Program Delivery Plan

Sanitary Sewer Overflow (SSO) Control and Wastewater Facilities Program

Prepared for

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

Prepared by

CH2MHILL

In association with

SIGMA Consulting Group, Inc.

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Acronyms and Abbreviations

BOD	Biochemical Oxygen Demand
BPS	Booster Pump Station
BTRSSO	Baton Rouge Sanitary Sewer Overflow
CCTV	Closed Circuit Television
C-P	City of Baton Rouge, Parish of East Baton Rouge
DPW	Department of Public Works
IAP	Immediate Action Projects
I/I	inflow and infiltration
MG	Millions Gallons
mgd	million gallons per day
MH	manhole
NPDES	National Pollutant Discharge Elimination System
OandPA	Outreach and Public Awareness Program
PDP	Program Delivery Plan
PHF	peak hourly flow
PM	Project Manager
PMT	Program Management Team
PS	Pump Station
RDI	Rainfall Dependent Infiltration
RDII	Rain Dependent Inflow and Infiltration
RMAP1	Remedial Measures Action Plan 1
RMAP2	Remedial Measures Action Plan 2
SEP	Supplementary Environmental Projects
SSO	Sewer System Overflow
TF/SC	trickling filter/solids contact
TSS	Total Suspended Solids
VFD	Variable Frequency Drive
WWTP	Wastewater Treatment Plant

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Executive Summary

Overview

The City of Baton Rouge, Parish of East Baton Rouge (C-P) has contracted CH2M HILL to prepare a Program Delivery Plan (PDP) that summarizes the Sewer System Overflow (SSO) Control and Wastewater Facilities Program. This document is the second annual update of the original PDP published in January 2008.

This updated PDP incorporates several changes from the first annual update (published in October 2008). As of the end of October 2009, 1 project has completed construction, 16 projects have begun construction, and 33 projects have begun design, including Remedial Measures Action Plan (RMAP1) projects. Several construction sequencing issues were discovered, resulting in the combining of several capacity improvement projects to minimize these issues. Therefore, the number of capacity projects has decreased. Four comprehensive rehabilitation projects have been split in half so that the construction amount for each project is closer to $10,000,000. For this reason, the number of comprehensive rehabilitation projects has increased. Overall, the total number of projects have decreased from 92 to 82. The updated PDP schedule reflects the latest schedule for all active projects.

The Program is divided into the following three wet weather components:

- Comprehensive rehabilitation projects
- Capacity improvement projects
- Wastewater treatment and storage improvements

This PDP describes a total of 82 wet weather projects to be constructed by December 31, 2014 at an estimated total program cost of **$1.2 billion** in September 2007 dollars. These costs include construction, design engineering, construction engineering and management, and program management. Costs stated herein do not include costs of city staff participation and projects previously undertaken by the C-P, such as RMAP1 projects.

This PDP also describes 5 preliminary Master Plan projects that have an estimated total program cost of $110 million. The preliminary Master Plan projects include the master plan portion of the South Wastewater Treatment Plant (WWTP) improvements, the emergency generator installation project, and three projects to implement a Supervisory Control and Data Acquisition (SCADA) system for the wastewater collection and treatment system.

The goals of the program are to:

- Reduce excess wet weather flows that cause SSOs
- Rehabilitate the collection system
- Increase the hydraulic capacity of the collection system
- Accommodate growth in project areas
- Comply with wastewater treatment plant National Pollutant Discharge Elimination System (NPDES) permit
- Comply with the terms of the Consent Decree

The Consent Decree, Civil Action 01-978-B-M3, United States of America and State of Louisiana versus City of Baton Rouge, Parish of East Baton Rouge states that the Collection System Remedial Program projects shall be completed by December 31, 2014.

In preparing this PDP, the locations of known overflows are given highest priority in order to reduce the frequency of these overflows. Areas of the collection system that were found to have excessive levels of infiltration or inflow are also identified for rehabilitation. Hydraulic capacity improvement projects are sized to accommodate the predicted designed peak wet weather flows and anticipated growth in the project areas. Peak wet weather flows were predicted based on the previously selected 2-year frequency, 12-hour duration design storm. Figure ES-1 shows the ten hydraulic basins used in the evaluation of the program.

Program Description

Comprehensive Rehabilitation Projects

Sewer system comprehensive rehabilitation projects will be implemented to repair or replace components of the system that are defective and permit excessive infiltration and inflow.

The comprehensive rehabilitation portion of the program consists of 29 construction projects located throughout the C-P. The first projects began in 2008, and the last project is scheduled for completion in 2014. Four to six projects will begin construction each year. Design and construction will be continuous through 2014. Approximately 5 million feet of the gravity sewer will be inspected in these rehabilitation projects.

The areas selected for comprehensive rehabilitation are shown on Figure ES-2. Projects within these areas are described in detail in the body of this plan. The estimated total program cost of the comprehensive rehabilitation projects is approximately **$300 million** in September 2007 dollars.

Capacity Improvement Projects

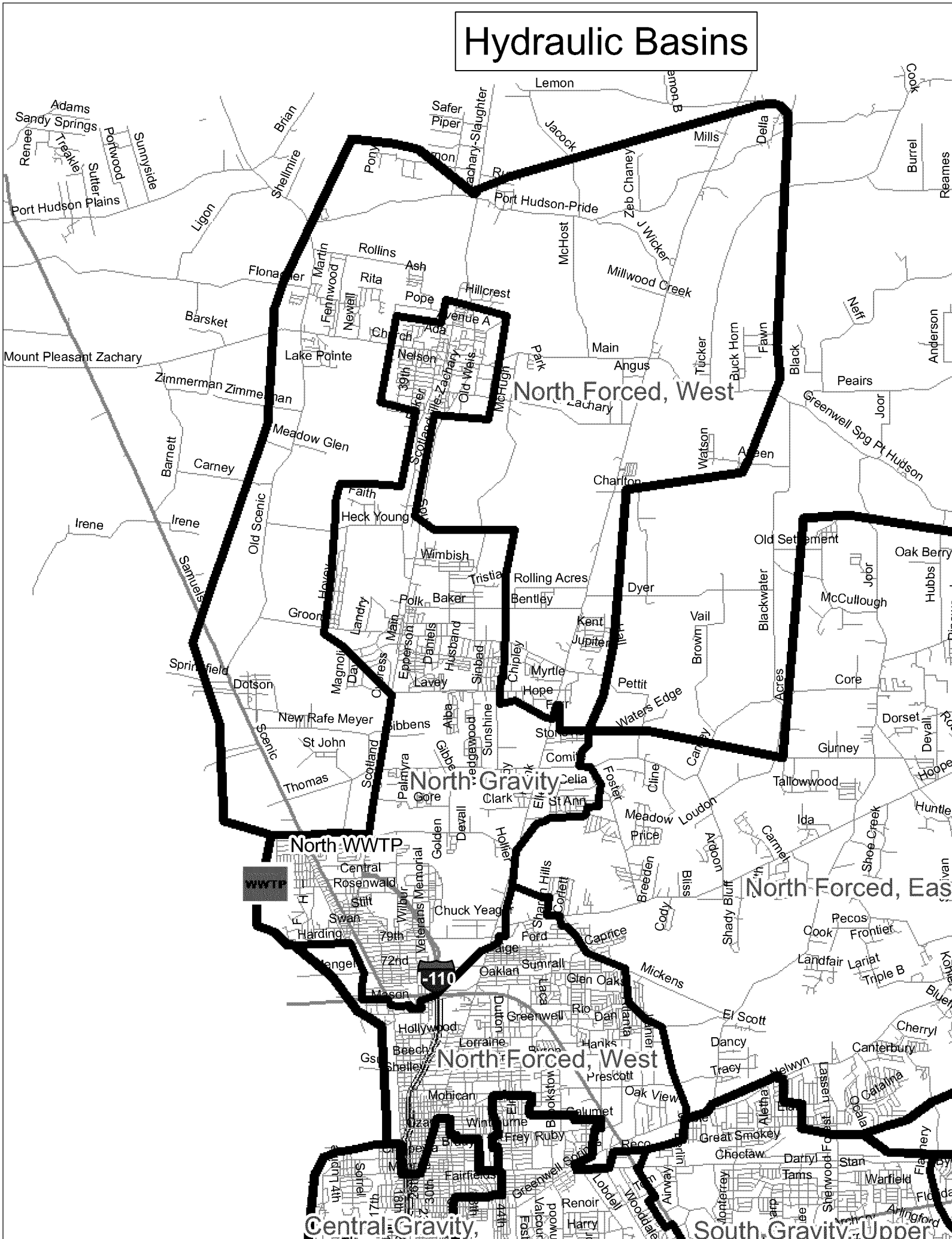
Capacity improvement projects have been defined based on three factors:

1. Computer "InfoWorks Model" comparison of existing capacity to predicted peak wet weather flows
2. Physical evidence of inadequate capacity based on C-P Department of Public Works (DPW) records
3. Predicted growth in demand for wastewater capacity

Capacity projects include replacement of inadequately sized gravity sewers and force mains as well as rehabilitation or replacement of pump stations.

Projects located nearest to the wastewater treatment plants are, in general, scheduled for the earlier years in the program.

The capacity improvements portion of the program consists of 46 projects located throughout the C-P. The first projects started in 2007, and the last project is scheduled for completion in 2014. Six to ten projects will begin construction every year from 2008 through 2013, and design and construction will be continuous through 2014. Approximately 350,000 linear feet of gravity sewer, 670,000 linear feet of forcemain, and 140 pump stations (PSs) will be upgraded as a part of the capacity projects.


Hydraulic Basins
North Forced, West
North Gravity
North WWTP
WWTP
North Forced, East
North Forced, West
Central Gravity
South Gravity Upper
I-110
Lemon
Safer
Piper
Jacock
Mills
Della
Burrel
Reames
Adams
Sandy Springs
Renee
Treakle
Portwood
Sunnyside
Sutter
Port Hudson Plains
Brian
Shellmire
Ligon
Port Hudson-Pride
Zeb Chaney
J Wicker
McHost
Millwood Creek
Rollins
Ash
Martin
Fennwood
Newell
Rita
Pope
Hillcrest
Avenue A
Ada
Church
Nelson
Barsket
Mount Pleasant Zachary
Lake Pointe
Zimmerman Zimmerman
Meadow Glen
Barnett
Carney
Old Scenic
Irene
Faith
Heck Young
Wimbish
Tristian
Rolling Acres
Bentley
Baker
Polk
Landry
Main
Epperson
Daniels
Husband
Sinbad
Chipley
Myrtle
Hope
Lavey
Dotson
Springfield
Samuels
New Rafe Meyer
Gibbens
Alba
Sunshine
Edgewood
Palmyra
Scenic
St John
Thomas
Scotland
Core
Clark
Celia
St Ann
Foster
Cline
Carney
Waters Edge
Pettit
Dyer
Kent
Jupiter
Vail
Brown
Blackwater
Old Settlement
Oak Berry
McCullough
Hubbs
Joor
Acres
Dorset
Gurney
Tallowwood
Hooper
Huntle
Meadow
Loudon
Price
Ida
Carmen
Shoe Creek
Golden
Devall
Hollier
Central
Rosenwald
Memorial
Veterans
Wilbur
Stilt
Swan
Harding
79th
72nd
Chuck Yeager
Sharon Hills
Corlett
Breeden
Bliss
Cody
Shady Bluff
Avoca
Pecos
Cook
Frontier
Landfair
Lariat
Triple B
Caprice
Ford
Sumrall
Oaklan
Glen Oak
Mickens
El Scott
Cherryl
Canterbury
Dancy
Tracy
Nelwyn
Prescott
Oak View
Mason
Hollywood
Beech
Lorraine
Hanks
Shelley
Mohican
Calumet
Frey
Ruby
Great Smokey
Choctaw
Darryl
Stan
Tams
Warfield
Sherwood Forest
Catalina
Ocala
Aletha
Fairfields
Greenwell Springs
Lobdell
Airway
Renoir
Harry
Woodvale
Monterrey
Arlingford
Florida
Greenwell Spg Pt Hudson
Watson
Aileen
Charlton
Neff
Anderson
Black
Buck Horn
Fawn
Tucker
Park
Main
Angus
McHugh
Old Wells
Scotlandville-Zachary
Peairs
Joor

Rehabilitation Project Areas

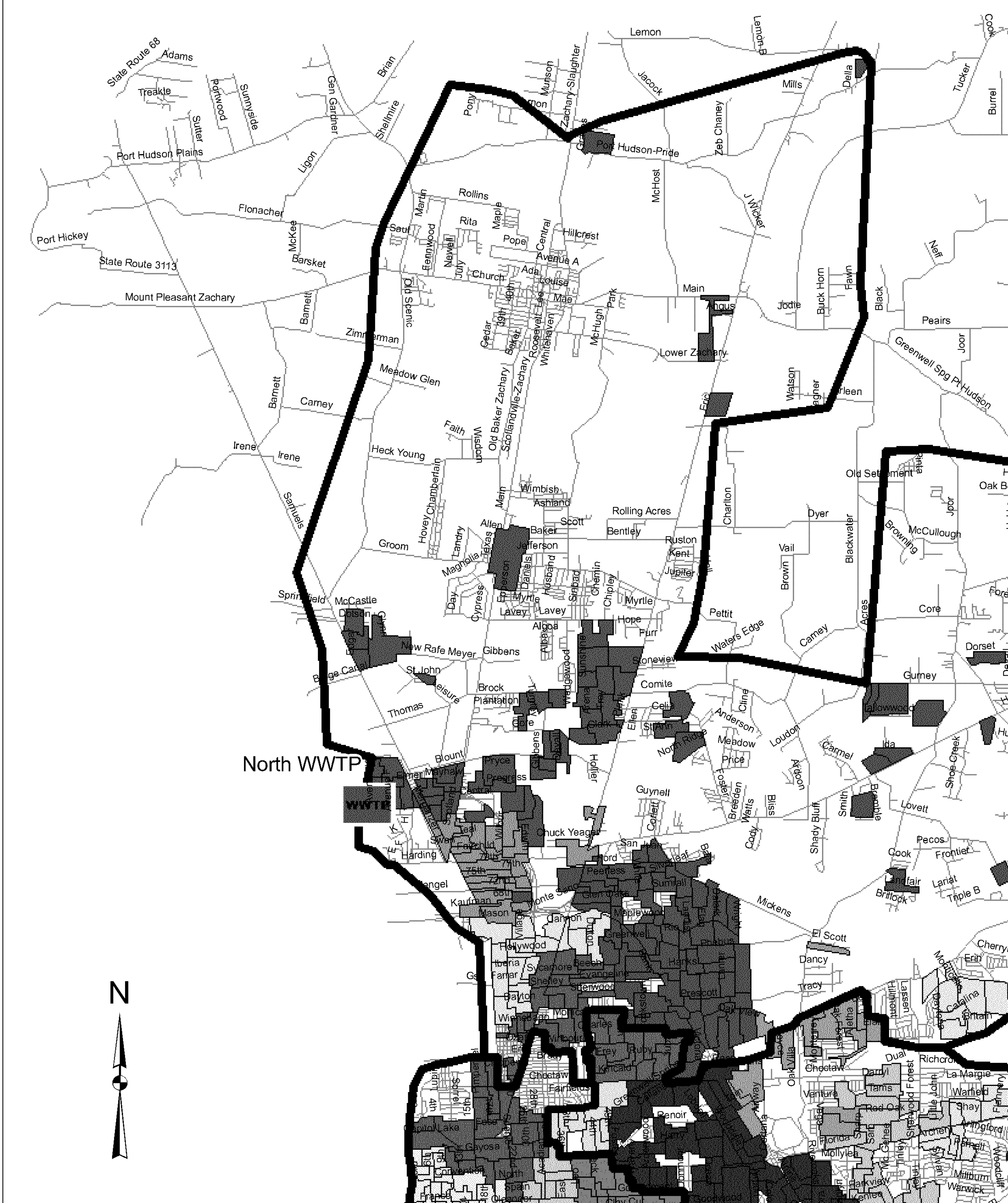


Figure ES-3 shows the location of the capacity improvement projects. Projects within these areas are described in detail in the body of this plan. The estimated total program cost of the capacity improvement projects is approximately **$600 million** in September 2007 dollars.

Wastewater Treatment Improvements/Storage Projects

The PDP includes four reservoir storage and repumping projects, as noted in Table ES-1. The cost of the Zachary Area Transmission Network Improvements Project (ZATNIP) storage facility at Red Mud Lakes is included in a project that also includes collection system capacity improvements and is included in the aforementioned capacity projects.

TABLE ES-1
Reservoir Storage and Repumping Projects

Location	Storage Volume
Choctaw Drive	26 MG
Hooper Road	10 MG
Red Mud Lakes (ZATNIP)	20 MG
South WWTP	64 MG

The wet weather treatment capacity of the South WWTP will be expanded to accommodate the predicted peak flow of 200 million gallons per day (mgd) after peak shaving storage and to accommodate wet weather flows from the Central WWTP, which will be consolidated with the South WWTP, per the technical memorandum entitled *Consolidation of South and Central Wastewater Treatment Plants in Baton Rouge (CH2M HILL, 2008)*. The wet weather treatment capacity improvements will be accomplished in two projects. The South WWTP Phase 1 project includes wet weather storage, influent pumping, and preliminary treatment. The South WWTP Phase 2 project (PDP portion) includes wet weather improvements within the treatment process

In addition to the wet weather improvement and storage projects, five Immediate Action Projects have been undertaken at the South WWTP. The purpose of those projects is to bring the plant in compliance with current discharge limits. These projects are described in the body of this report. Two of these Immediate Action Projects were either moved into another project (screenings improvements was moved to South WWTP Phase 1) or completed (Effluent Pumping Station project). The remaining three projects are being constructed as one construction project.

Design of the South WWTP immediate action projects began in 2007. These projects are now under construction. The design of the South WWTP – Phase 1 and Choctaw storage projects began in 2008, and construction will begin in 2010. The Hooper Road storage project and South WWTP – Phase 2 design started in 2009, with construction commencing in 2011. The Red Mud Lakes storage project is currently under design and is scheduled to begin construction in 2010.

Storage and treatment locations are shown on Figure ES-3. The total estimated program cost for the PDP portion of wastewater treatment and storage projects (excluding Red Mud Lakes is **$300 million** in September 2007 dollars.

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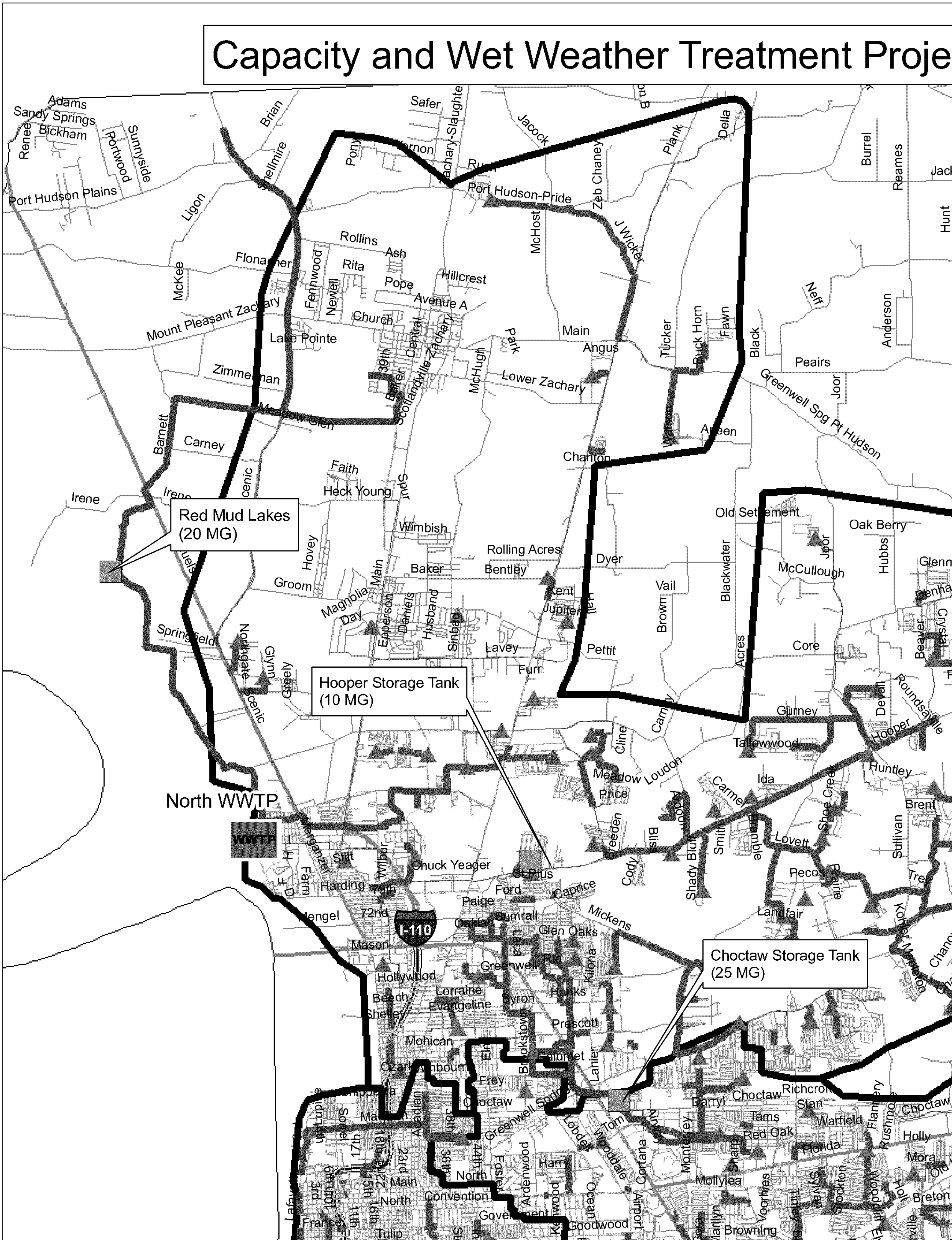
Capacity and Wet Weather Treatment Proje
Red Mud Lakes (20 MG)
Hooper Storage Tank (10 MG)
Choctaw Storage Tank (25 MG)
North WWTP
WWTP
I-110
Port Hudson Plains
Port Hudson-Pride
Mount Pleasant Zachary
Lake Pointe
Lower Zachary
Meadow Glen
Greenwell Spg Pt Hudson
Old Settlement
Rolling Acres
Heck Young
Chuck Yeager
St Pius
Glen Oaks
Greenwell Springs
Choctaw

Preliminary Master Plan Projects

The *Draft Master Plan* (CH2M HILL, 2008) outlined several improvements to the existing South WWTP facilities that are necessary to keep the plant in operation. These improvements are included in the South WWTP Phase 2 project (master plan portion).

Due to the extended power outages experienced after Hurricane Gustav, the C-P desires to install emergency generators at each of the collection system pump stations and at each of the WWTPs as part of the preliminary master plan.

The *Draft Master Plan* (CH2M HILL, 2008) outlined the need for a SCADA system. The design of the SCADA system is scheduled to begin in 2010, with construction beginning in 2011. SCADA components will be installed at all pump stations in the collection system as well as at the North WWTP. A SCADA system is already being designed for the South WWTP as part of the South WWTP – Phase 2 project.

The total estimated program cost for the preliminary master plan is $110 million in September 2007 dollars.

List of Active Projects and Projects to be Appropriated for 2010

Active Projects

Table ES-2 shows the list of active projects, which includes projects currently under design and/or construction. These projects have already been appropriated for design and/or construction as shown in the table.

TABLE ES-2
List of Active Projects

Project Number/Name	Status (November 2009)	Appropriations
SFL-R-0001 (Jefferson Hwy - HooShooToo Road)	Construction	Design & Construction
SGL-R-0002 (Staring Lane - Boone Drive)	Construction	Design & Construction
SGL-R-0001 (Gardere Lane - Burbank Road)	Construction	Design & Construction
SGU-R-0001 (Oak Villa Blvd - Choctaw Street)	Construction	Design & Construction
NGS-R-0002 (Scotland Avenue - Progress Road)	Construction	Design & Construction
NGS-R-0001 (Elm Grove Garden Road - Harding Blvd)	Bid for Construction	Design & Construction
SGU-R-0002 (Sharp Road - Florida Blvd)	Design	Design & Construction
SGL-R-0003 (Kenilworth Blvd - Boone Drive)	Design	Design & Construction
CGS-R-0001 (Foster Drive - Government Street)	Design	Design & Construction
NFW-R-0001a (Brookstown Road - Evangeline Street - Phase 1)	Design	Design & Construction
CGN-C-0001 (Capital Lake Drive - Gayosa Street)	Design	Design & Construction
NFE-C-0001 (Gurney Road - Joor Road)	Construction	Design & Construction
NFE-C-0002 (Sullivan Road - Lovett Road - Wax Road)	Construction	Design & Construction
NFE-C-0003 (Comite Drive - Foster Road - Phase 1)	Construction	Design & Construction
NFE-C-0003 (Comite Drive - Foster Road - Phase 2)	Construction	Design & Construction
NFE-C-0004 (Foster Road - Hooper Road)	Construction	Design & Construction
NFW-C-HWY61 (Zachary Area Transmission Network Improvements Project)	Design	Design

TABLE ES-2
List of Active Projects

Project Number/Name	Status (November 2009)	Appropriations
CGN-C-0003 (South Boulevard - St. Joseph Street)	Design	Design & Construction
CGN-C-0005 (Downtown Area - PS 15, PS 19, PS 59 & PS 60 Improvements)	Design	Design & Construction
CGS-C-0004 (Highland Road - Buchanan Street)	Design	Design & Construction
SGC-C-PS119 (Citiplace/Essen Area - PS119 & Forcemain Improvements)	Design	Design & Construction
Group Project 1A (Veterans Memorial Parkway - Gravity Mains)	Design	Design & Construction
Group Project 1B (Veterans Memorial Parkway - PS and FM)	Design	Design
SFL-C-0004 - Group Project 2 - Small Pump Stations	Design	Design & Construction
SFL-C-0005 (Highland Road - Burbank Drive)	Design	Design & Construction
SGC-C-PS58A (PS 58A Overflow Pump Station)	Design	Design
SGC-C-PS58FM-A (Staring Lane FM A - Burbank to Highland)	Construction	Design & Construction
SGC-C-PS58FM-B (Staring Lane FM B - Highland to Perkins)	Design	Design
SGC-C-PS58FM-C (Staring Lane FM C - Perkins to PS 58)	Design	Design
SFL-C-0002 (Perkins/Old Perkins Area - Booster Pump Station 514 Improvements)	Design	Design
SFL-C-0006 (Nicholson Dr - Highland Rd - Perkins Rd)	Design	Design
SGL-C-0005 (Bayou Duplantier Area Improvements Project)	Design	Design
CGN-C-0002 (25th Street - North Acadian Thruway)	Design	Design*
CGS-C-0006 (Government St - South Acadian Thruway)	Design	Design
NGS-C-0002 (Plank Road - Kleinpeter Road)	Design	Design
SFL-C-0001 (Multiple PS - Nicholson Dr - Brightside Dr)	Design	Design
SFU-C-0001 (Multiple PS - Jefferson Hwy - Park Forest Dr)	Design	Design
NFW-C-0002 (Choctaw Storage, Pump Stations and Forcemains)	Design	Design & Construction
CC-WWTP-PS (PS-42)	Design	Design
CC-EAST-FM (Central Consolidated FM)	Design	Design
CC-EAST-PS (Central Consolidated Pump Stations)	Design	Design
CC-WWTP-FM (PS-42 FM)	Design	Design
NFW-C-0004 (Hooper Storage)	Design	Design
STP-C-0001 (South WWTP - Phase 1)	Design	Design & Construction
STP-C-0002 (South WWTP - Phase 2)	Design	Design
SSO Odor Control NWWTP (07-TP-BD-0030)	Bid for Construction	Design & Construction
SWWTP IAP (08-TP-BD-0031)	Construction	Design & Construction
RMAP1 – Kleinpeter	Complete	Design & Construction
RMAP1 – Industriplex	Construction	Design & Construction
RMAP1 – PS 136	Construction	Design & Construction

*Construction for 25th Street - North Acadian Thruway project has been split between Capital Lake-Gayosa Street and South Blvd - St. Joseph Street projects

Projects for 2010

Table ES-3 shows the list of projects that are to be appropriated for design and/or construction in 2010. Some projects in Table ES-2 above will be active in 2010 (going from design to construction), so if they are appropriated for design & construction in Table ES-2, they are not included in Table ES-3 below, although they will be active in 2010. For instance, South WWTP – Phase 1 project is under design in 2009 and will begin construction in 2010, but it is fully appropriated for design and construction, so it is included in Table ES-2 only.

TABLE ES-3
List of Projects for 2010

Project Number/Name	Appropriations Needed for 2010
NFE-R-0001 (Silverleaf Road - Ford Street)	Construction (Design already appropriated)
NFW-R-0001a (Brookstown Road - Evangeline Street - Phase 1)	Construction (Design already appropriated)
NFW-R-0001b (Brookstown Road - Evangeline Street - Phase 2)	Construction (Design already appropriated)
SGC-R-0001 (Bluebonnet Blvd - Jefferson Hwy- Phases 1 & 2)	Construction (Design already appropriated)
CGS-R-0002 (Highland Road - Washington Street)	Design
CGS-R-0005 (Acadian Thruway - Perkins Road)	Construction
CGS-R-0003 (Stanford Avenue - Morning Glory Road)	Design & Construction
CGS-R-0004 (Acadian Thruway - Claycut Road)	Design
SGC-R-0002a (Airline Highway - Goodwood Blvd - Phase 1)	Design
SGC-R-0002b (Airline Highway - Goodwood Blvd - Phase 2)	Design
NFW-C-HWY61 (Zachary Area Transmission Network Improvements Project)	Construction
Group Project 1A (Metro Airport Area Sewer Upgrades)	Construction
Group Project 1B (Veterans Memorial Parkway - PS and FM)	Construction
SFL-C-0002 (Perkins/Old Perkins Area - Booster Pump Station 514 Improvements)	Construction
SFL-C-0005 (Highland Road – Burbank Drive)	Construction
SGC-C-PS58A (PS 58A Overflow Pump Station)	Construction
SGC-C-PS58FM-B (Staring Lane FM B - Highland to Perkins)	Construction
SGC-C-PS58FM-C (Staring Lane FM C - Perkins to PS 58)	Construction
SFU-C-0005 (O'Neal Lane Pipeline Projects)	None (Design already appropriated)
SGC-C-0002 (Airline Highway Pipeline Projects)	None (Design already appropriated)
SGL-C-0002 (Multiple PS - Highland Road - Kenilworth Parkway)	None (Design already appropriated)
SGC-C-0001 (Florida Blvd PS Projects)	Design
NFE-C-0005 (Hooper Road PS Projects)	Design
SFU-C-0002 (O'Neal Lane PS Projects)	Design
CC-WWTP-PS (PS 42)	Construction
CC-East-PS (Central Consolidated Pump Stations)	Construction
CC-WWTP-FM (PS 42 FM)	Construction
CC-East-FM (Central Consolidated FM)	Construction
NFW-C-0004 (Hooper Storage)	Construction
STP-C-0002 (South WWTP - Phase 2 - PDP & MP)	Construction
Sewer System Backup Power Program	Construction
North WWTP SCADA	Design
Collection System SCADA	Design
SCADA Operations Data/Control Center	Design

SECTION 1

Overview

1.1 Background

The purpose of the Sanitary Sewer Overflow (SSO) Control and Wastewater Facilities Program is to reduce sanitary sewer overflows while planning for the future. The City of Baton Rouge, East Baton Rouge Parish (C-P) entered into a Consent Decree (Civil Action 01-978-B-M3, United States of America and State of Louisiana versus C-P) with the United States Environmental Protection Agency (EPA) and the State of Louisiana to take remedial actions in the collection system to reduce SSOs by December 31, 2014. The Consent Decree details requirements for several components, including the following:

- Supplementary Environmental Projects (SEP)
- Remedial Measures Action Plan 1 (RMAP1)
- Remedial Measures Action Plan 2 (RMAP2)
- Preventive Maintenance
- Sewer Rehabilitation and Inspection
- Outreach and Public Awareness (O&PA) Program

This document constitutes the RMAP2. Other portions of the Consent Decree are addressed in other documents. This document is the second annual update of the *Program Delivery Plan* (PDP) that was initially published in January 2008.

1.2 Major Program Goals

The major goals of the program are to:

- Reduce excess wet weather flows that cause SSOs
- Rehabilitate the collection system
- Increase the hydraulic capacity of the collection system
- Accommodate growth in project areas
- Comply with wastewater treatment plant National Pollutant Discharge Elimination System (NPDES) permit
- Comply with the terms of the Consent Decree

The preparation of the PDP considered the locations of known overflows to assure that the projects defined would reduce the frequency of these overflows. Areas of the collection system found to have defects were also identified for rehabilitation.

1.3 Program Description

The three types of projects identified for implementation are designated comprehensive rehabilitation projects, capacity improvement projects, and wastewater treatment improvement/storage projects. The following paragraphs define each project type.

1.3.1 Comprehensive Rehabilitation Projects

Areas targeted for sewer pipe rehabilitation work are those in which flow monitoring has indicated the highest levels of inflow and infiltration (I/I). Comprehensive rehabilitation projects is being implemented using a process developed and implemented by the Program Manager (PM) in association with Department of Public Works (DPW) technical staff. The I/I reduction plan for these projects has the following goals:

- Identify and reduce stormwater inflow sources into sanitary sewers
- Identify and reduce Rainfall Dependent Infiltration (RDI) sources in sanitary sewers
- Reduce overflow events
- Increase the sewer system useful life
- Minimize public inconvenience

The process chosen for rehabilitation and/or reconstruction is generally referred to as "Find and Fix." As the process description suggests, there are two phases to the process. The first is to find or identify areas that require rehabilitation or reconstruction, and the second is to determine the best engineering solution to fix the problem. After the "Find" phase, some portions of the system may not require rehabilitation. In those portions of the system, the Engineer will recommend No Action. The overall approach to the comprehensive rehabilitation portion of program is to complete the following tasks:

1. Obtain basin data and perform basin field observations
2. Perform I/I testing and inspection, including
   - Flow monitoring assessment
   - Smoke testing
   - Manhole inspection
   - Closed circuit television inspection
3. Prepare I/I reduction plan
4. Prepare plans, specifications, and cost estimates
5. Implement I/I reduction construction
6. Evaluate I/I reduction results. Compare to pre-rehabilitation flow monitoring
7. Implement additional I/I reduction, if goals are not met

Flow monitoring is an integral part of the overall rehabilitation and reconstruction portion of the program and will be an ongoing process. Pre-construction flow monitoring is required to establish existing conditions. Post-construction flow monitoring will gauge the effectiveness of the rehabilitation and reconstruction. Flow monitoring will continue for the duration of the program to calibrate the rehabilitation progress.

1.3.2 Capacity Improvement Projects

Capacity improvement projects will reduce hydraulic bottlenecks in the system and convey wet weather flows to new upstream storage facilities and ultimately to the wastewater

treatment plants (WWTPs). These projects will include installation of larger pipes or constructing parallel pipes to increase conveyance capacity, as well as replacement of pump stations to handle future wet weather peak flows.

1.3.3 Wastewater Treatment Improvement/Storage Projects

Design and construction of WWTP wet weather improvement projects will occur early in the program to store and treat wet weather flows. Wastewater treatment projects at the South WWTP include the following:

- Immediate Action Projects (IAPs) for dry weather permit compliance
- Consolidation with the Central WWTP (Refer to the *Consolidation of South and Central Wastewater Treatment Plants in Baton Rouge TM* (CH2M HILL, 2008)
- Wet weather flow capacity increases to 200 million gallons per day (mgd) with hydraulic peak shaving
- Master Plan improvements

The South WWTP immediate action projects and treatment projects are included in this document and are part of the RMAP2. Master plan projects are described in a separate document (*Draft Master Plan; CH2M HILL, 2008*).

Storage projects will be designed and constructed early in the program to store wet weather flows upstream in the basins and then release flows back into the system after the wet weather event has passed. Storage facilities will be sized to store the peak flow from a 2 year frequency, 12-hour duration storm event, assuming rehabilitation projects are complete.

1.4 Project Delivery Summary

The projects have been scheduled for both design and construction activities based on funding considerations, and placed into a resource-loaded schedule shown in Table 1-1 and depicted graphically as Figure 1-1. Figure 1-2 presents the schedule for pre-construction and construction activities for all the program projects.

Note: Financial analysis and funding schedules are prepared by the C-P DPW and are not a part of this document.

1.5 Report Contents

The content of this report includes the following.

- Section 2, Planning Description, presents the process used to define the projects in this document.
- Section 3, South Basin Projects, describes the projects located in the South Basin. GIS maps that show locations of the work included in each project are located at the end of each project summary. The South Basin is the collection system that collects and conveys flow to the South WWTP.

- Section 4, Central Basin Projects, describes projects that are located in the Central Basin and collect and convey flow to the Central WWTP and will be conveyed in the future to the South WWTP.
- Section 5, North Basin Projects, details projects that are located in the North Basin and collect and convey flow to the North WWTP.
- Section 6, Emergency Generators, describes the stand-by engine generators that are to be located at each C-P pump station and the two WWTPs.
- Section 7, SCADA, describes the SCADA system that is to be implemented in the collection system and at the North WWTP. The SCADA system for the South WWTP is being implemented as part of the South WWTP – Phase 2 project.

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Comprehensive Rehabilitation Projects		2007	2008	2009
Project Description				
SFL-R-0001 (Jefferson Hwy - HooShooToo Road)				
	Estimated Find Work		$ -	
	Estimated Survey		$ -	
	Estimated Design Engineering		$ -	
	Estimated Construction		$ 2,250,000	
	Estimated SDC		$ 420,000	
	Project Sub-Total	$ -	$ 2,670,000	$
SGL-R-0002 (Staring Lane - Boone Drive)				
	Estimated Find Work		$ -	
	Estimated Survey		$ -	
	Estimated Design Engineering		$ -	
	Estimated Construction		$ 5,427,000	
	Estimated SDC		$ 500,000	
	Project Sub-Total	$ -	$ 5,927,000	$
SGL-R-0001 (Gardere Lane - Burbank Road)				
	Estimated Find Work		$ -	
	Estimated Survey		$ -	
	Estimated Design Engineering		$ -	
	Estimated Construction		$ 5,958,000	
	Estimated SDC		$ 460,000	
	Project Sub-Total	$ -	$ 6,418,000	$
SGU-R-0001 (Oak Villa Blvd - Choctaw Street)				
	Estimated Find Work		$ -	
	Estimated Survey		$ -	
	Estimated Design Engineering		$ -	
	Estimated Construction		$ 8,997,000	
	Estimated SDC		$ 500,000	
	Project Sub-Total	$ -	$ 9,497,000	$
NGS-R-0002 (Scotland Avenue - Progress Road)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			$ 9,487
	Estimated SDC			$ 670
	Project Sub-Total	$ -	$ -	$ 10,157
NGS-R-0001 (Elm Grove Garden Road - Harding Blvd)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			$ 8,600
	Estimated SDC			$ 770
	Project Sub-Total	$ -	$ -	$ 9,370
SGU-R-0002 (Sharp Road - Florida Blvd)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			$ 8,000
	Estimated SDC			$ 720
	Project Sub-Total	$ -	$ -	$ 8,720
SGL-R-0003 (Kenilworth Blvd - Boone Drive)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			$ 5,400
	Estimated SDC			$ 490
	Project Sub-Total	$ -	$ -	$ 5,890

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Comprehensive Rehabilitation Projects		2007	2008	2009
Project Description				
CGS-R-0001 (Foster Drive - Government Street)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			$ 6,900
	Estimated SDC			$ 620
	Project Sub-Total	$ -	$ -	$ 7,520
NFW-R-0001a (Brookstown Road - Evangeline Street -Phase I)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
NFW-R-0001b (Brookstown Road - Evangeline Street - Phase II)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
NFE-R-0001 (Silverleaf Road - Ford Street)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SGC-R-0001 (Bluebonnet Blvd - Jefferson Hwy - Phase I)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SGC-R-0001 (Bluebonnet Blvd - Jefferson Hwy - Phase II)				
	Estimated Find Work			$
	Estimated Survey			$
	Estimated Design Engineering			$
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
CGS-R-0005 (Acadian Thruway - Perkins Road)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
CGS-R-0003 (Stanford Avenue - Morning Glory Road)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Comprehensive Rehabilitation Projects		2007	2008	2009
Project Description				
CGS-R-0004 (Acadian Thruway - Claycut Road)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
CGS-R-0002 (Highland Road - Washington Street)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
SGC-R-0002a (Airline Highway - Goodwood Blvd - Phase I)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
SGC-R-0002b (Airline Highway - Goodwood Blvd - Phase II)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
SFU-R-0001 (Antioch Road - Chadsford Drive)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
SFL-R-0002 (Jones Creek Road - Tiger Bend Road)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
CGN-R-0001a (Scenic Highway - Spanish Town Road - Phase I)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
CGN-R-0001b (Scenic Highway - Spanish Town Road - Phase II)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Comprehenisve Rehabilitation Projects		2007	2008	2009
Project Description				
NFW-R-0002 (Interstate 110 - Hollywood Street)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SFL-R-0003 (Siegen Lane - Interstate 10)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SGC-R-0003 (Ardenwood Drive - Winboume Street)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SGU-R-0003 (Flannery Road - Florida Blvd)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
CGN-R-0002 (East Boulevard - Government Street)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SGC-R-0004 (North 38th Street - Gus Young Avenue)				
	Estimated Find Work			
	Estimated Survey			
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
Rehab Engineering Retainer Contracts				
	Estimated Design Engineering		$ 1,500,000	$ 920
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ 1,500,000	$ 920
WWCS Evaluation & Management Project (06-WC-AR-0064)				
	Estimated Design Engineering			
	Estimated Construction		$ 2,056,430	
	Estimated SDC		$ -	
	Project Sub-Total	$ -	$ 2,056,430	$
Comprehensive Rehabilitation Estimated Total Project Cost		**$ -**	**$ 28,100,000**	**$ 42,600**
Estimated Program Management for Comprehensive Rehab		**$ -**	**$ 3,300,000**	**$ 3,800**
Comprehensive Rehabilitation Estimated Total Program Cost		**$ -**	**$ 31,400,000**	**$ 46,400**

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Capacity Improvement Projects		2007	2008	2009
Project Description				
CGN-C-0001 (Capital Lake Drive - Gayosa Street)				
	Estimated Design Engineering	$ 733,000		
	Estimated Construction			$ 5,200
	Estimated SDC			$ 310
	Project Sub-Total	$ 733,000	$ -	$ 5,510
NFE-C-0001 (Gurney Road - Joor Road)				
	Estimated Design Engineering	$ 357,000		
	Estimated Construction		$ 1,400,000	
	Estimated SDC		$ 80,000	
	Project Sub-Total	$ 357,000	$ 1,480,000	$
NFE-C-0002 (Sullivan Rd./Lovett Rd./Wax Rd.)				
	Estimated Design Engineering	$ 486,000		
	Estimated Construction		$ 2,160,000	
	Estimated SDC		$ 130,000	
	Project Sub-Total	$ 486,000	$ 2,290,000	$
NFE-C-0003 (Comite Road - Foster Road) - Phase I				
	Estimated Design Engineering	$ 463,000		
	Estimated Construction		$ 1,920,000	
	Estimated SDC		$ 120,000	
	Project Sub-Total	$ 463,000	$ 2,040,000	$
NFE-C-0004 (Foster Road - Hooper Road)				
	Estimated Design Engineering	$ 388,000		
	Estimated Construction		$ 8,800,000	
	Estimated SDC		$ 530,000	
	Project Sub-Total	$ 388,000	$ 9,330,000	$
NFW-C-HWY61 (Zachary Area Transmission Network Improvements)				
	Estimated Design Engineering		$ 4,510,000	
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ 4,510,000	$
CGN-C-0003 (South Boulevard - St. Joseph Street)				
	Estimated Design Engineering		$ 809,000	
	Estimated Construction			$ 11,500
	Estimated SDC			$ 690
	Project Sub-Total	$ -	$ 809,000	$ 12,190
CGN-C-0005 (Downtown Area - PS15, PS19, PS 59 & PS60 Improvements)				
	Estimated Design Engineering		$ 899,000	
	Estimated Construction			$ 7,200
	Estimated SDC			$ 430
	Project Sub-Total	$ -	$ 899,000	$ 7,630
CGS-C-0004 (Highland Road - Buchanan Street)				
	Estimated Design Engineering		$ 532,000	
	Estimated Construction			$ 4,100
	Estimated SDC			$ 250
	Project Sub-Total	$ -	$ 532,000	$ 4,350

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Capacity Improvement Projects				
		2007	2008	2009
Project Description				
SGC-C-PS119 (Citiplace/Essen Area - PS119 & Forcemain Improvements)				
	Estimated Design Engineering		$ 480,000	
	Estimated Construction			$ 2,800
	Estimated SDC			$ 170
	Project Sub-Total	$ -	$ 480,000	$ 2,970
Group Project 1A (Metro Airport Area Sewer Upgrades)				
	Estimated Design Engineering		$ 2,760,000	
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ 2,760,000	$
Group Project 1B (Metro Airport Area Sewer Upgrades- PS and FM)				
	Estimated Design Engineering		$ 1,580,000	
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ 1,580,000	$
SFL-C-0002 (Perkins/Old Perkins Area - Booster Pump Station 514 Improvements)				
	Estimated Design Engineering			$ 1,303
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 1,303
SFL-C-0004 - Group Project 2 - Small Pump Stations				
	Estimated Design Engineering		$ 525,000	
	Estimated Construction			$ 3,300
	Estimated SDC			$ 200
	Project Sub-Total	$ -	$ 525,000	$ 3,500
SFL-C-0005 (Highland Road - Burbank Drive)				
	Estimated Design Engineering		$ 1,574,000	
	Estimated Construction			$ 16,200
	Estimated SDC			$ 970
	Project Sub-Total	$ -	$ 1,574,000	$ 17,170
SFL-C-0006 (Nicholson Dr - Highland Rd - Perkins Rd)				
	Estimated Design Engineering			$ 640
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 640
SGL-C-0005 (Bayou Duplantier Area Sewer Upgrades)				
	Estimated Design Engineering			$ 310
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 310
CGN-C-0002 (25th Street - North Acadian Thruway)				
	Estimated Design Engineering			$ 521
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 521
CGS-C-0006 (Government St - South Acadian Thruway)				
	Estimated Design Engineering			$ 300
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 300

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Capacity Improvement Projects		2007	2008	2009
Project Description				
NGS-C-0002 (Plank Road - Kleinpeter Road)				
	Estimated Design Engineering			$ 654
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 654
SFU-C-0005 (O'Neal Lane Pipeline Projects)				
	Estimated Design Engineering			$ 1,390
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 1,390
SFL-C-0001 (Multiple PS - Nicholson Dr - Brightside Dr)				
	Estimated Design Engineering			$ 410
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 410
SGC-C-PS58A (PS 58A Overflow Pump Station)				
	Estimated Design Engineering			$ 1,548
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 1,548
SGC-C-PS58FM-A (Staring Lane FM - Phase I - Burbank to Highland)				
	Estimated Design Engineering		$ 1,260,000	
	Estimated Construction			$ 4,615
	Estimated SDC			$ 280
	Project Sub-Total	$ -	$ 1,260,000	$ 4,895
SGC-C-PS58FM-B (Staring Lane FM - Phase II - Highland to Perkins)				
	Estimated Design Engineering		$ -	
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SGC-C-PS58FM-C (Staring Lane FM - Phase III - Perkins to PS 58)				
	Estimated Design Engineering			$ 700
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 700
SFU-C-0001 (Multiple PS - Jefferson Hwy - Park Forest Dr)				
	Estimated Design Engineering			$ 180
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 180
SGC-C-0002 (Airline Highway Pipeline Projects)				
	Estimated Design Engineering			$ 2,020
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 2,020
NFW-C-0009 (Multiple PS - Highway 61 - Plank Road)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Capacity Improvement Projects		2007	2008	2009
Project Description				
SGL-C-0002 (Multiple PS - Highland Road - Kenilworth Parkway)				
	Estimated Design Engineering			$ 640
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 640
SGC-C-0001 (Florida Blvd PS Projects)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
NGS-C-0003 (Plank Road PS Projects)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
SGU-C-0003 (Sherwood Forest Blvd - Goodwood Blvd Pipeline Projects)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
NFW-C-0001 (Joor Road - Greenwell Springs Road)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
NFW-C-0007 (Plank Road - Port Hudson Pride Road)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
SGL-C-0003 (Highland Road Pipeline Projects)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
SGU-C-0005 (Oak Villa Boulevard - Monterey Boulevard)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
NFE-C-0006 (Lovett Road - Greenwell Springs Road)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -
NFE-C-0005 (Hooper Road PS Projects)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ -

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Capacity Improvement Projects

Project Description		2007	2008	2009
NFW-C-0010 (Multiple PS - Prescott Rd - Greenwell Springs Rd)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SFU-C-0002 (O'Neal Lane PS Projects)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SFL-C-0003 (Multiple PS - Burbank Drive - Siegen Lane)				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
CC-WWTP-PS (PS 42)				
	Estimated Design Engineering			$ 1,150
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 1,150
CC-East-PS (Central Consolidated Pump Stations)				
	Estimated Design Engineering			$ 1,200
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 1,200
CC-WWTP-FM (PS 42 FM)				
	Estimated Design Engineering			$ 1,330
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 1,330
CC-East-FM (Central Consolidated FM)				
	Estimated Design Engineering			$ 1,288
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$ 1,288
Capacity Improvement Estimated Total Project Cost		**$ 2,400,000**	**$ 30,100,000**	**$ 73,800**
Estimated Program Management for Capacity Improvement		**$ 3,060,000**	**$ 3,280,000**	**$ 3,830**
Capacity Improvement Estimated Total Program Cost		**$ 5,500,000**	**$ 33,400,000**	**$ 77,600**

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

Wastewater Treatment/Storage Projects				
	2007	2008	2009	
Project Description				
NFW-C-0002 (Choctaw Storage, Pump Stations, and Forcemains)				
Estimated Design Engineering		$ 3,550,000		
Estimated Construction			$ 51,518	
Estimated SDC			$ 3,000	
Project Sub-Total	$ -	$ 3,550,000	$ 54,518	
NFW-C-0004 (Hooper Storage)				
Estimated Design Engineering			$ 1,255	
Estimated Construction				
Estimated SDC				
Project Sub-Total	$ -	$ -	$ 1,255	
STP-C-0001 (South WWTP - Phase 1)				
Estimated Design Engineering		$ 5,300,000		
Estimated Construction			$ 90,000	
Estimated SDC			$ 5,400	
Project Sub-Total	$ -	$ 5,300,000	$ 95,400	
STP-C-0002 (South WWTP - Phase 2 - PDP)				
Estimated Design Engineering			$ 9,560	
Estimated Construction				
Estimated SDC				
Project Sub-Total	$ -	$ -	$ 9,560	
SSO Odor Control NWWTP (07-TP-BD-0030)				
Estimated Design Engineering	$ 100,610			
Estimated Construction		$ 2,756,120		
Estimated SDC				
Project Sub-Total	$ 100,610	$ 2,756,120	$	
SWWTP IAP (08-TP-BD-0031)				
Estimated Design Engineering	$ 2,255,000			
Estimated Construction		$ 25,632,000		
Estimated SDC		$ -		
Project Sub-Total	$ 2,255,000	$ 25,632,000	$	
WW Treatment/Storage Estimated Total Project Cost	**$ 2,400,000**	**$ 37,200,000**	**$ 160,700**	
Estimated Program Management for WW Treatment/Storage	**$ 3,060,000**	**$ 3,280,000**	**$ 3,830**	
WW Treatment/Storage Estimated Total Program Cost	**$ 5,500,000**	**$ 40,500,000**	**$ 164,500**	
Total Estimated Wet Weather Program Cost (Sept. 2007 Dollars)	**$ 11,000,000**	**$ 105,300,000**	**$ 288,500**	
Total Estimated Wet Weather Program Cost (Considering 3% Per Year Inflation Rate)	**$ 11,000,000**	**$ 105,300,000**	**$ 288,500**	

TABLE 1-1
Project Funding Schedule
Program Delivery Plan

"Preliminary Master Plan"				
		2007	2008	2009
Project Description				
STP-C-0002 (South WWTP - Phase 2 - MP)				
	Estimated Design Engineering			$
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
Sewer System & WWTP Backup Power Program				
	Estimated Design Engineering			$
	Estimated Construction			$ 10,100
	Estimated SDC			$ 610
	Project Sub-Total	$ -	$ -	$ 10,710
North WWTP SCADA				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
Collection System SCADA				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
SCADA Operations Data/Control Center				
	Estimated Design Engineering			
	Estimated Construction			
	Estimated SDC			
	Project Sub-Total	$ -	$ -	$
"Preliminary Master Plan" Total Project Cost		**$ -**	**$ -**	**$ 10,800**
Estimated Program Management for "Preliminary Master Plan"		**$ -**	**$ -**	**$**
"Preliminary Master Plan" Estimated Total Program Cost		**$ -**	**$ -**	**$ 10,800**
Program Management Total		$ 6,120,000	$ 9,830,000	$ 11,500
Total Estimated Program Cost (Sept. 2007 Dollars)		**$ 11,000,000**	**$ 105,300,000**	**$ 299,300**
Total Estimated Program Cost (Considering 3% Per Year Inflation Rate)		**$ 11,000,000**	**$ 105,300,000**	**$ 299,300**

FIGURE 1-1
Program Funding Schedule
Program Delivery Plan

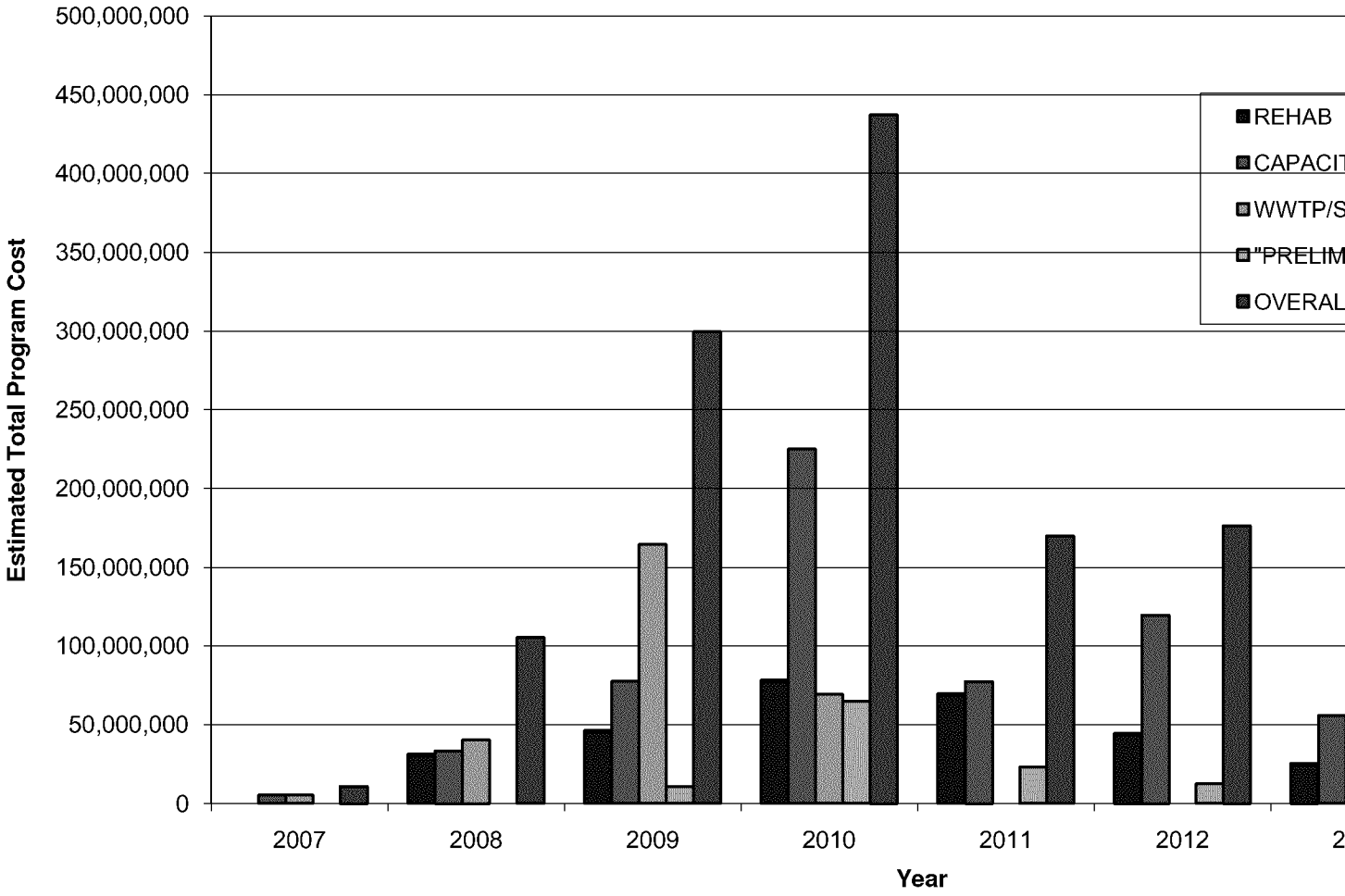

FIGURE 1-2
Program Schedule
Program Delivery Plan

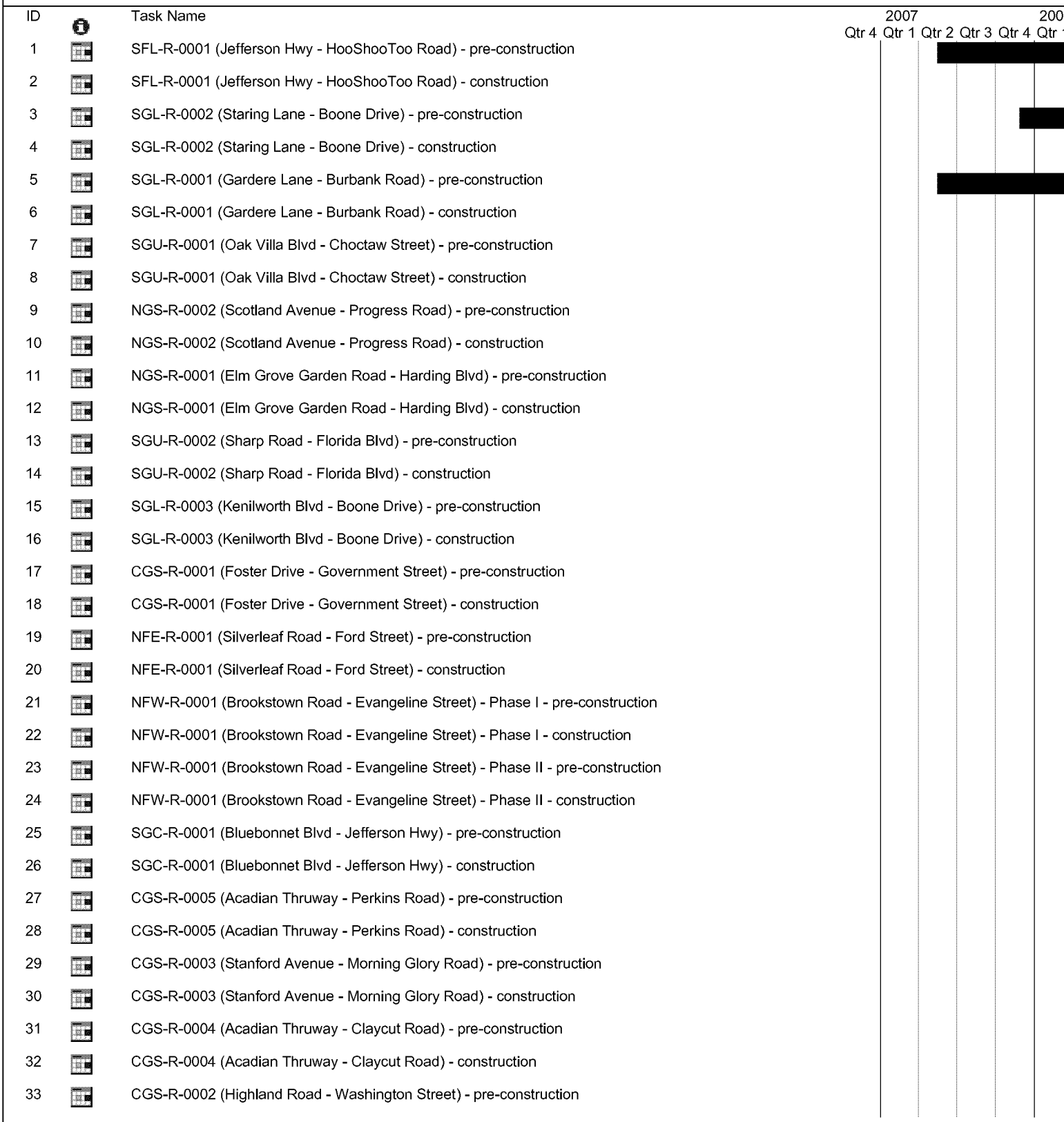

FIGURE 1-2
Program Schedule
Program Delivery Plan

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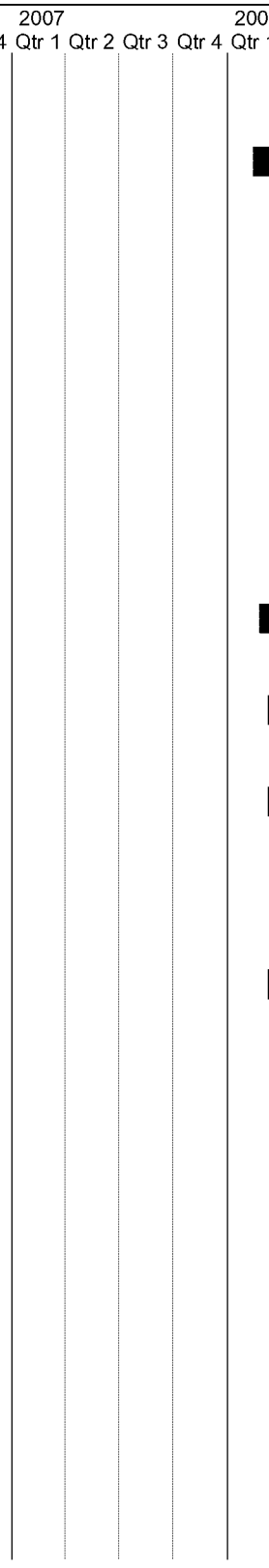
Task
Split
Progress
Milestone
Summary
Project Summary

FIGURE 1-2
Program Schedule
Program Delivery Plan

ID	Task Name
67	NFE-C-0003 (Comite Road - Foster Road Phase 2) - pre-construction
68	NFE-C-0003 (Comite Road - Foster Road Phase 2) - construction
69	NFE-C-0004 (Foster Road - Hooper Road) - pre-construction
70	NFE-C-0004 (Foster Road - Hooper Road) - construction
71	NFW-C-HWY61 (Zachary Area Transmission Network Improvements Project) - pre-construction
72	NFW-C-HWY61 (Zachary Area Transmission Network Improvements Project) - construction
73	CGN-C-0003 (South Boulevard - St. Joseph Street) - pre-construction
74	CGN-C-0003 (South Boulevard - St. Joseph Street) - construction
75	CGN-C-0005 (Downtown Area - PS15, PS19, PS59 & PS60 Improvements) - pre-construction
76	CGN-C-0005 (Downtown Area - PS15, PS19, PS59 & PS60 Improvements) - construction
77	CGS-C-0004 (Highland Road - Buchanan Street) - pre-construction
78	CGS-C-0004 (Highland Road - Buchanan Street) - construction
79	SGC-C-PS119 (Citiplace/Essen Area - PS119 & Forcemain Improvements) - pre-construction
80	SGC-C-PS119 (Citiplace/Essen Area - PS119 & Forcemain Improvements) - construction
81	Group Project 1A (Veterans Memorial Parkway - Gravity Mains) - pre-construction
82	Group Project 1A (Veterans Memorial Parkway - Gravity Mains) - construction
83	Group Project 1B (Veterans Memorial Parkway - PS and FM) - pre-construction
84	Group Project 1B (Veterans Memorial Parkway - PS and FM) - construction
85	SFL-C-0002 (Perkins/Old Perkins Area - Booster Pump Station 514 Improvements) - pre-construction
86	SFL-C-0002 (Perkins/Old Perkins Area - Booster Pump Station 514 Improvements) - construction
87	Group Project 2 - Small Pump Stations (SFL-C-0004) - pre-construction
88	Group Project 2 - Small Pump Stations (SFL-C-0004) - construction
89	SFL-C-0005 (Highland Road - Burbank Drive) - pre-construction
90	SFL-C-0005 (Highland Road - Burbank Drive) - construction
91	SFL-C-0006 (Nicholson Dr - Highland Rd - Perkins Rd) - pre-construction
92	SFL-C-0006 (Nicholson Dr - Highland Rd - Perkins Rd) - construction
93	SGL-C-0005 (Bayou Duplantier Area Sewer Upgrades) - pre-construction
94	SGL-C-0005 (Bayou Duplantier Area Sewer Upgrades) - construction
95	CGN-C-0002 (25th Street - North Acadian Thruway) - pre-construction
96	CGN-C-0002 (25th Street - North Acadian Thruway) - construction
97	CGS-C-0006 (Government St - South Acadian Thruway) - pre-construction
98	CGS-C-0006 (Government St - South Acadian Thruway) - construction
99	NGS-C-0002 (Plank Road - Kleinpeter Road) - pre-construction



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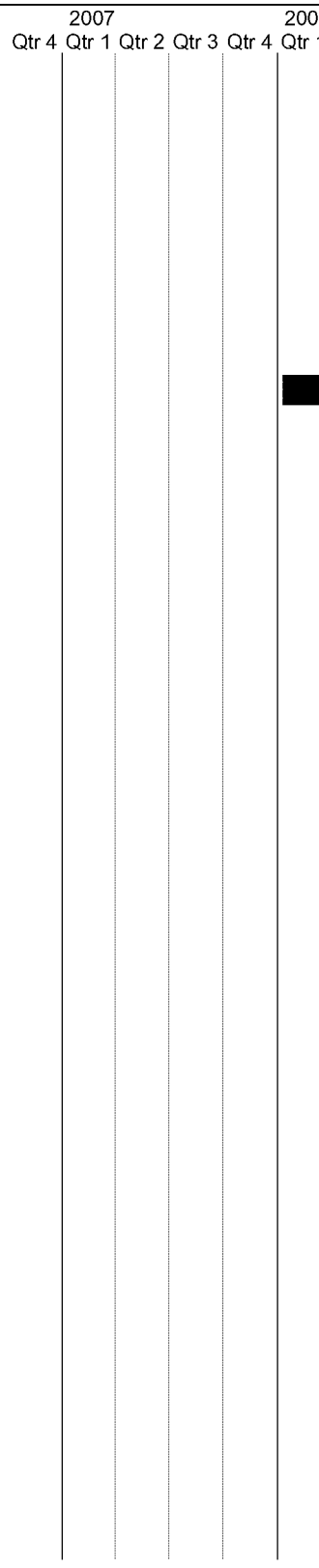
Task
Split
Progress
Milestone
Summary
Project Summary

FIGURE 1-2
Program Schedule
Program Delivery Plan

ID	Task Name
100	NGS-C-0002 (Plank Road - Kleinpeter Road) - construction
101	SFU-C-0005 (O'Neal Lane Pipeline Projects) - pre-construction
102	SFU-C-0005 (O'Neal Lane Pipeline Projects) - construction
103	SFL-C-0001 (Multiple PS - Nicholson Dr - Brightside Dr) - pre-construction
104	SFL-C-0001 (Multiple PS - Nicholson Dr - Brightside Dr) - construction
105	SGC-C-PS58A (PS 58A Overflow Pump Station) - pre-construction
106	SGC-C-PS58A (PS 58A Overflow Pump Station) - construction
107	SGC-C-PS58FM-A (Staring Lane FM Project A - Burbank to Highland) - pre-construction
108	SGC-C-PS58FM-A (Staring Lane FM Project A - Burbank to Highland) - construction
109	SGC-C-PS58FM-B (Staring Lane FM B - Highland to Perkins) - pre-construction
110	SGC-C-PS58FM-B (Staring Lane FM B - Highland to Perkins) - construction
111	SGC-C-PS58FM-C (Staring Lane FM C - Perkins to PS 58) - pre-construction
112	SGC-C-PS58FM-C (Staring Lane FM C - Perkins to PS 58) - construction
113	SFU-C-0001 (Multiple PS - Jefferson Hwy - Park Forest Dr) - pre-construction
114	SFU-C-0001 (Multiple PS - Jefferson Hwy - Park Forest Dr) - construction
115	SGC-C-0002 (Airline Hwy Pipeline Projects) - pre-construction
116	SGC-C-0002 (Airline Hwy Pipeline Projects) - construction
117	SGL-C-0002 (Multiple PS - Highland Road - Kenilworth Parkway) - pre-construction
118	SGL-C-0002 (Multiple PS - Highland Road - Kenilworth Parkway) - construction
119	SGC-C-0001 (Florida Boulevard PS Projects) - pre-construction
120	SGC-C-0001 (Florida Boulevard PS Projects) - construction
121	NGS-C-0003 (Plank Road PS Projects) - pre-construction
122	NGS-C-0003 (Plank Road PS Projects) - construction
123	NFW-C-0009 (Multiple PS - Highway 61 - Plank Road) - pre-construction
124	NFW-C-0009 (Multiple PS - Highway 61 - Plank Road) - construction
125	SFU-C-0002 (O'Neal Lane PS Projects) - pre-construction
126	SFU-C-0002 (O'Neal Lane PS Projects) - construction
127	SGU-C-0003 (Sherwood Forest Blvd - Goodwood Blvd Pipeline Projects) - pre-construction
128	SGU-C-0003 (Sherwood Forest Blvd - Goodwood Blvd Pipeline Projects) - construction
129	NFW-C-0001 (Joor Road - Greenwell Springs Road) - pre-construction
130	NFW-C-0001 (Joor Road - Greenwell Springs Road) - construction
131	NFW-C-0007 (Plank Road - Port Hudson Pride Road) - pre-construction
132	NFW-C-0007 (Plank Road - Port Hudson Pride Road) - construction



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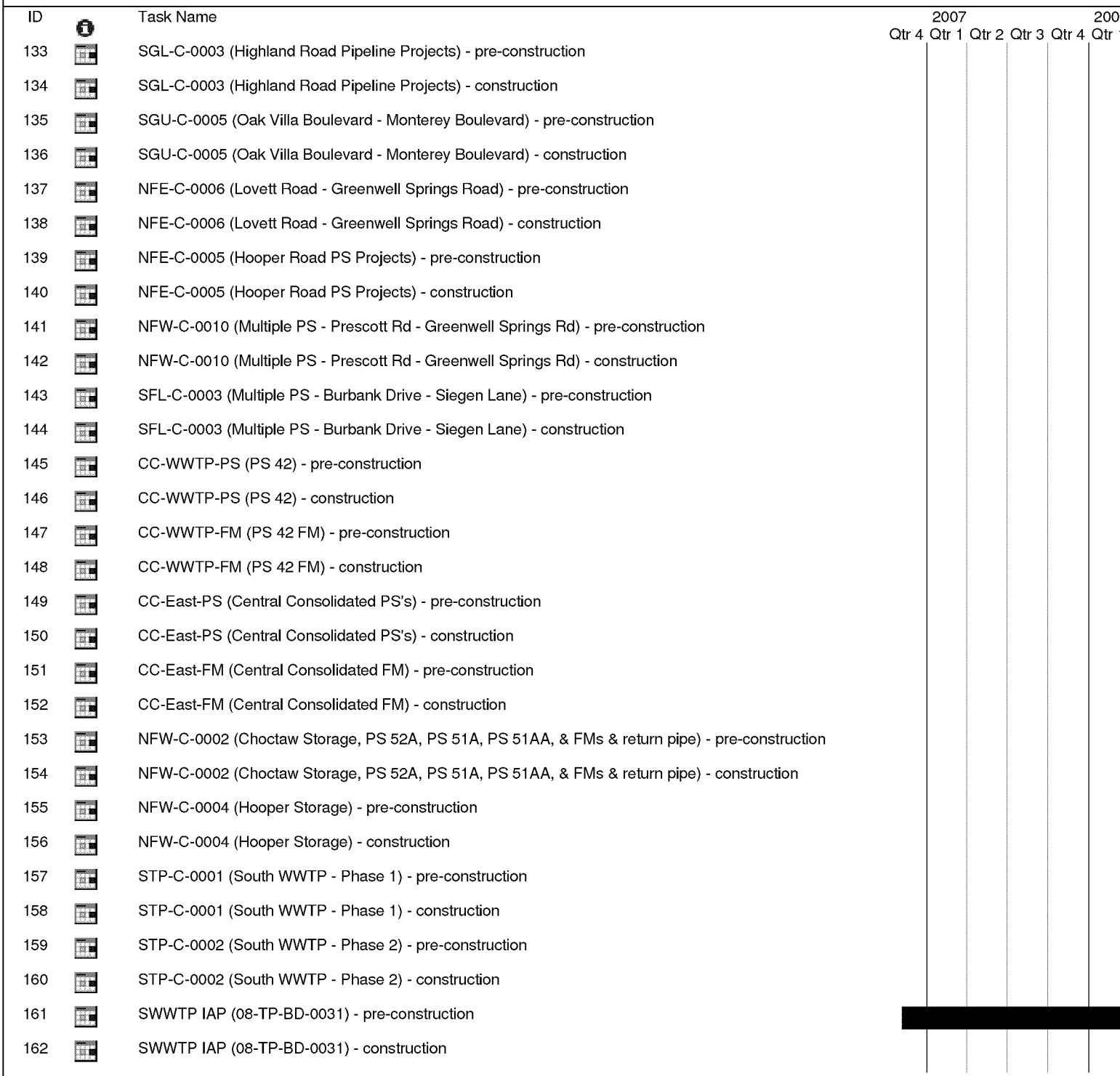
Task
Split
Progress
Milestone
Summary
Project Summary

FIGURE 1-2
Program Schedule
Program Delivery Plan



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Task
Split
Progress
Milestone
Summary
Project Summary

SECTION 2

Planning Description

2.1 Planning Overview

This section describes the process used to define the projects outlined in this report. This planning was necessary to meet the goals of the C-P for a sewer system rehabilitation and replacement program for SSO reduction.

2.2 Comprehensive Rehabilitation Planning

Rainfall dependent infiltration/inflow (RDII) is the major cause of wet weather related capacity deficiencies. Previously conducted concurrent monitoring of flow and rainfall throughout the wastewater collection system during several rainfall events of different magnitudes was used to characterize RDII and predict the system's wet weather response to rainfall.

The collected data were then used to set up and calibrate a computational BTRSSO hydraulic model of the Baton Rouge collection and transmission system. Each sub-catchment or drainage area was evaluated to establish the share of the rainfall that is predicted to enter the sewer system. Sub-catchments in which the RDII was excessive are scheduled for rehabilitation.

The sub-catchments selected for comprehensive rehabilitation were then arranged into 26 projects. Sections 3, 4, and 5 of this report describe the comprehensive rehabilitation projects.

The sub-catchments selected for rehabilitation will undergo a review of the rehabilitation work already completed by the DPW. Portions of the sub-catchments that have been previously rehabilitated will be deleted from the individual rehabilitation projects.

2.3 Capacity Improvement Planning

Capacity improvement planning for the Program is based on evaluating and replacing those facilities in the collection system where the Program hydraulic modeling and field information indicate that the existing collection or transmission system is inadequate to handle the future peak wet weather flows appropriately.

For this analysis, the C-P was divided into ten hydraulically independent basins in order to separate the collection and transmission systems for analysis. The Program Manager (PM) developed a process for evaluating the hydraulic model and analyzing its output. The PM utilized planning and design criteria as a basis for the process overview.

The PM prepared and used a 12-step hydraulic basin analysis method throughout the planning process. The 12-step process included the following components:

1. Dynamic model runs for evaluation of the capacity of existing pipes with predicted post-rehabilitation flows
2. Steady state calculations for evaluation of required pipe capacity
3. Dynamic models runs for evaluation of existing pipes with future flows added to post-rehabilitation flows
4. Steady state calculations for evaluation of required pipe capacity with future flows
5. Test of the revised model for its ability to handle future wet weather flows
6. Evaluation of the model output for acceptable design criteria and physical evidence of overflows
7. Documentation of project list
8. DPW endorsement
9. Prioritization of projects
10. Development of planning level cost estimates
11. Determine projects for reduction of existing SSOs
12. Definition of projects

Based on these steps, the projects, described in Sections 3, 4, and 5 of this report were developed.

2.4 Wastewater Treatment/Storage Planning

The wastewater treatment planning process began in 2006 and concluded with the development of the *Master Plan* (CH2M HILL, 2008). The following documents describe the planning efforts:

- Technical Memorandum entitled *Addressing Existing Noncompliance Issues and Future Wet-weather Flow Management Requirements for the South Wastewater Treatment Plant: Summary of Findings and Recommendations* (CH2M HILL, 2006)
- *South Wastewater Treatment Plant Immediate Action Plan Basis of Design Report* (CH2M HILL, 2007)
- *Draft Wastewater Master Plan* (CH2MHILL, 2008)
- *Consolidation of South and Central Wastewater Treatment Plants in Baton Rouge TM* (CH2M HILL, 2008)

This document describes the immediate action projects and wet weather capacity project for the South WWTP only. **No wet weather capacity projects are required at the North WWTP.** Other improvements at the treatment plants are not a part of this plan, since they are included in the *Draft Master Plan* (CH2MHILL, May 2008). Two of the preliminary master

plan projects included in this document involve construction at the North WWTP, specifically those involving the standby generators and SCADA.

This document also describes additional improvements that will be necessary at the South WWTP in order to consolidate the Central WWTP with the South WWTP. These improvements include additional influent pumping and storage at the South WWTP to accommodate future wet weather peak flows from the Central WWTP.

Storage for shaving of peak hydraulic flows in the system is employed to reduce the scope and cost of downstream capacity projects and treatment plant capacity. Storage facilities are reservoirs that retain wet weather flows for a short time until the wet weather period is past. At the end of the wet weather period, the flow is returned to the collection system for transport and treatment. Each storage facility is sized for the 2-year frequency, 12-hour duration storm event. The storage facilities will be used in any significant rain event in the future.

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SECTION 3

South Basin Projects

Section 3 presents summaries of the South Gravity System Comprehensive Rehabilitation Projects, the South Gravity System Capacity Improvement Projects, the South Forcemain System Comprehensive Rehabilitation Projects, the South Forcemain System Capacity Improvement Projects, and the South WWTP Projects. These projects are shown on Figures 3-1 and 3-2.

The project summaries presented herein represent the information available during this annual update period. The PDP will be revisited on an annual basis and revised as necessary based on results of additional hydraulic wastewater modeling, immediate needs, DPW and public input, and other factors.

