

PROFESSIONAL SERVICES
for
ST. CHARLES EAST BANK MASTER DRAINAGE PLAN

PROPOSED IMPROVEMENTS TO
THE ORMOND LAKES WATERSHED
RAINWATER DETENTION PONDS
St. Charles Parish, Louisiana

April 30, 2019

The following Professional Services are proposed by **Evans-Graves Engineers, Inc.** (E-G) to St. Charles Parish for Proposed Improvements to the Ormond Lakes Watershed Rainwater Detention Ponds. The primary objective is to deepen the ponds to recommended design depths.

The included area is entirely inside the bounds of the Ormond Lakes Watershed in Ormond. Rights of Entry have been provided to us and the Dredging Contractor.

Each pond will be considered a separate Task Item. The ponds will use the naming system developed in the 2003 Lambert Engineers report, with ponds numbered Lake No. 01 through Lake No. 20. The work required on each task will be similar in nature and description, with the geometry of each design determined by that pond's footprint, so as to not encroach on the associated golf course.

Surveys of the existing ponds have been provided to us. These surveys, coupled with the Parish LIDAR surveys, will be used to optimize the improved shape and depth design of each pond. These improved designs will be provided to the Parish and Dredging Contractor for review, and then as Maintenance Documents, for each pond in the sequence the Dredging Contractor and the Parish determine. E-G will include in this Proposal Supplementary Services for on-site E-G personnel for Inspection and Services during Maintenance, on an as-needed basis.

TASK No. 1: MEETINGS AND FIELD VISITS WITH PARISH, SURVEYOR, AND CONTRACTOR

This task includes meetings for coordination and development of scope.

NOT TO EXCEED CHARGE: \$3,200.00

TASK No. 2: COORDINATION AND DEVELOPMENT OF EXISTING CONDITIONS BATHYMETRIC SURVEY

This task includes coordinating and directing the Surveyor on the Existing Conditions Bathymetric Survey being provided by the Parish.

NOT TO EXCEED CHARGE: **\$4,000.00**

TASK Nos. 3 through 22: DESIGN OPTIMIZED IMPROVEMENTS TO THE ORMOND LAKES WATERSHED DETENTION POND NUMBER ASSOCIATED WITH THAT TASK NUMBER

These tasks will each be based on the Bathymetric Survey provided by the Parish and the Parish LIDAR survey.

These tasks will each include professional services for determining the new lake bottom geometry for the affected lake. This work will include:

- determining final lake bank footprint design
- determining appropriate embankment slope
- determining maximum depth
- determining operational minimum, normal, and maximum operational lake levels
- defining Design Storm maximum inundation elevation
- determining locations of required bulkheads in restricted spaces (bulkhead and other structural design to be done under separate contract)

This information will be provided to the Parish as georeferenced maintenance sketches and point data files adequate to direct the Dredging Contractor to dredge and remove existing material from the affected lake. The sketches will also identify lake bottom embankment which is currently over-excavated. (Fill work will be done under separate contract).

The Not to Exceed amount of any individual task may be amended if authorized in writing by the Parish.

NOT TO EXCEED CHARGE FOR EACH TASK ORDER

<u>TASK 03: LAKE 01</u>	<u>\$2,800.00</u>
<u>TASK 04: LAKE 02</u>	<u>\$14,300.00</u>
<u>TASK 05: LAKE 03</u>	<u>\$1,700.00</u>
<u>TASK 06: LAKE 04</u>	<u>\$2,500.00</u>
<u>TASK 07: LAKE 05</u>	<u>\$11,900.00</u>
<u>TASK 08: LAKE 06</u>	<u>\$10,300.00</u>
<u>TASK 09: LAKE 07</u>	<u>\$2,000.00</u>
<u>TASK 10: LAKE 08</u>	<u>\$4,400.00</u>

