SPRINGDALE WATER AND SEWER, LLC
DOCKET NO. W-1324, SUB 0

ROYAL OAKS, INC.
DOCKET NO. W-406, SUB 6

TESTIMONY OF D. MICHAEL FRANKLIN
ON BEHALF OF THE PUBLIC STAFF
NORTH CAROLINA UTILITIES COMMISSION

MARCH 18, 2020

Q. PLEASE STATE FOR THE RECORD YOUR NAME, BUSINESS ADDRESS, AND PRESENT POSITION.

A. My name is D. Michael Franklin. My business address is 430 North Salisbury Street, Dobbs Building, Raleigh, North Carolina. I am a Utilities Engineer with the Water, Sewer & Telephone Division of the Public Staff – North Carolina Utilities Commission (Public Staff).

Q. BRIEFLY STATE YOUR QUALIFICATIONS AND EXPERIENCE RELATING TO YOUR PRESENT POSITION WITH THE PUBLIC STAFF.

A. I graduated from the University of South Carolina, earning a Bachelor of Science Degree in Engineering. I worked in the electric utility industry for 33 years prior to joining the Public Staff in June 2019. While employed by the Public Staff I have presented recommendations in water/wastewater rate proceedings before the Commission.

Q. WHAT ARE YOUR DUTIES IN YOUR PRESENT POSITION?

A. My duties with the Public Staff are to monitor the operations of regulated water and wastewater utilities with regard to rates and service. Included in these duties are conducting field investigations to review, evaluate, and recommend changes, when needed, in the design, construction, and operations of regulated water and wastewater utilities; presentation of expert testimony in formal hearings; and presentation of information, data, and recommendations to the Commission.

Q. PLEASE DESCRIBE THE SCOPE OF YOUR INVESTIGATION IN THIS CASE.

A. On October 4, 2019, Springdale Golf Partners, LLC and Springdale Water & Sewer, LLC (Springdale), filed an Application with the Commission seeking authority to transfer a public utility franchise and for approval of rates for providing water and sewer utility service in Springdale Estates Subdivision and Springdale Country Club (together, Springdale Estates) in Haywood County, North Carolina. On January 27, 2020, the Commission issued the Order Scheduling Hearings and Requiring Customer Notice.

My investigation included a field inspection, review of company records, review of consumer statements, review of records from the North Carolina Department of Environmental Quality (NCDEQ), and gathering information from other sources. I have conducted an analysis of revenues at existing and proposed rates, assisted Public Staff

Accountant Iris Morgan in reviewing capital improvements and expenses, and designed water and wastewater rates to generate the service revenue requirement calculated by the Public Staff.

Q. PLEASE DESCRIBE THE PURCHASE AND OWNERSHIP OF THE WATER AND SEWER UTILITY ASSETS.

A. On March 28, 2018, by General Warranty Deed recorded with the Haywood County Register of Deeds and a Bill of Sale, Springdale Golf Partners, LLC purchased from Royal Oaks, Inc. (Royal Oaks), the real and personal property that included all assets used in connection with the operation of the existing Springdale Estates Water System including wells, pipes and pipelines, pumps, pump houses, storage tanks, maintenance buildings and the Springdale Estates Wastewater System, including the sewer collection system and the wastewater treatment plant, and all sewer related appurtenances. Neither Springdale Golf Partners, LLC nor Royal Oaks requested North Carolina Utilities Commission approval prior to the transfer of ownership of the public utility franchise.

Filings on the North Carolina Secretary of State's website indicate Springdale Golf Partners, LLC and Springdale Water and Sewer, LLC are owned by the same individuals: Alexander West, Sr. (50%) and Alexander West, Jr. (50%).

Springdale desires that the water and sewer systems be owned and operated under Springdale Water and Sewer, LLC. The Public Staff recommends that any Commission Order require that Springdale Golf Partners, LLC provide evidence of transfer (all necessary deeds, easements, and bill of sale) to Springdale Water and Sewer, LLC within 30 days of such Order.

