

WATER AND SEWER CAPITAL PROJECTS FUND

This fund is used to account for the capital outlays for the water and sewer system. Its revenues come from several sources. First, a transfer is made annually from the Water and Sewer Fund to finance some of the capital outlays. Second, any grants or Revolving Fund Loans from the state or federal governments for capital outlay would be accounted for here. Finally, the proceeds from any bonds, certificates of participation, capital leases or other debt instruments would be accounted for here.

Appropriations from this fund for capital projects do not lapse at the end of a fiscal year. Those appropriations stay in place until the project is completed. A capital project ordinance can be amended by another capital project ordinance, should the project cost change.

This fund is used to finance the six-year capital improvements plan for the water and sewer system. In order to determine what can be financed and in what order, we need to make two determinations: 1) about how much income can be transferred from the Water and Sewer Fund each year, after the operating budget is met; and 2) the amount of debt service over the projected six-year period.

The Debt Service Repayment Schedule shows every long-term debt instrument outstanding. The bottom third of this schedule shows the projected debt service payments for any debt instruments to be issued as part of the 6-year Capital Improvements Plan. Note that even with this additional indebtedness, the debt service payments on the bottom line do not fluctuate greatly from one year to the next. That makes this a very stable financial situation for the water and sewer system.

The following pages contain the six-year Capital Improvement Plan for the water and sewer system, taking this debt service schedule and the transfers from the Water and Sewer Fund into account. Barring unforeseen circumstances, these are the projects that we should be able to complete in this six-year period. The pages following that summary are more detailed explanations of each individual project.

Bear in mind that as you expand the water and sewer system, you will also increase the customer base, thereby increasing annual revenues. But, we have been conservative in these projections until recently. As the economy continues to rebound from recent years, we expect a gradual increase in residential and commercial growth. The expectation of these revenues from water and sewer fees are to improve noticeably; as a result, additional funding for capital projects or early repayment of debt over the next few years.

**DEBT SERVICE REPAYMENT SCHEDULE
WATER AND SEWER FUND**

		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
PROJECTED EXPENSES								
2004 Federal Revolving Loan \$387,438	Prin	\$ 22,791	\$ 22,791	\$ 22,791	\$ 22,791	\$ 22,791	\$ 22,791	\$ 22,784
Dated 5/1/06 – 5/1/22 2.66% Fixed Rate	Int	4,244	3,638	3,032	2,425	1,819	1,213	607
2004 Federal Revolving Loan \$520,430	Prin	30,614	30,614	30,614	30,614	30,614	30,614	30,608
Dated 5/1/06 – 5/1/22 2.66% Fixed Rate	Int	5,701	4,886	4,072	3,258	2,443	1,629	815
2007 Federal Revolving Loan \$2,295,067	Prin	135,004	135,004	135,004	135,004	135,004	135,004	135,004
Dated 11/1/07 – 5/1/24 2.66% Fixed Rate	Int	32,320	28,729	25,138	21,547	17,956	14,365	10,774
2009 Sewer Revolving Loan \$17,500,000	Prin	875,000	875,000	875,000	875,000	875,000	875,000	875,000
Dated 7/31/10 – 5/1/30 2.48% Fixed Rate	Int	347,200	325,500	303,800	282,100	260,400	238,700	217,000
2012 Installment Financing \$2,706,000	Prin	259,387	266,310	273,414	280,707	288,195	295,883	303,742
Dated 7/18/12 - 1/17/22 2.65% Fixed Rate	Int	50,435	43,516	36,412	29,119	21,631	13,943	6,084
2013 Refunding of 2003 COPS	Prin	6,312	4,229	4,198	1,479	1,526	17,140	16,790
Dated 11/14/13 - 6/1/27 2.52% Fixed Rate	Int	3,207	3,092	3,010	2,929	2,891	2,853	2,420
TOTAL PRINCIPAL PAYMENTS		1,329,108	1,333,948	1,341,021	1,345,595	1,353,130	1,376,432	1,383,928
TOTAL INTEREST PAYMENTS		443,107	409,361	375,464	341,378	307,140	272,703	237,700
TOTAL EXPENSES		1,772,215	1,743,309	1,716,485	1,686,973	1,660,270	1,649,135	1,621,628
2016 Installment Purchase Contract \$4,500,000	Prin		225,000	225,000	225,000	225,000	225,000	225,000
Dated 6/30/16 - 12/31/35 4% Fixed Rate 20 years	Int		177,750	168,750	159,750	150,750	141,750	132,750
	Prin							
	Int							
PROJECTED TOTAL PRINCIPAL PAYMENTS		1,329,108	1,558,948	1,566,021	1,570,595	1,578,130	1,601,432	1,608,928
PROJECTED TOTAL INTEREST PAYMENTS		443,107	587,111	544,214	501,128	457,890	414,453	370,450
PROJECTED TOTAL EXPENSES		\$ 1,772,215	\$ 2,146,059	\$ 2,110,235	\$ 2,071,723	\$ 2,036,020	\$ 2,015,885	\$ 1,979,378
updated 3/24/15 - dlr								

