

PUBLIC WORKS DEPARTMENT

**Council Presentation
OCTOBER 17, 2022**

MILES B. BINGHAM, PE

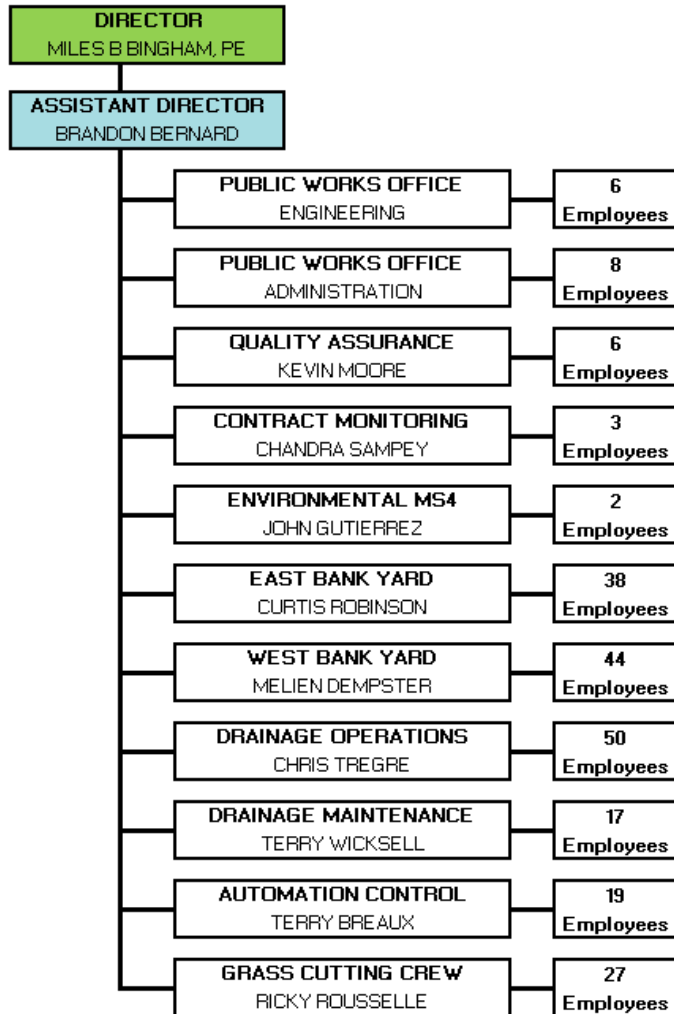


PUBLIC WORKS

AGENDA:

- **Public Works Organization**
- **Pump Stations – Maintenance and Operation**
- **Road Crews – Our Face in the Community**
- **Heavy Equipment Crews – Major Accomplishments**
- **Grass Crews – Keeping our Parish Mowed**
- **QA Department – Assuring Quality Work on Parish Projects**
- **Engineering – Moving Forward the Parish into the Future**
- **MS4 – Keeping the Parish Clean**
- **Projects – Underway and Complete**
- **Projects - What is Next**

PUBLIC WORKS



- **TOTAL POSITIONS** **222**
- **CURRENT STAFF** **170**
- **OPEN POSITIONS** **52**
 - Drainage Oper. 14 Openings
 - Grass Cutting 10 Openings
 - East Bank Yard 7 Openings
 - West Bank Yard 7 Openings
 - Automation 6 Openings
 - Drainage Maint. 4 Openings
 - PW Office 4 Openings