Q. PLEASE DESCRIBE THE SERVICE AREA.

A. The Springdale service area is located east of US-276 W between East Fork Ranch Road and Harley Creek Road in southeast Haywood County, 12 miles east of Waynesville, NC. There are currently 106 residential customers and 7 commercial customers. Five commercial customers and 45 residential customers receive metered water and wastewater utility service. Two commercial and 61 residential customers receive metered water-only utility service. All commercial customers are part of the Springdale Country Club.

Q. HAS SPRINGDALE PROVIDED CUSTOMER NOTICE, AS REQUIRED, DURING THIS PROCEEDING?

A. Yes, Springdale has provided the required customer notification. Springdale filed a Certificate of Service, dated January 29, 2020, following the Order issued on January 27, 2020.

Q. HAVE YOU RECEIVED ANY CUSTOMER COMPLAINTS AS A RESULT OF THE CUSTOMER NOTICE AND HEARING IN THIS PROCEEDING?

A. The Public Staff received twelve consumer statements by email. Of the emails received, nine stated concerns regarding Springdale's proposed increase amount and three were concerns regarding the zero usage, base charge increase, which applies regardless of usage. Those concerned with the base charge increase were individuals living in Springdale Estates part time. Other concerns identified in the consumer statements were water quality (3), frequency of outages (3), and timing of the customer hearing (2).

No consumer statements identified concerns regarding the transfer of public utility franchise from Royal Oaks to Springdale or the operational performance of the wastewater system.

A customer hearing was held on March 11, 2020, in Waynesville, North Carolina, with 5 individuals providing customer testimony. At the conclusion of the hearing, Springdale agreed to provide a response to the concerns expressed in the customer testimony by no later than April 1, 2020.

Q. IS THE UTILITY SYSTEM IN COMPLIANCE WITH NCDEQ REGULATIONS?

A. I have reviewed Public Water Supply Section (PWSS) records and received information on the Springdale Estates Water System from Mr. William P. Conner of the Asheville Regional Office of PWSS. Mr. Conner recently conducted a sanitary survey of the water system, and sent a letter to Springdale, dated November 14, 2019, which states in part, ". . . no deficiencies were identified."

I received information from Ms. Mikal Willmer of the Asheville Regional Office of The Water Quality Regional Operations Section on the Springdale Estates Wastewater System. The most recent Compliance Evaluation Inspection occurred on November 30, 2016, when Royal Oaks was the system owner. The December 19, 2016 letter to Royal Oaks documenting the inspection results states in part, ". . . the system was determined to be in compliance with Permit NC0040355." The inspection stated the facility still had rust issues (from the previous inspection) and should be repainted to extend the overall lifespan of the system and recommended that, at a minimum, the two primary aeration basins be repainted.

The Water System and the Wastewater System currently have no open or unresolved Notices of Violation.

Q. ARE THERE ANY UNRESOLVED NOTICES OF VIOLATION BY NCDEQ, DIVISION OF WATER RESOURCES IN THE PAST THREE YEARS?

A. No. The water system and wastewater system have not been issued any unresolved Notices of Violation by NCDEQ in the past three years. Based on information provided by Springdale and NCDEQ, and the Public Staff's investigation, I have found Springdale is providing adequate service to the customers.

Q HAS THE PUBLIC STAFF HAD THE OPPORTUNITY TO VISIT AND TOUR THE EXISTING WATER AND WASTEWATER SYSTEMS?

A. Yes, on March 11, 2020, David Furr of the Public Staff and I, accompanied by Mr. Buddy Lawrence and Mr. Gifford Raulerson, representatives from Springdale, visited and visually inspected the Springdale water and wastewater systems.

Springdale's water system operates under DEQ Permit NC0144113, which is renewed annually. The system consists of two wells and well houses with required appurtenances including sand filters and a 45,000-gallon ground storage tank located at a higher elevation than Springdale Estates. The water system also includes a chemical treatment facility with chemical addition apparatus, two chlorine contact tanks, two booster pumps, and mains and distribution lines. The water system equipment appeared to be in adequate condition.