<u>TASK 11: LAKE 09</u>	<u>\$5,800.00</u>
<u>TASK 12: LAKE 10</u>	<u>\$7,500.00</u>
<u>TASK 13: LAKE 11</u>	<u>\$4,000.00</u>
<u>TASK 14: LAKE 12</u>	<u>\$800.00</u>
<u>TASK 15: LAKE 13</u>	<u>\$1,500.00</u>
<u>TASK 16: LAKE 14</u>	<u>\$1,600.00</u>
<u>TASK 17: LAKE 15</u>	<u>\$1,300.00</u>
<u>TASK 18: LAKE 16</u>	<u>\$900.00</u>
<u>TASK 19: LAKE 17</u>	<u>\$2,200.00</u>
<u>TASK 20: LAKE 18</u>	<u>\$800.00</u>
<u>TASK 21: LAKE 19</u>	<u>\$1,100.00</u>
<u>TASK 22: LAKE 20</u>	<u>\$2,700.00</u>

Task SS: SUPPLEMENTARY SERVICES

Task SS.A: Professional Services by Evans-Graves: – This task will include additional E-G professional services authorized by the Parish and associated with this project, but not included in Tasks 1 through 22. The work under this category will be billed on a time charge basis in accordance with the attached fee schedule. A description of these services will be provided with the invoice.

Task SS.B: Professional Services by Others: – This task will include additional professional services by outside professionals, authorized by the Parish and associated with this project, such as surveying and geotechnical investigation, and not included in Tasks 1 through 22. Parish invoices will consist of the invoice amount by the outside professional, with a ten percent management fee added by Evans-Graves:

TIME CHARGES AS NEEDED

DELIVERABLES

Design Drawings – Design Drawings will be provided for each Lake prior to dredging operations being started for that Lake. These Drawings will include a map of Existing and Proposed Contours, a Typical Cross Section, and an Engineer's Quantities Estimate, without costs.

GENERAL NOTES

1. Tasks do not include any agency filing, review, permit, or application fees.
2. Invoices will be submitted monthly to reflect current work effort on the project. Payment is due upon receipt of the invoice.
3. Time-charge tasks will be billed in accordance with the approved Evans-Graves rate schedule.

TASK SUMMARY

TASK No. 01: MEETINGS	\$2,400.00
TASK No. 02: EXISTING SURVEY	\$3,200.00
TASK No. 03: LAKE 01	\$2,800.00
TASK No. 04: LAKE 02	\$14,300.00
TASK No. 05: LAKE 03	\$1,700.00
TASK No. 06: LAKE 04	\$2,500.00
TASK No. 07: LAKE 05	\$11,900.00
TASK No. 08: LAKE 06	\$10,300.00
TASK No. 09: LAKE 07	\$2,000.00
TASK No. 10: LAKE 08	\$4,400.00
TASK No. 11: LAKE 09	\$5,800.00
TASK No. 12: LAKE 10	\$7,500.00
TASK No. 13: LAKE 11	\$4,000.00
TASK No. 14: LAKE 12	\$800.00
TASK No. 15: LAKE 13	\$1,500.00
TASK No. 16: LAKE 14	\$1,600.00
TASK No. 17: LAKE 15	\$1,300.00
TASK No. 18: LAKE 16	\$900.00
TASK No. 19: LAKE 17	\$2,200.00
TASK No. 20: LAKE 18	\$800.00
TASK No. 21: LAKE 19	\$1,100.00
TASK No. 22: LAKE 20	\$2,700.00
TASK No. 23: FINAL SURVEY	\$3,200.00

<u>TOTAL PROJECT</u>	<u>\$88,900.00</u>
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<u>Task SS: SUPPLEMENTARY SERVICES</u>	<u>AS NEEDED</u>
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If you agree with the Scope of Services, and Compensation as outlined herein, please indicate your acceptance by signing on the line provided below, dating and returning a copy to our office.

EVANS-GRAVES ENGINEERS, INC.

ST CHARLES PARISH

Ashlyn Graves
Vice President

Larry Cochran
President

Date

Date