

Progress Report



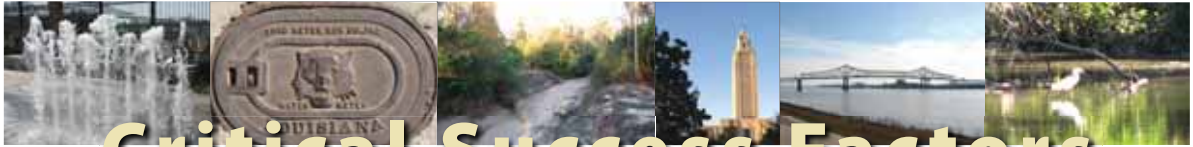
Prepared for
City of Baton Rouge/East Baton Rouge Parish
Department of Public Works

Prepared by
CH2MHILL

December 2007

Contents

Project	Page
Critical Success Factors.....	2
Program Management	
Program Management.....	3
Sanitary Sewer Overflow Program Delivery Plan	
Sanitary Sewer Overflow Planning.....	4
Master Planning	
Master Planning.....	6
Collection System Rehabilitation	
Jefferson Highway/Hoo Shoo Too Area	8
Burbank/Gardere Area.....	10
SCADA Master Plan	
SCADA Master Plan.....	12
Projects Under Design	
RMAP1 - Industriplex Area Upgrades.....	14
RMAP1 - Kleinpeter Area Upgrades.....	16
RMAP1 - Pump Station 136 Area Upgrades.....	18
IAP - Highway 61 Force Main.....	20
IAP - South Wastewater Treatment Plant Effluent Pump Station Stabilization.....	22
IAP - South Wastewater Treatment Plant Primary Treatment Improvements.....	24
IAP - South Wastewater Treatment Plant Screening Improvements.....	26
IAP - South Wastewater Treatment Plant Sludge Handling Improvements.....	28
IAP - South Wastewater Treatment Plant Trickling Filter Improvements.....	30
Treatment Plant - North Plant Odor Control.....	32



Critical Success Factors

The SSO Program Strategy

(goals, component projects, budget, schedule and CIP) is developed within 150 days of NTP.

Execution of the Program

meets and exceeds the expectations of the stakeholders with reference to quality, adherence to budget and schedule, and with minimum possible disruption to the public. The SSO elimination goal is achieved within the Consent Decree deadline of 2014.

The Program is cost-effective

and affordable and rate increases are minimized.

The Program Management Team

functions as a true partner with Department of Public Works (DPW) and City Parish (C-P). Program implementation is through a true teaming arrangement between the C-P and the Program Manager and ensures that the C-P staff is well trained on all systems and processes developed for the implementation of the Program.

DPW staff remains engaged

in various aspects of the Program

The PCS is set up to provide

a public-access web-site to provide accurate and timely information on Program progress.

The Program has a strong community outreach

and public awareness component to ensure that the public understands and supports the program; complaints or calls to public officials are minimal; public concerns are effectively addressed throughout the process; Immediate Action Projects are executed early and success is publicized.

A standard set of plans and specifications

are generated through the Program for future use by DPW.

Design of Treatment Plants, Pump Stations and other components

is based on stable, easy-to-operate and sustainable systems and as far as possible components are standardized to facilitate training of operators.

Develop RMAP2 Project list

as well as a fully functioning model by end of January 2007.

Program Management

Program Management

News

- Program Team Staffing for Project Delivery Phase.
- Program Team Occupying New Temporary Office Space - Chase Building.
- New Permanent Office is located at 700 Main Street, 4th Floor.
- Document Control System Operational.
- Delivery of SSO Plan - December 2007.

Planned Activities

- Web Site Updates - Monthly
- EPA Compliance Reporting
- Consultant Selection for 2008 Projects
- Contract for SSO "Physical Inspection" Work for 2008 - December 2007
- Standard Specification Revision - Continuous
- Start 4 Rehabilitation Projects in 2008
- Start Design of 15 Collection Systems SSO Projects in 2008
- Deliver North Treatment Plant Odor Project Operational - May 2008
- Provide Public Involvement Support to Department of Public Works (DPW)
- PCS system rollout complete by late December 2007
- Web Invoicing Setup - January 2008

Program Manager	Jim Hawley, P.E.
Program Contact Information	CH2M HILL 450 Laurel Street, Suite 806 Baton Rouge, LA 70801 225-381-7281