PUMP STATIONS

PUMP STATIONS EAST BANK

- Total Stations 24
- Stations on SCADA 14
- East Bank 2,605,320 GPM

EAST BANK								
	STATION NAME	PUMP SIZE						TOTAL GPM
		Pump #1	Pump #2	Pump #3	Pump #4	Pump #5	Pump #6	
1	BAYOU TREPAGNIER	60"	60"	60"	30"			359,100
2	CROSS BAYOU	60"	60"	60"	60"	60"	30"	587,000
3	DESTREHAN 1	48"	48"	48"	48"	54"	54"	340,000
4	DESTREHAN 2	48"	48"	48"	72"	72"		418,000
5	DIANNE	24"	24"	30"				63,000
6	ENGINEER'S CANAL	26"	26"	26"				84,000
7	FAIRFIELD	18"						11,000
8	4TH STREET	20"	24"					33,000
9	MONTZ PRESCOTT CANAL	30"	30"	30"				76,000
10	NEW SARPY	36"	36"	36"				102,000
11	OAK STREET	20"	24"					33,000
12	OAKLAND	18"	24"					30,000
13	SCHEXNAYDRE	36"	48"	36"				123,000
14	WALKER CANAL	36"	12"	36"				74,000
15	ALMEDIA ROAD	24"	24"	24"				54,000
16	ALMEDIA STRUCTURE	30"						26,000
17	BANKONE	24"						24,000
18	FOX LANE	24"						18,000
19	HARDING STREET	6"						1,400
20	RIVER BEND #1	24"	24"					36,000
21	RIVER BEND #2	24"	24"					36,000
22	TURTLE POND HYDRAULIC	24"	12"					24,500
23	WALKER STRUCTURE	30"	30"					52,000
24	WET LAND WATCHERS	3"	3"					320

PUMP STATIONS WEST BANK

- Total Stations 34
- Stations on SCADA 17
- West Bank 3,019,755 GPM

WEST BANK										
	STATION NAME	PUMP SIZE								TOTAL GPM
		Pump #1	Pump #2	Pump #3	Pump #4	Pump #5	Pump #6	Pump #7	Pump #8	
1	AMA SELLERS	42"	42"							92,000
2	CORTEZ	24"	24"							38,000
3	DAVIS / BARTON	42"	20"	42"						100,980
4	DAVIS POND	48"	48"	48"						165,000
5	EIGHTY ARPENT	48"	48"	42"	42"	48"	48"	48"	48"	422,000
6	ELLINGTON	42"	42"	42"	42"					144,800
7	GEORGE COUSINS	48"	48"	42"	42"	48"	48"	48"	48"	418,000
8	HACKBERRY	16"	16"							16,000
9	KELLOGG	42"	42"	42"						155,325
10	LAKEWOOD SOUTH	36"	36"							68,000
11	MAGNOLIA RIDGE	42"	42"	42"	42"					152,000
12	OLD KELLOGG ELECTRIC	12"	8"							7,000
13	PARADIS	30"	20"	24"						63,000
14	SUNSET	60"	60"	60"	30"	30"	36"			384,750
15	TIBBY	42"	42"							92,000
16	WILLOWDALE	54"	54"	54"						235,500
17	WILLOWRIDGE	48"	48"	48"						134,000
18	3127/BARRIERE	24"								24,000
19	BARTON SUMP	12"								4,000
20	BAYOU ROAD	3"	3"							320
21	BOUTTE	24"	24"							53,000
22	CORONADO #1	18"	18"							28,000
23	CORONADO #2	18"	18"							28,000
24	DAVIS SUMP	12"								4,000
25	ERIC SUMP	3"	1.5"							160
26	HAHNVILLE HIGH SCHOOL	16"								8,000
27	LAGATTUTA	20"	18"	8"						24,000
28	LAKEWOOD NORTH	8"	8"	30"						36,800
29	LAKEWOOD SCHOOL	16"								8,000
30	LOW STREET HYDRAULIC	24"								24,000
31	MIMOSA	24"	24"							27,800
32	NOLA STREET	30"	12"							27,000
33	RANDOLPH	36"								34,000
34	TUNNEL SUMP	3"	3"							320

PUMP STATIONS OPERATION AND MAINTENANCE

New Organization

- **Pump Operations Group**
Responsible for operating pump stations during storms and performing periodic operational checks to assure pump stations are ready when needed.
- **Pump Maintenance Group**
Responsible for maintaining pump stations by performing routine maintenance and investigating and repairing electrical and mechanical failures.
- **Operational Technology Group**
Responsible for Telemetry and SCADA (Supervisory Control and Data Acquisition) that operates the Parish pump systems remotely throughout Public Works and Wastewater. This Group is also responsible for the technical support of Asset Works.

