adopted by Resolution 19-78)
5/8" M25	1.00	\$1,243	\$710	\$1,243	\$1,300	\$185.65
3/4" M25	1.20	\$1,491	\$790	\$1,491	\$1,300	\$185.65
1" M170	1.60	\$1,988	\$1,021	\$1,988	\$1,600	\$306.80
1.5" M120	2.40	\$2,982	\$1,400	\$2,982	\$1,900	\$489.32
2" Turbo Series	3.20	\$3,977	\$1,782	\$3,977	\$2,100	\$826.80
2" Compound	3.20	\$3,977	\$1,782	\$3,977	\$2,100	\$1,866.80
3" Turbo Series	4.80	\$5,965	\$2,590	\$5,965	\$2,800	\$962.00
3" Compound	4.80	\$5,965	\$2,590	\$5,965	\$2,800	\$2,210.00
4" Turbo Series	6.40	\$7,953	\$3,446	\$7,953	\$3,700	\$1,591.20
4" Compound	6.40	\$7,953	\$3,446	\$7,953	\$3,700	\$3,387.28
6" Turbo Series	9.60	\$11,930	\$4,967	\$11,930	\$4,700	\$3,744.00
6" Compound	9.60	\$11,930	\$4,967	\$11,930	\$4,700	\$4,758.00
8" Combo	12.80	\$15,907	\$7,199	\$15,907	\$8,700	\$7,124.00
10" Turbo Series	16.00	\$19,883	\$9,900	\$19,883	\$10,700	\$7,500.00
12" Turbo Series	19.20	\$23,860	\$11,900	\$23,860	\$12,700	\$8,200.00
Irrigation System Connection		<u>Same as above based upon meter type and size</u>	<u>Same as above based upon meter type and size</u>	<u>Same as above based upon meter type and size</u>	<u>Same as above plus \$25.00 Backflow Permit</u>	<u>Same as above based upon meter type and size</u>

(B) These charges shall be in addition to any and all other fees and charges imposed by other ordinances or resolutions of the city.

2. Amend Title 7, Chapter 2, Section 7-205, (B) (10) and (11) as follows:

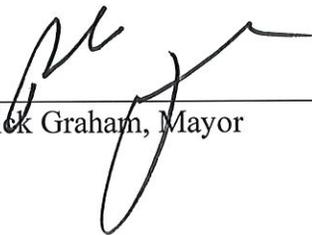
(10) For all fire sprinkler line taps that are used solely for the fire sprinkler and installed by the owner or developer with no cost to the City, there shall be a meter fee charge equivalent to the tap size and a corresponding system development charge based upon tap size as provided in Title 18, Chapter 1, Section 18-108 (A).

(11) For any fire sprinkler tap size that is installed by the city, the owner shall pay a meter and tap fee equivalent to the tap size and a corresponding system development charge based upon the tap size as provided in Title 18, Chapter 1, Section 18-108 (A).

3. The Ordinance shall be effective beginning January 1, 2020 with final phase of amended fees to be effective January 1, 2021.

4. Any Ordinance or Resolution in conflict with Water System Development Charges and other fees and charges as contained in Section 18-108 (A) are hereby repealed in their entirety.
5. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval from the City and are under construction prior to the effective date of the initial implementation phase of this Ordinance (January 1, 2020) shall pay the water system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.
6. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval after January 1, 2020 and are under construction prior to the effective date of second implementation phase this Ordinance (January 1, 2021) shall pay the water system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 21st day of October, 2019.



Rick Graham, Mayor

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



Patrick Carter, City Attorney

PASSED ON 1ST READING: September 16, 2019

PASSED ON 2ND READING: October 21, 2019



REQUEST: *Approval of Ordinance 19-32 and Ordinance 19-33*

SUBMITTED BY: Victor Lay, City Administrator
Chuck Downham, Assistant City Administrator

DATE: October 21, 2019

RE: Ordinance 19-32 and Ordinance 19-33 to Amend Title 18, Chapter 1, Sections 18-108 and 18-109 and Title 7, Chapter 2, Section 7-205

ATTACHMENTS: Ordinance 19-32 and Ordinance 19-33 and supporting documents

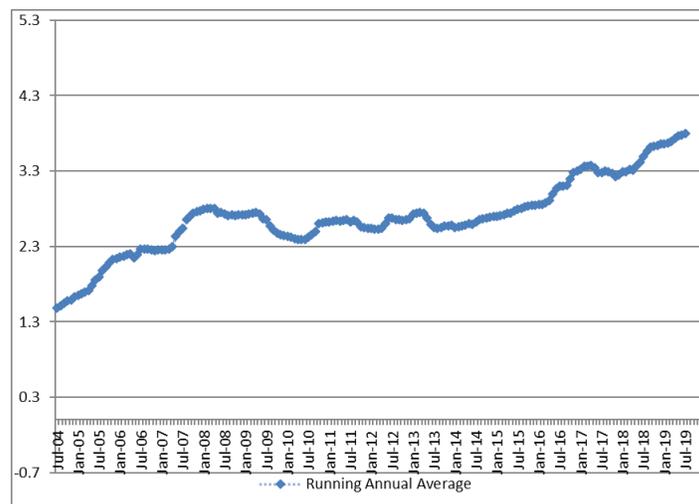
PURPOSE:

To approve Ordinance 19-32 and Ordinance 19-33 to amend Title 18, Chapter 1, Sections 18-108 and 18-109, Water and Sewer Connection Charges, and Title 7, Chapter 2, Section 7-205 (fire sprinkler system connection charges).

BACKGROUND:

Future Water and Sewer System Capacity Expansion Needs

Water production demand has steadily increased since 2004 as illustrated in chart below reflecting the running annual average for water production.

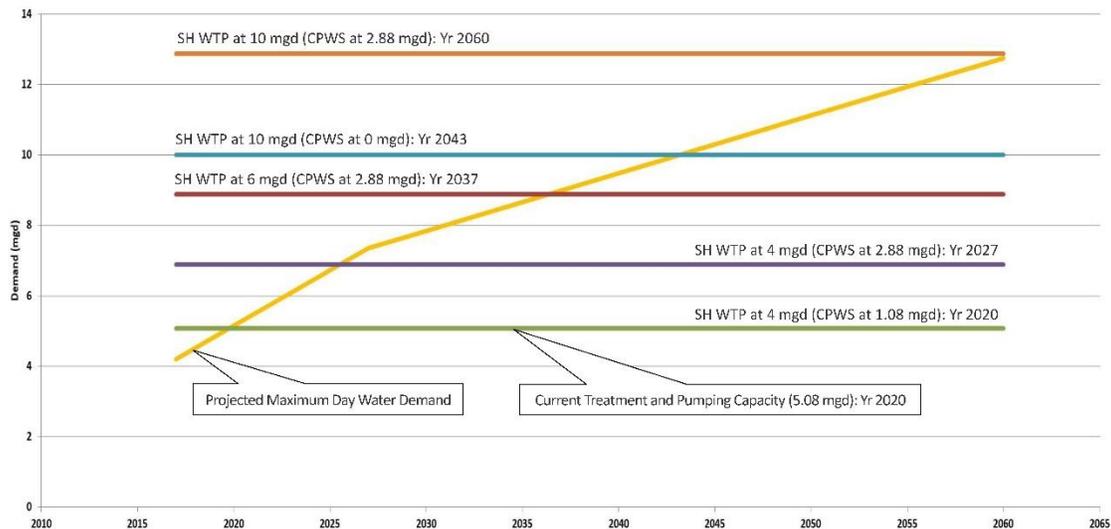


The following table summarizes average, minimum and maximum water production along with corresponding rainfall amounts that also highlights the increase in water demand during warm weather months associated with irrigation systems.

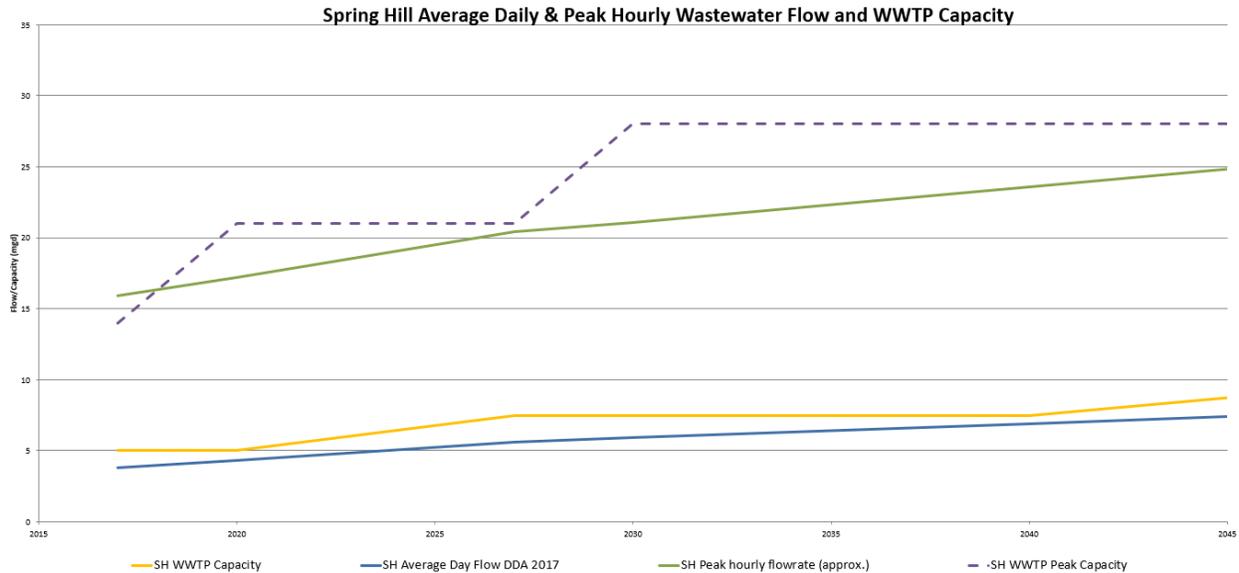
Month	Average (000)	Maximum (000)	Minimum	Rainfall
December 2018	2,529	2,700	1,973	6.38
January 2019	2,697	3,133	2,317	4.58
February 2019	2,687	3,292	2,379	9.79
March 2019	2,933	3,437	2,591	3.25
May 2019	3,729	4,293	3,167	3.45
June 2019	3,776	4,354	2,619	7.19
July 2019	3,817	4,147	3,374	6.36
August 2019	3,961	4,263	3,476	2.90

According to the recently completed Water and Sewer Capacity Study prepared by Dempsey Dilling & Associates, the City water treatment plant (WTP) capacity is 4mgd and current purchased capacity from CPWS is 1.08mgd for a total of 5.08mgd. Current WTP demands average 3.8mgd and maximum of 4.5mgd. Current purchases of water from CPWS average 0.4mgd up to a maximum of 0.7mgd. Within the next 5-year period, demands for water are projected to increase to an average of 4.1mgd and maximum of 6.2mgd, which exceeds the treatment and pump capacity of the current water system. To meet immediate needs (within the next 5 years) the current water treatment plant should be expanded from 4.5mgd to 6mgd utilizing an existing TDEC withdrawal permit. Near-term water needs (approved subdivision buildout within the next 10 years) is 7.4mgd peak in year 2027 and long-term (within the next 20-30 years) is 10mgd peak by the year 2037. Expansion of the water treatment plant and completion of distribution and pumping improvements will meet immediate, near and long-term water system needs associated with continued growth and development of the community.

The chart below summarizes demand for water in the immediate, near and long-term planning periods.



The capacity study also addressed near-term and long-term sewer system capacity needs of the City’s sewer system. In order to support continued growth and demand, the existing sewer treatment plant will need to be expanded 2.5mgd from its current capacity. In addition, repairs to an oxidation ditch will also be required to increase sewer treatment plant capacity and to optimize treatment system performance. The chart below summarizes near-term and long-term sewer treatment capacity needs for the City’s sewer treatment system.



Water and Sewer System Development Charge Analysis

The City contracted with Jackson Thornton to perform a water and wastewater cost of service study that analyzed data from 2013. The study was completed in 2014 and presented to the Board of Mayor Aldermen. Utility rates were not adjusted as a result of the completed utility cost of service study. Since 2014 the City has experienced significant growth and expansion of its water distribution and sewer collection system. Corresponding growth demands upon water production and sewer processing capacity have occurred as a result of continued growth and development throughout the community.

In October 2018 the Board of Mayor and Aldermen approved Resolution 18-196 to approve a professional services agreement with Jackson Thornton to perform a utility cost of service and rate study that included an evaluation of the adequacy of funding for capital improvement projects along with providing recommendations on adjustments to system development charges for water and sanitary sewer connections.

City staff has prepared a compilation of various ordinances and resolutions dating back to 1986 that contain provisions regarding utility rates and in particular provisions regarding various types of fees and charges for connection to the City’s water and sanitary sewer systems. The current sewer system “reserve” fee (i.e., sewer system development charge) is based upon a water/wastewater load table initially adopted in 1986 along with corresponding adjustments over time to the fee multiplier including an adjustment in 1997 (see Ordinance 97-20) to \$4.25 that serves as the current basis for sewer reserve fees. In 2002, the water “reserve” fee (i.e., water system development charge) was adjusted by Resolution 02-17 from \$0.28 to \$0.35 times the water tap fee. While the water and sewer reserve fees have provided capital investment funding for water and sewer capital projects, Jackson Thornton in performing their evaluation of

the sufficiency of the system development charge fee structure for both water and sewer determined that a change in methodology and resulting adjustments in charges were necessary to provide funding for capital improvement projects that will add capacity to each system and as approved in the City's Capital Improvement Plan.