SSO Program Delivery Plan

Sanitary Sewer Overflow Planning

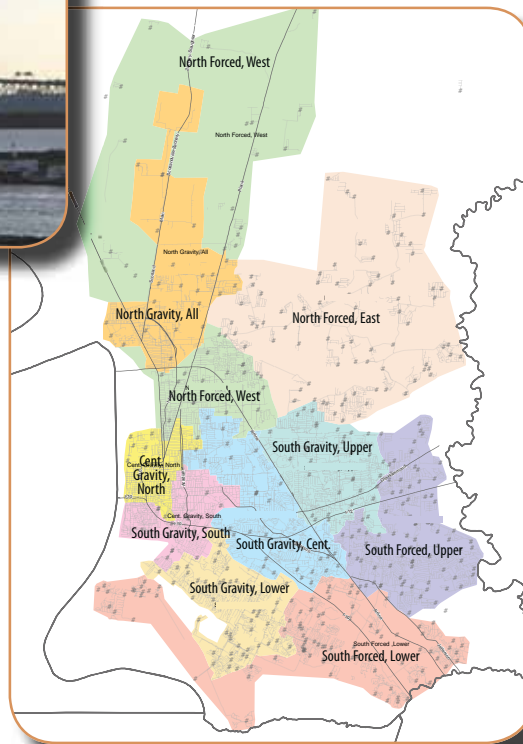
News

- The Program Delivery Plan is in progress. The Parish sewer collection system has been divided into 10 basins for focused analysis and development of projects.
- All ten of the basins have been completed and endorsed by the Department of Public Works (DPW).
- A draft Program Delivery Plan has been submitted for DPW review and comment.

Planned Activities

- Coordinate and incorporate DPW comments received on the draft Program Delivery Plan.
- Prepare and submit the final Delivery Plan the end of December 2007.

Project Number	NA
Project Name	SSO PDP
Project Description	The Sanitary Sewer Overflow (SSO) Program Delivery Plan outlines the projects to be completed to eliminate sewer overflows throughout the Parish. The Program Delivery Plan contains a description of each project, along with the anticipated completion schedule and budget.
Project Manager	Lee Davis, P.E. - Deputy Program Manager
Project Start Date	January 2007
Estimated Project End Date	December 2007



Schedule

- Behind Goal
- Near Goal
- At/Ahead of Goal

	2006				2007				2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project					1/07			12/07								

Master Planning

Master Planning

News

WWTP Condition Assessment

- Condition assessment for the three Wastewater Treatment Plants (WWTP's) occurred the week of September 24, 2007.
- Condition assessment for five small WWTP's occurred on September 28, 2007.
- Draft Technical Memorandum was submitted for internal review on November 26, 2007.

Data Collection and Processing

- Complete. All flow, BOD, and TSS data have been collected and summarized for the three WWTP's.

Establish Historical and Projected Flow and Pollutant Loading Peaking Factors

- Currently working on historical flow and load peaking factors.

Odor Control at the WWTP's

- Odor sampling for the three WWTP's occurred the week of September 10, 2007.

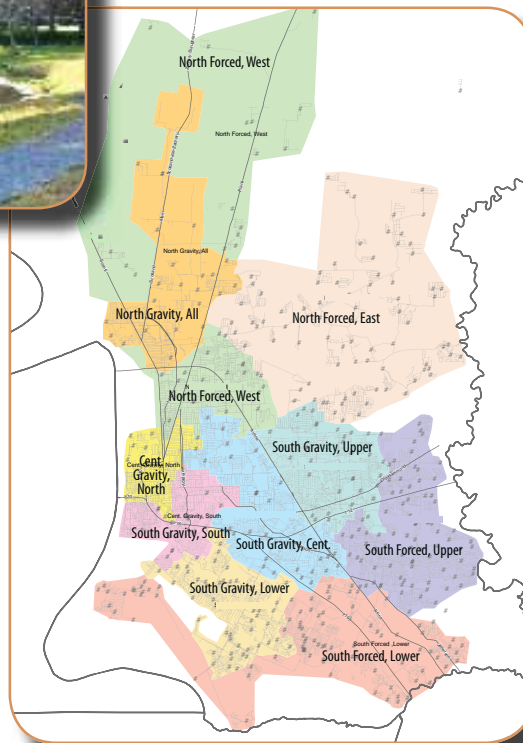
Future Regulatory Requirements Analysis

- Met with Louisiana Department of Environmental Quality (LDEQ) to discuss future regulatory framework for wastewater treatment the week of September 10, 2007.
- Draft Technical Memorandum was submitted for internal review on November 26, 2007.

Planned Activities

- Evaluate and summarize data collected during condition assessments of the WWTP's.
- Continue working on historical flow and load peaking factors.
- Summarize information from meeting with LDEQ concerning future regulatory requirements for wastewater treatment.

