



WELCOME TO THE ST. CHARLES PARISH DEPARTMENT OF
Public Works and Wastewater

St. Charles Parish
Public Works Department
2008 -2015 Presentation





WELCOME TO THE ST. CHARLES PARISH DEPARTMENT OF
Public Works and Wastewater

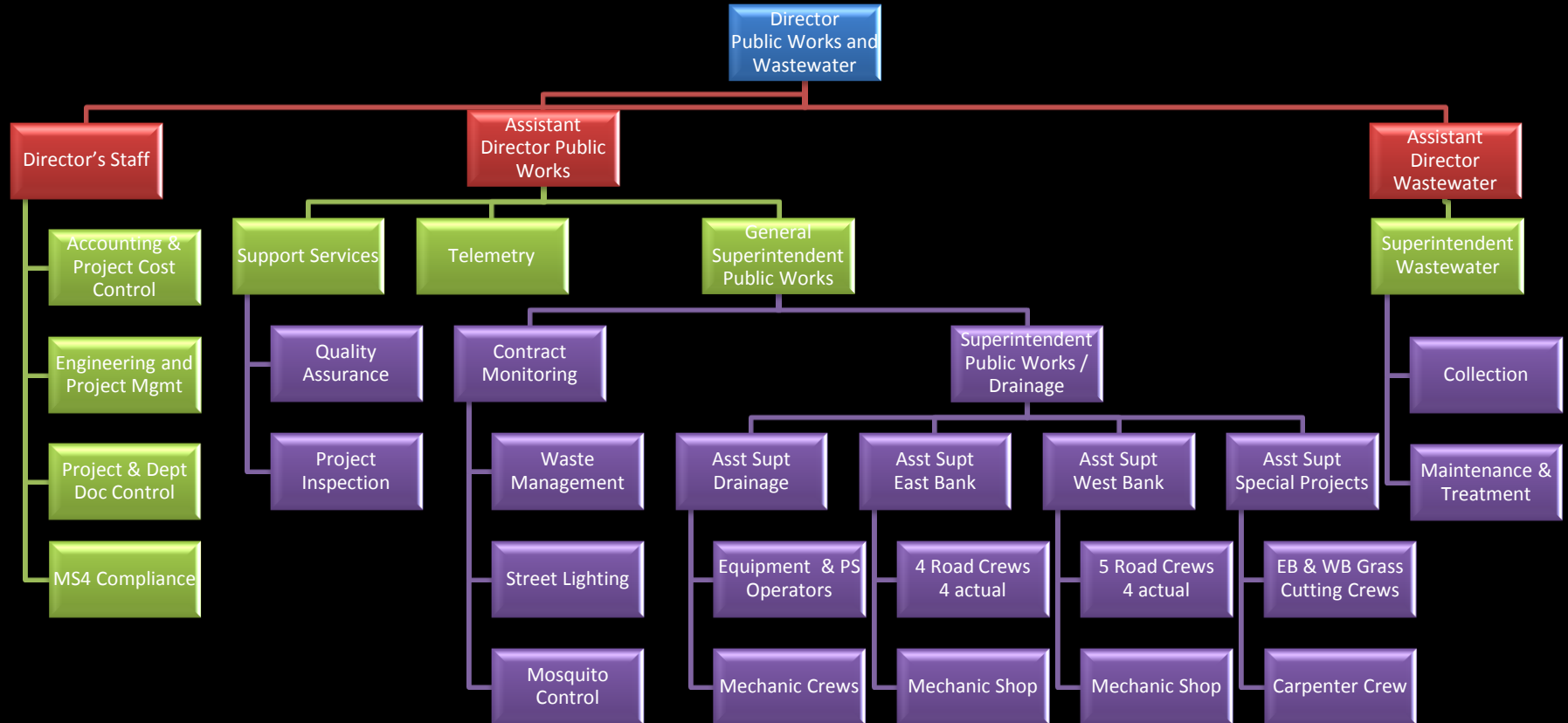
The St. Charles Parish Public Works Department's Mission is to provide the best possible Roads and Storm Drainage Systems to ensure the Safety and Security of the Parish Residents and their Property.



Public Works Maintains and Improves Critical Parish Wide Infrastructure: Roads, Storm Water Pumping Network, and Grass Cutting of Parish Property and Right of Ways

- 213 miles of roads - varying surfaces such as concrete, asphalt, and limestone
- 390 miles of drainage ditches/sub surface drainage
- 105 miles of major conveyance canals (major effort devoted to 55 miles in Sunset Drainage)
- 52 pumping stations
- 131 pumps (electric, diesel, natural gas, & hydraulic) with capacity of over 3.5 million gpm
- 40% of our pumping stations include telemetry

SCP Public Works and Wastewater



Accomplishments Last 12 Months

<u>Projects Completed</u>	<u>Const Cost</u>	<u>Grant</u>
Willowridge Levee – Phase I	5,714,003	3,082,732
Fairfield and Oakland Pump Station Upgrade	768,345	
Dunleith Canal Stabilization – Phase IV	1,392,468	
Sunset Drainage Building Rehab	71,982	
Reshape Carriage & Dunleith Canal Intersection	300,000	
Hill Heights Drainage Canal Improvements	85,200	
2014 Road Maintenance	1,395,694	
Spillway Road	405,197	
Reshape Carriage & Dunleith Canal Intersection	300,000	
Hill Heights Drainage Canal Improvements	85,200	
Total	10,518,089	3,082,732



Accomplishments Last 12 Months

<u>Projects Under Construction</u>	<u>Contract Amt</u>	<u>Grant</u>	<u>% Comp</u>
West Bank Hurricane Levee:			
• Willowridge Pump Station	5,572,160	4,395,564	3%
• Willowdale T-Wall & Levee Ext	7,440,171	6,829,125	0%
Primrose Canal Rd Crossing Improvements	1,999,453	1,584,941	51%
2015 Road Maintenance	1,311,898		5%
Ormond Blvd Overlay	3,600,000	3,112,000	0%
Mimosa Drainage Improvements	735,156	558,825	65%
Dunleith Phase V	1,108,863		0%
Randolph PS Auto Bar Screen Cleaners	770,450	693,405	65%
Generators (Mimosa, Oak St, 4th St & Paradis)	218,822	199,939	75%
Cajun Paradise Compliance Order			100%
(Permit Rec, Potential Remediation of Fine)			
Total	22,756,973	17,373,799	



Accomplishments Last 12 Months

Projects in Final Design

Est Const Cost

Grant Application

West Bank Hurricane Levee & Pump Stations:

46,428,761

33,545,988

- Ellington Levee Phase I
- Ellington Levee Phase II
- Magnolia Ridge PS
- Ellington PS
- Paradis Canal Flood Control Gate
- Cousins PS T-Wall
- Kellog PS T-Wall
- Ellington SFM Relocation

Sunset Pump Station Improvements

893,543

Primrose Sewer Forcemain

719,000

Subtotal

48,041,304

33,545,988

Continued on next Slide



Accomplishments Last 12 Months

<u>Projects in Final Design (Cont)</u>	<u>Est Const Cost</u>	<u>Grant Application</u>
Subtotal from previous slide	48,041,304	33,545,988
Anna & Ama Pump Stations (SRF Loan)	224,100	
Dunleith Canal Bank Stabilization (Ph VI)	1,800,000	
Mimosa Culvert Replacement	289,487	289,487
Sunset Drainage PS Improvements (Pumps)	1,028,380	561,199
East Bank Multipurpose Path	1,221,000	976,800
Riverbend Drainage Improvements	300,000	
Highland Estates Drainage Improvements	125,000	
Total Projects in Final Design	53,029,271	35,373,474



