

Appendix 2.1

Project Stakeholders NPDES Permit Summary

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## SUMMARY OF NPDES PERMIT LIMITATIONS FOR RUTHERFORD COUNTY WWTP'S

PLANT	FOREST CITY SECOND BROAD RIVER			FOREST CITY RIVERSTONE			FOREST CITY DRG		
NPDES PERMIT NO:	NC0025984			NC0087084			NC0083275		
PERMIT EXPIRATION DATE:	41486						7/31/2008		
PARAMETER	Effluent Limitations			Effluent Limitations			Effluent Limitations		
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum
Flow (MGD)	4.95 MGD			0.05 MGD			0.91 MGD		
BOD <sub>5</sub>	25.5 mg/L	38.25 mg/L		30 mg/L	45 mg/L		140 lbs/day	272 lbs/day	
COD							2219 lbs/day	3440 lbs/day	
Total Suspended Solids	30 mg/L	45 mg/L		30 mg/L	45 mg/L		322 lbs/day	726 lbs/day	
NH <sub>3</sub> - N (April - October)	10.0 mg/L	30.0 mg/L							
NH <sub>3</sub> - N (Nov. - March)	10.0 mg/L	30.0 mg/L							
Dissolved Oxygen	> 6.0 mg/L								
Fecal Coliform (geo. mean)	200 / 100 ml	400 / 100 ml		200 / 100 ml	400 / 100 ml				
pH	> 6.0 & < 9.0			> 6.0 & < 9.0			> 6.0 & < 9.0		
Total Residual Chlorine			28 µg/L			28 µg/L			
Temperature, °C	M&R - Daily			M&R - Weekly			M&R - Weekly		
Total Nitrogen	M&R - Quarterly						M&R - Semi-Annually		
Total Phosphorus	M&R - Quarterly						M&R - Semi-Annually		
Total Cadmium									
Total Cyanide			22 µg/L						
Total Copper							M&R - Quarterly		
Total Zinc							M&R - Quarterly		
Total Selenium									
Total Silver									
Chlorides									
Chronic Toxicity Eff. Conc	P/F Quarterly @ 18%						P/F Quarterly @ 0.75%		
Acute Toxicity				P/F Quarterly					
Sulfide							7.0 lbs/day	8.2 lbs/day	
Phenols							3.5 lbs/day	8.2 lbs/day	
Total Chromium							3.5 lbs/day	8.2 lbs/day	
Oil & Grease							30 mg/L	60 mg/L	
Conductivity							M&R - Monthly		
Color							M&R - Monthly		
BOD <sub>5</sub> & TSS Removal	85% Removal (min)			85% Removal (min)					
Alkalinity									
Aluminum									
Chronic Toxicity Eff. Conc	18%			Acute Tox. No Dilution Avail.			0.75%		
Receiving Stream	Second Broad River			Broad River			Broad River		
Stream Estimated 7Q10	51 cfs +			66 cfs ++ (per sta near Chimney Rock)			66 cfs ++ (per sta near Chimney Rock)		

<sup>1</sup> Spindale effluent limits are for a tiered permit at 3.0 MGD for average monthly flows < 2.4 MGD. The 4.5 MGD permit limits are for Q = 2.4 to 3.6 MGD and the 6.0 MGD per

<sup>2</sup> Rutherfordton effluent limits are for a tiered permit at 1.0 MGD for average monthly flow up to 0.8 MGD. The 3.0 MGD permit limits are for Q > 0.8 up to 3.0 MGD.

<sup>3</sup> Cliffside WWTP effluent limits are for a tiered permit at 0.05 MGD for average monthly flow up to 0.05 MGD. The 1.75 MGD permit limits are for Q > 0.05 up to 1.75 MGD.

## SUMMARY OF NPDE

PLANT										SPINDALE									
NPDES PERMIT NO:		NC0020664				NC0020664				NC0020664									
PERMIT EXPIRATION DATE:		7/31/2018				7/31/2018				7/31/2018									
PARAMETER	Effluent Limitations @ 3.0 (2.4) MGD <sup>1</sup>			Effluent Limitations @ 4.5 (2.4 -3.6) MGD <sup>1</sup>			Effluent Limitations @ 6.0 (> 3.6) MGD <sup>1</sup>												
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum										
Flow (MGD)	3.0 MGD			4.5 MGD			6.0 MGD												
BOD <sub>5</sub>	22.5 mg/L	38.2 mg/L		22.5 mg/L	38.2 mg/L		22.5 mg/L	38.2 mg/L											
COD																			
Total Suspended Solids	30 mg/L	45 mg/L		30 mg/L	45 mg/L		30 mg/L	45 mg/L											
NH <sub>3</sub> - N (April - October)	10.0 mg/L	30.0 mg/L		3.2 mg/L	9.6 mg/L		2.7 mg/L	8.1 mg/L											
NH <sub>3</sub> - N (Nov. - March)	10.0 mg/L	30.0 mg/L		7.7 mg/L	23.1 mg/L		6.2 mg/L	18.6 mg/L											
Dissolved Oxygen	> 6.0 mg/L			> 6.0 mg/L			> 6.0 mg/L												
Fecal Coliform (geo. mean)	200 / 100 ml	400 / 100 ml		200 / 100 ml	400 / 100 ml		200 / 100 ml	400 / 100 ml											
pH	> 6.0 & < 9.0			> 6.0 & < 9.0			> 6.0 & < 9.0												
Total Residual Chlorine			28 µg/L			28 µg/L			28 µg/L										
Temperature, °C	M&R - Daily			M&R - Daily			M&R - Daily												
Total Nitrogen	M& R - Quarterly			M& R - Quarterly			M& R - Quarterly												
Total Phosphorus	M& R - Quarterly			M& R - Quarterly			M& R - Quarterly												
Total Cadmium							M&R - 2/Month												
Total Cyanide							15.8 µg/L		155.4 µg/L										
Total Copper	M& R - Quarterly			M& R - Quarterly			M& R - Quarterly												
Total Zinc	M& R - Quarterly			M& R - Quarterly			M& R - Quarterly												
Total Selenium	M& R - Quarterly			M& R - Quarterly															
Total Silver	M& R - Quarterly			M& R - Quarterly			M& R - Quarterly												
Chlorides	M& R - Quarterly			M& R - Quarterly			M& R - Quarterly												
Chronic Toxicity Eff. Conc	P/F Quarterly @ 19%			P/F Quarterly @ 26%			P/F Quarterly @ 32%												
Acute Toxicity																			
Sulfide																			
Phenols																			
Total Chromium																			
Oil & Grease																			
Conductivity																			
Color																			
BOD <sub>5</sub> & TSS Removal	85% Removal (min)			85% Removal (min)			85% Removal (min)												
Alkaninity																			
Aluminum																			
Chronic Toxicity Eff. Conc	19%			26%			32%												
Receiving Stream	Cathey's Ck			Cathey's Ck			Cathey's Ck												
Stream Estimated 7Q10	14 cfs (Cathey's Ck near Ruth)			14 cfs (Cathey's Ck near Ruth)			14 cfs (Cathey's Ck near Ruth)												

<sup>1</sup> Spindale effluent limits are for amit limits are for Q = > 3.6 MGD.

<sup>2</sup> Rutherfordton effluent limits are

<sup>3</sup> Cliffside WWTP effluent limits are

## SUMMARY OF NPDE

PLANT	RUTHERFORDTON					
NPDES PERMIT NO:	NC0025909			NC0025909		
PERMIT EXPIRATION DATE:	7/31/2013			7/31/2013		
PARAMETER	Effluent Limitations @ 1.0 (0.8) MGD <sup>2</sup>			Effluent Limitations @ 3.0 (> 0.8) MGD <sup>2</sup>		
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum
Flow (MGD)	1.0 MGD			3.0 MGD		
BOD <sub>5</sub>	30 mg/L	45 mg/L		30 mg/L	45 mg/L	
COD						
Total Suspended Solids	30 mg/L	45 mg/L		30 mg/L	45 mg/L	
NH <sub>3</sub> - N (April - October)	2.0 mg/L	6.0 mg/L		1.0 mg/L	3.0 mg/L	
NH <sub>3</sub> - N (Nov. - March)	4.7 mg/L	14.1 mg/L		2.0 mg/L	6.0 mg/L	
Dissolved Oxygen	> 5.0 mg/L			> 5.0 mg/L		
Fecal Coliform (geo. mean)	200 / 100 ml	400 / 100 ml		200 / 100 ml	400 / 100 ml	
pH	> 6.0 & < 9.0			> 6.0 & < 9.0		
Total Residual Chlorine			28 µg/L			24 µg/L
Temperature, °C	M&R - Daily			M&R - Daily		
Total Nitrogen	M&R - Quarterly			M&R - Quarterly		
Total Phosphorus	M&R - Quarterly			M&R - Quarterly		
Total Cadmium	M&R - 2/Month					
Total Cyanide		11.0 µg/L	22.0 µg/L		7.0 µg/L	22.0 µg/L
Total Copper			40.0 µg/L			25.0 µg/L
Total Zinc			339.0 µg/L			216.0 µg/L
Total Selenium						
Total Silver	M&R - 2/Month			M&R - 2/ month		
Chlorides						
Chronic Toxicity Eff. Conc	P/F Quarterly @ 45%			P/F Quarterly @ 71%		
Acute Toxicity						
Sulfide						
Phenols						
Total Chromium						
Oil & Grease						
Conductivity						
Color						
BOD <sub>5</sub> & TSS Removal	85% Removal (min)			85% Removal (min)		
Alkalinity						
Aluminum						
Chronic Toxicity Eff. Conc	45%			71%		
Receiving Stream	Cleghorn Creek					
Stream Estimated 7Q10	Unknown					

<sup>1</sup> Spindale effluent limits are for a

<sup>2</sup> Rutherfordton effluent limits are

<sup>3</sup> Cliffside WWTP effluent limits are

## SUMMARY OF NPDE

PLANT	CLIFFSIDE						LAKE LURE		
NPDES PERMIT NO:	NC0004405			NC0004405			NC0025381		
PERMIT EXPIRATION DATE:	7/31/2013			7/31/2013			8/31/2013		
PARAMETER	Effluent Limitations @ 0.05 MGD <sup>3</sup>			Effluent Limitations @ 1.75 MGD <sup>3</sup>			Effluent Limitations		
	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum	Monthly Average	Weekly Average	Daily Maximum
Flow (MGD)	0.05 MGD			1.75 MGD			0.995 MGD		
BOD <sub>5</sub>	113.7 lbs/day	225.2 lbs/day		113.7 lbs/day	225.2 lbs/day		30 mg/L	45 mg/L	
COD	1344.2 lbs/day	2688.4 lbs/day		1344.2 lbs/day	2688.4 lbs/day				
Total Suspended Solids	291.7 lbs/day	581.3 lbs/day		291.7 lbs/day	581.3 lbs/day		30 mg/L	45 mg/L	
NH <sub>3</sub> - N (April - October)							4.3 mg/L	12.9 mg/L	
NH <sub>3</sub> - N (Nov. - March)									
Dissolved Oxygen									
Fecal Coliform (geo. mean)	200 / 100 ml	400 / 100 ml		200 / 100 ml	400 / 100 ml		200 / 100 ml	400 / 100 ml	
pH	> 6.0 & < 9.0			> 6.0 & < 9.0			> 6.0 & < 9.0		
Total Residual Chlorine			28 µg/L			28 µg/L			28 µg/L
Temperature, °C	M&R - 3 Per Week			M&R - 3 Per Week			M&R - 3 Per Week		
Total Nitrogen	M&R - Quarterly			M&R - Quarterly			M&R - Semi-annually		
Total Phosphorus	M&R - Quarterly			M&R - Quarterly			M&R - Semi-annually		
Total Cadmium									
Total Cyanide									
Total Copper	M&R - Semi-annually			M&R - Semi-annually					
Total Zinc	M&R - Semi-annually			M&R - Semi-annually					
Total Selenium									
Total Silver									
Chlorides									
Chronic Toxicity Eff. Conc	P/F Quarterly @ 4.2%			P/F Quarterly @ 4.2%			P/F Quarterly @ 19%		
Acute Toxicity	P/F Quarterly @ 0.12%			P/F Quarterly @ 0.12%					
Sulfide	3.6 lbs/day	7.2 lbs/day		3.6 lbs/day	7.2 lbs/day				
Phenols	1.8 lbs/day	3.6 lbs/day		1.8 lbs/day	3.6 lbs/day				
Total Chromium		0.43 lbs/day			0.43 lbs/day				
Oil & Grease									
Conductivity									
Color									
BOD <sub>5</sub> & TSS Removal							85% Removal (min)		
Alkalinity							M&R - Weekly		
Aluminum							M&R - Weekly		
Chronic Toxicity Eff. Conc	0.12%			4.2%			19%		
Receiving Stream	Second Broad			Second Broad			Broad River		
Stream Estimated 7Q10							> 66 cfs		

<sup>1</sup> Spindale effluent limits are for a

<sup>2</sup> Rutherfordton effluent limits are

<sup>3</sup> Cliffsides WWTP effluent limits are

Appendix 3.1  
Composite GIS Map

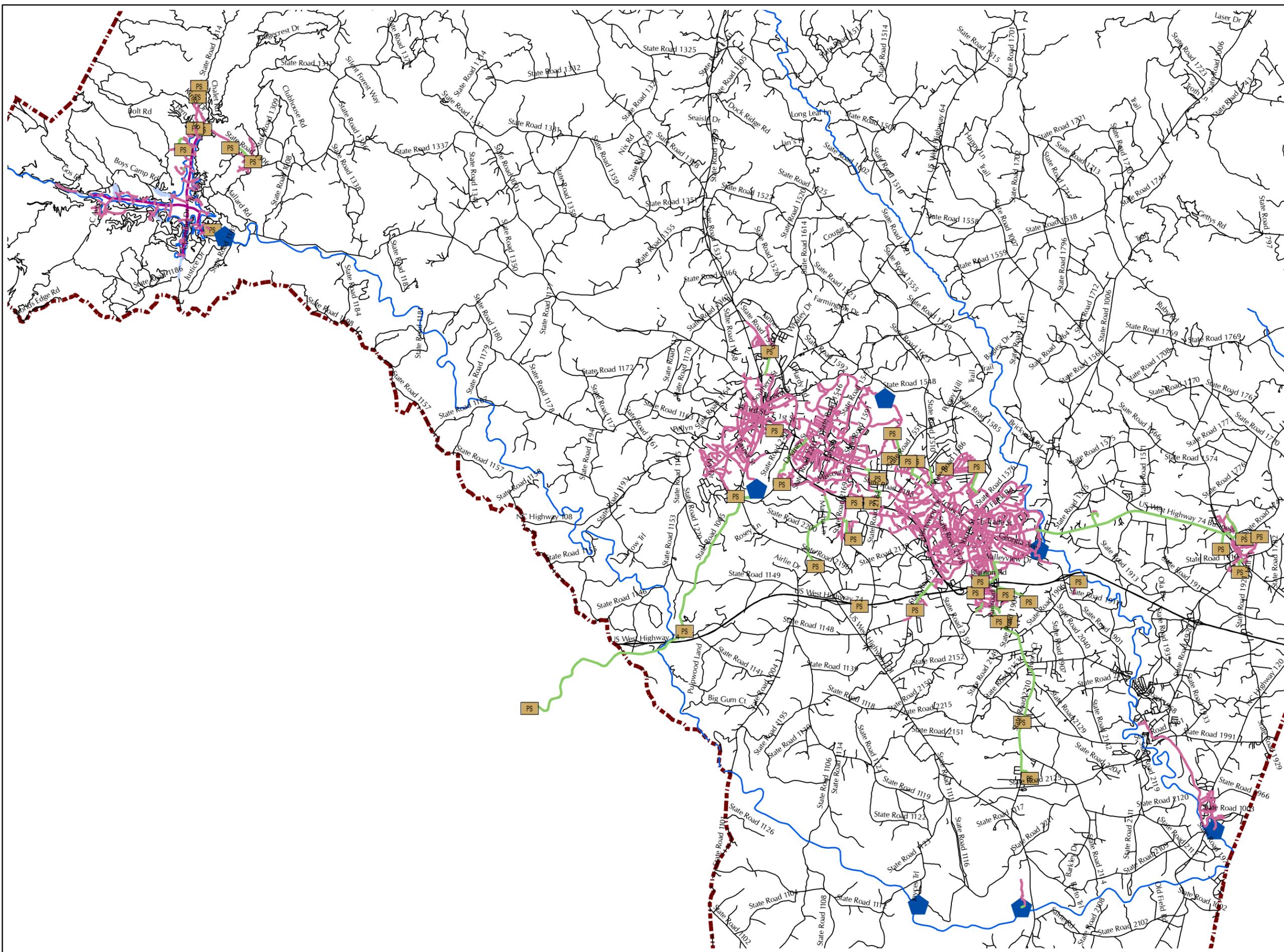
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# Rutherford County Existing Sewer Systems

January 2014

## Legend

-  WWTP in Rutherford County
-  Force Main
-  Gravity Sewer
-  Pump Stations
-  Rutherford County Hydrology
-  Rutherford County Roads
-  Rutherford County Boundary



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Appendix 5.1

Staff Complements for Wastewater Collection System Maintenance based on Population Size

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<b>Table 5.1 Staff Complements for Wastewater Collection System Maintenance based on Population Size</b>						
<b>Occupation Title</b>	<b>5,000</b>		<b>10,000</b>		<b>25,000</b>	
	(a)	(b)	(a)	(b)	(a)	(b)
Superintendent	1	5	1	10	1	20
Asst. Superintendent						
Maintenance Supervisor						
Foreman	1	15	1	20	1	20
Maintenance Man II	1	15	1	20	1	20
Maintenance Man I	1	15	1	20	2	60
Maint. Equipment Personnel					1	40
Const. Equipment Personnel	1	15	1	20	1	20
Laborer	1	15	1	20	2	40
Sewer Maintenance Staff	6	80	6	110	9	220
Maintenance Mech. II	# of pump stations x 8/3 = hrs					
Maint. Mechanic I	# of pump stations visits / wk = hrs					
Maint. Mechanic Helper	# of pump stations visits / wk = hrs					
Construction Inspection Supervisor	# of construction site visits per wk x 8/3 = hrs					
Total						

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Appendix 5.2

Recommended Collection System Staffing

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**Table 5.2 Recommended Collection System Staffing**

<b>Occupation Title</b>	<b>Cliffside</b>	<b>Forest City - 2nd Broad</b>	<b>Forest City - Riverstone</b>	<b>Forest City - DRG</b>	<b>Lake Lure</b>	<b>Rutherfordton</b>	<b>Spindale</b>	<b>All</b>	<b>All Excluding Forest City</b>
<i>LF of Gravity Sewer</i>	29,500	237,000	1,000	1,000	65,200	180,000	161,000	674,700	435,700
<i># of Pump Stations</i>	2	19	1	1	1	5	7	36	15
<i>Estimated Population Served</i>	150	7,413			1,191	4,208	4,302	17,264	9,851
<b>Superintendent</b>	4	10	4	4	8	5	5	20	10
<b>Asst. Superintendent</b>									
<b>Maintenance Supervisor</b>									
<b>Foreman</b>	4	20	4	4	8	15	15	20	20
<b>Maintenance Man II</b>	4	20	4	4	8	15	15	20	20
<b>Maintenance Man I</b>	4	20	4	4	8	15	15	60	20
<b>Maint. Equipment Personnel</b>								40	
<b>Const. Equipment Personnel</b>	4	20	4	4	8	15	15	20	20
<b>Laborer</b>	4	20	4	4	8	15	15	40	20
<b>Sewer Maintenance Staff</b>	4	110	4	4	40	80	80	220	110
<b>Maintenance Mech. II</b>	4	50	4	4	4	13	19	100	50
<b>Maint. Mechanic I</b>	4	20	4	4	4	5	7	40	20
<b>Maint. Mechanic Helper</b>	4	20	4	4	4	5	7	40	20
<b>Construction Inspection Supervisor</b>	<u>0</u>	<u>2</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>	<u>1</u>	<u>4</u>	<u>2</u>
<b>Total</b>	40	312	40	40	100	184	194	624	312
<b>Avg. FTE</b>	1	7.8	1	1	2.5	4.6	4.85	15.6	7.8
<b>Rounded Up Avg. FTE</b>	1	8	1	1	3	5	5	16	8
<b>Current Staffing Level</b>	0.25	7	N/A	N/A	0.75	3.5	2.75	14.25	7.25
<b>Surplus (Deficit)</b>	(0.75)	(1.00)			(2.25)	(1.50)	(2.25)	(1.75)	(0.75)

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Appendix 5.3

Recommended Treatment Staffing

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**Table 5.3 Recommended Treatment Staffing**

	Cliffside	Forest City - 2nd Broad	Forest City - Riverstone	Forest City - DRG	Lake Lure	Rutherfordton	Spindale	All	All (excluding Forest City)
<b>Plant Design Flow (MGD)</b>	1.75	4.95	0.05	0.91	0.995	3	6	10.95	6
<b>Average Daily Flow (MGD)</b>	0.043	1.26	0.005	0	0.34	0.5	0.87	3.013	1.753
<b>Max. Daily Flow (MGD)</b>	1.117	16.69	0.005	0	0.63	4.3	6.1	28.837	12.147
<b>Supervisory &amp; Administrative</b>	170	1500	170	500	500	1000	1700	2500	1700
<b>Clerical</b>	10	400	10	50	50	200	470	950	470
<b>Laboratory</b>	200	1500	200	550	550	1200	1800	3350	1800
<b>Yardwork</b>	150	1300	150	450	450	1000	1500	2300	1500
<b>Influent Pumping</b>	150		150	315	315				
<b>Screening</b>	15	430	15	62	62	215	533	1240	533
<b>Grit Removal</b>	75	540	75	220	220		550	800	550
<b>Primary Clarification</b>									
<b>Aeration</b>	350	2300	350	950	950	1700	2500	3500	2500
<b>Secondary Clarification</b>	130	1150	130	390	390	800	1450	2640	1450
<b>Disinfection</b>	130	370	130	330	330	480	630	750	630
<b>Digestion</b>	30	300	30	100	100	285	340	500	340
<b>Stabilization Ponds</b>						300			
<b>Incineration</b>		1600						1600	
<b>Other</b>					150				
<b>Sludge Handling</b>	90	450	90	240	240	380	500	650	500
<b>Manhours / Year</b>	1500	11840	1500	4157	4307	7560	11973	20780	11973
<b>Average FTE</b>	1.0	7.9	1.0	2.8	2.9	5.0	8.0	13.9	8.0
<b>Rounded Up FTE</b>	1	8	1	3	3	6	8	14	8
<b>Current Staffing Level</b>	0.25	7	N/A	N/A	1	2	3	13	6
<b>Surplus (Deficit)</b>	(0.75)	(1.00)			(2.00)	(4.00)	(5.00)	(1.00)	(2.00)

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Appendix 6.1

Characteristics of State Authorized Institutional Arrangements for the  
Provision of Water and/or Wastewater Service in North Carolina

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	Mun. & County Govt.	Interlocal Contracts	Joint Mgmt. Agency	County Service District	Sanitary District	W & S Authority	Metro Water District	Metro Sewer District	County W & S District
<b>Statutory Authorization</b>	N/A	G.S. 153A-278 G.S. 160A-461	G.S. 160A-461, 462	G.S. 153A, Art. 16	G.S. 130, Art. 12	G.S. 162A, Art. 1	G.S. 162A, Art. 4	G.S. 162A, Art. 5	G.S. 162A, Art. 86
<b>Creation by Town</b>	Yes	Yes	Yes	Yes	No	Jointly	No	No	Yes
<b>Creation by Incorporation or Legislature</b>	Yes	No	No	No	Yes	Jointly	Yes	Yes	No
<b>Governing Board: Appointed or Elected</b>	Elected	N/A	N/A	N/A	Elected	Appointed	Appointed	Appointed	Appointed
<b>General Corporate Powers: Own Property, Sue, Be Sued, Contract, etc.</b>	Yes	No	Yes	No	Yes	Yes	Yes	Yes	Yes
<b>Own, Extend and Operate Water and Sewage Systems</b>	Yes	Yes	Yes	No	Yes	Yes	Yes	Sewer Only	Yes
<b>Acquire Water &amp; Sewage Systems by Purchase, Lease, Gift or Otherwise</b>	Yes	Yes	Yes	No	Yes	Yes	Yes	Sewer Only	Yes
<b>Construct Water &amp; Sewage Systems</b>	Yes	Yes	Yes	No	Yes	Yes	Yes	Sewer Only	Yes
<b>Require Installation of Water &amp; Sewers in New Subdivision</b>	Yes	Yes	No	No	No	No	No	No	Yes
<b>Contract with Local Government</b>	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes
<b>Eligible for State &amp; Federal Grants</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Issue Revenue Bonds</b>	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
<b>Establish Rates &amp; Charges</b>	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Rates Regulated by Utilities Commission</b>	No	No	No	No	No	No	No	No	No
<b>Levy Property Taxes</b>	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes
<b>Issue General Obligation Bonds</b>	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes
<b>Impose Special Assessments for Extension of Lines</b>	Yes	Yes	No	Yes	No	No	No	No	Yes
<b>Power of Condemnation</b>	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
<b>Regulate Land Subdivision</b>	Yes	Yes	No	No	No	No	No	No	No
<b>Zoning Power</b>	Yes	Yes	No	No	No	No	No	No	No
<b>Provide Other Public Services</b>	Yes	Yes	Yes	No	Yes	No	No	No	No

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Appendix 9.1

Domestic Sewer System Analysis Opinions of Probable Costs

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W.K. Dickson & Co., Inc.  
 Community Infrastructure Consultants  
 616 Colonnade Drive  
 Charlotte, NC 28205  
 Phone (704) 334-5348 Fax (704)-334-0078

### Opinion of Probable Costs

**Project:** Ellenboro - Henrietta Interchange Service  
 Pump to Ellenboro GS to Wilson PS  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station at Hills Creek (off Four Lakes Dr) - 220 gpm @ 265' TDH	EA	1	\$350,000.00	\$350,000
2	6" Force Main to Ellenboro @ Church St & Main	LF	12,280	\$30	\$368,400
3	Rock Allowance @ 0.05 CY / LF FM	CY	614	\$80	\$49,120
4	Jack & Bore:				
4.1	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
4.2	Jack & Bore @ 4 ea RR Crossings @ 100 lf/ea	LF	400	\$300	\$120,000
4.3	Jack & Bore @ 5 Road Crossings @ 40 lf/ea	LF	200	\$250	\$50,000
5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
6	Connection into existing GS @ Ellenboro	EA	1	\$5,000	\$5,000
7	GS to Serve South Side of Interchange:				
7.1	8" GS	LF	2,470	\$35	\$86,450
7.2	MH's @ ~200'	EA	12	\$3,500	\$42,000
7.3	Rock Allowance @ 0.1 CY/LF	CY	247	\$80	\$19,760
8	GS to Serve North Side of Interchange:				
8.1	8" GS	LF	2,660	\$35	\$93,100
8.2	MH's @ ~200'	EA	13	\$3,500	\$45,500
8.3	Rock Allowance @ 0.1 CY/LF	LF	266	\$80	\$21,280
8.4	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
8.5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
9	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	17,410	\$4	\$69,640
10	Mobilization @ 3%				\$47,000
	<b>Subtotal</b>				\$1,622,516
	Contingency		approx.	15%	\$162,484
	<b>Total Construction</b>				\$1,785,000
	<b>Project Engineering Related Costs @ 25%*</b>				\$446,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$2,231,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Ellenboro - Henrietta Interchange Service**

Pump to Ellenboro GS to Wilson PS

1. New pump station off Four Lakes Drive near Hills Creek
2. Force main under Hwy 74 then following Ellenboro-Henrietta Rd to Church St to Main St in Ellenboro and connecting to existing gravity sewer to Wilson Pump Station.
3. Use existing Wilson Pump Station in Ellenboro for transfer to Forest City
4. Construct new gravity sewers serving north and south side of Hwy 74 interchange



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## Opinion of Probable Costs

**Project:** Ellenboro - Henrietta Interchange Service  
 Pump to Henrietta and connect to gravity sewer to Cliffside  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station at Hills Creek (off Four Lakes Dr) - 220 gpm @ 152' TDH	EA	1	\$350,000.00	\$350,000
2	6" Force Main to Henrietta @ former Cone Mills Site	LF	15,400	\$30	\$462,000
3	Rock Allowance @ 0.05 CY / LF FM	CY	770	\$80	\$61,600
4	Jack & Bore (5 Road Crossings @ 40 lf / ea	LF	200	\$300	
5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac		\$5,000	\$0
6	Connection into existing GS @ Henrietta	EA	1	\$5,000	\$5,000
7	GS to Serve South Side of Interchange				
7.1	8" GS	LF	2,470	\$35	\$86,450
7.2	MH's @ ~200'	EA	12	\$3,500	\$42,000
7.3	Rock Allowance @ 0.1 CY/LF	CY	247	\$80	\$19,760
8.0	GS to Serve North Side of Interchange				
8.1	8" GS	LF	2,660	\$35	\$93,100
8.2	MH's @ ~200'	EA	13	\$3,500	\$45,500
8.3	Rock Allowance @ 0.1 CY/LF	LF	266	\$80	\$21,280
8.4	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
8.5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
9.0	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	20,530	\$4	\$82,120
	Mobilization @ 3%				\$42,000
	<b>Subtotal</b>				\$1,438,443
	Contingency		approx.	15%	\$144,557
	<b>Total Construction</b>				\$1,583,000
	<b>Project Engineering Related Costs @ 25%*</b>				\$396,000
	<b>Preliminary Total Opinion of Probable Costs</b>				\$1,979,000

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**Concept Narrative:**

**Ellenboro - Henrietta Interchange Service**

Pump to Henrietta and connect to gravity sewer to Cliffside

1. New pump station off Four Lakes Drive near Hills Creek
2. Force main under Hwy 74 then following Ellenboro-Henrietta Rd to Henrietta w/ connection to existing gravity sewer at former Cone Mill's location.
3. Use existing gravity sewer to Cliffside WWTP.
4. Construct new gravity sewers serving north and south side of Hwy 74 interchange



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### Opinion of Probable Costs

**Project:** Harris Hwy 221 Industrial Site  
 FM to Spindale Torrington Pump Station  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station near intersection of Hwy 221 & Hooper Rd. (220 gpm @ 216')	EA	1	\$300,000	\$300,000
2	6" Force Main to Spindale Torrington PS	LF	20,900	\$30	\$627,000
3	Rock Allowance @ 0.05 CY / LF FM	CY	1,045	\$80	\$83,600
4	Jack & Bore (11 Road Crossings @ 40 lf / ea)	LF	440	\$300	\$132,000
5	Jack & Bore Road Crossings @ Hwy 74	LF	400	\$300	\$120,000
6	Connection into existing GS @ Torrington PS	EA	1	\$5,000	\$5,000
7	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	20,900	\$4	\$83,600
8	Mobilization @ 3%	LS	1		\$41,000
<b>Subtotal</b>					\$1,392,200
Contingency				15%	\$138,800
<b>Total Construction</b>					<b>\$1,531,000</b>
<b>Project Engineering Related Costs @ 25%*</b>					<b>\$383,000</b>
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$1,914,000</b>

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administration, construction observations, right-of-way, legal and financial consulting services allowance.

**Concept Narrative:**

**Harris Hwy 221 Industrial Site**

FM to Spindale Torrington Pump Station

1. Install new pump station in general area of Hwy 221 and Hooper Rd w/ 6" FM extend along Hwy 221 to Torrington P.S.
2. Potential connection of existing PS at Hwy 74 - Hwy 221 intersection. P.S. Upgrade and FM connection NIC.



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## Opinion of Probable Costs

**Project:** Harris Hwy 221 Industrial Site  
 FM to Forest City Riverstone WWTP  
**Client:** #REF!

**WKD No:** TBD  
**Pg:**  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station near intersection of Hwy 221 & Arthur Henson Rd. (220 gpm @ ~ 86')	EA	1	\$200,000	\$200,000
2	6" Force Main to Spindale Torrington PS	LF	28,290	\$30	\$848,700
3	Rock Allowance @ 0.05 CY / LF FM	CY	1,415	\$80	\$113,160
4	Jack & Bore (10 Road Crossings @ 40 lf / ea	LF	400	\$300	\$120,000
5	Jack & Bore RR Crossings	LF	100	\$400	\$40,000
6	Stream Crossing @ Floyd's Creek - Directional D	EA	250	\$300	\$75,000
7	Connection into existing GS @ Riverstone Blvd	EA	1	\$5,000	\$5,000
8	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	28,290	\$4	\$113,160
9	Mobilization @ 3%				\$45,000
	<b>Subtotal</b>				\$1,560,020
	Contingency			15%	\$155,980
	<b>Total Construction</b>				<b>\$1,716,000</b>
	<b>Project Engineering Related Costs @ 25%*</b>				<b>\$429,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$2,145,000</b>

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\* Project engineering related costs include planning, surveying design, permitting, bidding, construction administration, construction observations, right-of-way, legal and financial consulting services allowance.

**Concept Narrative:**

**Harris Hwy 221 Industrial Site**

FM to Forest City Riverstone WWTP

1. Install new pump station in general area of Hwy 221 and Arthur Henson Rd w/ 6" FM extend along Hwy 221 to Torrington P.S.
2. Potential connection of existing PS at Hwy 74 - Hwy 221 intersection. P.S. Upgrade and FM connection NIC.

Appendix 10.1

Rutherford County Economic Development Sewer Service Analysis Opinions of Probable Costs

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### Opinion of Probable Costs

**Project:** Ellenboro - Henrietta Interchange Service  
 Pump to Ellenboro GS to Wilson PS  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station at Hills Creek (off Four Lakes Dr) - 220 gpm @ 265' TDH	EA	1	\$350,000.00	\$350,000
2	6" Force Main to Ellenboro @ Church St & Main	LF	12,280	\$30	\$368,400
3	Rock Allowance @ 0.05 CY / LF FM	CY	614	\$80	\$49,120
4	Jack & Bore:				
4.1	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
4.2	Jack & Bore @ 4 ea RR Crossings @ 100 lf/ea	LF	400	\$300	\$120,000
4.3	Jack & Bore @ 5 Road Crossings @ 40 lf/ea	LF	200	\$250	\$50,000
5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
6	Connection into existing GS @ Ellenboro	EA	1	\$5,000	\$5,000
7	GS to Serve South Side of Interchange:				
7.1	8" GS	LF	2,470	\$35	\$86,450
7.2	MH's @ ~200'	EA	12	\$3,500	\$42,000
7.3	Rock Allowance @ 0.1 CY/LF	CY	247	\$80	\$19,760
8	GS to Serve North Side of Interchange:				
8.1	8" GS	LF	2,660	\$35	\$93,100
8.2	MH's @ ~200'	EA	13	\$3,500	\$45,500
8.3	Rock Allowance @ 0.1 CY/LF	LF	266	\$80	\$21,280
8.4	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
8.5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
9	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	17,410	\$4	\$69,640
10	Mobilization @ 3%				\$47,000
	<b>Subtotal</b>				\$1,622,516
	Contingency		approx.	15%	\$162,484
	<b>Total Construction</b>				\$1,785,000
	<b>Project Engineering Related Costs @ 25%*</b>				\$446,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$2,231,000</b>

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**Concept Narrative:**

**Ellenboro - Henrietta Interchange Service**

Pump to Ellenboro GS to Wilson PS

1. New pump station off Four Lakes Drive near Hills Creek
2. Force main under Hwy 74 then following Ellenboro-Henrietta Rd to Church St to Main St in Ellenboro and connecting to existing gravity sewer to Wilson Pump Station.
3. Use existing Wilson Pump Station in Ellenboro for transfer to Forest City
4. Construct new gravity sewers serving north and south side of Hwy 74 interchange



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## Opinion of Probable Costs

**Project:** Ellenboro - Henrietta Interchange Service  
 Pump to Henrietta and connect to gravity sewer to Cliffside  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station at Hills Creek (off Four Lakes Dr) - 220 gpm @ 152' TDH	EA	1	\$350,000.00	\$350,000
2	6" Force Main to Henrietta @ former Cone Mills Site	LF	15,400	\$30	\$462,000
3	Rock Allowance @ 0.05 CY / LF FM	CY	770	\$80	\$61,600
4	Jack & Bore (5 Road Crossings @ 40 lf / ea	LF	200	\$300	
5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac		\$5,000	\$0
6	Connection into existing GS @ Henrietta	EA	1	\$5,000	\$5,000
7	GS to Serve South Side of Interchange				
7.1	8" GS	LF	2,470	\$35	\$86,450
7.2	MH's @ ~200'	EA	12	\$3,500	\$42,000
7.3	Rock Allowance @ 0.1 CY/LF	CY	247	\$80	\$19,760
8.0	GS to Serve North Side of Interchange				
8.1	8" GS	LF	2,660	\$35	\$93,100
8.2	MH's @ ~200'	EA	13	\$3,500	\$45,500
8.3	Rock Allowance @ 0.1 CY/LF	LF	266	\$80	\$21,280
8.4	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
8.5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
9.0	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	20,530	\$4	\$82,120
	Mobilization @ 3%				\$42,000
	<b>Subtotal</b>				\$1,438,443
	Contingency		approx.	15%	\$144,557
	<b>Total Construction</b>				\$1,583,000
	<b>Project Engineering Related Costs @ 25%*</b>				\$396,000
	<b>Preliminary Total Opinion of Probable Costs</b>				\$1,979,000

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Ellenboro - Henrietta Interchange Service**

Pump to Henrietta and connect to gravity sewer to Cliffside

1. New pump station off Four Lakes Drive near Hills Creek
2. Force main under Hwy 74 then following Ellenboro-Henrietta Rd to Henrietta w/ connection to existing gravity sewer at former Cone Mill's location.
3. Use existing gravity sewer to Cliffside WWTP.
4. Construct new gravity sewers serving north and south side of Hwy 74 interchange



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## Opinion of Probable Costs

**Project:** Hwy 221 / US 74 Interchange

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station Upgrade	EA	1	\$101,000.00	\$101,000.00
2	Mobilization @ 3%	LS	1		\$3,000
	<b>Subtotal</b>				<b>\$104,000</b>
	Contingency		approx.	15%	\$16,000
	<b>Total Construction</b>				<b>\$120,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$30,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$150,000</b>

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### Opinion of Probable Costs

**Project:** Upgrade Forest City Riverstone WWTP to 0.15 mgd

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Expand Riverstone WWTP to 0.15 mgd	LS	1	\$600,000	\$600,000
2	Mobilization @ 3%	LS	1		\$18,000
	<b>Subtotal</b>				<b>\$618,000</b>
	Contingency		approx.	15%	\$93,000
	<b>Total Construction</b>				<b>\$711,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$178,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$889,000</b>

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**Concept Narrative:**

**Upgrade Forest City Riverstone WWTP to 0.15 mgd**

4. Assume cost for upgrade of Riverstone @ \$6/gallon capacity added/



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### Opinion of Probable Costs

**Project:** Upgrade Forest City Riverstone WWTP to 0.15 mgd

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Cost to return FC DRG WWTP to service.	LS	1	\$910,000	\$910,000
2	Mobilization @ 3%	LS	1		\$27,000
	<b>Subtotal</b>				<b>\$937,000</b>
	Contingency		approx.	15.0%	\$141,000
	<b>Total Construction</b>				<b>\$1,078,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$270,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,348,000</b>

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**Concept Narrative:**

**Upgrade Forest City Riverstone WWTP to 0.15 mgd**

Assume cost for reopening FC DRG @ \$1/gpd.



