



June 16, 2021

Mr. David deGeneres,  
Assistant Director of Wastewater  
Department of Public Works and Wastewater  
St. Charles Parish  
100 River Oaks Dr.  
Destrehan, LA 70047  
Email: ddegeneres@stcharlesgov.net

**Re: Proposal East Bank Sewer Masterplan Phase II**

Dear Mr. deGeneres:

Kyle Associates, LLC (Kyle Associates) is pleased to present the following proposal for the engineering services necessary for the East Bank Sewer Masterplan Phase II. Kyle Associates has completed Phase I of the East Bank Sewer Master Plan and submitted a report on the Planning/Data Gathering/Preliminary Evaluation of the findings generated from existing reports, field visits to conduct various tests, informational meetings with the Parish Department and overall understanding of the collection system. After meeting with the Parish staff on the findings in the Phase 1 report, it was decided that further flow metering will need to be conducted in the Norco and St. Rose sub-basins. Additionally, Kyle Associates will take the sewer model developed over 15 years ago through SewerCAD and dump it into a newer product called SewerGEMS. This new model will be built for the St. Rose and Destrehan areas first to assist the Parish with its moratorium placed on development and assist with understanding the system capacity and affects of adding two developments in the St. Rose and New Sarpy areas. The long-term goal is to develop a working model for the entire East Bank but this next phase will focus on these areas only to allow for immediate development. As we mentioned in the Phase I report, several portions of the wastewater collection system on the East Bank of St. Charles Parish are still prone to sanitary sewer overflows (SSOs) during wet weather events. This additional metering and model development will help determine the inefficiencies in the system and dictate what the next step should be for St. Charles Parish. This next step could result in additional capital investment in the system related to new facilities or combining collection system facilities and redirecting flows so that the existing collection system can handle the additional capacity and not affect any downstream areas.

Kyle Associates will further analyze and develop the flow monitoring and modeling data that will be completed and develop a plan of action that will lead into the next phase of the East Bank Sewer Master Plan. The scope of services to be provided include redeveloping the flow monitoring and modeling services followed by preparation of a corrective action report to develop a Capital Improvements Plan (CIP). Based upon the outcome of the modeling efforts, a corrective action plan, including rehabilitation and/or capacity improvements will reduce the I&I problems within the Parish's wastewater collection system in the St. Rose, Destrehan, and Norco sub-basins.

These master planning efforts will be performed in phases with Phase II being the following:

## **Phase II – Norco & St. Rose Flow Projections/I & I Investigations/St. Rose & Destrehan Model Build**

### **2.1 Review Existing East Bank Sewer Models**

Review existing east bank sewer models give to Kyle Associates from St. Charles Parish. These models were developed 2007 using SewerCAD and will be converted to a more updated model using SewerGEMS.

### **2.2 Develop New SewerGEMS Model for St. Rose/Destrehan**

Data gathered during Phase I will be compared to information in the old SewerCAD model, all changes to facilities in the collection system will be updated and a new model will be developed in SewerGEMS for the St. Rose and Destrehan sewer subbasins. The flow model will be calibrated based upon dry weather and wet weather flow data obtained. Once calibrated, the model will be utilized to establish problem areas within the two subbasins during simulated events.

### **2.3 Review Wet Weather Flow Data in St. Rose/Destrehan**

Review all wet weather flow data provided by the Parish and obtained using additional flow monitoring being performed by Compliance EnviroSystems (CES) of primary lift stations in the St. Rose and Destrehan sewer subbasins to establish base wastewater flows, groundwater infiltration, and rainfall dependent inflow and infiltration (RDI/I).

### **2.4 Establish Future Base Flows in St. Rose/Destrehan**

Conduct model runs in SewerGEMS to establish base flows for the St. Rose and Destrehan sewer subbasins.

## 2.5 Establish Future Wet Weather Flows in St. Rose/Destrehan

Conduct model runs in SewerGEMS to establish wet weather flows for the St. Rose and Destrehan sewer subbasins.

**Deliverable** – Prepare a report of all data gathered during the additional flow monitoring in the Destrehan and St. Rose subbasins. Develop a SewerGEMS model for the St. Rose and Destrehan subbasins to assist the Parish with planning for future developments in those areas. This additional Sewer System Evaluation and Survey (SSES) planning will further be used to develop a Capital Improvements Plan (CIP) for the east bank sewer collection system.

**Professional Services Fee** - It is anticipated that this phase of the project will take approximately 120 calendar days to complete. Fee for this phase of the project shall be lump sum amount of \$105,000. The following is an estimated breakdown of the staff assignments and man-hours for this phase of the project:

Position	Description	Hourly Rate	Hours	Subtotal
Principal/Senior Engineer	Project Manager	\$185	100	\$18,500
Civil Engineer	Project Engineer	\$130	600	\$78,000
CADD Technician III	Model/GIS Review and Analyzing	\$95	20	\$1,900
Civil Technician I	Field Verification/Data Gathering	\$60	100	\$6,000
Administrative	Report Preparation	\$60	10	\$600
			Total	\$105,000

Provided this proposal is acceptable, please proceed with the necessary contract documents for the desired tasks for execution by our office. We appreciate the opportunity to provide this proposal and look forward to working with St. Charles Parish on this next phase of this important drainage project.

With regards,



Christopher J. Hnatyshyn  
Vice President – Business Development