DESCRIPTION OF CAPITAL IMPROVEMENT PROGRAM

FISCAL YEARS 2010 – 2014

The Capital Improvement Program (CIP) contains the budgeted and proposed capital improvements by project description, proposed funding source, and scheduled costs. The CIP is a planning and financial tool for the City to prepare for future needs. The City's CIP is in three parts. The first part covers the proposed capital improvements in the General Fund. The second part covers those improvements in the Water and Sewer Fund while the third part covers Fiber Optic Network Fund. A brief narrative is provided for each proposed project. Following the narratives, a detailed CIP schedule for each fund is presented.

General Fund CIP

The following projects have been proposed over the next five years in the General Fund. Funding has been provided for the FY2009-10 projects in the budget.

Roof Replacement for Various Facilities: The City is continuing the annual roof audit process and is repairing and replacing roofs throughout the City on an 'as-needed' basis.
***Impact on Operations**: There will be no impact on operations.*

HVAC Replacement for Various Facilities: The City is continuing the scheduled replacement of outdated HVAC systems.
***Impact on Operations**: There will be no impact on operations.*

City Hall and GX Fitness: Future capital needs include the updating of the front entrance sidewalk area, the replacement of carpeting in both the council chambers and in common areas, and the demolition and debris removal at the site of the former GX Fitness building.
***Impact on Operations**: There will be no impact on operations.*

City Office Building: Future capital needs include the installation of a fire escape ladder system to protect the occupants of the upper floors, the renovation of the business office on the first floor, enclosing the stairwell between the first and second floors, and the installation of carpet on the third floor.
***Impact on Operations**: There will be no impact on operations.*

The Plaza: Current capital needs include refurbishing vacant units, and the scheduled replacement of appliances within the individual living units, and the installation of a backflow prevention system and improvements to the foundation wall to mitigate a moisture issue. Future capital needs include elevator upgrades, awning replacements, painting of the cornice, and exterior wall and foundation repair.
***Impact on Operations**: There will be a slight impact on future operations, as debt will be issued for the wall and foundation repair.*

Police Department: Current capital needs include provide fencing for the evidence storage area. Future capital needs include the acquisition of the adjacent Ketner property.
***Impact on Operations**: There will be no impact on operations.*

Fire Department: Current capital needs include window replacements at Station 53 and the installation of a plymo-vent system at Station 54, which is partially off-set by grant funding. Future capital needs include the construction of a drafting pit at Station 51, replacement of Station 53, the acquisition of land and the construction of Station 55 to serve the rapidly growing Highway 29 and interstate 85 corridors on the southern end of the City.
***Impact on Operations**: Debt will be issued for the construction of these stations. Personnel and operating costs will increase due to the staffing requirements of a new station.*

Telecommunications: Current capital needs include upgrading the grounding at the tower site and also on the telecomm lines. Future capital needs include updating the 800 Trunking System, water-proofing the building, updating the fuel tank, and re-gravelling the driveway at the tower site.

***Impact on Operations**: There will be no impact on current operations. Debt will be issued for the future updating of the 800-Trunking System and other tower site improvements.*

Public Services – Streets: Future capital needs include the construction of a salt and equipment storage building.
***Impact on Operations**: There will be no impact on operations. Debt will be issued to pay for the building.*

Public Services – Landscape Operations: Future capital needs include the acquisition of the adjacent parking lot.
***Impact on Operations**: There will be no impact on operations.*

Public Services – Fleet: Current capital needs include the installation of a water-oil separator for environmental compliance. Future capital needs include the construction of a new Fleet facility.
Impact on Operations: *Debt will need to be issued and there will be a minor impact in utility costs.*

Parks and Recreation – Routine Park and Facility Improvements: Funding is recommended for the on-going improvement and replacement of worn park equipment and facilities.
***Impact on Operations**: There will be no impact on operations. A constant amount of funding is appropriated annually to improve and renovate park equipment and facilities.*

Parks and Recreation – Hall Gym Parking: Future capital needs include additional citizen parking at Hall Gym.
***Impact on Operations**: There will be no impact on operations.*

Parks and Recreation – Play Structure Replacement: Future capital needs include the systematic replacement of outdated or unsafe play structures.
***Impact on Operations**: There will be no impact on operations.*