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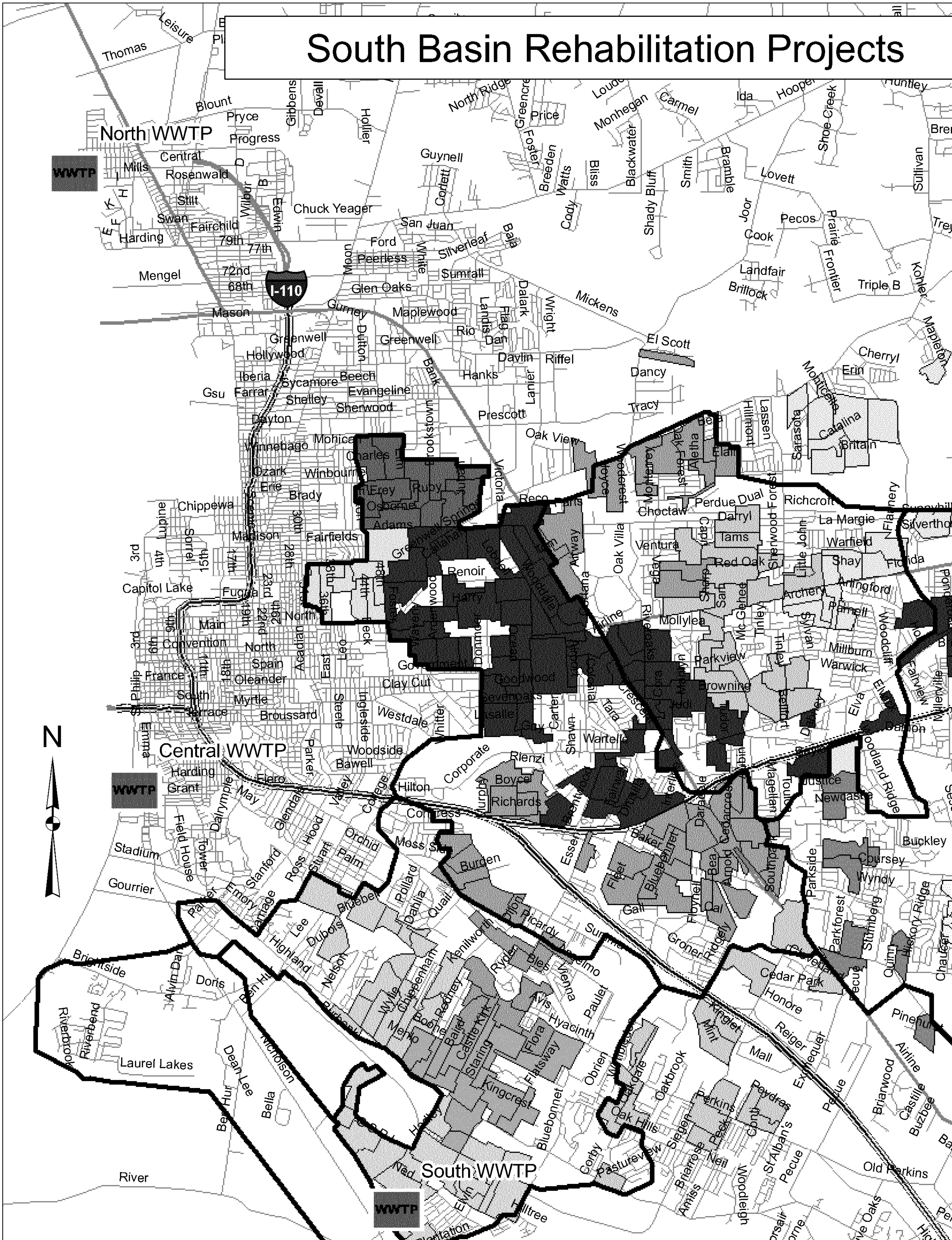
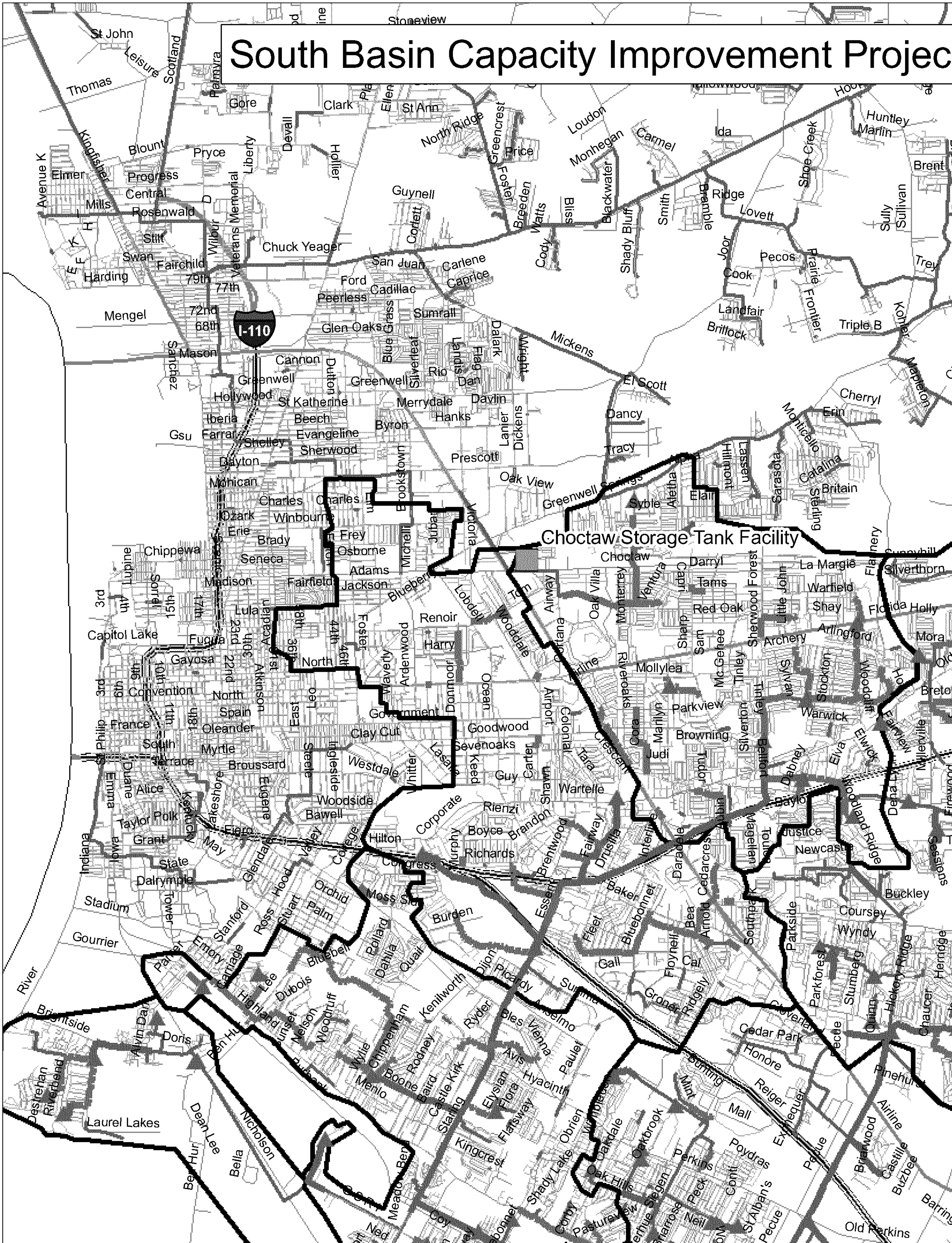
South Basin Rehabilitation Projects




South Basin Capacity Improvement Projec
Choctaw Storage Tank Facility
I-110

3.1 South Gravity System Comprehensive Rehabilitation Projects

3.1.1 SGC-R-0001, SGC-R-0002a, SGC-R-0002b, SGC-R-0003, SGC-R-0004, SGL-R-0001, SGL-R-0002, SGL-R-0003, SGU-R-0001, SGU-R-0002, SGU-R-0003

Project Description

The sanitary sewer system comprehensive rehabilitation projects consist of improvements to various components of the collection system to reduce the amount of I/I that enter into the system.

Purpose

The purpose of comprehensive sewer rehabilitation is to correct defects in the system such as offset pipe joints, collapsed pipe sections, leaking manholes, and direct inflow sources. The water that enters the system through the defects is a major contributor to sanitary sewer overflows. Comprehensive rehabilitation of the collection system will contribute to alleviating sanitary sewer overflows by reducing infiltration and inflow.

Location

There are eleven projects located primarily within the South Gravity Basin. The location of the projects is shown on the maps following this section (Figures 3-3 through 3-12).

Scope of Project

The first phase of comprehensive rehabilitation projects will be the physical inspection of the pipes and manholes including closed circuit television (CCTV) inspection of all pipes. Smoke testing will also be included in the physical inspection phase.

The data collected by the physical inspection contractor will be analyzed and, based on that analysis, a listing of recommended repairs with associated construction costs will be generated.

An engineering firm will then complete preparation of construction documents for project bidding.

The construction of comprehensive rehabilitation projects will typically include the following components.

- Replacement of pipes
- Point repair of pipes
- Rehabilitation of pipes by cured in place liners
- Rehabilitation or replacement of sewer manholes
- Repair of sewer laterals to the property line

Cost

The estimated construction cost for each project is presented in Table 3-1. These costs are based on preliminary estimates of the amounts of each component of the system that will require repair or replacement. During the physical inspection phase, the actual condition of

the components will be assessed and appropriate methods recommended. At that time, the cost estimate for each project will be revised.

TABLE 3-1
Estimated Construction Costs for South Gravity System Comprehensive Rehabilitation Projects

Project Description	Estimated Construction Cost	Scheduled Design Appropriation Year	Scheduled Construction Appropriation Year
SGC-R-0001 Bluebonnet Blvd-Jefferson Highway	$14,000,000	2009	2010
SGC-R-0002a Airline Highway-Goodwood Blvd, Phase 1	$12,500,000	2010	2011
SGC-R-0002b Airline Highway-Goodwood Blvd, Phase 2	$12,500,000	2010	2011
SGC-R-0003 Ardenwood Drive-Winbourne Street	$4,900,000	2011	2012
SGC-R-0004 North 38th Street-Gus Young Avenue	$3,800,000	2012	2013
SGL-R-0001 Gardere Lane-Burbank Road	$5,958,000	2008*	2008*
SGL-R-0002 Staring Lane-Boone Drive	$5,427,000	2008*	2008*
SGL-R-0003 Kenilworth Blvd-Boone Drive	$5,400,000	2009	2009
SGU-R-0001 Oak Villa Blvd-Choctaw Street	$8,997,000	2008*	2008*
SGU-R-0002 Sharp Road-Florida Blvd	$8,000,000	2009	2009
SGU-R-0003 Flannery Road-Florida Blvd	$8,300,000	2012	2013

*Appropriations already made for these projects (design and/or construction, as marked)

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 2,000 4,000 Feet

Bluebonnet Blvd. - Jefferson Hwy. Phase I, II

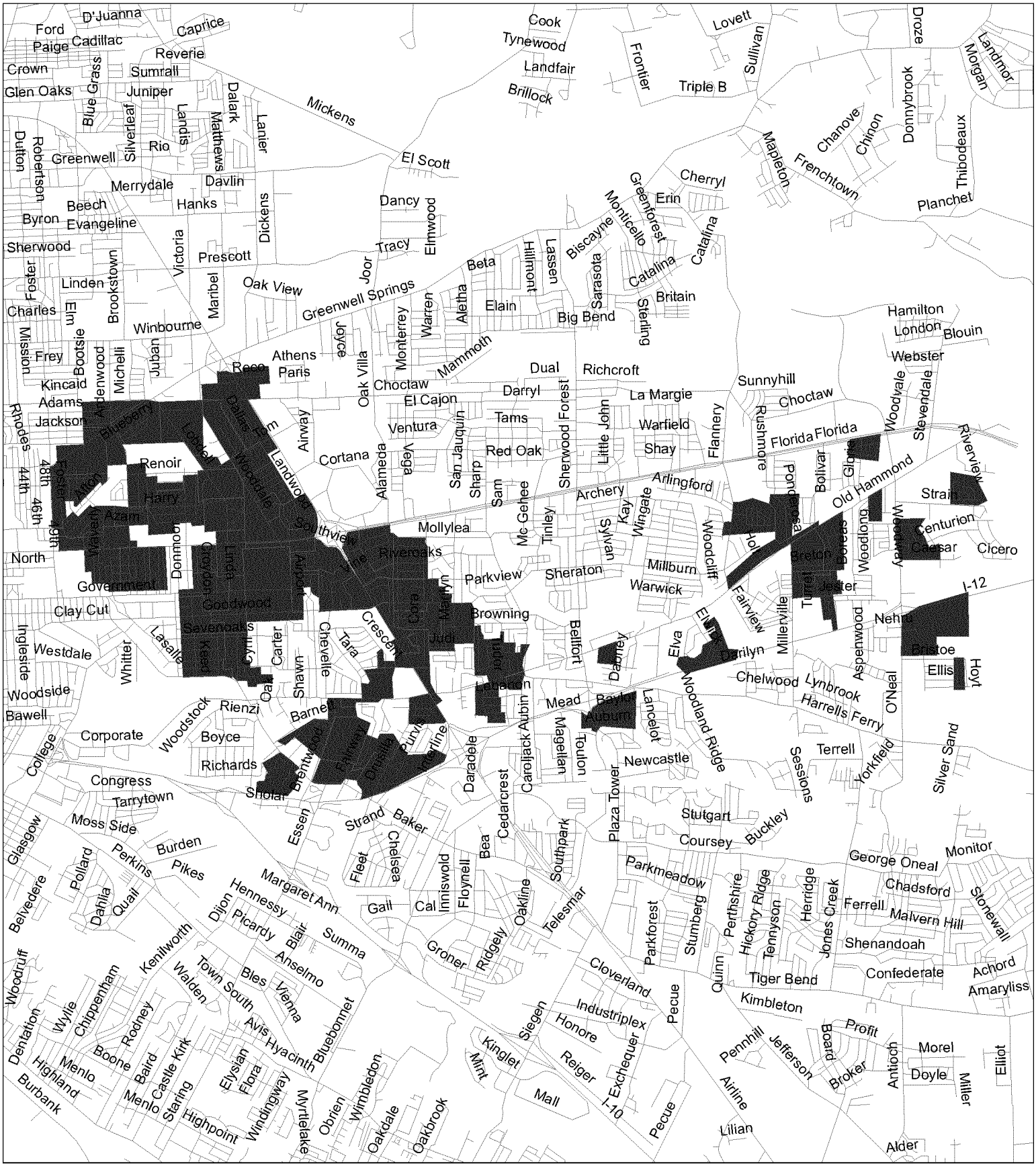
SGC-R-0001

Project Vicinity Map

PUBLIC WORKS

Figure 3-3

BATON ROUGE SSO Program



East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 4,100 8,200 Feet

PUBLIC WORKS

Airline Hwy. - Goodwood Blvd. Phase I and II

SGC-R-0002

Project Vicinity Map

Figure 3-4

BATON ROUGE SSO Program

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East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 750 1,500 Feet

Ardenwood Dr.- Winbourne St.

SGC-R-0003

Project Vicinity Map

PUBLIC WORKS

Figure 3-5

BATON ROUGE SSO Program

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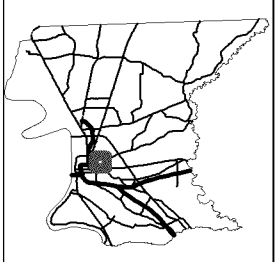

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

0 590 1,180 Feet

PUBLIC WORKS

N. 38th St. - Gus Young Ave.

SGC-R-0004

Project Vicinity Map

Figure 3-6

BATON ROUGE SSO Program

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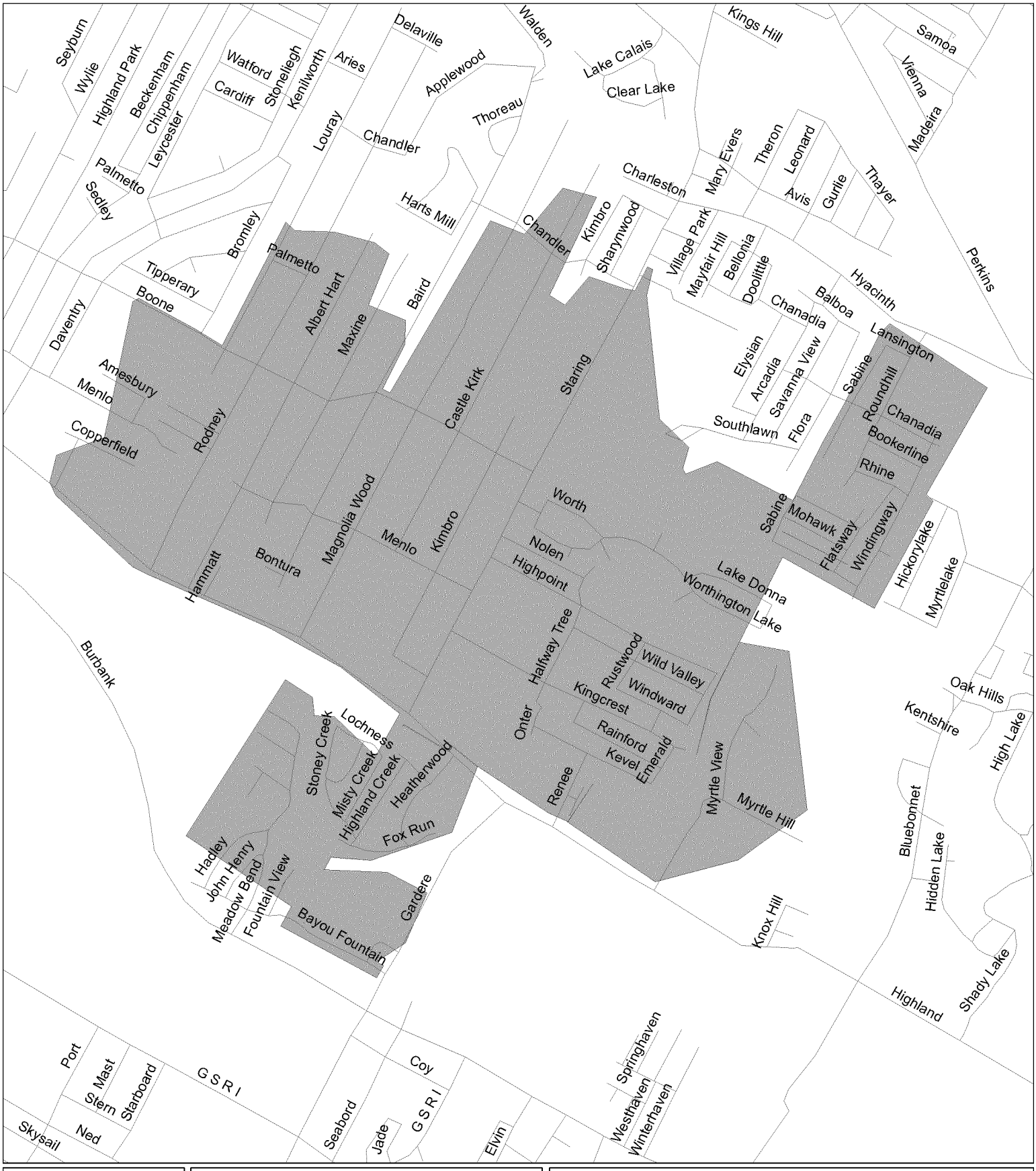


East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,000 2,000 Feet

PUBLIC WORKS

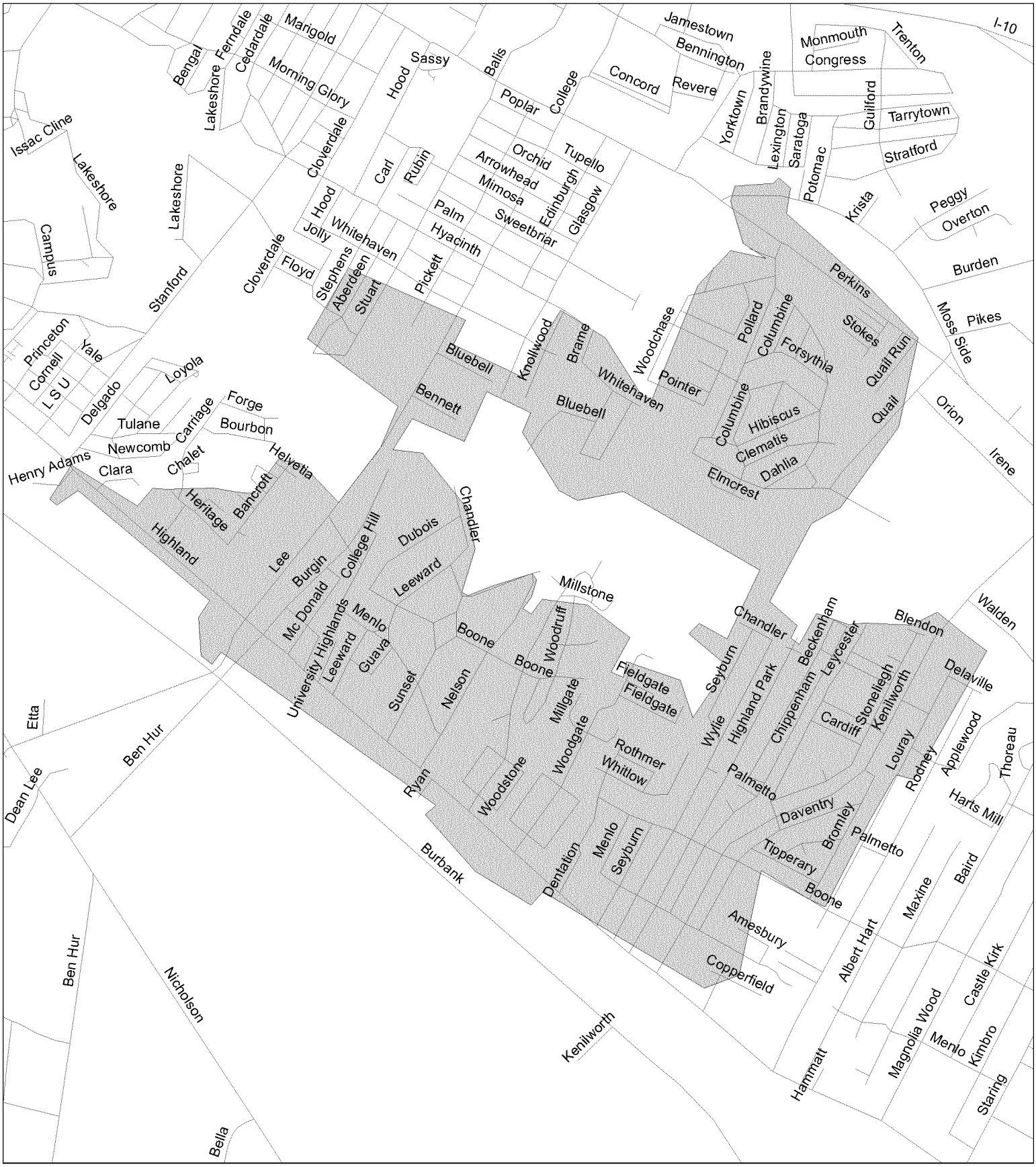
Staring Ln - Boone Dr.

SGL-R-0002

Project Vicinity Map

Figure 3-8

BATON ROUGE SSO Program



East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,400 2,800 Feet

PUBLIC WORKS

Kenilworth Blvd. - Boone Dr.

SGL-R-0003

Project Vicinity Map

Figure 3-9

BATON ROUGE SSO Program

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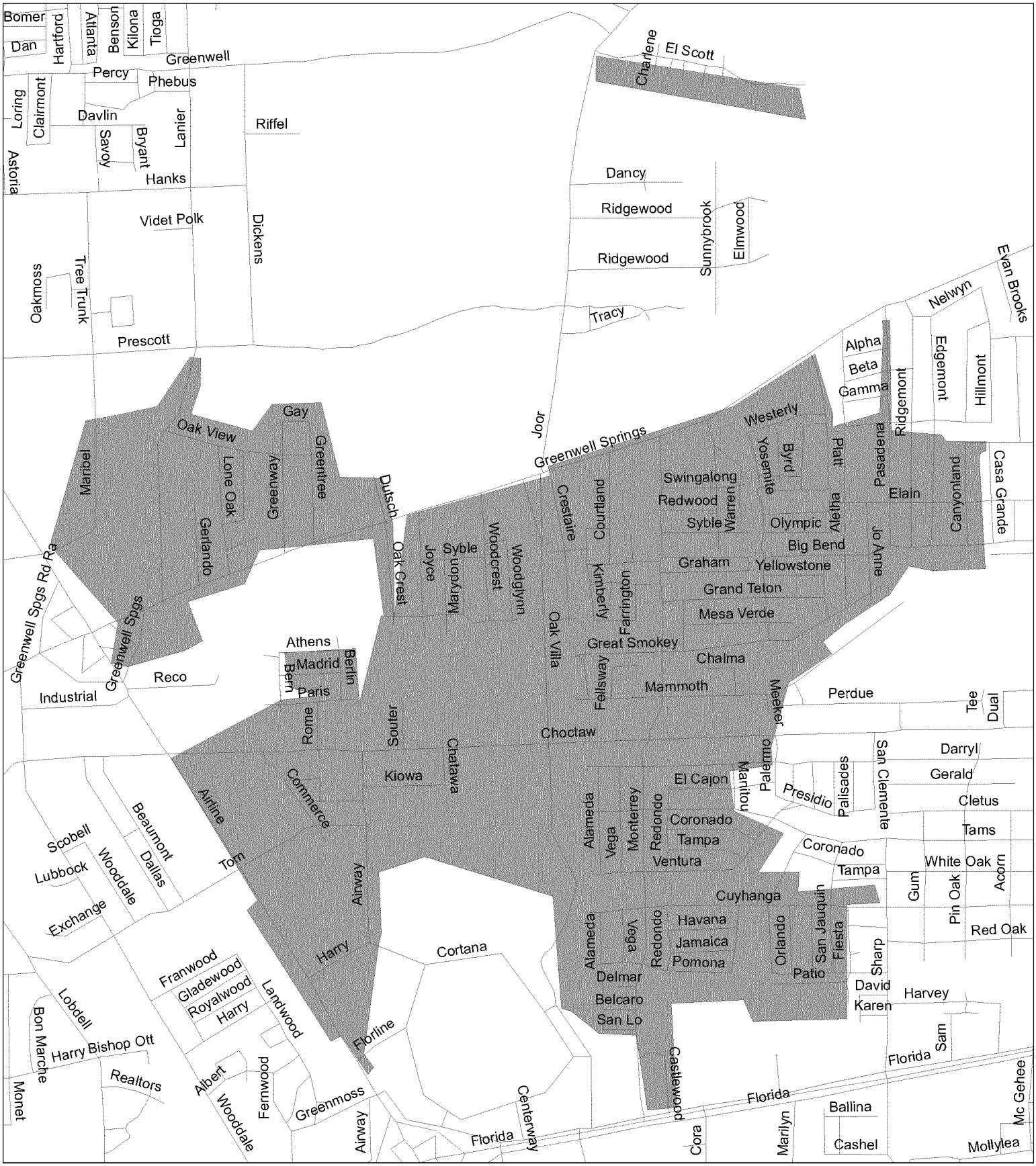


East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,400 2,800 Feet

PUBLIC WORKS

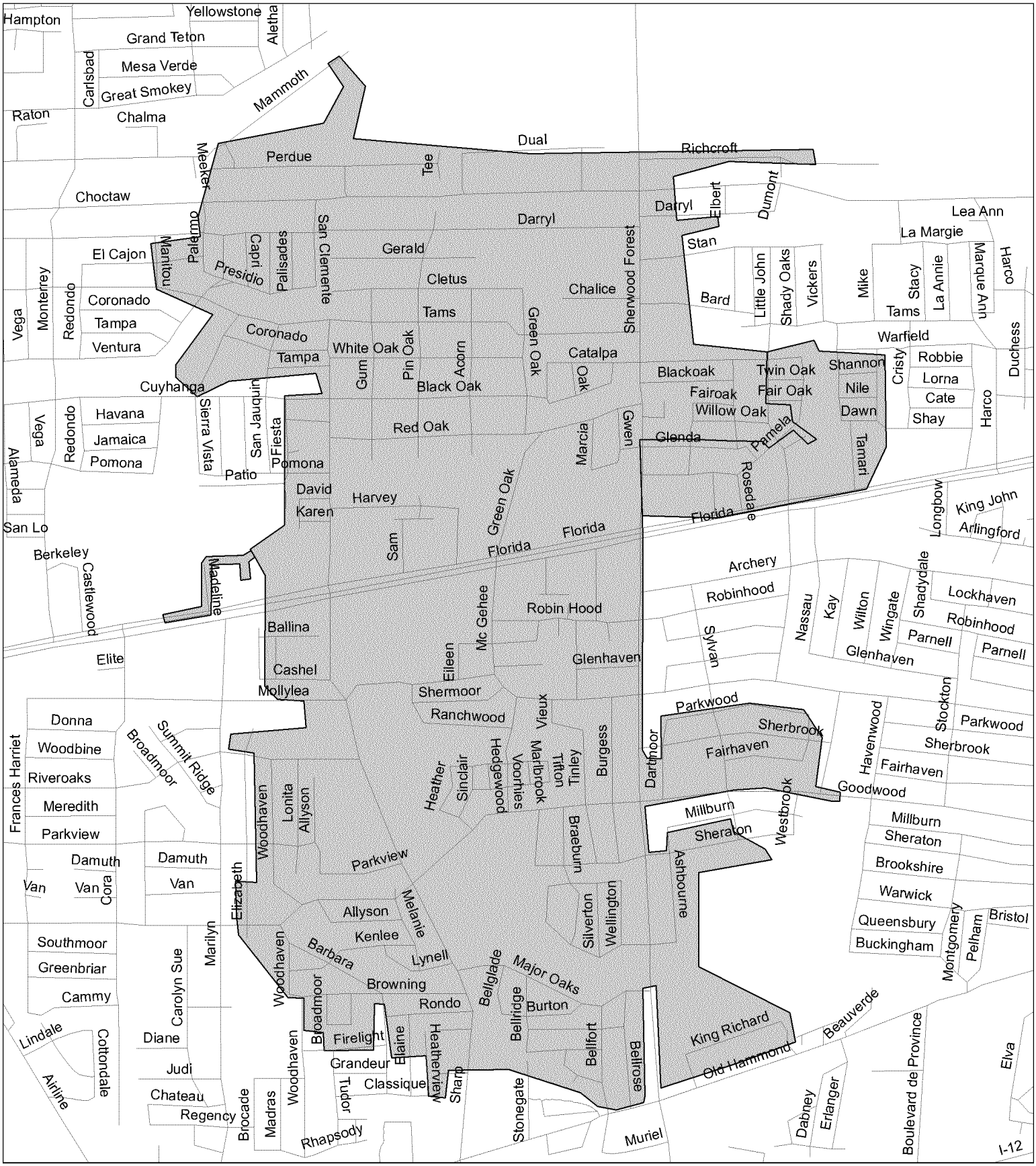
Oak Villa Blvd. - Choctaw St.

SGU-R-0001

Project Vicinity Map

Figure 3-10

BATON ROUGE SSO Program



East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,200 2,400 Feet

PUBLIC WORKS

Sharp Rd. - Florida Blvd.

SGU-R-0002

Project Vicinity Map

Figure 3-11

BATON ROUGE SSO Program

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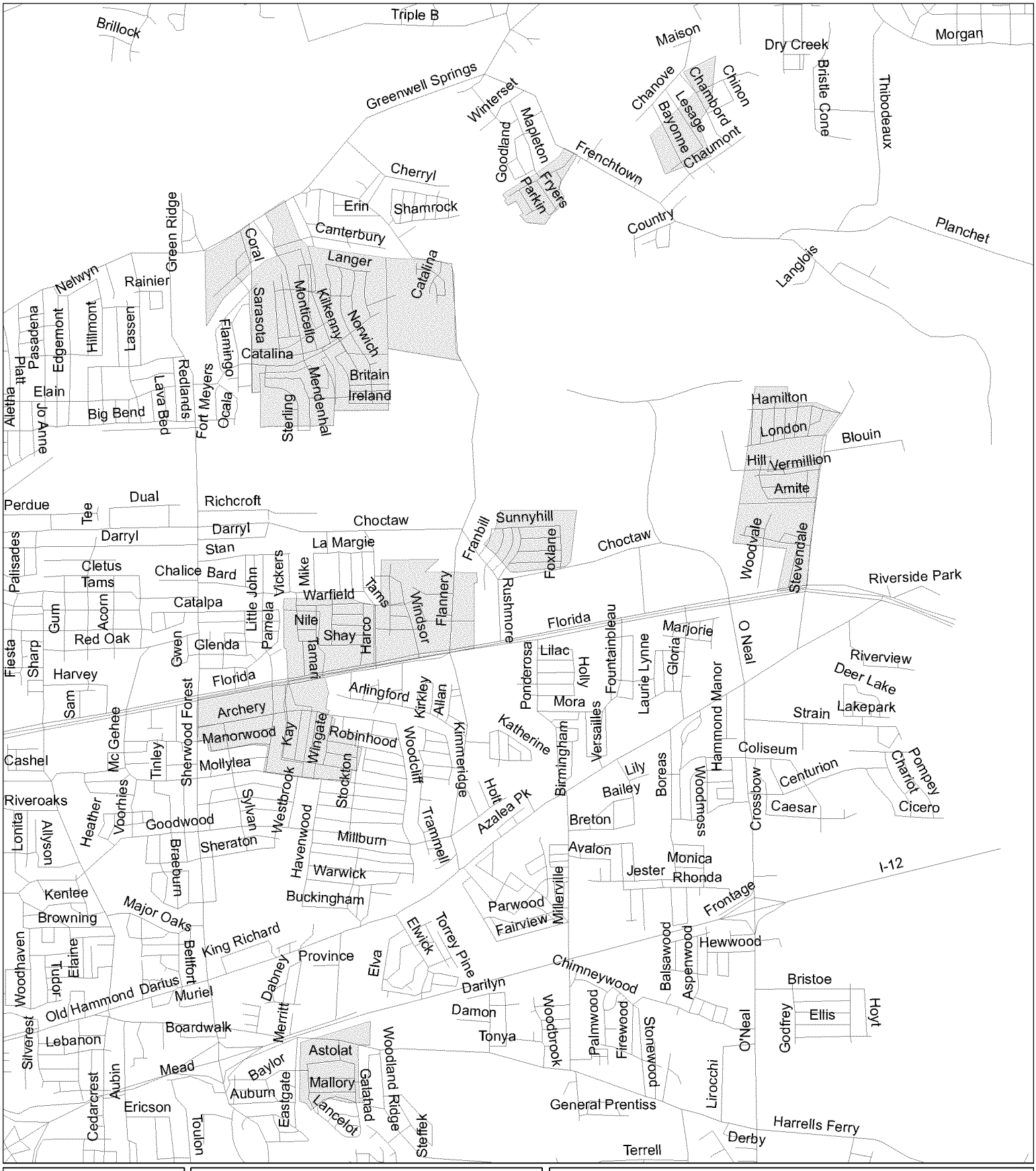

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 2,300 4,600 Feet

PUBLIC WORKS

Flannery Rd. - Florida St.

SGU-R-0003

Project Vicinity Map

Figure 3-12

BATON ROUGE SSO Program

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3.2 South Gravity System Capacity Improvements Projects

3.2.1 SGU-C-0001 (Multiple PSs - Florida Blvd - Sherwood Forest Blvd)

The SGU-C-0001 project has been combined with SGC-C-0001 (Airline Highway-Florida Blvd – PS 30 Improvements and New Pump Station). The combination project has been designated SGC-C-0001 (Florida Blvd PS Projects) and is described in Section 3.2.6.

3.2.2 SGU-C-0002 (Airline Highway - Interstate 12)

The SGU-C-0002 project has been combined with SGC-C-0002 (Airline Highway-Jefferson Highway) and SGC-C-0003 (Essen Lane-Interstate 12). The combination project has been designated SGC-C-0002 (Airline Highway Pipeline Projects) and is described in Section 3.2.7.

3.2.3 SGU-C-0003 (Sherwood Forest Blvd- Goodwood Blvd Pipeline Projects)

Project Description

Purpose of the Project / Project Background

The SGU-C-0003 (Sherwood Forest Blvd-Goodwood Blvd Pipeline Projects) project includes the upgrade of gravity sewers upstream of PS 13, PS 50, PS 21, PS 31, and PS 101 to alleviate SSOs.

Location

The gravity sewer replacements that comprise this project are located near the intersections of Florida Blvd and Sherwood Forest Drive, and are shown in Figure 3-13.

Gravity segment 050-00619 to 050-00682 starts on Sharp Lane near the Tams Drive intersection. The gravity segment travels north and turns east at Tams Drive. The line continues east until reaching 050-00682, located on Tams Drive between the Gum Street and Pin Oak Street intersections.

Gravity segment 050-00480 to 050-00924 starts near the Elizabeth Drive and South Riveroaks Drive intersection. The gravity segment travels east along a drainage to 050-00150, south along a drainage to 050-00168, and east parallel to Riveroaks Drive to 050-00909 where it then continues southeast along Sharp Road until reaching 050-00924.

Gravity segment 050-00203 to 050-00837 starts on Goodwood Blvd between Westbrook Drive and Sylvan Drive intersections. The gravity line travels west along Goodwood Blvd until reaching 050-00837, located near Sherwood Forest Drive and Goodwood Blvd intersection.

Gravity segment 050-00392 to 050-00280 starts on Pamela Drive. The gravity line travels southwest until reaching 050-00390, northwest until reaching 050-00388, and west until reaching 050-00280, located northwest of the Glenda Drive and Sherwood Forest Blvd intersection.

Gravity segment 050-00280 to 050-00272 starts northwest of Glenda Drive and Sherwood Forest Blvd intersection. The gravity line travels south until reaching 050-00272, located northwest of the Florida Blvd and North Sherwood Forest Drive intersection.

Gravity segment 013-00002 to 013-00001 starts north of the intersection of Elizabeth Drive with River Oaks Drive. The gravity line travels west until reaching 013-00001, located near PS 13.

Gravity segment 013-00049 to PS 13 starts near the Marilyn Drive and Mollylea Drive intersection. The gravity segment travels south until reaching 013-00012 and then traveling east until reaching PS 13. PS 13 will be upgraded as part of SGC-C-0001 (Florida Blvd PS Projects).

Gravity segment 021-00009 to PS 21 starts southwest of the Warfield Avenue and Windsor Drive intersection. The gravity segment travels southeast along Windsor Drive, crossing Florida Blvd until reaching 021-00001F. The gravity line continues west parallel to Florida Blvd until reaching PS 21, located near the Florida Blvd and Shelby Drive intersection.

Gravity segment 101-00024 to PS 101 starts south of the Darwin Avenue and South Flannery Road intersection. The gravity segments travels west until reaching 101-00018, southeast until reaching 101-00016, east until reaching 101-00014, and then southeast along Brinwood Avenue until reaching PS 101. PS 101 is located northeast of the Goodwood Blvd and Brinwood Avenue intersection.

Gravity segment 031-00035 to 031-00030 starts southwest of the Robinhood Drive and Little John Drive intersection. The gravity segment travels east until reaching 031-00033 and then southwest parallel to Little John Drive until reaching 031-00030. The segment ends northwest of the Little John Drive and Mollyea Drive intersection.

Gravity segment 031-00030 to PS 31 starts northeast of Little John Drive and Mollyea Drive intersection. The gravity segment travels southeast until reaching 031-00006 and then travels south along the canal parallel to Westbrook Drive until reaching PS 31. PS 31 is located southeast of the Goodwood Blvd and Westbrook Drive intersection.

Gravity segment 031-00378 to 031-00006 starts southwest of the East Glenhaven Drive and Wilton Drive intersection. The gravity line travels southwest until reaching 031-00006, located northeast of the Westbrook Drive and Mollylea Drive intersection.

Gravity segment 031-00442 to 031-00435 starts northwest of the Goodwood Blvd and Brinwood Avenue intersection. The gravity line travels southwest until reaching 031-00435, located northeast of the Goodwood Blvd and South Flannery Road intersection.

Gravity segment 031-00435 to 031-00237 starts northeast of South Flannery Road and Goodwood Blvd. The gravity line travels west until reaching 031-00434, south until reaching 031-00433, and then northwest until reaching 031-00237, following Goodwood Blvd. The segment ends northeast of the Goodwood Blvd and Trammell Drive intersection.

Gravity segment 031-00237 to 031-00132 starts northeast of the Trammell Drive and Goodwood Blvd intersection. The gravity line travels northwest along Goodwood Blvd until reaching 031-00132, located west of the Trammell Drive and Camelot Avenue intersection.

Gravity segment 031-00132 to 031-00112 is located west of the Trammell Drive and Camelot Avenue intersection. The gravity line travels northwest until reaching 031-00131, north until reaching 031-00129, and west until reaching 031-00112. The gravity segment ends southeast of the Fairhaven Drive and Woodcliff Drive intersection.

Gravity segment 031-00112 to PS 31 starts southeast of the Fairhaven Drive and Woodcliff Drive intersection. The gravity line travels west until reaching 031-00102, south until reaching 031-00102A, and then southwest until reaching PS 31. PS 31 is located southeast of the Westbrook Drive and Goodwood Blvd intersection.

Gravity segment 031-00270 to 031-00112 starts northeast of the East Robinhood Drive and Woodcliff Drive intersection. The gravity segment travels south until reaching 031-00112, located southeast of the Fairhaven Drive and Woodcliff Drive intersection.

Gravity segment 031-00299 to 031-00289 starts southeast of the Arlingford Avenue and Shelby Drive intersection The gravity line travels south until reaching 031-00289, located northeast of the Archery Drive and Woodcliff Drive intersection.

Gravity segment 031-00330 to 031-00299 starts east of the Norma Court and Shelby Drive intersection. The gravity line travels south until reaching 031-00299, located southeast of the Arlingford Avenue and Shelby Drive intersection.

Gravity segment 031-00330A to 031-00330 starts southeast of the Shelby Drive and Florida Blvd intersection. The gravity line travels south until reaching 031-00330, located east of the Norma Court and Shelby Drive intersection.

Forcemain segment PS21FM to 031-00330A starts near Florida Boulevard. The forcemain segment travels south until reaching 031-00330A, located southeast of the Shelby Drive and Florida Blvd intersection.

Scope

The scope of this project is shown in Table 3-2. This project includes the construction of approximately 8,400 feet of 15-inch, 21-inch, 24-inch, and 36-inch gravity sewer upstream of PS 50, approximately 950 feet of 12-inch and 15-inch gravity sewer upstream of PS 13, approximately 2,100 feet of 18-inch gravity sewer upstream of PS 21, approximately 2,000 feet of 10-inch gravity sewer upstream of PS 101, and approximately 13,800 feet of 10-inch, 12-inch, 15-inch, 18-inch, 21-inch, 24-inch, and 36-inch gravity sewer and forcemain upstream of PS 31.

TABLE 3-2
SGU-C-0003 (Sherwood Forest Blvd-Goodwood Blvd Pipeline Projects)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
050-00619	050-00682	1,000	15	24	
050-00480	050-00924	2,000	8 and 12	15	
050-00203	050-00837	1,800	18	36	
050-00392	050-00280	2,400	12	21	
050-00280	050-00272	1,200	15 or 18	24	
013-00002	013-00001	150	8	12	
013-00049	PS13	800	8 and 10	15	PS Replacement under SGC-C-0001 (Florida Blvd PS Projects)
021-00009	PS21	2,100	12 and 15	18	Crosses Florida Blvd; PS will be upgraded in SGC-C-0001 (Florida Blvd PS Projects)

TABLE 3-2
SGU-C-0003 (Sherwood Forest Blvd-Goodwood Blvd Pipeline Projects)

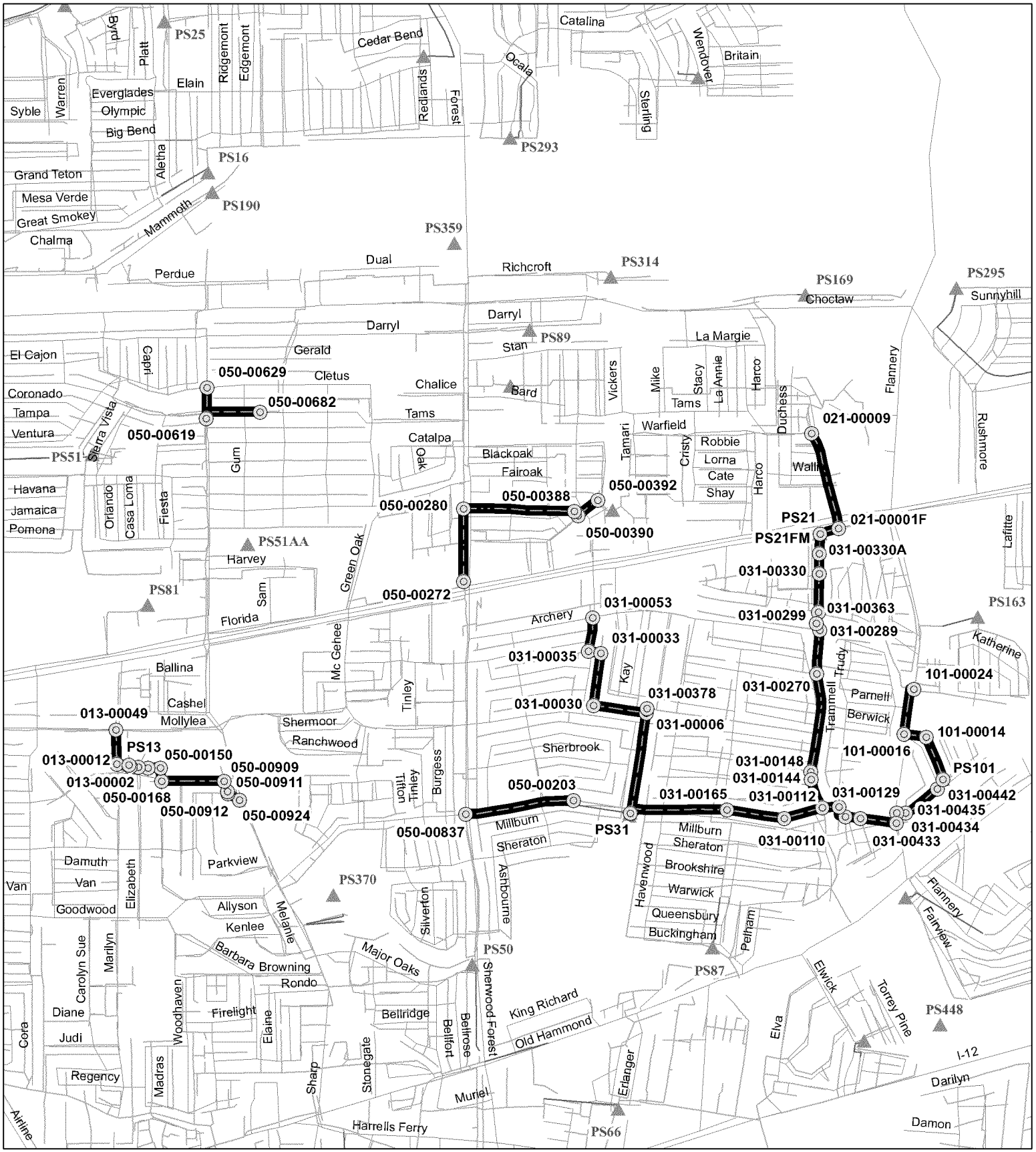
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
101-00024	PS101	2,000	8	10	
031-00035	031-00030	1,100	8	15	
031-00030	PS 31	2,600	8 to 12	21	PS upgraded in SGC-C-0001 (Florida Blvd PS Projects)
031-00378	031-00006	80	8	12	Crosses drainage canal
031-00442	031-00435	670	8	10	
031-00435	031-00237	930	8 and 12	12	
031-00237	031-00132	260	10	15	
031-00132	031-00112	550	10 to 12	18	
031-00112	PS31	3,400	21	36	
031-00270	031-00112	2,600	18	24	
031-00289	031-00270	740	8	18	
031-00299	031-00289	320	15	18	
031-00330	031-00299	670	15	18	
031-00330A	031-00330	340	15	18	
PS21FM	031-00330A	310	8	10	Forcemain

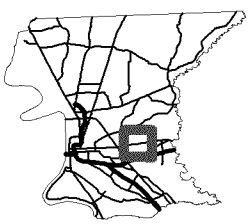
Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $10,200,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation Year is 2013.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,050 4,100 Feet

Sherwood Forest - Goodwood Blvd Pipeline Projects

SGU-C-0003

Project Vicinity Map

PUBLIC WORKS

Figure 3-13

BATON ROUGE SSO Program

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3.2.4 SGU-C-0004 (Goodwood Blvd - South Flannery Road)

The SGU-C-004 project has been combined with SGU-C-0003 (Florida Blvd-Sherwood Forest Blvd). The combined project has been designated SGC-C-0003 (Sherwood Forest Blvd-Goodwood Blvd Pipeline Projects) and is described in Section 3.2.3.

3.2.5 SGU-C-0005 (Oak Villa Blvd - Monterey Blvd)

Project Description

Purpose of the Project / Project Background

The SGU-C-0005 (Oak Villa Blvd – Monterey Blvd) project includes the upsizing of the gravity sewer upstream of PS 16, PS 50, and PS 51 and the forcemain from PS 16, which is being upgraded as part of the SGC-C-0001 (Florida Blvd PS Projects) project.

Location

The gravity sewer replacements that comprise the SGU-C-0005 project are located northeast of Airline Highway and Florida Blvd, and along Sherwood Forest Blvd, south of Florida Boulevard Road, and are shown in Figure 3-14.

Gravity segment 051-00222 to 051-00196 starts southeast of the Kimberly Drive and Kimberly Way intersection. The gravity segment travels east until reaching 051-00196, located northwest of the Monterrey Drive and Great Smokey Avenue intersection.

Gravity segment 016-00002 to PS 16 starts southwest of the Jo Anne Drive and Big Bend Avenue intersection. The gravity line travels south until reaching PS 16, located northeast of the Jo Anne Drive and Great Smokey Avenue intersection.

Gravity segment 051-00467 to 051-00196 starts southeast of the Syble Drive and Monterrey Drive intersection. The gravity line travels south until reaching 051-00196, located northwest of the Great Smokey Avenue and Monterrey Drive intersection.

Gravity segment 051-00196 to 051-00169 starts northwest of the Great Smokey Avenue and Monterrey Drive intersection. The gravity line travels south until reaching 051-00169, located northwest of the Great Smokey Avenue and Monterrey Drive intersection.

Gravity segment 051-00169 to 051-00168 starts northwest of the Great Smokey Avenue and Monterrey Drive intersection. The gravity line travels south until reaching 051-00168, located northwest of the Mammoth Avenue and Monterrey Drive intersection.

Gravity segment 051-00168 to 051-00070 starts northwest of the Mammoth Avenue and Monterrey Drive intersection. The gravity line travels south until reaching 051-00070, located near Mammoth Avenue between its intersections with Monterrey Drive and Needham Drive.

Gravity segment 051-00070 to PS 51 starts near Mammoth Avenue between its intersections with Monterrey Drive and Needham Drive. The gravity line travels east along the north side of the drainage channel until reaching PS 51, located north of Cuyhanga Parkway and Sierra Vista Drive intersection.

Gravity segment DS16 to 051-00169 starts at the intersection of Kings Canyon Drive and Great Smokey Avenue. The segment travels south behind the row of houses on the south side of Great Smokey Avenue, heading northeast behind four houses before it doubles back on its same path and goes southwest and then straight west behind the houses south of Great Smokey Avenue. It ends at manhole 051-00169 on Monterrey Drive, just northwest of its intersection with Great Smokey Avenue.

Gravity segment 051-00364B to 051-00070 starts north of a drainage canal near Cortana Place. The gravity segment travels southeast until reaching 051-00077, and then east until reaching 051-00070. The gravity segment ends near Mammoth Avenue between its intersection with Monterrey Drive and Needham Drive.

Gravity segment 051-00369 to 051-00364B starts above the drainage canal near Airway Drive. The gravity segment travels east until reaching 051-00364B, located north of Cortana Place.

Gravity segment 050-00837 to 050-00300A starts near Sherwood Forest Blvd and Goodwood Blvd intersection. The gravity line travels south along Sherwood Forest Blvd until reaching 051-00300, and then west until reaching 050-00300A. The segment ends northwest of the Sherwood Forest Blvd and Major Oaks Drive intersection.

The SGU-C-0005 (Oak Villa Blvd – Monterey Blvd) project also includes the replacement of the PS 16 forcemain. This forcemain is located along Great Smokey Drive near JoAnne Drive. The forcemain travels southwest along Great Smokey Avenue until reaching DS16, located near the King Canyon Drive and Great Smokey Avenue intersection.

Scope

This project includes construction of approximately 380 feet of 18-inch gravity sewer upstream of PS 16, approximately 2,600 feet of 42-inch gravity sewer upstream of PS 50, and approximately 16,700 feet of 18-inch, 21-inch, 24-inch, 30-inch, and 42-inch gravity sewer upstream of PS 51. This project also includes approximately 950 feet of 8-inch forcemain from PS 16. The full scope of this project is shown in Table 3-3.

TABLE 3-3
SGU-C-0005 (Oak Villa Blvd – Monterey Blvd)

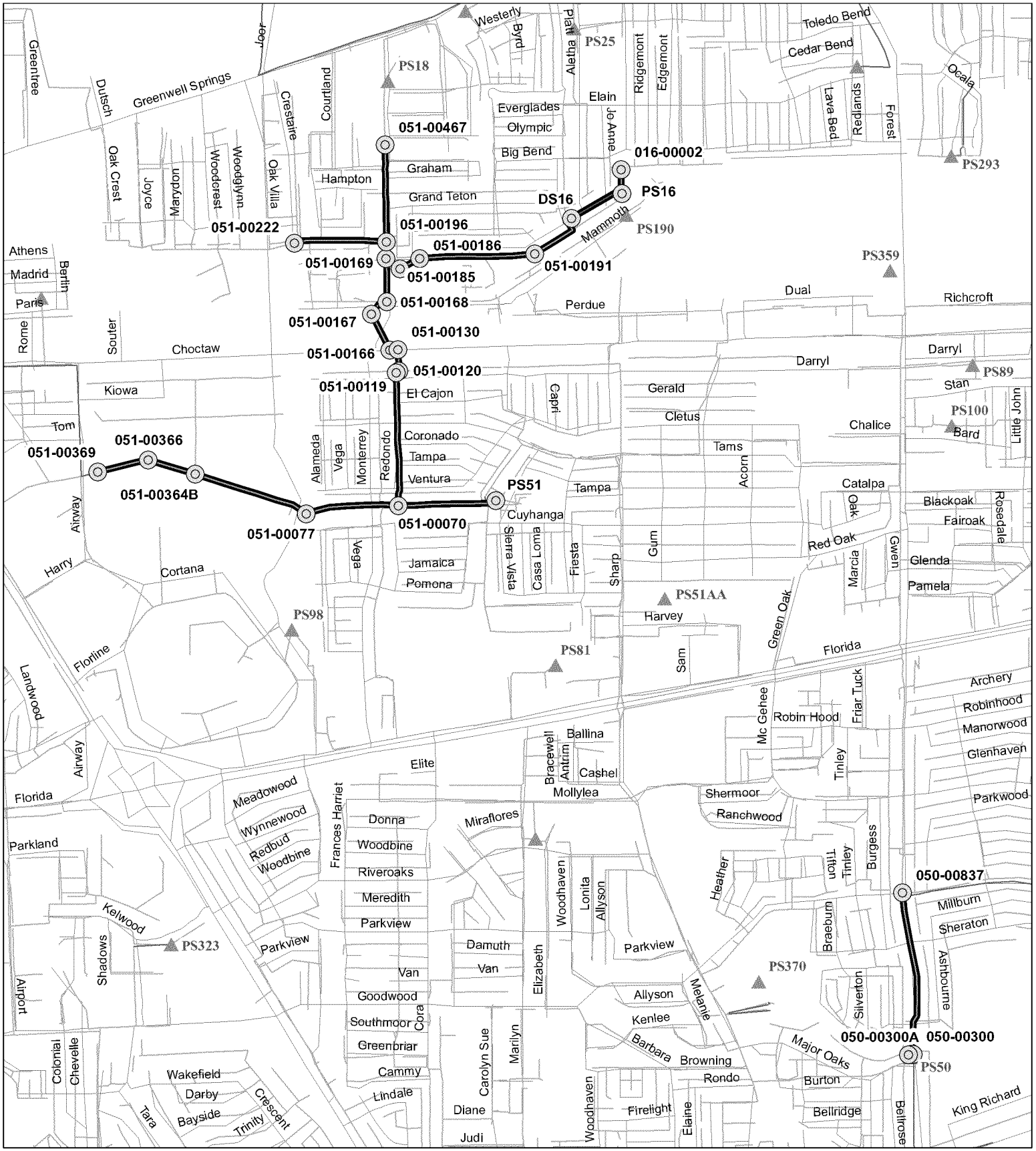
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
051-00222	051-00196	1,400	12	18	
016-00002	PS16	380	10	18	Influenced by the SGU-C-0001 project in which PS 16 will be upgraded
051-00467	051-00196	1,500	12	18	
051-00196	051-00169	260	15	21	
051-00169	051-00168	680	15	24	
051-00168	051-00070	3,300	15	30	
051-00070	PS51	1,500	18	42	Crosses Choctaw Drive and the railway just north of Choctaw Drive This segment will need to be coordinated with the PS51 upgrade as part of the NFW-C-0002 Project
DS16	051-00169	3,200	10	18	
051-00364B	051-00070	3,300	15	24	
051-00369	051-00364B	1,600	15	21	
050-00837	050-00300A	2,600	24	42	
PS16	DS16	950	6	8	Forcemain

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $8,200,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation Year is 2013.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,750 3,500 Feet

Oak Villa Blvd - Monterrey Blvd

SGU-C-0005

Project Vicinity Map

Figure 3-14

BATON ROUGE SSO Program

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3.2.6 SGC-C-0001 (Florida Blvd PS Projects)

Project Description

Purpose of the Project / Project Background

The SGC-C-0001 (Florida Blvd PS Projects) project includes those improvements that were previously included in SGU-C-0001 (Multiple Pump Stations-Florida Blvd - Sherwood Forest Blvd) and SGC-C-0001 (Airline Highway - Florida Blvd PS 30 Improvements and new pump station). This combined project includes upgrades of PS 13, PS 16, PS 18, PS 21, PS 30, PS 31, PS 50, and PS 66, and the construction of a new pump station (PS 5xx) to alleviate SSOs in their upstream basins.

PS 51 was originally part of the SGU-C-0001 project and was moved to the Choctaw Storage and Pump Station Project.

Location

The locations for the pump stations are presented in Table 3-4 and are shown in Figure 3-15.

Scope

The scope of this project is described in Table 3-4. PS 13, PS 16, PS 18, PS 21, PS 30, PS 31, PS 50, and PS 66 will be replaced. The new pump station (PS 5xx) will be located at or near manhole 058-01106, conveying all flow from the gravity system upstream directly to PS 58 through a new 30-inch forcemain will be constructed as part of project SGC-C-0002 (Airline Highway Pipeline Projects). This new pump station and forcemain will be constructed to alleviate peak wet weather flow exceedances in the gravity system downstream of the new pump station.

TABLE 3-4
SGC-C-0001 (Florida Blvd Pump Station Projects)

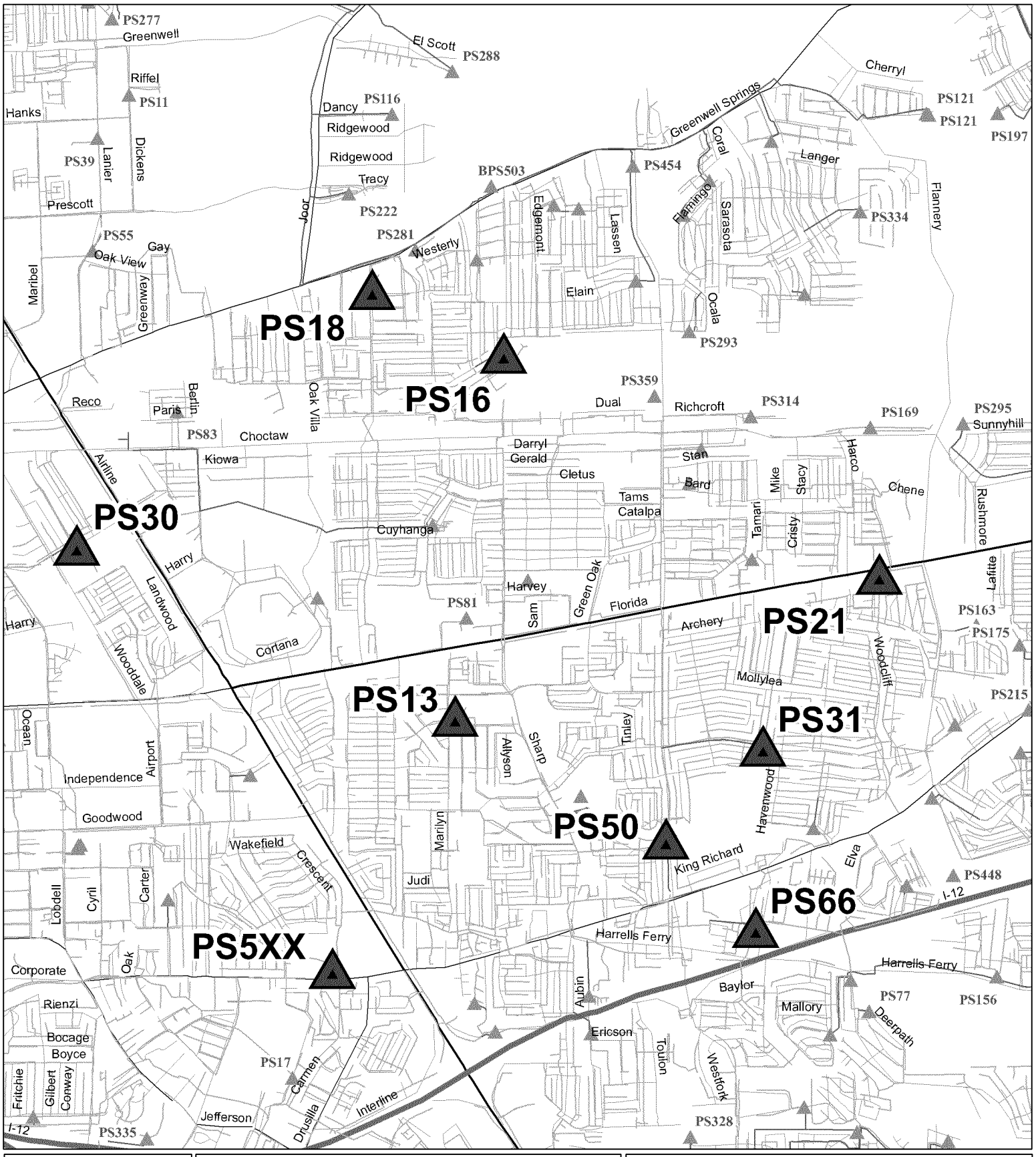
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather Flow	Comments
PS 13	Intersection of Elizabeth Drive and River Oaks Drive	1,042	1,389	158	
PS 16	Intersection of Great Smokey Avenue and JoAnne Drive	972	1,319	187	
PS 18	Intersection of Monterrey Avenue and Swingalong Avenue	625	833	44.4	
PS 21	Near Florida Blvd. at intersection of Shelby Drive	1,389	2,257	619	
PS 31	Goodwood Boulevard near Havenwood Boulevard	2,083	7,500	1,330	
PS 50	Intersection Major Oaks Road and Sherwood Forest Boulevard	7,291	22,568	4,190	
PS 66	Comal Drive, near intersection of Erlanger Drive	833	1,937	556	
PS 30	Tom Drive near intersection of Dallas Drive	624	1,111	273	
New PS (PS 5xx)	North of Tara Boulevard and Old Hammond Highway	New	19,554	3,145	Located at or near MH 058-01106

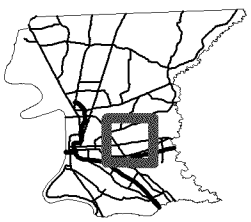
Note: The existing maximum capacity for the existing pump stations was obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $ 14,900,000.

Scheduled Design Appropriation Year is 2010.

Scheduled Construction Appropriation Year is 2012.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 3,000 6,000 Feet

PUBLIC WORKS

Florida Blvd PS Projects

SGC-C-0001

Project Vicinity Map

Figure 3-15

BATON ROUGE SSO Program

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3.2.7 SGC-C-0002 (Airline Highway Pipeline Projects)

Project Description

Purpose of the Project / Project Background

The SGC-C-0002 (Airline Highway Pipeline Projects) project includes those segments previously included in SGC-C-0003 (Essen Lane - Interstate-12) and SGU-C-0002 (Airline Highway - Interstate 12, specifically:

- Upsizing of the gravity sewer upstream of PS 58 to alleviate SSOs in the vicinity of the gravity sewer and pump station.
- Upsizing of the gravity sewers upstream of PS 50 and PS 66 and construction of new forcemains at PS 66 and PS 50 to address upstream SSOs.
- Construction of a new forcemain from the new pump station (PS 5xx), described in SGC-C-0001 (Florida Blvd Pump Station Projects), to the manifold point with the new forcemain from PS 50).
- Construction of a new forcemain from the manifold point to PS 58.

Location

The gravity sewers to be replaced under the SGC-C-0002 project are located near the intersection of Interstates 10 and 12, Old Hammond Highway, and north toward Airline Highway, and are shown in Figure 3-16.

Gravity segment 058-00034 to 058-00015 starts northeast of McCarroll Drive and Interstate 12. The gravity segment travels south crossing Interstate 12 until reaching 058-00029. The gravity segment then travels southeast until reaching 058-00020, and southwest along Essen Lane until reaching 058-00015, located northeast of the North Essen Heights Court and Essen Lane intersection.

Gravity segment 058-00586 to 058-00523 starts near the intersection of South Seracedar Street and Cedarcrest Avenue and travels south on Cedarcrest Avenue until reaching 058-00523. The gravity segment ends northeast of the Cedarcrest Avenue and Airline Highway intersection.

Section 058-00523 to 058-00501 starts northeast of the Cedarcrest Avenue and Airline Highway intersection. The gravity segment travels southwest until reaching 058-00501, located west of the Airline Highway and Cedarcrest Avenue intersection.

Section 058-00501 to 058-00479 starts west of the Airline Highway and Cedarcrest Avenue. intersection. The gravity segment travels southwest until reaching 058-00430, south along Bea Drive until reaching 058-00440 near Jefferson Highway, west until reaching 058-00446, and south until reaching 058-00479, located east of the Idlewood Drive and Ridgely Road intersection.

Gravity segment PS250DS to 058-00479 starts east of the Landsbury Avenue and Hackberry Drive intersection. The gravity segment travels northwest until reaching 058-00479, located east of the Idlewood Drive and Ridgely Road intersection.

Gravity segment 058-00479 to 058-00490 starts east of the Idlewood Drive and Ridgely Road intersection. The gravity line travels northwest along a drainage canal until reaching 058-00490, located south of the Inniswold Road and Jefferson Highway intersection.

Segment 058-00490 to 058-00017 starts south of the Inniswold Road and Jefferson Highway intersection. The gravity line travels northwest crossing Bluebonnet Blvd and travels along the canal. At 058-00499, the gravity segment travels southwest along Bluebonnet Road until

reaching 058-00215. At the intersection of Oliphant Road and Bluebonnet Road, the segment travels west to the drainage canal west of Drusilla Drive. The segment then travels north along the canal, crosses the canal, and ends at 058-00017 near the North Essen Heights Court and East Essen Heights Court intersection.

Gravity segment 058-01316 to 058-01310 starts west of North Donmore Avenue between intersections with Goya Avenue and Cezanne Avenue. The gravity segment travels south along Donmore Avenue until reaching 058-01310 located west of North Donmore Avenue between intersections with Rembrandt Avenue and Harry Avenue.

Gravity segment 058-01318 to 058-01316 starts west of North Donmore Avenue between intersections with Renoir Avenue and Cezanne Avenue. The gravity segment travels south along Donmore until reaching 058-01316, located west of North Donmore Avenue between intersections with Goya Avenue and Cezanne Avenue.

Gravity segment 058-03110 to 058-03116 starts near the Wooddale Blvd and Tom Drive intersection. The gravity segment travels southwest until reaching 058-03116, located east of the Tom Drive and Lobdell Blvd intersection.

Gravity segment 058-03116 to 058-03117 starts east of the Tom Drive and Lobdell Blvd intersection. The gravity segment travels northwest until reaching 058-03117.

Gravity segment 058-03117 to 058-03118 starts east of the Tom Drive and Lobdell Blvd intersection. The gravity segment travels west until reaching 058-03118.

Gravity segment 058-03118 to 058-03124 starts at the Tom Drive and Lobdell Blvd intersection. The gravity segment travels west until reaching 058-03124, located west of Tom Drive and Lobdell Blvd intersection.

Gravity segment 058-04039 to 058-04041A starts near the cul-de-sac of W E Heck Court and travels west through an industrial area to manhole 058-04041A, which is located near the intersection of Cedarcrest Avenue and Airline Highway.

Gravity segment 058-00016E to 058-00011E starts at the end of the PS 66 forcemain and travels south until reaching 058-00014E. The segment travels west until reaching 058-00011E, located northeast of Sherwood Forest Blvd and North Harrells Ferry intersection. Segment 058-00011E to 058-02653 starts east of Sherwood Forest Blvd. The gravity segment travels west until reaching 058-00005E. The line travels north until reaching 058-00002E.The line travels west to 058-00001E and north until reaching 058-02653, located west of the Sherwood Forest Blvd and Old Hammond Highway intersection.

Gravity segment 058-01868 to 058-01862 starts northeast of Airline Highway (North) and North Parkview Drive intersection. The gravity line travels southwest until reaching 058-01866, southeast until reaching 058-01865, and southwest crossing Airline Highway (North) until reaching 058-01864. The gravity line travels southeast until reaching 058-01862, located near the Airline Highway (North) and South Parkview Drive intersection.

Gravity segment 058-02851 to 058-02833 starts northwest of the Parkview Drive and Cora Drive intersection, traveling south, parallel to Cora Drive, until reaching 058-02833. Segment 058-02833 to 058-02677 starts northwest of Goodwood Blvd and Cora Drive. The gravity segment travels south, parallel to Cora Drive, then travels east until reaching 058-02701. The line travels south until reaching 058-02677, located near the end of Carolyn Sue Drive.

Gravity segment 058-02478 to 058-02475 starts on Airline Highway near the Gwenadele Avenue intersection. The gravity segment travels northwest along Airline Highway until reaching 058-02475, located near Airline Highway and Commonwealth Blvd intersection.

Gravity segment 058-02571 to 058-01395 starts on Bronzebush Avenue near Cedarcrest Avenue. The segment travels north and then turns west to manhole 058-02478 on Old Hammond Highway near Silverest Avenue.

Gravity segment 058-01859 to 058-01851A starts on Airline Highway (North) between its intersections with South Parkview Drive and Goodwood Blvd. The gravity line travels southeast until reaching 058-1851A, located near Lindale Avenue and Airline Highway intersection.

Gravity segment 058-01851A to 058-01850 starts near Lindale Avenue and Airline Highway intersection. The gravity line travels southeast until reaching 058-01850, located near the Delcourt Avenue and Airline Highway intersection.

Gravity segment 058-01850 to 058-01850A starts northeast of the Delcourt Avenue and Airline Highway intersection. The gravity segment travels southeast, towards Delcourt Ave, until reaching 058-01850A.

Gravity segment 058-01310 to 058-00935 starts at the Harry Drive and Donmoor Avenue intersection and travels south along Donmoor Avenue until reaching 058-00935 The gravity segment ends north of the Florida Blvd and Donmore Avenue intersection.

Gravity segment 058-01830 to 058-01826 starts on the west side of Fernwood Avenue. The gravity line travels south along Fernwood Avenue until 058-01826, located near the Florida Blvd and Fernwood Avenue intersection.

Gravity segment 058-01335 to 058-00890 starts north of Lils Court and Sevenoaks Avenue intersection. The gravity line travels north past the end of Lils Court at 058-01337, then travels southeast until reaching 058-00890, located near the north end of Carter Avenue.

Gravity segment 058-00890 to 058-01132 starts south of Thurman Drive, just north of the drainage canal. The segment travels north on Thurman Drive until reaching 058-01132, located south of the Thurman Drive and Goodwood Blvd intersection.

Gravity segment 058-05074 to 058-05006 starts on Murphy Drive north of the Murphy Drive and Richards Drive intersection. The gravity line travels south until reaching 058-05005, located south of the Murphy Drive and Richards Drive intersection.

Gravity segment 058-05006 to 058-00349 starts south of Murphy Drive and Richards Drive intersection. The gravity line travels south until reaching 058-00349, located near the north side of Interstate 12.

Gravity segment 058-00369 to 058-00004B starts northeast of the Marcel Avenue and Plaza Drive intersection. The segment travels east down Marcel Avenue, and then southeast across a golf course, terminating just east of Fairway Drive at 058-00004B.

Gravity segment 058-01171 to 058-01159 starts on Brentwood Drive at the edge of a golf course. The gravity line travels east across a golf course and crossing Fairway Drive until reaching 058-01157. The line continues north until reaching 058-01159.

Gravity segment 058-00497 to 058-00499 starts along Bluebonnet Road between intersections with Jefferson Highway and French Village Avenue. The gravity line travels south along Bluebonnet Road until reaching 058-00499.

Gravity segment 058-00481 to 058-00483 starts near the Floynell Drive and Ridgely Road intersection. The gravity line travels north until reaching 058-00483 near the drainage canal.

Gravity segment 058-00172 to 058-00173 starts south of the Florida Blvd and Marquette Avenue intersection. The gravity line travels west, parallel to Florida Blvd, until reaching 058-00173.

Gravity segment 058-00173 to 058-00940A starts southwest of the Florida Blvd and South Carrollton Avenue intersection. The gravity line travels north, crossing Florida Blvd, until reaching 058-00940A, located north of Florida Blvd between intersections with Marquette Avenue and South Carrollton Avenue.

Gravity segment 250-00026 to PS250 starts on a drainage path southeast of the intersection of Jefferson Highway and Auto Plex Drive, near an apartment complex. The segment then parallels Jefferson Highway along the drainage path to PS 250, which is located just south of the intersection of Jefferson Highway and Cal Road.

Gravity segment 066-00005 to PS 66 starts on the south side of Interstate 12 near Eastgate Drive, crosses Interstate 12, and travels north to PS66 near Comal Drive and Erlanger Drive intersection.

Gravity segment 066-0087A to 066-00001A starts at Woodland Ridge Boulevard. The line travels north, crossing Interstate 12, and then west to Blvd de Providence. Segment 066-00088 to PS 66 travels west from Blvd de Providence to PS 66.

The PS 66 forcemain runs from the upgraded PS 66, described in Project SGC-C-0001 (Florida Blvd PS Projects) on Comal Drive travels westward to the termination of the forcemain at manhole 058-00016E on Sherwood Meadow Drive.

This project includes the construction of a new forcemain from the upgraded PS 50, upgraded as described in Project SGC-C-0001 (Florida Blvd PS Projects). The segment of forcemain starts at PS 50 at the corner of Sherwood Forest Blvd and Major Oaks Drive, travels southerly along Sherwood Forest Blvd to Interstate 12.

The forcemain from the new pump station PS-5xx (described in SGC-C-0001 [Florida Blvd PS Projects] project) starts at Tara Blvd north of Old Hammond Highway and runs south down Fairway Drive. The forcemain then manifolds with the forcemain from PS 50 on the north side of Jefferson Highway and Interstate 12. The forcemain from the manifold site to PS58 starts near the intersection of Jefferson Highway and Interstate 12, goes west along the Interstate 12 ROW, and travels southerly down the ROW of Essen Lane to the wet well of PS58 on Essen Lane.

Scope

This project includes construction of approximately 51,360 feet of 10-inch, 12-inch, 15-inch, 18-inch, 21-inch, 24-inch, 27-inch, 36-inch, and 42-inch gravity sewer upstream of PS 58; approximately 880 feet of 12-inch gravity sewer upstream of PS 250; approximately 2,500 feet of 15-inch and 18-inch gravity sewer upstream of PS 66; a new 12-inch forcemain from PS 66 to replace the existing forcemain; and approximately 28,900 feet of new 30-inch, 42-inch, and 48-inch forcemains from new PS 5xx and PS 50 to PS 58.

Additional project details are presented in Table 3-5.

TABLE 3-5
SGC-C-0002 (Airline Highway Pipeline Projects)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
058-00034	058-00015	6,300	18	24	Segment crosses Interstate 12
058-00586	058-00523	1,900	12	18	
058-00523	058-00501	640	12 and 15	21	
058-00501	058-00479	2,700	15	27	
PS250DS	058-00479	1,100	8 and 15	18	
058-00479	058-00490	1,900	15 and 18	36	
058-00490	058-00017	8,200	18 and 24	42	Segment has a canal crossing near Drusilla Drive
058-01316	058-01310	880	10	15	
058-01318	058-01316	350	10	15	
058-03110	058-03116	720	12	15	
058-03116	058-03117	120	12	15	
058-03117	058-03118	420	12	15	
058-03118	058-03124	75	12	15	
058-04039	058-04041A	550	12	15	
058-00011E	058-02653	1,400	12 and 15	24	
058-00016E	058-00011E	740	12	21	
058-01868	058-01862	840	8	12	
058-02851	058-02833	1,140	8	15	
058-02833	058-02677	3,870	15	21	
058-02478	058-02475	830	8	12	
058-02571	058-01395	3,520	8	15	
058-01850	058-01850A	80	15	18	
058-01851A	058-01850	800	15	18	
058-01859	058-01851A	2,230	15	18	
058-01310	058-00935	2,000	10	18	
058-01830	058-01826	530	10 and 15	21	
058-01335	058-00890	460	8 and 10	15	
058-00890	058-01132	450	12	18	Includes a drainage cancel crossing
058-05074	058-05006	370	8	15	
058-05006	058-00349	270	12	18	
058-00369	058-00004B	2,900	18	24	Portion of these gravity segments go through a golf course.
058-01171	058-01159	1,800	8	12	
058-00497	058-00499	520	8	12	

TABLE 3-5
SGC-C-0002 (Airline Highway Pipeline Projects)

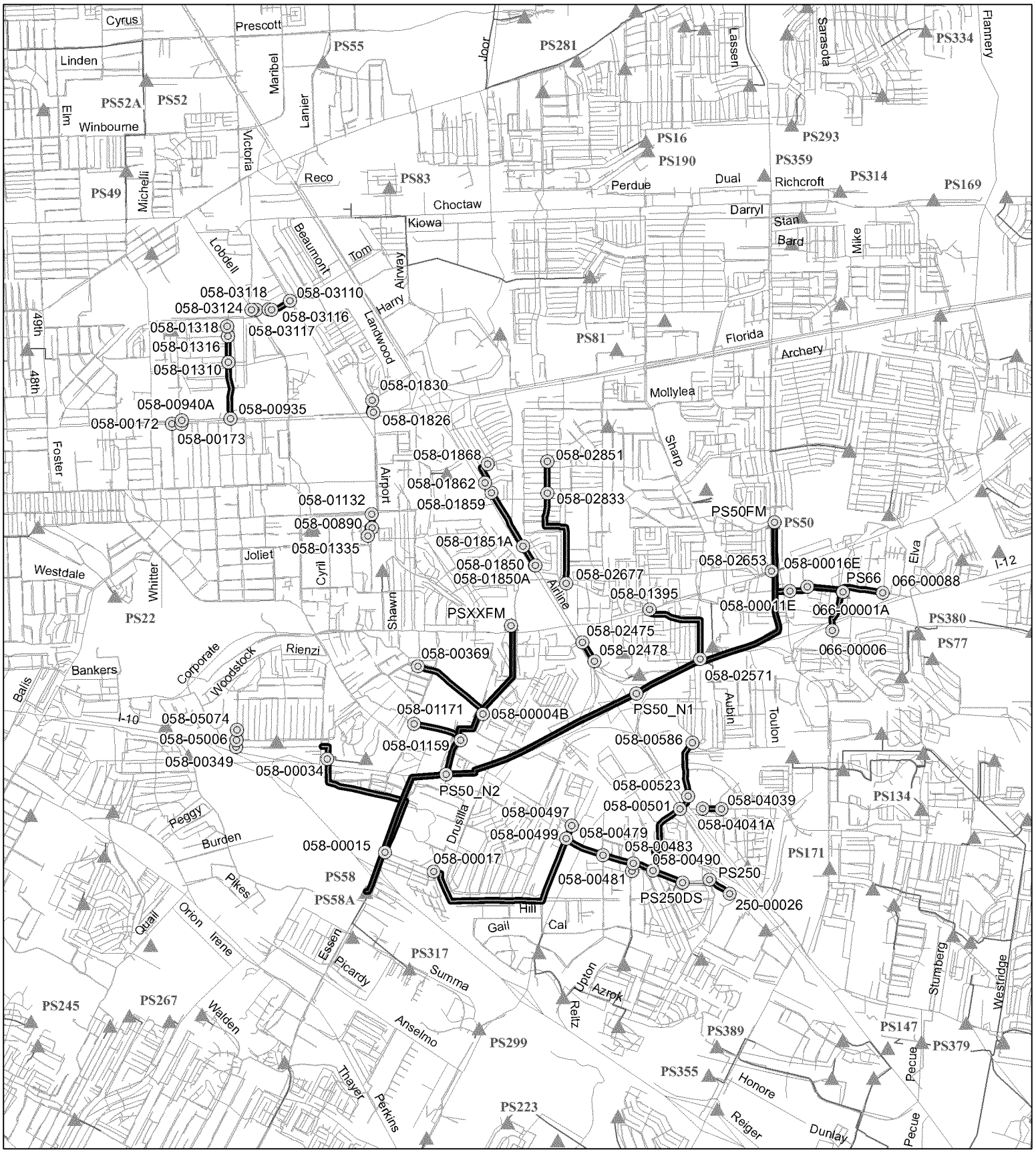
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
058-00481	058-00483	290	8	12	
058-00172	058-00173	330	8	10	
058-00173	058-00940A	130	8	12	Includes a crossing under Florida Blvd
250-00026	PS250	880	10	12	
066-00005	066-00002	730	8	15	
066-00002	PS66	660	8,10 & 12	18	
066-00087A	066-00001A	1,070	10 & 12	18	
PS 66		1,280	8	12	Forcemain Replacement
NEW FM (PS 50)		16,810	New	42	New forcemain, Need to coordinate with SGC-C-0003 (Essen Lane – Interstate 12)
New PS (described in SGC-C-0001 [Florida Blvd – PS Projects])	Manifold Pt w/ new FM from PS 50	6,500	New	30	Forcemain
Manifold Pt w/ new FM from PS 50	PS58	5,600	New	48	Forcemain; Crosses both Interstate 12 and Interstate 10

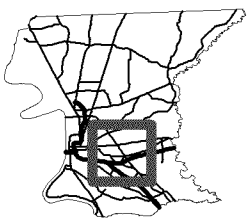
Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $28,800,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2012.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 4,450 8,900 Feet

Airline Highway Pipeline Projects

SGC-C-0002

Project Vicinity Map

PUBLIC WORKS

Figure 3-16

BATON ROUGE SSO Program

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3.2.8 SGC-C-0003 (Essen Lane - Interstate 12)

The SGC-C-0003 project has been combined with SGC-C-0002 (Airline Highway - Jefferson Highway) and SGU-C-0002 (Airline Highway - Interstate 12). The combined project has been designated SGC-C-0002 (Airline Highway Pipeline Projects), and is described in Section 3.2.7.

