

Client:

WL Bass Construction, Inc.
Louisiana Department
of Transportation and
Development (LADOTD)

Location:

Houma, LA

Service Provided:

Performance monitoring
during construction of new
bridge.

Value Provided:

- Provided value added changes to instrumentation specification
- Installed and commissioned remotely positioned Structural Monitoring System for innovative bridge design
- Performed load test of bridge structure prior to bridge opening
- Developed System Operation Manual and provide system operation training to LADOTD

Background & Project Challenges

The Bayou Lafourche Bridge is an AccelBridge that utilizes the simple method of compressing the deck by pre-stressed bridge girders. The bridge is located near Monroe, Louisiana and was constructed in 2016 and 2017. The project was sponsored by the Federal Highway Administration (FHWA) Innovative Bridge Research and Deployment Program. As part of this program, a detailed instrumentation system was implemented to verify design assumptions and construction methods.

Geocomp Role & Accomplishments

As part of the instrumentation plan, Geocomp installed strain gages on girders and slabs at the pre-cast facility and tie-down anchors and splice plates in the field. The monitoring system was set-up temporarily to evaluate the performance of the bridge during the innovative construction sequencing and methods.



After the construction was complete and prior to the bridge opening, a load test was performed on instrumented spans to verify the design response of the bridge.

A permanent monitoring system was designed and installed using remote power from solar panels with remote communication provided for data access to the LADOTD's Louisiana Technical Research Center in Baton Rouge. Geocomp provided a System Operation Manual and training in system operation to LADOTD Staff.