PUMP OPERATIONS



PUMP STATION MAINTENANCE



80 Arpent Pump Station

PUMP STATIONS TELEMETRY MAP

Alarm History
Alarm Events
Historian Client
ST CHARLES PARISH TELEMETRY SYSTEM
Weather Station

Today's Rain Totals

Yesterday Rain Totals

Inlet Levels

Parish Map

Eastbank Stations

Westbank Stations

East Bank Drainage Stations

Bayou Trepagnier

Cross Bayou

Destrehan 1

Destrehan 2

Diane

Engineer's

Fairfield

4th Street

New Sarpy

Oakland

Oak Street

Prescott

Schexnaydre

Walker

ACK ALL

8/24/2022 3:35:43 PM	ACK	Schexnaydre_PS	Schexnaydre_Pump1.Engine_Over_Crank	Alarm	Travis Sequeira	Acknowledge All Alarms
8/24/2022 3:35:43 PM	ACK	Schexnaydre_PS	Schexnaydre_Pump1.Engine_Over_Speed	Alarm	Travis Sequeira	Acknowledge All Alarms
8/24/2022 1:17:57 PM	ACK	Destrehan2_PS	Destrehan2_BarScreens_5_BarScreen_FTS	Alarm	Travis Sequeira	Acknowledge All Alarms
8/24/2022 12:49:53	ACK	Schexnaydre_PS	Schexnaydre_Pump3.Engine_Battery	Alarm	Wade Dufrene	Acknowledge All Alarms
8/23/2022 9:22:34 AM	ACK	Cortez_PS	Cortez_PS_Station_Data.Low_DC_Voltage	Alarm	Wade Dufrene	Acknowledge All Alarms
8/22/2022 4:01:11 PM	ACK	Magnolia_Ridge_PS	Magnolia_Ridge_Pump_1.Engine_Failed	Alarm	EOC	Acknowledge All Alarms

System Login

User

9999

Logon
LogOff

PUMP STATIONS STATION OPERATIONS WINDOW

80 ARPENT PUMP STATION

Fuel Data / Weather Station

Fuel System

Rain Total
1.0 Inches

Yesterdays Rain Total
0.5 Inches

Weather Data

Level Data

Sump Level
-1.9 FT

Inlet Level
-1.8 FT

Discharge Level
-11.7 FT

Station Data

City Power Failed

Low Low Level

Generator Power

Generator Running

15:37:6

PLC Clock

Panel 1 Failed

Panel 2 Failed

Fuel Panel Failed

Running

Pump	Status	Back Wash	Gear Switch	RPM's	PLC	Float	Auto
Pump 7	Running	Green	IN	0	Green	Green	Auto
Pump 8	Running	Green	IN	0	Green	Green	Auto
Pump 1	Running	Green	IN	0	Green	Green	Auto
Pump 2	Running	Green	IN	0	Green	Green	Auto
Pump 3	Running	Red	IN	0	Red	Red	Manual
Pump 4	Running	Red	IN	0	Red	Red	Manual
Pump 5	Running	Green	IN	0	Green	Green	Auto
Pump 6	Running	Red	IN	1500	Red	Red	Auto

Discharge

Station | **Barscreen**

80 Arpent Screen Cleaners

Auto Bar Screen 1	Running
Auto Bar Screen 2	Running
Auto Bar Screen 3	Running
Auto Bar Screen 4	Running
Auto Bar Screen 5	Running
Auto Bar Screen 6	Running
Auto Bar Screen 7	Running
Auto Bar Screen 8	Running

ACK ALL

8/24/2022 3:35:43 PM	ACK	Schexnaydre_PS	Schexnaydre_Pump1 Engine_Over_Crank	Alarm	Travis Sequeira	Acknowledge All Alarms
8/24/2022 3:35:43 PM	ACK	Schexnaydre_PS	Schexnaydre_Pump1 Engine_Over_Speed	Alarm	Travis Sequeira	Acknowledge All Alarms
8/24/2022 1:17:57 PM	ACK	Destrehan2_PS	Destrehan2_BarScreens_5 BarScreen_FTS	Alarm	Travis Sequeira	Acknowledge All Alarms
8/24/2022 12:49:53	ACK	Schexnaydre_PS	Schexnaydre_Pump3 Engine_Battery	Alarm	Wade Dufrene	Acknowledge All Alarms
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8/22/2022 4:01:11 PM	ACK	Magnolia_Ridge_PS	Magnolia_Ridge_Pump_1 Engine_Failed	Alarm	EOC	Acknowledge All Alarms

