Gresham Smith

LADOTD

LA 44: I-10 Roundabouts, Route: LA 44 & I-10
Contract No. 4400028432 | State Project No. H.015569.5 | Federal Aid Project No. H015569
Ascension Parish, LA | February 7, 2023

Genuine Ingenuity

10000 Perkins Rowe
Suite 280
Baton Rouge, LA 70810

225.757.5849
GreshamSmith.com

February 7, 2024

Ms. Paulette Territo
Consultant Contract Services Administrator
Department of Transportation and Development
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802

Re: Advertisement for Engineering and Related Services
Contract No. 4400028432 | State Project No. H.015569.5 | Federal Aid Project No. H015569
LA 44: I-10 Roundabouts, Route: LA 44 & I-10
Ascension Parish

Dear Ms. Territo,

At Gresham Smith, we have been honored to partner with LADOTD and numerous public agencies on a variety of projects. From our Baton Rouge office, and also at the corporate level, we share in the stake that the LADOTD holds in carrying out its responsibilities in the most effective manner possible. Our key local staff all have experience successfully completing road, bridge, complete street, and traffic projects individually for LADOTD and we look forward to the opportunity to partner with LADOTD to the opportunity to design the three roundabouts along LA 44, at the I-10 interchange and at the entrance to the River Parish's Community College and Edenborne development within this contract. We are honored for this opportunity to design these critical intersections.

For over the past 55 years Gresham Smith has partnered with our Transportation clients as a trusted advisor to help them deliver their transportation programs, our local office is supported by key staff and national experts in our other 28 offices throughout the southeastern US. We deliver an unparalleled diversity and depth of ***Resources*** rivaling those of much larger national firms, but we retain the dedicated, personalized service and ***Responsiveness*** of a local firm. Gresham Smith looks forward to continuing our great working relationship with DOTD staff and other key stakeholders on this project.

Since 2016, Gresham Smith has been designing roadways and intersections in accordance with LADOTD standards and guidelines. We have held a number of IDIQ and standalone contracts with various sections of LADOTD and have performed numerous task orders since we have established a presence in Louisiana over the past eight years. These task orders have included a wide range of scopes including roundabouts and full intersection realignments, intersection improvements, signing and striping designs, guardrail designs, and sidewalk and multi-use path designs. Gresham Smith offers the LADOTD a partnership with both years of experience serving the department as employees and delivering successful projects, ahead of schedule, and in strict accordance with all LADOTD procedures and guidelines for several years.

Our primary proposed staff members for this program have been honored to build their careers with DOTD. Gaining experience with similar types of projects while instilling that required attitude that puts the needs of the communities and safety of the traveling public first. The following key staff members will be leading the effort on these projects and have their career foundation with DOTD.

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- Richard Savoie, P.E., Project Manager, will oversee day-to-day project tasks. Richard's 40-year career includes 34 years with the LADOTD in increasing roles culminating as the LADOTD Chief Engineer. In his four years as Chief Engineer, Richard provided guidance to staff, while promoting innovation, continuous improvement and efficient use of resources. He was responsible for establishing engineering standards, policies and procedures that guide program and project delivery, construction, and preservation of all transportation-related projects and systems. In addition, he was accountable for the on-time and on-budget delivery of the DOTD Highway Priority Program. Richard has served this same role on a number of our LADOTD projects.
- Brennon Hughes, P.E., Deputy Project Manager and Lead Design Engineer, will assist with the overall project management of this contract and lead our road design tasks. Brennon's experience as a former LADOTD road design engineer and as a construction project engineer, make him a prime candidate to lead this design. While at LADOTD, he worked on multi-million-dollar projects with multiple stakeholders including the design of the roundabout at the intersection of LA 22 at LA 70. Brennon has served this same role on a number of our LADOTD projects.
- Ronnie Robinson, P.E., Senior Transportation Engineer, will assist with development of the roadway design and construction cost estimates under this contract. Ronnie has 33 years of experience with Louisiana DOTD including 11 years in construction, 8 years as Manager of the Design & permits section, and 9 years as the ADA of Engineering, over the design of many similar projects that will be designed under this contract, water resources, permit, and materials testing sections. Ronnie has served this same role on a number of our LADOTD projects.
- Herbert "Bert" Moore II, P.E., PLS, PTOE, Project Executive and Gresham Smith's Louisiana Transportation Leader, is experienced with safety, traffic management, and maintaining the state's facilities. In his 24 years of experience as both as a consultant and as LADOTD's District Traffic Operations Engineer for District 61, Bert has demonstrated his knowledge of DOTD requirements and preferences, and proven adept at getting things done efficiently. As the Project Executive, Bert will ensure the team has the expertise and resources necessary for LADOTD's successful completion of this project and ensuring that it will be completed on-time and under budget.

In addition to our talented staff, we will also have Michael Baker International (MBI) and Vectura Consulting Services to our team to support us on this project. MBI will lead our bridge related work on this project and support Gresham Smith with drainage and roadway design. Vectura will perform the Transportation Management Plan (TMP) and support Gresham Smith with other traffic engineering related tasks. Gresham Smith has teamed up with both MBI and Vectura on numerous projects in the past and also have strong working relationships between our staff members from previous employments and through professional organizations.

The Gresham Smith team is eager, enthusiastic and available to start work immediately on this project. We respectfully ask for your consideration and appreciate the opportunity to present this proposal. Please feel free to contact me with any questions at 225.282.2101 or by email at bert.moore@greshamsmith.com or our proposed project manager, Richard Savoie at 225.960.5483 or by email at richard.savoie@greshamsmith.com.

Sincerely,

Herbert "Bert" Moore II, P.E., PLS, PTOE
State Transportation Leader - Louisiana

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DOTD FORM: 24-102

(Revised January 1, 2023)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

1. Contract title as shown in the advertisement	LA 44: I-10 ROUNDABOUTS, ROUTE: LA 44 & I-10
2. Contract number(s) as shown in the advertisement	4400028432
3. State Project Number(s), if shown in the advertisement	H.015569.5
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	Gresham Smith
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0003429 DUNS number: 059153676
6. Prime consultant mailing address	10000 Perkins Rowe, Suite 280, Baton Rouge, LA 70810
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	10000 Perkins Rowe, Suite 280, Baton Rouge, LA 70810
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Richard Savoie, P.E. Senior Transportation Engineer 225.960.5483 / richard.savoie@greshamsmith.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Herbert "Bert" Moore, II, P.E., PLS, PTOE State Transportation Leader - Louisiana 225.757.5849 / bert.moore@greshamsmith.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.	Signature (shall be the same person as #9):  Date: February 7, 2024
11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.	Firm(s): — Firm(s)' %: Vectura — 6%

12. Past Performance Evaluation Discipline Table:

Past Performance Evaluation Categories	% of Overall Contract	Gresham Smith (Prime)	MBI (Sub)	Vectura (DBE) (Sub)	Each Discipline must total to 100%
Road	77%	80%	20%	0%	100%
Bridge	15%	20%	80%	0%	100%
Traffic	8%	25%	0%	75%	100%
	Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant.				
Percent of Contract	**100%**	**67%**	**27%**	**6%**	**100%**

13. Firm Size:

Firm Name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Gresham Smith	Principal	1	1
Gresham Smith	Supervisor-Engineer	2	6
Gresham Smith	Engineer	2	8
Gresham Smith	Engineer Intern	2	8
Gresham Smith	Senior Technician	2	6
Gresham Smith	Clerical	1	1
Michael Baker International	Principal	1	2
Michael Baker International	Supervisor – Engineer	1	3
Michael Baker International	Supervisor – Other	1	3
Michael Baker International	Engineer	2	5
Michael Baker International	Engineer – Aide	1	2
Michael Baker International	Engineer Intern	2	2
Michael Baker International	Engineer – Other	1	5
Michael Baker International	Environmental Pro	1	3
Michael Baker International	Biologist/ Wetlands	1	3
Michael Baker International	Senior Technician	1	5
Michael Baker International	Administrative	1	2
Vectura Consulting Services, LLC	Supervisor – Eng	2	2
Vectura Consulting Services, LLC	Engineer	3	3
Vectura Consulting Services, LLC	Engineer – Intern	1	2
Vectura Consulting Services, LLC	Inspector	0	2
Vectura Consulting Services, LLC	Supervisor - Other	0	1

14. Organizational Chart:

GS - Gresham Smith
MBI - Michael Baker International
VCS - Vectura Consulting Services

15. Minimum Personnel Requirements:

MPR No. (Do not insert wording from ad)	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR / certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1.	Herbert "Bert" Moore, II, P.E., PLS, PTOE	Gresham Smith	P.E. LA 31065 - (Civil)	Louisiana	P.E., LA 31065 Exp. 9/30/2024
			PLS LA 5043	Louisiana	PLS LA 5043 Exp. 9/30/2024
			PTOE 2728	International	PTOE 2728 Exp. 9/30/2024
2.	Herbert "Bert" Moore, II, P.E., PLS, PTOE	Gresham Smith	P.E. LA 31065 - (Civil)	Louisiana	P.E., LA 31065 Exp. 9/30/2024
			PLS LA 5043	Louisiana	PLS LA 5043 Exp. 9/30/2024
			PTOE 2728	International	PTOE 2728 Exp. 9/30/2024
3.	Richard Savoie, P.E.	Gresham Smith	P.E. LA 20936 - (Civil)	Louisiana	P.E., LA 20936 Exp 9/30/2024
	Brennon Hughes, P.E.	Gresham Smith	P.E. LA 39985 - (Civil)	Louisiana	P.E., LA 39985 Exp 3/31/2024
4.	John Weres, P.E.	Gresham Smith	PLS LA 4657 – (Civil)	Louisiana	P.E., LA 36429 Exp 9/30/2025
	Tom Tran, P.E.	Gresham Smith	PLS LA 5251 – (Civil)	Louisiana	P.E., LA 32072 Exp. 3/31/2024
	Jeff McRae, P.E.	MBI	P.E. LA 34554 – (Civil)	Louisiana	P.E., LA 34554 Exp. 9/30/2025
	Shalin Sheth, P.E.	MBI	P.E. LA 48337 – (Civil)	Louisiana	P.E., LA 39597 Exp. 9/30/2025
	Daniel Thornhill, P.E.	MBI	P.E. LA 32367 – (Civil)	Louisiana	P.E., LA 32367 Exp. 9/30/2024
5.	Courtney Rome, P.E.	Gresham Smith	P.E. LA 43355 - (Civil)	Louisiana	P.E., LA 43355 Exp. 9/30/2025
	Donald McCrary, P.E.	Gresham Smith	P.E. LA 48452 – (Civil)	Louisiana	P.E., LA 48452 Exp. 3/31/2024
	Eric Erikson, P.E., CFM	MBI	P.E. LA 31061 – (Civil)	Louisiana	P.E., LA 31061 Exp. 03/31/2024

