



## ST. CHARLES PARISH

### DEPARTMENT OF PUBLIC WORKS AND WASTEWATER

#### PROFESSIONAL SERVICES AGREEMENT

This AGREEMENT made and entered into the \_\_\_\_ day of \_\_\_\_\_, 2015, by and between ST. CHARLES PARISH acting herein by and through its President, who is duly authorized to act on behalf of the Parish, hereinafter called the OWNER and **Evans-Graves Engineers, Inc.**, a Louisiana Corporation acting herein and through its Vice-President, hereinafter called the CONSULTANT. Whereas the OWNER desires to employ the CONSULTANT to perform the services described herein for Parish Project No. **P140801 LAMP FEMA Challenge.**

#### 1. GENERAL

- a. The OWNER engages the CONSULTANT to perform specific professional services identified and described in the Scope of Services. CONSULTANT services shall conform to the requirements of the OWNER and all participating regulating agencies.

#### 2. SERVICES OF THE CONSULTANT

##### a. TASK No. 1: DETAILED MODEL

- i. H&H models will be developed using preliminary data consisting of the information currently available from the Parish GIS group, as-built documentation and prior studies provided by the Parish Public Works Department, field reconnaissance, and topographic surveys conducted under the USACE St. Charles Parish East Bank Urban Flood Study. This task will consist of the developing a new hydrology and hydraulics model using Autodesk Storm and Sanitary Analysis extension software on the Civii3D platform. The model will be created from a surface model Evans-Graves will provide, developed from the recent Parish LIDAR, supplemented with field data provided by the Parish, as-built drawings, and EG reconnaissance and surveys as conducted in Task 2 and under Supplemental Services, to bring the model to current conditions. The model will include individual manholes, inlets, storm drain lines, culverts, and ditches. Elevations of inverts will be collected from direct field measurements provided by the parish and calculated depths from ditch bottoms. Culvert sizes not already provided by the parish will be obtained by spot field measurements, with the intermediate sizes assumed. EG will create new maps to reflect model results and develop other maps and databases necessary for evaluation and presentation of the data. The model will be run on software not provided by USACE: Autodesk/Boss International (StormNet) Storm and Sanitary Analysis and the Environmental Protection Agency (EPA) Storm Water Management Model (SWMM). These programs produce a greatly enhanced and precisely defined model result at the precision of the LIDAR data. Creation of cross-sections and profiles is highly interactive. Flow directions, flowrates, and flood areas can be observed in animated real-time. Deficiencies in the capacities of individual elements in the model are isolated by the software. The program is directly linked with the CAD software to allow interactive visual processing. The stream locations and flood mapping is precisely accurate and representative of the true conditions on the ground. This software utilizes the information in huge LIDAR data sets, and provides detailed analysis of every component in the system. The software has been developed specifically for modelling a variety of storm events on subsurface urban drainage systems with many interacting components. The model is highly interactive and intended to be continually updated to reflect changing conditions, with a primary purpose being ongoing improvements in performance and operations. This task will include running any available known rainfall events through the model to compare the model's output to recorded flooding events.

**b. TASK No. 2: SUPPLEMENTARY SERVICES**

- i. **Professional Services by Evans-Graves:** -This task will include additional E-G professional services authorized by the Parish for modelling and developing remedial or imitative measures for structures, including sizing, design, plan development, and bid and construction services, for channels, pipes, structures, pumps, and storage. This task will also include design and modelling of any specific recommended operational changes in pumping, flow characteristics, and storage.
  - ii. **Professional Services by Evans-Graves:** - The work under this category can either be billed under a separate task or it can 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. This task will include additional E-G professional services authorized by the Parish and associated with this project, but not included in Task 1. 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.
  - iii. **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 Task 1. Parish invoices will consist of the invoice amount by the outside professional, with a ten percent management fee added by Evans-Graves.
- c. **Deliverables-**As part of the monthly pay requests, Evans-Graves will submit to the Parish a written description of the progress of each of the following deliverables, as well as a general description of the overall project progress and significant events and milestones. When each of the deliverables is developed enough to be meaningful, preliminary copies will be provided to the parish for review and comment. As the project develops, EG will provide a list of prospective remediation or mitigation items for the parish's consideration of inclusion into this project.
- i. **Plan Sheets** - Plans sheets will be provided at an appropriate scale to convey the information developed in the model and discussed in the Summary Report. Boundaries of specific flood events will be shown, as well as the location and geometry of any modeled structure or cross-section.
  - ii. **GIS Data** - The information developed under this project will be provided as geographic information systems (GIS) files for implementation into the overall parish GIS system. The information provided for GIS will be dependent on the Option level under which the model is developed.
  - iii. **Summary Report-**A Summary Report will be provided explaining the overall project, the methodologies used, assumptions made, relevant historic or empirical information. A textual description with illustrations will be given for the different elements of the study, including the data, the software, the existing conditions input and output, and any specific recommendations for remediation or mitigation of the existing system or operation.
  - iv. **Computer Model-**The final input, configuration, and output files for the particular software used will be provided. If the particular software is available without licensing fees, a copy of the software will also be provided. For licensed software, documentation for acquiring the appropriate licenses will be included.