Project Number	DPWSSO-0002
Project Name	Master Plan
Project Description	Develop the wastewater collection, conveyance, and treatment master plan for the City of Baton Rouge/Parish of East Baton Rouge Department of Public Works (DPW), Baton Rouge, Louisiana.
Project Manager	Michael Ellis, P.E.
Project Start Date	May 2007
Estimated Project End Date	April 2008



Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal

	2006				2007				2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project						5/07				4/08						

Collection System Rehabilitation

Sewer Rehabilitation Jefferson Highway/Hoo Shoo Too Area

News

- Field inspection has been completed and the area characterization report will be finalized in December 2007.
- Design will be completed by the end of January 2008.

Planned Activities

- Finalize basin report.
- Begin surveying and preliminary design.




Jefferson Highway/Hoo Shoo Too Area

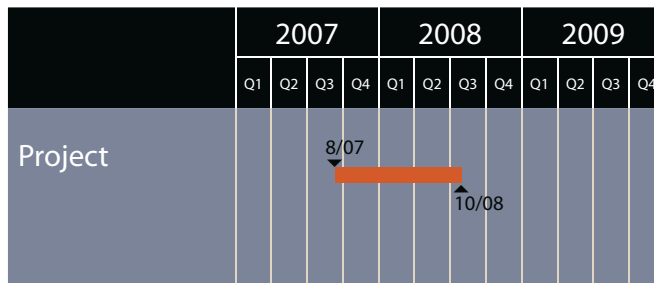


Project Number	DPWSSO-0033
Project Name	Sewer Rehabilitation- Jefferson Highway/Hoo Shoo Too Area
Project Description	The project includes the rehabilitation of the gravity collection system in the Jefferson Highway/Hoo Shoo Too area using a mixture of pipe lining technologies and replacement of some pipe.
Design Project Manager	Don Ripley, P.E.
Project Start Date	August 2007
Estimated Project End Date	October 2008

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Collection System Rehabilitation

Sewer Rehabilitation Burbank/Gardere

News

- Field inspection is ongoing and will be completed in December 2007.

Planned Activities

- The required field investigation will continue through the end of 2007.




Burbank/Gardere Area

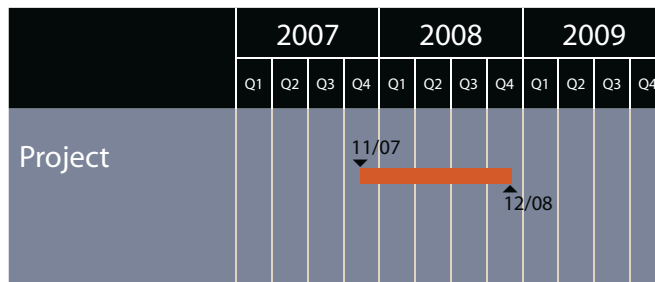


Project Number	DPWSSO-0037
Project Name	Sewer Rehabilitation Burbank/Gardere
Project Description	The project includes the rehabilitation of the gravity collection system in the Burbank/Gardere area in South Baton Rouge. The project will include both repair and replacement of some pipe within the project area.
Design Project Manager	Don Ripley, P.E.
Project Start Date	November 2007
Estimated Project End Date	December 2008

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



SCADA Master Plan

SCADA Master Plan

News

- Working with City Parish to identify scope and applicability of the future WiFi network for SCADA.

Planned Activities

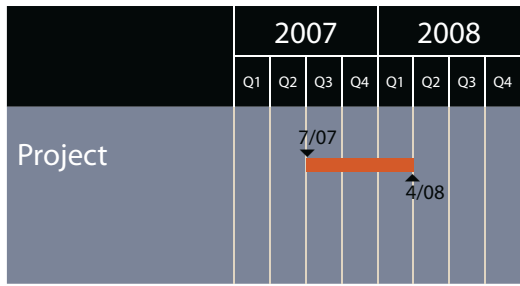
- Finalizing SCADA system master network diagram.
- Defining scope of work to resume replacement of controls at 37 pump stations.
- Preparing SCADA Master Plan describing system needs and functional requirements.

Project Number	DPWSSO-0004
Project Name	SCADA Master Plan
Project Description	Develop a plan for system-wide integration of process monitoring and control of collection systems and treatment plants. The plan will assess integration with the existing pump station SCADA project and recommend the completion or elimination of that work.
Project Manager	Ralph Williams, P.E.
Project Start Date	July 2007
Estimated Project End Date	Projected First Quarter 2008

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

RMAP1-Industriplex Area Upgrades

News

- The program team has reviewed the construction plans and specifications. Review comments have been submitted to the design consultant.