Jackson Thornton provided a presentation to the Board of Mayor and Aldermen in June 2019 titled "City of Spring Hill Water and Sewer System Development Charge Analysis". Jackson Thornton utilized an Incremental Cost Method that assigns to new development the incremental cost of system expansion needed to serve the new development. Such an approach is well recognized by the American Water Works Association. The presentation describes the process that was utilized to determine an "Equivalent Residential Unit" (ERU) for both water and sewer along with the corresponding ERU of capacity being added to water and sewer systems as well as the incremental cost that calculates the average investment per ERU on the additional capacity being added. The following summarizes the process for both water and sewer in determining the average investment per ERU.

Water System Development Charge. Utilizing the Incremental Approach the following calculations were provided by Jackson Thornton to determine the Average Investment/ERU utilized as the basis for recommended adjustments in water system development charges.

Annual Residential Sales (Gals)	814,368,403
Annual Residential Billings	172,688
Monthly Volume/Customer (Gals)	4,716
Annual Volume/Customer (Gals)	56,590
1.5 MGD Additional Capacity	547,500,000
Equivalent Residential Units (ERU)	9,675
Projected Investment in Water System	\$12,023,000
Net Investment in Water System	\$12,023,000
Average Investment/ERU	\$1,243

The projected investment in the water system includes expansion of the water treatment plant from 4.5mgd to 6mgd and water distribution projects totaling \$12.023M. Utilizing the City's current schedule of meter sizes available for connection to the City's water system, the following proposed water system development charges were recommended by Jackson Thornton for adoption by the City.

Average Investment/ERU		\$1,243
Meter Size	Multiplier	Proposed System Development Charge Fee
5/8" M25	1.00	\$1,243
3/4" M25	1.20	\$1,491
1" M170	1.60	\$1,988
1.5" M120	2.40	\$2,982
2" Turbo Series	3.20	\$3,977
2" Compound	3.20	\$3,977
3" Turbo Series	4.80	\$5,965
3" Compound	4.80	\$5,965
4" Turbo Series	6.40	\$7,953
4" Compound	6.40	\$7,953
6" Turbo Series	9.60	\$11,930
6" Compound	9.60	\$11,930
8" Combo	12.80	\$15,907
10" Turbo Series	16.00	\$19,883
12" Turbo Series	19.20	\$23,860

Irrigation system connections include a current reserve (i.e., system development charge) fee of \$140 per connection. One of the significant challenges in the operation of the City's water system is the consumption demand created by irrigation systems and the capacity and flows needed to meet those demands while also providing sufficient water flow and pressure for domestic consumption and fire protection throughout the City.

Reporting Period	Total Billed Consumption (Gallons)	Consumption from Irrigation Connections (Gallons)	% of Total Billed Consumption	Number of Connections	Number of Irrigation Connections	% of Total Connections
June 2019	137,645,453	15,100,493	11%	16,205	438	2.7%
July 2019	98,771,270	12,862,885	13%	16,387	459	2.8%
Aug 2019	137,620,555	19,985,976	14.5%	16,493	494	3%

While irrigation connections currently comprise approximately 3% of the total number of current connections to the City's water system, during warm weather months irrigation connections on average consume 11% to as much as 14.5% of total billed consumption of water produced by the City's water system. Because irrigation systems rely upon system capacity and water production capability, connections to the City's water system for irrigation system purposes should be required to also pay a full system development charge since the capital investment in the water system will in part also serve the growing number of irrigation systems connecting in the future to the City's water system. An amendment to the water system development charge for irrigation systems is included in Ordinance 19-32 so that irrigation system connections are

contributing capital funds toward capital improvement projects that will increase capacity of the system to meet future demands.

Fire sprinkler systems installed in both residential and non-residential structures are also connected to the City's water distribution system to provide sufficient flow and pressure to operate fire sprinkler systems installed within the structure. The City's water system has been designed to provide minimum flows and pressures for both domestic consumption as well as fire protection. Sprinkler systems installed within buildings rely upon that flow and pressure to protect buildings in the event the system needs to be activated. Future investments in the City's water plant and distribution systems will provide additional capacity for residential and non-residential buildings to connect for fire protection purposes and the installation of sprinkler systems. Connections made to the City's water system should include payment of a water system development charge equivalent to the size of the tap and meter that reflects the water demand created by that location in the event of a fire and the design and constructed capacity of the water system to accommodate that demand during a fire emergency. An amendment to the water system development charge for fire sprinkler system connections provided in Article 7, Chapter 2, Section 7-205 is included in Ordinance 19-32.

The following table summarizes and is a compilation of the various amendments for water system development charges recommended for adoption (except amendments to Article 7, Chapter 2, Section 7-205 that are specifically referenced in Ordinance 19-32). Staff is not recommending any amendments to the Tapping Fees or Meter Fees as both were recently amended with the exception of fees associated with 10-inch and 12-inch meters that were not established previously by the City.

Water System Development Charges								
Average Investment/ERU		\$1,243						
Meter Size	Multiplier	Proposed System Development Charge Fee	Current System "Reserve" Fee (*)	Difference	Phased Implementation - Jan. 1, 2020	Phased Implementation - July 1, 2020	Tapping Fee (Adopted by Resolution 19-78)	Meter Fees (Adopted by Resolution 19-78)
5/8" M25	1.00	\$1,243	\$455	\$788	\$710	\$1,243	\$1,300	\$185.65
3/4" M25	1.20	\$1,491	\$455	\$1,036	\$790	\$1,491	\$1,300	\$185.65
1" M170	1.60	\$1,988	\$560	\$1,428	\$1,021	\$1,988	\$1,600	\$306.80
1.5" M120	2.40	\$2,982		\$2,982	\$1,400	\$2,982	\$1,900	\$489.32
2" Turbo Series	3.20	\$3,977	\$735	\$3,242	\$1,782	\$3,977	\$2,100	\$826.80
2" Compound	3.20	\$3,977	\$735	\$3,242	\$1,782	\$3,977	\$2,100	\$1,866.80
3" Turbo Series	4.80	\$5,965	\$980	\$4,985	\$2,590	\$5,965	\$2,800	\$962.00
3" Compound	4.80	\$5,965	\$980	\$4,985	\$2,590	\$5,965	\$2,800	\$2,210.00
4" Turbo Series	6.40	\$7,953	\$1,295	\$6,658	\$3,446	\$7,953	\$3,700	\$1,591.20
4" Compound	6.40	\$7,953	\$1,295	\$6,658	\$3,446	\$7,953	\$3,700	\$3,387.28
6" Turbo Series	9.60	\$11,930	\$1,645	\$10,285	\$4,967	\$11,930	\$4,700	\$3,744.00
6" Compound	9.60	\$11,930	\$1,645	\$10,285	\$4,967	\$11,930	\$4,700	\$4,758.00
8" Combo	12.80	\$15,907	\$3,045	\$12,862	\$7,199	\$15,907	\$8,700	\$7,124.00
10" Turbo Series	16.00	\$19,883		\$19,883	\$9,900	\$19,883	\$10,700	\$7,500.00
12" Turbo Series	19.20	\$23,860		\$23,860	\$11,900	\$23,860	\$12,700	\$8,200.00
Irrigation System Connection		Same as above based upon meter type and size		Varies based upon meter size	Same as above based upon meter type and size	Same as above based upon meter type and size	Same as above plus \$25.00 Backflow Permit	Same as above based upon meter type and size

City staff has presented in the table above a phased implementation approach whereby the amended system development charges for water are phased over two periods starting on January 1, 2020 and a final phase starting on July 1, 2020. The Board of Mayor and Aldermen utilized a phased approach with the implementation of amendments to Traffic Impact Fees in order to provide sufficient time for developers and builders to adjust to the updated fee structure. Taking a similar approach to that utilized for Traffic Impact Fees, City staff provided the phased approach the later phase of which coincides with the remaining final adjustment of the traffic impact fees.

City staff has prepared Ordinance 19-32 for consideration by the Board of Mayor and Aldermen that reflects recommended adjustments in the water system development charges as presented by Jackson Thornton along with additional amendments relative to irrigation systems and fire sprinkler system connections to the City's water system.

Sewer System Development Charge. Utilizing the Incremental Approach the following calculations were provided by Jackson Thornton to determine the Average Investment/ERU utilized as the basis for recommended adjustments in sewer system development charges.

Annual Residential Sales (Gals)	841,836,736
Annual Residential Billings	168,776
Monthly Volume/Customer (Gals)	4,988
Annual Volume/Customer (Gals)	59,855
1.5 MGD Additional Capacity	912,500,000
Equivalent Residential Units (ERU)	15,245
Projected Investment in Sewer System	\$25,790,000
Average Investment/ERU	\$ 1,692

The projected investment in the sewer system includes 2.5mgd expansion of the sewer treatment plant and oxidation ditch repairs totaling \$25.79M. Utilizing the City's current schedule of meter sizes available for connection to the City's water system, the following proposed sewer system development charges were recommended by Jackson Thornton for adoption by the City.

		\$1,692
		Proposed System Development Charge Fee
Meter Size	Multiplier	
5/8"	1.00	\$1,692
3/4"	1.20	\$2,030
1"	1.60	\$2,707
1.5"	2.40	\$4,060
2"	3.20	\$5,413
3"	4.80	\$8,120
4"	6.40	\$10,827
6"	9.60	\$16,240
8"	12.80	\$21,653
10"	16.00	\$27,067
12"	19.20	\$32,480

Currently, sewer system reserve (i.e., sewer system development charges) are calculated based upon Appendix C: Table of Water/Wastewater Loads (see below) that are multiplied by \$4.25 in order to determine the fee paid by an applicant. For example, an applicant for a single family residence will pay a fee based upon the average water/wastewater load of 350 gallons per day times \$4.25 for a fee of \$1,487.50. The average flows utilized for calculating reserve fees were initially adopted in 1986 by the City and later amended in 1997.

Land Use	Design Unit	Average Flow Per Day (Gallons)
Residential		
Single Family Residence	Per House/Subdivision Lot	350
Mobile Home (Outside Park)	Per Home/Lot	250
Mobile Home Park	Per Home/Space	200
Multi-Family Residence (1bdrm)	Per Dwelling Unit	200
Multi-Family Residence (2bdrm)	Per Dwelling Unit	300
Multi-Family Residence (3bdrm)	Per Dwelling Unit	350
Motel and Institutional		
Hotels/Motels (without cooking)	Per Lodging Unit	100
Hotels/Motels (with cooking)	Per Lodging Unit	150
Nursing Homes/Rest Homes		
Nursing Homes/Rest Homes	Per Bed	100
Hospitals	Per Bed	200
Schools	Per Student (Max Capacity)	30
Office		
Office	Per 400 sf of gross floor space	25
General Retail	Per 1,000 sf of gross floor space	100
Restaurants and Taverns	Per seat	50
Other Commercial		
Laundromat	Per Washing Machine	500
Carwash	Per Bay	2000
Service Station	Per Bay/Pump Island	1000
Theater	Per Seat	3
Warehouse, Storage, Showroom	Per 1,000 sf of gym floor space	25
Industrial		
Domestic Waste Only	Per 1,000 sf of gym floor space	100
Process Waste	Determined by City	
Miscellaneous		
Churches and Assemblies	Per Seat	2
<i>Adopted by Ordinance No. 86-42 and Ordinance 97-20</i>		

The following is a summary and compilation of current “reserve” and sewer connection fees and recommended sewer system development charges as recommended by Jackson Thornton that correspond with the various water meter sizes (same as referenced in water system development charges). Similar to the amendment proposed for water system development charges, City staff has prepared a phased implementation approach with an initial implementation phase effective January 1, 2020 and the remaining phase to become effective July 1, 2020. Staff is not recommending any amendments to the Sewer Connection Fee structure (far right column) at this time.

Sewer System Development Charges							
Average Investment/ERU		\$1,692					
Meter Size	Multiplier	Proposed System Development Charge Fee	Current System "Reserve" Fee - Varies by Land Use Type (See Table)	Difference	Phased Implementation - Jan. 1, 2020	Phased Implementation - July 1, 2020	Sewer Connection Fee
5/8"	1.00	\$1,692	Adopted by Ordinance 86-42 and Ordinance 97-20		\$1,487	\$1,692	4-inch Tap (Residential - Single-Family, Duplex, Townhome) = \$1,100; Multifamily = \$600/dwelling unit; 6-inch Tap (Residential or Commercial) = \$1,300; 8-inch Tap (Residential or Commercial) = \$1,600; 10-inch or larger = To be determined by City Engineer.
3/4"	1.20	\$2,030			\$1,487	\$2,030	
1"	1.60	\$2,707			\$1,814	\$2,707	
1.5"	2.40	\$4,060			\$2,720	\$4,060	
2"	3.20	\$5,413			\$3,627	\$5,413	
3"	4.80	\$8,120			\$5,440	\$8,120	
4"	6.40	\$10,827			\$7,254	\$10,827	
6"	9.60	\$16,240			\$10,881	\$16,240	
8"	12.80	\$21,653			\$14,508	\$21,653	
10"	16.00	\$27,067			\$18,135	\$27,067	
12"	19.20	\$32,480		\$21,762	\$32,480		

Meeting with Developers

City staff facilitated a meeting with developers to discuss the pending Ordinances and the approach taken to deriving the fee adjustments for both water and sewer development charges as well as the proposed phased implementation approach. The meeting was attended by four (4) different developers that provided for an interactive discussion between staff and the developers in attendance. Alderman Allen was in attendance along with City staff from multiple departments.

