

Request for Qualification Statements for
Engineering Services for the Amite River Watershed
and Coastal Wetlands Restoration Phase I Project(s)
March 28, 2019

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A Professional Corporation

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Engineers • Surveyors
Environmental Consultants

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Client Focused. Technology Driven.

March 28, 2019

Attn: Heather Crain
Grant Coordinator
Livingston Parish Government
P.O. Box 1060
Livingston, LA 70754

**RE: AMITE RIVER WATERSHED AND COASTAL WETLANDS RESTORATION PHASE I PROJECT(S)
QUALIFICATIONS STATEMENT – ENGINEERING SERVICES**

Dear Ms. Crain,

The Fenstermaker team is pleased to submit our statement of qualifications to provide Engineering Services to Livingston Parish Government. Joining the Fenstermaker Team are the highly respected firms of **Duplantis Design Group, Professional Engineering Consultants, and APS Engineering and Testing (DBE)**.

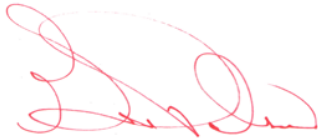
- a. **A brief statement of the Respondent's understanding of the scope of work to be performed:** C. H. Fenstermaker & Associates, L.L.C. has a long history of performing work in south Louisiana. Our team is comprised of Kimberly McDaniel, P.E., John Foret, Ph.D., Garvin Pittman, PMP, Amanda Phillips, P.E., Ricardo Johnson, PLS, and other available qualified staff. We understand that there are RESTORE Act and GOMESA funding requirements for this project. As can be seen in our proposal, Fenstermaker has administered grants and managed state and federally funded projects in the recent past. We fully understand all aspects of the scope of work to be performed.
- b. **A confirmation that the Respondent meets the appropriate state engineering and surveying licensing requirements to practice in the State of Louisiana:** C. H. Fenstermaker & Associates, L.L.C. is registered and listed as active with Louisiana Professional Engineering and Land Surveying Board (LAPELS). Fenstermaker's Engineering Firm number EF.0000311, and our Surveying Firm number is VF.0000154.
- c. **A confirmation that the Respondent has not engaged in any unethical practices within the last five years:** Fenstermaker strives to associate with positive and impactful projects in our state. We have had no record of performing any substandard work or engaged in any unethical practices.

- d. A confirmation that, if awarded the contract, the Respondent acknowledges its complete responsibility for the entire contract, including payment of any and all charges resulting from the contract:

To the extent these responsibilities and charges are identified in the Executed Agreement/ Contract, Fenstermaker accepts these obligations.

Thank you for the opportunity to present our credentials and we look forward to hearing from you. If you have any questions regarding our submittal or qualifications, please do not hesitate to contact me at 225.344.6701.

Sincerely,
FENSTERMAKER



Gregory L. Palmer
Vice President, Contracts & Acquisitions

2.a. Full Legal Name of Respondent: C. H. Fenstermaker & Associates, L.L.C.

DUNS number: 05-748-4255

Date of establishment: 1950

Type of entity and business expertise, short history, current ownership structure and any recent or materially significant proposed change in ownership:

C. H. Fenstermaker & Associates, L.L.C. was established in 1950 and is a Limited Liability Company whose business expertise is engineering, surveying and mapping, and environmental consulting services. The current ownership is William H. Fenstermaker (majority owner). The firm employs nearly 300 personnel in Louisiana and Texas with offices in Lafayette, Lake Charles, Baton Rouge, New Orleans, Shreveport, Houston, San Antonio, and Midland. The firm has provided local, state, and federal governments with a wide range of services throughout the State of Louisiana.

Fenstermaker has teamed with the highly respected firms of **Duplantis Design Group, Professional Engineering Consultants, and APS Engineering and Testing (DBE)** to provide Livingston Parish the full-service team with experienced personnel dedicated to successfully complete this project.

In 1997, **Duplantis Design Group (DDG)** began as a small, local civil engineering firm based in Thibodaux, Louisiana. From the very beginning, they believed that exceeding their client's expectations was the only way to achieve long-term success. In the 22 years since their founding, their unwavering commitment to client service excellence has allowed them to grow into a multi-disciplinary regional firm with over 100 full time employees with offices in Thibodaux, Covington, Baton Rouge, Lafayette, and Houston. Originally offering services in civil engineering, they have methodically expanded their services to include coastal and water resources engineering, landscape architecture, architecture, and most recently specialized services in structural engineering and surveying. Through the hiring of key staff and strategic partnerships with specialty firms, DDG has proven the capability to cost-effectively deliver a wide range of engineering services in support of Livingston Parish's mission to restore and protect the coast.

Hydrology and Hydraulics Engineering

DDG's expertise in hydrology and hydraulics engineering was developed through their years of experience with site development activities across the State, together with their support of local municipalities with flood risk assessments and regional drainage improvement projects. From the retrofit of local drainage infrastructure to the design of regional detention facilities, to conveyance improvements in major waterways, to complete drainage designs for thousands of acres of development, they have done it all. A successful drainage design involves the accurate modeling of rainfall-runoff processes and analysis of open- and closed-drainage systems. This involves an analysis of topography, identification of drainage patterns, land cover analysis, a comprehensive inventory of existing water control structures (surveys and condition assessments), model development and model calibration. The ability to accurately predict flooded areas and develop projects that alleviate constrictions or attenuate peak runoff rates by creating system storage is the basis of many capital improvement plans that give the highest priority to projects yielding the greatest benefits.

DDG is well-versed in both steady and unsteady hydraulic modeling for conveyance analysis and floodplain mapping. They routinely use public domain and proprietary models such as SWMM, HEC-HMS, HEC-RAS, PondPack, AutoDesk Storm and Sanitary Analysis, Hydraflow, and FHWA HY-8, for routine conveyance / storage analysis and drainage design. As these models (e.g., HEC-RAS and SWMM) advance to include both one-dimensional and two-dimensional modeling capabilities, DDG is continually improving their capabilities and utilizing cutting edge techniques as warranted by their projects.

For example, they have worked with partners to develop a 2-D MIKE-FLOOD model for the Fritchie Marsh in St. Tammany Parish to evaluate changes to water level and salinity as a result of proposed conveyance improvements in the contributing watershed.

With regard to hydraulic structures, they have designed drainage and conveyance systems containing culverts, storm drains, open channels, weirs, orifices, outlet control structures, and spillways in the course of site design activities and regional drainage improvements. DDG and their key staff also have experience with the analysis and design of drainage pump stations such as the work performed for Lafourche Parish.

Marsh Creation

DDG's specialized experience designing marsh creation is evidenced through our successful relationship with CPRA. In the past 5 years, CPRA has turned to DDG to support high-profile, large-scale marsh creation projects in the Lake Pontchartrain Basin. Beginning in 2016, DDG provided construction management and administration services for CPRA on the Bayou Bonfouca Marsh Creation Project (PO-0104). That role allowed their project manager, Joe Guillory, to continue his support of the design and optimization of the project that he started while working at CPRA. Today, 8 months post-construction, the Bayou Bonfouca Project has rapidly vegetated and is more than 500 acres larger than originally planned. DDG is continuing to support CPRA on the Bayou Bonfouca Project as you turn the project's success into an opportunity to further build the science of creation. In 2016, CPRA placed great confidence and trust in DDG by awarding their team the opportunity to deliver the Lake Borgne Marsh Creation Project (PO-0108), a NRDA funded project similar to the OBPC, with the goal of restoring 1,548 acres of open water and broken marsh. As DDG has completed the alternatives analysis phase of the project (15% design), it is now anticipated that the project will restore more than 3,000 acres making it one of if not the largest marsh creation projects undertaken by CPRA in its history.

Professional Engineering Consultants (PEC) is a civil/environmental firm which is currently celebrating its 50th anniversary performing projects for governments. PEC has the experience, technology and design skills needed to re-store marine and riverine habitat. That task requires knowledge of hydraulics, natural erosion, sediment drift and erosion, natural morphology, tools and techniques for sediment removal, de-watering and re-use, subsurface and shoreline grading, water quality related to depth and water movement, the characteristics of stable re-construction of shoreline and structural elements, and their interaction with current flow, habitat and native species.

To maintain recreational and functional use, increase aesthetics and natural value, and protect habitat, they have been entrusted in several parishes to rebuild, restore and rejuvenate shoreline ecosystems, and water recreational areas including fishing and boating areas.

Island and Channel Building to Restore Habitat

Since 2012, PEC has worked with **Fenstermaker** to restore the Aquatic Ecosystem in False River. The team restored the "South Flats" of False River to a healthy, deeper state, including shore aquatic edge habitat re-creation, and channel rebuilding by dredging and re-using 4 million cubic feet of sediment.

Following the success as the "South Flats", the team is currently restoring the "North Flats" of False River. The project's objective is to increase current shallow depths to a more natural 5 feet and greater, with habitat restoration, water quality improvement and a healthy ecosystem for aseptic value and recreational use. The team is using new technology and methods to dredge and de-water sediment in-place for more efficient transportation and re-use elsewhere.

Restoration of Hurricane Damage in Marine Environments

Recreational Marina – Hurricane Katrina badly damaged structure at Port Eads Marina in Plaquemine Parish. The structures and surrounding habitat were in a total water environment, accessible by boat only. This was a total rebuild of the marina, docks, shore protection, camp sites, other buildings and water, on-site sewer and fueling facilities. Tasks included detailed elevation/profile sheets showing required dredge depth at marina and main entrance to the canal. The structural plans contained elevation section cuts at all structures, including marina, elevated walkways, piling layouts (based on Geotechnical report). The firm obtained all related permits from the COE, LA Coastal Zone, LA DEQ, DHH and other applicable requirements.

Coastal Research – Katrina also hit two vital coastal research facilities: the LUMCON Port Fourchon and Turtle Cove Environmental Research Stations.

At LUMON, the hurricane caused severe erosion and failure at a wooden bulkhead wall, two docks (including a drive on dock), fencing and access road damage. Survey, geotechnical information and structural site investigations clearly showed the retaining wall has been undermined and breached. PEC designed and managed the restoration of this facility's shoreline, land access and its protections.

Turtle Cove is a major estuary in Louisiana. This setting includes various wetland environments, along with their aquatic counterparts, ranging from fresh to saline, including bottomland hardwood forests, cypress swamps and marshes, PEC was tasked with coordinating all necessary surveying and geotechnical services for the proper design of the proposed bulkhead, docks, including shoreline fill and stabilization.

APS Engineering and Testing, LLC is a geotechnical engineering, environmental, construction engineering, construction materials testing and inspection company that provides a broad range of related services which include but are not limited to:

- Geotechnical Engineering Analyses-Geotechnical investigations and reports, foundation design, pavement design, slope stability analyses, settlement and down drag analyses, cofferdam and excavation design, bulkheads, docks, wharfs, borrow pits, WEAP, and CAPWAP.
- Laboratory Testing- Strength testing UC, CU, CD, UU, consolidation, and classification testing for soils and aggregates.
- Construction Materials Testing and Inspection- Pile logging and load test monitoring, concrete inspection and testing, earthwork inspection and testing, and, in place density and compaction testing, Pile Driving Analyzer (PDA) monitoring, Cross-hole and Single Hole Sonic Logging, Pulse Echo Integrity Testing a non-destructive pile testing.
- Environmental- Environmental Site Assessments, Site Characterization, Asbestos Containing Materials, Soil and Water Sampling and Chemical Testing.

APS Engineering and Testing, LLC is a certified Small business and Disadvantaged business enterprise (DBE - minority owned).

2.b. Describe any prior engagements in which Respondent's firm assisted a governmental entity in dealings with RESTORE Act, FEMA Hazard Mitigation Grant Program (HMGP), Community Development Block Grant (CDBG), or other disaster grant or grant related projects and any other projects relating to coastal restoration and/or protection. Respondent should include at least ten (10) examples of work in the past ten (10) years on similar projects as described in Part One as well as herein. Respondent should provide a list of completed RESTORE Act projects, FEMA HMGP Projects, and/or similar coastal restoration projects. Preference is for the types of projects similar to those described in Part One and those related to disaster grants such as HMGP. Respondent should provide the names, phone numbers, and emails of contact

persons in the organizations for whom any projects referenced in this section were conducted. Respondent should include written references (letters or forms are acceptable) from previous clients attesting to the quality of work and compliance with performance schedules Respondent cites in this section.

Fenstermaker, DDG, PEC and APS have completed, or are currently working on more than 10 projects that are part of federal programs.

RESTORE Act Project

1. Cameron Parish Coastal Services

- **RESTORE Act Parish Matching Opportunities Program**
- **Planning Assistance to States – Coastal Erosion Master Plan**

Client: Cameron Parish Police Jury

Contact: Ryan Bourriague, Parish Administrator

Total Project Cost: CPRA RESTORE Act Parish Matching Program: Pledged \$2M of own RESTORE funds + CPRA Applied for \$20M & received \$6.67M
US Corps of Engineers (Planning Assistance to States) Identified Multiple Viable Options Still in Planning Phase

Completion Date: Ongoing

Fenstermaker has been representing the Cameron Parish Police Jury (CPPJ) in their efforts to advance their coastal restoration activities.

Fenstermaker developed and submitted a proposal to the Coastal Protection and Restoration Authority for the RESTORE Act Matching Opportunities Program. This effort was successful in obtaining \$6.67 million in matching funds for the Westward Expansion of the CWPPRA Rockefeller Refuge Shoreline Stabilization (ME-18) Project. Fenstermaker continues to support CPPJ in this effort through the development of formal scope and budget requests required by the CPRA and the RESTORE Council. It is expected that these funds will be made available to CPPJ in the fourth quarter of 2018 or first quarter of 2019.

Fenstermaker represented CPPJ in a USACE effort to develop the Cameron Parish Planning Assistance to States Coastal Erosion Master Plan. This plan identifies three beach sections, Long Beach, Little Florida and Rutherford beaches to be high priority and recommends protection and nourishment projects, including primary and alternate options and cost schedules. Fenstermaker provided a technical review and third-party cost estimates of each program component. With leftover funds in our contract, Fenstermaker developed a geotechnical sampling plan and submitted a geotechnical permit application. Fenstermaker is currently assisting CPPJ with the effort to secure matching funds from state and federal sources.

Coastal Wetlands Planning Protection and Restoration Act (CWPPRA)

2. Island Road Marsh Creation and Nourishment

Client: Coastal Protection and Restoration Authority

Contact: Brad Miller (225-342-4122, brad.miller@la.gov)

Total Project Cost: \$310,000

Completion Date: 2018 (Fenstermaker portion)

The Island Road Marsh Creation and Nourishment Project is a CWWPRA funded project with a goal to create 364 acres of new marsh and nourish 19 acres of saline marsh. Sediment will be hydraulically

pumped from a borrow source in Lake Tambour. Containment dikes are proposed to be constructed around the marsh creation area to retain sediment during pumping. The dikes will be degraded and/or gapped no later than three years post-construction. It is located in Eastern Terrebonne Parish, Louisiana, about 12.1 miles Northeast of Cocodrie, Louisiana, between Isle De Jean Charles, Louisiana and Lake Tambour. The proposed borrow area is located approximately 5 miles south in Lake Tambour.

Under two existing IDIQ contracts with CPRA, Fenstermaker was tasked to perform an extensive bathymetric, magnetometer and cultural resource surveys of the proposed borrow area and all proposed access and dredge pipe corridors. This work was completed in two phases, because of the expiration of one IDIQ contract and the issuance of another IDIQ contract. Fenstermaker used this survey information and estimated fill volume requirements to recommend two borrow area configurations and cut depths that minimized impacts to oil and gas infrastructure, avoided any underwater obstructions and any identified archaeological findings. No archaeological findings were identified during the investigation.

Fenstermaker performed a hydrodynamic impact analysis for the borrow region to provide a numerical assessment of the potential impacts associated with the borrow area on the surrounding marsh system in terms of water velocity (i.e., current speed) and wave energy. The analysis was carried out using industry standard software modeling packages (MIKE 21, SWAN) to form a digital representation of the existing (pre-project) conditions. The existing conditions were modified by including the project borrow area using a worst-case fully built-out borrow layout (post-project). The numerical models were run for a variety of wind/wave scenarios for both the pre and post-project conditions. The results suggest that project impacts do not exceed 0.06 ft in terms of significant wave height (H_s) based on the SWAN model wave runs. Current velocity differences were found to be less than 0.08 ft/s for the hydrodynamic scenario considered (winter period including the passage of extreme cold fronts). These differences are on the same order of magnitude as the practical accuracy limits for standard bathymetric measurements over soft-bottom topography and current velocity measurements in the marsh environment. No changes to either borrow area option were required as a result of the hydrodynamic model.

Preliminary borrow area geotechnical analysis was provided to Fenstermaker by CPRA. Fenstermaker performed a review of the findings and along with survey information, made a series of design recommendations, including:

- Delineating zones within borrow area for proposed excavation of optimum marsh fill material
- Prescribing minimum offset distances between borrow area boundaries and existing shorelines to eliminate the possibility of shoreline erosion due to slope failure
- Recommendations on maximum depth-of-cut contours
- Recommendations on overdredge tolerances
- Recommendations on advancing project under pay-on-the-cut or pay-on-the-fill scenarios
- Recommendations on use of floathose or alternate within borrow area for dredge maneuverability
- Recommendations on avoidance areas and use of pontoons or floathose to successfully convey over obstructions or active lines
- Recommendations on possible locations for booster pumps
- Recommendations on designing navigational crossings
- Recommendations on designing dredge and equipment access corridors
- Recommendations on expected use of signage or navigation light aids

Highlights <ul style="list-style-type: none"> • Borrow Area • Marsh Creation • Access Corridors • CWPPRA 	Services <ul style="list-style-type: none"> • Project Management • Surveying • Geotechnical Engineering • Civil Engineering • Borrow Area Investigation • Hydrodynamic Modeling • Archaeological Survey
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3. Oyster Bayou Marsh Creation 120 Day Survey

Client: S&ME (on behalf of Coastal Protection and Restoration Authority)

S&ME Contact: Gerald “Jerry” Hauske, (337-408-3103, jhauske@smeinc.com)

CPRA Contact: Katie Freer, (225-342-4635, katie.freer@la.gov)

Total Project Cost: \$ 45,000

Completion Date: 2018 (Fenstermaker portion)

As a sub-consultant to S&ME on the Geotechnical IDIQ, Fenstermaker was contracted to perform survey services to facilitate in determining a settlement curve for the Geotechnical Team. The Oyster Bayou Marsh Restoration project is funded by the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) under Priority Project List 21 in partnership with the National Marine Fisheries Service (NMFS). The original project proposed to create 510 acres of saline marsh, nourish 90 acres of existing saline marsh habitat, and create 14,140 LF of earthen terraces. Altered hydrology, drought stress, saltwater intrusion, and hurricane induced wetland losses have caused the area to undergo interior marsh breakup.

Fenstermaker was tasked to perform 120-Day Topographic Surveys along 10 Transects within the 818 Acre Fill Area. Due to the site conditions and inaccessibility issues caused by the soft fill, UAV Photogrammetry Survey was performed to collect point cloud data along all transect lines. Ground trothing was performed with RTK and Aerial Targets. A Digital Surface Model was created, and profiles were generated along each of the transects in AutoCAD. The Final Deliverables included comparisons to the As-Built Surveys and the design target elevation for the fill. In addition, the data facilitated in determining a settlement curve for the Geotechnical Team.

Highlights <ul style="list-style-type: none"> • Aerial Photography • RTK • High Accuracy Drone Survey • CWPPRA 	Services <ul style="list-style-type: none"> • Project Management • Surveying
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4. Freshwater Bayou Marsh Creation (APS)

Client: USDA – Natural Resources Conservation Service

Contact Person: Vicki Supler, (337-291-3142, vicki.supler@wdc.usda.gov)

Total project cost: \$125,000

Completion Date: 2018 (APS Portion)

APS was contracted by NRCS to perform geotechnical analysis for the CWPPRA funded Freshwater Bayou Marsh Creation Project. This project was approved for engineering and design by the Natural Resources Conservation Service (NRCS), in cooperation with the Coastal Protection and Restoration Authority of

Louisiana (CPRA). The project was funded in 2010 through the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) on Project Priority List 19. The primary goal of this task order is to obtain geotechnical engineering samples, analyses, and recommendations to support design and construction of the following project features:

- Marsh Creation and Nourishment;
- Containment Dikes;
- Offshore Borrow Areas;
- Develop five settlement curves, each with a unique initial fill height determined to
- be appropriate by the APS, with the concept that top of fill elevation should remain
- between the modified MHW and MWL or between the 90% inundation and 10%
- inundation elevations for a substantial portion of the 20-year project life;
- 1D consolidation tests and a settling column to determine cut to fill ratios;
- Estimated time rate of settlement of dewatered fill material, including substrate
- settlement;
- Settlement curves for the Primary Consolidation, Secondary Compression, and
- Desiccation of Dredged Fill (PSDDF) model; and
- Recommendation for spoil placement/marsh creation.

Highlights <ul style="list-style-type: none"> • Geotechnical Analysis • Marsh Creation • CWPPRA 	Services <ul style="list-style-type: none"> • Project Management • Geotechnical Investigation • Geotechnical Engineering • Settlement Curve Development • PSDDF
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5. Cameron Creole Levee Maintenance Project CS-04 Phase 2 Levee Erosion, Cameron Parish, Louisiana

Client: Coastal Protection and Restoration Authority

Contact Person: Darrell Pontiff, (337-482-0683 darrell.pontiff@la.gov)

Total project cost: \$840,000

Completion Date: 2012

The Cameron-Creole watershed consists of 64,000 acres of brackish, intermediate, and fresh marsh located in the Calcasieu/Sabine Basin in Cameron Parish, LA as part of the Sabine National Wildlife Refuge.

Fenstermaker surveyed all 5 sites from the -4' contour to the approximate toe of the proposed levee. The survey crews staked all PI locations and centerline of the levee and performed as-built surveys.

Fenstermaker performed all engineering services necessary for the construction oversight necessary to accomplish the objectives of the CWPPRA funded Cameron-Creole Maintenance Projects. These services included conducting a pre-construction conference, detailed construction drawings, providing on-site construction inspection, issued instructions to the construction contractors, reviewed contractor's invoice, and will conduct a final inspection.

Highlights <ul style="list-style-type: none"> • Shoreline Protection • CWPPRA Funded Project 	Services <ul style="list-style-type: none"> • Project Management • Construction Oversight and Inspection
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	<ul style="list-style-type: none"> • Conducting a Pre- Construction Conference • Detailed Construction Drawings • Providing On-Site Construction Inspection • Issued Instructions to the Construction Contractors • Reviewed Contractor's Invoices • Conduct a Final Inspection • Eco-Hydrologic Modeling
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Community Development Block Grant (CDBG)

6. City of Carencro CDBG Sewer Rehabilitation Grant, Carencro, Louisiana

Client: City of Carencro

Contact Person: Mayor Glenn Brasseux (337-896-0890, mayor@carencro.org)

Total project cost: \$32,000

Completion Date: 2012

Fenstermaker has served as the City Engineers for Carencro, Louisiana, since 2006. Services provided to the city include program management, general development review, management of FEMA flood plains, enforcement of drainage regulations, recommendations to drainage policies, review of hydraulics, quality assurance, public meeting coordination, and design and estimation of municipality improvements. Fenstermaker assisted the City of Carencro in engineering design services for the Fiscal Year 2009 LCDBG Sewer Rehabilitation project.

In administering and designing sewer rehabilitation for the City of Carencro as part of a retainer contract. Included in this project was the development and administration of CDBG Grant, general plans, and survey related to the design (water, sewer, and drainage lines) and installation of a Bar Screen at the Minolta Street Water Treatment Plant.

Highlights <ul style="list-style-type: none"> • CDBG 	Services <ul style="list-style-type: none"> • Smoke testing • Condition assessment • Design and bid phase services • Construction Administration
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7. City of Scott Comprehensive Master Plan, Lafayette Parish, Louisiana

Client: City of Scott

Contact Person: Mayor Purvis Morrison (337-233-1130, pmorrison@cityofscott.org)

Total project cost: \$230,000

Completion Date: 2013

The City of Scott received a resiliency grant funded with Community Development Block Grant (CDBG) Disaster Recovery Funds as a result of Hurricane Gustav and/or Ike. The CDBG funds were administered through the Office of Community Development with the State of Louisiana. The resiliency grant was for planning services to develop a comprehensive master plan including infrastructure planning and stormwater management, a zoning code and subsequent implementation.

Fenstermaker was the prime consultant on this project, leading the comprehensive planning effort including public outreach, infrastructure planning, and land use planning, as well as coordinating three sub-consultants in design and development. Fenstermaker was tasked with a hydrologic and hydraulic assessment task, which entailed conducting a full evaluation of the floodplain, local watersheds, and other natural manmade geological features relative to the topographic condition in the City. As a result of the study, high risk areas were identified and strategies to minimize flood hazard risks were implemented. Detention Best Management Practices were developed to help control stormwater volumes to local residential areas. After localized drainage recommendations were made, a re-study of the FEMA floodway was completed and resulted in reduced 100-year floodplains.

Highlights <ul style="list-style-type: none"> • CDBG 	Services <ul style="list-style-type: none"> • Project Management • Grant Application and Administration • Public Outreach • Infrastructure Planning Including Stormwater Management • Land Use Planning
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8. CDBG L-14 Drainage Improvements, Lafayette Parish, LA

Client: City of Scott

Contact Person: Mayor Purvis Morrison (337-233-1130)

Total project cost: \$705,000

Completion Date: 2016

Fenstermaker was responsible for preparing plans and specifications for the City of Scott L-14 Drainage Improvements Project. Fenstermaker investigated the conditions of the 6,300-foot channel for a 10-year storm event. Upon completion of analysis, preliminary and final plans will be produced to improve the channel such that it conveys the design storm flows. Fenstermaker is also responsible for the wetland delineation, environmental permitting, bidding and construction phasing, and construction administration.

Highlights <ul style="list-style-type: none"> • CDBG 	Services <ul style="list-style-type: none"> • Project Management • Engineering Design for channel improvements • Preparation of Plans & Specifications • Wetland Delineation & Permitting • Construction Administration
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9. City of Carencro CDBG Sewer Rehabilitation Grant, Lafayette Parish, LA

Client: City of Carencro

Contact Person: Mayor Glenn Brasseaux (337-896-0890)

Total project cost: \$32,000

Completion Date: 2011

Fenstermaker has served as the City Engineering for Carencro, Louisiana since 2006. Services provided to the city include program management, general development review, management of FEMA flood plains, enforcement of drainage regulations, recommendations to drainage policies, review of hydraulics,

quality assurance, public meeting coordination, and design and estimation of municipality improvements. Fenstermaker assisted the City of Carencro in engineering design services for the Fiscal Year 2009 CDBG Sewer Rehabilitation Project.

In administering and designing sewer rehabilitation for the City of Carencro as part of a retainer contract, included in this project was the development and administration of CDBG Grant funds, general plans and surveying related to the design (water, sewer, and drainage lines) and installation of a bar screen at the Minola Street Water Treatment Plant.

Highlights <ul style="list-style-type: none"> • CDBG 	Services <ul style="list-style-type: none"> • Project Management • Development Review • Management of FEMA floodplains • Public Meeting Coordination • Engineering Design for Sewer, Water and Drainage Improvements • Construction
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10. CDBG Wastewater Rehabilitation Project, Lafayette Parish, LA

Client: City of Carencro

Contact Person: Mayor Glenn Brasseaux (337-896-0890)

Total project cost: \$782,848

Completion Date: Ongoing

Fenstermaker was contracted by the City of Carencro to apply for the LCDBG funding for and provide engineering design for a wastewater rehabilitation project to address deficiencies in the wastewater collection system. The project includes upgrades to two (2) sewer lift stations along with addressing the inflow and infiltration problems in the wastewater collection system. The Francois St. Lift Station (No. 17) and Arceneaux Rd. Lift Station (No.18) experience extensive operational failures. Additionally, the Post Road Wastewater Treatment Plant and the Manola Wastewater Treatment Plant both experience overflows as a result of the excessive inflow and infiltration during heavy rainfall events. The sewerage overflows of lift stations, manholes, and treatment plants from the wastewater collection and operations results in the City being in violation with the regulations of the LDEQ. When overflows occur, the raw wastewater spills into local coulees, ditches, roads or even onto private properties. Besides the public health hazard, each incident of raw wastewater discharging in the community requires the City to report its violations to LDEQ for potential punitive actions. Fenstermaker is providing engineering services for the following:

- Elevating the essential equipment of the Francois and Arceneaux Road Lift Stations' to 1' above the base flood elevations (BFE) as well as completely rehabilitate the Arceneaux Rd. Lift Station.
- The project including sewer main point repairs to known locations within the collection system that introduce inflow and infiltration into the system.
- Videoing of sewer mains and manholes to identify source points of inflow and infiltration; point repairs of identified locations will be repaired.

Highlights <ul style="list-style-type: none"> • FEMA 	Services <ul style="list-style-type: none"> • Project Management
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<ul style="list-style-type: none"> • GOHSEP 	<ul style="list-style-type: none"> • Grant Application Development • Engineering Design • Construction Bidding • Construction Administration
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11. Program Management OCD/CDBG Drainage Project

Client: St. Tammany Parish Government

Contact Person: Kelly Rabalais - 985-898-2445

Total Project Cost: \$38,000,000

DDG is assisting St. Tammany Parish staff as the program manager of 10 drainage improvement projects throughout the parish. The main objective is to ensure the success of advancing and delivering each of the projects within the given budgets. DDG is responsible for coordinating and assisting with land acquisition by setting up and preparing exhibits necessary for the legal department to procure the land in order to implement the drainage projects; organizing/managing and assisting the wetlands consultant in the preparation of exhibits and drawings necessary to obtain approvals and permits to begin the projects; assisting with the site selection of the projects coordination and management of consultants; preparation of overall project schedules and budgets; and oversight of the construction management of six (6) of the 10 projects thus far. The total project's construction cost is \$38,000,000. The following is a list of each project:

- Abita River Sub Basin (Tammany Hills Drainage Improvements)
- French Branch (internal subdivision improvements)
- Labarre Street and Little Bayou Castine
- Meadow Subdivision Improvements
- Bayou Cinchuba
- Cypress Bayou
- Sharp Road/Century Oaks Drainage Improvements
- Lapin Street/Quail Creek/Forest Brook Drainage Improvements
- Ben Thomas Road Regimen Dentition Pond
- Eddins Canal/Whisperwood Subdivision/Northwood Village Drainage Improvements

Services: Project Management, Design Oversight, Construction Administration

12. PEC CDBG Projects

Client: Various

Total Project Construction Cost: Over \$1M

PEC and members of the staff have been involved in the Louisiana Community Development Block Grant Program since 1985. PEC has provided engineering services similar to those required for this project for numerous clients. We have served as engineers for LCDBG projects in the City of New Roads, City of Port

Allen, City of Zachary, Town of Livonia, the Town of Maringouin, City of St. Gabriel, and the City of Bogalusa, as well as for several parishes, all in Louisiana.

In addition, we have served in several Parishes including, St. Helena, Pointe Coupee West Baton Rouge, and Washington Parish.

Currently, **PEC is under contract to four (4) local government entities to perform engineering and/or grant administration services under the LCDBG program_** These entities are:

- St. Helena Parish Waterworks District No. 2 of St. Helena Parish — FY201 S LCDBG Water System Improvements
- Washington Parish Government— FY2017 LCDBG Road Rehabilitation Program (Hackley Area)
- Village of Angie — FY2017 LCDBG Road Rehabilitation
- Pointe Coupee Parish Council — FY2018 Wastewater System Improvements

PEC is very familiar with the requirements of the Louisiana Community Development Block Grant Program involving wastewater water, and road rehabilitation projects.

- PEC has provided all the required management and administrative services necessary to implement and complete CDBG projects. These services included, but were not limited to the following:
- With the assistance of the Owner, help conduct public hearings. This includes, but is not limited to, assisting in public hearings, preparing public notices, etc.
- Prepare an Environmental Review Record.
- Prepare the Requests for Payment to ensure consistency with the procedures established for the CDBG Program.
- Ensure that the community has an acceptable financial management system as it pertains to finances of the CDBG Program.
- Establish project files in the local government's office. These files must demonstrate compliance with all applicable State, local, and Federal regulations. We will monitor project files throughout the Program to ensure they are complete and that all necessary documentation is being retained in the community's files.
- If applicable to the Program, assist grant recipients in complying with regulations governing land acquisition (real property, easements, rights-of-way, donation of property, etc.)
- Prepare all bid documents and supervise the bidding process consistent with State and Federal regulations.
- Secure the Secretary of Labors wage decision from the State and include it in the bid documents.
- Prepare construction contracts which comply with Federal regulations.
- Obtain contractor and subcontractor clearance from the State.
- Check weekly payrolls to ensure compliance with wage decisions. Conduct on-site interviews and compare the results with appropriate payrolls.
- Monitor construction to ensure compliance with equal opportunity and labor standard provisions.
- Make progress inspection and certify partial payment requests.
- Attend and assist the Owner during the State's monitoring visit(s).

- Prepare Owner's response to any monitoring findings.
- Assist Owner in meeting the State's audit requirements.
- Make a final inspection and issue a final certificate of payment.
- Prepare close-out documents.

PEC has attended workshops sponsored by the Office of Community Development to ensure the Owner will be apprised of the latest revisions in regulations, both from a State and Federal level.