Planned Activities

- The design consultant will finalize construction plans and bid documents.
- Department of Public Works and program team are negotiating with design consultant for bidding and construction services.
- Projected Bid Opening Date - February 12, 2008.




Pump Station



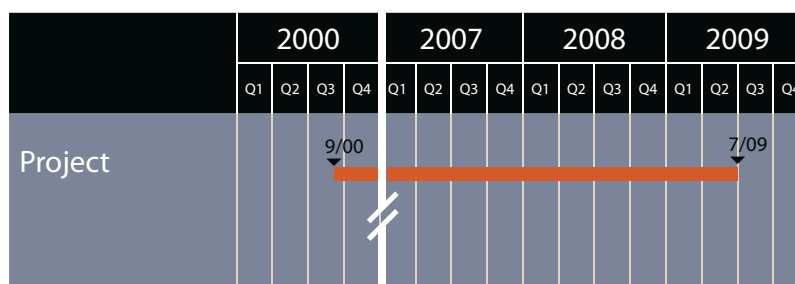
Project Number	DPWSSO-0008
Project Name	RMAP1- Industriplex Area Upgrades
Project Description	The Industriplex Area Waste Water Upgrade Project is located in the Seigen Lane/Industriplex Boulevard area. The project plan includes demolition of six pump stations: PS252, PS287, PS331, PS332, PS355 and PS389. A new gravity system will be constructed routing the sewer flow from the six demolished pump stations to one new centralized pump station near PS332, on Exchequer Drive between Little Cayman and Merchant Drive. A new 16-inch force main will discharge from the new station to an existing 42-inch force main east of Pecue Lane. This project will reduce pump station operation and maintenance costs and reduce any possible odor issues associated with the existing pump stations.
Design Project Manager	Jason Crain, P.E.
Design Consultant	Chad Bacas, P.E., Forte & Tablada
Project Start Date	September 2000
Estimated Project End Date	July 2009

Budget Allocated to Date	
Engineering Cost	\$550,738
Services During Construction	\$85,858
Construction	\$7,954,724
Physical Inspection	\$4,140
Miscellaneous	\$5,000
Contingency	\$305,469
ROW Acquisition	\$238,545
Total	\$9,144,474

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

RMAP1-Kleinpeter Area Upgrades

News

- Additional improvements have been added to the project as a second phase. Phase II will include a new pump station and sewer force main along with some gravity sewer lines to service existing and future growth in the area.
- The additional facilities are preliminarily located along Perkins Road south of Highland Road.

Planned Activities

- The design consultant will be finalizing construction plans and bid documents for Phase I.
- The design consultant will submit a proposal for engineering services required to design Phases I and II.
- Projected Bid Opening Date - April 29, 2008.




Kleinpeter Project Area



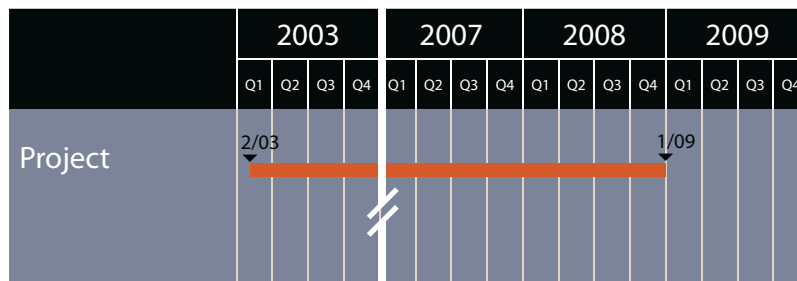
Project Number	DPWSSO-0009
Project Name	RMAP1- Kleinpeter Area Upgrades
Project Description	The Kleinpeter Area Waste Water Upgrade Project is located in the Santa Maria/Country Club of Louisiana area near Interstate 10 and Highland Road. The project consists of capacity upgrades to the following pump stations: PS343, PS344, and PS382. Also included in the project is the construction of approximately 2,000 linear feet of new 8-inch and 2,000 linear feet of new 10-inch sanitary sewer force main associated with the PS382 upgrade.
Design Project Manager	Jason Crain, P.E.
Design Consultant	Bill Monroe, P.E., Monroe & Corie
Project Start Date	February 2003
Estimated Project End Date	January 2009

Budget Allocated to Date	
Engineering Cost	\$113,865
Services During Construction	\$52,891
Construction	\$1,635,139
Miscellaneous	\$2,000
Total	\$1,803,895

