

2021 LOUISIANA

Engineering Excellence Awards



Presented to you by

ACEC

AMERICAN COUNCIL OF ENGINEERING COMPANIES
of Louisiana

“ADVANCING THE BUSINESS OF ENGINEERING”

FROM THE CHAIR



Andrée F. Cortez, P.E.
ACEC of Louisiana Chair
T. Baker Smith, LLC

Oh, what a night...to celebrate excellence in engineering! For three years now we have watched our Engineering Excellence Gala grow into a celebration that our members look forward to each year. The gala serves as a great opportunity to socialize with our friends and colleagues, but most importantly, it allows the business of engineering to honor the firms and clients behind some incredible engineering projects. This year's event was another huge success thanks to the awesome work of the ACECL staff and a great emcee in Congressman Garret Graves.

At the gala we honored 11 projects that met our engineering excellence criteria. From preserving our coastline to building a field of dreams, every one of these projects reflected the import role engineering plays in the sustainability of our communities, our economies, and our environment. Engineers are the foundation on which the *Three Pillars of Sustainability* sit, and these projects provide real life examples for why.

Projects were scored on the following criteria:

- Uniqueness and/or innovative application of new or existing techniques
- Future value to the engineering profession and enhanced public awareness/enthusiasm of the role of engineering
- Social, economic, and sustainable development considerations
- Complexity
- Successful fulfillment of client/owner needs

ACECL thanks the firms and partner owners who invested valuable time, expertise, and resources to ensure the successful execution of these eleven award winning projects. We hope you enjoy reading about each project and that you will be inspired to submit one of your own projects in 2022. More information about the 2022 EEA Program will be sent to the ACECL membership and posted on the ACECL website, www.acecl.org, in the coming weeks

Thank you to our distinguished panel of judges!

Foy B. Gadberry

District 15 State Representative and Civil Engineer

Sharon Hewitt

District 1 State Senator and Mechanical Engineer

Timothy Kelley

19th Judicial District Court Judge and Civil Engineer

Ali Mustapha

Caddo Levee District Administrator and Professional Civil Engineer

Ken Naquin

CEO of Louisiana Associated General Contractors

2021-2022 ACEC/L BOARD

Ms. Andree F. Cortez, P.E., PMP
Chair

Mr. Michael J. Thomassie, P.E.
Chairman-Elect

Mr. Nathan J. Junius, P.E., PLS
Vice-Chairman

Mr. Chad M. Poche, P.E.
Secretary-Treasurer

Mr. David Dupre, P.E.
National Director

Ms. Sherri LeBas, P.E.
Member-at-Large

Mr. Byron Racca, P.E.
Member-at-Large

Ms. Lisa F. Cookmeyer, P.E.
Member-at-Large

Mr. Bob Boagni, P.E.
Member-at-Large

Mr. Don R. Arrington, P.E.
Member-at-Large

Mr. Brett P. Bayard, P.E., PLS
Member-at-Large

Ms. Brin Ferlito, P.E., PTOE
Member-at-Large

Mr. Brandon Aillet, P.E.
Shreveport Chapter President

Mr. Colby J. Guidry, P.E.
Lafayette Chapter President

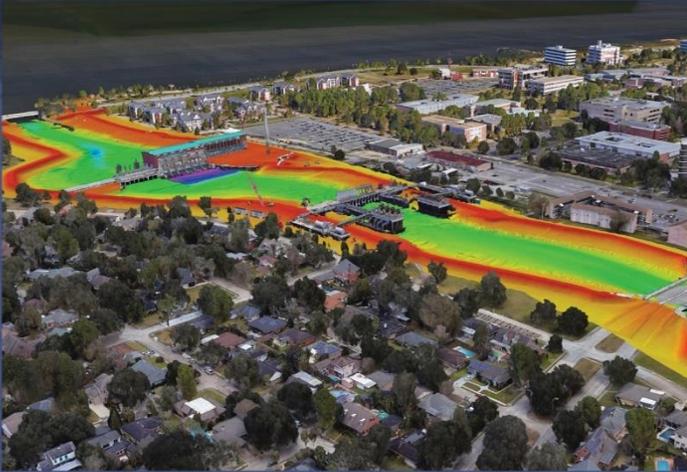
Mr. Robert Delaune, P.E.
New Orleans Chapter President

Mr. Chad A. Bacas, P.E.
Baton Rouge Chapter President

Mr. Butch Babineaux, P.E.
Lake Charles Chapter President



2021 Grand Conceptor Award Outfall Canals Topographic & Bathymetric Survey



Read more about the award-winning project here:



Established in 1950, C. H. Fenstermaker & Associates, L.L.C., is a highly diversified, multi-disciplinary consulting firm.