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### Opinion of Probable Costs

**Project:** Rutherford County Airport Pump Station & Force Main

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station w/ Generator (100 gpm)	Ea	1	\$300,000.00	\$300,000.00
2	4" PVC Force Main	LF	18,110	\$25.00	\$452,750.00
3	Road Crossings by Jack & Bore (4 @ 30')	LF	120	\$300.00	\$36,000.00
4	Stream crossings (Cathy's Ck & 2- Holland Cr)	LF	3	\$10,000.00	\$30,000.00
5	Railroad crossing (1) by Jack & Bore	LF	100	\$400.00	\$40,000.00
6	Air / Vacuum Relief Valves	EA	11	\$4,000	\$44,000
7	Rock Allowance @ 0.05 CY / LF	CY	905.5	\$80	\$72,440
8	R/W (Assume all on Road R/W)	AC	0	\$5,000.00	\$0
9	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	18,110	\$4.00	\$72,440
10	Mobilization @ 3%				\$31,000
	<b>Subtotal</b>				<b>\$1,078,630</b>
	Contingency		approx.	15%	\$162,370
	<b>Total Construction</b>				<b>\$1,241,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$310,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,551,000</b>

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## Opinion of Probable Costs

**Project:** Area North of Rutherfordton / Hwy 221 Pump Station & Force Main

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station w/ Generator (100 gpm)	Ea	1	\$300,000.00	\$300,000.00
2	4" PVC Force Main	LF	18,110	\$25.00	\$452,750.00
3	Road Crossings by Jack & Bore (4 @ 30')	LF	120	\$300.00	\$36,000.00
4	Stream crossings (Cathy's Ck & 2- Holland Cr)	LF	3	\$10,000.00	\$30,000.00
5	Railroad crossing (1) by Jack & Bore	LF	100	\$400.00	\$40,000.00
6	Air / Vacuum Relief Valves	EA	11	\$4,000	\$44,000
7	Rock Allowance @ 0.05 CY / LF	CY	905.5	\$80	\$72,440
8	R/W (Assume all on Road R/W)	AC	0	\$5,000.00	\$0
9	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	18,110	\$4.00	\$72,440
10	Mobilization @ 3%				\$31,000
	<b>Subtotal</b>				<b>\$1,078,630</b>
	Contingency		approx.	15%	\$162,370
	<b>Total Construction</b>				<b>\$1,241,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$310,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,551,000</b>

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Appendix 11.1

Cliffside Sanitary District Sewer Rates

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# BROAD RIVER WATER AUTHORITY

## Schedule of Water Rates –Payment Requirements

Effective July 1, 2013

### Section I – Minimum Volume and Service Rates

Each metered customer will be charged a monthly minimum rate, which includes zero to 1000 gallons of water volume:

Block	Meter Service Size	Minimum Charge: 0-1000 Gallons
1	¾"	\$ 25.60
1	1	44.85
1	1.5	119.25
1	2	224.85
1	3	298.70
1	4	374.75
1	6	451.15
1	8	597.90
1	10	750.35

### Section II – Volume Rates

#### Schedule A – Direct Sales

Each metered customer will be charged a monthly volume rate in accordance with the following schedule:

Block	Volume per Month	Rate per 1000 Gallons
2	Next 19,000 gallons	\$5.05
3	Next 980,000 gallons	4.50
4	Next 9,000,000 gallons	1.90
5	All over 10,000,000 gallons	1.60

#### Schedule B – Re-Sale (effective 1/1/2014)

This schedule is for state permitted water purveyors

Block	Volume per Month	Rate per 1000 Gallons
2	Next 999,000 gallons	\$3.00
3	Next 26,000,000 gallons	1.55
4	Next 12,000,000 gallons	1.25
5	All over 39,000,000 gallons	1.25

### Section III – Fire Protection

Fire Protection Service is available to all customers with un-metered fire connection lines. Rates are monthly charges based upon the number of sprinkler heads on the fire protection system within the customer's structure and per fire hydrant located on the customer's property. There is no charge for fire hydrants located on BRWA mains to serve the general public. It is the customer's responsibility to notify the BRWA of any change in number of sprinkler heads/fire hydrants on their property.

Monthly Rates:

1. Sprinkler heads, per sprinkler head \$ .085 each
2. Hydrant Service \$2.75 each

### Section IV – Bulk Water Service

Bulk water is available to purchase at designated locations. Pick up is to be approved/coordinated in advance through the BRWA. Bulk water requested for hauling, special projects and construction will be provided on a case-by-case basis, with charges set by the Manager and generally within the guidelines of the appropriate volume charges of Section II.

Schedule of Water Rates – Adopted June 25, 2002

Revised July 1, 2006

Revised July 1, 2007

Revised July 1, 2008

Revised July 1, 2009

Revised July 1, 2010

Revised July 1, 2012

Revised July 1, 2013

**Section V – Payment**

1. Bills will be sent to all customers based upon approximately thirty (30) days of service. Bills are due and payable by the first day of each month, and are past due and delinquent on the twenty-fifth (25<sup>th</sup>) day of the month. All bills paid after this date are subject to a late charge as approved by the BRWA. Bills not paid by the last day of the month subject the customer to termination of service.
2. No second notice will be sent to customers reminding of payments past due.
3. Customers who fail to receive a bill in the mail are not excused from the responsibility for timely payment of all services provided.
4. Customers who have service disconnected due to lack of payment, returned check for insufficient funds, or other reasons as per BRWA policy, may be required to complete a service agreement application and subject to full payment of all current and delinquent charges and fees, including reconnection fees prior to service being restored.

Payments must be in the form of cash, personal or bank check, or money order. Any other form of payment must be approved by the Manager.

**Section VI – Water Service Contracts**

The BRWA may negotiate with any single customer an individual service contract that covers the cost, delivery, conditions, and payment for water service. Each contract must be recommended by the Manager and approved by the Board of the BRWA. Water Service Contracts are generally established for only high volume customers.

**Section VII – Residential Irrigation Meter:**

Separate irrigation meters are available only for residential customers with sewer service, for an installation charge of \$500 with a monthly minimum charge of \$5 for a ¾” meter. For a 1” meter, a standard tap fees applies with a monthly minimum charge of \$9. Volume rates are exactly the same as regular rates.

**Section VIII – Sewer Rates**

By contract the BRWA collects sewer charges for the Towns of Spindale and Rutherfordton, and Cliffside Sanitary District. Payment of all sewer charges are subject to all conditions as set forth in Section V. Sewer rates are set by the towns and district and are as follows per month:

Rutherfordton:	<b><u>Inside</u></b>	<b><u>Rate per 1000 Gallons</u></b>
	Base Rate (includes 1,000 gals.)	\$12.09
	Next 499,000 gallons	\$ 4.70
	Next 500,000 gallons	\$ 4.08
	Next 9,000,000 gallons	\$ 2.62
	Over 10,000,000 gallons	\$ 1.17
	<b><u>Outside</u></b>	<b><u>Rate per 1000 Gallons</u></b>
	Base Rate (includes 1,000 gals.)	\$36.27
	Next 499,000 gallons	\$14.11
	Next 500,000 gallons	\$12.24
	Next 9,000,000 gallons	\$ 7.86
	Over 10,000,000 gallons	\$ 3.52
	** Note: Rutherfordton Rates Effective 7/1/2010	
Spindale:	<b><u>Inside</u></b>	<b><u>Outside</u></b>
Residential	\$5.69/1,000 after 1 <sup>st</sup> 1,000 gallons	\$11.38/1,000 after 1 <sup>st</sup> 1,000 gals.
Commercial	\$16.00 base, then \$5.69/1,000 after 1 <sup>st</sup> 1,000 gals.	\$32.00 base, then \$11.38/1,000 after 1 <sup>st</sup> 1,000 gal
Industrial	\$4.02/1,000 gallons	\$5.99/1,000 gallons
Cliffside Sanitary District:	\$26.00 minimum, volumetric rates are same as water rates (billed based upon water usage)	

Appendix 11.2

Cliffside Sanitary District Financial Data

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**Darrell L. Keller, CPA, PA**

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**CLIFFSIDE SANITARY DISTRICT  
FINANCIAL STATEMENTS  
YEAR ENDED JUNE 30, 2013**

**(704) 739-0771**

**CLIFFSIDE SANITARY DISTRICT  
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JUNE 30, 2013**

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**INDEPENDENT AUDITOR'S REPORT**

To the Board of Directors  
Cliffside Sanitary District  
Cliffside, North Carolina

**Report on the Financial Statements**

I have audited the accompanying financial statements of the business-type activities of Cliffside Sanitary District, Cliffside, North Carolina as of and for the year ended June 30, 2013, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

***Auditor's Responsibility***

My responsibility is to express opinions on these financial statements based on my audit. I conducted my audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, I express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinions.

***Opinions***

In my opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities of Cliffside Sanitary District, Cliffside, North Carolina, as of June 30, 2013, and the respective changes in financial position and cash flows, where applicable, thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

## Other Matters

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3–7 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. I have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to my inquiries, the basic financial statements, and other knowledge I obtained during my audit of the basic financial statements. I do not express an opinion or provide any assurance on the information because the limited procedures do not provide me with sufficient evidence to express an opinion or provide any assurance.

### *Supplementary and Other Information*

My audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Cliffside Sanitary District, Cliffside, North Carolina's basic financial statements. The budgetary schedules and other schedules are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The budgetary schedules and other schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In my opinion, budgetary schedules and other schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.



Darrell L. Keller, CPA, PA  
Kings Mountain, North Carolina  
February 28, 2014

## **Management's Discussion and Analysis**

As management of the Cliffside Sanitary District (the District), we offer readers of the Cliffside Sanitary District's financial statements this narrative overview and analysis of the financial activities of the Cliffside Sanitary District for the fiscal year ended June 30, 2013. We encourage readers to read the information presented here in conjunction with additional information that we have furnished in the District's financial statements, which follow this narrative.

### **Financial Highlights**

- The assets of the Cliffside Sanitary District exceeded its liabilities at the close of the fiscal year by \$774,091 (*net position*).
- The government's total net position decreased by \$43,555, primarily due to the depreciation of assets.

### **Overview of the Financial Statements**

The District's primary mission is to provide sewer services to Cliffside area commercial and residential customers. The District does not provide other general types of services or programs. The District's operations are funded almost entirely through sewer charges. As such, the District is considered to be, and therefore presents its financial report as a stand-alone enterprise fund.

As a stand-alone enterprise fund, the District's basic financial statements consist of Statement of Net Position, Statement of Revenues, Expenses and Changes in Fund Net Position, and Statement of Cash Flows.

These statements, together with the Management's Discussion and Analysis provide both short-term and long-term financial information for the District's financial position. The District's financial statements are prepared on the accrual basis in accordance with accounting principles generally accepted in the United States of America promulgated by the Governmental Accounting Standards Board (GASB). The District is structured as a single Enterprise Fund with revenues recognized when earned, not when received. Expenses are recognized when incurred, not when they are paid.

### **Basic Financial Statements**

Exhibits A, B, and C are the basic financial statements that provide both short and long-term information about the District's financial status.

### **Notes to the Financial Statements and Supplemental Information**

The next section of the basic financial statements is the notes. The notes to the financial statements explain in detail some of the data contained in those statements. The notes to the financial statements are Exhibit D. After the notes, supplemental information is

Management Discussion and Analysis  
Cliffside Sanitary District

provided to show details about the District's budgetary information as required by General Statutes.

**Financial Analysis:**

**Cliffside Sanitary District's Net Position**

**Figure 1**

	Business-Type Activities	
	2013	2012
Current and other assets	\$ 56,693	\$ 46,695
Capital assets	754,414	807,551
Total assets	811,107	854,246
Long-term liabilities outstanding	-	-
Other liabilities	37,016	36,601
Total liabilities	37,016	36,601
Net position:		
Net investment in capital assets	754,414	807,551
Restricted	-	-
Unrestricted	19,677	10,095
Total net position	\$ 774,091	\$ 817,646

The assets of the Cliffside Sanitary District exceeded liabilities by \$774,091 as of June 30, 2013. The District's net position decreased by \$43,555 for the fiscal year ended June 30, 2013. However, the largest portion (97.46%) reflects the District's net investment in capital assets (e.g. land, buildings, machinery, and equipment). The Cliffside Sanitary District uses these capital assets to provide services to citizens; consequently, these assets are not available for future spending. Although the Cliffside Sanitary District's investment in its capital assets is reported net of the outstanding related debt, the resources needed to repay that debt must be provided by other sources, since the capital assets cannot be used to liquidate these liabilities. The remaining balance of \$19,677 is unrestricted.

Management Discussion and Analysis  
Cliffside Sanitary District

**Cliffside Sanitary District Changes in Net Position**  
**Figure 2**

	Business-type Activities	
	2013	2012
Revenues:		
Program revenues:		
Charges for services	\$ 123,343	\$ 91,777
Operating grants and contributions	-	10,000
Capital grants and contributions	-	-
General revenues:		
Property taxes	5,944	6,744
Other taxes	-	-
Other	8	35,426
Total revenues	129,295	143,947
Expenses:		
Water and sewer	172,850	248,332
Total expenses	172,850	248,332
Decrease in net position before loss on discontinued operations	(43,555)	(104,385)
Loss on discontinued operations	-	-
Increase (Decrease) in net position	(43,555)	(104,385)
Net position, July 1	817,646	922,031
Net position, June 30	\$ 774,091	\$ 817,646

**Governmental activities.** The District has no governmental activities.

**Business-type activities:** Business-type activities decreased the Cliffside Sanitary District's net position by \$43,555, accounting for 100% of the total decrease in the government's net position.

Management Discussion and Analysis  
Cliffside Sanitary District

**Financial Analysis of the District's Funds**

As noted earlier, the Cliffside Sanitary District uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

**Governmental Funds.** The District has no Governmental Funds.

**General Fund Budgetary Highlights:** The District has no general fund.

**Proprietary Funds.** Unrestricted net position of the Sewer Fund at the end of the fiscal year amounted to \$19,677. The total change in net position was \$ 43,555. Other factors concerning the finances of this fund have already been addressed in the discussion of the Cliffside Sanitary District's business-type activities.

**Capital Assets**

**Capital assets.** The Cliffside Sanitary District's investment in capital assets for its business-type activities as of June 30, 2013, totals \$754,414 (net of accumulated depreciation). These assets include buildings, land, machinery and equipment, and waste water treatment plant.

**Cliffside Sanitary District's Capital Assets  
(net of depreciation)**

**Figure 3**

	Business-type Activities	
	2013	2012
Land	\$ 53,664	\$ 53,664
Waste Water Treatment Plant	367,500	402,500
Improvements other than buildings	76,673	79,040
Sewer lines, and related equipment	256,577	272,347
Machinery and equipment	-	-
Total	\$ 754,414	\$ 807,551

Additional information on the District's capital assets can be found in note V of the Basic Financial Statements.

Management Discussion and Analysis  
Cliffside Sanitary District

**Budget Highlights for the Fiscal Year Ending June 30, 2014**

**Governmental Activities:** The District has no governmental activities.

**Business – type Activities:** The District has instituted rate increases for all residential and industrial customers of the District. Please see Footnote number 7 regarding the closing of a major customer of the District. The long term effects of this closing are unable to be determined at this time.

**Requests for Information**

This report is designed to provide an overview of the District's finances for those with an interest in this area. Questions concerning any of the information found in this report or requests for additional information should be directed to the Director of Finance, Cliffside Sanitary District, P O Box 122, Cliffside, NC 28024.

**CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
PROPRIETARY FUND  
STATEMENT OF NET POSITION  
YEARS ENDED JUNE 30**

**Assets**

	<b>2013</b>
<b>Current Assets:</b>	
Cash and Cash Equivalents	\$ 24,179
Accounts Receivable	27,427
Taxes Receivable	280
Prepaid Expenses	4,807
<b>Total Current Assets</b>	<b>56,693</b>
<b>Capital Assets:</b>	
Land	53,664
Capital Assets (Net of depreciation)	700,750
<b>Total Capital Assets</b>	<b>754,414</b>
<b>Total Assets</b>	<b>811,107</b>

**Liabilities**

<b>Current Liabilities:</b>	
Accounts Payable	37,016
<b>Total Liabilities</b>	<b>37,016</b>

**Net Position**

Net Investment in Capital Assets	754,414
Unrestricted	19,677
<b>Total Net Position</b>	<b>\$ 774,091</b>

The notes to the financial statements are an integral part of this statement.

**CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
PROPRIETARY FUND  
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN FUND NET POSITION  
YEARS ENDED JUNE 30**

	<b>2013</b>
Operating Revenue	<b>\$ 123,343</b>
Operating Expenses	
BRWA Sewer Billing	1,062
Bad Debt Expense	375
Operating Expenses	65,189
Office Supplies and Postage	141
Repairs and Maintenance	17,628
Legal and Accounting	3,700
Election Expense	-
Utilities	19,017
Bank Charges	251
Insurance	7,000
Depreciation	53,137
Miscellaneous	-
Licenses	5,350
Total Operating Expenses	<b>172,850</b>
Loss From Operations	<b>(49,507)</b>
Non-Operating Revenues	
Property Taxes	5,944
County Contribution	-
Miscellaneous-refund	-
Interest Income	8
Total Non-Operating Revenues	<b>5,952</b>
Change In Net Position	<b>(43,555)</b>
Total Net Position-Beginning of Year	<b>817,646</b>
Total Net Position-End of Year	<b>\$ 774,091</b>

The notes to the financial statements are an integral part of this statement.

**CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
STATEMENT OF CASH FLOWS  
YEARS ENDED JUNE 30**

	2013
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>	
Cash Received from Customers	\$ 104,143
Cash Paid for Goods and Services	(113,966)
Net Cash Provided by Operating Activities	(9,823)
<b>CASH FLOWS FROM NONCAPITAL FINANCIAL ACTIVITIES:</b>	
Cash from Taxes	5,945
Miscellaneous	-
Net Cash Provided by (Used for) Noncapital Financing	5,945
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>	
County Contribution	-
Purchase of Fixed Assets	-
Net Cash Used by Capital Financing	-
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>	
Interest on Investments	8
Net Increase (Decrease) in Cash and Cash Equivalents	(3,870)
Cash and Cash Equivalents at Beginning of Year	28,049
Cash and Cash Equivalents at End of Year	\$ 24,179
<b>RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:</b>	
Operating Income (Loss)	\$ (49,507)
<b>ADJUSTMENTS TO RECONCILE OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES:</b>	
Depreciation	53,137
Change in Assets and Liabilities	
(Increase) Decrease in:	
Accounts Receivable	(14,200)
Prepaid Expenses	332
Accounts Payable	415
Total Adjustments	39,684
<b>NET CASH PROVIDED BY (USED BY) OPERATING ACTIVITIES</b>	<b>\$ (9,823)</b>

The notes to the financial statements are an integral part of this statement.

CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
NOTES TO FINANCIAL STATEMENTS  
YEAR ENDED JUNE 30, 2013

Exhibit D

I. Summary of Significant Accounting Policies

The accounting policies followed by Cliffside Sanitary District (“the District”) conform to generally accepted accounting principles as applicable to governments. The following is a summary of the more significant accounting policies.

A. Reporting Entity

Cliffside Sanitary District was created in 1971 under G.S. 130A-7 for the purpose of preserving and promoting the public health and welfare of the District. G.S. 130A-50 created the Board to govern the District. The Board consists of three (3) members, who are elected from residents in the District. The members are decided by a simple plurality as provided in G.S. 163-292. The non-partisan elections are conducted under the auspices of the Rutherford County Board of Elections, an authoritative body.

B. Basis of Presentation

The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Fund Net Position display information about the District. These statements include the financial activities of the district.

The statement of revenues, expenses, and changes in fund net position presents a comparison between direct expenses and program revenues for the business type activity of the authority. Direct expenses are those that are specifically associated with a program or function and, therefore, are clearly identifiable to a particular function. Program revenues include a) fees and charges paid by the recipients of goods or services offered by the programs and b) grants and contributions that are restricted to meeting the operational or capital requirements of a particular program.

Proprietary fund operating revenues, such as charges for services, result from exchange transactions associated with the principal activity of the fund. Exchange transactions are those in which each party receives and gives up essentially equal values. Non-operating revenues, such as subsidies and investment earnings, result from non-exchange transactions or ancillary activities.

The district reports one proprietary fund:

Enterprise Fund- Enterprise funds account for those operations a) that are financed and operated in a manner similar to private business enterprises, where the intent of the governing body is that the cost (expenses, including depreciation) of providing goods or services to the general public, on a continuing basis, be financed or recovered primarily through user charges; or b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for

CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
NOTES TO FINANCIAL STATEMENTS  
YEAR ENDED JUNE 30, 2013

Exhibit D

capital maintenance, public policy, management control, accountability, or other purposes. The District has one Enterprise Fund.

Use of Estimates: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions. Those estimates and assumptions affect the reported amounts of assets and liabilities, and the reported revenues and expenses. Actual results could differ from those estimates.

Income Taxes: The District is a tax-exempt organization under the Internal Revenue Code; therefore, no provision for income taxes has been made. The District is a governmental Special Revenue District entity and is not required to file Form 990.

C. Measurement Focus and Basis of Accounting

The accounting and financial reporting treatment applied to a fund is determined by its measurement focus. The enterprise fund is accounted for on the flow of economic resources measurement focus, as are all proprietary fund types. With this measurement focus, all assets and liabilities associated with the operations of this fund are included on the statement of net assets. Proprietary type equity (i.e. net assets) is segregated into investments in assets net of debt and net assets. The statement of activities for this fund presents increases (e.g. revenues) and decreases (e.g. expenses) in net total assets. As required for periods beginning after June 15, 2000 by statement 33 of the Governmental Accounting Standards Board, Accounting and Financial Reporting for Non-Exchange Transactions, the District has recognized capital contributions as revenue rather than as contributed capital.

The basis of accounting determines when the revenues and expenditures or expenses and the related assets and liabilities are recognized in the accounts and reported in the financial statement. Basis of accounting relates to the timing of the measurement, made regardless of the measurement focus applied.

In accordance with North Carolina General Statutes, the fund of the District is maintained during the year using the modified accrual basis of accounting. Under the modified accrual basis, revenues are recognized in the accounting period when they become susceptible to accrual (i.e. when they are “measurable” and “available”) to pay the liabilities of the current period. In addition, expenditures are recorded when the related fund liability is incurred, if measurable, except for the un-matured principal and interest on long-term debt, which is recognized when the obligations are expected to be liquidated with expendable available financial resources.

The District recognizes assets of the non-exchange transactions in the period when the underlying transaction occurs, when all eligibility requirements are met. Revenues are recognized on the modified accrual basis of accounting when they are measurable and available. Non-

**CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
NOTES TO FINANCIAL STATEMENTS  
YEAR ENDED JUNE 30, 2013**

Exhibit D

exchange transactions occur when one government provides (or receives) value to (from) another party without receiving (or giving) equal or nearly equal value in return. Under the modified accrual basis of accounting, the District considers all revenues available if they are collected within 60 days after year-end.

Proprietary funds are presented in the financial statements on the accrual basis of accounting. Under this basis, revenues are recorded when earned and expenses are recorded when incurred.

**D. Budgetary Data**

The District's budget is adopted as required by North Carolina General Statutes. Annual budgets are adopted and all annual appropriations lapse at the fiscal year end. The budget is prepared using the modified accrual basis of accounting.

Expenditures may not legally exceed appropriations at the line item level for all annually budgeted funds, and at the object level for all multi-year sub-funds. The budget officer is authorized by the budget ordinance to transfer appropriation between the line item expenditures without a report being required. The governing board must approve any revisions that alter the total expenditures of any fund or change departmental appropriations by more than \$2,500. During the year, several amendments to the original budget were necessary.

A budget calendar is included in the North Carolina Statutes, which prescribes the last day on which certain steps of that budget procedure are to be performed. The following schedule lists the tasks to be performed and the date which each is required to be completed.

April 30- Each department head will transmit to the budget officer the budget request and the revenue estimate for their department for the budget year.

June 1- The budget and the budget message shall be submitted to the governing board. The public hearing on the budget shall be scheduled at this time.

July 1- The budget ordinance shall be adopted by the governing board.

**CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
NOTES TO FINANCIAL STATEMENTS  
YEAR ENDED JUNE 30, 2013**

**Exhibit D**

**E. Assets, Liabilities, and Net Position**

**1. Deposits and Investments**

All deposits of the District are made in Board-designated, official depositories and are secured as required by state law (G.S. 159-13). The District may designate as an official depository any bank or savings and loan association whose principal office is located in North Carolina. Also, the District may establish time deposit accounts such as NOW and Super

NOW accounts, money market accounts and certificates of deposit. All monies deposited are insured with the Federal Deposit Insurance Corporation or collateralized as required by G.S. 159-30(b). The District has no policy regarding custodial credit risk for deposits.

**2. Cash and Cash Equivalents**

All of the District's cash is in demand deposits and is considered cash. For the purpose of the statement of cash flows, the District considers all highly liquid investments with maturities of three months or less when purchased to be cash and cash equivalents.

**3. Capital Assets**

Capital assets have been recorded at original cost or donated value. Depreciation has been computed on the straight-line basis over the useful life of the asset. Upon sale or other disposition of property and equipment, the cost and related accumulated depreciation is removed from the accounts and the related gain or loss is reflected in operations. Expenditures for major renewals, replacements and betterment's are capitalized. Repairs, maintenance and minor renewals, not in the nature of capital expenditures, are reflected in operations as incurred.

Lives used to calculate depreciation are as follows:

Water and Treatment Plant	50 years
Water and Sewer Lines	50 years
Improvements	50 years
Office Furniture	5 years
Office Equipment	5 years

CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
NOTES TO FINANCIAL STATEMENTS  
YEAR ENDED JUNE 30, 2013

Exhibit D

**4. Net Position**

Net position in the proprietary fund financial statements are classified as net investment in capital assets; restricted; and unrestricted. Restricted net position represents constraints on resources that are either externally imposed by creditors, grantors, contributors, or laws and regulations of other governments or imposed by state law through state statute.

State law G.S. 159-13(b)(16) restricts appropriation of fund balance for the subsequent year's budget to an amount not to exceed the sum of cash receipts and investments minus the sum of liabilities, encumbrances, and deferred revenues arising from cash receipts as those amounts stand at the close of the fiscal year preceding the budget year.

**II. Stewardship, Compliance and Accountability**

**Noncompliance with North Carolina General Statutes**

1. Several line items of the budget were over-spent. I recommend the District amend its budget timely to avoid over-expending the budget. The budget for the fiscal year 2012-2013 should be amended to correct over expenditures of the budget in the fiscal year.

2. The District appropriated \$10,000 of fund balance in the 2012-13 budget. The District did not have available cash to appropriate and is in violation of G.S. 159-8(a). Expenses and revenues in the budget should be increased/decreased to adopt a balanced budget without appropriating fund balance. The budget can then be amended during the fiscal year as circumstances change.

**III. Deposits**

All the deposits of the District are either insured or collateralized using one of two methods. Under the Dedicated Method, all deposits that exceed the federal depository insurance coverage level are collateralized with securities held by the District's agent in the districts' name. Under the Pooling Method, which is a collateral pool, all uninsured deposits are collateralized with securities held by the State Treasurer's agent in the name of the State Treasurer. Since the State Treasurer is acting in a fiduciary capacity for the District, these deposits are considered to e held by the District's agent in their name. The amount of the pledged collateral is based on an approved averaging method for non-interest bearing deposits and the actual current balance for interest bearing deposits. Depositories using the Pooling Method report to the State Treasurer the adequacy of their pooled collateral covering uninsured deposits. The State Treasurer does not confirm this information with the District or the escrow agent. Because of the inability to measure the exact amounts of collateral pledged, for the District under the Pooling Method, the potential exists for under-collateralization, and this risk may increase in periods of high cash flows. However, the State Treasurer of North Carolina enforces strict standards of financial stability for each depository hat collateralizes public deposits under the Pooling Method. The District has no policy regarding custodial risk for deposits.

CLIFFSIDE SANITARY DISTRICT  
 CLIFFSIDE, NORTH CAROLINA  
 ENTERPRISE FUND  
 NOTES TO FINANCIAL STATEMENTS  
 YEAR ENDED JUNE 30, 2013

Exhibit D

At June 30, 2013, the District's deposits had a carrying amount of \$24,129 and a bank balance of \$60,101. All of the bank balance was covered by federal depository insurance. At June 30, 2013, the District's petty cash fund totaled \$50.

IV. Receivables – Allowance for Doubtful Accounts

Proprietary Fund

Accounts Receivable	\$57,317
ADA	<u>\$29,890</u>
Net	<u>\$27,427</u>

V. Capital Assets

A summary of changes in capital assets follows:

	Capital Assets <u>2012</u>	<u>Additions</u>	<u>Dispositions</u>	Capital Assets <u>2013</u>
Land	\$ 53,664	\$ -	\$ -	\$ 53,664
Water and Treatment Plant	1,754,690	-	-	1,754,690
Water and Sewer Lines	241,445	-	-	241,445
Improvements	480,551	-	-	480,551
Office Furniture	579	-	-	579
Office Equipment	450	-	-	450
	<u>2,531,379</u>	-	-	<u>2,531,379</u>
Accumulated Depreciation	<u>1,723,828</u>	53,137	-	<u>1,776,965</u>
Net Book Value	<u>\$ 807,551</u>	<u>\$ (53,137)</u>	<u>\$ -</u>	<u>\$ 754,414</u>

CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
NOTES TO FINANCIAL STATEMENTS  
YEAR ENDED JUNE 30, 2013

Exhibit D

**VI. Operations and Facilities**

The land and waste treatment plant are owned by the District. However, from its inception, the actual operation of the facility has been carried out and cost paid by the primary user of the facility. Beginning July 1990, the primary user agreed to pay for all major repairs on the system and any cost on the sludge program in excess of \$25,000. See Note 7 below regarding the loss of this major user. Starting November 1980, the District began collecting revenues from all users and paying out expenses related to the income received.

**VII. Risk Management**

Cliffside Sanitary District is exposed to various risks of loss related to torts, theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. Cliffside Sanitary District carries commercial insurance to cover property, general liability and auto liability coverage of \$500,000 per occurrence. Settled claims resulting from these risks have not exceeded coverage in any of the past three (3) fiscal years. The District does not carry flood insurance. The District does have the \$50,000 Fidelity Bond on the Finance officer as required.

**VIII. Contingency**

1. The District has recorded a receivable for damages to their system caused by a utility company installing cables in the amount of \$29,890. This was billed in March of 2012 and remains unpaid. This amount has been reserved 100% in the accompanying financial statements. In addition, the District also has a payable to a supplier for the repairs of the damages. The supplier is currently not demanding payment, but the District is liable for this invoice and payment could be demanded at any time.

**IX. Change in Accounting Principles**

The District implemented Governmental Accounting Standards Board (GASB) Statement 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position*, and Statement 65, *Items Previously reported as Assets and Liabilities*, in the fiscal year ending June 30, 2013. In accordance with GASB Statement 63, the Statement of Net Assets has been replaced with the Statement of Net Position. Items on the Statement of Net Position are now classified into Assets, Deferred Outflows of Resources, Liabilities, Deferred Inflows of Resources and Net Position. Additionally, GASB Statement 65 requires that deferred costs from the refunding of debt, which were previously deferred and amortized, be presented as deferred outflows of resources.

**CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
PROPRIETARY FUND  
SCHEDULE OF REVENUES AND EXPENDITURES -BUDGET AND ACTUAL (NON-GAAP)  
FOR THE YEARS ENDED JUNE 30**

	<u>2013 Budget</u>	<u>2013 Actual</u>	<u>Favorable (Unfavorable)</u>	<u>2012 Actual</u>
<b>Operating Revenue</b>				
Sewer Revenue	\$ 118,445	\$ 123,343	\$ 4,898	\$ 91,277
Connection Fees	500	-	(500)	500
<b>Total Operating Revenue</b>	<u>118,945</u>	<u>123,343</u>	<u>4,398</u>	<u>91,777</u>
<b>Operating Expenses</b>				
BRWA Sewer Billing	864	1,062	(198)	1,063
Bad Debt Expense	-	375	(375)	31,129
Office Supplies and Postage	375	141	234	257
Legal and Accounting	3,500	3,700	(200)	3,800
Election Expense	-	-	-	1,143
Utilities	28,900	19,017	9,883	25,380
Licenses	8,300	5,350	2,950	4,850
Insurance	5,700	7,000	(1,300)	6,279
Bank Charges	200	251	(51)	199
Repairs and Maintenance	22,000	17,628	4,372	57,531
Operating Expenses	75,300	65,189	10,111	61,281
Miscellaneous	2,000	-	2,000	2,284
<b>Total Operating Expenses</b>	<u>147,139</u>	<u>119,713</u>	<u>27,426</u>	<u>195,196</u>
<b>Income (Loss) from Operations</b>	<u>(28,194)</u>	<u>3,630</u>	<u>31,824</u>	<u>(103,419)</u>
<b>Non-Operating Revenues</b>				
Fund Balance Appropriated	10,000	-	(10,000)	-
County Contribution	11,668	-	(11,668)	10,000
Property Taxes	6,511	5,944	(567)	6,744
Damages/Insurance	-	-	-	35,414
Interest Income	15	8	(7)	12
<b>Total Non-Operating Revenue</b>	<u>28,194</u>	<u>5,952</u>	<u>(22,242)</u>	<u>52,170</u>
<b>Capital Outlay</b>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
<b>Total Income (Loss)</b>	<u>\$ -</u>	<u>\$ 9,582</u>	<u>\$ 9,582</u>	<u>\$ (51,249)</u>

CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
SCHEDULE OF REVENUES AND EXPENDITURES - BUDGET AND ACTUAL (NON GAAP)  
FOR THE YEAR ENDED JUNE 30, 2013

Reconciliation of Modified Accrual Basis to Full Accrual Basis

Total Revenues from Page 1 of 2	\$ 129,295
Total Expenditures from Page 1 of 2	<u>(119,713)</u>
Revenues Over(Under) Expenditures	9,582
Depreciation	(53,137)
Repairs	-
Capital Outlay	<u>-</u>
Net Loss at Exhibit B	<u>\$ (43,555)</u>

**CLIFFSIDE SANITARY DISTRICT  
CLIFFSIDE, NORTH CAROLINA  
ENTERPRISE FUND  
SCHEDULE OF SPECIAL DISTRICTS AD VALOREM TAXES RECEIVABLE  
YEAR ENDED JUNE 30,2013**

Fiscal Year	Balance July 1, 2012	Additions	Collections and Credits	Balance June 30, 2013
2012-2013	\$ -	\$ 5,131	\$ 4,441	\$ 690
2011-2012	646	-	441	205
2010-2011	284	-	99	185
2009-2010	127	-	7	120
2008-2009	135	-	9	126
2007-2008	50	-	13	37
2006-2007	50	-	12	38
2005-2006	23	-	1	22
2004-2005	48	-	10	38
2003-2004	40	-	9	31
2002-2003	59	-	59	-
	<u>\$ 1,462</u>	<u>\$ 5,131</u>	<u>\$ 5,101</u>	<u>1,492</u>
Allowance for doubtful accounts				412
Ad Valorem Taxes Receivable				<u>\$ 1,080</u>
Reconciliation With Revenues:				
Ad Valorem Taxes - Special Districts				<u>\$ 5,944</u>
Reconciling Items:				
Interest Collected				(126)
Discounts/Adjustments				(776)
Taxes Written Off				59
Total Reconciling Items				<u>(843)</u>
Total Collections and Credits				<u>\$ 5,101</u>

CLIFFSIDE SANITARY DISTRICT  
 CLIFFSIDE, NORTH CAROLINA  
 ENTERPRISE FUND  
 ANALYSIS OF CURRENT TAX LEVY  
 FOR THE YEAR ENDED JUNE 30, 2013

	Property Valuation	Rate	Total Levy	Total Levy	
				Property excluding Registered Motor Vehicles	Registered Motor Vehicles
<b>Original Levy:</b>					
<i>Property Taxed at Current Years Rate</i>	\$ 6,957,500	\$ 0.08	\$ 5,131	\$ 4,776	\$ 355
<i>Motor Vehicles Taxed Prior Years Rate</i>	-	0.08	-	-	-
<b>Total</b>	<u>6,957,500</u>		<u>5,131</u>	<u>4,776</u>	<u>355</u>
<b>Discoveries:</b>					
<i>Current Year Taxes</i>	-	0.080	-	-	-
<i>Penalties</i>	-		-	-	-
<b>Total</b>	<u>-</u>		<u>-</u>	<u>-</u>	<u>-</u>
<b>Abatements</b>	<u>-</u>		<u>-</u>	<u>-</u>	<u>-</u>
<b>Total Property Valuation</b>	<u>\$ 6,957,500</u>				
<b>Net Levy</b>			<u>5,131</u>	<u>4,776</u>	<u>355</u>
<b>Less: Uncollected Taxes at June 30, 2013</b>			<u>690</u>	<u>620</u>	<u>70</u>
<b>Current Year Taxes Collected</b>			<u>\$ 4,441</u>	<u>\$ 4,156</u>	<u>\$ 285</u>
<b>Percent Current Year Collected</b>			<u>86.55%</u>	<u>87.02%</u>	<u>80.28%</u>

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Appendix 11.3

Cliffside Sanitary District 2012 / 2013 Sewer Usage Data

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CSD  
july - dec 12

jan - june 13

FY 2012 - 2013

	count	usage		count	usage		count	usage
301								
Commercial	9	95,000	Commercial	9	136,000	Commercial	9	231,000
Other	2	28,000	Other	2	11,000	Other	2	39,000
Public Govt	1	1,000	Public Govt	1	-	Public Govt	1	1,000
Residential	66	1,412,000	Residential	65	1,410,000	Residential	65	2,822,000
	<b>78</b>	<b>1,536,000</b>		<b>77</b>	<b>1,557,000</b>		<b>77</b>	<b>3,093,000</b>
303								
Commercial	1	69,000	Commercial	1	6,000	Commercial	1	75,000
	<b>1</b>	<b>69,000</b>		<b>1</b>	<b>6,000</b>		<b>1</b>	<b>75,000</b>
304								
Industrial	1	1,642,000	Industrial	1	2,046,000	Industrial	1	3,688,000
Public Govt	3	770,000	Public Govt	3	1,023,000	Public Govt	3	1,793,000
	<b>4</b>	<b>2,412,000</b>		<b>4</b>	<b>3,069,000</b>		<b>4</b>	<b>5,481,000</b>
305								
Industrial	1	42,000	Industrial	1	19,000	Industrial	1	61,000
	<b>1</b>	<b>42,000</b>		<b>1</b>	<b>19,000</b>		<b>1</b>	<b>61,000</b>
308								
Industrial	1	-	Industrial	1	1,000	Industrial	1	1,000
	<b>1</b>	<b>-</b>		<b>1</b>	<b>1,000</b>		<b>1</b>	<b>1,000</b>

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Appendix 11.4  
Forest City Sewer Rates

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**TOWN OF FOREST CITY  
WATER RATES  
Fiscal Year 2013-2014**

**INSIDE TOWN LIMITS**

Minimum charge for 3,000 gallons	\$ 14.95
\$3.71 per 1,000 for next 7,000 gallons	\$ 25.97
\$3.33 per 1,000 for next 40,000 gallons	\$ 133.20
\$2.89 per 1,000 for next 450,000 gallons	\$1300.50
\$1.94 per 1,000 for next 500,000 gallons	\$ 970.00
\$1.07 per 1,000 for all over 1,000,000 gallons	

**TOWN OF FOREST CITY  
SEWER RATES  
Fiscal Year 2013-2014**

**INSIDE TOWN LIMITS**

**COMMERCIAL AND INDUSTRIAL**

Minimum charge for 3,000 gallons	\$ 14.95
\$3.70 per 1,000 for next 997,000 gallons	\$3688.90
\$1.86 per 1,000 for all over 1,000,000 gallons	

Flow measurement based on 90% of water consumption

**RESIDENTIAL**

Sewer rates are same as water rates.