System Login

User:

Parish Map

Eastbank Stations

Westbank Stations

West Bank Drainage Stations

Ama Sellers

Cortez

Cousins Canal

Davis Barton

Davis Pond Diversion

80 Arpent

Ellington

Hackberry

Kellogg

Magnolia Ridge

Old Kellogg

South Lakewood

Paradis

Sector Gate

SunSet Drainage

Tibby DA

Willowdale

Willowridge

ROAD CREWS

ROAD CREWS CULVERT TRUCK



ROAD CREWS TRASH TRUCK



ROAD CREWS DITCH CLEARING AND RESHAPING



ROAD CREWS DITCH CLEANING



ROAD CREWS LAYING PIPE



ROAD CREWS ASPHALT PATCHING



ROAD CREWS TRIMMING TREES



ROAD CREWS SPECIAL EVENTS

Alligator Festival



- Safety Cones
- Barricades
- Traffic Path
- Light Towers

Public Works Supplies

- 200 Traffic Cones
- 30 Large Traffic Cones
- 6 3 Tier Barricades
- 5 Light Plants

Location

- Along both sides of Hwy 18 / West Center Line of Traffic
- Block Off Handicapped Parking Area / Block Off Frere St.
- Handicapped Parking Area / School Board Parking Lot / Cross Walk
- Under Bridge / Playground Area / Frere St. Judge Dufrene



ROAD CREWS WORK ORDERS

2022 WORK ORDERS			
DISTRICT	OPENED	CLOSED	REMAINING
Ama	21	11	10
Bayou Gauche	25	18	7
Boutte	38	22	16
Des Allemands	22	13	9
Destrehan	127	76	51
Hahnville	52	32	20
Killona	16	14	2
Luling	193	78	115
Montz	29	17	12
New Sarpy	34	22	12
Norco	82	38	44
Paradis	19	14	5
St Rose	43	18	25
Taft	1	1	0
TOTALS	702	374	328

WORK ORDERS CLOSED IN 2022	
District	Count
	11
1	114
2	94
3	81
4	87
5	51
6	119
7	82
	639

HEAVY EQUIPMENT CREWS

WETLAND WATCHERS UNDERPASS



WETLAND WATCHERS UNDERPASS



MICHAEL DRIVE CULVERT REPLACEMENT



Before Construction



During Construction

Pipe Installation



MICHAEL DRIVE CULVERT REPLACEMENT



CATHY DRIVE TO COTTAGE DRIVE BOX CULVERT INSTALLATION



CATHY DRIVE TO COTTAGE DRIVE BOX CULVERT INSTALLATION



CLEANING CANALS MARSH BUGGY



CLEANING CANALS MARSH BUGGY



BEFORE CLEANING



CLEANING UNDERWAY

AFTER CLEANING



GRASS CUTTING

GRASS CUTTING MOWING DITCHES



GRASS CUTTING MOWING ROADS AND ROW



GRASS CUTTING MAKING IT NEAT AND TIDY



QA DEPARTMENT

QUALITY ASSURANCE

WHAT WE DO

- **Investigate Council Requests and create Work Orders that are entered into AssetWorks. Upon completion, the Council Office is advised that the Council Request is completed.**
- **Investigate issues and develop rough preliminary plans that are entered into AssetWorks as Work Orders. These issues include Resident's Complaints, Administration Requests, etc.**
- **Respond to resident's complaints and investigate their concerns.**
- **Monitor AssetWorks to see when Work Orders and/or projects are completed so that QAs can inspect them and close them out in the AssetWorks system.**
- **Assist the Foreman with entering data into AssetWorks.**
- **Assist the Superintendents in assigning Work Orders to Foreman.**
- **Substitute for Superintendents at the East and West Bank Yard.**