With a commitment to help our clients succeed, we specialize in **surveying and mapping, engineering and environmental consulting.**

Lafayette | Baton Rouge | New Orleans | Lake Charles | Shreveport | Mandeville | Jennings
Houston | San Antonio | Midland | Ocean Springs

(337) 237-2200



Category: Studies, Research and Consulting Engineering Services

Firm: C.H. Fenstermaker & Associates, LLC (Lafayette)

Clients: Louisiana DOTD

Project: Cane River Bridge Church Street Environmental Assessment



For over 80 years, the Cane River Bridge has provided a vital transportation connection to the historical downtown areas of Natchitoches west of Cane River Lake and the historical residential areas east of the lake. CH Fenstermaker was tasked to develop a comprehensive Environmental Assessment Report for the proposed replacement of the Cane River Bridge. Fenstermaker managed a team of 7 sub-consultants, the planning, public outreach, engineering, and environmental studies necessary to gauge public support and document information for LDOTD and FHWA to reach an environmental decision, culminating into a final Environmental Assessment (EA) Report.

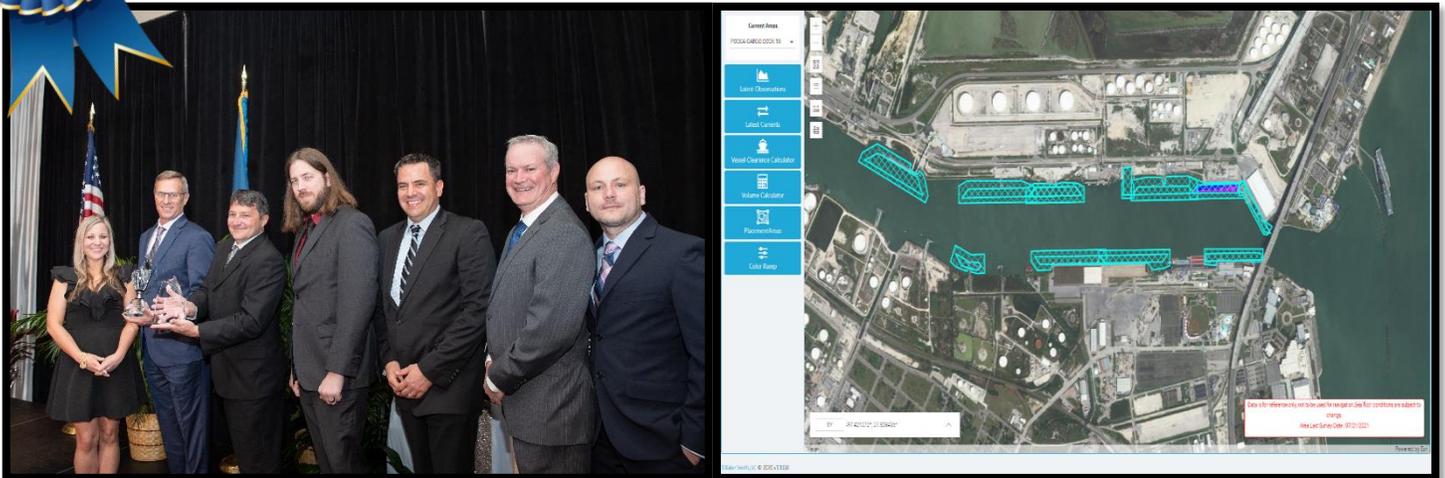


Category: Building/Technology Systems

Firm: T. Baker Smith, LLC (Houma)

Client: Port of Corpus Christi

Project: Port of Corpus Christi – Dock Management System



The Port of Corpus Christi engaged T. Baker Smith to provide port decision-makers and stakeholders with an integrated system for efficiently assessing and communicating port operational conditions. Leveraging data from the 200+ annual surveys, a Dock Management System was developed consisting of a user dashboard for analyzing data; a feature manipulation engine dashboard for loading data; and an internal quality control dashboard. The primary function of the dashboard is to provide consistent communication allowing bathymetric data to be presented on a user-friendly dashboard assessable to Port staff.