5.	Shalin Sheth, P.E.	MBI	P.E. LA 48337 – (Civil)	Louisiana	P.E., LA 48337 Exp. 9/30/2025
	Petrina Butler, P.E., ENV SP	MBI	P.E. LA 39597 – (Civil)	Louisiana	P.E., LA 39597 Exp. 9/30/2025
6.	Rebecca Murray, P.E., PTOE, RSP1	Gresham Smith	P.E. LA 43788 - (Civil)	Louisiana	P.E., LA 43788 Exp. 3/31/2024
			PTOE 4861	International	PTOE 4861 Exp. 3/26/2026
			RSP1 611	International	RSP1 611 Exp. 4/5/2024
	Alben Cooper, III, P.E., PTOE	Gresham Smith	P.E. LA 36291 - (Civil)	Louisiana	P.E., LA 36291 Exp. 9/30/2025
			PTOE 3206	International	PTOE 3206 Exp. 5/2/2024
	Sheelagh Brin Ferlito, PE, PTOE	Vectura	P.E. LA 25383 - (Civil) PTOE	Louisiana	P.E., LA 25383 9/30/2025
	Laurence Lambert, PE, PTOE, PTP	Vectura	P.E. LA 29901 – (Civil) PTOE	Louisiana	P.E., LA 29901 3/31/2024

16. Staff Experience:

Gresham Smith

Herbert "Bert" Moore, II, P.E., PLS, PTOE

Project Executive

Years of experience with this firm/employer	9
Years of experience with other firm(s)/employer(s)	16

Degree(s) / Years / Specialization	Bachelor of Science / 1999 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date	P.E.0031065 / LA / Exp. 9/30/24 | PTOE 2728 / Exp. 9/30/24 | PLS 5043 / LA / Exp. 9/30/24		
Year registered	2004(PE); 2009(PTOE); 2010(PLS)	**Discipline**	P.E./Civil, PLS, PTOE
Contract role(s) / brief description of responsibilities	Project Executive / Bert will provide overall contract management and direction for our team and will support the team with traffic-related tasks as needed.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
Career	Bert is a professional engineer with more than 25 years of experience designing and managing projects in the fields of traffic and transportation engineering. He previously spent six years as the district traffic operations engineer for LADOTD where he was responsible for the daily maintenance and operation of signs, striping and traffic equipment for 2,000 miles of roadway and over 600 traffic signals in the Department's Baton Rouge district. His experience is in traffic operations, traffic control, signal warrants, traffic signal timing and design, safety studies, the implementation of access management principles, temporary traffic control for work zones, Transportation Management Plans (TMP), and addressing bicycle and pedestrian needs within the roadway network. Bert has completed the LADOTD Traffic Analysis Process and Report Training.
04/20 – 12/22	**City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design | *Senior Transportation Engineer.*** Gresham Smith was tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Bert has assisted the team with roundabout analysis, temporary traffic control and sequencing of construction.
07/18 – 12/21	**LADOTD, LA 37: Sullivan Road to Liberty Road Stage 0 Feasibility Study, Baton Rouge, LA | *Project Executive.*** Collected and reviewed over 580 crash reports over a span of three years from the state highway crash database and collected ADT data on 21 segments of LA 37 and intersecting streets, peak hour turning movement counts at 12 significant intersections and 15-minute counts along 38 driveways and insignificant side streets. The reports were reviewed and evaluated using the safety triage safety tool box. Traffic analysis will be performed using HCS and Synchro and other software tools as needed. We reviewed historic traffic volume counts and TransCAD models and performed count analyses to develop regional growth rates for the study area. Bert was responsible for the review of traffic counts and traffic and safety analyses.
04/18 – 05/19	**LADOTD, I-10 TMP West of LA 108 to I-210 Interchange TMP, Lake Charles, LA | *Project Executive.*** Gresham Smith developed a TMP for the Rubbelization and Overlay on I-10 between I-210 and the LA 108 Interchange in Lake Charles, LA.

	This project included the mill and overlay of I-10, widening two flat deck bridges on I-10 to add a lane, and replacing all of the concrete panels on I-10 through the LA 108 interchange. In order to replace the concrete panels on I-10, traffic was moved to a C/D road within the interchange and cloverleaf ramps were closed during construction. Two temporary traffic signals were designed to facilitate traffic at this interchange. This project included data collection and queue and safety analyses and traffic signal design. Bert was responsible for the overall study including overseeing the data collection review, conducting the queue and safety analysis, implementing the proper traffic control plans, development of the TMP report, the design of two temporary traffic signals and QA/QC.
07/19 – 12/21	**LADOTD, Lafayette Consolidate Government Adaptive Traffic Signals, Lafayette County, LA	*Project Executive.*** Gresham Smith was selected to develop an Adaptive Traffic Signal network for the Lafayette Consolidated Government, which involved upgrading over 200 traffic signal controllers. In addition, 76 traffic signals will be upgraded to become adaptive traffic signals. This will be both the largest adaptive traffic signal system installed within the state of Louisiana. This project includes field inspection of over 200 traffic signals, design plans for 76 adaptive signals, implementation of a new EVP system, integration support, and before and after travel studies. Bert was responsible for the project including overseeing data collection, traffic signal design, integration, before travel time studies and QA/QC of the preliminary and final plans.
10/17 – 04/18	**LADOTD, US 90 Bridge Maintenance over I-10 Ramps, Transportation Management Plan (TMP), Lake Charles, LA	*Project Executive.*** Gresham Smith was selected to develop a TMP for the replacement of the bridge deck of the US 90 overpass over I-10 in Lake Charles, LA. The project included working with the design engineers to determine the required lane closures for the construction, data collection and queue and safety analyses. Bert was responsible for the overall study including overseeing the data collection review, conducting the queue and safety analysis, implementing the proper traffic control plans and development of the TMP report.
05/17 – 03/19	**LADOTD, I-210 at LA 1138-2 (Nelson Road) Interchange Modification Re-Evaluation Study, Lake Charles, LA	*Project Executive.*** Gresham Smith was selected to develop a calibrated VISSIM model to model existing conditions and the future proposed diverging diamond interchange at I-210 at Nelson Road in order to evaluate the proposed interchange design. The project included data collection, development of growth rates, lead the Road Safety Assessment, developing and calibrating an existing VISSIM model and evaluation of the proposed alternative. Bert was responsible for the overall study, overseeing data collection, conducting safety analysis, development of VISSIM models, development of alternatives and the report.
04/20 – 09/20	**LADOTD, Complex Bridge Inspections, Statewide, LA	Task Order 2 - Emergency Bridge Repairs, US 71 in Downtown Shreveport, LA	*Project Executive*.** In April 2020, a train derailment damaged Bent 3 of the Spring Street Bridge forcing the roadway closure. Gresham Smith was selected to perform the bridge repairs to open the bridge. Working with the selected contractor, helical piles were designed to support the new column foundations and crash wall. Bert served as Project Executive (Principal) and assisted with DOTD coordination.
11/08 – 11/14	**LADOTD, Baton Rouge, LA	*District Traffic Operations Engineer*.** While at LADOTD, Bert was responsible for reviewing, approving and developing plans for all signing, stripping and traffic signals as well as plans for all construction and maintenance work on the state highway system within District 61. Bert was also responsible for Transportation Management Plans (TMPs) for construction and maintenance activities.
Certifications (See section 20)	• DOTD Traffic Engineering Analysis Process & Report – Modules 1, 2 and 3 • U.S. Department of Transportation Federal Highway Administration – DPFA Certification • LADOTD – Highway Safety Manual Workshop NCHRP 17-38 • Louisiana Local Technical Assistance Program – Regional Crash Data Workshop • American Traffic Safety Services Association –Traffic Control Supervisor, LA State Specific

16. Staff Experience:

Gresham Smith

Richard Savoie, P.E.

Project Manager

Years of experience with this firm/employer	5
Years of experience with other firm(s)/employer(s)	40

Degree(s) / Years / Specialization	Bachelor of Science / 1978 / Civil Engineering, McNeese State University		
Active registration number / state / expiration date	P.E.0020936 / LA / 9/30/24		
Year registered	1983 (LA)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Project Manager / Richard will manage the roadway design team, coordinate with the subconsultants and QC on all deliverables.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
04/20 – 12/22	**City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design	*Senior Engineer.*** Gresham Smith was tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Richard is responsible for overall Quality Control on the project. He is mentoring the engineering staff on the field evaluation requirements, reviewing all potential improvements, and is responsible for QC reviews on the preliminary and final design plan submissions.
09/18 – 12/20	**LADOTD, SRTS/LRSP Task Order 6 and 21: Endom Bridge Preliminary and Final Design, West Monroe, LA	*Senior Engineer.*** The project consisted of roadway realignment at the bridge approach to improve roadway geometry and safety. Right-of-way is being acquired at one quadrant of the intersection and Richard is assisting with the coordination between the right-of-way plans and the roadway requirements. Richard performed Quality Control reviews on the final preliminary design submission and was responsible for Quality Control on the final design process.
09/18 – 12/19	**LADOTD, SRTS/LRSP Task Order 14: Farmerville Design, Union Parish, Farmerville, LA	*Senior Engineer.*** Richard provided quality control review for the Final Plan submission for this Safe Routes to Public Places Project. The review was to ensure that the plans were developed in accordance with standard LADOTD policy and procedure. Plans included installation of sidewalks along various local roadways, driveway adjustments to ensure ADA compliance and utility relocation avoidance.
02/09 – 03/14	**LADOTD, Project and Program Delivery	*Project Manager.*** Richard was the Project Manager for the I-49 North project in Caddo Parish, from I-220 to the Arkansas State Line. The project started with the Corridor Selection Study and progressed to the Environmental Impact Study. Once the alignment was selected plan development began and thence project delivery for this $670 million project. As the Deputy Chief and Chief Engineer, Richard participated in many partnering sessions for the Huey P. Long Bridge widening, John James Audubon Bridge and the cable replacement for the I-310 Luling Bridge with contractors and designers. He was the first Director of **Value Engineering** when the department started their **Value Engineering** program in 1998. He participated in multiple **Value Engineering** sessions and led the **Value Engineering** study for the pavement replacement for I-10 thru Lake Charles.