**DEBT SERVICE REPAYMENT SCHEDULE
WATER AND SEWER FUND**

		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
PROJECTED EXPENSES								
2004 Federal Revolving Loan \$387,438	Prin							
Dated 5/1/06 – 5/1/22 2.66% Fixed Rate	Int							
2004 Federal Revolving Loan \$520,430	Prin							
Dated 5/1/06 – 5/1/22 2.66% Fixed Rate	Int							
2007 Federal Revolving Loan \$2,295,067	Prin	135,004	135,003					
Dated 11/1/07 – 5/1/24 2.66% Fixed Rate	Int	7,183	3,592					
2009 Sewer Revolving Loan \$17,500,000	Prin	875,000	875,000	875,000	875,000	875,000	875,000	875,000
Dated 7/31/10 – 5/1/30 2.48% Fixed Rate	Int	195,300	173,600	151,900	130,200	108,500	86,800	65,100
2012 Installment Financing \$2,706,000	Prin							
Dated 7/18/12 - 1/17/22 2.65% Fixed Rate	Int							
2013 Refunding of 2003 COPS	Prin	16,441	16,154	15,852	15,566	15,248		
Dated 11/14/13 - 6/1/27 2.52% Fixed Rate	Int	1,997	1,583	1,176	777	384		
TOTAL PRINCIPAL PAYMENTS		1,026,445	1,026,157	890,852	890,566	890,248	875,000	875,000
TOTAL INTEREST PAYMENTS		204,480	178,775	153,076	130,977	108,884	86,800	65,100
TOTAL EXPENSES		1,230,925	1,204,932	1,043,928	1,021,543	999,132	961,800	940,100
2016 Installment Purchase Contract \$4,500,000	Prin	225,000	225,000	225,000	225,000	225,000	225,000	225,000
Dated 6/30/16 - 12/31/35 4% Fixed Rate 20 years	Int	123,750	114,750	105,750	96,750	87,750	78,750	69,750
	Prin							
	Int							
PROJECTED TOTAL PRINCIPAL PAYMENTS		1,251,445	1,251,157	1,115,852	1,115,566	1,115,248	1,100,000	1,100,000
PROJECTED TOTAL INTEREST PAYMENTS		328,230	293,525	258,826	227,727	196,634	165,550	134,850
PROJECTED TOTAL EXPENSES		\$ 1,579,675	\$ 1,544,682	\$ 1,374,678	\$ 1,343,293	\$ 1,311,882	\$ 1,265,550	\$ 1,234,850
updated 3/24/15 - dlr								