Accomplishments Last 12 Months

<u>Projects in Preliminary Design</u>	<u>Est Const Cost</u>	<u>Grant Application</u>
West Bank Hurricane Levee & Pump Stations:	16,303,698	3,200,000
• Ellington East Pipeline T-Wall		
• Ellington West Pipeline T-Wall		
• Magnolia Ridge Levee		
• Magnolia Ridge Pipeline T-Wall		
Montz MDP – Improve/Realign Coulee	500,000	
River Bend Drainage Improvements	1,500,000	
West Bank Multipurpose Path Phase 4 & 5	2,602,403	1,267,000
Engineers Canal PS Improvements	750,000	
Destrehan PS #1 Structural Stabilization	350,000	
	<hr/>	<hr/>
Total Projects in Preliminary Design	22,006,101	4,467,000



Accomplishments Last 12 Months

Roads and Drainage

- 102,547 ft of ditches cleaned
- 88,562 ft of culverts cleaned/blown out
- 7,170 ft of installed/replaced culverts
- 33.6 Miles or 177,410 ft of canals cleaned
- 191 council requested work order completed
- 8,426 department work orders completed
- Routine maintenance of roadways, trees, and signs

Telemetry

- 2 New Station equipped with new telemetry and 3 existing stations were upgraded with Cameras



MS4 Compliance

New MS4 Compliance Section (2015)

- Environmental Regulatory Subsection of Public Works created
- Environmental Manager Hired
- Begin program to remove all single-walled fuel storage tanks in Parish
 - 10 single walled tank replaced
- Implementation of a municipal fuel tank inspection program for Pump Stations and PW yards
 - Full Time Inspector assigned to perform tank inspections



MS4 Compliance

New MS4 Compliance Section (2015) (Cont)

- Designed and Implemented a construction site Stormwater Compliance Program
 - Goal of assisting construction site operators to be in compliance with State/Federal law
- Formalized Spill Prevention Control & Countermeasures plans for Public Works, Waste Water, Waterworks, and Government Buildings.
- Trained SCP personnel in spill containment & control methods
 - 3 Classes presented, July 27, 28, 29th, 2015 @ West Bank Community center
- Created an MS4 Enforcement policy to outline methods of enforcement related to the Federal Clean Water Act, 40 CFR 112, and LAC 33:IX



WEST BANK LEVEE

- Willowridge Levee
 - First phase, elevation +7.5' elevation, Construction Completed
 - Second phase, tie to Davis Diversion, in Award Process
 - Pump Station is under Constructoin
- Ellington Levee
 - Permit complete
 - In Bid Advertisement Process
 - Pump station in Final Design Phase, grant application
- Magnolia Ridge Levee
 - Permit complete, Preliminary Design Phase
 - Pump station in Final Design Phase
 - Operation at +0' to +0.5' elevation
 - No tidal gates



WEST BANK LEVEE

- Sunset Levee
 - LBLD proceeding with state/CPRA alignment
 - Completed evaluation and modeling
 - Hwy 90 alignment proposed for 2017 Coastal Master Plan
 - LBLD/parish proceeding with the LAMP analysis
 - Construction completed by 2017 included in Mapping
 - Will include other structures on the West Bank
 - CBI and BKI
 - Survey completed
 - Soil borings completed



WEST BANK LEVEE PROJECTS



Willowridge Levee Levee and Road Construction



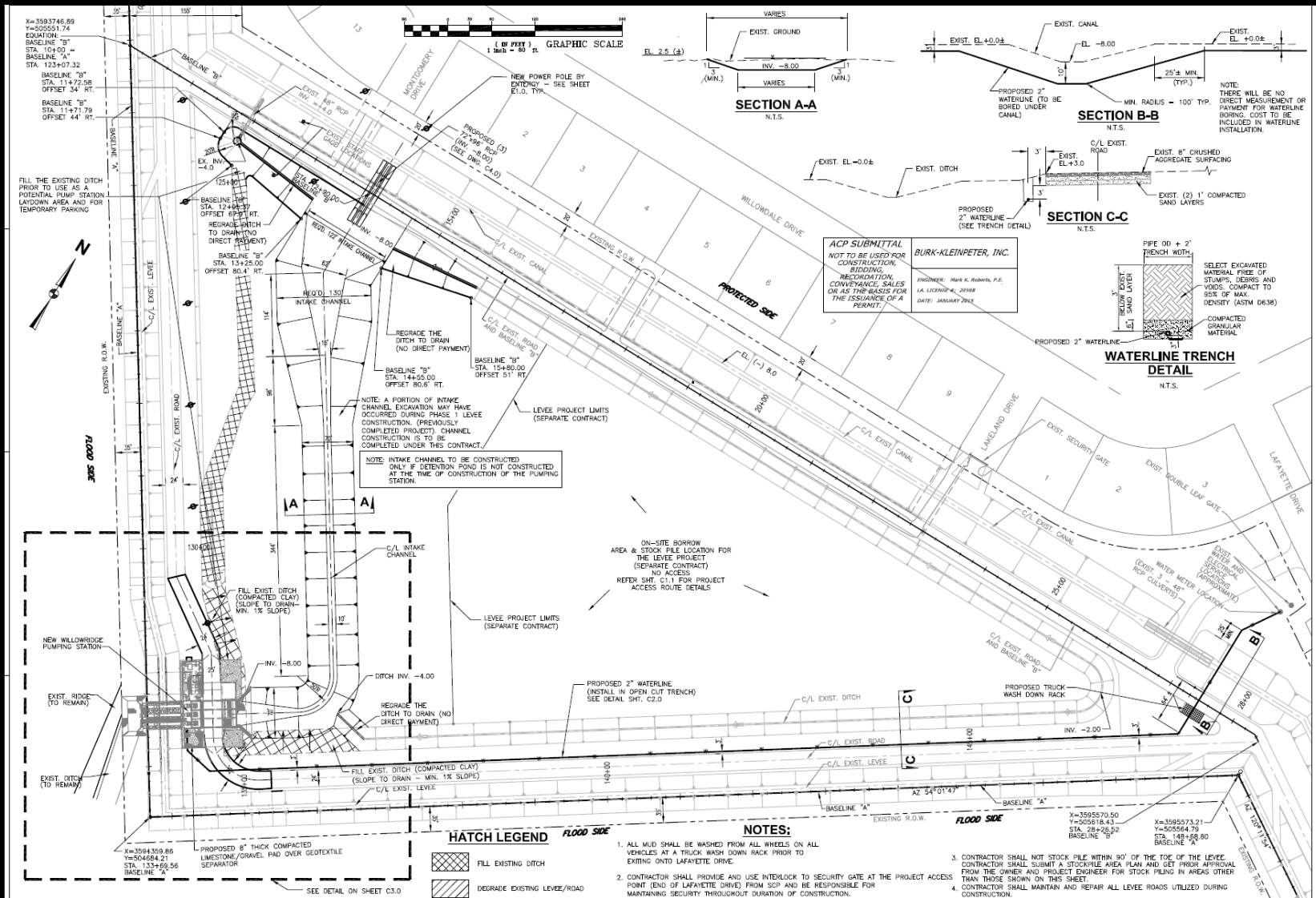
Sta 191 view east drainage fabric in place(28') sand for sand base and separator and rock to follow.

