digital engineering
Digital Engineering & Imaging, Inc.
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January 25, 2019

Mr. Don Edwards, P.E.
Senior Engineer
St. Charles Parish
Public Works Department
100 River Oaks Drive
Destrehan, LA 70047

Re: Hydrologic/hydraulic study of the Ormond Oaks area from Ormond Boulevard to the Destrehan Pump Station (P.S.) No. 2
Revised Project Proposal

Dear Mr. Edwards:

We appreciate the opportunity to prepare a proposal to provide professional services. The purpose of this project is to perform a hydrologic/hydraulic study of the Ormond Oaks area from Ormond Boulevard to the Destrehan Pump Station (P.S.) No. 2 in order to minimize or eliminate current flooding problems in this area. As per your request we will only utilize existing Parish GIS data and not obtain any additional survey information. If additional level of effort is required beyond the GIS data to develop the model we will notify you in regards to the required information to discuss the appropriate method to obtain the data. Below is the proposed scope of services for completing the hydrologic/hydraulic study.

SCOPE OF SERVICES

1. Delineate drainage area for Destrehan P.S. No. 2. Delineate sub-drainage areas for ditches and culverts from Destrehan P.S. No. 2 to Ormond Boulevard near River Road.
2. Coordinate with St. Charles Parish GIS Department to obtain existing information for the main ditches and culverts in the study area. Information that will be provided in GIS includes pipe inverts, pipe sizes, pipe materials and ditch inverts.
3. Prepare a planning-level, existing conditions plan for main ditches and culverts in the study area.
4. Determine peak flows for a 10-year storm.
5. Perform a hydrologic/hydraulic analysis for current conditions in the study area including the main ditches and culverts that convey water to Destrehan P.S. No. 2.
6. Prepare a hydraulic grade line for current conditions between Destrehan P.S. No. 2 and Ormond Boulevard near River Road.
7. Identify the largest hydraulic impacts in the ditches and culverts (e.g. undersized culverts, culverts set at wrong elevations, etc.).
8. Meet with the Parish to discuss improvement options.
9. Prepare a conceptual plan of proposed improvements between Destrehan P.S. No. 2 and Ormond Boulevard near River Road. Include preliminary details including pipe sizes, pipe materials, and typical ditch sections.

10. Perform hydraulic analysis for proposed conditions between Destrehan P.S. No. 2 and Ormond Boulevard near River Road.
11. Prepare a hydraulic grade line for proposed conditions between Destrehan P.S. No. 2 and Ormond Boulevard near River Road.
12. Assuming all improvements will not be performed at one time, identify a list of the most critical, cost-effective improvements to eliminate flooding at Ormond Boulevard.
13. Prepare cost estimates and time schedules for the overall conceptual plan of improvements along with the most critical, cost-effective improvements.
14. Prepare a draft report and submit two paper copies and one electronic copy of the draft report to the Parish.
15. Meet with the Parish to discuss draft report.
16. Revise the draft report to incorporate any comments.
17. Submit five paper copies and one electronic copy of the final report to the Parish.

SCHEDULE AND PROPOSED FEES

The proposed fee is an estimate of hours required to complete the scope of services. Actual billing will reflect actual hours spent up to but no more than the proposed not-to-exceed amount. Therefore, compensation is proposed as a not-to-exceed hourly amount of $50,947.00.

The scope of services will be completed within four months of the notice to proceed. We hope that this proposal meets your needs. Please contact us if you have any questions or require additional information. Should you concur with our proposal we are ready to prepare an engineering agreement for these services.

Sincerely,

Digital Engineering

Robert J Delaune Jr, P.E.
Vice President

cc: Mr. Tom Hickey, P.E.

ORMOND OAKS DOWNSTREAM HYDROLOGIC/HYDRAULIC MODEL AND REPORT
PROPOSED LEVEL OF EFFORT

DIGITAL ENGINEERING AND IMAGING, INC.

	PRINCIPAL $ 225.00	SR. PROFESSIONAL ENGINEER $ 160.00	PROFESSIONAL ENGINEER $ 145.00	ENGINEER INTERN $ 95.00	SENIOR TECHNICIAN/ DESIGNER $ 115.00	SENIOR GIS ANALYST $ 92.00	CADD TECHNICIAN $ 85.00	ADMINISTRATIVE/ CLERICAL $ 65.00	CONSTRUCTION MANAGER $ 80.00	RESIDENT PROJECT REPRESENTATIVE $ 72.00	TOTAL COSTS
1. Delineate drainage areas		1	16	10							$ 3,430.00
2. Coordinate with St. Charles Parish GIS Dept.			2			16					$ 1,762.00
3. Existing Conditions Plan	0.5	2	4	4		4					$ 1,760.50
4. Determine Peak Flows for 10-Year Storm			4	4							$ 960.00
5. Existing Conditions Hydrologic/Hydraulic Analysis	0.5	1	92	12							$ 14,752.50
6. HGL for Current Conditions		1	12								$ 1,900.00
7. Identify Hydraulic Impacts in Ditches and Culverts	0.5	1	8								$ 1,432.50
8. Meet with Parish to Discuss Improvements Options	2	2	2								$ 1,060.00
9. Conceptual Plan of Proposed Improvements	0.5	1	8				12				$ 2,452.50
10. Hydraulic Analysis of Proposed Improvments	0.5	2	30	12							$ 5,922.50
11. HGL for Proposed Improvements		1	12								$ 1,900.00
12. Prioritize Most Critical Cost Effective Improvements	0.5	1	8								$ 1,432.50
13. Prepare Cost Estimates and Schedule	0.5	1	4	4							$ 1,232.50
14. Draft Report	1	4	24	8		14	8	6			$ 7,463.00
15. Meet with Parish to Discuss Draft Report	2	2	2								$ 1,060.00
16. Revise Draft Report and Incorporate Comments	0.5	1	4	2		2	2	2			$ 1,526.50
QA/QC Review	4										$ 900.00
Total Manhours	**13**	**21**	**232**	**56**	**0**	**36**	**22**	**8**	**0**	**0**	
Total Cost	**$ 2,925.00**	**$ 3,360.00**	**$ 33,640.00**	**$ 5,320.00**	**$ -**	**$ 3,312.00**	**$ 1,870.00**	**$ 520.00**	**$ -**	**$ -**	**$ 50,947.00**