**DEBT SERVICE REPAYMENT SCHEDULE
WATER AND SEWER FUND**

		FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
PROJECTED EXPENSES								
2004 Federal Revolving Loan \$387,438	Prin							
Dated 5/1/06 – 5/1/22 2.66% Fixed Rate	Int							
2004 Federal Revolving Loan \$520,430	Prin							
Dated 5/1/06 – 5/1/22 2.66% Fixed Rate	Int							
2007 Federal Revolving Loan \$2,295,067	Prin							
Dated 11/1/07 – 5/1/24 2.66% Fixed Rate	Int							
2009 Sewer Revolving Loan \$17,500,000	Prin	875,000	875,000					
Dated 7/31/10 – 5/1/30 2.48% Fixed Rate	Int	43,400	21,700					
2012 Installment Financing \$2,706,000	Prin							
Dated 7/18/12 - 1/17/22 2.65% Fixed Rate	Int							
2013 Refunding of 2003 COPS	Prin							
Dated 11/14/13 - 6/1/27 2.52% Fixed Rate	Int							
TOTAL PRINCIPAL PAYMENTS		875,000						
TOTAL INTEREST PAYMENTS		43,400						
TOTAL EXPENSES		918,400						
2016 Installment Purchase Contract \$4,500,000	Prin	225,000	225,000	225,000	225,000	225,000	225,000	212,500
Dated 6/30/16 - 12/31/35 4% Fixed Rate 20 years	Int	60,750	51,750	42,750	33,750	24,750	15,750	6,750
	Prin							
	Int							
PROJECTED TOTAL PRINCIPAL PAYMENTS		1,100,000	225,000	225,000	225,000	225,000	225,000	212,500
PROJECTED TOTAL INTEREST PAYMENTS		104,150	51,750	42,750	33,750	24,750	15,750	6,750
PROJECTED TOTAL EXPENSES		\$ 1,204,150	\$ 276,750	\$ 267,750	\$ 258,750	\$ 249,750	\$ 240,750	\$ 219,250
updated 3/24/15 - dlr								

**DEBT SERVICE REPAYMENT SCHEDULE
WATER AND SEWER FUND**

				TOTALS	
PROJECTED EXPENSES				FY 14-30	
2004 Federal Revolving Loan \$387,438	Prin			\$ 159,530	
Dated 5/1/06 -- 5/1/22 2.66% Fixed Rate	Int			16,978	
2004 Federal Revolving Loan \$520,430	Prin			214,292	
Dated 5/1/06 -- 5/1/22 2.66% Fixed Rate	Int			22,804	
2007 Federal Revolving Loan \$2,295,067	Prin			1,215,035	
Dated 11/1/07 -- 5/1/24 2.66% Fixed Rate	Int			161,604	
2009 Sewer Revolving Loan \$17,500,000	Prin			14,000,000	
Dated 7/31/10 -- 5/1/30 2.48% Fixed Rate	Int			2,951,200	
2012 Installment Financing \$2,706,000	Prin			1,967,638	
Dated 7/18/12 - 1/17/22 2.65% Fixed Rate	Int			201,140	
2013 Refunding of 2003 COPS	Prin			130,935	
Dated 11/14/13 - 6/1/27 2.52% Fixed Rate	Int			26,319	
TOTAL PRINCIPAL PAYMENTS				17,687,430	
TOTAL INTEREST PAYMENTS				3,380,045	
TOTAL EXPENSES				20,170,775	
2016 Installment Purchase Contract \$4,500,000	Prin			4,487,500	
Dated 6/30/16 - 12/31/35 4% Fixed Rate 20 years	Int			1,845,000	
	Prin			-	
	Int			-	
PROJECTED TOTAL PRINCIPAL PAYMENTS		-	-	19,962,430	
PROJECTED TOTAL INTEREST PAYMENTS		-	-	5,027,845	
PROJECTED TOTAL EXPENSES		\$ -	\$ -	\$ 24,990,275	
<i>updated 3/24/15 - dlr</i>					