Willowridge Levee

Final Levee Shaping and Seeding

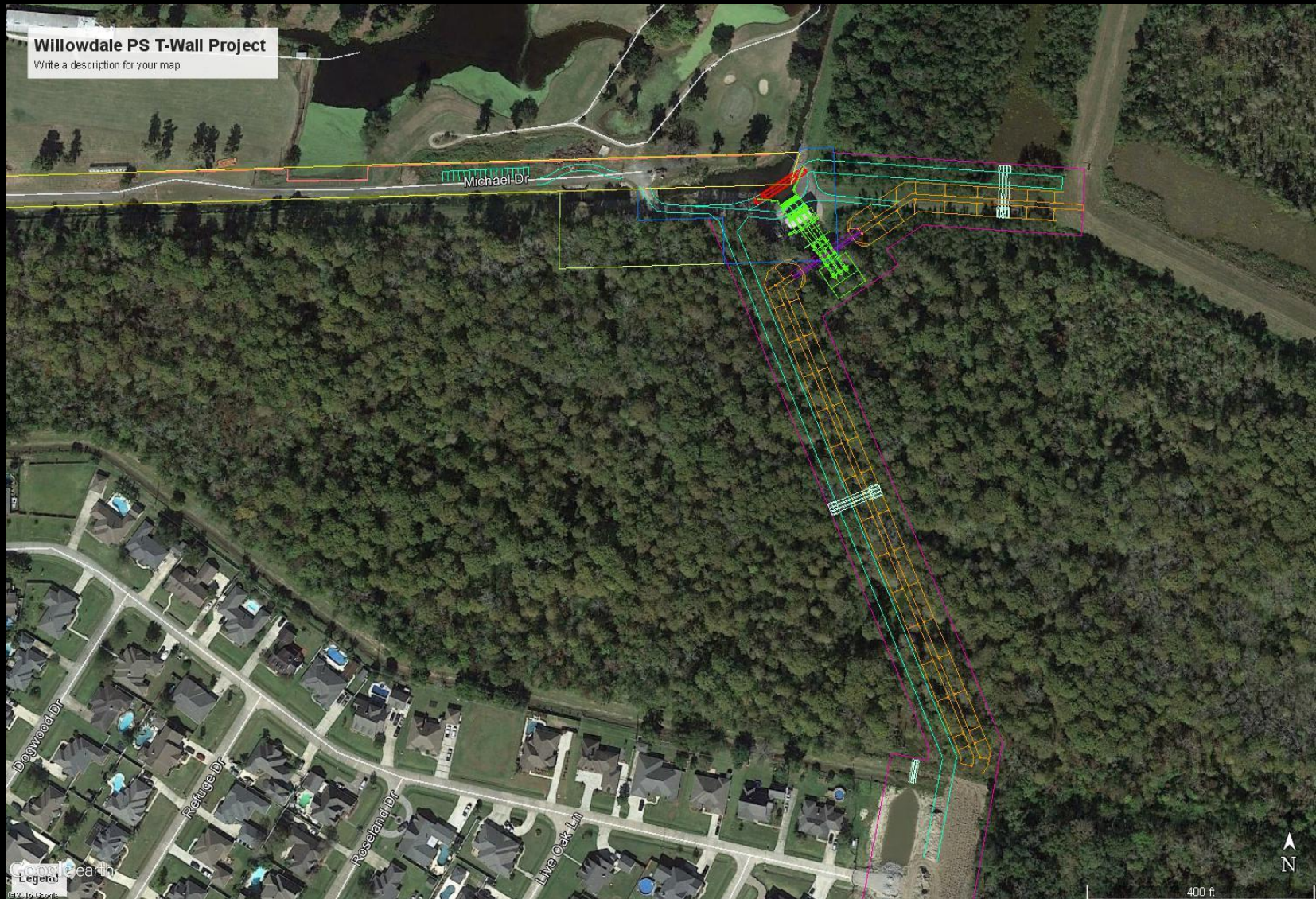


Willowridge Pump Station Notice to Proceed Issued



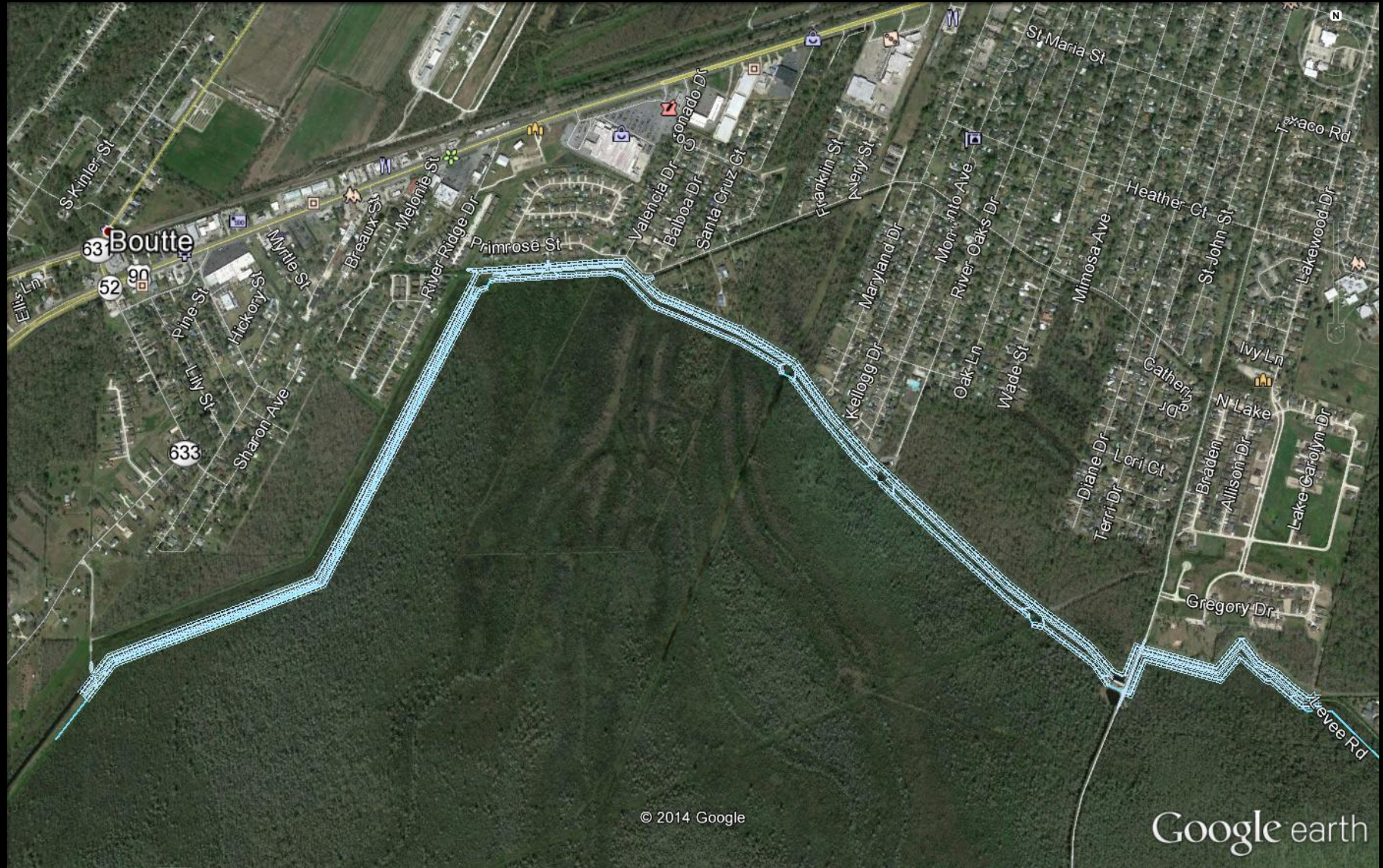
Willowdale PS T-Wall

Notice of Award Issued



Ellington Levee - Phase I

Bid Advertisement – Sept 17, 2015



PROJECTS COMPLETED OR UNDER CONSTRUCTION



Hill Heights Canal



Dunleith Carriage Canal



Destrehan PS Foundation



Dunleith Phase 4



Fairfield PS Repairs



Oakland PS Repairs



Primrose Culverts



Mimosa Drainage Improvements



Mimosa Drainage Improvements



Randolph Pump Station



Sunset PS Building Renovation



ROADS



2014 ROAD MAINTENANCE Program



2014 Road Maintenance Program



Oak Lane



Milling a Road



Milling a Road

2014 Road Maintenance Program



DesAllends Rd Paved



Memosa Rd Paved

DRAINAGE IMPROVEMENT PROJECTS



Giacomo St Drainage Repairs



Linwood Crossing Replacement



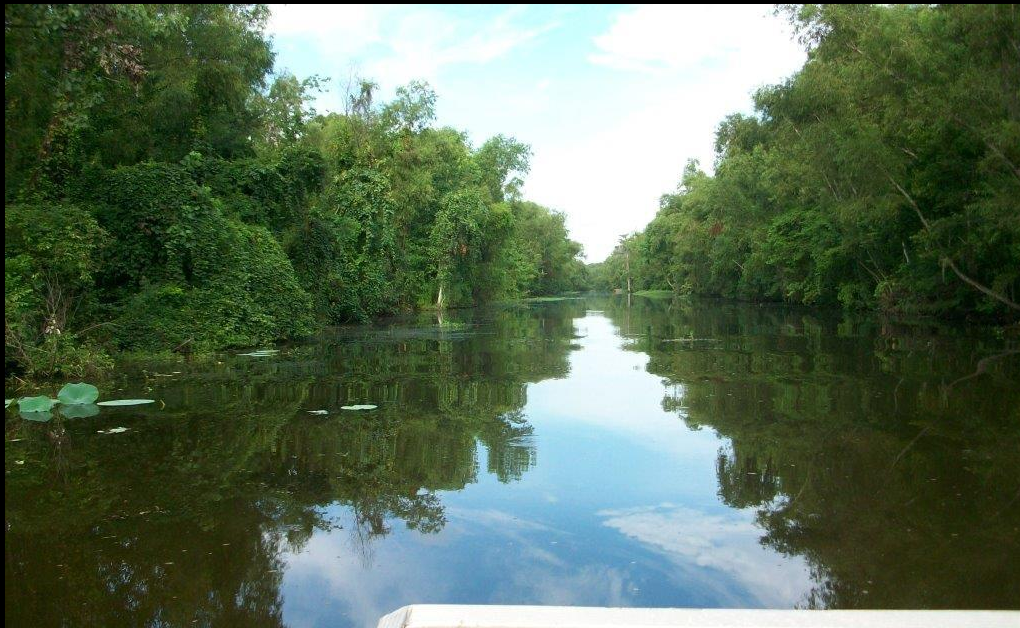
Cousins PS Pump Repair



East Bank Culvert Stabilization



80 Arpent Canal Tree Removal



Trapagnier Electric Pump Rebuild