Parks and Recreation – Civic Center Foundation Wall: Future capital needs include the repair and moisture mitigation of the foundation wall at the Civic Center.
***Impact on Operations**: There will be no impact on operations.*

Parks and Recreation – Park Land Acquisition: Future capital needs include general park land acquisition to accommodate the City's growth.
***Impact on Operations**: There will be no impact on operations.*

Parks and Recreation – New Gymnasium: Future capital needs include the construction of the Town Creek gymnasium.
***Impact on Operations**: Debt will need to be issued and there will be a minor impact in utility costs.*

***Impact on Operations in General Fund** – The capital improvements scheduled for FY10 will be financed from on-going General Fund revenues and will not have a major impact on the operating costs of the General Fund.*

Water and Sewer Fund CIP

The Water and Sewer Fund's CIP is divided into Water Improvements and Sewer Improvements. The following projects have been proposed over the next five years. Funding has been provided for the FY2009-10 projects in the budget.

Water Improvements

Annexation: Annexation became effective June 30, 2007 for the Old Mocksville/Hawkinstown Road and Camp/Harrison Road areas. Water line installation will be completed in FY09. Salisbury-Rowan Utilities (SRU) has committed to providing both public necessity and public convenience water to serve areas within the annexation area where service was requested.

Security Improvements: The Vulnerability Assessment mandated by the EPA in FY04 identified utility sites and facilities where security improvements need to be implemented.

New River Pump Station Design: The existing Raw Water Pump Station was constructed in 1917, and expanded to its current size in the 1950s. In 1968, a new intake was constructed with a withdrawal capacity of 24 MGD. However, all of the structures were built in the flood plain. This is the only supply of water for the City of Salisbury and much of Rowan County. The station is both inaccessible and potentially vulnerable during flood events. A need exists to build a new raw water pump station at a location out of the floodplain, as well as to increase withdrawal capacity for future system demands.

Emergency Generators: Currently SRU has only one finished water booster station with stand-by emergency power generation. There are six additional booster stations that need back-up power to ensure that we can maintain water service to all of our customers during emergency conditions.

Granite Quarry Secondary Supply Line: There is one main distribution line serving the towns of Granite Quarry and Rockwell. This line would provide a redundant source of water as well as improve the hydraulic characteristics of the distribution system along US Highway 52 South.

Raw Water Reservoir (30 MG): This is for a new raw water reservoir. State regulations require a minimum of 5 days of off-site storage in the event of equipment failure or poor raw water quality. With the expansion of the Water Plant to 24 MGD, additional reservoir capacity will be needed for the protection of the system.

Automated Meter Reading (AMR) System Conversion: Phased implementation of automated (radio) meter reading. AMR is an acronym referring to the reading of meters using a system of communication (such as radio) to communicate between the meters and the unit performing the "read". This would enable a smaller number of meter readers to repair/troubleshoot all of utility's meters, thereby freeing up personnel for other duties. It will require a significant funding commitment over time, as each meter will require either change-out or adaptation.

Water Treatment Plant Renovations:

- **Back-up Diesel Pump –** If there is an electrical problem at the water treatment plant or if the switchgear fails, a diesel-fueled pump would provide enough pumping capacity to keep the distribution system from completely shutting down.
- **Upgrade Water Plant Filter Venturis** – Currently, the venturis are rated at eighteen million gallons per day. To increase the production capacity of the plant, the venturis assemblies need to be upsized.
- **Electrical System Upgrade** – The majority of the existing water treatment plant was built more than 30 years ago. Technological improvements now control a majority of the plant. Manual devices have been upgraded to automatic devices, and computers monitor portions of the vast treatment process. The original building's electrical service was not designed for this power consumption. Certain circuits need to be upgraded to handle the existing and future demands.

Elevated Storage Tanks: The existing tanks were located to accommodate our present system. With the expansion of the water system to supply a larger service area, the need for additional storage will be necessary. This will help buffer high-demand periods at the Water Plant, correct pressure problems, and provide fire

protection. Tanks will be needed in the near future along both the Highway 70 and Highway 29 corridors as demand grows.