QUALITY ASSURANCE

WHAT WE DO

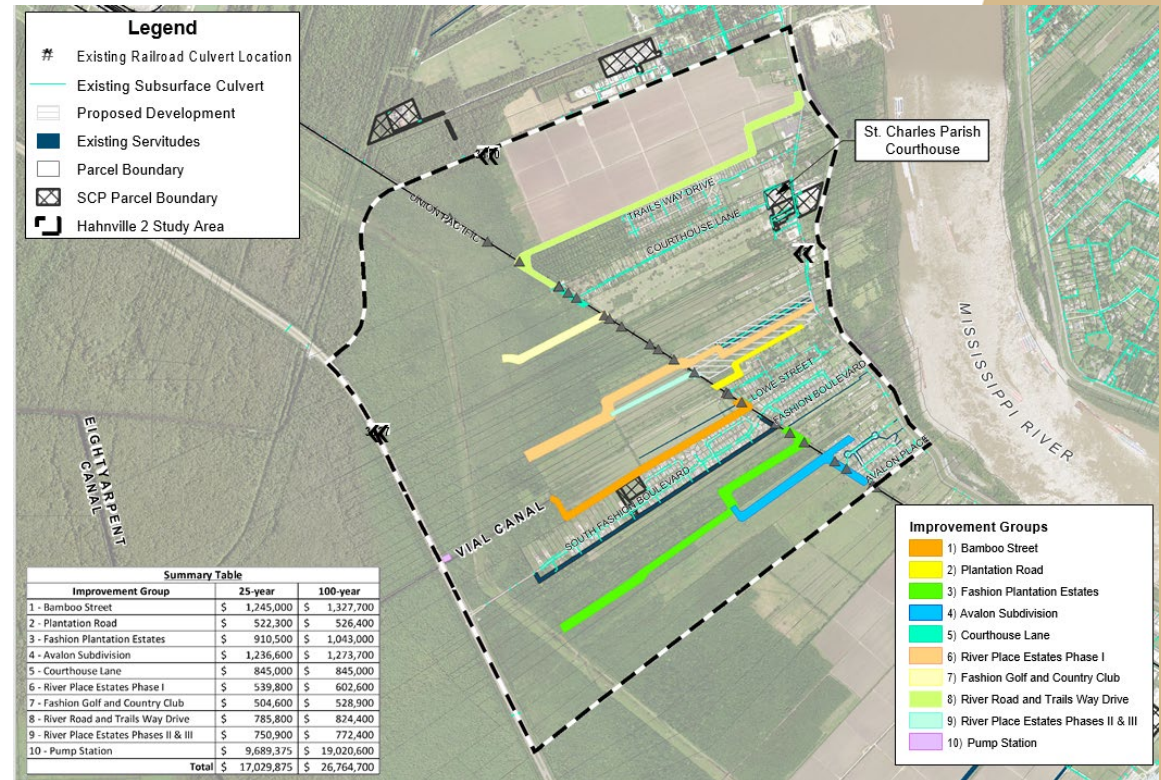
- **Visit the East and West Bank Yards weekly to participate in their morning meetings.**
- **QAs are assigned Construction Projects and/or Developments to monitor and prepare daily reports. They perform a critical role in coordination between contractors and the Parish; assuring public safety near job sites; and making sure Pump Stations are operational while work is being done at the Station.**
- **Visit project sites and take pictures, which are given to the Public Information for Social Media.**
- **Produce reports that help manage workload and identify areas of concern.**
- **When bad weather is coming, QAs assist with checking trouble spots to assure that they are ready for the storm.**
- **QAs review servitude documents to assure that work is being done legally and within our servitude.**