16. Staff Experience:

Gresham Smith

Brennon Hughes, P.E.

Lead Roadway Design Engineer / Deputy Project Manager

Years of experience with this firm/employer	7
Years of experience with other firm(s)/employer(s)	6

Degree(s) / Years / Specialization	Bachelor of Science / 2011 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date	P.E.0039985 / LA / 3/31/24		
Year registered	2015	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Lead Roadway / Design Engineer / Brennon will lead the development of the roadway plans and development of bid packages.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
04/20 – 12/22	**City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design	*Lead Roadway/Roundabout Design Engineer.*** Gresham Smith was tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Brennon led the design and preparation of preliminary plans and cost estimates. This project is currently undergoing scope adjustments for final design.
03/21 – Ongoing	**MSY Airport: Entrance Road Capacity Design	*Lead Roadway Design.*** Brennon was responsible for planning and coordinating staffing, scheduling, and budgeting for this project. He also led the design and the preparation of preliminary and final plans and cost estimates. He worked closely with Airport officials along with the consultant for the adjacent design-build project to coordinate the widening of the entrance road to the MSY Airport.
08/17 – 12/20	**LADOTD, SRTS/LRSP Task Order 6 and 21: Endom Bridge Preliminary and Final Design, West Monroe, LA	*Lead Roadway Design Engineer.*** Brennon led the design and the preparation of preliminary and final plans and cost estimates. This project involved safety and operations improvements for the intersection realignment, curb and gutter drainage design, sidewalks, truck islands and turnouts.
10/15 – 08/17	**LADOTD, Multilane Roundabout LA 22 at LA 70 and LA 22 Geometric Improvements near I-10, Ascension Parish, LA	*Lead Roadway Design.*** This was a widening and intersection improvement project located at the intersection of LA 22 and LA 70 in Ascension Parish to north of I-10. This project included widening of LA 22, a double lane roundabout at LA 22 and LA 70 with a slip lane, along with two J-Turns north of I-10 and two J-Turns south of I-10 along LA 22. Brennon's role was to lead the design and the preparation of preliminary and final plans and cost estimates. He developed these plans from initial survey request up to 60% final plans.
09/11 – 07/17	**LADOTD Roadway Group.	*Project Engineer.*** Prior to joining Gresham Smith, Brennon served with the LADOTD Roadway Group as a designer on various roadway projects including a new roundabout, widening projects, overlay projects, and intersection improvements.
Certifications (See section 20)	• DOTD FHWA-NHI-380096V Modern Roundabouts: Intersections Designed for Safety • American Traffic Safety Services Association –Traffic Control Supervisor, LA State Specific

16. Staff Experience:

Gresham Smith

Ronnie Robinson, P.E.

Senior Transportation Engineer

Years of experience with this firm/employer	8
Years of experience with other firm(s)/employer(s)	33

Degree(s) / Years / Specialization	Bachelor of Science / 1982 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date	P.E.0024040 / LA / 3/31/24		
Year registered	1988	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Senior Transportation Engineer / Ronnie will assist with the road design tasks for the preliminary and final plans.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
04/20 – 12/22	**City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design | *Senior Transportation Engineer.*** Gresham Smith was tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Ronnie provided quality control for the preliminary design phase, participated in the plan-in-hand meeting, and will provide design assistance for the development of the final design plans.
02/17 – 12/20	**LADOTD, SRTS/LRSP Task Order 6 and 21: Endom Bridge Preliminary and Final Design, West Monroe, LA | *Senior Transportation Engineer.*** Ronnie's responsibilities included assisting in the development of preliminary and final plans and construction cost estimates. His efforts included coordination of the contaminated waste investigation, drainage layout and quality control for the preliminary design.
07/17 – 06/19	**LADOTD, SRTS/LRSP Task Order 7: McMillan at Blanchard Intersection Improvements Design, West Monroe, LA | *Senior Engineer.*** Ronnie's responsibilities included conducting field traffic observations and collecting field data for the study portion. For the design portion, his responsibilities included developing conceptual designs, preliminary and final plans and construction cost estimates.
03/16 – 10/17	**LADOTD, Farmerville State and Local Road Traffic Study, Farmerville, LA | *Senior Engineer.*** Gresham Smith was selected to perform a formal traffic study of all the intersections (57) within and around the City of Farmerville on both state and local routes. The project included data collection, safety/crash review, developing alternatives, analysis of existing and proposed conditions and benefit/cost analysis. Ronnie assisted with the development of alternatives and was responsible for developing construction cost estimates for various alternatives.
Career	Ronnie has 33 years of experience with the Louisiana Department of Transportation and Development. He worked 11 of his 16 years in construction as a project engineer, eight years as manager of the design and permit sections and nine years as administrator for the design, water resources, permit and materials testing sections.

16. Staff Experience:

Gresham Smith

Leslie Corlett, P.E.

Senior Roadway Engineer | *Birmingham, AL*

Years of experience with this firm/employer	18
Years of experience with other firm(s)/employer(s)	2

Degree(s) / Years / Specialization	Bachelor of Science / 1996 / Civil Engineering, Auburn University		
Active registration number / state / expiration date	PE.25726 / AL / Exp. 12/31/23		
Year registered	2003 (AL PE)	**Discipline**	**Year registered**
Contract role(s) / brief description of responsibilities	Senior Roadway Engineer / Leslie will assist with the road design tasks for the preliminary and final plans.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
7/15 – 12/15	**ALDOT, North Region Roundabout Feasibility Study, US 72 at SR 79, Scottsboro, AL | *Project Professional.*** Leslie supported the team to complete a roundabout feasibility study to determine the safety and operational benefits and feasibility of a roundabout at the intersection of US 72 at SR 79. This existing two way stop controlled intersection has seen 29 crashes in a five-year period, with 24 of these crashes being angle crashes, and 15 of the crashes being serious injury crashes.
3/15 – 10/15	**ALDOT, Roundabout Design Support, Various Counties, AL | *Transportation Engineer.*** As a task order under Gresham Smith's Transportation Support Services Contract with ALDOT, Leslie provided design support to ALDOT's Roadway Design Section for the design of three roundabouts: US 231 at US 411/CR 33 in St. Clair County, SR 160 at SR 79 in Blount County, and SR 5 at CR 58 in Bibb County. Gresham assisted ALDOT's designers with the initial horizontal and vertical geometry for the roundabouts.
1/16 – 6/16	**ALDOT, 5th Street at the SR-13 Interchange from Main Avenue to Bridge Avenue, Roundabout Feasibility Study, HSIP-6315, Northport, AL | *Transportation Engineer.*** Leslie studied the existing and projected traffic volumes at four intersections along 5th Street within and adjacent to the SR 13 interchange to determine if the traffic operation would benefit by the construction of roundabouts at these intersections.
2/16 – 6/16	**ALDOT, CR 13 at CR 30 Roundabout Peer Review, Baldwin County, AL | *Supervisor.*** Leslie assisted the team to complete a roundabout peer review of the proposed Alabama Transportation Rehabilitation and Improvement Program (ATRIP) roundabout project at CR 13 and CR 30 for the ALDOT Southwest Region, Mobile Area County Transportation Office.
3/17 – 7/17	**McCollum Parkway and Big Shanty Road Intersection Improvements Concept Study, Cobb County, GA | *Roadway & Traffic Engineer.*** Leslie provided design and engineering services for two new transportation projects. The team designed intersection and sidewalk improvements for McCollum Parkway at Big Shanty Road and Ben King Road and designed a bridge replacement for Willeo Road over Willeo Creek, as part of the county's Bridge Replacement Program.

16. Staff Experience:

Gresham Smith

Zillah Zoleta, E.I.

Engineer Intern

Years of experience with this employer	1
Years of experience with other employer(s)	0

Degree(s) / Years / Specialization	Bachelor of Science / 2022 / Civil Engineering / Louisiana State University		
Active registration number / state / expiration date	EI. 0035238 / LA / 3/31/2025		
Year registered	2022	**Discipline**	Civil
Contract role(s) / brief description of responsibilities	Engineer Intern / Zillah will support the Roadway team.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; ***i.e.***, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
09/21 – 03/22	**LADOTD, LRSP TO#2 - Bonner Street Pedestrian Improvements, Ruston, LA | *Engineer Intern.*** Gresham Smith provided design services in connection with the installation of lighting, pedestrian signals, signs, striping, and pavement markings. Zillah served as the transportation engineer intern for this project. She was responsible for pedestrian crossing data collection at two bridges. She captured and counted multi-directional data for each intersection.
07/22 - Ongoing	**LADOTD, Greenwell Springs & Wooddale Sidewalks, Baton Rouge, LA | *Engineer Intern.*** Gresham Smith is providing design services in connection with the installation of sidewalks and other pedestrian safety features along Greenwell Springs and Wooddale Dr in Baton Rouge, LA. Zillah is responsible for development of typical section and plan profile sheets.
08/22 – Ongoing	**City of Gonzales, US 61 Superstreet (Lowes Ave to LA 44), Gonzales, LA | *Engineer Intern.*** Gresham Smith is currently performing the design to convert this section of US 61 to a Superstreet. This design will remove all of the uncontrolled median breaks and replace them with directional median U-Turn or J-Turn with exclusive turn lanes. These J-Turns will be controlled by a 2 phased traffic signal which will only stop one direction of US 61 so that the U-Turns can be made. Additionally, the existing signalized intersection of US 61 at Lowes and US 61 at LA 44 will be converted to Restricted Crossing U-Turns (RCUTs). Zillah is supporting geometric design and developing typical sections and plan profile sheets.
06/21 – Ongoing	**LADOTD, Complex Bridge Inspections Task Orders 3, 4, 5 and 6, Statewide, LA | *Engineer Intern.*** Zillah assisted in the development of the traffic control plans for various bridge inspection projects. The traffic control plans included single lane closures with alternating traffic with flaggers for projects in urbanized areas. Zillah worked closely with the bridge inspection team to develop the parameters for the lane closures to ensure that adequate protection was provided to the field inspection team while meeting requirements from LADOTD's traffic control standards.
06/21 – Ongoing	**EBR DTD, MovEBR-Plank Road Corridor Enhancement, Baton Rouge, LA | *Engineer Intern.*** This project is a design study along a portion of the Plank Road corridor between Dawson Drive and Harding Blvd. Zillah's responsibilities include assisting the design engineer with the development of Typical Sections and Plan and Profile Sheets. She is also responsible for addressing general markups in MicroStation.