**TOWN OF FOREST CITY  
WATER RATES  
Fiscal Year 2013-2014**

**OUTSIDE TOWN LIMITS**

Minimum charge for 3,000 gallons	\$ 27.15
\$6.97 per 1,000 for next 7,000 gallons	\$ 48.79
\$6.25 per 1,000 for next 40,000 gallons	\$ 250.00
\$5.42 per 1,000 for next 450,000 gallons	\$2439.00
\$2.02 per 1,000 for all over 500,000 gallons	

**TOWN FOREST CITY  
SEWER RATES  
Fiscal year 2013-2014**

**OUTSIDE TOWN LIMITS**

**COMMERCIAL AND INDUSTRIAL**

Minimum charge for 3,000 gallons	\$ 27.15
\$4.52 per 1,000 for next 997,000 gallons	\$4506.44
\$3.01 per 1,000 for all over 1,000,000 gallons	

Flow measurement based on 90% of water consumption

**RESIDENTIAL**

Sewer rates are same as water rates.

**TOWN OF FOREST CITY  
WATER AND SEWER RATES  
Dedicated Source Pump Stations Locations  
Fiscal Year 2013-2014**

Water – Minimum \$64.42 per month for 10,000 gallons or less  
\$6.44 per 1000 over 10,000 gallons per month

Sewer – Minimum \$64.42 per month for 10,000 gallons or less  
\$6.44 per 1000 over 10,000 gallons per month

Sewer flow based on 100% of water consumption.

**Locations**

Riverstone Industrial Park

~~MAGO and adjoining Industrial Park~~

Chase High School

East High School

Chase Middle School

Forrest Hunt School

Ellenboro Elementary School

Arvin Meritor Inc.

**TOWN OF FOREST CITY  
CHARGES AND FEES  
2013-2014**

<u>Electric Connection Fees</u>		<u>Garbage Fees</u>	
Temporary (For Construction)	\$24.27 + .73 = \$25.00	Residential	\$16.02 per container
Permanent	\$29.13 + .87 = \$30.00	Small Business	\$16.02 per container
Underground	\$29.13 + .87 = \$30.00	Small Business Sharing Dumpster	\$39.52 per container
Change from overhead to underground	See Public Works Director	Dumpster	Rate per schedule
Temporary for non-permanent structure:		<u>Returned Check Fee</u>	\$25.00
Under 100 AMPS	\$125.00	<u>Permit Fees</u>	See Building & Zoning Department
Over 100 AMPS (Determined by materials and labor)		<u>Meter Test Fee</u>	\$50.00
<u>Three Phase Connections</u>		<u>Delinquent Admin. Fee</u>	\$45.00
Three phase service from 200 to 400 AMPS	\$100.00 per phase	<u>If Cut Off at Pole</u>	\$48.54 + 1.46 = \$50.00
Three phase service 400 AMPS and over	See Public Works Director	<u>Late Charge</u>	\$6.00 or 1.5% (whichever is greater)
<u>Sewer Connections</u>		<u>Use of Electric Meter Downtown Per Day</u>	\$20.00
Inside and Outside	\$750.00	<u>Electric Charges for Outside Lighting</u>	See Public Works Director for Cost
<u>Replacement of Tapping Saddle</u>	\$50.00	<u>Special License</u>	According to Ordinance
<u>Replacement of Street Paving</u>	\$300.00	<u>Minimum Water and Sewer Charges</u>	
<u>Water Connections</u>		Water - Inside	\$14.95
3/4"	\$800.00	Sewer - Inside	\$14.95
1"	\$1,100.00	Water - Outside	\$27.15
2" - Price to be determined by individual job		Sewer - Outside	\$27.15
<u>Water Deposit</u>	\$25.00	<u>Electric Deposit</u>	
Residential or Commercial		Residential or Commercial	\$100.00

Appendix 11.5

Forest City Financial Data

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TOWN OF FOREST CITY, NORTH CAROLINA

Water and Sewer Fund

Schedule of Revenues and Expenditures

Budget and Actual (Non-GAAP)

For the Fiscal Year Ended June 30, 2012

	2012		Variance
	Budget	Actual	Positive (Negative)
<b>Revenues:</b>			
Operating revenues:			
Water sales	\$3 150 000	\$3 179 210	\$ 29 210
Sewer charges	1 311 000	1 317 869	6 869
Tap and connection fees	35 000	37 250	2 250
Operating grant		37 179	37 179
Other	35 500	38 422	2 922
	<u>4 531 500</u>	<u>4 609 930</u>	<u>78 430</u>
Nonoperating revenues:			
Interest	<u>80 000</u>	<u>108 133</u>	<u>28 133</u>
Total revenues	<u>4 611 500</u>	<u>4 718 063</u>	<u>106 563</u>
<b>Expenditures:</b>			
Administration: <i>Water &amp; Sewer</i>			
Salaries and benefits		231 405	
Supplies		28 840	
Repairs and maintenance		4 100	
Industrial development loan		950 000	
Other		5 948	
	<u>1 287 800</u>	<u>1 220 293</u>	<u>67 507</u>
Water operations:			
Salaries and benefits		295 147	
Supplies		175 692	
Repairs and maintenance		31 559	
Other		84 086	
	<u>996 500</u>	<u>586 484</u>	<u>410 016</u>
Water plant:			
Salaries and benefits		319 578	
Supplies		97 665	
Repairs and maintenance		51 277	
Utilities		78 359	
Other		44 235	
	<u>740 000</u>	<u>591 114</u>	<u>148 886</u>

TOWN OF FOREST CITY, NORTH CAROLINA

Water and Sewer Fund

Schedule of Revenues and Expenditures

Budget and Actual (Non-GAAP)

For the Fiscal Year Ended June 30, 2012

	2012		Variance Positive (Negative)
	Budget	Actual	
<b>Sewer Operations:</b>			
Salaries and benefits	\$	\$ 152 446	\$
Supplies		22 660	
Repairs and maintenance		51 917	
Other		<u>111 907</u>	
	<u>730 900</u>	<u>338 930</u>	<u>391 970</u>
<b>Waste treatment plant:</b>			
Salaries and benefits		287 188	
Supplies		78 467	
Utilities		184 922	
Repairs and maintenance		42 136	
Other		<u>61 498</u>	
	<u>678 500</u>	<u>654 211</u>	<u>24 289</u>
<b>Pump station and storage:</b>			
Salaries and benefits		193 621	
Supplies		17 433	
Utilities		82 659	
Repairs and maintenance		113 898	
Other		<u>12 690</u>	
	<u>533 400</u>	<u>420 301</u>	<u>113 099</u>
<b>Capital outlay:</b>			
Water operations	110 000	106 363	3 637
Water plant	59 200	53 900	5 300
<b>Sewer operations</b>	275 000	272 000	3 000
<b>Waste treatment plant</b>	20 000	14 892	5 108
Pump station and storage	<u>25 000</u>	<u>21 990</u>	<u>3 010</u>
	<u>489 200</u>	<u>469 145</u>	<u>20 055</u>
<b>Total expenditures</b>	<u>5 456 300</u>	<u>4 280 478</u>	<u>1 175 822</u>
<b>Revenues over (under) expenditures</b>	<u>(844 800)</u>	<u>437 585</u>	<u>1 282 385</u>

TOWN OF FOREST CITY, NORTH CAROLINA  
Water and Sewer Fund  
Schedule of Revenues and Expenditures  
Budget and Actual (Non-GAAP)  
For the Fiscal Year Ended June 30, 2012

	2012		Variance Positive (Negative)
	Budget	Actual	
<b>Other financing sources (uses):</b>			
Operating transfer:			
To General Fund	\$ (1 000 000)	\$ (1 000 000)	\$
To Broad River Capital Project	(50 000)	(50 000)	
Fund balance appropriated	<u>1 894 800</u>		<u>(1 894 800)</u>
	<u>844 800</u>	<u>(1 050 000)</u>	<u>(1 894 800)</u>
 Revenue and other sources under expenditures	 \$ -	 <u>( 612 415)</u>	 <u>\$ ( 612 415)</u>

**Reconciliation from budgetary basis  
(modified accrual) to full accrual:**

<b>Reconciling items:</b>	
Capital outlay	469 145
Depreciation	(1 307 317)
Contributions to Capital Project Fund	50 000
Industrial development loan	<u>950 000</u>
	<u>161 828</u>
 Change in net assets	 <u>\$ ( 450 587)</u>

TOWN OF FOREST CITY  
REVENUE & EXPENDITURE STATEMENT BY FUND

07/01/2012 TO 06/30/2013

*61 Water & Sewer Fund*

REVENUE:

	BUDGETED	CURRENT PERIOD	YEAR-TO-DATE	REMAINING BALANCE	PCT USED
61-3710-520 TAPS AND CONNECTION FEES <i>Water &amp; Sewer</i>	35,000.00	29,650.00	29,650.00	5,350.00	85
61-3712-510 CHARGES FOR UTILITIES/WATER	3,150,000.00	3,077,819.92	3,077,819.92	72,180.08	98
61-3712-516 BOSTIC WATER SERVICES	7,000.00	12,404.15	12,404.15	-5,404.15	177
61-3712-517 CONCORD WATER SERVICES	20,000.00	15,568.54	15,568.54	4,431.46	78
61-3712-518 ELLENBORO WATER SERVICES	1,000.00	6,257.59	6,257.59	-5,257.59	626
61-3713-510 CHARGES FOR UTILITIES/SEWER	1,240,000.00	1,190,036.66	1,190,036.66	49,963.34	96
61-3713-513 SEPTAGE USER FEES	1,000.00	2,799.00	2,799.00	-1,799.00	280
61-3713-516 ELLENBORO SEWER CHARGES	70,000.00	63,137.82	63,137.82	6,862.18	90
61-3831-497 INTEREST EARNED WA/SE FUND	100,000.00	108,786.87	108,786.87	-8,786.87	109
61-3835-810 USED MATERIAL SOLD	2,000.00	5,032.05	5,032.05	-3,032.05	252
61-3835-811 NEW MATERIAL SOLD	0.00	1,389.32	1,389.32	-1,389.32	0
61-3839-890 MISCELLANEOUS REVENUES	0.00	5,461.65	5,461.65	-5,461.65	0
61-3840-891 CUSTOMER SERVICES	3,000.00	3,870.00	3,870.00	-870.00	129
61-3991-995 FUND BALANCE APPROPRIATED	2,253,860.00	0.00	0.00	2,253,860.00	0
TOTAL REVENUE	6,882,860.00	4,522,213.57	4,522,213.57	2,360,646.43	66

EXPENDITURE:

7110 ADMINISTRATION AND BILLIN <i>Water &amp; Sewer - Water customers - 7.075 Sewer customers - 3.448</i>					
61-7110-121 SALARIES & WAGES-REGULAR	124,000.00	117,847.40	117,847.40	6,152.60	95
61-7110-129 OVERTIME-SALARIES	4,500.00	4,475.61	4,475.61	24.39	99
61-7110-180 FRINGE BENEFITS	47,000.00	44,498.61	44,498.61	2,501.39	95
61-7110-299 DEPT MATERIALS AND SUPPLIES	0.00	5,660.01	5,660.01	-5,660.01	0
61-7110-311 TRAVEL & TRAINING EXPENSE	0.00	89.74	89.74	-89.74	0
61-7110-325 POSTAGE	26,000.00	25,427.00	25,427.00	573.00	98
61-7110-350 BAD DEBTS	30,000.00	0.00	0.00	30,000.00	0
61-7110-450 INSURANCE AND BONDS	1,500.00	1,432.74	1,432.74	67.26	96
61-7110-491 DUES AND SUBSCRIPTIONS	0.00	20.00	20.00	-20.00	0
61-7110-550 DEPREC CAPITAL OUTLAY	7,721.00	7,767.62	7,767.62	-46.62	101
7110 ADMINISTRATION AND BILLIN	240,721.00	207,218.73	207,218.73	33,502.27	86
7120 WATER OPERATIONS AND CONS					
61-7120-121 SALARIES & WAGES-REGULAR	223,000.00	204,173.42	204,173.42	18,826.58	92
61-7120-129 OVERTIME-SALARIES	13,500.00	8,854.15	8,854.15	4,645.85	66
61-7120-180 FRINGE BENEFITS	97,000.00	88,080.33	88,080.33	8,919.67	91
61-7120-195 PROFESSIONAL SERVICES-ENGINEER	30,000.00	9,206.28	9,206.28	20,793.72	31
61-7120-212 UNIFORMS	2,500.00	2,388.29	2,388.29	111.71	96
61-7120-251 AUTOMOTIVE SUPPLIES	25,000.00	23,378.80	23,378.80	1,621.20	94
61-7120-299 DEPT MATERIALS AND SUPPLIES	148,500.00	139,018.35	139,018.35	9,481.65	94
61-7120-311 TRAVEL AND TRAINING EXPENSE	2,500.00	1,720.00	1,720.00	780.00	69
61-7120-321 TELEPHONE	1,800.00	1,613.77	1,613.77	186.23	90

TOWN OF FOREST CITY  
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07/01/2012 TO 06/30/2013

	<u>BUDGETED</u>	<u>CURRENT PERIOD</u>	<u>YEAR-TO-DATE</u>	<u>REMAINING BALANCE</u>	<u>PCT USED</u>
61-7120-352 MAINT & REPAIR OF EQUIPMENT	5,000.00	2,188.27	2,188.27	2,811.73	44
61-7120-353 MAINT & REPAIR AUTOS & TRUCKS	5,000.00	2,904.86	2,904.86	2,095.14	58
61-7120-397 CONTRACTED SERVICES	30,000.00	26,877.34	26,877.34	3,122.66	90
61-7120-450 INSURANCE	13,000.00	11,400.49	11,400.49	1,599.51	88
61-7120-525 NON-DEPR C O EQUIP	9,000.00	9,638.33	9,638.33	-638.33	107
61-7120-590 C O OTHER IMPROVEMENTS	200,000.00	133,012.64	133,012.64	66,987.36	67
61-7120-591 HWY 221 WATER LINE RELOCATION	154,100.00	0.00	0.00	154,100.00	0
7120 WATER OPERATIONS AND CONS	<u>959,900.00</u>	<u>664,455.32</u>	<u>664,455.32</u>	<u>295,444.68</u>	<u>69</u>
7121 WATER PLANT					
61-7121-121 SALARIES AND WAGES-REGULAR	230,000.00	234,009.02	234,009.02	-4,009.02	102
61-7121-129 OVERTIME-SALARIES	5,400.00	3,747.84	3,747.84	1,652.16	69
61-7121-180 FRINGE BENEFITS	95,000.00	97,718.06	97,718.06	-2,718.06	103
61-7121-195 ENGINEERING SERVICES	5,000.00	3,252.95	3,252.95	1,747.05	65
61-7121-212 UNIFORMS	2,100.00	2,067.72	2,067.72	32.28	98
61-7121-251 AUTOMOTIVE SUPPLIES	1,500.00	1,823.01	1,823.01	-323.01	122
61-7121-299 DEPT MATERIALS AND SUPPLIES	90,000.00	102,328.68	102,328.68	-12,328.68	114
61-7121-311 TRAVEL AND TRAINING EXPENSE	3,000.00	2,190.05	2,190.05	809.95	73
61-7121-321 TELEPHONE	6,000.00	6,358.98	6,358.98	-358.98	106
61-7121-325 POSTAGE	100.00	1,010.16	1,010.16	-910.16	1,010
61-7121-331 ELECTRIC UTILITIES	78,000.00	78,821.11	78,821.11	-821.11	101
61-7121-332 UTILITIES-FUEL OIL	5,000.00	0.00	0.00	5,000.00	0
61-7121-351 BLDGS AND GRDS-REPAIR AND MAIN	21,000.00	7,454.22	7,454.22	13,545.78	35
61-7121-352 EQUIPMENT SERVICE AND REPAIR	25,000.00	15,131.49	15,131.49	9,868.51	61
61-7121-353 VEHICLE SERVICE AND REPAIR	500.00	204.61	204.61	295.39	41
61-7121-397 CONTRACTED SERVICES	40,000.00	31,394.71	31,394.71	8,605.29	78
61-7121-450 INSURANCE AND BONDS	26,000.00	22,800.98	22,800.98	3,199.02	88
61-7121-491 DUES AND SUBSCRIPTIONS	7,000.00	7,081.56	7,081.56	-81.56	101
61-7121-525 NON-DEPR C O EQUIP	4,500.00	3,269.45	3,269.45	1,230.55	73
61-7121-550 C O EQUIPMENT	20,000.00	0.00	0.00	20,000.00	0
61-7121-590 C O OTHER IMPROVEMENTS	320,000.00	162,387.24	162,387.24	157,612.76	51
61-7121-591 C O SLUDGE REMOVAL	1,000.00	0.00	0.00	1,000.00	0
7121 WATER PLANT	<u>986,100.00</u>	<u>783,051.84</u>	<u>783,051.84</u>	<u>203,048.16</u>	<u>79</u>
7130 SEWER OPERATIONS AND CONS					
61-7130-121 SALARY AND WAGES-REGULAR	105,000.00	106,239.99	106,239.99	-1,239.99	101
61-7130-129 OVERTIME-SALARIES	2,700.00	728.97	728.97	1,971.03	27
61-7130-180 FRINGE BENEFITS	53,000.00	51,639.37	51,639.37	1,360.63	97
61-7130-195 PROFESSIONAL SERVICES-ENGINEER	3,000.00	1,267.50	1,267.50	1,732.50	42
61-7130-212 UNIFORMS	1,300.00	1,189.60	1,189.60	110.40	92
61-7130-251 AUTOMOTIVE SUPPLIES	15,000.00	11,515.68	11,515.68	3,484.32	77
61-7130-299 DEPT MATERIALS AND SUPPLIES	15,105.00	11,582.66	11,582.66	3,522.34	77
61-7130-311 TRAVEL AND TRAINING EXPENSE	1,195.00	1,195.00	1,195.00	0.00	100

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	<u>BUDGETED</u>	<u>CURRENT PERIOD</u>	<u>YEAR-TO-DATE</u>	<u>REMAINING BALANCE</u>	<u>PCT USED</u>
61-7130-321 TELEPHONE	500.00	456.12	456.12	43.88	91
61-7130-352 MAINT AND REPAIR-EQUIPMENT	2,000.00	1,575.41	1,575.41	424.59	79
61-7130-353 MAINT AND REPAIR-AUTOS AND TRU	3,000.00	762.44	762.44	2,237.56	25
61-7130-397 CONTRACTED SERVICES	100,000.00	43,629.91	43,629.91	56,370.09	44
61-7130-450 INSURANCE AND BONDS	6,000.00	5,261.76	5,261.76	738.24	88
61-7130-490 PERMITS	1,500.00	1,310.00	1,310.00	190.00	87
61-7130-525 NON-DEPR C O EQUIP	3,150.00	3,332.52	3,332.52	-182.52	106
61-7130-590 C O OTHER IMPROVEMENTS	700,000.00	89,815.00	89,815.00	610,185.00	13
61-7130-630 CONT TO	70,000.00	70,000.00	70,000.00	0.00	100
<b>7130 SEWER OPERATIONS AND CONS</b>	<b>1,082,450.00</b>	<b>401,501.93</b>	<b>401,501.93</b>	<b>680,948.07</b>	<b>37</b>
<b>7131 WASTE TREATMENT PLANT</b>					
61-7131-121 SALARIES AND WAGES-REGULAR	215,000.00	206,822.09	206,822.09	8,177.91	96
61-7131-129 OVERTIME-SALARIES	9,000.00	7,768.40	7,768.40	1,231.60	86
61-7131-180 FRINGE BENEFITS	85,000.00	85,057.07	85,057.07	-57.07	100
61-7131-195 PROFESSIONAL SERVICES-ENGINEER	10,000.00	5,440.00	5,440.00	4,560.00	54
61-7131-212 UNIFORMS	2,000.00	2,002.49	2,002.49	-2.49	100
61-7131-251 AUTOMOTIVE SUPPLIES	6,000.00	7,815.82	7,815.82	-1,815.82	130
61-7131-299 DEPT MATERIALS AND SUPPLIES	74,000.00	79,775.12	79,775.12	-5,775.12	108
61-7131-311 TRAVEL AND TRAINING EXPENSE	1,000.00	819.71	819.71	180.29	82
61-7131-321 TELEPHONE	2,500.00	1,846.92	1,846.92	653.08	74
61-7131-325 POSTAGE	300.00	363.50	363.50	-63.50	121
61-7131-331 ELECTRIC UTILITIES	160,000.00	148,100.67	148,100.67	11,899.33	93
61-7131-332 UTILITIES-FUEL OIL	2,000.00	901.42	901.42	1,098.58	45
61-7131-333 UTILITIES-PROPANE GAS	25,000.00	17,449.23	17,449.23	7,550.77	70
61-7131-351 BLDGS AND GRDS-REPAIR AND MAIN	10,000.00	7,258.41	7,258.41	2,741.59	73
61-7131-352 EQUIPMENT SERVICE AND REPAIR	30,000.00	24,265.24	24,265.24	5,734.76	81
61-7131-353 VEHICLE SERVICE & REPAIR	1,500.00	840.43	840.43	659.57	56
61-7131-397 CONTRACTED SERVICES	30,000.00	21,281.37	21,281.37	8,718.63	71
61-7131-398 CONT SERV/SPECIAL EPA FEES/IND	2,000.00	0.00	0.00	2,000.00	0
61-7131-450 INSURANCE AND BONDS	30,000.00	26,308.82	26,308.82	3,691.18	88
61-7131-490 PERMITS	8,000.00	11,824.00	11,824.00	-3,824.00	148
61-7131-491 DUES AND SUBSCRIPTIONS	500.00	184.56	184.56	315.44	37
61-7131-525 NON-DEPR C O EQUIP	9,000.00	8,020.34	8,020.34	979.66	89
<b>7131 WASTE TREATMENT PLANT</b>	<b>712,800.00</b>	<b>664,145.61</b>	<b>664,145.61</b>	<b>48,654.39</b>	<b>93</b>
<b>7132 WWTP-RIVERSTONE</b>					
61-7132-299 DEPT MATERIALS AND SUPPLIES	0.00	3.19	3.19	-3.19	0
61-7132-321 TELEPHONE	1,000.00	869.28	869.28	130.72	87
61-7132-331 ELECTRIC UTILITIES	12,000.00	9,245.61	9,245.61	2,754.39	77
61-7132-351 BLDGS AND GRDS-REPAIR AND MAIN	1,500.00	531.00	531.00	969.00	35
61-7132-352 EQUIPMENT SERVICE AND REPAIR	4,000.00	2,932.76	2,932.76	1,067.24	73
61-7132-450 INSURANCE AND BONDS	2,200.00	1,929.31	1,929.31	270.69	88

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61-7132-490 PERMITS	1,000.00	860.00	860.00	140.00	86
61-7132-525 NON-DEPR C O EQUIP	450.00	425.00	425.00	25.00	94
<b>7132 WWTP-RIVERSTONE</b>	<b>22,150.00</b>	<b>16,796.15</b>	<b>16,796.15</b>	<b>5,353.85</b>	<b>76</b>
7135 PUMP MAINTENANCE/STORAGE					
61-7135-121 SALARIES AND WAGES-REGULAR	145,000.00	146,444.83	146,444.83	-1,444.83	101
61-7135-129 OVERTIME-SALARIES	3,600.00	5,199.88	5,199.88	-1,599.88	144
61-7135-180 FRINGE BENEFITS	54,000.00	54,364.42	54,364.42	-364.42	101
61-7135-212 UNIFORMS	1,400.00	1,184.50	1,184.50	215.50	85
61-7135-251 AUTOMOTIVE SUPPLIES	7,500.00	7,799.25	7,799.25	-299.25	104
61-7135-299 DEPT MATERIALS AND SUPPLIES	18,000.00	6,696.60	6,696.60	11,303.40	37
61-7135-311 TRAVEL AND TRAINING EXPENSE	1,500.00	594.20	594.20	905.80	40
61-7135-321 TELEPHONE	4,000.00	2,604.20	2,604.20	1,395.80	65
61-7135-331 ELECTRIC UTILITIES	80,000.00	86,174.84	86,174.84	-6,174.84	108
61-7135-332 DIESEL FOR GENERATORS	5,000.00	990.36	990.36	4,009.64	20
61-7135-351 BLDGS & GRDS-REPAIR & MAINT	5,000.00	4,767.41	4,767.41	232.59	95
61-7135-352 EQUIPMENT SERVICE AND REPAIR	40,000.00	15,079.21	15,079.21	24,920.79	38
61-7135-353 VEHICLE SERVICE AND REPAIR	5,000.00	1,529.92	1,529.92	3,470.08	31
61-7135-397 CONTRACTED SERVICES	90,000.00	86,863.79	86,863.79	3,136.21	97
61-7135-400 RIVERSTONE	3,000.00	0.00	0.00	3,000.00	0
61-7135-450 INSURANCE	12,000.00	10,523.53	10,523.53	1,476.47	88
61-7135-525 NON-DEPR C O EQUIP	2,700.00	1,475.02	1,475.02	1,224.98	55
61-7135-590 C O OTHER IMPROVEMENTS	40,000.00	14,995.00	14,995.00	25,005.00	37
<b>7135 PUMP MAINTENANCE/STORAGE</b>	<b>517,700.00</b>	<b>447,286.96</b>	<b>447,286.96</b>	<b>70,413.04</b>	<b>86</b>
<b>7140 WATER METER SERVICES <i>water &amp; sewer</i></b>					
61-7140-121 SALARIES AND WAGES-REGULAR	48,000.00	46,365.72	46,365.72	1,634.28	97
61-7140-129 OVERTIME-SALARIES	900.00	515.96	515.96	384.04	57
61-7140-180 FRINGE BENEFITS	24,000.00	21,761.66	21,761.66	2,238.34	91
61-7140-212 UNIFORMS	500.00	525.00	525.00	-25.00	105
61-7140-251 AUTOMOTIVE SUPPLIES	3,500.00	3,052.86	3,052.86	447.14	87
61-7140-299 DEPT MATERIALS AND SUPPLIES	900.00	651.26	651.26	248.74	72
61-7140-311 TRAVEL AND TRAINING	500.00	363.17	363.17	136.83	73
61-7140-321 TELEPHONE	1,300.00	999.72	999.72	300.28	77
61-7140-352 EQUIPMENT SERVICE & REPAIR	1,700.00	2,372.64	2,372.64	-672.64	140
61-7140-353 VEHICLE SERVICE & REPAIR	1,000.00	432.91	432.91	567.09	43
61-7140-397 CONTRACTED SERVICES	500.00	544.56	544.56	-44.56	109
61-7140-450 INSURANCE AND BONDS	2,500.00	2,192.40	2,192.40	307.60	88
61-7140-525 NON-DEPRECIABLE CO EQUIP	2,579.00	379.40	379.40	2,199.60	15
<b>7140 WATER METER SERVICES</b>	<b>87,879.00</b>	<b>80,157.26</b>	<b>80,157.26</b>	<b>7,721.74</b>	<b>91</b>
9700 RESERVE-FUTURE APPROP					
61-9700-700 APPROVED SUBDIVISIONS	39,600.00	0.00	0.00	39,600.00	0
61-9700-750 WATER RESERVE	300,000.00	0.00	0.00	300,000.00	0

**TOWN OF FOREST CITY  
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	<u>BUDGETED</u>	<u>CURRENT PERIOD</u>	<u>YEAR-TO-DATE</u>	<u>REMAINING BALANCE</u>	<u>PCT USED</u>
61-9700-751 SEWER RESERVE	300,000.00	0.00	0.00	300,000.00	0
61-9700-752 SEWER BACKHOE	15,000.00	0.00	0.00	15,000.00	0
61-9700-753 SEWER RODDER	15,000.00	0.00	0.00	15,000.00	0
61-9700-754 WATER OPERATIONS EXCAVATOR	30,000.00	0.00	0.00	30,000.00	0
61-9700-755 WATER OPERATIONS DUMP TRUCK	15,000.00	0.00	0.00	15,000.00	0
61-9700-756 WATER OPERATIONS ON-CALL	25,000.00	0.00	0.00	25,000.00	0
61-9700-757 SEWER CAMERA UNIT	60,000.00	0.00	0.00	60,000.00	0
61-9700-759 WWTP BELT PRESS	120,000.00	0.00	0.00	120,000.00	0
61-9700-760 WWTP INFLUENT BAR SCREEN	45,000.00	0.00	0.00	45,000.00	0
61-9700-766 WTP-SLUDGE LAGOON/PUMP	150,000.00	0.00	0.00	150,000.00	0
61-9700-767 WTP-FILTER MEDIA	30,000.00	0.00	0.00	30,000.00	0
61-9700-768 WTP-BASIN REHAB	37,500.00	0.00	0.00	37,500.00	0
9700 RESERVE-FUTURE APPROP	<u>1,182,100.00</u>	<u>0.00</u>	<u>0.00</u>	<u>1,182,100.00</u>	<u>0</u>
9800 TRANSFERS TO OTHER FUNDS					
61-9800-982 TRANSFERS TO PARKS AND REC FUN	1,072,175.00	1,072,175.00	1,072,175.00	0.00	100
61-9800-985 TRNASFER TO CBD	18,885.00	0.00	0.00	18,885.00	0
9800 TRANSFERS TO OTHER FUNDS	<u>1,091,060.00</u>	<u>1,072,175.00</u>	<u>1,072,175.00</u>	<u>18,885.00</u>	<u>98</u>
TOTAL EXPENDITURE	<u>6,882,860.00</u>	<u>4,336,788.80</u>	<u>4,336,788.80</u>	<u>2,546,071.20</u>	<u>63</u>
BEFORE TRANSFERS	<u>0.00</u>	<u>185,424.77</u>	<u>185,424.77</u>		
AFTER TRANSFERS	<u>0.00</u>	<u>185,424.77</u>	<u>185,424.77</u>		

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	BUDGETED	CURRENT PERIOD	YEAR-TO-DATE	REMAINING BALANCE	PCT USED
<b>61 WATER AND SEWER</b>					
<b>REVENUE:</b>					
61-3710-520 TAPS AND CONNECTION FEES <i>Water &amp; Sewer</i>	35,000.00	11,225.00	11,225.00	23,775.00	32
61-3712-510 CHARGES FOR UTILITIES/WATER	3,320,000.00	778,951.20	778,951.20	2,541,048.80	23
61-3712-516 BOSTIC WATER SERVICES	10,000.00	2,186.71	2,186.71	7,813.29	22
61-3712-517 CONCORD WATER SERVICES	20,000.00	4,292.67	4,292.67	15,707.33	21
61-3712-518 ELLENBORO WATER SERVICES	1,000.00	0.00	0.00	1,000.00	0
61-3713-510 CHARGES FOR UTILITIES/SEWER	1,220,000.00	305,056.22	305,056.22	914,943.78	25
61-3713-513 SEPTAGE USER FEES	1,000.00	1,050.50	1,050.50	-50.50	105
61-3713-516 ELLENBORO SEWER CHARGES	75,000.00	18,888.86	18,888.86	56,111.14	25
61-3831-497 INTEREST EARNED WA/SE FUND	100,000.00	8,459.24	8,459.24	91,540.76	8
61-3835-810 USED MATERIAL SOLD	3,000.00	0.00	0.00	3,000.00	0
61-3839-890 MISCELLANEOUS REVENUES	0.00	4,456.68	4,456.68	-4,456.68	0
61-3839-892 HORSEHEAD ID LOAN REPAYMENT	107,143.00	0.00	0.00	107,143.00	0
61-3840-891 CUSTOMER SERVICES	3,000.00	900.00	900.00	2,100.00	30
61-3991-995 FUND BALANCE APPROPRIATED	593,400.00	0.00	0.00	593,400.00	0
<b>TOTAL REVENUE</b>	<b>5,488,543.00</b>	<b>1,135,467.08</b>	<b>1,135,467.08</b>	<b>4,353,075.92</b>	<b>21</b>

**EXPENDITURE:**

<b>7110 ADMINISTRATION AND BILLIN <i>Water &amp; Sewer</i> 3,448 <i>Sewer customers, 7,075 <i>water customers</i></i></b>					
61-7110-121 SALARIES & WAGES-REGULAR	124,458.00	26,004.38	26,004.38	98,453.62	21
61-7110-129 OVERTIME-SALARIES	3,500.00	1,495.54	1,495.54	2,004.46	43
61-7110-180 FRINGE BENEFITS	48,495.00	10,263.38	10,263.38	38,231.62	21
61-7110-299 DEPT MATERIALS AND SUPPLIES	16,350.00	10,960.09	10,960.09	5,389.91	67
61-7110-311 TRAVEL & TRAINING EXPENSE	1,650.00	64.13	64.13	1,585.87	4
61-7110-325 POSTAGE	26,000.00	6,647.80	6,647.80	19,352.20	26
61-7110-350 BAD DEBTS	30,000.00	0.00	0.00	30,000.00	0
61-7110-352 MAINT TO EQUIPMENT	410.00	0.00	0.00	410.00	0
61-7110-397 CONTRACTED SERVICES	18,950.00	14,518.95	14,518.95	4,431.05	77
61-7110-450 INSURANCE AND BONDS	1,500.00	0.00	0.00	1,500.00	0
61-7110-525 NON DEPRECIABLE EQUIP	2,717.00	2,873.82	2,873.82	-156.82	106
61-7110-550 DEPREC CAPITAL OUTLAY	1,870.00	0.00	0.00	1,870.00	0
<b>7110 ADMINISTRATION AND BILLIN</b>	<b>275,900.00</b>	<b>72,828.09</b>	<b>72,828.09</b>	<b>203,071.91</b>	<b>26</b>

**7120 WATER OPERATIONS AND CONS**

61-7120-121 SALARIES & WAGES-REGULAR	236,244.00	49,224.29	49,224.29	187,019.71	21
61-7120-129 OVERTIME-SALARIES	13,500.00	1,581.11	1,581.11	11,918.89	12
61-7120-180 FRINGE BENEFITS	103,259.00	18,874.48	18,874.48	84,384.52	18
61-7120-195 PROFESSIONAL SERVICES-ENGINEER	30,000.00	2,700.00	2,700.00	27,300.00	9
61-7120-212 UNIFORMS	2,500.00	0.00	0.00	2,500.00	0
61-7120-251 AUTOMOTIVE SUPPLIES	25,000.00	1,806.35	1,806.35	23,193.65	7
61-7120-299 DEPT MATERIALS AND SUPPLIES	150,000.00	60,717.89	60,717.89	89,282.11	40

TOWN OF FOREST CITY  
REVENUE & EXPENDITURE STATEMENT BY FUND

FY 2013-2014

07/01/2013 TO 09/30/2013

	<u>BUDGETED</u>	<u>CURRENT PERIOD</u>	<u>YEAR-TO-DATE</u>	<u>REMAINING BALANCE</u>	<u>PCT USED</u>
61-7120-311 TRAVEL AND TRAINING EXPENSE	2,500.00	1,080.00	1,080.00	1,420.00	43
61-7120-321 TELEPHONE	3,000.00	404.79	404.79	2,595.21	13
61-7120-352 MAINT & REPAIR OF EQUIPMENT	5,000.00	80.57	80.57	4,919.43	2
61-7120-353 MAINT & REPAIR AUTOS & TRUCKS	5,000.00	177.50	177.50	4,822.50	4
61-7120-397 CONTRACTED SERVICES	30,000.00	2,570.12	2,570.12	27,429.88	9
61-7120-450 INSURANCE	13,000.00	0.00	0.00	13,000.00	0
61-7120-491 DUES AND SUBSCRIPTIONS	460.00	55.34	55.34	404.66	12
61-7120-525 NON-DEPR C O EQUIP	9,000.00	1,925.18	1,925.18	7,074.82	21
61-7120-590 C O OTHER IMPROVEMENTS	200,000.00	0.00	0.00	200,000.00	0
61-7120-591 HWY 221 WATER LINE RELOCATION	154,100.00	0.00	0.00	154,100.00	0
<b>7120 WATER OPERATIONS AND CONS</b>	<b>982,563.00</b>	<b>141,197.62</b>	<b>141,197.62</b>	<b>841,365.38</b>	<b>14</b>
<b>7121 WATER PLANT</b>					
61-7121-121 SALARIES AND WAGES-REGULAR	242,608.00	54,774.62	54,774.62	187,833.38	23
61-7121-129 OVERTIME-SALARIES	5,400.00	762.66	762.66	4,637.34	14
61-7121-180 FRINGE BENEFITS	110,624.00	21,487.18	21,487.18	89,136.82	19
61-7121-195 ENGINEERING SERVICES	5,000.00	0.00	0.00	5,000.00	0
61-7121-212 UNIFORMS	2,450.00	0.00	0.00	2,450.00	0
61-7121-251 AUTOMOTIVE SUPPLIES	1,750.00	129.57	129.57	1,620.43	7
61-7121-299 DEPT MATERIALS AND SUPPLIES	130,000.00	23,873.82	23,873.82	106,126.18	18
61-7121-311 TRAVEL AND TRAINING EXPENSE	1,500.00	180.00	180.00	1,320.00	12
61-7121-321 TELEPHONE	7,000.00	1,094.68	1,094.68	5,905.32	16
61-7121-325 POSTAGE	2,000.00	239.82	239.82	1,760.18	12
61-7121-331 ELECTRIC UTILITIES	75,000.00	10,956.28	10,956.28	64,043.72	15
61-7121-351 BLDGS AND GRDS-REPAIR AND MAIN	10,000.00	7,457.07	7,457.07	2,542.93	75
61-7121-352 EQUIPMENT SERVICE AND REPAIR	23,000.00	1,862.35	1,862.35	21,137.65	8
61-7121-353 VEHICLE SERVICE AND REPAIR	500.00	55.98	55.98	444.02	11
61-7121-397 CONTRACTED SERVICES	40,000.00	15,618.90	15,618.90	24,381.10	39
61-7121-450 INSURANCE AND BONDS	26,000.00	0.00	0.00	26,000.00	0
61-7121-491 DUES AND SUBSCRIPTIONS	7,700.00	1,209.42	1,209.42	6,490.58	16
61-7121-525 NON-DEPR C O EQUIP	3,000.00	0.00	0.00	3,000.00	0
<b>7121 WATER PLANT</b>	<b>693,532.00</b>	<b>139,702.35</b>	<b>139,702.35</b>	<b>553,829.65</b>	<b>20</b>
<b>7130 SEWER OPERATIONS AND CONS</b>					
61-7130-121 SALARY AND WAGES-REGULAR	108,985.00	23,816.03	23,816.03	85,168.97	22
61-7130-129 OVERTIME-SALARIES	2,500.00	377.19	377.19	2,122.81	15
61-7130-180 FRINGE BENEFITS	56,265.00	10,035.92	10,035.92	46,229.08	18
61-7130-195 PROFESSIONAL SERVICES-ENGINEER	3,000.00	0.00	0.00	3,000.00	0
61-7130-212 UNIFORMS	1,300.00	0.00	0.00	1,300.00	0
61-7130-251 AUTOMOTIVE SUPPLIES	15,000.00	1,550.69	1,550.69	13,449.31	10
61-7130-299 DEPT MATERIALS AND SUPPLIES	15,000.00	975.92	975.92	14,024.08	7
61-7130-311 TRAVEL AND TRAINING EXPENSE	2,200.00	690.00	690.00	1,510.00	31
61-7130-321 TELEPHONE	500.00	76.02	76.02	423.98	15