Willowridge Canal 48" Culvert/Gates



Destrehan # 1 Discharge Repairs



Engineer's Canal PS Pump Replace



East Bank Levee Structure

St. Rose - Replace Foundation



Hahnville Canal Cleaning



Riverbend Pump Station



Magnolia Ridge Culvert & Gate



Magnolia Ridge Pump



Spillway Road Drainage



PUMP STATION GENERATORS



New Generators Installed



Permanent Pump Station Generators

34 Pump Stations with Permanent Generators

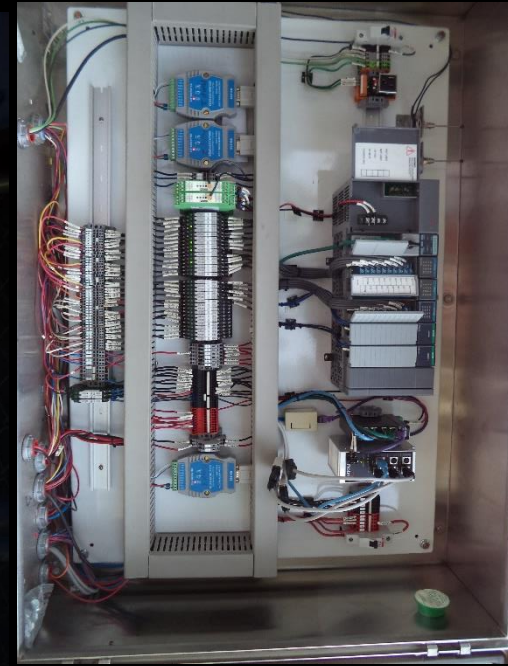
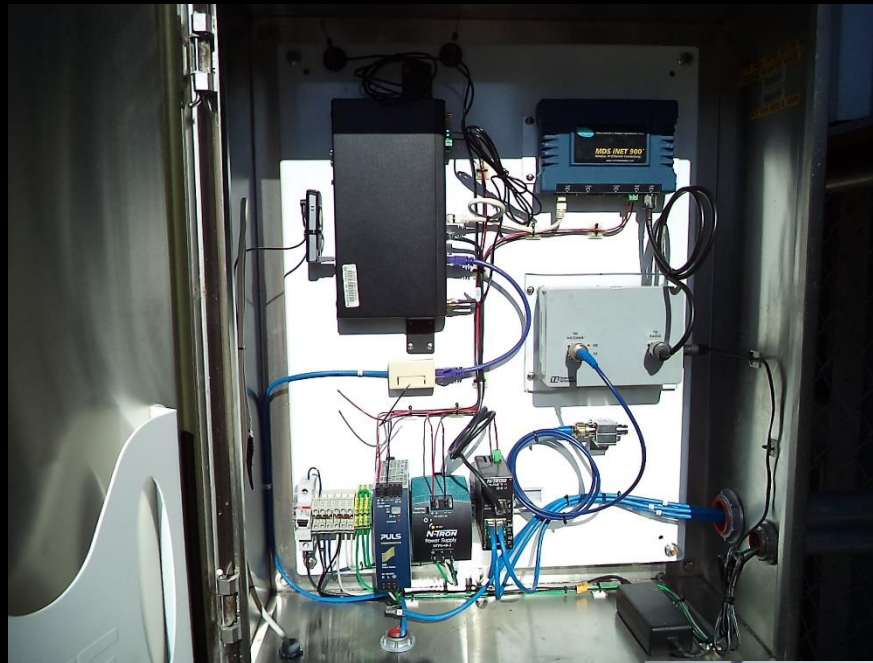
- | | | |
|-----------------------------|----------------|-----------------|
| •4 th Street (1) | •Davis Sump SP | •New Sarpy |
| •80 Arpent | •Destrehan #1 | •NOLA |
| •Barton Sump | •Destrehan #2 | •Oakland |
| •Bayou Trepagnier | •Diane | •Oak Street (1) |
| •Boutte | •Diversion | •Old Kellogg |
| •Coronado #1 | Structure | •Paradis (1) |
| •Coronado #2 | •Engineers | •Randolph |
| •Cortez (1) | •Fairfield | •Sunset |
| •Cousins | •Hackberry | •Up the Bayou |
| •Cross Bayou | •Kellogg (1) | •Walker |
| •Davis Barton SP | •Lagatutta | •Willowdale |
| •Davis Pond | •Lakewood | |