The developers expressed their understanding on the reasoning for the increase in water and sewer development charges and their correlation with specific water and sewer capital improvement projects. Some of the developers in attendance appeared to appreciate the phased approach but noted the time period between implementation phases was somewhat short and that consideration may be warranted for a longer period between phases. There was discussion on whether a phased approach was even necessary given the small amount of fee adjustment being proposed between phases in comparison to implementing the fee adjustments in one single step.

The developers in attendance were unified in their request that the City should consider not imposing the increased water and sewer system development charges on phases or sections of projects that are currently under construction where the increase in fees was not programmed into the developers financial pro forma. This would mean any subdivision or planned development project that has received construction plan approval for a particular phase or section of an approved project and is under construction would pay water and sewer system development charges based upon the fees in effect at the time of construction plan approval. Any phases or sections of an approved subdivision or planned development that have not received prior construction plan approval prior to the effective date of implementation of the initial adjustment in water and sewer system development charges would be required to pay the amended water and sewer system development charges in effect.

Staff was requested by Alderman Allen to prepare draft amendments for consideration by the Board that address the option of a single implementation step rather than a two-step implementation approach as well as introducing a provision that provides consideration for a phase or section of an approved subdivision or planned unit development that has received construction plan approval and is under construction prior to the effective date of the first phase of implementation that would be required to only pay the fees in effect on the date of construction plan approval. Similar consideration could also be given to phases or sections of developments that have received construction plan approval and are under construction prior to implementation of the second phase of fee adjustments that would be responsible for paying the fee structure that was in effect at the time of construction plan approval prior to implementing the second phase of fee adjustments. The draft language for these amendments are provided below for consideration by the Board. In order to incorporate into the Ordinance that has been approved on first reading, an amendment will be required that receives a favorable vote by a majority of the Board.

Single-Phase Implementation – Effective Date January 1, 2020 (Water and Sewer)

The following tables depict a single-phase implementation of water and sewer system development charges with an effective date of January 1, 2020.

Water System Development Charges							
Average Investment/ERU		\$1,243					
Meter Size	Multiplier	Proposed System Development Charge Fee	Current System "Reserve" Fee (*)	Difference	Effective Date - January 1, 2020	Tapping Fee (Adopted by Resolution 19-78)	Meter Fees (Adopted by Resolution 19-78)
5/8" M25	1.00	\$1,243	\$455	\$788	\$1,243	\$1,300	\$185.65
3/4" M25	1.20	\$1,491	\$455	\$1,036	\$1,491	\$1,300	\$185.65
1" M170	1.60	\$1,988	\$560	\$1,428	\$1,988	\$1,600	\$306.80
1.5" M120	2.40	\$2,982		\$2,982	\$2,982	\$1,900	\$489.32
2" Turbo Series	3.20	\$3,977	\$735	\$3,242	\$3,977	\$2,100	\$826.80
2" Compound	3.20	\$3,977	\$735	\$3,242	\$3,977	\$2,100	\$1,866.80
3" Turbo Series	4.80	\$5,965	\$980	\$4,985	\$5,965	\$2,800	\$962.00
3" Compound	4.80	\$5,965	\$980	\$4,985	\$5,965	\$2,800	\$2,210.00
4" Turbo Series	6.40	\$7,953	\$1,295	\$6,658	\$7,953	\$3,700	\$1,591.20
4" Compound	6.40	\$7,953	\$1,295	\$6,658	\$7,953	\$3,700	\$3,387.28
6" Turbo Series	9.60	\$11,930	\$1,645	\$10,285	\$11,930	\$4,700	\$3,744.00
6" Compound	9.60	\$11,930	\$1,645	\$10,285	\$11,930	\$4,700	\$4,758.00
8" Combo	12.80	\$15,907	\$3,045	\$12,862	\$15,907	\$8,700	\$7,124.00
10" Turbo Series	16.00	\$19,883		\$19,883	\$19,883	\$10,700	\$7,500.00
12" Turbo Series	19.20	\$23,860		\$23,860	\$23,860	\$12,700	\$8,200.00
Irrigation System Connection		Same as above based upon meter type and size	\$140	Varies based upon meter size	Same as above based upon meter type and size	Same as above plus \$25.00 Backflow Permit	Same as above based upon meter type and size

Sewer System Development Charges						
Average Investment/ERU		\$1,692				
Meter Size	Multiplier	Proposed System Development Charge Fee	Current System" Reserve" Fee - Varies by Land Use Type (See Table)	Difference	Effective Date - January 1, 2020	Sewer Connection Fee
5/8"	1.00	\$1,692	Adopted by Ordinance 86-42 and Ordinance 97-20		\$1,692	4-inch Tap (Residential - Single-Family, Duplex, Townhome) = \$1,100; Multifamily = \$600/dwelling unit; 6-inch Tap (Residential or Commercial) = \$1,300; 8-inch Tap (Residential or Commercial) = \$1,600; 10-inch or larger = To be determined by City Engineer.
3/4"	1.20	\$2,030			\$2,030	
1"	1.60	\$2,707			\$2,707	
1.5"	2.40	\$4,060			\$4,060	
2"	3.20	\$5,413			\$5,413	
3"	4.80	\$8,120			\$8,120	
4"	6.40	\$10,827			\$10,827	
6"	9.60	\$16,240			\$16,240	
8"	12.80	\$21,653			\$21,653	
10"	16.00	\$27,067			\$27,067	
12"	19.20	\$32,480		\$32,480		

Notes: (*) - Connection Charges as reflected in Title 18, Chapter 1, Sections 18-108 and 18-109 of Spring Hill Code of Ordinances; See also Resolution 02-17 (Reserve Fee increase from \$0.28 to \$0.35 times water tap fee)

Amendment to Recognize Prior Approved Construction Plans for Phases/Sections of Subdivisions and Planned Developments Under Construction

Ordinance 19-32 (Water System Development Charge)

5. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval from the City and are under construction prior to the effective date of the initial implementation phase of this Ordinance (January 1, 2020) shall pay the water system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

6. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval after January 1, 2020 and are under construction prior to the effective date of second implementation phase this Ordinance (July 1, 2020) shall pay the water system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

Ordinance 19-33 (Sewer System Development Charge)

4. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval from the City and are under construction prior to the effective date of the initial implementation phase of this Ordinance (January 1, 2020) shall pay the sewer system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

5. *Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval after January 1, 2020 and are under construction prior to the effective date of the second implementation phase of this Ordinance (July 1, 2020) shall pay the sewer system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.*

FINANCIAL IMPACT:

The City's adopted Capital Improvement Plan identifies water system projects totaling \$12.023M that include expansion of the water treatment plant as well as sewer system projects totaling \$25.79M that include expansion of the sewer treatment plan all of which are necessary and essential in providing additional system capacity for the City to support continued growth and development. The study prepared by Jackson Thornton utilized an incremental cost methodology to develop a recommended system development charge fee structure for both water and sewer connections to the City's utility system. These funds will provide necessary funding to support the design, permitting and construction of the water and sewer system projects reflected in the City's adopted Capital Improvement Plan that were utilized as the basis for the recommended charges.

Future adjustments to water and sewer system development charges may be necessary if additional water and sewer system projects that add capacity to the water or sewer system are incorporated into the City's Capital Improvement Plan in order to ensure sufficient fiscal resources are available to cover costs associated with these projects.

STAFF RECOMMENDATION:

Staff recommends approval of Ordinance 19-32 to amend Title 18, Chapter 1, Section 18-108 and Title 7, Chapter 2, Section 7-205. Staff further recommends approval of Ordinance 19-33 to amend Title 18, Chapter 1, Section 18-109.

ORDINANCE 86-42

AN ORDINANCE GOVERNING REQUESTS FOR CONNECTIONS TO AND TERMINATIONS FROM THE SPRING HILL WATER AND SEWER SYSTEMS AND ESTABLISHING REGULATIONS GOVERNING THESE SYSTEMS AND THEIR CUSTOMERS AND AMENDING TITLE 13 OF THE MUNICIPAL CODE ACCORDINGLY

BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE TOWN OF SPRING HILL, TENNESSEE, that Title 13 of the Municipal Code is amended by the adding of a Chapter 2, which shall include all of the provisions set forth in the attachment to this ordinance, which is hereby adopted in its entirety into this Ordinance.

PASSED AND ADOPTED BY THE BOARD OF MAYOR AND ALDERMEN OF THE TOWN OF SPRING HILL, TENNESSEE, on this the 15 day of September, 1986.

George Jones
GEORGE JONES, MAYOR

ATTEST:

June Quirk
JUNE QUIRK, CITY RECORDER

LEGAL FORM APPROVED:

Robin Courtney
ROBIN COURTNEY - TOWN ATTORNEY

Passed on 1st reading: 8-11-86

Passed on 2nd reading: 8-18-86

Passed on 3rd reading: 9-15-86

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CHAPTER 13

UTILITIES

Subchapter I - General Provisions

Article I - General Provisions

- Section 13-1 Definitions
- Section 13-2 Abbreviations
- Section 13-3 Service Provided Without Discrimination
- Section 13-4 Penalties and Remedies
- Section 13-5 Reserved

Subchapter II - Service to Properties Previously Connected to the
Water or Sewer System

Article II - Service Regulations

- Section 13-6 Application for Service
- Section 13-7 Denial of Service for Nonpayment of
Prior Accounts
- Section 13-8 Deposit
- Section 13-9 Rates
- Section 13-10 Minimum Service Charge
- Section 13-11 Access to Premises
- Section 13-12 Meter Reading and Determination of
Charges
- Section 13-13 Bills
- Section 13-14 Meter Testing and Special Readings
- Section 13-15 Calculation of Bill Where Equipment
Fails
- Section 13-16 Prohibited Activities
- Section 13-17 Town Property and Maintenance Thereof
- Sections 13-18 through 13-20 Reserved

Article III - Town and Customer Responsibilities

- Section 13-21 Town's Responsibility and Liability
- Section 13-22 Customer's Responsibilities
- Sections 13-23 through 13-25 Reserved

Article IV - Service Termination and Reinstatement

- Section 13-26 Termination or Interruption of Service
by Town
- Section 13-27 Notice of Proposed Termination of
Service and Right of Hearing
- Section 13-28 Hearing
- Section 13-29 Deposit Required to Stay Termination
- Section 13-30 Lessee May Take Responsibility for
Payments
- Section 13-31 Procedure for Service Termination and
Reinstatement
- Section 13-32 Termination at Customer's Request

Section 13-33 Temporary Discontinuance at Customer's Request
Sections 13-34 through 13-35 Reserved.

Subchapter III - Connections to the Water and Sewer Systems

Article V - Connections to the Water and Sewer Systems
Where Service is Available

Section 13-36 Connection Required
Section 13-37 Permit for Connection Required
Section 13-38 Application for Connection Permit
Section 13-39 Rejection of Permit Application
Section 13-40 Construction of Connections
Section 13-41 Separate Connections Required for Each Lot
Section 13-42 Requirements for Connection of Service Where Multiple Buildings or Structures are Located on One Lot
Section 13-43 Two or More Meters on Single Premises
Section 13-44 Town Inspection
Section 13-45 Laterals to Remain Town Property
Section 13-46 Maintenance of Private Distribution and Collection Systems
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Article VI - Water and Sewer Extensions

Section 13-51 General Policy
Section 13-52 Manner in Which Extensions Are to Be Made
Section 13-53 Inspection by Town of Work Done by Others
Section 13-54 Dedication of Water and Sewer Line Extensions
Section 13-55 Credits for Installing Oversized Lines
Sections 13-56 and 13-57 Reserved

Article VII - Capacity Reservation and System Expansion

Section 13-58 Relationship of Water System Capacity to Approvals Under Zoning, Subdivision, and Building Regulations
Section 13-59 Relationship of Sanitary Sewer Capacity to Approvals Under Zoning, Subdivision, and Building Regulations
Section 13-60 Reservation of Present Sewer Capacity
Section 13-61 Reservation of Future Sewer Capacity
Section 13-62 Determination of Capacity Reserved
Section 13-63 Transfer of Capacity Reservation
Section 13-64 Reserved

Article VIII - Fire Protection Service

Section 13-65 Fire Hydrants
Section 13-66 Fire Protection Service Lines
Section 13-67 Metering of Fire Protection Service Lines
Sections 13-68 through 13-75 Reserved

Subchapter IV - Sanitary Sewer Use

Article IX - Sanitary Sewer Use

- Section 13-76 Purpose, Objectives and Applicability
- Section 13-77 Storm Water Prohibited
- Section 13-78 Prohibited Uses
- Section 13-79 Federal Categorical Pretreatment Standards
- Section 13-80 Waiver of Discharge Limitations
- Section 13-81 Dilution of Discharge to Meet Standards Prohibited
- Section 13-82 Accidental Discharge
- Section 13-83 Preliminary Treatment Facilities
- Section 13-84 Inspection Manhole
- Section 13-85 Determination of Character and Concentration of Wastes
- Section 13-86 Authority for Temporary Exclusion
- Section 13-87 Permit Required for Discharge of Industrial Wastes by Significant Users
- Section 13-88 Permit Application
- Section 13-89 Public Notice of Applications
- Section 13-90 Response to Notice of Application
- Section 13-91 Notice of Public Meeting on Permit Applications
- Section 13-92 Action on Applications
- Section 13-93 Appeals
- Section 13-94 Permit Conditions
- Section 13-95 Permit Modifications
- Section 13-96 Permit Duration
- Section 13-97 Permit Transfer
- Section 13-98 Reporting Requirements for Permittee
- Section 13-99 Pretreatment
- Section 13-100 Enforcement
- Section 13-101 Surcharges for Industrial Wastes

Article I

GENERAL PROVISIONS

Section 13-1 Definitions

Unless otherwise specifically provided, or unless otherwise clearly required by the context, the words and phrases defined in this section shall have the meaning indicated when used in this chapter.