TOWN OF FOREST CITY  
REVENUE & EXPENDITURE STATEMENT BY FUND

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07/01/2013 TO 09/30/2013

	<u>BUDGETED</u>	<u>CURRENT PERIOD</u>	<u>YEAR-TO-DATE</u>	<u>REMAINING BALANCE</u>	<u>PCT USED</u>
61-7130-352 MAINT AND REPAIR-EQUIPMENT	2,000.00	158.53	158.53	1,841.47	8
61-7130-353 MAINT AND REPAIR-AUTOS AND TRU	3,000.00	194.45	194.45	2,805.55	6
61-7130-397 CONTRACTED SERVICES	100,000.00	1,863.09	1,863.09	98,136.91	2
61-7130-450 INSURANCE AND BONDS	6,000.00	0.00	0.00	6,000.00	0
61-7130-490 PERMITS	1,500.00	0.00	0.00	1,500.00	0
61-7130-491 DUES AND SUBSCRIPTIONS	170.00	28.70	28.70	141.30	17
61-7130-525 NON-DEPR C O EQUIP	3,150.00	0.00	0.00	3,150.00	0
61-7130-590 C O OTHER IMPROVEMENTS	175,000.00	0.00	0.00	175,000.00	0
<b>7130 SEWER OPERATIONS AND CONS</b>	<b>495,570.00</b>	<b>39,766.54</b>	<b>39,766.54</b>	<b>455,803.46</b>	<b>8</b>
<b>7131 WASTE TREATMENT PLANT</b>					
61-7131-121 SALARIES AND WAGES-REGULAR	203,587.00	45,540.40	45,540.40	158,046.60	22
61-7131-129 OVERTIME-SALARIES	9,000.00	1,950.38	1,950.38	7,049.62	22
61-7131-180 FRINGE BENEFITS	87,816.00	17,808.18	17,808.18	70,007.82	20
61-7131-195 PROFESSIONAL SERVICES-ENGINEER	27,500.00	0.00	0.00	27,500.00	0
61-7131-212 UNIFORMS	2,000.00	0.00	0.00	2,000.00	0
61-7131-251 AUTOMOTIVE SUPPLIES	6,000.00	417.53	417.53	5,582.47	7
61-7131-299 DEPT MATERIALS AND SUPPLIES	75,000.00	15,002.68	15,002.68	59,997.32	20
61-7131-311 TRAVEL AND TRAINING EXPENSE	1,200.00	0.00	0.00	1,200.00	0
61-7131-321 TELEPHONE	2,500.00	558.31	558.31	1,941.69	22
61-7131-325 POSTAGE	350.00	63.16	63.16	286.84	18
61-7131-331 ELECTRIC UTILITIES	160,000.00	19,485.38	19,485.38	140,514.62	12
61-7131-332 UTILITIES-FUEL OIL	2,000.00	0.00	0.00	2,000.00	0
61-7131-333 UTILITIES-PROPANE GAS	25,000.00	5,323.01	5,323.01	19,676.99	21
61-7131-351 BLDGS AND GRDS-REPAIR AND MAIN	10,000.00	2,590.25	2,590.25	7,409.75	26
61-7131-352 EQUIPMENT SERVICE AND REPAIR	43,412.00	846.80	846.80	42,565.20	2
61-7131-353 VEHICLE SERVICE & REPAIR	1,500.00	34.50	34.50	1,465.50	2
61-7131-397 CONTRACTED SERVICES	25,000.00	1,816.00	1,816.00	23,184.00	7
61-7131-398 CONT SERV/SPECIAL EPA FEES/IND	2,000.00	0.00	0.00	2,000.00	0
61-7131-450 INSURANCE AND BONDS	30,000.00	0.00	0.00	30,000.00	0
61-7131-490 PERMITS	7,000.00	4,977.00	4,977.00	2,023.00	71
61-7131-491 DUES AND SUBSCRIPTIONS	1,300.00	112.73	112.73	1,187.27	9
61-7131-525 NON-DEPR C O EQUIP	7,000.00	4,207.06	4,207.06	2,792.94	60
61-7131-550 C O EQUIPMENT	108,588.00	0.00	0.00	108,588.00	0
<b>7131 WASTE TREATMENT PLANT</b>	<b>837,753.00</b>	<b>120,733.37</b>	<b>120,733.37</b>	<b>717,019.63</b>	<b>14</b>
<b>7132 WWTP-RIVERSTONE</b>					
61-7132-121 SALARIES	33,502.00	0.00	0.00	33,502.00	0
61-7132-180 FRINGE BENEFITS	14,403.00	1,324.17	1,324.17	13,078.83	9
61-7132-212 UNIFORMS	800.00	0.00	0.00	800.00	0
61-7132-251 AUTOMOTIVE SUPPLIES	1,000.00	0.00	0.00	1,000.00	0
61-7132-299 DEPT MATERIALS AND SUPPLIES	15,000.00	1,648.87	1,648.87	13,351.13	11
61-7132-311 TRAVEL AND TRAINING	2,000.00	0.00	0.00	2,000.00	0

TOWN OF FOREST CITY  
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	<u>BUDGETED</u>	<u>CURRENT PERIOD</u>	<u>YEAR-TO-DATE</u>	<u>REMAINING BALANCE</u>	<u>PCT USED</u>
61-7132-321 TELEPHONE	5,600.00	218.58	218.58	5,381.42	4
61-7132-331 ELECTRIC UTILITIES	12,000.00	2,200.74	2,200.74	9,799.26	18
61-7132-332 UTILITIES - FUEL OIL	1,000.00	0.00	0.00	1,000.00	0
61-7132-351 BLDGS AND GRDS-REPAIR AND MAIN	3,000.00	437.08	437.08	2,562.92	15
61-7132-352 EQUIPMENT SERVICE AND REPAIR	15,000.00	635.00	635.00	14,365.00	4
61-7132-353 VEHICLE SERVICE AND REPAIR	500.00	0.00	0.00	500.00	0
61-7132-397 CONTRACTED SERVICES	11,750.00	0.00	0.00	11,750.00	0
61-7132-398 CONT SERV/SPEC EPA FEE/IND	2,000.00	0.00	0.00	2,000.00	0
61-7132-450 INSURANCE AND BONDS	2,200.00	0.00	0.00	2,200.00	0
61-7132-490 PERMITS	1,000.00	0.00	0.00	1,000.00	0
<b>7132 WWTP-RIVERSTONE</b>	<b>120,755.00</b>	<b>6,464.44</b>	<b>6,464.44</b>	<b>114,290.56</b>	<b>5</b>
<b>7135 PUMP MAINTENANCE/STORAGE</b>					
61-7135-121 SALARIES AND WAGES-REGULAR	147,767.00	32,986.11	32,986.11	114,780.89	22
61-7135-129 OVERTIME-SALARIES	3,600.00	1,360.15	1,360.15	2,239.85	38
61-7135-180 FRINGE BENEFITS	58,002.00	12,431.50	12,431.50	45,570.50	21
61-7135-212 UNIFORMS	1,300.00	0.00	0.00	1,300.00	0
61-7135-251 AUTOMOTIVE SUPPLIES	8,000.00	978.93	978.93	7,021.07	12
61-7135-299 DEPT MATERIALS AND SUPPLIES	15,000.00	1,115.78	1,115.78	13,884.22	7
61-7135-311 TRAVEL AND TRAINING EXPENSE	1,500.00	0.00	0.00	1,500.00	0
61-7135-321 TELEPHONE	4,500.00	703.71	703.71	3,796.29	16
61-7135-331 ELECTRIC UTILITIES	87,000.00	11,794.43	11,794.43	75,205.57	14
61-7135-332 DIESEL FOR GENERATORS	4,000.00	3,644.71	3,644.71	355.29	91
61-7135-351 BLDGS & GRDS-REPAIR & MAINT	5,000.00	0.00	0.00	5,000.00	0
61-7135-352 EQUIPMENT SERVICE AND REPAIR	35,000.00	1,273.06	1,273.06	33,726.94	4
61-7135-353 VEHICLE SERVICE AND REPAIR	5,000.00	257.01	257.01	4,742.99	5
61-7135-397 CONTRACTED SERVICES	103,000.00	30.76	30.76	102,969.24	0
61-7135-400 RIVERSTONE	3,000.00	0.00	0.00	3,000.00	0
61-7135-450 INSURANCE	12,000.00	106.00	106.00	11,894.00	1
61-7135-491 DUES AND SUBSCRIPTIONS	300.00	42.02	42.02	257.98	14
61-7135-525 NON-DEPR C O EQUIP	2,700.00	178.79	178.79	2,521.21	7
61-7135-590 C O OTHER IMPROVEMENTS	0.00	3,572.55	3,572.55	-3,572.55	0
<b>7135 PUMP MAINTENANCE/STORAGE</b>	<b>496,669.00</b>	<b>70,475.51</b>	<b>70,475.51</b>	<b>426,193.49</b>	<b>14</b>
<b>7140 WATER METER SERVICES - Sewer also</b>					
61-7140-121 SALARIES AND WAGES-REGULAR	49,472.00	10,916.80	10,916.80	38,555.20	22
61-7140-129 OVERTIME-SALARIES	900.00	195.93	195.93	704.07	22
61-7140-180 FRINGE BENEFITS	22,925.00	4,430.79	4,430.79	18,494.21	19
61-7140-212 UNIFORMS	525.00	0.00	0.00	525.00	0
61-7140-251 AUTOMOTIVE SUPPLIES	3,500.00	249.20	249.20	3,250.80	7
61-7140-299 DEPT MATERIALS AND SUPPLIES	900.00	196.88	196.88	703.12	22
61-7140-311 TRAVEL AND TRAINING	500.00	0.00	0.00	500.00	0
61-7140-321 TELEPHONE	1,400.00	223.90	223.90	1,176.10	16

JULIE

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TOWN OF FOREST CITY  
REVENUE & EXPENDITURE STATEMENT BY FUND

FY 2013-2014

07/01/2013 TO 09/30/2013

	<u>BUDGETED</u>	<u>CURRENT PERIOD</u>	<u>YEAR-TO-DATE</u>	<u>REMAINING BALANCE</u>	<u>PCT USED</u>
61-7140-352 EQUIPMENT SERVICE & REPAIR	3,000.00	497.68	497.68	2,502.32	17
61-7140-353 VEHICLE SERVICE & REPAIR	1,000.00	18.57	18.57	981.43	2
61-7140-397 CONTRACTED SERVICES	500.00	90.76	90.76	409.24	18
61-7140-450 INSURANCE AND BONDS	2,500.00	0.00	0.00	2,500.00	0
61-7140-491 DUES AND SUBSCRIPTIONS	350.00	42.02	42.02	307.98	12
61-7140-525 NON-DEPRECIABLE CO EQUIP	550.00	706.95	706.95	-156.95	129
61-7140-550 C O EQUIPMENT	9,348.00	9,047.80	9,047.80	300.20	97
7140 WATER METER SERVICES	<u>97,370.00</u>	<u>26,617.28</u>	<u>26,617.28</u>	<u>70,752.72</u>	<u>27</u>
7145 DEBT PAYMENTS <i>Sewer</i>					
61-7145-801 LOAN PRINCIPAL-CBD DENR	24,700.00	0.00	0.00	24,700.00	0
7145 DEBT PAYMENTS	<u>24,700.00</u>	<u>0.00</u>	<u>0.00</u>	<u>24,700.00</u>	<u>0</u>
9700 RESERVE-FUTURE APPROP					
61-9700-750 WATER RESERVE	150,000.00	0.00	0.00	150,000.00	0
61-9700-751 SEWER RESERVE	122,575.00	0.00	0.00	122,575.00	0
9700 RESERVE-FUTURE APPROP	<u>272,575.00</u>	<u>0.00</u>	<u>0.00</u>	<u>272,575.00</u>	<u>0</u>
9800 TRANSFERS TO OTHER FUNDS					
61-9800-981 TRANSFERS TO GENERAL FUND	57,268.00	0.00	0.00	57,268.00	0
61-9800-982 TRANSFERS TO PARKS AND REC FUN	850,000.00	0.00	0.00	850,000.00	0
61-9800-986 TRANSFERS TO FLORENCE MILL PRO	263,888.00	0.00	0.00	263,888.00	0
9800 TRANSFERS TO OTHER FUNDS	<u>1,171,156.00</u>	<u>0.00</u>	<u>0.00</u>	<u>1,171,156.00</u>	<u>0</u>
9910 CONTINGENCY					
61-9910-996 CONTINGENCY-MERIT	6,750.00	0.00	0.00	6,750.00	0
61-9910-997 CONTINGENCY-UNEMPLOYMENT	6,500.00	0.00	0.00	6,500.00	0
61-9910-999 CONTINGENCY-RECLASS	6,750.00	0.00	0.00	6,750.00	0
9910 CONTINGENCY	<u>20,000.00</u>	<u>0.00</u>	<u>0.00</u>	<u>20,000.00</u>	<u>0</u>
TOTAL EXPENDITURE	<u>5,488,543.00</u>	<u>617,785.20</u>	<u>617,785.20</u>	<u>4,870,757.80</u>	<u>11</u>
BEFORE TRANSFERS	<u>0.00</u>	<u>517,681.88</u>	<u>517,681.88</u>		
AFTER TRANSFERS	<u>0.00</u>	<u>517,681.88</u>	<u>517,681.88</u>		

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Appendix 11.6

Forest City 2012 / 2013 Sewer Usage Data

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## Brian Tripp

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**From:** John Condrey <[johncondrey@townofforestcity.com](mailto:johncondrey@townofforestcity.com)>  
**Sent:** Monday, April 14, 2014 4:54 PM  
**To:** Brian Tripp  
**Cc:** [juliescherer@townofforestcity.com](mailto:juliescherer@townofforestcity.com)  
**Subject:** FW: FW: Joint Sewer Study Financial Model - Additional Data Request - Billing / Customer Account / Sewer Usage Data

Brian,  
Please let me know if you have any additional questions.  
Thanks,  
John

**From:** Julie Scherer [mailto:[juliescherer@townofforestcity.com](mailto:juliescherer@townofforestcity.com)]  
**Sent:** Monday, April 14, 2014 11:54 AM  
**To:** John Condrey  
**Subject:** Fwd: FW: Joint Sewer Study Financial Model - Additional Data Request - Billing / Customer Account / Sewer Usage Data

See below. I changed 4 and 8 to read "outside" instead of inside. I am assuming that is what they meant.

### *Julie T. Scherer*

Finance Director  
Town of Forest City, NC  
(828) 248-5204

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**From:** Brian Tripp [mailto:[btripp@wkdickson.com](mailto:btripp@wkdickson.com)]  
**Sent:** Friday, April 11, 2014 1:22 PM  
**To:** John Condrey ([johncondrey@townofforestcity.com](mailto:johncondrey@townofforestcity.com)); 'townmanager@rutherfordton.net'; [TownMgr@TownofLakeLure.com](mailto:TownMgr@TownofLakeLure.com); R. Cameron McHargue ([rcmchargue@spindalenc.net](mailto:rcmchargue@spindalenc.net))  
**Cc:** [carl.classen@rutherfordcountync.gov](mailto:carl.classen@rutherfordcountync.gov); Tim Lowder; Rus Scherer; Maria Hunnicutt ([mhunnicutt@ncbrwa.com](mailto:mhunnicutt@ncbrwa.com))  
**Subject:** Joint Sewer Study Financial Model - Additional Data Request - Billing / Customer Account / Sewer Usage Data

Gentlemen:

In order to fine tune the model, we will require additional information from each of you – Cliffside, Forest City, Lake Lure, Rutherfordton, & Spindale. Information needs are presented below.

1. Average # of inside residential sewer customer accounts for FY 2012/2013 (2,797)
2. Average # of outside residential sewer customer accounts for FY 2012/2013 (28)
3. Average # of inside commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 (637)

4. Average # of inside (outside) commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 (23)
5. Sewer Usage of inside residential sewer customer accounts for FY 2012/2013 in gallons (114,215,980 gallons)
6. Sewer Usage of outside residential sewer customer accounts for FY 2012/2013 in gallons (1,230,900 gallons)
7. Sewer Usage of inside commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 in gallons (114,913,360 gallons)
8. Sewer Usage of inside (outside) commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 in gallons (25,634,310 gallons)

My hope is that you can easily pull these numbers out of your billing programs.

If you could provide this by Monday, April 21<sup>st</sup>, we would greatly appreciate it. This will allow us to continue to fine tune the model.

Please let me know if you have any questions or concerns. Thanks and have a great weekend.

**Brian L. Tripp, PE, BCEE**  
**Vice President**  
**W.K. Dickson & Co., Inc.**  
**Community Infrastructure Consultants**  
**616 Colonnade Drive**  
**Charlotte, NC 28205**  
**Phone - (704) 334-5348**  
**Fax - (704) 334-0078**  
**Cell - (704) 517-5656**  
**Email - [btripp@wkdickson.com](mailto:btripp@wkdickson.com)**  
**[www.wkdickson.com](http://www.wkdickson.com)**

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Appendix 11.7

Lake Lure Sewer Rates

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## TOWN OF LAKE LURE FEE SCHEDULE

### UTILITY BILLING

Effective: July 1, 2012

Water & Sewer Connections	Water Inside Rate	Water Outside Rate	Sewer Inside Rate	Sewer Outside Rate
Connection 3/4" or less	\$1,051	\$1,313		
Connection 1"	\$1,576	\$1,891		
Connection 2"	\$2,627	\$2,942		
Connection 3"	\$3,677	\$4,202		
Connection 4"	\$5,253	\$5,778		
Connection 4" or less			\$1,051	\$1,313
Connection 6"			\$1,576	\$1,891
Connections 8"			\$2,627	\$2,942
Discovery of Unapproved Connection:			Double Tap Fee + 2 yrs service back pay	
<b>Bimonthly Rates For Lake Lure Users on Water &amp; Sewer or Water Only</b>				
Basic Service Residential	\$44.00	\$89.00	\$42.00	\$84.00
Basic Service Commercial	\$53.00	\$105.00	\$47.00	\$95.00
Usage 0-5,000 gals. (per 1,000 gal. rate)	\$3.68	\$7.35	\$3.68	\$7.35
Usage over 5,000 - 20,000 gals.	\$4.20	\$8.40	\$3.94	\$7.88
Usage over 20,000 gals.	\$4.73	\$9.46	\$4.47	\$8.93
<b>Lake Lure User with Sewer Only</b>				
Basic Service Residential			\$69.00	\$137.00
Basic Service Commercial < 5,000 gals.			\$79.00	\$158.00
Comm.-Medium User (5,000-20,000 gals.)			\$132.00	\$263.00
Comm.- Large User (>20,000 gals.)			\$315.00	\$630.00
<b>Other Fees</b>				
Late Payment	\$25.00	\$25.00	\$25.00	\$25.00
Water Turn-On Fee (voluntarily turned off)	\$40.00	\$40.00		
Transfer Fee	\$20.00	\$20.00	\$20.00	\$20.00
Re-connection Fee (non-payment cutoff)	\$200.00	\$200.00	\$200.00	\$200.00

**Note: 3% increase from FY 2011-2012 rates (Lake Lure,**

Chimney Rock Water Bimonthly Rates	Basic Service
Basic Service Residential	\$60.00
Basic Service Commercial	\$50.00
Usage 0-5,000 gals. (per 1,000 gal. rate)	\$2.50
Usage over 5,000 - 20,000 gals.	\$3.00
Usage over 20,000 gals.	\$4.00

Garbage / Recycling		
Curbside Residential Garbage Collection (weekly)	free	included in taxes
Curbside Collection of Hard Trash or Lake Debris	free	by appointment
Curbside Recycling Collections	\$8/month	
Recycle Bins (set of 2)	\$17.24	
Recycle Bin Lids (set of 2)	\$11.00	

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Appendix 11.8

Lake Lure Financial Data

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**TOWN OF LAKE LURE, NORTH CAROLINA**

**WATER AND SEWER FUND  
SCHEDULE OF REVENUES AND EXPENDITURES  
BUDGET AND ACTUAL (NON GAAP)  
FOR THE YEAR ENDED JUNE 30, 2012**

	<u>Budget</u>	<u>Actual</u>	<u>Variance Over/Under</u>
<b>Revenues:</b>			
Operating revenues:			
Charges for service	\$ 653,600	\$ 627,818	\$ (25,782)
Restricted intergovernmental	39,000	39,019	19
Water and sewer taps	9,500	5,350	(4,150)
Other operating revenues	<u>5,500</u>	<u>8,475</u>	<u>2,975</u>
Total	707,600	680,662	(26,938)
<b>Non-Operating Revenues:</b>			
Interest earnings	<u>550</u>	<u>249</u>	<u>(301)</u>
Total revenues	<u>708,150</u>	<u>680,911</u>	<u>680,911</u>
<b>Expenditures:</b>			
Water administration and operations:			
Salaries and employee benefits	134,289	134,575	(286)
Operating expenditures	<u>182,708</u>	<u>124,420</u>	<u>58,288</u>
Total	<u>316,997</u>	<u>258,995</u>	<u>58,002</u>
Sewer administration and operations:			
Salaries and employee benefits	65,671	64,797	874
Operating expenditures	<u>229,387</u>	<u>245,688</u>	<u>(16,301)</u>
Total	<u>295,058</u>	<u>310,485</u>	<u>(15,427)</u>
Debt service:			
Principal	119,945	119,944	1
Interest	<u>19,346</u>	<u>19,346</u>	<u>-</u>
Total debt service	<u>139,291</u>	<u>139,290</u>	<u>1</u>
Total expenditures	<u>751,346</u>	<u>708,770</u>	<u>42,576</u>
Revenues over (under) expenditures	<u>(43,196)</u>	<u>(27,859)</u>	<u>15,337</u>
<b>Other Financing Sources (Uses):</b>			
Transfer (to) from other funds	(25,000)	(25,000)	-
Appropriated fund balance	<u>68,196</u>	<u>-</u>	<u>(68,196)</u>
Total other financing sources (uses)	<u>43,196</u>	<u>(25,000)</u>	<u>(68,196)</u>

TOWN OF LAKE LURE, NORTH CAROLINA

WATER AND SEWER FUND  
SCHEDULE OF REVENUES AND EXPENDITURES  
BUDGET AND ACTUAL (NON GAAP)  
FOR THE YEAR ENDED JUNE 30, 2012

	<u>Budget</u>	<u>Actual</u>	<u>Variance Over/Under</u>
Revenues and other financing sources (uses) over (under) expenditures and other financing sources (uses)	<u>\$ -</u>	(52,859)	<u>\$ (52,859)</u>
<b>Reconciliation from Budgetary Basis Modified Accrual) to Full Accrual:</b>			
Reconciling items:			
Depreciation		(287,076)	
Principle retirement		119,944	
Revenues from project fund		<u>439,309</u>	
Change in net assets		<u>\$ 219,318</u>	

Appendix 11.9

Lake Lure 2012 / 2013 Sewer Usage Data

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## **Brian Tripp**

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**From:** Harlow Brown <harlow@brownpa.net>  
**Sent:** Tuesday, April 29, 2014 3:22 PM  
**To:** Brian Tripp  
**Cc:** 'Lake Lure Customer Service'; 'Lake Lure Town Manager'; 'Jeffrey T Brown'  
**Subject:** RE: Joint Sewer Study Financial Model - Additional Data Request - Billing / Customer Account / Sewer Usage Data

*Mr. Tripp, Answers to your questions below in “RED”*

**Harlow L. Brown, PE**  
**Brown Consultants PA**  
**30 Ben Lippen School Road**  
**Asheville, NC 28806**  
**office 828-350-7683**  
**cell 828-545-7779**

*-----Original Message-----*

*From: Lake Lure Town Manager [<mailto:townmgr@townoflakelure.com>]*  
*Sent: Friday, April 11, 2014 3:24 PM*  
*To: 'Harlow Brown'; 'Jeffrey T Brown'*  
*Cc: 'Lake Lure Customer Service'*  
*Subject: FW: Joint Sewer Study Financial Model - Additional Data Request - Billing / Customer Account / Sewer Usage Data*

*Can you help pull these numbers together? You may have them from your sewer study...or can get them from Linda.*

*Thanks -*

*-----Original Message-----*

*From: Brian Tripp [<mailto:btripp@wkdickson.com>]*  
*Sent: Friday, April 11, 2014 1:22 PM*  
*To: John Condrey ([johncondrey@townofforestcity.com](mailto:johncondrey@townofforestcity.com));*  
*'townmanager@rutherfordton.net'; [TownMgr@TownofLakeLure.com](mailto:TownMgr@TownofLakeLure.com); R. Cameron McHargue*  
*([rcmchargue@spindalenc.net](mailto:rcmchargue@spindalenc.net))*  
*Cc: [carl.classen@rutherfordcountync.gov](mailto:carl.classen@rutherfordcountync.gov); Tim Lowder; Rus Scherer; Maria Hunnicutt*  
*([mhunnicutt@ncbrwa.com](mailto:mhunnicutt@ncbrwa.com))*  
*Subject: Joint Sewer Study Financial Model - Additional Data Request - Billing / Customer Account / Sewer Usage Data*

*Gentlemen:*

*In order to fine tune the model, we will require additional information from each of you - Cliffside, Forest City, Lake Lure, Rutherfordton, & Spindale.*

*Information needs are presented below.*

*1. Average # of inside residential sewer customer accounts for FY 2012/2013 - 869*

*2. Average # of outside residential sewer customer accounts for FY 2012/2013 - 0*

*3. Average # of inside commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 - 126*

*4. Average # of inside commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 - 1*

*5. Sewer Usage of inside residential sewer customer accounts for FY 2012/2013 in gallons – 65,000 GPD*

*6. Sewer Usage of outside residential sewer customer accounts for FY 2012/2013 in gallons - 0*

*7. Sewer Usage of inside commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 in gallons – 9,500 GPD*

*8. Sewer Usage of inside commercial, industrial, governmental & institutional sewer customer accounts for FY 2012/2013 in gallons – 100 GPD*

*My hope is that you can easily pull these numbers out of your billing programs.*

*If you could provide this by Monday, April 21st, we would greatly appreciate it. This will allow us to continue to fine tune the model.*

*Please let me know if you have any questions or concerns. Thanks and have a great weekend.*

*Brian L. Tripp, PE, BCEE*

*Vice President*

*W.K. Dickson & Co., Inc.*

*Community Infrastructure Consultants*

*616 Colonnade Drive*

*Charlotte, NC 28205*

*Phone - (704) 334-5348*

*Fax - (704) 334-0078*

*Cell - (704) 517-5656*

*Email - [btripp@wkdictson.com](mailto:btripp@wkdictson.com)<blocked::mailto:btripp@wkdictson.com>*

*[www.wkdickson.com](http://www.wkdickson.com)*

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*053CBD634030000A2AECFB30000/www.wkdickson.com>*

Appendix 11.10

Rutherfordton Sewer Rates

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# BROAD RIVER WATER AUTHORITY

## Schedule of Water Rates –Payment Requirements

Effective July 1, 2013

### Section I – Minimum Volume and Service Rates

Each metered customer will be charged a monthly minimum rate, which includes zero to 1000 gallons of water volume:

Block	Meter Service Size	Minimum Charge: 0-1000 Gallons
1	¾"	\$ 25.60
1	1	44.85
1	1.5	119.25
1	2	224.85
1	3	298.70
1	4	374.75
1	6	451.15
1	8	597.90
1	10	750.35

### Section II – Volume Rates

#### Schedule A – Direct Sales

Each metered customer will be charged a monthly volume rate in accordance with the following schedule:

Block	Volume per Month	Rate per 1000 Gallons
2	Next 19,000 gallons	\$5.05
3	Next 980,000 gallons	4.50
4	Next 9,000,000 gallons	1.90
5	All over 10,000,000 gallons	1.60

#### Schedule B – Re-Sale (effective 1/1/2014)

This schedule is for state permitted water purveyors

Block	Volume per Month	Rate per 1000 Gallons
2	Next 999,000 gallons	\$3.00
3	Next 26,000,000 gallons	1.55
4	Next 12,000,000 gallons	1.25
5	All over 39,000,000 gallons	1.25

### Section III – Fire Protection

Fire Protection Service is available to all customers with un-metered fire connection lines. Rates are monthly charges based upon the number of sprinkler heads on the fire protection system within the customer's structure and per fire hydrant located on the customer's property. There is no charge for fire hydrants located on BRWA mains to serve the general public. It is the customer's responsibility to notify the BRWA of any change in number of sprinkler heads/fire hydrants on their property.

Monthly Rates:

1. Sprinkler heads, per sprinkler head \$ .085 each
2. Hydrant Service \$2.75 each

### Section IV – Bulk Water Service

Bulk water is available to purchase at designated locations. Pick up is to be approved/coordinated in advance through the BRWA. Bulk water requested for hauling, special projects and construction will be provided on a case-by-case basis, with charges set by the Manager and generally within the guidelines of the appropriate volume charges of Section II.

Schedule of Water Rates – Adopted June 25, 2002

Revised July 1, 2006

Revised July 1, 2007

Revised July 1, 2008

Revised July 1, 2009

Revised July 1, 2010

Revised July 1, 2012

Revised July 1, 2013

**Section V – Payment**

1. Bills will be sent to all customers based upon approximately thirty (30) days of service. Bills are due and payable by the first day of each month, and are past due and delinquent on the twenty-fifth (25<sup>th</sup>) day of the month. All bills paid after this date are subject to a late charge as approved by the BRWA. Bills not paid by the last day of the month subject the customer to termination of service.
2. No second notice will be sent to customers reminding of payments past due.
3. Customers who fail to receive a bill in the mail are not excused from the responsibility for timely payment of all services provided.
4. Customers who have service disconnected due to lack of payment, returned check for insufficient funds, or other reasons as per BRWA policy, may be required to complete a service agreement application and subject to full payment of all current and delinquent charges and fees, including reconnection fees prior to service being restored.

Payments must be in the form of cash, personal or bank check, or money order. Any other form of payment must be approved by the Manager.

**Section VI – Water Service Contracts**

The BRWA may negotiate with any single customer an individual service contract that covers the cost, delivery, conditions, and payment for water service. Each contract must be recommended by the Manager and approved by the Board of the BRWA. Water Service Contracts are generally established for only high volume customers.

**Section VII – Residential Irrigation Meter:**

Separate irrigation meters are available only for residential customers with sewer service, for an installation charge of \$500 with a monthly minimum charge of \$5 for a ¾” meter. For a 1” meter, a standard tap fees applies with a monthly minimum charge of \$9. Volume rates are exactly the same as regular rates.

**Section VIII – Sewer Rates**

By contract the BRWA collects sewer charges for the Towns of Spindale and Rutherfordton, and Cliffside Sanitary District. Payment of all sewer charges are subject to all conditions as set forth in Section V. Sewer rates are set by the towns and district and are as follows per month:

Rutherfordton:	<b><u>Inside</u></b>	<b><u>Rate per 1000 Gallons</u></b>
	Base Rate (includes 1,000 gals.)	\$12.09
	Next 499,000 gallons	\$ 4.70
	Next 500,000 gallons	\$ 4.08
	Next 9,000,000 gallons	\$ 2.62
	Over 10,000,000 gallons	\$ 1.17
	<b><u>Outside</u></b>	<b><u>Rate per 1000 Gallons</u></b>
	Base Rate (includes 1,000 gals.)	\$36.27
	Next 499,000 gallons	\$14.11
	Next 500,000 gallons	\$12.24
	Next 9,000,000 gallons	\$ 7.86
	Over 10,000,000 gallons	\$ 3.52
	** Note: Rutherfordton Rates Effective 7/1/2010	
Spindale:	<b><u>Inside</u></b>	<b><u>Outside</u></b>
Residential	\$5.69/1,000 after 1 <sup>st</sup> 1,000 gallons	\$11.38/1,000 after 1 <sup>st</sup> 1,000 gals.
Commercial	\$16.00 base, then \$5.69/1,000 after 1 <sup>st</sup> 1,000 gals.	\$32.00 base, then \$11.38/1,000 after 1 <sup>st</sup> 1,000 gal
Industrial	\$4.02/1,000 gallons	\$5.99/1,000 gallons
Cliffside Sanitary District:	\$26.00 minimum, volumetric rates are same as water rates (billed based upon water usage)	

Appendix 11.11

Rutherfordton Financial Data

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TOWN OF RUTHERFORDTON

### SEWER FUND ONLY

	Budget	YTD
<u>Revenues</u>		
60-3380-0000 Violation Fines	0.00	0.00
60-3710-5200 Taps & Connections Fee	750.00	250.00
60-3713-5100 Sewer Use Fees	676,982.00	689,021.91
60-3713-5120 Late Payment Fees	0.00	0.00
60-3830-0000 Installment Purchase P	0.00	0.00
60-3831-0000 Interest Income	200.00	454.98
60-3839-0000 Miscellaneous Revenue	0.00	384.48
60-3842-0000 Grant Revenue	0.00	0.00
60-3984-0000 Transfer In Sewer Cap	0.00	0.00
60-3991-0000 Fund Balance Appropria	0.00	0.00
<b>Total Revenues for Fund</b>	<b>677,932.00</b>	<b>690,111.37</b>

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TOWN OF RUTHERFORDTON

	Budget	YTD
<u>Expenditures</u>		
60-7135-1250 Reim General Fund Sala	32,500.00	16,013.66
60-7135-2990 Department Supplies	41,892.00	40,028.04
60-7135-3100 Plant Chemicals	37,260.00	39,084.84
60-7135-3310 Utilities	77,395.00	77,074.86
60-7135-3350 Billing & Collection C	16,000.00	15,660.70
60-7135-3370 Bad Accounts	0.00	0.00
60-7135-3390 Refunds	0.00	0.00
60-7135-3400 Sludge Disposal	15,000.00	13,669.56
60-7135-3450 Testing/Monitoring	41,721.00	41,126.82
60-7135-3500 Administrative Fees	120,999.00	121,715.64
60-7135-3530 Line Maintenance & Rep	40,000.00	16,773.18
60-7135-3531 Plant Maintenance & Re	21,000.00	24,213.69
60-7135-3540 Sewer Equipt Repair /	0.00	0.00
60-7135-4500 Insurance	1,000.00	3,500.00
60-7135-4640 Grants	0.00	0.00
60-7135-4920 Depreciation Expense	0.00	0.00
60-7135-4990 Miscellaneous	17,639.00	8,343.60
60-7135-5000 Capital Project Intere	9,574.00	9,574.04
60-7135-5010 LAKE LURE CONNECTOR	0.00	0.00
60-7135-5100 Capital Project Princi	48,130.00	48,130.00
60-7135-5500 Capital Outlay	120,000.00	71,523.26
60-7135-5520 Capital Reserve Sewer	0.00	0.00
60-7135-5560 Installment Purchase	0.00	0.00
60-7135-5600 Intrafund Transfers	0.00	0.00
60-7135-9000 Capital Project Expens	0.00	0.00
60-7135-9930 For Future Appropriati	37,822.00	0.00
<b>Department Totals</b>	<b>677,932.00</b>	<b>546,431.89</b>

Revenues Over/(Under) Expenses:

143,679.48

Currently Finalziing 6/30/13 audit - 6/30/12 is on rutherfordton.net / Will send fye 6/30/13 audit once done

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Appendix 11.12

Rutherfordton 2012 / 2013 Sewer Usage Data

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RUTHERFORDTON

july - dec 12

jan - june 13

FY 2012- 2013

INSIDE	count	usage
Commercial	159	7,675,000
Industrial	5	4,774,000
Multifamily	14	1,096,000
Other	2	12,000
Public Govt	21	10,205,000
Residential	1369	27,831,000
	<b>1571</b>	<b>51,593,000</b>

INSIDE	count	usage
Commercial	158	6,947,000
Industrial	5	5,240,000
Multifamily	14	1,264,000
Other	2	20,000
Public Govt	21	9,269,000
Residential	1,370	26,085,000
	<b>1,569</b>	<b>48,825,000</b>

INSIDE	count	usage
Commercial	158	14,622,000
Industrial	5	10,014,000
Multifamily	14	2,360,000
Other	2	32,000
Public Govt	21	19,474,000
Residential	1,370	53,916,000
	<b>1,570</b>	<b>100,418,000</b>

OUTSIDE	count	usage
Commercial	3	1,239,000
Industrial	7	359,000
Multifamily		
Other		
Public Govt	2	1,096,000
Residential	7	191,000
	<b>19</b>	<b>2,885,000</b>

OUTSIDE	count	usage
Commercial	3	1,293,000
Industrial	7	285,000
Multifamily		
Other		
Public Govt	2	1,050,000
Residential	6	233,000
	<b>18</b>	<b>2,861,000</b>

OUTSIDE	count	usage
Commercial	3	2,532,000
Industrial	7	644,000
Multifamily		
Other		
Public Govt	2	2,146,000
Residential	6	424,000
	<b>18</b>	<b>5,746,000</b>

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Appendix 11.13  
Spindale Sewer Rates

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# BROAD RIVER WATER AUTHORITY

## Schedule of Water Rates –Payment Requirements

**Effective July 1, 2013**

### Section I – Minimum Volume and Service Rates

Each metered customer will be charged a monthly minimum rate, which includes zero to 1000 gallons of water volume:

Block	Meter Service Size	Minimum Charge: 0-1000 Gallons
1	¾"	\$ 25.60
1	1	44.85
1	1.5	119.25
1	2	224.85
1	3	298.70
1	4	374.75
1	6	451.15
1	8	597.90
1	10	750.35

### Section II – Volume Rates

#### Schedule A – Direct Sales

Each metered customer will be charged a monthly volume rate in accordance with the following schedule:

Block	Volume per Month	Rate per 1000 Gallons
2	Next 19,000 gallons	\$5.05
3	Next 980,000 gallons	4.50
4	Next 9,000,000 gallons	1.90
5	All over 10,000,000 gallons	1.60

#### Schedule B – Re-Sale (effective 1/1/2014)

This schedule is for state permitted water purveyors

Block	Volume per Month	Rate per 1000 Gallons
2	Next 999,000 gallons	\$3.00
3	Next 26,000,000 gallons	1.55
4	Next 12,000,000 gallons	1.25
5	All over 39,000,000 gallons	1.25

### Section III – Fire Protection

Fire Protection Service is available to all customers with un-metered fire connection lines. Rates are monthly charges based upon the number of sprinkler heads on the fire protection system within the customer's structure and per fire hydrant located on the customer's property. There is no charge for fire hydrants located on BRWA mains to serve the general public. It is the customer's responsibility to notify the BRWA of any change in number of sprinkler heads/fire hydrants on their property.

