



**CITY OF HAMPTON  
DEPARTMENT OF PUBLIC WORKS  
WASTEWATER OPERATIONS DIVISION**

**STRATEGIC PLAN  
2005-2009**

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2005

2006

2007

2008

2009

2010

# STRATEGIC PLAN

2005-2009

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# INTRODUCTION

## *The Wastewater Operations*

*Strategic Plan is a comprehensive document, outlining and prioritizing all planned work for the division from fiscal years 2005 to 2009. The plan provides a road map for both employees and interested citizens of the City of Hampton.*

*Our goal in preparing the plan is to provide the highest-quality, most cost-effective service to safeguard the health of Hampton's citizens and to protect our region's waterways.*

## THE STRATEGIC PLAN OVERVIEW

- **SECTION I** gives an overview of the Wastewater Operations Division, which operates, maintains, repairs and extends the sanitary sewer system for the City of Hampton.
- **SECTION II** provides a detailed schedule of maintenance projects to be completed in the next five years. These include rehabilitation of aging infrastructure, ongoing repairs and continued upgrades of computer-based maintenance systems.
- **SECTION III** outlines all new construction projects for 2005-2009, providing details on project costs and estimated time for completion as well as site maps.
- **SECTION IV** describes plans for the construction of new pumping stations and the installation of auxiliary equipment including emergency pumps, flow meters and pressure transducers.
- **SECTION V** lists specific capital equipment to be replaced in 2005-2009 and itemizes costs.
- **SECTION VI** provides an overview of the division's revenue sources and budget requirements, and shows detailed budgets for each of the five fiscal years covered by the Strategic Plan.

*Important Note:* We have prepared the Strategic Plan using the most accurate and reliable information possible. However, the schedules outlined are subject to change in light of funding restrictions and/or lack of resident participation in extension projects.

# SECTION I

## OVERVIEW OF OPERATIONS

The Wastewater Operations Division of the Department of Public Works operates, maintains, repairs and extends the sanitary sewer system for the City of Hampton. The system collects sewage from commercial and residential properties in Hampton and pumps the sewage to the Hampton Roads Sanitation District (HRSD) for treatment.

We employ 69 permanent, full-time staff members who are responsible for overseeing more than 360 miles of sewer mains, five miles of force mains and 106 wastewater pumping stations. These facilities provide sewer services to more than 126,000 customers in Hampton.

### WASTEWATER DIVISION SECTIONS

The division consists of four sections: Management, Pumping Stations, Construction, and Inflow and Infiltration.

Our **Pumping Station Section** monitors, maintains and services existing pumping stations and constructs new facilities. These stations consist of pumps, valves, piping, wet wells, dry wells, buildings and grounds, mechanical, electrical and electronic controls, alarms systems and telemetry equipment. Personnel in this section also monitor and maintain more than 30 recording flow meters and are currently installing rain gauges. These gauges serve as an analysis tool to enhance the reliability of our services and improve the performance of existing stations, as well as to project future actions and policies.

The goal of the **Inflow and Infiltration Section** is to prevent sewage overflows that have a negative

environmental impact on local waterways and ultimately the Chesapeake Bay. Our employees in this section use advanced technology in the form of computer controlled data-capturing software and robotically controlled cameras. The data we collect is used to evaluate Hampton's aging sewer system in order to prioritize rehabilitation and repair efforts for manholes, mainlines, laterals and pumping station wet wells. This equipment allows us to capture data in a rapid and efficient manner to fulfill the requirements of the Department of Environmental Quality's 2002 Consent Order (see Appendix A).

Our **Construction Section** provides both new sewer extensions and repairs to the existing infrastructure of pipelines and 10,000-plus manholes within the City of Hampton. We currently extend new sewer service to approximately 60 customers each year and repair and or replace sections of existing main lines and lateral pipelines for hundreds of customers.

### FUNDING SOURCES

Wastewater Operations operates financially as an enterprise fund independent of the City of Hampton's General Fund. Our annual budget is approximately \$5,400,000, generated from sewer use fees and new connection fees. Wastewater user fees are based on water usage and are collected from residential and/or commercial accounts through the Newport News Waterworks' bimonthly billing statements. New connection fees are appropriated by City Council when residents convert from septic to sewer systems. These fees supplement the funding of new sewer extension projects.



## SECTION II

# SYSTEM MAINTENANCE

*Hampton's sewer system infrastructure is one of the oldest in the area, dating back to the early 1900s. Most of the system was installed in the 1940s and '50s. With the age of much of the infrastructure now approaching sixty years or more, we will need to increase maintenance intervals over the next ten years. In addition, we anticipate an increase of approximately 300 customers over the next five years, adding to our maintenance workload.*

*The most effective maintenance program is one that focuses on prevention through planning and scheduled maintenance.*

*This section outlines our maintenance plan and associated costs over the life of the Strategic Plan.*

### COMPUTERIZATION

To support the division's goal of developing an optimally effective maintenance plan, Public Works management had the foresight to approve a computerized Infrastructure Management System (GBA) that tracks system maintenance and associated costs. This information provides a basis for us to make repair and/or replacement decisions regarding aging infrastructure. With the development of sophisticated design systems, we can add new information into the computer database accurately and with minimal personnel time. The system also enables us to respond to mandated Federal requirements.

### ONGOING MAINTENANCE PROJECTS

Wastewater Operations carries out ongoing maintenance projects to insure that Hampton's sewer system is in optimal condition and to preclude forced outages. The ongoing projects listed below are scheduled around other commitments:

- Cleaning
- Inspection
- Rehabilitation of Mainline Sewers
- Rehabilitation of Manholes
- Repair
- Installation of Individual Laterals
- Pumping Station PM's

### SPECIFIC PROJECTS

Construction projects consist primarily of moving main lines that are located in alleyways into streets to increase serviceability to the infrastructure. Inflow and infiltration projects are driven by the DEQ Consent Order and primarily consist of infrastructure assessments by flow areas and manhole rehabilitations. The need for pumping station rehabilitations is determined by assessments made during routine station maintenance.

<b>CONSTRUCTION PROJECTS</b>	<b>FISCAL YEAR</b>	<b>COST</b>
Shenandoah Road between Shell Road & Victoria Boulevard	2005	\$ 110,000
	<i>Annual Total</i>	<i>\$110,000</i>
Algonquin Road	2006	\$ 82,500
Hampton Roads Avenue	2006	\$ 48,750
Seminole Road	2006	\$ 94,500
	<i>Annual Total</i>	<i>\$225,750</i>
Atlantic & Seaboard	2007	\$ 150,000
	<i>Annual Total</i>	<i>\$150,000</i>
Reynolds Drive	2008	\$ 48,750
Connie & Mary Street	2008	\$ 48,750
	<i>Annual Total</i>	<i>\$ 97,500</i>
North Mallory Street	2009	\$ 45,000
Manford Drive	2009	\$ 48,750
	<i>Annual Total</i>	<i>\$ 93,750</i>
	<b>Five Year Total</b>	<b>\$677,000</b>

<b>I &amp; I PROJECTS</b>	<b>FISCAL YEAR</b>	<b>COST</b>
Force main tie in Rehab	2005	\$ 62,109
Aberdeen Road Manhole Replacement	2005	\$ 26,680
	<i>Annual Total</i>	<i>\$ 88,789</i>
PS 001 Manhole Rehab	2006	\$ 35,000
PS 101 Manhole Rehab	2006	\$ 6,000
PS 102 Manhole Rehab	2006	\$ 55,000
PS 107 Manhole Rehab	2006	\$ 22,000
PS** Wet Well Rehab	2006	\$ 15,000
	<i>Annual Total</i>	<i>\$133,000</i>
PS 111 Manhole Rehab	2007	\$ 36,000
PS 112 Manhole Rehab	2007	\$ 7,000
PS 208 Manhole Rehab	2007	\$ 107,203
PS ** Wet Well Rehab	2007	\$ 26,000
PS ** Wet Well Rehab	2007	\$ 26,000
	<i>Annual Total</i>	<i>\$202,203</i>