Chemical Storage Tanks: Additional fluoride and brine tanks are needed at the Water Treatment Plant to allow extra capacity and to take advantage of discount pricing on bulk delivery.

Sewer Improvements

Annexation: Annexation became effective June 30, 2007 for the Old Mocksville/Hawkinstown Road and Camp/Harrison Road areas. Sewer line installation will be completed in FY09. Salisbury-Rowan Utilities (SRU) has committed to providing both public necessity and public convenience water to serve areas within the annexation area where service was requested.

Wastewater System Security: Needed improvements to achieve compliance with state and federal anti-terror recommendations related to infrastructure protection. The Vulnerability Assessment mandated by the EPA in FY04 identified utility sites where security needs to be improved.

Inflow & Infiltration (I&I) Reduction: Repair of aging infrastructure to be in compliance with state and federal standards after being identified through regular, mandated inspections. I&I is a significant problem, as it taxes existing treatment plant and lift station capacity and also causes occasional overflows and spills. Lines identified by SRU staff may be targeted for major repair or replacement using this funding.

Emergency Generators: Currently, many of the sewer lift stations do not have emergency back-up power generation. Having stand-by power or having connections to mount a portable generator would allow the lift stations to operate without significant interruption.

Elimination of the Biosolids Land Application Program: With environmental regulations becoming more stringent and the decreasing availability of farmland in this county, SRU is exploring the opportunities of turning the production of biosolids into a "Class A" fertilizer that has no regulatory requirements. This program would consist of:

- Heat dryers at the Town Creek and Grants Creek Wastewater Treatment Plants. These dryers "superheat" the residuals and eliminate virtually all moisture in the final product, with a resultant 5/2 reduction in volume.
- A conveyor system to move the product from the plant to a storage pad.
- A sludge thickener to make the process more efficient by removing as much moisture as possible before the product is entered into the dryers.

Wastewater Treatment Plant Equipment Replacement Projects:

- **Waste Pumps:** Re-plumbing and replacement of existing waste pumps at the existing facilities to accommodate an emergency pump-around solution while maintaining standard plant output. The current pumping system does not allow varying pump rates. New pumps would allow the operator to pump 24 hours per day at lower rate. Re-plumbing would allow the operator to have redundant systems and additional operating capacity.
- **Grant Creek WWTP (GCWWTP) Aeration Basin Rehabilitation:** Rehabilitation of existing aeration basin at GCWWTP including four new aerators and six new mixers.
- **Screw Pumps Replacement:** Replacing ten old screw pumps at both Town Creek and Grant Creek.
- **Digester Aeration Replacement:** Replacement of existing TCWWTP Digester Aeration. Existing digester was installed when the plant was originally built.

I-85 Corridor Outfall Line: For economic development, Salisbury-Rowan Utilities will be partnering with Rowan County to extend sewer service along the I-85 corridor. This project will open development opportunities in central and southern Rowan County. The cost of this $6.5 million project will be split equally with Rowan County. Construction should be completed in FY10.

Plant Capacity Expansion: The Town Creek and Grant Creek Wastewater Treatment trains have a combined effluent discharge of 12.5 MGD. Now that the water treatment plant is completed, we have focused on improvements needed at the wastewater treatment plants. The study was commissioned to determine what upgrades were needed to extend the operations and maximize the current plants. The future plans include:

Grant Creek Wastewater Treatment Plant:

- A rotary drum thickener would be added in the process to further thicken the sludge, thereby reducing the processing necessary at the residual belt filter press.

Town Creek Wastewater Treatment Plant:

- Rehabilitation of existing clarifiers at Town Creek WWTP. These clarifiers have not had any major rehabilitation since they were installed in 1965. Replacement of the existing plate-frame press with a belt-filter press like the one at Grant Creek.

Sewer Line Renovations: In addition to routine sewer line repairs performed annually, some line renovations are needed within the small and moderately-sized trunk lines in the system.

SCADA Upgrades: There are several sewer lift stations that do not have any monitoring system on them. The majority of these installations are located in the Town of Spencer. A fiber optic cable has been run to allow these lift stations to be connected. This funding will complete the project by installing the necessary communication boards in each lift station and connect them to the fiber optic network.