Public Staff water system recommendations made to Springdale included signage posting prohibiting the use of chemicals within a 100-foot radius of the well houses; separating the electrical service to the

well houses and chemical treatment facility from the golf course electrical loads; installing system flushing capabilities at system low points; and performing water testing for chlorine residual at the ground storage tank.

The Springdale Wastewater Treatment Plant (WWTP) is approved and operated under National Pollutant Discharge Elimination System (NPDES) Permit No. NC0040355. The system consists of an equalization basin and two operating aeration packages: a 0.025 million gallons per day (MGD) package and a 0.015 MGD package. Two 0.0075 MGD aeration packages are also installed but not in use. A settling basin is also part of the wastewater system and according to Springdale's wastewater system operator, Mountain Water, the volume of the settling basin is 12,000 gallons. There is visible rust on all installed equipment, although currently it does not appear to adversely affect system operation.

Public Staff wastewater system recommendations made to Springdale were to implement the recommendations identified in NCDEQ's November 30, 2016 Compliance Evaluation Inspection.

Q. WHAT ARE THE PRESENT AND PROPOSED RATES?

A. The present water and sewer rates were established by Order dated November 22, 2016, in Docket No. W-406, Sub 5 and Docket No. M-100, Sub 138. Under the present monthly metered water rate base

charge, zero usage is $6.59, and the usage charge is $2.63 per 1,000 gallons. The Springdale proposed monthly metered water rate base charge, zero usage is $30.00 and a usage charge of $4.00 per 1,000 gallons.

The present monthly metered sewer rate base charge, zero usage is $10.81 and a usage charge of $3.76 per 1,000 gallons. The Springdale proposed monthly metered sewer rate base charge, zero usage is $36.00 and a usage charge of $5.00 per 1,000 gallons.

Springdale is also proposing raising connection charges to existing mains. A water tap connection would increase from $350.00 to $1,000.00. A sewer tap connection would increase from $950.00 to $1,250.00.

Q. WHAT ARE THE ANNUAL SERVICE REVENUES UNDER PRESENT AND SPRINGDALE PROPOSED RATES?

A. The annual water and wastewater revenues are as follows:

Rate Type	Current Revenue	Proposed Revenue
Water	$21,967	$60,499
Wastewater	$16,873	$35,412
Total	$38,840	$95,911

The annual service revenues are based on an average usage of 3,654 gallons per month for water and 4,604 gallons for wastewater. My calculation of current and proposed revenue is provided in Franklin Exhibit 1.

Q. HAVE YOU RECOMMENDED ANY ADJUSTMENTS TO OPERATING EXPENSES?

A. Yes, I have provided Public Staff Accountant Iris Morgan with recommendations for adjustments to expenses related to water and wastewater system testing, purchased power, permit fees, and sludge removal expenses. Each is discussed in more detail as follows:

WATER AND WASTEWATER SYSTEM TESTING EXPENSES

I reviewed Springdale's water system and wastewater system testing expenses. The types of water system and wastewater system tests that must be performed and the testing frequency are determined by NCDEQ compliance standards for the Safe Drinking Water Act for the water system and Springdale's NPDES permit for the wastewater system. Springdale has an agreement with Mountain Water to provide drinking water and wastewater operations at a cost of $1,500 per month. Included in the agreement is Mountain Water's performance of various testing for both the water and wastewater systems and the issuance of monthly and annual reports. However, the cost of some testing required by NCDEQ or the NPDES permit are not covered in the Mountain Water agreement.

Comparing the testing required by NCDEQ and the NPDES permit to the testing covered by the Mountain Water agreement resulted in an additional annual testing fee expense of $629 for the water system and $134 for the wastewater system. Details of my analysis are included in Franklin Exhibit 2.

PURCHASED POWER

Springdale provided test year receipts for purchased power from Haywood Electric Membership Corporation. The receipts were for four different electric meter numbers and corresponding account descriptions. Based upon my review of the receipts, those for account description “Water Storage Tank” (meter number 10-010-783) and “Pump Sewage Treatment Plant 11” (meter number 10-005-796) are considered applicable to the filing. The invoices associated with “Pump 01 GC Pumphouse” (meter number 10-033-385) were discussed with Springdale during the site visit on March 11, 2020. According to Springdale, the water system wells and the chemical treatment equipment are on the same meter as the electrical loads for the golf course.