<b>I &amp; I PROJECTS, cont'd</b>	<b>FISCAL YEAR</b>	<b>COST</b>
PS 208 Manhole Rehab	2008	\$107,203
PS 007 Manhole Rehab	2008	\$ 28,560
PS ** Wet Well Rehab	2008	\$ 17,500
	<b><i>Annual Total</i></b>	<b><i>\$153,263</i></b>
PS 011 Manhole Rehab	2009	\$ 76,000
PS 012 Manhole Rehab	2009	\$ 16,500
PS 013 Manhole Rehab	2009	\$ 11,500
PS 014 Manhole Rehab	2009	\$ 12,500
PS ** Wet Well Rehab	2009	\$ 17,500
PS ** Wet Well Rehab	2009	\$ 17,500
	<b><i>Annual Total</i></b>	<b><i>\$151,500</i></b>
	<b>Five Year Total</b>	<b>\$728,755</b>

<b>PUMPING STATION REHABS</b>	<b>FISCAL YEAR</b>	<b>COST</b>
PS 106 Rehab	2005	\$ 70,000
PS 112 Rehab	2005	\$ 25,000
PS 016 Rehab	2005	\$ 25,000
	<b><i>Annual Total</i></b>	<b><i>\$120,000</i></b>
PS 103 Rehab	2006	\$ 35,000
PS 135 Rehab	2006	\$ 70,000
	<b><i>Annual Total</i></b>	<b><i>\$105,000</i></b>
PS 001 Rehab	2007	\$ 90,000
PS 117 Rehab	2007	\$ 70,000
	<b><i>Annual Total</i></b>	<b><i>\$160,000</i></b>
PS 041 Rehab	2008	\$90,000
	<b><i>Annual Total</i></b>	<b><i>\$90,000</i></b>
PS 021 Rehab	2009	\$40,000
	<b><i>Annual Total</i></b>	<b><i>\$40,000</i></b>
	<b>Five Year Total</b>	<b>\$515,000</b>

\*\* As stated above, pumping station assessments will be performed to determine what station wet wells will need to be rehabilitated. Pumping station numbers will be added to the chart on a priority basis.

# SECTION III CONSTRUCTION PROJECTS

*For the purpose of the Strategic Plan, "Sanitary Sewer Extensions" are defined as those projects designed and constructed by the City of Hampton. Our goal is to install public sewer lines to all areas that are currently not served by the City of Hampton. Thus the majority of the Wastewater sewer projects planned for fiscal years 2005-2009 involve unsewered areas and are based on actual resident participation.*

*This section lists all planned construction projects for the next five years. It provides specific information for each project, including project area, number of units involved, the estimated project total cost and the estimated time to complete the project. Its also contains the proposed construction maps for each project.*

## SANITARY SEWER EXTENSION PROJECTS

FY	AREA	UNITS	COST	COST/ UNIT
2005	Windmill Point Road*	40	\$240,000	\$ 6,000
	Windmill Point Road Pumping Station/Force Main*	1	\$185,000	
2006	Hall Road	13	\$150,000	\$ 11,538
	Old Buckroe Road Pumping Station/Force Main**	1	\$100,000	
2007	Old Buckroe Road**	20	\$ 80,000	\$ 4,000
2008	Brittain Lane	18	\$225,000	\$ 12,500
2009	Saunders Road West	13	\$100,000	\$ 7,692
	Betz Lane	22	\$ 50,000	\$ 2,273

## PROJECTS BEYOND FIVE YEARS (SEE APPENDIX B)

AREA	UNITS	COST	COST/ UNIT
Harris Creek Road Extension**	32	\$320,000	\$10,000
Harris Creek Road Pumping Station/Force Main	1	\$250,000	
Big Bethel Road Phase III	5	\$ 50,000	\$10,000

\* construction contract has been awarded  
\*\* currently under design

# FISCAL YEAR 2005 SANITARY SEWER EXTENSION PROJECT

<b>PROJECT AREA</b>	<b>WIND MILL POINT GRAVITY MAIN</b>
Approximate Number of Units Involved	40
Estimated Project Cost	\$240,000
Project Time	180 Days
Total Footage	1,940

# FISCAL YEAR 2005 SANITARY SEWER PUMPING STATION PROJECT

<b>PROJECT AREA</b>	<b>WIND MILL POINT PUMPING STATION/FORCE MAIN</b>
Estimated Project Cost (City-Funded)	\$185,000
Project Time	180 Days
Total Footage	2,400

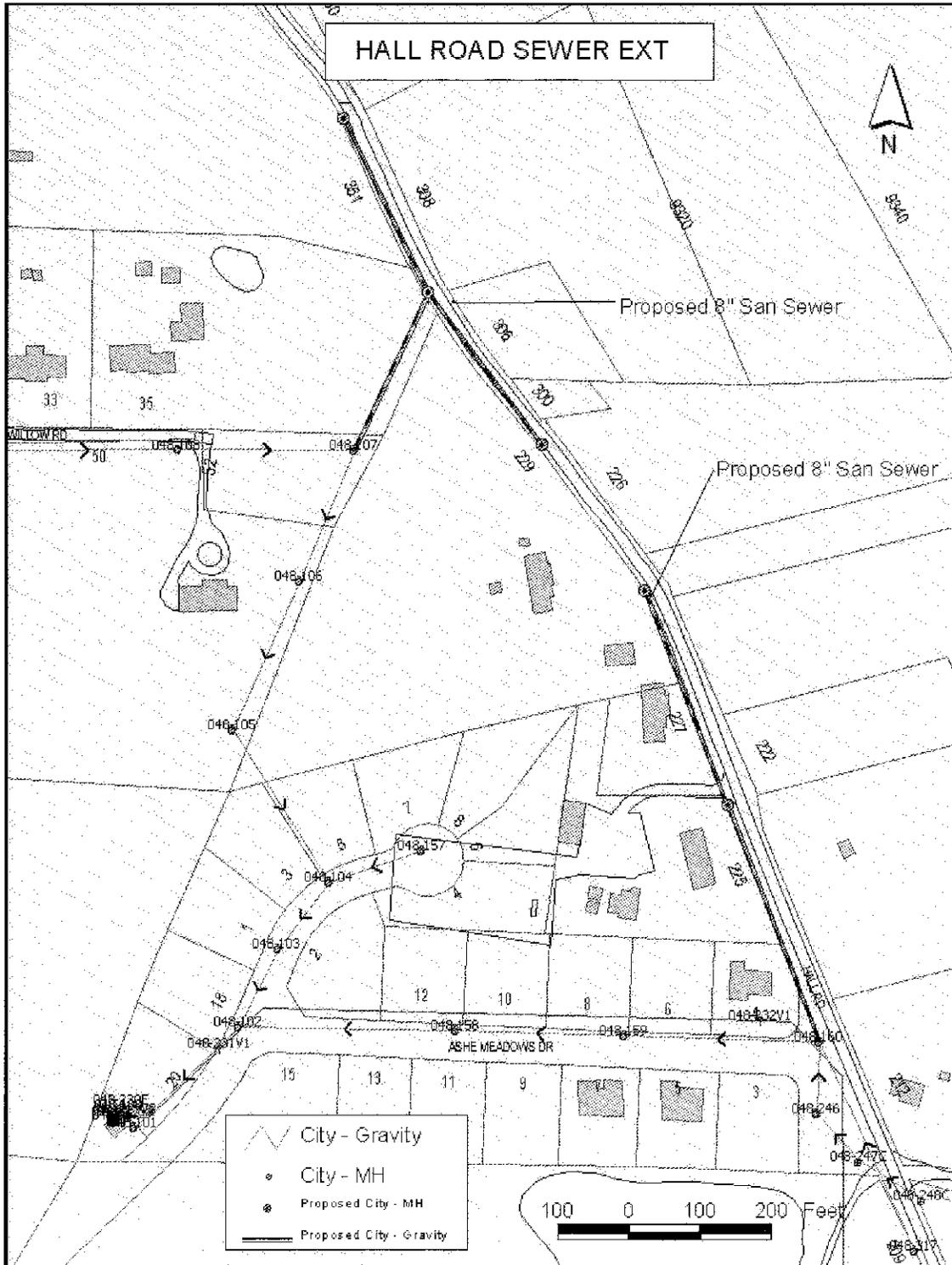


# FISCAL YEAR 2006 SANITARY SEWER EXTENSION PROJECT

## PROJECT AREA

## HALL ROAD

Approximate Number of Units Involved	13
Estimated Project Cost	\$150,000
Project Time	120 Days
Total Footage	1,440