16. Staff Experience:

Gresham Smith

Alben Cooper III, P.E., PTOE

Senior Traffic Engineer

Years of experience with this employer	<1
Years of experience with other employer(s)	17

Degree(s) / Years / Specialization	Bachelor of Science / 2006 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date	PE.0036291 / LA / Exp. 9/30/25 | PTOE 3206 / Exp. 5/2/24		
Year registered	2011 (LA) 2012 (PTOE)	**Discipline**	P.E./Civil; PTOE
Contract role(s) / brief description of responsibilities	Traffic Engineer / Alben will support the team with traffic-related tasks.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; ***i.e.***, **"designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
06/19 – Ongoing	**St. Tammany Parish, Roundabout Study, St. Tammany Parish, LA | *QA/QC.*** The project team evaluated converting the intersections of US 90 at Northshore Blvd, LA 59 at Lonesome Rd and LA 59 at Sharp Rd to roundabouts. Alben conducted QA/QC of SIDRA software input and results. The study concluded with recommendations for roundabout at each location.
07/19 – Ongoing	**Jefferson Parish, MSY Roundabout Evaluation, Jefferson Parish, LA | *Lead Engineer.*** As the lead engineer Mr. Cooper was responsible for the analysis of various scenarios to estimate the design life of the existing roundabout located at the entrance/exit of the MSY airport in Jefferson Parish, LA. Analysis was performed for various growth rates using Synchro software. Additional analysis was also performed for two potential improvements to the roundabout to determine if they would extend the design life of the intersection. The results of the analyses were graphed and summarized in a letter by Mr. Cooper. The information was provided to be included in a presentation for airport personnel for consideration.
08/20 – 07/21	**Jefferson Parish, Manhattan Blvd Northbound Widening Signal Modifications, Jefferson Parish | *Lead Engineer.*** Alben was the lead engineer for a signal modification project to accommodate an additional northbound lane on Manhattan Blvd from 9th St to Gretna Blvd. Modifications were required at two intersections, Target Blvd and Gretna Blvd. Additional modifications were required based on the relocation of utilities along the corridor. Mr. Cooper performed QA/QC for each of the signal designs.
11/17 – 01/18	**City of Temple, Planning\PLDV-2021.0012 Temple Mobility Master Plan | *QA/QC.*** Alben provided Quality Assurance/Quality Control (QA/QC) services for the City of Temple Mobility Master Plan designed to guide the development and management of a state of the practice multimodal transportation system. His main role was to provide QA/QC services for the Synchro Software model which was developed based on TransModeler output including traffic volumes, intersections geometry and intersection control. Synchro models were developed for five (5) different scenarios.

16. Staff Experience:

Gresham Smith

Rebecca Murray, P.E., PTOE, RSP1

Traffic Engineer

Years of experience with this employer	9
Years of experience with other employer(s)	0

Degree(s) / Years / Specialization	Bachelor of Science / 2015 / Civil Engineering, Louisiana State University		
Active registration number / state / expiration date	P.E.0043788 / LA / Exp. 3/31/24 | PTOE 4861 / Exp. 3/26/26 | RSP1 611 / Exp. 4/5/24		
Year registered	2019 (LA) 2020 (PTOE) 2021 (RSP1)	**Discipline**	P.E./Civil; PTOE; RSP1
Contract role(s) / brief description of responsibilities	Traffic Engineer / Rebecca will support the team with traffic related tasks.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
10/16 – 03/17	**LADOTD, SRTS/LRSP Task Order 2: McMillan Street Traffic Study, Monroe, LA | *Pre-Professional.*** Rebecca's role on the project was to review and analyze traffic count data, distribute trips throughout the study area, evaluate crash data and analyze proposed improvement alternatives.
05/21 – Ongoing	**MovEBR, Sherwood Forest Blvd MUP, C-P Project No. 20-EN-HC-0027, Baton Rouge, LA | *Engineer.*** Gresham Smith was selected to perform a traffic study and design of the pedestrian signal accommodations and crosswalks along Sherwood Forest Boulevard between South Harrell's Ferry Road and Old Hammond Highway in support of the Sherwood Forest Boulevard Multi-Use Path design project. Design plans will be developed to add pedestrian signals to the existing traffic signals with the goal of upgrading existing intersections up to current ADA requirements for pedestrians.
10/28 – Ongoing	**LADOTD, LCG Adaptive Traffic Signal System, Lafayette, LA | *Traffic Engineer.*** Gresham Smith was selected to develop an Adaptive Traffic Signal network for the Lafayette Consolidated Government, which involved upgrading 190 traffic signal controllers. In addition, 78 traffic signals will be upgraded to become adaptive traffic signals. This will be the largest adaptive traffic signal system installed within the state of Louisiana. This project includes field inspection of 190 traffic signals, design plans for 78 adaptive signals, implementation of a new EVP system, integration support, and before travel studies. Rebecca is responsible for coordinating field data collection, travel time studies and developing design of traffic signals.
04/18 – 05/19	**LADOTD, I-10 TMP West of LA 108 to I-210 Interchange TMP, Lake Charles, LA | *Pre-Professional.*** Gresham Smith developed a TMP for the Rubbelization and Overlay on I-10 between I-210 and the LA 108 Interchange. Included the mill and overlay of I-10, widening two flat deck bridges on I-10 to add a lane, and replacing all of the concrete panels on I-10 through the LA 108 interchange. Traffic was moved to a C/D road within the interchange and cloverleaf ramps were closed during construction. Two temporary traffic signals were designed to facilitate traffic at this interchange, and this project included data collection and queue and safety analyses and traffic signal design. Rebecca assisted with traffic counts and queue analysis, safety analysis, alternate route/detour analysis, temporary traffic control, and development of the TMP report.
08/22 – 12/23	**LADOTD, LRSP TO #6 LA 14 – US 90 to Power Center Parkway Traffic Report, Lake Charles, LA | *Traffic Engineer.*** Gresham Smith is analyzing no build and future conditions to identify possible pedestrian mitigation alternatives along LA 14 through the development of a traffic report. This report will also inform recommendations that improve safety/operation and access management.

16. Staff Experience:

Gresham Smith

John Weres, P.E.

Senior Bridge Engineer

Years of experience with this employer	7
Years of experience with other employer(s)	36

Degree(s) / Years / Specialization	Bachelor of Science / 1980 / Civil Engineering, University of Pittsburgh		
Active registration number / state / expiration date	PE.0036429 / LA / Exp. 9/30/25		
Year registered	2011 (LA) 1985 (PA)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Senior Bridge Engineer. John will support the bridge design tasks.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; ***i.e.***, **"designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
Career	John's 40+-year career includes diverse structure related activities including inspection, alternatives analysis, final design and construction management and program management. Experience includes multi-level interchanges, complex geometry, truss rehabilitations and suspension bridge rehabilitations, phased construction, deep foundations, complex pier geometry, and movable bridge inspection and design. John served as Team Leader on several LA DOTD complex bridge inspections and as Project Manager for underwater bridge inspections for TDOT. NHI Certified 130055 (Team Leader), 130078 (Fracture Critical Steel), and 135048 (Countermeasure Design). Also, FAA Part 107 USAS (drone) licensed pilot.
06/19 – 03/20	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Project Manager.* Task Order 1 -** Retainer project for various bridge inspections of major river crossings. Completed hands-on inspection of fracture critical elements on several structures including the LA1 Truss over Atchafalaya River at Simmesport, LA8 Segmental Bridge over Red River at Boyce and the US165 Vertical Lift Bridge over Red River. Gresham Smith was able to complete the inspection of Bridge 005860, in Jeanerette, a steel swing truss and Bridge 009130, in Charenton, a steel swing truss – within the original budget for the initial three bridges.
06/19 – 03/20	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Project Manager.* Task Order 1 -** Retainer project for various bridge inspections of major river crossings. Completed hands-on inspection of fracture critical elements on several structures including the LA1 Truss over Atchafalaya River at Simmesport, LA8 Segmental Bridge over Red River at Boyce and the US165 Vertical Lift Bridge over Red River. Gresham Smith was able to complete the inspection of Bridge 005860, in Jeanerette, a steel swing truss and Bridge 009130, in Charenton, a steel swing truss – within the original budget for the initial three bridges.
04/20 – 09/20	**LADOTD, Complex Bridge Inspections, Statewide, LA | Task Order 2 - Emergency Bridge Repairs, US 71 in Downtown Shreveport, LA | *Project Manager.*** In April 2020, a train derailment damaged Bent 3 of the Spring Street Bridge forcing the roadway closure. Gresham Smith was selected to perform the bridge repairs to open the bridge. Working with the selected contractor, helical piles were designed to support the new column foundations and crash wall. John served as the design coordinator and facilitated the repairs.
07/20 – 10/23	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Project Manager.* Task Order 3 -** Retainer project for various movable bridge inspections. Completed hands-on inspection of fracture critical elements on several structures and coordinated the efforts of mechanical and electrical staff and served as EOR for the reports including the Bridge 006210 Vertical Lift Bridge at Loreauville, LA, Bridge 054360 Gross Tete Steel Swing Bridge and Bridge 054472 Indian Village Steel Swing Bridge in