- (1) Act or "the Act". The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. 1251, et. seq.
- (2) Administrator. The water and sewer superintendent or any other person designated by the Board to perform the functions and exercise the responsibilities assigned by this chapter to the administrator.

the amount of availability fees that would be required in the absence of any credits, and then the developer may use credits for up to fifty percent of payment otherwise required (subject to the maximum creditable amount determined under subsection(b)).

Sections 13-56 and 13-57 Reserved.

Article VII

CAPACITY RESERVATION AND SYSTEM EXPANSION

Section 13-58 Relationship of Water System Capacity to Approvals Under Zoning, Subdivision, and Building Regulations.

(a) With respect to water supply from the town's system, neither connection permits nor reservations of present or future capacity are required before the commencement of site construction work, the issuance of building permits, or the sale of subdivision lots. However, as provided in Section 13-38, water availability fees (as well as other applicable fees) must be paid before a permit to connect to the water system is granted, and no occupancy permit may be issued until a connection permit has been obtained.

(b) Whenever a change in use takes place on property that has previously been connected to the town's water system and under the new use a greater demand will be placed on the water system than was placed on this system by the previous user (as determined by Appendix A), then no occupancy permit may be issued for such lot until the applicant has paid the required availability charges for the additional capacity needed.

Section 13-59 Relationship of Sanitary Sewer System Capacity to Approvals Under Zoning, Subdivision, and Building Regulations

(a) As provided in the town's zoning ordinance and subdivision regulations, zoning map amendments (including planned unit development map amendments) may be granted, preliminary plat and site plan approvals may be obtained, and zoning and special exception permits may be issued without any showing that the town's sanitary sewer system will have sufficient capacity when needed to serve the properties for which such approvals or permits are granted. However, with respect to any development (or phase thereof), building, or lot that is proposed, intended or required to be served by the town's sanitary sewer system, the remaining requirements of this section shall be applicable.

(b) No clearing, excavation, construction, or other site disturbing work may be undertaken on any lot or tract where one or more new sewer connections will be required or where the proposed use of the lot or tract will result in an increased demand on the sewer system (as determined in accordance with Appendix A) unless the developer has secured a reservation of existing sewer capacity (see Section 13-60) or future capacity (see Section 13-61) that is sufficient to accommodate the proposed development.

(c) Subdivision final plat approval may not be granted unless the applicant has secured a reservation of existing sewer capacity for every

lot that is sufficient to accommodate the development proposed or anticipated for that lot.

(d) No building permit may be issued for any lot where the construction work authorized under the permit will result in the need for a new connection to the town's sanitary sewer system or an increased demand on the sewer system (as determined in accordance with Appendix A) unless the developer has secured a reservation of existing sewer capacity (see Section 13-60) that is sufficient to accommodate the proposed development.

(e) If a building permit is sought for a lot not previously connected to the town's sewer system but with respect to which sewer capacity has been reserved and availability fees paid, and the use proposed at the time the building permit is sought will place more or less demand on the sewer system (according to Appendix A) than the capacity paid for at the time capacity was reserved, then:

- (1) If the demand of the proposed use exceeds the capacity reserved, the building permit will not be issued unless and until additional capacity has been reserved and the availability fees paid;
- (2) If the demand of the proposed use is less than the capacity reserved, a refund for excess capacity may be sought under Section 13-63.

(f) Whenever (i) a change in use is made with respect to property that has previously been connected to the town's sanitary sewer system, and (ii) no building permit is required to accomplish the change in use, and (iii) under the new use a greater demand will be placed on the sanitary system than was placed on this system by the previous user (as determined by Appendix A), then no occupancy permit may be issued for such use until the applicant has purchased additional existing capacity in accordance with Sections 13-6 and 13-9.

Section 13-60 Reservation of Present Capacity.

(a) Any person may reserve unutilized existing capacity within the sanitary sewer system by paying to the town the appropriate availability fee prescribed in section 13-9. Capacity reservations shall be accepted on a first come, first served basis upon receipt by the administrator of a properly completed application together with a cashier's or certified check for the full amount of the availability fee.

(b) For purposes of this section and section 13-61, "unutilized capacity" refers to that amount of the capacity of the sewage treatment system to adequately treat sewage that remains after subtracting (i) the portions of the capacity of the sewage treatment plant that the town determines should be reserved to serve customers already connected, and (ii) that portion of the total capacity already accounted for by persons holding reservations of existing capacity.

Section 13-61 Reservation of Future Sewer Capacity.

(a) As the town begins to approach exhaustion of the unutilized capacity within its sanitary sewer system, the town shall undertake to expand the capacity of the system. Any person may reserve future capacity in the system by paying the applicable availability fee for the amount of capacity reserved. Future capacity reservations shall be accepted on a first come, first served basis upon submission of a properly completed application together with a cashier's or certified check for the full amount of the availability fee.

(b) When the expanded system becomes operational, future capacity reservations automatically become present capacity reservations with the same order of priority.

Section 13-62 Determination of Capacity Reserved.

(a) To determine the amount of sanitary sewer capacity that should be reserved, the administrator shall review the proposed development for which the reservation is sought and make a determination based upon the table attached to this chapter as Appendix A. If anticipated demand cannot be determined from Appendix A, then the administrator shall make the determination based upon the best information available. The availability fee may then be calculated from the Schedule of Rates and Charges.

Section 13-63 Transfer of Capacity Reservations.

(a) Reservations of present or future capacity are not transferable from the property with respect to which the reservations were obtained to other property. However, the town may provide a refund of the amount paid for this capacity reservation to a person relinquishing a capacity reservation if another party is available who desires to purchase the relinquished reservation.

(b) Persons holding reservations of future capacity shall have first option on purchasing relinquished reservations of present capacity.

Section 13-64 Reserved.

ARTICLE VIII

FIRE PROTECTION SERVICE

Section 13-65 Fire Hydrants.

(a) The developers of subdivisions and unsubdivided developments, whether inside or outside the town, may be required as a condition of connecting to the town's water system to install fire hydrants in accordance

APPENDIX A

TABLE OF WATER/WASTEWATER LOADS

Projected water use and wastewater loads of developments shall be determined using the following standards as a guide:

<u>Planned Use</u>	<u>Design Unit</u>	<u>Average Flow Per Day (In Gallons)</u>
<u>Residential</u>		
Single-family residences	Per house (or subdivision lot)	350
Mobile home (outside park)	Per home (or lot)	250
Mobile home park	Per home (or space)	200
Multi-family residences		
One bedroom	Per dwelling unit	200
Two bedroom	Per dwelling unit	300
Three bedroom	Per dwelling unit	350
<u>Motel and Institutional</u>		
Hotels and Motels		
Without cooking facility	Per lodging unit	100
With cooking facilities	Per lodging unit	150
Nursing homes and rest homes	Per bed	100
Hospitals	Per bed	200
Schools	Per student (maximum capacity)	30
<u>Office</u>	Per 400 s.f. of gross floor space	25
<u>General Retail</u>	Per 1000 s.f. gross floor space	100
<u>Restaurants and Taverns</u>	Per seat	50
<u>Other Commercial</u>		
Laundromat	Per washing machine	500
Car wash	Per bay	2000
Service station	Per bay or pump island	1000
Theaters	Per seat	3
Warehouse, storage, showroom	Per 1000 s.f. of gym floor space	25
<u>Industrial</u>		
Domestic waste only	Per 1000 s.f. of gym floor space	100
Process waste	Determined by Town of Spring Hill	
<u>Miscellaneous</u>		
Churches and assemblies	Per seat	2

In the event that proposed uses are not covered in the above list, it shall be the responsibility of the administration to establish a standard after consultation with the city engineer, the Tennessee Department of Health and Environment, or other such firm, individual, or agency as may be appropriate, or to make such interpretation of the standards as may be required.

ORDINANCE NO. 96-11

AN ORDINANCE TO INCREASE THE SEWER RESERVE CAPACITY
FEES FROM \$3.00 PER GALLON
(ASSUMPTION BEING 350 GALLONS PER HOME DAILY USE)
TO \$3.50 PER GALLON IN ORDER TO CREATE
AN ADEQUATE CASH RESERVE FOR CONSTRUCTION
OF A NEW SEWER TREATMENT PLANT

Whereas, the Town of Spring Hill is being impacted by both State of Tennessee pollution limits requirements and the increasing volume of wastewater being created by building permits;

Whereas, the present sewer reserve capacity fees of \$3.00 per gallon per average daily use, calculated on a estimate/presumption of 350 gallons per day average use of the system by each home, is becoming inadequate;

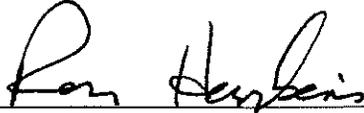
Whereas, the need for a new sewer plant is substantially a consequence of growth, therefore development fees should substantially pay for the new sewer plant, and the proposed plant is increasing in planned size due to accelerated growth; and

Whereas, the intention of the Board of Mayor and Aldermen is to have the new treatment plant constructed with cash reserves from the future sewer reserve capacity fund, the public interest requiring same.

BE IT THEREFORE ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE TOWN OF SPRING HILL, TENNESSEE that with reference to Title 18, Sections 18-146 to 149 inclusive of the 1995 Municipal Code of Spring Hill, the following increase in sewer future reserve capacity fees shall be in effect upon adoption and publication of this Ordinance:

Present or future reserve capacity fees shall be \$3.50 per gallon per average daily use for each type building use as shown in Appendix A entitled "Table of Water/Wastewater Loads" of the 1995 Spring Hill Municipal Code.

Passed and adopted by the Board of Mayor and Aldermen of the Town of Spring Hill, Tennessee on the 18th day of March, 1996.



RON HANKINS, MAYOR

ORDINANCE NO. 96-11

**AN ORDINANCE TO INCREASE THE SEWER RESERVE CAPACITY
FEES FROM \$3.00 PER GALLON
(ASSUMPTION BEING 350 GALLONS PER HOME DAILY USE)
TO \$3.50 PER GALLON IN ORDER TO CREATE
AN ADEQUATE CASH RESERVE FOR CONSTRUCTION
OF A NEW SEWER TREATMENT PLANT**

Whereas, the Town of Spring Hill is being impacted by both State of Tennessee pollution limits requirements and the increasing volume of wastewater being created by building permits;

Whereas, the present sewer reserve capacity fees of \$3.00 per gallon per average daily use, calculated on a estimate/presumption of 350 gallons per day average use of the system by each home, is becoming inadequate;

Whereas, the need for a new sewer plant is substantially a consequence of growth, therefore development fees should substantially pay for the new sewer plant, and the proposed plant is increasing in planned size due to accelerated growth; and

Whereas, the intention of the Board of Mayor and Aldermen is to have the new treatment plant constructed with cash reserves from the future sewer reserve capacity fund, the public interest requiring same.

BE IT THEREFORE ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE TOWN OF SPRING HILL, TENNESSEE that with reference to Title 18, Sections 18-146 to 149 inclusive of the 1995 Municipal Code of Spring Hill, the following increase in sewer future reserve capacity fees shall be in effect upon adoption and publication of this Ordinance:

Present or future reserve capacity fees shall be \$3.50 per gallon per average daily use for each type building use as shown in Appendix A entitled "Table of Water/Wastewater Loads" of the 1995 Spring Hill Municipal Code.

Passed and adopted by the Board of Mayor and Aldermen of the Town of Spring Hill, Tennessee on the _____ day of _____, 1996.

RON HANKINS, MAYOR

ATTEST:

JUNE QUIRK, RECORDER

LEGAL FORM APPROVED:

N. Houston Parks
N. HOUSTON PARKS, ATTORNEY

PASSED ON 1ST READING: _____

PASSED ON 2ND READING: _____

CAPTION PUBLISHED: _____

AN ORDINANCE CAUSING THE
1997 AMENDMENTS TO IMPACT FEES AND TAXES
ON NEW DEVELOPMENTS

Whereas, the monumental growth and expansion of both residential and non-residential construction with the Town of Spring Hill, Tennessee, create demand for additional water and sewer facilities to service such new development; and

Whereas, the Board of Mayor and Aldermen of the Town of Spring Hill, Tennessee, will undertake to adopt by resolution a new Capital Improvements Program which addresses such expansion, and lays forth the additional facilities and expenditures to be undertaken on account of such growth; and

Whereas, the Board of Mayor and Aldermen of the Town of Spring Hill, Tennessee, possesses the specific authority to lay and collect Adequate Facilities and Impact Taxes by virtue of PRIVATE ACTS OF 1988, Chapters 173 and 176, as made law by the Tennessee General Assembly and the Governor of the State of Tennessee in April of 1988; and

Whereas, the Board of Mayor and Aldermen of the Town of Spring Hill, Tennessee, have an affirmative obligation to protect the public health, safety and welfare of the citizens of the Town of Spring Hill, Tennessee; and

Whereas, the Board of Mayor and Aldermen of the Town of Spring Hill, Tennessee, desire to protect the property values of those persons owning property in the Town of Spring Hill, Tennessee; and

Whereas, such new development and expansion threatens to increase the Town's reliance on outside water sources and drastically increase water and sewer costs to the property owners of Spring Hill, Tennessee, new and existing alike; and

Whereas, the development of independent water treatment and distribution facilities will stabilize water costs to property owners of the Town of Spring Hill; therefore

BE IT ORDAINED BY THE BOARD OF MAYOR AND ALDERMEN OF THE TOWN OF SPRING HILL, TENNESSEE:

SECTION ONE:

A. Short Title

This ordinance shall be known and cited as the "1997 Amendments to Impact Fees and Taxes on New Developments Ordinance"

B. Amendments

(1) Title 20, Section 103 of the Town of Spring Hill Municipal Code is amended to increase the previous fee for water and sewer taps by \$100.00 each.