# FISCAL YEAR 2006 SANITARY SEWER PUMPING STATION PROJECT

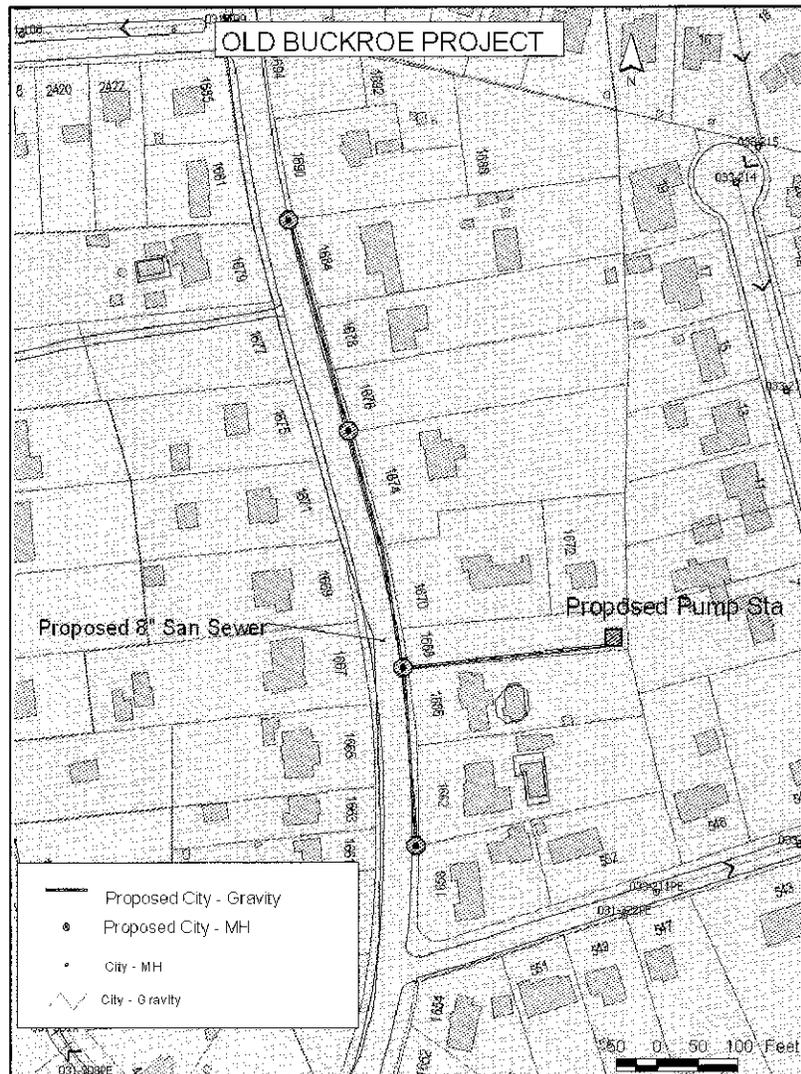
PROJECT AREA	OLD BUCKROE ROAD PUMPING STATION/FORCE MAIN
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Estimated Project Cost (City-Funded)	\$100,000
Project Time	180 Days
Total Footage	Information not yet available

# FISCAL YEAR 2007 SANITARY SEWER EXTENSION PROJECT

PROJECT AREA	OLD BUCKROE ROAD
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Approximate Number of Units Involved	20
Estimated Project Cost	\$80,000
Project Time	120 Days
Total Footage	1,000

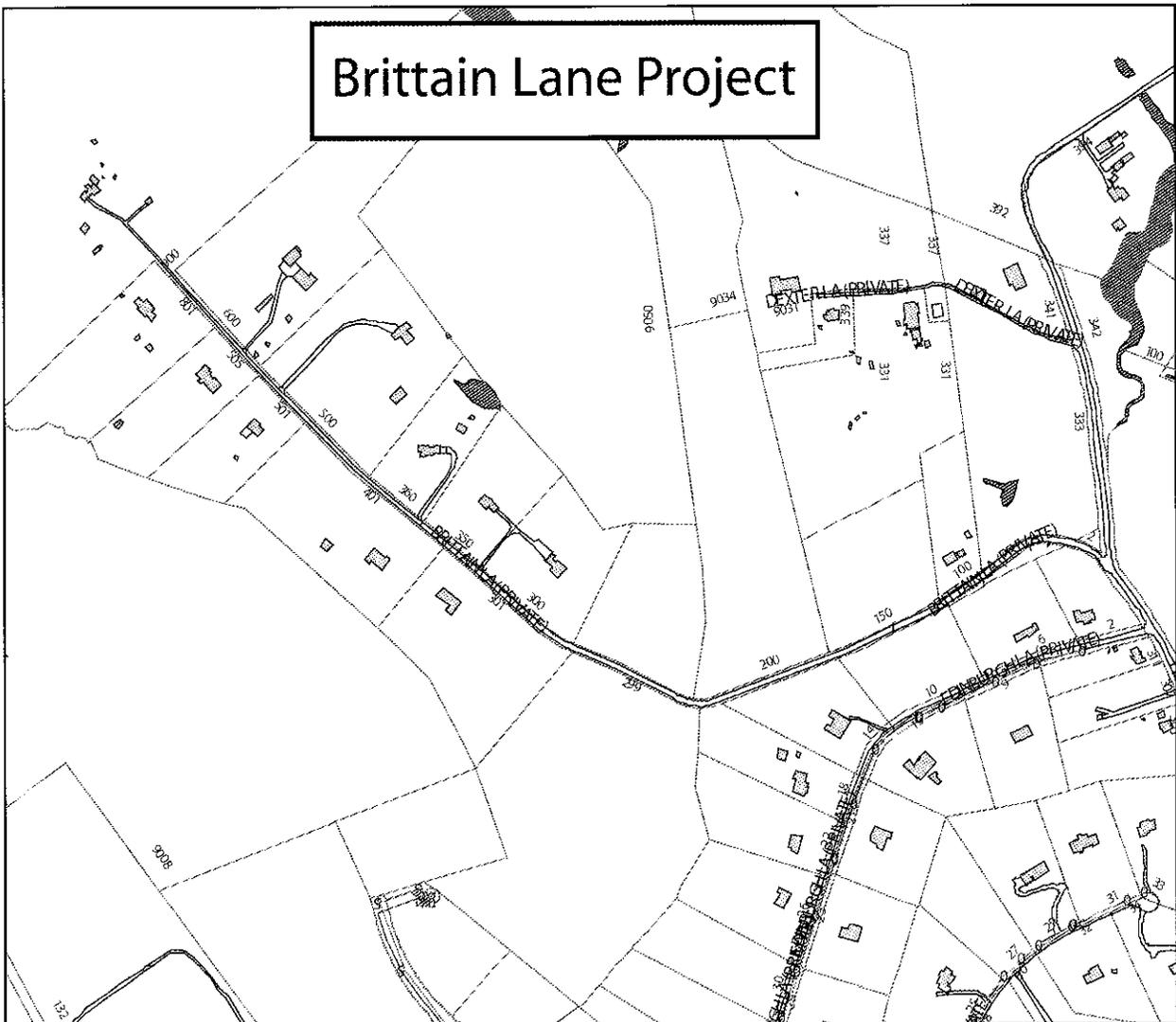


# FISCAL YEAR 2008 SANITARY SEWER EXTENSION PROJECT

## PROJECT AREA

## BRITTAIN LANE

Approximate Number of Units Involved	18
Estimated Project Cost	\$225,000
Project Time	150 Days
Total Footage	3,000