SUMMARY OF PROJECTS BY FISCAL YEAR:
WATER AND SEWER CAPITAL PROJECTS FUND

Project Number	Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	TOTALS
PW-WAT-14	NC 73 Water Line & Tank			\$ 1,800,000	\$ 1,200,000			\$ 3,000,000
PW-WAT-17	Kidville Road Water Line		1,200,000					\$ 1,200,000
PW-WAT-38	Replace NC 16 Waterline - Phase II	350,000						\$ 350,000
PW-WAT-41	SCADA Equipment & Controls							\$ -
PW-WAT-45	Raw Water Intake at Water Plant	90,000						\$ 90,000
PW-WAT-47	Relocate Water Main Hwy 150 & Dellinger Rd							\$ -
PW-WAT-48	WTP Expansion	250,000	8,613,000	1,040,000				\$ 9,903,000
PW-WAT-49	Chloride Treatment at Water Pump Stations							\$ -
PW-WAT-52	Shea Homes Waterline Construction	350,000						\$ 350,000
	MUNIS Software Conversion	50,000						\$ 50,000
								\$ -
PW-SEW-23	Lowesville Area Sewer Line Redirection	1,800,000						\$ 1,800,000
PW-SEW-24	Facility Improvements - WWTP Expansion	3,251,140						\$ 3,251,140
PW-SEW-25	Relocate Sewer Force Main Hwy 150 & Dellinger Rd							\$ -
PW-SEW-26	Lift Station 18 Surge Valve							\$ -
	Total Proposed Projects	6,141,140	9,813,000	2,840,000	1,200,000	-		19,994,140
	Other Uses of Cash	-	-	-	-	-		-
	Total Uses of Cash	6,141,140	9,813,000	2,840,000	1,200,000	-		19,994,140
								-
Project Number	Project	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	TOTALS
	Sources of Cash							
	Operating Income	1,571,112	750,000	750,000	750,000			3,821,112
	Special Purpose Bonds							-
	Certificates of Participation	4,570,028	9,063,000	2,090,000	450,000			16,173,028
	Installment Purchase Contracts							-
	Earned Interest							-
								-
	Total Sources of Cash	6,141,140	9,813,000	2,840,000	1,200,000	-		19,994,140
	Net Increase (decrease) in Cash	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -

LINCOLN COUNTY, NORTH CAROLINA

CAPITAL IMPROVEMENTS PROGRAM

PROJECT	PW-WAT-14 NC73 - Water line and Tank		Capital Improvement Project				
DEPARTMENT	Public Works Water Distribution	FUNCTION To increase reliability					
DESCRIPTION	To install a 16" water main from Highway 16 to Amity Church Road along Highway 73 To install a booster pump station and tank.						
STATUS	New construction						
PROJECT BUDGET	PROPOSED FY2016	PROJECTED FOR FUTURE YEARS					
		FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL
EXPENDITURE ALLOCATION							
Design & Permitting			\$ 200,000				\$ 200,000
Construction			\$ 1,600,000	\$ 1,200,000			\$ 2,800,000
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
TOTAL ALLOCATION	\$ -	\$ -	\$ 1,800,000	\$ 1,200,000	\$ -	\$ -	\$ 3,000,000
SOURCES OF FUNDS							
Water System Revenues			\$ 800,000	\$ 1,200,000			\$ 2,000,000
COPS			\$ 1,000,000				\$ 1,000,000
							\$ -
							\$ -
							\$ -
TOTAL FUNDS	\$ -	\$ -	\$ 1,800,000	\$ 1,200,000	\$ -	\$ -	\$ 3,000,000