**3. PERIOD OF SERVICE**

- a. The CONSULTANT shall complete and produce all deliverables described in the Scope of Services in Section 2c within one hundred twenty (120) calendar days of execution of this AGREEMENT.

- b. In the event that delays are experienced beyond the control of the CONSULTANT, the schedule may be revised as mutually agreed upon by the OWNER and the CONSULTANT.

#### 4. CONSULTANT'S COMPENSATION

- a. The method of payment for this AGREEMENT is a combination of LUMP SUM & billable hours. Such payment to be made to CONSULTANT within thirty (30) days after receipt of CONSULTANT'S invoice by OWNER.
  - i. TASK No. 1 as described in 2a will be paid LUMP SUM in the amount of \$166,300.00 as deliverables are received, reviewed, and approved.
  - ii. TASK No. 2 as described in 2b will be paid on billable hours in accordance with the attached fee schedule.

#### 5. SERVICES OF THE OWNER

- a. OWNER shall assist CONSULTANT in carrying out the Scope of Services by placing at his disposal all existing relevant data and records in its possession.
- b. CONSULTANT shall be responsible for searching said data and records provided and shall request specific clarification of the information as needed.
- c. OWNER guarantees CONSULTANT access to all public property as required in order to complete the Scope of Services.

#### 6. TERMINATION

- a. This AGREEMENT may be terminated without cause by either party upon ten (10) days written notice.
- b. Immediately after receiving such notice, the CONSULTANT shall discontinue advancing the services under this AGREEMENT.
- c. CONSULTANT shall invoice an ascertainable sum proportionate to the lump sum fee amount described in Section 4B. The percentage of services completed shall be based upon the Scope of Services set forth in Section 2B.
- d. In no event shall the fee exceed what is set forth in Section 4B of the AGREEMENT.
- e. OWNER, upon receiving the completed or partially completed deliverables, and after the final fee is mutually agreed upon, shall make payment within thirty (30) days.
- f. In the event that this contract is terminated, OWNER shall have the option of completing the Scope of Services in house or entering into an AGREEMENT with another party to complete the work.

#### 7. COMPLIANCE WITH LAWS AND ORDINANCES

- a. The CONSULTANT hereby agrees to comply with all Federal, State, and Local Laws and Ordinances applicable to the Scope of Services under this AGREEMENT.

#### 8. SUCCESSORS AND ASSIGNS

- a. This AGREEMENT is not assignable.

9. INSURANCE

- a. The CONSULTANT shall secure and maintain at his expense such insurance that will protect him and the OWNER, from claims under the Workmen's Compensation Acts and from claims for bodily injury, death or property damage which may arise from performance of services under this AGREEMENT.
- b. Insurance for bodily injury or death shall be in the unencumbered amount of FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00) for one person and not less than ONE MILLION DOLLARS (\$1,000,000.00) for all injuries and/or deaths resulting from any one occurrence.
- c. The insurance for property damage shall be in the unencumbered amount of TWO HUNDRED FIFTY THOUSAND DOLLARS (\$250,000.00) for each accident and not less than ONE MILLION DOLLARS (\$1,000,000.00) aggregate.
- d. CONSULTANT shall also secure and maintain at his own expense professional liability insurance in the unencumbered sum of FIVE HUNDRED THOUSAND DOLLARS (\$500,000.00).
- e. All certificates of insurance shall be furnished to the OWNER within five (5) days after execution of the AGREEMENT and shall provide that insurance not be cancelled without ten (10) days prior written notice to the OWNER.
- f. St. Charles Parish shall be named as additional insured on general liability insurance policies.
- g. OWNER may examine all insurance policies.
- h. For all purposes under Louisiana law, the principals of this AGREEMENT shall be recognized as the statutory employer of all contract employees as provided in LSA-R.S. 23:1061.

10. OTHER

- a. CONSULTANT shall indemnify and save harmless the OWNER against any and all claims, demands, suits or judgments for sums of money to any party for loss of life or injury or damages to person or property growing out of, resulting from or by reason of any negligent act by the CONSULTANT, its agents, servants or employees, while engaged upon or in connection with the services required or performed hereunder.
- b. This AGREEMENT constitutes the entire agreement between the parties. There are no understandings, agreements, or representations, oral or written, not specified within this AGREEMENT. This AGREEMENT may not be modified, supplemented or amended, in any manner, except by written agreement signed by both parties.

11. EXCLUSIVE JURISDICTION AND VENUE

- a. For all claims arising out of or related to this agreement, CONSULTANT hereby consents and yields to the exclusive jurisdiction and venue of the Twenty-Ninth Judicial District Court for the Parish of St. Charles and expressly waives any (a) pleas of jurisdiction based upon CONSULTANT'S residence and (b) right of removal to Federal Court based upon diversity of citizenship.

IN WITNESS WHEREOF, the parties hereto have executed this AGREEMENT the day, month and year first above mentioned.

**ATTEST**

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**ST. CHARLES PARISH**

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**By: Mr. V.J. St. Pierre, Jr.  
Parish President**

**ATTEST**

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**Evans-Graves Engineers, Inc.**

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**By: Vice-President**