Note: (1) Generator installed 2014-2015

SCADA & TELEMETRY



SCADA, Telemetry and Controls



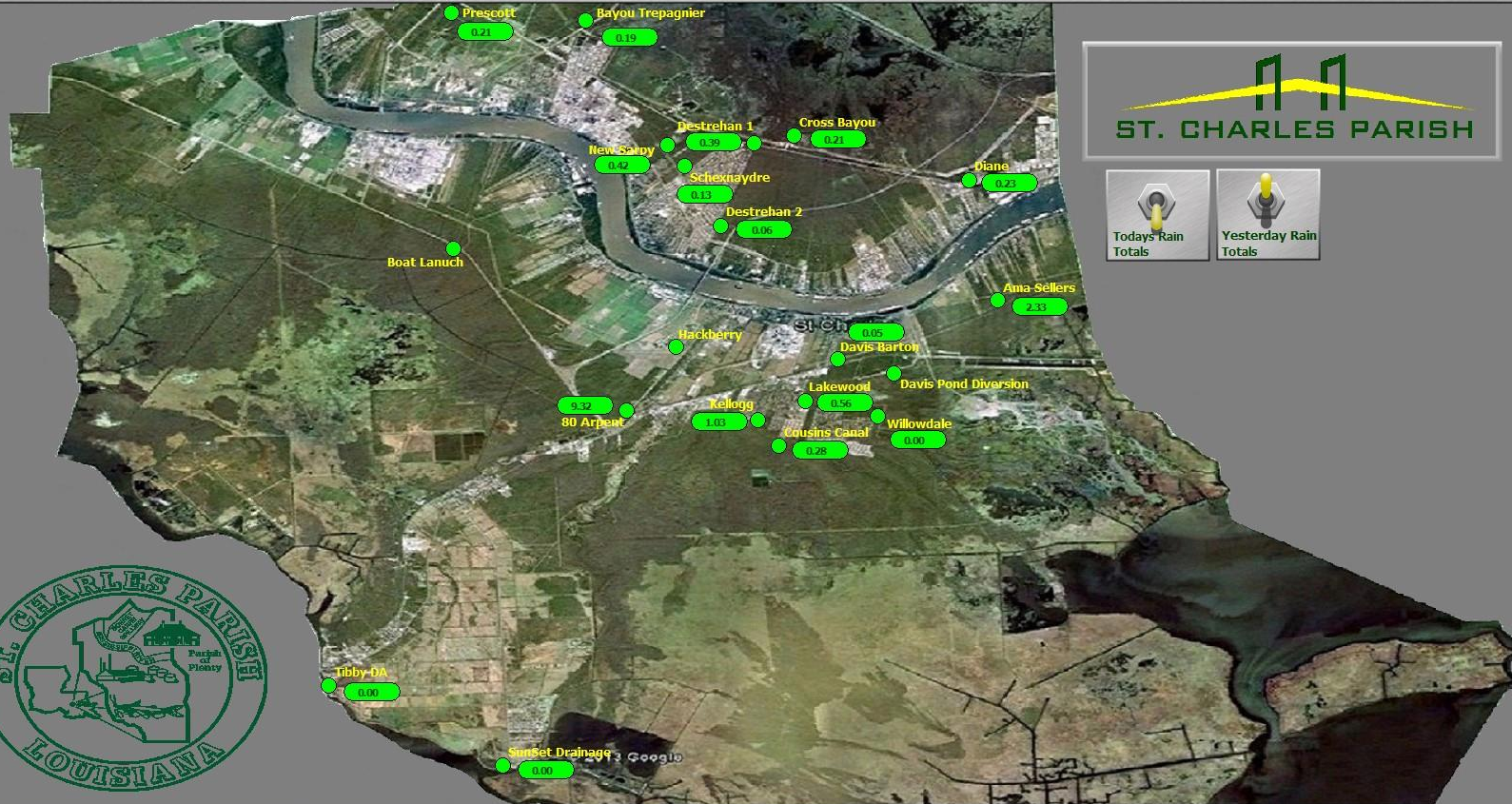
Telemetry Control Screen

Alarm History

Alarm Events

Historian Client

ST CHARLES PARISH TELEMETRY SYSTEM



ST. CHARLES PARISH

Today's Rain
Totals

Yesterday Rain
Totals

Parish Map

East Bank Drainage Station

Cross Bayou

Destrehan 1

Destrehan 2

Diane

Schexnaydre

New Sarpy

Bayou Trepagnier

Prescott

West Bank Drainage Station

80 Arpent

Ama Sellers

Cousins Canal

Davis Barton

Davis Pond Diversion

Hackberry

Kellogg

Lakewood

SunSet Drainage

Tibby DA

Willowdale

ACK ALL

9/12/2014 3:35:53 AM
9/15/2014 8:57:52 AM
9/15/2014 1:38:15 PM

ACK
ACK
ACK

Lakewood_PS
Kellogg_PS
NewSarpy_PS

Acknowledge All Alarms
Acknowledge All Alarms
Acknowledge All Alarms

Alarm 000 00:04:31.721
Alarm 000 00:00:13.791
Alarm 000 00:00:06.631

Lakewood_Pump2 Engine_Battery
Kellogg_Station_Data.Low_Level
NewSarpy_Station_Data.Low_Level

System Login

User

1

Login

LogOff



9/16/2014

Telemetry Upgrades 2014-2015

East Bank Telemetry Stations

- Cross Bayou
- Destrehan 1
- Destrehan 2
- Diane
- Engineers **Install Camera System**
- Fairfield **New Telemetry System**
- New Sarpy
- Oakland **New Telemetry System**
- Prescott
- Schexnaydre
- Trepagnier

West Bank Telemetry Stations

- 80 Arpent **Install Camera System**
- Ama Sellers
- Cousins
- Davis Barton
- Davis Pond
- Hackberry
- Kellogg
- Lakewood **Update Control System**
- Sunset
- Tibby DA
- Willowdale **Install Camera System**

Telemetry Upgrades - Future

Planned Future Additions

- **4th Street** **New System**
- **Oak** **New System**
- **Paradis** **New System**