(2) Title 20, Section 103 of the Town of Spring Hill Municipal Code is amended to increase the previous allocation amount by \$100.00

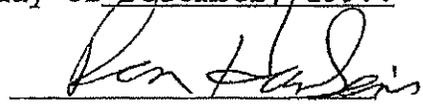
(3) Increase in and allocation of fees for all other types of construction are to be in the same proportion as are the increases in charges for water and sewer taps.

SECTION TWO:

Title 18, with reference to Sections 18-156 to 149 inclusive, is changed to show an increase in sewer reserve capacity fees, as calculated on daily effluent volume per type of construction as shown in Appendix A entitled "Table of Water/Wastewater Loads" of the 1995 Spring Hill Municipal Code, from \$3.50 per gallon to \$4.25 per gallon.

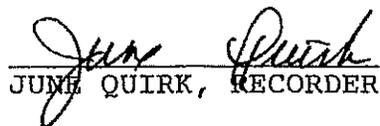
This ordinance is passed and adopted after a public hearing before the Board of Mayor and Aldermen on December 15, 1997, and after due publication in the Columbia Daily Herald on _____ and the Franklin Review Appeal on _____ and Car Country News on _____.

Passed and adopted by the Board of Mayor and Aldermen of the Town of Spring Hill, Tennessee on the 15th day of December, 1997.



RON HANKINS, MAYOR

ATTEST:



JUNE QUIRK, RECORDER

LEGAL FORM APPROVED:



M. ANDREW HOOVER, ATTORNEY

Passed on 1st Reading November 17, 1997

Passed on 2nd Reading December 15, 1997

RESOLUTION 02-17

**A RESOLUTION TO INCREASE WATER RESERVE FEES TO
INSURE ADEQUATE FUNDING AND CAPACITY IN THE CITY OF
SPRING HILL WATER SYSTEM**

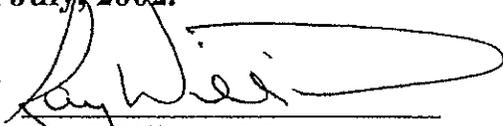
WHEREAS, the current water reserve fee of \$.28 times the cost of the water tap fee, an example of which is attached hereto and made a part of this resolution, is inadequate to assure future water system capacity; and

WHEREAS, the water reserve fee needs to be increased to meet the expanding needs of the City water system; and

NOW, THEREFORE BE IT RESOLVED, by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that the Water Reserve fee is hereby increased to \$.35 times the water tap fee. The water tap fee depends on the size of the meter installed.

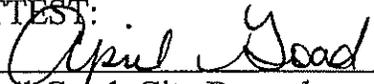
BE IT FURTHER RESOLVED that this resolution shall take effect immediately upon its adoption.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, on the 15th day of July, 2002.



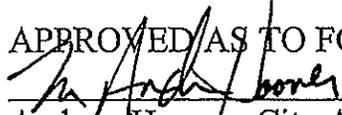
Ray Williams, Mayor

ATTEST:



April Goad, City Recorder

APPROVED AS TO FORM:



Andrew Hoover, City Attorney

ORDINANCE NO. 03-03

**AN ORDINANCE AMENDING THE MUNICIPAL CODE TO
REQUIRE THAT CERTAIN COMMERCIAL STRUCTURES HAVE
SPRINKLER SYSTEMS INSTALLED**

WHEREAS, it is proven technology that automatic fire sprinkler systems reduce the loss of life and property from fire, and are therefore reasonably necessary to protect the Public Health, Safety and Welfare; and

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that the Municipal Code is hereby amended as follows;

That Title 7, Chapter 2, Section 205, is hereby amended to add Subsection (b) as follows;

(b) Automatic Fire Sprinkler System.

- (1.) An automatic Fire Sprinkler System shall be installed throughout all new or remodeled buildings under the following conditions:
- (2.)
 - A. All commercial buildings of 10,000 gross square feet or larger.
- (3.) Automatic Fire Sprinkler Systems required by this code shall be designed and installed in accordance with the scope and purpose of the latest edition of the following standards as published by the National Fire Protection Association.
 - A. NFPA 13, Standard for the Installation of Sprinkler Systems.
 - B. NFPA 13R Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and including four (4) stories in height.
- (4.) In existing buildings which are substantially remodeled, or rehabilitated, an automatic fire sprinkler system shall be required if the subsequent building meets any of the conditions for new buildings in subsection (1) of this ordinance. "Substantially remodeled, or rehabilitated" means any structural alteration or restoration of a building for which cost or value exceeds fifty (50) percent of the current replacement cost of the particular building,

percent of the current replacement cost of the particular building, or where more than fifty (50) percent of the gross square footage has been structurally altered, such building shall conform to the requirements for new buildings.

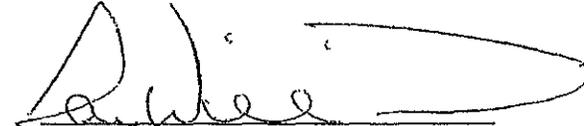
- (5.) Any addition to an existing building, which brings the area to 10,000 gross square feet or more shall cause the entire building to conform to the requirements for new buildings, or otherwise the addition shall be separated from the existing building by a four (4) hour fire wall with opening protectives in accordance with the Standard Building Code.
- (6.) Where an automatic fire sprinkler systems are determined to increase the hazard to the property or occupants to be protected, other automatic fire extinguishing systems appropriate for the hazard shall be designed, installed, tested, inspected, and maintained in accordance with the National Fire Protection standards.
- (7.) An automatic fire sprinkler system or automatic fire extinguishing system provided as a requirement of this code, or otherwise installed shall be supervised in accordance with the Standard Fire Prevention Code, Standard Building Code, and **NFPA 101**, Life Safety Code. Automatic fire sprinkler systems shall be equipped with an audible alarm located on the address side of the building exterior as approved by the Fire Chief.
- (8.) Every new fire department connection for an automatic sprinkler system shall be located on the address side of the building not more than one hundred (100) feet from the nearest fire hydrant connected to an approved water supply. Fire department connections shall be provided with a locking cap or caps of type approved by the Fire Chief.
- (9.) Occupancies shall be classified in accordance with Chapter 3 of the Standard Building Code, 1997 edition.
- (10.) Where these requirements conflict with the Standard Building Code, Standard Fire Prevention Code, **NFPA 101**, Life Safety

Code, or any state, or federal requirement, the more stringent requirement shall apply. (2002 Code S0-000)

BE IT FURTHER RESOLVED, that any ordinance or parts of ordinances in conflict herewith are hereby changed or repealed whatever the case may be.

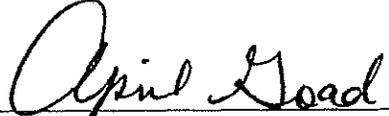
This Ordinance shall take effect from and after its adoption, the public welfare requiring it.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 18th day of February, 2003.



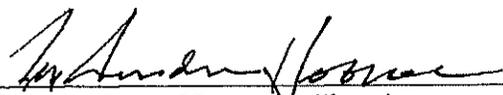
Ray Williams, Mayor

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



M. Andrew Hoover, City Attorney

Passed on 1st Reading 1 - 21 - 03

Passed on 2nd Reading 2 - 18 - 03

ORDINANCE NO. 03-40

**AN ORDINANCE AMENDING THE MUNICIPAL CODE TO
REQUIRE THAT CERTAIN COMMERCIAL STRUCTURES AND
MULTI-FAMILY RESIDENTIAL STRUCTURES HAVE
SPRINKLER SYSTEMS INSTALLED**

WHEREAS, it is proven technology that automatic fire sprinkler systems reduce the loss of life and property from fire, and are therefore reasonably necessary to protect the Public Health, Safety and Welfare; and

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that the Municipal Code is hereby amended as follows;

That Title 7, Chapter 2, Section 205, is hereby amended to add Subsection (b) as follows;

(b) Automatic Fire Sprinkler System.

- (1.) An automatic Fire Sprinkler System shall be installed throughout all new or remodeled buildings under the following conditions:
- (2.) A. All multi-family residential structures and all residential structures having a zero foot (0') building setback line.
B. All commercial buildings of 10,000 gross square feet or larger.
- (3.) Automatic Fire Sprinkler Systems required by this code shall be designed and installed in accordance with the scope and purpose of the latest edition of the following standards as published by the National Fire Protection Association.
A. NFPA 13, Standard for the Installation of Sprinkler Systems.
B. NFPA 13R Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and including four (4) stories in height.
- (4.) In existing buildings which are substantially remodeled, or rehabilitated, an automatic fire sprinkler system shall be required if the subsequent building meets any of the conditions for new

buildings in subsection (1) of this ordinance. "Substantially remodeled, or rehabilitated" means any structural alteration or restoration of a building for which cost or value exceeds fifty (50) percent of the current replacement cost of the particular building, or where more than fifty (50) percent of the gross square footage has been structurally altered, such building shall conform to the requirements for new buildings.

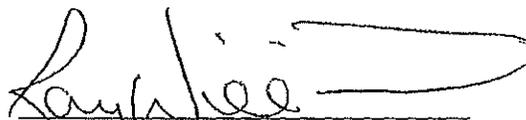
- (5.) Any addition to an existing commercial building, which brings the area to 10,000 gross square feet, or more, shall cause the entire building to conform to the requirements for new buildings, or otherwise the addition shall be separated from the existing building by a four (4) hour fire wall with opening protectives in accordance with the Standard Building Code.
- (6.) Where automatic fire sprinkler systems are determined to increase the hazard to the property or occupants to be protected, other automatic fire extinguishing systems appropriate for the hazard shall be designed, installed, tested, inspected, and maintained in accordance with the National Fire Protection standards.
- (7.) An automatic fire sprinkler system or automatic fire extinguishing system provided as a requirement of this code, or otherwise installed shall be supervised in accordance with the Standard Fire Prevention Code, Standard Building Code, and NFPA 101, Life Safety Code. Automatic fire sprinkler systems shall be equipped with an audible alarm located on the address side of the building exterior as approved by the Fire Chief.
- (8.) Every new fire department connection for an automatic sprinkler system shall be located on the address side of the building not more than one hundred (100) feet from the fire hydrant riser connected to an approved water supply. Fire department connections shall be provided with a locking cap or caps of type approved by the Fire Chief.
- (9.) Occupancies shall be classified in accordance with Chapter 3 of the Standard Building Code, 1997 edition.

(10.) Where these requirements conflict with the Standard Building Code, Standard Fire Prevention Code, NFPA 101, Life Safety Code, or any state, or federal requirement, the more stringent requirement shall apply. (2002 Code S0-000)

BE IT FURTHER RESOLVED, that any ordinance or parts of ordinances in conflict herewith are hereby changed or repealed whatever the case may be.

This Ordinance shall take effect from and after its adoption, the public welfare requiring it.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 20th day of January, 2004.


Ray Williams, Mayor

ATTEST:


April Goad, City Recorder

LEGAL FORM APPROVED:


M. Andrew Hoover, City Attorney

ORDINANCE NO. 07-29

AMENDMENT OF TITLE 18, CHAPTER 1, SUBSECTION 18-108, OF THE SPRING HILL MUNICIPAL CODE

WHEREAS, the Board of Mayor and Aldermen desires to amend the Municipal Code so as to amend Title 18, Chapter 1 Subsection 1-108.

NOW THEREFORE, in consideration of the premises, be it hereby ordained by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that Title 18, Chapter 1, Subsection 1-108, of the Spring Hill Municipal Code relative to the charges for sprinkler irrigation system meters is hereby amended as follows:

1. Section 1-108 of the Spring Hill Municipal Code is amended to read "five-eighths of one (1) inch except for water meters installed to serve a sprinkler irrigation system which will be charged at the rate of \$350.00 for each tap."

BE IT FURTHER ENACTED, that all ordinances or partial ordinances in conflict herewith be, and the same hereby are, repealed or modified as the case may be.

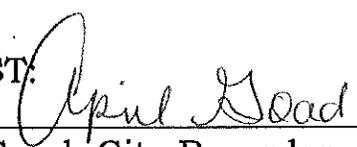
BE IT FURTHER ENACTED that this ordinance shall take effect from and after its passage the public welfare demanding it.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on 16th day of July, 2007.