Monthly Rates:

1. Sprinkler heads, per sprinkler head           \$.085 each
2. Hydrant Service                                   \$2.75 each

### Section IV – Bulk Water Service

Bulk water is available to purchase at designated locations. Pick up is to be approved/coordinated in advance through the BRWA. Bulk water requested for hauling, special projects and construction will be provided on a case-by-case basis, with charges set by the Manager and generally within the guidelines of the appropriate volume charges of Section II.

Schedule of Water Rates – Adopted June 25, 2002

Revised July 1, 2006

Revised July 1, 2007

Revised July 1, 2008

Revised July 1, 2009

Revised July 1, 2010

Revised July 1, 2012

Revised July 1, 2013

**Section V – Payment**

1. Bills will be sent to all customers based upon approximately thirty (30) days of service. Bills are due and payable by the first day of each month, and are past due and delinquent on the twenty-fifth (25<sup>th</sup>) day of the month. All bills paid after this date are subject to a late charge as approved by the BRWA. Bills not paid by the last day of the month subject the customer to termination of service.
2. No second notice will be sent to customers reminding of payments past due.
3. Customers who fail to receive a bill in the mail are not excused from the responsibility for timely payment of all services provided.
4. Customers who have service disconnected due to lack of payment, returned check for insufficient funds, or other reasons as per BRWA policy, may be required to complete a service agreement application and subject to full payment of all current and delinquent charges and fees, including reconnection fees prior to service being restored.

Payments must be in the form of cash, personal or bank check, or money order. Any other form of payment must be approved by the Manager.

**Section VI – Water Service Contracts**

The BRWA may negotiate with any single customer an individual service contract that covers the cost, delivery, conditions, and payment for water service. Each contract must be recommended by the Manager and approved by the Board of the BRWA. Water Service Contracts are generally established for only high volume customers.

**Section VII – Residential Irrigation Meter:**

Separate irrigation meters are available only for residential customers with sewer service, for an installation charge of \$500 with a monthly minimum charge of \$5 for a ¾” meter. For a 1” meter, a standard tap fees applies with a monthly minimum charge of \$9. Volume rates are exactly the same as regular rates.

**Section VIII – Sewer Rates**

By contract the BRWA collects sewer charges for the Towns of Spindale and Rutherfordton, and Cliffside Sanitary District. Payment of all sewer charges are subject to all conditions as set forth in Section V. Sewer rates are set by the towns and district and are as follows per month:

Rutherfordton:	<b><u>Inside</u></b>	<b><u>Rate per 1000 Gallons</u></b>
	Base Rate (includes 1,000 gals.)	\$12.09
	Next 499,000 gallons	\$ 4.70
	Next 500,000 gallons	\$ 4.08
	Next 9,000,000 gallons	\$ 2.62
	Over 10,000,000 gallons	\$ 1.17
	<b><u>Outside</u></b>	<b><u>Rate per 1000 Gallons</u></b>
	Base Rate (includes 1,000 gals.)	\$36.27
	Next 499,000 gallons	\$14.11
	Next 500,000 gallons	\$12.24
	Next 9,000,000 gallons	\$ 7.86
	Over 10,000,000 gallons	\$ 3.52
	** Note: Rutherfordton Rates Effective 7/1/2010	
Spindale:	<b><u>Inside</u></b>	<b><u>Outside</u></b>
Residential	\$5.69/1,000 after 1 <sup>st</sup> 1,000 gallons	\$11.38/1,000 after 1 <sup>st</sup> 1,000 gals.
Commercial	\$16.00 base, then \$5.69/1,000 after 1 <sup>st</sup> 1,000 gals.	\$32.00 base, then \$11.38/1,000 after 1 <sup>st</sup> 1,000 gal
Industrial	\$4.02/1,000 gallons	\$5.99/1,000 gallons
Cliffside Sanitary District:	\$26.00 minimum, volumetric rates are same as water rates (billed based upon water usage)	

Appendix 11.14  
Spindale Financial Data

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## TOWN OF SPINDALE, NORTH CAROLINA

STATEMENT OF NET ASSETS  
PROPRIETARY FUND  
JUNE 30, 2012

	<u>Sewer Fund</u>
<b>Assets:</b>	
Current assets:	
Cash and cash equivalents	\$ 987,857
Accounts receivable, net	115,952
Interest receivable	1,748
Total current assets	<u>1,105,557</u>
Non-current assets:	
Capital assets:	
Land	38,920
Construction in progress	215,381
Depreciable capital assets, net	<u>6,361,851</u>
Total capital assets	<u>6,616,152</u>
Total assets	<u>7,721,709</u>
<b>Liabilities and Net Assets:</b>	
<b>Liabilities:</b>	
Current liabilities:	
Accounts payable and accrued liabilities	25,997
Current portion of compensated absences	14,146
Bonds and notes payable - current maturities	<u>166,865</u>
Total current liabilities	<u>207,008</u>
Non-current liabilities:	
Bonds and notes payable - non-current maturities	<u>1,538,478</u>
Total liabilities	<u>1,745,486</u>
<b>Net Assets:</b>	
Invested in capital assets, net of related debt	4,910,809
Unrestricted	<u>1,065,414</u>
Total net assets	<u>\$ 5,976,223</u>

*The accompanying notes are an integral part of the financial statements.*

## TOWN OF SPINDALE, NORTH CAROLINA

STATEMENT OF REVENUES, EXPENSES, AND CHANGES  
IN FUND NET ASSETS - PROPRIETARY FUND  
FOR THE YEAR ENDED JUNE 30, 2012

	<u>Sewer Fund</u>
<b>Operating Revenues:</b>	
Charges for services	\$ 922,045
Sewer taps	<u>2,800</u>
Total operating revenues	<u>924,845</u>
<b>Operating Expenses:</b>	
Administration	71,823
Sewer department	354,012
Disposal plant	234,463
Depreciation	<u>289,863</u>
Total operating expenses	<u>950,161</u>
Operating income (loss)	<u>(25,316)</u>
<b>Non-Operating Revenues (Expenses):</b>	
Investment earnings	46,557
Miscellaneous income	25,970
Interest and fees	<u>(59,542)</u>
Total non-operating revenues (expenses)	<u>12,985</u>
Change in net assets	(12,331)
<b>Net Assets:</b>	
Beginning of year - July 1	<u>5,988,554</u>
End of year - June 30	<u>\$ 5,976,223</u>

*The accompanying notes are an integral part of the financial statements.*

## TOWN OF SPINDALE, NORTH CAROLINA

STATEMENT OF CASH FLOWS  
PROPRIETARY FUND  
FOR THE YEAR ENDED JUNE 30, 2012

	<u>Sewer Fund</u>
<b>Cash Flows from Operating Activities:</b>	
Cash received from customers	\$ 920,914
Cash paid for goods and services	(324,841)
Cash paid to employees	(348,086)
Net cash provided (used) by operating activities	<u>247,987</u>
<b>Cash Flows from Capital and Related Financing Activities:</b>	
Acquisition and construction of capital assets	(195,297)
Principal retirement	(165,915)
Interest paid on long-term debt	(59,542)
Net cash provided (used) by capital and related financing activities	<u>(420,754)</u>
<b>Cash Flows from Investing Activities:</b>	
Interest on investments	<u>46,557</u>
Net increase (decrease) in cash and cash equivalents	(126,210)
<b>Cash and Cash Equivalents</b>	
Beginning of year - July 1	<u>1,114,067</u>
End of year - June 30	<u>\$ 987,857</u>
<b>Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:</b>	
Operating income (loss)	\$ (25,316)
Adjustments to reconcile operating loss to net cash provided (used) by operating activities:	
Depreciation	289,863
Miscellaneous non-operating	25,970
Changes in assets and liabilities:	
(Increase) decrease in accounts receivable	(29,901)
Increase (decrease) in accounts payable	(13,869)
Increase (decrease) in accrued vacation pay	<u>1,240</u>
Net cash provided (used) by operating activities	<u>\$ 247,987</u>

*The accompanying notes are an integral part of the financial statements.*

# TOWN OF SPINDALE, NORTH CAROLINA

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2012

### D. Proprietary Capital Assets

The capital assets of the Proprietary Fund of the Town at June 30, 2012 were as follows:

	<u>July 1, 2011</u>	<u>Additions</u>	<u>Retirements</u>	<u>June 30, 2012</u>
<b>Business-Type Activities:</b>				
<b>Water and Sewer Fund:</b>				
<b>Non-Depreciable Capital Assets:</b>				
Land	\$ 38,920	\$ -	\$ -	\$ 38,920
Construction in progress	260,144	167,212	(211,975)	215,381
Total non-depreciable capital assets	299,064	167,212	(211,975)	254,301
<b>Depreciable Capital Assets:</b>				
Buildings	2,446,251	-	-	2,446,251
Sewer lines	4,221,253	-	-	4,221,253
Update and expansion	3,215,611	211,975	-	3,427,586
Equipment and vehicles	1,088,796	28,085	-	1,116,881
Total depreciable capital assets	10,971,911	240,060	-	11,211,971
<b>Less Accumulated Depreciation:</b>				
Buildings	1,336,247	-	-	1,336,247
Sewer lines	1,321,912	140,709	-	1,462,621
Update and expansion	1,236,720	107,187	-	1,343,907
Equipment and vehicles	665,378	41,967	-	707,345
Total accumulated depreciation	4,560,257	\$ 289,863	\$ -	4,850,120
Depreciable capital assets, net	6,411,654			6,361,851
Total capital assets, net	\$ 6,710,718			\$ 6,616,152

### Invested in Capital Assets, Net of Debt

The total invested in capital assets, net of related debt at June 30, 2012 is composed of the following elements:

	<u>Governmental Activities</u>	<u>Business-Type Activities</u>
Capital assets	\$ 2,381,569	\$ 6,616,152
Long-term debt	(532,800)	(1,705,343)
Invested in capital assets, net of related debt	\$ 1,848,769	\$ 4,910,809

# TOWN OF SPINDALE, NORTH CAROLINA

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2012

**Business-Type Activities:**

**Notes Payable:**

\$425,000; Installment debt for force main replacements and improvements on June 16, 2008. After an interest only payment in July of 2009, annual payments of \$39,990 until June 16, 2023; interest at 3.91% \$ 377,342

\$1,132,401; State loan for wastewater treatment works projects under the North Carolina Clean Water Revolving Loan and Grant act of 1987 and the Federal Clean Water Act amendments of 1987. Due on November 1 and May 1, in decreasing installments through May 1, 2019; interest at 2.91% 396,340

\$395,971; American Recovery and Reinvestment Act of 2009 loan assistance from the Clean Water State Revolving Fund for the Oak Street Pump Station and sewer improvements.. The maximum term of loan not to exceed 20 years at 0% interest per year. 356,374

Total notes payable - business-type activities \$ 1,130,056

Annual debt service requirements for long-term obligations are as follows:

Year Ending <u>June 30</u>	<u>Governmental Activities</u>		<u>Business-Type Activities</u>	
	<u>Principal</u>	<u>Interest</u>	<u>Principal</u>	<u>Interest</u>
2013	\$ 98,168	\$ 18,283	\$ 101,655	\$ 25,464
2014	101,457	14,994	102,641	22,829
2015	66,252	11,892	103,667	20,156
2016	53,255	9,634	104,732	17,443
2017	55,198	7,693	105,839	14,678
2018-2022	151,423	14,459	377,519	37,960
2023-2027	-	-	174,614	4,361
2028-2032	-	-	59,389	-
Total	<u>\$ 525,753</u>	<u>\$ 76,955</u>	<u>\$ 1,130,056</u>	<u>\$ 142,891</u>

**TOWN OF SPINDALE, NORTH CAROLINA**

**NOTES TO THE FINANCIAL STATEMENTS  
FOR THE YEAR ENDED JUNE 30, 2012**

**General Obligation Indebtedness**

The Town's bonded debt issued to finance the construction of facilities utilized in the operations of the sewer system and which are being retired by its resources are reported as long-term in the Sewer Fund. All general obligation bonds are collateralized by the full faith, credit, and taxing power of the Town. As of the end of the current fiscal year, the Town had \$575,283 remaining in general obligation bonds.

**Business-Type Activities:**

**Bonds Payable:**

\$536,090; Clean water bonds under the Clean Water and Natural Gas Critical Needs Act of 1998; principal due each May 1 with interest payable semi-annually on May 1 and November 1 through May 2022; interest at 4.02%	\$ 268,043
\$768,000; Clean water bonds under the Clean Water and Natural Gas Critical Needs Act of 1998; principal due each May 1 with interest payable semi-annually on May 1 and November 1 through May 2020; interest at 5.25%	307,244
Total bonds payable - business-type activities	\$ 575,287

Annual debt service requirements to maturity for the Town's bonds payable are as follows:

Year Ending	Business-Type Activities		
June 30	Principal	Interest	Total
2013	\$ 65,210	\$ 16,130	\$ 81,340
2014	65,210	14,114	79,324
2015	65,210	12,096	77,306
2016	65,210	10,080	75,290
2017	65,210	8,064	73,274
2018-2022	249,237	12,096	261,333
Total	\$ 575,287	\$ 72,580	\$ 647,867

At June 30, 2012, the Town had a legal debt margin of approximately \$14,289,611.

# TOWN OF SPINDALE, NORTH CAROLINA

## NOTES TO THE FINANCIAL STATEMENTS FOR THE YEAR ENDED JUNE 30, 2012

### Changes in Long-Term Liabilities

A summary of long-term debt is as follows:

	<u>July 1, 2011</u>	<u>Additions</u>	<u>Retirements</u>	<u>June 30, 2012</u>	<u>Current Portion</u>
<b>Governmental Activities:</b>					
Notes payable	\$ 620,777	\$ -	\$ (95,024)	\$ 525,753	\$ 98,168
Capital lease	14,094	-	(7,047)	7,047	7,047
OPEB liability	111,465	68,120	(6,876)	172,709	-
LEO liability	171,309	22,787	(40,998)	153,098	-
Compensated absences	78,589	123,839	(101,285)	101,143	10,114
Governmental activities long-term liabilities	<u>\$ 996,234</u>	<u>\$ 214,746</u>	<u>\$ (251,230)</u>	<u>\$ 959,750</u>	<u>\$ 115,329</u>
<b>Business-Type Activities:</b>					
General obligation bonds	\$ 640,497	\$ -	\$ (65,210)	\$ 575,287	\$ 65,210
Notes payable	1,230,761	-	(100,705)	1,130,056	101,655
Compensated absences	12,906	20,749	(19,509)	14,146	14,146
Business-type activities long-term liabilities	<u>\$ 1,884,164</u>	<u>\$ 20,749</u>	<u>\$ (185,424)</u>	<u>\$ 1,719,489</u>	<u>\$ 181,011</u>

Compensated absences, OPEB, and pension obligations typically have been liquidated in the General Fund. Compensated absences are accounted for on an FIFO basis.

### J. Internal Balances

Due to/from other funds for the year ended June 30, 2012 consisted of the following:

<u>Fund</u>	<u>Due To</u>	<u>Due From</u>	<u>Description</u>
General Fund	\$ 142,512		Repayment of internal loan
General Capital Reserve		\$ 142,512	

### 3. Federal and State-Assisted Programs

The Town has received proceeds from several federal and State grants. Periodic audits of these grants are required and certain costs may be questioned as not being appropriate expenditures under the grant agreements. Such audits could result in the refund of grant monies to the grantor agencies. Management believes that any required refunds will be immaterial. No provision has been made in the accompanying financial statements for the refund of grant monies.

TOWN OF SPINDALE, NORTH CAROLINA

SEWER FUND

SCHEDULE OF REVENUES AND EXPENDITURES

BUDGET AND ACTUAL (NON-GAAP)

FOR THE YEAR ENDED JUNE 30, 2012

WITH COMPARATIVE ACTUAL AMOUNTS FOR THE YEAR ENDED JUNE 30, 2011

	2012			2011
	Budget	Actual	Variance Over/Under	Actual
<b>Revenues:</b>				
Operating revenues:				
Sewer charges	\$ 951,939	\$ 922,045	\$ (29,894)	\$ 944,055
Sewer tap and connection fees	-	2,800	2,800	3,600
Total operating revenues	951,939	924,845	(27,094)	947,655
Non-operating revenues:				
Miscellaneous	16,150	15,590	(560)	14,902
Total non-operating revenues	16,150	15,590	(560)	14,902
Total revenues	968,089	940,435	(27,654)	962,557
<b>Expenditures:</b>				
Administration:				
Salaries and employee benefits	62,374	63,703	(1,329)	62,918
Operating expenses	9,200	8,120	1,080	8,100
Total	71,574	71,823	(249)	71,018
Sewer department:				
Salaries and employee benefits	158,940	153,714	5,226	157,718
Operating expenses	148,260	139,813	8,447	130,589
Repairs and maintenance	11,950	18,768	(6,818)	9,034
Capital outlay	117,885	69,802	48,083	146,876
Total	437,035	382,097	54,938	444,217
Disposal plant:				
Salaries and employee benefits	141,186	131,909	9,277	125,773
Operating expenses	97,566	94,094	3,472	103,938
Repairs and maintenance	19,500	8,460	11,040	8,097
Capital outlay	15,000	-	15,000	20,859
Total	273,252	234,463	38,789	258,667
Debt service:				
Interest and fees	68,793	59,542	9,251	65,361
Principal retirement	202,038	165,915	36,123	165,001
Total	270,831	225,457	45,374	230,362
Total expenditures	1,052,692	913,840	138,852	1,004,264

TOWN OF SPINDALE, NORTH CAROLINA

SEWER FUND

SCHEDULE OF REVENUES AND EXPENDITURES

BUDGET AND ACTUAL (NON-GAAP)

FOR THE YEAR ENDED JUNE 30, 2012

WITH COMPARATIVE ACTUAL AMOUNTS FOR THE YEAR ENDED JUNE 30, 2011

	2012		Variance Over/Under	2011
	Budget	Actual		Actual
Revenues over (under) expenditures	(84,603)	26,595	111,198	(41,707)
<b>Other Financing Sources (Uses):</b>				
Transfer from General Fund	132,885	-	(132,885)	-
Transfer from project fund	-	28,041	28,041	-
Contingency	(48,282)	-	48,282	-
Total other financing sources (uses)	84,603	28,041	(56,562)	-
Revenues and other financing sources over (under) expenditures and other financing uses	\$ -	\$ 54,636	\$ 54,636	\$ (41,707)

**Reconciliation from Budgetary Basis**

**(Modified Accrual) to Full Accrual:**

Revenues and other financing sources over

(under) expenditures and other financing (uses)

\$ 54,636

Reconciling items:

Principal retirement

165,915

Capital outlay

28,085

Revenue Textile Avenue Project

10,380

Revenue Capital Reserve

46,557

Transfers from projects

(28,041)

Depreciation

(289,863)

Total reconciling items

(66,967)

Change in net assets

\$ (12,331)

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Appendix 11.15

Spindale 2012 / 2013 Sewer Usage Data

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SPINDALE  
july - dec 12

jan - june 13

FY 2012- 2013

INSIDE	count	usage
Commercial	199	9,797,000
Industrial	13	20,156,000
Multifamily	12	1,864,000
Other	3	5,000
Public Govt	8	2,307,000
Residential	1085	27,576,000
	<b>1320</b>	<b>61,705,000</b>

INSIDE	count	usage
Commercial	194	13,268,000
Industrial	12	15,090,000
Multifamily	13	1,669,000
Other	3	6,000
Public Govt	8	2,932,000
Residential	1,065	26,153,000
	<b>1,295</b>	<b>59,118,000</b>

INSIDE	count	usage
Commercial	197	23,065,000
Industrial	13	35,246,000
Multifamily	12	3,533,000
Other	3	11,000
Public Govt	8	5,239,000
Residential	1,075	53,729,000
	<b>1,308</b>	<b>120,823,000</b>

OUTSIDE	count	usage
Commercial	5	1,219,000
Industrial	3	11,765,000
Public Govt	11	1,239,000
Residential	33	854,000
	<b>52</b>	<b>15,077,000</b>

OUTSIDE	count	usage
Commercial	3	12,584,000
Industrial	1	240,000
Public Govt	11	1,207,000
Residential	29	813,000
	<b>44</b>	<b>14,844,000</b>

OUTSIDE	count	usage
Commercial	4	13,803,000
Industrial	2	12,005,000
Public Govt	11	2,446,000
Residential	31	1,667,000
	<b>48</b>	<b>29,921,000</b>

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Appendix 11.16

Lake Lure to Rutherfordton WWTP Opinion of Probable Cost

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W.K. Dickson & Co., Inc.  
 Community Infrastructure Consultants  
 616 Colonnade Drive  
 Charlotte, NC 28205  
 Phone (704) 334-5348 Fax (704)-334-0078

## Opinion of Probable Costs

**Project:** Lake Lure - Force Main to Rutherfordton WWTP  
 Lake Lure - Force Main to Rutherfordton WWTP

**WKD No:** TBD  
**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	10" DIP FM (Based on 2.0 PF & 372,000 GPD)	LF	95,000	\$45	\$4,275,000
2	Duplex Pump Station w/ Generator	EA	3	\$350,000	\$1,050,000
3	Decommission Lake Lure WWTP	EA	1	\$200,000	\$200,000
4	Rock Allowance @ 0.05/LF	CY	4,750	\$80	\$380,000
5	ARV (Assume 50)	EA	50	\$6,000	\$300,000
6	R/W (Assume all on Road w/ 10% Private)	AC	5	\$5,000	\$27,000
7	Sed & Erosion Control (S.F., Ck D., Etc.)	LF	95,000	\$4.00	\$380,000
8	Rutherfordton WWTP Receiving Station	LS	1	\$75,000	\$75,000
9	Mobilization @ 3%				\$201,000
	<b>Subtotal</b>				<b>\$6,888,000</b>
	Contingency		approx.	15%	\$1,033,000
	<b>Total Construction</b>				<b>\$7,921,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$1,980,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$9,901,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Notes:**

1. Assumes closure of LL WWTP with new PS at existing influent pump station.
2. Assumes design flow in 10" FM @ 2.5 fps = 600 gpm (0.86 mgd) opposed to previous 16" FM.
3. Reduced the previous projected 16" FM as joint repair has reduced I/I from 0.9 mgd to 0.32 mgd and lower.

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Appendix 11.17

Cost to Upgrade Lake Lure WWTP Opinion of Probable Cost

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 Community Infrastructure Consultants  
 616 Colonnade Drive  
 Charlotte, NC 28205  
 Phone (704) 334-5348 Fax (704)-334-0078

### Opinion of Probable Costs

**Project:** Lake Lure WWTP Upgrade (On-Site)  
 Lake Lure 0.5 MGD WWTP Upgrade On-Site  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Upgrade Influent PS @ Dam	EA	3	\$80,000	\$240,000
2	New Magnetic Flow Meter for pacing chem feed	EA	1	\$10,000	\$10,000
3	Pkg Pump Station @ Flocc Basin to Iron Removal Clarifier	LS	1	\$80,000	\$80,000
4	New Lamella Clarifier(s) with Rapid Mix / Flocc	EA	1	\$169,000	\$169,000
5	Concrete Pad for New Clarifier (25' x 15' x 1.5')	CY	28	\$400	\$11,000
6	Modify Exist Sedimentation Basin into MBBR:				
7.a	MBBR Biofilm Carriers, Sieves, Aeration Grids	LS	1	\$626,600	\$627,000
7.b	MBBR Walls	CY	188	\$600	\$113,000
7.c	Blowers & Controls (870 scfm @ 4.10 psi)	EA	2	\$45,000	\$90,000
7.d	Misc Basin repairs / modifications, cleanout, etc	LS	1	\$50,000	\$50,000
8	New Secondary 50' Dia Clarifier w/ Conc. Tank	EA	1	\$508,310	\$508,000
9	New RAS Pump Station	LS	1	\$80,000	\$80,000
10	Convert Existing 27' Dia Clarifier to Thickener	LS	1	\$105,000	\$105,000
11	Repairs to Existing Sludge Holding Tank	LS	1	\$20,000	\$20,000
12	Sludge Dewatering System:				
12.a	Building (35' x 40' - 2 story) - Blowers & Dewatering	SF	3,400	\$250	\$850,000
12.b	Sludge Dewatering System - Sludge Pumps	EA	2	\$30,000	\$60,000
12.c	Sludge Dewatering - Screw, Rotary Press or Centri.	LS	1	\$600,000	\$600,000
13	Effluent UV System:				
13.a	Self Contained UV in SS Channel	LS	1	\$75,000	\$75,000
13.b	UV Conc Pad (30' L x 8' W x 8" H)	CY	6	\$300	\$1,800
14	Emergency Generator	EA	1	\$100,000	\$100,000
15	Electrical / Instrumentation @ 15%	LS	1		\$568,470
16	Site & Piping @ 10%	LS	1		\$378,980
17	Mobilization @ 3%	LS	1		\$142,000
	<b>Subtotal</b>				<b>\$4,879,250</b>
	Contingency		approx.	15%	\$731,750
	<b>Total Construction</b>				<b>\$5,611,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				<b>\$1,403,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$7,014,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Notes:**

Assume design flow at 0.5 MGD including allowance for future area growth and continued control of inflow from lake.

1. Proposed process description:

- a. Replace existing pumps to with pumps with VFD's to provide better flow control to WWTP
- b. Continues use of existing screening, rapid mix and flocculation w/ mixer replacement as necessary
- c. Install new pump station to transfer flow from Flocc Basin to new Lamella Clarifier for iron removal. (Overflow to MBBR)
- d. Convert existing Sedimentation Basin into MBBR system with addition of 2 baffle walls, retaining screens & aeration grid.
- e. Add new secondary clarifier (50' dia. providing SOR of 255 gpd/sf @ 0.5 mgd.)
- f. Provide new UV disinfection (assuming iron removal is successful in providing transmittance req'd.)
- g. Convert existing 27' dia clarifier into sludge thickener with existing pumps utilized for transfer of sludge to holding tank.
- h. Add new sludge dewatering system (screw press, centrifuge or rotary press) in 2 story buliding due to space limitations.

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Appendix 11.18

Rutherfordton WWTP Upgrades to Handle Lake Lure &  
Equestrian Center Opinion of Probable Cost

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W.K. Dickson & Co., Inc.  
 Community Infrastructure Consultants  
 616 Colonnade Drive  
 Charlotte, NC 28205  
 Phone (704) 334-5348 Fax (704)-334-0078

## Opinion of Probable Costs

**Project:** Rutherfordton WWTP Upgrade for Lake Lure & Equestrian Center

**WKD No:** TBD  
**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Aeration Basins:				
1.a	Add 6 - 25 Hp Aerators in Basin #2	EA	6	\$25,000	\$150,000
1.b	Repairs to Cover in Basin 2	LS	1	\$50,000	\$50,000
2	Sed & Erosion Control (Silt Fence, Ck D & Ent. Rd)	LS	1	\$5,000	\$5,000
3	Mobilization @ 3%				\$6,000
	<b>Subtotal</b>				<b>\$211,000</b>
	Contingency		approx.	15%	\$32,000
	<b>Total Construction</b>				<b>\$243,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$61,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$304,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Rutherfordton WWTP Upgrade for Lake Lure & Equestrian Center**

	Exist	ADF	2034	
Flows:	Expanded population in Rutherford Area to 2034	0.5	0.58 mgd *	
	Tryon Equestrian Center	0	0.6 mgd	
	Lake Lure / Chimney Rock Area	0.32	0.37 mgd *	
	Spindale		mgd *	
		0.82	1.55 mgd	Say 2 mgd Design Q

Assume : Lake Lure existing WWTP to be used for EQ.

\* Future flows are base upon assumed city growth will be proportional to County growth rate of 506 cap/year.

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Appendix 11.19

Rutherfordton to Spindale WWTP Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Rutherfordton WWTP to Spindale WWTP FM Via Power Line R/W  
 Including Upgrade of Spindale WWTP for Rutherfordton

**WKD No:** TBD  
**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Modifications @ Rutherfordton WWTP for EQ:				
1.a	Influent Flow Control for Div. to EQ	EA	1	\$20,000	\$20,000
1.b	EQ Basin Pump to Return Flow to PS	EA	1	\$100,000	\$100,000
1.c	Floating Aerators in Existing Aer. Basins	EA	0		\$0
1.d	New piping to RWWTP Pump Station - 30"	LF	500	\$150	\$75,000
1.e	MH's	EA	3	\$5,000	\$15,000
1.f	Misc. allowance for plant modifications / closure	LS	1	\$100,000	\$100,000
2	New PS @ RWWTP (1400 gpm @ 295' TDH)	EA	1	\$500,000	\$500,000
3	14" FM to Spindale WWTP	LF	26,340	\$50	\$1,317,000
4	Connection of Thunder Rd PS FM to new FM	LS	1	\$10,000	\$10,000
5	Jack & Bore Road Crossings	LF	800	\$300	\$240,000
6	Modify Existing Thunder Rd PS w/ new Pumps	EA	2	\$25,000	\$50,000
7	Connection of New FM at SWWTP	LS	1	\$10,000	\$10,000
8	Air / Vacuum Relief Valves	EA	17	\$6,000	\$102,000
9	Rock Allowance @ 0.1 CY / LF	CY	2634	\$80	\$210,720
10	R/W Costs (25' W x 12,780' L @ \$5000/Ac)	AC	7.33	\$5,000	\$37,000
11	Closeout RWWTP not used for EQ (Budget Allow)	LS	1.00	\$600,000	\$600,000
12	Spindale WWTP Upgrade for RWWTP Flow	(See Separate Opinion)			
13	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	26,340	\$4.00	\$105,360
14	Mobilization @ 3%	LS	1		\$105,000
	<b>Subtotal</b>				<b>\$3,597,080</b>
	Contingency		approx.	15%	\$539,920
	<b>Total Construction</b>				<b>\$4,137,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$1,034,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$5,171,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Rutherfordton WWTP to Spindale WWTP FM Via Power Line R/W**

- Continue to receive influent for screening and grit removal at existing Rutherfordton WWTP headworks.
- Add new influent diversion structure to divert influent below 2 mgd to new pump station for transfer to Spindale with flow > 2 mgd diverted to existing aeration basins converted into equalization basin for storage or EQ basin. Add EQ transfer pump to automatically activate and begin transfer of EQ contents back into system when Q = < 2 mgd.
- Existing clarifiers and digester could also be maintained in an emptied conditions and receive overflow for additional storage with RAS/WAS pumps utilized for returning flow to the EQ tank.
- Construct 14" force main following existing power line R/W to Oakland Rd, Hwy 74 & Ledbetter Rd to the existing Spindale WWTP.
- Possibly connect Spindale's existing Thunder Rd FM into new force main and modify pumps for head conditions.

NOTE: Pump Station at Rutherfordton WWTP to Spindale WWTP has estimated 255' static head and 309' TDH.

	2014	2034	
Flows: Expanded population in Rutherford Area to 2034	0.5	0.58 mgd *	
Tryon Equestrian Center	0	0.6 mgd	
Lake Lure / Chimney Rock Area	0.32	0.37 mgd *	
	0.82	1.55 mgd	(Say 1400 gpm)

Assume: Lake Lure existing WWTP to be used for EQ.

\* Future flows are base upon assumed city growth will be proportional to County growth rate of 506 cap/year.

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Appendix 11.20

Upgrades to Spindale WWTP to Handle Rutherfordton &  
Lake Lure Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Spindale WWTP Upgrade for Rutherfordton & Lake Lure

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Remove Sludge from the Aeration Basin @ 200,000 Gallons @ 3%	Dry Ton	25	\$2,500	\$63,000
2	Spindale Upgrades	Gallon	3,000,000	\$2.5	\$7,500,000
2.a	New Headworks - Grit & Screening				
2.b	Aeration Basin Modifications to Provide Multiple Basins				
2.c	Aeration System Upgrade				
2.d	Clarifier Improvements				
2.e	RAS/WAS Improvements				
2.f	Disinfection System Upgrades				
2.g	Sludge Dewatering System				
3	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LS	1	\$5,000	\$5,000
4	Mobilization @ 3%				\$227,040
	<b>Subtotal</b>				<b>\$7,795,000</b>
	Contingency		approx.	15%	\$1,169,000
	<b>Total Construction</b>				<b>\$8,964,000</b>
	<b>Project Engineering Related Costs @ 25%*</b>				<b>\$2,241,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$11,205,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

\* Project engineering related costs include planning, surveying design, permitting, bidding, construction administration, construction observations, right-of-way, legal and financial consulting services allowance.

**Concept Narrative:**

**Spindale WWTP Upgrade for Rutherfordton & Lake Lure**

	Exist ADF	2034	
Flows: Expanded population in Rutherford Area to 2034	0.5	0.58 mgd *	
Tryon Equestrian Center	0	0.6 mgd	
Lake Lure / Chimney Rock Area	0.32	0.37 mgd *	
Spindale	0.868	1.01 mgd *	
	1.688	2.56 mgd	Say 3 mgd Design

Spindale Permit = 2.4, 3.6 & 6.0 mgd

Assume upgrades to Spindale ~ 50% of new plant @ \$5/gpd

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Appendix 10.21

Spindale to Rutherfordton WWTP Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Spindale WWTP FM to Rutherfordton WWTP Via Power Line R/W  
 Combined Spindale & Rutherfordton WWTP's @ Rutherfordton  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Modifications @ Spindale WWTP for EQ:				
1.a	Influent Flow Control for Div. to EQ	EA	1	\$20,000	\$20,000
1.b	EQ Basin Pump to Eff.	EA	1	\$100,000	\$100,000
1.c	Floating Aerators in EQ Basin	EA	8	\$20,000	\$160,000
1.d	Remove Sludge ~ 200,000 Gallons @ 3%	Dry Ton	25	\$1,200	\$30,024
1.e	New piping to RWWTP Pump Station - 30"	LF	500	\$150	\$75,000
1.f	MH's	EA	3	\$5,000	\$15,000
1.g	Misc. Allowance for Spindale Modifications / Closure	LS	1	\$500,000	\$500,000
2	New PS @ SWWTP (1400 gpm @ 283' TDH	EA	1	\$500,000	\$500,000
3	14" FM to Rutherfordton WWTP	LF	26,340	\$50	\$1,317,000
4	Connection of Thunder Rd PS FM to new FM	LS	1	\$10,000	\$10,000
5	Jack & Bore Road Crossings	LF	800	\$300	\$240,000
6	Modify Existing Thunder Rd PS w/ new Pumps	EA	2	\$25,000	\$50,000
7	Connection of New FM at RWWTP	LS	1	\$10,000	\$10,000
8	Air / Vacuum Relief Valves	EA	17	\$6,000	\$102,000
9	Rock Allowance	CY	2634	\$80	\$210,720
10	R/W Costs (25' W x 12,780' L @ \$5000/Ac)	AC	7.33	\$5,000	\$36,674
11	RWWTP Upgrade for Inc. Flow TO 3 MGD	(See Separate Opinion)			\$2,117,000
12	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	26,840	\$4	\$107,360
13	Mobilization @ 3%				\$168,000
	<b>Subtotal</b>				<b>\$5,768,778</b>
	Contingency		approx.	15%	\$865,222
	<b>Total Construction</b>				<b>\$6,634,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$1,658,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$8,292,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Spindale WWTP FM to Rutherfordton WWTP Via Power Line R/W**

- Continue to receive influent for screening and grit removal at existing Spindale WWTP headworks.
- Add new influent diversion structure to divert influent below 2 mgd to new pump station for transfer to Rutherfordton with flow > 2 mgd diverted to existing aeration basin converted into equalization basin for storage. As influent falls below 1.5 mgd, a EQ transfer pump will automatically be activated to begin transfer of EQ contents back into system. Existing clarifiers and digester could also be maintained in an emptied conditions and receive overflow from EQ basin for additional storage with RAS /WAS pumps utilized for returning flow to the EQ tank.
- Construct new 14" force main following Ledbetter Rd, to Oakland Rd then paralleling an existing power line RW to the Rutherfordton WWTP.
- Connect Spindale's existing Thunder Rd FM into new force main at and modify pumps for lower head pumping.

NOTE: Pump Station at Spindale WWTP to Rutherfordton WWTP has estimated 251' static head and 290' TDH.