PEC follows a systematic approach to complete all aforementioned tasks, and any others which might be necessary, to bring projects to a successful completion.

Natural Resource Damage Assessment (NRDA)

13. Queen Bess Island Restoration

Federal Sponsor: US Department of Interior

Client: Coastal Protection and Restoration Authority

Contact Person: Katie Freer, (225-342-4635, katie.freer@la.gov)

Total Project Cost: \$17.5M

Queen Bess Island, located approximately 2.5 miles northeast of Grand Isle in Jefferson Parish, is the only brown pelican rookery in the Barataria Basin and one of the three most important rookeries in Louisiana. Only five acres of the island remain above water, which in peak years supports over 4,000 nests. In January 2017, the Louisiana Natural Resource Damage Assessment Trustee Implementation Group issued its Final Restoration Plan #1, which included the Queen Bess Island Restoration Project (BA-202). The Restoration Plan allocates \$17,500,000 to restore 36 acres of suitable brooding and rearing habitat for various species of terns, black skimmers, brown pelicans, and other colonial nesting waterbirds.

Under an existing IDIQ contract with CPRA, C. H. Fenstermaker & Associates, L.L.C. was tasked to perform all survey, geotechnical and engineering and design activities for this project. As a first priority, Fenstermaker developed a geotechnical plan and permit application for CPRA. While waiting for the issuance of the geotech permit, Fenstermaker performed all necessary survey activities, including the installation of a permanent deep rod monument, verification of multiple water level gauges in the area, and bathymetric, topographic and magnetometer surveys of Queen Bess Island, waters surrounding the island, proposed access routes, potential borrow areas and potential dredge pipe corridors. Fenstermaker also performed a data gap analysis that included a desktop cultural resources survey, desktop land rights evaluation, pipeline review, wind data review, water level review, including probability of exceedance and percent inundation charts, desktop HTRW analysis and evaluations of previous projects on the island and in area. Fenstermaker also performed a literature review to evaluate natural and man-made habitat preferences and success rates for brown pelicans, various species of terns and black skimmers.

Fenstermaker developed six island configuration alternatives and evaluated eight potential borrow sources. In May 2018, an Alternatives Concept Workshop was held with multiple state and federal agencies to present a synopsis of relevant data collected to date, the bird habitat evaluation report, island configuration options and borrow area evaluations. The meeting lasted five hours and information presented allowed the group of approximately 15 professionals to reach a consensus decision about what

the island configuration would be and which borrow source best met project goals of availability, cost and performance.

With a borrow material identified, Fenstermaker developed settlement curves for breakwaters, rock dikes and three individual fill cells.

The Queen Bess Island Restoration project intends to maximize the elevation of the southwestern edge and slope the island downward toward the northeast. Fill material will consist of an estimated 200,000 cubic yards of approved river quarry sediment, comprised mostly of sands and silts. Similar materials used in previous projects have shown to provide a good combination of stability and ability to sustain vegetation.

Existing external dikes will be raised to an appropriate elevation with new armor stone to act as containment during construction and shoreline protection after construction. Breakwaters will be installed southwest of the island for additional shoreline protection and to provide calmer waters for juvenile birds to loaf and swim.

To date, Fenstermaker has submitted the permit plans and application, draft geotechnical report, draft 95% design report, draft 95% plans, and the engineer's estimate of cost.

Highlights	Services
<ul style="list-style-type: none">• Deep Water Horizon Natural Resource Damage Assessment Program• Shoreline Protection• Marsh Creation• Habitat Creation• Accelerated Schedule	<ul style="list-style-type: none">• Project Management• Conceptual Alternative Development• Grant Application Material Development• Permit Application Development• Coastal Engineering• Geotechnical Engineering

14. Lake Borgne Marsh Creation Project – Increment One (PO-0180)

Federal Sponsor: NRDA Trustees

Client: Coastal Protection and Restoration Authority

Contact Person: Vida Carver, PE - 225.342.2799

Total Project Cost: \$127,000,000

The Lake Borgne Marsh Creation (LBMC) Project Increment One is one of six projects selected through the **Natural Resources Damage Assessment (NRDA) process to restore injuries associated with the Deepwater Horizon Oil Spill**. As outlined in the Final Restoration Plan dated January 2017 prepared by the Louisiana Trustee Implementation Group (TIG), the Plan focuses on the implementation of large-scale marsh creation projects due to the immediate benefits to coastal habitats directly impacted by the oil spill. The LBMC Project is one of several large-scale marsh creation projects that are proposed. CPRA selected Duplantier Design Group, PC (DDG) and its subconsultants to deliver the LBMC Project – Increment One, one of three large scale marsh creation projects to be funded through NRDA.

The LBMC Project is a large-scale restoration strategy for the southwestern shoreline of Lake Borgne that would re-establish the degraded bay rim and intertidal marsh habitat. The comprehensive project would restore approximately 4,100 acres of marsh habitat and be implemented in three increments through

multiple design and construction phases. The project is in St. Bernard Parish between the Mississippi River Gulf Outlet (MRGO) channel and Lake Borgne in the vicinity of Shell Beach.

This specific project is anticipated to create approximately 1,548 acres of marsh with an anticipated construction budget of \$120M. When completed, the project will represent one of the largest marsh creation projects to be implemented by CPRA to date. Borrow material for the marsh creation is expected to be obtained from Lake Borgne; however, an evaluation of borrow material from the Mississippi River, as well as Mobile Sands will also be conducted as part of this project. The marsh creation area will extend from the eastern shore of Bayou Yscloskey approximately 4.3 miles to the east toward Lena Lagoon.

As the lead engineer and project manager, DDG will coordinate all data collection activities including: topographic, bathymetric, magnetometer, and side-scan surveys; geotechnical data collection, and environmental data collection activities in support of regulatory compliance. DDG will conduct an alternatives analysis to define the marsh creation borrow and fill areas, prepare detailed designs and cost estimates, obtain all required regulatory permits, and support bidding services.

Services: Project Management, Coastal Engineering & Design

FEMA- and GOHSEP-Funded Projects

15. 500-Year Flood Recovery Project funded by FEMA & GOHSEP, Lafayette Parish, LA

Client: City of Carencro

Contact Person: Mayor Glenn Brasseaux (337-896-0890)

Total project cost: \$7.3M

Completion Date: 2018

On March 12, 2012, the City of Carencro was inundated with over 14" of water in one morning amounting to nearly a 500-year storm event. Large areas of the City were completely inundated resulting in emergency rescues and wide spread property damage. Many of the City's wastewater, stormwater, and roadway infrastructure was severely damaged or destroyed. Fenstermaker was hired by the City to survey and map high water marks throughout the City and quantify the amount of inundation and damage to the City's infrastructure. Fenstermaker led a nearly 4-year collaboration with **FEMA** and **GOHSEP** to identify improvement projects that will repair and protect the City's infrastructure from the 500-year storm event. Fenstermaker secured federal funding from **FEMA's Hazard Mitigation Grant Program (HMGP)** for the following projects as a result of the flood event:

2014 Lift Station Upgrades-HMGP 4015-055-0002 (FEMA-4015-DR-LA) (Project Cost: \$1,055,548)

- Elevated three lift stations above the 500-year base flood elevation.
- Complete rehab and increased lift stations' flow capacity.

Richard Street Drainage Improvements (HMGP 1603-055-0004) (Project Cost: \$1,332,502)

- Installed over 700' of concrete vertical wall channel and articulated block mat in Beau Bassin Coulee to stop erosion and protect homeowners.

Andre Street Drainage and Utility Improvements (HMGP 1786-055-0002) (Project Cost: \$3,350,359)

- Installation of over 1,100' of concrete trapezoidal channel and articulated block mat in Beau Bassin Coulee to stop erosion and protect homeowners.

- Conversion of the Church St. Lift Station to a “mega” lift station capable of 2.0MGD as well as elevate the lift station above the 500-year BFE.

Post Road Channel Improvements (HMGP 4015-055-0001) (Project Cost: \$1,532,531)

- Installation of over 1,700’ of concrete revetment in a channel adjacent to the City’s oxidation pond levee at its Post Road Wastewater Treatment Plant in an effort to protect the levee from failure.

Highlights <ul style="list-style-type: none"> • FEMA • GOHSEP 	Services <ul style="list-style-type: none"> • Project Management • Surveying • Engineering Design • Construction Bidding & Administration
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HMGP & Additional Relevant Projects:

16. False River Ecosystem Restoration/False River Nitrogen Impact Analysis, Point Coupee Parish, LA

Client: LA Coastal Protection and Restoration Authority

Contact Person: Thomas Van Biersel, Ph.D.

Total Project Cost: \$206K (Fenstermaker fees)

Completion Date: February 2019

The False River Nitrogen Impact Study report was prepared for the Louisiana Department of Natural Resources and the False River Watershed Council by Fenstermaker. False River is a 3,000-acre oxbow lake formed from the Mississippi River in Pointe Coupee Parish with a watershed of approximately 37,000 acres. Fisheries, vegetative habitat, and overall water quality have been in decline since the 1980s. The Louisiana Department of Natural Resources, the False River Watershed Council, Chustz Surveying, and residents teamed with the Water Resources and Environmental groups at Fenstermaker to update the hydrodynamic modeling, perform water quality sampling and baseline monitoring, conduct wetland delineations, and prepare Corps of Engineers permits based upon the recommendations that were made to reduce nitrogen loads entering False River.

17. Bayou Bonfouca Marsh Creation (PO-104)

Federal Sponsor: U.S. Fish & Wildlife Service

Client: Providence Engineering / Coastal Protection and Restoration Authority

Contact Person: Gary Leonards, PE, Services Director | 225-766-7400 |

garyleonards@providenceeng.com

Total Project Cost: \$23M

DDG was hired by CPRA as a sub-consultant to Providence Engineering’s IDIQ to perform the construction administration on the Bayou Bonfouca Marsh Creation Project near Slidell, LA. The primary goal of the project is to create 600 acres and nourish over 200 acres of low salinity brackish marsh in open water areas adjacent to Bayou Bonfouca with sediment pumped from Lake Pontchartrain. This project consisted of placing sediment, hydraulically dredged from Lake Pontchartrain in open water areas to a height of +1.2 NAVD 88. Several historic marsh ponds have been identified and would be restored. Tidal creeks were also designed to connect these ponds to facilitate water exchange and access to fisheries. In addition, shoreline protection was provided using articulated concrete block mats for a portion of the containment dike exposed to open water. Containment dikes were gapped and degraded to allow for fisheries access.

DDG is responsible for construction administration duties which include review of shop drawings and submittals, preparation of field changes, change orders, review of invoices (including Davis Bacon Act responsibilities) construction progress meetings, and final inspections.

**Joseph Guillory, PE, Lead Project Engineer for RSIQ2503-16-34, also served as a member on the design team for Bayou Bonfouca Marsh Creation while employed at CPRA.*

Services: Construction Administration

18. Cameron Prairie National Refuge Marsh Creation

Client: Venture Global Calcasieu Pass, LLC

Contact Person: Ben Frothingham - 202.793.4441

Total Project Cost: Confidential

DDG, as a subconsultant to Providence Engineering, is assisting Venture Global in the permitting and design of 130 acres of marsh which is to be created as a means of mitigation for a new natural gas terminal and pipeline system in Cameron Parish. Excavated material from the site of the new terminal and pipeline system will be hydraulically dredged and transported approximately seven miles to the marsh creation site. Earthen containment dikes were designed to keep dredged material in during dredging activities. Coordination efforts with local, state, and federal agencies are on-going and will continue throughout the construction of the project.

19. Drainage & Coastal Protection Planning Assistance

Client: St. Tammany Parish Government

Contact Person: Kelly Rabalais - 985-898-2445

Total Project Cost: Planning Only

DDG was hired to provide St. Tammany Parish with support for various flood protection activities including funding strategies for coastal and flood risk reduction projects, project planning and development, assistance in coordinating with **FEMA** regarding the issuance of Digital Flood Insurance Rate Maps (DFIRMs) for the Parish, and further evaluation and situational awareness of risks associated with inland and coastal flooding events. Feature tasks:

2017 COASTAL MASTER PLAN

DDG prepared a variety of coastal projects for St. Tammany Parish's submittal to the state coastal master plan for year 2017, including project fact sheets, map preparation, and project cost estimates. Projects totaling \$543,294,957 submitted to the 2017 Coastal Master Plan include: Guste Island Shoreline Protection and Marsh Creation, West St. Tammany Shoreline Protection, Bayou Cane Marsh Creation Project, Bayou Lacombe Marsh Creation, Faciane Canal Marsh Creation, Fritchie North Marsh Creation, and Eastern Tangipahoa Shoreline Protection.

FLOOD RISK AWARENESS FOR COASTAL AND INLAND FLOODING

Through a comprehensive inventory of existing H&H models in St. Tammany Parish, DDG utilized and significantly enhanced an existing regional 2D HEC-RAS model developed by USACE to be used as the basis of a Dynamic Flood Inundation Mapping (DFIM) tool. The DFIM tool, prepared specifically for St. Tammany Parish, produces forecasted inundation extents in real time based on observed and forecasted precipitation and tidal boundary conditions. With this tool, St. Tammany Parish emergency managers will

be able to use this application to increase response times, identify evacuation routes, inform road closures, and many other benefits.

Services: Master Planning, Conceptual Design

20. W-14 Canal Hydraulic Improvements/ Fritchie Marsh Hydrologic Restoration

Client: St. Tammany Parish Government

Contact Person: Kelly Rabalais - 985-898-2445

Total Project Cost: \$2.5 M

Due to the increase in land development, insufficient stormwater conveyance systems and worsening tail water conditions (i.e., sea level rise), there are significant drainage problems in the W-14 Basin resulting in significant street and structure flooding during severe rain events. DDG worked with St. Tammany Parish to obtain **HMGP grant funding** to reduce the risk of flooding for people residing in the W-14 basin while simultaneously reducing the marsh loss rates in the Fritchie Marsh. This will be accomplished by widening approximately 3,250 feet of the W-14 Canal and improving the conveyance of water through Fritchie Marsh, which will allow an increased amount of flow from the W-14 basin. The DDG team is refining an unsteady state HEC-RAS model of the W-14 and developing a 2D water surface model of Fritchie Marsh in coordination with the Water Institute of the Gulf. After the existing conditions model is developed and calibration is complete, multiple alternatives will be evaluated to determine how to best move water away from the W-14 and improve conveyance of water through the marsh. After solutions have been found using the numerical models, those project elements showing the most improvement will enter the engineering and design phase. Alternatives currently under evaluation include:

- Modification of an existing weir to direct water back into the marsh (see photo).
- Conveyance dredging at the outfalls of the W-14 and W-15 canals to improve flow into the marsh. This option will also improve drainage in areas that are experiencing frequent flooding as documented in FEMA's RL/SRL list.
- Culverts under Hwy 90 to allow water to flow through the marsh rather than bypassing it.
- Conveyance dredging along Salt Bayou to improve flow of sediment rich fresh water from the Pearl River. Marsh creation via beneficial use of dredged material.

Services: Project Management, Design, Construction Admin.

21. Lower W-15 Canal Improvements, Slidell, LA

Client: St. Tammany Parish Government

Contact Person: Kelly Rabalais - 985-898-2445

Total Project Cost: \$10,500,000

H&H Modeling: The project consisted of preparing a HEC-RAS and HMS model on a 35 square mile drainage basin of the French Branch Basin including W-15 and W-14 canals and Gum Bayou Basin to determine the tail water effects in the lower French Branch and Doubloon Bayou area. DDG developed an existing conditions model, as well as a model of 27 different alternative improvements in the basin to determine the most economical solution to alleviate the existing problems in different parts of the basin. The modeling was completed and DDG prepared construction documents for the proposed improvements, which employed both conveyance improvements and additional storage within the basin. Cost of the project was \$10,500,000.

Drainage Improvements: The Lower W-15 Area Drainage Improvement project is one of the drainage projects identified in the 3 Basin Hydraulic model study performed previously by DDG. The main objective

is to decrease surface water elevations within the W-15 Canal through the widening of the Lower W-15 canal and construction of a 324 ac-ft detention pond. DDG is providing engineering service to St. Tammany Parish on this **HMGP funded project**. DDG's responsibilities comprise of design, assisting with permitting, preparation of bid documents and construction inspection. DDG is currently assisting with construction administration of the detention pond component and completing construction documents.

Services: Project Management, Design, Construction Admin.

22. St. Tammany Parish Watershed Management Study

Client: St. Tammany Parish Government

Contact Person: Kelly Rabalais - 985-898-2445

Total Project Cost: Planning only

Rapid growth in St. Tammany Parish in the past 20 years has led to a number of challenges related to public infrastructure including water, sewer, and drainage. Rapid urban sprawl during this time period coupled with decentralized and private sewer collection and treatment facilities contributed to a significant decline in surface water quality. As water quality in the parish declined, flood risk increased as areas were developed without adequate stormwater controls (i.e., detention) or best practices for floodplain management. Lack of detention and loss of floodplain storage caused the capacity of existing infrastructure to be exceeded and flooding increased.

In 2014, DDG led a flood risk assessment of St. Tammany Parish waterways as part of a comprehensive watershed management study. DDG completed an analysis of repetitive loss/severe repetitive loss data from FEMA as part of identifying and prioritizing needed drainage improvements in the area. 13 different project concepts were developed that totaled more than 5,000 acre-feet of storage. For each project, conceptual designs and cost estimates were prepared along with estimates of flood risk reduction. In addition, estimates of water quality benefits associated with these features were provided. Several of these projects are currently in the design phase and moving toward implementation.

As part of this project, DDG reviewed St. Tammany Parish's drainage ordinance and made recommendations related to design criteria for new detention ponds. DDG also developed funding concepts for regional detention ponds that would include special taxing districts to curtail the effects of development.

Services: Study/Planning

23. False River Ecosystem Restoration – Phase I, New Roads, LA

Client: Pointe Coupee Parish

Contact Person: James Lee, Office of Facility Planning, 225.2194276

Total Project Construction Cost: \$2 M

False River was filling in with sediment. For generations, this beautiful and valuable oxbow lake has supported homes, fishing, swimming boating and skiing for thousands drawn to its record bass and cool water. The shallowing, however, sent the aquatic ecosystem into steady decline: loss of aquatic vegetation, increased turbidity, warmer water, and low dissolved oxygen. At both ends of the lake, the shallowing caused "flats" of extremely shallow water, mud, and surface vegetation, rendering these areas useless for fishing or recreation.

Pointe Coupee Parish entrusted PEC to design a means of restoring the lake's habitat and ecosystem and bring about a fuller use of the lake. The planned objective was to restore the lake's depth in the flats and re-create aquatic edge habitat, and thereby decrease water temperature, decrease turbidity, increase oxygen, and allow the return of viable spawning habitat and water's edge flora and fauna.

Phase I focused on the "South Flats", the southernmost end of the lake in which the water depth at normal pool elevation ranged from 1.5 to 4 feet. Improved the water meant a new water depth greater than 5 feet. Simply removing sediment and disposing were costly. PEC used it to build an island with aquatic edge habitat.

PEC designed and built a circular levee to create a 16.5-acre containment area within the shallow flats of the lake. The levee doubled as the foundation for 3500 feet of new aquatic edge habitat. Hydraulically dredged sediments from the adjacent lake bottom was pumped inside the levee and allowed to settle; the outflow returned to the lake through an effluent weir structure.

PEC dredged and re-located more than 4 million cubic feet of sediment to create a substantial island and shoreline. The restored aquatic and new edge habitat are now returning this area of the lake to its prominent past.

24. False River Ecosystem Restoration – Phase II, New Roads, LA

Client: Pointe Coupee Parish

Contact Person: James Lee, Office of Facility Planning, 225.219.4276

Total Project Construction Cost: \$1.7 M

Following the success of the False River Ecosystem Restoration Phase I in 2015, PEC's contract was extended by Pointe Coupee Parish to expand this project to the North Flats of the River located in the City of New Roads.

As in the South Flats, the water depths in the North Flats were very shallow leading to poor water quality because of increase turbidity from wave action and warmer temperatures during the summer months which hampers the survival of aquatic habitat. The PEC design team was tasked with developing alternatives for removal of the bottom sediments; however, unlike Phase I, the client wanted the material removed from the lake.

PEC studied three alternatives for removing the sediments, settling basins in uplands, uplands storage in geotextile tubes and disposal into the Mississippi River. With the available lands and limited funding, the hydraulic dredging with dewatering in geotextile tubes was the selected method of sediment removal.

Our technical staff provided site selection management, design and plan preparation for the removal, dewatering and storage of 96,000 cubic yards of sediment in geotextile dewatering tubes. Construction of Phase II began in January 2019 and is anticipated to be completed in July 2019.

25. Port Eads Marina and Canal Restoration and Improvement, Port Eads, LA

Client: Plaquemines Parish

Contact Person: All South Consulting Engineers, 504.322.2783

Total Project Construction Cost: \$13 M

Hurricane Katrina badly damaged the structures at Port Eads Marina, its entrance canal, and surrounding terrain. The Parish of Plaquemines asked us to design and manage the reparation and restoration of the Parish owned marina and associated infrastructure destroyed during Hurricane Katrina.

The facility is located in a total water environment accessible only by water craft. Plans included detailed elevations and profiles for dredge depth at the marina and main entrance to the canal. Structural plans included the marina, elevated walkways, piling layouts (based on provided Geotechnical report).

PEC coordinated with the Parish's Program Manager and **FEMA** regarding eligibility of items to be reconstructed such as boat docks, fueling stations, administration building, two camp sites, water storage, pumping, and distribution facilities, miscellaneous electrical items, and other miscellaneous structures. We also brought the facility up to the latest sanitary standards by installing a new sanitary sewer system.

PEC obtained all related permits from the COE, LA Coastal Zone, LA DEQ, DHH, and other applicable requirements. The firm worked closely with Parish authorities and their PM to bring this facility back on line at the desired level of quality and completeness within a critical ecosystem that made it an outstanding recreational facility.

26. Hurricane Katrina Site Repairs- LUMCON Research Facility, Port Fourchon, LA

Client: Louisiana Office of Facility Planning and Control

Contact Person: David Van Alstine, Facility Planning & Control, 225.342.7000

Total Project Construction Cost: \$1.1 M

Hurricane Katrina also severely damage the state-owned LUMCON Port Fourchon research facility, including erosion and failures at a wooden bulkhead wall, two docks (including a drive-on dock}, fencing and access road damage.

The **Louisiana Office of Facility Planning and Control** tasked PEC with investigating the site for input to design these repairs. We prepared a Program Completion and Schematic Design Submittal to secure FEMA funding and approval of all the repairs.

The initial plan called for placing fill in geotextile fabric behind the wooden retaining walls, basically performing none (or very little) structural repair. To make a more detailed assessment of this repair method, PEC retained a survey subconsultant to perform a detailed topographic survey as well as retained a Geotechnical Engineering firm to analyze and make repair recommendations regarding the retaining wall.

The survey, geotechnical information and structural site investigations clearly showed the retaining wall had been undermined and breached, with the fill material eroded. It was not cost effective to repair the existing structure. PEC worked with FEMA to subsequently amend the PW, which fully funded a replacement steel sheet pile wall, docks and fences. We designed and managed the project to restore the area, protect the shore and allow full use of this extremely important facility.

27. Turtle Cove Environmental Research Station, St. John the Baptist Parish, LA

Client: LA Department of Natural Resources

Contact Person: Andrew Gasaway, Gasaway, Gasaway Bankston, 985.345.5047

Total Project Construction Cost: \$3.2 M

Also damaged by Katrina, Turtle Cove Environmental Research Station lies between Lake Ponchartrain and Lake Maurepas and is accessible only by water. Operated by Southeastern Louisiana University, its purpose is to fully understand the critical estuarine wetlands ecosystem.

Located at the upper end of this major estuary, Turtle Cove is within one hour by boat of various wetland and aquatic habitats ranging from fresh to saline environments, including bottomland hardwood forests, cypress swamps and marshes. Each of these habitat types exists in pristine, degraded and restored states.

The facility compliments other field stations in the State (and Nation) that are more concerned with high salinity marine waters or fresh waters. The facility qualified for restoration through a **FEMA grant**.

As a subconsultant to Gasaway and Gasaway Architects, PEC provided engineering and consulting on plans to replace the existing shoreline protection at this facility's coastal and wetlands locations. The team coordinated all surveying and geotechnical services to gather data for the design of a proposed new docks and the dredging, fill and stabilization of 900 feet of shoreline to be protected by a new, steel bulkhead with tie-backs. The project included 5,000 cubic yards of dredged material to fill voids and restabilize the existing facility's shoreline.

28. Outfall Drainage Improvements- Hurricane Gustav/Ike Disaster Recovery Maringouin, LA

Client: Iberville Parish

Contact Person: J. Mitchell Ourso, Parish President, 225.687.5190

Total Project Construction Cost: \$435,475

Iberville Parish was awarded monies through the **Office of Community Development Disaster Recovery Program**. This project involves installation of a 72" diameter RCP subsurface drainage pipe and backfilling a portion of a major drainage lateral outfall in Iberville Parish. Drainage from both sides and direction along the highway is tied into the new culvert. Anti-erosion mat is placed at the pipe outlet to prevent erosion upon completion. In addition, the project involves relocation of water main and gas main crossing the ditch and in conflict with the subsurface culvert. The purposed of the project is to prevent major erosion and encroachment into the adjacent properties. The steep side slopes along the existing canal banks also prevent routine maintenance and mowing.

29. PEC HMGP Drainage Improvements, St. Gabriel, LA

Client: City of St. Gabriel, LA

Contact Person: Lionel Johnson, Jr., Mayor, 225.642.9600

Total Project Construction Cost: \$5.4 M

PEC was retained by the City of St. Gabriel for the Hazard Mitigation Drainage Improvements design and construction.

PEC performed a comprehensive stormwater drainage engineering study and make recommendations for improvements to a residential area which experienced flood events several times of the year including rainfalls associated with tropical storms and hurricanes.

Subsequently, PEC was tasked with developing detailed design construction drawings and specifications for the recommended improvements. The project consisted of the installation of approximately 34,500 linear feet of reinforced concrete drainage culverts ranging in size from 15-inch to 72" diameter in open ditches and included substantial pavement removal and replacement as well as water and gas main utility relocation.

30. Drainage Master Plan and OCD/DRU Gustav/Ike Drainage Improvements Pointe Coupee Parish, LA

Client: Pointe Coupee Parish Council

Contact Person: Major Thibaut, Parish President, 225.638.3811

Total Project Construction Cost: \$3.3 M

Drainage Master Plan

As a result of Hurricanes Gustav/Ike, monies were allocated to the Parish to assist in recovery efforts.

PEC was the prime consultant and worked with 2 subconsultants on the Master Drainage Plan to assess the Parish's needs. The goal of the Pointe Coupee Parish Master Drainage Plan is to reduce flood damages and risks to the people of Pointe Coupee Parish. We focused on the Upper Pointe Coupee, Bayou Portage Canal, and False River watersheds. This includes problem identification, data collection, problem evaluation, solution development and solution evaluation as well as expected benefits and costs. The plan identified 28 total drainage projects with an estimated cost of \$6,000,000 for the Parish.

Drainage Improvements Projects

As a result of the Parish's Master Drainage Plan, the Parish selected 15 projects with top priority out of the 28 that were identified in the plan. Out of the 15 projects, PEC was selected to provide engineering & surveying services for 10 local drainage projects being funded by the LA Recovery Authority for Hurricane Gustav/Ike Disaster Recovery. PEC is responsible for the design, plans and specs preparation, cost estimating, construction and inspection services for the projects described below:

Fisher Bayou: clearing, de-snagging and channel excavation of Fisher Bayou from La Hwy 1 and then southwestward to an existing rock weir; This rock weir, constructed by the USDA NRCS, is near the confluence of Fisher Bayou and Johnson Bayou. This reach is approximately 4.2 miles and drains Bayou Lettsworth, several local drainage ways, the community of Lettsworth and St. Mary Subdivision. La Hwy 1 and La Hwy 970 are part of the drainage area.

Stumpy Bayou Drainage: clearing, de-snagging and channel excavation of Stumpy Bayou from La Hwy 982 and then downstream and southwestward to the West Baton Rouge Parish line; This reach is approximately 2.2 miles long and drains several local drainage ways, the communities of Glynn & Rougon and the Russell Lane area. La Hwy 416, La Hwy 415 and La Hwy 982 are part of the drainage area.

Island Road Drainage: closing an open canal with erosion problems with storm drain pipe; This drainage canal drains into False river and there is a drainage culvert (72" CMPA) under La Hwy 413 that direct water to False River from the Parish drainage Canal. These drainage improvements will reduce blockages due to erosion. The length of this drainage canal is 150 feet.

Lighthouse Canal Bulkhead: installation of a vinyl sheet bulkhead along the north bank of Lighthouse Canal and False River at its confluence with False River; Lighthouse Canal, a man-made canal, is now the main drain for False River and was constructed in the 1940's to alleviate flooding along False River. The natural drain for False River is Bayou Sere on the south end of False River, however, it was inadequate to drain the whole waterway.

Frisco Ridge Subdivision Drainage: clearing, de-snagging and channel excavation of two (2) local drainage canals which drain Frisco Ridge Subdivision and Blue Bayou Subdivision; These subdivisions are located off of La Hwy 78 between False River and the Town of Livonia in Police Jury District No. 9. These reaches are approximately 1.91miles long and drain into locate canals that empty into Lighthouse Canal and then into Bayou Grosse Tete.

La Hwy. 47 7 Drainage: clearing, de-snagging and channel excavation of one (1) local drainage canal which drains a watershed waterway in which part of the Town of Livonia drains; This canal is located across from Valverde Elementary School on the east side of Bayou Grosse Tete and along La Hwy 411 in Police Jury District No. 10. This canal reach is approximately 1,800 feet long and drains into Bayou Grosse Tete.

Portage Canal Slides and Drop Pipes: repair slides from the Portage Canal embankments and install drop pipes along the embankments of Portage Canal from Hospital Road westward and downstream; The side slopes of Portage Canal are not as flat as they should be and periodically a slide will occur where part of

the embankment will end up at the bottom of Portage Canal. There are also some existing drop pipes that need to be upsized and replaced. This work will enlarge the channel area and improve the drainage of Portage Canal.

La Hwy. 78 Drainage: 600 L.F of 36" storm drain pipe along Okelousas St. and 1,000 L.F. of 60" storm drain pipe along Sparks Lateral to divert storm water westward from La Hwy 78 in the Town of Livonia and into Bayou Grosse Tete; Two (2) similar projects (Selma St. and Glaser St.) were completed in the Town of Livonia over the last eight (8) years by taking advantage of Bayou Grosse Tete for drainage.

Evelina Street at Railroad: installation of an additional 36" steel pipe for additional drainage capacity under the Union Pacific Railroad in the vicinity of Evelina Street in the Town of Fordoche; Installation will be by direct bore method under the existing single railroad track.

Canezaro Road Drainage Relief: divert storm water from Canezaro Road at the water shed drainage canal to Bayou Grosse Tete at the upper reaches of the water shed drainage canal along J.B. LeFeau Street; The water shed canal drains a watershed upstream of Canezaro Road and include residences on J.B. Lefeau Road and Valverda Elementary School. The distance along J.B. LeFeau Street eastward to Bayou Grosse Tete is approximately 2,800 feet with a crossing at La Hwy 977.

Grant Application and Administration

The Fenstermaker team has extensive experience with grant applications and grant administration. During their times at NMFS and CPRA, respectively, Dr. Foret and Mr. Pittman have prepared and administered over a dozen grant applications as part of the CWPRA program, nearly all of which included pre-award costs. Our intimate knowledge of the project, access to CAD drawings, project descriptions and cost data, along with our experience with grant writing will keep pre-award costs to a minimum.

The Fenstermaker team is prepared to request an informal review by members of the RESTORE Council, prior to submission of the grant application. Pre-submission reviews have shown to reduce the time required to receive a grant award, because the reviewer can ask questions and provide guidance that will help to expedite the application and approval process.

Fenstermaker's Community Development Block Grant (CDBG) experience consists of multiple application submittals for clients such as the Cities of Carencro and Scott. Fenstermaker has extensive experience assisting municipal clients with attaining and managing funds received from Louisiana Division of Administration's Office of Facility Planning & Control (FPC), Office of Community Development (OCD), Federal Emergency Management Agency (FEMA), U. S. Army Corps of Engineers (USACE), and Louisiana Department of Transportation (LADOTD). Below is a table of Fenstermaker's grant/funding experience.