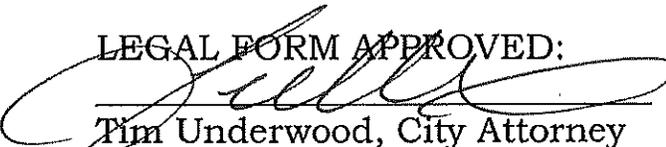
Danny M. Leverette, Mayor

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



Tim Underwood, City Attorney

ORDINANCE NO. 07-48

AN ORDINANCE TO AMEND ORDINANCE 07-29, WHICH AMENDED TITLE 18, CHAPTER 1, SUBSECTION 18-108, OF THE SPRING HILL MUNICIPAL CODE, TO INCLUDE FEES FOR WATER METERS, WATER IRRIGATION METERS, AND COMPONENTS

WHEREAS, the Board of Mayor and Aldermen desires to further amend the Municipal Code so as to amend Title 18, Chapter 1 Subsection 1-108,

WHEREAS, the City of Spring Hill is paying costs in excess of the amount that is being charged and collected for water meters and components.

WHEREAS, in consideration of the difference, be it hereby ordained by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that Title 18, Chapter 1, Subsection 1-108, of the Spring Hill Municipal Code relative to the charges for meters and taps, is hereby amended to read: Water Connection Charge. There is hereby imposed a charge of one thousand three hundred dollars (\$1,300.00) for each connection made to the water system maintained by the City of Spring Hill for all water meter sizes through five eighths (5/8) inch by three fourths (3/4) inch.

WHEREAS, be it in addition hereby ordained by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that Title 18, Chapter 1, Subsection 1-108, of the Spring Hill Municipal Code relative to the charges for meters and taps, is hereby further amended as follows:

Section 1-108 of the Spring Hill Municipal Code is amended to read "three fourths of one (1) inch except for water meters installed to serve a sprinkler irrigation system which will be charged at the rate of \$600.00 for each tap."

WHEREAS, be it hereby further ordained by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that Title 18, Chapter 1, Subsection 1-108, of the Spring Hill Municipal Code relative to the charges for meters and taps be amended to reflect the following changes:

WATER METER SIZE	TAPPING FEE	METER FEES
M25 5/8" x 3/4" Meter	\$1,300.00	\$ 165.00
M170 1" Meter	\$1,600.00	\$ 235.00
M120 1 1/2" Meter	\$1,900.00	\$ 425.00
M170 2" Meter	\$2,100.00	\$ 600.00
3" Compound Meter	\$2,800.00	\$1,646.00
4" Compound Meter	\$3,700.00	\$2,639.00
6" Compound Meter	\$4,700.00	\$4,789.00
8" Compound Meter	\$8,700.00	\$7,174.00

WHEREAS, the City of Spring Hill is hereby clarifying and adding to Title 18, Chapter 1, Subsection 1-108, of the Spring Hill Municipal Code, the charges for other related parts or components as follows:

5/8 Inch X 3/4 Inch Meter Base	\$ 71.00
5/8 Inch X 3/4 Inch Setter	\$ 95.00
5/8 Inch X 3/4 Inch Register	\$ 160.00
Fire Hydrants	\$1,218.00

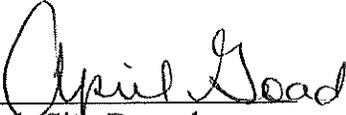
NOW THEREFORE BE IT FUTHER ORDAINED, that all ordinances or partial ordinances in conflict herewith be, and the same hereby are, repealed or modified as the case may be.

BE IT FURTHER ENACTED, that this ordinance shall take effect from and after its final passage.

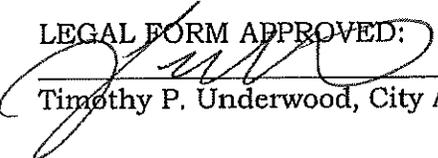
Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on 17th day of December, 2007.


Danny M. Leverette, Mayor

ATTEST:


April Goad, City Recorder

LEGAL FORM APPROVED:


Timothy P. Underwood, City Attorney

Passed on First Reading: November 19, 2007

Passed on Second Reading: December 17, 2007

ORDINANCE NO. 10-16

**AN ORDINANCE TO AMEND THE SPRING HILL MUNICIPAL CODE,
CHAPTER 18-108 REGARDING SEWER CONNECTION CHARGES**

WHEREAS, the Mayor and Board of Aldermen of The City of Spring Hill desire to clarify sections of the Spring Hill Municipal Code; and

WHEREAS, Section 1(b) should read, "Duplexes, Townhomes, Condominiums, Villas, Garden Homes*: \$1,100.00"

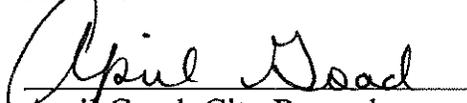
WHEREAS, Section 1 (c) should read, "Apartments, Boarding Houses*: \$600.00 for each family dwelling unit and office."

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 21st day of June, 2010.



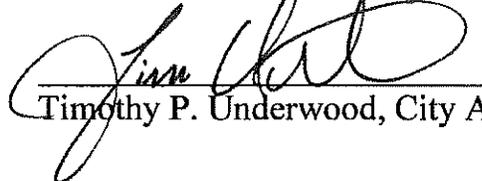
Michael Dinwiddie, Mayor

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



Timothy P. Underwood, City Attorney

PASSED ON 1ST READING: May 17, 2010

PASSED ON 2ND READING: June 21, 2010

*Underscore notes added wording. No fees have been changed.

RESOLUTION 11-56

**A RESOLUTION AFFIRMING THE SCHEDULED SEWER RATE FOR THE CITY OF
SPRING HILL, AS SET FORTH IN ORDINANCE 10-09**

WHEREAS, the Board of Mayor and Aldermen of the City of Spring Hill passed Ordinance 10-09 to establish sewer rates for customers inside the city limits; and

WHEREAS, the Board of Mayor and Aldermen desires to review the scheduled rate adjustment prior to implementation as stated in Section 2 of Ordinance 10-09; and

WHEREAS, Ordinance 10-09, section 2 states:

"Section 2.The Sewer rates shall increase on July 1, 2011, upon review by the Board of Mayor and Aldermen by April 2011, to the following:

Gallons per month:

0- 2,000
Over 2,000

Sewer Rate Inside City:

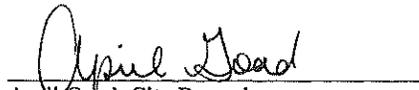
\$ 10.97 (minimum)
\$ 4.11 per thousand gal."

NOW, THEREFORE BE IT RESOLVED that the Board of Mayor and Aldermen of the City of Spring Hill hereby affirms the sewer rate, as stated above.

Passed and adopted this 20th day of June, 2011.


Michael Dinwiddie, Mayor

ATTEST:


April Good, City Recorder

LEGAL FORM APPROVED:


Timothy P. Underwood, City Attorney

ORDINANCE 11-11

**AN ORDINANCE AMENDING THE SPRING HILL MUNICIPAL CODE
TO ADD SUBSECTIONS "J" AND "K" TO TITLE 7, CHAPTER 2,
SECTION 7-205 AS IT PERTAINS TO FIRE SPRINKLER LINE TAPS**

WHEREAS, it is proven technology that automatic fire sprinkler systems reduce the loss of life and property from fire, and are therefore reasonably necessary to protect the Public Health, Safety and Welfare; and

NOW, THEREFORE, BE IT ORDAINED by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee, that the Municipal Code is hereby amended as follows;

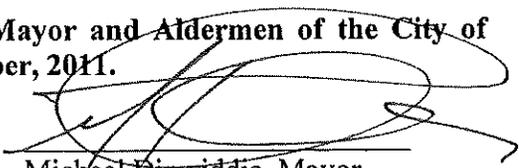
That Title 7, Chapter 2, Section 7-205, is hereby amended to add Subsections (j) and (k) as follows:

- (j) For ALL Fire Sprinkler line taps that are used solely for the Fire Sprinkler and installed by the Owner or Developer with NO cost to the City of Spring Hill there shall be no fee charged other than the METER fee for that tap size.
- (k) Any Fire Sprinkler Tap size that is installed by the City of Spring Hill, owner shall pay full price (tap and meter) for that tap size installed.

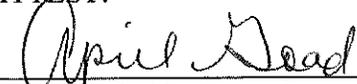
BE IT FURTHER RESOLVED, that any ordinance or parts of ordinances in conflict herewith are hereby changed or repealed whatever the case may be.

This Ordinance shall take effect from and after its adoption, the public welfare requiring it.

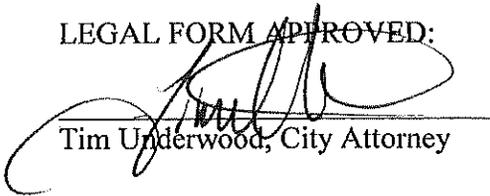
Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 17th day of October, 2011.


Michael Dinwiddie, Mayor

ATTEST:


April Goad, City Recorder

LEGAL FORM APPROVED:



Tim Underwood, City Attorney

Passed on First Reading: August 15, 2011
Amended and Deferred on September 19, 2011
Passed on Second Reading: October 17, 2011

ORDINANCE 12-20

**AN ORDINANCE TO AMEND TITLE 18 CHAPTER 1, SECTION 108
OF THE SPRING HILL MUNICIPAL CODE,
IN REGARD TO THE FEE FOR WATER IRRIGATION METERS**

WHEREAS, the Board of Mayor and Aldermen desire to amend 18-108(1) and (3) of the Spring Hill Municipal Code; and

WHEREAS, that such amendments are in the best interest of the citizens of Spring Hill resulting in a decrease to the cost of irrigation meters and beneficial to the City as it promotes further use and provides a mechanism of relief from sewer charger on irrigation water usage.

WHEREAS, the Spring Hill Municipal Code, Section 18-108(1) shall be amended to read as follows:

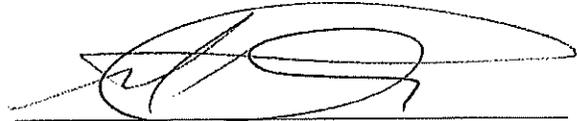
Water Connection Charge. There is hereby imposed a charge of one thousand three hundred dollars (\$1,300.00) for each connection made to the water system maintained by the City of Spring Hill for all non-irrigation water meter sizes up to and through five eighths (5/8) inch by three fourths (3/4) inch. Water meters installed to serve a homeowner irrigation system will be charged four hundred dollars (\$400.00) per irrigation meter connection at the homeowner's existing service tap.

WHEREAS, Section 18-108(3) providing for charges for parts and components be deleted in its entirety.

NOW, THEREFORE, BE IT ORDAINED, that the Spring Hill Municipal Code, Section 18-108(1) and (3) be amended accordingly as the public safety and welfare regards such.

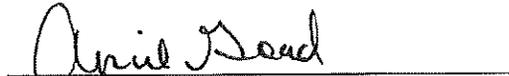
BE IT FURTHER ENACTED, that this Ordinance shall take effect from and after its final passage and supersede any prior Resolution or Ordinance to the contrary.

Passed and adopted by the Board of Mayor and Aldermen of the City of Spring Hill,
Tennessee on 22nd day of January, 2013.

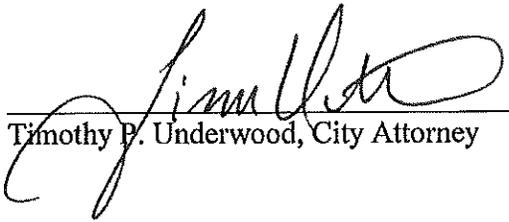


Michael Dinwiddie, Mayor

ATTEST:


April Goad, City Recorder

LEGAL FORM APPROVED:


Timothy P. Underwood, City Attorney

Passed on First Reading: November 19, 2012

(Deferred on December 17, 2012)

Passed on Second Reading: January 22, 2013

RESOLUTION 19-78

**A RESOLUTION TO AMEND FEES FOR WATER METERS AND TAPPING FEES
IN ORDINANCE 07-48**

WHEREAS, the City of Spring Hill can collect for water meters and tapping fees pursuant to Ordinance 07-48; and

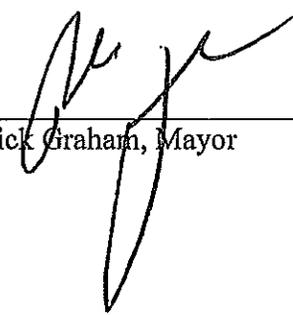
WHEREAS, compound meters are available for use within the city's water system and therefore need to be added to the ordinance to reflect associated fees.

NOW, THEREFORE, BE IT RESOLVED, that Title 18, Chapter 1, Subsection 1-108 of the Spring Hill Municipal Code relative to the charges for meters and taps should be amended to reflect the following additions:

WATER METER SIZE	TAPPING FEE	METER FEES
M25 5/8" x 3/4" Meter	\$1,300.00	\$ 185.65
M170 1" Meter	\$1,600.00	\$ 306.80
M120 1 1/2" Meter	\$1,900.00	\$ 489.32
2" Turbo Series Meter	\$2,100.00	\$ 826.80
3" Turbo Series Meter	\$2,800.00	\$ 962.00
4" Turbo Series Meter	\$3,700.00	\$1,591.20
6" Turbo Series Meter	\$4,700.00	\$3,744.00
8" Combo Meter	\$8,700.00	\$7,124.00
2" Compound Meter	\$2,100.00	\$1,866.80
3" Compound Meter	\$2,800.00	\$2,210.00
4" Compound Meter	\$3,700.00	\$3,387.28
6" Compound Meter	\$4,700.00	\$4,758.00

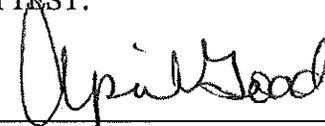
BE IT FURTHER RESOLVED, that the City of Spring Hill Board of Mayor and Aldermen authorizes amendments to the Spring Hill Municipal Code in reference to the fees charged for water meters as set forth hereinabove.