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

RMAP1-Pump Station 136 Area Upgrades

News

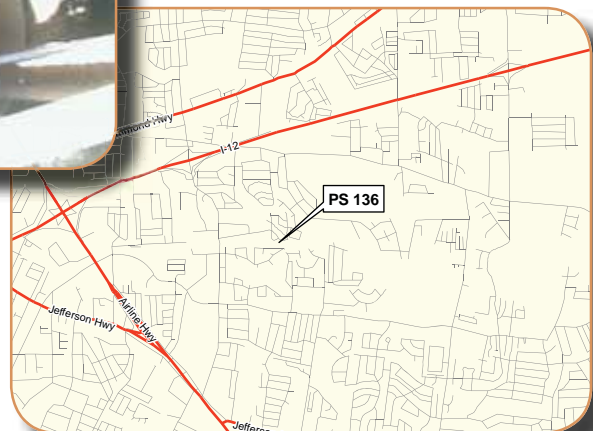
- The design consultant has proposed modifications to the project that could save an estimated \$5,000,000 in construction costs.
- Modifications were made possible by the change in direction of the East Baton Rouge Sanitary Sewer Overflow Program Strategy from deep tunnels to rehabilitation.

Planned Activities

- Department of Public Works (DPW) and program team have reviewed the proposal modifications.
- The design consultant is awaiting notice to proceed to implement the modifications into the current plan.
- Projected Design Completion Date - March 17, 2008.




Pump Station Wet Well



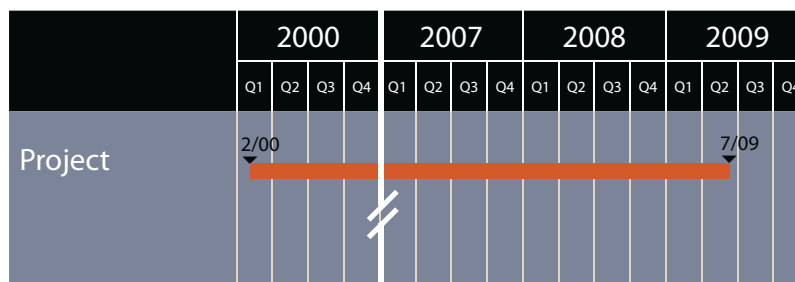
Project Number	DPWSSO-0010
Project Name	RMAP1- PS 136 Area Upgrades
Project Description	The Pump Station 136 Area Waste Water Upgrade Project is located in the Lake Sherwood Acres area. The project plan currently includes demolition of nine existing pump stations: PS143, PS216, PS270, PS136, PS168, PS328, PS217, PS134, and PS135 and 27,700 linear feet of associated 4-24 inch forcemains. A new gravity system will be constructed routing sewer flow from the nine demolished pump stations to one new centralized 4.5 million gallon per day pump station located in the Gulf States Utility (GSU) right-of-way at Tollway Drive. The new gravity system includes construction of approximately 10,300 linear feet of 10-12 inch gravity sewer, approximately 6,000 linear feet of 15-18 inch gravity sewer, and approximately 4,400 linear feet of 24-36 inch gravity sewer. The project is intended to reduce pump station operation and maintenance costs and eliminate possible odor issues associated with existing pump stations.
Design Project Manager	Jason Crain, P.E.
Design Consultant	Greg Sepeda, P.E., Sigma Consulting Group
Project Start Date	February 2000
Estimated Project End Date	July 2009

Budget Allocated to Date	
Engineering Cost	\$514,245
Services During Construction	\$238,848
Construction	\$7,486,899
Miscellaneous	\$4,500
Contingency	\$159,555
ROW Acquisition	\$122,000
Total	\$8,526,047

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

Highway 61 Force Main

News

- SJB/Owen & White currently working on alternatives analysis to evaluate future waste water infrastructure needs for the North Service Area.
- CH2M HILL provided SJB/Owen & White flow projections from the Zachary/Baker area to be used in the alternatives analysis.
- CH2M HILL provided SJB/Owen & White information on Red Mud Lakes to evaluate as a potential storage site for wet weather flows.

Planned Activities

- SJB/Owen & White to continue working on alternatives analysis to be submitted in January 2008.




Highway 61



Project Number	DPWSSO-0016
Project Name	Highway 61 Force Main
Project Description	The goal of the Highway 61 Force Main Project is to proactively plan infrastructure for growth in the Northern Service Area and reduce proliferation of small treatment plants. The project includes 16,000 linear feet of 24-inch force main along Highway 61 from Old Ralph Mayer Road to Mills Avenue.
Design Project Manager	Michael Ellis, P.E.
Project Start Date	July 2007
Estimated Project End Date	November 2007

Budget Allocated to Date	
Engineering Cost	\$710,000
Total	\$710,000


Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal

	2007				2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Project												

7/07 11/07



Projects Under Design

South Wastewater Treatment Plant Effluent Pump Station Stabilization

News

- Department of Public Works (DPW) issued Notice to Proceed for Phase I (Preliminary Design) on September 10, 2007.
- Kick off meeting was conducted on October 3, 2007
- Drilling and sampling (4 - 25 foot soil borings) conducted on November 30, 2007.
- Piezometers installed on December 3, 2007.