Public Works Accomplishments 2008 - 2015



Accomplishments since 2008

<u>Category</u>	<u>Costs</u>	<u>Grant</u>
Buildings & Facility Upgrades <i>Parish Beautification, Administrative Upgrades, Community Center</i>	11,845,927	7,709,545
Drainage Improvements <i>Canal Stabilizations, Culvert Improvements, Automatic Sand bag machine, Sheet Piling Installation, Drainage studies</i>	26,192,911	12,261,004
Pump Station Upgrades <i>Automatic Bar Screen Cleaners, Emergency Generators, Electrical System Upgrades, Critical Repairs, Pump Upgrades</i>	37,341,489	27,218,922
Roads & Sidewalks <i>Road Maint, Sidewalks, Bike Paths</i>	21,250,767	6,020,164
Waste Water <i>Destrehan & Hahnville Plant Rehab</i>	<u>4,943,393</u>	<u>2,026,354 (loan)</u>
Total	101,574,487	55,235,989

Accomplishments since 2008

Roads and Drainage

- 2,715,349 ft of ditches cleaned/ culverts cleaned/blown out
- 199.5 Miles of canals cleaned
- 1,952 council requested work order completed
- 57,370 department work orders completed

PREVENTATIVE MAINTENANCE PROGRAM

- Implemented Parish wide for all PW Equipment
- Increases life on millions of dollars of PW Equipment
- Limits Down time of parish infrastructure
- Ensures routine Maintenance is scheduled



Accomplishments 2008-2015

Pump Stations



Engineer's
Canal
Pump



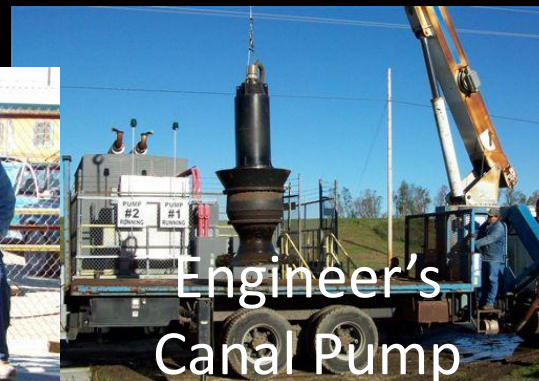
Destrehan II PS Access
Bridge



Prescott PS 3rd pump



New Pump
Walker Station



Engineer's
Canal Pump



Destrehan #1 PS
Gearbox 4

Accomplishments 2008-2015

Pump Stations



Cousin's PS Bar
Screens



Paradis PS Bar
Screens



Schexnayder PS
Bar Screens



Ama Bar
Screen Cleaner

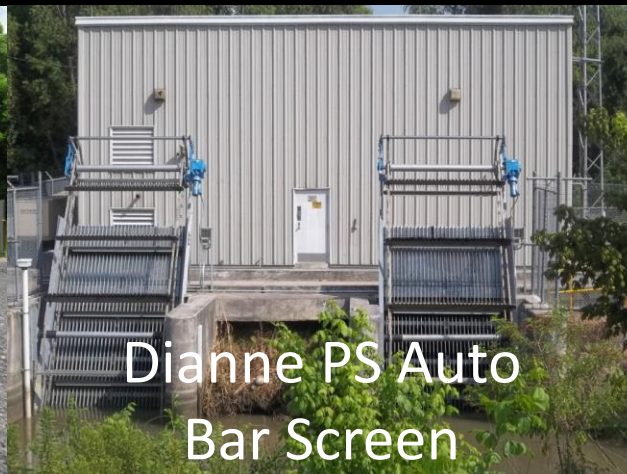
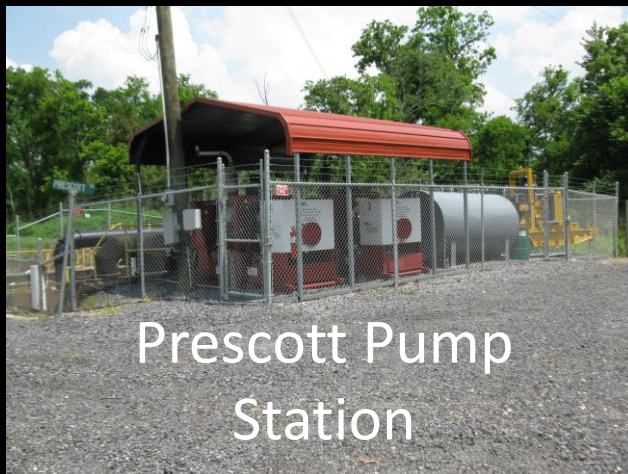