To determine the purchased power expense allowed for operating the Springdale water system wells and chemical treatment equipment, the monthly invoices for meter 10-033-385 were reviewed. Assuming golf course loads in the North Carolina Mountains will be lower in the late Fall and early Winter months, the monthly invoices for the months of

November 2018 through February 2019 were averaged. This average monthly rate was then used to determine the annual purchased power amount for the Springdale water system wells and chemical treatment equipment. As a result, I adjusted the water system purchased power expense to $10,558; $10,147 for the Springdale wells and chemical treatment equipment and $411 for the storage tank operation.

Additionally, a single invoice for meter 10-001-464 for $32.49 was provided by Springdale. However, Springdale could not identify the location or purpose of the meter, resulting in this amount being disallowed. In conclusion, a total of $5,093 was disallowed for water system purchased power. No adjustments were made for wastewater system purchased power.

PERMIT FEES

In the Application, Springdale identified only the permit fees for the wastewater system as an expense. Review of the NCDEQ website for the water system shows that a permit fee of $330 was paid to NCDEQ for the water system. As a result, the permit fees were adjusted to include the $330 paid to NCDEQ for water system permitting.

SLUDGE REMOVAL

Springdale did not list any expenses for sludge removal in the Application. The Public Staff discussed sludge removal expenses with the wastewater system operator to determine the frequency and

volume of sludge removal. The operator stated that sludge is removed approximately once a year using a 2,000-gallon pumping truck. Based on this information, the Public Staff adjusted the sludge removal expense from $0 to $350.

Q. ARE THERE ANY CLARIFICATIONS NEEDED ON ALLOWED OPERATING EXPENSES?

A. Yes, a clarification is needed on the allowed Chemical expenses. In response to Date Request 1.e), Springdale could only provide limited chemical invoices that totaled less than the chemical expense values identified in the Application of $607 for the water system and $600 for the wastewater system. The Public Staff discussed the chemical expenses with the water system and wastewater system operator to determine the validity of the chemical expense values in the Application. The chemical expenses were then calculated using the chemicals and chemical quantities provided by the operator and the chemical unit cost shown on the invoices that Springdale provided in response to DR 1.e). Where an invoice for the chemical was not provided, online searches of chemical vendors were used to determine the typical chemical unit cost. The calculation resulted in chemical expenses higher than those contained in the Application. As a result, the chemical expense Application amount is considered acceptable and no adjustments were made.

Q. WHAT ADJUSTMENTS HAVE YOU RECOMMENDED TO PLANT IN SERVICE?

A. I have assisted Public Staff Accountant Iris Morgan in review of plant in service and made the following recommendations:

RECLASSIFIED ITEMS

I have recommended the following item be classified as a capital expense for the water system:

Well Pump and Motor Replacement	$8,537

I have recommended the following item be classified as a capital expense for the wastewater system:

Blower Replacement	$2,126

DEPRECIATION LIVES

I have recommended the following service lives for the capitalized items:

Well Pump and Motor	7 years
Blower	10 years

Q. WHAT RATES ARE RECOMMENDED BY THE PUBLIC STAFF?

A. The Public Staff recommended monthly metered water rate base charge, zero usage is $9.35 and a usage charge of $3.75 per 1,000 gallons. The recommended monthly metered sewer rate base charge, zero usage is $12.30 and a usage charge of $3.85 per 1,000 gallons.

The Public Staff's recommended rates result in an average monthly metered water bill of $23.04 and average monthly metered water and sewer bill of $53.04. The rate design is provided as Franklin Exhibit 3.

Springdale proposed an increase in its connection charges from $350 to $1,000 for a water tap to existing mains and from $950 to $1,250 for a sewer tap to existing mains. Springdale could not provide sufficient justification for the increase in these charges. As a result, the Public Staff is recommending no changes to the connection charges.