	Iberville Parish. Due to cost savings on the initial 3 bridges in Task Order 2, we were able to complete the inspection of Bridge 006306, Bayside Bridge in Jeanerette, a steel swing bridge – within the original budget.
06/21 – 08/21	**FLDOT, Florida DEP, Florida Keys Overseas Heritage Trail Historic Bridge Evaluation, Marathon, FL | *QA/QC.*** Florida DEP selected Gresham Smith to inspect and evaluate two historic bridges, the Seven Mile Bridge and the Bahia-Honda Historic Truss. John led the field evaluations, including drone video documentation and development of the recommendations report. This historic, former railroad structure includes a 247' Parker Truss main span with 24 Pratt truss approach spans as well as 9 plate girder approaches.
07/19 – Ongoing	**TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN | *Senior Structural Engineer.*** John provided bridge load rating for approximately 141 complex structures and 137 standard structures across the state of Tennessee. Structures were analyzed utilizing finite element methods and CSi Bridge software. The structures load rated consisted of curved steel tub girders, steel arches with steel cables supporting steel floor beam – stringer systems, deck trusses, bascule arched steel truss, steel girder-floor beam-stringer system bridges, steel rigid K-frame bridges, and reinforced concrete rigid k-frames with spliced prestressed girders for center span bridges. The standard structures were analyzed using the AASHTOWare BrR software.
4/15 – 3/17 With another firm	**LADOTD, I-49 Lafayette Connector, Lafayette, LA | *Deputy Lead Structural Design Engineer*.** Served as Deputy Lead Structural Design Engineer for the concept design for a 4-mile long elevated structure through an urban area. Structure concepts included post-tensioned concrete U-girders, span-by-span segmental boxes, and steel trapezoidal boxes. John coordinated the efforts of the individual design teams for each structure type and served as the public coordination lead for the structures as part of an overall community involvement plan on developing the proposed structure type for this $800M project.
6/15 – 3/17 With another firm	**LADOTD, State Project No. H.004367.5 – Earhart Expressway Connector, Metairie, LA | *Deputy Project Manager, Lead Structures Engineer.*** Preliminary and final design for a 7,000-foot urban expressway structure as part of the Earhart Expressway to Airline Highway Connector project. Preliminary design activities included survey, SUE, development of design criteria, development of bridge typical sections and development of proposed span arrangements and coordination with CN Railroad for the placement of bridge piers within the railroad right-of-way.
11/17 – 09/21	**MDOT, MS-178 Benton County Bridges, Benton County, MS | *Lead Structure Engineer*.** John served as the Lead Design Engineer for the final design of a 2-cell box culvert and two prestressed concrete girder structures in northern Mississippi. These water crossings improved the hydraulic conditions at the sites and incorporated low-maintenance details such as jointless bridges.
01/17 – 08/21	**MDOT, Marshall County Bridges Replacements, MS | *Lead Structure Engineer***. John provided construction services for the new 3-span Byahalia Bridge and served as Engineer of Record (EOR) for replacement of 5 multi-span stream crossing structures in north Mississippi.

16. Staff Experience:

Gresham Smith

Tom Tran, P.E.

Senior Bridge Engineer

Years of experience with this employer	9
Years of experience with other employer(s)	22

Degree(s) / Years / Specialization	Bachelor of Science / 1991 / Civil Engineering, University of Central Florida		
Active registration number / state / expiration date	PE.0032072 / LA / Exp. 3/31/24		
Year registered	2005 (LA)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Senior Bridge Engineer / Tom will support the bridge design tasks.		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
6/19 – 03/20	**LADOTD, Complex Bridge Inspections, Statewide, LA | *QA/QC*. Task Order 1 -** Retainer project for various bridge inspections of major river crossings. Completed hands-on inspection of fracture critical elements on several structures including the LA1 Truss over Atchafalaya River at Simmesport, LA8 Segmental Bridge over Red River at Boyce and the US165 Vertical Lift Bridge over Red River. Gresham Smith was able to complete the inspection of Bridge 005860, in Jeanerette, a steel swing truss and Bridge 009130, in Charenton, a steel swing truss – within the original budget for the initial three bridges.
04/20 – 9/20	**LADOTD, Complex Bridge Inspections, Statewide, LA | Task Order 2 - Emergency Bridge Repairs, US 71 in Downtown Shreveport, LA | *QA/QC.*** In April 2020, a train derailment damaged Bent 3 of the Spring Street Bridge forcing the roadway closure. Gresham Smith was selected to perform the bridge repairs to open the bridge. Working with the selected contractor, helical piles were designed to support the new column foundations and crash wall.
07/20 - Ongoing	**LADOTD, Complex Bridge Inspections, Statewide, LA | *QA/QC*. Task Order 3 -** Retainer project for various movable bridge inspections. Completed hands-on inspection of fracture critical elements on several structures and coordinated the efforts of mechanical and electrical staff and served as EOR for the reports including the Bridge 006210 Vertical Lift Bridge at Loreauville, LA, Bridge 054360 Gross Tete Steel Swing Bridge and Bridge 054472 Indian Village Steel Swing Bridge in Iberville Parish. Due to cost savings on the initial 3 bridges in Task Order 2, we were able to complete the inspection of Bridge 006306, Bayside Bridge in Jeanerette, a steel swing bridge – within the original budget.
6/14 – 03/17 With another firm	**LADOTD, Complex Bridge Inspections, Statewide, LA | *QA/QC*.** Retainer project for various bridge inspections of major river crossings. Completed hands-on inspection of fracture critical elements on several structures including the Louisa Bascule Bridge in St. Mary's Parish. John served on the field inspection teams for the I-20 Mississippi River Bridge in Vicksburg and the LA 47 Bridge over the Mississippi River Gulf Outlet. The study was to determine the structural adequacy of the bridge with the addition of a center median.
06/21 – 08/21	**FLDOT, Florida DEP, Florida Keys Overseas Heritage Trail Historic Bridge Evaluation, Marathon, FL | *QA/QC.*** Florida DEP selected Gresham Smith to inspect and evaluate two historic bridges, the Seven Mile Bridge and the Bahia-Honda Historic Truss. Both structures are closed to traffic.
07/19 – Ongoing	**TDOT, Complex Bridge Load Ratings, Statewide, TN | *Senior Bridge Engineer.*** Complex structures were analyzed utilizing finite element methods and CSi Bridge software. The structures load rated consisted of curved steel tub girders, steel arches with

	steel cables supporting steel floor beam – stringer systems, deck trusses, bascule arched steel truss, steel girder-floor beam-stringer system bridges, steel rigid K-frame bridges, and reinforced concrete rigid k-frames with spliced prestressed girders for center span bridges. The standard structures were analyzed using the AASHTOWare BrR software. Tom provided quality control review for the complex arch structures.
08/20 – Ongoing	**GDOT, State Wide Engineering On-Call for Bridge Repair, Statewide, GA | *Project Manager*.** This contract includes, Inspection, load rating and repair of problematic bridges thru out the state of Georgia. Typical scope includes inspection of bridge, verification of repair needed, development of repair plans, development of special provision, advertisement of project, review of shop drawings and post construction services as needed.
11/14 – 10/17	**MDOT, MS-309 Bridge Replacements, Marshall County MS | Lead Bridge Engineer.** Tom served as the EOR for this project. The design included replacing full timber structures with AASHTO beam structures supported by either concrete piles or pipe piles. Span lengths ranged from 41' to 140'. Structure arrangements varied from 3-span to 6-span structures. Work included Services During Construction, scheduled for completion Fall 2021.
11/13 – 10/14	**MDOT, Roadway WA #4: US 82 Underpass Bridge Removal at Leland, Leland, MS | *Lead Bridge Engineer*.** Gresham Smith was tasked with the US 82 Underpass Bridge Removal projects to provide a feasibility study and engineering design services as required to prepare Phase A (preliminary design) plans for removal of an abandoned railroad under-pass bridge and reconstruction of approximately 1,000 linear feet of US 82 near the Old Hwy. intersection in Leland.
08/07 – 01/12	**GDOT, SR 10/US 78 Bridge Replacement at Apalachee River, Walton, GA | *Senior Bridge Engineer*.** This project consists of replacing the existing SR 10/US 78 bridge over the Apalachee River at the Walton/Oconee County line. The existing 418-foot-long historic westbound bridge is to be replaced with a 410-foot-long bridge located north of the existing bridge. The historic bridge will remain in place. The existing 397-foot-long east bound bridge will remain. The contributing basin is 136.16 square miles. The existing bridge has a studied flood plain and floodway.
1/13 – 6/14	**LADOTD, ITS Design and Implementation Services, WO#4: I-10 Twin Span ITS-Orleans & St. Tammany Parishes, Statewide, LA | *Structures Design Lead*.** Tom led the detailed structural analyses of new camera poles and the DMS poles could be installed on the existing foundations within the bridge structure. The DMS pole required a butterfly cantilever to support the new front access LED DMS enclosure. This was the first of each to be installed along the interstate system in Louisiana.

16. Staff Experience:

Gresham Smith

Courtney Rome, P.E.