Client	Project Name	Funding Source	Amount
Cameron Parish Police Jury	CPRA RESTORE Act Parish Matching Program	Pledged \$2M of own RESTORE funds + CPRA	Applied for \$20M & received \$6.67M
Cameron Parish Police Jury	US Corps of Engineers (Planning Assistance to States)	Identified Multiple Viable Options	Still in Planning Phase
City of Carencro	2008-2009 CDBG Application	Community Development Block Grant (CDBG)	Applied for & received \$700K

Client	Project Name	Funding Source	Amount
City of Carencro	2015 Wastewater Forcemain Improvements	Facility Planning & Control (FP&C) - Capital Outlay	Applied for \$5.6M combined for both of these projects, award pending
City of Carencro	2015 Wastewater Infrastructure Phase II	Facility Planning & Control (FP&C) - Capital Outlay	
City of Carencro	2015-2016 CDBG Application	Community Development Block Grant (CDBG)	Applied for and received \$850K
City of Carencro	Richard St. Drainage Improvements	FEMA	Applied for & received \$1.3M
City of Carencro	March 2012 Flood Event	FEMA	Applied for & received \$3.4M
City of Carencro	DOTD Statewide Flood Control Program	USACE/DOTD	applied for and Received \$700K
City of Carencro	Post Road Wastewater Treatment Facility	U. S. Department of Agriculture (USDA) LOAN	Applied for \$2m in grants those are received, applied for \$22M loan from USDA, loan approved, on hold until City determines repayment method
City of Carencro	Andre St. Drainage	FEMA	Applied for & received \$2.5M
City of Carencro	Lift Station #15 Upgrade	Facility Planning & Control (FP&C) - Capital Outlay	Applied for & received \$275K
City of Carencro	CAP 205 Project Design & Implementation	USACE	Applied for & received \$4.6M
City of Carencro	2013- 2014 CDBG Application	Community Development Block Grant (CDBG)	Applied for \$800K, project not funded by CDBG
City of Carencro	Gaston Coulee Cleaning	Facility Planning & Control (FP&C) - Capital Outlay	Applied for & received \$190K
City of Carencro	St. Anne Drainage Improvements	Facility Planning & Control (FP&C) - Capital Outlay	Applied for & received \$476K
City of Carencro	Arceneaux Rd. Drainage Improvements	Facility Planning & Control (FP&C) - Capital Outlay	Applied for \$750K, pending
City of Carencro	2014 Lift Station Upgrades	FEMA	Applied for & received \$800K
City of Carencro	Post Road Channel Improvements	FEMA	Applied for & received \$1.2M
City of Carencro	Post Road Waterline	Office of Community Development - Community Water Enrichment Fund	Applied for & received \$75K for all 3 Post Rd. projects combined
City of Carencro	Post Rd. Water Main Phase I	Office of Community Development - Community Water Enrichment Fund	
City of Carencro	Post Rd. Water Main Phase II	Office of Community Development - Community Water Enrichment Fund	

Client	Project Name	Funding Source	Amount
City of Carencro	Hector Connolly Water Treatment Plant	Louisiana Department of Health	Currently applying for \$5.5M
City of Carencro	Ground Water Storage Tank	Facility Planning & Control (FP&C) - Capital Outlay	Applied for \$2.6M, pending
City of Carencro	Recreation Center Channel Cleaning Project	Facility Planning & Control (FP&C) - Capital Outlay	Applied for \$440K, pending
City of Carencro	2012 Utility Improvement along I-49 Frontage Rd	Facility Planning & Control (FP&C) - Capital Outlay	Applied for \$780K, pending
City of Scott	City of Scott Comprehensive Plan	Community Development Block Grant (CDBG)	Applied for & received \$230K
City of Scott	Apollo Road - Dulles Drive Roundabout	Facility Planning & Control (FP&C) - Capital Outlay	Applied for \$15M and pending for these 3 Apollo Rd. Projects combined.
City of Scott	Apollo Road - Old Spanish Trail to JB Rd.	Facility Planning & Control (FP&C) - Capital Outlay	
City of Scott	Apollo Road -JB Rd. to Dulles Dr.	Facility Planning & Control (FP&C) - Capital Outlay	
City of Scott	FEMA Model Review and Update	Community Development Block Grant (CDBG)	Applied for & received \$3.9M
City of Scott	Apollo Road Water & Sewer - Phase 1	Facility Planning & Control (FP&C) - Capital Outlay	Applied for and received \$1.365M & applied for an additional \$285K shown in HB2

DDG has also completed a large number of projects for local parishes using federal funding, a majority of which have involved water management aspects. See the list below for a comprehensive list of HMGP and CDBG funded projects:

2019 – Lafayette Consolidated Government – Derby Heights Drainage Improvements (CDBG)
2016 – St. Tammany Parish Government, W-14 Widening and Fritchie Marsh Creation (HMGP)
2014 – City of Broussard; Street Construction (CDBG)
2014 – City of Broussard; Water & Sewer Lift Station Service for IPT Global (CDBG)
2013 – Terrebonne Parish Consolidated Government, Dept. of Public Works Admin. Bldg. (CDBG)
2013 – St. Charles Parish Government, Emergency Operations Center (CDBG)
2013 – Lafourche Parish Government, Elevation Program Project (HMGP)
2013 – Assumption Parish Police Jury, Administrative Bldg. (CDBG)
2012 – Terrebonne Parish Consolidated Government, Juvenile Justice Complex (CDBG)
2012 – Assumption Parish Police Jury, Community Center (CDBG)
2012 – Assumption Parish Police Jury, Bayou L’Ourse Community Center (CDBG)
2011 – City of Slidell, Rufus Viner Community Center (CDBG)
2011 – Lafourche Parish School Board, Thibodeaux Elementary School Classroom Addition (CDBG)
2011 – St. Tammany Parish Government, Drainage Improvements (LRA/CDBG)
2011 – Lafourche Parish Government, Timberland Pump Station Phase I (HMGP)
2011 – Lafourche Parish Government, Pointe-aux-Chenes Pump Station Improvements Phase I (HMGP)
2010 – St. Tammany Parish Government, Lower 15 Drainage Improvements (CDBG)
2010 – Plaquemines Parish Government, East Bank Sewer Improvements (CDBG)
2010 – Morgan City Housing Authority, Brownell Renovations Phases I, II, & III (ARRA/HUD)

2010 – St. Charles Parish House Authority, Renovations (HUD)
 2010 – Lafourche Parish Government, Jesse Dufrene Pump Station/Gheens Area Drainage Improvements (HMGP)
 2009 – City of Slidell, Drainage Projects (CDBG)
 2009 – Lafourche Parish Government, Various Turn Lane Improvements (ARRA)
 2009 – Terrebonne Economic Development Authority, Bayou Region Cold Storage Facility (OCD)
 2009 – St. Tammany Parish Government, Program Management Services Drainage Project (LRA/CDBG)
 2009 – City of Thibodeaux, Beautification Projects (ARRA)
 2009 – Lafourche Parish Housing Authority, Independent Cost Verification at Multiple Sites (HUD)
 2009 – Lafourche Parish Government, Sewer Rehabilitation to Marydale/Lewistown/Rita Communities (HMGP)
 2009 – Diocese of Houma-Thibodeaux, Emergency Repairs to High Schools (FEMA)
 2009 – Terrebonne Parish Consolidated Government, Government Tower Re-Roofing (FEMA)
 2009 – Lafourche Parish Government, Alidore Water System Waterline Improvements (CDBG)
 2008 – Lafourche Parish Government, Parishwide Pump Station Mitigation (HMGP)
 2008 – Lafourche Parish Government, Parish Facility Hurricane Damage Assessment (HMGP)
 2008 – Lafourche Parish School Board, Hurricane Repairs to 13 Schools (HMGP)
 2002 – 2008 – Houma-Terrebonne Housing Authority, 100% Physical Needs Assessment of Bayou Towers and Senator Circle (HUD)
 2008 – 2013 – St. Martin Parish Government, Street Improvements (CDBG)
 2007 – Terrebonne Parish Consolidated Government, Transit Office and Bus Maintenance Facility (FTA)
 2005 – Diocese of Houma-Thibodeaux, Emergency Repairs (FEMA)
 2004 – Lafourche Parish Government, Drainage Improvement Project (CDBG)
 2002 – City of Thibodeaux, Road Rehabilitation (CDBG)
 2000 – City of Thibodeaux, Drainage Rehabilitation (CDBG)
 1999 – City of Thibodeaux, Rehabilitation of Water and Gas Distribution Systems (CDBG)

In addition, **PEC** also has extensive working knowledge and success in:

- FEMA funding and procedures
- Louisiana Community Development Block Grant (LCDBG) program
- DEQ SRF program
- Hazard Mitigation Applications
- Louisiana Recovery Authority
- Office of Community Development Disaster Recovery Unit
- USDA Rural Development
- DOTD Transportation Enhancement Program (formerly ISTEAD)
- Louisiana Government Assistance Program (LGAP)
- Community Water Enrichment Fund (CWEF)
- Capital Outlay

To further illustrate this point, since 1985, PEC has effectively provided both administrative and engineering services for 45 LCDBG projects. In addition, they have provided engineering design for an additional 60 projects. PEC has administered and engineered federally and state funded projects in the City of New Roads, the City of Port Allen, the City of Zachary, the Town of Livonia, City of St. Gabriel, and the City of Bogalusa. In addition, they have served in several Parishes throughout South Louisiana including Helena Parish, Pointe Coupee Parish, West Baton Rouge Parish and Washington Parish. PEC has also engineered and administered federally and state funded Disaster Recovery Infrastructure Projects for Iberville Parish, Pointe Coupee Parish, the City of Baker, the City of Zachary, and West Baton Rouge Parish.

2.c. Describe the firm's workload and current capacity to accomplish the work in the required time.

Fenstermaker's Kimberly McDaniel, P.E. will serve as the project manager for this effort. Ms. McDaniel has over 12 years of engineering project management experience, including projects for a variety of government entities. She recently joined the Fenstermaker team as Director in the Baton Rouge Engineering Office and has the capacity to dedicate the time necessary to this project. In addition, she will be assisted by DDG's Joseph Guillory. Mr. Guillory leads DDG's Coastal Division and has a decade of experience leading coastal projects. The joining of Ms. McDaniel's management experience with Mr. Guillory's coastal expertise presents a unique project management approach with double the normal capacity of a single project manager.

In addition to the management duo presented, the team includes several personnel from Fenstermaker as well as subconsultants Duplantis Design Group (DDG), Professional Engineering Consultants (PEC), and APS Engineering and Testing (APS). All personnel presented by these firms in the team organizational chart have the capacity to dedicate the time needed to perform work on this project. In addition, each of these firms have additional staff available on an as-needed basis to round out the project team.

2.d. Describe any issue the characteristics of which would be uniquely relevant in evaluating the experience of respondent's firm to handle the proposed project

The Fenstermaker Team is a full service, fully integrated team that has been performing surveying, mapping, geotechnical analysis, engineering & design, permitting, construction administration and post construction monitoring in Coastal Louisiana for over 60 years. Our rich history is combined with modern technologies and methods that offer Livingston Parish a highly qualified, highly professional team of coastal engineers, hydrodynamic modelers, ecologists and grant administrators that are leaders in the coastal engineering, design and environmental consulting industry.

Some of Fenstermaker's most recent projects include:

- Lake Borgne Marsh Creation Project, Increment 1 – NRDA Funding
- Queen Bess Island Restoration – NRDA Funding
- Rockefeller Refuge Gulf Shoreline Protection Extension – RESTORE Act and CDBG Funding
- Cameron Parish Gulf Shoreline Protection at Rutherford Beach, Little Florida Beach and Long Beach – USACE Planning Assistance to States Funding
- Freshwater Bayou Marsh Creation – CWPPRA Funding
- Island Road Marsh Creation – CWPPRA Funding
- False River Nitrogen Impact Study – Specially Allocated State Funding
- Bayou Bonfouca Marsh Creation – CWPPRA Funding
- Oyster Bayou Marsh Creation – CWPPRA Funding

As an example of our Grant Assistance capabilities, Fenstermaker represented the Cameron Parish Police Jury (CPPJ) in the RESTORE Act Parish Matching Initiative. CPPJ had been allocated \$2.0 million by the RESTORE Act and planned to use these funds for the Rockefeller Refuge Gulf Shoreline Protection Extension project. In late 2017, the Coastal Protection and Restoration Authority (CPRA) and the RESTORE Act Council offered \$20 million in matching funds to the parishes in a highly competitive process. On CPPJ's behalf, Fenstermaker prepared a proposal for this effort and, in 2018, secured an additional \$6.67 million to be included in the project budget, which was the highest award for that program. In 2018, the CPPJ was able to leverage the RESTORE Act funds for an additional \$4.27 million of Community Development Block Grant Funds. With Fenstermaker's help, CPPJ was able to convert \$2.0 million into \$12.94 million. In late 2019, the CPRA and the RESTORE Act Council will initiate another \$20 million matching process. Fenstermaker is prepared to assist Livingston Parish in this process to

secure additional funds and is prepared to search for other funding opportunities to help Livingston Parish expand this project.

2.e. Describe the firm's presence in and commitment to Louisiana.

C. H. Fenstermaker & Associates, L.L.C., was established in 1950 and is a Limited Liability Company whose business expertise is engineering, surveying and mapping, and environmental consulting services. The current ownership is William H. Fenstermaker (majority owner) and the current President is Charles Fenstermaker. The firm employs nearly 300 personnel in Louisiana and Texas with offices in Lafayette, Lakes Charles, Baton Rouge, New Orleans, Shreveport, Houston, San Antonio, and Midland. The firm has a long history of providing exceptional engineering and surveying services to local, state, and federal governments with a wide range of services throughout the State of Louisiana. The company is committed to the State of Louisiana and the many communities which make up the brilliant landscape and beautiful culture of the state.

Fenstermaker has joined with Duplantis Design Group (DDG), Professional Engineering Consultants (PEC), and APS Engineering and Testing (APS), each of which adds unique expertise to this project team. All three of these companies are Louisiana-based and have decades of commitment to the places and people of South Louisiana.

2.f. Provide current information on professional errors and omissions coverage carried by Respondent's firm, including amount of coverage.

Carrier = XL Catlin Indian Harbor Insurance Company, AMBest Rated A XV
Effective 1/1/2019-1/1/2020 on a claims made basis retroactive to 12/31/1996
Limit = \$1,000,000 per claim, \$2,000,000 aggregate with
Excess = \$10,000,000 applicable to Professional Liability

2.g. Provide evidence of adequate financial stability through certified financial statements, including a balance sheet and income statement. The Parish reserves the right to request any additional information to assure itself of a Respondent's financial status.

Insurance certificate and financial statements from the past three years are provided on the following pages.

ACORDTM**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

3/27/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS **WAIVED**, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer any rights to the certificate holder in lieu of such endorsement(s).

PRODUCER McGriff Insurance Services 5750 Johnson Street 5th Floor Suite 505 Lafayette, LA 70503	CONTACT NAME: Kristine LeBlanc CIC,CMIP,CISR PHONE (A/C, No, Ext): 337 314-8949 FAX (A/C, No): 337-234-0776 E-MAIL ADDRESS: kristine.leblanc@mcgriffinsurance.com	
	INSURER(S) AFFORDING COVERAGE	
INSURED C.H. Fenstermaker & Associates, LLC 135 Regency Square Lafayette, LA 70508	INSURER A : Indian Harbor Insurance Company NAIC # 36940	
	INSURER B : Gray Insurance Company 36307	
	INSURER C : XL Specialty Insurance Company 37885	
	INSURER D : Indemnity Insurance Company of North Am 43575	
	INSURER E :	
	INSURER F :	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			US00081973LI19A	01/01/2019	01/01/2020	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			XSAL075391	01/01/2019	01/01/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$			US00081974LI19A	01/01/2019	01/01/2020	EACH OCCURRENCE \$ 10,000,000 AGGREGATE \$ 10,000,000 \$
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE/OFFICER/MEMBER EXCLUDED? <input checked="" type="checkbox"/> Y/N N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	XSWC071119	01/01/2019	01/01/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Prof & Poll Liab			US00081973LI19A	01/01/2019	01/01/2020	*See Attached Limit: \$750,000 Limit: \$317,053
C	Leased/Rented EQP			UM00072344MA19A	01/01/2019	01/01/2020	
D	Hull			N04928702	01/01/2019	01/01/2020	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

(See Attached Descriptions)

CERTIFICATE HOLDER**CANCELLATION**

Livingston Parish Government
 P.O. Box 1060
 Livingston, LA 70754

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



DESCRIPTIONS (Continued from Page 1)

Commercial General Liability (Occurrence form CG 00 01 04 13) includes:

- *Blanket Waiver of Subrogation when required by written contract
- *Blanket Additional Insured (Forms CG 20 10 10/01 & CG 20 37 10/01) when required by written contract.
- *Primary and Non-Contributory Insurance Wording Included when required by written contract.
- *Broad Form Property Damage Liability including Explosion, Collapse and Underground (XCU)
- *Premises/Operations & Products/Completed Operations
- *Contractual Liability
- *Personal Injury
- *In Rem Endorsement
- *Gulf of Mexico Territory extension
- *Per Project Endorsement - subject to \$5,000,000 cap
- *Cross Liability
- *Severability of Interests Provision
- *Action Over Claims
- *Independent Contractors coverage for work sublet
- *Watercraft Amendment Endorsement includes liability for non-owned watercraft not used to carry persons or property for a charge
- *Boat endorsement provides liability coverage for scheduled vessels
- *30 days Notice of Cancellation to holder when required by written contract

Automobile Liability Policy includes:

- *Blanket Waiver of Subrogation & Blkt Additional Insured when required by written contract
- *30 days Notice of Cancellation to holder when required by written contract
- *MCS-90 Endorsement

Workers Compensation/ Maritime Employers Liability:

- *Blanket Waiver of Subrogation where Required by Written Contract
- *U.S. Longshoremen & Harbor Workers Compensation Act Coverage
- *Outer Continental Shelf Land Act
- *Jones Act (Including Transportation, Wages, Maintenance & Cure)
- *Death on the High Seas Act & General Maritime Law
- *Maritime Employers Liability Limit: \$1,000,000
- *Voluntary Compensation Endorsement
- *Other States Endorsement
- *Alternate Employer / Borrowed Servant Endorsement
- *In Rem Endorsement
- *Gulf of Mexico Territorial Extension
- *30 days Notice of Cancellation to holder when required by written contract

Excess Liability Policy includes:

- *Coverage is follow form of Auto Liab, General Liab, Employers Liab, Maritime Employers Liab, Professional Liab, Contractors Pollution Liability and includes drop-down clause
- *Blanket Primary & Non-Contributory when required by written contract
- *Blanket Additional Insured when required by written contract
- *Blanket Waiver of Subrogation when required by written contract
- *30 Days Notice of Cancellation except for 10 days for non-payment to the first named insured

Professional / Pollution Liability: (1/1/19-1/1/20; Indian Harbor Ins Co; Policy #US00081973LI19A):

- *Professional Liability: \$1,000,000 each incident, subject to \$2,000,000 general aggregate(claims made)
- *Contractors Pollution Liability: \$1,000,000 each claim, subject to \$2,000,000 general aggregate
- *Blkt Add'l Insured, Waiver of Subrogation & Primary & Non-Contributory where required by written contract
- *In Rem Endorsement
- *Gulf of Mexico Territory Endorsement
- *Transportation Pollution Liability Endorsement-provides pollution coverage for watercraft
- *30 Days Notice of Cancellation except for 10 days for non-payment to the first named insured

Unmanned Aircraft Liability: (1/1/19-1/1/20; Global Aerospace Pool; Policy #80010790);

- *Each Occurrence Limit: \$10,000,000

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
CONSOLIDATED FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2015

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
CONSOLIDATED FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2015

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HARRY V. BARTON, CPA, LLC

INDEPENDENT ACCOUNTANT'S REVIEW REPORT

To the Members
C. H. Fenstermaker & Associates, LLC
Lafayette, Louisiana

I have reviewed the accompanying consolidated financial statements of C. H. Fenstermaker & Associates, LLC and subsidiaries which comprise the consolidated balance sheet as of December 31, 2015, and the related consolidated statements of income, comprehensive income, changes in members' equity, and cash flows for the year then ended, and the related notes to the consolidated statements. A review includes primarily applying analytical procedures to management's financial data and making inquiries of company management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the consolidated financial statements as a whole. Accordingly, I do not express such an opinion.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the consolidated financial statements that are free from material misstatement whether due to fraud or error.

Accountant's Responsibility

My responsibility is to conduct the review in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the American Institute of Certified Public Accountants. Those standards require me to perform procedures to obtain limited assurance as a basis for reporting whether I am aware of any material modifications that should be made to the consolidated financial statements for them to be in accordance with generally accepted accounting principles in the United States of America. I believe that the results of my procedures provide a reasonable basis for my report.

Accountant's Conclusion

Based on my review, I am not aware of any material modifications that should be made to the accompanying consolidated financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.

Harry V. Barton CPA LLC

Harry V. Barton, CPA, LLC

Lafayette, Louisiana
April 22, 2016

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET

DECEMBER 31, 2015

ASSETS

Current assets	
Cash and cash equivalents	\$ 328,384
Accounts receivable, less allowance for credit losses of \$352,000	7,245,792
Unbilled work-in-progress	1,200,800
Other receivables	219,402
Notes receivable – current (Note 3)	216,830
Employee advances	3,634
Prepaid income taxes (Note 8)	408,096
Prepaid expenses	652,013
Total current assets	10,274,951
Property and equipment (Notes 1 and 4)	2,769,517
Other assets	
Notes receivable (Note 3)	673,952
Investments in securities at fair value (\$5,717,269 at cost) (Note 2)	6,343,192
Other investments (at cost)	4,948
Cash surrender value of insurance policies (Notes 10 and 12)	1,325,974
Intangible assets (Notes 1 and 5)	145,654
Deferred tax assets (Note 8)	265,000
Deposits	29,598
TOTAL ASSETS	\$ 21,832,786

LIABILITIES

Current liabilities	
Notes payable (Note 6)	\$ 935,664
Cash management payable (Note 15)	73,198
Accounts payable	1,978,145
Accrued liabilities	869,555
Accrued profit-sharing plan (Note 9)	439,461
Income tax payable (Notes 1 and 8)	24,990
Current portion of long-term debt (Note 7)	1,169,000
Total current liabilities	5,490,013
Long-term debt (Note 7)	1,481,305
Deferred compensation (Note 10)	1,865,923

MEMBERS' EQUITY

Members' equity	12,995,545
TOTAL LIABILITIES AND MEMBERS' EQUITY	\$ 21,832,786

See accompanying notes and independent accountant's review report.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

YEAR ENDED DECEMBER 31, 2015

STATEMENT OF INCOME

Revenue	\$ 38,940,203
Operating expenses	
Reimbursable expenses	7,339,943
Direct expenses	10,681,956
Indirect expenses	20,445,768
Depreciation and amortization	<u>1,239,929</u>
Total operating expenses	39,707,596
(Loss) from operations	(767,393)
Other income (expense)	
Gain on sale of assets	6,344
Gain on sale of securities	156,491
Impairment loss on securities	(977,508)
Interest and dividend income	175,358
Interest expense	(165,189)
Other income	<u>181,416</u>
Total other income (expense)	<u>(623,088)</u>
(Loss) before taxes	(1,390,481)
Income tax (benefit)	<u>(577,680)</u>
Net (loss)	\$ <u>(812,801)</u>

STATEMENT OF COMPREHENSIVE INCOME

Net (loss)	\$ (812,801)
Other comprehensive (loss)	
Unrealized losses on securities of \$(1,061,639) arising during the year, net of income tax benefit of \$414,039	(647,600)
Unrealized gains on securities of \$156,491 reclassified to net income, net of income tax benefit of \$(61,031)	(95,460)
Impairment losses on securities of (\$977,508) reclassified to net income, net of income tax expense of 381,228	<u>596,280</u>
Total other comprehensive (loss)	<u>(146,780)</u>
Comprehensive (loss)	\$ <u>(959,581)</u>

See accompanying notes and independent accountant's review report.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN MEMBERS' EQUITY

YEAR ENDED DECEMBER 31, 2015

	<u>Membership Interests</u>	<u>Retained Earnings</u>	<u>Membership Interests in Treasury</u>	<u>Other Accumulated Comprehensive Income</u>	<u>Total</u>
BALANCE, December 31, 2014	\$ 50,000	\$ 17,632,125	\$ (4,000,000)	\$ 523,001	\$ 14,205,126
COMPREHENSIVE INCOME					
Net (loss)		(812,801)			(812,801)
Other comprehensive (loss), net of income taxes				(146,780)	<u>(146,780)</u>
TOTAL COMPREHENSIVE INCOME					(959,581)
Dividends paid		(250,000)			(250,000)
BALANCE, December 31, 2015	\$ <u>50,000</u>	\$ <u>16,569,324</u>	\$ <u>(4,000,000)</u>	\$ <u>376,221</u>	\$ <u>12,995,545</u>

See accompanying notes and independent accountant's review report.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS

YEAR ENDED DECEMBER 31, 2015

CASH FLOWS FROM OPERATING ACTIVITIES

Net (loss)		\$ (812,801)
Adjustments to reconcile net loss to net cash provided by operating activities		
Amortization	\$ 14,433	
Depreciation	1,225,496	
Gain on disposition of assets	(6,344)	
Gain on disposition of securities	(156,491)	
Impairment loss on securities	977,508	
Decrease in accounts receivable	1,020,957	
Decrease in allowance for credit losses	(1,100)	
Increase in unbilled work-in-process	(47,784)	
Decrease in employee advances	4,675	
Increase in other receivable	(202,402)	
Increase in prepaid income taxes	(8,542)	
Increase in prepaid expenses	(318,071)	
Decrease in cash surrender value of insurance	178,581	
Decrease in deposits	9,169	
Increase in accounts payable	992,123	
Decrease in cash management payable	(270,689)	
Decrease in accrued liabilities	(177,166)	
Increase in accrued profit-sharing plan	43,336	
Decrease in deferred taxes	(591,158)	
Decrease in deferred compensation payable	(84,199)	
Decrease in income taxes payable	(29,886)	
Total adjustments		<u>2,572,444</u>
Net cash provided by operating activities		1,759,643

CASH FLOWS FROM INVESTING ACTIVITIES

Collections of notes receivable	154,508	
Disbursements of notes receivable	(45,612)	
Proceeds from disposition of securities	549,279	
Proceeds from sale of property and equipment	12,787	
Purchases of property and equipment	(795,116)	
Purchases of securities	(859,906)	
Net cash used in investing activities		(984,060)

CASH FLOWS FROM FINANCING ACTIVITIES

Proceeds from issuance of notes payable	909,415	
Proceeds from issuance of long-term debt	509,273	
Dividends paid	(250,000)	
Net decrease in line of credit payable	(120,078)	
Repayment of notes payable	(909,415)	
Repayment of long-term debt	(931,255)	
Net cash used in financing activities		<u>(792,060)</u>

Net decrease in cash and cash equivalents	\$ (16,477)
Cash and cash equivalents at December 31, 2014	<u>344,861</u>
Cash and cash equivalents at December 31, 2015	\$ <u>328,384</u>

See accompanying notes and independent accountant's review report.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 2015

Note 1: Company business and summary of significant accounting policies

The significant accounting policies of the Company are summarized below:

Nature of operations

The Company provides survey and mapping, environmental, advanced technology and engineering services for federal, state and local governments, the oil and gas industry and private enterprise. The Company maintains offices in Louisiana and Texas and provides its services nationwide in the United States.

The Company has two subsidiaries, Fenstermaker Services, LLC and Totaland Technologies, LLC. Fenstermaker Services, LLC provides engineering and surveying services in the Midwestern and Northeastern regions of the United States. Totaland Technologies, LLC, provides computer based land services for oil and gas exploration businesses. Totaland Technologies generates less than 2% of the Company's revenues.

Revenues are earned for time spent on a per diem basis, and for charges for rental of equipment supplied by the Company. Revenue is recognized when time is incurred rather than upon billing.

Estimates and assumptions

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Consolidation policy

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. Intercompany transactions and balances have been eliminated in consolidation.

Marketable Securities

The Company's securities investments that are bought and held principally for the purpose of selling them in the near term are classified as trading securities. Trading securities are recorded at fair value on the balance sheet in current assets, with the change in fair value during the period included in earnings. Securities investments that the Company has the intent and ability to hold to maturity are classified as held-to-maturity securities and are recorded at amortized cost in investments.

Securities investments not classified as either held to maturity or trading securities are classified as available-for-sale securities. Available-for-sale securities are recorded at fair value on the balance sheet, with the change in fair value during the period excluded from earnings and recorded net of tax as a component of other comprehensive income.

Realized gains and losses are determined on the first-in, first out method.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 1: Company business and summary of significant accounting policies (continued)

Property and equipment

Property and equipment are stated at cost. Depreciation of assets is computed primarily by the use of straight-line methods over the estimated useful lives of the respective assets, which are as follows:

Vehicles	5 years
Office furniture and equipment	3 - 7 years
Leasehold improvements	7 -15 years

Maintenance and repairs are charged to expense as incurred, while the cost of additions and improvements which substantially extend the useful life of a particular asset is capitalized. When an item is retired or otherwise disposed of, the cost is removed from the asset account and the related depreciation allowance is adjusted with the difference being charged or credited to income.

Goodwill and Other Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of identifiable tangible and intangible net assets of companies acquired. Goodwill is not amortized unless events or circumstances occur indicating that an impairment exists within a particular reporting unit. Impairment losses, if any are recorded in the statement of income as part of income from operations.

Other intangible assets are amortized over 15 years using the straight-line method.

Receivables

Trade receivables and loans receivable are carried at their estimated collectible amounts. Notes receivable are placed on non-accrual status when they become ninety days past due. Interest income on loans receivable is recognized using the interest method. Interest income on impaired loans is recognized as cash is collected. Trade credit is generally extended on a short-term basis, although a finance charge may be applied to receivables that are past due.

Trade receivables are periodically evaluated for collectability based on past credit history with customers and their current financial condition. Trade receivables are charged against an allowance account when such receivables are deemed to be uncollectible.

Revenues are generally recognized when the services are provided. Unbilled work-in-progress represents fees for services provided on projects for which billings have not been presented to customers. When billed, these amounts are included in accounts receivable. Reimbursable costs, including subcontractor costs, are included in professional fees revenues and project expenses as incurred.

Income taxes

Income taxes are provided for the tax effects of transactions reported in the consolidated financial statements and consist of taxes currently due plus deferred taxes related primarily to differences between the bases of certain assets and liabilities for financial and tax reporting. The deferred taxes represent the future tax return consequences of these differences, which will either be deductible or taxable when the assets and liabilities are recovered or settled.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 1: Company business and summary of significant accounting policies (continued)

Statement of cash flows

For the purposes of the statement of cash flows, the Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

Advertising costs

The Company generally records advertising costs as expense as of the first date the advertisements take place. Advertising costs for the year ended December 31, 2015 were \$354,907.

Sales taxes

The Company records revenues net of sales tax.

Accrued interest and penalties

The Company reports accrued interest and penalties related to unrecognized tax benefits as interest expense and penalty expense, respectively.

Note 2: Investments in securities

Investments in securities at December 31, 2015 are summarized as follows:

	<u>Cost</u>	<u>Gross Unrealized Gain</u>	<u>Gross Unrealized Loss</u>	<u>Fair Value</u>
Available-for-sale securities:				
Equity securities	\$ 5,717,269	\$ 1,185,045	\$(559,122)	\$ 6,343,192

Sales proceeds and gross realized gains and losses that have been included in earnings as a result of sales of securities classified as available for sale were:

Sales proceeds	\$ 549,279
Gross realized gains	\$ 156,491
Gross realized losses	\$ -

The change in net unrealized holding gains and losses on securities available for sale in the amount \$(240,622) has been debited to other comprehensive income for the year ended December 31, 2015. The net unrealized loss includes an other-than-temporary impairment of one marketable equity security in the energy sector of \$(977,508) which has been transferred to net income. The market price of the security has fluctuated since the Company's initial purchase in 2008, but there have been significant unrealized losses beginning in 2014. Sales of certain lots of this security subsequent to the balance sheet date indicate that the Company will not recover its investment.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 2: Investments in securities (continued)

As of December 31, 2015, the following available-for-sale securities were in an unrealized loss position:

<u>Equity securities</u>	<u>Fair value</u>	<u>Unrealized loss</u>
For a period of less than 12 months	\$ 419,612	\$ 10,831
For a period of 12 months or longer	<u>724,653</u>	<u>548,291</u>
Total	\$ <u>1,144,265</u>	\$ <u>559,122</u>

The available-for-sale securities in an unrealized loss position consisted of six securities in the energy sector and one security in the financial sector. Management has judged that impairment of these securities in 2015 is due to overall losses in the energy sector and the specific performance of the financial security. Based on a review of market and other conditions, the Company expects that the fair values of these investments will ultimately exceed the cost basis. Accordingly, no impairment loss has been recognized.

Fair Value of Investments

The Company's available-for-sale securities are measured at fair value on a recurring basis, determined as follows:

<u>Description</u>	<u>Fair value at 12/31/2015</u>	<u>Quoted Prices in active markets (Level 1)</u>	<u>Other significant observable inputs (Level 2)</u>	<u>Significant unobservable inputs (Level 3)</u>
Common stocks	\$ 6,043,862	\$ 6,043,862	\$ -	\$ -
Mutual funds	23,522	23,522	-	-
Private equity REIT	<u>275,808</u>	<u>-</u>	<u>275,808</u>	<u>-</u>
Total	\$ <u>6,343,192</u>	\$ <u>6,067,384</u>	\$ <u>275,808</u>	\$ <u>-</u>

The significant observable inputs for the private equity real estate investment trust (REIT) consist of a valuation using a market approach corroborated by the annual Form 10-K filed with the Securities and Exchange Commission. At December 31, 2015, the REIT valued the investment at the current value of its common stock of \$10.40 per share.

Note 3: Notes receivable

At December 31, 2015, notes receivable consisted of the following:

Note receivable for an advance to four employees in the total original amount of \$6,395: This note is collectible from various biweekly payroll deductions, including interest from 3.25% to 4.25%.