3.2.9 SGC-C-PS58A (Staring Lane – Overflow Pump Station)

Project Description

Purpose of the Project/Project Background

The SGC-C-PS58A (Staring Lane – Overflow Pump Station) project includes the construction of a new overflow pump station (PS 58A) for PS 58 which will pump flow directly to the South WWTP. The purpose of this project is to relieve SSOs at PS 58 as well as in the respective upstream and downstream basins. This project is related to SGC-C-PS58FM-Phase I (Staring Lane FM-Phase I – Highland to Burbank), SGC-C-PS58FM-Phase II (Staring Lane FM Phase II – Perkins to Highland), and SGC-C-PS58FM-Phase III (Staring Lane FM Phase III – PS 58 to Perkins) which involve the construction of the forcemain from PS 58A to the South WWTP.

Location

The location of PS 58A is shown in Table 3-6 and in Figure 3-17.

Scope

The current PS 58 will not have enough pumping capacity to handle the predicted future wet weather peak flow. Rather than replace the entire PS 58, an overflow pump station (PS 58A) is proposed in the scope shown in Table 3-6.

TABLE 3-6
SGC-C-PS58A (Staring Lane - Overflow Pump Station)

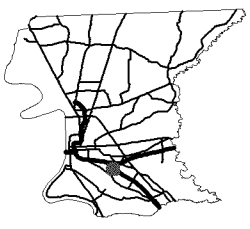
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather Flow
PS58A	Intersection of Essen Lane and Essen Park	New	62,460	**0**

Note: The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $11,100,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 255 510 Feet

Staring Ln. Overflow Pump Station

SGC-C-PS58A

Project Vicinity Map

Figure 3-17

BATON ROUGE SSO Program

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3.2.10 SGC-C-PS58FM-Phase I (Staring Lane FM-Phase I – Highland to Burbank)

Project Description

Purpose of the Project / Project Background

The SGC-C-PS58FM-Phase I (Staring Lane FM-Phase I – Highland to Burbank) project includes the construction of a portion of the new forcemain from the PS 58A overflow pump station to the South WWTP. The purpose of this project is to relieve SSOs at PS 58 as well as in the respective upstream basins. The construction of the direct forcemain between PS 58A and the South WWTP alleviates the wet weather flows into existing downstream gravity pipe, and allows the capacity needed for future flows in the Staring Lane area.

This portion of the new forcemain is being constructed as part of the Green Light Program project for the Staring Lane Extension.

Location

This portion of the new forcemain runs along Staring Lane Extension from Highland Road to Burbank Road (to the South WWTP), connecting into Staring Lane forcemain.

Scope

The scope of this project is shown in Table 3-7 and in Figure 3-18.

TABLE 3-7
SGC-C-PS58FM-Phase I (Staring Lane FM-Phase I - Highland to Burbank)

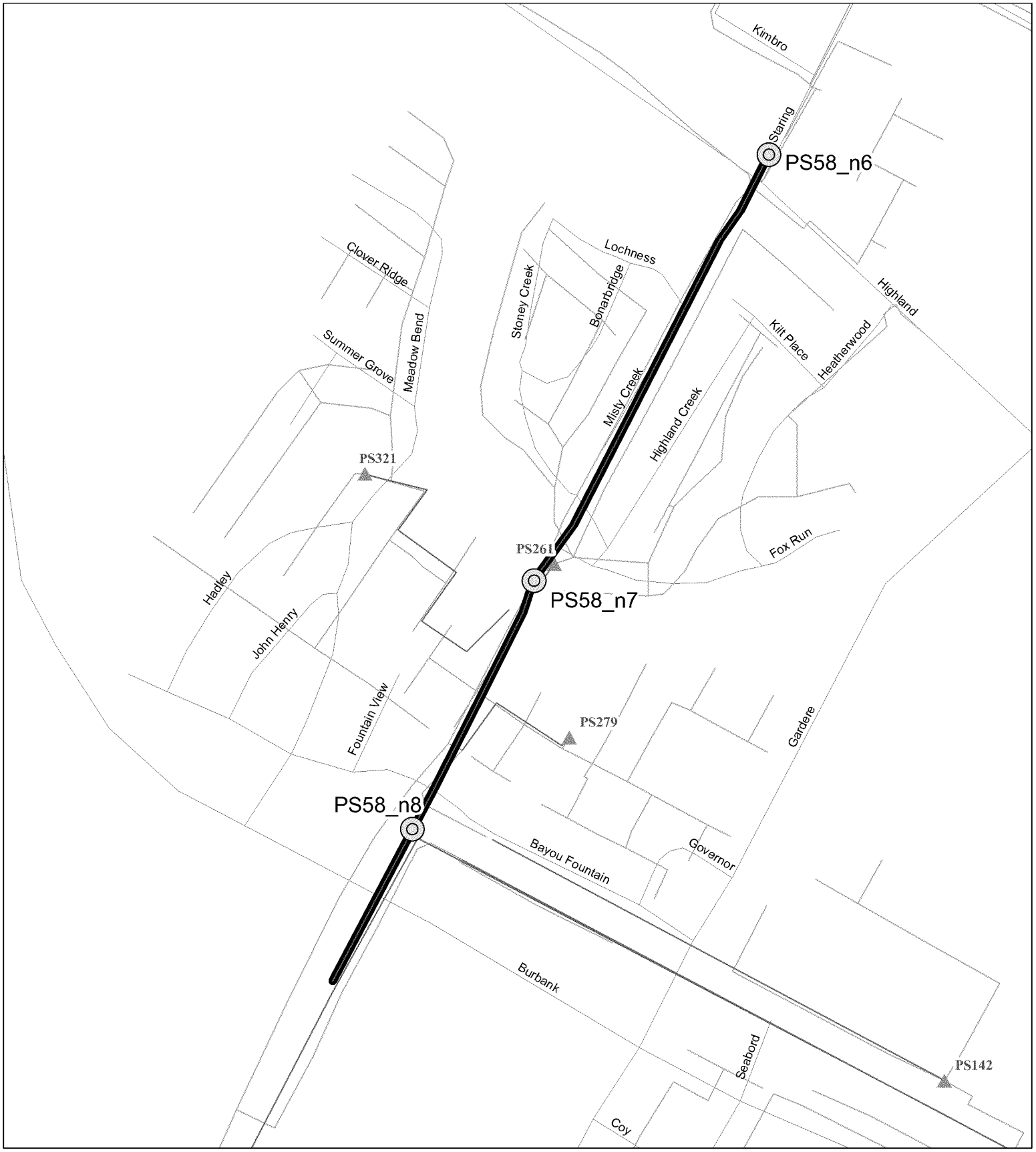
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
Highland Road	Burbank Road	2960	New	64	To be constructed under Green Light Program

Note: The pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $4,615,500.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 480 960 Feet

Staring Lane FM Phase I

SGC-C-PS58FM-Ph I

Project Vicinity Map

PUBLIC WORKS

Figure 3-18

BATON ROUGE SSO Program

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3.2.11 SGC-C-PS58FM-Phase II (Staring Lane FM-Phase II – Perkins to Highland)

Project Description

Purpose of the Project / Project Background

The SGC-C-PS58FM-Phase II (Staring Lane FM-Phase II – Perkins to Highland) project includes the construction of a portion of the new forcemain from PS 58A (overflow pump station) to the South WWTP. The purpose of this project is to relieve SSOs at PS 58 as well as in the respective upstream and downstream basins. The construction of the direct forcemain between PS 58A and the South WWTP alleviates the wet weather flows into existing downstream gravity pipe, and allows the capacity needed for future flows in the Staring Lane area.

This portion of the new forcemain will be constructed as part of the Green Light Program project for improvements to Staring Lane.

Location

This portion of the new forcemain from PS 58 to the South WWTP runs along Staring Lane from Perkins Road to Highland Road.

Scope

The scope of the project is shown in Table 3-8 and in Figure 3-19. The forcemain increases in size at Boone Drive due to the addition of flow at this point from a new overflow pump station at PS 53, described in Project SGL-C-0002 (Multiple Pump Stations – Highland Road – Kenilworth Parkway).

TABLE 3-8
SGC-C-PS58FM-Phase II (Staring Lane FM-Phase II - Perkins to Highland)

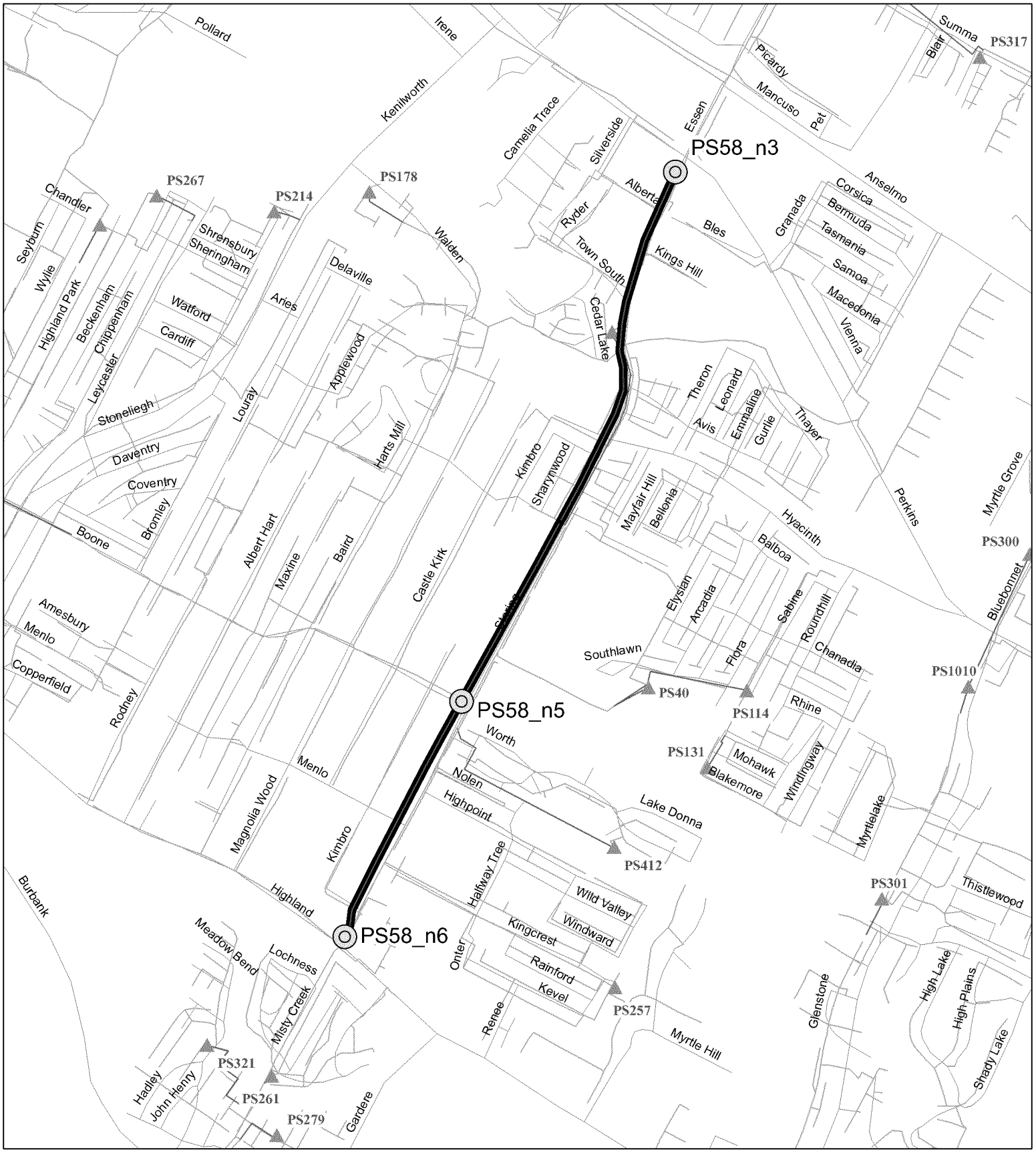
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
Boone Drive	Highland Road	3320	New	64	Constructed under Green Light Program
Perkins Road	Boone Drive	7180	New	60	Constructed under Green Light Program

Note: The pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $14,000,000.

Design is appropriated with SGC-C-PS58FM-Phase I (Staring Lane FM Phase I – Burbank to Highland).

Scheduled Construction Appropriation Year is 2010.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,400 2,800 Feet

PUBLIC WORKS

Staring Lane FM Phase II

SGC-C-PS58FM-Ph II

Project Vicinity Map

Figure 3-19

BATON ROUGE SSO Program

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3.2.12 SGC-C-PS58FM-Phase III (Staring Lane FM-Phase III – PS 58 to Perkins)

Project Description

Purpose of the Project/Project Background

The SGC-C-PS58FM-Phase III (Staring Lane FM-Phase III – PS 58 to Perkins) project involves the construction of a portion of the new forcemain from the PS 58A overflow pump station to the South WWTP. The purpose of this project is to relieve SSOs at PS 58 as well as in the respective upstream and downstream basins. The construction of the direct forcemain between PS 58A and the South WWTP alleviates the wet weather flows into existing downstream gravity pipe, and allows the capacity needed for future flows in the Staring Lane area.

Location

This portion of the new forcemain starts approximately at the intersection of Essen Lane and Essen Park and proceeds in a southerly direction along Essen Lane to Perkins Road.

Scope

The scope of this project is shown in Table 3-9 and in Figure 3-20.

TABLE 3-9
SGC-C-PS58FM-Phase III (Staring Lane FM-Phase III – PS 58 to Perkins)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS58	Perkins Road	4240	New	60	

Note: The pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $10,000,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.

East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 500 1,000 Feet

PUBLIC WORKS

Staring Lane FM Phase III

SGC-C-PS58FM-Ph III

Project Vicinity Map

Figure 3-20

BATON ROUGE SSO Program

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3.2.13 SGC-C-PS119 (Citiplace/Essen Area PS 119 and FM Improvements)

Project Description

Purpose of the Project/Project Background

The SGC-C-PS119 (Citiplace/Essen Area PS 119 and Forcemain Improvements) project includes the construction of both 8,100 feet of new 16-inch forcemain from PS 119 to PS 58 and the upgrade of PS 119 due to the longer forcemain and the predicted increase in future peak wet weather flow.

Location

Figure 3-21 shows the scope of this project. PS 119 is located on the north side of Highway I-10 on the western side of the creek near the movie theater and Citiplace Drive.

A new 16-inch forcemain will replace the existing 12-inch forcemain extending from PS 119 to MH 058-00194T. From MH 058-00194T, an existing 16-inch forcemain will be utilized. The existing forcemain follows Ward's Creek to MH 058-00129T. At MH 058-00129T, a new 16-inch forcemain will be connected to the existing forcemain and continue to follow Ward's Creek until nearing the intersection of Essen Lane and Ward's Creek. At this point, the forcemain will turn in a northerly direction and connect to PS 58.

Scope

The scope of the project is shown in Tables 3-10 (pump station scope) and 3-11 (forcemain scope).

TABLE 3-10
SGC-C-PS119 (Citiplace/Essen Area PS 119 and Forcemain Improvements) – Pump Station Scope

PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 119	Citiplace Drive near the Movie Theater	2,430	1,561	594

TABLE 3-11
SGC-C-PS119 (Citiplace/Essen Area PS 119 and Forcemain Improvements) – Forcemain Scope

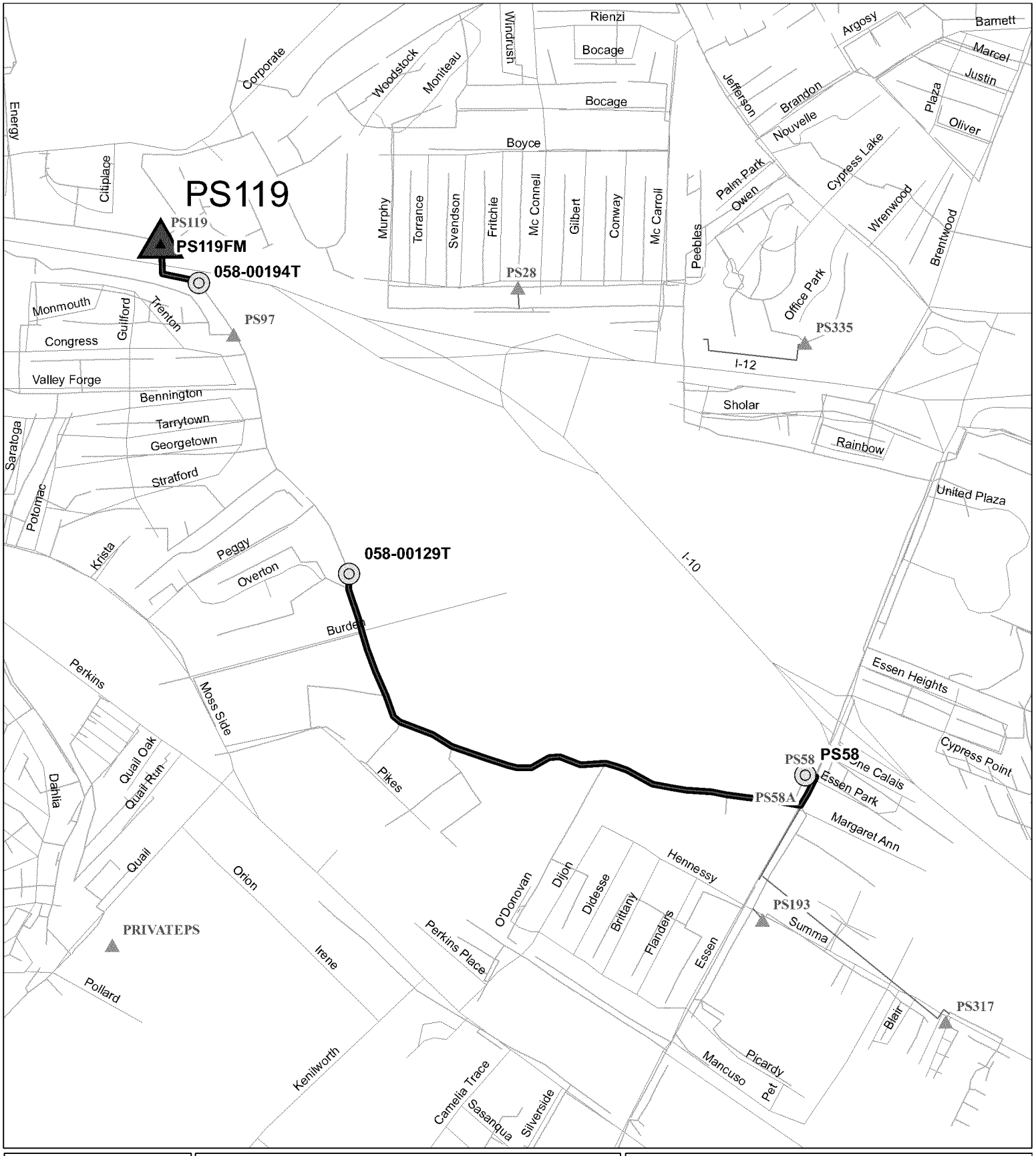
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS 119	PS58	8,100	New	16	New forcemain segments (PS 119 to 058-00194T and 058-00129T to PS 58)

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model. The pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $2,800,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,350 2,700 Feet

Citiplace/Essen Area PS119 & FM Improvements

SGC-C-PS119

Project Vicinity Map

PUBLIC WORKS

Figure 3-21

BATON ROUGE SSO Program

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3.2.14 SGL-C-0001 (Essen/Staring Area PS 57 Improvements)

Project Description

This project has been deleted from the PDP.

3.2.15 SGL-C-0002 (Multiple PSs – Highland Road – Kenilworth Parkway)

Project Description

Purpose of the Project / Project Background

The SGL-C-0002 (Multiple Pump Stations – Highland Road – Kenilworth Parkway) project includes the upsizing of PS 120, PS 329, PS 40, PS 53A, PS 56, PS 68, PS 102, PS 27, PS 74, and PS 302 to alleviate SSOs at and near the pump stations and in their respective upstream basins. The BTRSSO hydraulic model also predicts that these pump stations will exceed their existing capacities at the predicted future peak wet weather flows. PS 102 was originally slated as a master plan pump station but was added to this PDP project. PS 27, PS 74, and PS 302 have been added to this project since the October 2008 PDP.

Location

The locations of the pump stations are shown in Table 3-12 and in Figure 3-22.

Scope

The scope of the project is shown in Table 3-12. All pump stations except PS 53A are replacements of existing pump stations. PS 53A is a new overflow pump station for PS 53, which will alleviate upstream overflows and not require PS 53 to be upsized. PS 53A will have a dedicated forcemain, described in SGL-C-0003 (Highland Road Pipeline Projects), through which it will pump to the manifold with the new forcemain from PS 58A, described in SGC-C-PS58FM-Phase II (Staring Lane FM-Phase II – Perkins to Highland).

TABLE 3-12
SGL-C-0002 (Multiple Pump Stations - Highland Road - Kenilworth Parkway)

PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 120	Helvetia Drive, near the intersection of Bancroft Way	417	515	92
PS 329	Kenilworth Parkway, near the intersection of Burbank Drive	903	1,224	196
PS 40	Southlawn Drive, near the intersection of Arcadia Drive	833	802	110
PS 53A	Boone Avenue, near the intersection of Chippenham Drive	6,041	9,045	0
PS 56	Chandler Drive, near the intersection of Highland Park Drive	1,250	4,737	574
PS 68	Burbank Drive, near the intersection of Jennifer Jean Drive	833	1,132	338
PS 102	GSRI Avenue, near the intersection of Jasper Avenue	400	886	228
PS 27	Burbank Drive, near the intersection of Ridgehaven Avenue		264	84

TABLE 3-12
SGL-C-0002 (Multiple Pump Stations - Highland Road - Kenilworth Parkway)

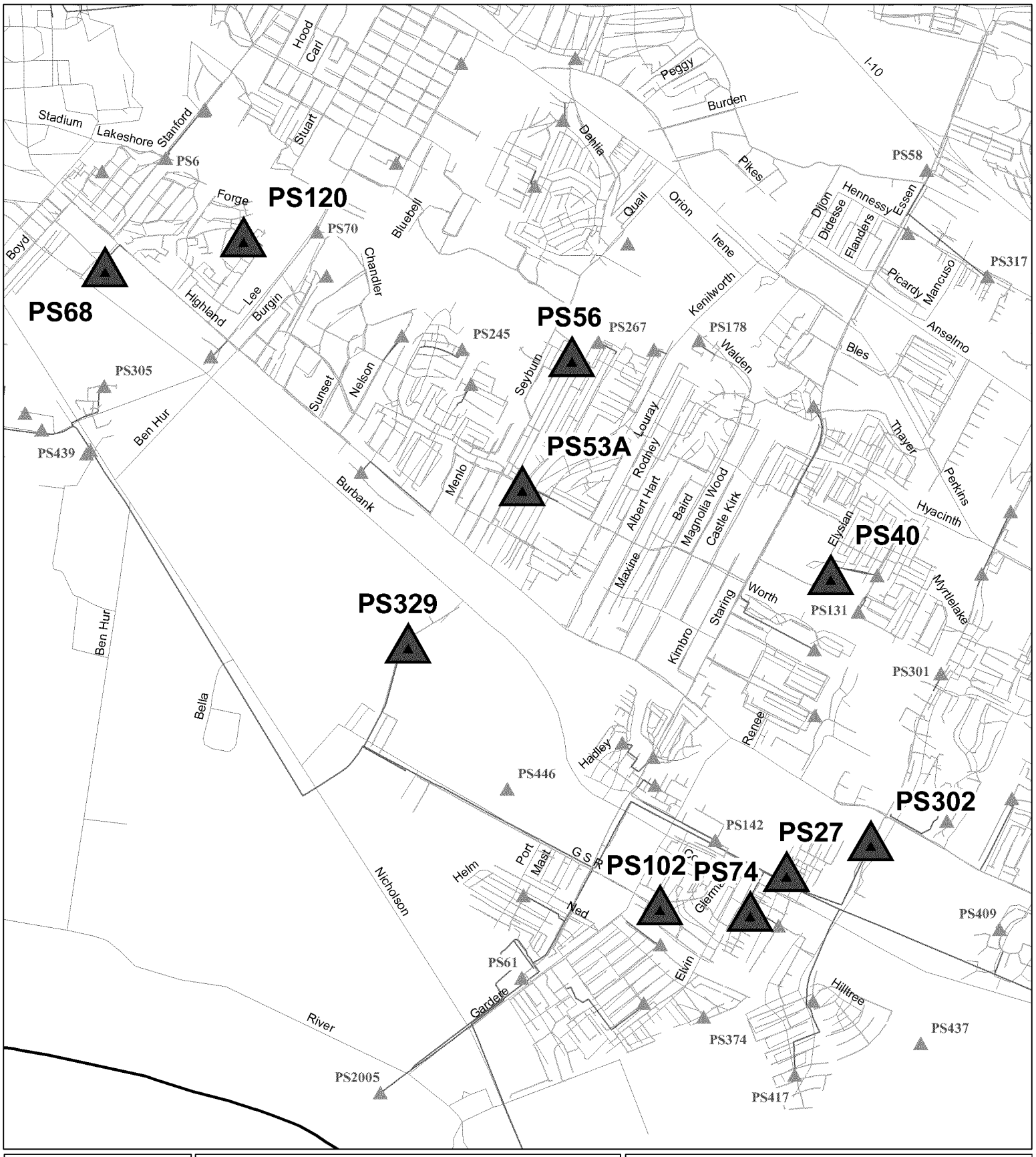
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 74	Pecan Tree Drive, south of intersection with Burbank Drive		352	132
PS 302	Bluebonnet Boulevard, north of intersection with Burbank Drive		4,463	904

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $9,200,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2012.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,300 4,600 Feet

Multiple PS - Highland Rd. - Kenilworth Pkwy

SGL-C-0002

Project Vicinity Map

PUBLIC WORKS

Figure 3-22

BATON ROUGE SSO Program

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3.2.16 SGL-C-0003 (Highland Road Pipeline Projects)

Project Description

Purpose of the Project/Project Background

The SGL-C-0003 (Highland Road Pipeline Projects) project is a newly combined project which includes segments previously included in SGL-C-0003 (Essen Lane-Highland Road) and SGL-C-0004 (Highland Road-Lee Drive). The following is a summary of the project: upsizing of gravity sewers upstream of PS 57, PS 61, PS 302, PS 329, and PS 40; upsizing of the forcemain from PS 329; construction of a new forcemain from PS 53A, described in SGL-C-0002 (Multiple Pump Stations – Highland Road – Kenilworth Parkway), to the manifold point with the new PS 58A forcemain, described in SGC-C-PS58FM-Phase II (Staring Lane FM-Phase II – Perkins to Highland; upsizing of gravity sewers upstream of PS 53, which will assist with alleviating upstream SSOs; and upsizing of the forcemain from PS 56 to alleviate overflows. PS 56 is described in SGL-C-0002 (Multiple Pump Stations – Highland Road – Kenilworth Parkway).

Location

The SGL-C-0003 project is roughly bound by I-10 in the north, Nicholson Drive in the south, Winterhue Drive in the east, and Wylie Drive in the west. It also includes upgrades of gravity sewers near Highland Road between Bromley Road in the east and Delgado Drive in the west. Project specifics are presented in Table 3-17 and are shown in Figure 3-23.

Gravity segment 057-00117 to 057-00080 starts south of the Thoreau Drive and Baird Drive intersection, and goes north along Baird Drive and back over the water channel. This segment bends east along the water channel, then travels north, parallel to Walden Road. Gravity segment 057-00080 to 057-00003 starts southeast of the intersection of Walden Road and Applewood Road and travels in an easterly direction over a drainage canal toward Lake Calais Court. The gravity segment then runs parallel to Clear Lake Avenue south of the houses on that street and next travels in an easterly direction to the west side of Staring Lane. Segment 057-00003 to 057-00001 runs northerly along Staring Lane to PS 57.

Gravity segment 057-00330 to 057-05069 starts east of Madeira Drive between Perkins Road and Vienna Avenue. The gravity segment travels southeast to the back of nearby houses that are along Madeira Drive. The segment then turns southwest and ends just north of Perkins Road. Segment 057-05069 to 057-00367 starts north of Perkins Road and travels southwest to the southern side of Perkins Road. Gravity segment 057-00367 to 057-00368 runs northwest from Perkins Road on the north side of a drainage canal. Gravity segments 057-00368 to 057-00495, 057-00495 to 057-00371D, 057-00371D to 057-00371E, and 057-00371E to 057-00003 follow the northern side of the drainage canal west and north to Staring Lane.

Gravity segment 040-00012 to PS 40 is located west of Elysian Drive and goes in a southwesterly direction past Southlawn Drive until reaching 040-00002. The segment then travels southeast to PS 40, located southwest of Southlawn Drive and Arcadia Drive intersection.

Gravity segments 329-00016 to 329-00008 and 329-00008 to PS 329 are located in a wooded area off GSRI Avenue. 329-00016 to 329-00008 runs northerly from Tracy Lee Drive. Segment 329-00008 to PS 329 runs northerly to PS 329.

Gravity segment PS102DS to 061-00364 is located along GSRI Road, starting at Seaboard Drive and running northwesterly past Gardere Lane.

Gravity segment 302-05073 to 302-05052 runs down Lakeview Drive and heads in a southeasterly direction to the corner of Lakeview Drive and Oak Hills Parkway. Segment 302-05052 to 302-05031 starts at Lakeview Drive and Oak Hills Parkway and heads in a southerly direction down Oak Hills Parkway, cutting southwesterly to Pastureview Drive. The segment continues southeasterly past Pastureview Drive to Willow End Drive, which it follows easterly to Mossy Oak Avenue. It then turns southerly and ends at Highland Road. Segment 302-05031 to 302-05010 goes westerly along Highland Road to manhole 302-05010, which is halfway between Huntington Drive and Grand Lakes Drive. Segment 302-05010 to 302-05007A runs along Highland Road to the intersection of highland Road and Rue de Laplace. Segment 302-05007A to 302-05004 starts at Rue de Laplace and heads up Highland Road westerly to Shady Lake Place. Segment 302-05004 to 302-05002 runs along Highland Road between Shady Lake Place and Bluebonnet Boulevard.

Gravity segment 061-00102 to 061-00407 is located on Boone Avenue between the first manhole southeast of Daventry Drive and Staring Lane.

Gravity segment 061-00351 to 061-00302 starts south of the cul-de-sac of Southlawn Drive and heads westward to Staring Lane.

Gravity segment PS56DS to 053-00003 is located between Wylie Drive and Highland Park Drive. The northern boundary of this line is Chandler Avenue and the southern boundary is Boone Avenue.

Gravity segments 053-00177 to 053-00168 and 053-00168 to 053-00144 start near the intersection of Leycster Drive and Kenilworth Parkway and run southwest behind houses between Kenilworth Parkway and Chippenham Drive to Boone Avenue.

Gravity segment 053-00410 to 053-00407 starts on Highland Road between Lee Drive and Duplantier Boulevard and runs in a southeasterly direction down Highland Road to manhole 053-00407, which is just past Lee Drive. Segment 053-00407 to 053-00316 starts on Highland Road just past Lee Drive and runs in a southeasterly direction to Burgin Avenue. At Burgin Avenue, this segment goes in a northeasterly direction. At Boston Street, it turns southeasterly again. At McDonald Avenue, the line turns to go northeasterly, then turns again southeasterly onto Menlo Drive. The segment goes down Menlo Drive to manhole 053-00316, which is halfway between Leeward Drive and Sunset Boulevard.

Gravity segments 053-00316 to 053-00016 and gravity segment 053-00016 to 053-00014 starts on Menlo Drive halfway between Leeward Drive and Sunset Blvd and travels southeasterly

along Menlo Drive past the intersection of Nelson Drive with Menlo Drive. The segment continues past the end of Menlo Drive behind a line of houses, and then the segment turns northerly to manhole 053-00014, which is northwest of Woodstone Drive.

Gravity segment 053-00010A to 053-00003 starts northwest of the Woodgate Blvd and North Woodgate Court intersection and travels southeasterly direction along a drainage canal between Woodgate Court and Millgate Place to manhole 053-00003, which is located on Boone Avenue halfway between Wylie Drive and Highland Park Drive.

Gravity segment 053-00429 to 053-00410 runs parallel to Bancroft Way, set off southeasterly half a block. The segment starts northeast of Timbercove Street and ends at Highland Road.

Gravity segment 068-00050 to PS 68 begins near the cul-de-sac on the northern end of Jennifer Jean Drive and follows a servitude east in between Highland Road and Burbank Drive to PS 68, which is located just south of the intersection of Highland Road and Delgado Drive

The forcemain from PS 56 begins at PS 56, which is roughly located at the intersection of Highland Park Drive with Chandler Drive, and continues along Highland Park Drive for approximately 540 feet.

The PS 329 forcemain will be replaced under this project. This forcemain starts at PS 329, which is located in a wooded area in a northerly direction from GSRI Avenue, then runs south to GSRI Avenue, and turns easterly on GSRI Avenue to Gulf South Parkway.

The PS 53A forcemain is a new forcemain from PS 53 to the manifold with the new PS 58A forcemain, as described above. This forcemain begins at PS 53A, which will be located near the intersection of Boone Avenue and Chippenham Drive, and runs southeasterly along Boone Avenue to Staring Lane.

Scope

This project includes construction of the following: approximately 6,800 feet of 15-inch, 18-inch, 21-inch, 27-inch, 30-inch, 36-inch, and 42-inch gravity sewer upstream of PS 57; approximately 1,200 feet of 15-inch gravity sewer upstream of PS 40; approximately 2,000 feet of 15-inch and 18-inch gravity sewer upstream of PS 329; approximately 7,800 feet of 12-inch, 15-inch, 18-inch, 24-inch, and 27-inch gravity sewer upstream of PS 302; approximately 2,400 feet of 15-inch and 18-inch gravity sewer upstream of PS 61; approximately 18,300 feet of 18-inch, 21-inch, 24-inch, 27-inch, 30-inch, and 36-inch gravity sewer upstream of PS 53; approximately 1,200 feet of 18-inch gravity sewer upstream of PS 68; approximately 4,300 feet of 10-inch forcemain from PS 329 to replace the existing forcemain; approximately 6,200 feet of new 24-inch forcemain from PS 53A; and approximately 540 feet of 18-inch forcemain from PS 56 to replace the existing forcemain.

Table 3-13 shows the detailed scope of this project.

TABLE 3-13
SGL-C-0003 (Highland Road Pipeline Projects)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
057-00117	057-00080	710	10 and 12	18	This segment goes underneath a water channel.
057-00080	057-00003	2,200	12	21	
057-00003	057-00001	180	24	42	Segment includes crossing of a drainage canal.
057-00330	057-05069	460	8	15	
057-05069	057-00367	170	10	15	
057-00367	057-00368	190	10	18	
057-00368	057-00495	700	10	21	
057-00495	057-00371D	1,345	12	27	
057-00371D	057-00371E	230	12	30	
057-00371E	057-00003	665	12	36	
040-00012	PS 40	1,200	8	15	PS 40 will be upgraded under SGL-C-0002 (Multiple PS – Highland Road – Kenilworth Parkway)
329-00016	329-00008	1,700	10	15	
329-00008	PS 329	300	10	18	PS 329 will be upgraded under SGL-C-0002 (Multiple PS – Highland Road – Kenilworth Parkway) – forcemain replacement described below.
302-05073	302-05052	660	8	12	
302-05052	302-05031	1,700	8	15	
302-05031	302-05010	1,800	15 to 18	18	
302-05010	302-05007A	950	18	24	
302-05007A	302-05004	1,200	18	24	
302-05004	302-05002	1,500	18	27	
PS102DS	061-00364	930	8	15	
061-00351	061-00302	1,500	12	18	
PS56DS	053-00003	2,900	18	24	This segment includes a canal crossing.
053-00177	053-00168	325	10	18	
053-00168	053-00144	1,600	10	21	
053-00410	053-00407	715	12	18	
053-00407	053-00316	3,500	12 or 18	24	
053-00316	053-00016	1,800	18	27	
053-00016	053-00014	470	18	30	

TABLE 3-13
SGL-C-0003 (Highland Road Pipeline Projects)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
053-00010A	053-00003	2,400	24	36	This segment includes a canal crossing.
053-00429	053-00410	1,800	12	18	
068-00050	PS68	1,200	10	18	
PS 329	PS329DS	4,300	8	10	Forcemain – PS 329 replacement is described in SGL-C-0002 (Multiple PS – Highland Road – Kenilworth Parkway)
PS 53A	Manifold point with Staring Lane FM (PS 58A FM)	6220	New	24	New forcemain from new PS 53A, which is described in SGL-C-0002 (Multiple PS – Highland Road – Kenilworth Parkway)
PS56FM	PS56DS	540	12	18	Forcemain from PS 56 (see Project SGL-C-0002 (Multiple PS – Highland Road – Kenilworth Parkway) for PS description)

Note: The existing pipe sizes and lengths and new pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $16,700,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation Year is 2013.

East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 3,375 6,750 Feet

Highland Rd. Pipeline Projects

SGL-C-0003

Project Vicinity Map

PUBLIC WORKS

Figure 3-23

BATON ROUGE SSO Program

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3.2.17 SGL-C-0004 (Highland Road – Lee Drive)

This project has been combined with SGL-C-0003 (Essen Lane-Highland Road). The combination project has been designated SGL-C-0003 (Highland Pipeline Projects) and is found in Section 3.2.16.

3.2.18 SGL-C-0005 (Bayou Duplantier Area Sewer Upgrades)

Project Description

Purpose of the Project / Project Background

The SGL-C-0005 (Bayou Duplantier Area Sewer Upgrades) project includes the upsizing of gravity sewer upstream of PS 56 and PS 91 to alleviate upstream SSOs.

Location

The SGL-C-0005 project includes gravity sewer replacements in the area of Perkins Road and Bayou Duplantier, and is shown in Figure 3-24.

Gravity segment 056-00133H to 056-00153 is located in a wooded area, starting south of Belvedere Drive and progressing in an easterly direction through the woods south of Elmcrest Drive and Pollard Parkway.

Segment 056-00208 to 056-00133H starts at Lee Drive south of Bennett Drive. The segment travels in a northeasterly direction, then goes easterly on Bluebell Drive. This segment continues easterly beyond the end of Bluebell Drive through a wooded area to manhole 056-00133H, which is south of Belvedere Drive.

Gravity segment 056-00148 to PS 56 starts in the wooded area north of Chandler Drive and heads in a southeasterly direction to PS 56, which is located off Chandler Drive west of its intersection with Highland Park Drive. Gravity segment 056-00153 to 056-00148 starts south of the Christian Life Academy off Quail Drive and continues in a southwesterly direction to manhole 056-00148 in a wooded area.

Gravity segment PS70DS to 056-00208 is located along Lee Drive north of the drainage canal north of PS 70.

Gravity segment 091-00004 to 091-00001 is located along Concord Avenue between Yorktown Drive and Brandywine Drive. Segment 091-00074 to 091-00006 begins on Valley Creek Drive and continues southeasterly through a wooded area to the intersection of Concord Avenue and Congress Boulevard.

Scope

This project includes the construction of approximately 10,500 feet of 18-inch, 21-inch, 24-inch, 30-inch, and 36-inch gravity sewer upstream of PS 56 and approximately 2,000 feet of 15-inch and 18-inch gravity sewer upstream of PS 91. Table 3-14 shows the detailed scope of this project.

TABLE 3-14
SGL-C-0005 (Bayou Duplantier Area Sewer Upgrades)

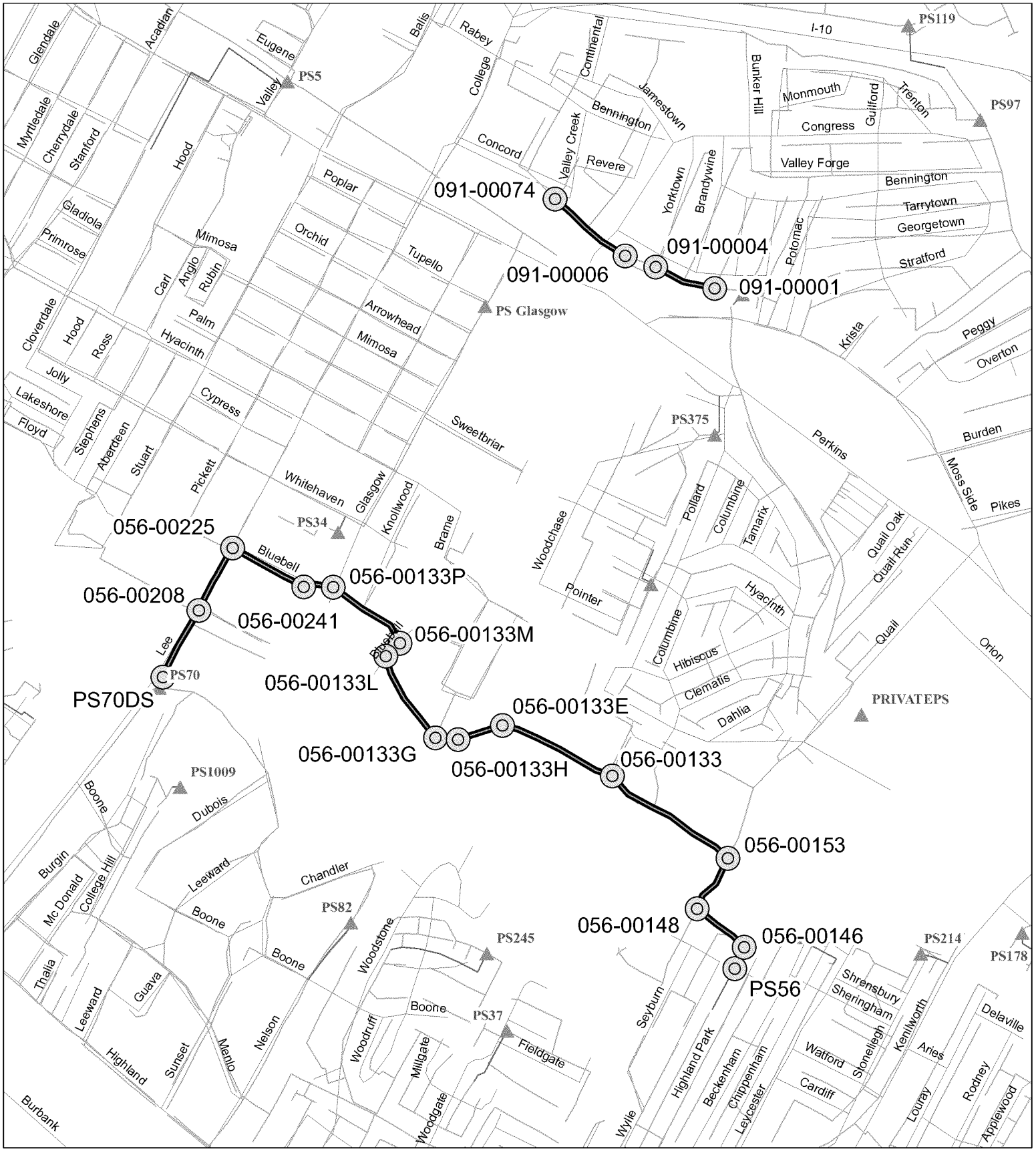
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
056-00133H	056-00153	3,800	15	24	
056-00208	056-00133H	4,200	12 to 15	21	Includes a crossing of a drainage canal
056-00148	PS56	970	18	36	PS 56 will be upgraded in Project SGL-C-0002
056-00153	056-00148	700	15 or 18	30	
PS70DS	056-00208	790	12	18	
091-00004	091-00001	700	12	18	
091-00074	091-00006	1,300	10	15	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction is $4,400,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2011.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,250 2,500 Feet

PUBLIC WORKS

Bayou Duplantier Area Sewer Upgrades

SGL-C-0005

Project Vicinity Map

Figure 3-24

BATON ROUGE SSO Program

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3.3 South Forcemain System Comprehensive Rehabilitation Projects

3.3.1 SFL-R-0001, SFL-R-0002, SFL-R-0003, AND SFU-R-0001

Project Description

The sanitary sewer system comprehensive rehabilitation projects consist of improvements to various components of the sewer collection system to reduce the amount of rainwater and groundwater that leak into the system.

Purpose

The purpose of the comprehensive sewer rehabilitation is to correct defects in the system such as offset pipe joints, collapsed pipe sections, leaking manholes, and direct inflow sources. The water that enters the system through the defects can contribute to sanitary sewer overflows. Comprehensive rehabilitation of the collection system will contribute to alleviating sanitary sewer overflows by reducing I/I.

Location

There are four projects located primarily within the South Forcemain Basin. The locations of the projects are shown on the attached maps, Figures 3-25 to 3-28.

Scope of Project

The first phase of comprehensive rehabilitation projects will be the physical inspection of the pipes and manholes including closed circuit television inspection of all pipes. Smoke testing may also be included in the physical inspection phase.

The data collected by the physical inspection contractor will be analyzed and based on that analysis, a listing of recommended repairs with associated construction costs will be generated.

An engineering firm will then complete detailed design and preparation of construction documents for project bidding.

The construction of rehabilitation projects will include the following components:

- Replacement of pipes
- Point repair of pipes
- Rehabilitation of pipes by cured in place liners
- Rehabilitation or replacement of sewer manholes
- Repair of sewer laterals to the property line

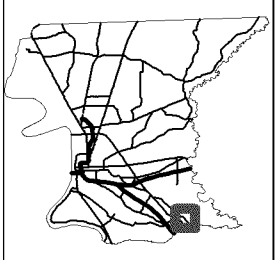
Cost

The estimated construction cost for each project is presented in Table 3-15. These costs are based on preliminary estimates of the amounts of each component of the system that will require repair or replacement. During the physical inspection phase, the actual condition of the components will be assessed and appropriate methods recommended. At that time, the cost estimate for each project will be revised.

TABLE 3-15
Estimated Construction Costs for South Forcemain System Comprehensive Rehabilitation Projects

Project Description	Construction Cost	Scheduled Design Appropriation Year	Scheduled Construction Appropriation Year
SFU-R-0001-Antioch Road-Chadsford Drive	$8,100,000	2010	2011
SFL-R-0001-Jefferson Highway-Hoo Shoo Too Road	$2,250,000	2008*	2008*
SFL-R-0002-Jones Creek Road-Tiger Road	$5,400,000	2011	2011
SFL-R-0003-Siegen Lane-Interstate 10	$6,400,000	2011	2012

*Appropriations already made for these projects (design and/or construction, as marked). SFL-R-0001 (Jefferson Highway – Hoo Shoo Too Road) project has already bid for construction.



East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 910 1,820 Feet

Jefferson Hwy - Hoo Shoo Too Rd.

SFL-R-0001

Project Vicinity Map

PUBLIC WORKS

Figure 3-25

BATON ROUGE SSO Program

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 2,500 5,000 Feet

Jones Creek Rd. - Tiger Bend Rd.

SFL-R-0002

Project Vicinity Map

PUBLIC WORKS

Figure 3-26

BATON ROUGE SSO Program

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East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,500 3,000 Feet

PUBLIC WORKS

Siegen Ln. - Interstate 10

SFL-R-0003

Project Vicinity Map

Figure 3-27

BATON ROUGE SSO Program

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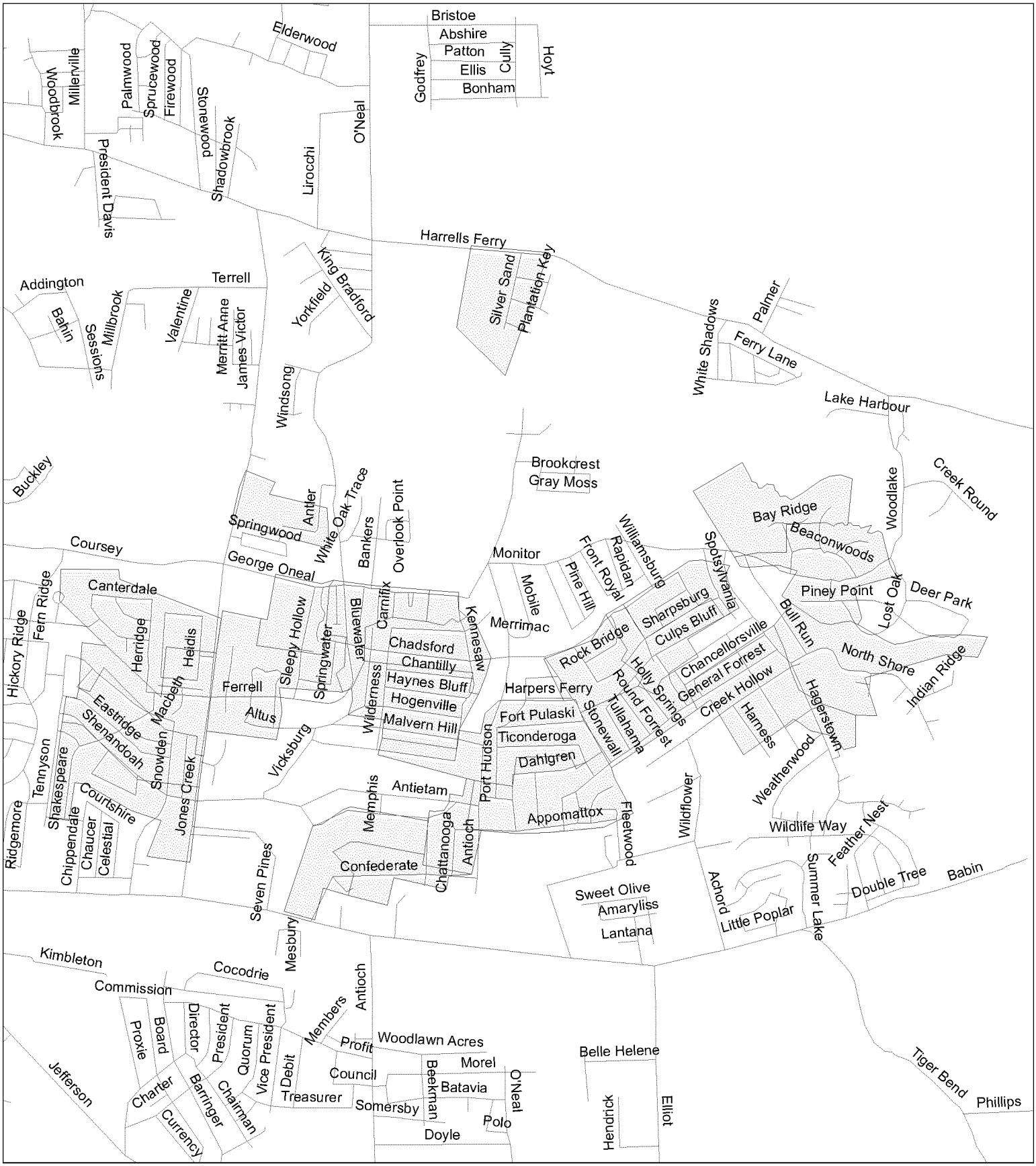
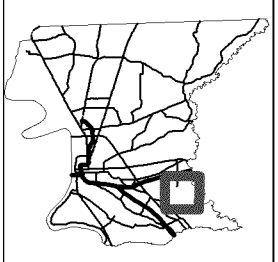




East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,500 3,000 Feet

PUBLIC WORKS

Antioch Rd. - Chadsford Dr.

SFU-R-0001

Project Vicinity Map

Figure 3-28

BATON ROUGE SSO Program

3.4 South Forcemain System Capacity Improvements Projects

3.4.1 SFL-C-0001 (Multiple PSs – Nicholson Drive – Brightside Drive)

Project Description

Purpose of the Project / Project Background

The project includes replacement of PS 236, PS 336, PS 311, PS 107, Booster Pump Station (BPS) 505, and PS 505A. The new pump stations will work in conjunction with forcemain upgrades in other South Forced Lower Basin projects to alleviate chronic SSOs at and near these pump stations.

The upgrades will also allow the pump stations to handle future peak wet weather flows that are predicted by the model to exceed the existing maximum capacities.

Location

The locations of the pump stations are shown in Table 3-16 and in Figure 3-29.

Scope

This project includes construction of the pump stations shown in Table 3-16. BPS 505 and PS 505A are related, in that PS 505A is an overflow pump station for BPS 505. BPS 505 is an existing in-line booster pump station that will be converted to a wet well pump station, PS 505. Since BPS 505 will be converted to a wet well, it is possible that rather than building two new pump stations, PS 505 and PS 505A could share a divided wet well and pump in two directions, with one piped to the existing forcemain (BPS 505) and one piped to the new forcemain that will intersect with the PS 42 forcemain (PS 505A). The PS 42 forcemain is described in the Central Consolidation PS 42 Forcemain Project, as described in Section 4 of this plan.

TABLE 3-16
SFL-C-0001 (Multiple Pump Stations – Nicholson Drive – Brightside Drive)

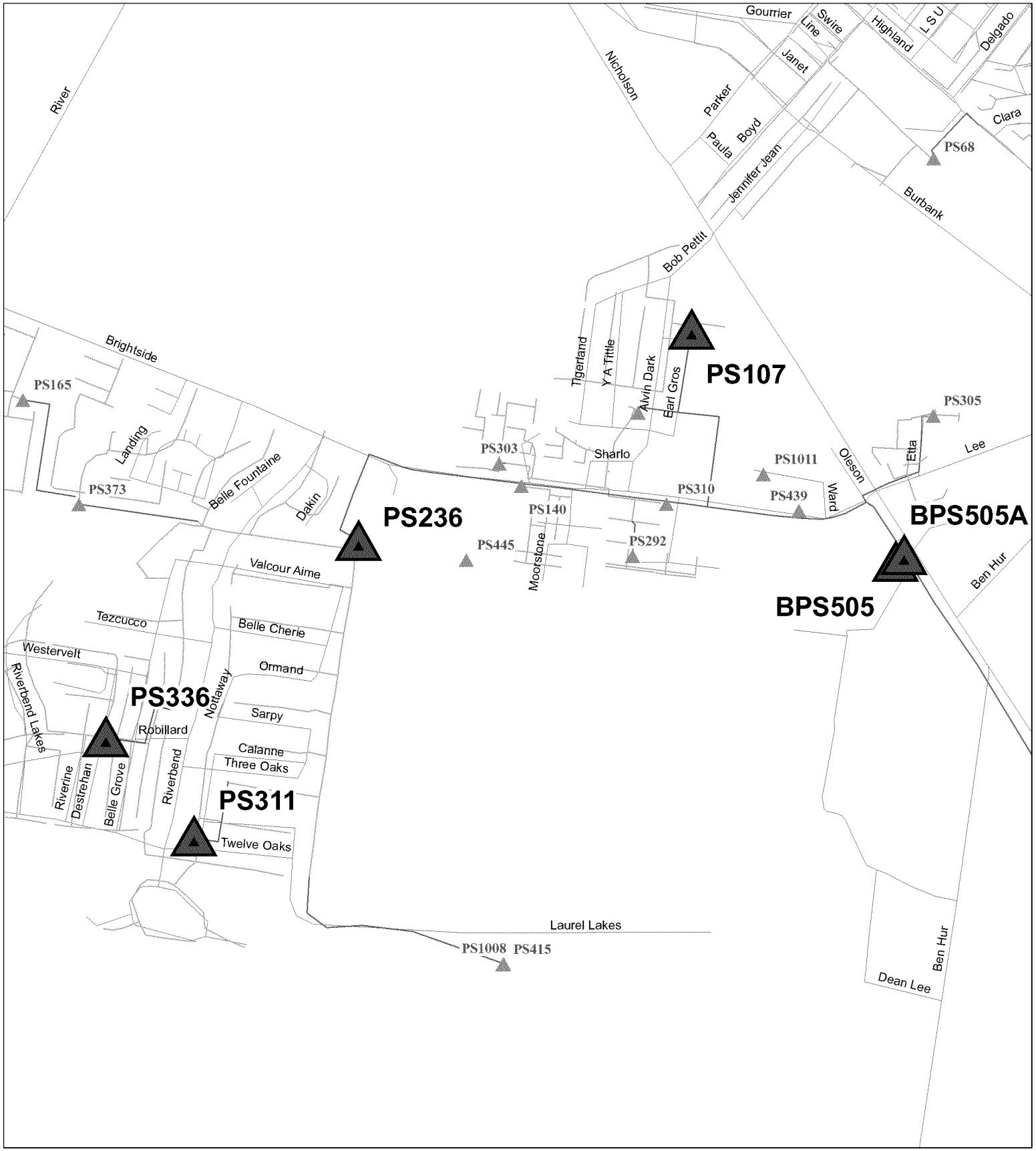
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
PS 236	Brightside Road, near Riverbend Road	625	4,930	609	
PS 336	Nicholson Road, near Riverbend Road	417	972	153	
PS 311	Twelve Oaks Road, near Riverbend Road	556	1,250	152	
PS 107	Brightside Road, near Earl Gross	833	1,030	375	
BPS 505	Intersection of Oleson Road and Brightside Road	5,000	6,388	2,014	Will be converted from in-line to wet well.
PS 505A	Intersection of Oleson Road and Brightside Road	New	2,995	0	Overflow PS for BPS 505

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $5,900,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2011.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,000 2,000 Feet

Multiple PS - Nicholson Dr. - Brightside Dr.

PUBLIC WORKS

SFL-C-0001

Project Vicinity Map

Figure 3-29

BATON ROUGE SSO Program

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3.4.2 SFL-C-0002 (Perkins/Old Perkins Area BPS 514 Improvements)

Project Description

Purpose of the Project / Project Background

The purpose of this project is to upgrade BPS514 to handle revised flow and head requirements. The existing BPS 514 has a capacity that is less than the predicted future peak wet weather flow.

Location

The location of BPS 514 is given in Table 3-17 and shown in Figure 3-30.

Scope

The scope of the project is noted in Table 3-17. BPS 514 will be converted from an in-line booster pump station to a wet well pump station as part of this project.

TABLE 3-17
SFL-C-0002 (Perkins/Old Perkins Area BSP 514 Improvements)

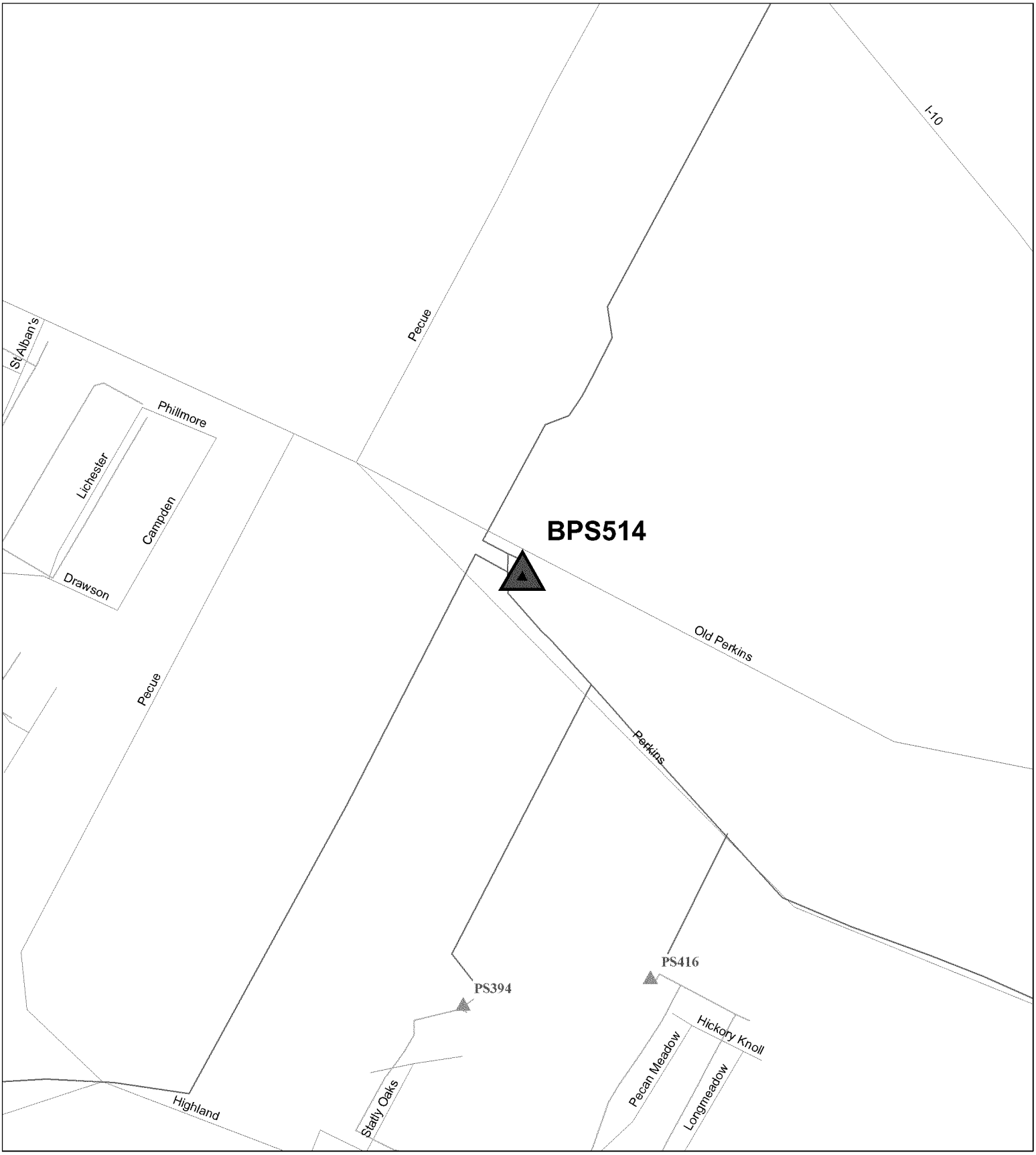
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
BPS 514	Intersection of Pecue Lane and Old Perkins Road	24,000	53,440	9,476	Will be converted from in-line to wet well.

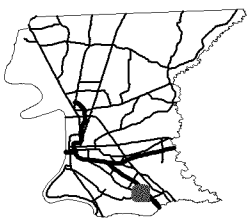
Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $9,800,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

N

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

0 500 1,000 Feet

Perkins - Old Perkins Area BPS514

SFL-C-0002

Project Vicinity Map

PUBLIC WORKS

Figure 3-30

BATON ROUGE SSO Program

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3.4.3 SFL-C-0003 (Multiple PSs - Burbank Drive – Siegen Lane)

Project Description

Purpose of the Project/Project Background

The following pump stations will be replaced in this project: PS 118, PS 221, PS 358, BPS 999, PS 239, and PS 229. The new pump stations will work in conjunction with forcemain upgrades in other South Forced Lower Basin projects to alleviate chronic SSOs at and near these pump stations.

The upgrades will also allow the pump stations to handle future peak wet weather flows that are predicted by the model to exceed the existing maximum capacities.

Location

The locations of the pump stations are shown in Table 3-18 and in Figure 3-31.

Scope

The scope of the pump station replacements is shown in Table 3-18. BPS 999 will be converted from an in-line booster pump station to a wet well pump station.

TABLE 3-18
SFL-C-0003 (Multiple Pump Stations - Burbank Drive - Siegen Lane)

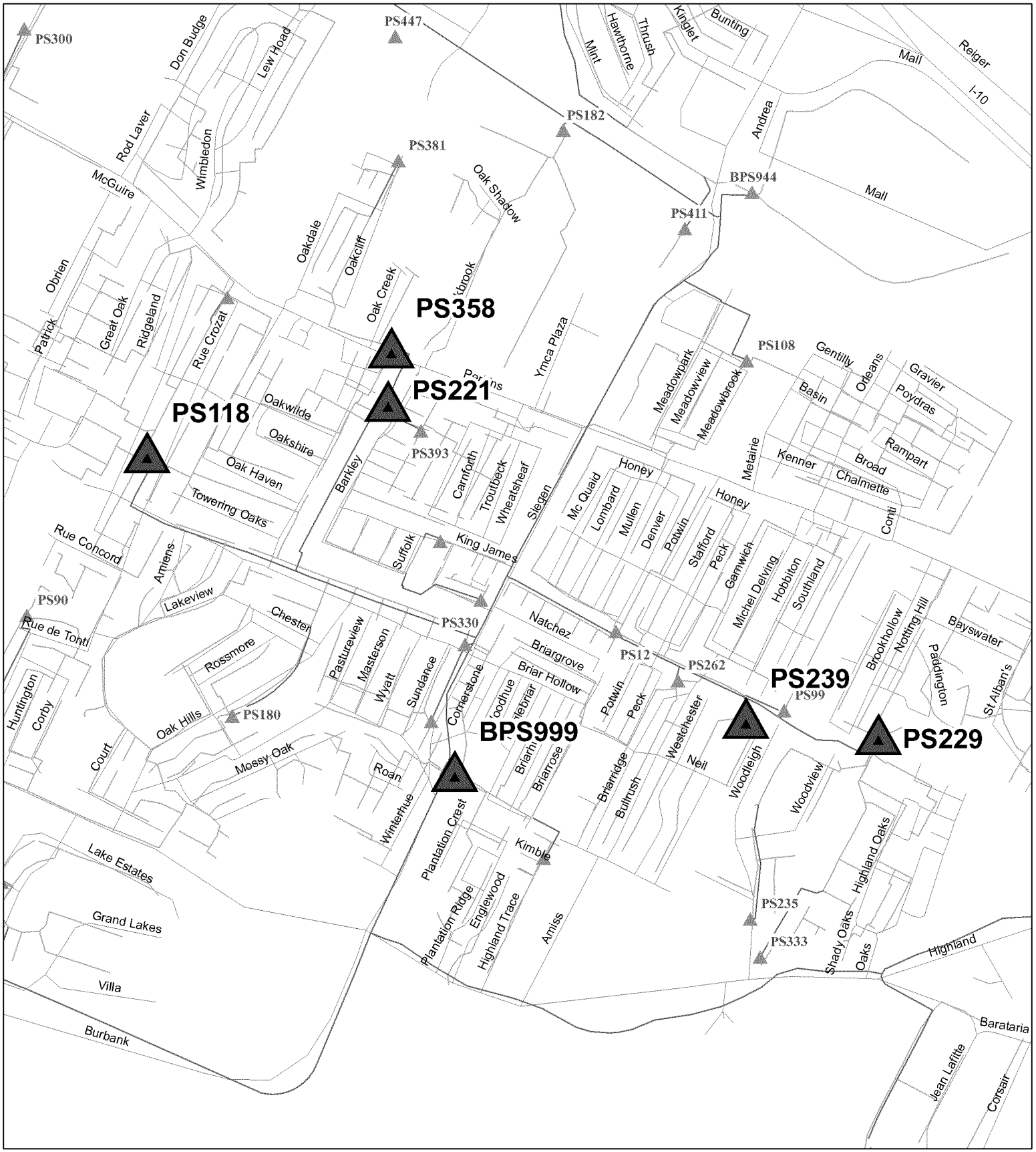
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
PS 118	Near Rue Crozat and Rue Desiree	417	909	171	
PS 221	Near Barkley and Mirkwood	694	1,058	232	
PS 358	Old Perkins Road, near Oakbrook Road	208	278	29	
BPS 999	Siegen Road, near Quail Ridge	6,250	8,893	1,962	Will be converted from in-line to wet well.
PS 239	Near Neil Avenue and Highland Knoll Court	69	168	48	
PS 229	Near intersection of Rendale Avenue and Brookhollow Drive	278	685	202	

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump* Station Maintenance reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $4,000,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation Year is 2012.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,400 2,800 Feet

Multiple PS - Burbank Dr. - Siegen Ln.

SFL-C-0003

Project Vicinity Map

PUBLIC WORKS

Figure 3-31

BATON ROUGE SSO Program

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3.4.4 SFL-C-0004 (Group Project 2 – Small PSs)

Project Description

Purpose of the Project/Project Background

The following pump stations will be replaced in this project: PS 182, PS 223, PS 327, PS 353, PS 278, PS 372, and PS 365. The new pump stations will work in conjunction with forcemain upgrades in other South Forced Lower Basin projects to alleviate chronic SSOs at and near these pump stations.

The upgrades will also allow the pump stations to handle future peak wet weather flows that are predicted by the model to exceed the existing maximum capacities. This project is currently under design.

Location

Table 3-19 and Figure 3-32 show the locations of the pump stations in this project. These pump stations are generally located in the area of Jefferson Highway and Highland Road.

Scope

Table 3-19 shows the detailed scope of this project.

TABLE 3-19
SFL-C-0004 (Group Project 2 – Small Pump Stations)

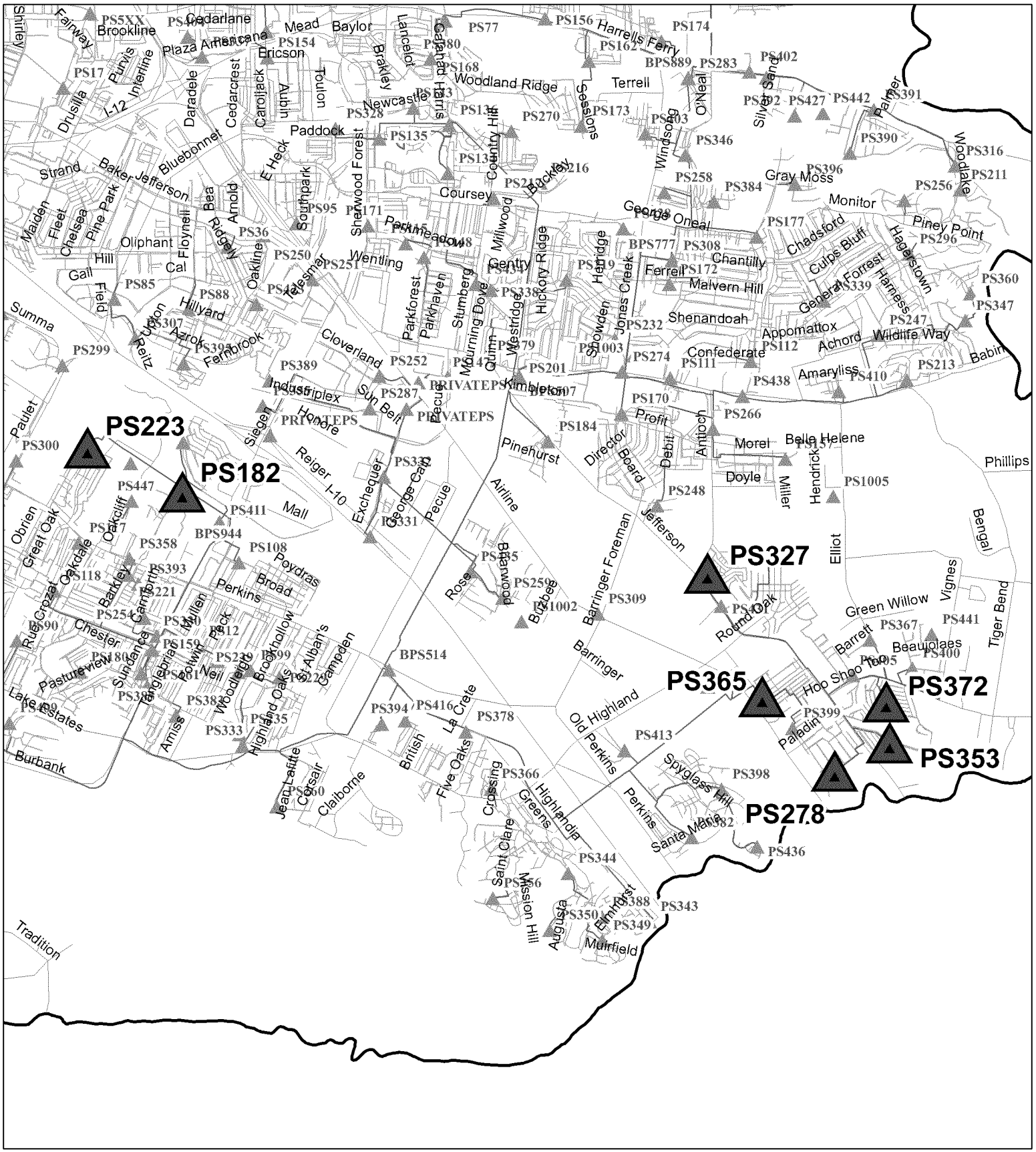
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
PS 182	Near YMCA Plaza Drive	208	597	148	
PS 223	Intersection of Don Budge Avenue and Backcourt Drive	278	795	168	
PS 327	Intersection of Alder Drive and Crepe Myrtle Drive	278	369	44	
PS 353	Intersection of Azalea Lakes Avenue and Lake Iris Avenue	486	537	49	
PS 278	Near Bainbridge Avenue	347	764	174	
PS 372	Intersection of West Lake Terrace Drive and Lake Tulip Avenue	278	544	314	
PS 365	Intersection of Sugar Mill Avenue and Umbehagen Lane	1,528	4,155	762	

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $3,300,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility
- Parish Boundary

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 3,650 7,300 Feet

PUBLIC WORKS

Group Project 2
SFL-C-0004
Project Vicinity Map

Figure 3-32

BATON ROUGE SSO Program

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3.4.5 SFL-C-0005 (Highland Road – Burbank Drive)

Project Description

Purpose of the Project / Project Background

The SFL-C-0005 (Highland Road – Burbank Drive) project consists of forcemain upgrades in the South Forced Lower Basin. This project includes the upsizing of forcemain in an area that extends north to the intersection of Jefferson Highway and Tiger Bend Road and continues south to the Staring Lane extension and Burbank Drive intersection. The upgrades are designed to alleviate chronic SSOs at the pump stations and increase the forcemain capacity. The upgrades range in size from 48-inch to 60-inch diameter.

Location

The first segment of forcemain from node BPS 507 to BPS 514 begins at BPS 507 near the intersection of Kimbleton Avenue and Jefferson Highway. Upon leaving the pump station the forcemain travels south through a servitude along the east edge of the Briarwood Golf Club for approximately 2,800 feet before turning slightly east At this point, the forcemain crosses the golf club for approximately 1,300 feet before crossing Airline Highway. After crossing Airline Highway, the forcemain continues south parallel to Pecue Lane, crosses I-10 and the railroad, and continues south to BPS 514.

The forcemain resumes downstream of BPS 514 and continues south to Highland Road, crosses, and follows the Entergy right-of-way to Buccaneer Avenue, then to Burbank Drive. It then follows Burbank Drive to the intersection of Burbank Drive and Staring Lane extension.

Scope

SFL-C-0005 (Highland Road – Burbank Drive) includes construction of approximately 10,500 feet of 48-inch forcemain, approximately 31,000 feet of 54-inch forcemain, and approximately 3,700 feet of 60-inch forcemain downstream of BPS 507 and BPS 514. Table 3-20 and Figure 3-33 shows the detailed scope of this project.

TABLE 3-20
SFL-C-0005 (Highland Road - Burbank Drive)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
BPS 507	SS340	6,610	42	48	
SS340	SS364	3,780	42	48	
SS369	BPS514	2,200	42	48	
BPS514	Burbank Dr Intersection	15,000	48	54	
Burbank Drive Intersection	Blueboonet Blvd Intersection	8,800	48	54	
Bluebonnet Blvd Intersection	Staring Lane Extension	6,200	48	60	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $16,200,000.

Scheduled Design Appropriation Year is 2008 (already appropriated).

Scheduled Construction Appropriation Year is 2009.

East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 0.5 1 Miles

Highland Rd. - Burbank Dr.

SFL-C-0005

Project Vicinity Map

PUBLIC WORKS

Figure 3-33

BATON ROUGE SSO Program

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3.4.6 SFL-C-0006 (Nicholson Drive – Highland Road – Perkins Road)

Project Description

Purpose of the Project / Project Background

The SFL-C-0006 project consists of forcemain and gravity upgrades in the South Forced Lower Basin. This project includes the upsizing of forcemain and gravity mains in an area that extends north to the intersection of Jefferson Highway and Tiger Bend Road and continues south to the South WWTP on Gardere Lane. The upgrades are designed to alleviate chronic SSOs at the pump stations and increase the gravity main capacity. The upgrades range in size from 6 inch to 24 inch in diameter.

Location

This project involves the replacement of portions of the South Forced Lower forcemain and gravity systems as shown in Figures 3-34a and 3-34b. A majority of the contributing flows are from residential areas. The upgrades can be broken into the following segments:

Forcemain segment PS 259 to SS340 starts at PS 259, near the intersection of Thistle Ridge Drive and Martin Ridge Drive. From PS 259, the forcemain continues in a northwesterly direction through the subdivision and through empty lots, following a servitude/drainage path to Pecue Lane, where node SS340 is located.

Forcemain segment PS278FM to SS459 starts at PS278, which is located near the intersection of Bainbridge Avenue and Newman Drive. The forcemain continues in a generally northeasterly direction through the subdivision to Jefferson Highway, intersecting with Jefferson Highway near Pecan Creek Lane. At Jefferson Highway, the forcemain follows the highway in a northwesterly direction to node SS459, which is on Jefferson Highway between Lake Iris Road and Lake Azalea Drive.