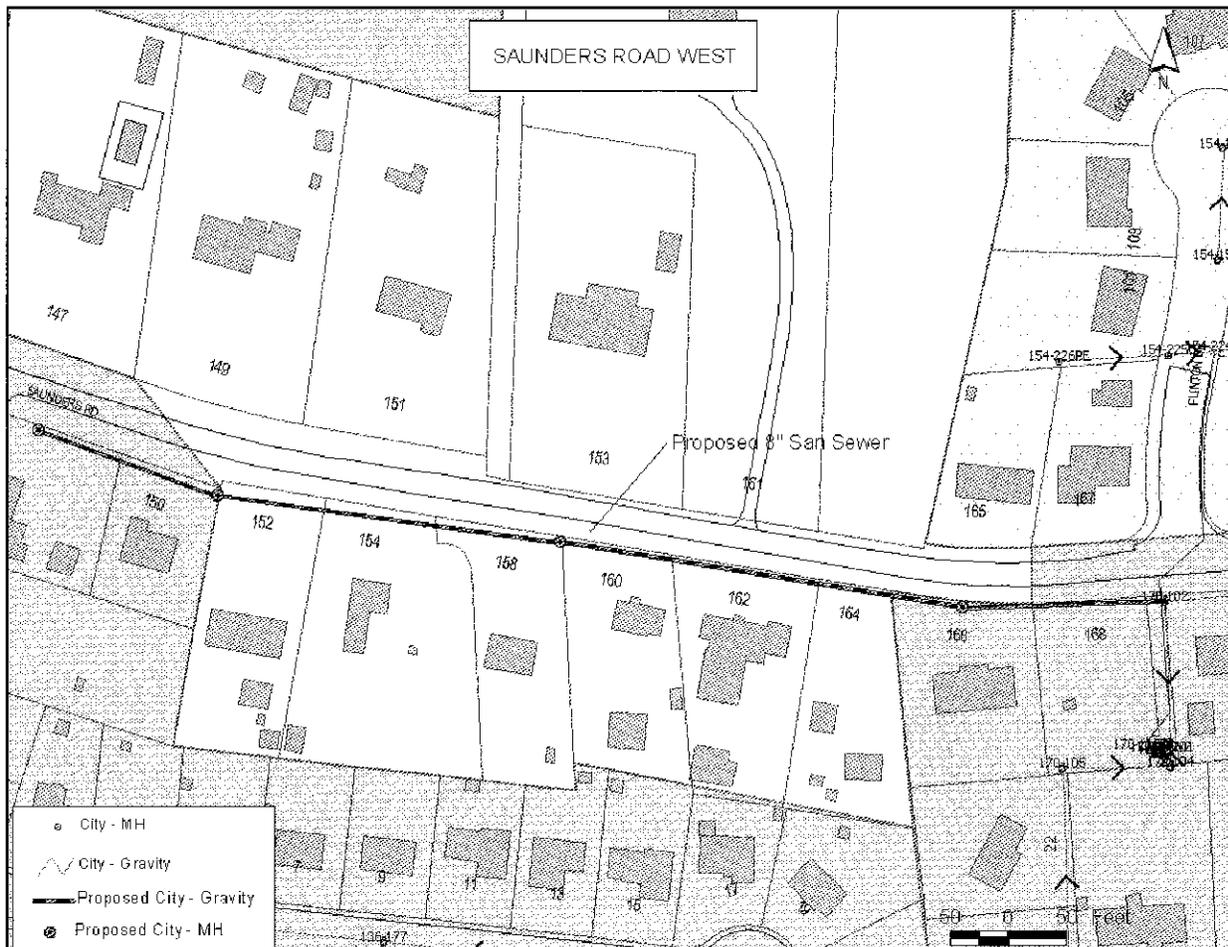


# FISCAL YEAR 2009 SANITARY SEWER EXTENSION PROJECT

## PROJECT AREA

## SAUNDERS ROAD WEST

Approximate Number of Units Involved	13
Estimated Project Cost	\$100,000
Project Time	150 Days
Total Footage	1,000

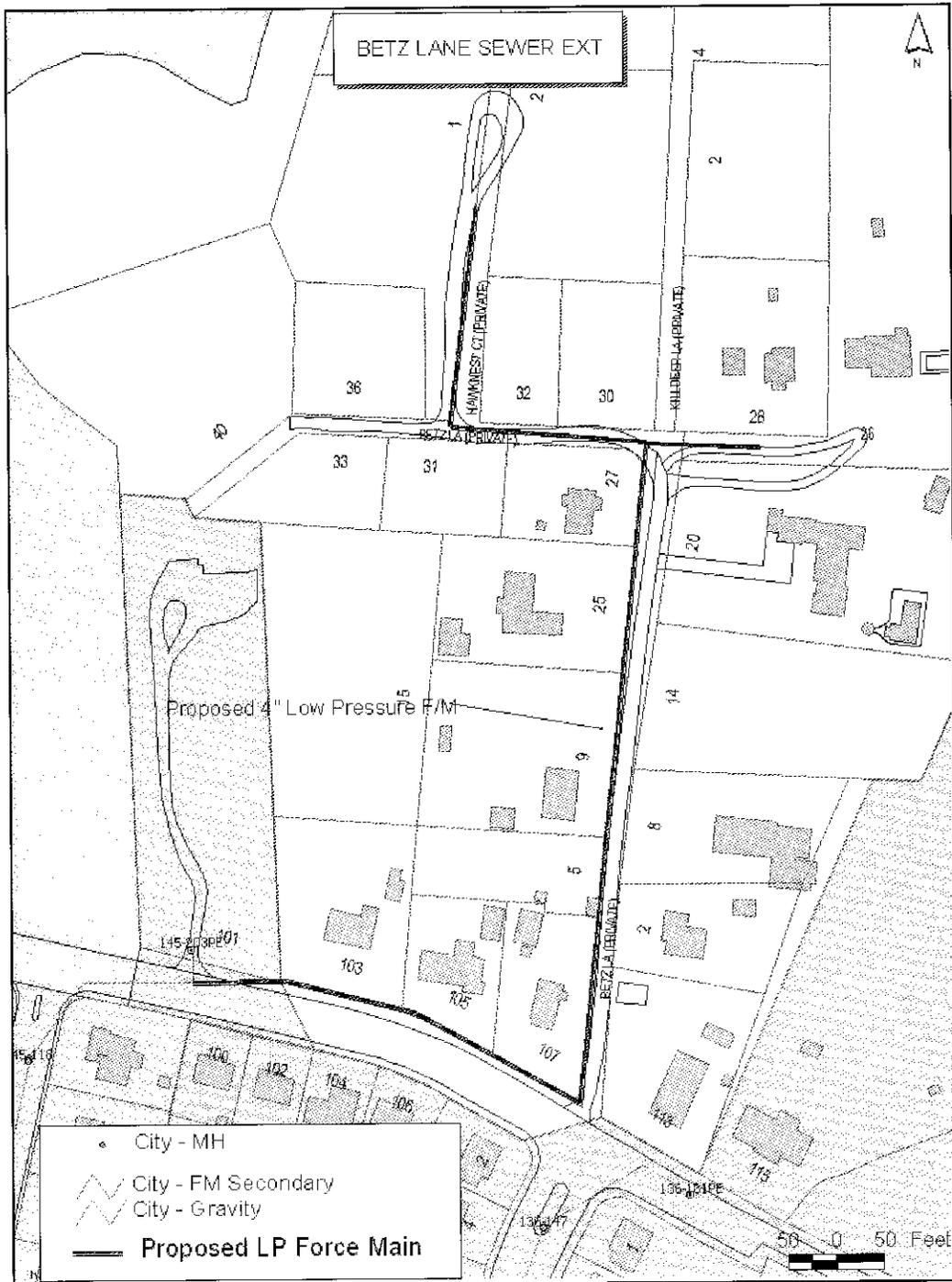


# FISCAL YEAR 2009 SANITARY SEWER EXTENSION PROJECT

## PROJECT AREA

## BETZ LANE

Approximate Number of Units Involved	22
Estimated Project Cost	50,000
Project Time	120 Days
Total Footage	1,300