\$ 5,670

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 3: Notes receivable (continued)

Note receivable on demand from an officer and member of the Company for cash advances: Interest on the unpaid balance is accrued at the short term blended Adjusted Federal Rate, currently 0.34%. This note is classified as current.

45,651

Note receivable from The Fenstermaker Family Partnership, a related partnership whose partners are members of the Company, dated December 31, 2010, in the original amount of \$1,529,722: The note represents a consolidation of prior advances for building additions to the Company's Lafayette Louisiana facility. The note is receivable in 120 monthly payments of \$14,948, including interest at 3.25%, with final payment receivable December 2020.

839,461

Total \$ 890,782

Less: current portion 216,830

Notes receivable \$ 673,952

Note 4: Property and equipment

Property and equipment consist of the following at cost:

Autos and trucks	\$ 2,891,730
Equipment	6,611,594
Furniture and fixtures	986,452
Boats	542,365
Leasehold improvements	<u>818,254</u>
Total cost	11,850,395
Less: accumulated depreciation	<u>9,080,878</u>
Net property and equipment	\$ <u>2,769,517</u>

Note 5: Intangible Assets

The following is a summary of intangible assets at December 31, 2015.

Intangible assets subject to amortization:

	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>
Survey data	\$ 20,000	\$ 18,444
Software and associated intangibles	<u>196,498</u>	<u>52,400</u>
Total	\$ <u>216,498</u>	\$ <u>70,844</u>

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 5: Intangible Assets (continued)

Amortization expense was \$14,433.

A summary of estimated amortization expense for the five years subsequent to 2015 follows:

<u>Year</u>	<u>Amortization Expense</u>
2016	\$ 14,433
2017	13,322
2018	13,100
2019	13,100
2020	<u>13,100</u>
	\$ <u>67,055</u>

Note 6: Notes payable

At December 31, 2015, notes payable consisted of the following:

The Company has available a revolving line of credit with a bank in an amount up to \$5,000,000, due July 2016, with interest payable monthly at the prime rate published in the Wall Street Journal, adjusted daily, currently 3.50%. At December 31, 2015, the Company has \$4,064,336 of unused available credit. The Company is liable for a non-use fee of 0.25%, payable quarterly, on the daily average unused portion of the line of credit.

\$ 935,664

The Company has available an additional revolving line of credit with a bank in an amount up to \$1,000,000, due July 2016, with interest payable monthly at the prime rate published in the Wall Street Journal, adjusted daily, currently 3.50%. At December 31, the Company has \$1,000,000 of unused available credit.

Note 7: Long-term debt

At December 31, 2015, long-term debt consisted of the following:

Consolidated equipment note payable to a bank, dated July 2015, in the original amount of \$2,832,854: This note is payable in 32 monthly installments of \$92,930, including interest at the prime rate published in the Wall Street Journal, adjusted daily, currently 3.50%, with final payment of all outstanding principal and interest in March 2018.

\$ 2,501,328

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 7: Long-term debt (continued)

Short-term obligations expected to be refinanced as long-term debt:

Non-revolving equipment line of credit with a bank, in an amount up to \$1,500,000: The total aggregate principal amount shall not exceed 80% of the purchase price of the equipment. Interest on the line of credit is payable monthly at the prime rate published in the Wall Street Journal, currently 3.50%. The outstanding principal balance is expected to be refinanced in July 2016 as an installment note payable in 20 monthly installments, including interest at the prime rate published in the Wall Street Journal.

	<u>148,977</u>
Total	\$ 2,650,305
Less: current maturities	<u>1,169,000</u>
Total long-term debt	\$ <u>1,481,305</u>

Aggregate principal payments on long-term debt in future periods are as follows:

<u>Year</u>	<u>Payment</u>
2016	\$ 1,169,000
2017	1,174,000
2018	<u>307,305</u>
	\$ <u>2,650,305</u>

As part of the current credit facility with the bank, the lines of credit (Note 6), the consolidated term loans, and the equipment line of credit are secured by the Company's assets, and a guarantee of one of the members. Eighty percent of eligible accounts receivable is included in the Company's borrowing base. See Note 15 for other loan agreement commitments and restrictions.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 8: Income taxes

The provision for income taxes for the year ended December 31, 2015 consisted of the following:

	<u>Continuing Operations</u>	<u>Other Comprehensive Income</u>	<u>Total</u>
Current income tax	\$ 13,478	\$ -	\$ 13,478
Deferred income tax (benefit)	(591,158)	(93,842)	(685,000)
Income tax (benefit)	\$ (577,680)	\$ (93,842)	\$ (671,522)

The Company's effective income tax benefit for the current year is more than what would be expected if the federal statutory rate were applied to the loss from continuing operations primarily because there are more expenses deductible for financial reporting purposes that are not deductible for tax purposes, and the Company has claimed various federal tax credits which increase its marginal tax benefit.

The components of and changes in deferred income taxes for the year ended December 31, 2015 are as follows:

	<u>Deferred Tax Assets</u>	<u>Deferred Tax (Liabilities)</u>	<u>Net Deferred Assets/(Liab.)</u>
Balance - December 31, 2014	\$ 748,000	\$ (1,168,000)	\$ (420,000)
Deferred benefit for 2015	439,000	246,000	685,000
Balance - December 31, 2015	\$ 1,187,000	\$ (922,000)	\$ 265,000

The temporary differences giving rise to the deferred tax assets consist of deferred compensation deductible for financial purposes, but not for tax purposes, impairment losses on marketable equity securities recognized for financial purposes, but not for tax purposes and tax credit carryforwards. The temporary differences giving rise to the deferred tax liabilities consist of depreciation deductible for income tax purposes, but not for financial purposes, unrealized gains on securities and the increase in the cash values of life insurance policies recognized for financial purposes, but not for tax purposes.

At December 31, 2015, the Company had \$408,096 of income taxes receivable. This includes prepaid federal and state income taxes of \$343,346 available to offset tax expense of future periods or to be refunded and \$64,750 of net income taxes receivable as a result of a carryback of the current federal research and development credit to the 2014 tax year. The Company owes \$24,990 for current state income and margin taxes. At December 31, 2015, the Company has \$77,888 of the research and development tax credit carryforwards, expiring in 2036.

Unrecognized tax benefits

In management's opinion, the Company has no material unrecognized tax benefits or uncertain tax positions at December 31, 2015. The statute of limitations for the examination of the Company's federal and state tax returns is generally three years from the due date of the tax return, including extensions. No federal or state income tax returns are currently under examination.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 9: Profit-sharing plan

The Company provides a 401(k) profit-sharing plan that allows eligible employees the option to defer receipt of a portion of their compensation. The Company elects to match employee deferrals yearly. For the year ended December 31, 2015, the Company agreed to match 100% of the first 3% of employee compensation deferred to the plan and 50% of the next 2% of employee compensation deferred to the plan. The Company's liability for the employer's contribution of \$439,461 is required to be paid to the plan trust on or before September 15, 2016. The Company's profit sharing 401(k) plan expense for the year was \$453,159. The Company also absorbs certain accounting, administration, and investment expenses related to the management of the plan. For the year ended December 31, 2015, the Company paid \$19,610 for these expenses.

Note 10: Deferred compensation plan

The Company provides a supplemental retirement plan for certain key employees. The plan is an unfunded, non-qualified deferred compensation plan that is exempt from the provisions of ERISA. The plan provides additional pre-retirement disability and death benefits. As of January 1, 2015, the plan no longer allows discretionary employee contributions. The compensation and associated interest cost have been accrued as a long term liability.

As of December 31, 2015, the Company's accrued deferred compensation liability was \$1,865,923. Net deferred compensation expense of \$92,431 for the year ended consisted of \$95,040 of deferred compensation expense and \$2,609 of a reduction in interest cost on deferred account balances. Distributions from the plan totaled \$176,630. For the year ended December 31, 2015, the Company incurred \$5,000 of plan administration fees.

The Company has purchased variable universal insurance contracts on certain participants' lives to recover a majority of the distributions made or to be made under the plan. At December 31, 2015, the cash surrender value of these policies was \$1,037,298, and the Company's cost basis was \$938,770. If all assumptions regarding mortality, policy dividends and other factors are realized, the Company expects to ultimately realize its investment. For the year ended December 31, 2015, the Company recognized net life insurance expense of \$11,931 for the decrease in the cash surrender value of the policies over the cost of insurance.

Note 11: Leases

The Company leases real property in Louisiana and Texas under terms of long-term, non-cancelable leases expiring from March 2016 to April 2021. It also leases office equipment under operating leases expiring from April 2016 to April 2018.

Rental expense for the year for property and equipment under non-cancellable leases, excluding the related party lease described in Note 12 was \$771,612.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 11: Leases (continued)

Minimum future rental payments, excluding related property leases for real property discussed in Note 12, under non-cancellable operating leases having terms in excess of one year at December 31, 2015 are:

<u>Year ending</u> <u>December 31</u>	<u>Minimum future</u> <u>rental payments</u>
2016	\$ 607,564
2017	418,665
2018	293,622
2019	210,820
2020 and thereafter	<u>281,093</u>
	<u>\$ 1,811,764</u>

The Company has subleased a portion of its Houston, Texas office under an operating lease beginning in December 2015 and expiring in November 2018. Rental income for 2015 was \$2,150. Minimum future rental payments to be received from this sublease total \$78,850.

Note 12: Related party transactions

In addition to the related party notes receivable described in Note 3, the Company engaged in the following related party transactions:

The Company has purchased whole life insurance policies covering the lives of the members. At December 31, 2015, the cash value of the policies was \$288,676. Insurance expense for the year was \$27,691.

The Company leases its Lafayette, Louisiana facilities from The Fenstermaker Family Partnership, a partnership owned by the members of the Company. The lease is renewable annually, adjusted for market rates based on square footage. The monthly rent is \$83,508 and \$918,588 is payable in 2016 under the current lease which expires November 30, 2016. In addition to paying monthly rental payments, the Company is required to pay additional occupancy costs. For the year ended December 31, 2015, the Company paid \$1,002,096 for rent, \$41,479 for repairs and maintenance, \$102,828 for insurance, and \$89,818 for property taxes.

The Company guarantees the bank debt of the Fenstermaker Family Partnership, which had an outstanding balance of \$5,103,505 at December 31, 2015.

For the year ended December 31, 2015, the Company recognized \$29,687 of interest income from related parties. (Note 3)

The Company has evaluated accounting guidance which clarifies whether or not to consolidate certain entities in which equity investors do not have the characteristics of a controlling financial interest or do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support from other parties. The Company has determined that The Fenstermaker Family Partnership should not be consolidated with the Company.

Note 13: Comprehensive income

Comprehensive income is the total of net income plus all other changes in net assets arising from non-owner sources, which are referred to as other comprehensive income. The Company has presented a separate statement of other comprehensive income.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 14: Statement of cash flows

Non cash investing and financing transactions for the year ended December 31, 2015 included refinancing the outstanding balances of an equipment note and an equipment line of credit totaling \$2,842,854 to one term loan. (Note 7)

During the year, the Company exchanged used vehicles and survey equipment and cash of \$284,835 for new vehicles and equipment valued at \$334,335. The new assets are recorded in the amount of \$285,340 which represents the book value of the equipment given up plus the cash paid.

Cash paid during the year for interest was \$165,751. Cash paid during the year for income taxes was \$66,161.

Note 15: Commitments

The Company's loan agreement with a bank includes various covenants, including prohibitions against mergers, acquisitions, transfers of assets or incurrence of further indebtedness, without the bank's prior written consent. The Company is also required to maintain various financial ratios. As of December 31, 2015, the Company was in compliance with the covenants.

The Company has negotiated a cash management agreement with the bank. As a result of this agreement, the Company is committed to draw on its line of credit for checks written, but not yet presented to the bank. At December 31, 2015, the Company recorded a cash management payable of \$73,198.

Note 16: Contingencies

Fringe benefits

Employees of the Company are entitled to paid time off for leave of absence for illness, disability or vacation. Effective January 1, 2016, a full time employee is generally entitled to 80 to 200 hours of paid time off per year, depending on his/her years of service. Employees accrue paid time off benefits during the year and, upon separation, will be paid unused paid time off. A maximum of 40 hours of paid time off remaining at the end of a given year may be carried forward to the subsequent year. At December 31, 2015, an estimate for the amount of compensation for future absences of \$99,759 has been included in accrued liabilities.

Litigation

In the normal course of business, the Company becomes involved in various claims and legal actions. The Company maintains commercial insurance coverage to mitigate and manage these types of business risks. Management believes the outcomes of these types of matters are adequately insured and will not have a material adverse effect on the Company's financial position.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2015

Note 17: Concentration of credit risk

The Company maintains its cash balances at financial institutions in Louisiana. Accounts are insured by the Federal Deposit Insurance Corporation. At December 31, 2015, the Company's uninsured cash on deposit and on hand, including money market mutual funds, totaled \$234,028.

The Company routinely grants short-term credit to customers in the ordinary course of business. These customers are primarily related to the oil and gas exploration and pipeline industries, as well as Federal, State and local governments. Trade accounts receivable and unbilled revenues could pose a concentration of risk because of the type and nature of industries comprising the Company's customer base, and their lack of dispersion across geographic areas. Management maintains an allowance for uncollectible accounts due to potential credit losses and does not anticipate any additional significant credit losses.

Note 18: Economic dependency - major customers

For the year ended December 31, 2015, the Company provided services to two clients who each could be considered a major customer that accounted for 10% or more of the Company's gross revenue. The Company expects that the business relationship with these clients will be continued. As of December 31, 2015, these two clients' accounts receivable were 30% of the Company's total accounts receivable. The Company's top ten clients supplied 64% of its revenue in 2015.

Note 19: Subsequent events

Notes payable - Insurance

In December 2015, the Company renewed its liability and worker's compensation insurance policies. The cost of the insurance coverage for one year beginning December 31, 2015 is \$918,088. These policies were financed in January 2016. The professional liability, property and umbrella liability policies were financed by a note payable to a credit corporation for \$467,414 less a down payment of \$98,724. The note is payable in ten monthly payments of \$37,284 including interest at 2.45%. The worker's compensation, general liability, and vehicle liability policies were financed by an installment obligation of \$450,674, payable in ten months. The company paid a 25% security deposit of \$112,668 in January 2016.

Other

Management has evaluated subsequent events through April 22, 2016, the date on which the financial statements were available to be issued.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2016

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2016

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INDEPENDENT ACCOUNTANTS' REVIEW REPORT

To the Members
C. H. Fenstermaker & Associates, LLC

We have reviewed the accompanying consolidated financial statements of C. H. Fenstermaker & Associates, LLC and Subsidiaries (the Company) which comprise the consolidated balance sheet as of December 31, 2016, the related consolidated statements of income and comprehensive loss, changes in members' equity, and cash flows for the year then ended, and the related notes to the consolidated statements. A review includes primarily applying analytical procedures to management's financial data and making inquiries of company management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the consolidated financial statements as a whole. Accordingly, we do not express such an opinion.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the consolidated financial statements that are free from material misstatement whether due to fraud or error.

Accountants' Responsibility

Our responsibility is to conduct the review in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. Those standards require us to perform procedures to obtain limited assurance as a basis for reporting whether we are aware of any material modifications that should be made to the consolidated financial statements for them to be in accordance with generally accepted accounting principles in the United States of America. We believe that the results of our procedures provide a reasonable basis for our conclusion.

Accountants' Conclusion

Based on our review, we are not aware of any material modifications that should be made to the accompanying consolidated financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.



Emphasis of Matter – Reissuance of 2016 Financial Statements

We originally issued our report dated July 11, 2017, on the reviewed 2016 consolidated financial statements. As described in Note 14, certain revisions were made in presentation and disclosure, and the 2016 consolidated financial statements have been reissued. Based on our review, we are not aware of any material modifications that should be made to the 2016 consolidated financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.

A handwritten signature in black ink that reads "Postlethwaite & Netterville" in a cursive script.

Lafayette, Louisiana
August 14, 2017

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET

DECEMBER 31, 2016

(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

ASSETS

Current assets:

Cash and cash equivalents	\$ 487,607
Investments, available for sale	7,838,406
Accounts receivable, net	4,997,452
Unbilled work-in-progress	500,148
Notes receivable – current	204,597
Income tax receivable	315,622
Prepaid expenses and other current assets	519,102
Total current assets	<u>14,862,934</u>

Property and equipment, net	<u>2,034,048</u>
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Other assets:

Cash surrender value of insurance policies	1,258,507
Notes receivable, long-term portion	513,384
Deferred tax assets	1,451,700
Deposits and other assets	147,072
Total other assets	<u>3,370,663</u>

Total assets	<u><u>\$ 20,267,645</u></u>
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LIABILITIES AND MEMBERS' EQUITY

Current liabilities:

Lines of credit	\$ 3,436,914
Accounts payable and accrued expenses	2,296,633
Income tax payable	32,954
Capital lease obligation, current portion	33,302
Note payable, current portion	892,966
Total current liabilities	<u>6,692,769</u>

Non-current liabilities:

Capital lease obligation, long-term portion	75,688
Note payable, long-term portion	1,080,092
Deferred compensation	1,725,052
Total liabilities	<u>9,573,601</u>

Members' equity	<u>10,694,044</u>
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Total liabilities and members' equity	<u><u>\$ 20,267,645</u></u>
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The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF INCOME AND COMPREHENSIVE INCOME

YEAR ENDED DECEMBER 31, 2016

(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

Revenue	\$ 22,864,969
Operating expenses:	
Reimbursable expenses	3,180,018
Direct expenses	6,914,218
Indirect expenses	17,426,714
Depreciation and amortization	1,167,392
Total operating expenses	28,688,342
Loss from operations	(5,823,373)
Other income (expense):	
Gain on sale of assets	94,250
Loss on sale of investment securities	(151,089)
Interest and dividend income	100,362
Interest expense	(139,011)
Other income	502,567
Total other income, net	407,079
Loss before income taxes	(5,416,294)
Income tax benefit	(2,110,900)
Net loss	(3,305,394)
<u>Other comprehensive income</u>	
Unrealized net holding gains arising during the period, net of taxes of \$582,908	911,728
Reclassification adjustment for realized losses included in net income, net of taxes of \$58,925	92,165
Total other comprehensive income	1,003,893
Comprehensive loss	\$ (2,301,501)

The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CHANGES IN MEMBERS' EQUITY
YEAR ENDED DECEMBER 31, 2016
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	Members'	Other Accumulated Comprehensive Income	Total
	Equity		
Balance, January 1, 2016	\$ 12,619,324	\$ 376,221	\$ 12,995,545
Net loss	(3,305,394)	-	(3,305,394)
Other comprehensive income	-	1,003,893	1,003,893
Balance, December 31, 2016	<u>\$ 9,313,930</u>	<u>\$ 1,380,114</u>	<u>\$ 10,694,044</u>

The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CASH FLOWS
YEAR ENDED DECEMBER 31, 2016
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

CASH FLOWS FROM OPERATING ACTIVITIES

Net loss	\$ (3,305,394)
Adjustments to reconcile net loss to net cash used in operating activities	
Depreciation and amortization	1,167,392
Deferred income taxes	(1,828,531)
Gain on sale of assets	(94,250)
Loss on sale of securities	151,089
Changes in operating assets and liabilities:	
Accounts receivable and unbilled work-in-progress	2,948,992
Income tax receivable	315,322
Prepaid expenses and other assets	84,406
Accounts payable and accrued expenses	(1,063,726)
Income tax payable	7,964
Deferred compensation	(140,871)
Net cash used in operating activities	<u>(1,757,607)</u>

CASH FLOWS FROM INVESTING ACTIVITIES

Purchases of property, plant, and equipment	(205,381)
Proceeds from sale of equipment	122,352
Proceeds from sales of available for sale investments	224,042
Purchase of available for sale investments	(224,621)
Repayment of notes receivable	176,435
Net cash provided by investing activities	<u>92,827</u>

CASH FLOWS FROM FINANCING ACTIVITIES

Net advances on lines of credit	(148,373)
Issuance of note payable	2,044,951
Payments on note payable	(72,575)
Net cash provided by financing activities	<u>1,824,003</u>

Net change in cash and cash equivalents 159,223

Cash and cash equivalents at beginning of year 328,384

Cash and cash equivalents at end of year \$ 487,607

SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION

Cash paid for interest	<u>\$ 139,011</u>
Cash paid for income taxes	<u>\$ -</u>
Purchase of property and equipment through capital lease	<u>\$ 108,990</u>

The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

Description of Business

C.H. Fenstermaker & Associates, LLC, provides survey and mapping, environmental, advanced technology and engineering services for federal, state and local governments, the oil and gas industry and private enterprise. Offices are maintained in Louisiana and Texas and services are provided throughout the United States.

The Company has two subsidiaries, Fenstermaker Services, LLC and TotaLand Technologies, LLC. Fenstermaker Services, LLC provides engineering and surveying services in the Midwestern and Northeastern regions of the United States. TotaLand Technologies, LLC, provides computer based land services for oil and gas exploration businesses. TotaLand Technologies, LLC generates less than 2% of the Company's revenues.

Basis of presentation

The accompanying consolidated financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (GAAP).

Basis of consolidation

The accompanying consolidated financial statements include the accounts of C.H. Fenstermaker & Associates, LLC and its wholly-owned subsidiaries (collectively, the Company). All intercompany balances and transactions have been eliminated in consolidation. The Company has chosen to adopt the provisions in Accounting Standards Update (ASU) No. 2014-07, *Consolidation (Topic 810)*, that allows the Company to elect an alternative not to apply the generally accepted accounting principles guidance on variable interest entities (VIE), which would require consolidation for related party lessor/lessee arrangements, such as the one disclosed in Note 12.

Cash and cash equivalents

The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be classified as cash and cash equivalents.

Revenues and receivables

Trade receivables and loans receivable are carried at their estimated collectible amounts. Notes receivable are placed on non-accrual status when they become ninety days past due. Interest income on loans receivable is recognized using the interest method. Interest income on impaired loans is recognized as cash is collected. Trade credit is generally extended on a short-term basis, although a finance charge may be applied to receivables that are past due.

Trade receivables are periodically evaluated for collectability based on past credit history with customers and their current financial condition. Trade receivables are charged against an allowance account when such receivables are deemed to be uncollectible. At December 31, 2016, the allowance for doubtful accounts was \$412,831.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies (continued)

Revenues and receivables (continued)

Revenues are earned for time spent on a per diem basis, and for charges for rental of equipment supplied by the Company. Revenue is recognized when time is incurred rather than upon billing. Unbilled work-in-progress represents fees for services provided on projects for which billings have not been presented to customers. When billed, these amounts are included in accounts receivable. Reimbursable costs, including subcontractor costs, are included in professional fees revenues and project expenses as incurred. The Company records revenue net of sales tax.

Investments

Equity securities with readily determinable fair values are classified as “available-for-sale” and recorded at estimated fair value, with unrealized gains and losses excluded from earnings and reported in other comprehensive income (loss). The Company has classified all of its investment securities as available-for-sale and recorded a corresponding adjustment, net of applicable deferred income taxes, in members’ equity in the accompanying consolidated balance sheet. See Note 5 for further disclosure regarding fair value.

Impairment losses, other than those considered temporary, result in a permanent reduction of the cost basis of the underlying investment and are reflected as a realized loss. In evaluating potential other-than-temporary impairment (OTTI) of investments, management considers, among other criteria: (1) the Company’s ability and intent to retain the investment for a period of time sufficient to allow for an anticipated recovery in value; (2) the likelihood of the recoverability of cost for equity securities; (3) the length of time and extent to which the fair value has been less than cost for equity securities; and (4) the financial condition, near-term and long-term prospects for the issuer, including the relevant industry conditions and trends, and implications of rating agency actions and offering prices.

Property and equipment

Property and equipment are stated at cost. Depreciation of assets is computed using the straight-line method over the lesser of the estimated useful lives of the respective assets or the lease term, as applicable, which are as follows:

Vehicles and boats	5 years
Office equipment and software	3 - 15 years
Furniture, fixtures and equipment	3 - 7 years
Leasehold improvements	7 - 15 years

Depreciation for capital leases is included in the accumulated depreciation of property and equipment. Maintenance and repairs are charged to expense as incurred, while the cost of additions and improvements which substantially extend the useful life of a particular asset is capitalized. When an item is retired or otherwise disposed of, the cost is removed from the asset account and the related depreciation allowance is adjusted with the difference being charged or credited to income.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies (continued)

Long-lived assets

Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the related carrying amount may not be recoverable. When required, impairment losses on assets to be held and used are recognized based on the excess of the asset's carrying amount and the fair value of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. As of December 31, 2016, the Company has reviewed its assets and determined no impairment was necessary.

Income Taxes

The Company files as a taxable C-Corporation for federal and state income tax purposes. Income tax provisions are based on the asset and liability method, which recognizes deferred income taxes for differences between the tax bases of assets and liabilities and their reported amounts in the consolidated financial statements. Deferred taxes are also recognized for operating losses that are available to offset future taxable income. Valuation allowances are established to reduce deferred tax assets to the amount expected to be realized. Deferred tax assets are reduced by a valuation allowance, if based on the weight of evidence available, it is more-likely-than-not that some portion or all of deferred tax asset will not be realized.

Under accounting guidance related to accounting for uncertainty in income taxes, deferred tax assets are recognized if it is more-likely-than-not, based on the technical merits, that the tax position will be realized or sustained upon termination. The term more-likely-than-not means a likelihood of more than 50 percent; the terms examined and upon examination also include resolution of the related appeals or litigation processes, if any. A tax position that meets the more-likely-than-not recognition threshold is initially and subsequently measured as the largest amount of tax benefit that has a greater than 50 percent likelihood of being realized upon settlement with a taxing authority that has full knowledge of all relevant information.

The determination of whether or not a tax position has met the more-than-likely-than-not recognition threshold considers the facts, circumstances, and information available at the reporting date and is subject to management's judgment.

Use of estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Advertising costs

The Company expenses advertising costs as incurred. Advertising costs for the year ended December 31, 2016 were \$215,082.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies (continued)

Other comprehensive income (loss)

Accounting principles generally require that recognized revenue, expenses, gains and losses be included in net income (loss). Certain changes in assets and liabilities, such as unrealized gains and losses on available-for-sale securities, are reported as a separate component of the equity section in the consolidated balance sheet, net of deferred income taxes.

Accounting pronouncements issued but not yet adopted

The Financial Accounting Standards Board (FASB) has issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, to update its revenue recognition standard to clarify the principles of recognizing revenue and eliminate industry-specific guidance as well as help financial statement users better understand the nature, amount, timing, and uncertainty of revenue that is recognized. This standard will be effective for the Company for December 31, 2019.

In February 2016, the FASB issued ASU 2016-02, *Leases*. This accounting standard requires lessees to recognize assets and liabilities related to lease arrangements longer than 12 months on the balance sheet as well as additional disclosures. The updated guidance is effective for the Company for December 31, 2020.

In January 2016, the FASB issued Accounting Standards Update (ASU) No. 2016-01, *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. The new guidance is intended to improve the recognition and measurement of financial instruments. The ASU requires all changes in fair value of equity securities (except those accounted for under the equity method of accounting) to be recognized in net income. The standard on recognition and measurement will take effect for the Company for December 31, 2019.

The Company is currently assessing the impact of these pronouncements on its financial statements.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

2. Notes Receivable

At December 31, 2016, notes receivable consisted of the following:

Note receivable for an advance to two employees in the total original amount of \$5,868: These notes are collectible from biweekly payroll deductions, at interest rates of 3.25% and 3.50%. \$ 3,250

Note receivable on demand from an officer and member of the Company for cash advances: Interest on the unpaid balance is accrued at the short term blended Adjusted Federal Rate, which was 0.73% at December 31, 2016. 42,746

Note receivable from The Fenstermaker Family Partnership, a related entity whose partners are members of the Company, dated December 31, 2010, in the original amount of \$1,529,722. The note is receivable in 120 monthly payments of \$14,948, including interest at 3.25%, with final payment receivable December 2020. See Note 12. 671,985

Total notes receivable \$ 717,981

Less: current portion (204,597)

Notes receivable, long-term portion \$ 513,384

3. Property and Equipment

At December 31, 2016, property and equipment consisted of the following:

Furniture, fixtures and equipment	\$ 6,584,868
Vehicles and boats	3,380,628
Office equipment and software	986,451
Leasehold improvements	818,254
	<u>11,770,201</u>
Less: accumulated depreciation	<u>(9,736,153)</u>
Property and equipment, net	<u>\$ 2,034,048</u>

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

4. Investments in Securities

The amortized cost, gross unrealized gains and losses, and estimated fair value of investment securities at December 31, 2016 are shown below. All investment securities are considered available-for-sale.

	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
Common stocks	\$ 5,279,358	\$ 2,681,099	\$ (425,222)	\$ 7,535,235
Mutual funds	24,215	2,089	(2)	26,302
Private equity real estate investment trust (REIT)	<u>263,186</u>	<u>13,683</u>	<u>-</u>	<u>276,869</u>
Total investment securities	\$ <u>5,566,759</u>	\$ <u>2,696,871</u>	\$ <u>(425,224)</u>	\$ <u>7,838,406</u>

As of December 31, 2016, the following available-for-sale securities were in an unrealized loss position:

<u>Equity securities</u>	<u>Fair Value</u>	<u>Unrealized Loss</u>
For a period of less than 12 months	\$ 23,308	\$ (8,844)
For a period of 12 months or longer	<u>728,518</u>	<u>(416,380)</u>
Total	\$ <u>751,826</u>	\$ <u>(425,224)</u>

The available-for-sale securities in an unrealized loss position consisted of eight securities in the energy sector and one security in the financial sector. Management has judged that impairment of these securities in 2016 is due to adverse market conditions in the energy sector and the specific performance of the financial security. Based on management's review of market and other conditions, management expects that the fair values of these investments will ultimately exceed the cost basis. Accordingly, no impairment loss has been recognized.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

5. Disclosures about the Fair Value of Financial Instruments

GAAP defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date. Fair value is best determined based upon quoted market prices. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including discount rate and estimates of future cash flows. Accordingly, the fair value estimates may not be realized in an immediate settlement of the instrument.

GAAP also establishes a fair value hierarchy for valuation inputs. The hierarchy prioritizes the inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. These levels are as follows:

- *Level 1* – Valuation is based on quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 assets and liabilities generally include debt and equity securities that are traded in an active exchange market. Valuations are obtained from readily available pricing sources for market transactions involving identical assets or liabilities.
- *Level 2* – Valuation is based on inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly. The valuation may be based on quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability.
- *Level 3* – Valuation is based on unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which determination of fair value requires significant management judgment or estimation.

Categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The following methods and assumptions were used by the Company in estimating its fair value disclosures:

Common stocks – valued at the closing price reported on the active market on which the individual securities are traded.

Mutual funds – valued at the daily closing price as reported by the mutual fund. The mutual fund held by the Company is an open-ended mutual fund that is registered with the SEC. These funds are required to publish their daily net asset value (NAV) and to transact at that price. The mutual fund held by the Company is deemed to be actively traded.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

5. Disclosures about the Fair Value of Financial Instruments (continued)

Real estate investment trust (REIT) – valuation using a market approach corroborated by the filings with the SEC. At December 31, 2016, the REIT valued the investment at the current value of its common stock of \$10.44 per share.

The Company's available-for-sale securities are measured at fair value on a recurring basis, determined as follows at December 31, 2016:

Description	Total	Level 1	Level 2	Level 3
Common stocks	\$ 7,535,235	\$ 7,535,235	\$ -	\$ -
Mutual funds	26,302	26,302	-	-
Private equity REIT	276,869	-	276,869	-
Total	\$ 7,838,406	\$ 7,561,537	\$ 276,869	\$ -

6. Lines of Credit

At December 31, 2016, notes payable and long-term debt consisted of the following:

The Company has available a revolving line of credit with a bank in an amount up to \$5,000,000, due July 31, 2017. Interest on the line of credit is payable monthly at the prime rate published in the Wall Street Journal, 3.50% at December 31, 2016, plus a margin of 0.50%. The Company is liable for a non-use fee of 0.125%, payable quarterly, on the daily average unused portion of the line of credit. The balance on the line of credit at December 31, 2016 was \$2,805,940.

The Company has available an additional revolving line of credit with a bank in an amount up to \$4,000,000, due July 31, 2017. Interest on the line of credit is payable monthly at the prime rate published in the Wall Street Journal, 3.50% at December 31, 2016, plus a margin of 0.50%. The balance on the line of credit at December 31, 2016 was \$600,000.

The Company has a non-revolving equipment line of credit with a bank, in an amount up to \$250,000. Interest on the line of credit is payable monthly at the prime rate published in the Wall Street Journal, 3.50% at December 31, 2016, plus a margin of 0.50%. Principal is due in a single payment on July 31, 2017. The balance on the line of credit at December 31, 2016 was \$30,974.

As part of the current credit facility with the bank, the lines of credit, and the equipment line of credit are secured by the Company's assets, and a guarantee of one of the members. Borrowings under the line of credit are limited to a borrowing base calculation, based on eighty percent of eligible accounts receivables. Also, see Notes 12 and 13 for other loan agreement commitments and restrictions.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

7. Capital Lease and Note Payable

The Company leases certain specialized equipment under leases classified as capital leases. The leased equipment is amortized on a straight line basis over 36 months. The capital lease payable is due January 2020 and secured by equipment with a book value of \$107,249 at December 31, 2016. Depreciation applicable to this asset under capital lease charged to expense was \$1,741 for the year ended December 31, 2016. The following is a schedule showing the future minimum lease payments under capital lease by years as of December 31, 2016.