Bridge Engineer

Years of experience with this employer	6
Years of experience with other employer(s)	7

Degree(s) / Years / Specialization	Bachelor of Science / 2009 / Civil Engineering, Southern University and A&M College		
Active registration number / state / expiration date	PE.0043355 / LA / Exp. 9/30/25		
Year registered	2019 (LA)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer / Courtney will support the bridge load rating tasks.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
06/19 – Ongoing	**LADOTD, Complex Bridge Inspections, Statewide, LA | *Engineer.*** As an NHI Certified Bridge Inspector, Courtney is performing bridge inspections for various complex bridge structures throughout Louisiana, including steel trusses, concrete structures and moveable bridges.
07/19 – Ongoing	**TDOT, Complex Bridge Load Ratings, Statewide, TN | *Project Engineer.*** Complex structures were analyzed utilizing finite element methods and CSi Bridge software. The structures load rated consisted of curved steel tub girders, steel arches with steel cables supporting steel floor beam – stringer systems, deck trusses, bascule arched steel truss, steel girder-floor beam-stringer system bridges, steel rigid K-frame bridges, and reinforced concrete rigid k-frames with spliced prestressed girders for center span bridges. The standard structures were analyzed using the AASHTOWare BrR software. Courtney performed QC reviews on the load rating analysis and reports.
06/21 – 08/21	**FLDOT, Florida DEP, Florida Keys Overseas Heritage Trail Historic Bridge Evaluation, Marathon, FL | *QA/QC.*** Florida DEP selected Gresham Smith to inspect and evaluate two historic bridges, the Seven Mile Bridge and the Bahia-Honda Historic Truss. Both structures are closed to traffic.
11/17 – 01/18	**TDOT, Off-System Underwater Bridge Inspections, Statewide, TN | *QC Reviewer.*** Courtney provided quality control reviews for the inspection reports and graphics. The project included over 50 bridges throughout Tennessee
11/17 – 12/20	**MDOT, SR 178 Benton County Bridge Replacements, MS | *Engineer.*** Gresham Smith provided final design (Phase B) services for the replacement of two water crossings on parallel alignment. Both bridges include utilization of prestressed Florida I-Beams (FIB) to maximize span lengths while minimizing structure depths. Courtney performed the deck design and beam design services for a one-span (135-foot) and three-span (80- x 100- x 80-foot) structure and also completed the design of pipe piles for the pier bents.
07/18 – Ongoing	**MDOT, SR 149 Simpson County Bridge Replacements, MS | *Engineer.*** Gresham Smith is partnering with MDOT for Phase B (Final Design) for the reconstruction of S.R. 149 near D'Lo, Simpson County, Mississippi. Courtney served as Engineer-of-Record for the two longer structures (Bridge 128.2 and Bridge 128.6). This is the first instance of partial depth deck panels utilized for MDOT as a pilot to verify the ease of construction and as an accelerated (ABC) time condition.

16. Staff Experience:

Gresham Smith

Donald McCrary, P.E.

Senior Bridge Engineer

Years of experience with this employer	6
Years of experience with other employer(s)	16

Degree(s) / Years / Specialization	Bachelor of Science / 2001 / Civil Engineering / Tennessee Technological University		
Active registration number / state / expiration date	PE. #110436 / TN / Exp. 7/31/25		
Year registered	2009 (TN)	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Load Rating / Donald will support the load rating tasks, including AASHTOWare evaluations.		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
07/19 – Ongoing	**TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN | *Senior Structural Engineer.*** Donald provided bridge load rating management and QC reviews for approximately 141 complex structures and 137 standard structures across the state of Tennessee. Complex structures were analyzed utilizing finite element methods and CSi Bridge software. The structures load rated consisted of curved steel tub girders, steel arches with steel cables supporting steel floor beam – stringer systems, deck trusses, bascule arched steel truss, steel girder-floor beam-stringer system bridges, steel rigid K-frame bridges, and reinforced concrete rigid k-frames with spliced prestressed girders for center span bridges. The standard structures were analyzed using the AASHTOWare BrR software.
10/17 – Ongoing	**TDOT, Bridge Maintenance and Repair Contract, Regions 1, 2 & 3, TN | *Project Engineer.*** This contract has included underwater bridge inspections, routine structural repairs, superstructure replacements and widening, full structure replacements and Accelerated Bridge Construction projects. Donald's responsibilities included preliminary layouts, bridge inspections, superstructure design, substructure design, quantities, and preparing and organizing plan sheets and detail sheets.
06/17 – 1/18	**TDOT, I-40 Interchange at SR 255, Davidson County, TN | *Project Engineer.*** The proposed structure is a two-span steel welded plate girder bridge. Additionally, this project has two other bridge structures along SR 255 crossing MNAA East-West Road and McCrory Creek. The geometric layout and preliminary design were also developed for these structures. The MNAA bridge structure proposes a single-span prestressed concrete girder structure that utilizes uniquely modified bulb-tee beams to meet the tight vertical alignment and clearance constraints. The McCrory Creek bridge structure is a three-span traditional prestressed concrete bulb-tee girder bridge.
06/17 – Ongoing	**TDOT, SR 171 over I-40 Bridge Widening, Wilson County, TN | *Senior Bridge Engineer.*** Engineer-of-Record. This project included the widening of a 249-foot four-continuous-span, concrete structure utilizing 36-inch by 36-inch precast prestressed concrete box beams with composite deck. Donald's responsibilities included bridge inspections, superstructure design, substructure design, quantities, and QA/QC of design and plans.

07/19 – Ongoing	**TDOT, Complex and Standard Bridge Load Ratings, Statewide, TN | *Senior Structural Engineer.*** Donald provided bridge load rating management and QC reviews for approximately 141 complex structures and 137 standard structures across the state of Tennessee. Complex structures were analyzed utilizing finite element methods and CSi Bridge software. The structures load rated consisted of curved steel tub girders, steel arches with steel cables supporting steel floor beam – stringer systems, deck trusses, bascule arched steel truss, steel girder-floor beam-stringer system bridges, steel rigid K-frame bridges, and reinforced concrete rigid k-frames with spliced prestressed girders for center span bridges. The standard structures were analyzed using the AASHTOWare BrR software.
10/17 – Ongoing	**TDOT, Bridge Maintenance and Repair Contract, Regions 1, 2 & 3, TN | *Project Engineer*.** This contract has included underwater bridge inspections, routine structural repairs, superstructure replacements and widening, full structure replacements and Accelerated Bridge Construction projects. Donald's responsibilities included preliminary layouts, bridge inspections, superstructure design, substructure design, quantities, and preparing and organizing plan sheets and detail sheets.

16. Staff Experience:

Michael Baker International

Daniel Thornhill, P.E.

Office Executive & Associate Vice President

Years of experience with this firm/employer	4
Years of experience with other firm(s)/employer(s)	22

Degree(s) / Years / Specialization	Bachelor of Science / 1997 / Civil Engineering		
Active registration number / state / expiration date	PE No. 32367 / LA / 09-30-2024; Traffic Control Technician-LA State Specific / April 2026; Traffic Control Supervisor / LA State Specific / April 2026		
Year registered	2006	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	QA/QC Reviewer (Roadway) / Michael Baker Project Manager; Bridge Design Task Lead		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).**
08/22 - Ongoing	***NAVFAC Southeast,* Barksdale AFB Entrance Roads, Bossier Parish, Louisiana | Project Manager.** Responsible for the development of construction plans for new entrance roads for Barksdale AFB. The project includes a new roundabout at the Air Force Base gates along with new 4-lane divided highway to tie into the new LA 1267 highway constructed by DOTD under the I-20/I-220 Design Build interchange improvements. Additional responsibilities include coordination with the DOTD I-20/I-220 Project Manager and Design Build Owner Verification Managers along with overseeing new roadway drainage that meets DOTD Hydraulic requirements. Mr. Thornhill re-designed the proposed roundabout from the EA document to reduce the footprint by reducing the inscribed circle from 230'+ to 180' to meet DOTD Roundabout criteria along with reducing the median on the approach to the roundabout to encourage motorist to reduce speed as it approached the roundabout.
11/21 - Ongoing	**LADOTD, US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana | Project Manager / Principal-in-Charge.** Responsible for the design and development of construction plans for the replacement of 3 bridges at two locations along US 371. Additional responsibilities included both horizontal and vertical geometry, intersection improvements, and setting the grade for the bridges. The first location is the replacement of a 3 span bridge over KCS Railroad in Sibley, LA. Project entails the development of new bridge alignment following DOTD and KCS Railroad requirements along with modifications of the existing road to accommodate the new bridge vertical alignment. Second location is the replacement of parallel bridges along US 371 at the Minden/I-20 interchange. Bridges will be replaced in phase construction to maintain traffic. Two new 3-span bridges will be construction over KCS railroad meeting all the required DOTD and KCS design requirements as required at the Sibley bridge site.
10/22 – Ongoing	**LADOTD, Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07 | Principal-in-Charge.** Responsible for the oversight of the development of a Preliminary Bridge Matrix and Final Structure Recommendation for the off-system bridge program for five parishes in District 07. Project is broken into Initial Phase and Final Design Phase. Matrix developments were part of the initial phase that started in October 2022 and was finished and submitted in December 2022. District 07 was given $30.3 million dollars with allocations for each parish. Also responsible for meeting with each Parish engineer/Policy Jury to determine priority for which bridges needed

	replacement. Project is currently in Final Design Phase for the replacement of 12 Bridges and he duties include contract management, overseeing the design of the roadway approaches and approving the new bridge grades and selection of new bridge structures.
04/22 – Ongoing	**LADOTD, LA 30: EBR PL – I-10, East Baton Rouge, Iberville, and Ascension Parishes, LA | Project Manager & Principal-in-Charge.** Responsible for the oversight of the Environmental Assessment (EA) of the widening of LA 30 from a 2-lane roadway to 4-lane roadway. Project limits is roughly 14 miles from the East Baton Rouge/Iberville Parish line to the terminus at I-10 interchange. Project is currently in Part 1 of the EA which main focus on traffic count/study/analysis along with some early environmental field screening, initial geometric improvements at existing 5 intersections, SUE services, and development of existing hydraulic flows for existing 6 bridge/culvert structures. Additional responsibilities include oversight of existing alignments along with existing right-of-way lines. Additional coordination required is with DOTD new Mississippi River Bridge Environmental on-going project. Recent addition of 7 miles to the project limits have been added to the project to include LA 30 from Brightside/Lee Drive Intersection to the East Baton Rouge/Iberville Parish line. Project challenges are the number of industrial pipelines that parallel LA 30 on both sides of the roadway along with railroad on the west side of LA 30 from Brightside Intersection to just south of East Iberville High School.
08/12 – 01/18	**LADOTD, Juban Road (LA 1026) Widening (I-12 to US 190), Livingston Parish, Louisiana | Project Manager/Lead Design Engineer.** Responsible for the development of construction plans for the widening of Juban Road from a 2-lane roadway to a 4-lane boulevard from just north of the I-12 Interchange to US 190. Improvements included three (3) multi-lane roundabouts along Juban Road while including sidepaths on both sides of Juban Road to meet the LADOTD complete streets initiative. Access Management was a priority along this route therefore the median was reduced to 6' to 8' to discourage left turn movements and make all driveways right-in/right-out while utilizing the roundabouts for U-turn movements. The first roundabout was located at future driveway number 5 for the Juban Crossing Development. The second roundabout was located midway along project with addition of service roads to encourage Livingston Parish to extend during future development to reduce driveways along Juban Road. The third roundabout was located at the Juban Road at US 190 intersection. The roundabout would replace an existing signal that causes traffic congestion especially during peak afternoon traffic. Project included all necessary improvements along US 190 for the new roundabout and additional turn lane for the new Sanctuary Development along with the replacement of several major box culvert crossings from Gray's Creek Branch.
05/16 – 01/18	**Calcasieu Parish, Ham Reid Road at Lake Street (LA 3092) Intersection Improvement Project for Calcasieu Parish Police Jury | Project Manager/Lead Design Engineer.** Responsible for the development of construction plans for a new single lane roundabout at the intersection of Ham Reid Road and Lake Street (LA 3092). Project was studied as both a new signal and roundabout to provide traffic flow for land being developed along the southwest quadrant of the project. Through coordination with DOTD, it was determined a new single lane roundabout was the best alternative. The new roundabout would be a four-leg roundabout that would connect to Spanish Mission Trail roadway of Trails Subdivision with one of roundabout legs to provide seamless connectivity with Ham Reid Road to eliminate a possible Z-intersection configuration with only a 3-leg roundabout. Mr. Thornhill coordinated with both Calcasieu Parish Project Manager, DOTD District 7 Engineers, and DOTD Project Permit Specialist; development of geometric layouts both horizontally and vertically, development of right-of-way taking lines and coordination of right-of-way maps with surveyor, and hydraulic analysis for both subsurface and storm water flow. Project was being done as a permit project for Calcasieu Parish through DOTD District 7.