Assumptions:

Existing Flow =	0.87 mgd Monthly Average
Existing Peak Flow =	6.1 mgd (1/12 -11/12)
20 year Flow =	1.01 mgd
Pump Station PF =	2

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Appendix 10.22

Spindale to Forest City Second Broad River WWTP Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Spindale WWTP to Forest City Second Broad River WWTP  
 PS @ Hudrow Rd w/ FM to Cherry Mt. St. Via Horn Bottom Rd.  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Modifications @ Spindale WWTP for EQ:				
1.a	Influent Flow Control for Diversion to EQ	EA	1	\$20,000	\$20,000
1.b	EQ Basin Pump to Effluent	EA	1	\$100,000	\$100,000
1.c	Floating Aerators in EQ Basin	EA	8	\$20,000	\$160,000
1.d	Remove Sludge ~ 200,000 Gallons @ 3%	Dry Ton	25	\$2,500	\$63,000
1.e	New piping to effluent - 30"	LF	1,000	\$150	\$150,000
1.f	MH's	EA	5	\$5,000	\$25,000
1.g	Misc. allowance for plant modifications/closure	LS	1	\$100,000	\$100,000
2	Closure of Spindale WWTP not used for EQ	LS	1	\$600,000	\$600,000
3	New PS @ Catheys Creek / Hudrow Rd (1400 gpm @ 195' TDH	EA	1	\$800,000	\$800,000
4	14" FM to Existing 24" FC GS @ River Hills Dr	LF	25,000	\$50	\$1,250,000
5	Jack & Bore Rd Crossings & RR (6 @ 50')	LF	300	\$300	\$90,000
6	Connection into existing FC Gravity Sewer	EA	1	\$10,000	\$10,000
7	Air /Vacuum Relief Valves	EA	16	\$6,000	\$96,000
8	Rock Allowance @ 0.1 CY/LF	CY	2,500	\$80	\$200,000
8	R/W Cost (25' W x 11,400' L @ \$5000 / ac)	AC	6.5	\$5,000	\$32,500
9	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	26,000	\$4.00	\$104,000
10	Mobilization @ 3%				\$114,000
	<b>Subtotal</b>				<b>\$3,914,500</b>
	Contingency		approx.	15%	\$587,500
	<b>Total Construction</b>				<b>\$4,502,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$1,126,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$5,628,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

### Concept Narrative:

#### PS @ Hudrow Rd w/ FM to Cherry Mt. St. Via Horn Bottom Rd.

- Continue to receive influent for screening and grit removal at existing headworks.
- Add new influent diversion structure to divert influent below 2 mgd to plant effluent outfall to Forest City Pump Station with flow > 2 mgd diverted to existing aeration basin converted into equalization basin for storage. As influent falls below 1.5 mgd, a EQ transfer pump will automatically activate to begin transfer of EQ contents back to system. Existing clarifiers & digester could also be maintained in an emptied condition & receive overflow from EQ basin for additional storage with RAS /WAS pumps utilized for returning flow to EQ tank.
- Construct new pump station at existing outfall pipe at Catheys Creek at Hudrow Road.
- Construct new 14" force main following Horn Bottom Rd to Cherry Mountain Road for connection to the Forest City existing 24" gravity sewer near Crown Park,

#### Assumptions:

Existing Flow =	0.87 mgd Monthly Average
Existing Peak Flow =	6.1 mgd (1/12 -11/12)
2034 year Flow Spindale Only	1.01 mgd

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Appendix 11.23

Spindale and Rutherfordton to Forest City WWTP Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Spindale & Rutherfordton WWTP to Forest City Second Broad River WWTP  
 PS @ Hudrow Rd w/ FM to FC WWTP Via River Route

**WKD No:** TBD  
**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Modifications @ Spindale WWTP for EQ:				
1.a	Influent Flow Control for Diversion to EQ	EA	1	\$20,000	\$20,000
1.b	EQ Basin Pump to Effluent	EA	1	\$100,000	\$100,000
1.c	Floating Aerators in EQ Basin	EA	8	\$20,000	\$160,000
1.d	Remove Sludge ~ 200,000 Gallons @ 3%	Dry Ton	25	\$2,500	\$63,000
1.e	New piping to effluent - 30"	LF	1,000	\$150	\$150,000
1.f	MH's	EA	5	\$5,000	\$25,000
1.g	Misc. allowance for plant modifications/closure	LS	1	\$100,000	\$100,000
2	New PS @ Catheys Creek / Hudrow Rd (2200 gpm @ 160' TDH)	LS	1	\$800,000	\$800,000
3	20" FM to Existing FC WWTP	LF	47,600	\$75	\$3,570,000
4	Jack & Bore Rd Crossings & RR (4 @ 80')	LF	300	\$300	\$90,000
5	Connection into existing FC Gravity Sewer	EA	1	\$30,000	\$30,000
6	Air / Vacuum Relief Valves	EA	6	\$6,000	\$36,000
7	Rock Allowance @ 0.1 CY / LF	CY	4,760	\$80	\$380,800
8	R/W (25' W x 47,600' L @ \$5000 / Ac)	AC	27	\$5,000	\$137,000
9	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	48,600	\$4.00	\$194,400
10	Mobilization @ 3%				\$176,000
	<b>Subtotal</b>				\$6,032,200
	Contingency		approx.	15%	\$602,800
	<b>Total Construction</b>				\$6,635,000
	<b>Project Engineering Related Costs @ 25% *</b>				\$1,659,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$8,294,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's

experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**PS @ Hudrow Rd w/ FM to FC WWTP Via River Route**

1. Continue to receive influent for screening and grit removal at existing Rutherfordton & Spindale headworks.
2. Transfer Rutherford WW to Spindale with flow equalization at Rutherfordton using existing facilities.
3. Add new influent diversion structure @ Spindale to divert influent below 3 mgd to plant effluent outfall to new Pump Station with flow > 3 mgd diverted to existing aeration basin converted into equalization basin for storage. As influent falls below 3 mgd, a EQ transfer pump will automatically be activated to begin transfer of EQ contents back into system. Existing clarifiers and digester could also be maintained in an emptied conditions and receive overflow from EQ basin for additional storage with RAS /WAS pumps utilized for returning flow to the EQ tank.
4. Construct new pump station at existing outfall pipe at Catheys Creek and Hudrow Road.
5. Construct new 20" force main following Second Broad River to connection point at the Forest City WWTP.

Rutherfordton Spindale Total Combined

Assumptions:

Year 2034 Ave Daily Flow (mgd)	0.582	1.01	1.59
Design Peak Flow w/ EQ at Exist. WWTP (mgd)	1.164	2.02	3.18

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Appendix 11.24

Cliffside to Forest City Second Broad River WWTP Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Cliffside WWTP to Forest City Second Broad River WWTP Via Social Circle PS  
 Cliffside WWTP PS & FM to Caroleen  
 Caroleen PS & FM to existing Social Circle PS

**WKD No:** TBD  
**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	New Mech. Influent Screen w/ Manual By-pass	EA	1	\$150,000	\$150,000
2	Pump Station @ Cliffside WWTP (220 GPM @ 212' - Series Pumps)	EA	1	\$300,000	\$300,000
3	EQ Return Pump (@ Pond Overflow)	EA	2	\$50,000	\$100,000
4	Return Piping to Pkg WWTP (4" PVC)	LF	500	\$20	\$10,000
5	6" Force Main to Caroleen	LF	23,339	\$30	\$700,000
6	Jack & Bore (~ 14 locations @ 40'/ea)	LF	560	\$300	\$168,000
7	Rock Allowance @ 0.05 CY / LF	CY	1,167	\$80	\$93,000
8	Pump Station @ Caroleen (220 GPM @ 267' - Series Pumps)	EA	1	\$350,000	\$350,000
9	6" FM to existing Social Circle PS	LF	19,000	\$30	\$570,000
10	Jack & Bore (~ 8 locations @ 40'/ea)	LF	320	\$300	\$96,000
11	Rock Allowance @ 0.05 CY / LF	CY	950	\$80	\$76,000
12	Directional Drill Stream Crossings (2 @ 250')	LF	500	\$300	\$150,000
13	Replace Social Circle Pump w/ Higher Cap.	EA	2	\$20,000.00	\$40,000
14	R/W purchase - N/A all on highway R/W				\$0
15	Closeout Cliffside WWTP w/ except of EQ	LS	1	\$600,000	\$600,000
16	Sed. & Erosion (Silt F, Ck D, & Entr. Rd)	LF	42,339	\$ 4.00	\$169,000
17	Mobilization @ 3%	LS	1		\$107,000
	<b>Subtotal</b>				<b>\$3,679,000</b>
	Contingency		approx.	15%	\$552,000
	<b>Total Construction</b>				<b>\$4,338,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				<b>\$1,085,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$5,423,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Cliffside WWTP to Forest City WWTP with intermediate PS at Caroleen and to existing PS at Social Circle**

1. Install new influent screening system w/ overflow to EQ
2. Install new high head series pumps at Cliffside WWTP w/ 6" FM to Caroleen
3. Install new high head series pumps at Caroleen w/ 6" FM to the existing Social Circle PS for transfer to FC Rivreside WWTP.
4. Divert Caroleen gravity sewer to new pump station with overflow to existing Cliffside WWTP.
5. Upgrade Social Circle Pumps to increase capacity to ~ 600 gpm. Existing 480 gpm capacity used unknown.

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Appendix 11.25

Cliffside to Riverstone WWTP Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Cliffside WWTP to Forest City Riverstone WWTP

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	New Mech. Influent Screen w/ Manual By-pass	EA	1	\$150,000	\$150,000
2	Pump Station @ Cliffside WWTP (220 GPM @ 142' Pumps)	EA	1	\$275,000	\$275,000
3	EQ Return Pump (@ Pond Overflow	EA	2	\$50,000	\$100,000
4	Return Piping to Pkg WWTP (4" PVC)	LF	500	\$20	\$10,000
5	6" Force Main to FC DRG WWTP	LF	26,770	\$30	\$803,000
6	Jack & Bore (~ 3 locations @ 250' total)	LF	250	\$300	\$75,000
7	Rock Allowance @ 0.05 CY / LF	CY	1,339	\$80	\$107,000
8	Directional Drill Stream Crossings (2 @ 250')	LF	750	\$500	\$375,000
9	Connection @ Riverstone WWTP	Budget	1	\$10,000	\$10,000
10	R/W Costs (8,355 lf x 25' w @ \$5000/Ac)	AC	5.75	\$5,000	\$29,000
11	Closeout Cliffside WWTP Except EQ	Budget	1	\$600,000	\$600,000
12	Expand Riverstone WWTP to 0.15 mgd	Budget	1	\$600,000	\$600,000
13	Sed. & Erosion (Silt F, Ck D, & Entr. Rd)	LF	26,770	\$ 4.00	\$107,000
14	Mobilization @ 3%				\$97,000
	<b>Subtotal</b>				<b>\$3,338,000</b>
	Contingency		approx.	15%	\$501,000
	<b>Total Construction</b>				<b>\$3,839,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$960,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$4,799,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Cliffside WWTP to Forest City Riverstone WWTP**

1. Install new influent screening system w/ overflow to EQ
2. Install new high head series pumps at FC DRG WWTP w/ 6" FM.
3. FM is to cross Second Broad R., Hwy 221 and follow Island Ford Rd. to Goodes Creek, then parallel power line R/W to point near FC DRG.
4. Assume cost for upgrade of Riverstone @ \$6/gallon capacity

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Appendix 11.26

Cliffside to Forest City DRG WWTP w/o Riverstone WWTP Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Cliffside WWTP to Forest City DRG WWTP without Riverstone WWTP

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	New Mech. Influent Screen w/ Manual By-pass	EA	1	\$150,000	\$150,000
2	Pump Station @ Cliffside WWTP (220 GPM @ 260' - Series Pumps)	EA	1	\$350,000	\$350,000
3	EQ Return Pump (@ Pond Overflow)	EA	2	\$50,000	\$100,000
4	Return Piping to Pkg WWTP (4" PVC)	LF	500	\$20	\$10,000
5	6" Force Main to FC DRG WWTP	LF	40,220	\$30	\$1,207,000
6	Jack & Bore (~4 locations @ 350' total)	LF	350	\$300	\$105,000
7	Rock Allowance @ 0.05 CY / LF	CY	2,011	\$80	\$161,000
8	Directional Drill Stream Crossings (2 @ 250')	LF	750	\$500	\$375,000
9	Connection @ DRG WWTP	LS	1	\$10,000	\$10,000
10	R/W Costs (20,645 lf x 25' w @ \$5000/Ac)	AC	13.22	\$5,000	\$66,000
11	Closeout Cliffside WWTP w/ except of EQ	LS	1	\$600,000	\$600,000
12	DGR Upfit to make operational (1\$/GPD)	LS	1	\$910,000	\$910,000
13	Sed. & Erosion (Silt F, Ck D, & Entr. Rd)	LF	40,220	\$ 4.00	\$161,000
14	Mobilization @ 3%	LS	1		\$126,000
	<b>Subtotal</b>				<b>\$4,331,000</b>
	Contingency		approx.	15%	\$650,000
	<b>Total Construction</b>				<b>\$4,981,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$1,245,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$6,226,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Cliffside WWTP to Forest City DRG WWTP without Riverstone WWTP**

1. Install new influent screening system w/ overflow to EQ
2. Install new high head series pumps at FC DRG WWTP w/ 6" FM.
3. FM is to cross Second Broad R., Hwy 221 and follow Island Ford Rd. to Goodes Creek, then parallel power line R/W to point near FC DRG.
4. Issues: Discharged above Forest City Intake and low flow in large WWTP.

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Appendix 11.27

Cliffside to Forest City DRG WWTP with Riverstone WWTP Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Cliffside WWTP & FC Riverstone WWTP to Forest City DRG WWTP

**WKD No:** TBD

**Pg:** 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	New Mech. Influent Screen w/ Manual By-pass	EA	1	\$150,000	\$150,000
2	Pump Station @ Cliffside WWTP (220 GPM @ 142' Pumps)	EA	1	\$250,000	\$250,000
3	EQ Return Pump (@ Pond Overflow	EA	2	\$50,000	\$100,000
4	Return Piping to Pkg WWTP (4" PVC)	LF	500	\$20	\$10,000
5	6" Force Main to FC DRG WWTP	LF	26,770	\$30	\$803,000
6	Jack & Bore (~4 locations @ 350' total)	LF	350	\$300	\$105,000
7	Rock Allowance @ 0.05 CY / LF	CY	1,339	\$80	\$107,000
8	Directional Drill Stream Crossings (2 @ 250')	LF	750	\$500	\$375,000
9	Connection @ DRG WWTP	LS	1	\$10,000	\$10,000
10	R/W Costs (20,645 lf x 25' w @ \$5000/Ac)	AC	5.75	\$5,000	\$29,000
11	PS @ Riverstone PS to FC-DRG WWTP (220 GPM @ 68' TDH)	EA	1	\$250,000	\$250,000
12	6" Force Main to FC DRG WWTP	LF	13450	\$30	\$404,000
13	R/W Costs (13019 lf x 25' w @ \$5000/Ac)	AC	7.47	\$5,000	\$37,000
14	Convert Riverstone WWTP to EQ	LS	1	\$100,000	\$100,000
15	Closeout Cliffside WWTP Except EQ	LS	1	\$600,000	\$600,000
16	DGR Upgrade to make operational (1\$/GPD)	LS	1	\$910,000	\$910,000
17	Sediment & Erosion Control (Silt Fence, Check Dams, & Entr. Rd)	LF	40,220	\$ 4.00	\$161,000
18	Mobilization @ 3%				\$127,000
	<b>Subtotal</b>				<b>\$4,528,000</b>
	Contingency		approx.	15%	\$679,000
	<b>Total Construction</b>				<b>\$5,207,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$1,302,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$6,509,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Cliffside WWTP & FC Riverstone WWTP to Forest City DRG WWTP**

1. Install new influent screening system w/ overflow to EQ
2. Install new high head series pumps at FC DRG WWTP w/ 6" FM.
3. FM is to cross Second Broad R., Hwy 221 and follow Island Ford Rd. to Goodes Creek, then parallel power line R/W to point near FC DRG.
4. Issues: Discharged above Forest City Intake and low flow in large WWTP.

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Appendix 11.28

Forest City Second Broad River WWTP Upgrades to Handle  
Cliffside, Rutherfordton, and Spindale WWTP Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Forest City Second Broad River WWTP upgrade for Lake Lure, Rutherfordton, Spindale & Cliffside Flows  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	New EQ Tank:				
1.a	Above Ground Crom Tank - 5 MG	Gal	5,000,000	\$0.60	\$3,000,000
1.b	Transfer Pump Station and Return Flow Valves	LS	1	\$300,000	\$300,000
2	Reactivate Existing Aer. Basins A, B, C & D:				
2.a	Add Floating Mixers at each basin	EA	4	\$50,000	\$200,000
2.b	Misc Piping / Tank Upgrades	LS	1	\$400,000	\$400,000
3	Additional Aerators for Main A.B (4 @ 75 Hp)	EA	4	\$55,000	\$220,000
4	Add one new 75' Dia. Clarifier	EA	1	\$1,400,000	\$1,400,000
5	New belt press or alternate dewatering	LS	1	\$600,000.0	\$600,000
6	Upgrade Sudge Dryer	LS	1	\$2,450,500	\$2,451,000
7	Misc Piping & Electrical Costs @ 15%	LS	1		\$1,286,000
8	Mobilization @ 3%	LS	1		\$296,000
	<b>Subtotal</b>				\$10,153,000
	Contingency		approx.	15%	\$1,015,000
	<b>Total Construction</b>				\$11,168,000
	<b>Project Engineering Related Costs @ 25%*</b>				\$2,792,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$13,960,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Centralized treatment of Lake Lure, Rutherfordton w/ Equestrian Center, Spindale and Cliffside at Forest C. Riverside**

- Utilize existing Lake Lure, Rutherfordton & Spindale WWTP for screening and flow equalization.
- Transfer Lake Lure to Rutherford, Rutherfordton to Spindale then to FC. Cliffside to FC via Social Circle PS.

	Exist ADE	2034	
Flows: Expanded population in Rutherford Area to 2034	0.5	0.58 mgd *	
Tryon Equestrian Center	0	0.6 mgd	
Lake Lure / Chimney Rock Area	0.32	0.37 mgd *	
Spindale	0.868	1.01 mgd *	
Forest City / Ellenboro	1.263	1.468	
	2.95	4.03 mgd	Say 3 mgd Design
	0.047	0.06 mgd	
	3.00	4.09	

- Assume FC upgrades for Added Flow to ~ 4 mgd
- Add 5 MG EQ basin (~ 24 hr at 4.95 mgd permit condition).
- Reactivate existing Aeration Basins A, B, C & D for Anoxic Treatment - Add 60 Hp floating mixers ea. tank
- Add additional floating aerators in large aeration basin - @ ~ 75 Hp / ea
- Add additional clarifier (4,000,000 GPD/(3\*4418 SF) = 301 GPD/SF also provides ability to operate w/ 1 out of service.
- Replace existing belt press
- Rebuild / replace existing sludge dryer

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Appendix 11.29

Upgrades to Forest City Riverstone WWTP to Handle Cliffside Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Upgrade Forest City Riverstone WWTP to 0.15 mgd

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Expand Riverstone WWTP to 0.15 mgd	LS	1	\$600,000	\$600,000
2	Mobilization @ 3%	LS	1		\$18,000
	<b>Subtotal</b>				<b>\$618,000</b>
	Contingency		approx.	15%	\$93,000
	<b>Total Construction</b>				<b>\$711,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$178,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$889,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Upgrade Forest City Riverstone WWTP to 0.15 mgd**

4. Assume cost for upgrade of Riverstone @ \$6/gallon capacity added/

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Appendix 11.30

Upgrades to Forest City DRG WWTP to Handle Cliffside and Riverstone Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Upgrade Forest City Riverstone WWTP to 0.15 mgd

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Cost to return FC DRG WWTP to service.	LS	1	\$910,000	\$910,000
2	Mobilization @ 3%	LS	1		\$27,000
	<b>Subtotal</b>				<b>\$937,000</b>
	Contingency		approx.	15.0%	\$141,000
	<b>Total Construction</b>				<b>\$1,078,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$270,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,348,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Upgrade Forest City Riverstone WWTP to 0.15 mgd**

Assume cost for reopening FC DRG @ \$1/gpd.

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Appendix 11.31

Rutherford County Airport to Spindale Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Rutherford County Airport Pump Station & Force Main

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station w/ Generator (100 gpm)	Ea	1	\$300,000.00	\$300,000.00
2	4" PVC Force Main	LF	18,110	\$25.00	\$452,750.00
3	Road Crossings by Jack & Bore (4 @ 30')	LF	120	\$300.00	\$36,000.00
4	Stream crossings (Cathy's Ck & 2- Holland Cr)	LF	3	\$10,000.00	\$30,000.00
5	Railroad crossing (1) by Jack & Bore	LF	100	\$400.00	\$40,000.00
6	Air / Vacuum Relief Valves	EA	11	\$4,000	\$44,000
7	Rock Allowance @ 0.05 CY / LF	CY	905.5	\$80	\$72,440
8	R/W (Assume all on Road R/W)	AC	0	\$5,000.00	\$0
9	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	18,110	\$4.00	\$72,440
10	Mobilization @ 3%				\$31,000
	<b>Subtotal</b>				<b>\$1,078,630</b>
	Contingency		approx.	15%	\$162,370
	<b>Total Construction</b>				<b>\$1,241,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$310,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,551,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.32

Area North of Rutherfordton / Hwy 221 to Rutherfordton Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Area North of Rutherfordton / Hwy 221 Pump Station & Force Main

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station w/ Generator (100 gpm)	Ea	1	\$300,000.00	\$300,000.00
2	4" PVC Force Main	LF	18,110	\$25.00	\$452,750.00
3	Road Crossings by Jack & Bore (4 @ 30')	LF	120	\$300.00	\$36,000.00
4	Stream crossings (Cathy's Ck & 2- Holland Cr)	LF	3	\$10,000.00	\$30,000.00
5	Railroad crossing (1) by Jack & Bore	LF	100	\$400.00	\$40,000.00
6	Air / Vacuum Relief Valves	EA	11	\$4,000	\$44,000
7	Rock Allowance @ 0.05 CY / LF	CY	905.5	\$80	\$72,440
8	R/W (Assume all on Road R/W)	AC	0	\$5,000.00	\$0
9	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	18,110	\$4.00	\$72,440
10	Mobilization @ 3%				\$31,000
	<b>Subtotal</b>				<b>\$1,078,630</b>
	Contingency		approx.	15%	\$162,370
	<b>Total Construction</b>				<b>\$1,241,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$310,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,551,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.33

Sewer Service to Ellenboro Henrietta Rd Interchange at  
Hwy 74 via FM to Ellenboro Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Ellenboro - Henrietta Interchange Service  
 Pump to Ellenboro GS to Wilson PS  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station at Hills Creek (off Four Lakes Dr) - 220 gpm @ 265' TDH	EA	1	\$350,000.00	\$350,000
2	6" Force Main to Ellenboro @ Church St & Main	LF	12,280	\$30	\$368,400
3	Rock Allowance @ 0.05 CY / LF FM	CY	614	\$80	\$49,120
4	Jack & Bore:				
4.1	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
4.2	Jack & Bore @ 4 ea RR Crossings @ 100 lf/ea	LF	400	\$300	\$120,000
4.3	Jack & Bore @ 5 Road Crossings @ 40 lf/ea	LF	200	\$250	\$50,000
5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
6	Connection into existing GS @ Ellenboro	EA	1	\$5,000	\$5,000
7	GS to Serve South Side of Interchange:				
7.1	8" GS	LF	2,470	\$35	\$86,450
7.2	MH's @ ~200'	EA	12	\$3,500	\$42,000
7.3	Rock Allowance @ 0.1 CY/LF	CY	247	\$80	\$19,760
8	GS to Serve North Side of Interchange:				
8.1	8" GS	LF	2,660	\$35	\$93,100
8.2	MH's @ ~200'	EA	13	\$3,500	\$45,500
8.3	Rock Allowance @ 0.1 CY/LF	LF	266	\$80	\$21,280
8.4	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
8.5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
9	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	17,410	\$4	\$69,640
10	Mobilization @ 3%				\$47,000
	<b>Subtotal</b>				\$1,622,516
	Contingency		approx.	15%	\$162,484
	<b>Total Construction</b>				\$1,785,000
	<b>Project Engineering Related Costs @ 25%*</b>				\$446,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$2,231,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Ellenboro - Henrietta Interchange Service**

Pump to Ellenboro GS to Wilson PS

1. New pump station off Four Lakes Drive near Hills Creek
2. Force main under Hwy 74 then following Ellenboro-Henrietta Rd to Church St to Main St in Ellenboro and connecting to existing gravity sewer to Wilson Pump Station.
3. Use existing Wilson Pump Station in Ellenboro for transfer to Forest City
4. Construct new gravity sewers serving north and south side of Hwy 74 interchange

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Appendix 11.34

Sewer Service to Ellenboro Henrietta Rd Interchange at  
Hwy 74 via FM to Henrietta Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Ellenboro - Henrietta Interchange Service  
 Pump to Henrietta and connect to gravity sewer to Cliffside  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station at Hills Creek (off Four Lakes Dr) - 220 gpm @ 152' TDH	EA	1	\$350,000.00	\$350,000
2	6" Force Main to Henrietta @ former Cone Mills Site	LF	15,400	\$30	\$462,000
3	Rock Allowance @ 0.05 CY / LF FM	CY	770	\$80	\$61,600
4	Jack & Bore (5 Road Crossings @ 40 lf / ea	LF	200	\$300	
5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac		\$5,000	\$0
6	Connection into existing GS @ Henrietta	EA	1	\$5,000	\$5,000
7	GS to Serve South Side of Interchange				
7.1	8" GS	LF	2,470	\$35	\$86,450
7.2	MH's @ ~200'	EA	12	\$3,500	\$42,000
7.3	Rock Allowance @ 0.1 CY/LF	CY	247	\$80	\$19,760
8.0	GS to Serve North Side of Interchange				
8.1	8" GS	LF	2,660	\$35	\$93,100
8.2	MH's @ ~200'	EA	13	\$3,500	\$45,500
8.3	Rock Allowance @ 0.1 CY/LF	LF	266	\$80	\$21,280
8.4	Jack & Bore @ Hwy 74	LF	400	\$300	\$120,000
8.5	R/W Costs (2660' x 25' w @ \$5000 / Ac)	Ac	1.53	\$5,000	\$7,633
9.0	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	20,530	\$4	\$82,120
	Mobilization @ 3%				\$42,000
	<b>Subtotal</b>				\$1,438,443
	Contingency		approx.	15%	\$144,557
	<b>Total Construction</b>				\$1,583,000
	<b>Project Engineering Related Costs @ 25%*</b>				\$396,000
	<b>Preliminary Total Opinion of Probable Costs</b>				\$1,979,000

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

**Concept Narrative:**

**Ellenboro - Henrietta Interchange Service**

Pump to Henrietta and connect to gravity sewer to Cliffside

1. New pump station off Four Lakes Drive near Hills Creek
2. Force main under Hwy 74 then following Ellenboro-Henrietta Rd to Henrietta w/ connection to existing gravity sewer at former Cone Mill's location.
3. Use existing gravity sewer to Cliffside WWTP.
4. Construct new gravity sewers serving north and south side of Hwy 74 interchange

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Appendix 11.35

Service to Industrial Area on HWY 221 near Harris Elementary via PS  
& FM to Spindale Torrington PS on Hwy 221 Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Harris Hwy 221 Industrial Site  
 FM to Spindale Torrington Pump Station  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station near intersection of Hwy 221 & Hooper Rd. (220 gpm @ 216')	EA	1	\$300,000	\$300,000
2	6" Force Main to Spindale Torrington PS	LF	20,900	\$30	\$627,000
3	Rock Allowance @ 0.05 CY / LF FM	CY	1,045	\$80	\$83,600
4	Jack & Bore (11 Road Crossings @ 40 lf / ea)	LF	440	\$300	\$132,000
5	Jack & Bore Road Crossings @ Hwy 74	LF	400	\$300	\$120,000
6	Connection into existing GS @ Torrington PS	EA	1	\$5,000	\$5,000
7	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	20,900	\$4	\$83,600
8	Mobilization @ 3%	LS	1		\$41,000
<b>Subtotal</b>					\$1,392,200
Contingency				15%	\$138,800
<b>Total Construction</b>					<b>\$1,531,000</b>
<b>Project Engineering Related Costs @ 25%*</b>					<b>\$383,000</b>
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$1,914,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

administration, construction observations, right-of-way, legal and financial consulting services allowance.

**Concept Narrative:**

**Harris Hwy 221 Industrial Site**

FM to Spindale Torrington Pump Station

1. Install new pump station in general area of Hwy 221 and Hooper Rd w/ 6" FM extend along Hwy 221 to Torrington P.S.
2. Potential connection of existing PS at Hwy 74 - Hwy 221 intersection. P.S. Upgrade and FM connection NIC.

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Appendix 11.36

Service to Industrial Area on Hwy 221 near Harris Elementary via PS & FM to  
Forest City Riverstone WWTP

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## Opinion of Probable Costs

**Project:** Harris Hwy 221 Industrial Site  
 FM to Forest City Riverstone WWTP  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:**  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station near intersection of Hwy 221 & Arthur Henson Rd. (220 gpm @ ~ 86')	EA	1	\$200,000	\$200,000
2	6" Force Main to Spindale Torrington PS	LF	28,290	\$30	\$848,700
3	Rock Allowance @ 0.05 CY / LF FM	CY	1,415	\$80	\$113,160
4	Jack & Bore (10 Road Crossings @ 40 lf / ea	LF	400	\$300	\$120,000
5	Jack & Bore RR Crossings	LF	100	\$400	\$40,000
6	Stream Crossing @ Floyd's Creek - Directional D	EA	250	\$300	\$75,000
7	Connection into existing GS @ Riverstone Blvd	EA	1	\$5,000	\$5,000
8	Sed. & Erosion Control (@ \$4/LF) GS & FM	LF	28,290	\$4	\$113,160
9	Mobilization @ 3%				\$45,000
	<b>Subtotal</b>				\$1,560,020
	Contingency			15%	\$155,980
	<b>Total Construction</b>				<b>\$1,716,000</b>
	<b>Project Engineering Related Costs @ 25%*</b>				<b>\$429,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$2,145,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

\* Project engineering related costs include planning, surveying design, permitting, bidding, construction administration, construction observations, right-of-way, legal and financial consulting services allowance.

**Concept Narrative:**

**Harris Hwy 221 Industrial Site**

FM to Forest City Riverstone WWTP

1. Install new pump station in general area of Hwy 221 and Arthur Henson Rd w/ 6" FM extend along Hwy 221 to Torrington P.S.
2. Potential connection of existing PS at Hwy 74 - Hwy 221 intersection. P.S. Upgrade and FM connection NIC.

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Appendix 11.37

Hwy. 221 / US 74 Interchange PS Upgrade – Spindale Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Hwy 221 / US 74 Interchange

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Pump Station Upgrade	EA	1	\$101,000.00	\$101,000.00
2	Mobilization @ 3%	LS	1		\$3,000
	<b>Subtotal</b>				<b>\$104,000</b>
	Contingency		approx.	15%	\$16,000
	<b>Total Construction</b>				<b>\$120,000</b>
	<b>Project Engineering &amp; Related Costs @ 25% *</b>				\$30,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$150,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.38

Forest City Central Business District Sewer Rehab (Post Bid) Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Town of Forest City  
 Central Business District Sewer Rehabilitation (Post Bid)

**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	8" PVC Sanitary Sewer	LF	3,560	\$59	\$210,040
2	8" CIPP	LF	2,525	\$39	\$98,475
3	8" Pipe Bursting	LF	315	\$85	\$26,775
4	4" Sewer Tap (CIPP)	EA	45	\$200	\$9,000
5	Removal of Protruding Taps	EA	25	\$400	\$10,000
6	Jack & Bore Steel Encasement Pipe & Sewer Carrier Line	LF	168	\$226	\$37,968
7	4' Diameter Manhole (All Depths)	EA	22	\$2,600	\$57,200
8	4' Diameter Manhole Rehabilitation	EA	13	\$1,000	\$13,000
9	Plug & Abandon Existing Manhole	EA	2	\$1,000	\$2,000
10	4" Point Repair / Service Reconnect	EA	2	\$800	\$1,600
11	Connect to Existing Manhole	EA	3	\$1,500	\$4,500
12	Drive Repair	LF	120	\$50.00	\$6,000
13	Connect Existing Laterals	EA	46	\$1,800	\$82,800
14	Grout Existing Sewer Line Under Railroad	LF	285	\$12	\$3,420
15	Erosion Control	LS	1	\$2,000	\$2,000
16	Town Street Asphalt Repair	LF	2,850	\$43.40	\$123,690
17	NCDOT Pavement Repair including Milling	SY	150	\$110	\$16,500
18	2" Asphalt Overlay	SY	2,000	\$15	\$29,000
19	Mobilization @ 3%	LS	1		\$26,386
	<b>Subtotal</b>				<b>\$760,354</b>
	Contingency		approx.	5%	\$38,018
	<b>Total Construction</b>				<b>\$798,372</b>
	<b>Project Engineering &amp; Related Costs</b>				<b>\$145,825</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$944,197</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.39

Forest City Mill Street Area Sewer Rehabilitation Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Town of Forest City  
 Mill Street Area Sewer Rehabilitation  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	15" PVC Sanitary Sewer	LF	1,200	\$65	\$78,000
2	15" CIPP	LF	500	\$125	\$62,500
3	12" PVC Sanitary Sewer	LF	900	\$55	\$49,500
4	12" CIPP	LF	400	\$115	\$46,000
5	8" PVC Sanitary Sewer	LF	2,000	\$43	\$86,000
6	8" CIPP	LF	1,200	\$95	\$114,000
7	4' Diameter Manhole (All Depths)	EA	15	\$2,900	\$43,500
8	5' Diameter Manhole (All Depths)	EA	3	\$4,000	\$12,000
9	Tie In Existing Sewer Line	EA	2	\$4,400	\$8,800
10	Pipe Bedding	TN	2,400	\$24	\$57,600
11	Silt Fence	LF	1,200	\$4	\$4,800
12	Rock Check Dams	EA	10	\$125	\$1,250
13	Pavement Repair	LF	5,500	\$8.50	\$46,750
14	Miscellaneous Concrete	CY	50	\$195	\$9,750
15	Materials Testing	LS	1	\$5,000	\$5,000
16	Mobilization @ 3%	LS	1		\$19,000
	<b>Subtotal</b>				<b>\$644,450</b>
	Contingency		approx.	15%	\$97,550
	<b>Total Construction</b>				<b>\$742,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				<b>\$186,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$928,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.40

Forest City WWTP Large Aeration Basin & Digester Improvements Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Town of Forest City  
 Large Aeration Basin and Digesters - Aeration Improvements  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1 of 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	New Diffused Aeration System	LS	1	\$425,000	\$425,000
2	Dewater Aeration Basin	LS	1	\$25,000	\$25,000
3	New Blowers for Aeration System	LS	1	\$175,000	\$175,000
4	Air Piping	LS	1	\$80,000	\$80,000
5	Controls	LS	1	\$50,000	\$50,000
6	New Electrical Improvements	LS	1	\$35,000	\$35,000
7	New Diffused Aeration System - New Digester	LS	1	\$92,000	\$92,000
8	New Digester Bridge	LS	1	\$38,000	\$38,000
9	New Diffused Aeration System - Old Digester	LS	1	\$45,000	\$45,000
10	Old Digester Bridge	LS	1	\$20,000	\$20,000
11	New Digester Aeration System Blowers	LS	1	\$85,000	\$85,000
12	Digester Air Piping	LS	1	\$50,000	\$50,000
13	Digester Electrical Improvements	LS	1	\$35,000	\$35,000
14	Mobilization @ 3%	LS	1		\$35,000
	<b>Subtotal</b>				<b>\$1,190,000</b>
	Contingency		approx.	15%	\$179,000
	<b>Total Construction</b>				<b>\$1,369,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$342,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,711,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.41

Spindale – Rehabilitation of Trunk Line A3 Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Spindale - Rehabilitation of Trunk Line A3

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	18" Gravity Sewer CIPP	LF	10,000	\$55	\$550,000
2	Long Span 8" Diameter	LF	150	\$200	\$30,000
3	4' Diameter Manhole	EA	25	\$2,500	\$63,000
4	Restoration	LS	1	\$10,000	\$10,000
5	Mobilization @ 3%	LS	1		\$19,590
	<b>Subtotal</b>				<b>\$673,000</b>
	Contingency		approx.	15%	\$101,000
	<b>Total Construction</b>				<b>\$774,000</b>
	<b>Project Engineering Related Costs @ 25%*</b>				<b>\$194,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$968,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.42

Spindale – Rehabilitation of Trunk Line A2 Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Spindale - Rehabilitation of Trunk Line A2

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	10" Gravity Sewer CIPP	LF	300	\$50	\$15,000
2	21" Gravity Sewer CIPP	LF	825	\$60	\$50,000
3	24" Gravity Sewer CIPP	LF	11,200	\$65	\$728,000
3	32" Gravity Sewer CIPP	LF	1,500	\$75	\$113,000
4	4' Diameter Manhole	EA	25	\$2,500	\$63,000
5	Restoration	LS	1	\$10,000	\$10,000
6	Mobilization @ 3%	LS	1		\$29,000
	<b>Subtotal</b>				<b>\$1,008,000</b>
	Contingency		approx.	15%	\$151,000
	<b>Total Construction</b>				<b>\$1,159,000</b>
	<b>Project Engineering Related Costs @ 25%*</b>				<b>\$290,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$1,449,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.43

Spindale – Rehabilitation of Oak Street PS – Southern Trunk Line Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Spindale - Rehabilitation of Oak Street PS - Southern Trunk Line

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherford County

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	10" Gravity Sewer CIPP	LF	1,700	\$50	\$85,000
2	12" Gravity Sewer CIPP	LF	4,000	\$55	\$220,000
3	12" Long Span DIP	LF	150	\$200	\$30,000
4	4' Diameter Manhole	EA	25	\$3,500	\$88,000
5	Restoration	LS	1	\$10,000	\$10,000
6	Mobilization @ 3%	LS	1		\$13,000
	<b>Subtotal</b>				<b>\$446,000</b>
	Contingency		approx.	15%	\$67,000
	<b>Total Construction</b>				<b>\$513,000</b>
	<b>Project Engineering Related Costs @ 25%*</b>				<b>\$128,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$641,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.44

Spindale – Rehabilitation of Oak Street PS – Southern Trunk Line Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Spindale - Rehabilitation of Oak Street PS - Northern Trunk Line

**WKD No:** TBD

**Client:** Rutherford County

**Pg:** 1 of 1

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	12" Gravity Sewer CIPP	LF	2,750	\$55	\$151,000
2	12" Long Span DIP	LF	125	\$200	\$25,000
3	4' Diameter Manhole	EA	25	\$3,250	\$81,000
4	Restoration	LS	1	\$20,000	\$20,000
5	Mobilization @ 3%	LS	1		\$8,000
	<b>Subtotal</b>				<b>\$285,000</b>
	Contingency		approx.	15%	\$43,000
	<b>Total Construction</b>				<b>\$328,000</b>
	<b>Project Engineering Related Costs @ 25%*</b>				<b>\$82,000</b>
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$410,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.45

Rutherfordton – Sewer Outfall to the Second Broad River Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Rutherfordton WWTP Outfall Extension to Broad River  
 Combined Spindale & Rutherfordton WWTP @ Rutherfordton  
**Client:** Rutherford County