GRAND AWARD WINNERS



Category: Waste and Storm Water
Firm: Meyer Engineers, Ltd. (Metairie)
Client: LCMC Health
Project: Children's Hospital Green Infrastructure



Meyer Engineers and LCMC Health created a green infrastructure design as part of a \$300 Million expansion to renovate and modernize the Children's Hospital New Orleans Campus, meeting the City of New Orleans' standards of practice. The green infrastructure plan included a unique mix of stormwater BMP's - landscaped bioswales, subsurface stormwater tanks, and pervious pavement. Meyer's design accounted for the challenges of limited land availability on the Uptown Campus as well as the challenges associated with implementing these systems to protect life and property, lessen stormwater runoff to the surrounding neighborhood, beautify the area all the while remaining within budget.



Category: Water Resources
Firm: HDR, Inc. (Lafayette)
Client: Coastal Protection and Restoration Authority
Project: Rockefeller Refuge Gulf Shoreline Stabilization (ME-0018)

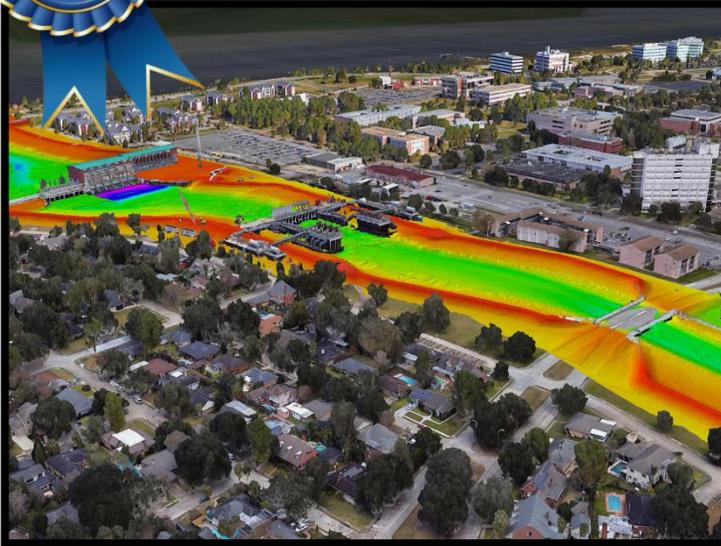


HDR, Inc. partnered with CPRA and took on the 71,000-acre Rockefeller Wildlife Refuge marshland sanctuary shoreline stabilization project to protect this critical habitat of abundant fish, migratory birds, and alligators. The team overcame significant challenges, including repeatedly competing for funding and constructing the breakwater from the harsh Gulf environment without land access. Not long after project completion, Hurricane Laura, a category 4 storm, and Hurricane Delta, a category 2 storm, directly impacted the project area. Yet, those impacts were mitigated because of this stabilization project.

GRAND AWARD WINNERS



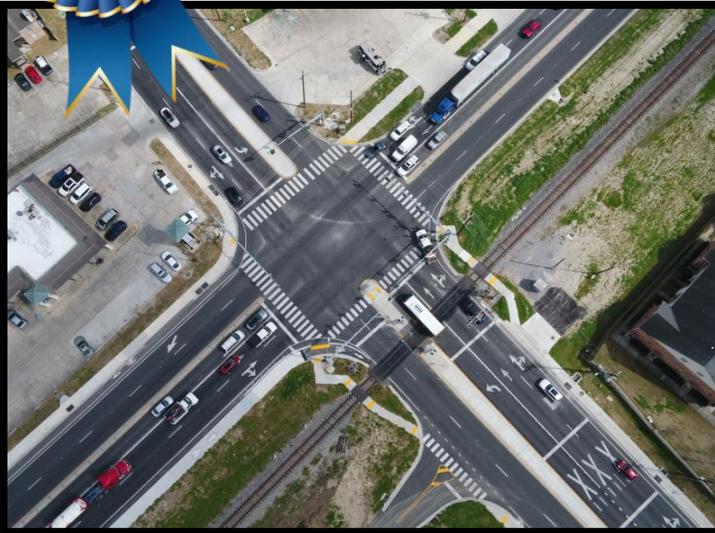
Category: Surveying/Mapping Technology
Firm: C.H. Fenstermaker & Associates, LLC (Lafayette)
Client: Flood Protection Authority East
Project: Outfall Canals Topographic and Bathymetric Survey



C.H. Fenstermaker partnered with the Flood Protection Authority to develop the New Orleans Outfall Canals and the Hurricane Storm Damage Risk Reduction System (HSDRRS). The system significantly diminishes the risk of flooding for over 1 million residents in the New Orleans Metropolitan area. Fenstermaker provided the most innovative solution, using both Aerial Drone-based LiDAR and an Unmanned Surface Vehicle (USV) outfitted with a multi-beam sonar device to create a seamless topographic/bathymetric survey meeting the requirements set forth by the FPA.