Planned Activities

- URS working on preliminary design report.




South Wastewater Treatment Plant



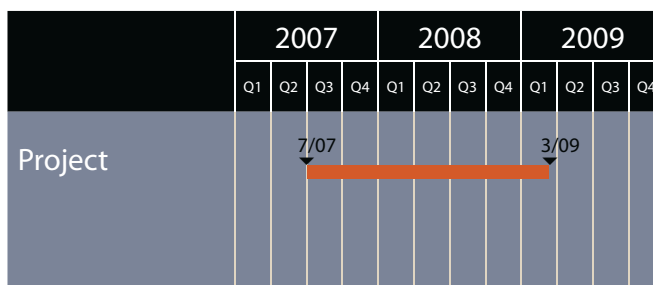
Project Number	DPWSSO-0014
Project Name	SWWTP Effluent Pump Station Stabilization
Project Description	The project includes the investigation, engineering, and construction services for effluent pump station improvements at the South Waste Water Treatment Plant. Ground settlements have caused wiring, piping and pump operational problems in the effluent pump station. Improvements are intended to improve operational reliability of the pump station.
Design Project Manager	Michael Ellis, P.E.
Design Consultant	Ken Thomas, P.E., Project Manager, URS Corporation
Project Start Date	September 2007
Estimated Project End Date	March 2009

Budget Allocated to Date	
Engineering Cost	\$75,000
Construction	\$500,000
Miscellaneous	\$5,000
Contingency	\$20,000
Total	\$600,000

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

South Wastewater Treatment Plant Primary Treatment Improvements

News

- Department of Public Works (DPW) issued Notice To Proceed for Phase I (Preliminary Design) on July 30, 2007.
- Kickoff meeting held on August 8, 2007.
- Preliminary Design submitted on September 27, 2007.
- Review comments submitted on October 25, 2007.
- Review meeting conducted on October 30, 2007.
- Revised final preliminary design report submitted on November 29, 2007.
- Final Design Phase fee proposal submitted on November 29, 2007.
- Final Design Phase fee proposal reviewed by CH2M HILL.

Planned Activities

- Present final design phase fee proposal to Department of Public Works for review and approval.
- Begin 60% design after fee proposal approved.




South Wastewater Treatment Plant



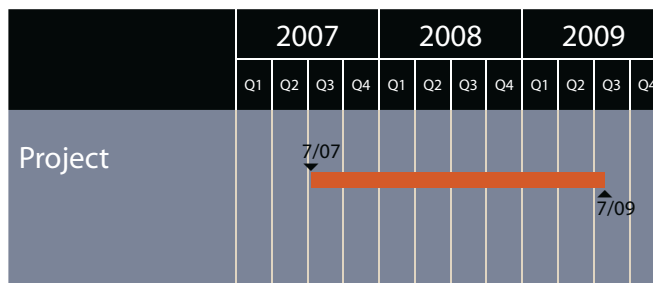
Project Number	DPWSSO-0012
Project Name	SWWTP Primary Treatment Improvements
Project Description	The purpose of this project is to improve primary treatment at the South Wastewater Treatment Plant by utilizing chemically enhanced primary treatment to reduce loadings to the trickling filter process. Improvements will also include the repair and/or replacement of clarifier mechanisms and components, replacement of existing sludge pumps, and the replacement of inlet plug valves on clarifiers 1,2,3,and 4. The project will provide for flow control/ flow measurement improvements at multiple splitter boxes on the gravity side of the plant by installing weir gate electric actuators and level elements for flow measurement. The project will connect the actuators and level elements to the plant SCADA system to allow monitoring and control of the flow splits to provide remote control capabilities.
Design Project Manager	Michael Ellis, P.E.
Design Consultant	Kenny Ferachi, P.E., Project Manager, CDM
Project Start Date	July 2007
Estimated Project End Date	July 2009

Budget Allocated to Date	
Engineering Cost	\$150,000
Construction	\$1,500,000
Miscellaneous	\$10,000
Contingency	\$140,000
Total	\$1,800,000

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

South Wastewater Treatment Plant Screening Improvements

News

- Department of Public Works (DPW) issued Notice To Proceed for Phase I (Preliminary Design) on July 30, 2007.
- Preliminary Design submitted on September 13, 2007.
- Preliminary Design review meeting conducted on October 3, 2007.
- Preliminary Design review comments were submitted on October 25, 2007.
- Follow-up preliminary design review meeting conducted on November 3, 2007.
- Department of Public Works issued Notice To Proceed for 60% Design on November 19, 2007.
- Revised Preliminary Design report was due on December 12, 2007.