Town Creek Access Road: Currently, Heiligtown Road is the only point of access to the Town Creek Wastewater Treatment plant. This road is residential and SRU must use this road to operate tanker trucks and other heavy equipment on a daily basis. An access road is proposed to enter the plant from the south to avoid the residential neighborhood.

Impact on Operations in Water/Sewer Fund *- These capital improvements will not have an adverse impact on the operating costs of the Water and Sewer Fund. Currently, no additional staffing is proposed due to any CIP project. The proposed improvements are needed for upgrading aging infrastructure, providing services to new areas, equipping the system with backup and meeting mandates from both state and federal agencies.*

Debt service requirements for the CIP are calculated in the Water/Sewer rate structure. The City will issued debt to pay for its share of the WWTP Improvement Project during FY2009-10. Utility rates, including operations and debt service for residential customers, are proposed to increase an average of 4.57% in FY2009-10.

Fiber Optic Network Fund CIP

The Fiber Optic Network Fund's CIP is based on the financial feasibility study for the next five years. No additional capital expenditures are projected for the next two years beyond that funded through a debt issue. The City issued $33.5 million in debt to construct and purchase the assets needed to start a Fiber to the Home network and fund working capital, capitalized interest, and debt service fund.

Impact on Operations in Fiber Optic Network Fund *- These capital improvements will not have an adverse impact on the operating costs of the Fund based on the feasibility model. Currently, no additional staffing is proposed due to any CIP project. The proposed improvements are needed to continue expanding to additional customers and update equipment.*

CAPITAL IMPROVEMENT PROGRAM (FY2010-14)
GENERAL FUND SCHEDULE

PROJECT DESCRIPTION ($ 000's)	PROPOSED FUNDING SOURCE	TOTAL PROJECT COST FY2010-14	FIVE YEAR SCHEDULE (FY10 - FY14) 2009-10	2010-11	2011-12	2012-13	2013-14
Roof Replacements & Repair	General Fund	$ 634	$ 275	$ 71	$ 93	$ 195	$ -
HVAC Replacements & Repair	General Fund	752	225	310	16		201
City Hall & GX Fitness Building							
Front Entrance Improvements	General Fund	20			20		
Replace Flooring in Council Chambers	General Fund	40			40		
Demolish GX Fitness Building	General Fund	100				100	
Replace Carpet in Common Areas	General Fund	40				40	
City Office Building							
Install Fire Escape for Upper Floors	General Fund	18	-	18	-	-	-
First Floor Renovation	General Fund	120		120			
Enclose Second Floor Stairwell	General Fund	25			25		
Replace Carpet on Third Floor	General Fund	13			13		
The Plaza							
Awning replacements	General Fund	20				20	
Paint Cornice	General Fund	35				35	
Elevator Upgrades	General Fund	15				15	
Foundation Wall Waterproofing	General Fund	34	34	-	-	-	-
Backflow Prevention Solution	General Fund	20	20	-	-	-	-
Exterior Wall Repair	Debt Issuance	1,250			1,250		
Tuck Point and Water-proof Exterior	General Fund	50				50	
Police Department							
Purchase Ketner Property	General Fund	160			160		
Evidence Area Fencing	General Fund	15	15	-	-	-	-
Fire Department							
Station 51 - Buy Adjacent Property	General Fund	529				529	
Station 51 - Construct Drafting Pit	General Fund	130				130	
Station 53 - Window Replacement	General Fund	15	15	-	-	-	-
Station 53 - Building Replacement	Debt Issuance	1,550			1,550		
Station 54 - PlymoVent Installation	General Fund	25	25	-	-	-	-
Station 55 - Purchase Land	General Fund	120			120		
Station 55 - Build New Station	Debt Issuance	1,500					1,500
Telecommunications							
Grounding Upgrade at Tower Site	General Fund	25	25				
Grounding on Telecomm Lines	General Fund	25	25				
Waterproof Building at Tower Site	General Fund	15			15		
Re-gravel Drive to Back of Site	General Fund	10				10	
Back-up 500 Gallon Fuel Tank at Site	General Fund	20					20
Upgrade 800 Trunking System	Debt Issuance	3,000			3,000		
Public Services							
Streets - Salt/Equipment Storage Bldg.	Debt Issuance	300					300
Landscape - Buy Adjacent Parking Lot	General Fund	24			24		
Fleet - Water-Oil Separator	General Fund	15	15	-	-	-	-
Fleet - Building Replacement	Debt Issuance	1,750		1,750			
Parks and Recreation							
Buy Land & Develop Town Creek Park	Debt Issuance	2,050			120	180	1,750
Park & Facility Repair & Replacement	General Fund	89	89	-	-	-	-
TOTAL GENERAL FUND		$ 14,553	$ 763	$2,269	$6,446	$1,304	$3,771