# SECTION IV PUMPING STATIONS

*The Wastewater Operations Division currently operates 106 wastewater pumping stations, with six new stations constructed in the past five years. Based on past experience, we have projected the need to construct six new pumping stations in fiscal years 2005–2009. Some stations will be needed to serve areas converting from septic systems, and others will be developer-driven (new subdivisions, commercial development, etc.).*

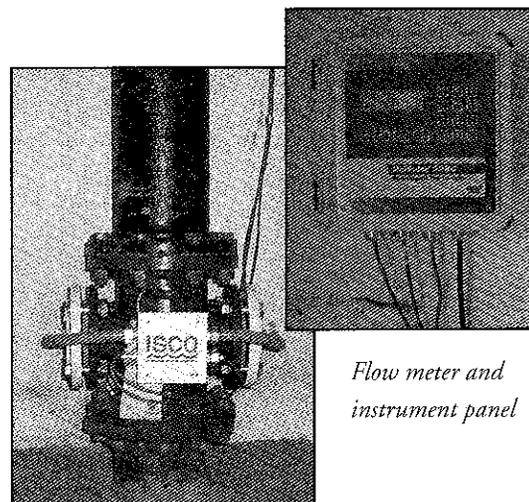
*In addition, we plan to purchase state-of-the-art equipment such as flow meters, pressure transducers and emergency pumps to provide optimal service to Hampton's citizens.*

## NEW PUMPING STATIONS CITY AND DEVELOPER DRIVEN

2005	King Kove (developer)	(\$70,000)
2005	Wind Mill Point (city)	\$185,000
2006	Old Buckroe (city)	\$100,000
2006	Mary Ann Drive (developer)	(\$70,000)
2007	Projected Station	\$ 75,000
2008	—	-0-
2009	Projected Station	\$ 75,000
<b>City Total</b>		<b>\$435,000</b>

## FLOW METERS AND PRESSURE TRANSDUCERS

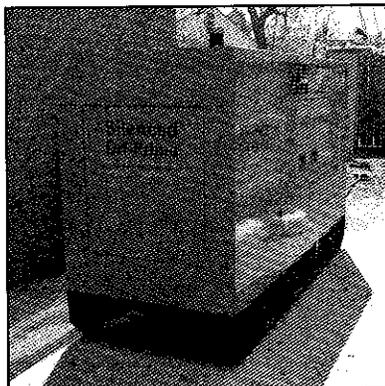
Flow meters are used to better evaluate the amount of sewage moving through a specific flow area. This evaluation includes inflow and infiltration studies taking place during both dry weather and rain events. Flow meters also assist maintenance crews in troubleshooting and maintaining a pumping station's electrical and mechanical equipment. In conjunction with an updated SCADA (Supervisory and Control Data Acquisition) system, flow meters and pressure transducers (on pressure main pumping stations) provide Wastewater personnel with a real-time snapshot of a selected flow area. This information is vital in preventing sewage overflows and in maintaining our sewage infrastructure.



*Flow meter and instrument panel*

## FLOW METER/TRANSDUCER SCHEDULE

PUMPING STATION	FY	SIZE	COST
137	2005	8"	\$ 16,300
021	2005	6"	\$ 14,000
034	2005	4"	\$ 9,800
035	2005	6"	\$ 14,000
043	2005	6"	\$ 14,000
047	2005	6"	\$ 14,000
113	2005	8"	\$ 16,300
116	2005	8"	\$ 16,300
140	2005	8"	\$ 16,300
<hr/>			
153	2006	8"	\$ 16,300
022	2006	6"	\$ 14,000
023	2006	8"	\$ 16,300
121	2006	6"	\$ 14,000
126	2006	8"	\$ 16,300
135	2006	8"	\$ 16,300
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141	2007	8"	\$ 16,300
151	2007	8"	\$ 16,300
024	2007	4"	\$ 9,800
044	2007	6"	\$ 14,000
130	2007	6"	\$ 14,000
<hr/>			
142	2008	8"	\$ 16,300
154	2008	8"	\$ 16,300
143	2008	8"	\$ 16,300
038	2008	4"	\$ 9,800
<hr/>			
117	2009	6"	\$ 14,000
125	2009	6"	\$ 14,000
<hr/>			
<b>Total</b>			<b>\$381,300</b>



## EMERGENCY BYPASS PUMPS

Emergency bypass pumps keep the pumping station operational during extreme and/or emergency conditions — for example, excessive force main pressures due to major rain events and/or loss of power. Some of this emergency equipment requires permanent installation, including controls and a protective building. The other emergency pumps required will be portable.

We selected the stations listed below for installation work because they either pump into a force main and/or they service large flow areas. Overflows in these situations would release a considerable amount of sewage into the surrounding environment.

PUMPING STATION	EMERGENCY PUMP	FY	COST
001	6" on skids (frees up portable)	2005	\$ 35,000
124	6" on skids (frees up portable)	2005	\$ 35,000
133	6" on skids (replace old unit)	2005	\$ 35,000
<hr/>			
141	6" on skids (replace old unit)	2006	\$ 27,000
011	6" on skids	2006	\$ 27,000
153	6" on skids	2006	\$ 35,000
154	6" on skids	2006	\$ 27,000
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123	6" on skids	2007	\$ 27,000
126	6" on skids	2007	\$ 27,000
151	6" on skids	2007	\$ 27,000
<hr/>			
135	6" on wheels	2008	\$ 30,000
137	6" on wheels	2008	\$ 30,000
145	6" on wheels	2008	\$ 30,000
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147	6" on wheels	2009	\$ 30,000
121	6" on skids	2009	\$ 27,000
143	6" on wheels	2009	\$ 30,000
144	6" on wheels	2009	\$ 30,000
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<b>Total cost (without buildings or hookups)</b>			<b>\$509,000</b>

*Permanently mounted  
auxiliary pump*

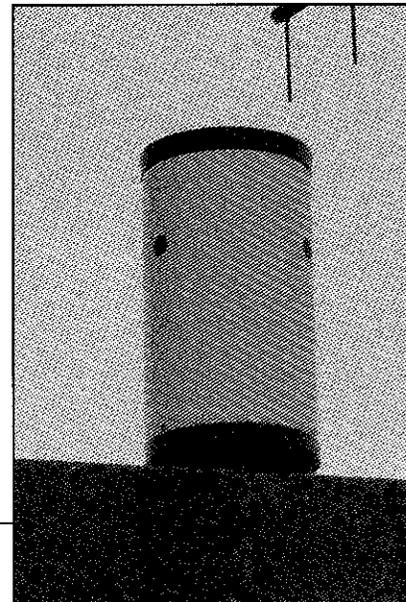
## RAIN GAUGES

Wastewater Operations personnel are installing rain gauges at various pumping stations throughout the City of Hampton. This will enable our staff to monitor the increase in flow during rain events. Monitoring will identify potential problematic pumping station areas. The data will be available through the existing SCADA alarm system.

PUMPING STATION	COST
017	\$ 1,200
004	\$ 1,200
102	\$ 1,200
031	\$ 1,200
047	\$ 1,200
32	\$ 1,200
036	\$ 1,200
147	\$ 1,200
103	\$ 1,200
124	\$ 1,200
<b>FY 05 TOTAL</b>	<b>\$12,000</b>

## WET WELL ASSESSMENTS

Wastewater Operations will conduct assessments in fiscal year 2005 on the 106 wet wells in the City of Hampton. We use the wet well assessments to identify hydrogen sulfide and other types of deterioration or damage. Selected criteria dictate whether a well needs to be rehabilitated.