Category: Transportation
Firm: Forte & Tablada, Inc. (Baton Rouge)
Owner: East Baton Rouge City Parish
Project: Nicholson Drive/Brightside Lane/W. Lee Intersection Improvement



Partnering with East Baton Rouge City Parish, Forte and Tablada was tasked to design an intersection improvement project that delivered both congestion relief and safety improvements that focused on multiple forms of transportation. The project brought many challenges, one of which was the sight distance issues over the railroad track going from W. Lee to Brightside and back. Taking care of this sight distance, which was elevated well above LA30, was a top priority in achieving congestion relief.

GRAND AWARD WINNERS



Category: Special Projects
Firm: Aillet, Fenner, Jolly & McClelland, Inc. (Shreveport)
Owner: Louisiana Tech University & TBA Studio
Project: LA Tech University's Baseball & Women's Sports Complexes



On April 25, 2019, an EF-3 tornado struck the Louisiana Tech baseball stadium, softball stadium, and women's soccer stadium. Aillet, Fenner, Jolly & McClelland (AFJM) and TBA Architects were on-site the day after, surveying the damage and analyzing the condition while developing cost estimates of the damaged facilities for repair and replacement. Louisiana Tech developed a long-term strategic plan to upgrade the Women's facilities and to relocate near the football field to consolidate the athletics facilities. It was also decided to rebuild the baseball stadium at its current location.



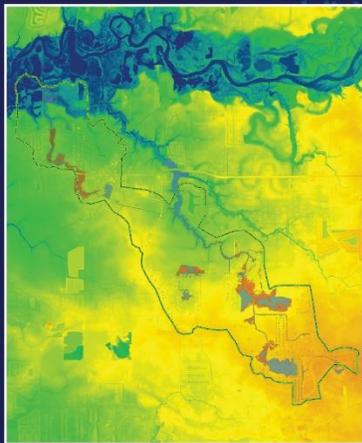
Award Winning.

Featured Project

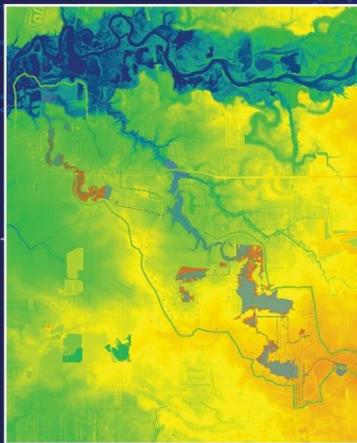


*Large Scale Watershed Study for
Livingston Parish.*

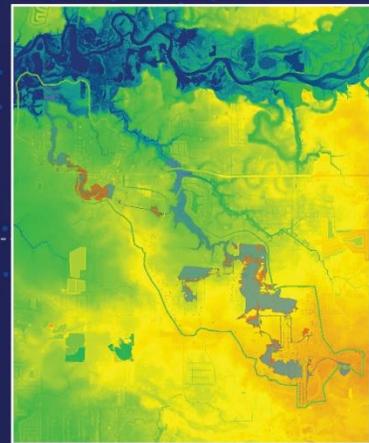
Quality Engineering and Surveying's (QES) was tasked with a large-scale watershed study for Livingston Parish Gravity Drainage District 1. It is one of the most comprehensive watershed studies in Southeast Louisiana and showcases what QES can do.



Gray's Creek Inundation - 10 YR



Gray's Creek Inundation - 25 YR



Gray's Creek Inundation - 100 YR

During the years of study, QES created specific and detailed analysis of each watershed (above), with recommendations and costs for drainage improvements ranging from simple dredging and clearing of existing ditches to widening and new

construction of canals, levees, pumps, and retention ponds. The result is a modern, technologically advanced way to view, explain and understand the details of hundreds of specific locations and interactions within the boundaries of LPGDD #1.

QUALITY
ENGINEERING & SURVEYING



learn more at
qesla.com



info@qesla.com
225-698-1600



18320 LA HWY 42
Port Vincent, LA 70726

HONOR AWARD WINNERS



Firm: C.H. Fenstermaker & Associates, LLC (Lafayette)

Owner: City of Scott

Project: City of Scott Drainage Improvement Plan



Partnering with the City of Scott, Fenstermaker developed a comprehensive document that defines and evaluates the existing drainage system, establishes a procedure for inspection and maintenance, and plots a course for improvement. The Plan at its core is an agreement of the community to hold itself responsible for combating flooding and drainage problems in all its forms.