**WKD No:** TBD  
**Pg:** 1  
**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	30" Dia DIP Outfall to Broad River	LF	28,500	\$150	\$4,275,000
2	5' Dia Manholes	EA	143	\$5,000	\$712,500
3	Jack & Bore Roadways (5 @ 50 lf )	LF	250	\$300	\$75,000
4	Rock Allowance	CY	2,850	\$80	\$228,000
5	Sediment & Erosion Control (Silt Fence, Check Dams & Ent. Rd)	LF	28,500	\$4.00	\$114,000
6	Mobilization @ 3%				\$162,000
	<b>Subtotal</b>				<b>\$5,566,500</b>
	Contingency		approx.	15%	\$835,500
	<b>Total Construction</b>				<b>\$6,402,000</b>
	<b>Project Engineering &amp; Related Costs @ 25%*</b>				\$1,601,000
	<b>Preliminary Total Opinion of Probable Costs</b>				<b>\$8,003,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.46

Sewer Operation & Maintenance Programs Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Sewer Operation and Maintenance Programs

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** All Project Stakeholders

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Sewer Overflow Response Plan (SORP)	EA	1	\$30,000	\$30,000
2	Continuing Sewer Assessment Program (CSAP)	EA	1	\$40,000	\$40,000
3	FOG Program	EA	1	\$40,000	\$40,000
4	Gravity Line Maintenance Program (GLMP)	EA	1	\$30,000	\$30,000
5	Infrastructure Rehabilitation Program (IRP)	EA	1	\$30,000	\$30,000
6	Information Management System (IMS)	EA	1	\$30,000	\$30,000
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$200,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.47

Cliffside Continuing Sewer Assessment / Sanitary Sewer Evaluation Study Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Continuing Sewer Assessment (Sanitary Sewer Evaluation Survey)

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Cliffside Sanitary District

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Dyed Water Flooding	EA	4	\$1,750	\$7,000
2	Corrosion Defect Identification	EA	1	\$5,100	\$5,100
3	Routine Manhole Inspections	EA	208	\$175	\$36,400
4	Rainfall & Flow Monitoring	EA	4	\$20,000	\$80,000
5	CCTV	LF	39,000	\$2.50	\$97,500
6	Gravity System Defect Analysis	EA	1	\$5,000	\$5,000
7	Smoke Testing	LS	208	\$75	\$16,000
8	Pump Station Performance & Adequacy Testing	EA	2	\$7,500	\$15,000
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$262,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.48

Forest City Continuing Sewer Assessment / Sanitary Sewer  
Evaluation Study Opinion of Probable Cost

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### Opinion of Probable Costs

**Project:** Continuing Sewer Assessment (Sanitary Sewer Evaluation Survey)

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Lake Lure

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Dyed Water Flooding	EA	0	\$0	\$0
2	Corrosion Defect Identification	EA	0	\$0	\$0
3	Routine Manhole Inspections	EA	0	\$0	\$0
4	Rainfall & Flow Monitoring	EA	20	\$20,000	\$400,000
5	CCTV	LF	0	\$0.00	\$0
6	Gravity System Defect Analysis	EA	0	\$0	\$0
7	Smoke Testing	LS	0	\$0	\$0
8	Pump Station Performance & Adequacy Testing	EA	7	\$5,000	\$35,000
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$435,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.49

Lake Lure Continuing Sewer Assessment / Sanitary Sewer  
Evaluation Study Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Continuing Sewer Assessment (Sanitary Sewer Evaluation Survey)

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Forest City

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Dyed Water Flooding	EA	8	\$1,750	\$14,000
2	Corrosion Defect Identification	EA	1	\$10,000	\$10,000
3	Routine Manhole Inspections	EA	200	\$175	\$35,000
4	Rainfall & Flow Monitoring	EA	8	\$20,000	\$160,000
5	CCTV	LF	40,000	\$2.50	\$100,000
6	Gravity System Defect Analysis	EA	1	\$10,000	\$10,000
7	Smoke Testing	LS	200	\$75	\$15,000
8	Pump Station Performance & Adequacy Testing	EA	27	\$4,000	\$108,000
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$452,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.50

Rutherfordton Continuing Sewer Assessment / Sanitary Sewer  
Evaluation Study Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Continuing Sewer Assessment (Sanitary Sewer Evaluation Survey)

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherfordton

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Dyed Water Flooding	EA	8	\$1,750	\$14,000
2	Corrosion Defect Identification	EA	1	\$10,000	\$10,000
3	Routine Manhole Inspections	EA	200	\$175	\$35,000
4	Rainfall & Flow Monitoring	EA	8	\$20,000	\$160,000
5	CCTV	LF	40,000	\$2.50	\$100,000
6	Gravity System Defect Analysis	EA	1	\$5,000	\$5,000
7	Smoke Testing	LS	200	\$75	\$15,000
8	Pump Station Performance & Adequacy Testing	EA	5	\$5,000	\$25,000
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$364,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.51

Spindale Continuing Sewer Assessment / Sanitary Sewer  
Evaluation Study Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Continuing Sewer Assessment (Sanitary Sewer Evaluation Survey)

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Spindale

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	Dyed Water Flooding	EA	8	\$1,750	\$14,000
2	Corrosion Defect Identification	EA	1	\$10,000	\$10,000
3	Routine Manhole Inspections	EA	200	\$175	\$35,000
4	Rainfall & Flow Monitoring	EA	8	\$20,000	\$160,000
5	CCTV	LF	40,000	\$2.50	\$100,000
6	Gravity System Defect Analysis	EA	1	\$10,000	\$10,000
7	Smoke Testing	LS	200	\$75	\$15,000
8	Pump Station Performance & Adequacy Testing	EA	7	\$5,000	\$35,000
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$379,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.52

Upgrading the Rutherfordton WWTP from 3 MGD to 6 MGD  
Opinion of Probable Cost

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## Opinion of Probable Costs

**Project:** Upgrading the Rutherfordton WWTP from 3 MGD to 6 MGD

**WKD No:** TBD

**Pg:** 1 of 1

**Client:** Rutherfordton

**Date:** 05/04/14

ITEM	DESCRIPTION	UNIT	EST QTY	UNIT COST	TOTAL
1	3 MG @ \$5.00 / Gallon	LS	1	\$15,000,000	\$15,000,000
<b>Preliminary Total Opinion of Probable Costs</b>					<b>\$15,000,000</b>

WK Dickson's opinion of probable costs are made on the basis of WK Dickson's experience and qualifications and represent WK Dickson's best judgment as a professional generally familiar with the construction industry. Since WK Dickson has no control over the cost of labor, materials, equipment, or services furnished by others; over the contractor's methods of determining prices; or over competitive bidding or market conditions, WK Dickson cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from opinions of probable costs prepared by WK Dickson.

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Appendix 11.53

Table A.11.1 – Revenues & Expenses - All Project Stakeholders

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Appendix 11.53 - Table A.11.1 - Revenues & Expenses - All Project Stakeholders

	Cliffside	Forest City	Lake Lure	Rutherfordton	Spindale	Total	Total (Adjusted [80%])	Total - Forest City & Cliffside	Total - Forest City & Cliffside (Adjusted [80%])	Forest City & Cliffside
<b>Operating Revenues</b>										
Violation Fines	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Taps & Connections Fee	\$ -	\$ 18,625.00	\$ -	\$ 250.00	\$ 2,800.00	\$ 21,675.00	\$ 21,675.00	\$ 3,050.00	\$ 3,050.00	\$ 18,625.00
Sewer Use Fees	\$ 61,671.50	\$ 1,317,869.00	\$ -	\$ 689,021.91	\$ 922,045.00	\$ 2,990,607.41	\$ 2,990,607.41	\$ 1,611,066.91	\$ 1,611,066.91	\$ 1,379,540.50
Installment Purchase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Income	\$ -	\$ -	\$ -	\$ 454.98	\$ -	\$ 454.98	\$ 454.98	\$ 454.98	\$ 454.98	\$ -
Miscellaneous Revenue	\$ -	\$ 37,800.50	\$ -	\$ 384.48	\$ 15,590.00	\$ 53,774.98	\$ 53,774.98	\$ 15,974.48	\$ 15,974.48	\$ 37,800.50
Investment Earnings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fund Balance Appropriations	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grant Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Operating Revenue</b>	<b>\$ 61,671.50</b>	<b>\$ 1,374,294.50</b>	<b>\$ 477,050.00</b>	<b>\$ 690,111.37</b>	<b>\$ 940,435.00</b>	<b>\$ 3,066,512.37</b>	<b>\$ 3,066,512.37</b>	<b>\$ 1,630,546.37</b>	<b>\$ 1,630,546.37</b>	<b>\$ 1,435,966.00</b>
<b>Operating Expenses</b>										
Reimb General Fund Salaries	\$ -	\$ -	\$ -	\$ (16,013.66)	\$ -	\$ (16,013.66)	\$ (12,810.93)	\$ (16,013.66)	\$ (12,810.93)	\$ -
Department Supplies	\$ -	\$ -	\$ -	\$ (40,028.04)	\$ -	\$ (40,028.04)	\$ (32,022.43)	\$ (40,028.04)	\$ (32,022.43)	\$ -
Plant Chemicals	\$ -	\$ -	\$ -	\$ (39,084.84)	\$ -	\$ (39,084.84)	\$ (31,267.87)	\$ (39,084.84)	\$ (31,267.87)	\$ -
Utilities	\$ -	\$ -	\$ -	\$ (77,074.86)	\$ -	\$ (77,074.86)	\$ (61,659.89)	\$ (77,074.86)	\$ (61,659.89)	\$ -
Billing and Collection	\$ -	\$ -	\$ -	\$ (15,660.70)	\$ -	\$ (15,660.70)	\$ (12,528.56)	\$ (15,660.70)	\$ (12,528.56)	\$ -
Bad Accounts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Refunds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sludge Disposal	\$ -	\$ -	\$ -	\$ (13,669.56)	\$ -	\$ (13,669.56)	\$ (10,935.65)	\$ (13,669.56)	\$ (10,935.65)	\$ -
Testing/Monitoring	\$ -	\$ -	\$ -	\$ (41,126.82)	\$ -	\$ (41,126.82)	\$ (32,901.46)	\$ (41,126.82)	\$ (32,901.46)	\$ -
Administrative Fees	\$ -	\$ -	\$ -	\$ (121,715.64)	\$ -	\$ (121,715.64)	\$ (97,372.51)	\$ (121,715.64)	\$ (97,372.51)	\$ -
Repairs to Lines	\$ -	\$ -	\$ -	\$ (16,773.18)	\$ -	\$ (16,773.18)	\$ (13,418.54)	\$ (16,773.18)	\$ (13,418.54)	\$ -
Plant Repairs	\$ -	\$ -	\$ -	\$ (24,213.69)	\$ -	\$ (24,213.69)	\$ (19,370.95)	\$ (24,213.69)	\$ (19,370.95)	\$ -
Insurance	\$ -	\$ -	\$ -	\$ (3,500.00)	\$ -	\$ (3,500.00)	\$ (2,800.00)	\$ (3,500.00)	\$ (2,800.00)	\$ -
Miscellaneous	\$ -	\$ -	\$ -	\$ (8,343.60)	\$ -	\$ (8,343.60)	\$ (6,674.88)	\$ (8,343.60)	\$ (6,674.88)	\$ -
Capital Project Interest	\$ -	\$ -	\$ -	\$ (9,574.00)	\$ -	\$ (9,574.00)	\$ (7,659.20)	\$ (9,574.00)	\$ (7,659.20)	\$ -
Capital Project Principal	\$ -	\$ -	\$ -	\$ (48,130.00)	\$ -	\$ (48,130.00)	\$ (38,504.00)	\$ (48,130.00)	\$ (38,504.00)	\$ -
Capital Outlay	\$ -	\$ (20,000.00)	\$ -	\$ (71,523.26)	\$ -	\$ (91,523.26)	\$ (73,218.61)	\$ (71,523.26)	\$ (57,218.61)	\$ (20,000.00)
Administration	\$ (86,425.50)	\$ (610,146.50)	\$ -	\$ -	\$ (71,823.00)	\$ (768,395.00)	\$ (614,716.00)	\$ (71,823.00)	\$ (57,458.40)	\$ (696,572.00)
Sewer Department	\$ -	\$ (338,930.00)	\$ -	\$ -	\$ (382,097.00)	\$ (721,027.00)	\$ (576,821.60)	\$ (382,097.00)	\$ (305,677.60)	\$ (338,930.00)
Disposal Plant	\$ -	\$ (678,500.00)	\$ -	\$ -	\$ (234,463.00)	\$ (912,963.00)	\$ (730,370.40)	\$ (234,463.00)	\$ (187,570.40)	\$ (678,500.00)
Installment Purchase	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Intrafund Transfers	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Expenses</b>	<b>\$ (86,425.50)</b>	<b>\$ (1,647,576.50)</b>	<b>\$ (386,459.00)</b>	<b>\$ (546,431.85)</b>	<b>\$ (688,383.00)</b>	<b>\$ (2,968,816.85)</b>	<b>\$ (2,375,053.48)</b>	<b>\$ (1,234,814.85)</b>	<b>\$ (987,851.88)</b>	<b>\$ (1,734,002.00)</b>
<b>Net Operating Income</b>	<b>\$ (24,754.00)</b>	<b>\$ (273,282.00)</b>	<b>\$ 90,591.00</b>	<b>\$ 143,679.52</b>	<b>\$ 252,052.00</b>	<b>\$ 97,695.52</b>	<b>\$ 691,458.89</b>	<b>\$ 395,731.52</b>	<b>\$ 642,694.49</b>	<b>\$ (298,036.00)</b>
<b>Debt Service</b>										
Debt Service	\$ -	\$ -	\$ (69,645.00)	\$ (57,021.00)	\$ (225,457.00)	\$ (352,123.00)	\$ (352,123.00)	\$ (352,123.00)	\$ (352,123.00)	\$ -
New Potential Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total Debt Service</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ (69,645.00)</b>	<b>\$ (57,021.00)</b>	<b>\$ (225,457.00)</b>	<b>\$ (352,123.00)</b>	<b>\$ (352,123.00)</b>	<b>\$ (352,123.00)</b>	<b>\$ (352,123.00)</b>	<b>\$ -</b>
Debt Service Coverage Ratio			1.30	2.52	1.12	0.28	1.96	1.12	1.83	
Target Coverage Ratio	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
<b>Net Income</b>	<b>\$ (24,754.00)</b>	<b>\$ (273,282.00)</b>	<b>\$ 20,946.00</b>	<b>\$ 86,658.52</b>	<b>\$ 26,595.00</b>	<b>\$ (254,427.48)</b>	<b>\$ 339,335.89</b>	<b>\$ 43,608.52</b>	<b>\$ 290,571.49</b>	<b>\$ (298,036.00)</b>

Notes:

- (1)
- (2)
- (3)
- (4)

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Appendix 11.54

Table A.11.2 – Revenue Projections - Consolidation of Lake Lure, Rutherfordton & Spindale

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Appendix 11.54 - Table A.11.2 - Revenue Projections - Consolidation of Lake Lure, Rutherfordton & Spindale

	Cliffside	Forest City	Lake Lure	Rutherfordton	Spindale	Lake Lure, Rutherfordton, & Spindale	Lake Lure, Rutherfordton, & Spindale Yr 1	Lake Lure, Rutherfordton, & Spindale Yr 2
Customer Count - Inside - Commercial	13	637	126	200	233	559	559	559
Customer Count - Inside - Residential	65	2797	869	1370	1075	3314	3314	3314
Total Customers-Inside	78	3434	995	1570	1308	3873	3873	3873
Customer Count - Outside - Commercial	6	23	1	12	17	30	30	30
Customer Count - Outside - Residential		28	0	6	31	37	37	37
Total Customers-Outside	6	51	1	18	48	67	67	67
<b>Customer Usage (Gallons) - Inside</b>								
Commercial	270,000	114,913,360	3,467,500	46,502,000	67,094,000	117,063,500	117,063,500	117,063,500
Residential	2,822,000	114,215,980	23,725,000	53,916,000	53,729,000	131,370,000	131,370,000	131,370,000
Total Usage-Inside	3,092,000	229,129,340	27,192,500	100,418,000	120,823,000	248,433,500	248,433,500	248,433,500
<b>Customer Usage (Gallons) - Outside</b>								
Commercial	5,544,000	25,634,310	36,500	5,322,000	28,254,000	33,612,500	33,612,500	33,612,500
Residential		1,230,900	0	424,000	1,667,000	2,091,000	2,091,000	2,091,000
Total Usage-Outside	5,544,000	26,865,210	36,500	5,746,000	29,921,000	35,703,500	35,703,500	35,703,500
<b>Customer Renewals (Dollars)</b>								
Base Charge Revenue	\$ 32,904	\$ 632,675	\$ 255,090	\$ 231,816	\$ 214,992	\$ 759,696	\$ 835,666	\$ 919,232
Volumetric Revenue	\$ 28,730	\$ 740,028	\$ 121,876	\$ 459,885	\$ 722,660	\$ 1,740,526	\$ 1,914,578	\$ 2,106,036
Total Revenue	\$ 61,634	\$ 1,372,704	\$ 376,966	\$ 691,701	\$ 937,652	\$ 2,500,222	\$ 2,750,244	\$ 3,025,268
<b>Rate Assumptions (Residential)</b>								
Base Rate Applied (first 1,000 gallons) Inside	\$ 26.00	\$ 14.95	\$ 42.00	\$ 11.85	\$ 12.00	\$ 16.00	\$ 17.60	\$ 19.36
Volumetric Rate (per 1,000 gallons) inside	\$ 4.00	\$ 2.75	\$ 4.47	\$ 3.75	\$ 4.00	\$ 6.00	\$ 6.60	\$ 7.26
Base Rate Applied (first 1,000 gallons) outside	\$ 26.00	\$ 27.15	\$ 84.00	\$ 39.64	\$ 24.00	\$ 20.00	\$ 22.00	\$ 24.20
Volumetric Rate (per 1,000 gallons) outside	\$ 4.00	\$ 6.00	\$ 8.93	\$ 14.50	\$ 8.00	\$ 7.00	\$ 7.70	\$ 8.47
<b>Rate Assumptions (Commercial)</b>								
Base Rate Applied (first 1,000 gallons) Inside	\$ 26.00	\$ 14.95	\$ 47.00	\$ 11.85	\$ 16.00	\$ 16.00	\$ 17.60	\$ 19.36
Volumetric Rate (per 1,000 gallons) inside	\$ 3.00	\$ 2.75	\$ 4.47	\$ 3.75	\$ 4.00	\$ 6.00	\$ 6.60	\$ 7.26
Base Rate Applied (first 1,000 gallons) outside	\$ 119.00	\$ 27.15	\$ 95.00	\$ 39.64	\$ 32.00	\$ 20.00	\$ 22.00	\$ 24.20
Volumetric Rate (per 1,000 gallons) outside	\$ 3.00	\$ 4.00	\$ 8.93	\$ 14.50	\$ 8.00	\$ 7.00	\$ 7.70	\$ 8.47
	\$ 61,672	\$ 1,374,295	\$ 477,050	\$ 690,111	\$ 940,435	\$ 2,107,596		
5,000 gallons / mth user rate	\$ 46.20	\$ 22.35	\$ 39.40	\$ 30.89	\$ 34.76	\$ 40.00	\$ 44.00	\$ 48.40
Total Operating Revenue						\$ 2,500,222	\$ 2,750,244	\$ 3,025,268
Total Projected Expenses						\$ (1,339,975)	\$ (1,339,975)	\$ (1,366,774)
Net Income						\$ 1,160,247	\$ 1,410,269	\$ 1,658,494

Notes:

1. Cliffside has a declining rate block structure
2. Forest City has a declining rate block structure
3. Forest City's base rate is for the 1st 3,000 gallons
4. Lake Lure has an inclining rate block structure
5. Rutherfordton has a declining rate block structure

Lake Lure, Rutherfordton, & Spindale Yr 3	Lake Lure, Rutherfordton, & Spindale Yr 4	Lake Lure, Rutherfordton, & Spindale Yr 5	Lake Lure, Rutherfordton, & Spindale Yr 6	Lake Lure, Rutherfordton, & Spindale Yr 7	Lake Lure, Rutherfordton, & Spindale Yr 8	Lake Lure, Rutherfordton, & Spindale Yr 9	Lake Lure, Rutherfordton, & Spindale Yr 10	Lake Lure, Rutherfordton, & Spindale Yr 11	Lake Lure, Rutherfordton, & Spindale Yr 12
559	559	559	559	559	559	559	559	559	559
3314	3314	3314	3314	3314	3314	3314	3314	3314	3314
3873	3873	3873	3873	3873	3873	3873	3873	3873	3873
30	30	30	30	30	30	30	30	30	30
37	37	37	37	37	37	37	37	37	37
67	67	67	67	67	67	67	67	67	67
117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500
131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000
248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500
33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500
2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000
35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500
\$ 1,011,155	\$ 1,112,271	\$ 1,223,498	\$ 1,284,673	\$ 1,348,907	\$ 1,416,352	\$ 1,487,169	\$ 1,561,528	\$ 1,639,604	\$ 1,721,585
\$ 2,316,639	\$ 2,548,303	\$ 2,803,134	\$ 2,943,290	\$ 3,090,455	\$ 3,244,978	\$ 3,407,227	\$ 3,577,588	\$ 3,756,467	\$ 3,944,291
\$ 3,327,795	\$ 3,660,574	\$ 4,026,632	\$ 4,227,963	\$ 4,439,361	\$ 4,661,330	\$ 4,894,396	\$ 5,139,116	\$ 5,396,072	\$ 5,665,875
1.1	1.1	1.1	1.05	1.05	1.05	1.05	1.05	1.05	1.05
\$ 21.30	\$ 23.43	\$ 25.77	\$ 27.06	\$ 28.41	\$ 29.83	\$ 31.32	\$ 32.89	\$ 34.53	\$ 36.26
\$ 7.99	\$ 8.78	\$ 9.66	\$ 10.15	\$ 10.65	\$ 11.19	\$ 11.75	\$ 12.33	\$ 12.95	\$ 13.60
\$ 26.62	\$ 29.28	\$ 32.21	\$ 33.82	\$ 35.51	\$ 37.29	\$ 39.15	\$ 41.11	\$ 43.16	\$ 45.32
\$ 9.32	\$ 10.25	\$ 11.27	\$ 11.84	\$ 12.43	\$ 13.05	\$ 13.70	\$ 14.39	\$ 15.11	\$ 15.86
\$ 21.30	\$ 23.43	\$ 25.77	\$ 27.06	\$ 28.41	\$ 29.83	\$ 31.32	\$ 32.89	\$ 34.53	\$ 36.26
\$ 7.99	\$ 8.78	\$ 9.66	\$ 10.15	\$ 10.65	\$ 11.19	\$ 11.75	\$ 12.33	\$ 12.95	\$ 13.60
\$ 26.62	\$ 29.28	\$ 32.21	\$ 33.82	\$ 35.51	\$ 37.29	\$ 39.15	\$ 41.11	\$ 43.16	\$ 45.32
\$ 9.32	\$ 10.25	\$ 11.27	\$ 11.84	\$ 12.43	\$ 13.05	\$ 13.70	\$ 14.39	\$ 15.11	\$ 15.86
\$ 53.24	\$ 58.56	\$ 64.42	\$ 67.64	\$ 71.02	\$ 74.57	\$ 78.30	\$ 82.22	\$ 86.33	\$ 90.65
\$ 3,327,795	\$ 3,660,574	\$ 4,026,632	\$ 4,227,963	\$ 4,439,361	\$ 4,661,330	\$ 4,894,396	\$ 5,139,116	\$ 5,396,072	\$ 5,665,875
\$ (1,394,110)	\$ (1,421,992)	\$ (1,450,432)	\$ (1,479,441)	\$ (1,509,029)	\$ (1,539,210)	\$ (1,569,994)	\$ (1,601,394)	\$ (1,633,422)	\$ (1,666,090)
\$ 1,933,685	\$ 2,238,582	\$ 2,576,200	\$ 2,748,523	\$ 2,930,332	\$ 3,122,120	\$ 3,324,402	\$ 3,537,722	\$ 3,762,650	\$ 3,999,785

Lake Lure, Rutherfordton, & Spindale Yr 13	Lake Lure, Rutherfordton, & Spindale Yr 14	Lake Lure, Rutherfordton, & Spindale Yr 15	Lake Lure, Rutherfordton, & Spindale Yr 16	Lake Lure, Rutherfordton, & Spindale Yr 17	Lake Lure, Rutherfordton, & Spindale Yr 18	Lake Lure, Rutherfordton, & Spindale Yr 19	Lake Lure, Rutherfordton, & Spindale Yr 20
559	559	559	559	559	559	559	559
3314	3314	3314	3314	3314	3314	3314	3314
3873	3873	3873	3873	3873	3873	3873	3873
30	30	30	30	30	30	30	30
37	37	37	37	37	37	37	37
67	67	67	67	67	67	67	67
117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500	117,063,500
131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000	131,370,000
248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500	248,433,500
33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500	33,612,500
2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000	2,091,000
35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500	35,703,500
\$ 1,807,664	\$ 1,898,047	\$ 1,992,949	\$ 2,032,808	\$ 2,073,464	\$ 2,114,934	\$ 2,157,232	\$ 2,200,377
\$ 4,141,505	\$ 4,348,580	\$ 4,566,009	\$ 4,657,330	\$ 4,750,476	\$ 4,845,486	\$ 4,942,395	\$ 5,041,243
\$ 5,949,169	\$ 6,246,627	\$ 6,558,959	\$ 6,690,138	\$ 6,823,941	\$ 6,960,420	\$ 7,099,628	\$ 7,241,620
1.05	1.05	1.05	1.02	1.02	1.02	1.02	1.02
\$ 38.07	\$ 39.97	\$ 41.97	\$ 42.81	\$ 43.67	\$ 44.54	\$ 45.43	\$ 46.34
\$ 14.28	\$ 14.99	\$ 15.74	\$ 16.05	\$ 16.38	\$ 16.70	\$ 17.04	\$ 17.38
\$ 47.59	\$ 49.97	\$ 52.47	\$ 53.52	\$ 54.59	\$ 55.68	\$ 56.79	\$ 57.93
\$ 16.66	\$ 17.49	\$ 18.36	\$ 18.73	\$ 19.11	\$ 19.49	\$ 19.88	\$ 20.27
\$ 38.07	\$ 39.97	\$ 41.97	\$ 42.81	\$ 43.67	\$ 44.54	\$ 45.43	\$ 46.34
\$ 14.28	\$ 14.99	\$ 15.74	\$ 16.05	\$ 16.38	\$ 16.70	\$ 17.04	\$ 17.38
\$ 47.59	\$ 49.97	\$ 52.47	\$ 53.52	\$ 54.59	\$ 55.68	\$ 56.79	\$ 57.93
\$ 16.66	\$ 17.49	\$ 18.36	\$ 18.73	\$ 19.11	\$ 19.49	\$ 19.88	\$ 20.27
\$ 95.18	\$ 99.94	\$ 104.93	\$ 107.03	\$ 109.17	\$ 111.36	\$ 113.58	\$ 115.86
\$ 5,949,169	\$ 6,246,627	\$ 6,558,959	\$ 6,690,138	\$ 6,823,941	\$ 6,960,420	\$ 7,099,628	\$ 7,241,620
\$ (1,699,412)	\$ (1,733,400)	\$ (1,768,068)	\$ (1,803,430)	\$ (1,839,498)	\$ (1,876,288)	\$ (1,913,814)	\$ (1,952,090)
\$ 4,249,757	\$ 4,513,227	\$ 4,790,890	\$ 4,886,708	\$ 4,984,442	\$ 5,084,131	\$ 5,185,814	\$ 5,289,530

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Appendix 11.55

Table A.11.3 – Capital Improvements & Net Income - Consolidation of  
Lake Lure, Rutherfordton & Spindale

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Appendix 11.55 - Table A.11.3 - Capital Improvements & Net Income - Consolidation of Lake Lure, Rutherfordton & Spindale

			FY 2015 / 2016	FY 2016 / 2017	FY 2017 / 2018
	<b>Total Revenue</b>		\$ 2,750,244	\$ 3,025,268	\$ 3,327,795
	<b>Total Expenses</b>		\$ (1,339,975)	\$ (1,366,774)	\$ (1,394,110)
A.	Lake Lure to Rutherfordton WWTP	\$ 9,901,000	\$ (665,503)		
B.	Cost to Upgrade Lake Lure WWTP	\$ 7,014,000	\$ (471,451)		
	Rutherfordton WWTP Upgrades to Handle Lake Lure & Equestrian Center	\$ 304,000	\$ (20,434)		
D.	Rutherfordton to Spindale WWTP	\$ 5,171,000	\$ (347,572)		
E.	Upgrades to Spindale WWTP to Handle Rutherfordton & Lake Lure	\$ 11,205,000	\$ (753,152)		
F.	Spindale to Rutherfordton WWTP	\$ 8,292,000	\$ (557,353)		
G.	Spindale to Forest City Second Broad River WWTP	\$ 5,628,000	\$ (378,290)		
H.	Spindale and Rutherfordton to Forest City WWTP	\$ 8,294,000	\$ (557,487)		
I.	Cliffside to Forest City Second Broad River WWTP	\$ 5,423,000	\$ (364,511)		
J.	Cliffside to Riverstone WWTP	\$ 4,799,000	\$ (322,568)		
J.	Cliffside to Forest City DRG WWTP w/o Riverstone WWTP	\$ 6,226,000	\$ (418,485)		
L.	Cliffside to Forest City DRG WWTP with Riverstone WWTP	\$ 6,509,000	\$ (437,507)		
M.	Forest City Second Broad River WWTP Upgrades to Handle Cliffside, Rutherfordton, and Spindale WWTP	\$ 13,960,000	\$ (938,331)		
N.	Upgrades to Forest City Riverstone WWTP to Handle Cliffside	\$ 889,000	\$ (59,755)		
O.	Upgrades to Forest City DRG WWTP to Handle Cliffside and Riverstone	\$ 1,348,000	\$ (90,607)		
P.	Rutherford County Airport to Spindale	\$ 1,551,000	\$ (104,252)		
Q.	Area North of Rutherfordton / Hwy 221 to Rutherfordton	\$ 1,551,000	\$ (104,252)		
R.	Sewer Service to Ellenboro Henrietta Rd Interchange at Hwy 74 via FM to Ellenboro	\$ 2,231,000	\$ (149,958)		
S.	Sewer Service to Ellenboro Henrietta Rd Interchange at Hwy 74 via FM to Henrietta	\$ 1,979,000	\$ (133,020)		
T.	Service to Industrial Area on HWY 221 near Harris Elementary via PS & FM to Spindale Torrington PS on Hwy 221	\$ 1,914,000	\$ (128,651)		
U.	Service to Industrial Area on Hwy 221 near Harris Elementary via PS & FM to Riverstone Blvd Gravity Sewer to Riverstone WWTP	\$ 2,145,000	\$ (144,178)		
V.	Hwy. 221 / US 74 Interchange PS Upgrade - Spindale	\$ 150,000	\$ (10,082)		
	<b>Total Sewer Fund CIP</b>	<b>\$ 106,484,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
	<b>Net Income</b>		<b>\$ 1,410,268.77</b>	<b>\$ 1,658,493.64</b>	<b>\$ 1,933,684.95</b>
	Existing Debt Service	\$ (352,123.00)	\$ (352,123.00)	\$ (352,123.00)	\$ (352,123.00)
	Existing & Proposed Debt Service		\$ (352,123.00)	\$ (352,123.00)	\$ (352,123.00)
	Debt Service Target Ratio		1.1	1.1	1.1
	Debt Service Ratio		4.01	4.71	5.49

Notes:

1. Existing debt service payments based on FY 2012/20313 and reduction in years 6, 11, 15 are estimated.

FY 2018 / 2019	FY 2019 / 2020	FY 2020 / 2021	FY 2021 / 2022	FY 2022 / 2023	FY 2023 / 2024	FY 2024 / 2025	FY 2025 / 2026	FY 2026 / 2027
\$ 3,660,574	\$ 4,026,632	\$ 4,227,963	\$ 4,439,361	\$ 4,661,330	\$ 4,894,396	\$ 5,139,116	\$ 5,396,072	\$ 5,665,875
\$ (1,421,992)	\$ (1,450,432)	\$ (1,479,441)	\$ (1,509,029)	\$ (1,539,210)	\$ (1,569,994)	\$ (1,601,394)	\$ (1,633,422)	\$ (1,666,090)
\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)
			\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)
								\$ (753,152)

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\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (1,013,075)	\$ (1,013,075)	\$ (1,013,075)	\$ (1,013,075)	\$ (1,013,075)	\$ (1,013,075)	\$ (1,766,227)
\$ 1,573,079.51	\$ 1,910,697.10	\$ 2,083,020.05	\$ 1,917,256.98	\$ 2,109,044.47	\$ 2,311,326.75	\$ 2,524,646.67	\$ 2,749,574.58	\$ 2,233,557.72	
\$ (352,123.00)	\$ (352,123.00)	\$ (264,092.25)	\$ (264,092.25)	\$ (264,092.25)	\$ (264,092.25)	\$ (264,092.25)	\$ (264,092.25)	\$ (176,061.50)	\$ (176,061.50)
\$ (1,017,625.72)	\$ (1,017,625.72)	\$ (929,594.97)	\$ (1,277,167.39)	\$ (1,277,167.39)	\$ (1,277,167.39)	\$ (1,277,167.39)	\$ (1,277,167.39)	\$ (1,189,136.64)	\$ (1,942,288.65)
1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1.55	1.88	2.24	1.50	1.65	1.81	1.98	2.31		1.15

FY 2027 / 2028	FY 2028 / 2029	FY 2029 / 2030	FY 2030 / 2031	FY 2031 / 2032	FY 2032 / 2033	FY 2033 / 2034	FY 2034 / 2035
\$ 5,949,169	\$ 6,246,627	\$ 6,558,959	\$ 6,690,138	\$ 6,823,941	\$ 6,960,420	\$ 7,099,628	\$ 7,241,620
\$ (1,699,412)	\$ (1,733,400)	\$ (1,768,068)	\$ (1,803,430)	\$ (1,839,498)	\$ (1,876,288)	\$ (1,913,814)	\$ (1,952,090)
\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)

\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)	\$ (347,572)
\$ (753,152)	\$ (753,152)	\$ (753,152)	\$ (753,152)	\$ (753,152)	\$ (753,152)	\$ (753,152)	\$ (753,152)

\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)
	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)

\$ (128,651) \$ (128,651) \$ (128,651) \$ (128,651) \$ (128,651) \$ (128,651)

\$ (1,870,479)	\$ (1,974,730)	\$ (2,103,381)	\$ (2,103,381)	\$ (2,103,381)	\$ (2,103,381)	\$ (2,103,381)	\$ (2,103,381)
\$ 2,379,278.11	\$ 2,538,496.75	\$ 2,687,509.25	\$ 2,783,327.06	\$ 2,881,061.22	\$ 2,980,750.07	\$ 3,082,432.69	\$ 3,186,148.97
\$ (176,061.50)	\$ (176,061.50)	\$ (176,061.50)	\$ (88,030.75)	\$ (88,030.75)	\$ (88,030.75)	\$ (88,030.75)	\$ (88,030.75)
\$ (2,046,540.21)	\$ (2,150,791.77)	\$ (2,279,442.64)	\$ (2,191,411.89)	\$ (2,191,411.89)	\$ (2,191,411.89)	\$ (2,191,411.89)	\$ (2,191,411.89)
1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1.16	1.18	1.18	1.27	1.31	1.36	1.41	1.45

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Appendix 11.56

Table A.11.4 – Revenue Projections - Consolidation of Cliffside Sanitary District,  
Lake Lure, Rutherfordton, and Spindale with Forest City

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Appendix 11.56 - Table A.11.4 - Rutherford County Projections - Consolidation of Cliffside, Lake Lure, Rutherfordton & Spindale with Forest City

	Cliffside	Forest City	Lake Lure	Rutherfordton	Spindale	All	All - New Rate	Yr 1
Customer Count - Inside - Commercial	13	637	126	200	233	1209	1209	1209
Customer Count - Inside - Residential	65	2797	869	1370	1075	6176	6176	6176
<b>Total Customers-Inside</b>	<b>78</b>	<b>3434</b>	<b>995</b>	<b>1570</b>	<b>1308</b>	<b>7385</b>	<b>7385</b>	<b>7385</b>
Customer Count - Outside - Commercial	6	23	1	12	17	59	59	59
Customer Count - Outside - Residential		28	0	6	31	65	65	65
<b>Total Customers-Outside</b>	<b>6</b>	<b>51</b>	<b>1</b>	<b>18</b>	<b>48</b>	<b>124</b>	<b>124</b>	<b>124</b>
<b>Customer Usage (Gallons) - Inside</b>								
Commercial	270,000	114,913,360	3,467,500	46,502,000	67,094,000	232,246,860	232,246,860	232,246,860
Residential	2,822,000	114,215,980	23,725,000	53,916,000	53,729,000	248,407,980	248,407,980	248,407,980
<b>Total Usage-Inside</b>	<b>3,092,000</b>	<b>229,129,340</b>	<b>27,192,500</b>	<b>100,418,000</b>	<b>120,823,000</b>	<b>480,654,840</b>	<b>480,654,840</b>	<b>480,654,840</b>
<b>Customer Usage (Gallons) - Outside</b>								
Commercial	5,544,000	25,634,310	36,500	5,322,000	28,254,000	64,790,810	64,790,810	64,790,810
Residential		1,230,900	0	424,000	1,667,000	3,321,900	3,321,900	3,321,900
<b>Total Usage-Outside</b>	<b>5,544,000</b>	<b>26,865,210</b>	<b>36,500</b>	<b>5,746,000</b>	<b>29,921,000</b>	<b>68,112,710</b>	<b>68,112,710</b>	<b>68,112,710</b>
<b>Customer Renewals (Dollars)</b>								
Base Charge Revenue	\$ 32,904	\$ 632,675	\$ 255,090	\$ 231,816	\$ 214,992	\$ 1,367,478	\$ 1,447,680	\$ 1,592,448
Volumetric Revenue	\$ 28,730	\$ 740,028	\$ 121,876	\$ 459,885	\$ 722,660	\$ 2,073,179	\$ 3,360,718	\$ 3,696,790
<b>Total Revenue</b>	<b>\$ 61,634</b>	<b>\$ 1,372,704</b>	<b>\$ 376,966</b>	<b>\$ 691,701</b>	<b>\$ 937,652</b>	<b>\$ 3,440,657</b>	<b>\$ 4,808,398</b>	<b>\$ 5,289,238</b>
<b>Rate Assumptions (Residential)</b>								
Base Rate Applied (first 1,000 gallons) Inside	\$ 26.00	\$ 14.95	\$ 42.00	\$ 11.85	\$ 12.00	\$ 16.00	\$ 16.00	\$ 17.60
Volumetric Rate (per 1,000 gallons) inside	\$ 4.00	\$ 2.75	\$ 4.47	\$ 3.75	\$ 4.00	\$ 6.00	\$ 6.00	\$ 6.60
Base Rate Applied (first 1,000 gallons) outside	\$ 26.00	\$ 27.15	\$ 84.00	\$ 39.64	\$ 24.00	\$ 20.00	\$ 20.00	\$ 22.00
Volumetric Rate (per 1,000 gallons) outside	\$ 4.00	\$ 6.00	\$ 8.93	\$ 14.50	\$ 8.00	\$ 7.00	\$ 7.00	\$ 7.70
<b>Rate Assumptions (Commercial)</b>								
Base Rate Applied (first 1,000 gallons) Inside	\$ 26.00	\$ 14.95	\$ 47.00	\$ 11.85	\$ 16.00	\$ 16.00	\$ 16.00	\$ 17.60
Volumetric Rate (per 1,000 gallons) inside	\$ 3.00	\$ 2.75	\$ 4.47	\$ 3.75	\$ 4.00	\$ 6.00	\$ 6.00	\$ 6.60
Base Rate Applied (first 1,000 gallons) outside	\$ 119.00	\$ 27.15	\$ 95.00	\$ 39.64	\$ 32.00	\$ 20.00	\$ 20.00	\$ 22.00
Volumetric Rate (per 1,000 gallons) outside	\$ 3.00	\$ 4.00	\$ 8.93	\$ 14.50	\$ 8.00	\$ 7.00	\$ 7.00	\$ 7.70
	\$ 61,671.50	\$ 1,374,294.50	\$ 477,050.00	\$ 690,111.37	\$ 940,435.00	\$ 3,543,562.37		
5,000 gallons / mth user rate	\$ 46.20	\$ 22.35	\$ 39.40	\$ 30.89	\$ 34.76	\$ 40.00	\$ 40.00	\$ 44.00
Total Operating Revenue						\$ 3,066,512	\$ 3,066,512	\$ 5,289,238
Total Projected Expenses						\$ (2,727,176)	\$ (2,727,176)	\$ (2,727,176)
Net Income						\$ 339,336	\$ 339,336	\$ 2,562,061