<u>Year</u>		<u>Payment</u>
2017	\$	33,302
2018		36,330
2019		36,330
2020		3,028
	\$	<u>108,990</u>

During 2016, the Company consolidated certain previously existing debt instruments into one note payable in the amount of \$2,044,951. The note was issued in October 2016 has an annual interest rate of 4.00%, with interest and principal payments due monthly in the amount of \$79,391 through November 2018. A final balloon payment of the remaining principal is due on December 31, 2018. The balance on the note payable at December 31, 2016 is \$1,973,058. The following is a schedule of scheduled payments under the note payable by year as of December 31, 2016:

<u>Year</u>		<u>Payment</u>
2017	\$	892,966
2018		1,080,092
	\$	<u>1,973,058</u>

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

8. Income Taxes

Income tax expense includes amounts currently payable and amounts deferred to or from other years as a result of differences in the timing of recognition of income and expense for financial reporting and federal tax purposes. The components of income tax benefit are as follows:

Current	\$ 282,369
Deferred	<u>1,828,531</u>
Total income tax benefit	<u>\$ 2,110,900</u>

Deferred income taxes are based on timing differences between the bases of assets and liabilities for financial statement purposes and tax reporting purposes. The tax effects of the cumulative temporary differences which create deferred tax assets and liabilities are as follows as of December 31:

Deferred income tax asset, net	
Deferred compensation	\$ 672,770
Investment loss carryforward	439,678
Net operating loss carryforward	1,276,543
Tax credit carryforward	387,872
Depreciation	(395,155)
Unrealized gains on investments	(885,942)
Life insurance	<u>(44,066)</u>
Net deferred income tax asset	<u>\$ 1,451,700</u>

The Company has approximately \$3.3 million of net operating loss carryforwards available at December 31, 2016. These net operating loss carryforwards are generally available to offset future taxable income over 20 years from the year generated and will begin to expire, if unused, in 2036. The Company has other tax credit carryforwards, primarily related to research and development that will begin to expire, if unused, in 2033. The ability to realize the future benefits of net operating loss carryforwards, net investment loss carryforwards, and other tax credit carryforwards is dependent on the Company's ability to generate taxable income during the carryforward period.

9. Profit-Sharing Plan

The Company provides a 401(k) profit-sharing plan that allows eligible employees the option to defer receipt of a portion of their compensation. The Company elects to match employee deferrals yearly. For the year ended December 31, 2016, the Company agreed to match 100% of the first 3% of employee compensation deferred to the plan and 50% of the next 2% of employee compensation deferred to the plan through the first six months and elected to forgo the match for the remaining six months. The Company's liability for the employer's contribution of \$219,907 is required to be paid to the plan trust on or before September 15, 2017.

The Company's profit sharing 401(k) plan expense for the year was \$228,802. The Company also absorbs certain accounting, administration, and investment expenses related to the management of the plan. For the year ended December 31, 2016, the Company paid \$8,709 for these expenses.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

10. Deferred Compensation Plan

The Company provides a supplemental retirement plan for certain key employees. The plan is an unfunded, non-qualified deferred compensation plan that is exempt from the provisions of ERISA. The plan provides additional pre-retirement disability and death benefits. As of January 1, 2015, the plan no longer allows discretionary employee contributions. The compensation and associated interest cost have been accrued as a long term liability.

As of December 31, 2016, the Company's accrued deferred compensation liability was \$1,725,052. Net deferred compensation expense of \$187,878 for 2016 consisted of \$90,036 of deferred compensation expense and \$97,842 of an increase in interest cost on deferred account balances. Distributions from the plan totaled \$330,089 in 2016. For the year ended December 31, 2016, the Company incurred \$3,900 of plan administration fees.

The Company has purchased variable universal insurance contracts on certain participants' lives to fund a majority of the distributions made or to be made under the plan. At December 31, 2016, the cash surrender value of these policies was \$877,627, and the Company's cost basis was \$855,190. If all assumptions regarding mortality, policy dividends and other factors are realized, the Company expects to ultimately realize its investment. For the year ended December 31, 2016, the Company recognized net life insurance expense of \$41,163 for the decrease in the cash surrender value of the policies over the cost of insurance.

11. Operating Leases

The Company leases real property in Louisiana and Texas under terms of long-term, non-cancelable leases expiring through April 2021. It also leases office equipment under operating leases expiring through March 2020.

Rental expense for the year for property and equipment under non-cancellable leases, excluding the related party lease described in Note 12 was \$679,253.

Minimum future rental payments, excluding related property leases for real property discussed in Note 12, under non-cancellable operating leases having terms in excess of one year at December 31, 2016 are:

Years ending December 31		Minimum future rental payments
2017	\$	460,778
2018		323,227
2019		264,050
2020		238,488
Thereafter		76,656
	\$	<u>1,363,199</u>

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

11. Operating Leases (continued)

The Company has subleased a portion of its Houston, Texas office under an operating lease beginning in December 2015 and expiring in November 2018. Rental income for 2016 was \$25,800. Minimum future rental payments to be received from this sublease total \$49,450.

12. Related Party Transactions

In addition to the related party notes receivable described in Note 2, the Company engaged in the following related party transactions:

The Company has purchased whole life insurance policies covering the lives of the members. At December 31, 2016, the cash value of the policies was \$380,880. Insurance expense related to this was \$22,140 during 2016.

The Company leases its Lafayette, Louisiana facilities from The Fenstermaker Family Partnership, a partnership owned by members of the Company. The lease is renewable annually, adjusted for market rates based on square footage. The monthly rent is \$83,508 and \$918,588 is payable in 2017 under the current lease which expires November 30, 2017. In addition to paying monthly rental payments, the Company is required to pay additional occupancy costs. For the year ended December 31, 2016, the Company paid \$1,002,096 for rent, \$26,465 for repairs and maintenance, \$106,830 for insurance, and \$90,229 for property taxes.

The Fenstermaker Family Partnership, has loans with a bank with an outstanding balance of \$4,715,897 at December 31, 2016 and was secure by the partnerships real estate and is guaranteed by the Company. The Company has determined that The Fenstermaker Family Partnership should not be consolidated with the Company.

For the year ended December 31, 2016, the Company recognized \$24,578 of interest income from related party notes receivable described in Note 2.

13. Commitments and Contingencies

The Company's loan agreement with a bank includes various covenants, including prohibitions against mergers, acquisitions, transfers of assets or incurrence of further indebtedness, without the bank's prior written consent. The Company is also required to maintain various financial ratios. As of December 31, 2016, the Company was not in compliance with the covenants and obtained a waiver from the financial institution.

Litigation

In the normal course of business, the Company becomes involved in various claims and legal actions. The Company maintains commercial insurance coverage to mitigate and manage these types of business risks. Management believes the outcomes of these types of matters are adequately insured and will not have a material adverse effect on the Company's financial position.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

13. Commitments and Contingencies (continued)

During 2016, the Company received \$375,000 from claims relating to the 2010 Deepwater Horizon oil spill in the Gulf of Mexico, which is included in other income on the statement of income.

Major customers

For the year ended December 31, 2016, the Company provided services to two clients who each could be considered a major customer that accounted for 10% or more of the Company's gross revenue. The Company expects that the business relationship with these clients will be continued.

As of December 31, 2016, these two clients' accounts receivable were 23% of the Company's total accounts receivable. The Company's top ten clients represented 58% of its revenue in 2016.

Credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk include cash deposits. The Company maintains its cash in bank deposits at a financial institution which, at times, may exceed federally insured limits. The Company has not experienced any losses and does not believe that significant credit risk exists as a result of this practice.

14. Reissued Financial Statements

The 2016 consolidated financial statements have been revised for presentation and disclosures in Notes 6 and 7 to reflect the terms and classification of balances related to notes payable and lines of credit. Related presentation changes have also been reflected in the Company's consolidated balance sheet and consolidated statement of cash flows. Disclosure of amounts distributed from the deferred compensation plan during 2016 has also been added to Note 10. These revisions did not affect net loss or total members' equity as originally presented.

15. Subsequent Events

Management has evaluated subsequent events through the date that the consolidated financial statements were available to be issued, August 14, 2017, and determined that there were no events which required disclosure. No subsequent events occurring after this date have been evaluated for inclusion in these consolidated financial statements.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2017

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2017

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INDEPENDENT ACCOUNTANTS' REVIEW REPORT

To the Members
C. H. Fenstermaker & Associates, LLC

We have reviewed the accompanying consolidated financial statements of C. H. Fenstermaker & Associates, LLC and Subsidiaries (the Company) which comprise the consolidated balance sheet as of December 31, 2017, the related consolidated statements of income and comprehensive income, changes in members' equity, and cash flows for the year then ended, and the related notes to the consolidated financial statements. A review includes primarily applying analytical procedures to management's financial data and making inquiries of company management. A review is substantially less in scope than an audit, the objective of which is the expression of an opinion regarding the consolidated financial statements as a whole. Accordingly, we do not express such an opinion.

Management's Responsibility for the Financial Statements

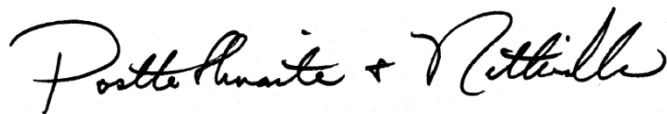
Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the consolidated financial statements that are free from material misstatement whether due to fraud or error.

Accountants' Responsibility

Our responsibility is to conduct the review in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. Those standards require us to perform procedures to obtain limited assurance as a basis for reporting whether we are aware of any material modifications that should be made to the consolidated financial statements for them to be in accordance with generally accepted accounting principles in the United States of America. We believe that the results of our procedures provide a reasonable basis for our conclusion.

Accountants' Conclusion

Based on our review, we are not aware of any material modifications that should be made to the accompanying consolidated financial statements in order for them to be in accordance with accounting principles generally accepted in the United States of America.



Lafayette, Louisiana
July 16, 2018

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEET

DECEMBER 31, 2017

(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

ASSETS

Current assets:

Cash and cash equivalents	\$ 241,534
Investments, available for sale	8,041,546
Accounts receivable, net	6,551,960
Unbilled work-in-progress	1,152,318
Notes receivable, current portion	165,881
Income tax receivable	315,319
Prepaid expenses and other current assets	602,051
Total current assets	<u>17,070,609</u>

Property and equipment, net	<u>1,908,779</u>
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Other assets:

Cash surrender value of insurance policies	1,573,950
Notes receivable, long-term portion	382,411
Deferred tax assets	1,171,361
Deposits and other assets	116,031
Total other assets	<u>3,243,753</u>

Total assets	<u><u>\$ 22,223,141</u></u>
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LIABILITIES AND MEMBERS' EQUITY

Current liabilities:

Lines of credit	\$ 4,923,878
Accounts payable and accrued expenses	2,126,186
Income tax payable	65,302
Capital lease obligation, current portion	132,252
Note payable, current portion	918,315
Total current liabilities	<u>8,165,933</u>

Non-current liabilities:

Capital lease obligation, long-term portion	111,301
Note payable, long-term portion	753,933
Deferred compensation	2,068,220
Total liabilities	<u>11,099,387</u>

Members' equity	<u>11,123,754</u>
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Total liabilities and members' equity	<u><u>\$ 22,223,141</u></u>
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The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF INCOME AND COMPREHENSIVE INCOME

YEAR ENDED DECEMBER 31, 2017

(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

Revenue	\$ 32,910,526
Operating expenses:	
Reimbursable expenses	5,763,662
Direct expenses	9,251,607
Indirect expenses	16,375,681
Depreciation and amortization	957,935
Total operating expenses	32,348,885
Income from operations	561,641
Other income (expense):	
Gain on sale of assets	15,721
Gain on sale of investment securities	90,862
Interest and dividend income	257,358
Interest expense	(332,580)
Other income	208,357
Total other expense, net	239,718
Income before income taxes	801,359
Income tax expense	354,171
Net Income	447,188
<u>Other comprehensive income</u>	
Unrealized net holding losses arising during the period	(128,678)
Reclassification adjustment for realized gains included in net income	90,862
Other comprehensive loss before taxes	(37,816)
Income tax benefit related to other comprehensive loss	20,338
Total other comprehensive loss	(17,478)
Comprehensive Income	\$ 429,710

The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CHANGES IN MEMBERS' EQUITY

YEAR ENDED DECEMBER 31, 2017

(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

	Members'	Other Accumulated Comprehensive Income	Total
	Equity		
Balance, January 1, 2017	\$ 9,313,930	\$ 1,380,114	\$ 10,694,044
Net income	447,188	-	447,188
Reclassification to eliminate disproportionate tax effect	(290,644)	290,644	-
Other comprehensive loss	-	(17,478)	(17,478)
Balance, December 31, 2017	<u>\$ 9,470,474</u>	<u>\$ 1,653,280</u>	<u>\$ 11,123,754</u>

The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

CONSOLIDATED STATEMENT OF CASH FLOWS
YEAR ENDED DECEMBER 31, 2017
(SEE INDEPENDENT ACCOUNTANTS' REVIEW REPORT)

CASH FLOWS FROM OPERATING ACTIVITIES

Net income	\$ 447,188
Adjustments to reconcile net income to net cash used in operating activities	
Depreciation and amortization	957,935
Deferred income taxes	295,087
Gain on sale of assets	(15,721)
Gain on sale of securities	(90,862)
Changes in operating assets and liabilities:	
Accounts receivable and unbilled work-in-progress	(2,206,678)
Prepaid expenses and other assets	(367,048)
Accounts payable and accrued expenses	(164,857)
Income tax payable	32,348
Deferred compensation	343,168
Net cash used in operating activities	<u>(769,440)</u>

CASH FLOWS FROM INVESTING ACTIVITIES

Purchases of property, plant, and equipment	(650,514)
Proceeds from sale of equipment	25,414
Proceeds from sales of available for sale investments	866,262
Purchase of available for sale investments	(1,016,356)
Repayment of notes receivable	169,689
Net cash used in investing activities	<u>(605,505)</u>

CASH FLOWS FROM FINANCING ACTIVITIES

Net draws on lines of credit	1,736,963
Issuance of notes payable	263,409
Payments on notes payable and capital leases	(871,500)
Net cash provided by financing activities	<u>1,128,872</u>

Net change in cash and cash equivalents (246,073)

Cash and cash equivalents at beginning of year	487,607
Cash and cash equivalents at end of year	<u>\$ 241,534</u>

SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION

Cash paid for interest	<u>\$ 332,580</u>
Cash paid for income taxes	<u>\$ 30,143</u>
Purchase of property and equipment through capital lease	<u>\$ 191,845</u>

The accompanying notes are an integral part of this consolidated financial statement.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

Description of Business

C.H. Fenstermaker & Associates, LLC, provides survey and mapping, environmental, advanced technology and engineering services for federal, state and local governments, the oil and gas industry and private enterprise. Offices are maintained in Louisiana and Texas and services are provided throughout the United States.

The Company has two subsidiaries, Fenstermaker Services, LLC and TotaLand Technologies, LLC. Fenstermaker Services, LLC provides engineering and surveying services. TotaLand Technologies, LLC, provides computer based land services for oil and gas exploration businesses. TotaLand Technologies, LLC generates less than 2% of the Company's revenues.

Basis of presentation

The accompanying consolidated financial statements have been prepared on the accrual basis of accounting in accordance with accounting principles generally accepted in the United States of America (GAAP).

Basis of consolidation

The accompanying consolidated financial statements include the accounts of C.H. Fenstermaker & Associates, LLC and its wholly-owned subsidiaries (collectively, the Company). All intercompany balances and transactions have been eliminated in consolidation. The Company has chosen to adopt the provisions in Accounting Standards Update (ASU) No. 2014-07, *Consolidation (Topic 810)*, that allows the Company to elect an alternative not to apply the generally accepted accounting principles guidance on variable interest entities (VIE), which would require consolidation for related party lessor/lessee arrangements, such as the one disclosed in Note 12.

Cash and cash equivalents

The Company considers all highly liquid debt instruments purchased with a maturity of three months or less to be classified as cash and cash equivalents.

Revenues and receivables

Trade receivables and loans receivable are carried at their estimated collectible amounts. Notes receivable are placed on non-accrual status when they become ninety days past due. Interest income on loans receivable is recognized using the interest method. Interest income on impaired loans is recognized as cash is collected. Trade credit is generally extended on a short-term basis, although a finance charge may be applied to receivables that are past due.

Trade receivables are periodically evaluated for collectability based on past credit history with customers and their current financial condition. Trade receivables are charged against an allowance account when such receivables are deemed to be uncollectible. At December 31, 2017, the allowance for doubtful accounts was \$352,000.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies (continued)

Revenues and receivables (continued)

Revenues are earned for time spent on a per diem basis, and for charges for rental of equipment supplied by the Company. Revenue is recognized when time is incurred rather than upon billing. Unbilled work-in-progress represents fees for services provided on projects for which billings have not been presented to customers. When billed, these amounts are included in accounts receivable. Reimbursable costs, including subcontractor costs, are included in professional fees revenues and project expenses as incurred. The Company records revenue net of sales tax.

Investments

Equity securities with readily determinable fair values are classified as “available-for-sale” and recorded at estimated fair value, with unrealized gains and losses excluded from earnings and reported in other comprehensive income (loss). The Company has classified all of its investment securities as available-for-sale and recorded a corresponding adjustment, net of applicable deferred income taxes, in members’ equity in the accompanying consolidated balance sheet. See Note 5 for further disclosure regarding fair value.

Impairment losses, other than those considered temporary, result in a permanent reduction of the cost basis of the underlying investment and are reflected as a realized loss. In evaluating potential other-than-temporary impairment (OTTI) of investments, management considers, among other criteria: (1) the Company’s ability and intent to retain the investment for a period of time sufficient to allow for an anticipated recovery in value; (2) the likelihood of the recoverability of cost for equity securities; (3) the length of time and extent to which the fair value has been less than cost for equity securities; and (4) the financial condition, near-term and long-term prospects for the issuer, including the relevant industry conditions and trends, and implications of rating agency actions and offering prices.

Property and equipment

Property and equipment are stated at cost. Depreciation of assets is computed using the straight-line method over the lesser of the estimated useful lives of the respective assets or the lease term, as applicable, which are as follows:

Vehicles and boats	5 years
Office equipment and software	3 - 15 years
Furniture, fixtures and equipment	3 - 7 years
Leasehold improvements	7 - 15 years

Depreciation for capital leases is included in the accumulated depreciation of property and equipment. Maintenance and repairs are charged to expense as incurred, while the cost of additions and improvements which substantially extend the useful life of a particular asset is capitalized. When an item is retired or otherwise disposed of, the cost is removed from the asset account and the related depreciation allowance is adjusted with the difference being charged or credited to income.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies (continued)

Long-lived assets

Long-lived assets to be held and used are reviewed for impairment whenever events or changes in circumstances indicate that the related carrying amount may not be recoverable. When required, impairment losses on assets to be held and used are recognized based on the excess of the asset's carrying amount and the fair value of the asset. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less cost to sell. As of December 31, 2017, the Company has reviewed its assets and determined no impairment was necessary.

Income Taxes

The Company files as a taxable C-Corporation for federal and state income tax purposes. Income tax provisions are based on the asset and liability method, which recognizes deferred income taxes for differences between the tax bases of assets and liabilities and their reported amounts in the consolidated financial statements. Deferred taxes are also recognized for operating losses that are available to offset future taxable income. Valuation allowances are established to reduce deferred tax assets to the amount expected to be realized. Deferred tax assets are reduced by a valuation allowance, if based on the weight of evidence available, it is more-likely-than-not that some portion or all of deferred tax asset will not be realized.

Under accounting guidance related to accounting for uncertainty in income taxes, deferred tax assets are recognized if it is more-likely-than-not, based on the technical merits, that the tax position will be realized or sustained upon termination. The term more-likely-than-not means a likelihood of more than 50 percent; the terms examined and upon examination also include resolution of the related appeals or litigation processes, if any. A tax position that meets the more-likely-than-not recognition threshold is initially and subsequently measured as the largest amount of tax benefit that has a greater than 50 percent likelihood of being realized upon settlement with a taxing authority that has full knowledge of all relevant information.

The determination of whether or not a tax position has met the more-likely-than-not recognition threshold considers the facts, circumstances, and information available at the reporting date and is subject to management's judgment.

Use of estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Advertising costs

The Company expenses advertising costs as incurred. Advertising costs for the year ended December 31, 2017 were \$205,228.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies (continued)

Other comprehensive income (loss)

Accounting principles generally require that recognized revenue, expenses, gains and losses be included in net income (loss). Certain changes in assets and liabilities, such as unrealized gains and losses on available-for-sale securities, are reported as a separate component of the equity section in the consolidated balance sheet, net of deferred income taxes.

Accounting pronouncements issued but not yet adopted

The Financial Accounting Standards Board (FASB) has issued Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, to update its revenue recognition standard to clarify the principles of recognizing revenue and eliminate industry-specific guidance as well as help financial statement users better understand the nature, amount, timing, and uncertainty of revenue that is recognized. This standard will be effective for the Company for December 31, 2019.

In January 2016, the FASB issued Accounting Standards Update (ASU) No. 2016-01, *Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*. The new guidance is intended to improve the recognition and measurement of financial instruments. The ASU requires all changes in fair value of equity securities (except those accounted for under the equity method of accounting) to be recognized in net income. The standard on recognition and measurement will take effect for the Company for December 31, 2019.

In February 2016, the FASB issued ASU 2016-02, *Leases*. This accounting standard requires lessees to recognize assets and liabilities related to lease arrangements longer than 12 months on the balance sheet as well as additional disclosures. The updated guidance is effective for the Company for December 31, 2020.

The Company is currently assessing the impact of these pronouncements on its consolidated financial statements.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

2. Notes Receivable

At December 31, 2017, notes receivable consisted of the following:

Note receivable for an advance to one employee in the total original amount of \$698: These notes are collectible from biweekly payroll deductions.	\$	698
Note receivable on demand from an officer and member of the Company for cash advances.		35,516
Note receivable from The Fenstermaker Family Partnership, a related entity whose partners are members of the Company, dated December 31, 2010, in the original amount of \$1,529,722. The note is receivable in 120 monthly payments of \$14,948, including interest at 3.25%, with final payment receivable December 2020. See Note 12.		512,078
Total notes receivable	\$	548,292
Less: current portion		(165,881)
Notes receivable, long-term portion	\$	<u>382,411</u>

3. Property and Equipment

At December 31, 2017, property and equipment consisted of the following:

Furniture, fixtures and equipment	\$	4,886,399
Vehicles and boats		3,612,190
Office equipment and software		2,451,487
Leasehold improvements		828,254
		<u>11,778,330</u>
Less: accumulated depreciation		(9,869,551)
Property and equipment, net	\$	<u>1,908,779</u>

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

4. Investments in Securities

The amortized cost, gross unrealized gains and losses, and estimated fair value of investment securities at December 31, 2017 are shown below. All investment securities are considered available-for-sale.

	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
Common stocks	\$ 5,522,597	\$ 2,688,657	\$ (467,965)	\$ 7,743,289
Mutual funds	24,750	7,252	(3)	31,999
Private equity real estate investment trust (REIT)	<u>260,368</u>	<u>5,892</u>	<u>(2)</u>	<u>266,258</u>
Total investment securities	<u>\$ 5,807,715</u>	<u>\$ 2,701,801</u>	<u>\$ (467,970)</u>	<u>\$ 8,041,546</u>

As of December 31, 2017, the following available-for-sale securities were in an unrealized loss position:

<u>Equity securities</u>	<u>Fair Value</u>	<u>Unrealized Loss</u>
For a period of less than 12 months	\$ 435,545	\$ (3,303)
For a period of 12 months or longer	<u>574,286</u>	<u>(464,667)</u>
Total	<u>\$ 1,009,831</u>	<u>\$ (467,970)</u>

The available-for-sale securities in an unrealized loss position consisted of five securities in the energy sector and three securities in the financial sector. Management has judged that impairment of these securities in 2017 is due to adverse market conditions in the energy sector and the specific performance of the financial security. Based on management's review of market and other conditions, management expects that the fair values of these investments will ultimately exceed the cost basis. Accordingly, no impairment loss has been recognized.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

5. Disclosures about the Fair Value of Financial Instruments

GAAP defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction (that is, not a forced liquidation or distressed sale) between market participants at the measurement date. Fair value is best determined based upon quoted market prices. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including discount rate and estimates of future cash flows. Accordingly, the fair value estimates may not be realized in an immediate settlement of the instrument.

GAAP also establishes a fair value hierarchy for valuation inputs. The hierarchy prioritizes the inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. These levels are as follows:

- *Level 1* – Valuation is based on quoted prices in active markets for identical assets or liabilities that the reporting entity has the ability to access at the measurement date. Level 1 assets and liabilities generally include debt and equity securities that are traded in an active exchange market. Valuations are obtained from readily available pricing sources for market transactions involving identical assets or liabilities.
- *Level 2* – Valuation is based on inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly. The valuation may be based on quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the asset or liability.
- *Level 3* – Valuation is based on unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. Level 3 assets and liabilities include financial instruments whose value is determined using pricing models, discounted cash flow methodologies, or similar techniques, as well as instruments for which determination of fair value requires significant management judgment or estimation.

Categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The following methods and assumptions were used by the Company in estimating its fair value disclosures:

Common stocks – valued at the closing price reported on the active market on which the individual securities are traded.

Mutual funds – valued at the daily closing price as reported by the mutual fund. The mutual fund held by the Company is an open-ended mutual fund that is registered with the SEC. These funds are required to publish their daily net asset value (NAV) and to transact at that price. The mutual fund held by the Company is deemed to be actively traded.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

5. Disclosures about the Fair Value of Financial Instruments (continued)

Real estate investment trust (REIT) – valuation using a market approach corroborated by the filings with the SEC. At December 31, 2017, the REIT valued the investment at the current value of its common stock of \$10.04 per share.

The Company's available-for-sale securities are measured at fair value on a recurring basis, determined as follows at December 31, 2017:

Description	Total	Level 1	Level 2	Level 3
Common stocks	\$ 7,743,289	\$ 7,743,289	\$ -	\$ -
Mutual funds	31,999	31,999	-	-
Private equity REIT	266,258	-	266,258	-
Total	\$ 8,041,546	\$ 7,775,288	\$ 266,258	\$ -

6. Lines of Credit

At December 31, 2017, notes payable and long-term debt consisted of the following:

The Company has available a revolving line of credit with a bank in an amount up to \$5,000,000, due July 31, 2018. Interest on the line of credit is payable monthly at the prime rate published in the Wall Street Journal, 3.50% at December 31, 2017, plus a margin of 0.50%. The Company is liable for a non-use fee of 0.125%, payable quarterly, on the daily average unused portion of the line of credit. The balance on the line of credit at December 31, 2017 was \$2,776,937.

The Company has available an additional revolving line of credit with a bank in an amount up to \$4,000,000, due July 31, 2018. Interest on the line of credit is payable monthly at the prime rate published in the Wall Street Journal, 3.50% at December 31, 2017, plus a margin of 0.50%. The balance on the line of credit at December 31, 2017 was \$2,000,000.

The Company has a non-revolving equipment line of credit with a bank, in an amount up to \$250,000. Interest on the line of credit is payable monthly at the prime rate published in the Wall Street Journal, 3.50% at December 31, 2017, plus a margin of 0.50%. Principal is due in a single payment on July 31, 2018. The balance on the line of credit at December 31, 2017 was \$146,941.

As part of the current credit facility with the bank, the lines of credit, and the equipment line of credit are secured by the Company's assets, and a guarantee of one of the members. Borrowings under the line of credit are limited to a borrowing base calculation, based on eighty percent of eligible accounts receivables. Also, see Notes 12 and 13 for other loan agreement commitments and restrictions.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

7. Capital Leases and Notes Payable

The Company leases certain specialized equipment under leases classified as capital leases. The leased equipment is amortized on a straight line basis over 24 to 36 months. The capital lease payables are due August 2019 and January 2020 and secured by equipment with a book value of \$259,398 at December 31, 2017. Depreciation applicable to these assets under capital leases charged to expense was \$33,250 for the year ended December 31, 2017. The following is a schedule showing the future minimum lease payments under capital lease by year as of December 31, 2017.

<u>Year</u>		<u>Payment</u>
2018	\$	132,252
2019		108,272
2020		3,029
	\$	<u>243,553</u>

During 2017, the Company consolidated certain previously existing debt instruments into one note payable in the amount of \$1,559,644. The note was issued in September 2017 has an annual interest rate of 4.75%, with interest and principal payments due monthly in the amount of \$68,290 through August 2019. A final balloon payment of the remaining principal is due on September 30, 2019. The balance on the note payable at December 31, 2017 is \$1,435,579. The following is a schedule of scheduled payments under the note payable by year as of December 31, 2017:

<u>Year</u>		<u>Payment</u>
2018	\$	833,507
2019		602,072
	\$	<u>1,435,579</u>

During 2017, the Company entered into various notes payable with a finance entity, bearing interest at 5.34%, payable in 36 monthly installments of principal and interest through August 29, 2020, secured by vehicles. The balance on the note payable at December 31, 2017 is \$236,669. The following is a schedule of scheduled payments under the note payable by year as of December 31, 2017:

<u>Year</u>		<u>Payment</u>
2018	\$	84,808
2019		89,472
2020		62,389
	\$	<u>236,669</u>

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

8. Income Taxes

Income tax expense includes amounts currently payable and amounts deferred to or from other years as a result of differences in the timing of recognition of income and expense for financial reporting and federal tax purposes. The components of income tax expense are as follows:

Current	\$	61,654
Deferred		<u>292,517</u>
Total income tax expense	\$	<u>354,171</u>

Federal income tax expense differs from the amount computed by applying the statutory federal income tax rate of 34% to earnings for the following reasons:

Income before income taxes	\$	<u>801,359</u>	100%
Federal and state income taxes:			
Federal computed at statutory rate	\$	272,462	34.0%
State computed at statutory rate		40,068	5.0%
Non-deductible expenses		41,184	5.1%
R&D and other tax credits		(191,451)	-23.9%
Other		(83,203)	-10.4%
Effect of federal tax rate change		<u>275,111</u>	34.3%
	\$	<u>354,171</u>	44.2%

Deferred income taxes are based on timing differences between the bases of assets and liabilities for financial statement purposes and tax reporting purposes. The tax effects of the cumulative temporary differences which create deferred tax assets and liabilities are as follows as of December 31, 2017:

Deferred tax assets:

Deferred compensation	\$	537,737
Investment loss carryforward		269,565
Net operating loss carryforward		545,161
Tax credit carryforwards and other		<u>692,137</u>
		<u>2,044,600</u>

Deferred tax liabilities:

Depreciation		240,896
Unrealized gains on investments		580,550
Life insurance		<u>51,793</u>
		<u>873,239</u>

Net deferred income tax asset	\$	<u>1,171,361</u>
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C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

8. Income Taxes (continued)

The Company has approximately \$2.0 million of federal net operating loss carryforwards available at December 31, 2017. These net operating loss carryforwards are generally available to offset future taxable income over 20 years from the year generated and will begin to expire, if unused, in 2036. The Company has other tax credit carryforwards, primarily related to research and development that will begin to expire, if unused, in 2033. The ability to realize the future benefits of net operating loss carryforwards, net investment loss carryforwards, and other tax credit carryforwards is dependent on the Company's ability to generate taxable income during the carryforward period.

As a result of the enactment in 2017 of the Tax Cuts and Jobs Act ("Act"), deferred tax assets and liabilities have been measured as of December 31, 2017 using the 21% corporate rate set forth in the Act. In accordance with current accounting guidance, the impact of the remeasurement of the deferred tax effects of items reported in accumulated other comprehensive income ("AOCI") is recorded through income tax expense not through other comprehensive income ("OCI"). This creates a disproportionate tax effect in AOCI as the recorded deferred tax assets or liabilities related to an item reported in AOCI no longer equals the tax effect included in AOCI for that item. Accordingly, in February of 2018, the FASB issued a narrow-scope amendment to the FASB Codification that eliminates the disproportionate tax effect by requiring such effect to be reclassified from AOCI to retained earnings in financial statements that have not yet been issued. The amount of the reclassification is the difference between the amount initially charged or credited directly to OCI at the previously enacted federal corporate rate and the amount that would have been charged or credited using the newly enacted 21% rate. Accordingly, the Company has chosen to reflect the reclassification in the amount of approximately \$291,000 in the accompanying consolidated statement of stockholder's equity.

9. Profit-Sharing Plan

The Company provides a 401(k) profit-sharing plan that allows eligible employees the option to defer receipt of a portion of their compensation. The Company elects to match employee deferrals yearly. For the year ended December 31, 2017, the Company elected to forgo the match in 2017.

The Company had no profit sharing 401(k) plan expense for the year. The Company also absorbs certain accounting, administration, and investment expenses related to the management of the plan. For the year ended December 31, 2017, the Company paid \$7,656 for these expenses.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

10. Deferred Compensation Plan

The Company provides a supplemental retirement plan for certain key employees. The plan is an unfunded, non-qualified deferred compensation plan that is exempt from the provisions of ERISA. The plan provides additional pre-retirement disability and death benefits. As of January 1, 2015, the plan no longer allows discretionary employee contributions. The compensation and associated interest cost have been accrued as a long term liability.