Gravity segment 278-00029 to 278-00028 starts at manhole 278-00029, which is on Brunswick Avenue and travels in a southeasterly direction to manhole 278-00028, which is at the intersection of Macon Drive and Brunswick Avenue.

Gravity segment 365-01007 to 365-00001Z starts at manhole 365-01007, which is on Jefferson Highway between Chasefield Avenue and Nine Oaks Avenue, and travels in a southerly direction between Beckfield Avenue and Sugar Mill Avenue to manhole 365-00001Z, which is next to PS365.

Forcemain segment PS 365FM to SS 471 starts at PS 365, which is on Umbehagen Lane near Sugar Mill Avenue, follows Umbehagen Lane for approximately 600 feet, crosses Airline Highway, and continues in a southwesterly direction to node SS449. From node SS449, the forcemain travels in a southwesterly direction parallel to Highland Road to node SS471, which is north of a drainage path that is south of Bellerive Court.

Forcemain segment PS 398 to SS502 starts at the cul-de-sac on Arcadian Shores Drive and continues in a southwesterly direction along Arcadian Shores Drive and Spyglass Hill Drive to node SS502, which is roughly located near the end of Spyglass Hill drive, near a drainage path.

Forcemain segment SS502 to SS507 starts at SS502, which is at the intersection of Santa Marie Avenue and Trent Jones Drive. The forcemain continues in a northwesterly direction following Trent Jones Drive and paralleling Perkins Road to a servitude near Petroleum Drive. The forcemain then continues in a southwesterly direction to node SS507, on Highlandia Drive off Highland Road.

Forcemain segment SS507 to BPS 514 starts near Perkins Road, southeast of its intersection with Pecue Lane. The forcemain travels northeast until reaching BPS 514, located near the Perkins Road and Old Perkins Road intersection.

Gravity segment 108-00047 to 108-00008 starts at manhole 108-00047, which is at the corner of Meadowbrook Avenue and Meadowmere Drive, and travels in a southerly direction along Meadowbrook Avenue to the corner of Meadowbrook and Meadowlane Drive. The gravity line turns westerly along Meadowlane Drive to manhole 108-00008, which is between Meadowlane Drive and Perkins Road.

Forcemain segment PS 223 to SS312 starts at PS 223, which is at the intersection of Roy Emerson Drive and Don Budge Avenue, and travels overland to node SS312, which is on the corner of Lew Hoad Avenue.

Forcemain segment PS 236 to SS286 starts at PS 236, which is between Brightside Drive and Valcour Aime Avenue, turns northerly and travels easterly along Brightside Drive to node SS286, which is at the corner of Brightside Drive and Brightside View Drive.

Forcemain segment PS 229FM to SS400 begins at PS 229, which is at the end of Brookhollow Drive and travels in a northwesterly direction to node SS400, which is at the end of Scotland Court.

Forcemain segment SS371 to SS385 begins at node SS371, which is at corner of Twisted Oak Lane and Oak Hills Parkway, and travels along Oak Hills Parkway to node SS385, which is at Siegen Lane.

Gravity segment 236-00032 to PS 236 starts northwest of the Riverbend Road and Robillard Avenue intersection. The gravity segment travels north until reaching 236-00020 and then east until reaching 236-00002. The gravity line travels northeast until reaching PS 236, which is between Brightside Drive and Valcour Aime Avenue.

Gravity segment 236-00091 to 236-00002 starts southeast of Three Oaks Avenue and Covington Drive intersection. The gravity segment travels north until reaching 236-00002, located southeast of Dakin Avenue cul-de-sac.

Gravity segment 944-01006 to PS 944 begins near the intersection of Mint Drive and Buttercup Drive and runs east along a drainage path to PS 944, located near the intersection of Andrea Drive and S. Mall Drive.

Forcemain segment PS 311FM to PS 311DS starts at PS 311, located on Twelve Oaks Road, near its intersection with Riverbend Road. The forcemain travels east and then north until reaching PS 311DS, located southeast of the Riverbend Road and Three Oaks Avenue intersection.

Forcemain segment PS 253 to SS370 starts on Round Oak Drive, north of its intersection with Shady Grove Avenue. The forcemain travels southwest until reaching SS370, located northwest of Highland Road and Jefferson Highway.

Scope

This project includes construction of approximately 270 feet of 12-inch gravity sewer upstream of PS 278, approximately 2,200 feet of 24-inch gravity sewer upstream of PS 365, approximately 1,600 feet of 12-inch gravity sewer upstream of PS 108, approximately 7,700 feet of 15-inch, 18-inch, and 24-inch gravity sewer upstream of PS 236, and approximately 1,900 feet of 10-inch gravity sewer upstream of PS 944. The project also includes the construction of approximately 50,400 feet of forcemain in the South Forced Lower Basin. Table 3-21 shows the detailed scope of this project.

TABLE 3-21
SFL-C-0006 (Nicholson Drive – Highland Road – Perkins Road)

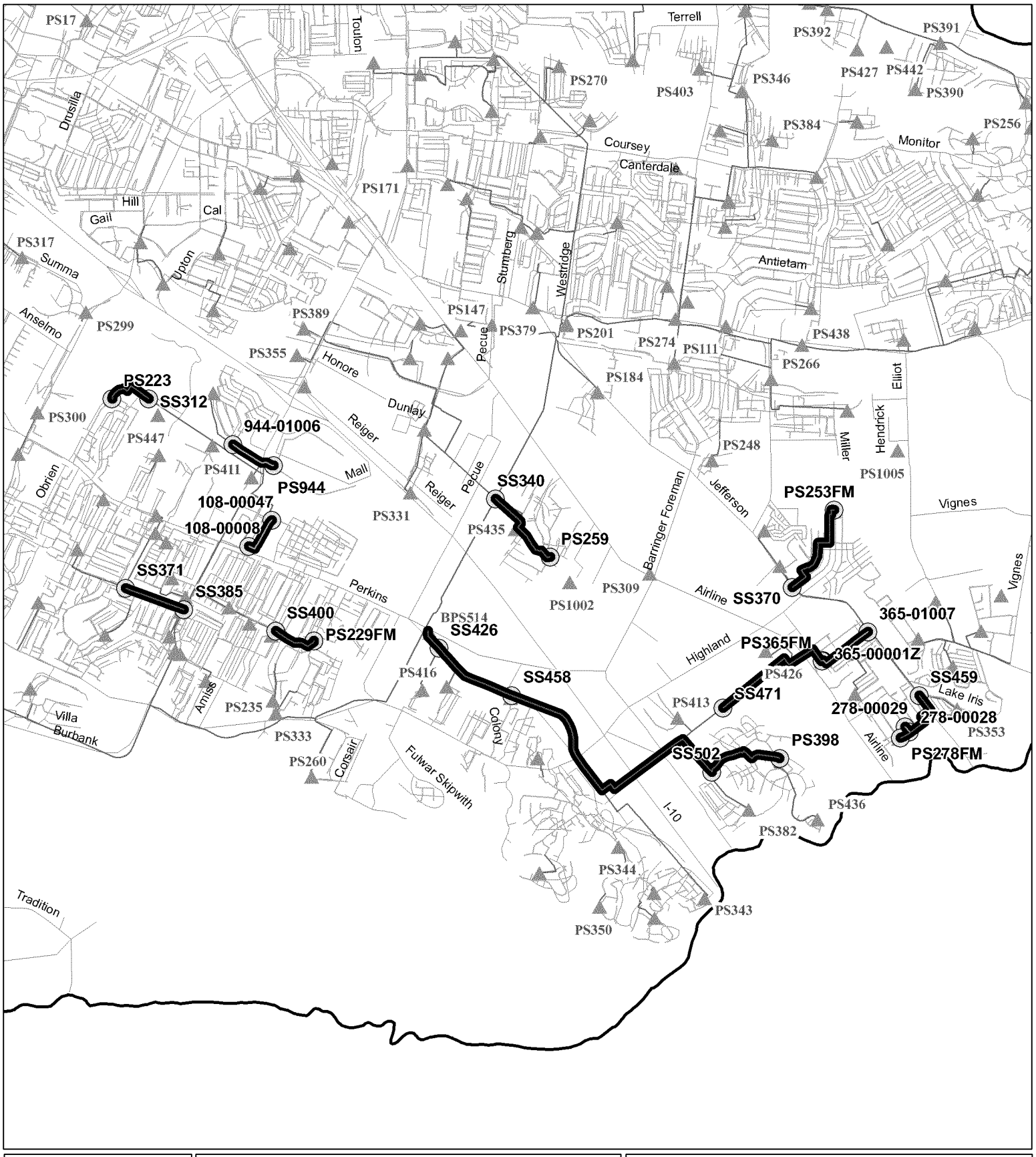
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS 259	SS340	3,400	6	8	
PS 278FM	SS459	2,600	5	8	
278-00029	278-00028	270	8	12	Gravity sewer
365-01007	365-00001Z	2,200	18	24	Gravity sewer
PS 365FM	SS444	50	10	14	
SS444	SS471	4,700	14	16	
SS502	SS489	1,900	8	12	
SS489	SS507	3,900	16	18	
PS 398	SS502	3,100	8	10	
SS458	BPS514	4,300	18	24	
SS507	SS458	5,100	18	24	
108-00047	108-00001	50	8	12	Gravity sewer
108-00001	108-00003	510	8	12	Gravity sewer
108-00003	108-00005	560	8	12	Gravity sewer
108-00005	108-00008	440	8	12	Gravity sewer
PS 223	SS312	1,800	6	8	
PS 236	SS272	1,000	10	16	
SS272	SS286	3,600	14	16	
PS 229FM	SS400	1,700	6	8	
SS371	SS385	2,400	10	12	
236-00032	236-00025	1,500	12	15	Gravity sewer
236-00025	236-00020	1,300	12	15	Gravity sewer
236-00020	236-00006	470	12	15	Gravity sewer
236-00006	236-00004	640	12	18	Gravity sewer
236-00004	236-00002	490	12	18	Gravity sewer
236-00002	PS 236	260	12	24	Gravity sewer
236-00091	236-00085	470	12	15	Gravity sewer
236-00085	236-00064	1,450	12	15	Gravity sewer
236-00064	236-00055	570	12	18	Gravity sewer
236-00055	236-00002	510	12	18	Gravity sewer
944-01006	PS 944	1,920	8	10	Gravity sewer
PS 311FM	PS 311DS	1,030	6	10	
PS 253	SS344	260	6	6	
SS344	SS370	3,900	6	8	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $9,200,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2011.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 4,000 8,000 Feet

Nicholson Dr. - Highland Rd. - Perkins Rd.

SFL-C-0006

Project Vicinity Map

PUBLIC WORKS

Figure 3-34A

BATON ROUGE SSO Program

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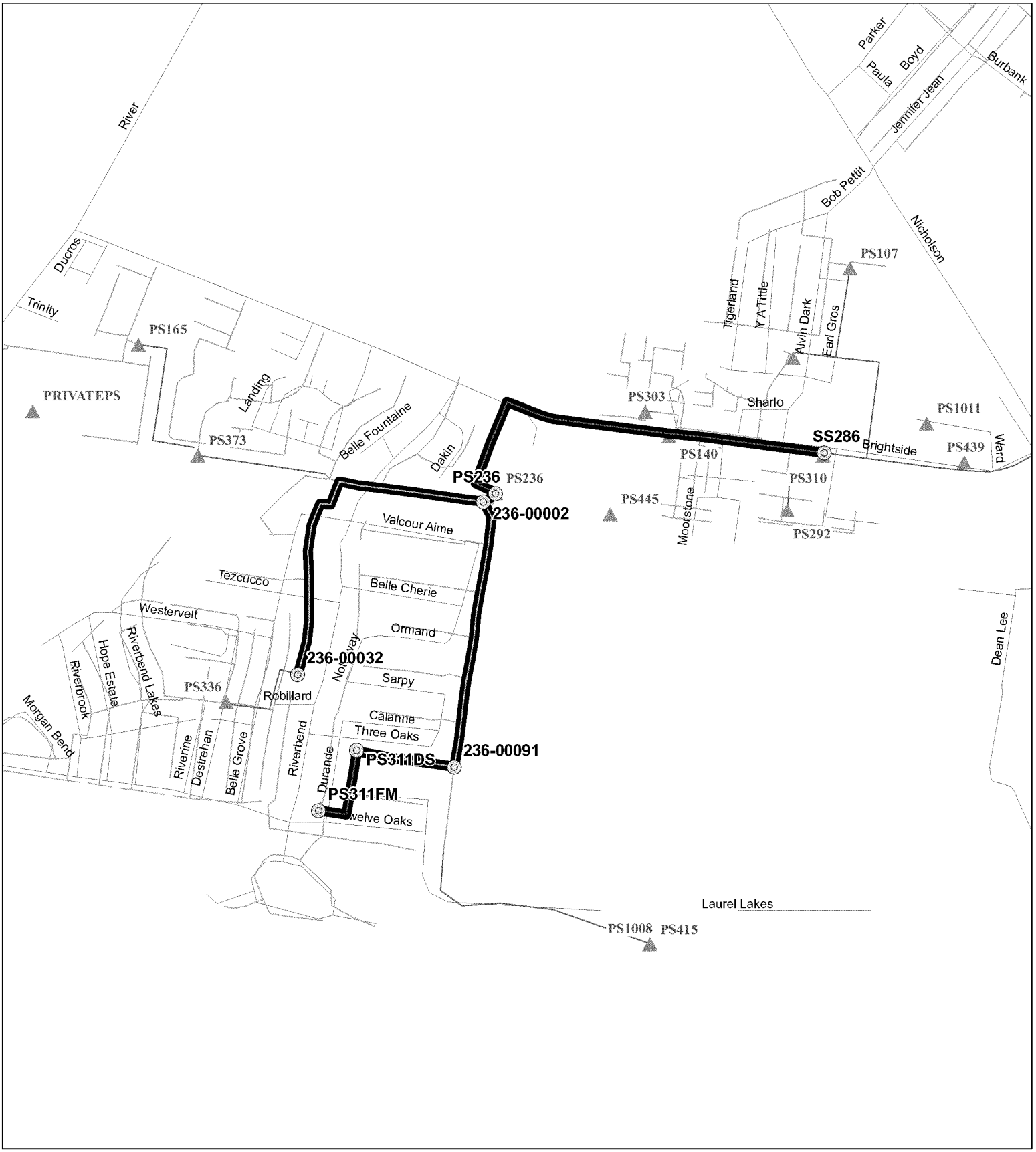

East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,000 2,000 Feet

Nicholson Dr. - Highland Rd. - Perkins Rd.

SFL-C-0006

Project Vicinity Map

Figure 3-34B

BATON ROUGE SSO Program

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3.4.7 SFU-C-0001 (Multiple PSs – Jefferson Highway – Park Forest Drive)

Project Description

Purpose of the Project/Project Background

The pump stations to be replaced in this project consist of the following: PS 111, PS 115, PS 338, PS 379, and PS 201. The upgrades will work in conjunction with forcemain upgrades in other South Forced Upper Basin projects to alleviate chronic SSOs at and near these pump stations.

The upgrades will also allow the pump stations to handle future peak wet weather flows that are predicted by the model to exceed the existing maximum capacities.

Location

The location of each PS is shown in Table 3-22 and in Figure 3-35.

Scope

Table 3-22 shows the detailed scope of this project, which includes the replacement of five pump stations in the South Forced Upper basin.

TABLE 3-22
SFU-C-0001 (Multiple PSs - Jefferson Highway - Park Forest Drive)

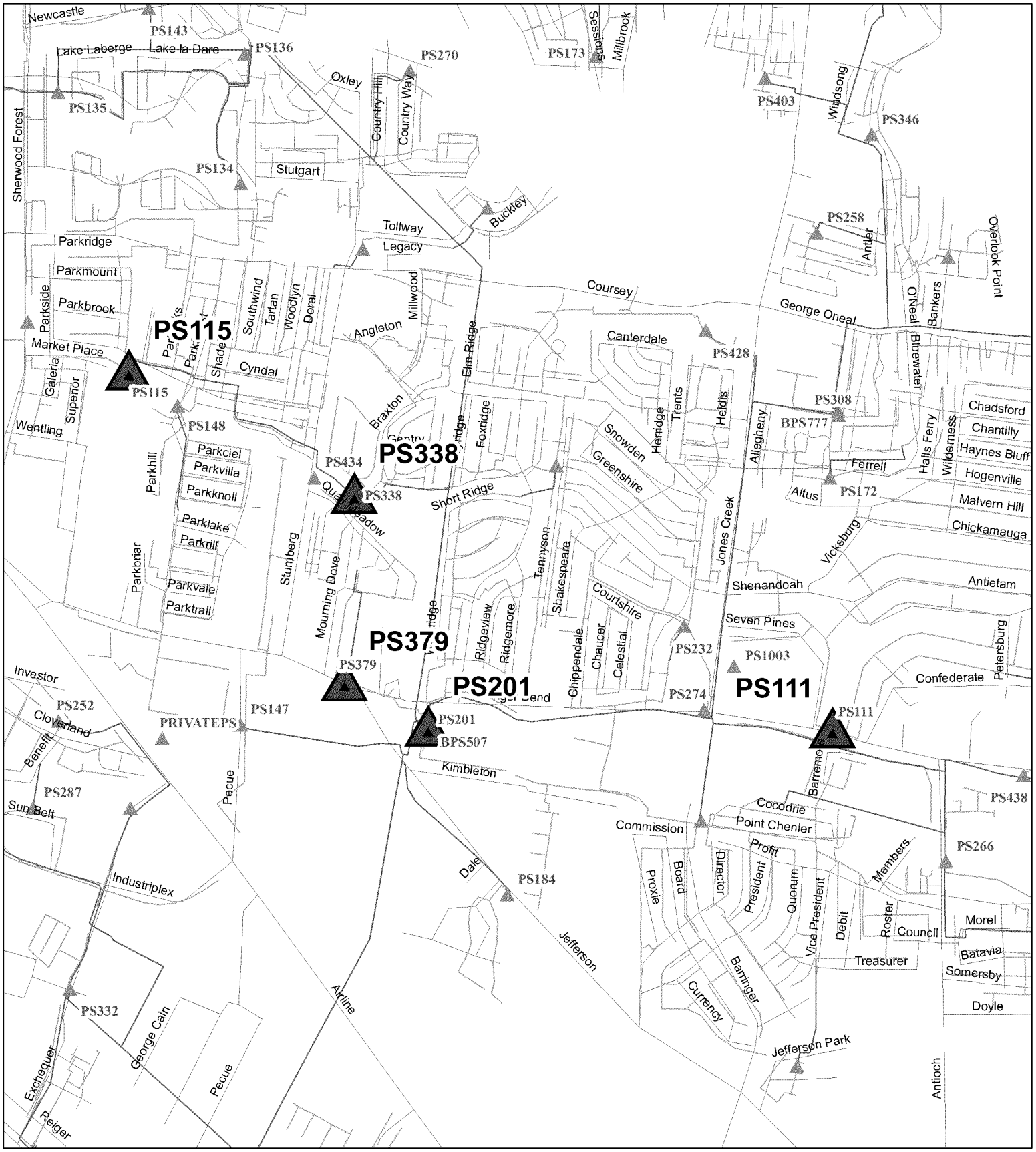
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
PS 115	Parkmeadow Avenue, near Parkhollow Drive	556	556	58	
PS 338	Near intersection of Quail Meadow Drive and Golden Pheasant Court	764	1,315	551	
PS 379	Jefferson Highway, near intersection of Tiger Bend	208	361	39	
PS 201	Near the intersection of Tiger Bend and Jefferson Highway	556	1,386	248	
PS 111	Near intersection of Tiger Bend Road and Green Trails Road	1,575	2,323	241	Will be converted from in-line booster to wet well pump station

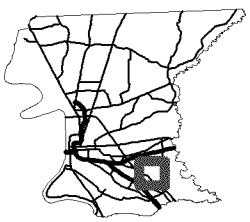
Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $2,500,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2011.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,750 3,500 Feet

PUBLIC WORKS

Multiple PS - Jefferson Hwy
Park Forest Dr
SFU-C-0001
Project Vicinity Map

Figure 3-35

BATON ROUGE SSO Program

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3.4.8 SFU-C-0002 (O'Neal Lane PS Projects)

Project Description

Purpose of the Project / Project Background

The SFU-C-0002 (O'Neal Lane Pump Station Projects) project includes segments previously included in SFU-C-0002 (Multiple Pump Stations - Jones Creek Road - Tiger Bend Road), SFU-C-0003 (Multiple Pump Stations - O'Neal Lane), and SFU-C-0004 (Multiple Pump Stations - O'Neal - S. Harrell's Ferry).

The project involves the upgrade of BPS 777, PS 172, PS 112, PS 274, PS 170, PS 148, BPS 889, PS 402, PS 174, PS 162, PS 224, PS 139, PS 345, PS 149, PS 247, PS 391, PS 316, PS 211, PS 296, BPS 100A, PS 227, PS 175, PS 326, PS 153, PS 77, and PS 41. The upgrades will work in conjunction with forcemain upgrades in the SFU-C-0005 (O'Neal Lane Pipeline Projects) project to alleviate chronic SSOs at and near these pump stations. The upgrades will also allow the pump stations to handle future peak wet weather flows that modeling predicts will exceed the existing maximum capacities.

Location

The locations of the pump stations included in this project are given in Table 3-23 and shown in Figure 3-36.

Scope

Table 3-23 shows the detailed scope of this project, which includes replacing 27 pump stations; including converting BPS 777 from an in-line booster station to a wet well pump station; converting BPS 889 from an in-line booster station to a wet well pump station; and converting BPS 100A from an in-line booster station to a wet well pump station.

TABLE 3-23
SFU-C-0002 (O'Neal Lane PS Projects)

PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather Flow	Comments
PS 148	Parkforest Drive, near Parkmeadow Avenue	417	556	304	
BPS 777	Located near PS 308	14,582	22,195	4,363	Will be converted from in-line booster to wet well pump station
PS 172	Near the intersection of Ferrell Avenue and Guymon Avenue	278	392	66	
PS 112	Near the intersection of Confederate Avenue and Chattanooga Drive	694	1,406	241	
PS 274	Near the intersections of Jones Creek Road and Tiger Bend Road	417	1,875	334	
PS 170	Near the intersection of Barrington Road and Point Chenier Avenue	139	4,514	853	
BPS 889	Near the end of King Bradford Drive	11,110	17,773	3,780	Will be converted from in-line booster to wet well pump station
PS 402	South Harrell's Ferry Road, near the intersection of O'Neal Lane	833	833	138	

TABLE 3-23
SFU-C-0002 (O'Neal Lane PS Projects)

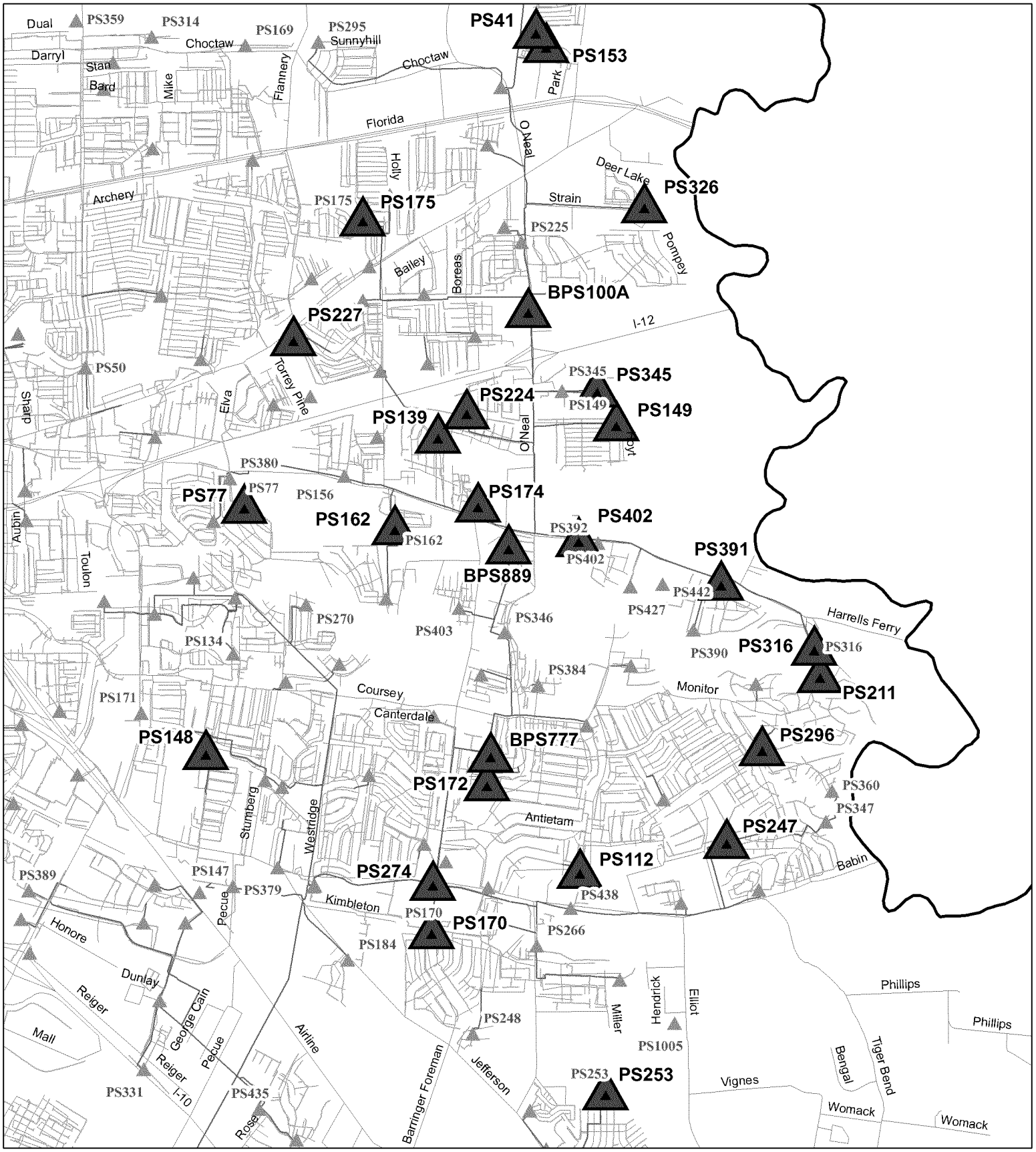
PS No.	Location	Existing Max. Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather Flow	Comments
PS 174	Berrybrook Drive	417	417	109	
PS 162	Intersection of General Prentiss Avenue and President Davis Drive	417	903	270	
PS 224	Banyanwood Ave, near the intersection of Balsawood Drive	764	1,702	448	
PS 139	Firewood Drive, near the intersection of Stonewood Drive	208	278	135	
PS 345	Physicians Park Drive	417	417	251	
PS 149	Near the intersection of Hoyt Drive and Bristoe Avenue	486	1,171	327	
PS 247	Harness Road	417	1,528	34	
PS 391	Near int of South Harrell's Ferry Road and White Shadow Drive	139	421	127	
PS 316	Woodlake Drive, near intersection of South Harrell's Ferry Road	486	2,639	405	
PS 211	Woodlake Drive, near intersection of Creek Round Avenue	694	2,369	244.387242	
PS 296	Near intersection of North Shore Drive and Bull Run Drive	556	1,180	153	
BPS 100A	O'Neal Lane, near the intersection of Commercial Avenue	5,555	9,705	1,780	Will be converted from in-line booster to wet well pump station
PS 227	Near intersection of Old Hammond Highway and South Flannery Road	278	389	127	
PS 175	Near Lafitte Street Park	208	1,023	237	
PS 326	Near Lake Park Avenue	208	438	105.698976	
PS 153	Woodvale Drive, near cul-de-sac	139	625	116	
PS 41	Near intersection of West Amite Drive and South Amite Drive	486	486	103	
PS77	Near intersection of Woodland Ridge Blvd and Deerpath Way	350	590	163	
PS 253	Near intersection of Shady Grove Avenue and Round Oak Drive	Not Available	486	69	

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $21,400,000.

Scheduled Design Appropriation Year is 2010.

Scheduled Construction Appropriation Year is 2012.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility
- Parish Boundary

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 3,050 6,100 Feet

PUBLIC WORKS

O'Neal Ln. PS Projects

SFU-C-0002

Project Vicinity Map

Figure 3-36

BATON ROUGE SSO Program

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3.4.9 SFU-C-0003 (Multiple PSs – O'Neal Lane – Interstate 12)

The SFU-C-0003 project has been combined with SFU-C-0002 (Multiple Pump Stations - Jones Creek Road - Tiger Bend Road) and SFU-C-0004 (Multiple Pump Station - O'Neal Lane-S.Harrell's Ferry Road). The combined project has been designated SFU-C-0002 (O'Neal Lane PS Projects) and is described in Section 3.4.8.

3.4.10 SFU-C-0004 (Multiple Pump Stations – O'Neal Lane – South Harrell's Ferry Road)

The SFU-C-0004 project has been combined with SFU-C-0002 (Multiple Pump Station - Jones Creek Road - Tiger Bend Road) and SFU-C-0003 (Multiple Pump Station - O'Neal). The combined project has been designated SFU-C-0002 (O'Neal Lane Pump Station Projects) and is described in Section 3.4.8.

3.4.11 SFU-C-0005 (O'Neal Lane Pipeline Projects)

Project Description

Purpose of the Project / Project Background

The SFU-C-0005 (O'Neal Lane Pipeline Projects) project includes segments previously included in SFU-C-0005 (O'Neal Lane - Tiger Bend Road) and SFU-C-0006 (O'Neal Lane - Jones Creek Road).

The project involves upsizing of gravity main in an area that extends north of Florida Blvd to the Monticello Subdivision and continues south to include the Shenandoah and Old Jefferson areas of East Baton Rouge Parish. The upgrades are developed to alleviate chronic SSOs at pump stations and increase the gravity main capacity. The forcemain upgrades are in an area that extends north of Florida Blvd to the Monticello Subdivision and continues south to include the Shenandoah and Old Jefferson areas of East Baton Rouge Parish. The upgrades are developed to alleviate chronic SSOs at the pump stations and increase the forcemain capacity.

Location

This project involves the replacement of portions of the South Forced Upper gravity main and forcemain systems and is shown in Figure 3-37. A majority of the contributing flows are from residential areas.

The gravity main upgrades are divided into the following segments.

Gravity segment 062-00064 to PS 62 starts at 062-00064, located near the intersection of Bonnie Drive and Marjorie Drive. From this location, the gravity main travels westerly for approximately 650 feet near Marjorie Drive. At this point, the main turns northwest and continues for approximately 380 feet before turning south near Nancy Drive. The main then continues generally west for approximately 1,000 feet before joining PS 62, which is located in a servitude north of the intersection of Patricia Dale Drive and Laurie Lynn Drive.

Gravity segment 146-00031 to PS 104 starts at manhole 146-00031, which is in a servitude located east of Rhonda Avenue, near Outrigger Drive. The gravity sewer then travels west in the servitude for approximately 1,200 feet before turning north for about 500 feet, where it then turns west in a servitude that is located in between Schafer Avenue and Schnebelen Avenue. The gravity sewer then travels north into a servitude located southeast of the

intersection with Boreas Drive and Woodlore Drive for approximately 200 feet, where it then turns west in an east/west servitude to PS 104, which is located in a servitude west of the intersection of Woodlong Drive and Riverdale Avenue East.

Gravity segment 189-00022 to PS 189 starts north of Rhonda Avenue at manhole 189-00022 and travels west in a servitude that parallels Rhonda Avenue to PS 189, which is located north of Rhonda Avenue near Outrigger Avenue.

Gravity segment 191-00065 to 191-00001 starts at manhole 191-00065 near the intersection of Catiline Place and Caesar Avenue and travels east for approximately 530 feet before reaching manhole 191-00001 in a servitude where it connects to another gravity main.

Gravity segment 224-00091 to PS 224 starts at manhole 224-00091 and continues approximately 500 feet east to PS 224. This main is located west of the cul-de-sacs for Banyanwood Avenue and Westwood Court.

Gravity segment 224-00063 to 224-00057 starts at manhole 224-00063, which is located near the intersection of Firewood Drive and Stonewood Drive. The main then travels north and then east for approximately 1,300 feet to manhole 224-00057 where it combines with gravity segment 224-00091 to PS 224.

Gravity segment 211-00051 to PS 211 starts at manhole 211-00051, which is located near the intersection of Lost Oak Drive and West Piney Point Avenue. From this location, the gravity main travels generally north for approximately 970 feet before reaching manhole 211-00057 near Woodlake Drive. The main upsize continues along Woodlake Drive to PS 211, which is located on Woodlake Drive north of its intersection with Creek Round Avenue.

Gravity segment 177-00180 to 177-00021 starts southeast of Kennesaw Drive and Chadsford Avenue intersection The gravity segment travels east until reaching 177-00027, and then north. The gravity segment ends at 177-00021, located near Missionary Ridge Court.

Gravity segment 177-00282 to 177-00257 starts at manhole 177-00282 located in a servitude between Ferrell Avenue and Harrell's Ferry Drive. From this location, it continues northerly for approximately 1,600 feet before turning east. From this point, the main continues approximately 1,200 feet to manhole 177-00257.

Gravity segment 112-00013 to PS 112 starts southwest of the Antioch Blvd and Antietam Avenue intersection. The gravity line travels southwest until reaching PS 112, located northeast of the Confederate Avenue and Chattanooga Drive intersection.

Gravity segment PS 112DS to PS 111 starts northeast of the Confederate Avenue and Chattanooga Drive intersection. The gravity line travels northwest until reaching 110-00108, southwest until reaching 110-00102, northwest until reaching 110-00094, and then southwest, crossing Shenandoah Country Club, until reaching 110-00088. The gravity line travels west until reaching PS 111, located near Tiger Bend Drive, between its intersections with Seven Pines Avenue and Sugar Springs Drive.

Gravity segment 274-00002 to PS 274 starts south of the Jones Creek Road and Shenandoah View Court intersection. The gravity segment travels south, along Jones Creek Road. The gravity segment ends at PS 274, located at the Tiger Bend Road and Jones Creek Road intersection.

Gravity segment 274-00009 to 274-00003 begins at manhole 274-00009 near the intersection of Greenshire Avenue and North Snowden Avenue. From this point, the gravity main heads south and continues for approximately 1,300 feet to manhole 274-00005. From this point, the gravity main heads south and east for approximately 450 feet to manhole 274-00003, which is located in a servitude between Snowden Avenue and Jones Creek Road.

Gravity segment 170-00015 to 170-00002 begins at manhole 170-00015, which is located near the south end of Chaucer Street. From there, it continues south for approximately 1,300 feet and crosses Tiger Bend Road before turning east near Kimbleton Avenue. After turning east, the gravity main travels approximately 1,550 feet east and south to manhole 170-00002 near PS 170.

Gravity segment 170-00167 to 170-00001 begins at manhole 170-00167 near the north end of Board Road. From there, it continues approximately 750 feet north and east to node 170-00001 near PS 170.

Gravity segment 170-00110 to PS 170 begins at manhole 170-00110 near the intersection of Vice President and Profit Avenue and continues north for approximately 150 feet before reaching manhole 170-00039. From this node, the main turns west and continues west before ending at PS 170.

Gravity segment 148-00038 to 148-00034 begins at manhole 148-00056 east Park Meadow Avenue and Parkforest Drive intersection. The gravity segment travels west for approximately 70 feet before turning south and then back north as it generally follows a drainage feature toward manhole 148-00034, which feeds into PS 148 near the intersection of Parklawn Avenue and Parkforest Drive.

The forcemain upgrades consist of the following segments.

Forcemain segment PS 153 to SS11 starts outside the property boundary of PS 153. Upon leaving the pump station, the forcemain travels southwest for approximately 800 feet along Woodvale Drive to the intersection of Woodvale Drive and Mockingbird Lane where it then travels 545 feet to the west, where it enters a manifold intersection with an existing 12-inch forcemain at node SS11.

Forcemain segment PS 101A to SS32 starts outside the property boundary of PS 101A. Upon leaving the pump station, the forcemain travels southeast until reaching SS32, located at Old Hammond Highway and O'Neal Lane.

Forcemain segment SS24 to SS36 starts west of South Choctaw Drive, above Florida Boulevard. The forcemain travels southwest, crossing Florida Blvd near O'Neal Lane intersection and crossing O'Neal Lane. The forcemain segment ends at SS36 and is located near the O'Neal Lane and Strain Road intersection.

Forcemain segment PS 104 to SS64 starts outside the property boundary of PS 104. Upon leaving the pump station, the forcemain travels south for approximately 200 feet to node SS68 and enters a servitude where it turns east and follows the servitude for approximately 3,800 feet to node SS64, where it intersects a manifold forcemain at O'Neal Lane.

Forcemain segment BPS 100A to SS75 begins outside the property boundary of BPS 100A. Upon leaving the pump station, the forcemain travels east for approximately 200 feet to node SS75 where it intersects a manifolded forcemain at O'Neal Lane.

Forcemain segment PS 224 to SS96 begins outside the property boundary of PS 224. Upon leaving PS 224, the forcemain travels south for approximately 900 feet before reaching Firewood Drive. At Firewood Drive, the forcemain turns east and follows the ROW for approximately 2,300 feet to the intersection of O'Neal Lane where it manifolds with node SS96.

Forcemain segment PS 173 to PS 173DS starts outside the property boundary of PS 173, east of Sessions Drive. The forcemain travels west to PS 173FM, then north until reaching PS 173DS, located southwest of Colonel Allen Court and General Prentiss Avenue intersection.

Forcemain segment PS 162 to SS109 starts at PS 162, which is located at the intersection of General Prentiss Avenue and President Davis Drive. Upon leaving PS 162, the forcemain travels generally north for approximately 2,800 feet before reaching node SS130 where it continues approximately 300 feet north to PS 162. The forcemain upsize continues north of PS 162 and travels approximately 1500 feet north to the intersection of Harrell's Ferry Road where it manifolds with node SS109.

Forcemain segment BPS 889 to SS148 starts at BPS 889 and continues approximately 120 feet south to node SS148.

Forcemain segment PS 211 to 316-00001 starts outside the property boundary of PS 211. Upon leaving PS 211, the forcemain travels approximately 1,100 feet north along Woodlake Drive to manhole 316-00001 near PS 316.

Forcemain segment PS 316 to SS147 outside the northern property boundary of PS 316. Upon leaving PS 316, the forcemain travels north along Woodlake Drive for approximately 2,000 feet to node SS 173 and the intersection of South Harrell's Ferry Road. At South Harrell's Ferry Road, the forcemain turns west and continues for approximately 5,600 feet to node SS147 where it ties into a larger forcemain, which continues along South Harrell's Ferry Road.

Forcemain segment PS 296 to 211-00051 starts outside the property boundary of PS 296. Upon leaving PS 296, the forcemain travels approximately 400 feet north and east where it crosses West Piney Point Avenue. It then continues approximately 500 feet further north and east to manhole 211-00051 where it discharges into a gravity main.

Forcemain segment PS 347 to 247-00001 starts outside the property boundary of PS 347. Upon leaving PS 347, the forcemain travels approximately 500 feet west between South Shore Drive and Double Tree Drive and into a servitude. At this point, the forcemain continues approximately 500 feet along the servitude and then heads southwest toward the intersection of Double Tree Drive and Feather Nest Lane. The forcemain continues approximately 400 feet into another servitude located between Double Tree Drive and Wildlife Way Drive and then turns northwest. The forcemain follows the servitude for approximately 450 feet to a point located between Hagerstown Drive and Double Tree Drive. The forcemain then continues west in a servitude, crossing Hagerstown Drive, for approximately 2,400 feet to manhole 247-00001, which then ties into PS 247.

Forcemain segment PS 247 to SS274 continues outside the property boundary of PS 247. Upon leaving PS 247, the forcemain travels approximately 800 feet west in a servitude to East Achord Road. At East Achord Road, the forcemain turns south and travels

approximately 2,100 feet to node SS274 where it ties into a larger manifolded forcemain, which continues along Tiger Bend Road.

Forcemain segment PS 213 to SS274 begins outside the property boundary of PS 213. Upon leaving PS 213, the forcemain travels approximately 250 feet south to Tiger Bend Road where it then turns west and continues approximately 1,200 feet to node SS274.

Forcemain segment SS274 to SS248 begins at node SS274 and continues west along Tiger Bend Road for approximately 1,500 feet to node SS282 where it receives flow from a 4-inch forcemain and increases in size. From node SS282, the forcemain continues west along Tiger Bend Road for approximately 6,200 feet to the intersection of Antioch Road where it turns south and then continues approximately 250 feet to node SS275. From SS275, the forcemain turns west again and continues approximately 1,800 feet in a servitude to node SS265 where it receives flow from a 10-inch forcemain and increases in size. From SS265 the forcemain continues approximately 1,900 feet west to node SS248 near PS 274.

Forcemain segment PS 274 to SS268 resumes outside the property boundary of PS 274. Upon leaving the pump station, the forcemain travels approximately 100 feet south to SS241. From SS241, the forcemain increases in size and continues approximately 4,600 feet west to BPS507. From BPS507, this segment resumes and continues approximately 200 feet west before turning south and continuing approximately 800 feet to node SS268 near Jefferson Highway.

Forcemain segment PS 112 to 110-00113 begins at PS 112 and continues west to manhole 10-00113 near Shenandoah Avenue.

Forcemain segment SS196 to SS243 begins at node SS196 located at George O'Neal Road and approximately 170 feet east of the intersection of Cumberland Cove Drive. The forcemain continues west for approximately 650 feet before turning south into a servitude. The forcemain then continues south for approximately 1,500 feet before entering the property boundary of BPS777. The forcemain then continues approximately 1,200 feet west to node SS522 near Jones Creek Road. From node SS522, the forcemain turns south and continues approximately 4,800 feet to node SS243 where it ties into a larger manifold forcemain near PS 274.

Forcemain segment PS 258 to SS192 begins outside the property boundary of PS 258. Upon leaving the pump station, the forcemain travels approximately 50 feet north before turning east into a servitude and continuing for approximately 1,200 feet to node SS192 where it intersects a manifold forcemain in a servitude between Springwood Avenue and Charleston Villa Drive.

Forcemain segment SS168 to SS186 begins at node SS168 near PS 136 and continues approximately 2,700 feet southeast in a servitude to node SS186 where it joins a forcemain.

Forcemain segment PS 172 to PS 172DS begins outside the boundary of PS 172. Upon leaving the pump station, the forcemain travels approximately 300 feet north and across Ferrell Avenue before turning east into a servitude located between Stillwater Avenue and Ferrell Avenue. The forcemain continues in the servitude for approximately 900 feet before turning north. The forcemain continues north for approximately 300 feet to manhole PS 172DS where it joins a forcemain.

Forcemain segment PS 170 to SS248 begins outside the property boundary of PS 170. Upon leaving the pump station, the forcemain travels northeast until reaching SS 248, located southeast of Tiger Bend Road and Jones Creek Road.

Forcemain segment PS 148FM to 147-00057A begins outside the boundary of PS 148 at node PS 148FM, east of the intersection of Parkview Church Road and Superior Drive. From that location, the forcemain travels approximately 1,500 feet south and east to node 147-00057A where it joins a manifold forcemain.

Forcemain segment PS 147 to SS 268 includes a forcemain that begins outside the property boundary of PS 147. Upon leaving the pump station, the forcemain travels approximately 3,000 feet south and west to node SS 268 where it joins a manifold forcemain near Jefferson Highway.

PS 77 forcemain begins at PS 77, located northeast of the intersection of Deerpath Way and Woodland Ridge Blvd, and continues west along an existing servitude to Woodland Ridge Blvd, where it then parallels Woodland Ridge Blvd north to SS102A, located near the intersection of South Harrells Ferry Road.

PS 379 forcemain begins at PS 379, located near the intersection of Jefferson Highway and Tiger Bend Road and parallels Tiger Bend Road east to 201-00009, located east of the intersection of Tiger Bend road and Quinn Road.

Scope

This project includes construction of approximately 2,100 feet of 12-inch, 15-inch, and 18-inch gravity sewer upstream of PS 62; approximately 4,700 feet of 15-inch and 18-inch gravity sewer upstream of PS 146; approximately 210 feet of 18-inch gravity sewer upstream of PS 189; approximately 540 feet of 12-inch gravity sewer upstream of PS 191; approximately 2,300 feet of 18-inch gravity sewer upstream of PS 224; approximately 3,400 feet of 18-inch, 21-inch, and 24-inch gravity sewer upstream of PS 211; approximately 4,000 feet of 12-inch, 15-inch, and 21-inch gravity sewer upstream of PS 177; approximately 1,000 feet of 15-inch and 18-inch gravity sewer upstream of PS 112; approximately 3,900 feet of 15-inch, 18-inch, and 24-inch gravity sewer upstream of PS 110; approximately 2,300 feet of 18-inch and 21-inch gravity sewer upstream of PS 274; approximately 5,500 feet of 15-inch, 18-inch, and 21-inch gravity sewer upstream of PS 170; approximately 690 feet of 12-inch sewer upstream of PS 148; and approximately 81,500 feet of 6-inch, 8-inch, 10-inch, 12-inch, 14-inch, 16-inch, 18-inch, 20-inch, 24-inch, 30-inch, 36-inch, and 42-inch forcemain in the South Forced Upper Basin.

Table 3-24 shows the detailed scope of this project.

TABLE 3-24
SFU-C-0005 (O'Neal Lane Pipeline Projects)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
062-00064	062-00048	470	10	12	
062-00048	062-00002	1,400	10	15	
062-00002	PS62	190	12	18	
146-00031	146-00018	920	10	15	
146-00018	146-00001	2,200	10	18	

TABLE 3-24
SFU-C-0005 (O'Neal Lane Pipeline Projects)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
146-00001	PS104	1,600	12	18	
189-00022	PS189	210	8	18	
191-00065	191-00001	540	8	12	
224-00091	224-00057	500	8	18	
224-00057	224-00001	445	8	18	
224-00001	PS224	15	12	18	
224-00063	224-00060	690	8	18	
224-00060	224-00057	660	8	18	
211-00051	211-00047	970	12	18	
211-00047	211-00039	460	10	18	
211-00039	211-00038	150	12	24	
211-00038	211-00037	260	12	18	
211-00037	211-00001	1,500	12	21	
211-00001	PS211	70	10	21	
177-00180	177-00179	50	8	15	
177-00179	177-00025	630	8	15	
177-00025	177-00021	400	15	21	
177-00282	177-00257	2,900	10	12	
112-00013	112-00002	830	10	18	
112-00002	PS112	200	10	15	
PS112DS	110-00094	2,250	10	18	
110-00094	110-00088	1,300	10	18	
110-00088	110-00001	240	10	15	
110-00001	PS111	70	10	24	
274-00002	PS274	570	12	18	
274-00009	274-00005	1,280	10	18	
274-00005	274-00004	90	10	18	
274-00004	274-00003	380	10	21	
170-00015	170-00005	2,100	10	15	
170-00005	170-00002	750	10	15	
170-00167	170-00001	600	10	18	
170-00110	170-00039	150	8	15	
170-00039	170-00037	700	8	18	
170-00037	170-00036	330	10	18	
170-00036	170-00001	770	10	21	
170-00001	PS170	60	15	21	
148-00038	148-00034	690	8	12	
PS 153	SS11	1,300	4	6	
PS 101A	SS32	1,700	6	8	
SS24	SS32	3,220	14	18	
SS32	SS36	1,300	16	20	

TABLE 3-24
SFU-C-0005 (O'Neal Lane Pipeline Projects)

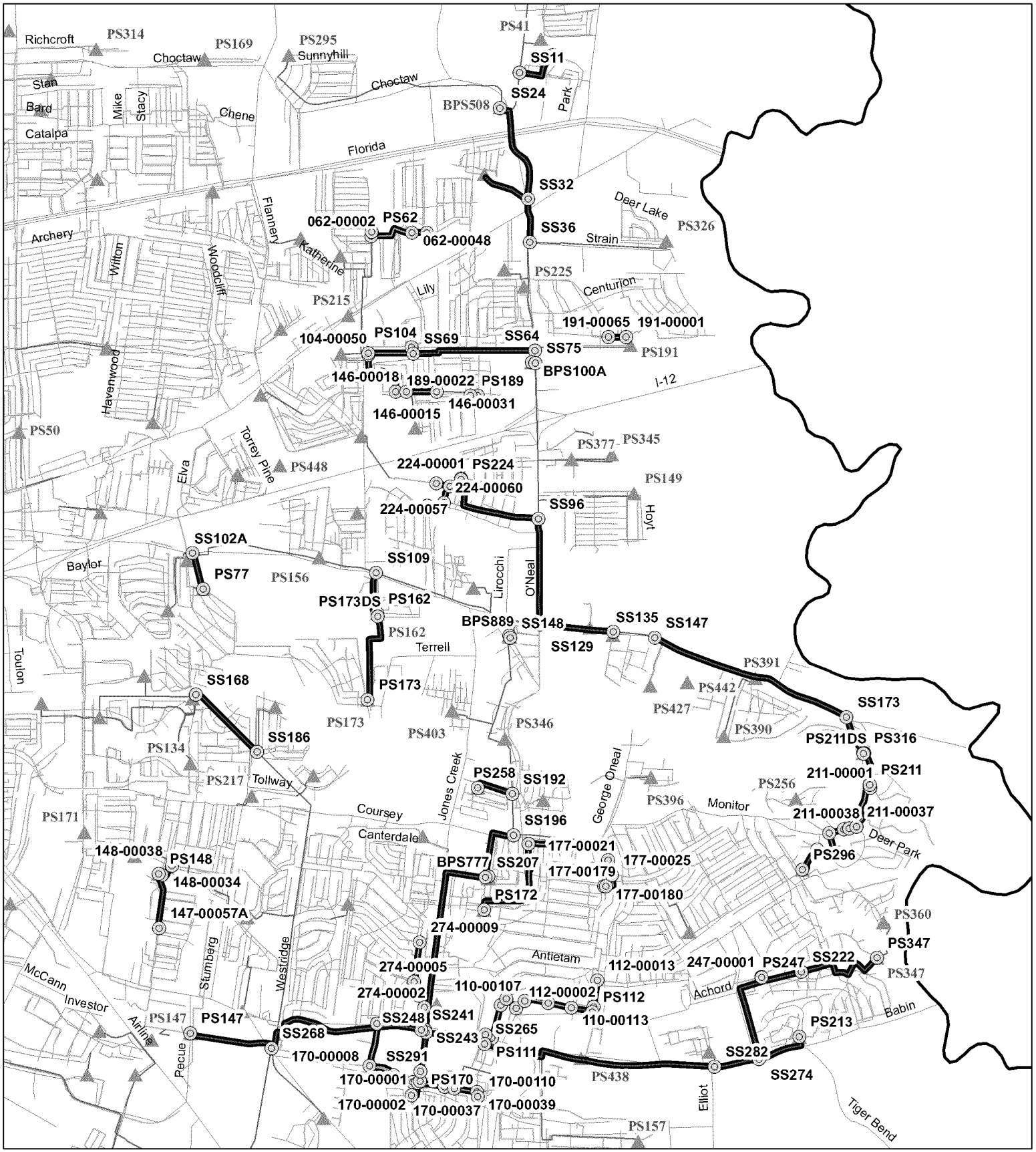
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS 104	SS69	220	10	16	
SS69	SS64	3,800	16	24	
BPS 100A	SS75	200	18	24	
PS 224	SS96	3,300	10	12	
PS173	PS173DS	3,100	4	6	
PS162	SS109	1,500	6	8	
BPS 889	SS148	120	24	30	
PS 211	316-00001	1,100	6	14	
PS 316	SS173	1,300	8	14	
SS173	SS147	6,300	10	14	
PS 296	211-00051	880	6	8	
PS 347	SS222	3,100	4	8	
SS222	247-00001	1,100	6	8	
PS 247	SS274	3,100	8	12	
PS 213	SS274	1,400	4	6	
SS274	SS282	1,600	10	12	
SS282	SS265	7,300	12	16	
SS265	SS248	1,900	16	24	
PS 274	SS241	110	8	12	
SS241	SS268	5,600	36	42	
PS 112	110-00113	600	6	10	
SS196	BPS 777	2,100	30	36	
BPS 777	SS207	100	24	36	
SS207	SS243	6,000	30	36	
PS 258	SS192	1,200	4	6	
SS168	SS186	2,700	14	16	
PS 172	PS172DS	1,500	4	6	
PS 170	SS291	200	10	14	
SS291	SS248	1,370	10	14	
PS148FM	147-00057A	1,500	4	6	
PS 147	SS268	3,000	8	10	
PS 77	PS77DS	1,200	New	10	
PS 379	201-00009		4	6	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $19,900,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2011.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility
- Parish Boundary

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,500 5,000 Feet

PUBLIC WORKS

O'Neal Ln. Pipeline Projects

SFU-C-0005

Project Vicinity Map

Figure 3-37

BATON ROUGE SSO Program

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3.4.12 SFU-C-0006 (O'Neal Lane – Tiger Bend Road)

The SFU-C-0006 project has been combined with SFU-C-0005 (O'Neal Lane - Jones Creek Road). The combined project has been designated SFU-C-0005 (O'Neal Lane Pipeline Projects) and is described in Section 3.4.11.

3.5 South WWTP Projects

3.5.1 STP-C-0001 South WWTP – Phase 1

Project Description

Purpose of the Project/Background Information

The existing unit processes at the South WWTP have been designed and constructed to process a peak hydraulic capacity of 119 mgd. The predicted future peak hydraulic flow to this facility after improvements to collection and conveyance infrastructure is 273 mgd. The C-P is also planning to consolidate the Central WWTP and the South WWTP, with all flow being diverted to the South WWTP for treatment. The predicted future peak wet weather flow from the Central WWTP is 93 mgd. Therefore, the total predicted wet weather peak flow to the South WWTP after the Central Consolidation is 366 mgd. To treat and accept either of the above noted flows, several wet weather improvements must be constructed at the South WWTP. These improvements will be achieved in two projects, specifically STP-C-0001 South WWTP – Phase 1 and STP-C-0002 South WWTP – Phase 2.

Location

The South WWTP is located at 2850 South Gardere Lane, and its outfall is located at geographical coordinates of latitude 30° 20′ 27″ north and longitude 91° 08′ 52″ west.

Scope

The South WWTP will be upgraded to process wet-weather flows up to 366 mgd. Influent flows will be equalized to allow not more than a 200 mgd maximum flow to the treatment facilities. Sixty-six (66) million gallons of equalization storage will be provided for this purpose.

The existing gravity pump station at the South WWTP will be modified as part of this project to pump to a new headworks. An additional new raw sewage/equalization pump station will also be constructed to convey flows from the forcemain (existing South Suburban Transportation Network [STN]; new Pump Station 58A; and Central Consolidation) system. This pump station will have the capability to pump either to the headworks or to the storage facilities. This pump station will also accept flow from the storage facilities when flow is allowed to be returned after a wet weather storage event. Raw sewage pumped from the modified gravity pump station and the new forcemain pump station to the process train will be directed into a new headworks facility sized to process 200 mgd. Both of the existing headworks facilities will be demolished and replaced by this single system. The proposed headworks will screen and degrit the influent wastewater.

This project also includes odor control facilities for the influent pump stations, storage facilities, and headworks. A new electrical substation is also included in this project. The remainder of the South WWTP improvements are described in STP-C-0002 South WWTP – Phase 2. All of the proposed Phase 1 improvements are shown on the process flow diagram presented as Figure 3-38. Principal Phase 1 project elements are:

- Modify existing gravity pump station to pump 62 mgd to new headworks
- Construct a new raw sewage (138 mgd)/equalization (166 mgd) pump station and force main system

  - Below-grade concrete dry well/wet well-type structure. No building.
  - Dry-pit submersible pumps operating from variable frequency drives (VFDs)
  - Electrical building to house electrical systems and controls
  - Facility includes discharge flow meters
  - Facility is covered and includes odor control provisions

- Construct covered storage for flows in excess of 200 mgd

  - Circular lined above-ground tanks (3 at 16 MG and 1 at 6 mgd)
  - Return line with control valve and flowmeter to convey return flow to forcemain system raw sewage pump station
  - Mixers are provided for 6 mgd tank that will receive initial flows. Hydrants will be provided for cleaning.
  - Odor control facilities included

- Construct 200 mgd headworks

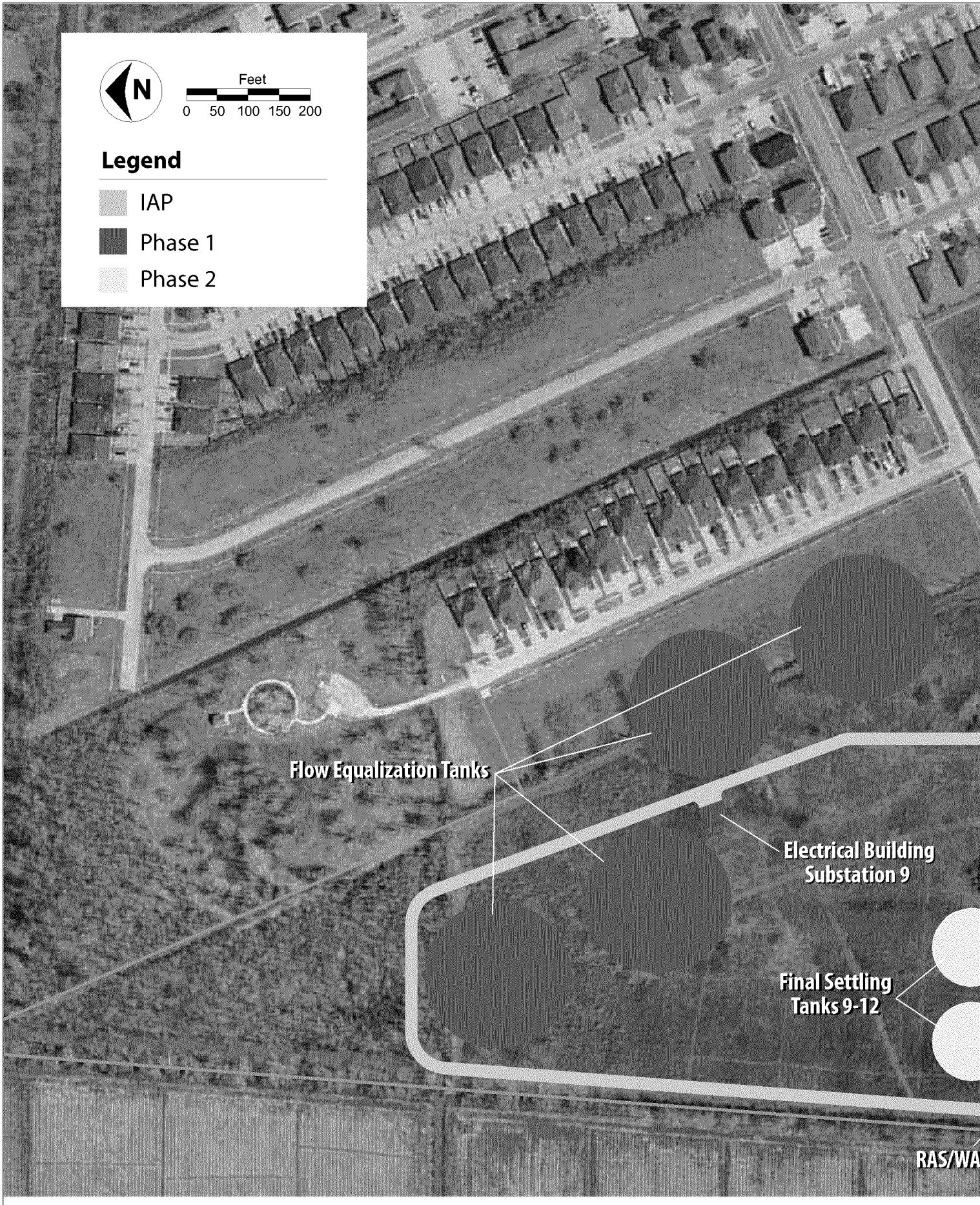
  - Elevated facility, constructed of cast in place concrete
  - Facility contains both screening and grit removal equipment
  - Six screening channels
  - Six gravity vortex grit units
  - Odor control facilities included.
  - A splitter box is constructed on the end of the headworks structure to split plant flow between the dry-weather and wet-weather process trains during wet-weather events. Structure splits flow at 120-mgd to dry-weather train, and 80-mgd to wet-weather train.

- Construction of new electrical substation.
- Yard piping
- Site work
- Demolition

Total Estimated Construction Cost is $90,000,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



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3.5.2 STP-C-0002 South WWTP – Phase 2

Project Description

Purpose of the Project/Background Information

Existing unit processes at the South WWTP have been designed and constructed to process a peak hydraulic capacity of 119 mgd. The predicted future peak hydraulic flow to this facility after improvements to collection and conveyance infrastructure is 273 mgd. The C-P is also planning to consolidate the Central WWTP and the South WWTP, with all flow being diverted to the South WWTP for treatment. The predicted future peak wet weather flow from the Central WWTP is 93 mgd. Therefore, the total predicted wet weather peak flow to the South WWTP after the Central Consolidation is 366 mgd. To treat and accept either of the above noted flows, several wet weather improvements must be constructed at the South WWTP. These improvements will be achieved in two projects, specifically STP-C-0001 South WWTP – Phase 1 and STP-C-0002 South WWTP – Phase 2.

Location

The South WWTP is located at 2850 South Gardere Lane, and its outfall is located at geographical coordinates of latitude 30° 20′ 27″ north and longitude 91° 08′ 52″ west.

Scope: The South WWTP will be upgraded to process wet-weather flows up to 366 mgd. The STP-C-0001 South WWTP Phase 1 project includes influent pumping, equalization storage, and headworks facilities. This project begins downstream of the headworks, and includes additional wet weather treatment improvements at the South WWTP. This project has two portions to it, since some of the improvements are required due to wet weather and some are required from the *Draft Wastewater Master Plan (CH2M HILL, May 2008).*

Wet Weather Improvements

From the headworks, preliminary treated wastewater up to 120 mgd will flow by gravity to the existing primary clarifiers. Flows in excess of 120 mgd (up to 80 mgd) will flow from the headworks to new solids contact basins. Under this scenario, up to 120 mgd of preliminary treated wastewater will flow from the headworks through the existing primary clarifiers and the existing trickling filters. The upgraded secondary treatment process will contain both TFs and SC basins. Normally, flows up to 120 mgd will be pumped into the TFs and then be pumped into the SC basins. Trickling Filter recirculation is part of the ongoing IAP projects at the plant

Additional final settling tanks must also be provided to manage the 200 mgd wet-weather flow condition. The existing disinfection system will be converted from gaseous chlorination to ultraviolet light (UV) disinfection for flows up to 120 mgd, and hypochlorite disinfection for excess flows above 120 mgd. The existing effluent pump station and outfall piping will require expansion. These improvements are shown on Figure 3-46. Principal project elements include the following:

- Construct Solids Contact Basin (200 mgd)
  - Above grade rectangular concrete structure
  - Aeration blowers located near the solids contact basin.
  - Fine bubble diffused aeration system

  - Return activated and waste activated sludge pump stations for sludge return from the final settling tanks to the solids contact basins, and for sludge wasting to the gravity belt thickeners
  - A splitter box is constructed on the end of the solids contact basins to distribute the flow between the existing and proposed final settling tanks
- Construct four additional final clarifiers at 160-foot diameter each
- Conversion of disinfection to UV disinfection and hypochlorite disinfection
- Construction of a new effluent PS (120 mgd)
  - Existing PS will continue to be used to discharge wet weather flows in excess of 120 mgd up to 200 mgd
  - New PS will consist of vertical turbine pumps mounted on a concrete slab. Discharge piping and flow metering will be above grade.
- Construction of parallel effluent pipeline and river outfall structure
- Construction of odor control for the primary clarifiers effluent weirs and the existing solids processing building.
- Yard piping
- Site work
- Demolition
  - Methane storage/power conversion facilities
  - Miscellaneous yard piping and electrical

Preliminary Master Plan Improvements

The Master Plan improvements, as outlined in the *Draft Wastewater Master Plan (CH2M HILL, May 2008)*, include the following principle project elements.

- Secondary source consisting of on-site engine/generators
- Additional solids dewatering facilities
- Repair of existing anaerobic digesters
- Rehabilitation of existing buildings
- Construction of a plant SCADA system
- Construction of new laboratory, and administration buildings, and a new warehouse facility

Total Estimated Construction Cost for the Wet Weather Improvements is $40,000,000.

Total Estimated Construction Cost for the Preliminary Master Plan Improvements is $50,000,000.

Total Estimated Construction Cost for the entire project is $90,000,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.

3.5.3 South WWTP Immediate Action Projects

Project Description

Purpose of the Project/Project Background

The South WWTP is under consent decree due to NPDES Permit violations related to total suspended solids (TSS) and biochemical oxygen demand (BOD). The WWTP is presently required to maintain a 30-mg TSS/L and 30-mg BOD/L monthly average and 45-mg TSS/L and 45-mg BOD/L weekly average discharge standard.

A number of improvement projects will be implemented to assist the plant in complying with its effluent permit limits. These improvements will be implemented early in the program to bring the plant into compliance as soon as possible under dry weather conditions.

The screenings improvements project that was formerly in this project has been moved to STP-C-0001 (South WWTP Phase 1). The effluent pumping station stabilization project has been completed.

Location

The South WWTP is located at 2850 South Gardere Lane.

Scope

The improvement projects have been grouped together for their implementation. A description of each grouping of projects follows.

Primary Treatment Improvements

Primary treatment improvements will be implemented to improve the reliability of the primary settling tanks and consistently meet BOD and TSS effluent limits.

The first project element includes the addition of ferric chloride and polymer injection systems for enhanced BOD/TSS removal. This element includes installation of chemical storage and feed systems on both the gravity and forcemain trains of the plant.

The second project element includes various improvements to the primary settling tanks to improve their mechanical reliability. There are six existing tanks. Several of these tanks currently experience significant down time due to issues with mechanical reliability. DPW operations staff also experience difficulty in removing sludge from the clarifiers, which could be associated with issues such as improper collector mechanism speed, pump capacities, pump cycle times, or a combination thereof. The following improvements have been identified for enhanced operational reliability:

- **Repair/Replace clarifier mechanisms and components**. Improvements include replacement of boards, wear strips, sprockets, drives, and expansion joints. Some clarifiers will require new chain.
- **Replace existing sludge pumps**. The current piston pumps have significant maintenance problems. New pumps will be installed to ensure sludge removal design criteria are met.

- **Replace large inlet plug valves on clarifiers 1, 2, 3, and 4.** Existing valves (32 valves total) are maintenance intensive. These valves will be replaced.

The third project element includes the addition of flow control/flow measurement devices at several splitter boxes. The plant has several structures designed to split the flow between process trains, and between discrete basins. These flow splits occur by gravity flow over weir gates. Currently, there is no means to monitor or control the flow splits, or determine proper distribution to downstream facilities. To improve this, weir gate electric actuators and level (flow) elements will be installed at splitter boxes No. 1 and 2.

Trickling Filter Improvements

The secondary treatment process consists of two separate trickling filter, final settling tank, and effluent PS trains. An upstream splitter box receives flow from the primary clarifiers, and splits it to the two secondary trains. The following improvements will assist in achieving permit compliance.

- **Construction of a new Trickling Filter Influent Pump Station.** This includes two independent sides, the Trickling Filter Recirculation Pump Station and the Trickling Filter Effluent Pump Station. The Recirculation Pump Station is needed to maintain proper wetting rates on the trickling filters
- **Construction of new Electrical Building.**
- Construction of new flow splitting structure to divide the pump station effluent flow among existing clarifiers
- Construction of new piping, valves, flow meters, pipe supports, concrete structures, piping tie-ins, and other work to deliver primary effluent flow to the new station, to pump primary effluent to the existing trickling filter splitter boxes at a controlled rate, to deliver return flow from the trickling filters to the new pump station, and to deliver trickling filter effluent at a controlled rate to the flow splitting structure and form there to the existing clarifiers.
- **Primary Effluent Pump Stations Improvements**. There are two existing primary effluent pump stations, with two separate wet wells. The wet wells are hydraulically connected by an existing pipe. The pumps operate off various wet well levels to pump primary effluent to the trickling filter splitter box. The new trickling filter recirculation pump station will discharge into the primary effluent pump stations' wet wells. A hydraulic, electrical, and control system evaluation is required for this entire system to determine required modifications to the pump stations. The hydraulic evaluation needs to be comprehensive in nature, and include trickling filter recirculation pump station, primary effluent pump stations, and final settling tank flow control elements as a comprehensive hydraulic system.

Sludge Handling Improvements

Improvements to the sludge handling systems are as follows:

- **Gravity Thickeners and Thickened Sludge Pump Station Rehabilitation**. The gravity thickener complex has not been in service for many years. The complex will be rehabilitated so that primary and secondary sludge can be evacuated in a timely manner

from process facilities, and allow for thickening prior to anaerobic digestion. The thickened sludge will enhance the digestion unit process. In addition, a persistent flooding problem has rendered much of the equipment inoperable. Improvements include replacing gravity thickeners, rehabilitating/replacing sludge pump station components, and improving site grading to reduce the potential of flooding.

- **Final Settling Tank Sludge Withdrawal Improvements**. Sludge pumps from each settling tank complex discharge through a common header and do not provide adequate withdrawal. A new larger diameter pump discharge manifold will be installed to increase pumping capacity.

Total Construction Bid Amount is $25,632,000.

Construction is ongoing.

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SECTION 4

Central Basin Projects

Section 4 presents summaries of the Central Gravity System Comprehensive Rehabilitation Projects, the Central Gravity System Capacity Improvement Projects, and the Central Consolidation Projects. These projects are shown on Figures 4-1 and 4-2.

The project summaries presented herein represent the information available during this annual update period. The PDP will be revisited on an annual basis and revised, as necessary, based on results of additional hydraulic wastewater modeling, immediate needs, DPW and public input, and other factors.

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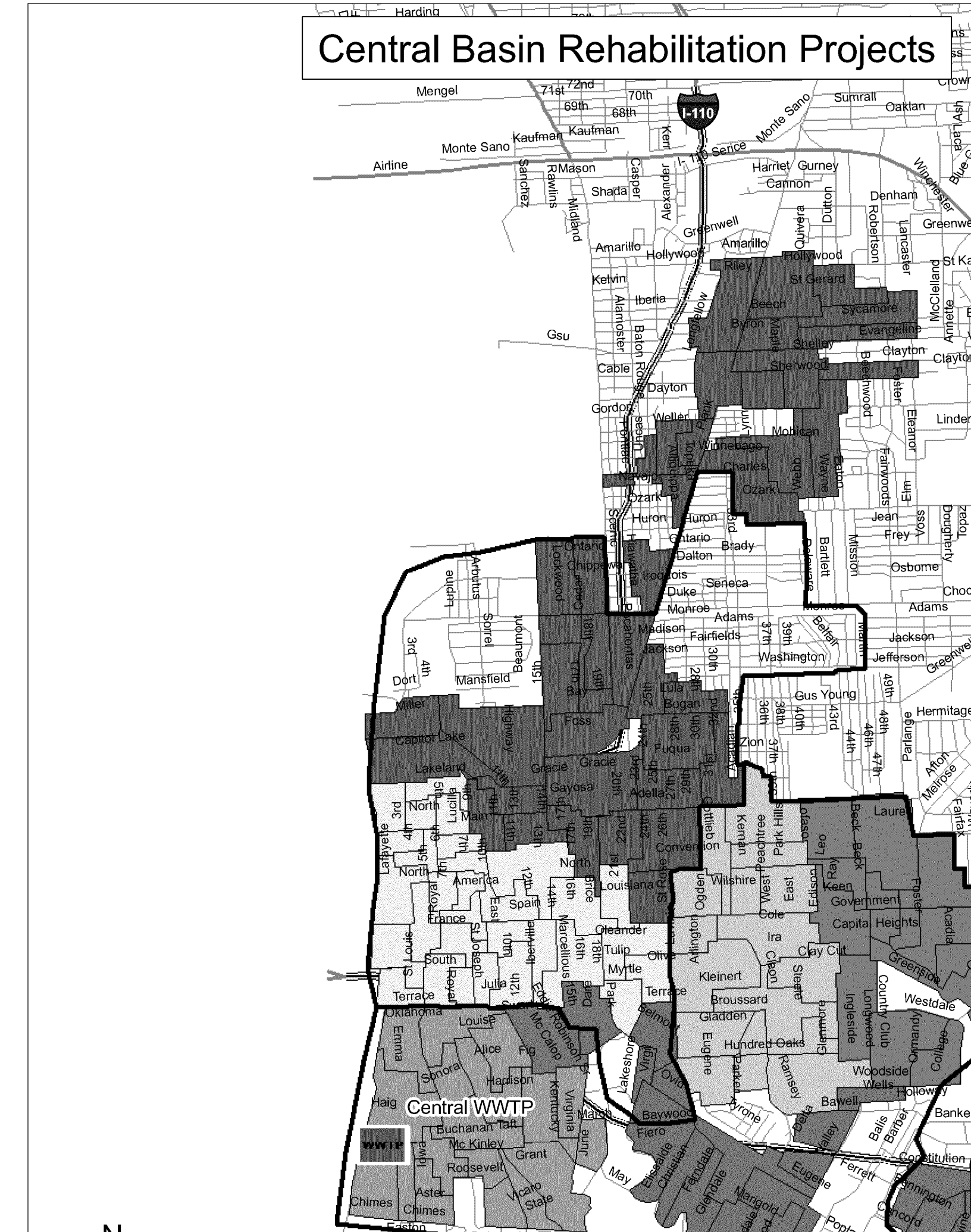
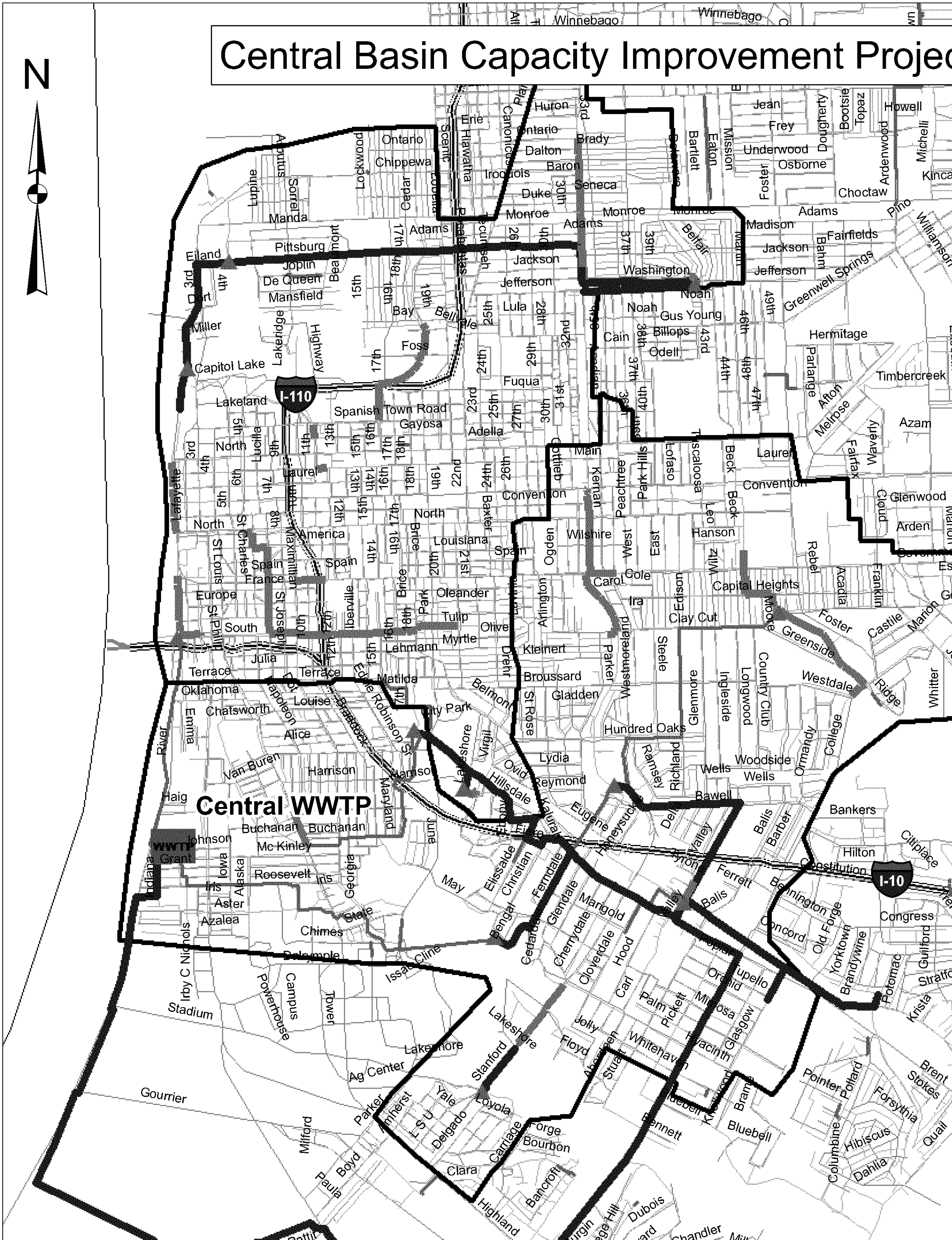
Central Basin Rehabilitation Projects




Central Basin Capacity Improvement Projec
N
Central WWTP
WWTP
I-110
I-10
Winnebago
Huron
Ontario
Erie
Dalton
Baron
Iroquois
Duke
Monroe
Adams
Jackson
Jefferson
Washington
Noah
Brady
Seneca
Chippewa
Lockwood
Cedar
Scenic
Hiawatha
Canonicus
Manda
Sorrel
Lupine
Arbutus
Pittsburg
Joplin
De Queen
Mansfield
Beaumont
Eiland
Dort
Miller
Capitol Lake
Lakeridge
Highway
Bay
Belle
Foss
Lula
Fuqua
Lakeland
Spanish Town Road
Gayosa
Adella
North
Laurel
America
Spain
France
Europe
South
Terrace
Julia
Lafayette
St Louis
St Charles
St Philip
Maximillian
St Joseph
Iberville
Louisiana
Oleander
Tulip
Myrtle
Olive
Lehmann
Matilda
Oklahoma
Chatsworth
Emma
Louise
Alice
Napoleon
Braddock
Eddie Robinson Sr
City Park
Belmont
Van Buren
Harrison
Haig
River
Johnson
Grant
Buchanan
Mc Kinley
Roosevelt
Iris
Iowa
Alaska
Georgia
Aster
Azalea
Indiana
State
Chimes
Dalrymple
Maryland
June
May
Irby C Nichols
Stadium
Powerhouse
Campus
Tower
Issac
Cline
Lakeshore
Gourrier
Ag Center
Milford
Parker
Amherst
Yale
LSU
Delgado
Stanford
Loyola
Carriage
Forge
Bourbon
Clara
Bancroft
Highland
Boyd
Paula
Dubois
Chandler
Main
Convention
Kernan
Peachtree
Park Hills
Lofaso
Tuscaloosa
Beck
Gottlieb
Wilshire
West
East
Leo
Hanson
Cole
Carol
Ira
Edison
Clay Cut
Capital Heights
Moore
Foster
Greenside
Westdale
Ridge
Castile
Marion
Rebel
Acadia
Franklin
Steele
Parker
Westmoreland
Kleinert
Broussard
Gladden
St Rose
Ogden
Arlington
Drehr
Virgil
Lydia
Reymond
Ovid
Hillsdale
Hundred Oaks
Ramsey
Richland
Glenmore
Ingleside
Longwood
Country Club
Woodside
Wells
Ormandy
College
Bawell
Eugene
Honeysuckle
Valley
Tyrone
Balis
Barber
Bankers
Hilton
Citiplace
Constitution
Ferrett
Bennington
Concord
Old Forge
Congress
Yorktown
Brandywine
Potomac
Guilford
Stratford
Krista
Elissalde
Christian
Ferndale
Glendale
Marigold
Cherrydale
Cloverdale
Hood
Carl
Palm
Pickett
Mimosa
Orchid
Tupelo
Glasgow
Jolly
Floyd
Whitehaven
Hyacinth
Stuart
Bluebell
Bennett
Brent
Stokes
Pointer
Pollard
Forsythia
Hibiscus
Dahlia
Columbine
Quail
Jean
Frey
Underwood
Osborne
Bartlett
Eaton
Mission
Foster
Dougherty
Bootsie
Topaz
Howell
Ardenwood
Michelli
Choctaw
Madison
Belfair
Bahm
Fairfields
Greenwell Springs
Williamson
Pino
Gus Young
Cain
Billops
Odell
Hermitage
Parlange
Timbercreek
Afton
Melrose
Fairfax
Waverly
Azam
Glenwood
Cloud
Arden
Whitter

4.1 Central Gravity System Comprehensive Rehabilitation Projects

4.1.1 CGS-R-0001, CGS-R-0002, CGS-R-0003, CGS-R-0004, CGS-R-0005, CGN-R-0001a, CGN-R-0001b, and CGN-R-0002

Project Description

The sanitary sewer system comprehensive rehabilitation projects consist of improvements to various components of the collection system to reduce the amount of infiltration and inflow that enter the system.