Lakewood PS Auto
Bar Screen

ST. CHARLES PARISH

Accomplishments 2008-2015

Pump Stations



Accomplishments 2008-2015

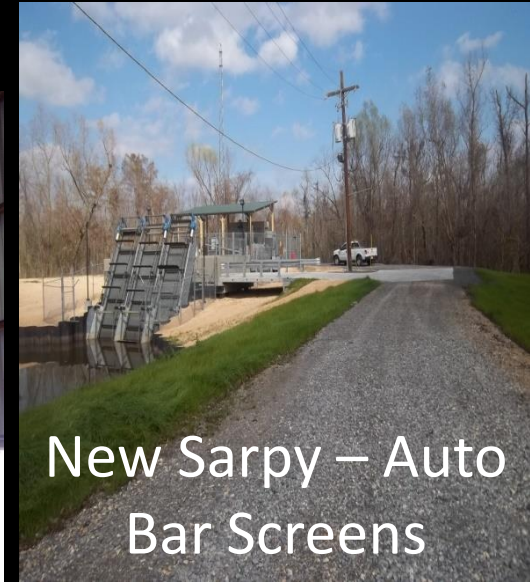
Pump Stations



80 Arpent PS Bar
Screen Cleaners



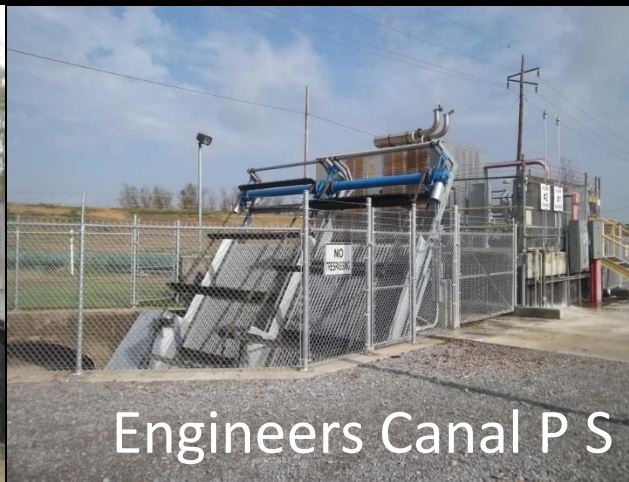
80 Arpent PS
additional Pumps



New Sarpy – Auto
Bar Screens



Coronado Park PS # 2



Engineers Canal P S



Accomplishments 2008-2015

Pump Stations



Accomplishments 2008-2015

Building and Facilities



Courthouse HVAC Efficiency Upgrades



Courthouse
Emergency Generator

Accomplishments 2008-2015

Edward Dufrene Community Center



Accomplishments 2008-2015

Public Works Office



Public Works
Office Relocation



Public Works Office
Roof Replacement



Public Works Office Window Retrofit



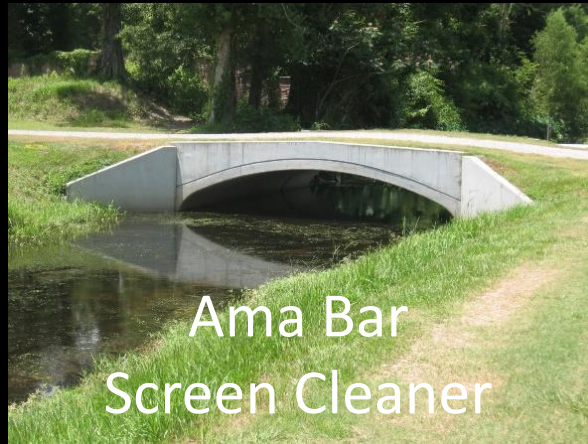
Accomplishments 2008-2015

West Bank Yard



Accomplishments 2008-2015

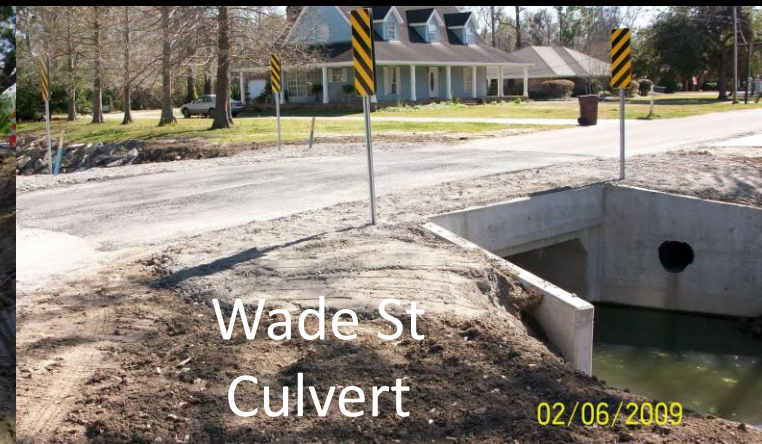
Drainage



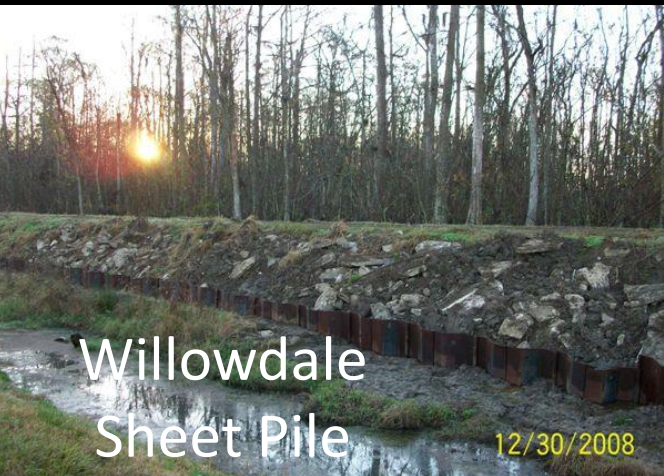
Ama Bar
Screen Cleaner



Evangeline
Rd Culverts



Wade St
Culvert



Willowdale
Sheet Pile



Maryland Dr
Crossing



Prescott Canal

Accomplishments 2008-2015

Drainage



Accomplishments 2008-2015

Drainage



Accomplishments 2008-2015

Drainage



Dunleith Canal
Stabilization - Phase 2



Willowdale &
Beaupre Culverts



Prescott Gates



UP RR Culvert
Replacement



Carriage Canal -
Stanton Hall 12/14/2012



KCS Canal Upgrades 12/14/2012

Accomplishments 2008-2015

Drainage



CN Culvert Replacement in Destrehan

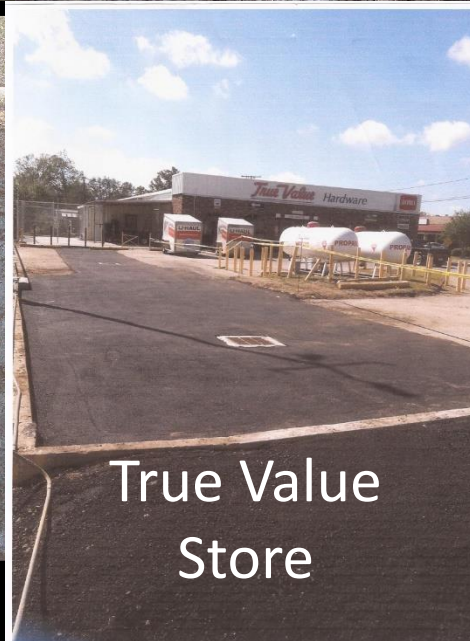
2013/07/10



Murray Hill
Drainage
Improvements



Barbara and 306



True Value
Store



Dunleith Canal Bank
Stabilization - Phase III

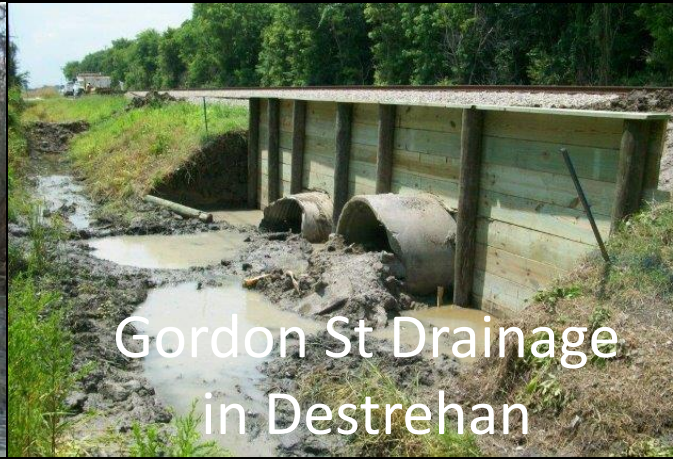
ST. CHARLES PARISH

Accomplishments 2008-2015

Drainage



Cajun Paradise
Berm



Gordon St Drainage
in Destrehan



Barton Ave Ditch
Stabilization



Balboa Culvert
Replacement



Valencia
Culvert
Replacements



Engineers Canal
Bank Repairs

Accomplishments 2008-2015

Roads



EB Levee Bike Paths



Rathborne
Walking Trail



Rathborne
Walking Trail



WB Levee
Bike Paths

Accomplishments 2008-2015

Roads



Accomplishments 2008-2015

Roads



Gassen Paved




Wetland
Watcher Park
Road Repair



Lake Ponchartrain
Fishing Pier
Repairs

Accomplishments 2008-2015

Wastewater

A large, rectangular concrete structure, likely a tank or basin, is shown under construction. The interior walls are painted a bright yellow color. The structure is surrounded by a concrete walkway and some construction equipment.

Destrehan
WWTP Phase I

An aerial view of a wastewater treatment plant facility. A large, blue, rectangular structure is the central focus, surrounded by various pipes, valves, and other equipment. The facility is situated in a grassy area with trees in the background.