Passed and Adopted by the Board of Mayor and Aldermen of the City of Spring Hill, Tennessee on the 17th day of June, 2019.



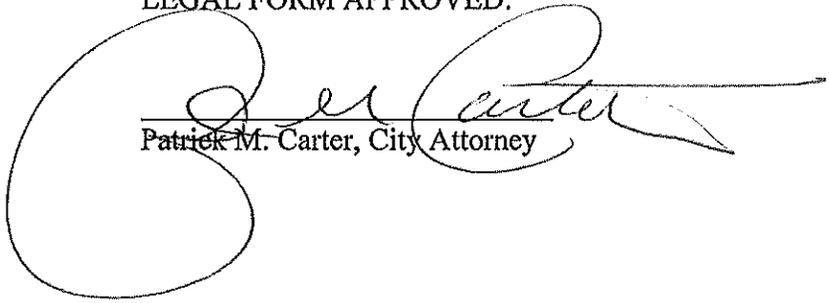
Rick Graham, Mayor

ATTEST:



April Goad, City Recorder

LEGAL FORM APPROVED:



Patrick M. Carter, City Attorney

APPENDIX C: TABLE OF WATER/WASTEWATER LOADS

Spring Hill - Table of Water/Wastewater Loads

APPENDIX C: TABLE OF WATER/WASTEWATER LOADS

(A) Projected water use and wastewater loads of developments shall be determined using the following standards as a guide:

<i>Planned Use</i>	<i>Design Unit</i>	<i>Average Flow Per Day (in Gallons)</i>
General Retail	Per 1,000 s.f. gross floor space	100
Industrial		
Domestic waste only	Per 1,000 s.f. of gym floor space	100
Process waste		Determined by city
Miscellaneous		
Churches and assemblies	Per seat	2
Motel and Institutional		
Hospitals	Per bed	200
Hotels and motels		
Without cooking facility	Per lodging unit	100
With cooking facilities	Per lodging unit	150
Nursing homes and rest homes	Per bed	100
Schools	Per student (maximum capacity)	30
Office	Per 400 s.f. of gross floor space	25
Other Commercial		
Car wash	Per bay	2,000
Laundromat	Per washing machine	500
Service station	Per bay or pump island	1,000
Theaters	Per seat	3
Warehouse, storage, showroom	Per 1,000 s.f. of gym floor space	25

Spring Hill - Table of Water/Wastewater Loads

<i>Planned Use</i>	<i>Design Unit</i>	<i>Average Flow Per Day (in Gallons)</i>
Residential		
Mobile home (outside park)	Per home (or lot)	250
Mobile home park	Per home (or space)	200
Multi-family residences		
1 bedroom	Per dwelling unit	200
2 bedroom	Per dwelling unit	300
3 bedroom	Per dwelling unit	350
Single-family residences	Per house (or subdivision lot)	350
Restaurants and Taverns	Per seat	50

(B) In the event that proposed uses are not covered in the above list, it shall be the responsibility of the administration to establish a standard after consultation with the City Engineer, the state's Department of Health or other such firm, individual or agency as may be appropriate, or to make such interpretation of the standards is may be required.
(2011 Code, App. C)

Certified Public Accountants
& Consultants



2019 System Development Charge Analysis
City of Spring Hill

JACKSON THORNTON

Certified Public Accountants
& Consultants

City of Spring Hill Water and Sewer System Development Charge Analysis Presented June 3, 2019



System Development Fees - Definition

- A contribution of capital toward existing or planned future plant facilities necessary to meet the service needs of new customers to which such fees apply.
- Two methods used to determine the amount of these charges are the buy-in method and the incremental-cost pricing method.
- Charges are intended to provide funds to be used to finance all or part of capital improvements necessary to serve new customers.

*AWWA's, Principles of Water Rates, Fees and Charges, p328

System Development Fees – Methodologies

- Equity (Buy-In) Method – This approach attempts to assess new customers a fee to approximate the equity position of current customers. (AWWA M-1, p199)
- Incremental Cost Method – Assigns to new development the incremental cost of system expansion needed to serve the new development. (AWWA M-1, p202).
- Given the dynamics of Spring Hill's water and sewer systems, the Incremental Cost Method was applied.

Process Overview

1. Develop Equivalent Residential Unit using 12 months ended January 2019 billing statistics.
2. Determine the number of ERU's of capacity being added.
3. Incremental Cost - Calculate the average investment per ERU on the additional capacity being added.

Water – Develop Equivalent Residential Unit

Incremental Approach

Annual Residential Sales (Gals)	814,368,403
Annual Residential Billings	172,688
Monthly Volume/Customer (Gals)	4,716
Annual Volume/Customer (Gals)	56,590
1.5 MGD Additional Capacity	547,500,000
Equivalent Residential Units (ERU)	9,675

Water – Determine the Avg. Investment Per ERU in New Capacity

Equivalent Residential Units (ERU)	9,675
Projected Investment in Treatment Plant*	\$ 12,023,000
Net Investment in Plant	<u>\$ 12,023,000</u>
Average Investment/ERU**	\$ 1,243

* BOMA approved projects
** Does not include labor and materials

Water – Fee Escalation by Meter Size

Meter Size (Inches)	Multiplier		Fee
3/4	1.00	\$	1,243
1	1.33	\$	1,657
1 1/2	2.00	\$	2,485
2	2.67	\$	3,314
3	4.00	\$	4,971
4	5.33	\$	6,628
6	8.00	\$	9,942
8	10.67	\$	13,256
10	13.33	\$	16,569
12	16.00	\$	19,883

Sewer – Develop Equivalent Residential Unit

Incremental Approach	
Annual Residential Sales (Gals)	841,836,736
Annual Residential Billings	168,776
Monthly Volume/Customer (Gals)	4,988
Annual Volume/Customer (Gals)	59,855
2.5 MGD Additional Capacity	912,500,000
Equivalent Residential Units (ERU)	15,245

Sewer – Determine the Avg. Investment Per ERU in New Capacity

Equivalent Residential Units (ERU)	15,245
Projected Investment in Treatment Plant*	\$ 25,790,000
Average Investment/ERU**	\$ 1,692

* BOMA approved projects
** Does not include labor and materials

Sewer – Fee Escalation by Meter Size

Meter Size (Inches)	Multiplier		Fee
3/4	1.00	\$	1,692
1	1.33	\$	2,256
1 1/2	2.00	\$	3,383
2	2.67	\$	4,511
3	4.00	\$	6,767
4	5.33	\$	9,022
6	8.00	\$	13,533
8	10.67	\$	18,045
10	13.33	\$	22,556
12	16.00	\$	27,067

2019 Water System Development Charge Analysis
BOMA Approved Projects

City of Spring Hill, Water System
 System Development Charge Analysis - Incremental Approach
 Period Ending June 2018
 Summary

Incremental Approach	
Annual Residential Sales (Gals)	814,368,403
Annual Residential Billings	172,688
Monthly Volume/Customer (Gals)	4,716
Annual Volume/Customer (Gals)	56,590
1.5 MGD Additional Capacity	547,500,000
Equivalent Residential Units (ERU)	9,675
Projected Investment in Treatment Plant	\$ 12,023,000
Net Investment in Plant	\$ 12,023,000
Average Investment/ERU	\$ 1,243

Meter Size (Inches)	Multiplier	Fee
5/8	1.00	\$ 1,243
3/4	1.20	\$ 1,491
1	1.60	\$ 1,988
1 1/2	2.40	\$ 2,982
2	3.20	\$ 3,977
3	4.80	\$ 5,965
4	6.40	\$ 7,953
6	9.60	\$ 11,930
8	12.80	\$ 15,907
10	16.00	\$ 19,883
12	19.20	\$ 23,860

Maximum Rated Flow GPM	Meter Size	Multiplier	Fee
20	5/8	1.00	\$ 1,243
30	3/4	1.50	\$ 1,864
50	1	2.50	\$ 3,107
100	1 1/2	5.00	\$ 6,214
160	2	8.00	\$ 9,942
320	3	16.00	\$ 19,883
500	4	25.00	\$ 31,068
1,000	6	50.00	\$ 62,135
1,600	8	80.00	\$ 99,417
4,200	10	210.00	\$ 260,968
5,300	12	265.00	\$ 329,317

City of Spring Hill, Water System
System Development Charge Analysis - Incremental Approach
Period Ending January 2019
Long Term Water Supply Investment

	<u>Actual</u>	<u>Adj.</u>	<u>Test Yr.</u>
Treatment			
Facility Plan	\$ 203,000		\$ 203,000
Construction Plans and Permitting	\$ 1,150,000		\$ 1,150,000
Construction	\$ 8,000,000		\$ 8,000,000
Construction Engineering and Inspection	\$ 800,000		\$ 800,000
Subtotal Treatment	<u>\$ 10,153,000</u>		<u>\$ 10,153,000</u>
Distribution			
Design (Pump Station)	\$ 70,000		\$ 70,000
Design (Hardins Landing to Kedron)	\$ 100,000		\$ 100,000
Construction (Pump Station)	\$ 600,000		\$ 600,000
Construction (Hardins Landing to Kedron)	\$ 1,100,000		\$ 1,100,000
Subtotal Distribution	<u>\$ 1,870,000</u>	\$ -	<u>\$ 1,870,000</u>
Secondary Projects			
16" Main from Relocated Meter to Crossing Cir Ext	\$ 4,900,000	\$ (4,900,000)	\$ -
12" Main from Main St to Cleburne Rd	\$ 1,700,000	\$ (1,700,000)	\$ -
12" Main Crossings Circle Extension	\$ 1,400,000	\$ (1,400,000)	\$ -
Relocate CPWS Master Meter	\$ 100,000	\$ (100,000)	\$ -
Booster Pump Station on Main St	\$ 1,400,000	\$ (1,400,000)	\$ -
Subtotal Secondary Projects	<u>\$ 9,500,000</u>	<u>\$ (9,500,000)</u>	<u>\$ -</u>
Subtotal Treat, Dist & Secondary	<u>\$ 21,523,000</u>	<u>\$ (9,500,000)</u>	<u>\$ 12,023,000</u>

2019 Water System Development Charge Analysis
BOMA Approved Projects and Secondary Projects

City of Spring Hill, Water System
 System Development Charge Analysis - Incremental Approach
 Period Ending June 2018
 Summary

Incremental Approach	
Annual Residential Sales (Gals)	814,368,403
Annual Residential Billings	172,688
Monthly Volume/Customer (Gals)	4,716
Annual Volume/Customer (Gals)	56,590
1.5 MGD Additional Capacity	547,500,000
Equivalent Residential Units (ERU)	9,675
Projected Investment in Treatment Plant	\$ 21,523,000
Net Investment in Plant	\$ 21,523,000
Average Investment/ERU	\$ 2,225

Meter Size (Inches)	Multiplier	Fee
5/8	1.00	\$ 2,225
3/4	1.20	\$ 2,670
1	1.60	\$ 3,559
1 1/2	2.40	\$ 5,339
2	3.20	\$ 7,119
3	4.80	\$ 10,678
4	6.40	\$ 14,238
6	9.60	\$ 21,356
8	12.80	\$ 28,475
10	16.00	\$ 35,594
12	19.20	\$ 42,713

Maximum Rated Flow GPM	Meter Size	Multiplier	Fee
20	5/8	1.00	\$ 2,225
30	3/4	1.50	\$ 3,337
50	1	2.50	\$ 5,562
100	1 1/2	5.00	\$ 11,123
160	2	8.00	\$ 17,797
320	3	16.00	\$ 35,594
500	4	25.00	\$ 55,616
1,000	6	50.00	\$ 111,232
1,600	8	80.00	\$ 177,971
4,200	10	210.00	\$ 467,173
5,300	12	265.00	\$ 589,528

City of Spring Hill, Water System
System Development Charge Analysis - Incremental Approach
Period Ending January 2019
Long Term Water Supply Investment

	<u>Actual</u>	<u>Adj.</u>	<u>Test Yr.</u>
Treatment			
Facility Plan	\$ 203,000		\$ 203,000
Construction Plans and Permitting	\$ 1,150,000		\$ 1,150,000
Construction	\$ 8,000,000		\$ 8,000,000
Construction Engineering and Inspection	\$ 800,000		\$ 800,000
Subtotal Treatment	<u>\$ 10,153,000</u>		<u>\$ 10,153,000</u>
Distribution			
Design (Pump Station)	\$ 70,000		\$ 70,000
Design (Hardins Landing to Kedron)	\$ 100,000		\$ 100,000
Construction (Pump Station)	\$ 600,000		\$ 600,000
Construction (Hardins Landing to Kedron)	\$ 1,100,000		\$ 1,100,000
Subtotal Distribution	<u>\$ 1,870,000</u>	\$ -	<u>\$ 1,870,000</u>
Secondary Projects			
16" Main from Relocated Meter to Crossing Cir Ext	\$ 4,900,000		\$ 4,900,000
12" Main from Main St to Cleburne Rd	\$ 1,700,000		\$ 1,700,000
12" Main Crossings Circle Extension	\$ 1,400,000		\$ 1,400,000
Relocate CPWS Master Meter	\$ 100,000		\$ 100,000
Booster Pump Station on Main St	\$ 1,400,000		\$ 1,400,000
Subtotal Secondary Projects	<u>\$ 9,500,000</u>	\$ -	<u>\$ 9,500,000</u>
Subtotal Treat, Dist & Secondary	<u><u>\$ 21,523,000</u></u>	\$ -	<u><u>\$ 21,523,000</u></u>