Purpose

The purpose of comprehensive rehabilitation is to correct defects in the system such as offset pipe joints, collapsed pipe sections, leaking manholes, and direct inflow sources. The water that enters the system through the defects is a major contributor to SSOs. Comprehensive rehabilitation of the collection system will contribute to alleviating SSOs.

Location

There are eight rehabilitation projects located within the Central Gravity Basin. The locations of the projects are shown in Figures 4-3 to 4-9.

Scope of Project

The first phase of comprehensive rehabilitation projects will consist of the physical inspection of the pipes and manholes including CCTV inspection. Smoke testing may also be included in the physical inspection phase.

The data collected by the physical inspection contractor will be analyzed and, based on that analysis, a listing of recommended repairs with associated construction costs will be generated.

An engineering firm will then complete detailed design and preparation of construction documents for project bidding.

The construction of comprehensive rehabilitation projects will typically include the following components::

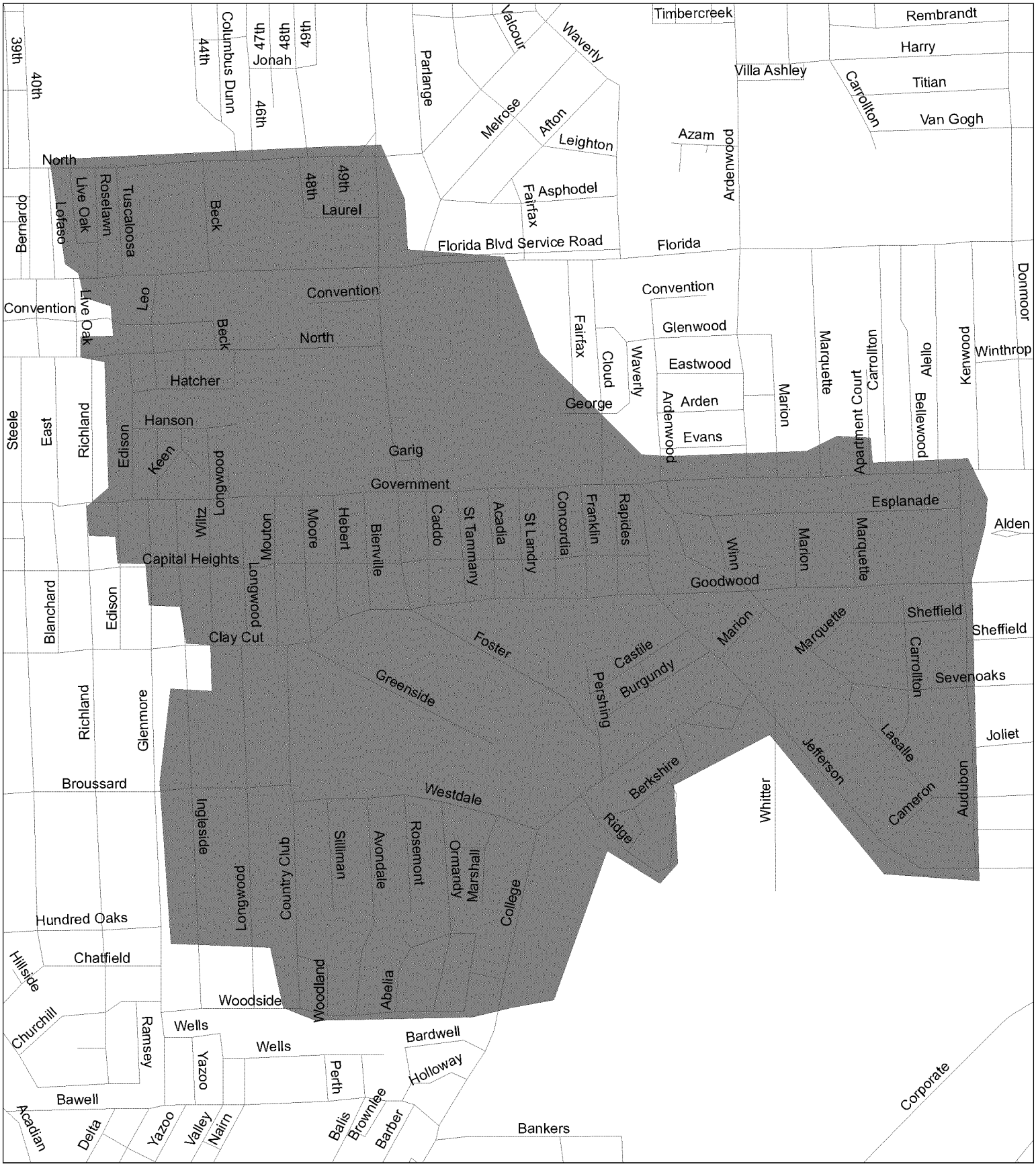
- Replacement of pipes
- Point repair of pipes
- Rehabilitation of pipes by cured in place pipe liners
- Rehabilitation or replacement of manholes
- Repair of sewer laterals to the property line

Cost

The estimated construction cost for each project is presented in Table 4-1. These costs are based on preliminary estimates of the amounts for each component of the system that will require repair or replacement. During the physical inspection phase, the actual condition of the components will be assessed and appropriate methods recommended. At that time, the cost estimate for each project will be revised.

TABLE 4-1
Estimated Construction Costs for Central Gravity System Comprehensive Rehabilitation Projects

Project Description	Construction Cost	Scheduled Design Appropriation Year	Scheduled Construction Appropriation Year
CGS-R-0001-Foster Drive-Government Street	$6,900,000	2009	2009
CGS-R-0002-Highland Road-Washington Street	$8,400,000	2010	2011
CGS-R-0003-Stanford Avenue-Morning Glory Road	$7,200,000	2010	2010
CGS-R-0004-Acadian Thruway-Claycut Road	$7,800,000	2010	2011
CGS-R-0005-Acadian Thruway-Perkins Road	$4,100,000	2010	2011
CGN-R-0001a-Scenic Highway-Spanish Town Road, Phase I	$9,000,000	2011	2012
CGN-R-0001b-Scenic Highway-Spanish Town Road, Phase II	$9,000,000	2011	2012
CGN-R-0002- East Boulevard-Government Street	$10,000,000	2012	2013



East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 860 1,720 Feet

PUBLIC WORKS

Foster Dr. - Government St.

CGS-R-0001

Project Vicinity Map

Figure 4-3

BATON ROUGE SSO Program

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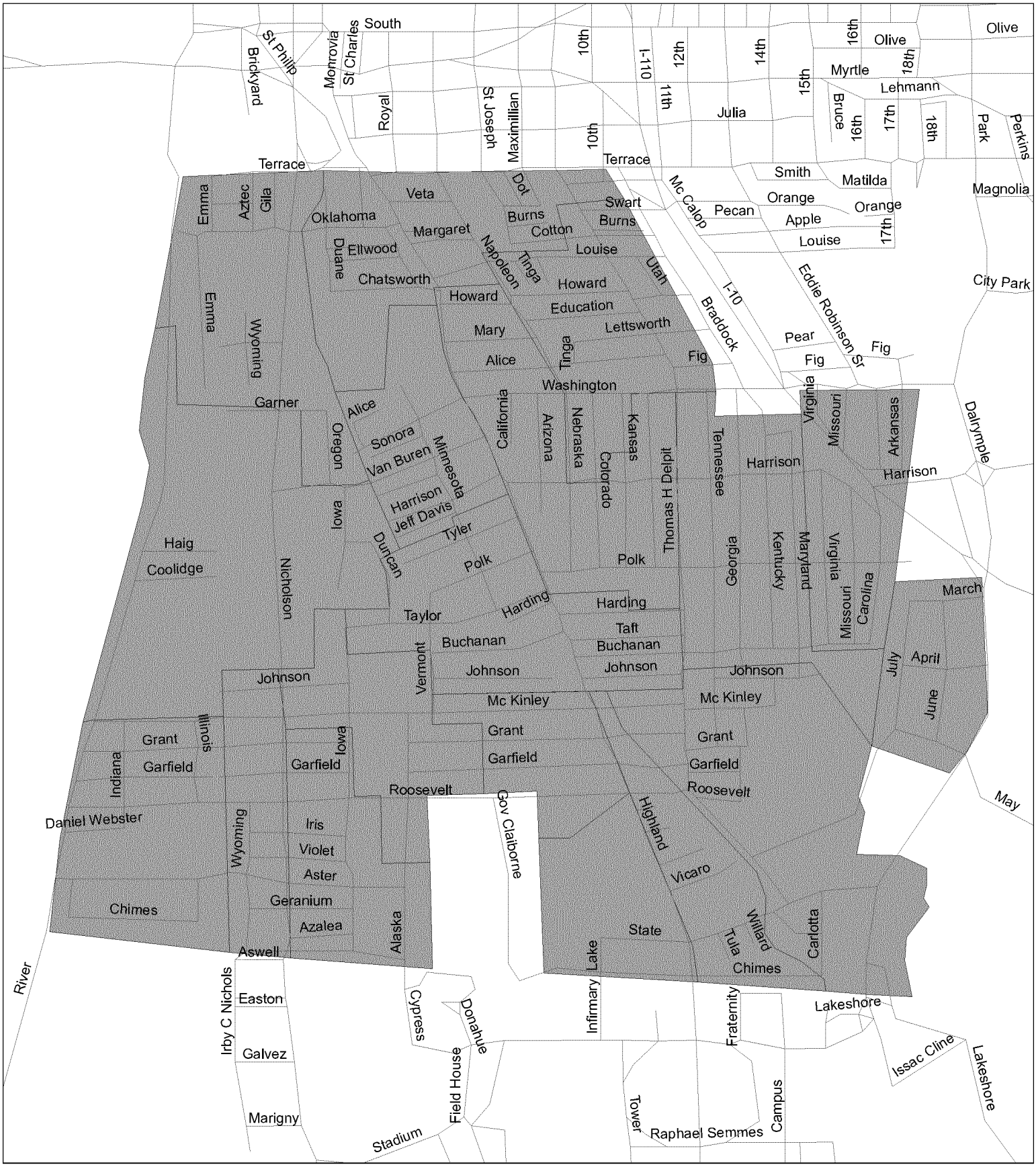

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 500 1,000 Feet

PUBLIC WORKS

Highland Rd. - Washington St.

CGS-R-0002

Project Vicinity Map

Figure 4-4

BATON ROUGE SSO Program

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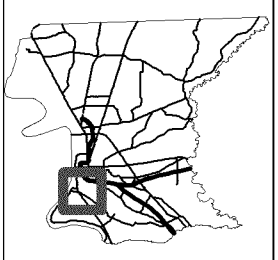

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,800 3,600 Feet

Stanford Ave. - Morning Glory Rd.

CGS-R-0003

Project Vicinity Map

PUBLIC WORKS

Figure 4-5

BATON ROUGE SSO Program

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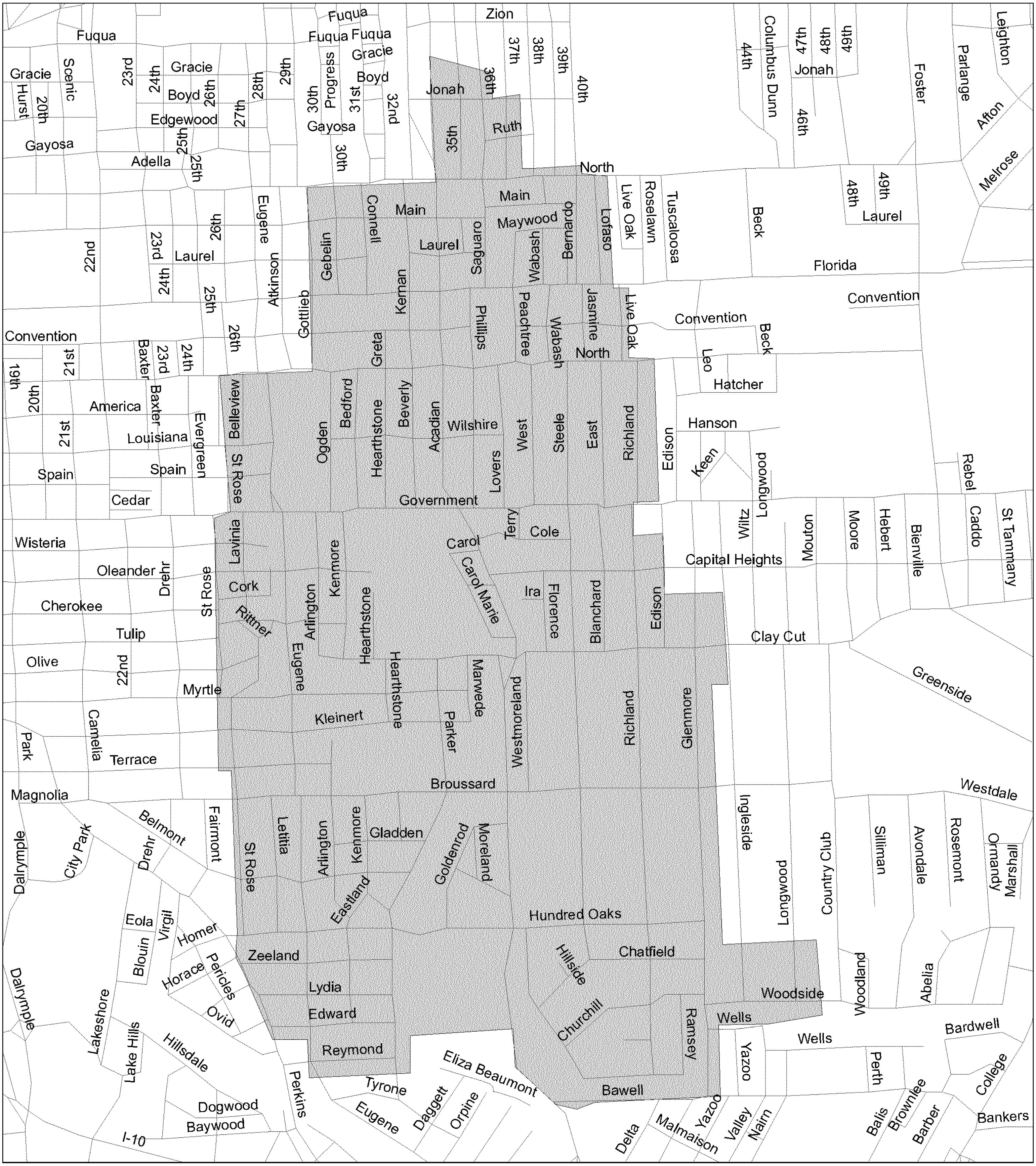

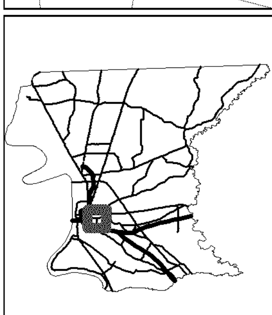

Legend

Area Designated for Physical Inspection

0 850 1,700 Feet

Acadian Thruway - Claycut Rd.

CGS-R-0004

Project Vicinity Map

Figure 4-6

BATON ROUGE SSO Program

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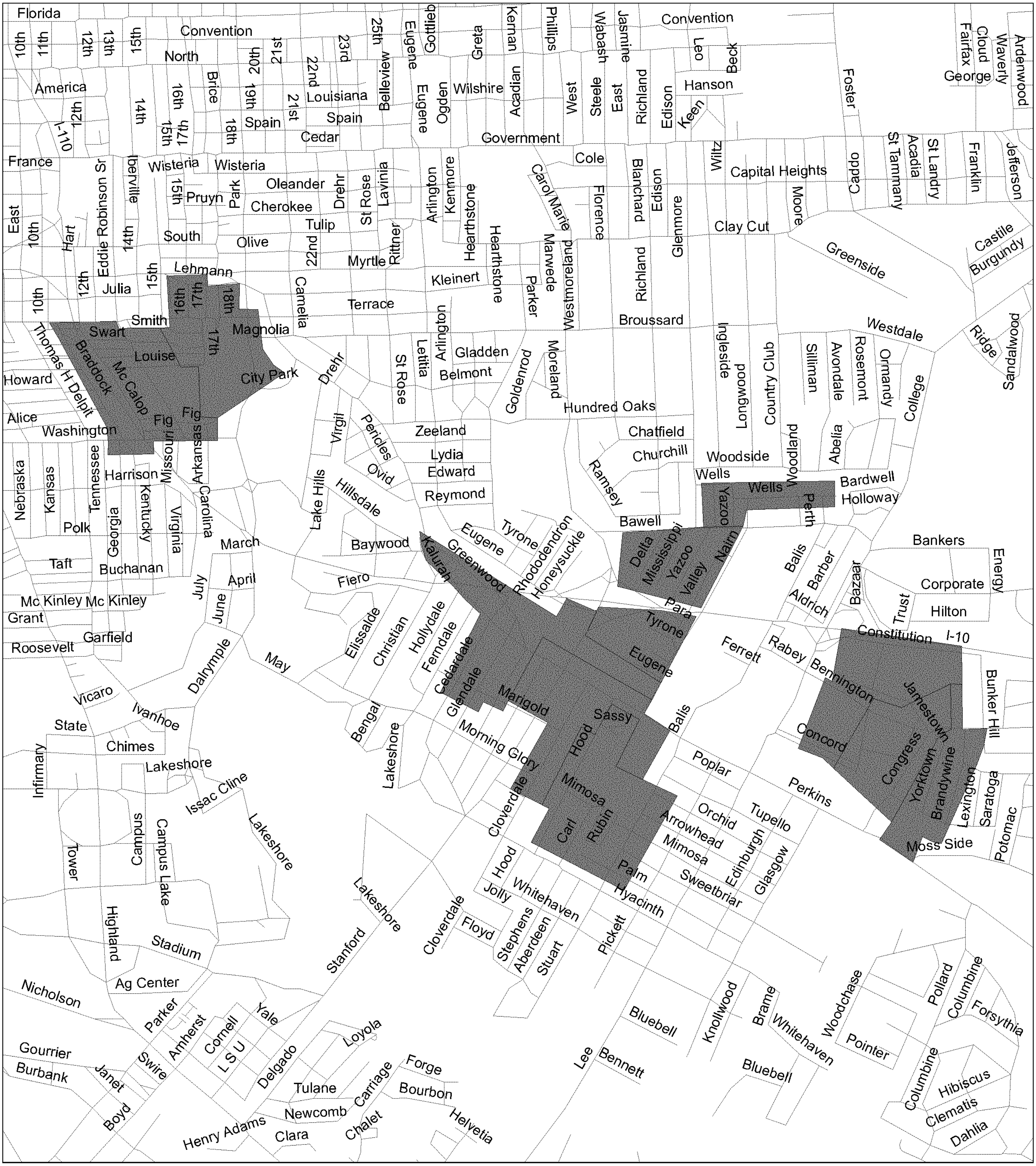

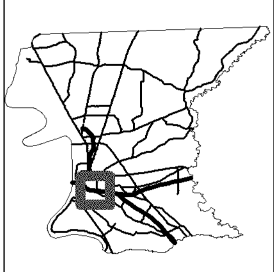

Legend

Area Designated for Physical Inspection

N

0 1,300 2,600 Feet

PUBLIC WORKS

Acadian Thruway - Perkins Rd.

CGS-R-0005

Project Vicinity Map

Figure 4-7

BATON ROUGE SSO Program

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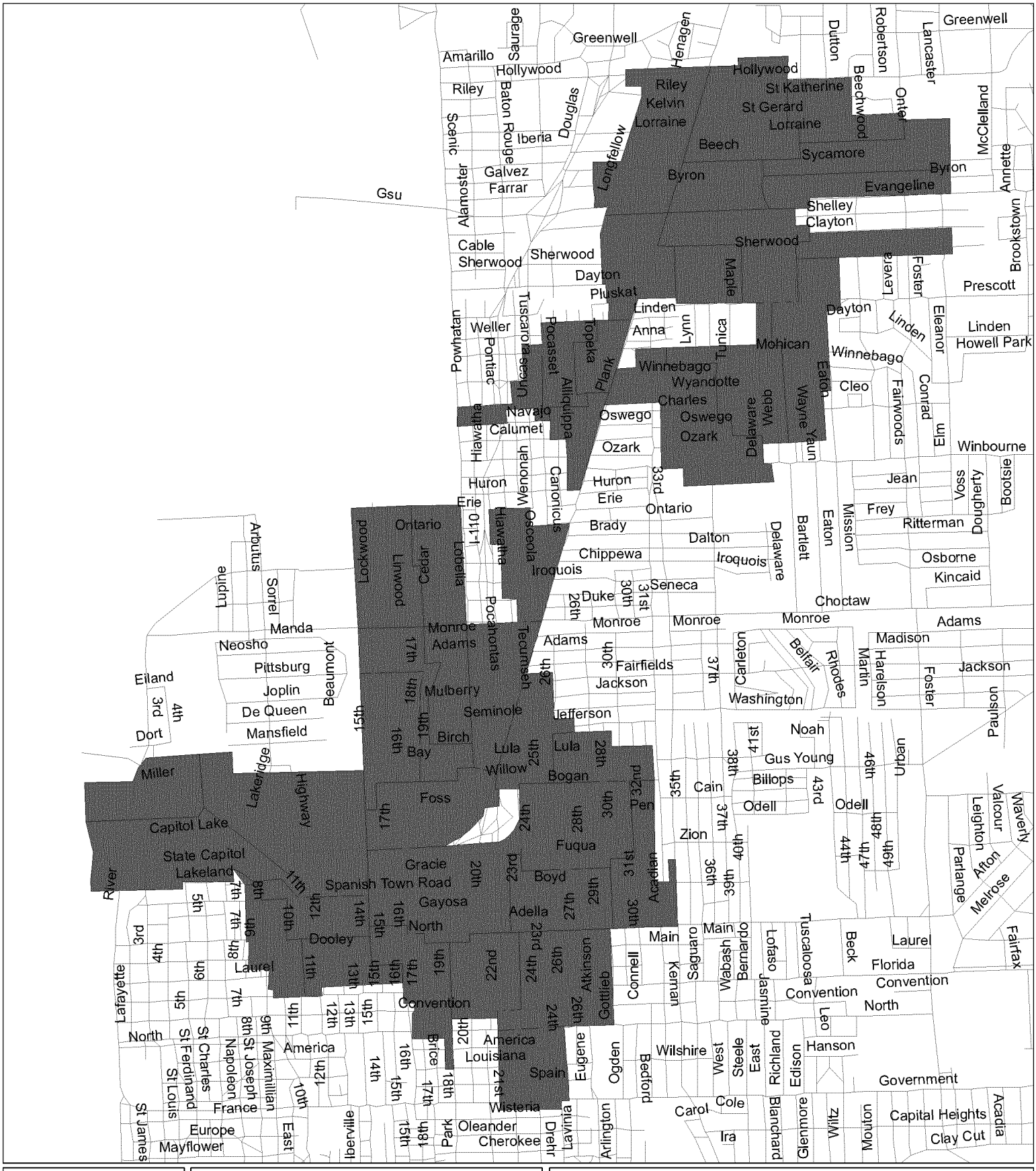

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,600 3,200 Feet

Scenic Hwy. - Spanish Town Rd. Phase I and II

CGN-R-0001

Project Vicinity Map

PUBLIC WORKS

Figure 4-8

BATON ROUGE SSO Program

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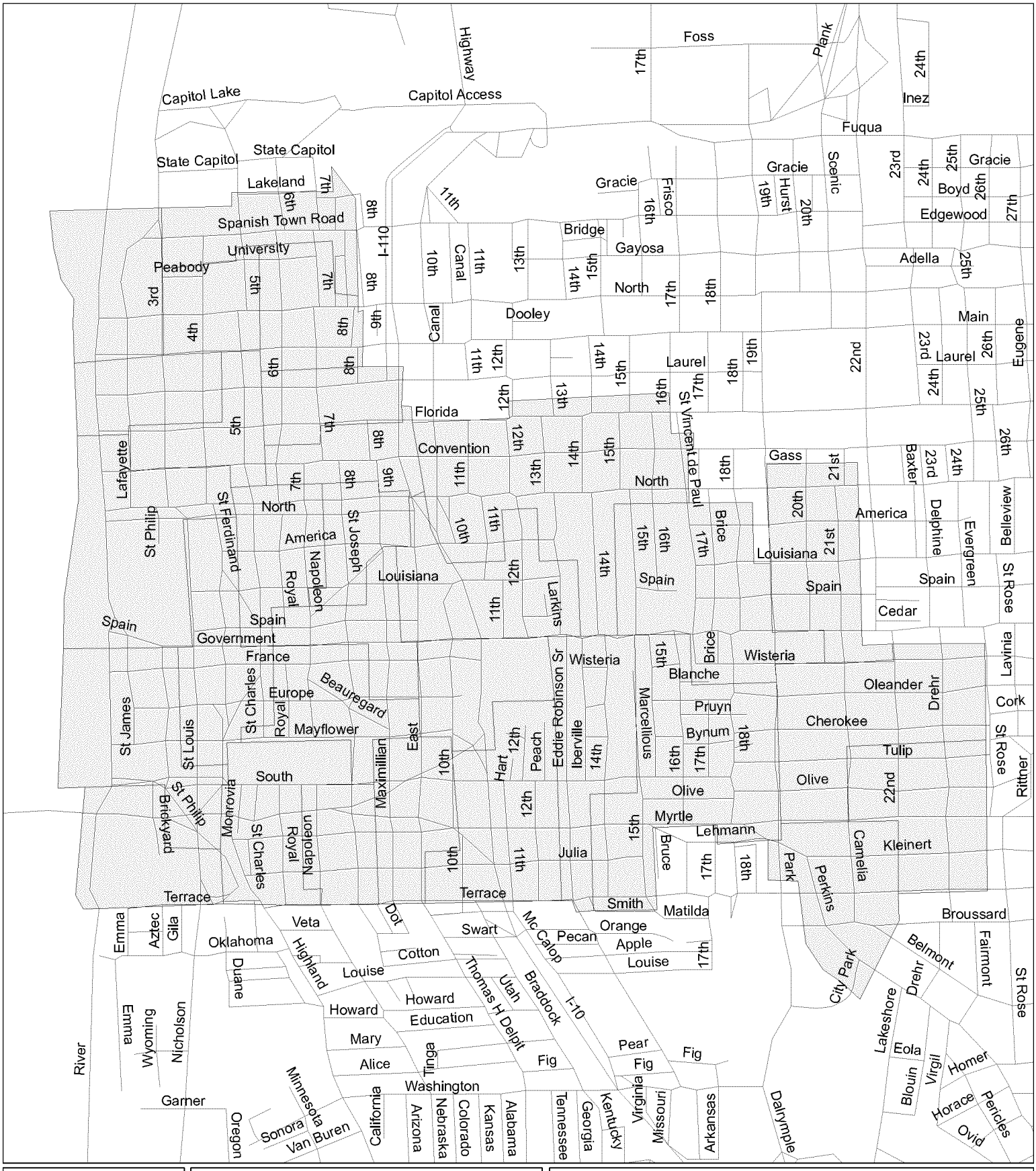

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 800 1,600 Feet

East Blvd. - Government St.

CGN-R-0002

Project Vicinity Map

PUBLIC WORKS

Figure 4-9

BATON ROUGE SSO Program

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4.2 Central Gravity System Capacity Improvements Projects

4.2.1 CGN-C-0001 (Capital Lake Drive – Gayosa Street)

Project Description

Purpose of the Project/Background Information

The purpose of this project is to re-route flow from PS 15 and PS 19 so that they directly pump through a common forcemain and manifold with the forcemain from to PS 60 to increase the capacity of the system. This October 2009 version of the PDP also adds the construction of those gravity segments originating near North Acadian Thruway and the intersection of Washington Avenue and West Belfair Drive, both terminating at PS 15, that were originally part of CGN-C-0002 (25th Street-North Acadian) to improve constructability and scheduling issues. Information about those segments has been included in this section.

Location

The locations of forcemains and gravity sewers in this project are shown in Figure 4-10. Forcemain segment PS 15FM to PS 15DS starts south of the Washington Ave and West Belfair Drive intersection. The forcemain travels west until reaching North Acadian Thruway. The forcemain then turns in a northerly direction until reaching the intersection of North Acadian Thruway West and Madison Avenue where the forcemain turns in a westerly direction, and continues until reaching Eiland Street. On Eiland Street, the PS 15 forcemain will be manifolded at PS 15DS into to the forcemain exiting PS 19.

Forcemain segment PS 19FM to PS 15DS starts on Eiland Street near the intersection of 4th Street. The forcemain travels west until reaching PS 15DS.

Forcemain segment PS 15DS to PS 60 travels west until reaching 3rd Street and then travels south to PS 60 along River Road.

Forcemain segment PS 60FM to 059-05885 travels south from PS 60 on River Road to manhole 059-05885, which is located on River Road between State Capitol Drive and North Street.

Gravity segment 060-07642 to 060-07619 starts northeast of the North Acadian Thruway West and Ontario Street intersection. The gravity segment travels until reaching 060-07619, near the North Acadian Thruway and Baron Street intersection.

Gravity segment 060-07619 to 060-07544 travels south until reaching 060-07544 located near the North Acadian Thruway and Fairfields Avenue intersection.

Gravity segment 060-07544 to 060-07486 travels south until reaching 060-07486 located near the North Acadian Thruway and Jefferson Avenue intersection. Gravity segment 060-07486 to 060-07970 travels east until reaching 060-07970, located west of 38th Street.

Gravity segment 060-07970 to PS 15 travels east until reaching PS 15, located below the Washington Avenue and Belfair Drive intersection.

Gravity segment 015-05119 to PS 15 starts northwest of the Washington Avenue and Belfair Drive intersection. The gravity segment travels southwest until reaching 015-05117. At 015-05117, the gravity segment travels south east until reaching 015-05116. The gravity segment

continues south until reaching 015-05115. At 015-05115, the gravity segment travels west until reaching PS 15.

Scope

The entire CGN-C-0001 (Capital Lake Drive – Gayosa Street) project consists of approximately 7,150 feet of 18-inch, 21-inch, and 24-inch gravity sewer and approximately 18,800 feet of 18-inch, 20-inch, and 30-inch forcemain, as outlined below in Table 4-2

TABLE 4-2
CGN-C-0001 (Capital Lake Drive – Gayosa Street)

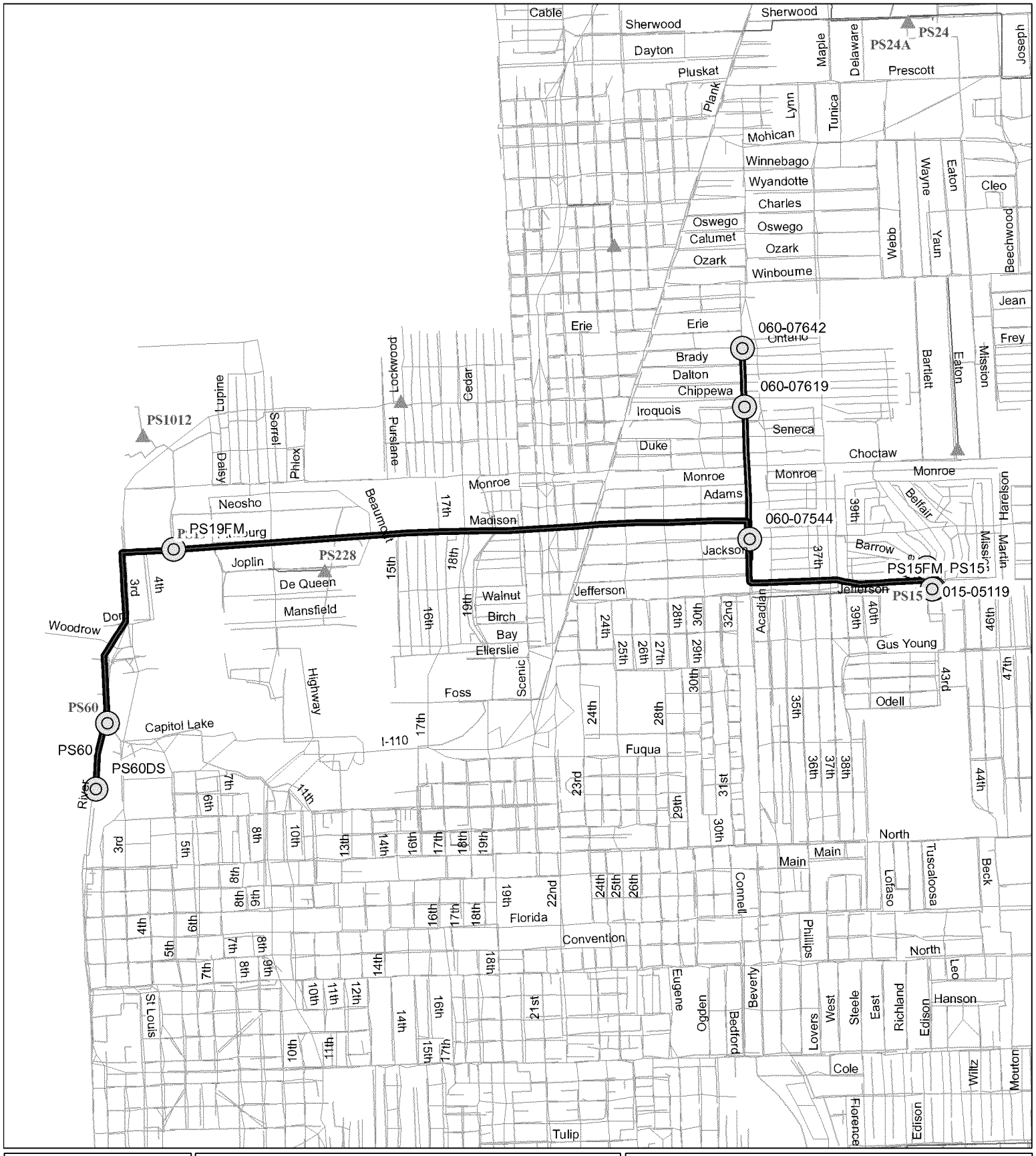
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
PS15FM	PS15DS	13,700	New	18
PS19FM	PS15DS	120	New	18
PS15DS	PS60	3,600	New	20
PS 60FM	059-05885	1,400	24	30
060-07642	060-07619	950	10 to 12	18
060-07619	060-07544	2,100	12, 15, 18	21
060-07544	PS 15	3,600	18, New	24
015-05119	PS 15	500	18	10

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $5,200,000.

Design was appropriated in 2007 and is ongoing.

Scheduled Construction Appropriation Year is 2010.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,000 4,000 Feet

Capital Lake Dr-Gayosa St. Area Capacity Improvements

CGN-C-0001

Project Vicinity Map

PUBLIC WORKS

Figure 4-10

BATON ROUGE SSO Program

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4.2.2 CGN-C-0002 (25th Street – North Acadian Thruway)

Project Description

Purpose of the Project/Background Information

The original purpose of the CGN-C-0002 (25th Street – North Acadian Thruway) project was to increase the capacity of the gravity trunk sewer upstream of PS 60, PS 15, and PS 59 to alleviate SSOs. This project now consists of designing approximately 9,500 linear feet of gravity sanitary sewer pipeline replacement with pipelines ranging in diameter from 15 to 24 inches, and installing approximately 3,000 lf of new gravity sanitary sewer pipeline with diameters of 21 to 24 inches.

For constructability and schedule alignment, those segments originating near North Acadian Thruway to PS 15 will be constructed as project CGN-C-0001 (Capital Lake Drive-Gayoso Street), while those segments originating north of I-110 near Memorial Stadium and east of I-110 between Spanish Town Road and Main Street will be constructed in the vicinity of project CGN-C-0003 (South Boulevard-St. Joseph Street). The location descriptions and maps of those projects include the scope that is being designed under this project.

Total Estimated Design Cost is $521,000.

Scheduled Design Appropriation Year is 2009.

4.2.3 CGN-C-0003 (South Boulevard – St. Joseph Street)

Project Description

Purpose of the Project/Background Information

The purpose of this project is to increase the capacity of the gravity sewers upstream PS 59 and PS 60. Nearly 3,000 feet of gravity sewer and the forcemain from PS 10 were deleted from this project due to hydraulic modeling updates. This October 2009 version of the PDP also adds construction of forcemain segments that were part of CGN-C-0002 (25th Street - North Acadian Thruway) to improve constructability and scheduling issues. This section includes information about those segments.

Location

The locations of the gravity sewers in this project are shown in Figure 4-11. Gravity segment 059-06088 to new MH #1 starts at the intersection of St Philip Street and South Blvd. The gravity segment travels west until reaching new MH #1.

Gravity segment 059-06445 to 059-06550 starts at the Camellia Avenue and Tulip Street intersection. The gravity segment travels west, turning south at 059-06575A. The gravity segment turns west at 059-06574, continuing until reaching 059-06550.

Gravity segment 059-06550 to 059-06045 starts west of Marcellious Lane and South Street. The gravity segment travels west along South Street, crossing the KCS railroad tracks and under I-110 ramps and overpass, and continues until reaching 059-06621. The line travels north, turning west at 059-06614. The line continues west until reaching 059-06045 located northwest of the St Joseph Street and South Blvd intersection.

Gravity segment 059-06140 to 059-06236 starts near the North Blvd and N 6th Street intersection. The gravity segment travels south until reaching 059-06139. The line travels east until reaching 059-06229. The gravity segment travels south until reaching 059-06230. The line travels east until reaching 059-06236, located near the America Street and St Joseph Street intersection.

Gravity segment 059-6236 to 059-06128 starts southwest of the America Street and St. Joseph Street intersection. The gravity segment travels south until reaching 059-06128, located at the Government Street and St. Joseph Street intersection.

Gravity segment 059-06128 to 059-06045 starts at the Government Street and St. Joseph Street intersection. The gravity segment travels south until reaching 059-06045, located near the South Boulevard and St. Joseph Street intersection.

Gravity segment 059-05878 to 059-05870 starts southwest of North St and River Road intersection. The gravity segment travels south until reaching 059-05872, located near the Florida Blvd and River Road intersection, where it then travels south until reaching 059-05870 near the River Road and North Boulevard intersection.

Gravity segment 059-05864 to 059-05858 starts north of the intersection of France Street and River Road. The gravity segment travels south until reaching 059-05858 located north of the intersection of South Boulevard and River Road.

Gravity segment 059-05858 to new MH #1starts north of the intersection of South Boulevard and River Road. The gravity segment travels south until reaching new MH #1 located near the intersection of South Boulevard and River Road.

Gravity segment 059-06287 to 059-06128 starts northwest of the Government Street and 11th Street intersection. The gravity segment travels west, running parallel to Government Street, until reaching 059-06128 near Government and St. Joseph Street.

Gravity segment 060-06987 to 060-06935 starts west of Main Street and N 12th Street intersection. The gravity segment travels southwest until reaching 060-06935 located east of the Main Street and North 11th Street intersection.

Gravity segment 060-07038 to 060-06953A starts north of North Street between Canal Street and N 11th Street. The gravity segment travels north until reaching 060-06953A near Spanish Town Road.

Gravity segment 060-7741 to 060-07736 starts west of Scenic Highway between Bay Street and Ellerslie Drive. The gravity segment travels southeast until reaching 060-07737 near Ellerslie Drive, where it then travels southwest along a drainage canal towards Foss Street to 060-07736. Gravity segment 060-07736 to 060-07735 travels southwest ending at 060-07735 near Foss Street.

Gravity segment 060-07735 to 060-07735I starts northeast of Foss Street and North 19th Street intersection. The gravity segment travels southwest along Foss Street until reaching 060-07735I.

Gravity segment 060-07735I to 060-07735J travels west, parallel to Foss Street, until reaching 060-07735J, located at the intersection of Foss Street and North 19th Street.

Gravity segment 060-07735J to 060-07734 travels southeast parallel to North 19th Street until reaching 060-07734, located northwest of the intersection of North 19th Street and North 17th Street.

Gravity segment 060-7734 to 060-07729 starts northwest of the intersection of North 19th Street and North 17th Street and travels over land in a southwesterly direction near the Memorial Stadium to 060-07739, which is west of the interchange of I-110 and North 19th Street.

Gravity segment 060-7729 to 060-07931 travels south from 060-07729, crosses I-110, and parallels Frisco Street to 060-07931, which is located near the intersection of North 16th Street and Spanish Town Road.

Scope

The entire CGN-C-0003 (South Boulevard – St. Joseph Street) project consists of approximately 10,200 feet of gravity sewer upstream of PS 59 and PS 60. Table 4-3 shows the scope of this project.

TABLE 4-3
CGN-C-0003 (South Boulevard – St. Joseph Street)

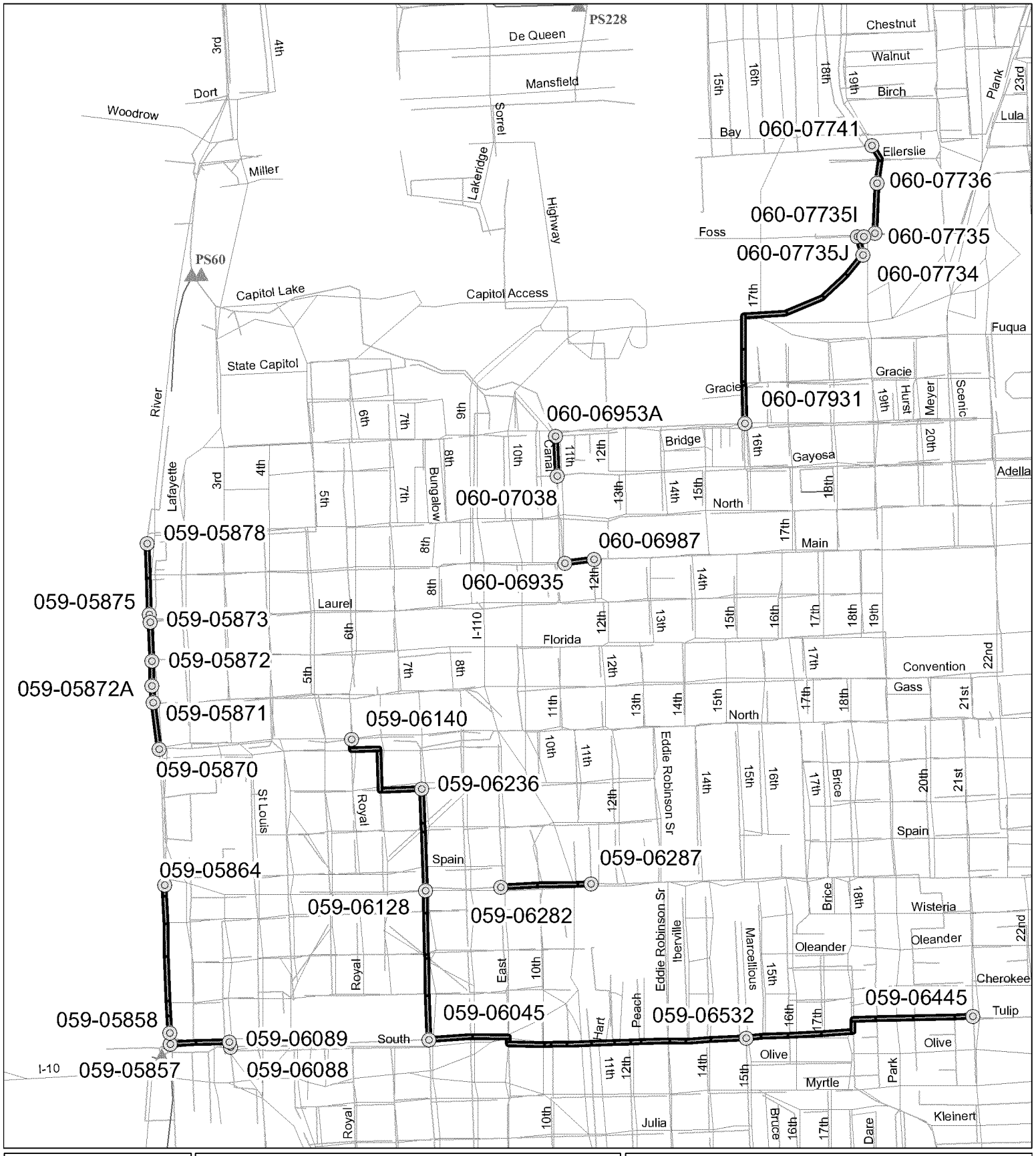
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
059-06088	New MH #1	600	24	36	
059-06445	059-06550	2,360	10 & 12	21	
059-06550	New MH #2	2,750	10 & 12	24	
New MH #2	059-06045	10	New	30	
059-06140	059-06236	1,100	10	15	
059-06236	059-06128	940	18	24	
059-06128	059-06045	1,300	15 & 21	27	
059-05878	059-05870	1,870	27, 30, & 36	36	
059-05864	059-05858	1,760	36	42	
059-05858	New MH #1	135	42	48	
059-06287	059-06128	1,530	10	15	
060-06987	060-06935	280	10	15	
060-07038	060-06953A	360	18	24	
060-07741	060-07736	400	18	24	
060-07736	060-07735	345	18	24	
060-07735	060-07735I	80	18	24	
060-07735I	060-07735J	70	18	24	
060-07735J	060-07734	170	18	24	
060-07734	060-07729	1,300	18	24	
060-07729	060-07931	1,000	18	24	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $11,500,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,050 2,100 Feet

PUBLIC WORKS

South Blvd - St. Joseph St. Sewer Area Upgrades

CGN-C-0003

Project Vicinity Map

Figure 4-11

BATON ROUGE SSO Program

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4.2.4 CGN-C-0004 (Downtown Area –PS 59 Improvements)

The CGN-C-0004 project has been combined with CGN-C-0005 (Downtown Area - PS 15, PS 19, PS 59, and PS 60 Improvements). The combined project has been designated CGN-C-0005 (Downtown Area PS 15, PS 19, and PS 59 Improvements) and is described in Section 4.2.5.

4.2.5 CGN-C-0005 (Downtown Area – PS 15, PS 19, and PS 59 Improvements)

Project Description

Purpose of the Project/Project Background

The CGN-C-0005 (Downtown Area – PS 15, PS 19, and PS 59 Improvements) project includes the upgrade of PS 15, PS 19, and PS 59 to alleviate SSOs at and near the PSs as well as in their respective upstream basins. The BTRSSO hydraulic model also predicts a PS capacity exceedance for the future peak wet weather flow. PS 15, PS 19, and the existing PS 60 will utilize the new forcemains outlined in project CGN-C-0001 (Capital Lake Drive – Gayosa Street). PS 59 was added to this project in 2009 because of the similarity of the project and proximity to the other pump stations included in this project.

Location

The locations of PS 15, PS 19, and PS 59 are given in Table 4-4 and in Figure 4-12.

Scope

The scope of this project is shown in Table 4-4.

TABLE 4-4
CGN-C-0005 (Downtown Area – PS 15, PS 19, and PS 59 Improvements)

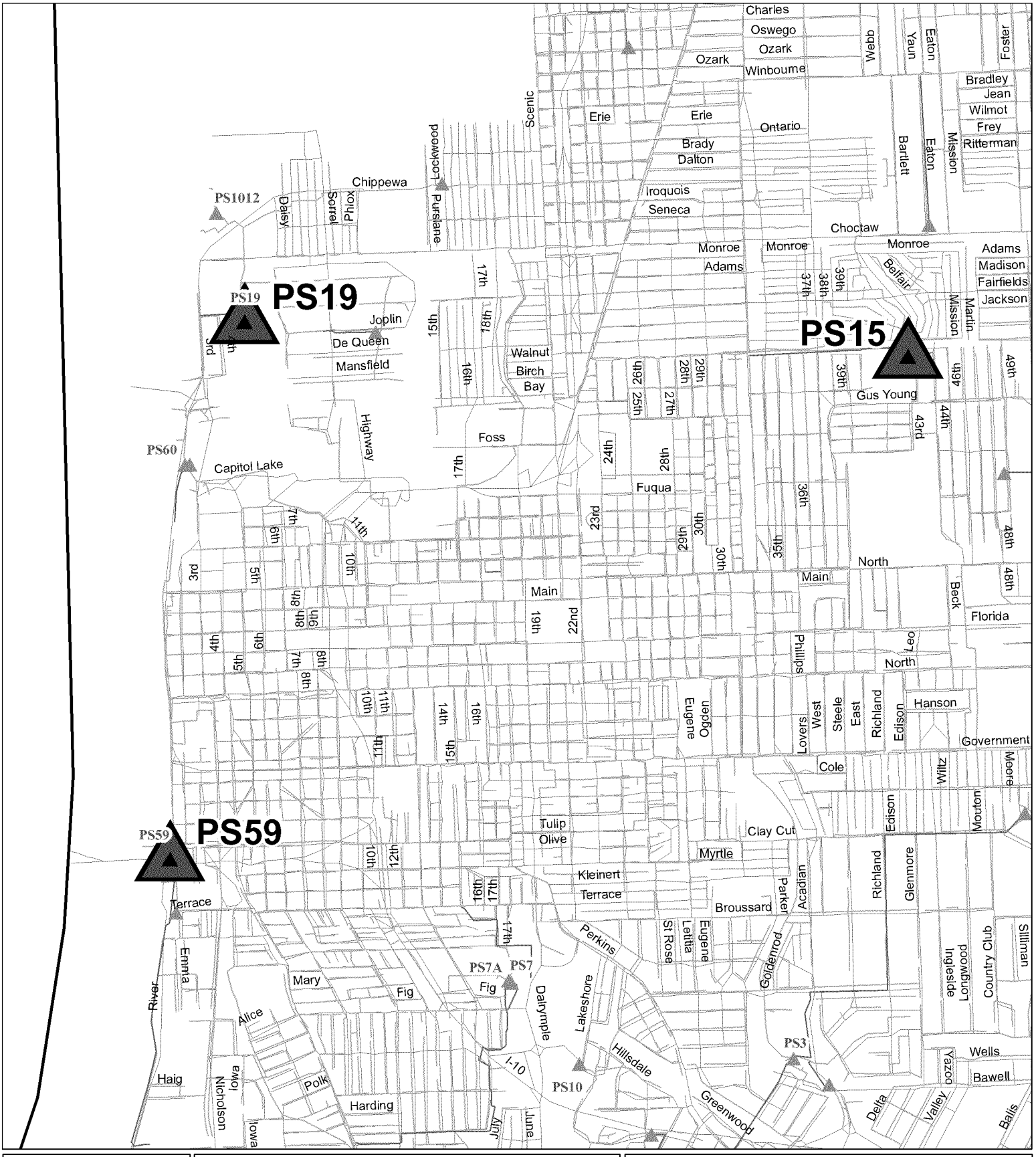
PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 15	Washington Street, near intersection of West Belfair Drive	694	4,014	799
PS 19	Eiland Drive, near intersection of 4th Street	417	1,493	193
PS 59	Near the intersection of River Road and South Blvd.	7,777	26,665	4,570

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $7,200,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,200 4,400 Feet

PUBLIC WORKS

Downtown Area PS 15, 19 and 59 Improvements

CGN-C-0005

Project Vicinity Map

Figure 4-12

BATON ROUGE SSO Program

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4.2.6 CGS-C-0001 (Roosevelt Street Area – PS 1 Improvements)

Project Description

This project was deleted due to the Central Consolidation, as PS 1 no longer required improvements due to consolidation.

4.2.7 CGS-C-0002 (University Lake Area – PS2, PS5, and PS6 Improvements)

Project Description

This project was deleted due to the Central Consolidation. PS 2, PS 5, and PS 6 will all be part of the Central Consolidated Pump Station project.

4.2.8 CGS-C-0003 (Acadian/Claycut Area – PS3 and PS4 Improvements)

Project Description

This project was deleted due to the Central Consolidation. PS 3 and PS 4 will be part of the Central Consolidated Pump Station project.

4.2.9 CGS-C-0004 (Highland Road – Buchanan Street)

Project Description

Purpose of the Project/Project Background

The purpose of this project is to upgrade gravity sewers upstream of PS 1, PS 2, and PS 5to alleviate SSOs in the Central Gravity South basin. The project also includes new forcemain from PS 6, PS 91, and the new Glasgow PS, which will all be constructed as part of the Central Consolidated Pump Stations project. The original project from the January 2008 PDP had several hundred feet of gravity sewer deleted from it with several hundred feet of forcemain added to it due to Central Consolidation, and was combined with the CGS-C-0005 (Stanford Avenue – Ferndale Avenue) project.

Location

The forcemains and gravity segments in this project are shown in Figure 4-13.

Gravity segment 001-00425A to 001-00425 starts on East Polk Street between Colorado Street and Nebraska Street. The gravity segment travels west until reaching 001-00425 located on East Polk Street between Nebraska Street and Highland Road.

Gravity segment 001-00425 to 001-00293 starts on East Polk Street between Nebraska Street and Highland Road. The gravity segment travels west on Polk Street, then southeasterly along Highland Road, ending at Johnson Street.

Gravity segment 002-01393 to 002-01390 starts northeast of the Stanford Avenue and West Lakeshore Drive intersection. The gravity segment travels northeast until reaching 002-01391. The line travels north until reaching 002-01390 near the Stanford Avenue and South Lakeshore Drive intersection.

Gravity segment 002-01390 to 002-01361 starts near the Stanford Avenue and South Lakeshore Drive intersection. The gravity segment travels northeast along Stanford Ave until reaching 002-01361, located southwest of the Stanford Avenue and East Lakeshore Drive intersection.

Gravity segment 005-03915 to 005-03914 starts southwest of the Eugene Street and Valley Street intersection. The gravity segment travels southeast until reaching 005-3914, located near the railroad crossing at Valley Street.

Gravity segment 005-03808 to JM001 starts at the Nairn Drive and Valley Street intersection. The gravity segment travels southwest until reaching 005-03802. The line travels southeast until reaching 005-03801. The gravity line travels southwest until reaching JM001 , located near Valley St and Pump Station 5.

Gravity segment JM001 to 005-03800 will travel in a southwesterly direction until reaching 005-03800 near Valley Street and PS 5.

Gravity segment 006-04250 to PS 6 starts southeast of the West Lakeshore Drive and Stanford Drive intersection. The gravity segment travels northwest until reaching PS 6.

The new forcemain segment PS 91 FM to DUM 001 will start from PS 91 located near the intersection of Concord Avenue and Lexington Drive, and travels south then southwest along Moss Side Lane until reaching the railroad right-of-way on the north side of the railroad. The forcemain will then travel in a northwesterly direction within the railroad right-of-way until it intersects (DUM 001) with a new forcemain near the intersection of Glasgow Avenue and Perkins Road.

The new forcemain segment Glasgow PS to DUM 0001 will start near the intersection of Tupelo Street and Glasgow Avenue, and follow Glasgow Avenue crossing Perkins Road and the railroad to intersection (DUM 001) with the forcemain segment from PS 91.

The new forcemain segment DUM 001 to JM001 will begin at the intersection point of segments PS 91 forcemain to DUM 001 and DUM DS to DUM 001. The forcemain will then travel in a northwesterly direction mostly within the railroad right-of-way until reaching JM 001.

Forcemain segment PS6 to PS6DS starts southeast of West Lakeshore Drive and Stanford Drive intersection. The forcemain travels northeast, parallel to Stanford Drive until reaching PS6DS near the South Lakeshore Drive and Stanford Drive intersection.

Scope

Project CGS-C-0004 (Highland Road – Buchanan Street) includes approximately 1,100 feet of 10-inch and 15-inch gravity sewer upstream of PS 1, approximately 2,000 feet of 21-inch and 24-inch gravity sewer upstream of PS 2, approximately 1,100 feet of 12-inch, 18-inch, and 42-inch gravity sewer upstream of PS 5, approximately 40 feet of 21-inch gravity sewer upstream of PS 6,approximately 1,400 feet of 12-inch forcemain downstream of PS 6, and approximately 7,000 feet of 10-inch, 12-inch, and 15-inch forcemain downstream of PS 91 and Glasgow PS, as shown in Table 4-5.

TABLE 4-5
CGS-C-0004 (Highland Road – Buchanan Street)

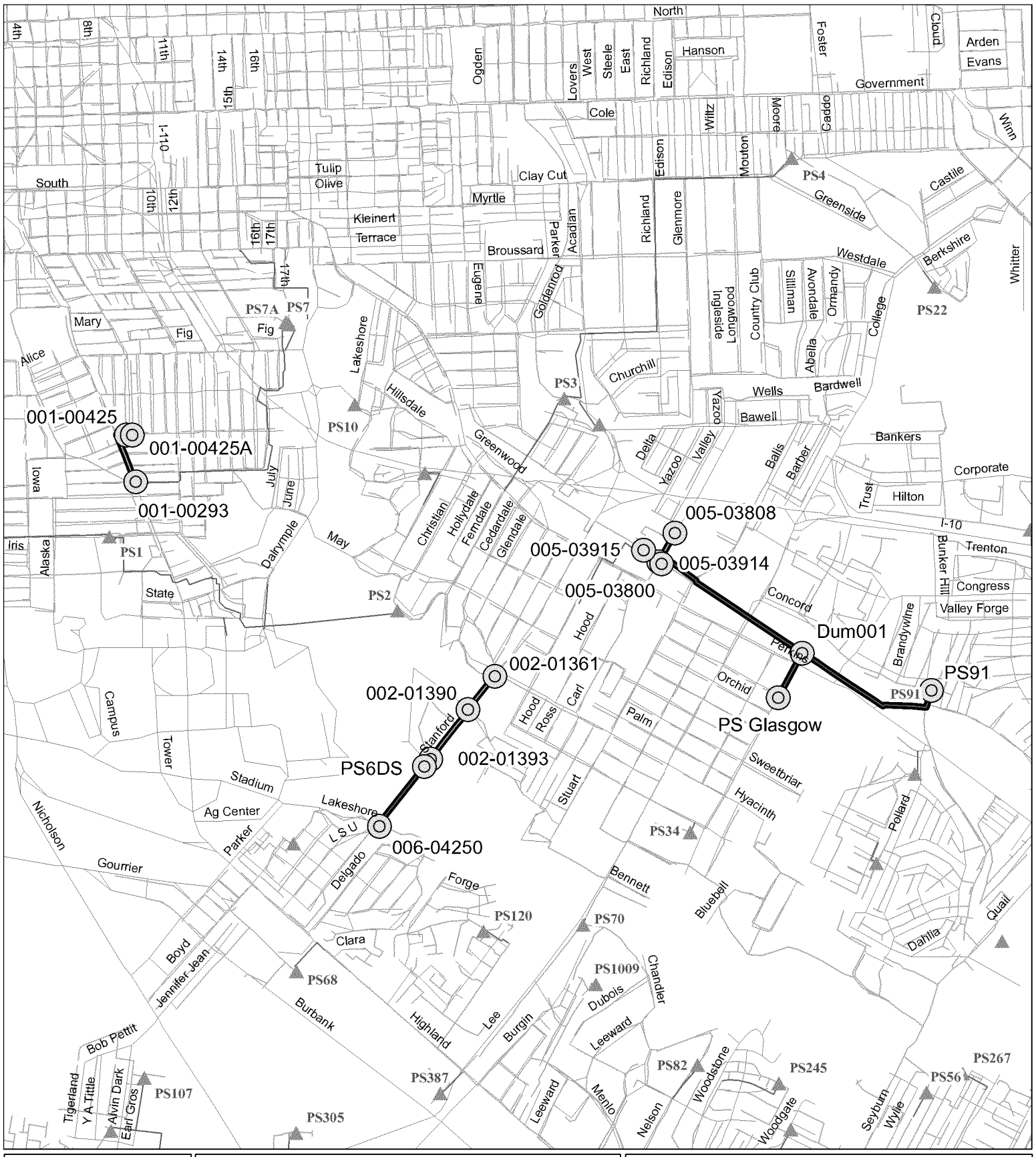
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
001-00425A	001-00425	15	8	10	
001-00425	001-00293	1,100	8 & 10	15	
002-01393	002-01390	1,200	15 & 18	21	
002-01390	002-01361	800	18	24	
005-03915	005-03914	400	8	12	
005-03808	JM 0001	560	10	18	
JM 001	005-03800	110	New	42	
PS 91 FM	DUM 001	2,750	New	12	Forcemain
Glasgow PS	DUM 001	960	New	10	Forcemain
DUM 001	JM 001	3,280	New	15	Forcemain
006-04250	PS6	40	10	21	
PS6	PS6DS	1,400	8	12	Forcemain

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $4,100,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,750 3,500 Feet

Highland Rd. - Buchanan St. Sewer Area Upgrades

CGS-C-0004

Project Vicinity Map

Figure 4-13

PUBLIC WORKS

BATON ROUGE SSO Program

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4.2.10 CGS-C-0005 (Stanford Avenue – Ferndale Avenue)

Project Description

This project was combined with project CGS-C-0004 (Highland Road – Buchanan Street) due to deletion of large gravity sewer because of the Central Consolidation projects.

4.2.11 CGS-C-0006 (Government Street – South Acadian Thruway)

Project Description

Purpose of the Project/Project Background

Project CGS-C-0006 includes the upgrade of gravity sewers upstream of PS 3 and PS 4 to alleviate SSOs in the vicinity. Sections of gravity sewer that were to be upgraded as part of this project in the January 2008 PDP have been deleted due to improved hydraulic modeling.

Location

The gravity segments in this project are shown in Figure 4-14.

Gravity segment 004-03201 to 004-03199 starts nears Westdale Drive and College Drive. The gravity line travels northeast until reaching 004-03199, located northwest of the South Ridge Drive and College Drive intersection. Gravity segment 004-03199 to 004-03269 starts northwest of the South Ridge Drive and College Drive intersection. The gravity line travels northwest until reaching 004-03269 near Greenside Lane. Gravity segment 004-03269 to 004-03279 starts northwest of the South Ridge Drive and College Drive intersection, near Greenside Lane. The gravity line travels northwest, parallel to South Foster Drive, until reaching 004-02951. 004-02951 is located near Claycut Road and Hebert Street.

Gravity segment 004-03027 to 004-03006 starts southeast of the Hanson Street and Wiltz Drive intersection. The gravity line travels south until reaching 004-03006, located northeast of the Government Street and Longwood Drive intersection. Gravity segment 004-03006 to 004-02951 starts on Government Street just northeast of its intersection with Longwood Drive. The line then goes south to Capitol Heights Avenue, then travels east on Capital Heights Avenue to Hebert Street and follows Hebert Street south to manhole 004-02951. Gravity segment 004-02951 to PS 4 then follows Hebert Street south to Claycut Road and turns west at Claycut Road Avenue to PS 4, which is located just west of the intersection.

Gravity segment 003-02286 to 003-02203 starts near Florida Blvd and Kernan Avenue intersection. The gravity line travels south until reaching 003-02203, located near the Government Street and Beverly Drive intersection.

Gravity segment 003-02203 to 003-02084 starts near Government Street and Beverly Drive intersection. The gravity line travels west until reaching 003-02084 located below Government Street between the Hearthstone Drive and Beverly Drive intersections.

Gravity segment 003-02084 to 003-02039 starts below Government Street between the Hearthstone Drive and Beverly Drive intersections. The gravity line travels south until reaching 003-02039, located east of the Government Street and Hearthstone Drive intersection.

Gravity segment 003-02039 to 003-02035 starts east of the Government Street and Hearthstone Drive intersection. The gravity line travels southeast, parallel to Carol Marie

Drive, until reaching 003-02035, located west of the Marie Drive and Carol Marie Drive intersection.

Gravity segment 003-02203B to 003-02203 starts near the Westmoreland Drive and Government Street intersection. The gravity line travels until west reaching 003-02033, located near the Beverly Drive and Government Street intersection.

Gravity segment 003-02035 to 003-01927 starts west of the Marie Drive and Carol Marie Drive intersection. The gravity line travels southeast until reaching 003-01927, located on Claycut Road near its intersection with Marwede Avenue.

Gravity segment 003-01929 to 003-01927 starts north of the Myrtle Avenue and Marwede Avenue intersection. The gravity line travels north until reaching 003-01928. The gravity line travels east until reaching 003-01927, located on Claycut Road near its intersection with Marwede Avenue.

Scope

Project CGS-C-0006 includes approximately 5,800 feet of 21-inch, 24-inch, and 27-inch gravity sewer construction upstream of PS 4 and approximately 5,200 feet of 12-inch, 15-inch, 18-inch, 24-inch, and 27-inch gravity sewer construction upstream of PS 3, as shown in Table 4-6.

TABLE 4-6
CGS-C-0006 (Government Street – South Acadian Thruway)

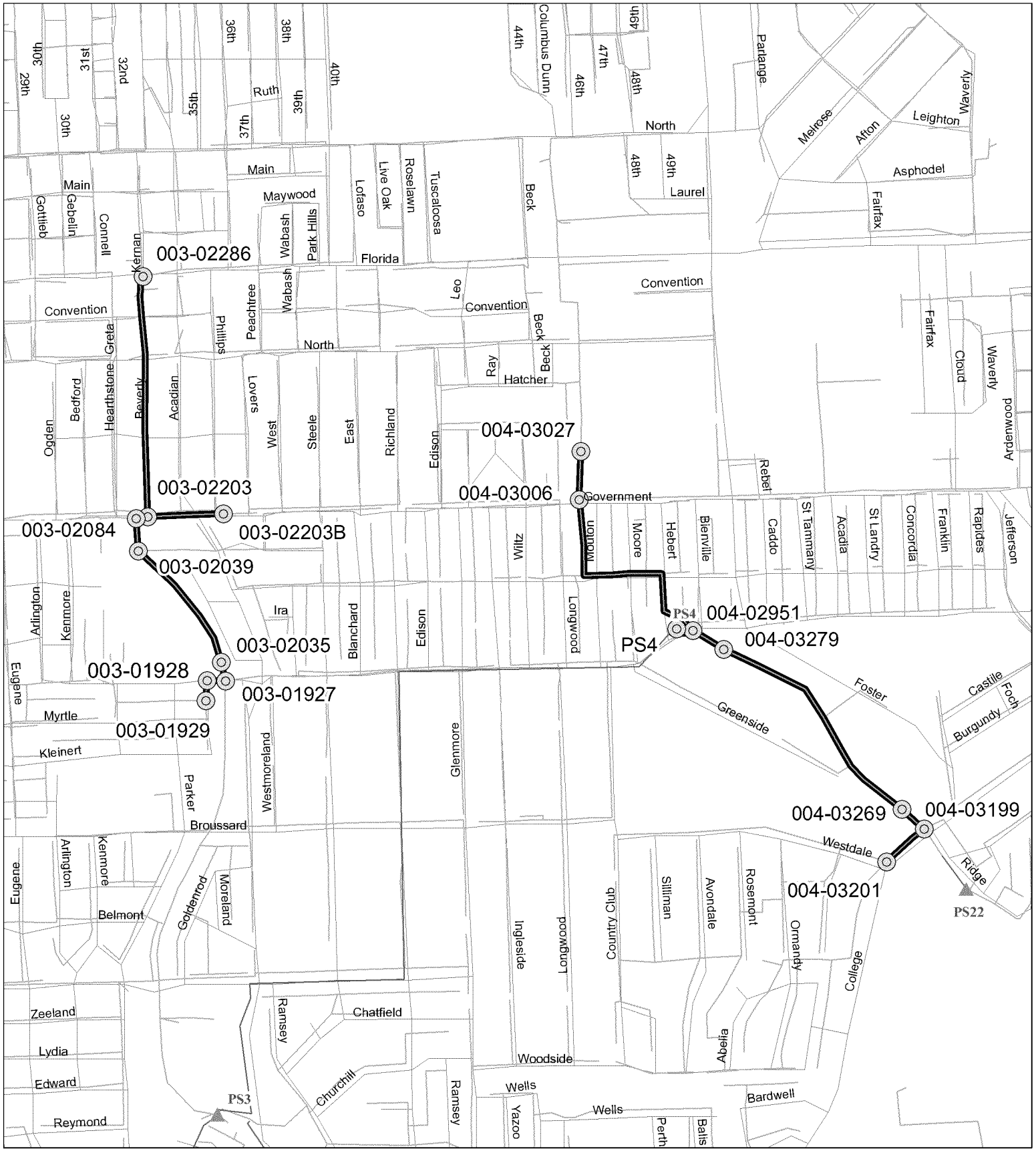
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
004-03201	004-03199	470	18	21	
004-03199	004-03269	290	15 & 18	21	
004-03269	004-02951	2,700	15 & 18	27	
004-03027	004-03006	500	12	21	
004-03006	004-02951	2,100	15	24	
004-02951	PS 4	170	15	27	
003-02286	003-02203	2,300	8 & 10	15	
003-02203	003-02084	230	12	18	
003-02084	003-02039	400	18	24	
003-02039	003-02035	1,200	18	27	
003-02203B	003-02203	680	8	12	
003-02035	003-01927	250	18	27	
003-01929	003-01927	180	10	12	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $4,300,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2011.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,050 2,100 Feet

Government St. - South Acadian Thrwy.

CGS-C-0006

Project Vicinity Map

PUBLIC WORKS

Figure 4-14

BATON ROUGE SSO Program

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4.2.12 CGS-C-0007 (Central Storage/Equalization)

Project Description

This project has been deleted from the PDP due to the Central Consolidation. The storage at the Central WWTP is no longer needed, although the storage volume required at the South WWTP has been increased due to the consolidation of the Central WWTP with the South WWTP operations.

4.2.13 CC-WWTP-PS (PS 42)

Project Description

Purpose of the Project/Project Background

The CC-WWTP-PS (PS 42) Project includes the design and construction of one 48 MGD (33,300 gal/min) pump station facility (PS 42), vapor phase biotower-type odor control, and associated yard piping and valves to pump the flow from PS 1, PS 59, and the LSU pump station to the South WWTP. The Central WWTP pump station will be located near the current site of the Central WWTP, and will pump through the new forcemain described in the project entitled *CC-WWTP-PS (PS 42 FM)*. Once this project is completed, the Central WWTP will be decommissioned and demolished.

Location

The Central Pump Station Project is located adjacent to the existing Central WWTP property at 2443 River Road, south of the downtown Baton Rouge area. The proposed location of the pump station is on existing property owned by the C-P and is shown in Figure 4-15.

Scope

The scope of this project is shown in Table 4-7.

TABLE 4-7
Central Consolidation – New Central WWTP PS

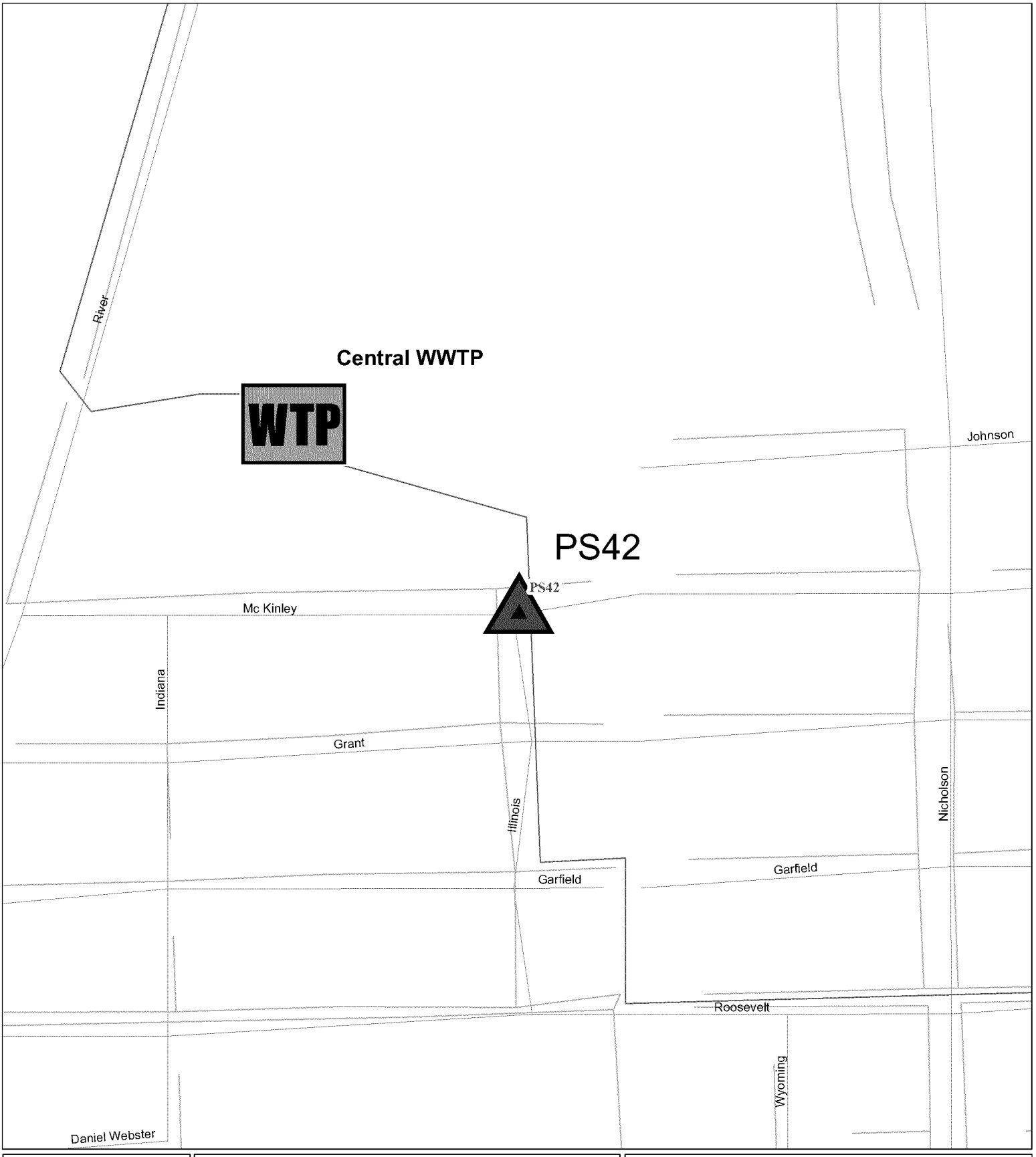
PS NO.	LOCATION	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 42	2443 River Bend	New	33,300	6,144

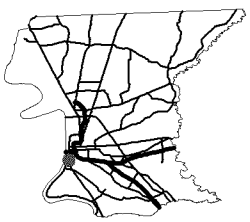
Note: The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $6,900,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- WTP Wastewater Treatment Plant

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 160 320 Feet

PUBLIC WORKS

PS 42
CC-WWTP-PS
Project Vicinity Map

Figure 4-15

BATON ROUGE SSO Program

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4.2.14 CC-EAST-PS (Central Consolidated PSs)

Project Description

Purpose of the Project/Project Background

The CC-EAST-PS (Central Consolidated Pump Stations) Project involves the design and construction of nine pump stations (PS 2, PS 3, PS 4, PS 5, PS 6, PS 7, PS 10, PS 91, and the Glasgow Pump Station). Three pump stations (PS 2, PS 7, and PS 10) are to be interconnected in a network that will discharge into PS 5. PS 5 will pump directly to the South WWTP via a new large forcemain following completion of construction of the South WWTP – Phase I project, which is currently in the design phase. PS 3, PS 91, and the Glasgow Pump Station will each pump independently to PS 5 through two separate new forcemains. PS 4 pumps to PS 3 through an existing forcemain. PS 6 will pump through a new 12-inch forcemain that will replace the existing forcemain from PS 6 along Stanford Avenue northeast to node PS 6DS (MH 002-01393), located near the intersection of South Lakeshore Drive and Stanford Avenue.

The forcemains from PS 2, PS 3, PS 5, PS 7, and PS 10 will be constructed as part of the CC-EAST-PS (Central Consolidated Forcemain) project. The forcemains from PS 6, PS 91, and the Glasgow Pump Station will be constructed as part of the Highland Road – Buchanan Street Improvements Project (DPW Project No. 08-GS-ST-0021).

Location

The CC-EAST-PS (Consolidated Pump Stations) Project is primarily located in the Central Baton Rouge area. Detailed location descriptions of the required capacity improvements are presented in Table 4-10and are shown in Figure 4-16.

Scope

The scope of this project is shown in Table 4-8.

TABLE 4-8
Central Consolidated PS

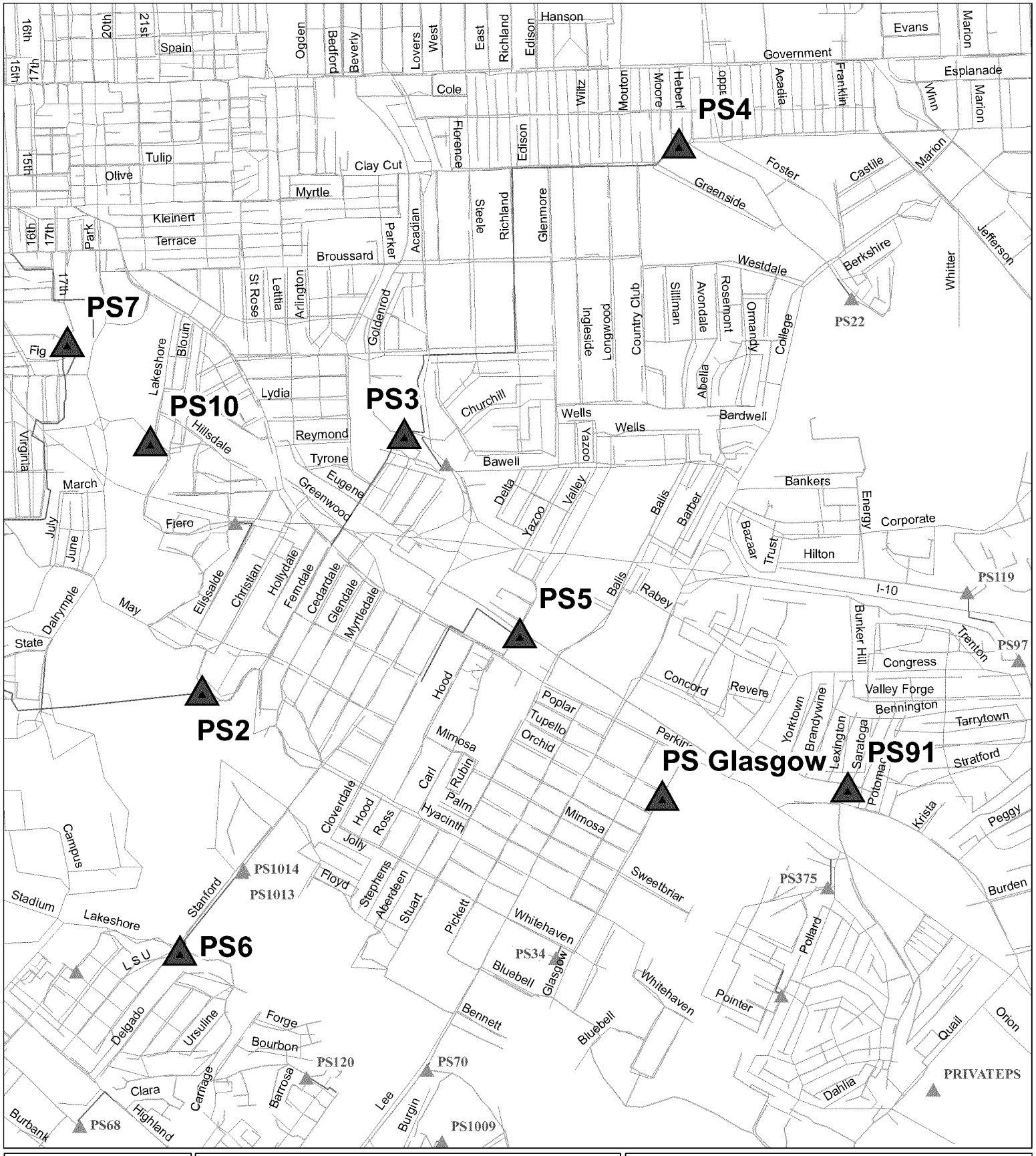
PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 2	Claycut Bayou	3,819	6,458	1,481
PS 3	Acadian Thruway, near Bawell Street	3,958	16,436	2,094
PS 4	Claycut Road near the intersection at Bienville Street	3,819	8,055	1,042
PS 5	Valley Street and Perkins Road	903	29,720	5,589
PS 6	Stanford Ave and Lakeshore Drive	347	1,805	351.322926
PS 7	Dalrymple Drive, near the intersection at E Washington Street	720	1,180	140
PS10	East Lakeshore Drive, near southeastern corner of City Park	500	1,479	92
PS 91	Concord Drive near the intersection with Lexington Drive	500	1,517	294
Glasgow Pump Station	Glasgow Avenue near the intersection with Tupelo Drive	New	1,800	N/A

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $17,100,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,800 3,600 Feet

Central Consolidated Pump Stations

CC-EAST-PS

Project Vicinity Map

PUBLIC WORKS

Figure 4-16

BATON ROUGE SSO Program

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4.2.15 CC–WWTP-FM (PS 42 FM)

Project Description

Purpose of the Project/Project Background

The CC–WWTP-FM (PS 42 FM) project includes the design and construction of the forcemain to convey flow from PS 42 FM to the South WWTP. This project also includes segments of two other separate forcemains that are part of DPWSSO-0035 (Highland Road – Burbank Drive) and DPWSSO-0057 (PS58A Overflow Pump Station).