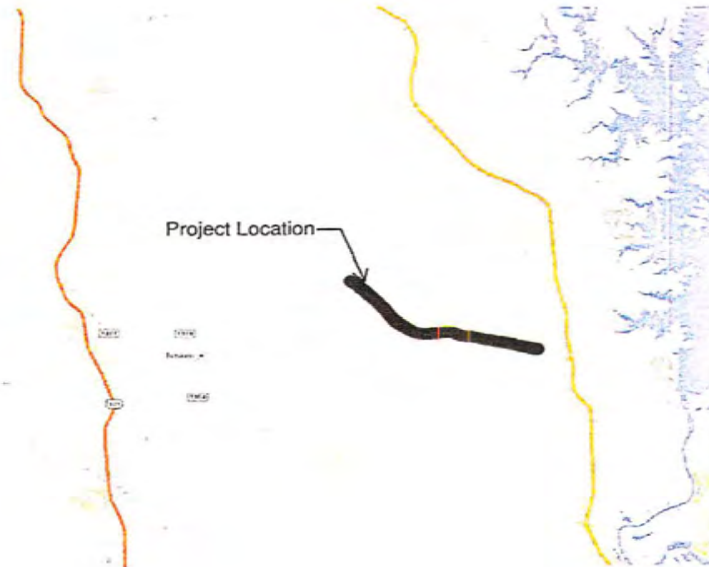
LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION

The Highway 150 12" water main is the only water main that distributes water from the eastern zone to the central zone. In order to system reliability and to potential customer base the installation of a booster pump station and a 12" water main Highway 73 is required.

LOCATION MAP

PIN



ANNUAL OPERATING BUDGET IMPACT:

	Personnel
	No additional
	Operations and Maintenance
	Other Capital Outlay
\$ -	Total Operating Expenses
	Sources of Revenue to Cover Expenses
\$ -	Total Revenues

LINCOLN COUNTY, NORTH CAROLINA

CAPITAL IMPROVEMENTS PROGRAM

PROJECT	PW-WAT-17 St James Kidville		Capital Improvement Project					
DEPARTMENT	Public Works Water Distribution		FUNCTION To construct water system improvements on Kidville and St. James Roads					
DESCRIPTION	Kidville and St. James Church Road water line installation.							
STATUS	New construction							
PROJECT BUDGET		PROPOSED FY2016	PROJECTED FOR FUTURE YEARS					
			FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL
EXPENDITURE ALLOCATION Contruction			\$1,200,000					\$ 1,200,000 \$ - \$ - \$ - \$ - \$ -
TOTAL ALLOCATION			\$1,200,000	\$ -	\$ -	\$ -	\$ -	\$ 1,200,000
SOURCES OF FUNDS Water System Revenues			\$1,200,000					\$ - \$ 1,200,000 \$ - \$ - \$ - \$ -
TOTAL FUNDS			\$1,200,000	\$ -	\$ -	\$ -	\$ -	\$ 1,200,000

LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION

To meet NCDENR permit requirements for water quality an interconnection is required between St. James Church Road and the existing Kidville Road water main. Additionally to improve system reliability an upgrade to the existing 6" water main is required.

LOCATION MAP



ANNUAL OPERATING BUDGET IMPACT:

	Personnel
	No additional
	Operations and Maintenance
	Other Capital Outlay
\$ -	Total Operating Expenses
	Sources of Revenue to Cover Expenses
\$ -	Total Revenues

LINCOLN COUNTY, NORTH CAROLINA

CAPITAL IMPROVEMENTS PROGRAM

PROJECT	PW-WAT-38 NC 16 and NC73 - Phase II		Capital Improvement Project					
DEPARTMENT	Public Works Water Distribution		FUNCTION Management					
DESCRIPTION	This project is to replace the undersized and old PVC water line along Highway 16 from Highway 73 North to the Denver Water Tank. This is intended to be a phased project to replace sections of the water line over a period of years.							
STATUS								
PROJECT BUDGET		PROPOSED FY2016	PROJECTED FOR FUTURE YEARS					
			FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL
EXPENDITURE ALLOCATION Construction		FY 2015 (850,000) \$ 350,000						\$ 1,200,000 \$ - \$ - \$ - \$ - \$ - \$ -
TOTAL ALLOCATION		\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,200,000
SOURCES OF FUNDS								
Water System Revenues		\$ 350,000						\$ - \$ 1,200,000 \$ - \$ - \$ - \$ -
TOTAL FUNDS		\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,200,000

LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION

This phase of the project is to replace the existing 12" PVC water main under Business Highway 16 pavement from the intersection of Highway 73 to Forest Oak Drive.