Planned Activities

- 60% design due on January 3, 2008.




South Wastewater Treatment Plant



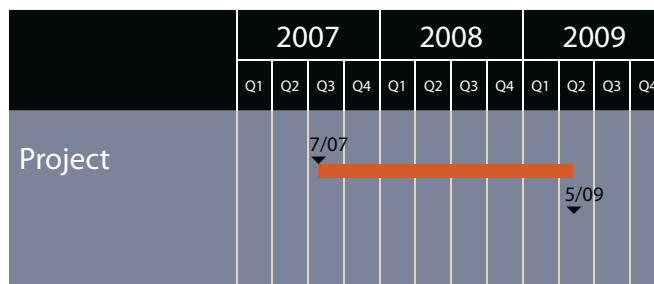
Project Number	DPWSSO-0011
Project Name	SWWTP Screening Improvements
Project Description	The project consists of screening improvements to the gravity side of the South Waste Water Treatment Plant. The existing bar screens on the gravity side of the plant are frequently out of service due to mechanical failure. Out of service bar screens result in reduced preliminary treatment and allow rags and other large material to accumulate in downstream treatment facilities, such as primary settling tanks, leading to process mechanical equipment failure in the downstream processes.
Design Project Manager	Michael Ellis, P.E.
Design Consultant	Robert Isemann, P.E., Project Manager, Aillet, Fenner, Jolly & McClland (AFJM)
Start Date	July 2007
Estimated Project End Date	May 2009

Budget Allocated to Date	
Engineering Cost	\$80,000
Construction	\$800,000
Miscellaneous	\$10,000
Contingency	\$70,000
Total	\$960,000

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

South Wastewater Treatment Plant Sludge Handling Improvements

News

- Department of Public Works (DPW) issued Notice To Proceed for Phase I (Preliminary Design) on September 10, 2007.
- Kickoff meeting conducted on October 3, 2007.
- Preliminary Design Report was submitted on November 30, 2007.

Planned Activities

- Review Preliminary Design Report and provide comments by December 19, 2007.
- Following preliminary design, URS to submit detailed design proposal for negotiation and approval.




South Wastewater Treatment Plant



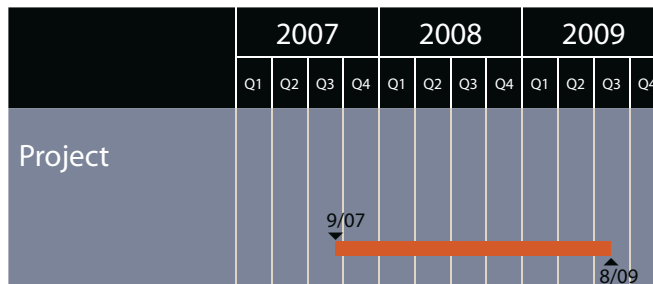
Project Number	DPWSSO-0015
Project Name	SWWTP Sludge Handling Improvements
Project Description	The project involves engineering, testing, and construction services for sludge handling improvements at the South Wastewater Treatment Plant. The recommended improvements for the sludge handling process include: replace gravity thickener mechanisms, rehabilitate sludge pump station, improve site grading in gravity thickener complex, improve thickener overflow capabilities, snail shell screening improvements, final settling tank sludge withdrawal improvements, and belt filter press filtrate line improvements.
Design Project Manager	Michael Ellis, P.E.
Design Consultant	Ken Thomas, P.E., Project Manager, URS
Start Date	September 2007
Estimated Project End Date	August 2009

Budget Allocated to Date	
Engineering Cost	\$180,000
Construction	\$1,800,000
Miscellaneous	\$10,000
Contingency	\$170,000
Total	\$2,160,000