*The rain gauge (above) monitors rainwater flow, sending signals through the SCADA system. A SCADA system antenna is pictured at left.*

# SECTION V EQUIPMENT REPLACEMENT

## FISCAL YEAR 2005

- Electrical Van (replacement for Vehicle 720) \$ 25,000
- Flat Bed Truck \$ 45,000
- Tandem Dump Truck (replacement for Vehicle 708) \$ 70,000

*Annual Total* \$140,000

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## FISCAL YEAR 2006

- Utility Truck \$ 50,000
- Stoppage Truck (replacement for Vehicle 760) \$111,000

*Annual Total* \$161,000

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## FISCAL YEAR 2007

- Utility Truck \$ 50,000
- Tandem Dump Truck \$ 70,000

*Annual Total* \$120,000

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## FISCAL YEAR 2008

- Backhoe (replacement for Vehicle 750) \$ 70,000
- Ecology Van (lateral inspections) (replacement for Vehicle 719) \$ 35,000
- Utility Truck \$ 50,000

*Annual Total* \$155,000

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## FISCAL YEAR 2009

- Loader \$ 75,000
- Pickup Truck \$ 35,000

*Annual Total* \$110,000

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# SECTION VI FINANCIAL INFORMATION

*The Strategic Plan is carefully designed so that the cost of all projected work falls within the parameters of Wastewater Operations annual operating budgets. As proposed, the Plan will cost approximately \$27,000,000 over the next five fiscal years.*

*Wastewater Operations uses a cash flow model to predict fund availability at the end of each year. This model is based on estimates of projected revenues and anticipated expenditures. The year-end cash position for each of the next five fiscal years (pp. 20–24) shows a surplus.*

## ANTICIPATED REVENUES

Funds for implementing the Extension Projects outlined in the Strategic Plan will be available from the following sources:

- Sewer User Fees
- Revolving Fund
- Resident Participation

**Sewer Use Fees.** Sewer User Fees fund the maintenance, repair and replacement of the City's sanitary sewer system. Fees are collected from all Newport News Waterworks residential and commercial customers through a bimonthly billing. The rate is set and approved by Hampton City Council each year. Currently the User Fee is \$1.07 per 100 cubic feet of water consumption (about 750 gallons) for all customers. We do not anticipate any rate increase over the life of the Strategic Plan. Consequently, our revenues should not change significantly.

**Revolving Fund.** Funds collected for new sewer connections (tap fees) are used to finance future extension projects in unsewered areas of Hampton. Tap fees are deposited in a sanitary sewer revolving fund, which is comprised solely of these fees.

Fees are calculated based on front footage. The typical fee is \$100 plus \$100 per foot of total frontage. If sewer is available, the front footage fee applies. For example, if the frontage of a property is 75 feet, the fee would total \$850. However, there are many cost variations depending on whether there is sewer service available on the street, the distance to the nearest available sewer main, and whether a connection point (the sewer tap) is available for connection. These issues are handled on a case-by-case basis.

A change has been proposed for fiscal year 2005 to amend the City Code provisions governing the sewer connection fee. Under the proposed change, the tap fee would be determined solely by the size of the user's water meter.

The proposed schedule of fees is:

5/8" meter	\$ 1,000
3/4" meter	\$ 1,200
1" meter	\$ 3,000
1 1/2" meter	\$ 5,000
2" meter	\$ 7,000
3" meter	\$ 9,000
4" meter	\$10,000
6" meter	\$13,000

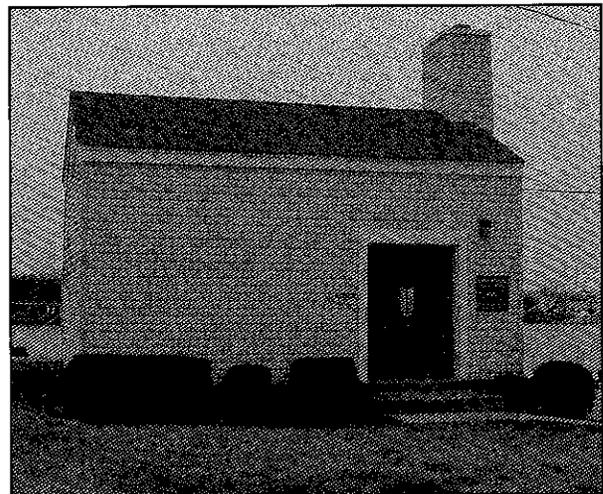
The minimum sewer connection fee for undeveloped residential properties will be equivalent to the  $\frac{5}{8}$ " water meter fee, and equivalent to the 1" meter fee for undeveloped commercial properties.

**Resident Participation.** For Hampton residents currently using septic systems, we allow a 50 percent reduction in the total cost for sewer connection in certain situations. This discount provides an incentive for residents to convert from septic systems to sewer service.

## ANTICIPATED EXPENDITURES

Yearly expenditures include salaries and benefits for our 69 full-time employees, fleet services and equipment replacement. In addition, the yearly budgets include the following fixed costs:

- **Permacast Materials:** Permacast is a substance used to coat existing manholes.
- **SCADA system maintenance:** The Supervisory and Control Data Acquisition (SCADA) system is used to monitor pumping stations, pump controls and well levels.
- **GBA/Autocad:** These two major software programs are used to track work orders, job costs, and mapping and infrastructure locations by GPS.
- **Hampton Sheriff:** The Wastewater Division has contracted with the Hampton Sheriff's Office for ongoing lawn maintenance.
- **1% Collection Fee:** Newport News Waterworks charges us a 1 percent fee to manage the collection of sewer use fees through their residential and commercial billing.



*Pumping station at East Hampton Bridge,  
501 East Pembroke Ave.*



*Pumping station interior*

# FISCAL YEAR 2005 BUDGET PROJECTIONS

**TOTAL OPERATING BUDGET** **\$ 5,400,754**

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**Operating Costs**

Salaries	\$2,465,366
Benefits	\$ 768,141
Indirect Costs	\$ 456,000
Fleet Services	\$ 237,084
Equipment Replacement	\$ 140,000
Contingency	\$ 100,000

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**\$ <4,166,591>**

**Fixed Costs**

Permacast Materials	\$ 66,000*
SCADA System Maintenance	\$ 27,504*
GBA/Autocad	\$ 8,400*
Hampton Sheriff	\$ 36,050*
1% Collection Fee	\$ 48,000

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**\$ <185,954>**

\* Indicates a 3% increase from the previous fiscal year

**NET OPERATING BUDGET** **\$ 1,048,209**

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**FY 2005 Projects**

CIP Project from 2004 - Riverview	\$ 5,898
CIP Project from 2004 - Convention Center	\$ 20,000
Wind Mill Point Road Sewer Extension	\$ 240,000
Wind Mill Point Pumping Station	\$ 185,000
Shenandoah Road between Shell and Victoria Replacement	\$ 110,000
Force Main tie in Rehab	\$ 62,109
Aberdeen Road Frame and Cover Repairs	\$ 26,680
PS 106 Rehab	\$ 70,000
PS 016 Rehab	\$ 25,000
PS 112 Rehab	\$ 25,000
10 rain gauges	\$ 12,000
Flow Meters & Pressure Transducers	\$ 131,000
Emergency Bypass Pumps	\$ 105,000

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**TOTAL PROJECT COSTS FY 2005** **\$ 1,017,687**

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# FISCAL YEAR 2006 BUDGET PROJECTIONS

**TOTAL OPERATING BUDGET** **\$ 5,400,754**

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**Operating Costs**

Salaries	\$2,539,327*
Benefits	\$ 791,185*
Indirect Costs	\$ 456,000
Fleet Services	\$ 237,084
Equipment Replacement	\$ 161,000
Contingency	\$ 100,000

**\$ <4,284,596>**

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**Fixed Costs**

Permacast Materials	\$ 67,980*
SCADA System Maintenance	\$ 28,329*
GBA/Autocad	\$ 8,652*
Hampton Sheriff	\$ 37,132*
1% Collection Fee	\$ 48,000