The overall project is to replace in phases the 12" PVC waterline on Highway 16 with a 24" ductile iron line. Upon completion of the entire project, the water line along Highway 16 from Highway 73 north to the Denver water Tank will be replaced with ductile Iron pipe.

LOCATION MAP



PIN



ANNUAL OPERATING BUDGET IMPACT:

	Personnel
	No additional
	Operations and Maintenance
	Other Capital Outlay
\$ -	Total Operating Expenses
	Sources of Revenue to Cover Expenses
\$ -	Total Revenues

LINCOLN COUNTY, NORTH CAROLINA

CAPITAL IMPROVEMENTS PROGRAM

PROJECT		PW- WAT-45 Raw Water Intake						
DEPARTMENT		Public Works WTP		FUNCTION Redundent third intake pump				
DESCRIPTION		Raw Water Intake at Water Treatment Plant. Add redundant third intake pump at elevation 740.						
STATUS								
PROJECT BUDGET		PROPOSED FY2016	PROJECTED FOR FUTURE YEARS					
			FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL
EXPENDITURE ALLOCATION								
Raw Water Pump		FY 2015 (\$110,000.00)	\$ 90,000					
								\$ 200,000
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -
TOTAL ALLOCATION			\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000
SOURCES OF FUNDS								
Water System Revenues			\$ 90,000					
								\$ -
								\$ 200,000
								\$ -
								\$ -
								\$ -
TOTAL FUNDS			\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ -
			\$ 90,000	\$ -	\$ -	\$ -	\$ -	\$ 200,000

LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION

In order to provide redundancy and reliability at the water treatment plant a new raw water pump is required to be installed in the existing intake structure to be able to provide raw water in the event of a pump failure.

LOCATION MAP



PIN



ANNUAL OPERATING BUDGET IMPACT:

	Personnel
	No additional
	Operations and Maintenance
	Other Capital Outlay
\$ -	Total Operating Expenses
	Sources of Revenue to Cover Expenses
\$ -	Total Revenues

LINCOLN COUNTY, NORTH CAROLINA

CAPITAL IMPROVEMENTS PROGRAM

PROJECT		W0048 Expansion of Water Treatment Plant							
DEPARTMENT		Public Works WTP		FUNCTION Water distribution					
DESCRIPTION This project is to upgrade and expand the Water Treatment Plant to allow the plant to process and distribute more water. Currently the Plant is rated at 3.9 MGD. This project could double the capacity at the Plant.									
STATUS									
PROJECT BUDGET		PROPOSED FY2016	PROJECTED FOR FUTURE YEARS						
			FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL	
EXPENDITURE ALLOCATION		FY 2015							
Study		\$ 60,000						\$ 60,000	
Design		\$ 709,000						\$ 709,000	
Right of Way			\$ 40,000					\$ 40,000	
Permitting								\$ -	
Plant Construction		\$ 8,154,000						\$ 8,154,000	
Line Extension			\$1,000,000					\$ 1,000,000	
CEI								\$ -	
TOTAL ALLOCATION		\$ 60,000	\$ 8,863,000	\$1,040,000	\$ -		\$ -	\$ -	\$ 9,963,000
SOURCES OF FUNDS									
Reserve Fund									\$ -
Debt Financing			\$8,863,000	\$1,040,000					\$ 9,903,000
									\$ -
									\$ -
									\$ -
TOTAL FUNDS		\$ -	\$ 8,863,000	\$1,040,000	\$ -	\$ -	\$ -	\$ -	\$ 9,903,000

LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION

Based on projected growth within the eastern and central zones in the County the existing plant capacity of 4 MGD will not be sufficient to support new growth. The 2015 budget year is for design and permitting fees only.