As of December 31, 2017, the Company's accrued deferred compensation liability was \$2,068,220. Net deferred compensation expense of \$406,183 for 2017 consisted of \$83,782 of deferred compensation expense and \$322,401 of an increase in interest cost on deferred account balances. Distributions from the plan totaled \$63,015 in 2017. For the year ended December 31, 2017, the Company incurred \$4,750 of plan administration fees.

The Company has purchased variable universal insurance contracts on certain participants' lives to fund a majority of the distributions made or to be made under the plan. At December 31, 2017, the cash surrender value of these policies was \$1,096,492, and the Company's cost basis was \$897,706. If all assumptions regarding mortality, policy dividends and other factors are realized, the Company expects to ultimately realize its investment. For the year ended December 31, 2017, the Company recognized net life insurance expense of \$3,520 for the decrease in the cash surrender value of the policies over the cost of insurance.

11. Operating Leases

The Company leases real property in Louisiana and Texas under terms of long-term, non-cancelable leases expiring through April 2021. It also leases office equipment under operating leases expiring through August 2022.

Rental expense for the year for property and equipment under non-cancellable leases, excluding the related party lease described in Note 12 was \$817,404.

Minimum future rental payments, excluding related property leases for real property discussed in Note 12, under non-cancellable operating leases having terms in excess of one year at December 31, 2017 are:

Years ending December 31	Minimum future rental payments
2018	\$ 518,106
2019	387,871
2020	359,088
2021	203,578
Thereafter	88,870
	<u>\$ 1,557,513</u>

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

11. Operating Leases (continued)

The Company has subleased a portion of its Houston, Texas office under an operating lease beginning in December 2015 and expiring in November 2018. Rental income for 2017 was \$29,344. Minimum future rental payments to be received from this sublease total \$25,850.

12. Related Party Transactions

In addition to the related party notes receivable described in Note 2, the Company engaged in the following related party transactions:

The Company has purchased whole life insurance policies covering the lives of the members. At December 31, 2017, the cash value of the policies was \$477,458. Insurance expense related to this was \$18,050 during 2017.

The Company leases its Lafayette, Louisiana facilities from The Fenstermaker Family Partnership, a partnership owned by members of the Company. The lease is renewable annually, adjusted for market rates based on square footage. The monthly rent is \$83,508 and \$918,588 is payable in 2018 under the current lease which expires November 30, 2018. In addition to paying monthly rental payments, the Company is required to pay additional occupancy costs. For the year ended December 31, 2017, the Company paid \$1,002,096 for rent, \$46,752 for repairs and maintenance, \$101,906 for insurance, and \$133,100 for property taxes.

The Fenstermaker Family Partnership, has loans with a bank with an outstanding balance of \$4,328,289. at December 31, 2017 and was secure by the partnerships real estate and is guaranteed by the Company. The Company has determined that The Fenstermaker Family Partnership should not be consolidated with the Company.

For the year ended December 31, 2017, the Company recognized \$19,471 of interest income from related party notes receivable described in Note 2.

13. Commitments and Contingencies

The Company's loan agreement with a bank includes various covenants, including prohibitions against mergers, acquisitions, transfers of assets or incurrence of further indebtedness, without the bank's prior written consent. The Company is also required to maintain various financial ratios.

Litigation

In the normal course of business, the Company becomes involved in various claims and legal actions. The Company maintains commercial insurance coverage to mitigate and manage these types of business risks. Management believes the outcomes of these types of matters are adequately insured and will not have a material adverse effect on the Company's financial position.

C. H. FENSTERMAKER & ASSOCIATES, LLC AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

13. Commitments and Contingencies (continued)

Major customers

For the year ended December 31, 2017, the Company provided services to one client who could be considered a major customer that accounted for 10% or more of the Company's gross revenue. The Company expects that the business relationship with these clients will be continued.

As of December 31, 2017, this clients' accounts receivable was 12% of the Company's total accounts receivable. The Company's top ten clients represented 58% of its revenue in 2017.

Credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk include cash deposits. The Company maintains its cash in bank deposits at a financial institution which, at times, may exceed federally insured limits. The Company has not experienced any losses and does not believe that significant credit risk exists as a result of this practice.

14. Subsequent Events

Management has evaluated subsequent events through the date that the consolidated financial statements were available to be issued, July 16, 2018, and determined that there were no events which required disclosure. No subsequent events occurring after this date have been evaluated for inclusion in these consolidated financial statements.

2.h. Describe the firm's current classifications; such as Disadvantaged Business Enterprise (DBE) or others.

Joining the Fenstermaker Team is the respected firm of APS Engineering and Testing, LLC, who is a certified Small Business and Disadvantaged Business Enterprise (DBE - minority owned).

3.a. Describe their knowledge and experience in the particular types of projects described in Part One and throughout.

1. Consultation with the Owner and Grants Consultant to define and clarify the requirements for the project, review of available data and reports provided by the Owner and advise the Owner of any additional data or services required to complete the Project.

The Fenstermaker Team includes professional engineers, project managers and ecologists that have performed many dozens of coastal protection and restoration projects for the State of Louisiana (CPRA, LADNR, LDWF), National Oceanic Atmospheric Association (NOAA), and many parishes, local governments and private clients. Our staff have performed Swamp Restoration projects, Marsh Creation projects, Hydrologic Restoration projects, Shoreline Protection projects, Habitat Restoration projects and Flood Control projects throughout the state. We have been heavily involved in all phases, from concept development, data collection, engineering & design and construction administration. We understand all the many steps required to take a project concept and turn it into a reality.

We will meet with the Livingston Parish Government representatives to quantify project goals and constraints. We will seek out and review any available data, including topographic and bathymetric survey data, cultural resource investigations, geotechnical data, water salinity and inundation levels, wind and wave data, habitat evaluations and existing infrastructure. We will apply our intimate knowledge of the design, permitting and construction processes to tailor Livingston Parish's ideas into a viable, permittable, and constructible project that meets available funding constraints and maximizes value to the Parish. We will inform the Parish of the nature of any additional data collection activities that must be performed, which may include vegetation surveys, topographic and bathymetric surveys, water velocities, geotechnical sampling, or biological surveys. We will inform the Parish of the nature of any additional engineering services that must be performed, which may include borrow area hydrodynamic modeling, flood modeling, geotechnical analysis, design, bid document preparation and construction administration.

2. Provide a narrative statement of the scope of work for the Project including all services to be provided by the engineer and its sub-consultants, an initial stage estimate of the anticipated costs for services to be provided and initial stage estimate of the anticipated costs for construction of the Project and an initial stage implementation schedule.

As part of the grant application process, a detailed narrative statement of the scope of services, including scope activities, implementation schedule and a detailed budget breakdown is required. The Fenstermaker team has done this for multiple clients for many different types of projects. Our environmental, survey and geotechnical experts will provide highly accurate narratives, including budget and schedule, for all data collection activities. Our engineers will provide a detailed description of the required engineering, modeling, design and permitting activities, schedule and budget and a construction narrative that includes a detailed budget analysis and schedule.

3. Provide basic engineering services including topographic surveying, hydrographic surveying, environmental permitting, engineering design, geotechnical engineering, best available science reporting and bidding services.

Geotechnical Engineering:

For a Coastal Wetlands Restoration project, the critical path almost always runs through the geotechnical sampling, analysis, and engineering process. For this reason, Fenstermaker's first priority will be to develop enough understanding of Livingston Parish's goals to develop a detailed geotechnical plan. Existing geotechnical information will be reviewed and incorporated into the geotechnical plan if appropriate. The geotechnical plan will include sampling and analysis of borrow area material and receiving area material. As soon as possible, our team will apply for a geotechnical sampling permit with the US Army Corps of Engineers. Upon receipt of the permit, we will mobilize a crew to collect geotechnical samples, and perform a series of laboratory tests that will allow our geotechnical engineers to calculate settlement profiles and slope stability of any project feature. The Fenstermaker Team has performed geotechnical engineering and analysis for dozens of coastal projects. We possess all of our own equipment to collect samples in shallow water, marsh and swamp settings. We have experience and relationships with firms that collect deep water samples. The Fenstermaker Team has performed the testing specifically required for marsh creation projects, such as self-weight consolidation, large scale sediment column testing, and Primary consolidation, Secondary compression and Desiccation of Dredge Fill (PSDDF) analyses that are needed to generate accurate settlement curves. Our in-house geotechnical engineers have decades of experience in the design of restoration projects and use the most efficient and advanced techniques on the market today.

Dan Aucutt, M.S., P.E. will lead the geotechnical services for this project. Mr. Aucutt has over 40 years of geotechnical engineering experience and most recently served as the geotechnical engineer for the Queen Bess Island Restoration project. Mr. Aucutt will be responsible for the development of settlement curves that will help the coastal engineers to determine construction elevations.

Sergio Aviles, P.E. will lead the field sample collection and laboratory analysis services for this project. Mr. Aviles has 18 years of geotechnical sampling and engineering experience and most recently served in this capacity for the Queen Bess Island Restoration project and the Freshwater Bayou Marsh Creation project. Mr. Aviles will be responsible for analysis of all laboratory data, slope stability analysis of containment features and borrow pit areas, and will assist in the development of settlement curves.

Surveying Services:

During the geotechnical process, our experienced survey crews will perform topographic, hydrographic and hazard surveys in and around the borrow area, fill area, dredge pipe corridor and access corridors. If necessary, a certified archaeologist will accompany the survey field crews to document the presence or absence of any cultural resource. Fenstermaker's coastal zone survey capabilities are the best in the state. With 15 professionally licensed surveyors and approximately 39 field survey crews, Livingston Parish can be assured that all survey services will be performed rapidly and accurately.

Ricardo Johnson, PLS will lead survey services for this project. Mr. Johnson has 40 years of experience surveying in Louisiana's coastal region and has led the survey efforts for dozens of coastal projects, most recently, he led these efforts for the Queen Bess Island Restoration project and the Island Road Marsh Creation project.

Christian Morales will lead the field crew that collects the design survey data and will serve as the CAD technician to develop the survey maps. By serving in both roles, Mr. Morales will ensure that the quality of data collection efforts and the efficiency of data processing efforts is maximized. Christian has served as Party Chief under Ricardo Johnson for many projects.

For the design survey, Fenstermaker will perform topographic and single-beam bathymetric surveys along the fill area, borrow area, shoreline and any proposed access corridors to determine the existing grades. Single-beam bathymetric surveys will be performed from a 26-foot marine vessel using a dual frequency echo sounder. Topographic surveys will also be performed using highly accurate RTK from an airboat or by foot. Overlaps will be performed using RTK along the cross transects collected with echo sounder for a minimum of 50 ft overlap to ensure consistency with the datasets and to avoid data gaps.

Environmental Services:

Fenstermaker's team of environmental professionals will guide the permitting process and will ensure that the best available science is incorporated into the design of the Amite River Watershed and Coastal Restoration Project.

Upon establishment of the project goals, Fenstermaker's environmental and engineering staff will conduct a literature review to seek out and learn from similar projects, and to establish ideal conditions for target species of flora and/or fauna. Our environmental staff and design team will use this information to develop a suite of project feature options that meet the project goals. Each option will be compared based upon ability to meet the project goals, ease of construction, cost and long-term performance expectations. We will generate a report, called the Conceptual Design Alternatives Analysis, and a presentation which will explain the results of our findings and present the project options to Livingston Parish and appropriate stakeholders. As we did with the Queen Bess Island Restoration project, we will allow the client (Livingston Parish) and their appointed stakeholders to choose which project options best meet their needs. This process will be documented as part of a Restoration Plan, which will be used during the permitting process and the construction funding request process.

Throughout the design process, Fenstermaker's environmental professionals will coordinate with the design team to develop a design that meets the project goals and to ensure that environmental permitting factors are accounted for. If necessary, our Team will perform a Biological Assessment for the project to be used by regulatory agencies. Our environmental professionals will facilitate a pre-permit application meeting between our design team, appropriate regulatory agencies and Livingston Parish to ensure that there are no surprises during the permitting process.

Dr. John Foret will lead the environmental consulting services for this project. Dr. Foret has 22 years of experience in coastal ecology, project management and environmental permitting. Most of his career was spent as a CWPPRA Program Manager for the National Marine Fisheries Service division of NOAA. He has successfully managed two dozen CWPPRA and NRDA funded projects.

Garvin Pittman, PMP will assist with the environmental consulting services for this project. Mr. Pittman has 27 years of engineering, environmental and project management experience. He has managed the world's largest coastal monitoring program (the Coastwide Reference Monitoring Systems program) and has managed dozens of CWPPRA and NRDA projects on behalf of the State of Louisiana.

Engineering and Design:

Fenstermaker's Team of experienced coastal and civil engineers will guide all aspects of the project, including geotechnical engineering and survey data collection. They will be heavily involved in the literature review and production of the Conceptual Design Alternatives Analysis.

As soon as a design concept is chosen, the design team will work with the geotechnical engineers and survey team to ensure that all necessary information has been collected and analyzed, then will generate 30% design documents. These documents will include a set of 30% design plans that show each project feature, including:

- borrow area dimensions and allowable cut depth
- fill area dimensions and construction elevations
- containment dimensions and construction elevations
- vegetation planting expectations
- any other feature required to meet the project goals.

Also included in the 30% design documents will be 30% design report that explains each project feature, how it was developed and an estimation of cost. It will include basic survey information and the results of the geotechnical engineering efforts.

This information will be presented to Livingston Parish and appropriate stakeholders for review and comment. Any minor adjustments to the 30% design will be incorporated and returned to Livingston Parish for review and approval.

Upon approval of the 30% design documents, the Fenstermaker Hydrodynamic Modeler will perform a detailed study of potential effects of the borrow area dredging. Increasing the depths in or near open water could increase the height of nearshore waves thereby increasing erosive forces on adjacent shorelines. Developing an understanding of changes in wave patterns will be necessary to determine what, if any, mitigating factors (e.g., shoreline protection) will be required to prevent increased shoreline erosion. In addition, knowledge of the wave climate will provide insight into the need for shoreline protection along areas of fill placement. Also, increasing the depth at the river mouth has the potential to improve conveyance in the Amite River which can be evaluated using hydrodynamic models. Improved conveyance will propagate upstream during large storm events such as occurred during August 2016.

To evaluate nearshore waves, a DELFT 3D or DELFT Flexible Mesh (FM) hydrodynamic model will be developed. These models can easily be coupled with D-Waves, a model extension that simulates the evolution of short-crested, wind generated waves based on the algorithms of the model Simulating Waves Nearshore (SWAN). The DELFT 3D or FM allows analysis of flow in two-dimensions which can be used to determine changes in flow and velocity patterns that could contribute to erosion, sedimentation, or negative impacts to water quality in the Amite River. Tidal boundary conditions will be established based on predicted tides or surge conditions during tropical storms and hurricanes. A coupled D-Wave model (i.e., SWAN) will be used to evaluate the potential impacts that deeper waters may have on wave generation on adjacent shorelines compared to existing conditions.

In addition, or in-lieu of the DELFT 3D or FM models, the Fenstermaker Hydrodynamic Modeler will utilize the use of the 2-Dimensional HEC-RAS model prepared for Louisiana DOTD following the August 2016 flood. This relatively high resolution integrated 1D / 2D model, to be obtained from LA DOTD, can be used to determine local changes in flow patterns that will propagate to the Amite River upstream thereby decreasing flood depths.

These details will be presented to Livingston Parish to prove that there are no adverse effects associated with the proposed dredging activities in Amite River as well as to assess the potential benefits to drainage.

Upon approval of the 30% design and borrow area hydrodynamic model, Fenstermaker will initiate the environmental permitting process. We will begin by holding a pre-permit application with the Louisiana Department of Natural Resources Office of Coastal Management (LDNR OCM), the US Army Corps of Engineers Regulatory Branch, the National Marine Fisheries Service and any other regulatory agencies that may be deemed necessary. Will present the project goals, the draft Restoration Plan, the design plans, results of any biological assessments and the hydrodynamic modeling results to the agencies and receive their feedback and compare that feedback to the project goals and constraints. Given the Fenstermaker Team's skill and experience, we would expect only minor comments, which will be incorporated into the design. At this point, a Joint Permit Application

will be developed and submitted to the LDNR OCM. The permit review and approval process typically take between six months and one year. During that time, Fenstermaker's environmental and design teams will be available to respond to any requests for information made by the regulatory agencies.

While the regulatory agencies are reviewing the permit application, our engineering and design team will continue to refine all project features, plans and cost estimates to the point that we have reached a 95% design level of detail by the time the environmental permits are issued. We will finalize the Restoration Plan and the Environmental Assessment that can be submitted with the construction funding grant application.

The 95% design, 95% cost estimate, 95% design report and draft construction specifications will be submitted to Livingston Parish for review and comment. Any comments will be incorporated to create final plans, final cost estimate, final specifications and bid documents to allow Livingston Parish to advertise for construction bids. Fenstermaker's design team will assist Livingston Parish with the bid process, including conducting a pre-bid presentation, a bid opening meeting and evaluations of the bids.

Our engineering and design team leadership will consist of:

Kimberly McDaniel, P.E. as the Project Engineer and Program Manager. Ms. McDaniel has over fifteen years' experience leading and managing a variety of civil engineering and transportation project. Ms. McDaniel will lead this program for the Fenstermaker team working closely with Mr. Guillory (DDG) to manage the projects. She has served as a project manager in the private sector as a consultant as well as the public sector with the Louisiana Department of Transportation & Development. Her strong organizational skills and precise attention to detail will lend uniqueness to the Fenstermaker management team. Ms. McDaniel is a highly-effective communicator and will ensure Livingston Parish is kept updated on all project progress. She will act as the contract manager and primary point of contact for Livingston Parish.

Joseph Guillory, P.E. as the Senior Engineer and Deputy Program Manager. Mr. Guillory has 9 years of experience as a civil and coastal engineer and will act as the quality control agent. Mr. Guillory understands what it takes to plan, design, permit, and construct successful coastal restoration projects with an emphasis on marsh creation. He has executed this process on the Bayou Bonfouca Marsh Creation Project as a former member of CPRA's Engineering Division and in his current role as Senior Engineer on the Lake Borgne Marsh Creation Project. Mr. Guillory will help to develop restoration concepts as well as review all design features including but not limited to borrow area source and configuration (footprint, depth), marsh footprint, target marsh fill elevations, containment dike layout and section design, access corridors, dredging methodology (i.e., mechanical vs. hydraulic), and post-marsh fill activities such as containment dike degrading, shoreline gapping, and creation of tidal creeks.

Amanda Phillips, P.E. as a Mid-Level Engineer and Primary Design Engineer. Mrs. Phillips has 19 years of engineering and design experience and has designed and constructed numerous coastal projects throughout Coastal Louisiana. These projects include breakwater design, marsh creation projects, dredging of inland waterways, riprap installation, levee construction and other heavy civil construction projects. Most recently, she served as the design lead for the Queen Bess Island Restoration project.

Joel Tillery, P.E. as a Mid-Level Engineer and Hydrodynamic Modeler. Mr. Tillery has 13 years of experience in the planning and design of river engineering, flood risk management, and coastal restoration projects and most recently served as project manager for the Lake Borgne Marsh Creation Project, Increment 1.

4. Consultant shall also assist the Parish with all supporting grant documentation, scheduling and/or grant administrative matters on an as needed basis.

Fenstermaker regularly assists clients with grant applications and administrative matters. This Team is currently providing similar services to Cameron Parish Police Jury for its RESTORE Act Grants. We are prepared to assist Livingston Parish with any and all supporting documentation, the development and tracking of schedules and budgets and will assist with any grant administrative matters.

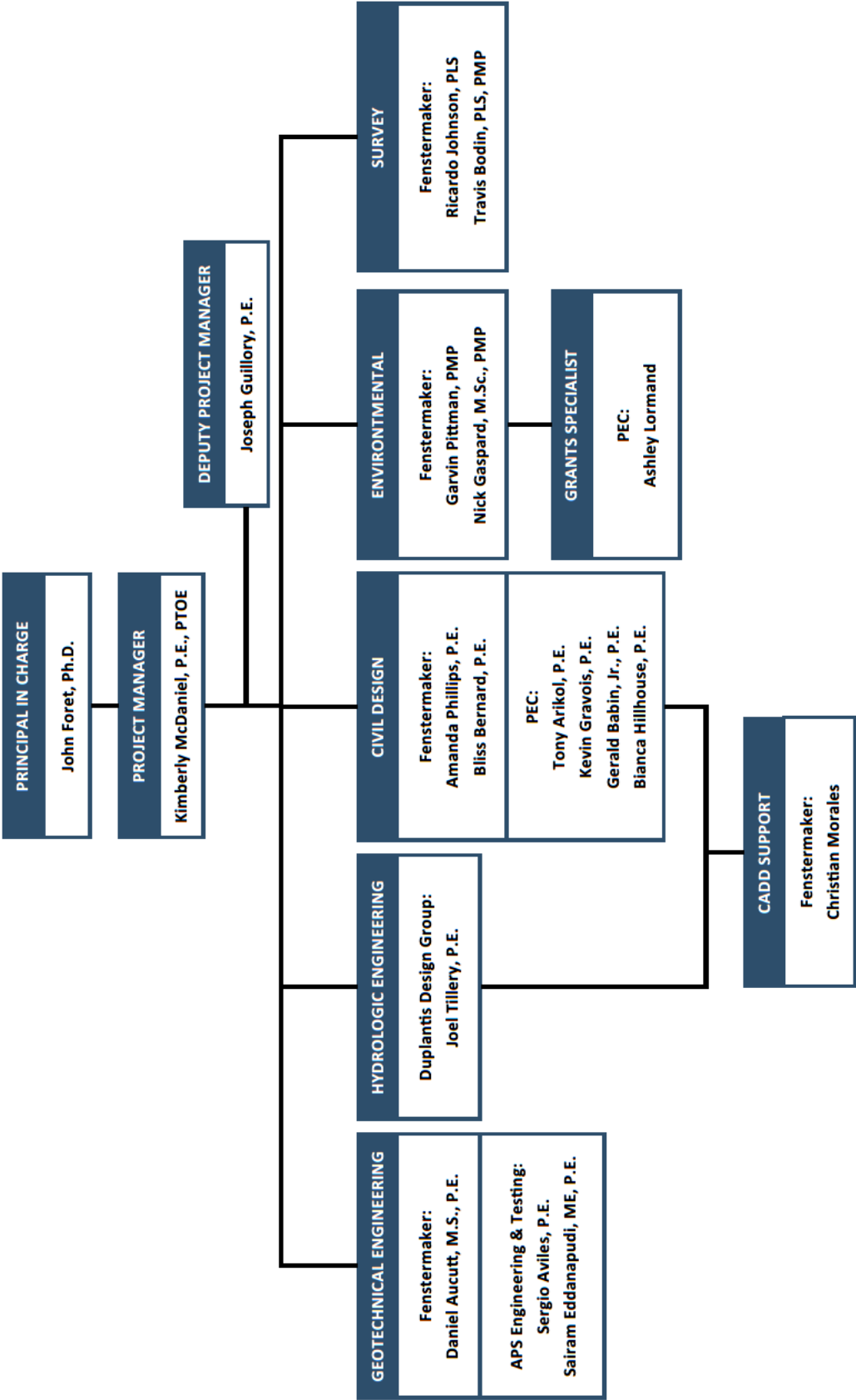
Our grant assistance team will be led by **Kimberly McDaniel, P.E.** with assistance from **Garvin Pittman, PMP**, both of whom have been described above.

4.a. Identify staff members (as applicable), in the job classifications of (1) Principal in Charge, (2) Project Engineer, (3) Senior Engineer, (4) Mid-level Engineer, (5) Junior Engineer (6) Surveyor, (7) Engineer interns (8) Senior CAD technician, (9) CAD technician, and (10) Engineering technician; who would be assigned to act for Respondent's firm in key management and field positions providing the services described in Part One: Scope of Services, and the functions to be performed by each.

JOB CLASSIFICATION	KEY TEAM MEMBER	PROJECT ROLE	COMPANY
Principal in Charge	John Foret, PhD	Principal in Charge	Fenstermaker
Project Engineer	Kimberly McDaniel, P.E. Joseph Guillory, P.E.	Project Manager Deputy Project Manager	Fenstermaker DDG
Senior Engineer	Daniel Aucutt, P.E.	Geotechnical Engineering	Fenstermaker
	Sergio Aviles, P.E.	Geotechnical Engineering	APS
	Joel Tillery, P.E.	Hydrologic Engineering	DDG
	Tony Arikol, P.E.	Civil Design	PEC
	Kevin Gravois, P.E.	Civil Design	PEC
	Gerald Babin, Jr., P.E.	Civil Design	PEC
	Bianca Hillhouse, P.E.	Civil Design	PEC
Senior Scientists	Garvin Pittman, PMP Nick Gaspard, M.Sc., PMP	Environmental Environmental	Fenstermaker Fenstermaker
Mid-Level Engineer	Amanda Phillips, P.E. Sairam Eddanapudi, ME, P.E.	Civil Design Geotechnical Engineering	Fenstermaker APS
Junior Engineer	Bliss Bernard, P.E.	Civil Design	Fenstermaker
Surveyor	Ricardo Johnson, PLS	Survey	Fenstermaker
	Travis Bodin, PLS, PMP	Survey	Fenstermaker
Senior CAD Technician	Christian Morales	CADD Support	Fenstermaker
Grants Specialist	Ashley Lormand	Grants Specialist	PEC

4.b. Include resumes or curriculum vitae of each such staff member designated above, including name, position, telephone number, fax number, email address, education, and years and type of experience. Describe, for each such person, the projects relevant to RESTORE Act, FEMA HMGP, CDBG, and/or coastal restoration and protection on which they have worked. Provide the names, telephone numbers, and email addresses of contact persons with the firms or organizations with whom these staff members worked on RESTORE Act, FEMA HMGP, CDBG, and/or coastal restoration and protection projects.

Below is an organizational chart, followed by resumes of Team Members: Fenstermaker, DDG, PEC, and APS.



Tony Arikol, P.E., President, Principal

tarikol@pecla.com

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225.769.2810 | 225.769.2882
PECLA.com**JOB CLASSIFICATION:** Principal in Charge, QA-QC**EDUCATION:** BS, 1984, Civil Engineering**LICENSES:** Civil Engineering, 1989, #23244**YEARS OF EXPERIENCE:** 36 (29 with PEC)

Mr. Arikol has designed, managed and overseen construction in coastal restoration, marine, roadways; water production, distribution, and treatment; wastewater collection, treatment, rehabilitation, and recreational projects.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

- **Repair/Restoration following Hurricane Katrina – LUMCOM, Office of Facility Planning, Fourchon, Louisiana.** Waves and wind erosion caused failure of a primary, wooden bulkhead wall, two docks (including a drive-on dock), channel, fencing and the access road of this critical research facility. Mr. Arikol managed the design and construction of the repair and restoration of the channel bank and facilities, including a new, protective bulkhead and dock for the LA Office of Facility Planning & Control.

Client Reference: David Van Alstine, Office of Facility Planning, 225.219.4404

- **Restore Shoreline Protection at Turtle Cove Environmental Research Station, St. John Parish.** As Consulting Engineer, Mr. Arikol was tasked with repairing the shoreline and its protection at this important research facility, located in sensitive coastal wetlands. Heavy damage from Hurricane Katrina required channel deepening, shoreline fill and stabilization, and a new bulkhead and docks. The project used approximately 5,000 cubic yards of dredged material to build and restabilize 900 feet of shoreline. The project was under a FEMA grant and included USACE and State Coastal Zone Permitting.

Client Reference: Andrew Gasaway, Gasaway, Gasaway, and Bankston Architects, 985.345.5047

- **Lee's Landing Boat Launch, Tangipahoa Parish.** Project Manager and Design responsible for a new wider concrete ramp with low maintenance concrete walkways. Additional parking and improved drainage were also part of this project. The entire project was performed to meet the requirements of a federal RESTORE ACT Grant.

Client Reference: Robby Miller, Parish President- Tangipahoa Parish, 985.748.3492

LCDBG EXPERIENCE

Mr. Arikol has provided grant application, administration, engineering and project management for: Town of Livonia, Village of Wilson, City of Port Allen, City of New Roads, City of St. Martinville, Tangipahoa Parish, Livingston Parish, City of St. Gabriel, City of Bogalusa, St. Martin Parish, Village of Morganza, City of Plaquemine.



DANIEL J. AUCUTT, P.E.

SENIOR GEOTECHNICAL ENGINEER

225.344.6701 x1536

445 NORTH BLVD, SUITE 650

BATON ROUGE, LA 70802

DANIEL@FENSTERMAKER.COM

EDUCATION:

BS, 1970, Marine Geology & Physical Oceanography, University of Michigan, Ann Arbor, MI

MSCE, 1977, Geotechnical Engineering, University of Illinois, Chicago, IL

YEARS OF EXPERIENCE:

With Firm: 7

Total: 47

TYPE OF EXPERIENCE: Geotechnical Services

PROFESSIONAL PROFILE:

Mr. Daniel J. Aucutt, P.E. has managed projects in geotechnical design, pavement design, highway soil surveys, bridge foundation design, and coastal studies. Mr. Aucutt was part of the diving team that mapped and monitored storm-driven sand bar movements in the vicinity of cooling water intakes. He has completed geotechnical and environmental projects in several petrochemical plants within Louisiana, Arkansas, and Texas. In addition, he has performed wetland delineations per the 1987 USACE procedures. Mr. Aucutt's experience includes all facets of field engineering from tailgate safety meetings, staking borings, determining station and offset, and supervising soil borings and sampling operations for PSDDF, SCTCS, and self-weight consolidation testing. He is a Registered Water Well Contractor with DOTD/DNR and has served as Project Manager on barge mooring facilities, BUDM projects, and marsh creation studies.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Queen Bess Island Restoration (BA-202), Barataria Bay, LA, Geotechnical Engineer (2017-Present) – Mr. Aucutt is serving as Project Geotechnical Engineer on this CPRA restoration project. After reviewing existing information and contributing to the project Data Gap Report, Dan completed planning of a geotechnical exploration and submitted necessary permit information for approval by CPRA, the LDWF, and the USACE. The exploration included six soil borings and four Cone Penetrometer Test probes, all to a depth of approximately 40 ft. Mr. Aucutt reviewed the field information, assigned laboratory testing, evaluated the test results, and coordinated preparation of a Geotechnical Data Report. Recently completed are the settlement and slope stability evaluations of breakwaters, rock containment dikes, sand platform, and the submittal of a written geotechnical report.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Island Road Marsh Creation (TE-117), Terrebonne Parish, LA, Geotechnical Engineer (2016-2018)

This project was awarded to Fenstermaker for design of a borrow area to create approximately 364 acres of new marsh land, and to nourish an additional 19 acres of existing marsh. Mr. Aucutt's responsibility was to prepare the Work Plan for CPRA approval and to design the borrow area. Dan calculated the necessary borrow area and selected locations for six borings to a depth of 20 ft. He reviewed the boring logs and test results, created subsurface profiles, and prepared a report addressing geotechnical conditions within the borrow area. No areas of concern were identified within the borrow area to a design dredge depth of 15 ft with side slopes maintained at 10(H):1(V).

Client Reference: Jacques Boudreaux, P.E., CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-0242, jacques.boudreaux@la.gov

East Marsh Island Marsh Creation (LDNR TV-21) Iberia Parish, LA, Principal Investigator (2008-2010)

Mr. Aucutt was contracted by Fenstermaker for evaluation of borrow material for perimeter levee construction and performance of detailed geotechnical analyses, including: bearing capacity; slope stability; settlement; PSDDF; and sediment column testing. Areas targeted by this project were those with the greatest historic land loss and within proximity to East Cote Blanche Bay.

Client Reference: Dain Gillen, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4557, dain.gillen@la.gov

Sergio Aviles, P.E.

APS Engineering and Testing, L.L.C.

President/Owner

PHONE: 225.456.5714

FAX: 225.456.5734

Sergio@aps-testing.com

JOB CLASSIFICATION: President/Owner

EDUCATION:

Bachelor of Science 2001 Civil Engineering, Louisiana State University

YEARS OF EXPERIENCE:

With Firm: 8

Total: 18

TYPE OF EXPERIENCE: Over 16 years' experience in geotechnical engineering, civil engineering, and Construction Material Testing.

PROFESSIONAL PROFILE:

Mr. Aviles is the President and owner of APS Engineering and Testing, LLC which is an engineering and testing firm that handles geotechnical engineering, subsurface investigation, environmental, civil design, construction material testing, and construction management. Mr. Aviles received project experience throughout Louisiana with the Pavement and Geotechnical Section of Louisiana Department of Transportation and Development (LADOTD). Duties for LADOTD included pile foundation design and construction inspection of piles, slope stability design, embankment settlement calculations, design, and testing services that included, PDA, WEAP, and CAPWAP analysis of piles. Prior to signing on the Pavement & Geotechnical Section of LADOTD, Mr. Aviles participated in the LADOTD Rotational Engineer Intern program developed by the Louisiana Transportation Research Center (LTRC). During the program, Mr. Aviles learned most of the duties and responsibilities of LADOTD main design and construction sections (Bridge Design, Road Design, Hydraulic Design, Head Quarter construction, and district construction).