**\$ <190,093>**

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\* Indicates a 3% increase from the previous fiscal year

**NET OPERATING BUDGET** **\$ 926,065**

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**FY 2006 Projects**

Algonquin Road	\$ 82,500
Hampton Roads Avenue	\$ 48,750
Seminole Road	\$ 94,500
PS 001 Manhole Rehab	\$ 35,000
PS 101 Manhole Rehab	\$ 6,000
PS 102 Manhole Rehab	\$ 55,000
PS 107 Manhole Rehab	\$ 22,000
PS ** Wet Well Rehab	\$ 15,000
Hall Road Extension Project	\$ 150,000
Old Buckroe Road Pumping Station	\$ 100,000
Flow Meters & Pressure Transducers	\$ 93,200
PS 135 Rehab	\$ 70,000
PS 103 Rehab	\$ 35,000
Emergency Bypass Pumps	\$ 116,000

**TOTAL PROJECT COSTS FY 2006** **\$ 922,950**

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# FISCAL YEAR 2007 BUDGET PROJECTIONS

**TOTAL OPERATING BUDGET** **\$ 5,400,754**

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**Operating Costs**

Salaries	\$2,615,507*
Benefits	\$ 814,921*
Indirect Costs	\$ 456,000
Fleet Services	\$ 237,084
Equipment Replacement	\$ 120,000
Contingency	\$ 100,000

**\$ <4,343,512>**

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**Fixed Costs**

Permacast Materials	\$ 70,019*
SCADA System Maintenance	\$ 29,179*
GBA/Autocad	\$ 8,912*
Hampton Sheriff	\$ 38,246*
1% Collection Fee	\$ 48,000

**\$ <194,356>**

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\* Indicates a 3% increase from the previous fiscal years

**NET OPERATING BUDGET** **\$ 862,886**

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**FY 2007 Projects**

Atlantic & Seaboard	\$ 150,000
PS 111 Manhole Rehab	\$ 36,000
PS 112 Manhole Rehab	\$ 7,000
PS 208 Manhole Rehab	\$ 107,203
PS ** Wet Well Rehab	\$ 26,000
PS ** Wet Well Rehab	\$ 26,000
PS 001 Rehab	\$ 90,000
PS 117 Rehab	\$ 70,000
Old Buckroe Road	\$ 80,000
New Pumping Station ***	\$ 75,000
Flow Meters & Pressure Transducers	\$ 70,400
Emergency Bypass Pumps	\$ 81,000

**TOTAL PROJECT COSTS FY 2007** **\$ 818,603**

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# FISCAL YEAR 2008 BUDGET PROJECTIONS

**TOTAL OPERATING BUDGET** **\$ 5,400,754**

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**Operating Costs**

Salaries	\$ 2,693,972*
Benefits	\$ 839,369*
Indirect Costs	\$ 456,000
Fleet Services	\$ 237,084
Equipment Replacement	\$ 155,000
Contingency	\$ 100,000

**\$ <4,481,425>**

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**Fixed Costs**

Permacast Materials	\$ 72,120*
SCADA System Maintenance	\$ 30,054*
GBA/Autocad	\$ 9,179*
Hampton Sheriff	\$ 38,246*
1% Collection Fee	\$ 48,000

**\$ <197,599>**

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\* Indicates a 3% increase from the previous fiscal years

**NET OPERATING BUDGET** **\$ 721,730**

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**FY 2008 Projects**

Reynolds Drive	\$ 48,750
Connie & Mary Streets	\$ 48,750
PS 208 Manhole Rehab	\$ 107,203
PS 007 Manhole Rehab	\$ 28,560
PS ** Wet Well Rehab	\$ 17,500
PS 041 Rehab	\$ 90,000
Brittain Lane	\$ 225,000
Flow Meters & Pressure Transducers	\$ 58,700
Emergency Bypass Pumps	\$ 90,000

**TOTAL PROJECT COSTS FY 2008** **\$ 714,463**

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# FISCAL YEAR 2009 BUDGET PROJECTIONS

**TOTAL OPERATING BUDGET** **\$ 5,400,754**

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**Operating Costs**

Salaries	\$2,774,791*
Benefits	\$ 864,550*
Indirect Costs	\$ 456,000
Fleet Services	\$ 237,084
Equipment Replacement	\$ 110,000
Contingency	\$ 100,000

**\$ <4,542,425>**

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**Fixed Costs**

Permacast Materials	\$ 74,280*
SCADA System Maintenance	\$ 30,955*
GBA/Autocad	\$ 9,454*
Hampton Sheriff	\$ 39,393*
1% Collection Fee	\$ 48,000

**\$ <202,082>**

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\* Indicates a 3% increase from the previous fiscal years

**NET OPERATING BUDGET** **\$ 656,247**

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**FY 2009 Projects**

North Mallory Street	\$ 45,000
Manford Drive	\$ 48,750
PS 011 Manhole Rehab	\$ 76,000
PS 012 Manhole Rehab	\$ 16,500
PS 013 Manhole Rehab	\$ 11,500
PS 014 Manhole Rehab	\$ 12,500
PS *** Wet Well Rehab	\$ 17,500
PS *** Wet Well Rehab	\$ 17,500
PS 021 Rehab	\$ 40,000
Saunders Road West	\$ 100,000
Betz Lane	\$ 50,000
New Pumping Station ***	\$ 75,000
Flow Meters & Transducers	\$ 28,000
Emergency Bypass Pumps	\$ 117,000

**TOTAL PROJECT COSTS FY 2009** **\$ 655,250**

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# APPENDIX A

## DEPARTMENT OF ENVIRONMENTAL QUALITY CONSENT ORDER

In 2002, the Commonwealth of Virginia's Department of Environmental Quality (DEQ) issued a Consent Order, unanimously approved by the State Water Control Board and agreed to by the City of Hampton and the Hampton Roads Sanitation District (HRSD), to resolve certain violations of environmental laws and regulations.

The Consent Order stated in its Findings of Facts that a sewage collection system owned by HRSD and Hampton, connected with the HRSD sewage treatment plant at the Newport News facility, received excessive infiltration and inflow of rainwater. This excess resulted in overflows of untreated sewage to certain service areas within the City of Hampton.

To correct the problem, the City agreed to complete the following actions:

1. By January 1, 2003, install magnetic flow meters at the following pumping stations: 14, 30, 33, 101, 106, 107 and 112 (Claremont Avenue and Bridge Street Pumping Station Service Areas).\*
2. Beginning March 1, 2003, obtain continuous flow data from all City of Hampton pumping stations listed in Items 3, 4 and 5 below, to measure effectiveness of repair efforts.\*
3. By January 1, 2005, complete television inspection of all pipelines, assess all manholes, determine repairs, estimate cost, and provide a schedule of repair for the following pumping station flow areas: 1, 2, 17, 101, 102, 107, 111, 112, and HRSD 208 (Claremont Avenue Pump Station Service Area).\*
4. By July 1, 2004, complete smoke testing of all sewer lines in the following pumping station flow areas: 7, 11, 12, 13, 14, 15, 16, 27, 30, 31, 32, 33, HRSD 203, HRSD 206, HRSD 211, HRSD 223 and HRSD 225 (Bridge Street Pumping Station Service Area). Sources that do not require extensive labor will be repaired immediately upon identification.\*
5. By September 1, 2005, submit a schedule to remove inflow sources identified in Item 3 above.
6. By January 1, 2008, complete television inspection of all pipelines, assess all manholes, determine repairs, estimate costs, and provide a schedule of repair for the following station flow areas: 3, 4, 5, 6, 7, 11, 12, 13, 14, 15, 16, 21, 30, 31, 21, 22, HRSD 203, HRSD 206, HRSD 211, HRSD 223 and HRSD 225 (Bridge Street Pump Station Service Area).