Q. WHAT IS THE BOND AMOUNT RECOMMENDED FOR THE WATER AND WASTEWATER SYSTEMS?

A. The Public Staff recommends a bond of $25,000 for the water system. The system has adequate capacity and water storage, appears to be in good condition, and the current certified operator has a long history operating the system. The new owner, Springdale, plans to make upgrades to the system to facilitate better operation and water quality. No near term expansion of the system should be necessary. The $25,000 would cover a large part of replacement of a water storage tank or be adequate to cover a significant equipment repair/replacement.

The Public Staff recommends a bond of $25,000 for the wastewater system. The system has more than adequate capacity with multiple trains, and the current certified operator has a long history operating

the system. The new owner, Springdale, plans to make upgrades to the system to improve the condition of the treatment facility. No near term expansion of the system should be necessary. The $25,000 would cover a large part of resolving the necessary rust issues if not done by the new owner, or be adequate to cover a significant equipment repair/replacement.

These bond amounts are based on the assumption that the utility will be owned and operated by Springdale Water and Sewer, LLC, separate from the developer, Springdale Golf Partners, LLC. Due to developer risks, higher bonds would be recommended if the systems were to be owned and operated directly by the development company.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

DOCKET NOS. W-1324, SUB 0 and W-406, SUB 6
SPRINGDALE WATER AND SEWER, LLC - SPRINGDALE ESTATES SUBDIVISION AND SPRINGDALE COUNTRY CLUB

FRANKLIN EXHIBIT 1 - REVENUE AT PRESENT (CURRENT) AND PROPOSED RATES

Prepared by: D. Michael Franklin (Public Staff - Water, Sewer and Telephone)

3,654 Gallons Water (Test Year Monthly Usage based on Billing Spreadsheet)
4,604 Gallons Sewer

Present Revenue

Rate Description	Base Charge - Water	Base Charge - Sewer	Accounts	Base Charge Monthly	Total Annual Base Charge	Usage Annual Total (Gallons)	Usage Rate (Per 1000 Gallons)	Total Annual Usage Charge	Total Present Revenue (Base + Usage)
Water	$ 6.59		113	$ 744.67	$ 8,936.04	4,954,824	$ 2.63	$ 13,031.19	$ 21,967.23
Sewer		$ 10.81	50	$ 540.50	$ 6,486.00	2,762,400	$ 3.76	$ 10,386.62	$ 16,872.62

Proposed Revenue

Rate Description	Base Charge - Water	Base Charge - Sewer	Accounts	Base Charge Monthly	Total Annual Base Charge	Usage Annual Total (Gallons)	Usage Rate (Per 1000 Gallons)	Total Annual Usage Charge	Total Proposed Revenue (Base + Usage)
Water	$ 30.00		113	$3,390.00	$40,680.00	4,954,824	$ 4.00	$ 19,819.30	$60,499.30
Sewer		$ 36.00	50	$1,800.00	$21,600.00	2,762,400	$ 5.00	$ 13,812.00	$35,412.00

Franklin Exhibit 2 (Page 1 of 2)

DOCKET NOS. W-1324, SUB 0 and W-406, SUB 6

SPRINGDALE WATER AND SEWER, LLC - SPRINGDALE ESTATES SUBDIVISION AND SPRINGDALE COUNTRY CLUB

NC0144113, 2 wells

Water Quality Testing Expenses

Cost based on ETS Cost Sheet

Test		No. of Tests	Freq. of Tests	Annual Tests	Cost Per Sample	Annual Expense	
Coliform Bacteria	S	12	per year	12.00	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
Asbestos	D01	1	per 9 years	0.11	$ 150.00	$ 17	
TTHM	D01	1	per 3 years	0.33	$ 60.00	$ 20	
HAA5	D01	1	per 3 years	0.33	$ 160.00	$ 53	
Lead/Copper	D01	5	per 3 years	1.67	$ 25.00	$ 42	
Inorganics	EP1	1	per 3 years	0.33	$ 250.00	$ 83	
Secondaries	EP1	1	per 3 years	0.33	$ 80.00	$ 27	estimated
VOCs	EP1	1	per 3 years	0.33	$ 140.00	$ 47	
SOCs	EP1	1	per 3 years	0.33	$ 850.00	$ 283	
Nitrate	EP1	1	per year	1.00	$ 18.00	$ 18	
Radiologicals							
Gross Alpha	EP1	1	per 9 years	0.11	$ 85.00	$ 9	
Comb. Uranium	EP1	1	per 9 years	0.11	$ 85.00	$ 9	
Comb. Rad.	EP1	1	per 6 years	0.17	$ 125.00	$ 21	
Annual CCR		1	per year	1.00	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
			Average Annual Water Testing Expense			**$ 629**	