The project purpose is to redirect flows within the Central Basin to the South WWTP and accommodate upgrades within the South Basin following completion of construction of the South WWTP – Phase I project, which is currently in the design phase.

Location

The location of this project is shown in Figure 4-17. The forcemain will start out as a 42-inch pipe from the new PS 42 and will roughly follow River Road South to an un-named road on the LSU campus, where it will turn roughly east. The forcemain will continue roughly along this road and then over land to Nicholson Drive, where it will then follow Nicholson Drive roughly southeast. As it follows Nicholson Drive, the 42-inch forcemain will intersect with the 12-inch forcemain from PS 505A, which is an overflow pump station for BPS 505, near Dean Lee Drive. East of Dean Lee Drive, the forcemain will follow Ben Hur Road north to Burbank Road, where it will follow Burbank Road east. At Burbank Road and Lee Drive, the forcemain will increase in size to 54-inch due to the forcemain from the CC-EAST-FM (Central Consolidated Forcemain) project joining this forcemain at this point. The 54-inch forcemain will follow Ben Hur Road north to Burbank Road, where it will follow Burbank Drive roughly east to Gardere Lane, where it will follow the right-of-way that parallels Gardere Lane roughly south to the South WWTP. At Burbank Drive, the 64-inch forcemain from PS 58A and the 60-inch forcemain from the Highland Road. Burbank Drive project will also be constructed to the South WWTP in the right-of-way parallel to Staring Lane extension.

The new forcemain from BPS 505A (overflow pump station) is a 12-inch line that generally follows Dean Lee Drive to Nicholson Drive, where it intersects with the 42-inch Central WWTP forcemain.

Scope

The scope of this project is shown in Table 4-9.

TABLE 4-9
Central Consolidation – New Central WWTP FM

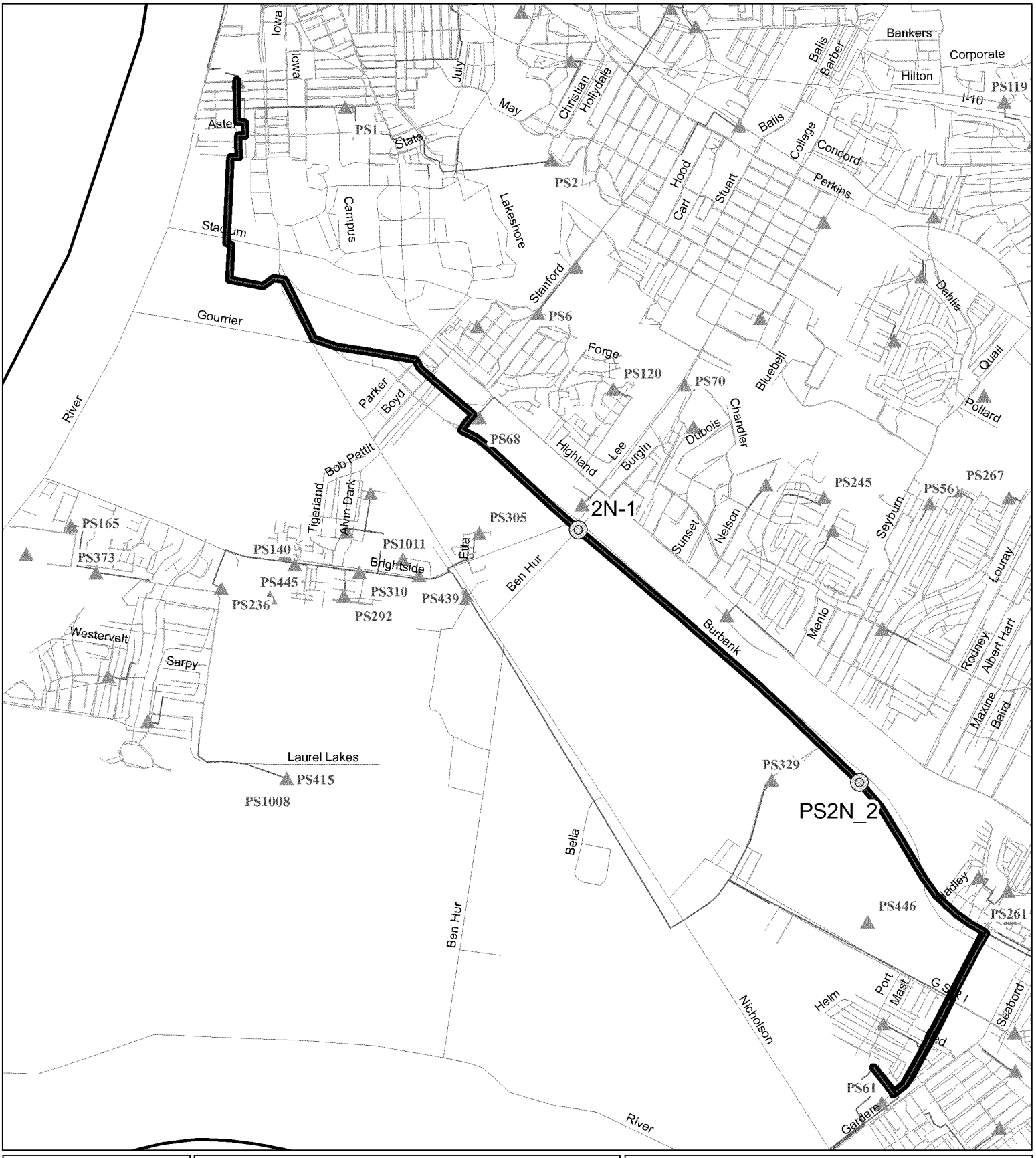
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS 42	PSCWWTP-4	22,800	New	42	Includes 600 feet of tunneling
PS505A	PSCWWTP-4	100	New	12	
PSCWWTP-4	2N-1	4,160	New	42	
2N-1	SWWTP	21,000	New	54	
PS58_n8	SWWTP	4,700	New	64	
SS381	SWWTP	4,700	New	60	

Note: The pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $19,000,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

N

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

0 2,950 5,900 Feet

PUBLIC WORKS

PS 42 Forcemain

CC-WWTP-FM

Project Vicinity Map

Figure 4-17

BATON ROUGE SSO Program

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4.2.16 CC-EAST-FM (Central Consolidated FM)

Project Description

Purpose of the Project/Project Background

The CC-EAST-FM (Central Consolidated Forcemain) project will work in conjunction with the CC-EAST-PS (Central Consolidated Pump Stations) Project which includes design and construction of nine new pump stations (PS 2, PS 3, PS 4, PS 5, PS 6, PS 7, PS 10, PS 91, and Glasgow). This project includes the design and construction of a manifolded forcemain to convey flow to PS 5 from PS 2, PS 7, and PS 10. The project also includes a new individual forcemain separate from the aforementioned manifolded forcemain to convey flow from PS 3 directly to PS 5. In addition, a forcemain will be constructed to convey flow from PS 5 to a new manifolded forcemain that will be constructed as part of the CC-WWTP-FM (PS 42 FM) project.

The project purpose is to redirect flows within the Central Basin to the South WWTP following completion of construction of the South WWTP Wet Weather Improvements Project, Phase I, which is currently in the design phase.

Location

Figure 4-18 shows the location of the gravity sewer and forcemain in this project.

Gravity segment 010-04925 to PS 10 begins at manhole 010-04925, which is located near the intersection of Hillsdale Drive and Cottonwood Avenue, and runs over-land to PS 10, which is located on East Lakeshore Drive, near Dalrymple Drive.

The main forcemain will start out as an 8-inch pipe at PS 7, located near the intersection of Dalrymple Drive and Washington Street, and run southeast to PS 10, near Dalrymple Drive and East Lakeshore Drive. At PS 10, it will increase to a 12-inch pipe and continue east to Perkins Road and follow Perkins Road southeast, where it intersect with the new forcemain from PS 2 and become a 24-inch pipe that will follow Perkins Road southeast until it intersects with the new forcemain from PS 3 and continue southeast along Perkins Road as a 42-inch pipe to PS 5, located near the intersection of Perkins Road and Valley Street. At PS 5, the 42-inch forcemain will continue on Perkins Road to Lee Drive, where it will intersect with the Central WWTP forcemain at Ben Hur Extension.

The new forcemain from PS 2 to its intersection with the main "Eastside" forcemain is a 16-inch pipe that follows Lakeshore Drive east to Ferndale Avenue and Ferndale Avenue north to Perkins Road. The new forcemain from PS 3 to its intersection with the main "Eastside" forcemain is a 36-inch pipe that follows Orpine Avenue south to Perkins Road.

Scope

The scope of this project is shown in Table 4-10.

TABLE 4-10
Central Consolidation East FM New Pipes-Central to South

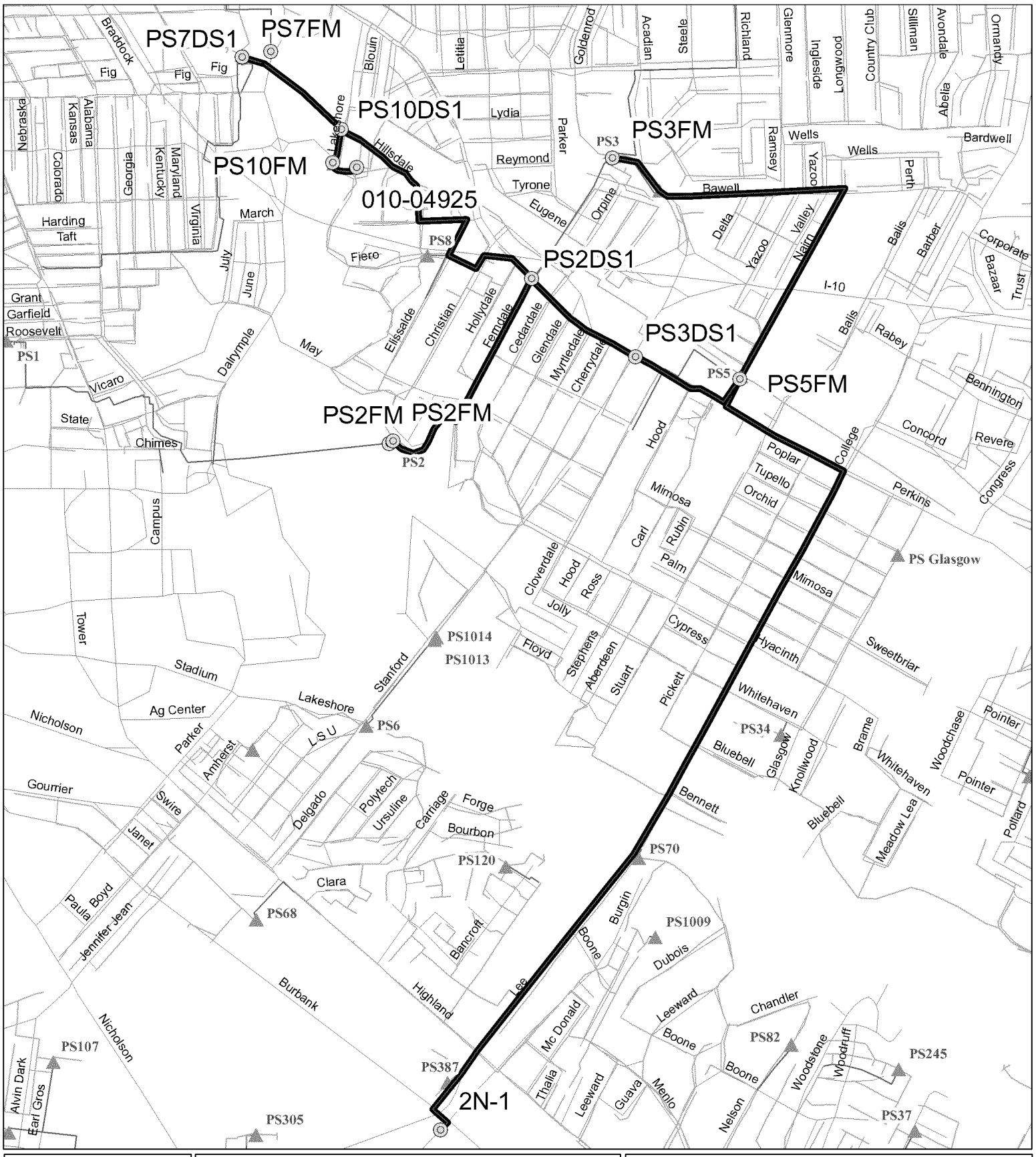
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
010-04925	PS 10	520	10	18	Gravity sewer
PS 7	PS10DS	1,900	New	8	
PS 10DS	PS2DS	3,500	New	12	Includes 500 feet of tunneling under I-10
PS 2	PS2DS	3,400	New	16	
PS 2DS	PS3DS	1,800	New	24	
PS 3	PS3DS	3,500	New	36	Includes 500 feet of tunneling under I-10
PS 3DS	PS5US	1,800	New	42	
PS 5US	2N-1	13,000	New	42	

Note: The pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $7,400,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.



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SECTION 5

North Basin Projects

Section 5 presents summaries of the North Gravity System Comprehensive Rehabilitation Projects, the North Gravity System Capacity Improvements, the North Forcemain System Rehabilitations Projects, and the North Forcemain Capacity Improvement Projects. These projects are shown on Figures 5-1 and 5-2.

The project summaries presented herein represent the information available during this annual update period. The PDP will be revisited on an annual basis and revised as necessary based on results of additional hydraulic wastewater modeling, immediate needs, DPW and public input, and other factors.

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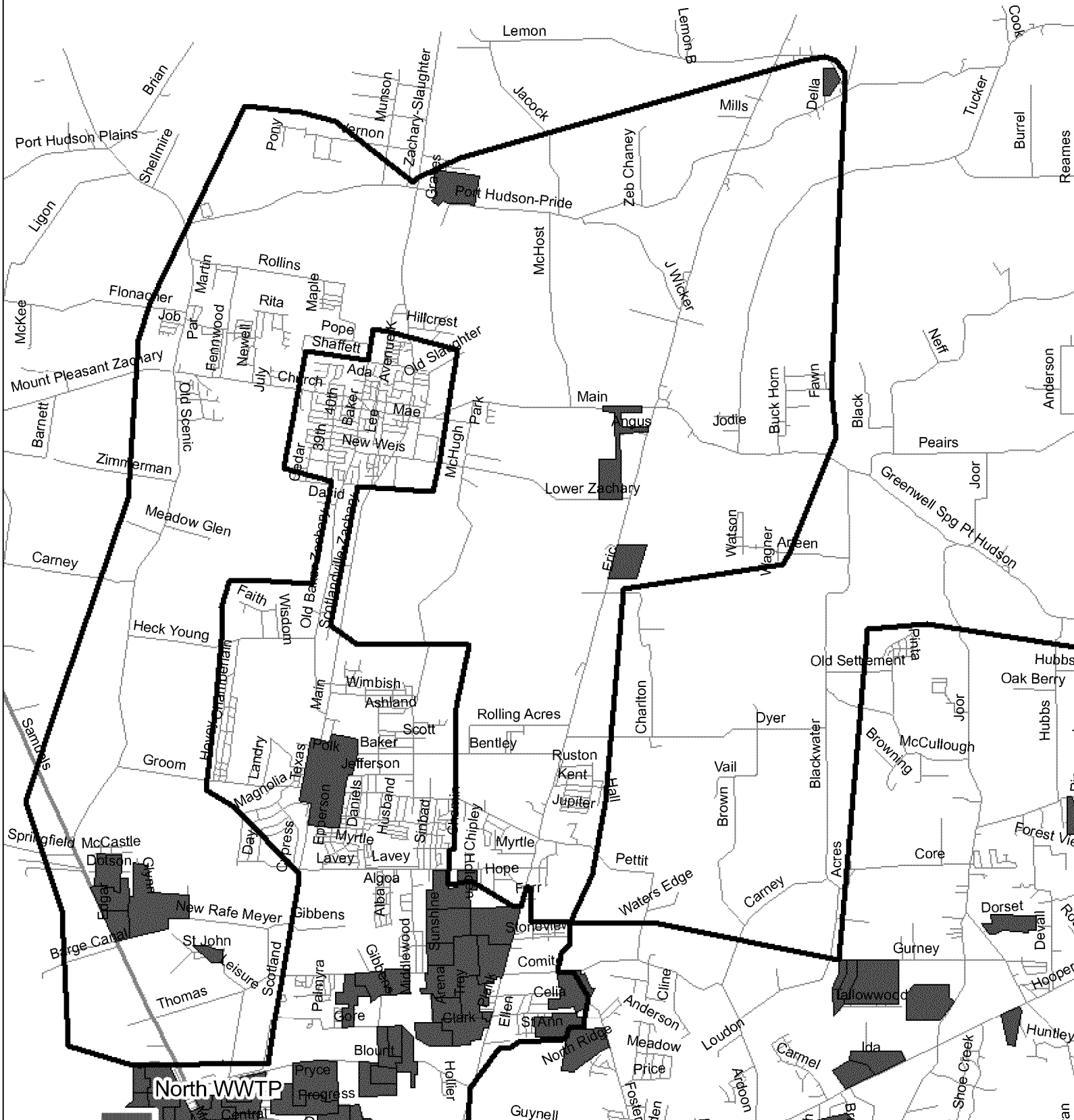
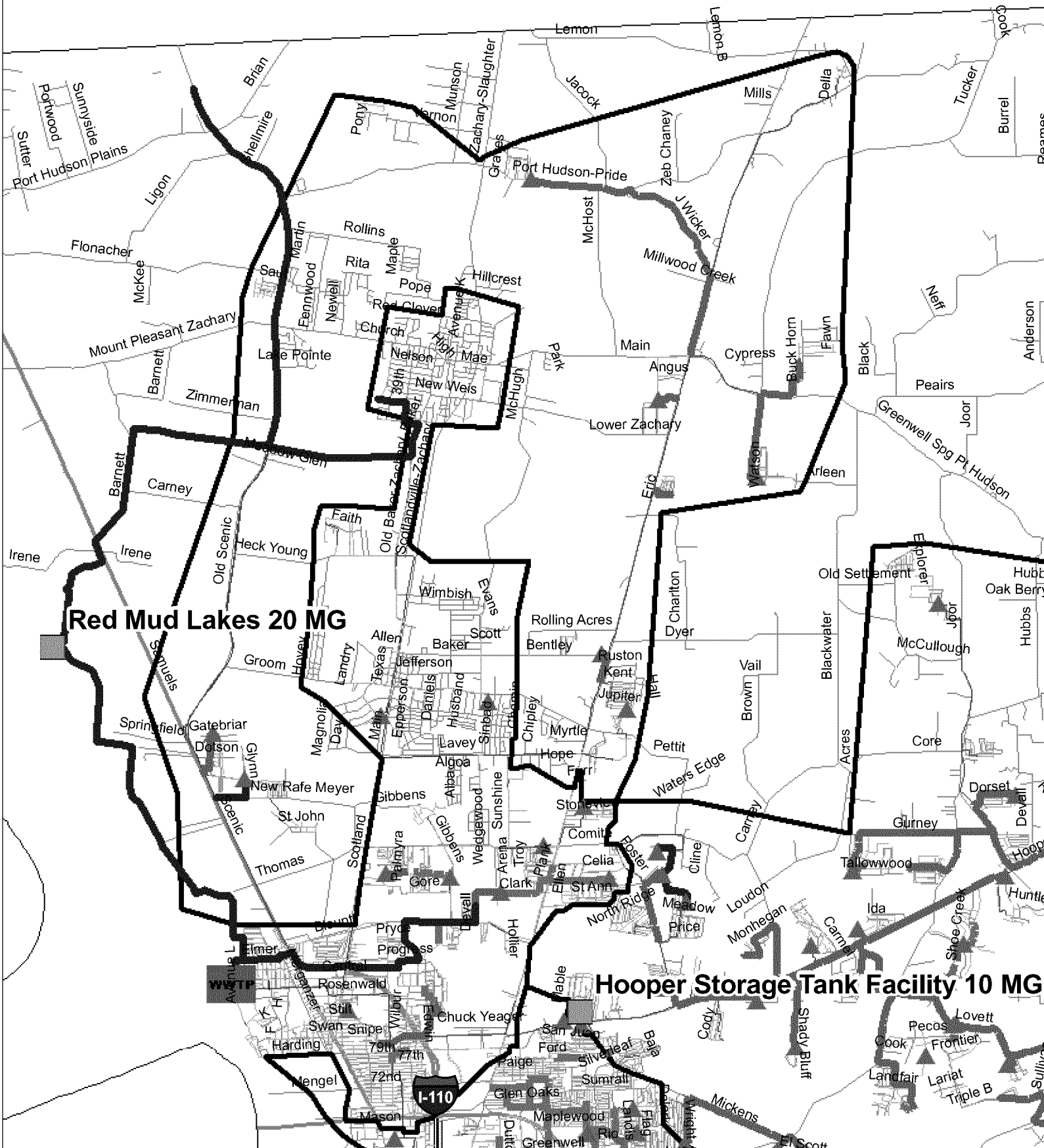
North Basin Rehabilitation Projects



North Basin Capacity Improvement Project



5.1 North Gravity System Comprehensive Rehabilitation Projects

5.1.1 NGS-R-0001 and NGS-R-0002

Project Description

The comprehensive sewer rehabilitation projects consist of improvements to various components of the sewer collection system to reduce the amount of rainwater and groundwater that leak into the system.

Purpose

The purpose of the comprehensive sewer rehabilitation projects is to correct defects in the system such as offset pipe joints, collapsed pipe sections, leaking manholes, and direct inflow sources. The water that enters the system through the defects is a major contributor to SSOs. Comprehensive rehabilitation of the collection system will alleviate SSOs.

Location

There are two projects located within the North Gravity Basin. The attached maps show the project locations in Figures 5-3 to 5-4 in Figures 5-3 to 5-4.

Scope of Project

The first phase of comprehensive rehabilitation projects will be the physical inspection of the pipes and manholes including CCTV inspection. Smoke testing may also included in the physical inspection phase. The data collected by the physical inspection contractor will be analyzed. Based on that analysis, a listing of recommended repairs with associated construction costs will be generated. An engineering firm will then complete detailed design and preparation of construction documents for project bidding. The construction of rehabilitation projects will typically include the following components:

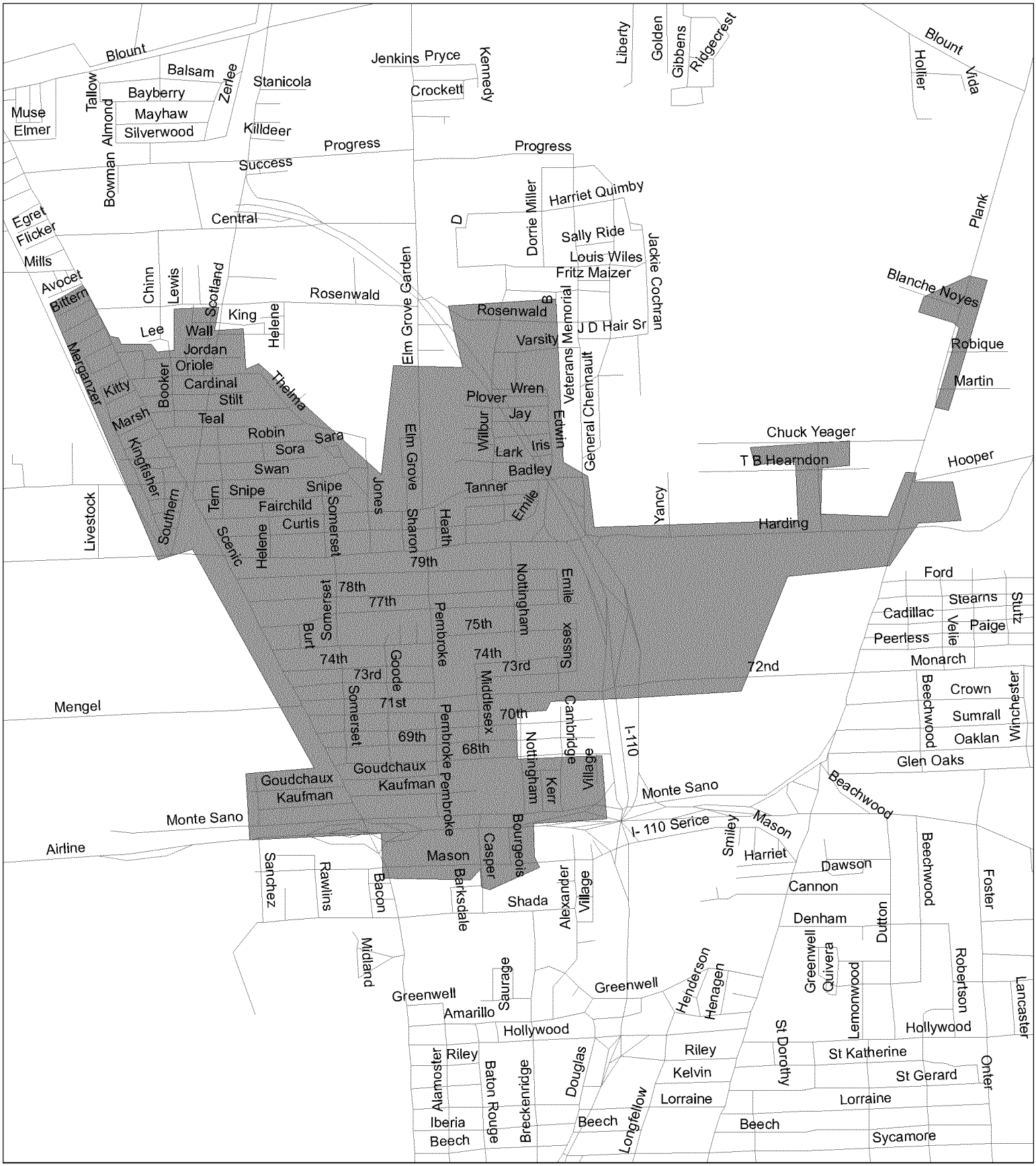
- Replacement of pipes
- Point repair of pipes
- Rehabilitation of pipes by cured in place pipe liners
- Rehabilitation or replacement of manholes
- Repair of sewer laterals to the property line

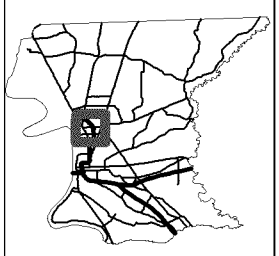
Cost

The estimated construction costs for each project are presented in Table 5-1. The cost for NGS-R-0001 is based on a preliminary estimate of the amounts of each component of the system that will require repair or replacement. During the physical inspection phase, the actual condition of the components will be assessed and appropriate methods recommended. At that time, the cost estimate for the NGS-R-0001 project will be revised. The NGS-R-0002 project has bid for construction, so its construction cost in Table 5-1 is the bid amount.

TABLE 5-1
Estimated Construction Costs for the North Gravity System Comprehensive Rehabilitation Projects

Project Description	Construction Cost	Scheduled Design Appropriation Year	Scheduled Construction Appropriation Year
NGS-R-0001 –Elm Grove Garden Road-Harding Boulevard.	$8,600,000	2009	2009
NGS-R-0002 –Scotland Avenue-Progress Road	$9,487,000	2009	2009





East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,300 2,600 Feet

Elm Grove Rd. - Harding Blvd.

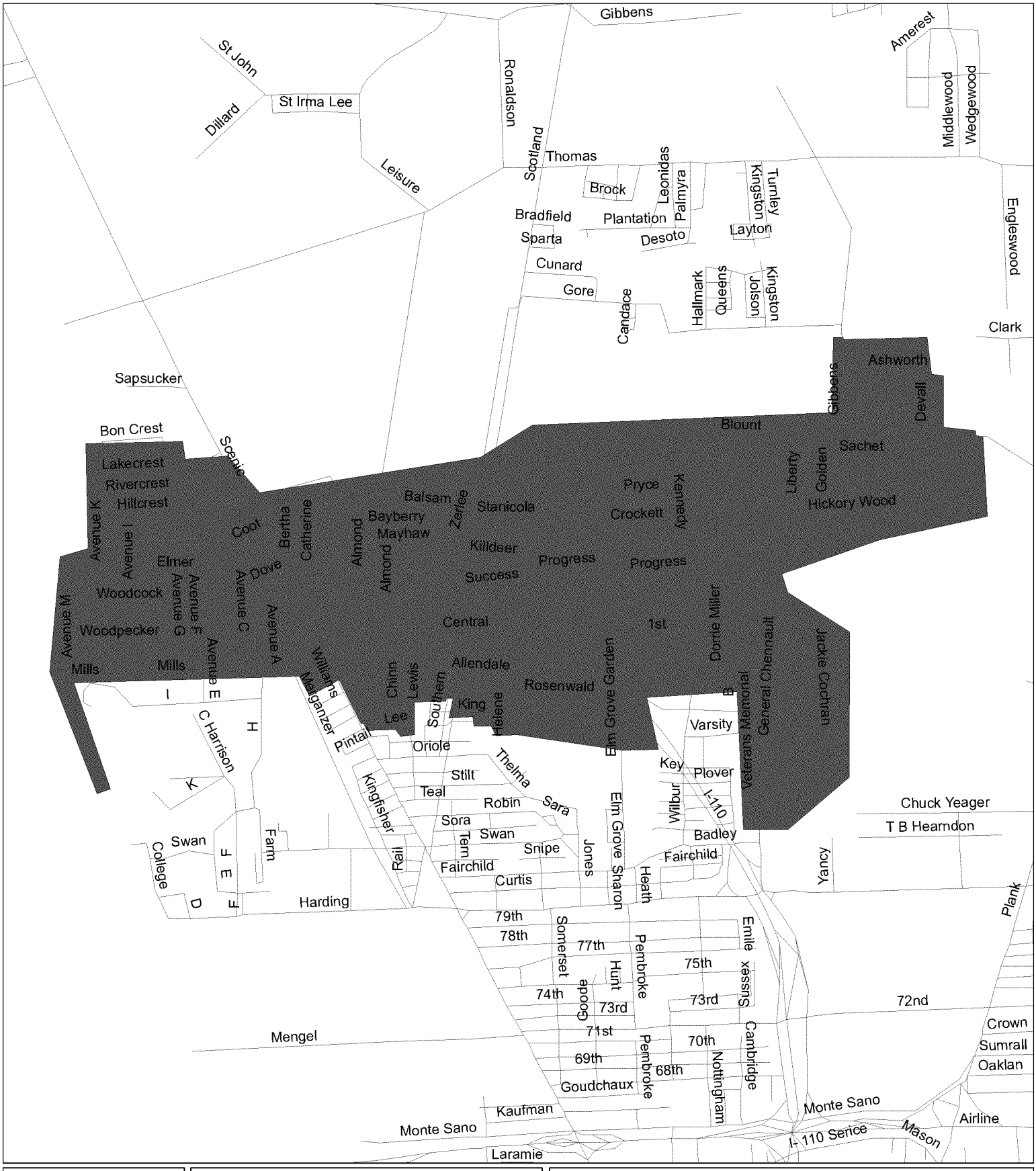
NGS-R-0001

Project Vicinity Map

PUBLIC WORKS

Figure 5-3

BATON ROUGE SSO Program



East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 1,600 3,200 Feet

PUBLIC WORKS

Scotland Ave. - Progress Rd.

NGS-R-0002

Project Vicinity Map

Figure 5-4

BATON ROUGE SSO Program

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5.2 North Gravity System Capacity Improvements Projects

5.2.1 NGS-C-0001 (Progress Road – Baton Rouge Metro Airport)

Project Description

Purpose of the Project / Background Information

This project has been deleted and consolidated with Group Project 1A and Group Project 1B, which are described in the North Forcemain System section.

5.2.2 NGS-C-0002 (Plank Road – Kleinpeter Road)

Project Description

Purpose of the Project/Background Information

The purpose of the NGS-C-0002 (Plank Road – Kleinpeter Road) is to upsize gravity sewers upstream of PS 45, PS 127, PS 44, and PS 244 as well as forcemains exiting PS 38, PS 244, and PS 63, which will alleviate chronic SSOs in the gravity system.

Location

The locations of the gravity sewers and forcemains in this project are shown in Figure 5-5.

Gravity segment 045-00039 to 045-00026 begins on Kleinpeter Road between its intersections with St. Peter Avenue and St. Claude Avenue and travels west along Kleinpeter Road to 045-00026, located near the intersection of Newsom Drive and Kleinpeter Road.

Gravity segment 045-00026 to PS 45 begins near the intersection of Newsom Drive and Kleinpeter Road and travels west along Klienpeter Road to its intersection with Nimitz Street. The segment then turns south and follows Nimitz Street to its intersection with Clark Street. The segment then turns west and follows Clark Street to PS 45, which is near the intersection of Clark Street and Granberry Drive.

Gravity segment 045-00043 to 045-00020 begins at manhole 045-00043, located near the intersection of Plank Road and Brownfields Drive, and follows Plank Road southwest to manhole 045-00020, located near the intersection of Plank Road and Kleinpeter Road.

Gravity segment PS 38DS to PS 127 begins at manhole PS 38DS, located near the intersection of Rebecca Lynn Avenue and Hallmark Drive, and runs east, following Rebecca Lynn Avenue and then going through an open space, to PS 127, which is located on Gibbens Drive, north of its intersection with Gore Road.

Gravity segment 044-00342 to 044-00322 starts at manhole 044-00342, located near the intersection of 78th Avenue and Pembroke Street, and follows Pembroke Street north to Harding Boulevard, where it then follows Harding Boulevard east to manhole 044-00322, located near the intersection of Harding Boulevard and Nottingham Street.

Gravity segment 244-00029 to 244-00004 begins at manhole 244-00029, located near the intersection of Lt. Gen. Ben Davis Jr. Avenue and Veterans Memorial Boulevard, and follows Veterans Memorial Boulevard south to its intersection with Amelia Earhart Avenue. It then follows Amelia Earhart Avenue east to a drainage path, where it then follows the drainage path south to manhole 244-00004, located near PS 244 on General Chennault Drive, near the Baton Rouge Metropolitan Airport.

Gravity segment 080-00011 to PS 80 begins at Manhole 080-00011, which is located in a drainage path north of Kleinpeter Road between its intersections with St. Peter Avenue and St. Claude Avenue. The segment travels south to PS 80, which is on Kleinpeter Avenue.

Forcemain segment PS 38 to PS 38DS runs from PS 38, located at the south end of Constance Street, in an easterly direction through a servitude that parallels Desoto Drive to manhole PS 38DS, located near the intersection of Rebecca Lynn Avenue and Hallmark Drive.

Forcemain segment PS 244FM to PS 244DS begins at PS 244, located on General Chennault Drive, near the Baton Rouge Metropolitan Airport, and follows General Chennault Drive and Veterans Memorial Boulevard south to Badley Road. At Badley Road, the forcemain turns west to follow Badley Road and terminates at manhole PS 244DS, located near the intersection of Badley Road and Jones Street.

Forcemain segment PS 63FM to PS 63DS starts at PS 63, located on Georgia Street, in between Groom Road and Harding Street, and runs south along Georgia Street for approximately 115 feet to its termination point at manhole PS 63DS.

Scope

This project includes approximately 9,400 feet of 12-inch, 24-inch, 27-inch, 30-inch, and 42-inch gravity sewer upstream of PS 45, approximately 2,600 feet of 12-inch, 15-inch, and 21-inch gravity sewer upstream of PS 127, approximately 2,300 feet of 12-inch, 18-inch, and 24-inch gravity sewer upstream of PS 44, approximately 1,500 feet of 12-inch, and 15-inch gravity sewer upstream of PS 244, and approximately 330 feet of 15-inch gravity sewer upstream of PS 80. This project also includes replacement of forcemains from PS 38, PS 244, and PS 63. Table 5-2 shows the detailed scope of this project.

TABLE 5-2
NGS-C-0002 (Plank Road – Kleinpeter Road)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
045-00039	045-0026	3,160	12	24	
045-00026	045-00020	840	12 & 18	24	
045-00020	045-00007	2,600	18	27	
045-00007	045-00001	1,500	18	30	
045-00001	PS 45	65	18	42	
045-00043	045-00020	1,200	8	12	
PS38DS	127-00020	100	8	12	
127-00020	127-00015A	970	8 & 12	15	
127-00015A	PS 127	1,500	12	21	
044-00342	044-00274	560	8	12	
044-00274	044-00325	1,070	10	18	
044-00325	044-00323	340	18	24	
044-00323	044-00322	320	18	24	
244-00029	244-00006	1,260	10	12	

TABLE 5-2
NGS-C-0002 (Plank Road – Kleinpeter Road)

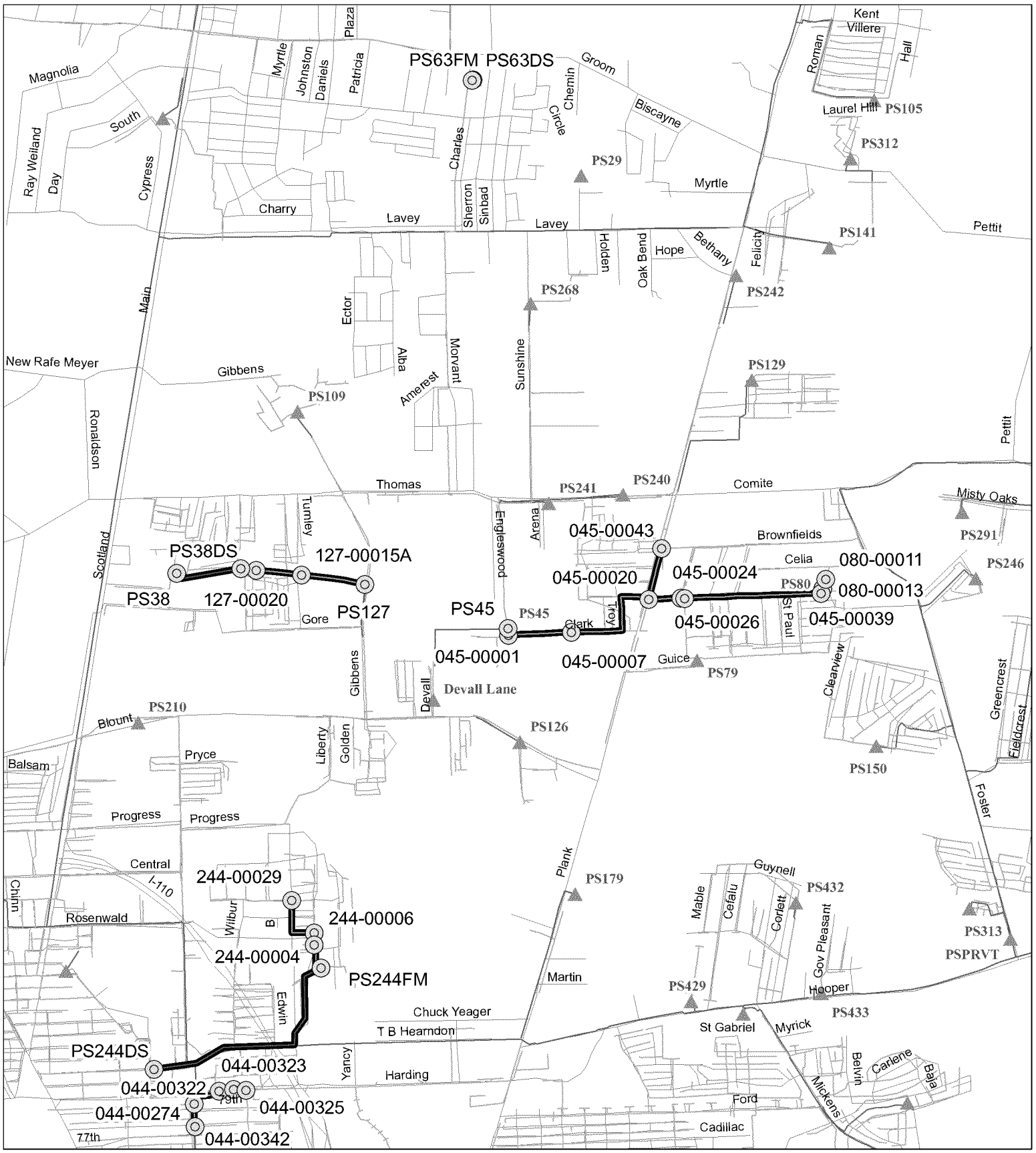
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
244-00006	244-00004	265	10	15	
080-00011	PS 80	330	8	15	
PS 38	PS38DS	1,700	6	8	Forcemain
PS244FM	PS244DS	5,570	8	12	Forcemain
PS63FM	PS63DS	115	18	24	Forcemain

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $7,000,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2011.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,750 5,500 Feet

PUBLIC WORKS

Plank Rd. - Kleinpeter Rd. Sewer Systems Upgrades

NGS-C-0002

Project Vicinity Map

Figure 5-5

BATON ROUGE SSO Program

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5.2.3 NGS-C-0003 (Plank Road Pump Station Projects)

Project Description

Purpose of the Project / Project Background

The NGS-C-0003 (Plank Road Pump Station Projects) Project includes the replacement of PS 127, PS 129, PS 38, PS 63, PS 64, PS 244, PS 44, PS 75, and PS 80. This project is the combination of NGS-C-0003 (Multiple PS – Plank Road – Harding Blvd) and NGS-C-0004 (Multiple PS-Plank Road-Harding Boulevard) from the October 2008 PDP. The pump station replacements will work in conjunction with the forcemain and gravity sewer upgrades in the North Gravity Basin projects to alleviate chronic SSOs at the pump stations and in the gravity basins upstream of the pump stations.

The upgrades will also allow the pump stations to handle future peak wet weather flows that modeling predicts will equal or exceed the existing maximum capacities.

Location

The locations of the pump stations are given in Table 5-3 and in Figure 5-6.

Scope

This project includes the replacement of the 9 pump stations shown in Table 5-3.

TABLE 5-3
NGS-C-0003 (Multiple PS – Plank Road – Thomas Road)

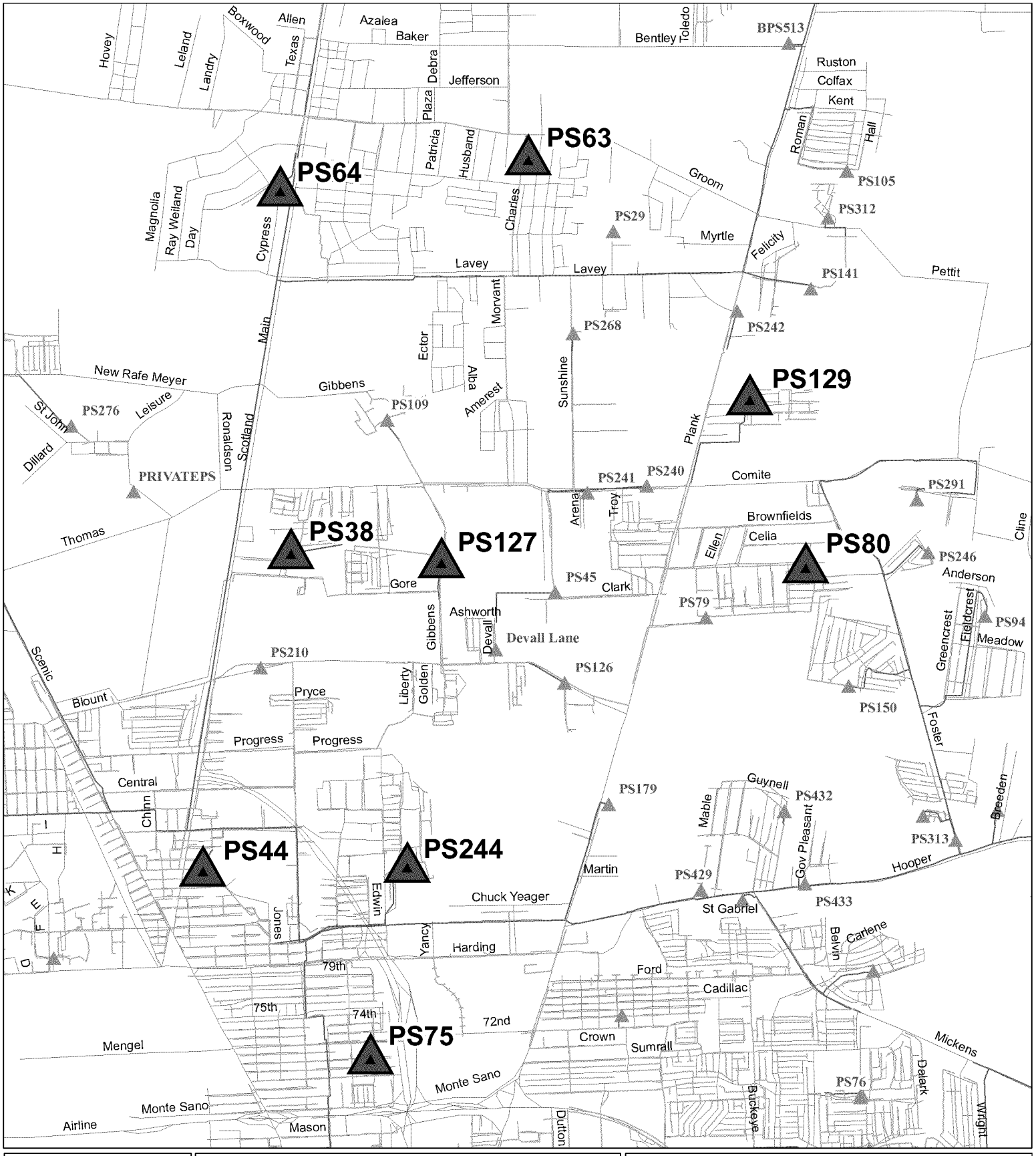
PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 127	Gibbens Road, near intersection of Gore Road	1,805	1,805	308
PS 129	Near the intersection of Wynell Drive and Lebrent Avenue	417	417	68
PS 38	Desoto Drive, near Clifford Seymour Senior Park	1,389	1389	186
PS 63	Near the intersection of Groom Road and Georgia Street	7,152	12,638	2,586
PS 64	Near the intersection of Cypress Street and South Street	1,319	1,640	567
PS 244	Near the intersection of Captain Ryan Drive and General Chennault Drive	972	3,865	181
PS 44	Near the intersection of Oriole Street and Thelma Street	11,180	11,180	1,558
PS 75	Near the intersection of 72nd Avenue and Yorkshire Street	278	278	49
PS 80	Near the intersection of St. Peter Avenue and Kleinpeter Road	417	764	0

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $9,600,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation year is 2012.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 3,700 7,400 Feet

PUBLIC WORKS

Plank Rd. PS Projects

NGS-C-0003

Project Vicinity Map

Figure 5-6

BATON ROUGE SSO Program

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5.2.4 NGS-C-0004 (Multiple Pump Stations – Plank Road – Harding Boulevard)

The NGS-C-0004 project has been combined with NGS-C-0003, (Multiple PS-Plank Road-Thomas Road). The combined project has been designated NGS-C-0003 (Plank Road Pump Station Projects), and is described in Section 5.2.3.

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5.3 North Forcemain System Comprehensive Rehabilitation Projects

5.3.1 NFW-R-0001, NFW-R-0002, and NFE-R-0001

Project Description

The sanitary sewer system comprehensive rehabilitation projects consist of improvements to various components of the sewer collection system to reduce the amount of rainwater and groundwater that leak into the system.

Purpose

The purpose of the comprehensive sewer rehabilitation is to correct defects in the system such as offset pipe joints, collapsed pipe sections, leaking manholes, and direct inflow sources. The water that enters the system through the defects is a major contributor to SSOs. Comprehensive rehabilitation of the collection system will contribute to alleviating SSOs.

Location

There are four projects located within the North Forcemain Basin. The attached maps show the locations of the projects, shown in Figure 5-7 to 5-9.

Scope of Project

The first phase of comprehensive rehabilitation projects will be the physical inspection of the pipes and manholes including CCTV inspection of pipes. Smoke testing may also be included in the physical inspection phase.

The data collected by the physical inspection contractor will be analyzed and based on that analysis a listing of recommended repairs with associated construction costs will be generated. An engineering firm will then complete detailed design and preparation of construction documents for project bidding.

The construction of rehabilitation projects will typically include the following components.

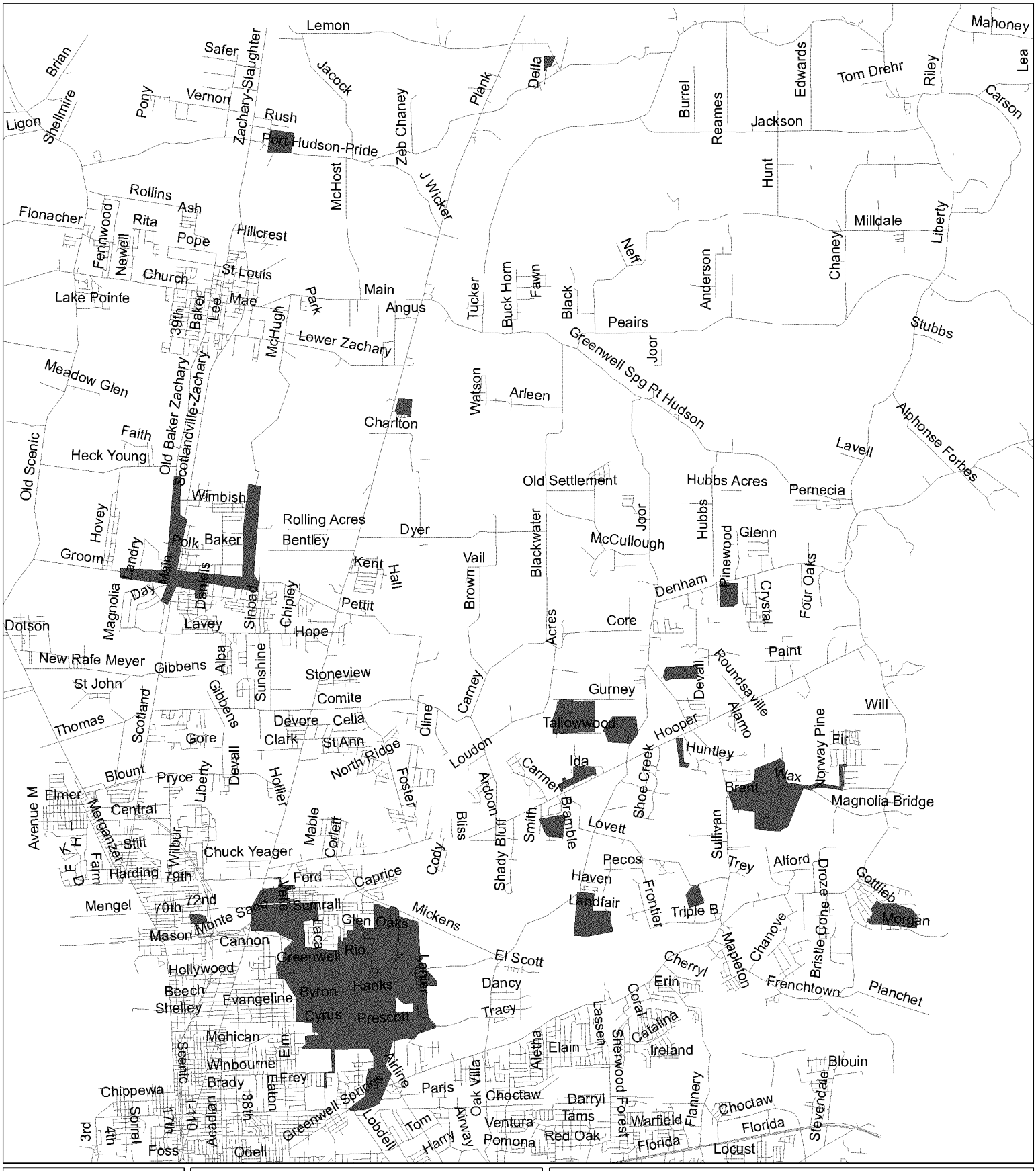
- Replacement of pipes
- Point repair of pipes
- Rehabilitation of pipes by cured in place pipe liners
- Rehabilitation or replacement of manholes
- Repair of sewer laterals to the property line

Cost

The estimated costs for each project are presented in Table 5-4. These costs are based on preliminary estimates of the amounts of each component of the system that will require repair or replacement. During the physical inspection phase, the actual condition of the components will be assessed and appropriate methods recommended. At that time, the cost estimate for each project will be revised.

TABLE 5-4
Estimated Construction Costs for North Forcemain System Comprehensive Rehabilitation Projects

Project Descriptions	Construction Cost	Scheduled Design Appropriation Year	Scheduled Construction Appropriation Year
NFW-R-0001a-Brookstown Road-Evangeline Street, Phase I	$11,500,000	2009	2010
NFW-R-0001b-Brookstown Road – Evangeline Street, Phase II	$11,500,000	2009	2010
NFW-R-0002-Interstate 110-Hollywood Street	$6,300,000	2011	2012
NFE-R-0001-Silverleaf Road-Ford Street	$11,000,000	2009	2010



East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 6,750 13,500 Feet

Brookstown Rd. - Evangeline St. Phase I and II

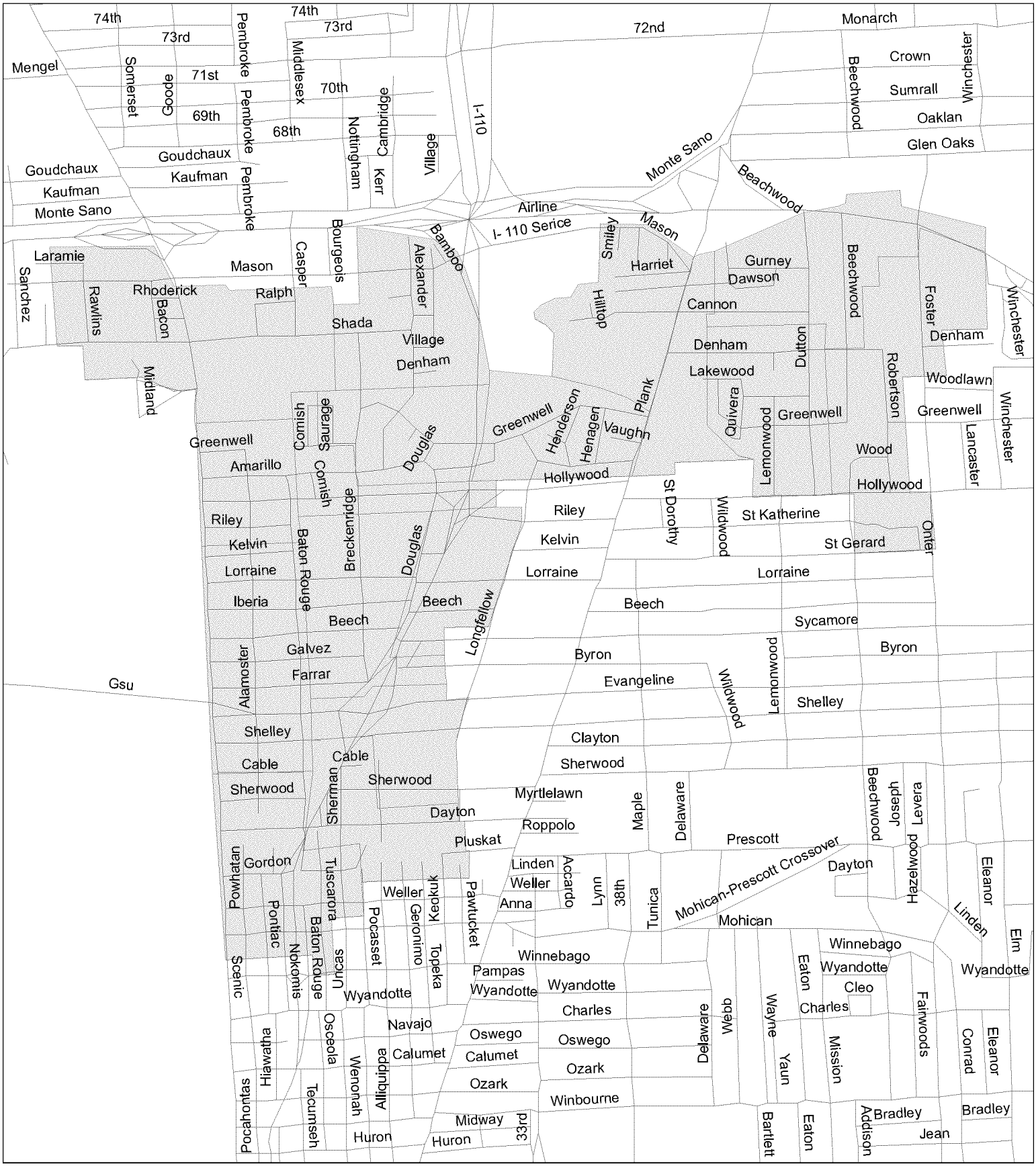
NFW-R-0001

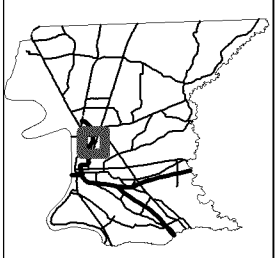
Project Vicinity Map

PUBLIC WORKS

Figure 5-7

BATON ROUGE SSO Program





East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

0 1,000 2,000 Feet

Interstate 110 - Hollywood St.

NFW-R-0002

Project Vicinity Map

PUBLIC WORKS

Figure 5-8

BATON ROUGE SSO Program

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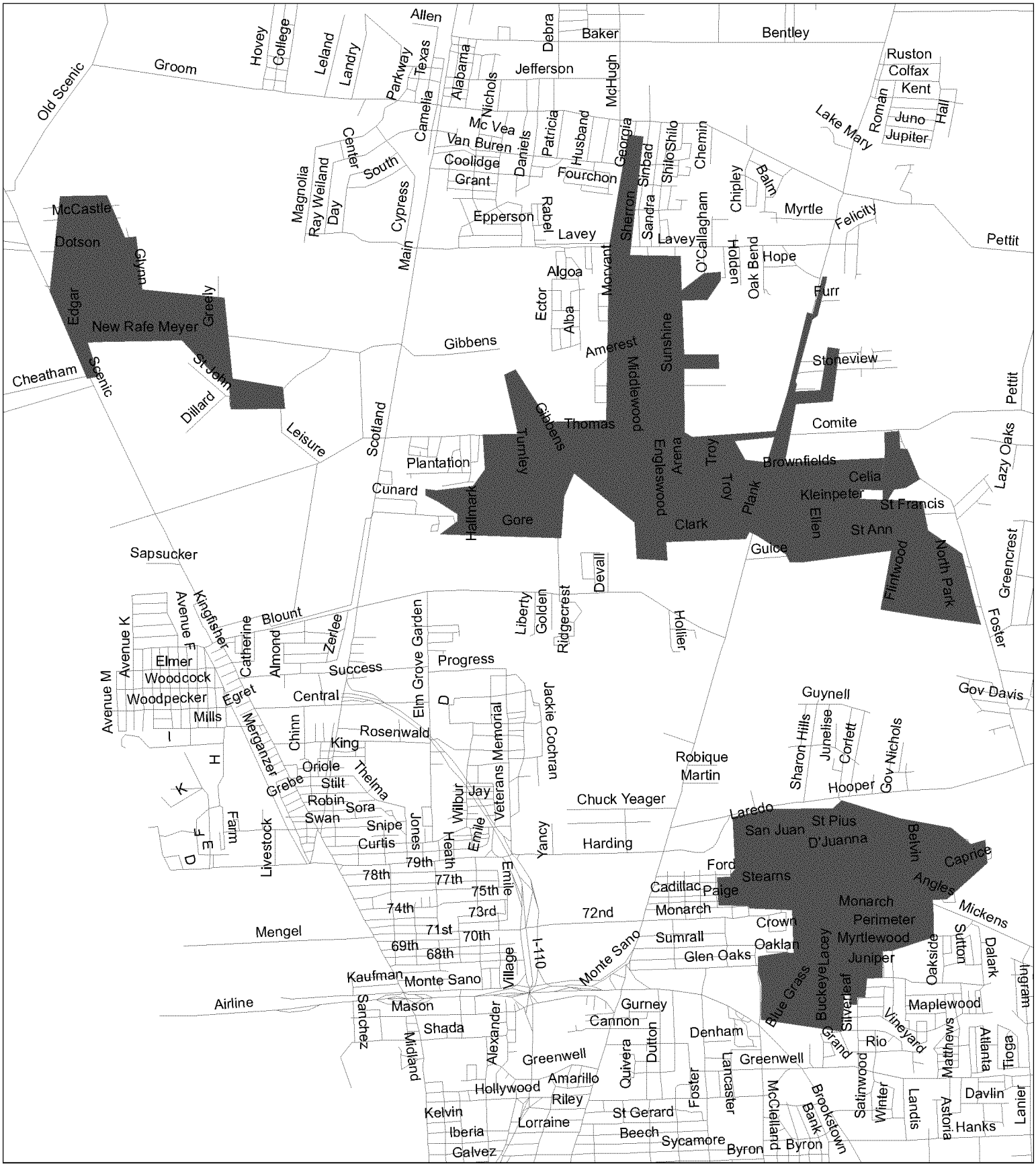

East Baton Rouge Parish

Legend

Area Designated for Physical Inspection

N

0 2,750 5,500 Feet

PUBLIC WORKS

Silverleaf Rd. - Ford St.

NFE-R-0001

Project Vicinity Map

Figure 5-9

BATON ROUGE SSO Program

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5.4 North Forcemain System Capacity Improvements Projects

5.4.1 NFE-C-0001 (Gurney Road – Joor Road)

Project Description

Purpose of the Project/ Project Background

The purpose of the NFE-C-0001 (Gurney Road – Joor Road) Project is to replace PS176 to alleviate SSOs at and near the pump station. The forcemains exiting PS 176 and PS 284 will also be upsized. In addition, future wet weather peak flow at PS 176 is predicted by the BTRSSO model to be greater than the existing maximum capacity of the pump station. This project is currently under construction.

Location

The location of PS 176 is described in Table 5-5 and shown along with the forcemain locations in Figure 5-10.

Forcemain segment PS 176 to NS 6157 begins at PS 176, located on Tallowwood Avenue, between Pheasantwood Drive and Partridgewood Drive, travels north on Partridgewood Drive to Gurney Road, follows Gurney Road east, and terminates at node NS6157, near the intersection of Gurney Road with Sullivan Road.

Gravity segment 176-00001 to PS 176 begins at manhole 176-00001, which is located near the pump station, which is on Tallowwood Avenue between Pheasantwood Drive and Partridgewood Drive, and travels to PS 176.

Forcemain segment PS 284 to NS6156 begins at PS 284, located at the cul-de-sac on Fairmead Drive, travels down a servitude that parallels to the north of Arrowood Avenue, proceeds up Joor Road and terminates at node NS 6156, which is located at the intersection of Joor Road and Gurney Road.

Scope

This project includes replacement of one pump station as well as approximately 14,500 feet of 8-inch, 10-inch, 12-inch, and 14-inch forcemain and approximately 100 feet of 15-inch gravity sewer. Tables 5-5 and 5-6 show the detailed scope of the project.

TABLE 5-5
NFE-C-0001 (Gurney Road – Joor Road) – Pump Stations

PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Comments
PS 176	Tallowwood Ave, between the intersection of Pheasantwood Drive and Patridgewood Drive	417	1,187	

TABLE 5-6
NFE-C-0001 (Gurney Road – Joor Road) - Pipelines

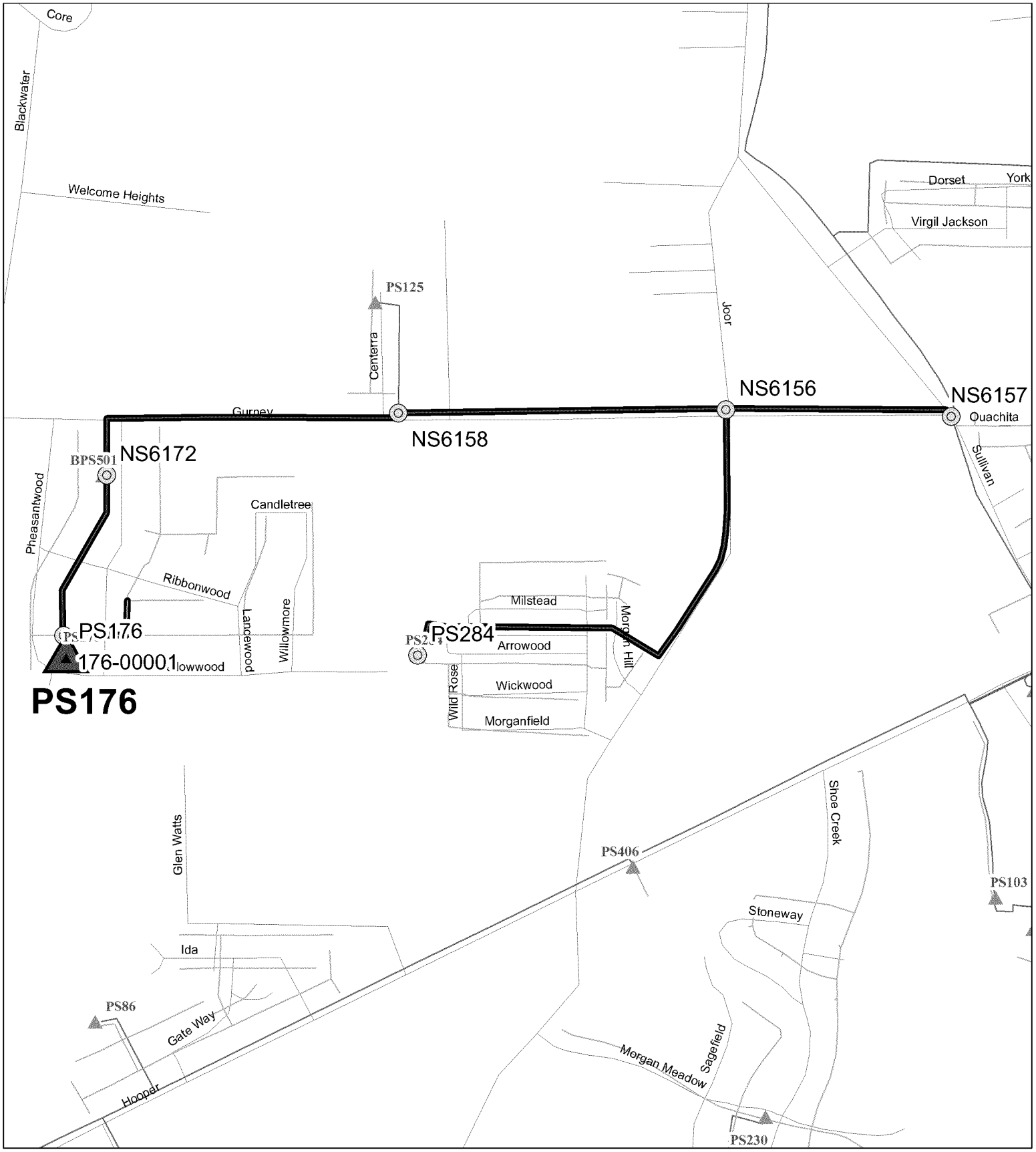
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS 176	NS6172	1800	6	10	
NS6172	NS6158	75	8	10	
NS6158	NS6156	3400	10	12	
NS6156	NS6157	2500	10	14	
176-00001	PS176	100	8	15	Gravity segment
PS 284	NS6156	6700	6	8	

Note: The existing maximum capacities for the pump stations were obtained from the DPW Field Pump Station Maintenance reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model. The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Bid Amount is $1,400,000.

Design was appropriated in 2007.

Scheduled Construction Appropriation Year was 2008.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,200 2,400 Feet

Gurney Rd. Sewer Area Upgrades

NFE-C-0001

Project Vicinity Map

PUBLIC WORKS

Figure 5-10

BATON ROUGE SSO Program

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5.4.2 NFE-C-0002 (Multiple PS – Lovett Road Area)

Project Description

Purpose of the Project/Project Background

The purpose of NFE-C-0002 (Multiple Pump Stations – Lovett Road Area) project is to replace PS 230, PS 282, and PS 187 to alleviate SSOs at and near the pump stations. This project also includes the upsizing of the forcemains from the three pump stations as well as the gravity sewer that feeds PS 230. This project is currently under construction.

Location

The locations of the pump stations is described in Table 5-8 and shown along with the forcemain locations in Figure 5-11.

Gravity segment 230-00009 to PS 230 begins at manhole 230-0009, which is located near the intersection of Sagebrush Avenue and Shoe Creek Drive, and travels south along Shoe Creek Drive to Morgan Meadow Avenue, where it then parallels Morgan Meadow Avenue in a westerly direction to PS 230, which is located on Morgan Meadow Avenue in between its intersection with Shoe Creek Drive and Sagefield Drive.

Forcemain segment PS 230 to PS230DS begins at PS 230, describe above, and follows Morgan Meadow Avenue in a westerly direction to its intersection with Sagefield Drive, where it then parallels Sagefield Drive in a southerly direction to its termination point at manhole PS 230DS, which is located on Sagefield Drive, approximately halfway in between Morgan Meadow Avenue and Conwood Avenue.

Forcemain segment PS 187 to NS6402 begins at PS 187, located near the intersection of Clear Oak Avenue and Oak Meadow Drive, goes east down Clear Oak Avenue then turns north on Woods Edge Drive and terminates at node NS6402, located near the intersection of Woods Edge Drive and Lovett Road.

Forcemain segment PS 282 to NS6305 begins at PS 282, located near the intersection of Regent Avenue and Trendale Drive, goes west through a wooded area crossing an unnamed channel, then turns north and follows the channel bank and terminates at node NS6305, near the intersection of Brookside Drive and Brighton Avenue.

Scope

The scope of this project includes three pump station replacements, approximately 4,200 feet of 6-inch and 8-inch forcemain, and approximately 2,100 feet of 12-inch gravity sewer. The detailed scope is shown in Tables 5-7 and 5-8.

TABLE 5-7
NFE-C-0002 (Multiple PSs – Lovett Road Area)

PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
PS 230	Morgan Meadow Ave, near the intersection of Shoe Creek Drive	417	1,229	146	
PS 282	Regent Ave, near the intersection of Trendale Drive	127	924	42	
PS 187	Clear Oak Ave, near the intersection of Oak Meadow Drive	139	382	87	

TABLE 5-8
NFE-C-0002 (Sullivan Road/Lovett Road/Wax Road)

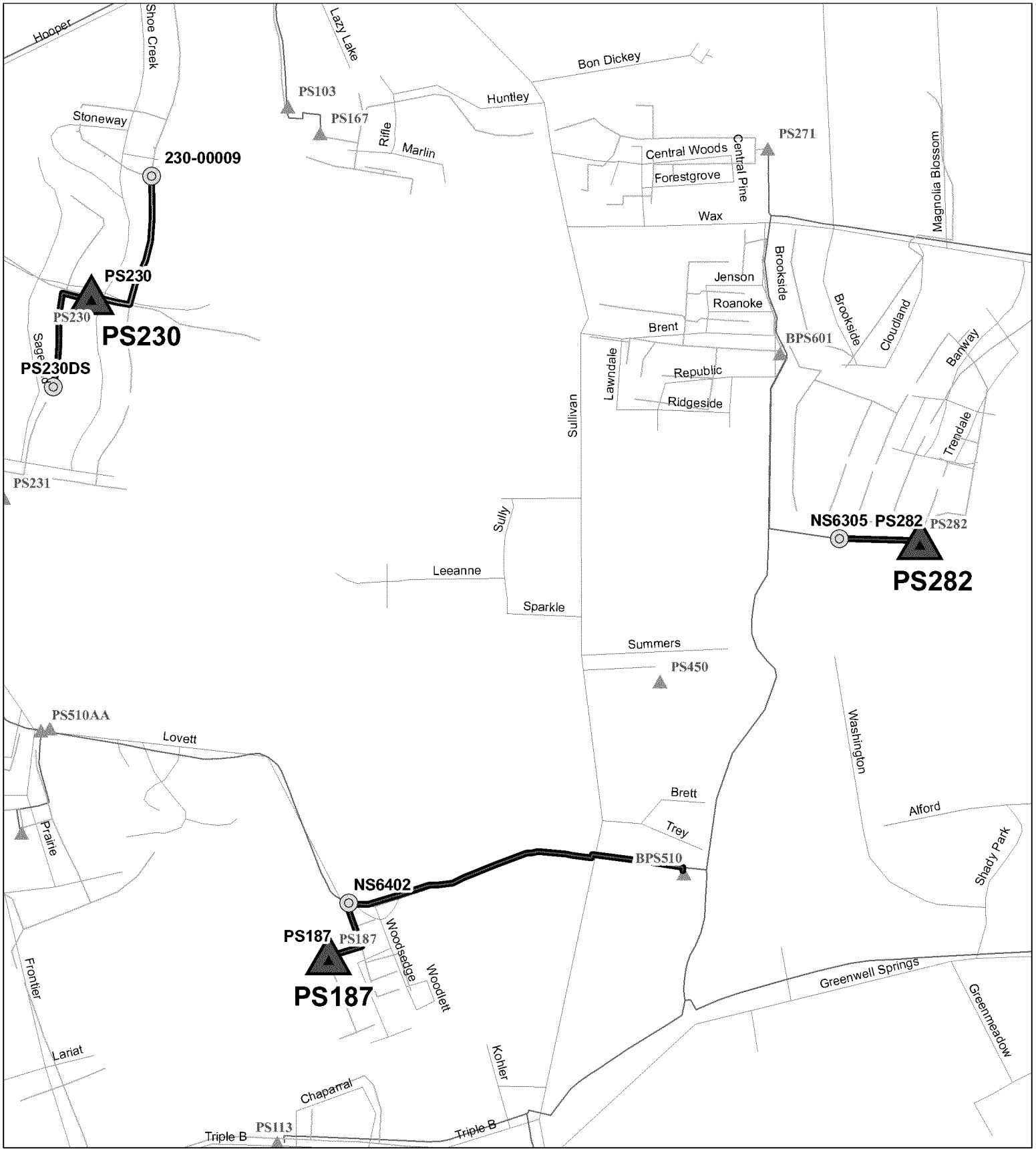
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
230-00009	PS230	2100	8	12	Gravity segment
PS230	PS230DS	1200	6	8	
PS187	NS6402	1100	4	6	
PS282	NS6305	1900	4	8	

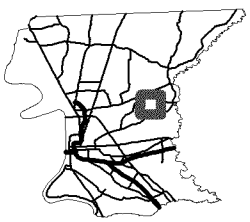
Note: The existing maximum capacities for the PSs were obtained from the DPW Field Pump Station Maintenance reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model. The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Bid Amount is $2,160,000.

Design was appropriated in 2007.

Construction Appropriation Year was 2008.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 1,400 2,800 Feet

Sullivan Rd. /Lovett Rd. /Wax Rd. Sewer Area Upgrades

NFE-C-0002

Project Vicinity Map

PUBLIC WORKS

Figure 5-11

BATON ROUGE SSO Program

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5.4.3 NFE-C-0003 (Comite Road – Foster Road – Phase I)

Project Description

Purpose of the Project/Project Background

The purpose of the NFE-C-0003 (Comite Road – Foster Road) project is to replace PS 291, PS 246, and PS 94 to alleviate SSOs at and near the PS. The forcemains exiting these pump stations will also be upsized. In addition, the future peak wet weather flow at the pump stations is predicted by the BTRSSO model to exceed the existing maximum capacity. This project is currently under construction.

Location

The locations of the pump stations is given in Table 5-9 and shown along with the forcemain locations in Figure 5-12.

Forcemain segment PS 291 to NS6393 begins at PS 291, located near the intersection of Misty Oaks Avenue and Lazy Oak Drive, and goes east on Misty Oaks Avenue to Lazy Oak Drive, where it then follows Laky Oak Drive south to its cul-de-sac, and then continues south over-land to node NS6393, which is located just downstream of PS 246, located near the intersection of Green Gate Drive and Holly Fern Avenue.

Forcemain segment NS6193 to NS6251 begins at node NS6193, located near the intersection of Green Gate Drive and Holly Fern Avenue, runs southeast along Green Gate Drive to Foster Road, where it then follows Foster Road south to its termination at node NS6251, located near the intersection of Windcrest Avenue and Foster Road.

Forcemain segment PS 94 to NS6193 begins at PS 94, located near the intersection of Fieldcrest Drive and Meadow Avenue, and travels.

Scope

This project includes the replacement of three pump stations and the upsizing of approximately 12,000 feet of 6-inch and 8-inch forcemain. The detailed scope of the project is presented in Tables 5-9 and 5-10.