CAPITAL IMPROVEMENT PROGRAM (FY2010-14)
WATER AND SEWER FUND SCHEDULE

PROJECT DESCRIPTION ($ 000's)	PROPOSED FUNDING SOURCE	TOTAL PROJECT COST FY2010-14	FIVE YEAR SCHEDULE (FY10 - FY14) 2009-10	2010-11	2011-12	2012-13	2013-14
WATER IMPROVEMENTS							
Roof Replacements	W/S/ Fund	$ 135	$ 125	$ 10	$ -	$ -	$ -
HVAC Replacements	W/S/ Fund	142	112	-	8	15	7
Annexation Area	Revenue Bonds	1,008	1,008	-	-	-	-
Security Improvements	W/S Fund	215	-	215	-	-	-
River Pump Station Improvements	W/S Fund	150	-	-	-	-	150
New River Pump Station Design	Revenue Bonds	750	-	-	-	-	750
Emergency Generators	W/S Fund	1,180	-	590	590	-	-
Granite Quarry Secondary Line	W/S Fund	500	-	-	-	-	500
Raw Water Reservoir (30 MG)	Revenue Bonds	6,000	-	-	-	3,000	3,000
Automated Meter Reading	Revenue Bonds	3,000	-	-	1,000	1,000	1,000
Treatment Plant Renovation	Revenue Bonds	2,900		2,000	900	-	-
Elevated Storage Tanks	Revenue Bonds	4,000		-	-	-	4,000
Chemical Storage Tanks	Revenue Bonds	220	-	220	-	-	
TOTAL WATER IMPROVEMENTS		$ 20,200	$ 1,245	$3,035	$2,498	$ 4,015	$ 9,407
SEWER IMPROVEMENTS							
Annexation	Revenue Bonds	$ 2,017	$ 2,017	$ -	$ -	$ -	$ -
Security Improvements	W/S Fund	176	-	176		-	-
I&I Reduction	W/S Fund	500	100	100	100	100	100
Emergency Generators	W/S Fund	230	-	230	-	-	-
Elimination of Land Application	W/S Fund	1,800	-	-	800	-	1,000
Plant Equipment Replacement	Revenue Bonds	2,740	-	300	600	1,840	-
I-85 Corridor Outfall Line	Revenue Bonds/ Rowan County	6,500	6,500	-	-	-	-
Plant Capacity Expansion	Revenue Bonds	8,200	-	-	2,000	5,200	1,000
Sewer Line Renovations	W/S Fund	320	-	120	200	-	-
SCADA Upgrades	W/S Fund	150	150	-	-	-	-
Town Creek Access Road	W/S Fund	200	-	-	-	200	-
TOTAL SEWER IMPROVEMENTS		$ 22,833	$ 8,767	$ 926	$3,700	$ 7,340	$ 2,100
TOTAL WATER / SEWER IMPROVEMENTS		$ 43,033	$10,012	$3,961	$6,198	$11,355	$11,507

CAPITAL IMPROVEMENT PROGRAM (FY2010-14)
FIBER OPTIC NETWORK FUND SCHEDULE

PROJECT DESCRIPTION ($ 000's)	PROPOSED FUNDING SOURCE	TOTAL PROJECT COST FY2010-14	FIVE YEAR SCHEDULE (FY10 - FY14) 2009-10	2010-11	2011-12	2012-13	2013-14
FIBER NETWORK IMPROVEMENTS							
Network Construction Costs	FON Fund	$ 712	$ -	$ -	$ 329	$ 252	$ 131
TOTAL FIBER IMPROVEMENTS		$ 712	$ -	$ -	$ 329	$ 252	$ 131