2019 Sewer System Development Charge Analysis
BOMA Approved Projects

**City of Spring Hill, Sewer System
System Development Charge Analysis - Incremental Approach
Period Ending June 2018
Summary**

Incremental Approach	
Annual Residential Sales (Gals)	841,836,736
Annual Residential Billings	168,776
Monthly Volume/Customer (Gals)	4,988
Annual Volume/Customer (Gals)	59,855
2.5 MGD Additional Capacity	912,500,000
Equivalent Residential Units (ERU)	15,245
Projected Investment in Treatment Plant	\$ 25,790,000
Average Investment/ERU	\$ 1,692

Meter Size (Inches)	Multiplier	Fee
5/8	1.00	\$ 1,692
3/4	1.20	\$ 2,030
1	1.60	\$ 2,707
1 1/2	2.40	\$ 4,060
2	3.20	\$ 5,413
3	4.80	\$ 8,120
4	6.40	\$ 10,827
6	9.60	\$ 16,240
8	12.80	\$ 21,653
10	16.00	\$ 27,067
12	19.20	\$ 32,480

Maximum Rated Flow GPM	Meter Size	Multiplier	Fee
20	5/8	1.00	\$ 1,692
30	3/4	1.50	\$ 2,538
50	1	2.50	\$ 4,229
100	1 1/2	5.00	\$ 8,458
160	2	8.00	\$ 13,533
320	3	16.00	\$ 27,067
500	4	25.00	\$ 42,292
1,000	6	50.00	\$ 84,584
1,600	8	80.00	\$ 135,334
4,200	10	210.00	\$ 355,252
5,300	12	265.00	\$ 448,294

City of Spring Hill, Sewer System
System Development Charge Analysis - Incremental Approach
Period Ending January 2019
2.5 MGD Treatment Plant Expansion

	<u>Actual</u>	<u>Adj.</u>	<u>Test Yr.</u>
Treatment			
Environmental/Permitting/Geotech	\$ 100,000		\$ 100,000
Water Quality Study (Rutherford Creek)	\$ 100,000		\$ 100,000
Biosolids Study/Environmental	\$ 100,000		\$ 100,000
Design/Permitting	\$ 1,780,000		\$ 1,780,000
Construction (Lining of Oxidation Ditch)	\$ 1,900,000		\$ 1,900,000
Construction (Plant Expansion)	\$ 19,600,000		\$ 19,600,000
CEI Services	\$ 2,210,000		\$ 2,210,000
Subtotal Expansion	<u>\$ 25,790,000</u>		<u>\$ 25,790,000</u>
Secondary			
Replace 8" w/ 12" gravity along McCutcheon	\$ 1,500,000	\$ (1,500,000)	\$ -
Replace 10" w/ 30" from Kedron	\$ 100,000	\$ (100,000)	\$ -
Replace 10" w/ 15" gravity from Hummingbird	\$ 200,000	\$ (200,000)	\$ -
Construct 18" gravity main along Crooked Creek	\$ 600,000	\$ (600,000)	\$ -
Subtotal Secondary	<u>\$ 2,400,000</u>	<u>\$ (2,400,000)</u>	<u>\$ -</u>
Subtotal Treatment & Secondary	<u>\$ 28,190,000</u>	<u>\$ (2,400,000)</u>	<u>\$ 25,790,000</u>

2019 Sewer System Development Charge Analysis
BOMA Approved Projects and Secondary Projects

City of Spring Hill, Sewer System
 System Development Charge Analysis - Incremental Approach
 Period Ending June 2018
 Summary

Incremental Approach	
Annual Residential Sales (Gals)	841,836,736
Annual Residential Billings	168,776
Monthly Volume/Customer (Gals)	4,988
Annual Volume/Customer (Gals)	59,855
2.5 MGD Additional Capacity	912,500,000
Equivalent Residential Units (ERU)	15,245
Projected Investment in Treatment Plant	\$ 28,190,000
Average Investment/ERU	\$ 1,849

Meter Size (Inches)	Multiplier	Fee
5/8	1.00	\$ 1,849
3/4	1.20	\$ 2,219
1	1.60	\$ 2,959
1 1/2	2.40	\$ 4,438
2	3.20	\$ 5,917
3	4.80	\$ 8,876
4	6.40	\$ 11,834
6	9.60	\$ 17,751
8	12.80	\$ 23,668
10	16.00	\$ 29,586
12	19.20	\$ 35,503

Maximum Rated Flow GPM	Meter Size	Multiplier	Fee
20	5/8	1.00	\$ 1,849
30	3/4	1.50	\$ 2,774
50	1	2.50	\$ 4,623
100	1 1/2	5.00	\$ 9,246
160	2	8.00	\$ 14,793
320	3	16.00	\$ 29,586
500	4	25.00	\$ 46,228
1,000	6	50.00	\$ 92,455
1,600	8	80.00	\$ 147,928
4,200	10	210.00	\$ 388,311
5,300	12	265.00	\$ 490,012

City of Spring Hill, Sewer System
System Development Charge Analysis - Incremental Approach
Period Ending January 2019
2.5 MGD Treatment Plant Expansion

	<u>Actual</u>	<u>Adj.</u>	<u>Test Yr.</u>
Treatment			
Environmental/Permitting/Geotech	\$ 100,000		\$ 100,000
Water Quality Study (Rutherford Creek)	\$ 100,000		\$ 100,000
Biosolids Study/Environmental	\$ 100,000		\$ 100,000
Design/Permitting	\$ 1,780,000		\$ 1,780,000
Construction (Lining of Oxidation Ditch)	\$ 1,900,000		\$ 1,900,000
Construction (Plant Expansion)	\$ 19,600,000		\$ 19,600,000
CEI Services	\$ 2,210,000		\$ 2,210,000
Subtotal Expansion	<u>\$ 25,790,000</u>		<u>\$ 25,790,000</u>
Secondary			
Replace 8" w/ 12" gravity along McCutcheon	\$ 1,500,000		\$ 1,500,000
Replace 10" w/ 30" from Kedron	\$ 100,000		\$ 100,000
Replace 10" w/ 15" gravity from Hummingbird	\$ 200,000		\$ 200,000
Construct 18" gravity main along Crooked Creek	\$ 600,000		\$ 600,000
Subtotal Secondary	<u>\$ 2,400,000</u>	\$ -	<u>\$ 2,400,000</u>
Subtotal Treatment & Secondary	<u>\$ 28,190,000</u>	\$ -	<u>\$ 28,190,000</u>

Meeting with Developers

City staff facilitated a meeting with developers to discuss the pending Ordinances and the approach taken to deriving the fee adjustments for both water and sewer development charges as well as the proposed phased implementation approach. The meeting was attended by four (4) different developers that provided for an interactive discussion between staff and the developers in attendance. Alderman Allen was in attendance along with City staff from multiple departments.

The developers expressed their understanding on the reasoning for the increase in water and sewer development charges and their correlation with specific water and sewer capital improvement projects. Some of the developers in attendance appeared to appreciate the phased approach but noted the time period between implementation phases was somewhat short and that consideration may be warranted for a longer period between phases. There was discussion on whether a phased approach was even necessary given the small amount of fee adjustment being proposed between phases in comparison to implementing the fee adjustments in one single step.

The developers in attendance were unified in their request that the City should consider not imposing the increased water and sewer system development charges on phases or sections of projects that are currently under construction where the increase in fees was not programmed into the developers financial pro forma. This would mean any subdivision or planned development project that has received construction plan approval for a particular phase or section of an approved project and is under construction would pay water and sewer system development charges based upon the fees in effect at the time of construction plan approval. Any phases or sections of an approved subdivision or planned development that have not received prior construction plan approval prior to the effective date of implementation of the initial adjustment in water and sewer system development charges would be required to pay the amended water and sewer system development charges in effect.

Staff was requested by Alderman Allen to prepare draft amendments for consideration by the Board that address the option of a single implementation step rather than a two-step implementation approach as well as introducing a provision that provides consideration for a phase or section of an approved subdivision or planned unit development that has received construction plan approval and is under construction prior to the effective date of the first phase of implementation that would be required to only pay the fees in effect on the date of construction plan approval. Similar consideration could also be given to phases or sections of developments that have received construction plan approval and are under construction prior to implementation of the second phase of fee adjustments that would be responsible for paying the fee structure that was in effect at the time of construction plan approval prior to implementing the second phase of fee adjustments. The draft language for these amendments are provided below for consideration by the Board. In order to incorporate into the Ordinance that has been approved on first reading, an amendment will be required that receives a favorable vote by a majority of the Board.

Single-Phase Implementation – Effective Date January 1, 2020 (Water and Sewer)

The following tables depict a single-phase implementation of water and sewer system development charges with an effective date of January 1, 2020.

Water System Development Charges							
Average Investment/ERU		\$1,243					
Meter Size	Multiplier	Proposed System Development Charge Fee	Current System "Reserve" Fee (*)	Difference	Effective Date - January 1, 2020	Tapping Fee (Adopted by Resolution 19-78)	Meter Fees (Adopted by Resolution 19-78)
5/8" M25	1.00	\$1,243	\$455	\$788	\$1,243	\$1,300	\$185.65
3/4" M25	1.20	\$1,491	\$455	\$1,036	\$1,491	\$1,300	\$185.65
1" M170	1.60	\$1,988	\$560	\$1,428	\$1,988	\$1,600	\$306.80
1.5" M120	2.40	\$2,982		\$2,982	\$2,982	\$1,900	\$489.32
2" Turbo Series	3.20	\$3,977	\$735	\$3,242	\$3,977	\$2,100	\$826.80
2" Compound	3.20	\$3,977	\$735	\$3,242	\$3,977	\$2,100	\$1,866.80
3" Turbo Series	4.80	\$5,965	\$980	\$4,985	\$5,965	\$2,800	\$962.00
3" Compound	4.80	\$5,965	\$980	\$4,985	\$5,965	\$2,800	\$2,210.00
4" Turbo Series	6.40	\$7,953	\$1,295	\$6,658	\$7,953	\$3,700	\$1,591.20
4" Compound	6.40	\$7,953	\$1,295	\$6,658	\$7,953	\$3,700	\$3,387.28
6" Turbo Series	9.60	\$11,930	\$1,645	\$10,285	\$11,930	\$4,700	\$3,744.00
6" Compound	9.60	\$11,930	\$1,645	\$10,285	\$11,930	\$4,700	\$4,758.00
8" Combo	12.80	\$15,907	\$3,045	\$12,862	\$15,907	\$8,700	\$7,124.00
10" Turbo Series	16.00	\$19,883		\$19,883	\$19,883	\$10,700	\$7,500.00
12" Turbo Series	19.20	\$23,860		\$23,860	\$23,860	\$12,700	\$8,200.00
Irrigation System Connection		Same as above based upon meter type and size	\$140	Varies based upon meter size	Same as above based upon meter type and size	Same as above plus \$25.00 Backflow Permit	Same as above based upon meter type and size

Sewer System Development Charges						
Average Investment/ERU		\$1,692				
Meter Size	Multiplier	Proposed System Development Charge Fee	Current System" Reserve" Fee - Varies by Land Use Type (See Table)	Difference	Effective Date - January 1, 2020	Sewer Connection Fee
5/8"	1.00	\$1,692	Adopted by Ordinance 86-42 and Ordinance 97-20		\$1,692	4-inch Tap (Residential - Single-Family, Duplex, Townhome) = \$1,100; Multifamily = \$600/dwelling unit; 6-inch Tap (Residential or Commercial) = \$1,300; 8-inch Tap (Residential or Commercial) = \$1,600; 10-inch or larger = To be determined by City Engineer.
3/4"	1.20	\$2,030			\$2,030	
1"	1.60	\$2,707			\$2,707	
1.5"	2.40	\$4,060			\$4,060	
2"	3.20	\$5,413			\$5,413	
3"	4.80	\$8,120			\$8,120	
4"	6.40	\$10,827			\$10,827	
6"	9.60	\$16,240			\$16,240	
8"	12.80	\$21,653			\$21,653	
10"	16.00	\$27,067			\$27,067	
12"	19.20	\$32,480			\$32,480	

Notes: (*) - Connection Charges as reflected in Title 18, Chapter 1, Sections 18-108 and 18-109 of Spring Hill Code of Ordinances; See also Resolution 02-17 (Reserve Fee increase from \$0.28 to \$0.35 times water tap fee)

Amendment to Recognize Prior Approved Construction Plans for Phases/Sections of Subdivisions and Planned Developments Under Construction

Ordinance 19-32 (Water System Development Charge)

5. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval from the City and are under construction prior to the effective date of the initial implementation phase of this Ordinance (January 1, 2020) shall pay the water system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

6. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval after January 1, 2020 and are under construction prior to the effective date of second implementation phase this Ordinance (July 1, 2020) shall pay the water system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

Ordinance 19-33 (Sewer System Development Charge)

4. Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval from the City and are under construction prior to the effective date of the initial implementation phase of this Ordinance (January 1, 2020) shall pay the sewer system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.

5. *Phases or Sections of Subdivisions or Planned Unit Developments that received preliminary plat and construction plan approval after January 1, 2020 and are under construction prior to the effective date of the second implementation phase of this Ordinance (July 1, 2020) shall pay the sewer system development charge in effect at the time construction plan approval was granted by the City of Spring Hill.*