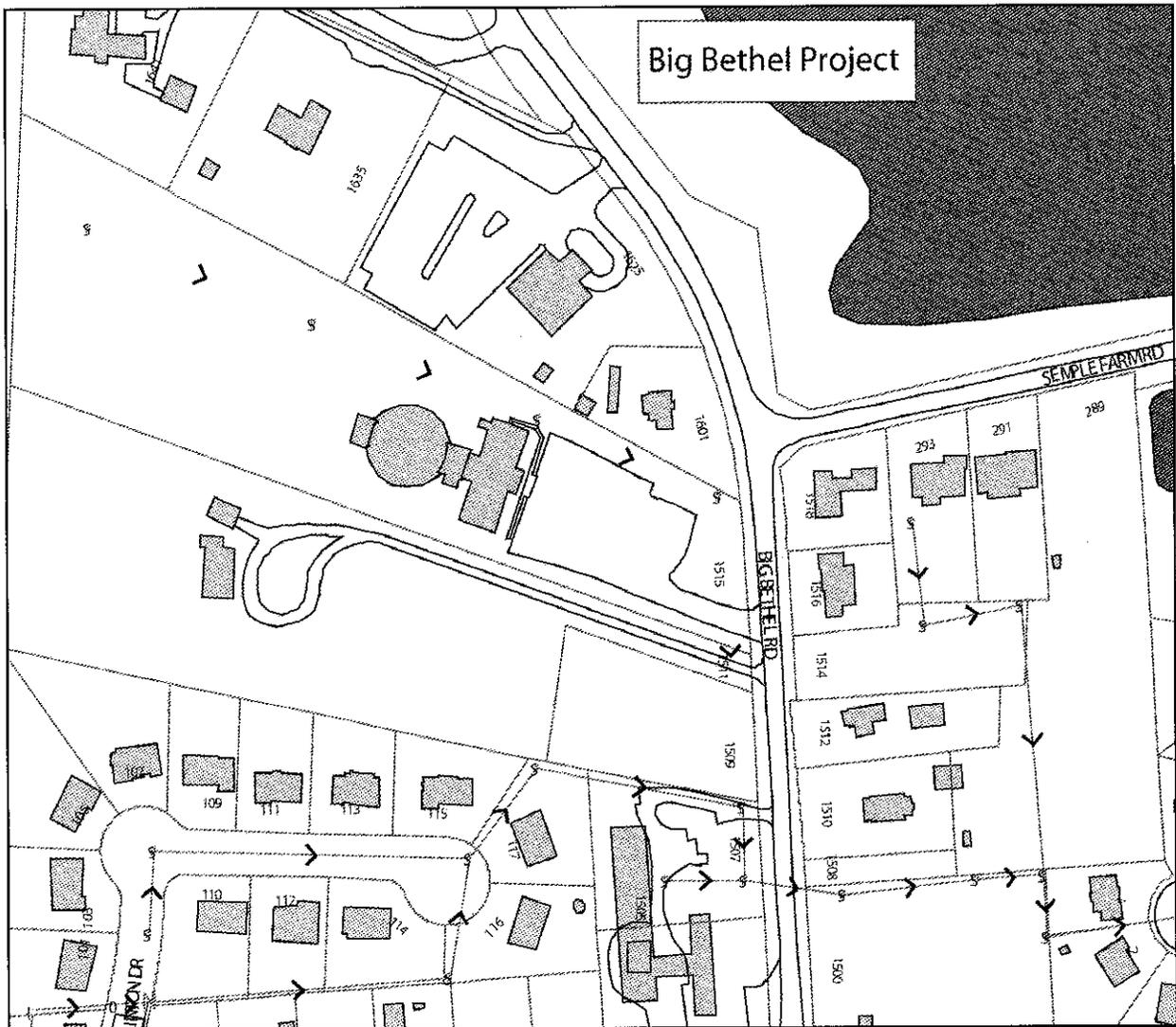
\* Work completed



**PROJECT AREA**

**BIG BETHEL PHASE III**

Approximate Number of Units Involved	5
Estimated Cost	\$50,000
Project Time	120 Days
Total Footage	1,140



# SANITARY SEWER PUMPING STATION PROJECT

## PROJECT AREA

HARRIS CREEK ROAD  
PUMPING STATION/FORCE MAIN

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Estimated Project Cost

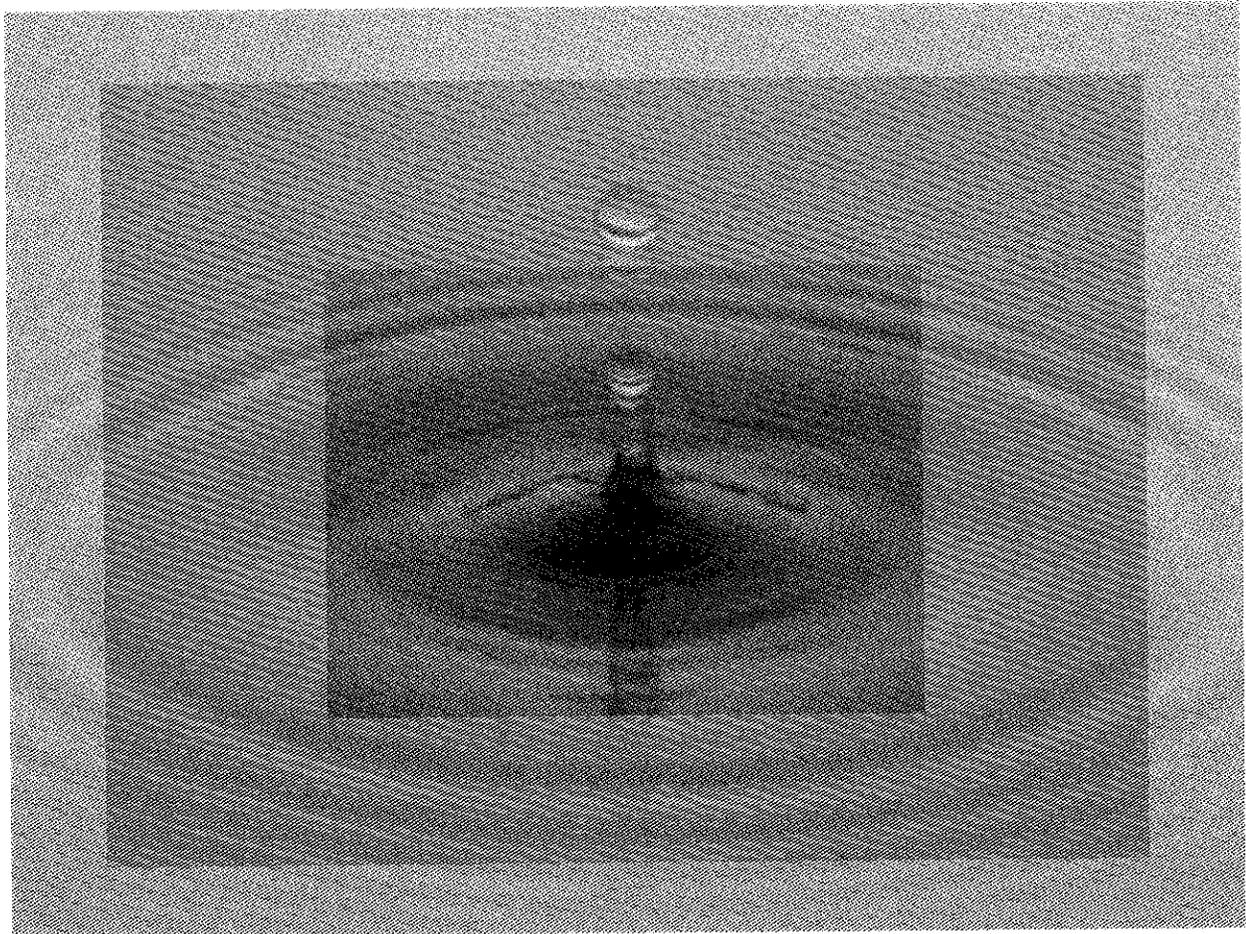
\$250,000

Project Time

Information not yet available

Total Footage

Information not yet available





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Wastewater Operations Division  
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