ENGINEERING

MASTER DRAINAGE PLAN WEST BANK

WEST BANK

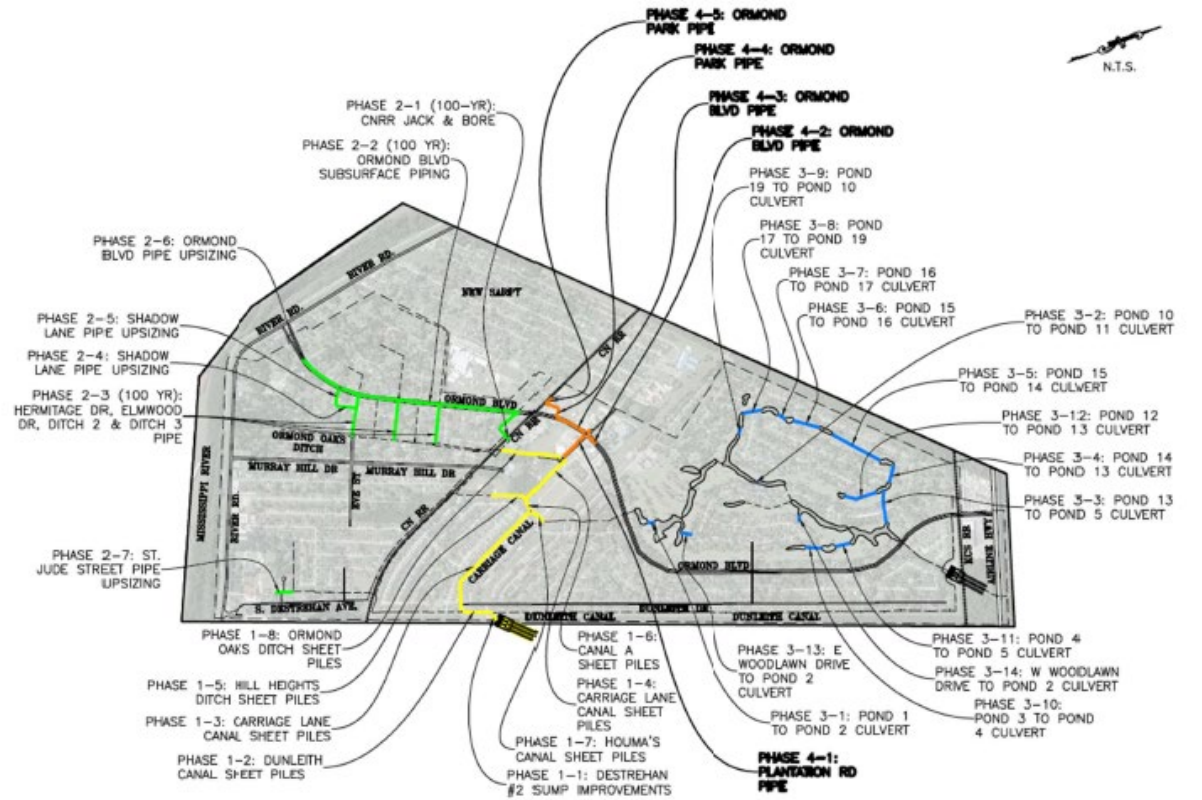
- Ama-Sellers, Hahnville 1 and Hahnville 2 Watersheds Complete.
- Luling, Luling I-310 and Mimosa/Willowdale Watershed in Progress.
- 2 Projects from the Ama-Sellers Report are being designed.
- 1 Project from the Hahnville 1 Report is being designed.
- 1 Project from the Hahnville 2 Report is being designed.



MASTER DRAINAGE PLAN EAST BANK

EAST BANK

- Montz, Norco, New Sarpy and Ormond Watersheds Complete.
- St. Rose, Dianne Place, Bar None, Turtle Pond and Almedia Watersheds in Progress.
- 3 Projects from the Montz Report are being designed.
- 3 Projects from the Norco Report are being designed.
- 2 Projects from the New Sarpy Report are being designed
- 8 Projects from the Ormond Report are being designed.



DRAINAGE PROJECTS CURRENTLY IN DESIGN

• Proposal Phase	4
• Survey Phase	4
• Preliminary Design Phase	19
• Final Design Phase	12
• Bidding	1
• On Hold	5
TOTAL PROJECTS	43

ROADWAY PROJECTS CURRENTLY IN DESIGN

• Proposal Phase	1
• Survey Phase	0
• Preliminary Design Phase	5
• Final Design Phase	1
• Bidding	1
• On Hold	8
TOTAL PROJECTS	16

ENGINEERING

WHAT WE DO

Besides Overseeing All Public Works Capital Projects, We:

- Review and Approve Utility Permit Applications**
- Review Subdivision Plans and Manage Construction for Parish Acceptance**
- Review and Approve Commercial Developments**
- Assist other Parish Departments with Engineering Projects**
- Review and Approve Driveway and Subsurface Permits**
- Manage and Track Environmental Permits for Canal Cleaning**
- Review and Approve Traffic and Drainage Impact Analyses**
- Assess Sewer Impact Fees.**
- Perform Field Engineering Services as Needed**

MS4
ENVIRONMENTAL

MS4 KEEPING THE PARISH CLEAN



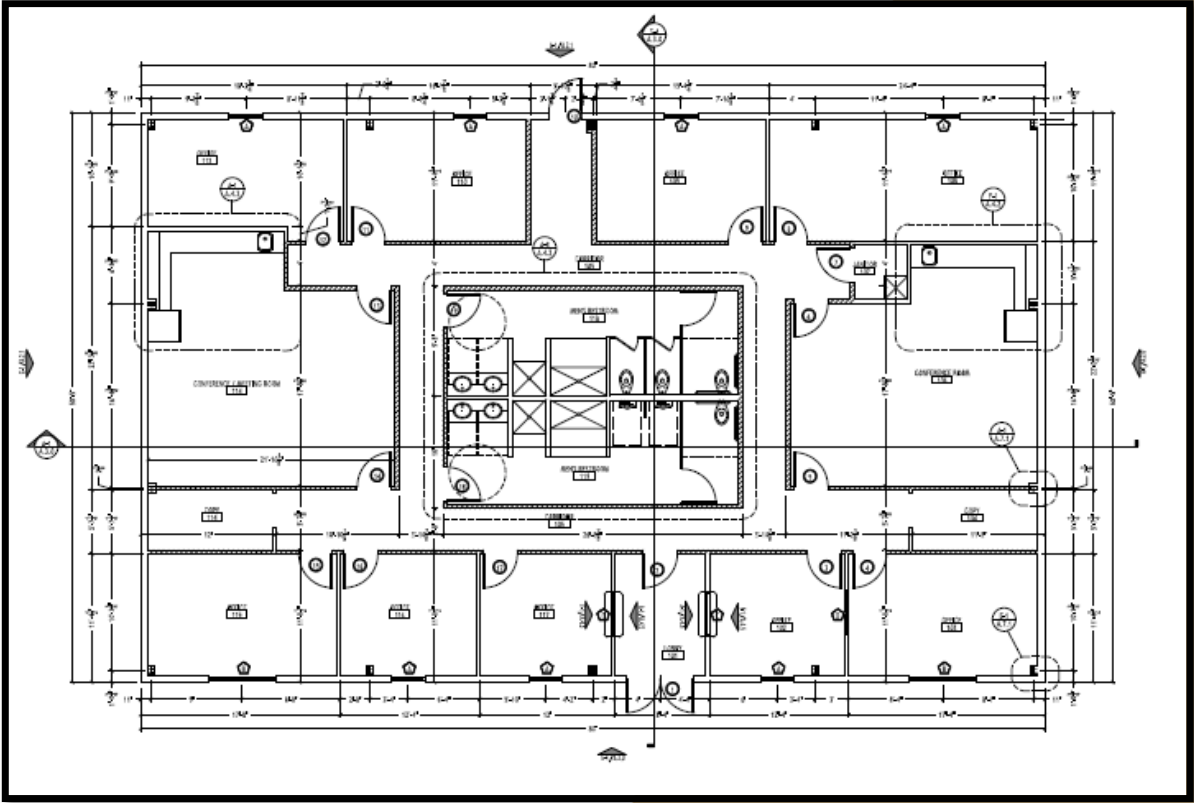
PROJECTS UNDER CONSTRUCTION

AMA PUMP STATION UPGRADE



COMPLETED PROJECTS

NEW WEST BANK YARD BUILDING



SPILLWAY ROAD BEFORE REPAIRS



SPILLWAY ROAD AFTER REPAIRS



5TH STREET DRAINAGE



DES ALLEMANS BULKHEAD AFTER HURRICANE IDA



DES ALLEMANDS BULKHEAD TEMPORARY REPAIR



ASPHALT PAVEMENT MANAGEMENT TASK ORDER #1

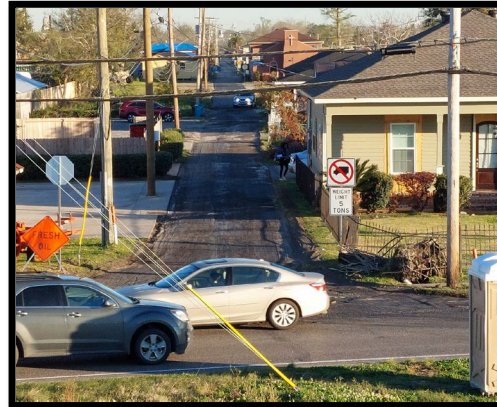
Street Name	District	Boundary
ASH STREET (2)	4	PINE ST. (4) - ACORN DR.
BAYOU ESTATES DRIVE	4	BAYOU GAUCHE RD (LA 306) - GRAND BAYOU DR.
MARINO DRIVE (1)	6	RIVER RD. (E. BANK) - THIRD ST. (2)
MARK DRIVE	4	BAYOU GAUCHE RD (LA 306) - SHAMROCK DR. (1)
MARYLAND DRIVE	7	US 90 - DEAD END
MATTHEW STREET	4	BAYOU GAUCHE RD (LA 306) - SECOND ST. (2)
MELONIE STREET	4	US 90 - DEAD END
MICHAEL DRIVE (3)	4	BAYOU GAUCHE RD (LA 306) - DEAD END
MONSANTO AVENUE (1)	7	US 90 - PRIMROSE DR. (2)
MONSANTO AVENUE (2)	7	PRIMROSE DR. (2) - DEAD END