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Queen Bess Island Restoration (BA-202) Project, Barataria Bay, LA. Geotechnical Manager Engineer (2017 – 2018) – APS Engineering and Testing has performed sub-consultant, data collection, and geotechnical engineering & design activities necessary to complete construction plans and specifications. This project aims to recreate multiple types of bird habitats on a 37-acre island in lower Barataria Bay using dredged material from the Mississippi River.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Freshwater Bayou Marsh Restoration Project (ME-31), Cameron Parish, LA. Program Geotechnical Manager Engineer (2018 - present) – The project goals included: 1) creating/nourishing marsh and associated edge habitat for aquatic species through pipeline sediment delivery via dedicated dredging from Gulf of Mexico or beneficial use of maintenance dredging from the Freshwater Bayou Canal; 2) Restoring a wetland buffer between the large open water areas in the Mermentau Basin and Freshwater Bayou. Project features include creating and/or nourishing approximately 401 acres of marsh using dredge material. APS performed the geotechnical exploration and design the entire project.

Client Reference: Vicki L. Supler, Contract Specialist, Natural Resource Conservation Service, 646 Cajundome Boulevard, Suite 180 Lafayette, LA 70506, vicki.supler@wdc.usda.gov

Gerald W. Babin, Jr., P.E., Principal
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PECLA.com

JOB CLASSIFICATION: Senior Project Engineer

EDUCATION: BS, 1999, Civil Engineering

BS, 1993, Civil Engineering Technology

LICENSES: Civil Engineering, 2000, #28785

YEARS OF EXPERIENCE: 34 (31 with PEC)

As project manager and lead designer, Mr. Babin is currently leading a project to restore water quality, depth and shoreline habitat on False River.

His specialized expertise lies in coastal, bank, and shoreline restoration projects, roadways and bridges and airport design. He has completed detailed engineering on post-hurricane marina, inlet, canal and upland restoration, including design and restoration in isolated, sparsely populated areas, accessible by boat only, as well as densely populated recreational lake shores.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

- **False River Ecosystem Restoration – Phase II, Pointe Coupee Parish – in progress**
This project will restore ecosystem function by improving water depth and quality and creating vital aquatic habitat in the very shallow “north flats” of False River. The objective is to dredge the flats to a depth of 5 to 6 feet, then dewater the sediment for efficient transport elsewhere. Mr. Babin prepared the preliminary engineering report, the design and plan, and is overseeing the construction.

Client Reference: James Lee, Office of Facility Planning, 225.219.4276, james.lee@la.gov

- **False River Ecosystem Restoration – Phase I South Flats, Pointe Coupee Parish (2015).**
This successful project also restored an ecosystem by increasing water depth and quality and creating shoreline habitat. The “South Flats” of False River was a hundred-acre shallow bottom area at the southernmost end of the lake. Water depth had diminished to less six inches in some areas. Mr. Babin led in the creation of sustainable islands built from lake-bottom sediment. Tasks consisted of creating a ring levee, dredging the south flats to a minimum of 5 to 6 feet, then mounding the sediment inside the levee to dewater, creating a 2-3 foot island elevation. Mr. Babin prepared the preliminary engineering report, the design, and the plan, and oversaw construction.

Client Reference: James Lee, Office of Facility Planning, 225.219.4276, james.lee@la.gov



BLISS KELLEY BERNARD, P.E.

ENGINEER

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EDUCATION:

BS, 2014, Civil Engineering, University of Louisiana at Lafayette, Lafayette, LA

YEARS OF EXPERIENCE:

With Firm: 4.5

Total: 4.5

TYPE OF EXPERIENCE: NEPA, Transportation, Water Resources, Coastal Engineering, Project Management, Manages Coastal Projects

PROFESSIONAL PROFILE:

Mrs. Bernard's experience includes project management and public outreach coordination, as well as designing and developing engineering, environmental, coastal, transportation, construction, and regulatory permit documents and reports for a range of projects. She has worked on numerous projects for various private industries as well as governmental agencies, including LADOTD, CPRA, DNR, FHWA, and multiple city and parish municipalities. She has extensive knowledge with the National Environmental Policy Act (NEPA) regulations and has served as the deputy project manager on multiple environmental analyses. Mrs. Bernard has experience in a multitude of engineering and environmental projects including environmental planning, water resources (open channel, sub-surface, floodplain mapping, and 2d numerical modeling), coastal and habitat restoration, traffic engineering, and roadway design, including multi-use facilities and sidewalk design.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Deputy Project Manager | Cane River Bridge Church Street | LADOTD | Natchitoches Parish, LA (2017-2019) - The lead federal agency, FHWA, in partnership with the state agency, LADOTD, and the City of Natchitoches is proposing to replace the Cane River Bridge at Church Street in Natchitoches Parish, Louisiana. Fenstermaker, the prime consultant, was tasked with developing the Environmental Assessment (EA) document, which evaluates the significance of impacts to the environment, as required by the National Environmental Policy Act (NEPA). Mrs. Bernard provides the planning, public outreach, and engineering and environmental services necessary to gauge public support and document information necessary for LADOTD and FHWA to reach an environmental decision. She has analyzed project impacts by coordinating and assisting in developing various technical studies, including: the line and grade study, GIS mapping, wetland delineation and threatened and endangered species study, phase 1 environmental assessment, air and noise impact studies, and cultural resources surveys. Through the compilation of all studies required and through public and agency involvement, Mrs. Bernard is developing the Final EA for the project.

Client Reference: Jacob Fusilier, Senior Project Manager, LADOTD, 1201 Capitol Access Road, Baton Rouge, LA (225) 379-1185, jacob.fusilier@la.gov

Engineer | Queen Bess Island Restoration Project | CPRA | Jefferson Parish, LA (2017-2019) - The Queen Bess Island Restoration project was selected by Natural Resource Damage Assessment Technical Implementation Group to make the environment and public whole for injuries to natural resources and services resulting from the Deepwater Horizon Oil Spill. This project, which is expected to begin construction in September 2019, will increase the viable brood rearing habitat on Queen Bess Island from four acres to thirty-seven acres by elevating existing rock dikes and importing approximately 170,000 cubic yards of high-quality Mississippi River sand. Three distinct habitat types will be created: an intertidal mangrove marsh area and a supratidal shrub/scrub area will serve as pelican habitat and a supratidal limestone beach will serve as tern and skimmer habitat.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Deputy Project Manager | US 80 Widening: Vancil Road to Well Road | LADOTD | Ouachita Parish, LA (2017-2018) - The lead federal agency, FHWA, in partnership with the state agency, LADOTD, is proposing to widen US 80 from Vancil Road to Well Road in Ouachita Parish, Louisiana. Fenstermaker, the prime consultant, was tasked with developing the Environmental Assessment (EA) document, which evaluates the significance of impacts to the environment, as required by the National Environmental Policy Act (NEPA). Fenstermaker is also responsible for the planning, public outreach, line and grade study, engineering documents, GIS mapping, wetlands delineation, and threatened and endangered species analysis.

Client Reference: Christina Brignac, Project Manager, LADOTD, 201 Capitol Access Road, Baton Rouge, LA, (225) 379-1394



TRAVIS BODIN, PLS, PMP

C. H. FENSTERMAKER & ASSOCIATES, L.L.C.

OPERATION LEADER, SURVEY

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EDUCATION:

BS, 2004, Industrial Technology, University of Louisiana, Lafayette, LA

YEARS OF EXPERIENCE:

With Firm: 14

Total: 15

TYPE OF EXPERIENCE: Over 14 years of survey experience.

PROFESSIONAL PROFILE: Mr. Bodin is a Survey Operations Leader at Fenstermaker. His main areas of responsibility include managing multiple survey teams within the survey division, preparing survey plats, subdivision plats, topographic plats, roadway plans, right of way plats and survey field work. Mr. Bodin is an experienced user of MicroStation, AutoCAD, and Trimble Business Center. He is also responsible for directing survey crews for engineering projects and processing survey data.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Driftwood LNG - Master ALTA Survey, Calcasieu Parish, LA: Project Surveyor (2018 – present) - Fenstermaker has been contracted by Driftwood LNG to generate the overall ALTA survey, following the provided commitment for title insurance for the project site, consisting of approximately 11,000 acres. These tasks include reviewing title reports and 500+ title exceptions, research for additional information needed to map the boundaries within the site, managing survey field crews, utility coordination, and plat generation. Mr. Bodin is serving as Project Manager

Client Reference: Rachel Candelet, VP Legal, Driftwood LNG, LLC, 1201 Louisiana St., Suite 580, Houston, TX, (832) 962-4027, Rachel.candelet@driftwoodlng.com

Cameron-Creole Maintenance Project CS-04, Phase II, Cameron Parish, LA: Fenstermaker performed all engineering and surveying services necessary for the construction oversight required to accomplish the objectives of the maintenance project designed to combat levee erosion on the 64,000-acre brackish watershed. Mr. Bodin served as lead survey technician.

Myrtle Grove Delta Building Diversion (Plaquemines Parish): This project is deigned to review the effectiveness of the site locations for the proposed freshwater diversion at Myrtle Grove. Fenstermaker is the lead agency in charge of collecting specific field data and survey plats as needed to calibrate and setup numerical models. Mr. Bodin serves as Survey tech for this effort.

Braithwaite to White Ditch Levee Lift (Plaquemines Parish, LA): Fenstermaker provided engineering, surveying, and environmental services for the short-term improvements within the existing foot-print of

the levee to include alternatives for a levee raise to elevation 12.5. Mr. Bodin assisted with the survey data processing.

Phoenix to Bohemia Levee Enlargement and Concrete Slope Paving Repairs at the Mississippi River for New Orleans District USACE (New Orleans, LA): Fenstermaker was part of the Stanley Consultants, Inc. team, furnishing all surveying services, materials, supplies, labor, equipment, computations, superintendence, travel, and coordination, as required, for the preparation of plans and specifications for the enlargement of approximately 43,400 linear feet of levees. Mr. Bodin was part of the team which worked closely with the U.S. Army Corps of Engineers to collect field survey data in areas indicated by the scope of work and/or background reference materials.

Hero Canal Levee, East of Harvey Canal at the Mississippi River for New Orleans District USACE (Orleans/Jefferson Parish, LA): This project provides improved hurricane protection for the communities of Belle Chase and Gretna. The scope of the project includes repairs and upgrades to the Hero Canal 1st lift by increasing the grade elevation approximately 1.5 feet. Mr. Bodin was part of the survey team to set four permanent benchmarks were placed along the land side of the levee right-of-way. The hydrographic survey performed at Hero Canal was performed at standards that meet or exceed the U.S. Army Corps of Engineers minimum accuracy standards, quality control, and quality assurance requirements for Navigation and Dredging support surveys for a soft bottom material classification.

Fronting Protection at the Duncan Pump Station on the Mississippi River for New Orleans District Army Corps of Engineers (Orleans Parish, LA): The professional services required for this project included detailed engineering and design, preparation of a design report, preparation of plans and specifications, and engineering and design support. Fenstermaker was responsible for preparing and submitting right-of-way required for construction and incorporating site surveys and mapping. A topographic survey and cross sections were made of the construction area.

Sairam (Sai) Eddanapudi, M.E., P.E.

APS Engineering and Testing, L.L.C.

Project Engineer

PHONE: 225.456.5714

FAX: 225.456.5734

Sai@aps-testing.com

JOB CLASSIFICATION: Project Engineer

EDUCATION:

BE, Civil Engineering, Sri Venkateswara University, India Aug. 1999

ME, Civil Engineering, Lamar University, Dec. 2002

YEARS OF EXPERIENCE:

With Firm: 8

Total: 15

TYPE OF EXPERIENCE: Over 14 years' experience in geotechnical engineering, civil engineering, and Construction Material Testing.

PROFESSIONAL PROFILE:

Mr. Sairam is a geotechnical engineer with experience that includes field engineering, soils and concrete, as well as quality control inspection of shallow and deep foundations. Sairam Eddanapudi acted as a field supervisor and coordinator of geotechnical drilling and sampling operations. Mr. Sairam's laboratory experience includes performing laboratory tests to determine engineering and physical characteristics of soils and aggregates. He also has experience in geotechnical analysis of shallow foundations, precast and prestressed concrete piles, augercast piles, drilled shaft foundations, embankment stability, settlement, retaining walls, and marsh creation.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Queen Bess Island Restoration (BA-202) Project, Barataria Bay, LA. Geotechnical Project Manager (2017 – 2018) – APS Engineering and Testing has performed sub-consultant, data collection, and geotechnical engineering & design activities necessary to complete the permitting process and provide construction plans and specifications. This multi-disciplinary project aims to recreate multiple types of bird habitats on a 37-acre island in lower Barataria Bay using dredged material from the Mississippi River.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Freshwater Bayou Marsh Restoration Project (ME-31), Cameron Parish, LA. Program Manager (2018 - present) – The project goals included: 1) creating/nourishing marsh and associated edge habitat for aquatic species through pipeline sediment delivery via dedicated dredging from Gulf of Mexico or beneficial use of maintenance dredging from the Freshwater Bayou Canal; 2) Restoring a wetland buffer between the large open water areas in the Mermentau Basin and Freshwater Bayou. Project features

include creating and/or nourishing approximately 401 acres of marsh using dredge material. APS performed the geotechnical exploration and design the entire project.

Client Reference: Vicki L. Supler, Contract Specialist, Natural Resource Conservation Service, 646 Cajundome Boulevard, Suite 180 Lafayette, LA, vivki.supler@wdc.usda.gov



JOHN D. FORET, PhD

C. H. FENSTERMAKER & ASSOCIATES, L.L.C.

VICE PRESIDENT, ENVIRONMENTAL

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JDFORET@FENSTERMAKER.COM

EDUCATION:

PhD, 2001, Environmental and Evolutionary Biology, University of Louisiana at Lafayette, Lafayette, LA

MS, 1997, Biology, University of Southwestern Louisiana, Lafayette, LA

BS, 1994, Aquatic and Fisheries Biology, University of Southwestern Louisiana, Lafayette, LA

YEARS OF EXPERIENCE:

With Firm: 2

Total: 20

TYPE OF EXPERIENCE: Twenty-two years of experience managing coastal restoration and protection projects. Successfully managed 21 NOAA/NMFS/CWPPRA projects totaling \$300 Million.

PROFESSIONAL PROFILE:

Dr. Foret is Vice President of Environmental, and the Environmental Leader to a staff of fourteen biologists. Duties include supervising all environmental staff activities as they relate to industry permitting activities (air/water/wetland), wetland delineations, mitigation banking consultation, wetland habitat restoration consultation (emergent marsh, shoreline protection, reef restoration), environmental assessments, biological assessments, project budgets and timelines, and project management. Prior to his time at Fenstermaker Dr. Foret served as a Research Fisheries Biologist for 18 years with DOC/NOAA/NMFS Galveston Laboratory. He was the Team Leader within the Fishery Ecology Branch in Lafayette, LA and managed all activities associated to the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) as they related to coastal fisheries habitat restoration. He was also a Federal restoration project manager for NOAA Fisheries in the CWPPRA Program.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Queen Bess Island Restoration (BA-202) Project, Barataria Bay, LA. Program Manager/Lead Ecologist (2017 – present) - Fenstermaker is performing project management, data collection, and engineering & design activities necessary to complete the permitting process and provide construction plans and specifications. This multi-disciplinary project aims to recreate multiple types of bird habitats on a 37-acre island in lower Barataria Bay using dredged material from the Mississippi River. Fenstermaker is providing: project initiation and planning; compilation, review, and analysis of existing data; data collection, including but not limited to topographic, bathymetric, and magnetometer surveys, geotechnical investigations, environmental and cultural resource investigations,

numerical/computational modeling, water quality analyses, permit development, land rights support, engineering and design, bid document development, bid phase support, and technical assistance.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Rockefeller Refuge Gulf Shoreline Stabilization Project (ME-18), Cameron Parish, LA. Program Manager (2018 - present) – A rock breakwater is being tied into the west bank of Joseph Harbor and constructed westward along the gulf shoreline for three miles. The structure is designed to reduce shoreline retreat along this stretch of gulf shoreline, as well as promote shallowing, settling out, and natural vegetative colonization of the overwash material landward of the breakwater. Dr. Foret has assisted the parish government to secure an additional \$12M to extend the project to an estimated 6 miles.

Client Reference: Ryan Bourriaque, Parish Administrator, Cameron Parish, PO Box 1280, Cameron, LA, (337) 775-5718, ryanb@camtel.net

Driftwood LNG BUDM Plan, Calcasieu Parish, LA. Program Manager (2016 – present) - Dr. Foret has worked on the BUDM 10 mapping request and permitting for Stream. He is responsible for field survey coordination and reviewing survey data.

Client Reference: David Richard, Executive Vice President, Stream Companies, 2417 Shell Beach Road, Lake Charles, (337) 433-1055, drichard@streamcompany.com

Oyster Bayou Marsh Restoration, Cameron Parish. Program Manager (2011 – 2016) - The area is 809 acres of fragmented brackish marsh and shallow open water. Impacts from Hurricanes Rita and Ike resulted in the coalescence of Oyster Lake with interior water bodies increasing wake related erosion. Goals: create 510 acres of saline marsh in recently formed shallow open water; nourish 90 acres of existing saline marsh; create 14,140LF of terraces; reduce wave/wake erosion.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Cameron Meadows Marsh Restoration Project. Program Manager (2013 – 2016)- The area is 989 acres of shallow open water fringed by brackish-to-intermediate marsh. Marsh loss is attributed to rapid fluid and gas extraction, coupled with tropical storm impacts. In addition to these direct losses, significant marsh loss has resulted from saltwater intrusion and hydrologic changes associated with storm damage and blocked drainages. Specific goals of the project are: create 350 acres of brackish marsh in recently formed shallow open water; create 35,000LF of terraces; and, reduce wave/wake erosion; and reestablish pre-Hurricane Rita drainage patterns through the cleaning out of approximately 10,000LF of existing canals.

Client Reference: Colton Sanner, Project Manager, Dore Energy, 120 W Pujo Street, Ste 300, Lake Charles, LA, (337) 502-5225, colton@doreenergy.com



NICHOLAS GASPARD, MS, PMP

DATA ANALYSIS AND MANAGEMENT

337.237.2200 x1203

135 REGENCY SQUARE

LAFAYETTE LOUISIANA, LA 70508

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EDUCATION:

MS, 2008, Marine & Environmental Biology, Nicholls State University,
Thibodaux, LA

BS, 2006, Marine Biology, Nicholls State University, Thibodaux, LA

TRAINING & CERTIFICATIONS:

2018, Project Management Professional, (PMI PMP No: 2237828, expires 08/01/2021)

USACE Wetland Delineation Certification

O.L.D.E.B. (Oyster Lease Damage Evaluation Board) Certification

YEARS OF EXPERIENCE:

With Firm: 6

Total: 13

TYPE OF EXPERIENCE: Regulatory and Environmental Compliance, Biological Assessments, Permitting, Wetland Delineations, Phase I Environmental Site Assessments, Threatened & Endangered Species Surveys, Biological Oyster Assessment

PROFESSIONAL PROFILE:

Mr. Gaspard's experience primarily consists of regulatory and environmental compliance. He has performed Phase I Environmental Site Assessments, Wetland Delineations, Threatened and Endangered Species Surveys, Biological Oyster Assessment, and has applied for and obtained numerous permits for Oil/Gas, commercial, and private development clients. Mr. Gaspard completed the U. S. Army Corps of Engineers Wetland Delineation Training Course in 2009 and the Hydric Soils Workshop in 2011.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Thesis Research: Comparison of Intertidal Oyster Populations Between a Rock Breakwater and a Natural Reef in Lower Barataria Estuary, Jefferson Parish, LA. Graduate Student (2006-08)– Mr. Gaspard completed his thesis research project in Grand Isle, LA which culminated 2 years' worth of data to gather baseline data on intertidal oyster populations in the Lower Barataria Estuary. He conducted site visits every 2 weeks to document and record recruitment and survivability of the oyster populations at various intertidal heights as well as subtidal. This research was conducted in conjunction with the Nature Conservancy and community outreach with Grand Isle Elementary. Mr. Gaspard was also tasked helping to organize the annual "Oyster Day" for Grand Isle Elementary.

Client Reference: Dr. Earl Melancon, Alcee Fortier Professor, Distinguished Service Professor, Professor Emeritus, Nicholls State University, P.O. Box 2021, Thibodaux, LA, (985) 448-4700, earl.melancon@nicholls.edu

Numerous Biological Oyster Assessments for the Office of the Coastal Protection and Restoration Authority of Louisiana and private Oil and Gas Operators spanning across coastal Louisiana. Project Manager (2008-Present) - Mr. Gaspard has performed numerous biological oyster assessments for the Office of Coastal Protection and Restoration under the Oyster Lease Acquisition and Compensation Program (OLACP) and numerous biological oyster assessment for various oil and gas operators. Mr. Gaspard performed the bottom-type identification as well as biological sampling on privately held oyster leases as well as state-owned oyster seed grounds.

Client Reference: James Wray, Land Specialist III, OLACP Real Estate and Land Division, CPRA, P.O. Box 44027, 150 Terrace Avenue, Baton Rouge, LA (225) 342-7329, james.wray@la.gov

Texas Offshore Port System (TOPS) Biological Oyster Assessment for Proposed 36-inch Port Arthur Crude Oil Express (PACE) Pipeline from Texas City, TX to Smith Point, TX Galveston Bay, Texas. Project Manager (2007-08) - The Texas Offshore Port System (TOPS) requested agency authorization to install a 36-inch crude oil pipeline through Galveston Bay from Swan Lake, under the Texas Dike, and ending at Smith Point. Bottom substrate mapping and imaging was conducted with side scan sonar and sub-bottom profiler. Areas of interest were identified from side scan sonar. Mr. Gaspard conducted bottom-type identification as well as biological sampling located within five-hundred (500) ft. of the projected pipeline centerline. The final document included summaries of bottom types, quantification of oyster resources, and projected damages.

Client Reference: Randy Burkhalter, Investor Relations, Enterprise Products Partners, L.P., Houston, TX, (713) 381-6812, Raburkhalter@eprod.com

Cameron Parish Shoreline Stabilization, Cameron Parish, LA. Project Manager (2017-Present) – A rock breakwater is being designed for Little Florida, Long, and Rutherford Beaches. The structures will be designed to reduce shoreline retreat along this stretch of gulf shoreline, as well as promote shallowing, settling out, and natural vegetative colonization of the overwash material landward of the breakwater.

Client Reference: Ryan Bourriaque, Parish Administrator, Cameron Parish, PO Box 1280, Cameron, LA, (337) 775-5718, ryanb@camtel.net

Driftwood LNG BUDM Plan, Calcasieu Parish, LA. Environmental Specialist (2016-Present) - Fenstermaker is assisting with preparing a mitigation prospectus for the Beneficial Use of Dredge Material areas of a proposed LNG site. Dr. Foret has worked on the BUDM 10 mapping request and permitting for Stream. He is responsible for data analysis and reviewing environmental data.

Client Reference: David Richard, Executive Vice President, Stream Companies, 2417 Shell Beach Road, Lake Charles, (337) 433-1055, drichard@streamcompany.com

Kevin A. Gravois, P.E., Vice-President, Principal

kgravois@pecla.com



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JOB CLASSIFICATION: Project Manager

EDUCATION: BS, 1981, Agricultural Engineering

LICENSES: **Agricultural Engineering - 1987**, Civil Engineering - 1993, Environmental Engineering - 1993, #22722
Mississippi Civil Engineering - #12564

YEARS OF EXPERIENCE: 38 (37 with PEC)

Mr. Gravois has extensive experience in shoreline, channel, canal and upland restoration and habitat restoration to enhance value and increase recreational and environmental quality. Tasks include channel clearing and deepening, channel bank and shore restoration and protection, improved topography, erosion control, water quality enhancement, habitat restoration, fishery development, and enhanced watershed drainage.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

- **False River Nitrogen Impact Mitigation Project, Pointe Coupee Parish.** Managed Project to reduce nitrogen loading, algae blooms, and improve water quality in drainage canals, bayous and the lake, improve spawning and fisheries, improve riparian and aquatic habitat, improve nitrogen and phosphorous nutrient balance in the lake, decrease sediment flux to the lake, improve lake aquatic habitat, improve recreational and commercial fisheries, and peak flow attenuation within the watershed.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

- **Booker Fowler Fish Hatchery, Rapides Parish (LA Dept. of Wildlife & Fisheries).** Managed project to improve the Booker Fowler Fish Hatchery. Included in this project were ground water supply, surface water supply, pumping and screening, disinfection, pumping, earthwork, supply and drain system for ponds, various buildings, raceways and troughs for fish production and various appurtenances related to fish hatcheries. Total project cost was \$13 million dollars.

Client Reference: Department of Wildlife and Fisheries, 225.765.2800

- **Bayou Sere Phase II Drainage Improvements, Pointe Coupee Parish.** Clearing, desnagging and channel excavation of the entrance channel from False River to La Hwy 416 after Hurricane Gustav.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

- **Bayou Grose Tete, Bayou Fardoche, and Portage Canal Drainage Improvements, Pointe Coupee Parish.** Clearing and desnagging of three waterways.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

- **Clearing and Desnagging of Lighthouse Canal for the Pointe Coupee Parish.** Project consisted of outfall improvements, clearing, desnagging and channel improvements to Lighthouse Canal which drains False River.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

- **False River Sediment Control LA and Drainage Improvements, Pointe Coupee Parish.** Erosion control management of a drain into False River in Ventress and erosion control management of a drain into Patin Dyke in Waterloo. This work was done with the USDA Natural Resources Conservation Services. Work included drainage pipe, concrete catch basins, rip-rap and earthwork.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

- **Bayou Discharge Bulkhead, Pointe Coupee Parish.** Bayou Discharge drains the Island which drains the Interior lands of False River and enters False River in the southern flats. Work included approximately 400 feet of bulkhead, wooden piles and earthwork to stabilize the banks and control erosion of Bayou Discharge at False River.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

- **Drainage Improvements for Pointe Coupee Parish.** Responsible for the design and construction management for bridge repairs, new bulkheads, sediment basin dredging, and concrete lining of False Bayou. Project also included the clearing and desnagging of Lighthouse Canal which is the outfall for False River.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

HAZARD MITIGATION EXPERIENCE:

- **Pointe Coupee Parish HMGP Drainage Improvements Projects.** PEC was selected to survey and engineer 10 local drainage projects funded by the LA Recovery Authority for Hurricane Gustav/Ike Disaster Recovery. Mr. Gravois was Project Manager responsible for the design, plans and specs preparation, cost estimating, construction and inspection services.

Client Reference: Major Thibaut, Parish President- Pointe Coupee Parish, 225.638.9556

- **West Baton Rouge Parish Council – HMGP Drainage Improvements.** Project Manager/Design Engineer responsible for preliminary and final design of four drainage projects within the Parish funded by the HMGP program.

Client Reference: Riley "PeeWee" Berthelot, Parish President, 225.383.4755

LCDBG EXPERIENCE:

Mr. Gravois has served as Project Manager for many LCDBG funded projects. He has provided grant application preparation (engineering components), cost estimates, preliminary and final engineering design, plans and specifications, bidding & award, and construction administration services for the following entities: Pointe Coupee Sewerage District No. 1, Pointe Coupee Parish, Washington Parish, Village of Angie, St. Helena Parish, West Baton Rouge Parish, Livonia, Tangipahoa Parish, West Baton Rouge Parish, City of Bogalusa, Town of Maringouin, Town of St. Francisville, Town of Fordoche, City of Bogalusa, Town of Kentwood, West Feliciana Parish Police, and Town of Pleasant Hill, among others.

DISASTER RECOVERY EXPERIENCE:

- **OCD-DRU Rosedale Road Drainage Improvements, West Baton Rouge Parish Council (2013).** Hurricanes Gustav and Ike hit Louisiana in September 2008 and general flooding occurred in the Rosedale Road area in the City of Port Allen in West Baton Rouge Parish. An Office of Community Development Disaster Recovery Program, PEC was responsible for the design, plan preparation and construction administration of an enhance flood prevention system along LA Highway 1.

Client Reference: Riley "PeeWee" Berthelot, Parish President, 225.383.4755



Joseph P. Guillory, PE

Duplantis Design Group, PC

PHONE: 985.249.6180

FAX: 9850249.6190

EMAIL: jguillory@ddgpc.com

JOB CLASSIFICATION: Senior Associate & Coastal Division Lead

EDUCATION:

Bachelor of Civil Engineering, 2010 - University of New Orleans

YEARS OF EXPERIENCE:

With Firm: 6

Total: 9

TYPE OF EXPERIENCE: As a civil and coastal engineer, Joe brings a practical yet technical approach to many of

Louisiana's coastal challenges – land loss, sea level rise, subsidence, storm surge, water management, and erosion.

PROFESSIONAL PROFILE:

DDG's coastal and water resources engineering group is led by Mr. Joe Guillory, a native of Evangeline Parish, Louisiana. Upon completing his undergraduate studies at Louisiana State University, Joe worked as a nurse for over 10 years in the emergency room of Charity Hospital in New Orleans, LA later becoming the Clinical Director of Organ and Tissue Recovery at the Louisiana Organ and Procurement Agency (LOPA). After dedicated years of service, Joe's lifelong passion for the Louisiana outdoors motivated him to obtain his degree in civil engineering from the University of New Orleans and embark on a new career in coastal restoration.

As a civil and coastal engineer, Joe brings a practical yet technical approach to many of Louisiana's coastal challenges – land loss, sea level rise, subsidence, storm surge, water management, and erosion. He began his engineering career working for the Coastal Protection and Restoration Authority of Louisiana where he supported the design of thousands of acres marsh creation. He also helped analyze and develop sound approaches to water management through his involvement with operation plans for Mississippi River diversions (Caernarvon and Davis Pond) as well as his support of the State's 2012 Coastal Master Plan. His understanding and familiarity with Louisiana's coast ensures that his design concepts will work with the natural process that shape the coast.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

CPRA

Lake Borgne Marsh Creation Project - Increment One (PO-0180) / St. Bernard Parish, LA

Lead Engineer. Mr. Guillory is leading the DDG team with the engineering and design of this project, a large scale marsh creation project that is anticipated to create approximately 1,548 acres of marsh.

When completed, the project will represent one of the largest marsh creation projects to be implemented by CPRA to date.

Client Reference: Coastal Restoration and Protection Authority | Vida Carver | (225) 342-4635

CPRA *(Experience prior to DDG and Current)

Bayou Bonfouca Marsh Creation Project (PO-104) / St. Tammany Parish, LA

Engineer/CM. While working at CPRA, Mr. Guillory served as the engineer with responsibilities consisting of evaluation of historic tidal, wind and wave conditions, and utilization of survey and geotechnical data in order to complete the marsh creation design. After joining DDG, Mr. Guillory provided construction administration on the project as a sub-consultant to Providence Engineering. This consists of placing sediment hydraulically dredged from Lake Pontchartrain in open water sites to create 620 acres and nourish approximately 200+ acres of marsh.

Client Reference: Providence Engineering | Gary Leonards, PE, Services Director | 225-766-7400 | garyleonards@providenceeng.com

St. Tammany Parish Government

Lower W-15 Canal Drainage Improvements / St. Tammany Parish, LA

Project Manager/ Lead Engineer. Mr. Guillory lead the DDG team in the design phase, permitting, preparation of bid documents and construction inspection of this project. The drainage improvements include widening of the Lower W-15 canal and construction of a 324 ac-ft detention pond.

Client Reference: Kelly Rabalais | 21454 Koop Drive, Suite 2F, Mandeville, LA 70471 | 985-898-2445

St. Tammany Parish Government

W-14 Canal Hydraulic Improvements/Fritchie Marsh Hydrologic Restoration / St. Tammany Parish, LA

Project Manager. Project scope aimed at reducing the risk of flooding for people residing in the W-14 basin and also reducing the marsh loss rates in the Fritchie Marsh. This will be accomplished by widening approximately 3,250 feet of the W-14 Canal and improving the conveyance of water through Fritchie Marsh, which will allow an increased amount of flow from the W-14 basin.

Client Reference: Kelly Rabalais | 21454 Koop Drive, Suite 2F, Mandeville, LA 70471 | 985-898-2445

Venture Global Calcasieu Pass, LLC

Cameron Prairie National Wildlife Refuge Marsh Creation / Cameron Parish, LA

Project Engineer. Mr. Guillory is providing engineering design and construction administration of a 130-acre marsh creation project, as a means of mitigation for a new natural gas terminal and pipeline system in Cameron Parish.

Client Reference: Venture Global Calcasieu Pass, LLC | Ben Frothingham, 2200 Pennsylvania Ave., N.W., Suite 600 West, Washington, DC 20037 | 202.793.4441

St. Tammany Parish Government

Coastal Management Assistance / St. Tammany Parish

Project Manager/Lead Engineer DDG was hired to assist in coastal planning, including the preparation of a coastal plan for identifying areas that are in need of protection or restoration. The firm also assisted the parish to identify and secure funding sources for various coastal projects. DDG prepared a menu of coastal projects for St. Tammany Parish's submittal to the state coastal master plan for year 2017, including project fact sheets, map preparation, and project cost estimates.