Franklin Exhibit 2 (Page 2 of 2)

DOCKET NOS. W-1324, SUB 0 and W-406, SUB 6

SPRINGDALE WATER AND SEWER, LLC - SPRINGDALE ESTATES SUBDIVISION AND SPRINGDALE COUNTRY CLUB

Wastewater NPDES Required Tests (Permit NC0040355)

Test		No. of Tests	Freq. of Tests	Annual Tests	Cost Per Sample	Annual Expense	
Flow	I or E	Continuous	Continuous		$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
Total Residue Chorine (TRC)	E	2	Week	52.00	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
BOD	E	1	Week	0.33	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
Total Suspended Solids (TSS)	E	1	Week	0.33	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
Fecal Coliform	E	1	Week	0.33	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
Temperature	E	1	Week	0.33	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
pH	E	1	Week	0.33	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
NH3 (Ammonia)	E	2	Month	0.67	$ -	$ -	cost paid for by Mountain Water Contract ($1,500 per month)
Total Nitrogen (NO2+NO3+TKN)	E	2	per year	2.00	$ 45.00	$ 90	
Total Phosphorus	E	2	per year	2.00	$ 22.00	$ 44	

Average Annual Wastewater Testing Expense $ 134

Total Average Annual Testing Expense $ 763

DOCKET W-1324, SUB 0 and W-406, SUB 6
SPRINGDALE WATER AND SEWER, LLC - SPRINGDALE ESTATES SUBDIVISION AND SPRINGDALE COUNTRY CLUB

FRANKLIN EXHIBIT 3 - RATE DESIGN

Prepared by: D. Michael Franklin (Public Staff - Water, Sewer and Telephone)

WATER

Revenue Requirement	**$**	**31,237**
Total EOP Metered Customers		113
Annual Metered Customer Billings		1,356
Total Adjusted Annual Metered Usage		4,954,824 gallons

Monthly Metered Rates, Monthly Base Charge, Zero Usage

Recover approx. 40% of metered revenue requirement

$	31,237	x	40.59%	=	$	12,679
$	12,679	/	1,356	=	$	9.35

Set Base Charge at **$ 9.35**

Revenue From Base Charge

$	9.35	x	1,356	=	$	12,679

Usage Charge

Usage Revenue Requirement

$	31,237	-	$ 12,679	=	$	18,558

Usage Charge per 1,000 gallons

$	18,558	/	4,954.82	=	$	3.75

Set Usage Charge at **$ 3.75** per 1 Kgal

Revenue from Usage Charge

$	3.75	x	4,954.82	=	$	18,558

SEWER

Revenue Requirement	**$**	**18,004**
Total EOP Metered Customers		50
Annual Metered Customer Billings		600
Total Adjusted Annual Metered Usage		2,762,400

Monthly Metered Rates, Monthly Base Charge, Zero Usage

Recover approx. 40% of metered revenue requirement

$	18,004	x	40.98%	=	$	7,378
$	7,378	/	600	=	$	12.30

Set Base Charge at **$ 12.30**

Revenue From Base Charge

$	12.30	x	600	=	$	7,378

Usage Charge

Usage Revenue Requirement

$	18,004	-	$ 7,378	=	$	10,626

Usage Charge per 1,000 gallons

$	10,626	/	2,762.40	=	$	3.85

Set Usage Charge at **$ 3.85** per 1 Kgal

Revenue from Usage Charge

$	3.85	x	2,762.40	=	$	10,626