NORCO STREET	6	THIRD ST. (4) - FIFTH ST. (1)
PLEASANT VALLEY DRIVE (1)	4	BAYOU GAUCHE RD (LA 306) - CONCRETE
SOUTH KINLER STREET (1)	1	TINNEY ST. (1) - DEAD END
WEST B STREET (1)	6	RIVER RD. (E. BANK) - THIRD ST. (2)
WOODLAND DRIVE	4	RIVER RIDGE DR. (1) - DEAD END



ASH STREET

ASPHALT PAVEMENT MANAGEMENT TASK ORDER #2

Street Name	District	Boundary
TINNEY ST (1)	1	PAUL MAILLARD (LA52) - CONCRETE
ALLEN ST	2	RIVER ROAD (LA18) – DEAD END
BECK ST	2	RIVER ROAD (LA18) – DEAD END
GRIFFEN ST	2	RIVER ROAD (LA18) – DEAD END
KENNEDY ST	2	RIVER ROAD (LA18) – DEAD END
JOHNSON ST (1)	2	RIVER ROAD (LA18) – DEAD END
ST. MARKS AVE	2	RIVER ROAD (LA18) – DEAD END
TRAVIS ST	4	BARBER RD – DEAD END
2 ND ST	5	RIVER ROAD (LA4) – SHORT ST (3)
4 TH ST	5	RIVER ROAD (LA48) – DEAD END
SHORT ST	5	1 ST ST – 4 TH ST
SECOND ST (6)	6	WASHINGTON ST – EAST ST
BIRCH ST (1)	7	MIMOSA ST (BRIDGE) - CONCRETE
DESOTO DR	7	CORONADO DR – CUL-DE-SAC
PENN ST	7	MIMOSA ST – WADE ST
WADE ST	7	US90 – DEAD END
SPILLWAY UPRAMP		NORCO SIDE OF SPILLWAY
HWWTP ROAD		GATE – TURN IN ROAD



4th Street

2nd Street

UPCOMING PROJECTS

Hydraulic Bottleneck Near Destrehan PS No. 2

- Bidding October 18, 2022

Lakewood Drive Rehabilitation (US-90 to Heather Drive)

- Letting Scheduled for December 7, 2022

LA 52 Project (Blueberry Hill to Angus Drive)

- Letting anticipated in February of 2023

PUBLIC WORKS MOTTO

WE ARE THE STORM WARRIORS

***WHEN OTHERS GO INSIDE TO ESCAPE
THE STORM, WE RUN OUTSIDE TO
PROTECT THE PARISH.***

QUESTIONS?