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

South Wastewater Treatment Plant Trickling Filter Improvements

News

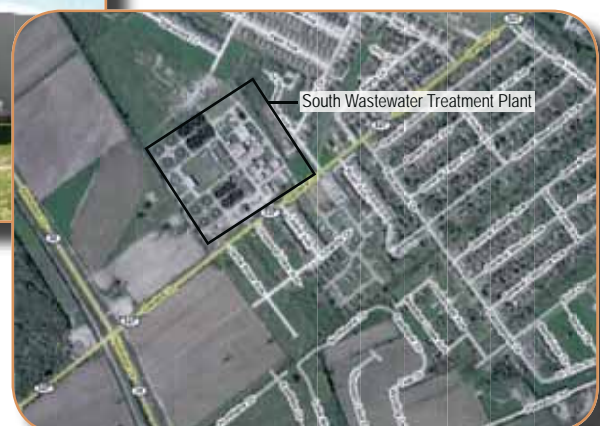
- Department Of Public Works (DPW) issued Notice To Proceed for Phase I (Preliminary Design) on July 16, 2007.
- Kickoff meeting held on July 18, 2007.
- Project meeting held on July 31, 2007 to discuss design alternatives for the recirculation pump station location.
- Preliminary Design Report submitted on November 16, 2007.
- Preliminary Design Report under review, comments were provided by December 11, 2007.

Planned Activities

- Review meeting will be scheduled to discuss preliminary design.
- After acceptance of preliminary design, and notice to proceed is issued, 60% design will begin.




South Wastewater Treatment Plant



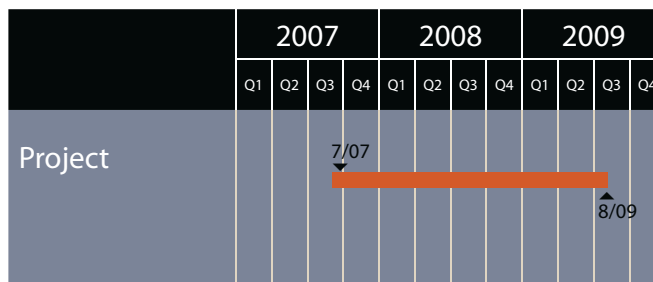
Project Number	DPWSSO-0013
Project Name	SWWTP Trickling Filter Improvements
Project Description	The project includes construction of a new recirculation pump station to maintain proper wetting rates on the trickling filters. The new recirculation pumping station will require a flow rate between 20 to 100 million gallons per day (mgd). In addition to the new recirculation pump station, hydraulic and process improvements require that the two final settling tank complexes be interconnected with piping. The interconnection of the settling tank complexes allows for reception of trickling filter effluent from both the gravity and the force main sides of the plant.
Design Project Manager	Michael Ellis, P.E.
Design Consultant	Ray Rials, P.E., Project Manager, MWH
Project Start Date	July 2007
Estimated Project End Date	August 2009

Budget Allocated to Date	
Engineering Cost	\$600,000
Construction	\$4,500,000
Miscellaneous	\$20,000
Contingency	\$280,000
Total	\$5,400,000

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal



Projects Under Design

Treatment Plants - North Odor Control

News

- The contract for existing services to design installation of the biotowers has been awarded. Environmental Engineering Services (EES) was given a Notice to Proceed the week of November 16, 2007.
- The program team has prepared equipment procurement packages for the odor control equipment to be installed at the North Plant and the pump station locations upstream of the plant. These packages have been delivered to Department of Public Works (DPW).
- The kickoff meeting with EES was held on December 7, 2007.
- DPW Engineering met with their purchasing department to discuss and prepare the equipment procurement packages for advertisement the week of December 10, 2007.

Planned Activities


- EES will begin work on the engineering design.



Project Number	DPWSSO-0020
Project Name	Treatment Plants- North Odor Control
Project Description	<p>The North Plant Odor Control Improvements project consists of a two phase approach to address the odor problems at the plant. The liquid dosing equipment phase of the project will consist of installing equipment at five pump station locations (PS43, PS52, PS371, PS430 and PS509). This system will address odor problems in the collection system and will result in a reduction in odor at the receiving treatment plant. The feed systems will consist of a storage tank and control system.</p> <p>The second phase of the project consists of installing a biotower odor control system at the North Waste Water Plant. The biotower odor control equipment consists of a biotower system, odor control blower fan, and control panel. Odorous air will be captured in the gravity main headworks and force main headworks and will travel through the biotower which contains a foam style media. The media provides surface area for biological growth of the organisms that will consume the hydrogen sulfide odors and reduce odors.</p>
Design Project Manager	Matthew Johnson
Design Consultant	Environmental Engineering
Project Start Date	July 2007
Estimated Project End Date	May 2008

Budget Allocated to Date	
Engineering Cost	\$100,610
Construction	\$2,280,000
Miscellaneous	\$10,000
Contingency	\$466,120
Total	\$2,856,730

Schedule



- Behind Goal
- Near Goal
- At/Ahead of Goal