16. Staff Experience:

Michael Baker International

Shalin Sheth, P.E.

Bridge Engineer

Years of experience with this firm/employer	2
Years of experience with other firm(s)/employer(s)	4

Degree(s) / Years / Specialization	MS / 2019 / Civil Engineering (Structural); BTech / 2016 / Civil Engineering		
Active registration number / state / expiration date	PE No. 48337 / LA / exp. 03/31/2024		
Year registered	2023	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Bridge Engineer; Bridge Ratings; Bridge Design		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).**
11/22 – Ongoing	**LADOTD, Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program | Bridge Engineer.** Responsible for developing engineering design calculations, bridge geometry, bridge quantities, and design plans. Michael Baker was selected by DOTD to provide bridge, roadway and environmental services for the replacement of off-system bridges in the five parishes located in DOTD District 07. Structures replaced by this program include numerous culverts, box culverts, and slab span bridges. Currently, 10 of the 12 bridge surveys have been approved, hydraulic studies are ongoing and initial submittals in February 2024, Solicitation of Views have been sent out, and Preliminary Plans have started.
11/21 – Ongoing	**LADOTD, US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana | Bridge Engineer.** Responsible for computation of engineering design calculations, determining structural feasibility of bridge geometry, structural design of all bridge components, computation of bridge quantities, and plan production at various preliminary and final submittal stages/milestones. Ensured that bridge plans meet both DOTD and KCS Railroad Design Guidelines. Project includes the design of a detour structure (Akrow Bridge) for the bridge site at Sibley in order to keep US 371 open under traffic. The new bridges will be concrete girder-type and includes widening the two existing bridges in Minden to accommodate an additional travel lane for each bridge. A detour bridge will also be included for the Sibley location. Strict adherence to the KCS railroad design guidelines as well as adequate coordination with KCS will have to be maintained during all phases of design..
07/19 – 08/22	**LADOTD, Macarthur Interchange Completion Phase II at US90-Z Eastbound, Jefferson Parish, Louisiana | Engineer Intern.** Responsible for structural analysis and girder capacity verification of prestressed concrete girders, developing spreadsheets and Mathcad files for computing development lengths and splice lengths, and deck reinforcement design. Also developed computing bridge quantities, girder riser elevations, riser thicknesses, deck elevations for the bridge, along with drafting CAD sheets in MicroStation for framing plans, pier cap details, and deck reinforcement plans in compliance with DOTD standards. This project consisted of demolition of an off-ramp and an on-ramp, along with reconstruction of both at different locations in addition to new construction to facilitate bridge widening.

05/21 – 08/21	**LADOTD, Mermentau River Swing Span Truss Bridge Repairs at Grand Cheniere, Louisiana | Engineer Intern.** Responsible for preparing a structural rehabilitation solution to repair a steel truss member with structural deficiency, along with repair solutions for floorbeams and stringers using steel cover plates. Drafted and redrew the fender system plans and railing repair plans and reviewing overall bridge repair quantities and the plan set. Assisted with bridge inspection and load rating services in the preliminary stage, and later prepared repair and rehabilitation plans and procedures for the entire superstructure and substructure along with the fender system for the movable bridge span.
07/19 – 02/21	**LADOTD, Load Rating of 311 Bridges, Louisiana | Engineer Intern.** Responsible for load rating 51 bridges of various types such has concrete slab bridges, reinforced concrete girder bridges, prestressed girder bridges, prestressed and reinforced channel bridges, reinforced concrete culverts, and timber beams/timber trestle bridges. For a typical bridge, the load rating process involved developing and analyzing the superstructure structural model in AASHTOWare BrR, substructure structural model in RC Pier (now LEAP Bridge Concrete), and post processing the analysis results using Mathcad to effectively determine the load carrying capacity of the bridge (load rating factors) and accordingly recommending the posting load to DOTD. This project's scope was initially the load rating of 311 bridges located across Louisiana, however later another 300+ bridges and culverts were added to the scope.
07/22 – 08/22	**LADOTD, Load Rating of 176 Bridges, Louisiana | Engineer Intern.** Responsible for performing load rating for a total of 43 culverts out of 176. The typical process mainly involved developing and analyzing the structural model for concrete box culverts in AASHTOWare BrR, and then preparing reports with load posting recommendations, if applicable.
07/22 – 08/22	**LADOTD, Load Rating of 114 Bridges, Louisiana | Engineer Intern.** Responsible for performing load rating for a historic steel beam bridge, and a prestressed concrete girder bridge. The typical load rating process involves modelling the superstructure and substructure in AASHTOWare BrR and LEAP Bridge Concrete respectively, along with compiling the load rating report. Also reviewed over 40 concrete slab bridges to be load rated by three junior engineer interns.
03/23 - Ongoing	**TXDOT, I-2/I-69C Interchange Construction Support (Design-Build) | Bridge Engineer.** Responsibilities include addressing RFIs, FDCs (Field Design Change), NDCs (Notice of Design Change) by performing structural analysis, making changes to the construction plan set sheets using Microstation as required, reviewing changes and drawings by other engineers, ensuring conformance to TXDOT construction specifications, coordinating with subconsultants and prime contractor DPJV (Dragados-Pulice Joint Venture), working with Bentley and Axiom to prepare custom drawing configuration files to prepare record drawings in accordance with TXDOT's requirements for 19 bridges (steel, prestressed concrete, concrete slab bridges).
10/23 - Ongoing	**OSARC (MS), Load Rating based on 2023 Bridge Inspection Recommendations | Bridge Engineer.** Responsibilities include performing load rating evaluation for 8 bridges (concrete slabs, steel girders, steel and timber girder/stringer/floor-beam systems, steel railcar bridges) using AASHTOWare BrR for superstructure analysis and an in-house spreadsheet developed for substructure analysis, preparing load rating summary reports and critical finding recommendations if applicable, and providing guidance to engineer interns.

16. Staff Experience:

Michael Baker International, Inc.

Aaron Dunavant, P.E.

Civil Engineer - Water

Years of experience with this firm/employer	3
Years of experience with other firm(s)/employer(s)	5

Degree(s) / Years / Specialization	Bachelor of Science / Biological and Agricultural Engineering / 2015 / Texas A&M University		
Active registration number / state / expiration date	P.E. 47578 / LA / Exp. 9/30/2025		
Year registered	2023	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Drainage Design Support		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
02/23 – Ongoing	**LADOTC, US 371 KCS Railroad Overpass HBI, Louisiana | Drainage Engineer.** Responsible for supporting drainage design for this overpass project.
09/19 – Present	**LADOTD, Task Order 1, Louisiana Watershed Initiative, Region 4, LA | Hydraulic Engineer.** Responsible for gathering background data and creating a 2D HEC-RAS model for the Sabine River HUC-model in Region 4. Developed the loss method data and stream centerlines for a major portion of the model. Created bridge and culvert structures within the model. Performed HEC-HMS calibration runs for the model using available gage data. Created technical memos detailing all information and data from model.
10/21 – Ongoing	**LADOTD, Task Order 2, Louisiana Watershed Initiative, Region 6, LA | Hydraulic Engineer.** Modeler for the Eastern Louisiana Coastal (Region 6) HEC-RAS model. Developed the loss method for infiltration, soils and land use data. Created centerlines for the major streams in the watershed by filtering out small streams from the National Hydrology Database. Developed break lines, bridge structures and mesh geometry in the hydraulic models. Simulated storms within the HEC-RAS models and adjusted calculated values for calibration and validation of the model. Michael Baker is providing engineering and modeling services to the Louisiana Department of Transportation & Development (DOTD) for Region 6 for the Louisiana Watershed Initiative (LWI). The LWI project was launched in 2018 and introduced a watershed-based approach to reducing flood risk in Louisiana. It is organized by seven modeling regions, each of which encompasses multiple HUC-8 watersheds. For the second task order, Michael Baker supplemented data collection and analysis, continued stakeholder engagement services, and performed topographic, bathymetric, and channel surveys.
01/22 – Ongoing	**LADOTD, Task Order 1, Louisiana Watershed Initiative, Region 4, LA | Hydraulic Engineer.** Responsible for gathering background data and creating a 2D HEC-RAS model for the Sabine River HUC-model in Region 4. Developed the loss method data and stream centerlines for a major portion of the model. Created bridge and culvert structures within the model. Performed HEC-HMS calibration runs for the model using available gage data. Created technical memos detailing all information and data from model.
09/22 – Ongoing	**St. Tammany Parish, Parish Comprehensive Drainage Plan, St. Tammany Parish, Louisiana | Water Resources Engineer.** Responsible for helping with community and public outreach presentation. Assisted with data acquisition and