TABLE 5-9
NFE-C-0003 (Comite Road – Foster Road)

PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
PS 291	Misty Oaks Ave, near the intersection of Lazy Oak Drive	69	208	92	
PS 246	Holly Fern Ave, near the intersection of Green Gate Drive	69	278	21	
PS 94	Fieldcrest Dr. near the intersection of Meadow Ave	278	764	62	

TABLE 5-10
NFE-C-0003 (Comite Road – Foster Road)

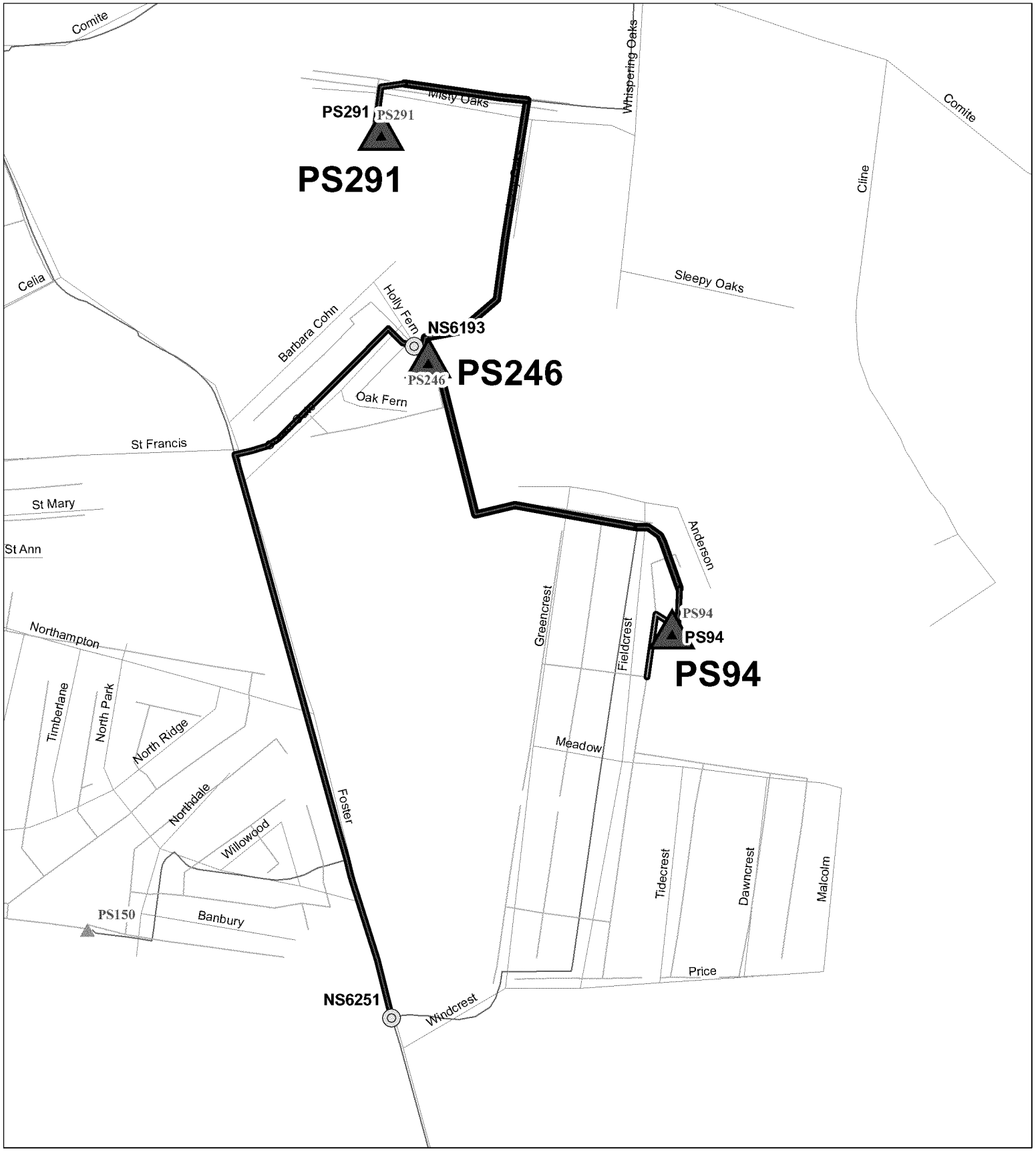
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS291	NS6193	3340	4	8	New routing of existing FM to PS 246
NS6193	NS6251	5600	4	10	
PS94	NS6193	3140	6	8	

Note: The existing maximum capacities for the PSs were obtained from the DPW Field Pump Station Maintenance reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model. The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Bid Amount is $1,920,000.

Design was appropriated in 2007.

Construction Appropriation Year was 2008.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 750 1,500 Feet

PUBLIC WORKS

Comite Dr. - Foster Rd.
NFE-C-0003
Project Vicinity Map

Figure 5-12

BATON ROUGE SSO Program

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5.4.4 NFE-C-0004 (Foster Road – Hooper Road)

Project Description

Purpose of the Project/Background Information

The purpose of Project NFE-C-0004 (Foster Road – Hooper Road) is to increase the capacity of the STN forcemain system and the manifold forcemains along Foster Road and Hooper Road to assist in transferring high flows to the main STN forcemain along Hooper Road. This project is currently under construction.

Location

The location of the forcemains in this project are shown in Figure 5-13.

Forcemain segment PS 255 to NS6289 begins at PS 255, which is located at the end of the cul-de-sac at Loch Fyne Avenue, and goes east on Loch Fyne Avenue to Ardoon Drive, turns north/northwest on Ardoon Drive to Monhegan Avenue, turns northeast on Monhegan Avenue to Blackwater Road, turns south onto Blackwater Road and terminates at node NS6289, located at the intersection of Blackwater Road and Hooper Road.

Forcemain segment PS 196 to NS 6281 begins at PS 196, which is located near the intersection of Shady Bluff Drive and Shady Knoll Place, and goes north along Shady Bluff Drive to node NS 6281, which is located at the intersection of Shady Bluff Dive and Hooper Road.

Forcemain segment BPS 509 to NS 6247 begins at BPS 509, located near the intersection of Hooper Road and Lazy Lake Drive, and follows Hooper Road southwest until it reaches node NS 6247, located approximately 600 feet east of the intersection of Hooper Road and Lovett Road.

Forcemain segment BPS 511 to NS6334 starts at BPS 511, located in between Hooper Road and Blackwater Road, and travels west along Hooper Road to node NS 6334, located near the intersection of Hooper Road and Foster Road.

Forcemain segment NS6306 to NS6334 starts at node NS 6306, located on Foster Road south of its intersection with Summer Place Avenue and goes south along Foster Road to node NS6334, located near the intersection of Hooper Road and Foster Road.

Scope

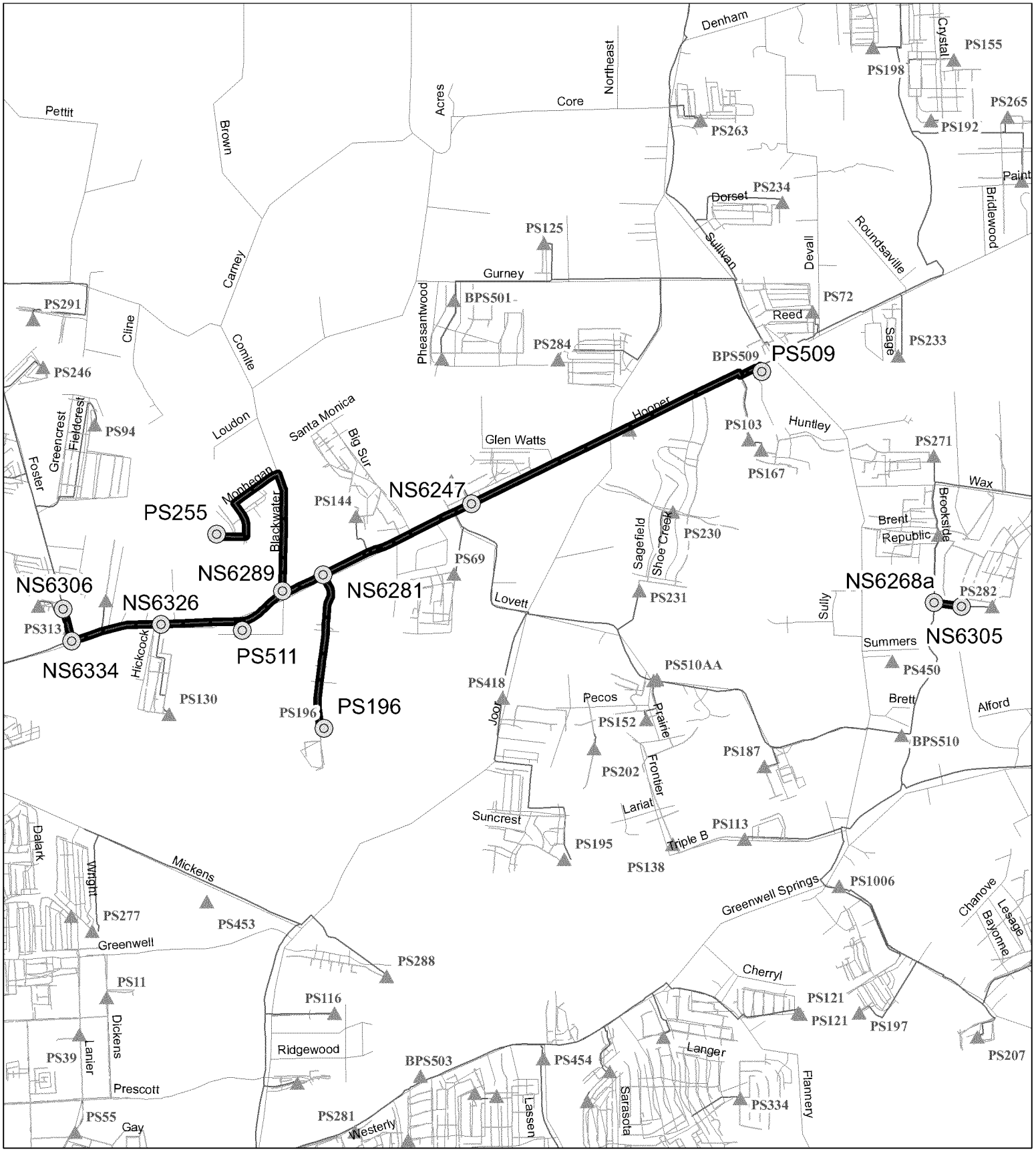
This project includes the construction of approximately 26,000 feet of 6-inch, 8-inch, 14-inch, 24-inch, and 36-inch forcemain in the North Forced Basin. The detailed scope of this project is presented in Table 5-11.

TABLE 5-11
NFE-C-0004 (Foster Road – Hooper Road)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS 255	NS6289	7600	6	8	
PS 196	NS6281	5200	4	6	
BPS 509	NS6247	6500	20	24	
BPS 511	NS6326	2700	24	36	
NS6326	NS6334	3000	30	36	
NS6306	NS6334	1200	12	14	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Bid Amount is $8,800,000.
Design was appropriated in 2007.
Construction Appropriation Year was 2008.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 3,700 7,400 Feet

PUBLIC WORKS

Foster Rd. - Hopper Rd.
NFE-C-0004
Project Vicinity Map

Figure 5-13

BATON ROUGE SSO Program

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5.4.5 NFE-C-0005 (Hooper Road Pump Station Projects)

Project Description

Purpose of the Project/Background Information

This project is a combination of NFE-C-0005 (Multiple PS – Hooper Road- Greenwell Springs Road) and NFE-C-0007 (Multiple BPS - Hooper Road - Lovett Road) from the October 2008 PDP. The purpose of the NFE-C-0005 (Hooper Road Pump Station Projects) project is the following:

Replace PS 313, PS 144, PS 86, PS 234, PS 218, PS 271, PS 249, PS 164, PS 285, PS 196, PS 231, PS 207, BPS 509, BPS 510 and BPS 511 to alleviate SSOs. BPS 510 will be replaced with a new PS 510AA, located downstream of the existing BPS 510. The three in-line booster pump stations being replaced in this project will be replaced with wet well pump stations.

Location

The locations of the pump stations are described in Table 5-12 and shown in Figure 5-14. PS 510AA will replace the existing BPS 510, which is currently located at the end of Lovett Road east of Sullivan Road.

Scope

The detailed scope of this project is given in Table 5-12.

TABLE 5-12
NFE-C-0005 (Hooper Road Pump Station Projects)

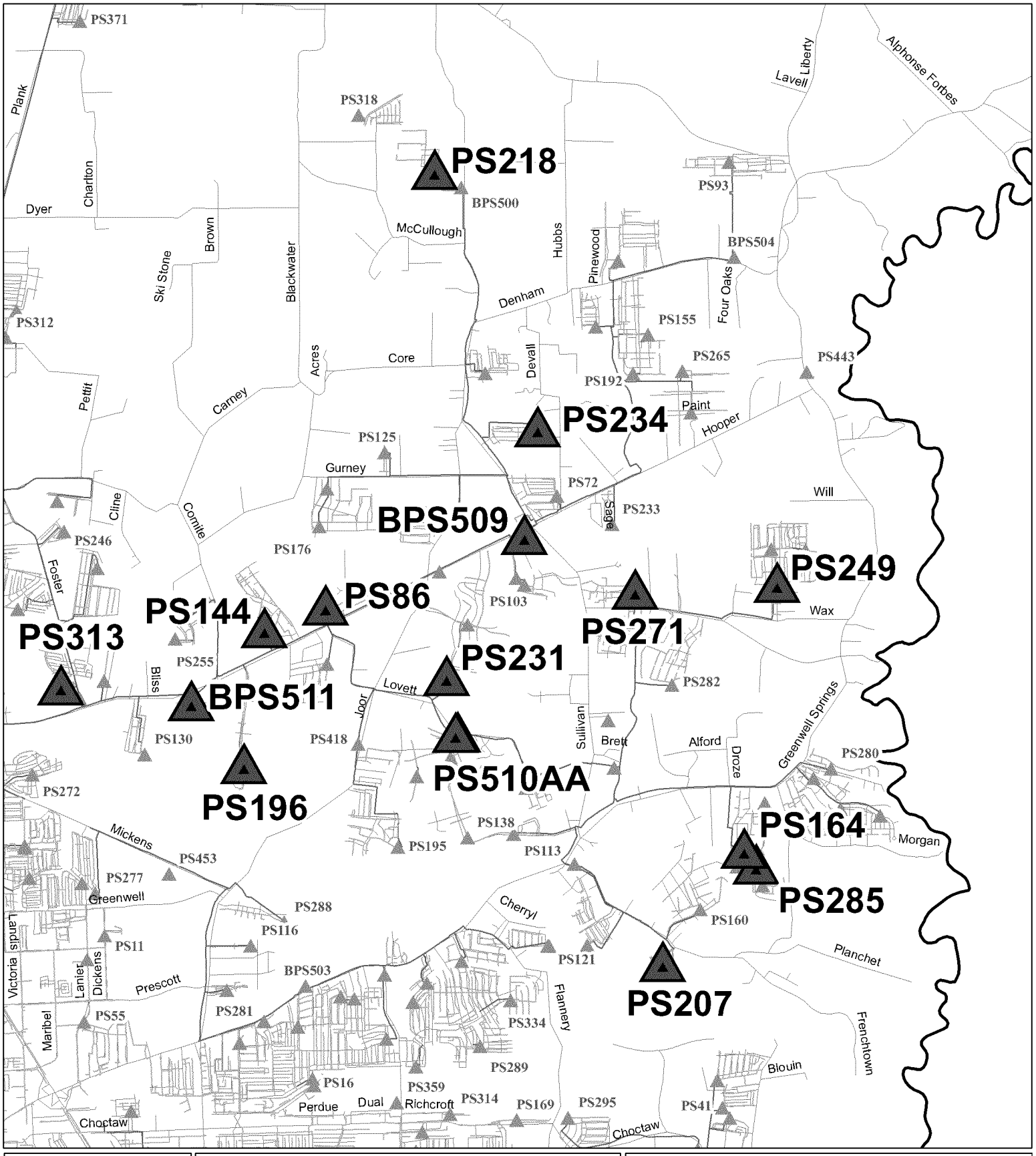
PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 313	Summer Place Avenue off Foster Road	69	113	6
PS 144	La Jolla Court off Carmel Drive	417	584	105
PS 86	Hooper Road between Lovett Road and Allena Drive	347	545	92
PS 234	Dorset Avenue off Farnham Avenue	139	492	71
PS 218	Weyanoke Drive off Solitude Lane	208	431	60
PS 271	Central Place Drive off Central Woods Avenue	278	486	139
PS 249	Durmast Drive off Way Road	625	1,128	314
PS 164	Stoneridge Drive off Donnybrook Avenue	278	694	92
PS 285	Bristle Cone Court off Evergreen Hills Avenue	69	417	52
PS 196	Shady Bluff Drive off Hooper Road	278	417	50
PS 231	Shoe Creek Drive off Morgan Creek Avenue	278	1,595	217
PS 207	Red Maple Drive off West Post Oak Court	139	403	140
PS 509	Hooper Road between Sullivan Road and Lazy Lake Drive	4,861	7,638	803
PS 511	Hooper Road between Hickcock Drive and Blackwater Road	8,888	20,437	2,643
PS 510AA	End of Lovett Road off of Hooper Road	3,541	8,157	1,224

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $11,800,000.

Scheduled Design Appropriation Year is 2010.

Scheduled Construction Appropriation Year is 2011.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 5,500 11,000 Feet

PUBLIC WORKS

Hooper Rd. PS Projects

NFE-C-0005

Project Vicinity Map

Figure 5-14

BATON ROUGE SSO Program

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5.4.6 NFE-C-0006 (Lovett Road – Greenwell Springs Road)

Project Description

Purpose of the Project / Background Information

The purpose of the NFE-C-0006 (Lovett Road – Greenwell Springs Road) project is to increase the capacity of the forcemain system in the North East Forcemain Basin to assist in transferring peak flows to the main STN sewer along Hooper Road and to increase the capacity of the gravity sewer systems upstream of PS 155, PS 195, PS 200, and PS 231. The gravity sewer replacement will work to alleviate chronic SSOs in the gravity basins upstream of these pump stations.

Location

The gravity sewers and forcemains in this project are shown in Figure 5-15.

Gravity segment 155-00037 to PS 155 begins at manhole 155-00037, located near the intersection of Crystal Drive and Libra Avenue and heads north along Crystal Drive to its termination point at PS 155, located near the intersection of Crystal Drive and Taurus Avenue.

Gravity segment 195-00004 to PS 195 begins at manhole 195-00004, located east of the intersection of Suncrest Avenue and Bretshire Drive, and heads generally east through a servitude in a forested area to PS 195, which is located just south of the south end of Stoneshire Drive.

Gravity segment 200-00011 to PS 200 starts at manhole 200-00011, located east of the intersection of Keystone Avenue and Bridgeport Drive, and heads east along Keystone Avenue to PS 200, located on Keystone Avenue, in between Teah Drive and Tarrora Drive.

Gravity segment 231-00015 to PS 231 begins at manhole 231-00015, located on Sagefield Drive, in between Cornwood Avenue and Morgan Meadow Avenue, and heads south along Sagefield Drive to PS 231, located near the intersection of Sagefield Avenue and Cornwood Avenue.

Forcemain segment PS 181 to NS6088 starts at PS 181, located off of Pinewood Drive, in between Arceneaux Avenue and Denham Avenue, and follows the access road from the pump station to Pinewood Drive, and then follows Pinewood Drive south to node NS6088, located near the intersection of Pinewood Drive and Denham Avenue.

Forcemain segment PS 155 to NS6103 begins at PS 155, located near the intersection of Crystal Drive and Taurus Avenue, and follows Taurus Avenue west to node NS6103, located near the intersection of Taurus Avenue and West Beaver Drive.

Forcemain segment PS 106 to NS6128 begins at PS 106, located near the intersection of Palomino Drive and Paint Avenue, heads north along Palomino Drive, turns west on Shetland Avenue, and terminates at node NS6128, which is located in an open area, just south of the intersection of Libra Avenue and Crystal Drive.

Forcemain segment PS 233 to NS6189 begins at PS 233, located at the south end of Sage Drive, heads north along Sage Drive and Cimmaron Drive, turns southwest at Hooper Road, and terminates at node NS6189, located at the intersection of Hooper Road and Sullivan Road.

Forcemain segment PS 234 to NS 6189 starts at PS 234, located at the intersection of Dorset Avenue and York Road, heads west on Dorset Avenue, turns southeast on Sullivan Road, and terminates at node NS6189, located at the intersection of Hooper Road and Sullivan Road.

Forcemain segment PS 249 to NS 6239 starts at PS 249, located near the intersection of Durmast Drive and Roble Avenue, heads south along Durmast Drive, turns west on Wax Road, and terminates at node NS6239, located near the intersection of Wax Road and Brookside Road.

Forcemain segment NS 6268A to NS 6393 begins at new node NS 6268A, located just southwest of the intersection of Regent Avenue and Overwood Drive, and follows a drainage path roughly south to node NS6393, located on Greenwell Springs Road, in between Greenmeadow Drive and Sullivan Road.

Forcemain segment PS 200 to NS 6391 starts at PS 200, located on Keystone Avenue, in between Teah Drive and Tarrora Drive, follows Gottlieb Road and a drainage path generally northwest, turns southwest on Greenwell Springs Road, and follows Greenwell Springs Road to NS6391, located on Greenwell Springs Road in between Greenmeadow Drive and Sullivan Road.

Forcemain segment PS 285 to NS 6406 begins at PS 285, located on Bristlecone Court, just north of its intersection with Evergreen Hills Avenue, and follows a servitude to the northwest to PS 164, located at the eastern end of Stoneridge Drive. From PS 164, the forcemain follows Stoneridge Drive west, turns north at Donnybrook Avenue, and terminates at node NS6406, located near the intersection of Donnybrook Avenue and Greenwell Springs Road.

Forcemain segment PS 113 to NS 6431 starts at PS 113, located near the intersection of Triple B Road and Chapparal Place, heads east along Triple B Road, and terminates at node NS6431, located near the intersection of Triple B Road and Sullivan Road.

Forcemain segment PS 160 to NS 6419, begins at PS 160, located near the intersection of Chambord Drive and Chaumont Avenue, heads southwest along Chaumont Avenue, turns northwest on Frenchtown Road, turns northeast on Greenwell Springs Road, and follows Greenwell Springs Road to node NS6419, located near the drainage path that is in between Sullivan Road and Greenmeadow Drive.

Forcemain segment PS 207 to NS 6489 begins at PS 207, located near the intersection of Red Maple Place and Post Oak Court, heads north along Post Oak Court, turn east on Country Road, turns northwest on Frenchtown Road, and terminates at node NS 6489, located near the intersection of Frenchtown Road and Chaumont Road.

Forcemain segment PS 152 to NS 6377 starts at PS 152, located just southwest of the intersection of Pecos Avenue and Prairie Drive, heads east to Prairie Drive, turns north on Prairie Drive, and terminates at node NS 6377, located near the intersection of Prairie Drive and Lovett Road.

Forcemain segment PS 231 to NS 6328 begins at PS 231, located near the intersection of Sagefield Avenue and Cornwood Avenue, heads south through a wooded area, and terminates at node NS 6328, located on Lovett Road, approximately 3,500 feet east of its intersection with Joor Road.

Forcemain segment PS 195 to NS 6308 begins at PS 195, located just south of the south end of Stoneshire Drive, goes north along Stoneshire Road, turns west on Landfair Road, turns north on Burtcliff Drive, turns west on Tynwood Avenue, turns north on Joor Road, and terminates at node NS 6308, located at the intersection of Joor Road and Lovett Road.

Forcemain segment PS 69 to NS 6257 starts at PS 69, located in between the eastern ends of Tanglewood Drive and Rustling Oaks Drive, heads north on Tanglewood Road, and terminates at node NS 6257, located near the intersection of Tanglewood Drive and Lovett Road.

Forcemain segment BPS 510 to NS 6252 begins at BPS 510, which will be abandoned as part of project NFE-C-0005 (Hooper Road Pump Station Projects), located near the intersection of Sullivan Road and Lovett Road. From BPS 510, the forcemain follows Lovett Road west and north to node NS 6252, located near the intersection of Lovett Road and Hooper Road.

Scope

This project includes construction of approximately 5,200 feet of 10-inch, 12-inch, and 15-inch gravity sewer upstream of PS 155, PS 195, PS 200, and PS 231. This project also includes construction of approximately 113,000 feet of 6-inch, 8-inch, 10-inch, 12-inch, 14-inch, 16-inch, 18-inch, 24-inch, and 30-inch forcemain in the North Forced East Basin. The detailed scope of the project is shown in Table 5-13.

TABLE 5-13
NFE-C-0006 (Lovett Road – Greenwell Springs Road)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
155-00037	155-00031	710	8	10	Gravity segment
155-00031	155-00013	1,230	8	12	Gravity segment
155-00013	PS155	420	10	15	Gravity segment
195-00004	PS 195	940	8	12	Gravity segment
200-00011	PS 200	370	8	12	Gravity segment
231-00015	231-00013	500	8	12	Gravity segment
231-00013	PS 231	1,040	8	15	Gravity segment
PS181	NS6088	1,840	6	10	
PS155	NS6103	1,900	8	10	
PS106	NS6134	2,460	6	10	
NS6134	NS6128	3,100	8	10	
PS233	NS6165	2,060	4	6	
NS6165	NS6183	3,000	18	24	
NS6183	NS6189	1,450	18	24	
PS234	NS6150	3,400	4	8	
NS6150	NS6157	2,320	10	16	
NS6157	NS6189	3,040	14	24	
PS249	NS6239	9,100	8	10	
NS6268A	NS6393	4,410	12	16	

TABLE 5-13
NFE-C-0006 (Lovett Road – Greenwell Springs Road)

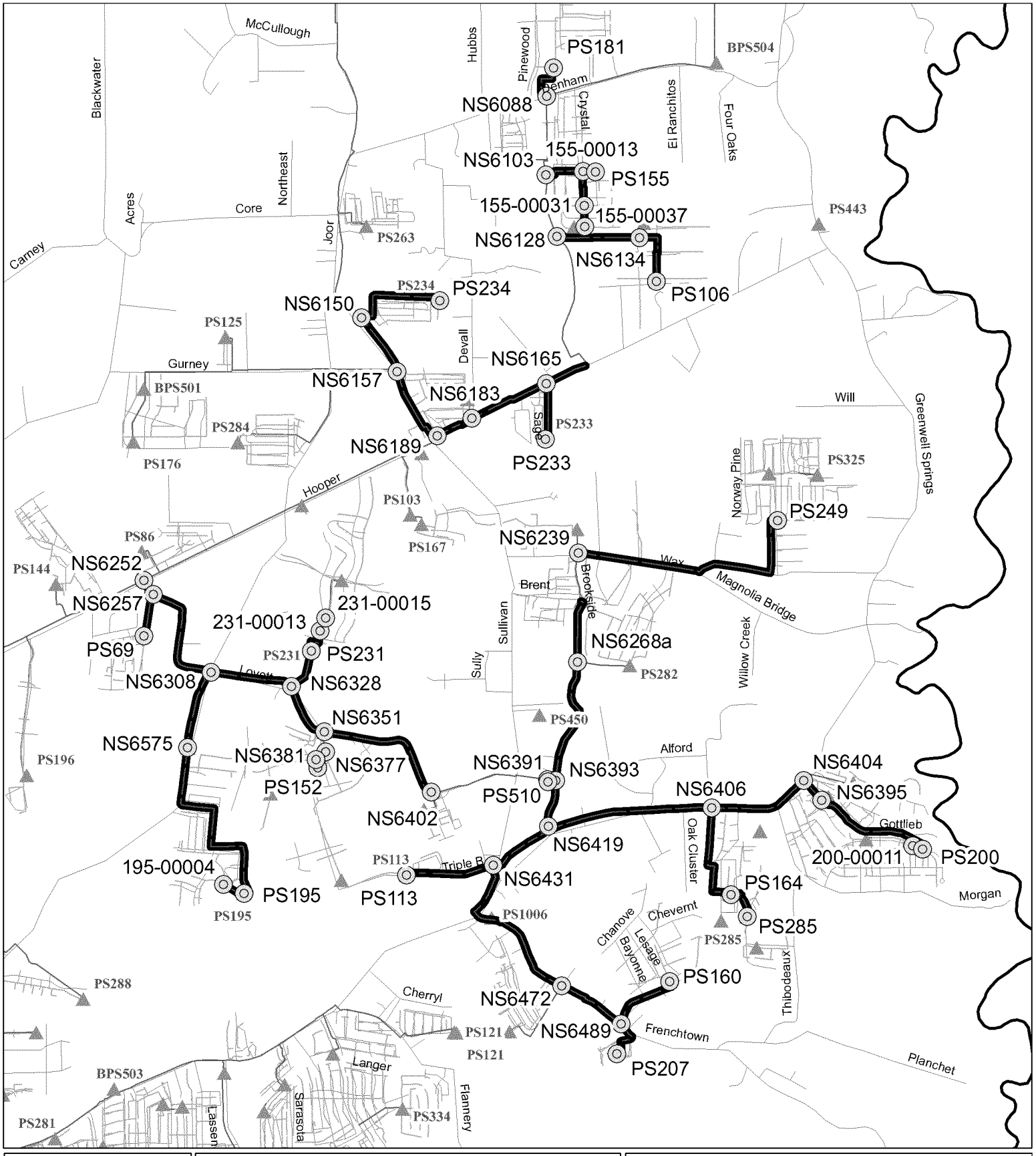
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS200	NS6404	4,260	8	10	
NS6404	NS6395	970	8	10	
NS6395	NS6406	3,600	10	12	
NS6406	NS6419	5,950	12	16	
NS6419	NS6393	1,750	14	18	
NS6393	NS6391	380	18	30	
PS285	PS164	1,300	6	8	
PS164	NS6406	3,960	6	8	
PS113	NS6419	3,170	6	8	
NS6419	NS6431	2,680	12	14	
PS160	NS6489	2,510	6	10	
NS6489	NS6472	2,540	8	12	
NS6472	NS6419	6,110	10	14	
PS207	NS6489	1,600	4	6	
PS152	NS6381	500	4	6	
NS6381	NS6377	500	4	6	
PS231	NS6328	1,720	6	12	
PS195	NS6575	7,840	8	14	
NS6575	NS6308	2,920	8	14	
PS69	NS6257	1,510	6	8	
PS510	NS6402	4,280	10	30	
NS6402	NS6351	4,890	20	30	
NS6351	NS6328	2,200	20	30	
NS6328	NS6308	2,930	20	30	
NS6308	NS6257	4,340	24	30	
NS6257	NS6252	600	24	30	

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $15,400,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation Year is 2012.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility
- Parish Boundary

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,700 5,400 Feet

Lovett Rd. - Greenwell Springs Rd.

NFE-C-0006

Project Vicinity Map

PUBLIC WORKS

Figure 5-15

BATON ROUGE SSO Program

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5.4.7 NFE-C-0007 (Multiple BPS – Hooper Road – Lovett Road)

The NFE-C-007 project has been combined with NFE-C-0005 (Multiple PS-Hooper Road-Greenwell Springs Road). The combined project has been designated NFE-C-0005 (Hooper Road Pump Station Projects) and is described in Section 5.4.5.

5.4.8 NFW-C-0001 (Joor Road – Greenwell Springs Road)

Project Description

Purpose of the Project/Background Information

The NFW-C-0001 project involves the design and construction of forcemain upgrades in the North Forced West Basin. The upgrades are designed to alleviate chronic SSOs at the pump stations and increase the forcemain capacity. The upgrades range in size from 6 to 24 inch diameter.

Location

This project involves the replacement of portions of the North Forced West manifold forcemain system as well as replacement of some gravity segments in the same area as the forcemain segments. The locations of the gravity sewer and forcemains in this project are shown in Figure 5-16.

Forcemain segment PS 183 to NS 6485 begins outside the property boundary of PS 183. Upon leaving the pump station, the forcemain travels north for approximately 50 feet before reaching Canterbury Drive. At Canterbury Drive, the forcemain turns east and follows the road for approximately 225 feet to the intersection of Canterbury Drive and Greenforrest Drive. At Greenforrest Drive, the forcemain turns northward and follows the road for approximately 1,500 feet to the intersection of Greenforrest Drive and Greenwell Springs Road. At this point, the forcemain travels under Greenwell Springs Road and manifolds into a larger forcemain at node NS 6485.

Forcemain segment PS 119N to NS 6509 begins outside the property boundary of PS 119. Upon leaving the pump station, the forcemain travels west for approximately 50 feet before reaching Sarasota Drive. At Sarasota Drive, the forcemain turns north and follows the road for approximately 1,000 feet to the intersection of Sarasota Drive and Coral Drive. At Coral Drive, the forcemain turns northward and follows the road for approximately 500 feet to the intersection of Coral Drive and Greenwell Springs Road. At this point, the forcemain travels under Greenwell Springs Road and manifolds into a larger forcemain at node NS 6509.

Forcemain segment BPS 503 to NS 6438 begins outside the property boundary of BPS 503 and travels south for approximately 150 feet before reaching Greenwell Springs Road. At Greenwell Springs Road, the forcemain turns west and follows the north ROW for approximately 6,000 feet to the intersection of Greenwell Springs Road and Joor Road. At Joor Road, the forcemain turns north and follows the east ROW for approximately 7,600 feet to the intersection of Joor Road and Mickins Road. At the intersection of Joor Road and Mickens Road (node NS6438), the forcemain travels northwest along Mickens Road for approximately 7,000 feet to node NS6438, located at the intersection of Mickens Road and Lanier Drive.

Forcemain segment PS 288 to NS 6461 begins outside the property boundary of PS 288. Upon leaving PS 288, the forcemain travels northwest along an electrical servitude for approximately 2,650 feet to its intersection with Joor Road. At Joor road, the forcemain turns south for approximately 250 feet to node NS 6461, located near the intersection of Mickens Road and Joor Road.

Forcemain segment NS 6499 to NS 6500 begins at node NS 6499, located near the end of the cul-de-sac on Dancy Avenue, and follows Dancy Avenue west to node NS6500, located near the intersection of Dancy Avenue and Joor Road.

Gravity segment 119N-00039 to PS 119N starts at manhole 119-00039, located near the intersection of Daytona Avenue and Flamingo Drive, runs northeast along Flamingo Drive, and turns north on Sarasota Drive to PS 119N, located on Sarasota Drive in between Flamingo Drive and Biscayne Drive.

Gravity segment 183-00009 to 183-00001Z begins at manhole 183-00009, located near the intersection of Cardigan Avenue and Kilkenny Drive, and follows Kilkenny Drive north to manhole 183-00001Z, which is located near the intersection of Kilkenny Drive and N. Salem Drive.

Gravity segment 128-00041A to PS 128 starts at manhole 128-00041A, located near the intersection of Toledo Bend Avenue and Redlands Drive, and heads south to PS 128, located on Redlands Drive, in between Cedar Bend Avenue and Elaine Drive.

Scope

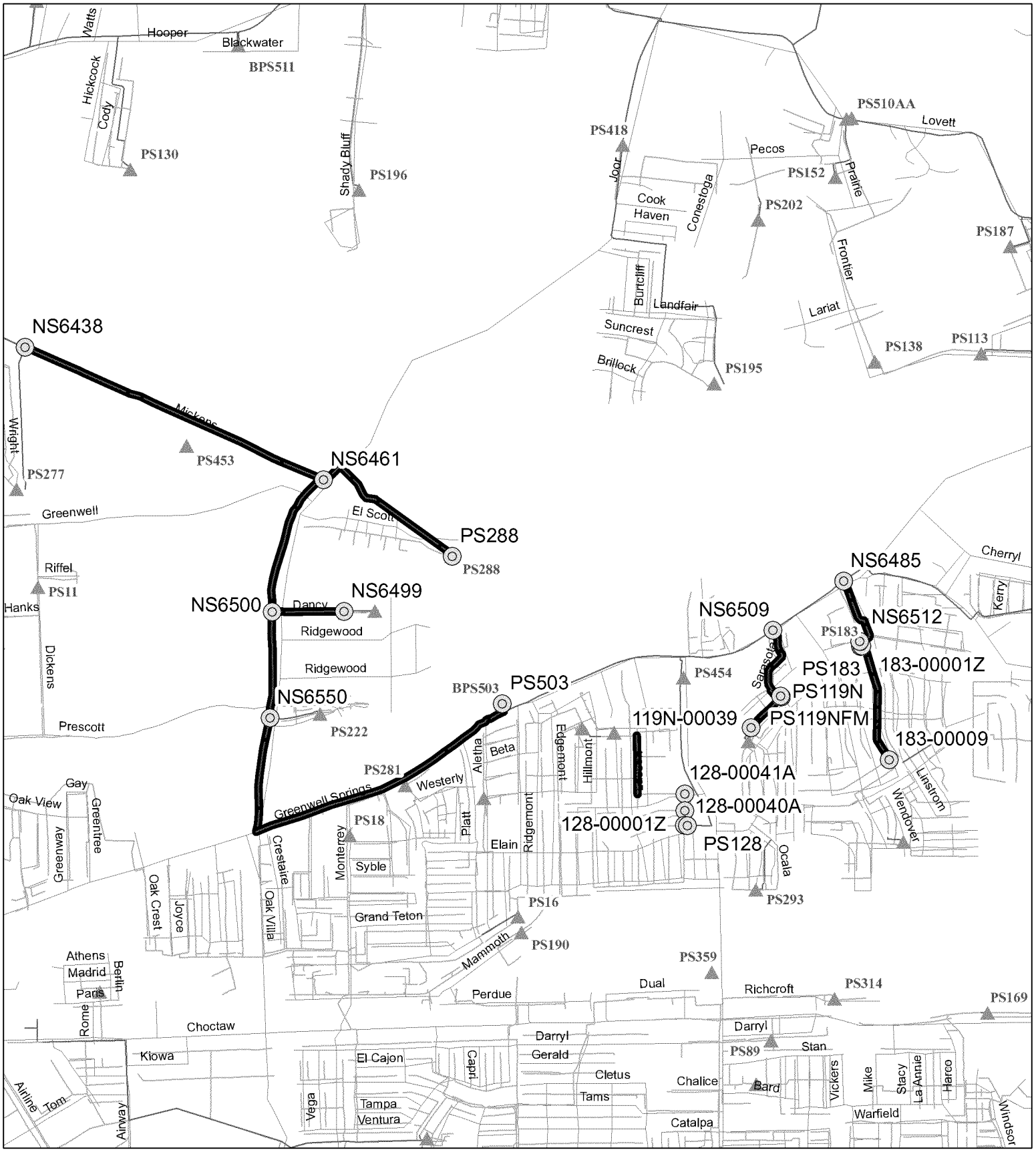
The scope of this project includes construction of approximately 1,750 feet of 10-inch and 12-inch gravity sewer upstream of PS 119N and PS 128 and approximately 2,600 feet of 21-inch gravity sewer upstream of PS 183. This project also includes construction of 29,800 feet of 4-inch, 6-inch, 10-inch, 16-inch, and 24-inch forcemain in the North Forced West basin. The detailed scope of this project is given in Table 5-14.

TABLE 5-14
NFW-C-0001 (Joor Road – Greenwell Springs Road)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)	Comments
PS 183	NS6512	160	14	16	
NS6512	NS6485	1,600	14	16	
PS 119N	NS6509	2,150	8	10	
BPS503	NS6550	8,500	14	24	
NS6550	NS6500	2,300	18	24	
NS6500	NS6438	10,200	14	24	
PS288	NS6461	3,400	4	6	
NS6499	NS6500	1,500	3	4	
119N-00039	PS119N	990	8	10	Gravity segment
183-00009	183-00001Z	2,600	12, 15, & 16	21	Gravity segment
128-00041A	128-00040A	360	10	12	Gravity segment
128-00040A	128-00001Z	320	10	12	Gravity segment
128-00001Z	PS128	85	10	12	Gravity segment

Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $5,000,000.
Scheduled Design Appropriation Year is 2012.
Scheduled Construction Appropriation Year is 2013.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,625 5,250 Feet

Joor Rd. - Greenwell Springs Rd.

NFW-C-0001

Project Vicinity Map

PUBLIC WORKS

Figure 5-16

BATON ROUGE SSO Program

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5.4.9 NFW-C-0002 (Choctaw Storage, PS 52A, PS 51A, PS 51AA, and Forcemains)

Project Description

Purpose of the Project/Background Information

The NFW-C-0002 (Choctaw Storage, PS 52A, PS 51A, PS 51AA, and Forcemains) project involves the design and construction of a 26-million gallon (MG) storage facility (Choctaw Storage Facility) in west-central Baton Rouge Parish. This project also includes the construction of an overflow pump station for Pump Station 52 (PS 52A), an overflow pump station for PS 51 (PS 51A), a gravity trunk line overflow pump station (PS 51AA), and the forcemains to convey the flow from the pump stations to the storage facility. One of the forcemains will also serve as the return line for flow from the Choctaw Storage Facility to PS 52. The purpose of this facility is to detain peak wet weather flows during a storm event, and release them back into the collection system when demand is lower.

Construction of the storage facility will eliminate approximately 6.5 miles of pipe replacement, reduce the overall pipe diameter for the remaining sewer projects, and eliminate the need to increase the capacity of the North WWTP.

Location

The location of the 26 MG storage facility is near the northeast corner of the intersection of Airline Highway and South Choctaw Drive. The C-P already owns the parcel of land. The locations of the pump stations are given in Table 5-15.

The force main from PS 52A to the storage facility will lead south along E. Brookstown Drive to Winbourne Avenue It will then head east along Winbourne Avenue to the intersection with Victoria Drive. From Victoria Drive, the main will cross Greenwell Springs Road and follow the frontage road at the intersection of Airline Highway and Greenwell Springs Road. The main will then cross Airline Highway and run parallel to Reco Avenue to the storage facility. The forcemain from PS 51A to the storage facility will run south along Sierra Vista Drive to Cuyhenga Parkway. It then travels west along Cuyhenga Parkway to the end of Cuyhenga Parkway and cross open field to Tom Drive. The main will run west along Tom Drive to Airway Drive where it will head north to W. El Cajon Drive. It will run west along W. El Cajon Drive north on Commerce Avenue and across Choctaw Drive to the storage facility. The forcemain from PS 51AA to the manifold point with the forcemain from PS 51A will begin near the intersection of Red Oak Drive and Sharp Lane and head north along Sharp Lane to the intersection with Cuyhanga Parkway. From this point, the force main will head west along Cuyhanga Parkway to the intersection with Sierra Vista Drive, where it will intersect with the force main from PS 51A.

Scope

This project includes the construction of one, 20 million gallon (MG) storage tank and one 6 MG storage tank at the Choctaw Storage Facility and their associated piping, valving, controls, and appurtenances. The pump stations and forcemains are detailed in Table 5-15 and Table 5-16 and are shown in Figure 5-17.

TABLE 5-15
NFW-C-0002 (Choctaw Storage, PS 52A, PS 51A, PS 51AA and Forcemains) – Pump Station Information

PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS51A	Sierra Vista Drive north of the intersection with Cuyhanga Parkway	New	8,333	0
PS51AA	Near the intersection of Red Oak Drive and Sharp Lane	New	3,125	0
PS 52A	NE of Brookstown Drive intersection with Winbourne	New	31,924	0

TABLE 5-16
NFW-C-0002 (Choctaw Storage, PS 52A, PS 51A, PS 51AA and Forcemains) – Forcemain Information

US No.	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
PS52A	Choctaw Storage	10,100	New	42
PS51A	PS51WW1	130	New	21
PS51WW1	Choctaw Storage	10,380	New	24
PS51AA	PS51WW1	2,830	New	15

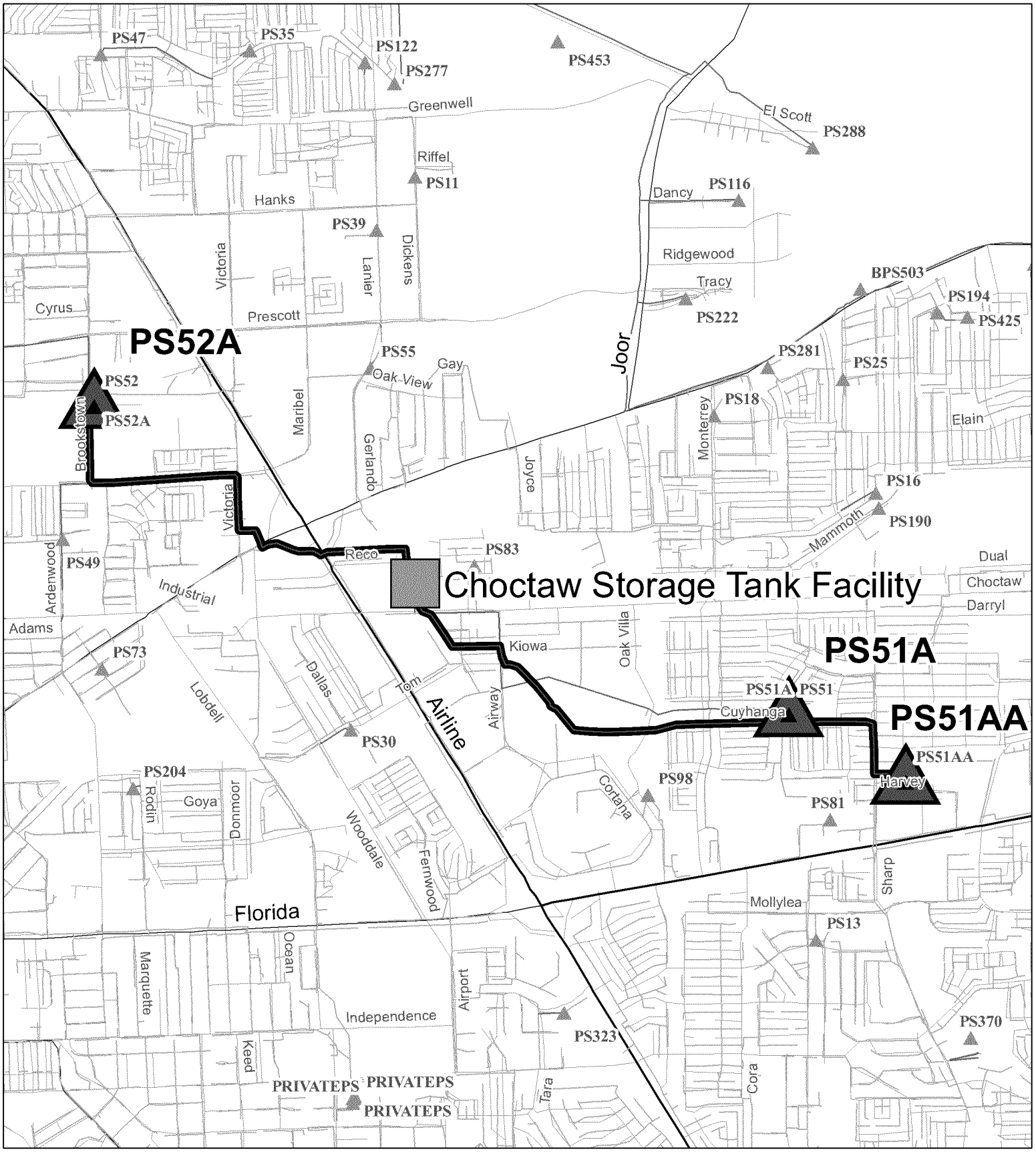
Note: The future peak wet weather flow was obtained from the BTRSSO hydraulic model. The new pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $50,300,000.

Total Storage Facility Land Acquisition Cost is $1,218,720 (already acquired).

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2009.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,450 4,900 Feet

Choctaw Storage Tank, PSs and FMs

NFW-C-0002

Project Vicinity Map

PUBLIC WORKS

Figure 5-17

BATON ROUGE SSO Program

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5.4.10 NFW-C-0003 (Choctaw Storage Pump Station)

Project Description

This project has been deleted and combined with NFW-C-0002 (Choctaw Storage, PS 52A, PS 51A, PS 51AA, and Forcemains).

5.4.11 NFW-C-0004 (Hooper Storage)

Project Description

Purpose of the Project/Background Information

The NFW-C-0004 (Hooper Storage) project involves the design and construction of a 10-MG storage facility (Hooper Storage Facility) in northwest Baton Rouge Parish as well as the replacement of BPS 897 with a wet well pump station. The purpose of this facility is to detain peak wet weather flows during a storm event, and release them back into the collection system when demand is lower.

Construction of the storage facility will eliminate the need for approximately 13,200 feet of pipe replacement, reduce the overall pipe diameter for the remaining sewer projects, and eliminate the need to increase the capacity of the North WWTP.

Location

The proposed location of the storage facility is near the northwest corner of the intersection of Hooper Drive (Highway 408) and Mickens Road and is shown in Figure 5-18.

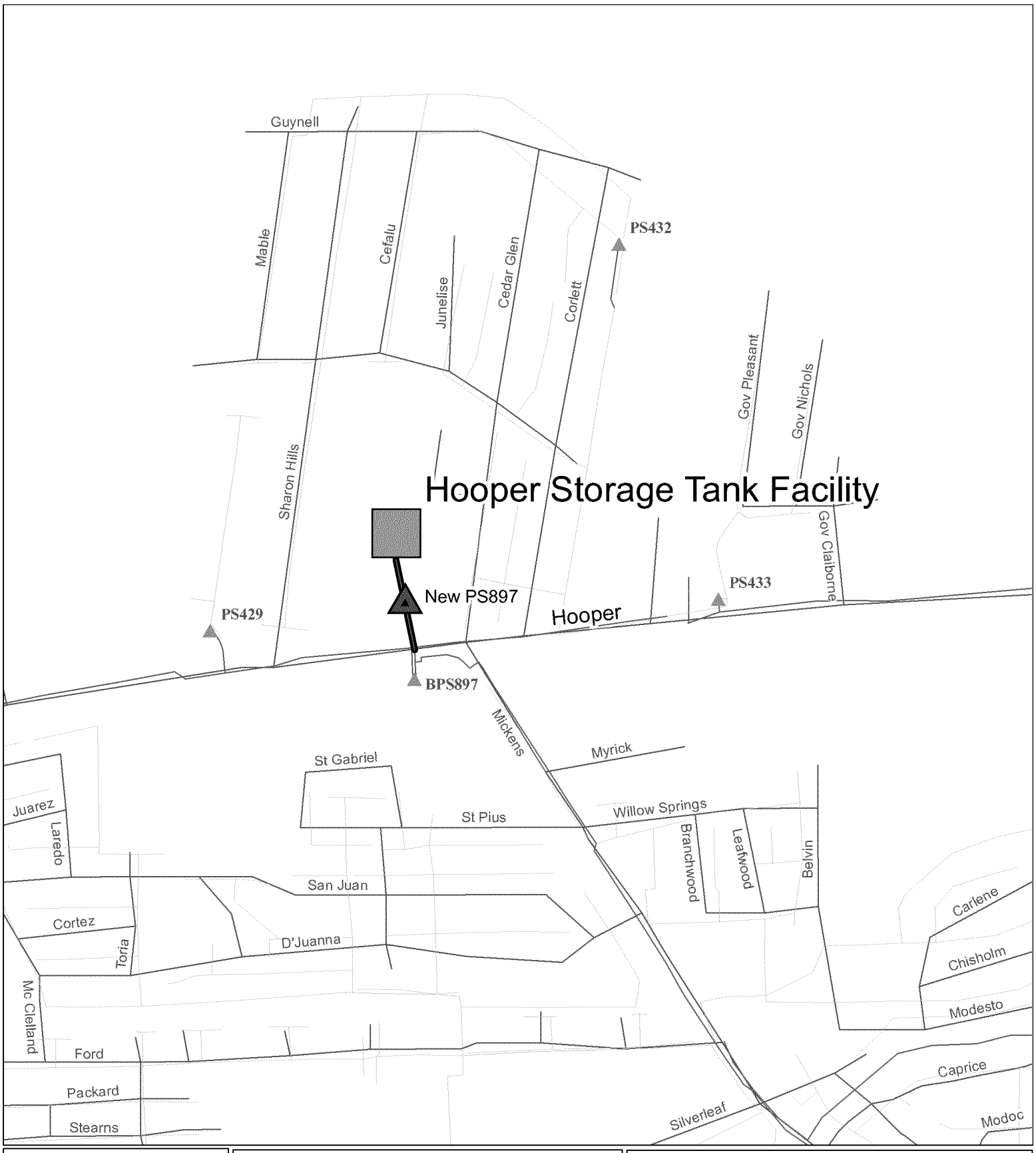
Scope

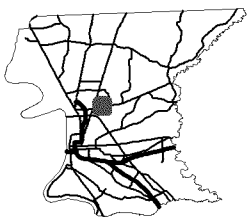
The project scope includes the design and construction of the storage facility and associated pumping systems to transfer flows in and out of the facility. A new PS 897 will be built on the same site as the storage facility to transfer flows in and out of the facility. Once the storage facility and pump station are operational, BPS 897 will be abandoned.

Total Estimated Construction Cost is $19,700,000.

Scheduled Design Appropriation Year is 2009.

Scheduled Construction Appropriation Year is 2010.





East Baton Rouge Parish

Legend

Proposed	Existing
New Pump Stations	Exist. Gravity
New Gravity Main	Exist. Forcemain
New Force Main	Exist. Pump Station
New Storage Facility	Manholes\Nodes

N

0 330 660 1,320 Feet

PUBLIC WORKS

Hooper Storage Facility
NFW-C-0004
Project Vicinity Map

Figure 5-18

BATON ROUGE SSO Program

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5.4.12 Group Project 1A (Metro Airport Sewer Upgrades)

Project Description

Purpose of the Project / Project Background

The Group Project 1A (Metro Airport Sewer Upgrades) project involves the design and construction of upgrades to the collection system in the North Forced West Basin and the North Gravity Basin. This project includes upgrading portions of the gravity collection system located in the areas served by PS 46, PS 55, PS 39, PS 52, PS47, PS 54, PS 24, and PS 43. The upgrades are designed to alleviate chronic SSOs in the collection system and at the pump stations, as well as increase the system capacity. This project includes gravity sewers from the following projects in the January 2008 PDP: NGS-C-0001 (Progress Road – Baton Rouge Metro Airport), NFW-C-0005 (Airline Highway – Victoria Drive), and NFW-C-0006 (McClelland Drive).

Location

This project involves the replacement of portions of the gravity collection system, which are shown in Figure 5-19.

Gravity segment 047-00428 to 047-00029 begins at the intersection of Packard Street and White Street. The gravity line travels north along White Street to Ford Street. The gravity line turns east and follows Ford Street to manhole 047-00029.

Gravity segment 047-00264 to 047-00043 begins in a servitude east of Mickens Road. The gravity line travels west along the servitude to Mickens Road. The gravity line turns south and follows Mickens Road to 047-00043 near the intersection of Mickens Road and Ford Street. The inverts along this segment are approximately 5 feet to 10 feet deep.

Gravity segment 054-00027 to 054-00001A begins at manhole 054-00027, located on Dutton Street, south of the intersection of Dutton Street and Cannon street. From this point, the gravity line travels south for approximately 1,200-feet to manhole 054-00009, located near intersection of Dutton Street and Greenwell Street. At manhole 054-00009, the gravity line turns east and follows Greenwell Street to manhole 054-00001A, which is adjacent to PS 54. The inverts along this segment are approximately 10 feet to 15 feet deep.

Gravity segment 052-00700 to 052-00521 begins at manhole 052-00700, located on Greenwell Street, and travels east along Greenwell Street to manhole 052-000710, located near the intersection of Greenwell Street and Winchester Avenue. At manhole 054-00710, the gravity line turns south and follows Winchester Avenue to the intersection of Winchester Avenue and Hollywood Street. At this point, the gravity turns east and travels along Hollywood Street for approximately 950 feet before joining a larger trunk line at manhole 052-00521. The inverts along this segment are approximately 15 feet to 20 feet deep.

Gravity segment 024-00186 to 024-00011 begins at manhole 024-00186, which is located east of the intersection of Plank Road and Lorraine Street. At this point, the gravity line travels east along Lorraine Street for approximately 1,380 feet to manhole 024-000182, located near Lorraine Street. At manhole 24-000182, the gravity line turns south and travels to manhole 024-00088 and then follows Wildwood Parkway for approximately 1,400 feet to manhole 024-00011. The inverts along this segment are approximately 15 feet to 20 feet deep.

Gravity segment 024-00192 to 024-00182 begins at manhole 024-00192 which is located west of the intersection of Lorraine Street and Lemonwood Drive. At this point, the gravity line

travels west along Lorraine Street for approximately 850 feet to manhole 24-000182, located near Lorraine Street. The inverts along this segment are approximately 15 feet to 20 feet deep.

Gravity segment 024-00528 to 024-00496 begins at manhole 024-00528, located east of North 38th Street and Wyandotte Street intersection and travels east. At manhole 024-00522, the gravity line turns north and follows Delaware Street. At this point, the gravity turns east and travels along Mohican Street until reaching manhole 024-00496, located at Mohican Street and Wayne Drive.

Gravity segment 039-00035 to PS 39 begins at manhole 039-00035 located near Phebus Drive. From this point, the gravity line travels east for approximately 850 feet to manhole 039-00008. At manhole 039-00008, the gravity line connects with a larger trunk line. The trunk line runs south for approximately 2,600 feet to PS 39. The inverts along this segment are approximately 10 feet to 15 feet deep.

Gravity segment 052-00214 to 052-00204 begins near the intersection of Videt Polk Drive and Lanier Drive and travels south along Lanier Drive to the intersection of Lanier Drive and Prescott Road.

Gravity segment 043-00095 to 043-00073 begins north of Interstate 110, near Baton Rouge Avenue. The gravity line travels north along Baton Rouge Avenue to the intersection of Baton Rouge Avenue and Hollywood Street.

Gravity segment PS23DS to 043-00190 begins near the intersection of Wyandotte Street and Baton Rouge Avenue. The gravity line travels north along Baton Rouge Avenue towards Gordon Street until reaching manhole 043-00190.

Gravity segment 052-00882 to 052-00768 begins at manhole 052-00882 which is located at the intersection of Plank Road and Crown Avenue. From this point, the gravity line travels east along Crown Avenue approximately 1,100 feet to manhole 052-00451, located at the intersection of Crown Avenue and Beachwood Drive. At manhole 052-00451 the gravity turns south and travels along Beachwood Drive to manhole 052-00768, located near Beechwood Drive and Sumrall Drive intersection.

Gravity segment 052-00451 to PS 47 begins at manhole 052-00451, located at the intersection of Crown Avenue and Beachwood Drive. From this point, the gravity line travels east until reaching 052-00583B located near the intersection of Crown Avenue and Winchester Avenue. The gravity segment travels south until reaching 052-00556JA, located near the intersection of Winchester Avenue and Glenn Oaks Drive, continuing east until reaching 052-00556D. After leaving 052-00556D, the gravity line travels south along McClelland Drive until reaching 052-00556DA, located at the intersection of Crestway Avenue and McClelland Drive. The gravity line continues east along Crestway Avenue until reaching 047-00008, located east of the Crestway Avenue and Buckeye Drive intersection. The gravity segment travels south until reaching PS 47, located near the intersection of Vineyard Drive and W Rio Drive.

Gravity segment 052-00583A to 052-00583B begins at manhole 052-00583A, located near Monarch Avenue and Winchester Avenue intersection. The gravity line travels south until reaching 052-00583B, located near the intersection of Crown Avenue and Winchester Avenue.

Gravity segment 047-00014 to 047-00008 begins at manhole 047-00014, located near Glen Oaks Drive and Buttonwood Drive intersection. The gravity line travels south until reaching 047-00008, located east of the Crestway Avenue and Buckeye Drive intersection.

Gravity segment PS92DS to 047-00003 begins at PS92DS, located north of Glen Oaks Drive and Landis Drive intersection. The gravity line travels southwest until reaching 047-00556, then travels south, crossing Glen Oaks Drive until reaching 047-00557. The gravity line travels south until reaching Maplewood Drive and then travels northwest along Maplewood Drive until reaching 047-00474, located near Maplewood Drive and Cedar Grove Drive intersection. After leaving 047-00474, the gravity line travels southwest until reaching 047-00472. The gravity segment travels west along the north side of the drainage canal until reaching 047-00003.

Gravity segment 052-00144 to 052-00001 begins at 052-00144, located south of the Evangeline Street and East Brookstown Drive intersection. The gravity line travels south down East Brookstown Drive until reaching 052-00400. The gravity line continues east until reaching 052-00001.

Gravity segment PS 35 DS to PS 52 begins at PS35DS, located near Maplewood Drive and Shiloh Street intersection. The gravity line travels southwest along the drainage canal until reaching 052-00295 (PS47DS). The gravity line travels south, from 052-00295 until reaching 052-00269A located on Greenwell Street between its intersections with Landis Drive and Loring Drive. The gravity line continues east on Greenwell Street for 268 ft until reaching 052-00280A and then continues south. The gravity segment continues to travel south along Victoria Drive until reaching 052-00100, locates south of Victoria Drive and Prescott Road intersection. The gravity line travels southwest, crossing Airline Highway and traveling parallel to Bicentennial Place for 1,390 feet. The gravity line continues south until reaching 052-00006A and then travels west for 1600 feet until reaching 052-00001. The gravity segments travels southwest until reaching PS52, located near the intersection of East Brookstown Drive and Hendricks Avenue.

Gravity segment 052-00168 to 052-00161 begins at 052-00168, located at Prescott Road and Maribel Drive intersection. The gravity line travels west until reaching 052-00161, located at the intersection of Prescott Road and Victoria Drive.

Scope

The detailed scope of this project is shown in Table 5-17.

TABLE 5-17
Group Project 1A (Metro Airport Sewer Upgrades)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
047-00428	047-00418	221	10	18
047-00418	047-00417	313	12	21
047-00417	047-00029	1602	12	18
047-00264	047-00043	507	8	15
054-00027	054-00026	246	8	18
054-00026	054-00009	966	15	21
054-00009	054-00008	233	15	24

TABLE 5-17
Group Project 1A (Metro Airport Sewer Upgrades)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
054-00008	054-00006	530	15	24
054-00006	054-00001A	177	15	24
054-00001A	PS54	77	15	24
052-00755	052-00521	499	18	27
052-00745	052-00755	235	18	27
052-00716	052-00745	816	18	27
052-00710	052-00716	289	18	27
052-00700	052-00710	1277	18	27
024-00192	024-00182	673	8	21
024-00186	024-00182	1373	10	21
024-00182	024-00110	323	15	21
024-00110	024-00101	301	15	21
024-00101	024-00088	332	18	21
024-00088	024-00067	349	18	24
024-00067	024-00064	365	18	27
024-00064	024-00030	338	21	27
024-00030	024-00011	347	21	27
052-00214	052-00209	1173	12	15
052-00209	052-00205	586	12	18
052-00205	052-00204	301	15	18
039-00035	039-00008	847	10	15
039-00008	039-00007	299	10	18
039-00007	039-00006	268	10	18
039-00006	039-00003	1436	10	21
039-00003	PS39	599	12	21
043-00095	043-00093	357	15	24
043-00093	043-00085	1198	15	24
043-00085	043-00076	1311	15	24
043-00076	043-00075	339	15	24
043-00075	043-00073	315	15	24
PS 23DS	043-00135	451	12	15
052-00014	052-00012	754	15	18
052-00882	052-00880	416	8	12
052-00880	052-00792	298	8	12
052-00792	052-00451	438	8	12
052-00451	052-00768	455	8	12
052-00583B	052-00556JA	1329	New	18
052-00556JA	052-00556D	990	15	21

TABLE 5-17
Group Project 1A (Metro Airport Sewer Upgrades)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
052-00556DA	047-00192	1680	New	30
052-00556D	052-00556DA	342	18	30
052-00451	052-00583B	1627	New	12
047-00192	047-00191	320	8	30
047-00191	047-00009	375	8	30
047-00009	047-00008	257	10	30
047-00008	047-00005	896	24	36
047-00005	047-00004	352	24	36
047-00004	047-00003	154	24	42
047-00003	PS47	209	24	42
052-00583A	052-00583B	496	New	18
047-00014	047-00012	146	24	36
047-00012	047-00011	243	24	36
047-00011	047-00008	273	24	36
PS92DS	047-00556	129	8	12
047-00557	047-00474	1957	8	18
047-00556	047-00557	135	8	15
047-00474	047-00472	150	8	18
047-00472	047-00466	785	New	18
047-00466	047-00003	764	New	18
052-00400	052-00001	105	36	42
052-00152A	052-00152	118	30	42
052-00152	052-00115	959	30	42
052-00144	052-00143	306	30	42
052-00143	052-00152A	441	30	42
052-00115	052-00113	700	30	42
052-00113	052-00107	311	30	42
052-00107	052-00106	261	30	42
052-00106	052-00400	98	36	42
PS35DS	052-00299	27	8	15
052-00299	052-00295 (PS47DS)	634	8	21
052-00295 (PS47DS)	052-00292	262.4	8	42
052-00292	052-00284	469	8	42
052-00284	052-00280	414	8	42
052-00280A	052-00245	2007	New	42
052-00280	052-00280A	268	New	42
052-00245	052-00240	1452	30	48

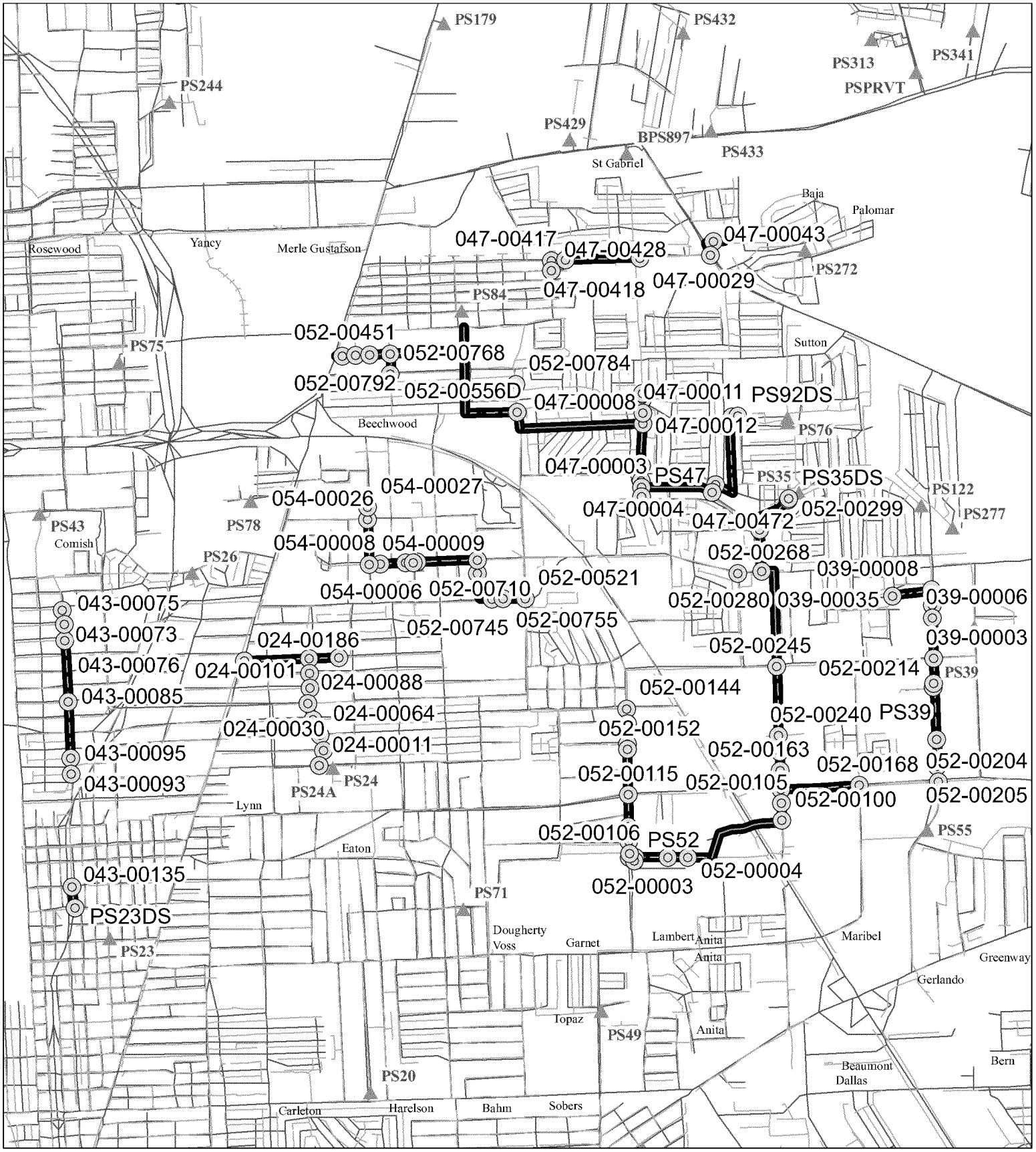
TABLE 5-17
Group Project 1A (Metro Airport Sewer Upgrades)

US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
052-00240	052-00239	361	30	48
052-00239	052-00163	399	30	48
052-00163	052-00161	404	30	48
052-00161	052-00105	290	30	48
052-00105	052-00100	367	30	48
052-00100	052-00067B	675	New	48
052-00067B	052-00006A	1253	New	48
052-00006A	052-00004	483	36	54
052-00004	052-00003	435	36	54
052-00003	052-00001	712	36	54
052-00001	PS52	69	48	66
052-00168	052-00161	1673	24	36

Total Estimated Construction Cost is $29,200,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2010.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 2,650 5,300 Feet

PUBLIC WORKS

Metro Airport Area Sewer Upgrades

Group Project 1A

Project Vicinity Map

Figure 5-19

EBR SSO Program

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5.4.13 Group Project 1B (Metro Airport Area Sewer Pump Station and Forcemain Upgrades)

Project Description

Purpose of the Project/Background Information

Group Project 1B (Metro Airport Area Sewer Pump Station and Forcemain Upgrades)

Group Project 1B is a combination of two individual projects identified in the *Program Delivery Plan*, dated January 2008, specifically the NFW-C-0008 (Multiple Pump Stations – Airline Highway – Greenwell Street) and portions of NFW-C-0005 (Airline Highway – Victoria Drive). This project includes the upgrades of forcemain segments and pump stations in the North Gravity and North Forced West Basins.

Group Project 1B consists of the replacement of nine pump stations, replacement of 8,000 linear feet of 8 to 15-inch sanitary sewer forcemain pipeline, and 26,060 linear feet of new 30 sanitary sewer forcemain.

The pump station and forcemain upgrades will work in conjunction with the Group Project 1A gravity sewer upgrades in the North Gravity and North Forced West Basin projects to alleviate chronic sanitary sewer overflows (SSOs) at the pump stations and in the gravity basins upstream of the pump stations.

Location

The locations of the pump stations are given in Table 5-18 and shown in Figure 5-20.

Group Project 1B is primarily located in the north Baton Rouge area. Detailed location descriptions of the required capacity improvements follow.

Forcemain segment PS45FM to North WWTP begins at PS 45 located near Clark Street and Granberry Drive. Upon leaving the pump station, the forcemain travel west and then south, traveling south down Devall Lane. After reaching Devall Lane and Blount Road, the forcemain travels west until reaching Liberty Drive. The forcemain travels south until the end of Liberty Drive and travels southwest near the airport runway until reaching Progress Road. The forcemain travels west down Progress Road until reaching intersection with Elm Grove Garden Drive. The forcemain travels south down Elm Grove Garden Drive. The forcmain turns west near I-110 and travels west down Central Road. The forcmain travels southwest down Scotland Avenue and then travels west until reaching Mills Avenue. The forcemain continues west along Mills Avenue until reaching North WWTP.

Forcemain segment PS277FM to NS6438 begins near PS 277 located at the end of Wright Drive. The forcemain travels north, parallel to Wright Drive until reaching NS6438, located on Mickens Road.

Forcemain segment PS275FM to NS6140AA (new node) begins at PS275, located at Glynn Road and Old Rafe Meyer Road. Upon leaving the pump station, the forcemain travels west along Old Rafe Meyer Road to a new node, NS6140AA, located at the intersection of Old Rafe Meyer Road and Highway 61.

Forcemain segment PS54FM to PS54DS begins at PS 54, located at Greenwell Street and Robertson Avenue. The forcemain travels north until reaching PS54DS.

Forcemain segment PS 47FM to PS 47DS begins at PS 47, located on Vineyard Drive between Grand Drive and West Rio Drive, travels northeast towards Maplewood Drive. The forcemain segment then travels east and then southeast until reaching PS47DS located near W Fairlane Court.

Forcemain segment PS35FM to PS35DS begins at PS 35, located on Maplewood Drive between East Fairlane Court and Flag Street. The forcemain segment travels southwest until reaching PS 35DS, located near the intersection of Maplewood Drive and Shiloh Street.

Forcemain segment PS39FM to PS39DS starts at PS 35, located on Lanier Drive between Hanks Drive and Prescott Drive, and follows Lanier Drive south for approximately 35 feet to manhole PS39DS.

Scope

This project includes the replacement of PS 45, PS47, PS 35, PS 39, PS 54, PS 23, PS 275, and PS 277. This project also includes the replacement of the forcemains PS277, PS 275, PS 54, PS 47, PS 35, PS 39 and an extension of PS45 forcemain. Tables 5-18 and 5-19 show the detailed scope of this project.

TABLE 5-18
Group Project 1B (Metro Airport Area Sewer Pump Stations Upgrades)

PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)	Comments
PS45	Near intersection of 72nd Avenue and Yorkshire Street	9,652	16,571	1,917	Moved from NGS-C-0004
PS47	Vineyard Drive between Grand Drive and West Rio Drive	7,152	14,366	1,202	
PS35	Maplewood Drive between East Fairlane Court and Flag Street	694	1,687	323	
PS39	Lanier Drive between Hanks Drive and Prescott Drive	625	2,083	256	
PS54	Greenwell Street between North Foster Drive and Beechwood Drive	1,042	3,715	201	
PS23	Canonicus Street between Calumet Street and Navajo Street	1,528	1,569	418	
PS275	Intersection of Old Rafe Meyer Road and Glynn Road	694	1,604	0	
PS277	End of Wright Drive	208	660	134	

TABLE 5-19
Group Project 1B (Metro Airport Area Forcemain Upgrades)

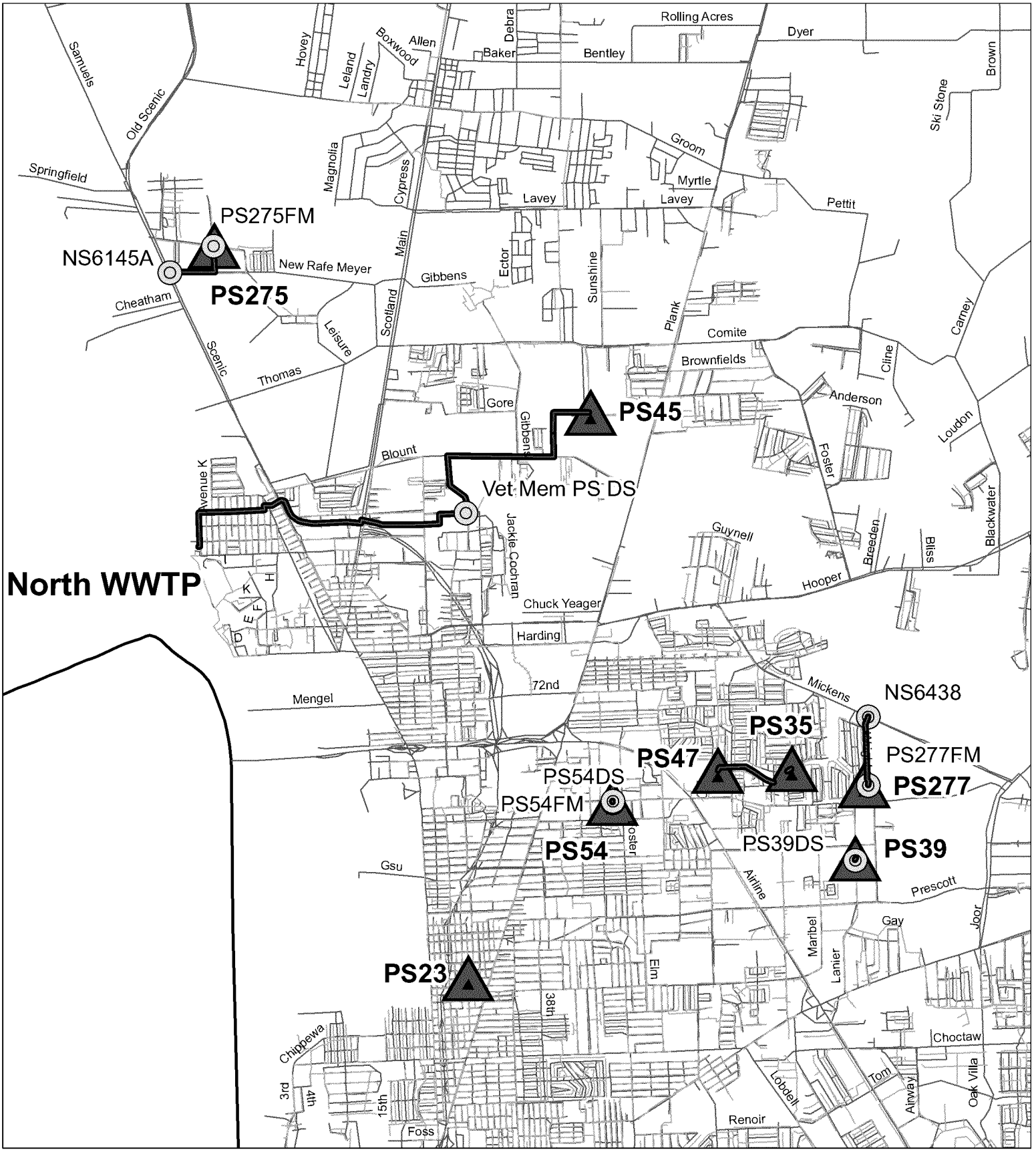
US	DS	Length (ft)	Existing (in)	Proposed (in)
PS45FM	North WWTP	23,256	New	30
PS277FM	NS6438	3,124	6	8
PS55FM	PS55DS	1,100	8	10
PS275FM	NS6140AA (new node)	3,400	8 & 10	12
PS54FM	PS54DS	60	8	15
PS47FM	PS47DS	2,803	16	30
PS35FM	PS35DS	240	6	8
PS39FM	PS39DS	35	8	10

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model. The existing pipe sizes and all pipe lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $17,200,000.

Scheduled Design Appropriation Year is 2008 (already appropriated).

Scheduled Construction Appropriation Year is 2010.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 5,000 10,000 Feet

Metro Airport Area Sewer Pump Station and Forcemain Upgrades

Group Project 1B

Project Vicinity Map

PUBLIC WORKS

Figure 5-20

BATON ROUGE SSO Program

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5.4.14 NFW-C-0007 (Plank Road – Port Hudson Pride Road)

Project Description

Purpose of the Project / Background Information

The NFW-C-0007 (Plank Road – Port Hudson Pride Road) project involves the design and construction of forcemain upgrades in the North Forced West Basin. The upgrades are designed to alleviate chronic SSOs at the pump stations and increase the forcemain capacity.

Location

This project involves the replacement of portions of the North Forced West manifold forcemain system and locations are shown in Figure 5-21.

Forcemain segment BPS 513 to NS 6087 starts outside the property boundary of BPS 513. Upon leaving the pump station, the forcemain travels east for approximately 400 feet along Bentley Drive to the intersection of Bentley Drive and Plank Road At Plank Road, the forcemain turns southwest and follows the road for approximately 1,800 feet to node NS 6087, located near the intersection of Plank Road and Kent Drive.

Forcemain segment PS 371 to NS 6049 starts outside the property boundary of PS371. Upon leaving the pump station, the forcemain travels north for approximately 50 feet west before reaching Danielle Avenue. At Danielle Avenue, the forcemain turns west and follows the road for approximately 1,000 feet to the intersection of Danielle Avenue and Eric Drive. At Eric Drive, the forcemain turns northward and follows the road for approximate 50 feet to the intersection of Eric Drive and an existing servitude. At this point the forcemain travels west for approximately 500 feet to manhole NS6049, located on the west side of Plank Road, and manifolds into the larger forcemain, which runs along Plank Road.

Forcemain segment PS OXLF to NS 6037 starts at PS OXLF, located near the intersection of Hereford Avenue and Little Farms Drive, and travels east along a servitude to node NS6307, which is located on Plank Road.

Forcemain segment PS 123 to NS 6033 starts outside the property boundary of PS 123. Upon leaving the PS, the forcemain travels west for approximately 50 feet before reaching Tucker Road. At Tucker Road, the forcemain turns north and follows the road for approximately 5,600 feet to node NS6033, located near the intersection of Tucker Road and Zachary Deerford Road.

