



**PROJECT START**  
 March 2017 (Design)  
 December 2018 (Construction)

**PROJECT FINISH**  
 May 2018 (Design)  
 May 2019 (Construction)

**KEY PERSONNEL INVOLVED**  
 Robert Delaune, Jr., P.E.  
 Andrew Woodroof, P.E.  
 Ross Liner, AICP, PTP, CFM  
 Victoria Malley, EI  
 Donnie Wittke  
 Mickey Cochran

**PROJECT OWNER**  
 City of Covington  
 317 North Jefferson Avenue  
 Covington, LA 70433

**OWNER REFERENCE**  
 Mike Cooper, Mayor  
 985.892.1811  
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**DE FEE**  
 \$112,083

**CONSTRUCTION**  
 \$538,410

## Bogue Falaya Shoreline Protection

### Covington, LA

Located on an outer bend in the Bogue Falaya River, the northeastern shoreline of the Bogue Falaya Park continued to erode away after previous shoreline protection efforts had failed to keep the bank stabilized. To solve this problem, the City of Covington selected Digital Engineering (DE) to provide design, permitting, bidding, construction administration and resident inspection services for a 200 foot long sheet pile bulkhead along with an ADA compliant paddlers launch. Additionally, this project consists of a new 150 foot long concrete driveway to the paddlers launch and a new 180 foot long concrete walkway along the river.

DE analyzed the geotechnical investigation findings and topographic survey of the area to design the sheet pile lengths and tie-back anchoring system for the bulkhead using SPW911 Pile Buck sheet pile design software. The mean, high and low water levels from the USGS gauge at Boston Street were analyzed to ensure the bulkhead would be able to withstand forces from high flood waters. Upon completing the design of the project, DE obtained the required permit from the Army Corps of Engineers.

A challenge arose when the lowest bidder of the project intended on using steel sheet piles for the bulkhead that had been designed for fiberglass sheet piles. Ultimately DE was able to accommodate the contractor's variance and provide the Client with a stronger product that will be able to protect more of the park's shoreline while remaining within the same construction budget.

Four days after construction was substantially completed, the Bogue Falaya River flooded five feet over the top of the bulkhead and tested the durability of the project. The bulkhead had no problem withstanding the flood and only had minimal damage to the handrail.

DE's Andrew Woodroof, P.E., City of Covington Mayor Mike Cooper, and others at the ground breaking ceremony on January 16, 2019