Firm: Duplantis Design Group (Thibodaux)

Owner: D.R. Horton, Inc.

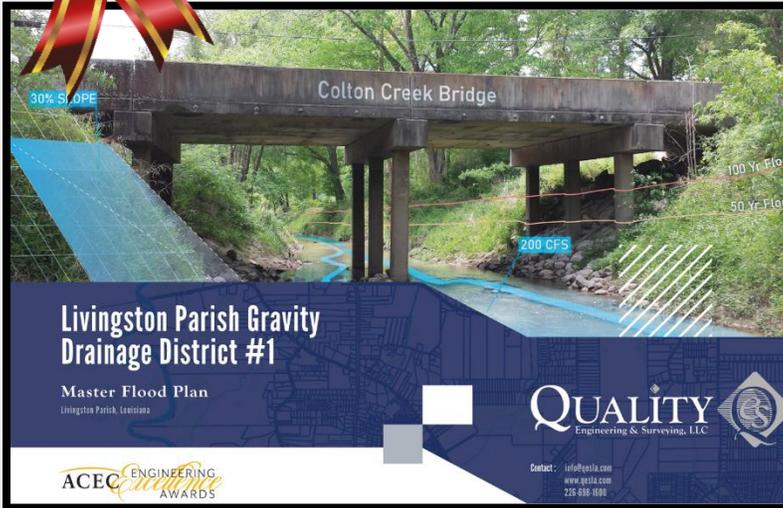
Project: Lakeshore Villages



Duplantis Design Group created a 3D model of all the major infrastructure for the development including storm pipes, sewer pipes, roads, and lots in the master-planned new 2,600 single-family lots. There were numerous iterations of mass grading to balance the earthwork within the development due to challenging soil conditions and the presence of unsuitable material like peat, that had to be removed and replaced.



Firm: Quality Engineering & Surveying, LLC
Owner: Livingston Parish Gravity Drainage District No 1
Project: Master Flood Plan



Quality Engineering & Surveying partnered with Livingston Parish Drainage District No. 1 to implement a master flood plan based on sophisticated flood modeling results. This forward-thinking plan helps parish leaders develop sustainable rules and procedures for commercial and residential development to drive sustainable growth in which future construction is positively affected by highly informed design.



Firm: C.H. Fenstermaker & Associates, LLC (Lafayette)
Owner: Lafayette Consolidated Government
Project: Kaliste Saloom Road Widening



CH Fenstermaker partnered with client Lafayette Consolidated Government to promote an aggressive mission to plan, design, acquire the necessary rights of way, and construct the necessary improvements to widen Kaliste Saloom Road, one of the six major urban arterials of the City of Lafayette located in the highest growth rate sectors of Lafayette Parish.

**NICHOLSON DR. @
BRIGHTSIDE LANE /
WEST LEE DR.**

INTERSECTION IMPROVEMENT PROJECT



**FORTE &
TABLADA**

**ACEC
GRAND AWARD &
PEOPLE'S CHOICE WINNERS**



INNOVATIVE INFRASTRUCTURE SOLUTIONS

ForteAndTablada.com | (225) 927-9321

Special thanks to our EEA sponsors!

Gold Sponsors:

- Aillet, Fenner, Jolly & McClelland, Inc.
- CSRS, Inc.
- Forte & Tablada, Inc.
- HDR, Inc.
- HNTB, Inc.
- Huval & Associates, Inc.
- Meyer Engineers, Ltd.
- Neel Schaffer & Associates, Inc.
- SJB Group, Inc.
- T. Baker Smith, LCC
- Terracon Consultants, LLC
- TRC Companies
- WSP, USA

Bronze Sponsors:

- Alliance Transportation Group, Inc.
- Mohr & Associates, Inc.




DOCK MANAGEMENT SYSTEM

- GIS User Dashboard
- Shoal/Scour Rates
- Vessel Clearance Calculator
- Dredge Volume Computations

Integrating technology, innovation, and professional surveying services for efficient port operations.




James "Jim" Naismith, RPLS, LSLs, Ports Practice Leader
361.799.7502 | jim.naismith@tbsmith.com

Award Winning & Patent Pending www.tbsmith.com

ENGINEERING | ENVIRONMENTAL | SURVEYING | INNOVATIVE SOLUTIONS



Explore with us



Nationwide
Terracon.com

- Facilities
- Environmental
- Geotechnical
- Materials

Baton Rouge
(225) 344-6052

Lake Charles
(337) 478-5345

New Orleans
(504) 818-3638

Shreveport
(318) 606-7559