Forcemain segment PS 124 to NS 6025 starts outside the property boundary of PS 124. Upon leaving PS 124, the forcemain travels south for approximately 50 feet before reaching Port Hudson Pride Road. At Port Hudson Pride Road, the forcemain turns east and follows the roadway for approximately 6,600 feet to node NS 6015, which is located south of the intersection of Port Hudson Pride Road and WJ Wicker Road. At WJ Wicker Road the forcemain turns southeast and follows the roadway for approximately 8,500 feet to node NS6022, located near the intersection of WJ Wicker Road and Plank Road. At node NS 6022, the forcemain turns south and follows Plank Road to node NS 6025, located near the intersection of Plank Road and Main Street/Zachary Deerford Road.

Forcemain segment PS 320 to NS 6035 begins outside the property boundary of PS 320. Upon leaving PS 320, the forcemain travels west for approximately 50 feet before reaching Buckhorn Drive. At Buckhorn Drive forcemain turns south and follows the roadway for approximately 1,600 feet as Buckhorn Drive turns to the west and intersects with Deercreek

Drive. At Deercreek Drive, the forcemain turns south and follows roadway for approximately 1,000 feet to the intersection of Deercreek Drive and Greenwell Spring Point Road. At Greenwell Spring Point Road the forcemain turns west and follows the road for approximately 2,000 feet to manhole NS 6035, located near the intersection of Tucker Road and Greenwell Spring Point Road.

Forcemain segment PS 243FM to NS6140 starts at PS 243, located at the northern end of Northgate Drive, and travels south along Northgate Drive to node NS6140, located at the intersection of Northgate Drive and Old Rafe Meyer Road. This forcemain will tie into the forcemain from PS 275, which is part of Group Project 1B (Metro Airport Area Sewer Pump Station and Forcemain Upgrades).

Scope

The detailed scope of this project, which includes construction of forcemains in the North Forced West Basin, is shown in Table 5-20.

TABLE 5-20
NFW-C-0007 (Plank Road – Port Hudson Pride Road)

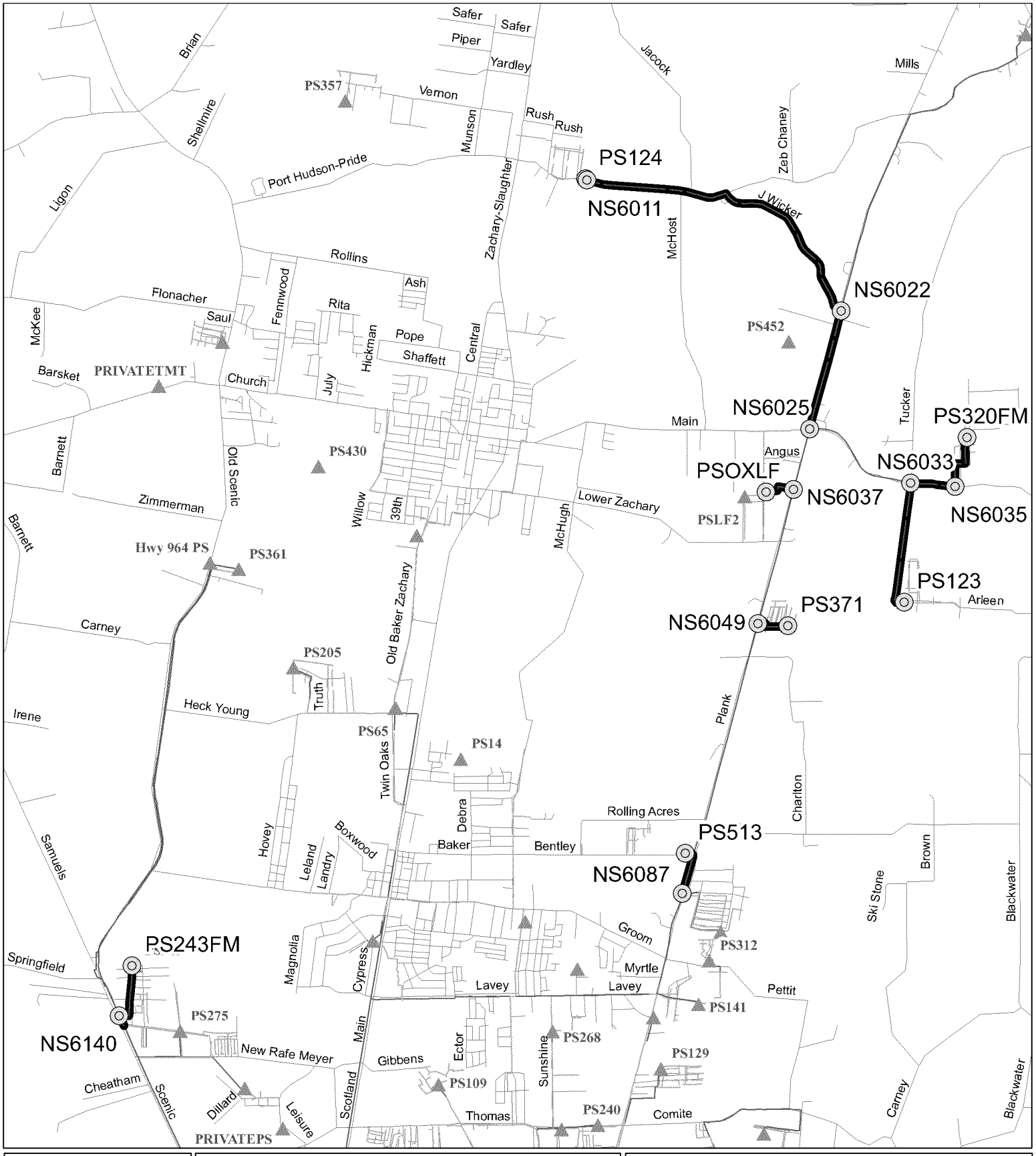
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
BPS 513	NS6087	2,500	18	20
PS 371	NS6049	1,600	4	6
PS OXLF	NS6037	1,500	6	10
PS123	NS6033	3,000	6	8
PS124	NS6011	30	6	8
NS6011	NS6022	15,000	10	12
NS6022	NS6025	5,800	10	14
PS320FM	NS6035	3,000	6	8
PS243FM	NS6140	3,340	8	12

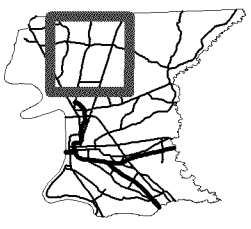
Note: The existing pipe sizes and lengths were obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $4,200,000.

Scheduled Design Appropriation Year is 2012.

Scheduled Construction Appropriation Year is 2013.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 6,000 12,000 Feet

Plank Rd. - Port Hudson Pride Rd.

NFW-C-0007

Project Vicinity Map

PUBLIC WORKS

Figure 5-21

BATON ROUGE SSO Program

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5.4.15 NFW-C-0009 (Multiple Pump Stations – Highway 61 – Plank Road)

Project Description

Purpose of the Project / Project Background

Project NFW-C-0009 (Multiple Pump Stations – Highway 61 – Plank Road) includes the upgrade of PS 243, PS 105, BPS 513, PS OXLF, PS 123, PS 124, PS 429, and PS 43. These upgrades are required to alleviate SSOs at and near the pump stations as well as in their respective upstream basins.

Location

The locations of the pump stations are given in Table 5-21 and is shown in Figure 5-22.

Scope

This project includes the replacement of the pump stations shown in Table 5-21. BPS 513 is being replaced so that it becomes a wet well pump station, rather than an in-line booster station.

TABLE 5-21
NFW-C-0009 (Multiple Pump Stations – Highway 61 – Plank Road)

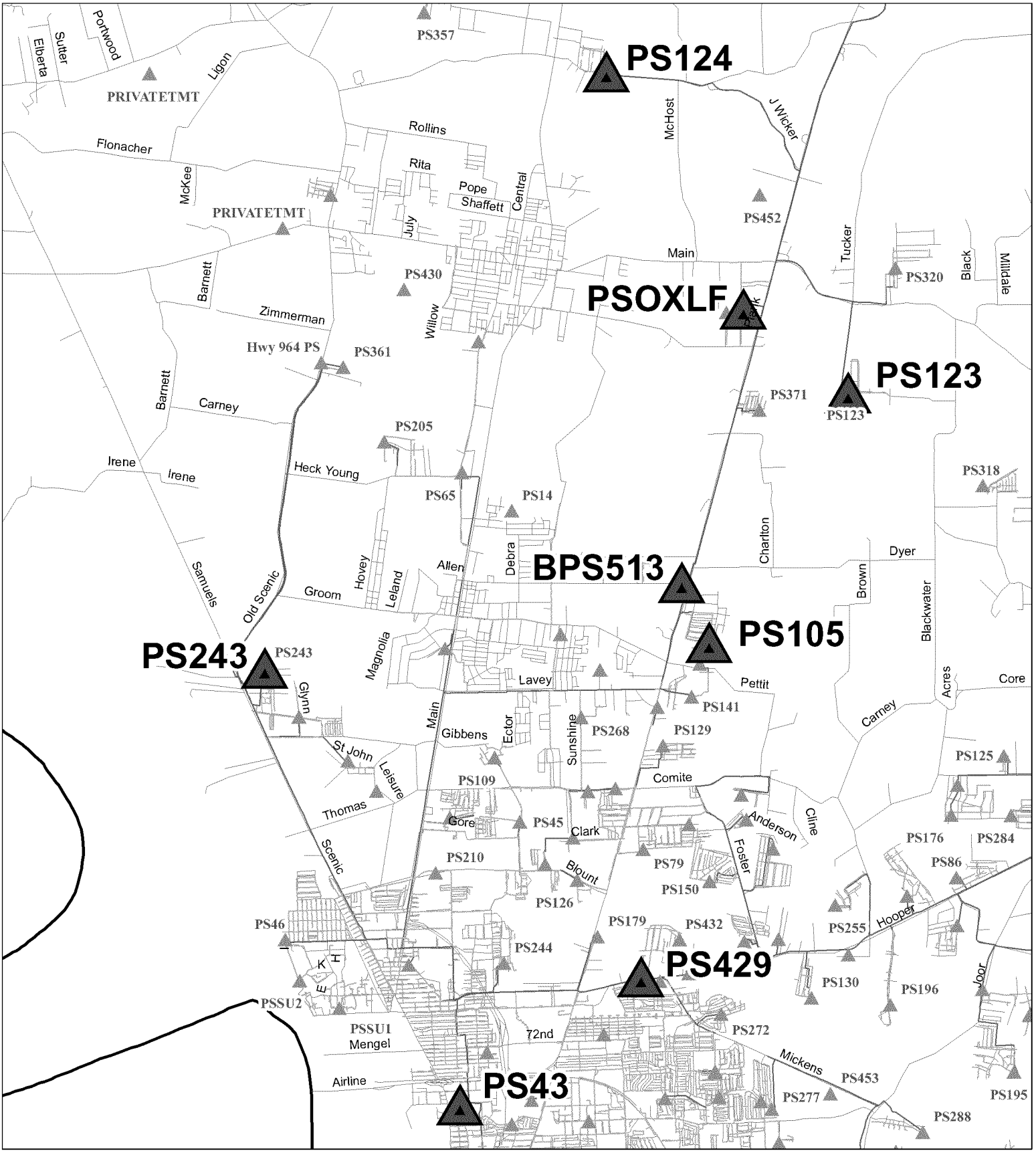
PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 243	Northgate Drive	625	1,139	184
PS 105	Jupiter Drive off Roman Drive	833	833	94
BPS 513	Bentley Drive off Plank Road	7,430	3,125	235
PS OXLF	Int of Little Farms Drive and Jersey Drive	Not Available	1,319	112
PS 123	Arleen Ave	139	347	31
PS 124	Int of Hudson Pride Road and Hagen Drive	208	900	120
PS 429	Hooper Ridge Blvd	Not Available	100	22
PS 43	Int of Ralph Street and Shada Ave	7,083	9215	1,937

Note: The existing maximum capacities for the PSs were obtained from the DPW *Field Pump Station Maintenance* reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $6,100,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation Year is 2013.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility
- Parish Boundary

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 6,250 12,500 Feet

Multiple PS Hwy 61- Plank Rd.

NFW-C-0009

Project Vicinity Map

PUBLIC WORKS

Figure 5-22

BATON ROUGE SSO Program

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5.4.16 NFW-C-0010 (Multiple Pump Stations – Prescott Road – Greenwell Springs Road)

Project Description

Purpose of the Project / Project Background

The NFW-C-0010 (Multiple Pump Stations – Prescott Road – Greenwell Springs Road) project includes the upgrade of PS 24, PS 24A, PS 503, PS 119N, and PS 183. These upgrades are required to alleviate SSOs at and near the pump stations as well as in their respective upstream basins.

Location

The locations of the pump stations are shown in Table 5-22 and in Figure 5-23.

Scope

This project includes the replacement of pump stations as outlined in Table 5-22.

TABLE 5-22
NFW-C-0010 (Multiple Pump Stations – Prescott Road – Greenwell Springs Road)

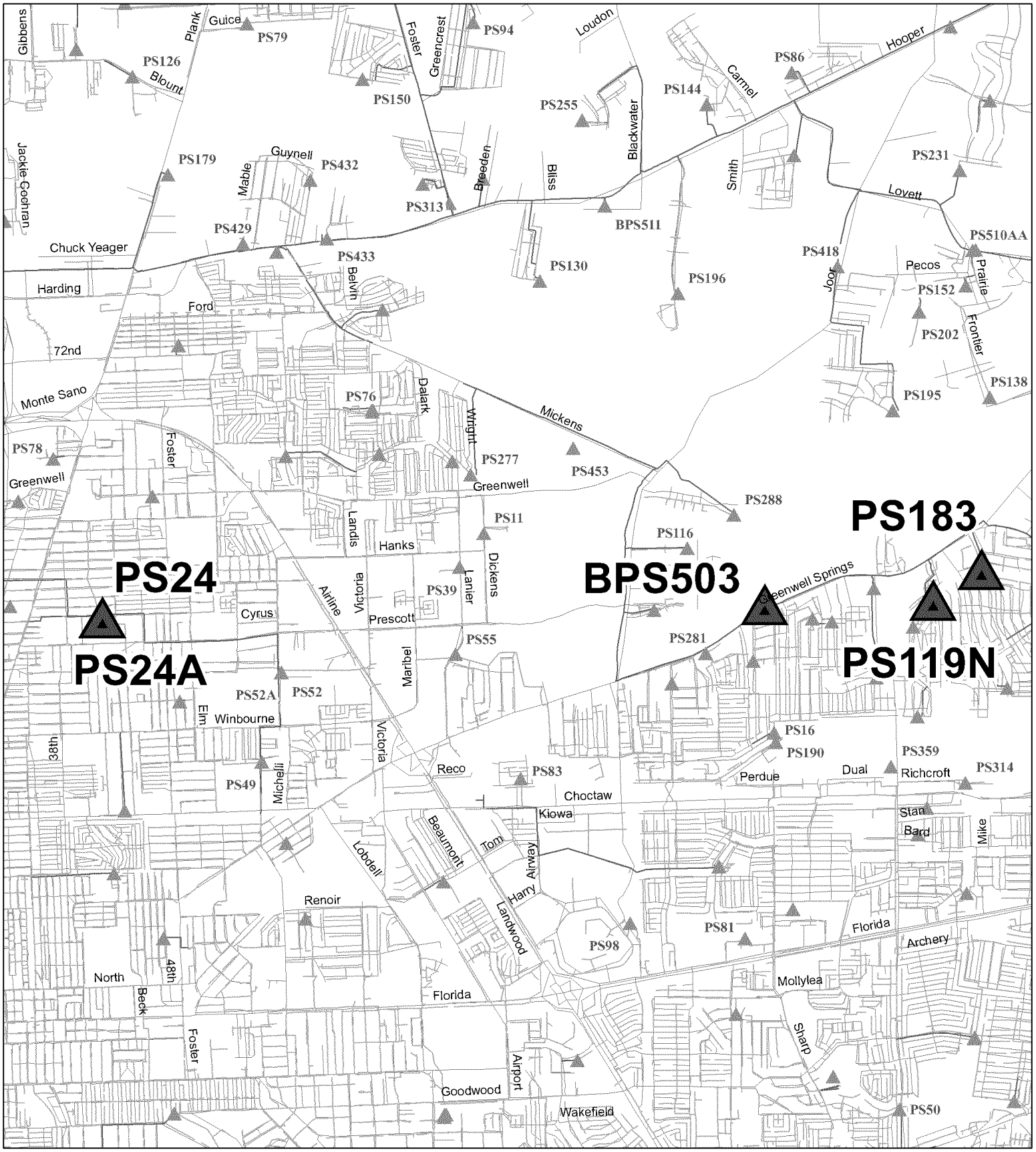
PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)	Dry Weather (GPM)
PS 24	Sherwood Street between Wildwood Parkway and Lemonwood Drive	4,028	3,819	1,733
PS 24A	Sherwood Street between Wildwood Parkway and Lemonwood Drive	5,902	3,264	165
PS 503	Greenwell Springs Road between the intersection of Aletha Drive and Pasadena Drive	2,847	4,088	736
PS 119N	Sarasota Drive between Biscayne Drive and Flamingo Drive	417	847	108
PS 183	Canterbury Drive between the intersection of Greenforest Drive and Monticello Blvd	1,528	2,194	443

Note: The existing maximum capacities for the PSs were obtained from the DPW Field Pump Station Maintenance reference guide. The future peak wet weather flow was obtained from the BTRSSO hydraulic model.

Total Estimated Construction Cost is $3,900,000.

Scheduled Design Appropriation Year is 2011.

Scheduled Construction Appropriation Year is 2012.



East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 4,300 8,600 Feet

PUBLIC WORKS

Multiple PS Prescott Rd. - Greenwell Springs Rd.

NFW-C-0010

Project Vicinity Map

Figure 5-23

BATON ROUGE SSO Program

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5.4.17 NFW-HWY61 (Zachary Area Transmission Network Improvement Project)

Project Description

Purpose of the Project / Project Background

The purpose of the NFW-C-HWY61 project is to address inadequate capacity in the Baker/Zachary contributing area and to divert flow from the Zachary contributing area around the Comite Diversion Canal to the North WWTP. This project also includes conversion of the Red Mud Lakes facility into a permanent storage facility, which will reduce the peak flows to the North WWTP from the Zachary area.

Scope

The NFW-C-HWY61 project consists of construction of pump stations, forcemains, and an equalization basin/storage facility to serve the Zachary area north of the Comite Diversion Canal. The project will re-route Zachary flows directly to the NWWTP, freeing up currently utilized capacity in the Baker system. The forcemains, shown in Figure 5-24, begin at the northern border of East Baton Rouge Parish and follow Highway 964 southward to its intersection with the Entergy transmission main right-of-way. This forcemain will increase in size as it runs southward, from a 16-inch to a 30-inch, since it will receive flow from this area as it develops. The existing Copper Mill pump station (PS 430) will pump through its existing 16-inch forcemain to the Hwy 964 PS located at the intersection of the Entergy right-of-way and Highway 964. A new pump station (Old Baker Road PS), located north of the intersection of Old Baker Road with the Entergy right-of-way, will capture all sewage from the Old Baker Road gravity main and pump through a 24-inch forcemain westward to Highway 964. The Hwy 964 PS will collect the flow from the 30-inch forcemain from the north, the existing 16-inch Copper Mill forcemain, and the new 24-inch Old Baker Road forcemain. This pump station will pump through a 48-inch forcemain westward along the Entergy right-of-way. The 48-inch forcemain will then follow Barnett Road, and cross Highway 61, to the Red Mud Lakes Equalization Facility.

The 20 million gallon (MG) equalization facility will be built inside the existing Red Mud Lakes facility that the C-P purchased from Kaiser Aluminum in 2004. The equalization basin will be utilized for storage during wet weather when flows in the forcemain exceed 20 mgd. A pump station with a capacity of 20 MGD, constructed on the Red Mud Lakes site, will pump the flow from the equalization facility to the North WWTP through a 30-inch forcemain that travels southeasterly along an existing servitude that is located to the west of Highway 61.

Table 5-23 below shows the capacities of each of the pump stations. Table 5-24 shows the sizes and lengths of the forcemains.

TABLE 5-23
NFW-C-HWY61 (Zachary Area Transmission Network Improvement Project) – Pump Stations

PS No.	Location	Existing Max Capacity (GPM)	Future Peak Wet Weather Flow (GPM)
Old Baker Road PS	West of the intersection of Plank Road with Entergy Right-of-Way	New	10,188
Hwy 964 PS	Intersection of Highway 964 and Entergy Right-of-Way	New	27,257
Red Mud Lakes PS	Red Mud Lakes Equalization Facility, near East Baton Rouge Parish Landfill	New	13,899

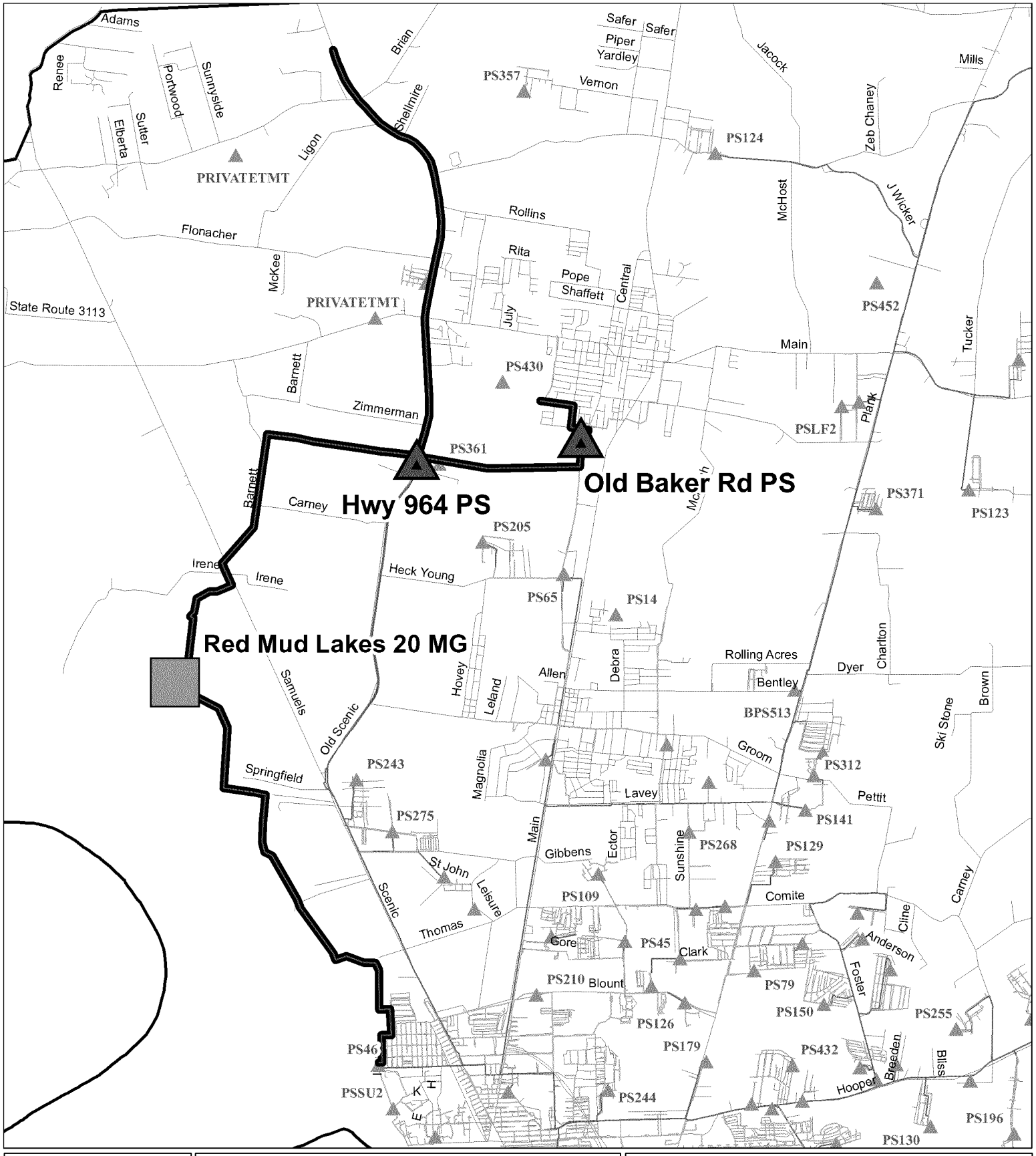
TABLE 5-24
NFW-C-HWY61 (Zachary Area Transmission Network Improvement Project) - Forcemains

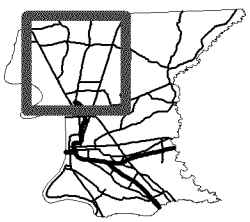
US Node	DS Node	Length (ft)	Existing Diameter (in)	Proposed Diameter (in)
Old Baker PS	Hwy 964 PS	10,500	New	24
Northern Parish Boundary	Hwy 964 PS	3,100	New	16
Northern Parish Boundary	Hwy 964 PS	8,850	New	20
Northern Parish Boundary	Hwy 964 PS	2,000	New	24
Northern Parish Boundary	Hwy 964 PS	11,630	New	30
Hwy 964 PS	Red Mud Lakes EQ Facility	33,900	New	48
Red Mud Lakes EQ Facility	North WWTP	32,750	New	30

Total Estimated Construction Cost $58,000,000.

Scheduled Design Appropriation Year is 2008.

Scheduled Construction Appropriation Year is 2010.





East Baton Rouge Parish

Legend

Proposed

- New Pump Stations
- New Gravity Main
- New Force Main
- New Storage Facility
- Parish Boundary

Existing

- Exist. Gravity
- Exist. Forcemain
- Exist. Pump Station
- Manholes\Nodes

N

0 4,300 8,600 Feet

PUBLIC WORKS

Zachary Area Transmition Network Improvement Project

NFW-C-HWY61

Project Vicinity Map

Figure 5-24

BATON ROUGE SSO Program

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SECTION 6

Emergency Generators

6.1 Background

The C-P does not currently have emergency/standby power generators at the majority of its pump stations in the collection system or at the WWTPs. Hurricane Gustav caused power outages throughout much of the C-P for the majority of a week. During this time, the collection system was not able to convey flows to the WWTPs due to lack of power at the pump stations in the system, and the WWTPs were not able to operate. There were a total of 34 recorded pump stations in the C-P that overflowed during and/or following Hurricane Gustav.

To address this issue, the C-P will install emergency generators at the combined South/Central WWTP, the North WWTP, and all the pump stations in the collection system. The wastewater projected flows and loads for the combined South/Central and North WWTP were used to determine the projected electrical demands for each plant. The treatment facilities at the North WWTP identified for upgrade during development of the C-P *Draft Master Plan (CH2M HILL, 2008)* are not included in this updated PDP. However, the costs for the generators needed at the North WWTP (and identified in the *Draft Master Plan*) are included in this updated PDP.

6.2 Collection System Pump Stations

To determine how many and what size of generators will be needed at each of the collection system pump stations, the stations were first divided into existing (non-PDP impacted) and PDP pump stations. For the PDP stations, each station's pumped flow and head were then determined or assumed with the resulting hydraulic horsepower calculated. The horsepower of the motors were then determined and ultimately generator units were selected and installed costs were determined. Each of the existing pump stations were visited by a field crew, and the horsepower requirement for the pumps were recorded. A generator sizing software program was used to select the appropriate generator sizes.

A list of 294 existing (non-PDP impacted) operational pump stations were developed based on C-P information (see Table 6-1). These stations will not be modified as part of the Program.

TABLE 6-1
Summary of Generator Units
Existing Pump Stations (not impacted by the PDP)

Generator Unit Size (KW)	Number of Units	Unit Installed Cost	Total Installed Cost 2007
10	66	$ 25,000	$ 1,650,000
15	10	$ 27,500	$ 275,000
20	57	$ 28,000	$ 1,596,000

TABLE 6-1
Summary of Generator Units
Existing Pump Stations (not impacted by the PDP)

Generator Unit Size (KW)	Number of Units	Unit Installed Cost	Total Installed Cost 2007
35	60	$ 41,000	$ 2,445,000
40	28	$ 45,000	$ 1,260,000
60	46	$ 48,000	$ 2,208,000
80	2	$ 53,000	$ 105,000
100	6	$ 56,000	$ 336,000
125	1	$ 62,000	$ 62,000
150	4	$ 68,000	$ 272,000
200	1	$ 75,000	$ 75,000
500	1	$ 137,000	$ 137,000
600	1	$ 193,000	$ 193,000
TOTAL	**284**		**$ 10,703,000**
Total Estimate: $10,703,000 Existing Stations (non-PDP impacted)			

Note 1: For each category, a diesel generator, automatic transfer switch, enclosure equipment pad, and other accessories were sized to estimate an installed construction cost.

Note 2: See Appendix A for detailed information on each of the existing stations and their respective generator requirements.

The 144 C-P pump stations that are to be added or modified as part of the Program are identified in Table 6-2.

TABLE 6-2
Summary of Generator Units
PDP Pump Stations

Generator Unit Size	Number of Units	Unit Installed Cost	Total Installed Cost
10	5	$ 25,000	$ 125,000
15	1	$ 28,000	$ 28,000
20	7	$ 28,000	$ 196,000
35	14	$ 41,000	$ 574,000
40	34	$ 45,000	$ 1,530,000
60	30	$ 48,000	$ 1,440,000
80	5	$ 53,000	$ 265,000
100	13	$ 56,000	$ 728,000
125	2	$ 62,000	$ 124,000
150	6	$ 68,000	$ 408,000
200	2	$ 75,000	$ 150,000
250	9	$ 84,000	$ 756,000

TABLE 6-2
Summary of Generator Units
PDP Pump Stations

Generator Unit Size	Number of Units	Unit Installed Cost	Total Installed Cost
300	2	$ 98,000	$ 196,000
400	4	$ 115,000	$ 460,000
600	6	$ 193,000	$ 1,158,000
800	3	$ 266,000	$ 798,000
900	1	$ 329,000	$ 329,000
1000	2	$ 339,000	$ 678,000
2250	3	$ 1,031,000	$ 3,093,000
2500	2	$ 1,260,000	$ 2,520,000
TOTAL	**151**		**$ 15,556,000**
Total Estimate: $15,556,000 Existing Stations (not expanded)			

Note 1: Some of the large pump stations require more than one installed generator unit.

Note 2: See Appendix B for detailed information on each of the PDP stations and their respective generator requirements.

Note 3: For each category, a diesel generator, automatic transfer switch, enclosure equipment pad, and other accessories were sized with a resulting estimated installed construction cost.

6.3 Wastewater Treatment Plants

For the North and South/Central WWTPs, the generation capacity needed was estimated based on the future estimated total flows and current loads seen at each of the plants. Natural gas generators were selected due to operator preference for natural gas. Cost estimates were developed for both the stand alone generators, and for the installed generator systems including automatic transfer switches, equipment pads, enclosures, and other site specific equipment necessary to integrate the generators into the facility's electrical system

The North WWTP estimated generator installed cost is $5.5 M for 7.5 MW of generation capacity, which is now included in this PDP update

The South/Central WWTP estimated installed cost is $11.0 M, for 15 MW of generation capacity. This cost is already included in the estimated construction cost for the Phase 2 expansion project (STP-C-0002, South WWTP Phase 2 – Master Plan Portion).

6.4 Generator Project Delivery Plan

In order to install generators in a timely manner at all pump stations and the North and South/Central WWTPs, a project delivery plan was developed. The first step in developing the project delivery plan was to prioritize the pump stations that were to get generators using the following criteria:

1) Pump stations to be replaced as a part of PDP

2) Existing pump stations (not impacted by this PDP) that overflowed during Hurricane Gustav

3) Existing pump stations (not impacted by this PDP) that were on DPW staff's list of critical pump stations

4) Existing pump stations (not impacted by this PDP) that were not on any of the previous lists (with larger pump stations receiving higher priority than smaller pump stations)

The WWTPs were prioritized based on the PDP and Draft Master Plan projects. As mentioned above, the South/Central WWTP generators will be installed as part of the South WWTP – Phase 2 project, with the generators funded as part of the overall project. The North WWTP generators will be installed as part of the North WWTP Master Plan project. The existing Central WWTP will not receive emergency generators, since current plans call for it to be decommissioned.

The schedule of the project delivery is based on this prioritization as well as available budget. The available budget for generators is estimated to be $10 million in 2009, $10 million in 2010, and $13 million in 2011. Therefore, for each of these three years, the first priority was the budget for generators at the PDP pump stations. After that, the second, third, and fourth priorities were considered in the order noted above. Table 6-3 shows the cost summary- for generator installation.

TABLE 6-3
Emergency Generators Cost Summary

Item	
Generator Purchase (including maintenance)	$19M
Generator Installation (non-PDP pump stations)	$11M
North WWTP	$5.5M
Land Acquisition	$0.5M
Total	**$36M**

In order to deliver these projects in a timely manner, the following criteria were used to develop the project delivery plan.

- All pump stations will have installed generators (no temporary generators, unless site constraints dictate).
- A 5-year renewable maintenance contract is required for the service of all generators.
- Pump stations will be designed as generator-ready.
- Generators will be provided by a generator vendor and installed by a general contractor. For PDP pump stations and WWTPs, the general contractor will be the general contractor for the entire project.
- The generator vendor will be selected by a bidding process. A 5-year maintenance contract will be part of this contract. The contract will be based on the number of generators needed per year, with a unit price given for each type of unit for each year.

- The generators will be delivered to a local warehouse, kept by the vendor, to be picked up and installed by the general contractors.
- The South WWTP generators will be delivered on the Program schedule by 2014, when the South WWTP – Phase 2 project is scheduled to be completed.

With these criteria in mind, the following project delivery plan was developed.

1) Program Manager to prepare contract documents for generator supply and maintenance in 2nd quarter of 2009.

   Program Manager to prepare standard specifications and installation details in 3rd quarter of 2009.

2) Installation specifications and details will be delivered to design engineers for PDP projects in 2nd quarter of 2009.

3) Installation package for non-PDP pump stations will be developed by the PM. The package will be ready to advertise in 3rd quarter of 2009.

   With this project delivery plan, each pump station and WWTP will have emergency power by the end of the Program (December 31, 2014). A list of the pump stations are provided in Table 6-4.

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TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
1	4+1 VTSH	4550	4	125	205	225	900
8	2	500	1	50	9	10	10
9	2	5500	1	50	99	100	100
11	AIR	40	AIR	-	-	5	5
12	2	727	1	50	13	15	15
13	2	550	1	50	10	10	10
14	2	400	1	50	7	10	10
17	2	100	1	50	2	3	3
20	2	125	1	50	2	3	3
22	2	115	1	50	2	3	3
25	AIR	100	AIR	-	-	5	5
26	2	200	1	50	4	5	5
27	2	382	1	50	7	7.5	7.5
28	2	300	1	50	5	5	5
29	2	300	1	50	5	5	5
32	2	200	1	50	4	5	5
33	2	3500	1	50	63	75	75
34	AIR	60	AIR	-	-	5	5
36	2	500	1	50	9	10	10
37	2	100	1	50	2	3	3
40	2	400	1	50	7	7.5	7.5
42	CTP		CTP	-	-	0	0
46	NTP		NTP	-	-	0	0
48	3	2380	2	75	64	75	150
49	4	2380	3	100	86	100	300
51	2	2000	1	50	36	40	40
52	4	4022	3	100	145	150	450
53	3	2000	2	75	54	60	120
57	5	6325	4	125	285	300	1200
58	5	6000	4	125	271	300	1200
61	STP		STP	-	-	0	0
62	2	781	1	50	14	15	15
65	3	700	2	75	19	20	40
67	2	3772	1	50	68	75	75
69	2	282	1	50	5	5	5

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
70	2	350	1	50	6	7.5	7.5
71	2	300	1	50	5	5	5
72	3	332	2	75	9	10	20
73	2	150	1	50	3	3	3
74	2	568	1	50	10	10	10
76	AIR	100	AIR	-	-	5	5
77	2	350	1	50	6	7.5	7.5
78	2	200	1	50	4	5	5
79	2	200	1	50	4	5	5
81	2	100	1	50	2	3	3
82	2	100	1	50	2	3	3
83	AIR	65	AIR	-	-	5	5
84	2	450	1	50	8	10	10
85	3	500	2	75	14	15	30
87	AIR	150	AIR	-	-	5	5
88	2	250	1	50	5	5	5
89	AIR	150	AIR	-	-	5	5
90	2	292	1	50	5	5	5
91	2	500	1	50	9	10	10
93	2	438	1	50	8	10	10
95	2	100	1	50	2	3	3
96	2	150	1	50	3	3	3
97	AIR	100	AIR	-	-	5	5
98	2	500	1	50	9	10	10
99	AIR	70	AIR	-	-	5	5
100	2	200	1	50	4	5	5
101	2	200	1	50	4	5	5
103	2	176	1	50	3	3	3
104	2	664	1	50	12	15	15
106	2	287	1	50	5	5	5
108	2	1140	1	50	21	25	25
109	2	200	1	50	4	5	5
110	2	500	1	50	9	10	10
111	2	1015	1	50	18	20	20
113	2	190	1	50	3	3	3

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
114	2	260	1	50	5	5	5
116	3	33	2	75	1	2	4
117	2	100	1	50	2	3	3
121	2	184	1	50	3	3	3
122	2	122	1	50	2	3	3
126	2	300	1	50	5	5	5
128	2	631	1	50	11	15	15
130	2	109	1	50	2	3	3
131	2	100	1	50	2	3	3
132	2	202	1	50	4	5	5
133	2	13	1	50	0	1	1
134	2	600	1	50	11	15	15
135	2	400	1	50	7	7.5	7.5
136	2	932	1	50	17	20	20
137	OFF LINE		OFF LINE	-	-	0	0
138	2	70	1	50	1	2	2
140	2	369	1	50	7	7.5	7.5
141	2	139	1	50	3	3	3
142	2	250	1	50	5	5	5
143	2	500	1	50	9	10	10
145	2	524	1	50	9	10	10
146	OFF LINE		OFF LINE	-	-	0	0
147	2	613	1	50	11	15	15
150	2	436	1	50	8	10	10
151	2	175	1	50	3	3	3
152	2	234	1	50	4	5	5
154	2	763	1	50	14	15	15
155	2	663	1	50	12	15	15
157	2	278	1	50	5	5	5
158	AIR	80	AIR	-	-	5	5
159	2	144	1	50	3	3	3
160	2	300	1	50	5	5	5
161	2	594	1	50	11	15	15
163	AIR	125	AIR		-	5	5
165	OFF LINE		OFF LINE	-	-	0	0

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
166	2	400	1	50	7	7.5	7.5
167	2	84	1	50	2	3	3
168	2	344	1	50	6	7.5	7.5
169	2	100	1	50	2	3	3
171	2	300	1	50	5	5	5
173	2	150	1	50	3	3	3
177	2+2	1000	3	100	36	40	120
178	AIR	20	AIR	-	-	5	5
179	2	100	1	50	2	3	3
180	2	83.8	1	50	2	3	3
181	2	274	1	50	5	5	5
184	2	142	1	50	3	3	3
185	2	178	1	50	3	3	3
186	OFF LINE		OFF LINE	-	-	0	0
188	5	6750	4	125	304	350	1400
189	2	360	1	50	6	7.5	7.5
190	2	160	1	50	3	3	3
191	2	367	1	50	7	7.5	7.5
192	2	100	1	50	2	3	3
193	2	110	1	50	2	3	3
194	2	170	1	50	3	3	3
195	2	395	1	50	7	7.5	7.5
197	2	329	1	50	6	7.5	7.5
198	2	263	1	50	5	5	5
199	2	700	1	50	13	15	15
200	2	481	1	50	9	10	10
202	AIR	30	AIR	-	-	5	5
203	2	187	1	50	3	3	3
204	2	183	1	50	3	3	3
205	2	154	1	50	3	3	3
206	2	641	1	50	12	15	15
208	OFF LINE		OFF LINE	-	-	0	0
209	OFF LINE		OFF LINE	-	-	0	0
210	2	150	1	50	3	3	3
212	OFF LINE		OFF LINE	-	-	0	0

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
213	2	85	1	50	2	3	3
214	2	80	1	50	1	2	2
215	2	160	1	50	3	3	3
216	AIR	70	AIR	-	-	5	5
217	AIR	80	AIR	-	-	5	5
219	2	275	1	50	5	5	5
220	2	150	1	50	3	3	3
222	2	103	1	50	2	3	3
225	2	519	1	50	9	10	10
226	2	429	1	50	8	10	10
232	2	150	1	50	3	3	3
233	2	85	1	50	2	3	3
235	2	80	1	50	1	2	2
237	2	150	1	50	3	3	3
238	OFF LINE		OFF LINE	-	-	0	0
241	2	700	1	50	13	15	15
242	2	200	1	50	4	5	5
245	AIR	82	AIR	-	-	5	5
248	2	100	1	50	2	3	3
250	2	450	1	50	8	10	10
251	2	300	1	50	5	5	5
252	2	479	1	50	9	10	10
253	2	145	1	50	3	3	3
254	AIR	40	AIR	-	-	5	5
255	2	147	1	50	3	3	3
256	AIR	70	AIR	-	-	5	5
257	AIR	40	AIR	-	-	5	5
258	2	156	1	50	3	3	3
259	2	227	1	50	4	5	5
260	2	91	1	50	2	3	3
261	2	150	1	50	3	3	3
262	2	295	1	50	5	4	4
263	2	184	1	50	3	3	3
264	2	333	1	50	6	7.5	7.5
265	2	169	1	50	3	3	3

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
266	2	120	1	50	2	3	3
267	AIR	70	AIR	-	-	5	5
268	2	200	1	50	4	5	5
269	3	3500	2	75	95	100	200
270	2	244	1	50	4	5	5
270	2	495	1	50	9	10	10
272	2	200	1	50	4	5	5
273	OFF LINE		OFF LINE	-	-	0	0
276	2	100	1	50	2	3	3
279	2	131	1	50	2	3	3
280	2	127	1	50	2	3	3
281	2	230	1	50	4	5	5
282	2	127	1	50	2	3	3
283	2	523	1	50	9	10	10
284	2	246	1	50	4	5	5
286	AIR	40	AIR	-	-	5	5
287	2	125	1	50	2	3	3
289	2	320	1	50	6	7.5	7.5
290	2	180	1	50	3	3	3
292	2	100	1	50	2	3	3
293	2	225	1	50	4	5	5
294	2	225	1	50	4	5	5
295	2	266	1	50	5	5	5
297	2	125	1	50	2	3	3
298	2	240	1	50	4	5	5
299	2	640	1	50	12	15	15
300	3	1650	2	75	45	50	100
301	3	1750	2	75	47	50	100
302	3	2575	2	75	70	75	150
303	2	80	1	50	1	2	2
304	2	520	1	50	9	10	10
305	2	494	1	50	9	10	10
306	OFF LINE		OFF LINE	-	-	0	0
307	2	160	1	50	3	3	3
308	2	201	1	50	4	5	5

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
309	2	80	1	50	1	2	2
310	2	424	1	50	8	10	10
312	2	240	1	50	4	5	5
314	2	300	1	50	5	5	5
315	2	86	1	50	2	3	3
317	2	350	1	50	6	7.5	7.5
318	OFF LINE		OFF LINE	-	-	0	0
319	2	250	1	50	5	5	5
320	2	222	1	50	4	5	5
321	2	200	1	50	4	5	5
322	2	265	1	50	5	5	5
323	2	265	1	50	5	5	5
324	2	360	1	50	6	7.5	7.5
325	2	159	1	50	3	3	3
328	2	735	1	50	13	15	15
330	2	100	1	50	2	3	3
331	2	365	1	50	7	7.5	7.5
332	2	550	1	50	10	10	10
333	2	20	1	50	0	1	1
334	2	225	1	50	4	5	5
335	2	410	1	50	7	7.5	7.5
337	2	250	1	50	5	5	5
339	2	150	1	50	3	3	3
341	2	80	1	50	1	2	2
342	2	100	1	50	2	3	3
343	2	750	1	50	14	15	15
344	2	700	1	50	13	15	15
346	2	650	1	50	12	15	15
347	2	450	1	50	8	10	10
348	OFF LINE		OFF LINE	-	-	0	0
349	2	100	1	50	2	3	3
350	2	100	1	50	2	3	3
351	2	424	1	50	8	10	10
352	2	350	1	50	6	7.5	7.5
354	2	100	1	50	2	3	3

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
355	2	100	1	50	2	3	3
356	2	108	1	50	2	3	3
357	OXID POND		OXID POND	-	-	0	0
359	2	125	1	50	2	3	3
360	2	100	1	50	2	3	3
361	2	93	1	50	2	3	3
362	2	100	1	50	2	3	3
363	2	170	1	50	3	3	3
364	OFF LINE		OFF LINE	-	-	0	0
366	2	425	1	50	8	10	10
368	OFF LINE		OFF LINE	-	-	0	0
369	2	5961	1	50	108	125	125
370	2	3500	1	50	63	75	75
371	2	170	1	50	3	3	3
373	2	240	1	50	4	5	5
374	1	150	1	50	3	3	3
375	2	100	1	50	2	3	3
376	2	150	1	50	3	3	3
377	2	150	1	50	3	3	3
378	2	262	1	50	5	5	5
380	2	185	1	50	3	3	3
381	2	100	1	50	2	3	3
382	2	48	1	50	1	2	2
383	2	100	1	50	2	3	3
384	2	100	1	50	2	3	3
385	2	100	1	50	2	3	3
386	2	400	1	50	7	7.5	7.5
387	2	100	1	50	2	3	3
388	2	100	1	50	2	3	3
389	2	588	1	50	11	15	15
390	2	100	1	50	2	3	3
392	2	64	1	50	1	2	2
393	2	199	1	50	4	5	5
394	2	30	1	50	1	2	2
395	2	127	1	50	2	3	3

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
396	2	100	1	50	2	3	3
397	2	6000	1	50	108	125	125
398	2	389	1	50	7	7.5	7.5
399	2	100	1	50	2	3	3
400	2	161	1	50	3	3	3
401	2	60	1	50	1	2	2
403			1	50	0	1	1
404	2	161	1	50	3	3	3
405	2	138	1	50	2	3	3
406	2	200	1	50	4	4	4
407	2	100	1	50	2	3	3
408	2	70	1	50	1	2	2
409			1	50	0	1	1
410	2	100	1	50	2	3	3
411			1	50	0	1	1
412	2	125	1	50	2	3	3
413	2	100	1	50	2	3	3
414			1	50	0	1	1
415	2	100	1	50	2	3	3
416	2	343	1	50	6	7.5	7.5
417	2	240	1	50	4	5	5
418			1	50	0	1	1
419			1	50	0	1	1
420			1	50	0	1	1
421			1	50	0	1	1
422			1	50	0	1	1
423	2	179	1	50	3	5	5
424			1	50	0	1	1
425			1	50	0	1	1
426			1	50	0	1	1
427			1	50	0	1	1
428			1	50	0	1	1
430			1	50	0	1	1
500	2	617	1	50	11	15	15
501	2	692	1	50	12	15	15

TABLE 6-4
Existing Pump Stations (Not Impacted By The PDP), Baton Rouge SSO Program

Pump Station Number	Number of Pumps	Capacity of Each Pump (gpm)	No. of Pumps for Des. Cap.	Pump TDH (ft)	HP per Duty Pump	Motor HP per Duty Pump	Operating HP
504	2	1012	1	50	18	20	20
508	3	1077	2	75	29	30	60
510	3	1781	2	75	48	50	100
601	3	1450	2	75	39	40	80
944	3	1177	2	75	32	40	80
1001(367)	2	154	1	50	3	3	3
1003(353)	2	292	1	50	5	5	5
101A	2	174	1	50	3	3	3
22A	2	115	1	50	2	3	3
31A	2	2060	1	50	37	40	40
353 (1003)	2	292	1	50	5	5	5
365 (676)	3	771	2	75	21	25	50
367(1001)	2	154	1	50	3	3	3
65A	3	1736	2	75	47	50	100
676(365)	3	770	2	75	21	25	50
7A	2	800	1	50	14	15	15
CHIPPEWA	SUMP PUMP		SUMP PUMP	-	-	0	0
DEVALLANE			1	50	0	1	1
EOPP CIV. CTR.			1	50	0	1	1
PARISH PRISON			1	50	0	1	1
PORT HUDSON			1	50	0	1	1
ST. JEAN APTS.	2	800	1	50	14	15	15
UTTLEFARMS	2	163	1	50	3	3	3
	2		1	50	0	1	1

Total Number of Active Stations = 320
Air PS = 21
included in the above 320
Off Line = 19

Appendix A
Existing Pump Stations and Generator Requirements

APPENDIX A

Existing Pump Stations and Generator Requirements

Pump Station	# of Pumps	Field Data Nameplate Horsepower	Horsepower Based On Inrush Amps	F/L Amps	Inrush Amps	Phase/ Volts	Gen Size (KW)
1	5	125		150	900	3/480	500
8	2	3		10	60	3/240	10
11	2	3	5	18	121	1/240	15
12	2	20		44	258	3/240	60
14	2	5		22		3/240	20
17	2		1.5	6.1	22.7	3/240	10
20	2		5	9	50	3/240	20
22	2	5	5	11	58	3/240	20
25	2	5	5	9	58	3/240	20
26	2	2		9	48	3/240	10
27	2	7.5		17	137	3/240	35
28	2	2				3/240	10
29	2		3	15		3/240	10
34	1	1		14		1/240	10
36	2	7.5		16	117	3/240	35
37	2	5	5	9	59	3/240	20
48	3		15	18	121	3/480	35
49	4	25		32		3/480	80
57	5	150		183		3/480	600
60	3		185			3/480	600
62	2	50/60	50	50	347	3/480	100
65A	3		77	84.0		3/480	150
69	2		15	46	273	3/240	40
70	2		5	14	87	3/240	20
71	2	5	3	14	56	3/240	20
72	2	20	15	36	205	3/240	60
73	2	5		12	58	3/240	20
74	2		7.5	17	132	3/240	35
77	2	5				3/240	20
78	2	5	5	12	64	3/240	20
79	2		3	7.7	56.1	3/240	10
81	2	5	5	11	64	3/240	20
82	2		3	7	61	3/240	10
83	2	3	2	6	50	3/240	10
84	2	7.5		16	92	3/240	35
85	2		25	24	177	3/480	40
87	2	5		14	82	3/240	20
88	2		5	11	93	3/240	20
89		3				3/240	10
90	2	10		29	159	3/240	35
93	2		7.5	18.1	130	3/240	35
95	2		3, 5	8		3/240	20

APPENDIX A

Existing Pump Stations and Generator Requirements

Pump Station	# of Pumps	Field Data Nameplate Horsepower	Horsepower Based On Inrush Amps	F/L Amps	Inrush Amps	Phase/ Volts	Gen Size (KW)
96	2	7.5		6	66	3/480	35
97	2		3	7	34	3/240	10
98	2	7.5		18	125	3/240	35
99	2	5				3/240	20
100	2		2	6	34	3/240	10
101	2	3		7	38	3/240	10
101A	2	10		27	161	3/240	35
103	2	20		35	363	3/240	60
104	2	29		31	224	3/480	60
106	2	25	40	28	283	3/480	60
108	2	50		52	399	3/480	60
109	2		10	20.1		3/208	35
111	2		50	60	358	3/480	60
113	2		40	45	302	3/240	60
114	2		3	9	56	3/240	10
116	3		5	5		3/480	20
117	2	2.2	5	14	74	3/240	20
121	2	25, 30		30		3/480	60
122	2	3		5	19	3/240	10
125							20
126	2		7.5	25		3/240	35
128	2	50		44	277	3/480	60
130	2		10	18	141	3/240	35
131	2		3	10	57	3/240	10
132	2		20	39	382	3/240	60
133	2	2		7	21	3/240	10
138	2		3	7.8	19	3/240	10
140	2	20		25	188	3/480	40
141	2		25	65	355	3/240	60
142	2		7.5	12	140	3/480	20
145		15		35	208	3/240	40
147	2	50		39	372	3/480	60
150	2		20	45	309	3/240	60
151	2	3		7	30	3/240	10
154	2		15	38	169	3/240	40
155	2		60	65	356	3/480	100
156	1		10			3/240	35
157	2		20		240	3/240	60
158	2		5			3/240	20
159	2		5, 15			3/240	40
160	2	60	60	45	413	3/480	100
161	2	15		14	110	3/480	35

APPENDIX A

Existing Pump Stations and Generator Requirements

Pump Station	# of Pumps	Field Data Nameplate Horsepower	Horsepower Based On Inrush Amps	F/L Amps	Inrush Amps	Phase/ Volts	Gen Size (KW)
163	2	3		7	33	3/240	10
165	2	3				3/240	10
166	2	5		15	83	3/240	20
168	2		30				60
169	2		2	10	46	3/240	10
171	2		3	11	46	3/240	10
173	2		15	20	162	3/240	40
177	4		75			3/480	250
178	2		5	8		3/240	20
179	3		40			3/240	80
180	2		2	5	28	3/240	10
181	2		40	36.5	338	3/480	60
184	2		20	34	237	3/240	60
185	2	15		29	214	3/240	40
189	2		7.5	18	148	3/240	35
190	2	3	2	5	39	3/240	10
191	2	10	15	17	115	3/480	35
192	2		3	6		3/240	10
193	2		5	18	82	3/240	20
194	2	5	3	11	53	3/240	20
195	2	40		52	267	3/480	60
197	2	40	50	49	381	3/480	60
198	2		10	24	160	3/240	35
200	2	60		46	423	3/480	100
202	2		5	8	47.6	3/240	20
203	2	5		12	96	3/240	20
204	2		3, 5			3/240	20
205	2		7.5	15		3/240	35
206	2	20		24	188	3/480	40
210	2		2	3.5	19.8	3/240	10
213			20	20	173	3/480	40
214	2		1.5	5	31	3/240	10
219	2		3			1/240	15
220	2		5	16		3/240	20
222	2		25	36	280	3/480	40
225	2	29	30	40		3/480	60
226	2		20	26	142	3/480	40
228	1		7.5				35
232	2		3	17		1/240	15
233	2	10		15	5	1/240	35
235	2		3	7	55	3/240	20
237	2		3	7	45	3/240	10

APPENDIX A

Existing Pump Stations and Generator Requirements

Pump Station	# of Pumps	Field Data Nameplate Horsepower	Horsepower Based On Inrush Amps	F/L Amps	Inrush Amps	Phase/ Volts	Gen Size (KW)
242	2		5	12		3/240	20
245	2		3		102	1/240	15
248	2	5	3	14	16?	3/240	20
250	2		7.5	21	107	3/240	35
251	2		5, 10			3/240	35
253	2	5			45	3/480	20
254	2		5			1/240	35
255	2		7.5	20.6	136	3/240	35
256	2		3	7		1/240	15
257	2	2	3	16	51	1/240	15
258	2		20	28	168	3/480	40
259	2		20	35	307	3/240	60
260	2	25	25	89	451	3/240	60
261	2		5	13	67	3/240	20
262	2	15	20	31	243	3/240	60
263	2		25	20	201	3/480	40
264	2		5	14	95	1/240	20
265	2	10	25	23	215	3/480	40
266	2		10	16	146	3/240	35
267	2		2	7	50	3/240	10
268	2		7.5	15		3/240	35
272	2		5	12	84	3/240	20
276	2		7.5	10.5	54	3/480	35
279	2	7.5				3/240	35
280	2		30	28	239	3/480	60
281	2		3	9	29	3/240	10
284	2	25		53	305	3/240	60
286	2	2	2	11		1/240	15
288	2		20	14	131	3/480	40
289	2		3	14.6	54	3/240	10
290	?		3	8		3/240	10
292	2		3	10	50	3/240	10
293	2		5	13	90	3/240	20
294	2		3	12		3/240	10
295	2		10	11	67	3/480	35
298	2		3	8		3/240	10
299	2		5	13	63	3/240	20
300	3	25	30	34	152	3/480	60
301	3	25		28	165	3/480	40
302	3		40	36	231	3/480	60
303	2	2		5	29	3/240	10
304	1		10	17	188	3/240	35

APPENDIX A

Existing Pump Stations and Generator Requirements

Pump Station	# of Pumps	Field Data Nameplate Horsepower	Horsepower Based On Inrush Amps	F/L Amps	Inrush Amps	Phase/ Volts	Gen Size (KW)
305	2	20		31	255	3/240	60
307	2		5	14	81	3/240	20
310	2	15		13	136	3/480	35
312	2		3	10		3/240	10
314	2		5	16	67	3/240	20
315	2		10	25	211	3/240	35
317	2		7.5	18	116	3/240	35
319	2		3	8	51	3/240	10
320			20			3/480	40
321	2		3	8	37	3/240	10
322	2		3	8	45	3/240	10
323	2		3	12	56	3/240	10
324	2		5	12	89	3/240	20
325	2		5	12	87	1/240	35
330	2		3	5.86	39	3/240	10
334	2		5	12	86	3/240	20
335	2		7.5	29	148	3/240	35
337	2		3	9.3	62.8	3/240	10
339	2		3	7	42	3/240	10
341	2		10				35
344	2		7.5	21	145	3/480	35
346	2		20	24	185	3/480	40
347	2		20	18	176	3/480	60
349	2		3	9	61	3/240	10
350	2		3	8	51	3/240	10
356	2		5	8.3	68	3/240	20
359	2	5		12	91	3/240	20
360	2		3	10	59	3/240	10
361	2		25	27.5	182.5	3/480	40
362	2		2	7.4	24.3	3/208	10
366	2		5	13.8	96	3/240	20
367	2		7.5	14	124	3/240	35
371	2		20	16.5		3/480	40
373	2		3	12	56	3/240	10
374	2		3	9	54	3/240	10
375	2		3	10	53	3/240	10
376	2		2	5	29	3/240	10
377	2		7.5	15	113	3/240	35
378	2		10	31	223	3/240	35
380	2		5	9	64	3/240	20
381	2	2		7.1	50	3/240	10
382	2		25			3/480	60

APPENDIX A

Existing Pump Stations and Generator Requirements

Pump Station	# of Pumps	Field Data Nameplate Horsepower	Horsepower Based On Inrush Amps	F/L Amps	Inrush Amps	Phase/ Volts	Gen Size (KW)
383	2		5	10	85	3/240	20
384	2		7.5	17	111	3/240	35
385	2		2	16	46	1/240	10
386	2		20	42	294	3/240	60
387	2		5	10	93	3/240	20
388	2		3			1/240	10
390	2		10	30	158	3/240	35
391	3	5		10	92	3/240	20
392	2		5	14	70	3/240	20
393	2	3		8	43	3/240	10
394	2	3		8	59	3/240	10
395	2		10	19	189	3/240	35
396	2		5	20	96	3/240	20
398	2		40	78	502	3/240	60
399	2		5	14	102	3/240	20
400	2		15	31	235	3/240	40
401	2		5	10	76	3/240	20
403	2		10			3/208	35
404	2	3		6	49	3/240	10
405	2		10	11	75	3/480	35
406	2		20	21.5	140.5	3/480	40
407	2		3	7.5	50	3/240	10
408	2		20	21	167	3/480	40
410	2		10	18	147	3/240	35
411	2		5	12	81	3/240	20
412	2	7.5		15	118	3/240	35
413	2	15		23	94	3/480	35
415	2		5	10		3/240	20
416	2	5	10	15	146	3/240	35
417	2	20		21	179	3/480	40
418	2		20	24.5	190	3/480	40
422	2		40	37	289	3/480	60
423	2		5	11	90	3/240	20
425	2		3	10	53	3/240	10
426	2		30	56	298	3/208	60
427	2		7.5	17	146	3/240	35
428	2		10	32	197	3/240	35
430	3		100	95		3/480	200
431	2		5				15
432	2		5				15
433							35
434							10

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Existing Pump Stations and Generator Requirements

Pump Station	# of Pumps	Field Data Nameplate Horsepower	Horsepower Based On Inrush Amps	F/L Amps	Inrush Amps	Phase/ Volts	Gen Size (KW)
435							35
436							60
437							60
438							35
439							35
441							10
442							35
443							60
444							60
445							40
446							60
447							60
448							15
449							60
450							35
451							15
452							60
453							60
454							35
500	2		50	60	351	3/480	60
504	2		60	70	433	3/480	100
508	3	50		56	376	3/480	100
601	3	75	60	53	393	3/480	150
676	3		60	55	418	3/480	125
944	3	75		52		3/480	150
Devall Lane	2		3	17	126	1/240	10
EOPP Civ Ctr	2		1.5	3.7	16.3	3/480	10
Parish Prison	2		2	6.6	34.9	3/240	10
Little Farms LF2	2		5	8	48	3/240	20

Total No. Generators 281

Notes:

If motors were accessible, motor nameplate data was obtained.

If motors were not accessible, motor running and starting current was measured.

For non-PDP pump stations the number of pumps listed is the number of installed pumps.

It is not clear whether or not 1 pump less than listed is sufficient for the peak wet weather flow.

Generators were sized based on running one pump less than the number listed, except that for pumps 20 hp and smaller, the generator was sized to run a minimum of 2 pumps.

If the data indicated two different motor sizes, the generator was selected based on the larger motor size.

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Appendix B
PDP Lift Stations

APPENDIX B

PDP Lift Stations; Baton Rouge Program

PS number	New Capacity (MGD)	New Capacity (gpm)	New Head (ft)	Hydraulic Station HP	Efficiency 70%	KW per Station	Gene Siz
PS 139	2.01	1394.94	50	18	25	28	35
PS 16	1.9	1318.6	45	15	21	24	35
PS 18	1.2	832.8	16	3	5	5	10
PS 21	3.25	2255.5	34	19	28	31	35
PS 31	10.8	7495.2	46.5	88	126	141	15
PS 50	32.5	22555	39.5	225	321	362	50
PS 66	4.4	3053.6	46	35	51	57	60
PS 30	1.6	1110.4	58	16	23	26	35
PS5XX	28.2	19570.8	82.2	406	580	653	68
PS 58A	88	61072	100	1542	2203	2479	2 @
PS 119	2.25	1561.5	50	20	28	32	35
PS 120	0.73	506.62	60.5	8	11	12	14
PS 329	1.7	1179.8	60	18	26	29	35
PS 40	1.15	798.1	56	11	16	18	20
PS 53A	16.5	11451	70	202	289	325	32
PS 56	9.25	6419.5	38	62	88	99	10
PS 68	1.63	1131.22	80	23	33	37	42
PS 102	1.2	832.8	50	11	15	17	20
PS 236	7.1	4927.4	105	131	187	210	21
PS 336	1.4	971.6	57.5	14	20	23	35
PS 311	1.8	1249.2	32.1	10	14	16	20
BPS 505	9.2	6384.8	192	310	442	498	50
BPS 505A	4.2	2914.8	77	57	81	91	10
PS 107	1.3	902.2	69.2	16	23	25	35
BPS 514	73.2	50800.8	88	1129	1613	1814	200
PS 118	1.23	853.62	121.8	26	38	42	42
PS 221	1.5	1041	152	40	57	64	70
PS 358	0.4	277.6	67.2	5	7	8	10
BPS 999	12.6	8744.4	60	132	189	213	21
PS 239	0.2	138.8	21	1	1	1	10
PS 229	0.9	624.6	89.3	14	20	23	35
PS 182	0.6	416.4	66	7	10	11	14
PS 223	1.1	763.4	98	19	27	30	35
PS 327	0.5	347	96	8	12	14	14
PS 353	0.7	485.8	89	11	16	18	20

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PDP Lift Stations; Baton Rouge Program

PS number	New Capacity (MGD)	New Capacity (gpm)	New Head (ft)	Hydraulic Station HP	Efficiency 70%	KW per Station	Gene Siz
PS 278	1.1	763.4	110	21	30	34	35
PS 372	0.6	416.4	150	16	23	25	35
PS 365	4.9	3400.6	90	77	110	124	12
PS 115	0.6	416.4	53.6	6	8	9	10
PS 148	0.8	555.2	57.8	8	12	13	14
PS 338	1.4	971.6	35.3	9	12	14	14
PS 379	0.3	208.2	111	6	8	9	10
PS 201	1.6	1110.4	31	9	12	14	14
BPS 507	56	38864	43	422	603	678	68
BPS 777	31	21514	30	163	233	262	28
PS 172	0.5	347	35	3	4	5	10
PS 112	2	1388	23	8	12	13	14
PS 274	2.7	1873.8	29	14	20	22	35
PS 170	6.5	4511	73	83	119	134	15
BPS 889	24.8	17211.2	77	335	478	538	57
PS 402	0.3	208.2	22	1	2	2	10
PS 174	0.4	277.6	28.6	2	3	3	10
PS 162	1.3	902.2	59	13	19	22	35
PS 224	2.2	1526.8	49.5	19	27	31	35
PS 139	0.4	277.6	10	1	1	1	10
PS 345	0.4	277.6	48	3	5	5	10
PS 149	0.9	624.6	96	15	22	24	35
PS 247	2.2	1526.8	83	32	46	51	60
PS 391	0.5	347	81	7	10	11	14
PS 316	3.8	2637.2	99	66	94	106	12
PS 211	3.4	2359.6	10	6	9	10	20
PS 296	1.7	1179.8	41	12	17	20	20
PS 156	0.8	555.2	42	6	8	9	10
BPS 100A	13.9	9646.6	57	139	198	223	25
PS 227	0.56	388.64	46	5	6	7	10
PS 175	1.3	902.2	74	17	24	27	35
PS 326	0.4	277.6	75	5	8	8	10
PS 153	0.9	624.6	61	10	14	15	20
PS 41	0.6	416.4	31	3	5	5	10

APPENDIX B

PDP Lift Stations; Baton Rouge Program

PS number	New Capacity (MGD)	New Capacity (gpm)	New Head (ft)	Hydraulic Station HP	Efficiency 70%	KW per Station	Gene Siz
PS 59	38.4	26649.6	50	336	481	541	57
PS 15	5.78	4011.32	66.5	67	96	108	12
PS 19	2.15	1492.1	26	10	14	16	20
PS 60	23.4	16239.6	94.5	388	554	623	62
Central WWTP PS	48	33312	200	1682	2403	2704	2 @
PS 2	9.3	6454.2	89.5	146	208	234	25
PS 3	23.67	16426.98	13	54	77	87	10
PS 4	11.6	8050.4	50	102	145	163	18
PS 5	42.8	29703.2	98.5	739	1055	1187	125
PS 6	2.6	1804.4	28.7	13	19	21	35
PS 7	1.7	1179.8	50	15	21	24	35
PS 10	2.13	1478.22	45	17	24	27	35
PS 127	1.3	902.2	39.1	9	13	14	14
PS 129	0.4	277.6	64	4	6	7	10
PS 240	1.9	1318.6	42.1	14	20	23	35
PS 38	0.7	485.8	30.6	4	5	6	10
PS 63	18.2	12630.8	15	48	68	77	85
PS 64	2.36	1637.84	41	17	24	27	35
PS 244	2.4	1665.6	46	19	28	31	35
PS 44	12.8	8883.2	24	54	77	87	10
PS 45	22.3	15476.2	37.6	147	210	236	25
PS 75	0.4	277.6	15	1	2	2	10
PS 80	1.1	763.4	50	10	14	15	20
PS 176	1.71	1186.74	84	25	36	40	42
PS 230	1.77	1228.38	72	22	32	36	42
PS 282	1.33	923.02	74	17	25	28	35
PS 187	0.55	381.7	26.1	3	4	4	10
PS 291	1.1	763.4	148	29	41	46	60
PS 246	0.4	277.6	125	9	13	14	14
PS 94	0.8	555.2	100	14	20	23	35
PS 313	0.16	111.04	69	2	3	3	10
PS 144	0.8	555.2	48	7	10	11	14
PS 86	0.7	485.8	74.5	9	13	15	20
PS 234	0.7	485.8	88.5	11	16	17	20

APPENDIX B

PDP Lift Stations; Baton Rouge Program

PS number	New Capacity (MGD)	New Capacity (gpm)	New Head (ft)	Hydraulic Station HP	Efficiency 70%	KW per Station	Gene Siz
PS 218	0.62	430.28	52	6	8	9	1(
PS 271	0.7	485.8	70	9	12	14	1⁴
PS 249	1.56	1082.64	114	31	45	50	6(
PS 164	1	694	81.5	14	20	23	3[
PS 285	0.6	416.4	20	2	3	3	1(
PS 196	0.6	416.4	107	11	16	18	2(
PS 231	2.2	1526.8	63	24	35	39	4[
PS 207	0.58	402.52	98	10	14	16	2(
BPS 509	11	7634	51	98	140	158	18
BPS 511	29.3	20334.2	66.3	340	486	547	57
BPS 510AA	11.5	7981	48.3	97	139	156	18
PS 288	0.27	187.38	63.5	3	4	5	1(
PS 51A	12	8328	28.3	60	85	96	10
PS 51 AA	4.5	3123	50	39	56	63	7(
PS 52A	48	33312	100	841	1202	1352	14(
Vet Mem PS	25.9	17974.6	100	454	648	729	75
PS 47	12.9	8952.6	18	41	58	65	7(
PS 92	0.7	485.8	54	7	9	11	1⁴
PS 35	2.43	1686.42	40	17	24	27	3[
PS 39	3	2082	16.8	9	13	14	1⁴
PS 55	3.2	2220.8	49.4	28	40	45	6(
PS 54	5.35	3712.9	16.7	16	22	25	3[
PS 23	2.26	1568.44	142	56	80	90	10
PS 243	1.64	1138.16	150	43	62	69	7(
PS 275	2.31	1603.14	130	53	75	85	8[
PS 105	0.44	305.36	125.5	10	14	16	2(
BPS 513	4.5	3123	146.4	115	165	186	21
PSOXLF	1.9	1318.6	67.8	23	32	36	4[
PS 123	0.5	347	86.2	8	11	12	1⁴
PS 124	1.3	902.2	81.1	18	26	30	3[
PS 429	0.05	34.7	135	1	2	2	1(
PS 897	23	15962	135	544	777	875	88
PS 43	13.3	9230.2	116.7	272	389	437	50
PS 24	5.5	3817	68.5	66	94	106	12

APPENDIX B

PDP Lift Stations; Baton Rouge Program

PS number	New Capacity (MGD)	New Capacity (gpm)	New Head (ft)	Hydraulic Station HP	Efficiency 70%	KW per Station	Gene Siz
PS 24A	4.7	3261.8	140	115	165	185	18
PS 277	0.95	659.3	108	18	26	29	3
PS 503	5.88	4080.72	53	55	78	88	10
PS 119N	1.22	846.68	124	27	38	43	6
PS 183	3.16	2193.04	141.3	78	112	126	15
Old Baker Rd	14.6	10,200	75	193	276	310	32
Hwy 964	39	27,300	60	414	591	665	68
Red Mud Lakes	20	14,000	145	513	732	824	88

Total Number of PS = 144

SECTION 7

Supervisory Control and Data Acquisition (SCADA)

7.1 Background

The C-P currently has a very limited SCADA capability at few of its pump stations in the collection system and at the WWTPs. Without a comprehensive fully integrated SCADA system, collection system and WWTP operators have to physically change settings and check each pump station or piece of equipment on a daily to weekly basis, depending on the criticality of the piece of equipment. If a comprehensive and integrated SCADA system is put into place, operations of the collection system pump stations and the WWTPs will become more automated and streamlined and save operator time so that preventive, rather than reactive, maintenance can be performed. Also, a SCADA system will allow the collection system pump station operations to be optimized during wet weather to maximize storage and decrease the peak flows to the WWTPs. The SCADA system will allow quick overview of the WWTPs and the collection systems at a central location to afford system-wide efficient operation.

To address this issue, the C-P will install a SCADA system at the South WWTP, the North WWTP, and all the pump stations in the collection system. The SCADA system for the South WWTP is being designed as part of the South WWTP – Phase 2 project. The SCADA system for the collection system and the North WWTP are described in this chapter.

7.2 SCADA Operations Data/Control Center

The SCADA Operations Data/Control Center, as outlined in the *SCADA Master Plan (CH2M HILL, June 2008)*, is required to provide central collection, storage, and processing of data from WWTPs and the collection system. The Operations Data/Control Center will collect, reduce, and archive measurements, alarms and, status information for use by operators, managers, and engineers. The data center will include centralized information servers that allows managers and engineers to view process graphics and to generate reports using visualization application software installed on their business network workstations.

The centralized information servers provide easy access to data for managers and engineers to support a number of activities, including regulatory reporting, management oversight, collection system and treatment capacity and quality analysis, and improvements planning. In the future, centralized control of the collection system and WWTPs can be accomplished via the centralized information servers.

The SCADA Operations Data/Control Center will be located at the SWWTP Control Room.

The SWWTP control room is presently under design and is expected to include the following major servers:

1. The SWWTP SCADA servers/work stations (Under Design). See SWWTP Phase 1 and 2 Project Definitions for details.
2. The South Collection System SCADA servers/work stations (Future) that will collect data from the South collection system pump stations and allow control and monitoring of the South Collection System pump stations.
3. Centralized information servers integrating the data from the two server nodes listed above , the future North WWTP server node and the future North Collection System server node, which will both be located at the North WWTP. The close proximity of the SWWTP and the South Collection System servers will allow hard-wired data links to the centralized information servers via a network switch. The type of data link between the North WWTP servers, North Collection System servers located at the North WWTP and the centralized information servers at the SWWTP control room will be determined during future design of the North WWTP/Collection System SCADA Networks.

As the design of each SCADA subsystem progresses, the requirements noted above will be further refined based on discussions with the C-P staff. Space will be provided in the SWWTP Control room for accommodating the equipment listed above.

7.3 Collection System SCADA System

The collection system SCADA system will be used by collection system operators to monitor and exercise control of collection pump stations in accordance with pump station design criteria. The overall collection system pump stations will be split in to two groups, namely the North and the South collection system pump stations. The North collection system pump stations will report to the North Collection System SCADA servers, located at the North WWTP, whereas the South Collection System Pump Stations will report to the South Collection System SCADA servers, located at the South WWTP. The North and the South Collection System SCADA servers will then report to the centralized information servers, located at the SWWTP. Each Collection System monitoring and control system includes the following major components:

- Programmable Logic Controllers (PLCs) at each pump station to provide local automatic control and to communicate with their respective Collection System servers located at the SWWTP and the NWWTP control rooms and part of the Collection System Process Control Networks
- Each Collection System server node will be housed in it's associated control room (NWWTP or SWWTP as applicable) in an air conditioned environment with security measures that limit access to servers and network components. Redundant servers will be provided at each location for reliability. The process control network collects collection system data and allows mobile collection system operators to monitor and exercise control of collection system pump stations without having to visit each pump station. Additionally, diagnostic information presented to operators can be used to prioritize maintenance activities and to plan preventive maintenance. An example of where control can be used is to pump down certain collection system pump stations in

advance of a significant wet weather event to reduce the peak flows that will be experienced at the WWTPs during the wet weather event.

- A wireless communications network to provide reliable communications between the local pump station PLCs and the associated Collection System servers (North or South). It is recommended that wireless communications be accomplished by a digital cellular network. The collection system pump stations presently under design will accommodate a future Cellular Radio Modem to be installed in the local control panel. Details of the Collection System SCADA design will be worked out during design .
- The North and South Collection System server nodes will communicate with the centralized information servers (physically located at the SWWTP control room) via appropriate data links to allow central monitoring of the collection systems along with the WWTPs.

7.4 North Wastewater Treatment Plant

The North WWTP Process Control Network will be used by WWTP operators to monitor and control North WWTP process equipment in accordance with operations procedures. The North WWTP network will be designed similar to the SWWTP SCADA System and include the following major components:

- A WWTP Process Control Network housed in an air conditioned environment in the North WWTP Control room with security measures that limit access to network components, servers, and workstation computers. The process control network connects control system components, collects WWTP data and allows WWTP operators to monitor and control WWTP process equipment. Additionally, diagnostic information presented to operators can be used to prioritize maintenance activities and to plan preventive maintenance.
- A fiber optic Fast Ethernet local area network (LAN) to provide reliable communications between the North WWTP PLCs, located in several strategic areas in the plant, and the North WWTP redundant servers in the control room. A reliable data communication link between the North WWTP servers and the centralized information servers located at the SWWTP Control room, to allow monitoring of the North WWTP from the SWWTP control room.
- As mentioned in paragraph 7.3 above, the North WWTP Control room will also house the North Collection system servers, which receive data from the North Collection System pump station PLCs and allow control and monitoring of the North Collection System.

7.5 SCADA Project Delivery Plan

In order to install a SCADA system in a timely manner at all pump stations as well as the North WWTP, a project delivery plan was developed. The first step in developing the project delivery plan was to prioritize the pump stations that were to get a SCADA system using the following criteria:

1) Pump stations to be replaced as a part of PDP

2) Existing pump stations (not impacted by this PDP) that were on DPW staff's list of critical pump stations

3) Existing pump stations (not impacted by this PDP) that were not on any of the previous lists (with larger pump stations getting higher priority than smaller pump stations).

The WWTPs were prioritized based on the PDP and Draft Master Plan projects. As mentioned above, the South WWTP SCADA system will be installed as part of the South WWTP – Phase 2 project, with the system funded as part of the overall project. The North WWTP SCADA system will be installed as part of the North WWTP Master Plan project. The existing Central WWTP will not receive a SCADA system, since current plans call for it to be decommissioned.

The schedule of the project delivery is based on this prioritization. The project delivery plan involves design of the system components in three projects in 2010. Construction will then commence in 2011 and continue throughout the program duration. Table 7-1 shows the cost summary for the projects.

TABLE 7-1
SCADA Cost Summary

Item	
North WWTP SCADA – design	$200,000
Collection System SCADA – design	$900,000
SCADA Operations Data/Control Center – design	$100,000
North WWTP SCADA – construction	$2,440,000
Collection System SCADA – construction	$13,670,000
SCADA Operations Data/Control Center – construction	$1,300,000
Total	**$18,610,000**

In order to deliver these projects in a timely manner, the following criteria were used to develop the project delivery plan.

- A 5-year renewable maintenance contract is required for the service of the entire SCADA system.
- PDP Pump stations will be designed SCADA-ready.
- SCADA components (antenna modem, and PLC, where needed) will be provided by a SCADA vendor (systems integrator) and installed by a general contractor. For PDP pump stations and the North WWTP, the general contractor will be the general contractor for the entire project.
- The collection system SCADA will be separated by North and South, so that the North collection system will communicate with the North WWTP and the South system will communicate with the South WWTP.

- The SCADA vendor will be selected by a bidding process. The contract will be based on the number of pump stations to receive SCADA per year, with a unit price given for each type of unit for each year. The North WWTP SCADA system will be designed and bid separately from the collection system SCADA.
- The South WWTP SCADA system will be delivered on the Program schedule by 2014, when the South WWTP – Phase 2 project is scheduled to be completed.

With these criteria in mind, the following project delivery plan was developed.

1) C-P will finalize a location for SCADA Operations Data/Control Center which is presently assumed to be the control room at the South WWTP.
2) PM will develop a plan to remodel roughly 300 existing pump stations that are not being upgraded in the Program. Each pump station will need new SCADA equipment, with some pump stations also requiring new controllers to be able to communicate with the SCADA equipment.
3) PM will develop a plan to connect pump stations being replaced/added in the Program to the SCADA system.
4) PM will develop a plan to implement a SCADA system at the North WWTP.
5) PM or a design engineer will prepare plans and specifications for the SCADA Operations Data/Control Center in 2nd quarter of 2010.
6) Installation specifications and details will be delivered to design engineers for PDP collection system projects in 2nd or 3rd quarter of 2010.
7) PM or a design engineer will prepare plans and specifications for the non-PDP collection system SCADA components in 3rd and 4th quarter 2010. This project will be ready to bid for construction in early 2011.
8) PM or a design engineer will prepare plans and specifications for the North WWTP SCADA beginning in 4th quarter 2010.

With this project delivery plan, the collection system and the WWTPs will have a SCADA system by the end of the Program (December 31, 2014).