Notes:

1. Cliffside has a declining rate block structure
2. Forest City has a declining rate block structure
3. Forest City's base rate is for the 1st 3,000 gallons
4. Lake Lure has an inclining rate block structure
5. Rutherfordton has a declining rate block structure

Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7	Yr 8	Yr 9	Yr 10	Yr 11
1209	1209	1209	1209	1209	1209	1209	1209	1209	1209
6176	6176	6176	6176	6176	6176	6176	6176	6176	6176
7385	7385	7385	7385	7385	7385	7385	7385	7385	7385
59	59	59	59	59	59	59	59	59	59
65	65	65	65	65	65	65	65	65	65
124	124	124	124	124	124	124	124	124	124
232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860
248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980
480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840
64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810
3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900
68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710
\$ 1,751,693	\$ 1,926,862	\$ 2,119,548	\$ 2,331,503	\$ 2,448,078	\$ 2,570,482	\$ 2,699,006	\$ 2,833,957	\$ 2,975,654	\$ 3,124,437
\$ 4,066,469	\$ 4,473,116	\$ 4,920,427	\$ 5,412,470	\$ 5,683,093	\$ 5,967,248	\$ 6,265,611	\$ 6,578,891	\$ 6,907,836	\$ 7,253,227
\$ 5,818,162	\$ 6,399,978	\$ 7,039,976	\$ 7,743,973	\$ 8,131,172	\$ 8,537,730	\$ 8,964,617	\$ 9,412,848	\$ 9,883,490	\$ 10,377,665
1.1	1.1	1.1	1.1	1.05	1.05	1.05	1.05	1.05	1.05
\$ 19.36	\$ 21.30	\$ 23.43	\$ 25.77	\$ 27.06	\$ 28.41	\$ 29.83	\$ 31.32	\$ 32.89	\$ 34.53
\$ 7.26	\$ 7.99	\$ 8.78	\$ 9.66	\$ 10.15	\$ 10.65	\$ 11.19	\$ 11.75	\$ 12.33	\$ 12.95
\$ 24.20	\$ 26.62	\$ 29.28	\$ 32.21	\$ 33.82	\$ 35.51	\$ 37.29	\$ 39.15	\$ 41.11	\$ 43.16
\$ 8.47	\$ 9.32	\$ 10.25	\$ 11.27	\$ 11.84	\$ 12.43	\$ 13.05	\$ 13.70	\$ 14.39	\$ 15.11
\$ 19.36	\$ 21.30	\$ 23.43	\$ 25.77	\$ 27.06	\$ 28.41	\$ 29.83	\$ 31.32	\$ 32.89	\$ 34.53
\$ 7.26	\$ 7.99	\$ 8.78	\$ 9.66	\$ 10.15	\$ 10.65	\$ 11.19	\$ 11.75	\$ 12.33	\$ 12.95
\$ 24.20	\$ 26.62	\$ 29.28	\$ 32.21	\$ 33.82	\$ 35.51	\$ 37.29	\$ 39.15	\$ 41.11	\$ 43.16
\$ 8.47	\$ 9.32	\$ 10.25	\$ 11.27	\$ 11.84	\$ 12.43	\$ 13.05	\$ 13.70	\$ 14.39	\$ 15.11
\$ 48.40	\$ 53.24	\$ 58.56	\$ 64.42	\$ 67.64	\$ 71.02	\$ 74.57	\$ 78.30	\$ 82.22	\$ 86.33
\$ 5,818,162	\$ 6,399,978	\$ 7,039,976	\$ 7,743,973	\$ 8,131,172	\$ 8,537,730	\$ 8,964,617	\$ 9,412,848	\$ 9,883,490	\$ 10,377,665
\$ (2,781,720)	\$ (2,837,354)	\$ (2,894,101)	\$ (2,951,984)	\$ (3,011,023)	\$ (3,071,244)	\$ (3,132,669)	\$ (3,195,322)	\$ (3,259,228)	\$ (3,324,413)
\$ 3,036,442	\$ 3,562,623	\$ 4,145,874	\$ 4,791,990	\$ 5,120,149	\$ 5,466,487	\$ 5,831,948	\$ 6,217,526	\$ 6,624,262	\$ 7,053,252

Yr 12	Yr 13	Yr 14	Yr 15	Yr 16	Yr 17	Yr 18	Yr 19	Yr 20
1209	1209	1209	1209	1209	1209	1209	1209	1209
6176	6176	6176	6176	6176	6176	6176	6176	6176
7385	7385	7385	7385	7385	7385	7385	7385	7385
59	59	59	59	59	59	59	59	59
65	65	65	65	65	65	65	65	65
124	124	124	124	124	124	124	124	124
232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860	232,246,860
248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980	248,407,980
480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840	480,654,840
64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810	64,790,810
3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900	3,321,900
68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710	68,112,710
\$ 3,280,659	\$ 3,444,692	\$ 3,616,927	\$ 3,797,773	\$ 3,873,728	\$ 3,951,203	\$ 4,030,227	\$ 4,110,832	\$ 4,193,048
\$ 7,615,889	\$ 7,996,683	\$ 8,396,517	\$ 8,816,343	\$ 8,992,670	\$ 9,172,524	\$ 9,355,974	\$ 9,543,093	\$ 9,733,955
\$ 10,896,548	\$ 11,441,375	\$ 12,013,444	\$ 12,614,116	\$ 12,866,398	\$ 13,123,726	\$ 13,386,201	\$ 13,653,925	\$ 13,927,003
1.05	1.05	1.05	1.05	1.02	1.02	1.02	1.02	1.02
\$ 36.26	\$ 38.07	\$ 39.97	\$ 41.97	\$ 42.81	\$ 43.67	\$ 44.54	\$ 45.43	\$ 46.34
\$ 13.60	\$ 14.28	\$ 14.99	\$ 15.74	\$ 16.05	\$ 16.38	\$ 16.70	\$ 17.04	\$ 17.38
\$ 45.32	\$ 47.59	\$ 49.97	\$ 52.47	\$ 53.52	\$ 54.59	\$ 55.68	\$ 56.79	\$ 57.93
\$ 15.86	\$ 16.66	\$ 17.49	\$ 18.36	\$ 18.73	\$ 19.11	\$ 19.49	\$ 19.88	\$ 20.27
\$ 36.26	\$ 38.07	\$ 39.97	\$ 41.97	\$ 42.81	\$ 43.67	\$ 44.54	\$ 45.43	\$ 46.34
\$ 13.60	\$ 14.28	\$ 14.99	\$ 15.74	\$ 16.05	\$ 16.38	\$ 16.70	\$ 17.04	\$ 17.38
\$ 45.32	\$ 47.59	\$ 49.97	\$ 52.47	\$ 53.52	\$ 54.59	\$ 55.68	\$ 56.79	\$ 57.93
\$ 15.86	\$ 16.66	\$ 17.49	\$ 18.36	\$ 18.73	\$ 19.11	\$ 19.49	\$ 19.88	\$ 20.27
\$ 90.65	\$ 95.18	\$ 99.94	\$ 104.93	\$ 107.03	\$ 109.17	\$ 111.36	\$ 113.58	\$ 115.86
\$ 10,896,548	\$ 11,441,375	\$ 12,013,444	\$ 12,614,116	\$ 12,866,398	\$ 13,123,726	\$ 13,386,201	\$ 13,653,925	\$ 13,927,003
\$ (3,390,901)	\$ (3,458,719)	\$ (3,527,894)	\$ (3,598,451)	\$ (3,670,420)	\$ (3,743,829)	\$ (3,818,705)	\$ (3,895,080)	\$ (3,972,981)
\$ 7,505,647	\$ 7,982,656	\$ 8,485,550	\$ 9,015,665	\$ 9,195,978	\$ 9,379,898	\$ 9,567,495	\$ 9,758,845	\$ 9,954,022

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Appendix 11.57

Table A.11.5 – Capital Improvements & Net Income - Consolidation of Cliffside  
Sanitary District, Lake Lure, Rutherfordton, and Spindale with Forest City

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Appendix 11.57 - Table A.11.5 - Capital Improvements & Net Income - Consolidation of Cliffside, Lake Lure, Rutherfordton & Spindale with Forest City

		Total Cost		FY	FY	FY	FY
				2015 / 2016	2016 / 2017	2017 / 2018	2018 / 2019
Total Revenue				\$ 5,289,238	\$ 5,818,162	\$ 6,399,978	\$ 7,039,976
Total Expenses				\$ (2,727,176)	\$ (2,781,720)	\$ (2,837,354)	\$ (2,894,101)
A.	Lake Lure to Rutherfordton WWTP	\$ 9,901,000	\$ (665,503)		\$ (665,503)	\$ (665,503)	\$ (665,503)
B.	Cost to Upgrade Lake Lure WWTP	\$ 7,014,000	\$ (471,451)				
	Rutherfordton WWTP Upgrades to Handle Lake Lure & Equestrian Center	\$ 304,000	\$ (20,434)				
D.	Rutherfordton to Spindale WWTP	\$ 5,171,000	\$ (347,572)				
E.	Upgrades to Spindale WWTP to Handle Rutherfordton & Lake Lure	\$ 11,205,000	\$ (753,152)				
F.	Spindale to Rutherfordton WWTP	\$ 8,292,000	\$ (557,353)				
G.	Spindale to Forest City Second Broad River WWTP	\$ 5,628,000	\$ (378,290)				
H.	Spindale and Rutherfordton to Forest City WWTP	\$ 8,294,000	\$ (557,487)			\$ (557,487)	\$ (557,487)
I.	Cliffside to Forest City Second Broad River WWTP	\$ 5,423,000	\$ (364,511)				\$ (364,511)
J.	Cliffside to Riverstone WWTP	\$ 4,799,000	\$ (322,568)				
J.	Cliffside to Forest City DRG WWTP w/o Riverstone WWTP	\$ 6,226,000	\$ (418,485)				
L.	Cliffside to Forest City DRG WWTP with Riverstone WWTP	\$ 6,509,000	\$ (437,507)				
M.	Forest City Second Broad River WWTP Upgrades to Handle Cliffside, Rutherfordton, and Spindale WWTP	\$ 13,960,000	\$ (938,331)				
N.	Upgrades to Forest City Riverstone WWTP to Handle Cliffside	\$ 889,000	\$ (59,755)				
O.	Upgrades to Forest City DRG WWTP to Handle Cliffside and Riverstone	\$ 1,348,000	\$ (90,607)				
P.	Rutherford County Airport to Spindale	\$ 1,551,000	\$ (104,252)				
Q.	Area North of Rutherfordton / Hwy 221 to Rutherfordton	\$ 1,551,000	\$ (104,252)				
R.	Sewer Service to Ellenboro Henrietta Rd Interchange at Hwy 74 via FM to Ellenboro	\$ 2,231,000	\$ (149,958)				
S.	Sewer Service to Ellenboro Henrietta Rd Interchange at Hwy 74 via FM to Henrietta	\$ 1,979,000	\$ (133,020)				
T.	Service to Industrial Area on HWY 221 near Harris Elementary via PS & FM to Spindale Torrington PS on Hwy 221	\$ 1,914,000	\$ (128,651)				
U.	Service to Industrial Area on Hwy 221 near Harris Elementary via PS & FM to Riverstone Blvd Gravity Sewer to Riverstone WWTP	\$ 2,145,000	\$ (144,178)				
V.	Hwy. 221 / US 74 Interchange PS Upgrade - Spindale	\$ 150,000	\$ (10,082)				
<b>Total Sewer Fund CIP</b>		<b>\$ 106,484,000</b>		<b>\$ -</b>	<b>\$ (665,503)</b>	<b>\$ (1,222,990)</b>	<b>\$ (1,587,501)</b>
<b>Net Income</b>				<b>\$ 2,562,061.33</b>	<b>\$ 2,370,938.86</b>	<b>\$ 2,339,633.54</b>	<b>\$ 2,558,373.45</b>
	Existing Debt Service	\$ (352,123.00)		\$ (352,123.00)	\$ (352,123.00)	\$ (352,123.00)	\$ (352,123.00)
	Existing & Proposed Debt Service			\$ (352,123.00)	\$ (1,017,625.72)	\$ (1,575,112.80)	\$ (1,939,623.58)
	Debt Service Target Ratio			1.1	1.1	1.1	1.1
	Debt Service Ratio			7.28	2.33	1.49	1.32

Notes:

1. Existing debt service payments based on FY 2012/2013 and reduction in years 6, 11, 15 are estimated.

FY 2019 / 2020	FY 2020 / 2021	FY 2021 / 2022	FY 2022 / 2023	FY 2023 / 2024	FY 2024 / 2025	FY 2025 / 2026	FY 2026 / 2027	FY 2027 / 2028	FY 2028 / 2029
\$ 7,743,973	\$ 8,131,172	\$ 8,537,730	\$ 8,964,617	\$ 9,412,848	\$ 9,883,490	\$ 10,377,665	\$ 10,896,548	\$ 11,441,375	\$ 12,013,444
\$ (2,951,984)	\$ (3,011,023)	\$ (3,071,244)	\$ (3,132,669)	\$ (3,195,322)	\$ (3,259,228)	\$ (3,324,413)	\$ (3,390,901)	\$ (3,458,719)	\$ (3,527,894)
\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)

\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)
\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)

\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)
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\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)
\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)

\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)
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\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)
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\$ (1,587,501)	\$ (1,587,501)	\$ (2,525,832)	\$ (2,525,832)	\$ (2,734,335)	\$ (2,867,355)	\$ (2,996,006)	\$ (2,996,006)	\$ (2,996,006)	\$ (2,996,006)
\$ 3,204,488.97	\$ 3,532,647.95	\$ 2,940,654.80	\$ 3,306,116.44	\$ 3,483,190.79	\$ 3,756,906.84	\$ 4,057,245.91	\$ 4,509,640.88	\$ 4,986,650.24	\$ 5,489,544.62
\$ (352,123.00)	\$ (264,092.25)	\$ (264,092.25)	\$ (264,092.25)	\$ (264,092.25)	\$ (264,092.25)	\$ (176,061.50)	\$ (176,061.50)	\$ (176,061.50)	\$ (176,061.50)
\$ (1,939,623.58)	\$ (1,851,592.83)	\$ (2,789,924.11)	\$ (2,789,924.11)	\$ (2,998,427.24)	\$ (3,131,447.13)	\$ (3,172,067.24)	\$ (3,172,067.24)	\$ (3,172,067.24)	\$ (3,172,067.24)
1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1.65	1.91	1.05	1.19	1.16	1.20	1.28	1.42	1.57	1.73

FY	FY	FY	FY	FY	FY
209 / 2030	2030 / 2031	2031 / 2032	2032 / 2033	2033 / 2034	2034 / 2035
\$ 12,614,116	\$ 12,866,398	\$ 13,123,726	\$ 13,386,201	\$ 13,653,925	\$ 13,927,003
\$ (3,598,451)	\$ (3,670,420)	\$ (3,743,829)	\$ (3,818,705)	\$ (3,895,080)	\$ (3,972,981)
\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)	\$ (665,503)

\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)	\$ (557,487)
\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)

\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)	\$ (938,331)
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\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)
\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)	\$ (104,252)

\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)	\$ (133,020)
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\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)	\$ (128,651)
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\$ (2,996,006)	\$ (2,996,006)	\$ (2,996,006)	\$ (2,996,006)	\$ (2,996,006)	\$ (2,996,006)
\$ 6,019,658.95	\$ 6,199,972.24	\$ 6,383,891.80	\$ 6,571,489.75	\$ 6,762,839.66	\$ 6,958,016.57
\$ (176,061.50)	\$ (88,030.75)	\$ (88,030.75)	\$ (88,030.75)	\$ (88,030.75)	\$ (88,030.75)
\$ (3,172,067.24)	\$ (3,084,036.49)	\$ (3,084,036.49)	\$ (3,084,036.49)	\$ (3,084,036.49)	\$ (3,084,036.49)
1.1	1.1	1.1	1.1	1.1	1.1
1.90	2.01	2.07	2.13	2.19	2.26

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Appendix 11.58

Table A.11.6 – Revenue Projections - Consolidation of Cliffside Sanitary District with Forest City

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Appendix 11.58 - Table A.11.6 - Rutherford County Projections - Consolidation of Cliffside with Forest City

	Cliffside	Forest City	Lake Lure	Rutherfordton	Spindale	Forest City and Cliffside	All - New Rate Minus Forest City and Cliffside Yr 1	All - New Rate Minus Forest City and Cliffside Yr 2	All - New Rate Minus Forest City and Cliffside Yr 3
<b>Inside</b>									
Customer Count - Inside - Commercial	13	637	126	200	233	637	637	637	637
Customer Count - Inside - Residential	65	2797	869	1370	1075	2797	2797	2797	2797
Total Customers-Inside	78	3434	995	1570	1308	3434	3434	3434	3434
<b>Outside</b>									
Customer Count - Outside - Commercial	6	23	1	12	17	42	42	42	42
Customer Count - Outside - Residential		28	0	6	31	93	93	93	93
Total Customers-Outside	6	51	1	18	48	135	135	135	135
<b>Customer Usage (Gallons) - Inside</b>									
Commercial	270,000	114,913,360	3,467,500	46,502,000	67,094,000	114,913,360	114,913,360	114,913,360	114,913,360
Residential	2,822,000	114,215,980	23,725,000	53,916,000	53,729,000	114,215,980	114,215,980	114,215,980	114,215,980
Total Usage-Inside	3,092,000	229,129,340	27,192,500	100,418,000	120,823,000	229,129,340	229,129,340	229,129,340	229,129,340
<b>Customer Usage (Gallons) - Outside</b>									
Commercial	5,544,000	25,634,310	36,500	5,322,000	28,254,000	31,448,310	31,448,310	31,448,310	31,448,310
Residential		1,230,900	0	424,000	1,667,000	4,052,900	4,052,900	4,052,900	4,052,900
Total Usage-Outside	5,544,000	26,865,210	36,500	5,746,000	29,921,000	35,501,210	35,501,210	35,501,210	35,501,210
<b>Customer Renewals (Dollars)</b>									
Base Charge Revenue	\$ 32,904	\$ 632,675	\$ 255,090	\$ 231,816	\$ 214,992	\$ 660,043	\$ 650,520	\$ 683,046	\$ 717,198
Volumetric Revenue	\$ 28,730	\$ 740,028	\$ 121,876	\$ 459,885	\$ 722,660	\$ 780,216	\$ 1,323,153	\$ 1,389,310	\$ 1,458,776
Total Revenue	\$ 61,634	\$ 1,372,704	\$ 376,966	\$ 691,701	\$ 937,652	\$ 1,440,259	\$ 1,973,673	\$ 2,072,356	\$ 2,175,974
<b>Rate Assumptions (Residential)</b>									
Base Rate Applied (first 1,000 gallons) Inside	\$ 26.00	\$ 14.95	\$ 42.00	\$ 11.85	\$ 12.00	\$ 14.95	\$ 15.00	\$ 15.75	\$ 16.54
Volumetric Rate (per 1,000 gallons) inside	\$ 4.00	\$ 2.75	\$ 4.47	\$ 3.75	\$ 4.00	\$ 2.75	\$ 5.00	\$ 5.25	\$ 5.51
Base Rate Applied (first 1,000 gallons) outside	\$ 26.00	\$ 27.15	\$ 84.00	\$ 39.64	\$ 24.00	\$ 27.15	\$ 20.00	\$ 21.00	\$ 22.05
Volumetric Rate (per 1,000 gallons) outside	\$ 4.00	\$ 6.00	\$ 8.93	\$ 14.50	\$ 8.00	\$ 6.00	\$ 5.00	\$ 5.25	\$ 5.51
<b>Rate Assumptions (Commercial)</b>									
Base Rate Applied (first 1,000 gallons) Inside	\$ 26.00	\$ 14.95	\$ 47.00	\$ 11.85	\$ 16.00	\$ 14.95	\$ 15.00	\$ 15.75	\$ 16.54
Volumetric Rate (per 1,000 gallons) inside	\$ 3.00	\$ 2.75	\$ 4.47	\$ 3.75	\$ 4.00	\$ 2.75	\$ 5.00	\$ 5.25	\$ 5.51
Base Rate Applied (first 1,000 gallons) outside	\$ 119.00	\$ 27.15	\$ 95.00	\$ 39.64	\$ 32.00	\$ 27.15	\$ 20.00	\$ 21.00	\$ 22.05
Volumetric Rate (per 1,000 gallons) outside	\$ 3.00	\$ 4.00	\$ 8.93	\$ 14.50	\$ 8.00	\$ 4.00	\$ 5.00	\$ 5.25	\$ 5.51
5,000 gallons / mth user rate	\$ 61,672	\$ 1,374,295	\$ 477,050	\$ 690,111	\$ 940,435	\$ 1,435,966			
Total Operating Revenue						\$ 1,440,259	\$ 1,973,673	\$ 2,072,356	\$ 2,175,974
Total Projected Expenses						\$ (1,734,002)	\$ (1,734,002)	\$ (1,768,682)	\$ (1,804,056)
Net Income						\$ (293,743)	\$ 239,671	\$ 303,674	\$ 371,919

Notes:

1. Cliffside has a declining rate block structure
2. Forest City has a declining rate block structure
3. Forest City's base rate is for the 1st 3,000 gallons
4. Lake Lure has an inclining rate block structure
5. Rutherfordton has a declining rate block structure

All - New Rate Minus Forest City and Cliffside Yr 4	All - New Rate Minus Forest City and Cliffside Yr 5	All - New Rate Minus Forest City and Cliffside Yr 6	All - New Rate Minus Forest City and Cliffside Yr 7	All - New Rate Minus Forest City and Cliffside Yr 8	All - New Rate Minus Forest City and Cliffside Yr 9	All - New Rate Minus Forest City and Cliffside Yr 10	All - New Rate Minus Forest City and Cliffside Yr 11	All - New Rate Minus Forest City and Cliffside Yr 12	All - New Rate Minus Forest City and Cliffside Yr 13	All - New Rate Minus Forest City and Cliffside Yr 14	All - New Rate Minus Forest City and Cliffside Yr 15
637	637	637	637	637	637	637	637	637	637	637	637
2797	2797	2797	2797	2797	2797	2797	2797	2797	2797	2797	2797
3434	3434	3434	3434	3434	3434	3434	3434	3434	3434	3434	3434
42	42	42	42	42	42	42	42	42	42	42	42
93	93	93	93	93	93	93	93	93	93	93	93
135	135	135	135	135	135	135	135	135	135	135	135
114,913,360	114,913,360	114,913,360	114,913,360	114,913,360	114,913,360	114,913,360	114,913,360	114,913,360	114,913,360	114,913,360	114,913,360
114,215,980	114,215,980	114,215,980	114,215,980	114,215,980	114,215,980	114,215,980	114,215,980	114,215,980	114,215,980	114,215,980	114,215,980
229,129,340	229,129,340	229,129,340	229,129,340	229,129,340	229,129,340	229,129,340	229,129,340	229,129,340	229,129,340	229,129,340	229,129,340
31,448,310	31,448,310	31,448,310	31,448,310	31,448,310	31,448,310	31,448,310	31,448,310	31,448,310	31,448,310	31,448,310	31,448,310
4,052,900	4,052,900	4,052,900	4,052,900	4,052,900	4,052,900	4,052,900	4,052,900	4,052,900	4,052,900	4,052,900	4,052,900
35,501,210	35,501,210	35,501,210	35,501,210	35,501,210	35,501,210	35,501,210	35,501,210	35,501,210	35,501,210	35,501,210	35,501,210
\$ 753,058	\$ 790,711	\$ 830,247	\$ 913,271	\$ 940,669	\$ 968,890	\$ 997,956	\$ 1,027,895	\$ 1,058,732	\$ 1,079,906	\$ 1,101,505	\$ 1,123,535
\$ 1,531,715	\$ 1,608,300	\$ 1,688,715	\$ 1,857,587	\$ 1,913,315	\$ 1,970,714	\$ 2,029,835	\$ 2,090,731	\$ 2,153,452	\$ 2,196,522	\$ 2,240,452	\$ 2,285,261
\$ 2,284,773	\$ 2,399,012	\$ 2,518,962	\$ 2,770,858	\$ 2,853,984	\$ 2,939,604	\$ 3,027,792	\$ 3,118,625	\$ 3,212,184	\$ 3,276,428	\$ 3,341,956	\$ 3,408,796
1.05	1.05	1.05	1.1	1.03	1.03	1.03	1.03	1.03	1.02	1.02	1.02
\$ 17.36	\$ 18.23	\$ 19.14	\$ 21.06	\$ 21.69	\$ 22.34	\$ 23.01	\$ 23.70	\$ 24.41	\$ 24.90	\$ 25.40	\$ 25.91
\$ 5.79	\$ 6.08	\$ 6.38	\$ 7.02	\$ 7.23	\$ 7.45	\$ 7.67	\$ 7.90	\$ 8.14	\$ 8.30	\$ 8.47	\$ 8.64
\$ 23.15	\$ 24.31	\$ 25.53	\$ 28.08	\$ 28.92	\$ 29.79	\$ 30.68	\$ 31.60	\$ 32.55	\$ 33.20	\$ 33.87	\$ 34.54
\$ 5.79	\$ 6.08	\$ 6.38	\$ 7.02	\$ 7.23	\$ 7.45	\$ 7.67	\$ 7.90	\$ 8.14	\$ 8.30	\$ 8.47	\$ 8.64
\$ 17.36	\$ 18.23	\$ 19.14	\$ 21.06	\$ 21.69	\$ 22.34	\$ 23.01	\$ 23.70	\$ 24.41	\$ 24.90	\$ 25.40	\$ 25.91
\$ 5.79	\$ 6.08	\$ 6.38	\$ 7.02	\$ 7.23	\$ 7.45	\$ 7.67	\$ 7.90	\$ 8.14	\$ 8.30	\$ 8.47	\$ 8.64
\$ 23.15	\$ 24.31	\$ 25.53	\$ 28.08	\$ 28.92	\$ 29.79	\$ 30.68	\$ 31.60	\$ 32.55	\$ 33.20	\$ 33.87	\$ 34.54
\$ 5.79	\$ 6.08	\$ 6.38	\$ 7.02	\$ 7.23	\$ 7.45	\$ 7.67	\$ 7.90	\$ 8.14	\$ 8.30	\$ 8.47	\$ 8.64
\$ 40.52	\$ 42.54	\$ 44.67	\$ 49.14	\$ 50.61	\$ 52.13	\$ 53.69	\$ 55.30	\$ 56.96	\$ 58.10	\$ 59.26	\$ 60.45
\$ 2,284,773	\$ 2,399,012	\$ 2,518,962	\$ 2,770,858	\$ 2,853,984	\$ 2,939,604	\$ 3,027,792	\$ 3,118,625	\$ 3,212,184	\$ 3,276,428	\$ 3,341,956	\$ 3,408,796
\$ (1,840,137)	\$ (1,876,940)	\$ (1,914,478)	\$ (1,952,768)	\$ (1,991,823)	\$ (2,031,660)	\$ (2,072,293)	\$ (2,113,739)	\$ (2,156,014)	\$ (2,199,134)	\$ (2,243,116)	\$ (2,287,979)
\$ 444,636	\$ 522,072	\$ 604,484	\$ 818,090	\$ 862,161	\$ 907,944	\$ 955,499	\$ 1,004,887	\$ 1,056,171	\$ 1,077,294	\$ 1,098,840	\$ 1,120,817

All - New Rate Minus Forest City and Cliffside Yr 16	All - New Rate Minus Forest City and Cliffside Yr 17	All - New Rate Minus Forest City and Cliffside Yr 18	All - New Rate Minus Forest City and Cliffside Yr 19	All - New Rate Minus Forest City and Cliffside Yr 20
637	637	637	637	637
2797	2797	2797	2797	2797
3434	3434	3434	3434	3434
42	42	42	42	42
93	93	93	93	93
135	135	135	135	135
114,913,360	114,913,360	114,913,360	114,913,360	114,913,360
114,215,980	114,215,980	114,215,980	114,215,980	114,215,980
229,129,340	229,129,340	229,129,340	229,129,340	229,129,340
31,448,310	31,448,310	31,448,310	31,448,310	31,448,310
4,052,900	4,052,900	4,052,900	4,052,900	4,052,900
35,501,210	35,501,210	35,501,210	35,501,210	35,501,210
\$ 1,146,005	\$ 1,168,925	\$ 1,192,304	\$ 1,216,150	\$ 1,240,473
\$ 2,330,966	\$ 2,377,586	\$ 2,425,137	\$ 2,473,640	\$ 2,523,113
\$ 3,476,972	\$ 3,546,511	\$ 3,617,441	\$ 3,689,790	\$ 3,763,586
1.02	1.02	1.02	1.02	1.02
\$ 26.43	\$ 26.95	\$ 27.49	\$ 28.04	\$ 28.60
\$ 8.81	\$ 8.98	\$ 9.16	\$ 9.35	\$ 9.53
\$ 35.23	\$ 35.94	\$ 36.66	\$ 37.39	\$ 38.14
\$ 8.81	\$ 8.98	\$ 9.16	\$ 9.35	\$ 9.53
\$ 26.43	\$ 26.95	\$ 27.49	\$ 28.04	\$ 28.60
\$ 8.81	\$ 8.98	\$ 9.16	\$ 9.35	\$ 9.53
\$ 35.23	\$ 35.94	\$ 36.66	\$ 37.39	\$ 38.14
\$ 8.81	\$ 8.98	\$ 9.16	\$ 9.35	\$ 9.53
\$ 61.66	\$ 62.89	\$ 64.15	\$ 65.43	\$ 66.74
\$ 3,476,972	\$ 3,546,511	\$ 3,617,441	\$ 3,689,790	\$ 3,763,586
\$ (2,333,738)	\$ (2,380,413)	\$ (2,428,021)	\$ (2,476,582)	\$ (2,526,113)
\$ 1,143,233	\$ 1,166,098	\$ 1,189,420	\$ 1,213,208	\$ 1,237,472

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Appendix 11.59

Table A.11.7 – Capital Improvements & Net Income - Consolidation of  
Cliffside Sanitary District with Forest City

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Appendix 11.59 - Table A.11.7 - Capital Improvements & Net Income - Consolidation of Cliffside with Forest City

	Total Cost	FY		FY	
		2015 / 2016	2016 / 2017	2017 / 2018	2018 / 2019
<b>Total Revenue</b>		\$ 1,973,673	\$ 2,072,356	\$ 2,175,974	\$ 2,284,773
<b>Total Expenses</b>		\$ (1,734,002)	\$ (1,768,682)	\$ (1,804,056)	\$ (1,840,137)
A. Lake Lure to Rutherfordton WWTP	\$ 9,901,000	\$ (665,503)			
B. Cost to Upgrade Lake Lure WWTP	\$ 7,014,000	\$ (471,451)			
Rutherfordton WWTP Upgrades to Handle Lake Lure & Equestrian Center	\$ 304,000	\$ (20,434)			
D. Rutherfordton to Spindale WWTP	\$ 5,171,000	\$ (347,572)			
E. Upgrades to Spindale WWTP to Handle Rutherfordton & Lake Lure	\$ 11,205,000	\$ (753,152)			
F. Spindale to Rutherfordton WWTP	\$ 8,292,000	\$ (557,353)			
G. Spindale to Forest City Second Broad River WWTP	\$ 5,628,000	\$ (378,290)			
H. Spindale and Rutherfordton to Forest City WWTP	\$ 8,294,000	\$ (557,487)			
I. Cliffside to Forest City Second Broad River WWTP	\$ 5,423,000	\$ (364,511)			
J. Cliffside to Riverstone WWTP	\$ 4,799,000	\$ (322,568)			
J. Cliffside to Forest City DRG WWTP w/o Riverstone WWTP	\$ 6,226,000	\$ (418,485)			
L. Cliffside to Forest City DRG WWTP with Riverstone WWTP	\$ 6,509,000	\$ (437,507)			
Forest City Second Broad River WWTP Upgrades to Handle Cliffside, Rutherfordton, and Spindale WWTP	\$ 13,960,000	\$ (938,331)			
M. Upgrades to Forest City Riverstone WWTP to Handle Cliffside	\$ 889,000	\$ (59,755)			
Upgrades to Forest City DRG WWTP to Handle Cliffside and Riverstone	\$ 1,348,000	\$ (90,607)			
O. Rutherford County Airport to Spindale	\$ 1,551,000	\$ (104,252)			
Q. Area North of Rutherfordton / Hwy 221 to Rutherfordton	\$ 1,551,000	\$ (104,252)			
R. Sewer Service to Ellenboro Henrietta Rd Interchange at Hwy 74 via FM to Ellenboro	\$ 2,231,000	\$ (149,958)			
S. Sewer Service to Ellenboro Henrietta Rd Interchange at Hwy 74 via FM to Henrietta	\$ 1,979,000	\$ (133,020)			
T. Service to Industrial Area on HWY 221 near Harris Elementary via PS & FM to Spindale Torrington PS on Hwy 221	\$ 1,914,000	\$ (128,651)			
U. Service to Industrial Area on Hwy 221 near Harris Elementary via PS & FM to Riverstone Blvd Gravity Sewer to Riverstone WWTP	\$ 2,145,000	\$ (144,178)			
V. Hwy. 221 / US 74 Interchange PS Upgrade - Spindale	\$ 150,000	\$ (10,082)			
<b>Total Sewer Fund CIP</b>	<b>\$ 106,484,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Net Income</b>		\$ 239,670.75	\$ 303,674.35	\$ 371,918.53	\$ 444,636.12
Existing Debt Service	\$ -	\$ -	\$ -	\$ -	\$ -
Existing & Proposed Debt Service		\$ -	\$ -	\$ -	\$ -
Debt Service Target Ratio		1.1	1.1	1.1	1.1
Debt Service Ratio		N/A	N/A	N/A	N/A

Notes:

1. Existing debt service payments based on FY 2012/20313 and reduction in years 6, 11, 15 are estimated.

FY 2019 / 2020	FY 2020 / 2021	FY 2021 / 2022	FY 2022 / 2023	FY 2023 / 2024	FY 2024 / 2025	FY 2025 / 2026	FY 2026 / 2027
\$ 2,399,012	\$ 2,518,962	\$ 2,770,858	\$ 2,853,984	\$ 2,939,604	\$ 3,027,792	\$ 3,118,625	\$ 3,212,184
\$ (1,876,940)	\$ (1,914,478)	\$ (1,952,768)	\$ (1,991,823)	\$ (2,031,660)	\$ (2,072,293)	\$ (2,113,739)	\$ (2,156,014)

\$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511)

\$ (133,020)

\$ -	\$ -	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (364,511)	\$ (497,531)
\$ 522,072.03	\$ 604,483.82	\$ 453,579.69	\$ 497,650.08	\$ 543,433.14	\$ 590,988.05	\$ 640,375.95	\$ 640,375.95	\$ 558,640.04
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ -	\$ -	\$ (364,510.78)	\$ (364,510.78)	\$ (364,510.78)	\$ (364,510.78)	\$ (364,510.78)	\$ (364,510.78)	\$ (497,530.68)
1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
N/A	N/A	1.24	1.37	1.49	1.62	1.76	1.76	1.12

FY 2027 / 2028	FY 2028 / 2029	FY 209 / 2030	FY 2030 / 2031	FY 2031 / 2032	FY 2032 / 2033	FY 2033 / 2034	FY 2034 / 2035
\$ 3,276,428	\$ 3,341,956	\$ 3,408,796	\$ 3,476,972	\$ 3,546,511	\$ 3,617,441	\$ 3,689,790	\$ 3,763,586
\$ (2,199,134)	\$ (2,243,116)	\$ (2,287,979)	\$ (2,333,738)	\$ (2,380,413)	\$ (2,428,021)	\$ (2,476,582)	\$ (2,526,113)

\$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511) \$ (364,511)

\$ (133,020) \$ (133,020) \$ (133,020) \$ (133,020) \$ (133,020) \$ (133,020) \$ (133,020) \$ (133,020)

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\$ (497,531)	\$ (497,531)	\$ (497,531)	\$ (497,531)	\$ (497,531)	\$ (497,531)	\$ (497,531)	\$ (497,531)	\$ (497,531)
\$ 579,763.45	\$ 601,309.34	\$ 623,286.14	\$ 645,702.47	\$ 668,567.14	\$ 691,889.09	\$ 715,677.49	\$ 739,941.65	
\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
\$ (497,530.68)	\$ (497,530.68)	\$ (497,530.68)	\$ (497,530.68)	\$ (497,530.68)	\$ (497,530.68)	\$ (497,530.68)	\$ (497,530.68)	\$ (497,530.68)
1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
1.17	1.21	1.25	1.30	1.34	1.39	1.44	1.49	

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