LOCATION MAP



PIN



ANNUAL OPERATING BUDGET IMPACT:

	Personnel
	No additional
	Operations and Maintenance
	Other Capital Outlay
\$ -	Total Operating Expenses
	Sources of Revenue to Cover Expenses
\$ -	Total Revenues

Client: Lincoln County, NC
 Project: Water Treatment Plant Expansion - Scenario 1 - additional 4 mgd - 8 mgd total
 KHA No.: 018911000

Date: 12/7/2014
 Prepared By: M. Shoesmith
 Checked By: M. Shelton

Sheet 1 of 1

Item No.	Item Description	Quantity	Unit	Unit Price	Item Cost
1	Mobilization	1	LS	\$338,000	\$338,000
2	Raw Water Pump (2,100 gpm with VFD)	2	EA	\$130,000	\$260,000
3	Raw Water Line (900-lf of 30-inch)	900	LF	\$320	\$288,000
4	Rapid Mix (Mixers)	2	EA	\$13,000	\$26,000
5	Flocculation (Flocculators)	4	EA	\$40,500	\$162,000
6	Sedimentation (Plate Settlers, and Sludge Collection System)	2	EA	\$262,000	\$524,000
7	Existing Sedimentation Rehabilitation (Plate Settlers)	2	EA	\$176,000	\$352,000
8	Structural (Basin for Rapid Mix, Floc, and Sedimentation and Gates)	1	LS	\$1,227,000	\$1,227,000
9	Filtration (Media, Underdrains, Piping, and Valves)	4	EA	\$224,000	\$896,000
10	Structural (Basin for Filtration)	1	LS	\$201,000	\$201,000
11	Piping and Valves	1	LS	\$223,000	\$223,000
12	Yard Piping	1	LS	\$72,000	\$72,000
13	Clearwell Storage (1.0 mgd Ground Storage Tank)	1	EA	\$720,000	\$720,000
14	High Service Pump (2,800 gpm with VFD)	1	EA	\$110,000	\$110,000
15	Backwash System (none in this scenario)	0	EA	\$0	\$0
16	Solids Handling (Screw Press, and Sludge Pump)	1	EA	\$324,000	\$324,000
17	Chemical Feed (Metering Pumps, Day Tanks)	1	LS	\$195,000	\$195,000
18	Power Systems (Electrical, SCADA, Backup Generator)	1	EA	\$747,000	\$747,000
19	Site Work (Pavement, Earthwork, Drainage)	1	LS	\$425,000	\$425,000

Basis for Cost Projection:

- ☒ No Design Completed
☐ Preliminary Design
☐ Final Design

Subtotal:	\$7,090,000
Contingency (±15%)	\$1,064,000
Permitting / Design (±10%)	\$709,000
Total Base Cost:	\$8,863,000

The Consultant has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Consultant at this time and represent only the Consultant's judgment as a design professional familiar with the construction industry. The Consultant cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

PROJECT		PW-WAT-52		Capital Improvement Project				
DEPARTMENT		Public Works Utilities	FUNCTION Agreement with Shea Homes for water line construction					
DESCRIPTION Agreement with Shea Homes to upgrade 12-inch water line near Trilogy development to 24-inch water line								
STATUS								
PROJECT BUDGET		PROPOSED FY 2016	PROJECTED FOR FUTURE YEARS					
			FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	TOTAL
EXPENDITURE ALLOCATION Construction		\$ - \$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$ 350,000 - - - - -
TOTAL ALLOCATION		\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 350,000
SOURCES OF FUNDS Water and Sewer Fund		\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ - \$ 350,000 - - - -
TOTAL FUNDS		\$ 350,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 350,000

LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION

LOCATION MAP

ANNUAL OPERATING BUDGET IMPACT:

Total Operating Expenses

\$0.00 Total Revenues

LINCOLN COUNTY, NORTH CAROLINA

CAPITAL IMPROVEMENTS PROGRAM

PROJECT S23 Lowesville Area Sewer							
DEPARTMENT Public Works Sewer Collections		FUNCTION Sewer Collection Improvements					
DESCRIPTION		This project is to install approximately 7,000 lf of 12" forcemain and upgrade existing lift station #15 to meet NCDENR flow requirements.					
STATUS							
PROJECT BUDGET		PROPOSED FY2016	PROJECTED FOR FUTURE YEARS				
			FY2017	FY2018	FY2019	FY2020	FY2021
EXPENDITURE ALLOCATION FY 2015 Design and Permitting \$ 200,000 Plant Construction		\$ 1,800,000					
							\$ 200,000
							\$ 1,800,000
							\$ -
							\$ -
							\$ -
							\$ -
TOTAL ALLOCATION \$ -		0	\$ -	\$ -	\$ -	\$ -	\$ -
							\$ 2,000,000
SOURCES OF FUNDS Water and Sewer Fund \$ 200,000		\$ 1,800,000					
							\$ 200,000
							\$ 1,800,000
							\$ -
							\$ -
							\$ -
TOTAL FUNDS \$ 200,000		1,800,000	\$ -	\$ -	\$ -	\$ -	\$ -
							\$ 2,000,000

LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION S0023 Lowesville Area Sewer

In order to meet NCDENR flow requirements and to allow additional customers to connect to the Lincoln County Sewer System an upgrade to Lift Station #15 and an additional forcemain is need to accomodate additional flow to the WWTP.

LOCATION MAP



ANNUAL OPERATING BUDGET IMPACT:

	Personnel
	No additional
	Operations and Maintenance
	Other Capital Outlay
\$ -	Total Operating Expenses
	Sources of Revenue to Cover Expenses
\$ -	Total Revenues

LINCOLN COUNTY, NORTH CAROLINA

CAPITAL IMPROVEMENTS PROGRAM

PROJECT		S0024 Expansion of Wastewater Treatment Plant							
DEPARTMENT		Public Works WWTP		FUNCTION Sewer Collection					
DESCRIPTION		This project is to upgrade and expand the Wastewater Treatment Plant to allow the plant to process more wastewater. Currently the Plant is rated at 1.6 MGD. This project will increase the capacity of the plant to 3.3 MGD.							
STATUS									
PROJECT BUDGET		PROPOSED FY2016	PROJECTED FOR FUTURE YEARS						
			FY2017	FY2018	FY2019	FY2020	FY2021	TOTAL	
EXPENDITURE ALLOCATION									
Design and Permitting	FY 2015 \$200,000	\$ 3,251,140						\$ 200,000	
Plant Construction								\$ 3,251,140	
Engineering								\$ -	
								\$ -	
								\$ -	
								\$ -	
TOTAL ALLOCATION		\$ -	3,251,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,451,140
SOURCES OF FUNDS									
Reserve Fund	\$200,000	\$ 3,251,140						\$ 200,000	
Debt Financing								\$ 3,251,140	
								\$ -	
								\$ -	
								\$ -	
TOTAL FUNDS		\$200,000	3,251,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,451,140

LINCOLN COUNTY, NORTH CAROLINA

JUSTIFICATION

In order to meet NCDENR flow requirements and to allow additional customers to connect to the Lincoln County Sewer System a capacity upgrade is required to the WWTP. The 2015 budget year is for design and permitting fees only.

LOCATION MAP



ANNUAL OPERATING BUDGET IMPACT:

	Personnel
	No additional
	Operations and Maintenance
	Other Capital Outlay
\$ -	Total Operating Expenses
	Sources of Revenue to Cover Expenses
\$ -	Total Revenues

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