Client Reference: Kelly Rabalais | 21454 Koop Drive, Suite 2F, Mandeville, LA 70471 | 985-898-2445

OTHER NOTABLE REPRESENTATIVE CLIENTS AND PROJECTS:

St. Tammany Parish, Madisonville Bulkhead*

Plaquemines Parish, Caerarvon Diversion*

Lafourche Parish, Caminada Headland Restoration*

Plaquemines Parish, South Lake Lery Shoreline & Marsh Creation*

St. Tammany Parish, Lower W-15 Drainage Improvements

Plaquemines Parish, Bertrandville Siphon Freshwater Diversion*

Plaquemines Parish, Bohemia Mississippi River Reintroduction*

Davis Pond Diversion*

*Experience prior to DDG

Bianca G. Hillhouse, Senior Project Manager, Principal

bhillhouse@pecla.com

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225.769.2810 | 225.769.2882
PECLA.com**JOB CLASSIFICATION:** Senior Design Engineer**EDUCATION:** BS, 1996, Civil Engineering**LICENSES:** Civil Engineering, 2001, #29391**YEARS OF EXPERIENCE:** 23 (23 with PEC)

Ms. Hillhouse has been the Project Manager and Design Engineer for numerous marine, road, drainage, and infrastructure improvements for several cities and parish communities. She has been lead designer and project manager in habitat restoration in sensitive lake and marine settings. She is well versed in CDBG and federal funding processes and guidelines.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

- **Port Eads Marina Reconstruction / Restoration, Plaquemines Parish.** Design Engineer and Project Manager to design the reconstruction of a Parish-owned marina in Venice, Louisiana and its associated infrastructure and surroundings destroyed by Hurricane Katrina. She coordinated with the Parish and FEMA to fund and restore waterway, boat docks, fueling stations, administration building, two camp sites, water storage, pumping, distribution facilities, miscellaneous electrical items, and other miscellaneous structures. Her work was in a complete water environment and included detailed elevation/profile sheets showing required dredge depth at marina and main entrance to the canal. The structural plans contained elevation section cuts at all structures, including marina, elevated walkways, piling layouts. Also, part of the project involves bringing the facility up to latest sanitary standards by installing a new sanitary sewer system. Adherence to permitting requirements from the COE, LA Coastal Zone, LADEQ and DHH were met.

Client Reference: Jarret Bauer, P.E., All South Consulting Engineers, 504.322.2783

- **Henderson Lake Study, St. Martin Parish.** Managed environmental study to address infestation of the aquatic nuisance, Hydrilla, the deterioration of the lake's control structure (this man-made lake required the structure to maintain minimum water level), and the overall economic development of this area. A key element of the study was the large number of stakeholders involved in scoping the project, debating solutions in public hearings and creating a plan. Ms. Hillhouse compiled historic environmental data water quality, ecological and hydrological information of the lake system to identify several alternative solutions that were consistent with the resident's concerns, economic feasibility, and minimized environmental impacts in the lake and the surrounding area. Her final plan encompassed all elements to propose necessary rehabilitation methods.
- **Improvements to the Water & Wastewater Facilities, Port Manchac Distribution Center, South Tangipahoa Port Commission, Maurepas, Louisiana.** Designed and prepared plans and specifications for construction of a wastewater and water systems. Ms. Hillhouse also assessed the warehouse dock house facility to determine if it could be used for storage, yacht and vessel mooring. PEC worked

closely with the Port Director and its commission to determine needs and financial requirements of projects proposed to be performed to upgrade the Port's overall facilities.

Client Reference: South Tangipahoa Parish Port Commission, 985.386.9309

LCDBG EXPERIENCE

Ms. Hillhouse provided grant application preparation (engineering components), cost estimates, preliminary and final engineering design, plans and specifications, bidding & award, and construction administration services for CDBG grants for the following entities: City of Bogalusa, City of Zachary, Louisiana, St. Francisville, Louisiana

HAZARD MITIGATION/FEMA EXPERIENCE:

Ms. Hillhouse was the project manager in charge of the 2001 HMGP Application for the City of Bogalusa Flood Control Project. She is also the project manager/design engineer on a HMGP Bogalusa Well Site Chlorine and Electrical Protection Buildings Project. She also assisted West Feliciana and West Baton Rouge Parish on their PPG applications. Ms. Hillhouse worked closely with the City of Bogalusa following Hurricanes Katrina and Rita to coordinate with local, FEMA and state agencies to restore the Parish's infrastructure.

Most significantly, Ms. Hillhouse served as the project manager for a FEMA funded project for the redevelopment of Port Eads Marina in Plaquemines Parish, LA.

- **Chappepeela Road Drainage Mitigation, Hammond, LA.** Mitigation of flood waters and improved bridge crossing at Chappepeela Road, including improved drainage under approach road to the bridge while keeping the existing 3 bridges in place. This plan mitigated the negative impacts of floodwaters and improved water flow to prevent overtopping roadway. Components for the engineering design are hydrologic and hydraulic (H&H) studies, surveying, and geotechnical investigation. This project is being funded through a **GOHSEP Hazard Mitigation Grant**.

Client Reference: Robby Miller, Parish President- Tangipahoa Parish, 985.748.3211



RICARDO JOHNSON, PLS

Professional Land Surveyor

337. 237.2200 x 1175

135 REGENCY SQUARE

LAFAYETTE, LA 70508

ricardo@FENSTERMAKER.COM

EDUCATION:

Architectural and Survey Drafting, Delta School of Drafting 1977

YEARS OF EXPERIENCE:

With Firm: 2

Total: 41

TYPE OF EXPERIENCE: Coastal Surveying Services, Topographic, Bathymetric and Infrastructure Surveying, Subsidence and Sea Level Rise Calculations, Project management and technical expertise of surveying for coastal protection and restoration projects, subsidence surveys and hydrographic surveys

PROFESSIONAL PROFILE: Mr. Johnson is the Director of Coastal Services and has acquired over 40 years of surveying experience and 22 years of managing government projects, supervising conventional and hydrographic data collection. Since 1998, Ricardo has provided surveying expertise on coastal projects for CPRA on over 70 Task Orders under eight separate Surveying Services Contracts. Johnson was instrumental in creating a document titled "Guidelines for Determining GPS Derived Orthometric Heights" adopted by CPRA. He supervises GPS planning, quality control, data acquisition, downloading, processing, datum adjustments, and GPS methodology reports. Johnson has established static GPS networks throughout the Louisiana Coastal Zone and was recently tasked to provide CPRA with updated datasheets for over 770 benchmarks. Recent projects include Bayou Dupont Marsh Creation Monitoring Surveys (BA-39), Barataria Barrier Islands Restoration Project (BA-38, BA-40, BA-110), East Timbalier Island Restoration Project (TE-118), and Coastwide Reference Monitoring System surveys on 160 Stations within St. Bernard, Plaquemines, and Jefferson Parishes.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Queen Bess Island Restoration (BA-202) Project, Barataria Bay, LA. Program Manager/Lead Surveyor (2017 – present) - Fenstermaker is performing project management, data collection, and engineering & design activities necessary to complete the permitting process and provide construction plans and specifications. This multi-disciplinary project aims to recreate multiple types of bird habitats on a 37-acre island in lower Barataria Bay using dredged material from the Mississippi River. Fenstermaker is providing: project initiation and planning; compilation, review, and analysis of existing data; data collection, including but not limited to topographic, bathymetric, and magnetometer surveys, geotechnical investigations, environmental and cultural resource investigations, numerical/computational modeling, water quality analyses, permit development, land rights support, engineering and design, bid document development, bid phase support, and technical assistance.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Rockefeller Refuge Gulf Shoreline Stabilization Project (ME-18), Cameron Parish, LA. Program Manager (2018 - present) – A rock breakwater is being tied into the west bank of Joseph Harbor and constructed westward along the gulf shoreline for three miles. The structure is designed to reduce shoreline retreat along this stretch of gulf shoreline, as well as promote shallowing, settling out, and natural vegetative colonization of the overwash material landward of the breakwater. Mr. Johnson is currently serving as the PM in charge of field crew coordination, processing and performing data analysis, and approving daily time reports.

Client Reference: Ryan Bourriaque, Parish Administrator, Cameron Parish, PO Box 1280, Cameron, LA, (337) 775-5718, ryanb@camtel.net

Driftwood LNG BUDM Plan, Calcasieu Parish, LA. Program Manager (2016 – present) - Fenstermaker is assisting with preparing a mitigation prospectus for the Beneficial Use of Dredge Material areas of a proposed LNG site. Johnson is responsible for reviewing and approving survey field crews Daily Time Reports and for submitting a Weekly Status Report to the client.

Client Reference: David Richard, Executive Vice President, Stream Companies, 2417 Shell Beach Road, Lake Charles, (337) 433-1055, drichard@streamcompany.com

Oyster Bayou Marsh Restoration, Cameron Parish. Program Manager (2011 – 2016) - Fenstermaker is providing survey services as a sub-consultant to S&ME on this CPRA project (LADNR Contract No. 4400012425). Fenstermaker is utilizing a UAV drone to capture elevations along the required transects, providing topographic points, a digital terrain model (DTM), ortho-imagery, and RTK surveys. Johnson is serving as the Survey Project Manager.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

NRDA-Shoreline Technical Working Group: Topo Surveys & LiDAR Acquisition in Coastal Louisiana: In 2010, in response to the MC 252 Oil Spill, Johnson managed this project to provide monitoring of established sites in 2 phases to assess the effects of oiling to the Louisiana marshes. Johnson performed static GPS surveys in conjunction with RTK topographic surveys and the task value for the topo work was \$325K. Johnson also supervised the collection of LiDAR data using the FLI-MAP system in coastal Louisiana areas that were impacted by oiling as well as in areas that were not impacted to use as reference. T.O. value for LiDAR data collection: \$625K.

Client Reference: Todd Folse, Coastal Resources Science Manager, CPRA, 1440 Tiger Drive, Thibodaux, LA, (985) 449-4082, todd.folse@la.gov

Ashley Lormand, Grants Administrator

alormand@pecla.com



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JOB CLASSIFICATION: Grants Administrator

EDUCATION: Young Memorial VoTech, 1993, Word Processor- Clerical

YEARS OF EXPERIENCE: 22 (22 with PEC)

Ms. Lormand's expertise is timely and accurate project and grant administration for multiple programs, agencies and government entities. She has facilitated numerous grant awards to municipalities and districts throughout Louisiana. Ms. Lormand coordinates with engineering staff to expedite grant and loan applications and carrying them out.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

- Grant Administrator for 20 LCDBG Public Facilities projects and served as Labor Compliance Officer for more than 10 OCD-DRU projects in which the firm provided engineering services
- Project administration under Division of Administration, Office of Community Development and USDA for programs such as LCDBG Public Facilities, CWEF, LGAP, RUS, SEARCH Grants as well as Capital Outlay, and HMGP.
- Manages required environmental reports, clearance and public notices for U.S. Army Corps of Engineers, SHPO, Wildlife & Fisheries and others.
- Timely and accurate preparation of DEQ SRF Funding Applications, Hazard Mitigation, Office of Community Development Disaster Recovery Unit, USDA Rural Development, Capital Outlay, DOTD, Recreational Trails, LGAP, CWEF, LWCF applications
- Ensures HUD and OCD compliance for financial management, procurement, fair housing, equal opportunity, property acquisition, Section 3, citizen participation, and Section 504.
- Federal Davis-Bacon/labor compliance officer

CDBG DISASTER RECOVERY

Ms. Lormand assists with the execution and implementation of all CDBG-DR projects, coordinating efforts with the CDBG Managers for all ongoing CDBG-DR projects. She ensures that all contract specifications are in accordance with CDBG-DR guidelines, and Davis Bacon Requirements.

Most recently, she was awarded full grant administration for the Town of Springfield's OCD-DRU Municipal Infrastructure Grant to construct new sewer system improvements for a portion of the Town.

HAZARD MITIGATION PROJECT EXPERIENCE

- **West Baton Rouge Parish Hazard Mitigation Plan Update (2010)** – Ms. Lormand assisted the prime consultant, ICG, to implement this project on a fast-track schedule.
- **West Baton Rouge Parish Hazard Mitigation Planning Pilot Grant Program (2009)** – feasibility study, scoping of numerous projects and a plan update. Also assisted with FEMA hurricane recovery applications
- **West Feliciana Parish Hazard Mitigation Planning Pilot Grant Program (2009)** –feasibility study, scoping of numerous projects and a plan update. Also assisted with FEMA hurricane recovery applications.



KIMBERLY MCDANIEL, M.S., P.E., PTOE

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ENGINEERING DIRECTOR

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KIMBERLYM@FENSTERMAKER.COM

EDUCATION:

MS, 2005, Civil Engineering, Wayne State University

BS, 2003, Civil Engineering, Louisiana Tech University

YEARS OF EXPERIENCE:

With Firm: <1

Total: 15

TYPE OF EXPERIENCE: Fifteen years of engineering and project management experience.

PROFESSIONAL PROFILE:

Kimberly McDaniel is an Engineering Director with 15 years of professional traffic engineering experience. Throughout her career, Mrs. McDaniel has performed corridor studies, traffic impact analyses, feasibility studies, safety and crash analyses, road designs, street improvements, context-sensitive designs, Complete Streets program applications, and computer analyses and models. She has been previously employed by LADOTD in Traffic Engineering Management, and since then, has been employed as a consultant performing a wide variety of traffic engineering projects throughout the states of Louisiana and Texas. Mrs. McDaniel is very knowledgeable in the areas of innovative intersection design and operation, feasibility study requirements, access connection safety and design, corridor studies, interchange modification and justification studies, traffic impact studies, crash analyses, safety studies, low-cost safety improvements, and traffic impact analyses.

PROJECT EXPERIENCE:

H.011989: US 90: LDRR and LA 329 Overpass (TMP Level 4 Services), New Iberia, LA, (2018) - Ms. McDaniel was the project manager for the development of a Level-4 Traffic Management Plan (TMP) for the rehabilitation of the LDRR and LA 329 Overpass crossing US 90. The project includes the traffic management plan for the replacement or rehabilitation of all bridge (overpass) components.

H.009932: US 80 Environmental Assessment, Ouachita Parish, LA (2019) - Ms. McDaniel was the project manager for the traffic and safety analyses portion of this environmental assessment project. The study corridor is 1.8 miles long and is being studied for both capacity and safety improvements. Multiple alternatives are evaluated in the study process and public involvement is also a part of the project.

Contract No. 4400007736: Traffic Engineering Services Retainer Contract Statewide, LA (2018) - Ms. McDaniel was the project manager for a \$3 million traffic engineering services on-call contract with LADOTD. Services include traffic engineering studies, corridor studies, safety and crash analyses, traffic signal design, traffic data collection, signing and pavement marking designs, traffic signal timing studies, and intersection design.

I-10 at Highland Road Interchange Modification Report, East Baton Rouge Parish, LA (2016) - Ms. McDaniel was the project manager for the traffic engineering services portion of an on-call contract with LADOTD. Services include performing traffic studies and crash analyses for a variety of safety-focused improvement projects throughout the state of Louisiana.

H.001271: Cane River Bridge Church Street (LA1-X), Natchitoches, LA (2019) - LADOTD in conjunction with the Federal Highway Administration is preparing an NEPA environmental assessment for the proposed replacement of Cane River Bridge on Church Street Route LA 1-X located in Natchitoches Parish, Louisiana. Ms. McDaniel is the project manager for the traffic and safety analyses portions of this environmental assessment project. The project focus is the replacement of a bridge in an historic district in Louisiana's oldest city. The project not only include traffic analyses with considerations for future capacity and safety improvements, but also consideration of detour routes and determination of a location for a temporary river crossing for construction. Due to the historic areas surrounding the project, the solutions must consider many context-sensitive solutions.

LA 3235 Stage 0 Feasibility Study & Crash Analysis, Lafourche Parish, LA (2014) - Ms. McDaniel was the project manager and lead engineer on a Stage 0 Study, safety study, and crash analysis for a 13.2-mile section of LA 3235. Ms. McDaniel coordinated efforts of consultants, local task forces, local agencies and MPOs, and LA DOTD for a comprehensive study of this corridor including warrant and crash analyses. This study included applications of the Highway Safety Manual.

LA 16 Access Management Corridor Study (2013) - Ms. McDaniel was the project manager and lead engineer for a study of a 16-mile section of LA 16. The study focused on comparing operational and safety performance of various sections of the corridor including a 5-lane section, 2-lane section, 4-lane undivided section, a couplet, and a 4-lane divided section. The results were compiled in a white paper and presented at various technical seminars.

US 61 and LA 427 Intersection Improvements Study, Baton Rouge, Louisiana (2013) - Ms. McDaniel led a study of the operation efficiency and safety performance of this intersection and adjacent intersections and corridors. Several alternatives for improving both operations, signal warrants and safety were developed which included innovative designs such as roundabouts, R-cuts, Michigan U-turns.



CHRISTIAN A. MORALES

C. H. FENSTERMAKER & ASSOCIATES, L.L.C.

SURVEY TECHNICIAN

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EDUCATION:

BS, 2008, Survey and Topography, University of Puerto Rico Engineering Campus

YEARS OF EXPERIENCE:

With Firm: 1

Total: 10

TYPE OF EXPERIENCE: Preparation of survey deliverables for coastal projects

PROFESSIONAL PROFILE:

Mr. Morales is currently a Survey Technician at Fenstermaker. His main responsibilities include assisting with the preparation of survey deliverables for coastal restoration projects. Mr. Morales' mapping and surveying capabilities span a wide range of services including Property Legal Descriptions and Deeds analysis and plotting, Sections drawings, Topographic Surveys, Boundary Surveys, As-Built Surveys, Raster Manipulation – Georeferencing & Ortho Rectification of Aerial Photo, Topographic Maps, and Satellite Images, LIDAR data Editing, and Analysis, GPS Data Processing, Editing, and Analysis, Layout Foundations for digging, Checkout foundations and piers for location and grade elevation, Coordinate calculations, interpolation for elevations.

He is proficient in the use of the following software: ArcGIS Desktop 10 and later versions, ArcPad, AutoDesk Civil 3D 2013 and later versions, AutoCad Map 3D 2013 and later versions, AutoDesk Raster 2013 and later versions, DeLorme Topo, Trimble Geomatics Office, Trimble Business Center, and Spectra Precision Survey Pro. With a background also consisting of serving as a Survey Party Chief, Mr. Morales is also proficient in the use of the following survey equipment: GIS TSCe Field Device Running TerraSync, GPS Pathfinder Office, Trimble Pathfinder Pro XR, Trimble Pathfinder Pro XRS, Trimble RTK Systems (Trimble R7 systems, Trimble R8 GNSS systems, Trimble Survey Controller 2 and 3 with Trimble Access), Trimble Recon, GeoXT GeoExplorer, Leica Total Station and Digital Levels, Nikon Total Station, Trimble S5 Robotic Total Station, Sokkia Site Level, Topcon Laser Level and RTK GPS systems, Spectra Precision T41 Data Collector.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Coon Island Disposal Area & Marsh (Calcasieu Parish, LA): Fenstermaker is performing topographic and bathymetric surveys for Port of Lake Charles. Fenstermaker performed bathymetric surveys using a single-beam dual-frequency echo sounder to determine existing water bottom depths adjacent to the following dock locations: City Docks; Port Aggregate BT-4; and Bulk Terminal No. 1. Limits of the

surveys are defined by Port of Lake Charles as previously performed by others. Mr. Morales has created surfaces, cross sections and calculated volumes for the concept plat. Cost: \$22,600

Oyster Bayou Marsh Creation (CS-59) 120-Day Post-Construction Survey (Cameron Parish, LA): Fenstermaker is providing survey services as a sub-consultant to S&ME on this CPRA project (LADNR Contract No. 4400012425). Fenstermaker is utilizing a UAV drone to capture elevations along the required transects, providing topographic points, a digital terrain model (DTM), ortho-imagery, and RTK surveys. Mr. Morales created profiles, surfaces and preliminary plats.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Queen Bess Island Restoration Project (BA-202): Fenstermaker is providing engineering and design, surveying and environmental services on this CPRA project. Surveying tasks include topographic, bathymetric, and magnetometer surveying. Mr. Morales is assisting with preparing survey deliverables, has performed volume calculations for the proposed containment dike and is the lead CAD technician for the project.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

Elevation Update of Coastwide Reference Monitoring System (CRMS) (Louisiana Coastal Zone East): CWPPRA requires an evaluation of the effectiveness of each coastal wetland restoration project. This requirement has resulted in a monitoring program to assess the effectiveness of each project. This project consisted of requesting right of entry and notification of survey schedule, static GPS survey and site visit, RTK survey-leveling at CRMS Monitoring Sites, GPS data downloading, processing and adjustments, and report. Mr. Morales served as Survey Analyst for this project.

Rockefeller Refuge Shoreline Stabilization Demo (ME-18a): Post-Construction Monitoring Survey (LADNR Contract No. 2503-10-08): To combat the loss of wetlands, LDNR has implemented this project, which will halt erosion along the 9.2-mile portion of the Refuge west of Joseph Harbor Bayou. The monitoring plan consisted of land-based and aerial photography, wave and tide gauging, bathymetric and topographic surveying, and measurement of settlement with settlement plates. The monitoring was initiated during construction of the test sections and lasted for at least one year. Along with the test sections, a 2,000-ft long control area was identified that is outside of the influence of the test sections. Mr. Morales served as Instrument Technician.

Client Reference: Ryan Bourriaque, Parish Administrator, Cameron Parish, PO Box 1280, Cameron, LA, (337) 775-5718, ryanb@camtel.net



AMANDA PHILLIPS, P.E.
C. H. FENTERMAKER & ASSOCIATES, L.L.C.
COASTAL ENGINEER
PHONE: 337.237.2200
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EDUCATION: BS, 2000, Biological Engineering, Louisiana State University, Baton Rouge, LA

YEARS OF EXPERIENCE:

With Firm: 2

Total: 19

TYPE OF EXPERIENCE: Civil and Coastal Engineering, Wind, Wave, and Water Analysis, Construction Cost Estimating

PROFESSIONAL PROFILE:

Mrs. Phillips is a licensed civil engineer with a history of coastal design and construction experience. Mrs. Phillips has designed and constructed numerous coastal projects throughout southern Louisiana. These projects include breakwater design, marsh creation projects, dredging of inland waterways, riprap installation, levee construction and other heavy civil construction projects. After leaving DNR, Mrs. Phillips has spent the last 10+ years working and learning the world of marine construction. This fast paced, real-world experience has provided her with successes and failures of inland waterway and heavy civil construction critical to furthering her understanding coastal engineering and construction challenges.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Queen Bess Island Restoration – Queen Bess, LA – Engineer of Record, C. H. Fenstermaker & Associates L.L.C. (2017-Present) - Project includes the restoration of Pelican, Terns, and Skimmer nesting habitat on Queen Bess Island near Grand Isle. It also includes development of project alternatives for habitat restoration including evaluations of various borrow sources, material types, and construction methods with a heavy emphasis on the project's overall design and construction schedule.

Client Reference: Katie Freer, Project Manager, Coastal Protection & Restoration Authority *Baton Rouge, LA*, (225) 342-4635, Katie.Freer@la.gov

SELA 15: Trapp Canal – Algiers, LA – Project Manager, Hamps Construction, Inc. (2012-2016) - The project included the excavation of 7500ft of inland drainage canal. It also included the installation of crushed limestone and concrete slope pavement as well as the marine placement of riprap and vinyl sheet piling for the upgrade of the canal. The project was in excess of \$20 million dollars and some of the complexities on this project included soil sapping failures, excess material settlement and quantity overruns, and limited access corridors.

Client Reference: Charlie Hampton, President, Hamps Construction, Inc. *New Orleans, LA*, (504)367-1400, admin@hampsconstruction.com

Teche-Vermilion Debris Screen – Krotz Springs, LA – Project Engineer (2016) - The project included coordination with Client to determine project issues and research into potential options utilizing client input. It also included the developed scopes of work for geotechnical subcontractor and oversight and design of debris screen of a temporary nature as chosen by client.

Client Reference: Jody White, Engineer, Coastal Protection and Restoration Authority, Lafayette, LA
(337) 482-0664, jody.white@la.gov



GARVIN D. PITTMAN, PMP

COASTAL PROJECT MANAGER

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EDUCATION: BS, 1992, Chemical Engineering, Louisiana State University, Baton Rouge, LA

YEARS OF EXPERIENCE:

With Firm: 2

Total: 27

TYPE OF EXPERIENCE: Coastal Project and Program Management

PROFESSIONAL PROFILE:

Mr. Pittman is an Environmental Specialist with a history of successfully managing projects in coastal Louisiana. His extensive field experience, combined with over two decades of project and program management experience make him one of the leaders in Louisiana's coastal industry. His experience managing CPRA's CWPPRA Program Management project, Coastwide Reference Monitoring Systems project and Natural Resource Damage Assessment – Coastal Wetland Vegetation project provides him a breadth of hands on experience in Louisiana's coastal environment that very few people can match.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Queen Bess Island Restoration (BA-202) Project, Barataria Bay, Louisiana. Project Manager (2017-Present) – C.H. Fenstermaker & Associates, L.L.C. Mr. Pittman is currently serving as the project manager for the design effort of this NRDA funded restoration project. Mr. Pittman has been responsible for the coordination of all design activities, including initial surveying, data gap analysis, geotechnical exploration, geotechnical engineering, conceptual alternatives analysis, and reporting. As this project now enters the permitting and design phase, Mr. Pittman is working closely with the engineer of record, state and federal partners, permitting agencies and other stakeholders to ensure the design of this project meets aggressive schedule requirements and provides the best possible value to the stakeholders.

Client Reference: Katie Freer, Project Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4635, katie.freer@la.gov

CWPPRA Program Management, Baton Rouge, LA. Senior Project Manager (2013-2017) – CBI Environmental & Infrastructure. As an imbedded contract project manager at CPRA for four years, Mr. Pittman managed a staff of up to four contracted project managers that were responsible for up to thirty-two Coastal Wetland Planning Protection and Restoration Act projects at any given time. Their responsibilities included financial management and forecasting of each project for input into CPRA's Annual Plan as well as shepherding these projects through the design and construction phases. Mr.

Pittman and his team became familiar with many of CPRA's financial systems and developed a firm understanding of CPRA's management philosophies and policies.

Client Reference: Andrew Beall, Project Management Administrator, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-4550, andrew.beall@la.gov

Coastwide Reference Monitoring Systems, LA, Operations Manager (2006-2013) – Shaw Environmental & Infrastructure. For over seven years, Mr. Pittman managed operations, logistics, training, and financial performance of the program that included five regional field offices with up to 45 field scientists and technicians and over 450 remotely located, multi-parameter CRMS and project-specific monitoring stations.

Client Reference: Ed Haywood, Coastal Resource Scientist Manager, CPRA, 150 Terrace Ave, Baton Rouge, LA, (225) 342-9428, ed.haywood@la.gov

Natural Resource Damage Assessment – Coastal Wetland Vegetation, LA, Operations Manager (2010-2014) – Shaw Environmental & Infrastructure. Mr. Pittman led the teams that served as the State of Louisiana's representatives during field data and sample collection activities to determine injury to coastal wetland vegetation resulting from the Deepwater Horizon oil spill. His responsibilities included training and management of up to five teams of scientists and a QA officer, coordination with Federal and Responsible Party management and staff, and financial and administrative control of this seasonal effort.

Client Reference: Todd Folse, Coastal Resource Scientist Manager, CPRA, 1440 Tiger Dr, Thibodeaux, LA (985) 449-4082, todd.folse@la.gov



Joel A. Tillery, PE, CFM

Duplantis Design Group

Senior Project Manager

PHONE: 985.249.6180

FAX: 985.249.6190

JTILLERY@DDGPC.COM

JOB CLASSIFICATION: Coastal Engineering Senior Project Manager

EDUCATION:

-Bachelors of Biological Engineering, 2001, Mississippi State University

-Masters in Civil & Environmental Engineering, 2003, Colorado State University

-Coastal Engineering Graduate Certificate, 2018, University of New Orleans

YEARS OF EXPERIENCE:

With Firm: 2.5

Total: 13

TYPE OF EXPERIENCE: Mr. Tillery is a water resources/coastal engineer and project manager with over 14 years of experience with the planning and design of river engineering, flood risk management, and coastal restoration projects.

PROFESSIONAL PROFILE:

Mr. Tillery is a civil / water resources engineer and project manager with 14 years of experience with the planning and design of river management, coastal restoration, and flood risk management projects including numerous drainage studies and designs. He has extensive experience with various hydrologic and hydraulic models including HEC-RAS, HEC-HMS, ICPR, PondPack, SWMM, Hydraflow, Storm Sewers, and Storm and Sanitary Analysis (SSA), and others. His drainage design experience spans piped networks, open channel systems, pressure distribution, stormwater pump station design, detention ponds, and stormwater wetlands. He has significant experience with the design of low impact development (LID) practices such as bioswales, bioretention areas, permeable pavement, and rain gardens. As a project manager, he has conducted and led efforts involving data collection, hydrologic and hydraulic analyses, master planning, design, permitting, preparing contract documents, bidding, and construction services.

PROJECTS RELEVANT TO RESTORE ACT, FEMA HMGP, CDBG, AND/OR COASTAL RESTORATION AND PROTECTION:

Coastal Protection And Restoration Authority, Lake Borgne Marsh Creation Project Increment 1, St. Bernard Parish, LA (PO-0180) Serving as project manager for this large-scale marsh creation project in St. Bernard Parish that will create 1,548 acres of restored marsh with an anticipated construction budget of \$127 million. Sediment will be dredged from Lake Borgne and pumped into the containment areas at specified elevations based on a geotechnical analysis.

Client Reference: Coastal Restoration and Protection Authority | Vida Carver | (225) 342-4635

Coastal Protection And Restoration Authority, Bayou Bonfouca Marsh Creation Project; St. Tammany Parish, Louisiana (2016 to ongoing)

Project Engineer. Supporting construction administration and inspection of 458 acre marsh creation project. Due to the cost effectiveness of the project, the marsh creation areas is expanding to nearly 800 acres. **Client Reference:** Providence Engineering - Gary Leonards, PE, Services Director | 225-766-7400 | garyleonards@providenceeng.com

St. Tammany Parish Government, W-14 Drainage Canal Hydraulic Improvements / Fritchie Marsh Hydrologic Restoration

Project Engineer. Mr. Tillery is currently working with St. Tammany Parish to reduce the risk of flooding for citizens residing in the W-14 Canal Basin while simultaneously reducing the rate of erosion in the Fritchie Marsh. This will be accomplished by widening of approximately 3,250 feet of the W-14 Canal and the design of features to strategically convey additional freshwater through the Fritchie Marsh. Mr. Tillery is refining an existing unsteady HEC-RAS model to evaluate alternatives for channel widening. He is also working with The Water Institute to prepare a MIKE21 model to represent flow through the marsh.

Client Reference: Kelly Rabalais | 21454 Koop Drive, Suite 2F, Mandeville, LA 70471 | 985-898-2445

St. Tammany Parish Government

St. Tammany Parish Government Flood Risk Awareness & Risk Reduction Project

Project Engineer. Supported improvements to a 2D HEC-RAS model of the Tchefuncte River Basin developed by USACE following severe flooding in August 2016 and assisted with the development of a framework that assimilates climate and hydrologic data and runs the model in real time to produce forecasts of water surface elevation and associated inundation extents.

Client Reference: Kelly Rabalais | 21454 Koop Drive, Suite 2F, Mandeville, LA 70471 | 985-898-2445

***Coastal Protection And Restoration Authority**

Calcasieu Ship Channel Salinity Control Measures Project (CS-65); Cameron and Calcasieu Parishes, Louisiana

Project Engineer / Project Manager. Supported the evaluation of options for salinity control and reducing land loss in Southwest Louisiana. The Tentatively Selected Plan (TSP) involves construction of channelization berms and barriers along navigable passes to isolate saltwater from the Gulf of Mexico within the Calcasieu Shipping Channel. The project involves design of control structures and berms to isolate saltwater from the Gulf of Mexico inside the CSC to manage salinities in the surrounding wetlands. Prior to departing his former firm, Mr. Tillery successfully developed a delivery team, prepared a workplan and schedule, and negotiated a phased scope of work to be executed. His efforts supported the award of RESTORE Act funds from the Department of Treasury.

OTHER NOTABLE REPRESENTATIVE CLIENTS AND PROJECTS:

Calcasieu Parish Police Jury, Rabbit Island Restoration/Breakwater Design*

CPRA/Living Shoreline Demonstration Project (PO-148)*

Southeast LA Flood Protection Authority - East Risk Assessment*

CPRA / Calcasieu Ship Channel Salinity Control Measures Project Feasibility Study*

CPRA / Mississippi River Reintroduction into Bayou Lafourche*

Calcasieu Parish Police Jury, Rabbit Island Restoration; Cameron Parish, Louisiana*

Gwinnett County Department of Water Resources / Big Haynes Creek Watershed Improvement Plan and Implementation*

Miami-Dade County / Miami-Dade County Stormwater Master Plan Basin C-2*

*Experience prior to DDG

- 4.c. Estimate the number of persons to be assigned to this project, indicated the number working in Louisiana and the number working elsewhere.

COMPANY	ESTIMATED TOTAL EMPLOYEES ASSIGNED	LOCATED IN LOUISIANA	LOCATED OUTSIDE LOUISIANA
C. H. Fenstermaker & Associates, L.L.C.	10	10	0
APS Engineering and Testing	2	2	0
Duplantis Design Group	2	2	0
Professional Engineering Consultants	5	5	0
TEAM TOTALS	19	19	0