Destrehan WWTP Inlet Well and
H₂S Control

A construction site for a new lift station. Several workers in safety vests are visible, working on a concrete foundation. A large, rectangular concrete structure is being built. The site is surrounded by a grassy area and some buildings in the background.

Antoine - New Lift
Station

A view of an upgraded lift station. A large, rectangular concrete structure is visible, surrounded by a concrete walkway. The station is situated in a grassy area with trees and a building in the background.

Bosco - Upgraded Lift
Station

A view of an upgraded lift station. A large, rectangular concrete structure is visible, surrounded by a concrete walkway. The station is situated in a grassy area with trees and a building in the background.

Loupe -
Upgraded Lift
Station

Accomplishments 2008-2015

Wastewater



Priority Force Mains



Ridge Rd - Upgraded
Lift Station



Monsanto LS -
Upgraded Lift Station



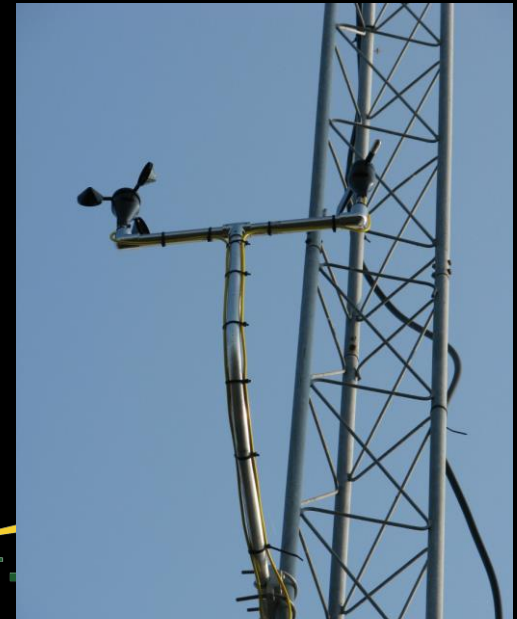
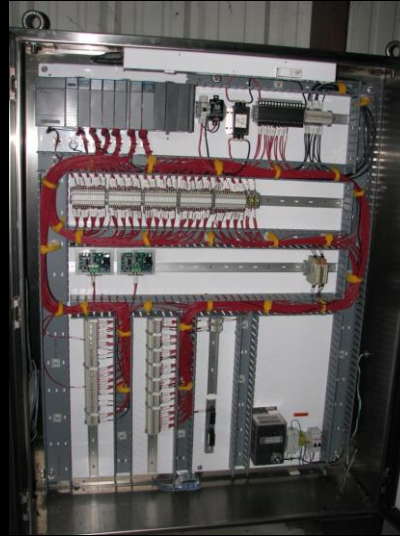
St Charles - Upgraded
Lift Station



Ashton Sewer
Forced Main

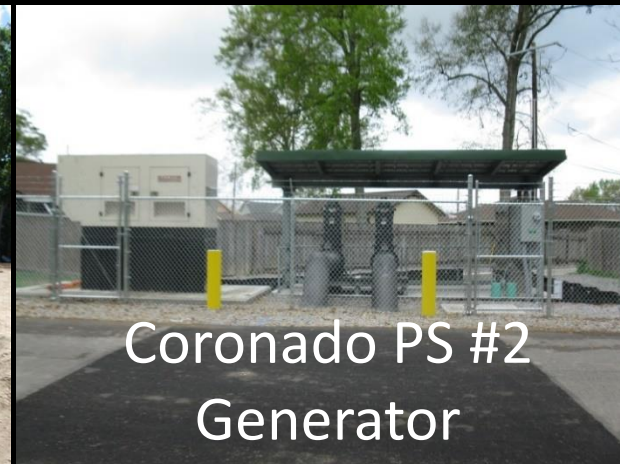
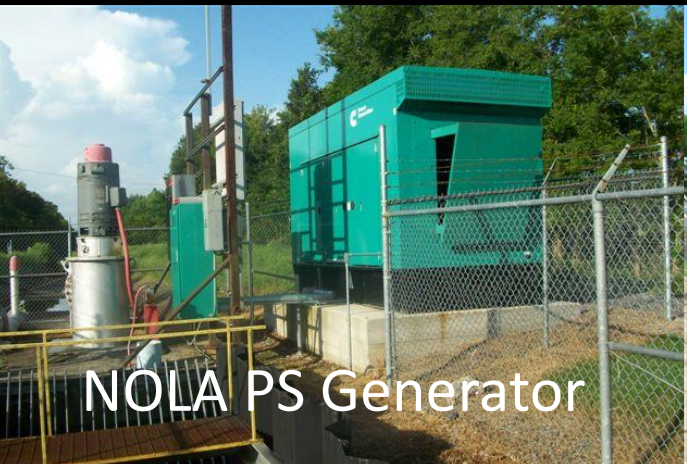
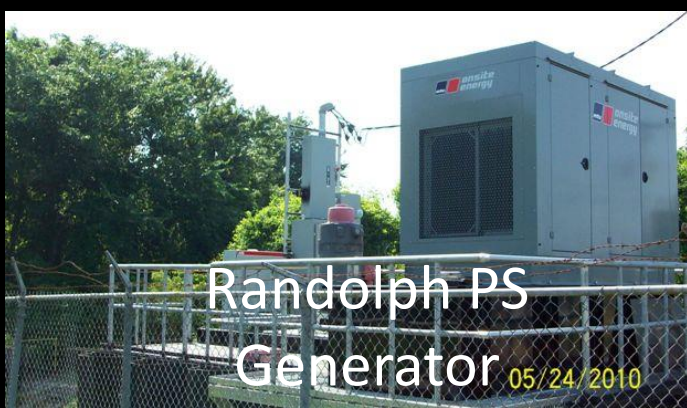
Accomplishments 2008-2015

SCADA / Telemetry



Accomplishments 2008-2015

Generators



Accomplishments 2008-2015

Generators



Accomplishments 2008-2015

Storm and Flood Fighting



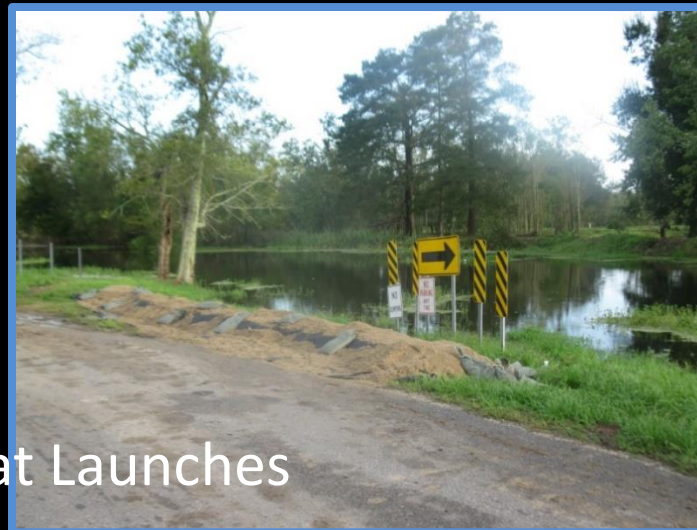
Up the Bayou



Des Allemands - Down the Bayou

Accomplishments 2008-2015

Storm and Flood Fighting





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Thank You