	processing to determine areas of high flood risk and reports. Michael Baker conducted a comprehensive drainage plan for the Saint Tammany Parish located on the north shore of Lake Pontchartrain, Louisiana. The plan evaluated the existing state of drainage in the parish including flood risk, water quality and development guidelines, recommended capital projects, and potential policy changes that would lead to reduced flood damaged and increased safety. The Michael Baker team provided data gathering efforts, ranked list of problem areas and provided four (4) in-person public and stakeholder outreach throughout Phase I of this project.
06/19 – 05/21	**Harris County, Basin Natural Stable Channel Design PER, Houston, Texas | Hydraulic Engineer.** Created assessment maps for soils, geology, impervious surfaces, and drainage area in GIS. Researched reference reach tributary upstream of L112 for design parameters. Produced CAD details, final planset and memo for submittal. This project was part of the Little Cypress Creek Frontier program that aimed to reduce the risk of flooding in the Little Cypress Creek watershed for more than 3,200 structures in the Atlas 14 1 percent (100-year) floodplain and reduce that floodplain by more than 5,800 acres. Bond ID F-34 will provide funding for right-of-way acquisition, design and construction of the Mason basin.
11/19 – 12/20	**Partnership and Harris County, Buffalo Bayou Geomorphic Channel Stability and Rehabilitation Assessment. Houston, Texas | Hydraulic Engineer.** Mapped the existing erosion conditions on Buffalo Bayou from Shepherd to Jensen using GPS device. Created assessment maps using GIS Software. Updated report figures and maps for all recommended projects. This project provided a fluvial geomorphic assessment that investigated an understanding of the physical processes responsible for channel form and adjustment of Buffalo Bayou and its riparian zones in the study area . The goal was to improve the overall stability and resilience to future hydrologic and hydraulic stressors.
03/17 – 05/19	**Harris County, K155 Stream Restoration Project, Harris County, Texas | Hydraulic Engineer.** Created assessment maps using GIS software. Created construction planset and details using CAD software.
06/22 – 06/22	**Jackson County Port Authority, Black Creek Cooling Water Facility Dam Spillway Study, Jackson County, Mississippi | Hydrologist.** Part of the H&H team that developed the hydrology and hydraulic models. Calculated the probable maximum precipitation values in HEC-HMS for 21 different storms to determine which storm would produce the maximum flood values. Performed dam break analysis in HEC-RAS using these values to ensure the design standard of the dam. Michael Baker conducted a probable maximum flood (PMF) analysis and incremental hazard evaluation for the Black Creek Cooling Water Facility. The team developed a formal report outlining the findings of the analysis and provided recommendations for spillway improvements. The project's goal was to achieve a safe, secure, and more resilient infrastructure by enhancing its protection to prevent or mitigate the potential for dam failure.

16. Staff Experience:

Michael Baker International, Inc.

Brandon Pitre, P.E., RSP1

Staff Engineer

Years of experience with this firm/employer	5
Years of experience with other firm(s)/employer(s)	12

Degree(s) / Years / Specialization	Master of Science / Civil Engineering / 2012 / Texas A&M University Bachelor of Science / Civil Engineering / 2010 / Louisiana State University		
Active registration number / state / expiration date	P.E. 40975 / LA / Exp. 03/31/2025; ; Traffic Control Technician/ LA State Specific / 04/2026; Traffic Control Supervisor / LA State Specific / 04/2026; Traffic Engineering Analysis Process & Report Modules 1-3; Roadway Safety Professional 1 / 12/2025		
Year registered	2016; 2018; 2020	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Roadway Design Support		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).**
11/21 - Ongoing	**LADOTD, US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana | Project Manager & Transportation Engineer.** Serving as Project Manager and Roadway Design Lead for the project who will oversee the delivery of the Preliminary and Final roadway and bridge design plans. The project consists of the design and replacement of three bridges which cross over a KCS railroad line at two different locations in Webster Parish (Sibley and Minden). The new bridges will be concrete girder-type and includes widening the two existing bridges in Minden to accommodate an additional travel lane for each bridge. A detour bridge will also be included for the Sibley location. Strict adherence to the KCS railroad design guidelines as well as adequate coordination with KCS will have to be maintained during all phases of design.
08/22 – Ongoing	**NAVFAC, Barksdale AFB Entrance Road and Gate Complex, Design-Build, Bossier Parish, Louisiana | Transportation Engineer.** Responsible for the roadway design and construction plan development of this project. The project consists of the design and construction of an extension of an existing state-owned highway, LA 1267, along with a new multi-lane roundabout. The new roadway will be a 4-lane divided highway entrance into the Barksdale AFB. Mr. Pitre is mainly responsible for the development of the 3D roadway design model for the project as well as overseeing the delivery of the construction plans.
10/23 – Ongoing	**MDOT, SR 25 - Grants Ferry to SR 471 | Roundabout Design Lead.** Leading the analysis and design for the roundabout portion of this roadway widening and improvement project. Michael Baker will develop final Right of Way Plans for the widening of SR 25 from Grants Ferry Road to SR 471 from 4 lanes to six lanes, approximately 3 miles. Our team is designing this project to the latest standards and criteria of MDOT and use the latest version of Open Roads Designer. All unsignalized crossovers will be converted to directional crossovers.
10/22 - Ongoing	**LADOTD, Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program – District 07, LA | Project Manager.** Responsible for the development of construction plans for 12 Off-System Bridge replacement locations for the five parishes in District 07. Additional responsibilities include the coordination with sub-consultants for the services

	of topographic surveys, row mapping, geotechnical investigations, and hydraulic support. This project program requires Michael Baker to deliver 12 bridge replacements within the $30.3 million dollars with allocated for District 07. DOTD issued NTP for additional services in May 2023.Unconsolidated Drained Or Undrained (UU)and Atterberg Limits by APS Laboratory. Surendra was QC for the Geotechnical Investigations.
06/18 – 12/19	**Texas DOTD, US 90 Ramps at LA 88 Roundabouts, New Iberia, Louisiana / Highway Safety Design Retainer | Lead Roadway Designer.** Served as lead Roadway Design Engineer for this project whose scope consisted of converting the eastbound and westbound U.S. 90 ramp terminals into two multilane roundabouts, along with making improvements to the existing drainage network (sub-surface and open ditch) to increase hydraulic capacity. Since the local project representatives expressed concerns for design solutions aimed at reducing flooding during intense rain events, many of the existing cross drains, side drains, and existing roadside ditches needed to be upsized. Other safety measures were implemented in this project by the following measures: safety end treatments on culvert ends adjacent to LA 88, guard rail improvements based on the latest DOTD design standards, flexible traffic delineators separating lanes of opposing traffic flow, and two U-turns (bulb-outs) added along LA 88 on each side of U.S. 90. Responsible for roadway design and construction plan production, completing the 100% Preliminary Plans based on comments from the client at the Plan-In-Hand meeting. This involved resolution of all the client's comments from the 100% Preliminary Plans submittal which involved items such as: modifying the typical pavement sections and details, adjusting the roadside ditch geometry, revising the construction sequencing layout, modifying the drainage design, and creating the permanent signing and pavement marking layout sheets. Responsible for developing and delivering the 100% Final Plans as the Engineer of Record which involved determining the required quantities of the required construction items and developing the accompanying construction cost estimate. Other work for this project included creating the existing and proposed drainage maps, hydraulics calculations utilizing DOTD's HYDRWIN program and preparation of the hydraulics report.
12/17 – 07/18	**LADOTD, U.S. 190B at Jefferson Avenue Roundabout Design for Highway Safety Design Retainer, Covington, Louisiana | Roadway Design Engineer.** Responsible for design and construction plan production for this project, whose scope consisted of converting a four-way intersection into a single-lane roundabout in downtown Covington in an area of narrow right-of-way limits. Responsible for completing 100% Preliminary Plans based on comments from the client (DOTD) at the Plan-In-Hand meeting. This involved making several changes to the plans such as: revisions to the typical pavement section and details, plan and profile sheets, and construction sequencing sheets. Responsible for developing the 60% Final Plans which involved resolution of all the client's comments from the 100% Preliminary Plan submittal, determining the required construction items, and developing the accompanying construction cost estimate. Other work included hydraulics calculations utilizing DOTD's HYDRWIN drainage program and preparation of the hydraulics report. During the 60% Final Plans development stage, this project was halted by DOTD based on the significant real estate cost for acquisition of an adjacent property (gas station on intersection corner).

16. Staff Experience:

Michael Baker International, Inc.

Eric Erikson, P.E., CFM.

Department Manager – Water

Years of experience with this firm/employer	1
Years of experience with other firm(s)/employer(s)	24

Degree(s) / Years / Specialization	Master of Science / 2003 / Engineering and Technology Management / Louisiana Tech University Bachelor of Science / 1999 / Civil Engineering / Louisiana Tech University		
Active registration number / state / expiration date	P.E. 31061 / LA / Exp. 3/31/2024; Certified Floodplain Manager / 07/2025		
Year registered	2003	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	Drainage Design Lead, Bridge Load Rating Lead		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
03/23 – Ongoing	**LADOTD, Barksdale AFB Entrance Roads, Bossier Parish, LA | Drainage Design Lead.** Responsible for development of drainage plans for new entrance roads for Barksdale AFB. The project includes a new roundabout at the Air Force Base gates along with new 4-lane divided highway to tie into the new LA 1267 highway constructed by DOTD under the I-20/I-220 Design Build interchange improvements. Coordinated with DOTD's I-20/I-220 Project Manager and Design Build Owner Verification Managers. The new roundabout is designed to be a multi-lane roundabout that accommodates the new LA 1267 spur of the I-20/220 interchange. Project includes the addition of street lighting in accordance with DOTD lighting guidelines.
02/23 – Ongoing	**LADOTD, US 371 KCS Railroad Overpass HBI, LA | Drainage Design Reviewer.** Responsible for providing guidance, review, and Quality Control for the drainage design.
1/2023 - Ongoing	**St. Tammany Parish, Parish Comprehensive Drainage Plan, St. Tammany Parish, LA | Deputy Project Manager.** Responsible for contract administration and assisting with general project management duties, such as resource allocation, team coordination, scheduling, and financial analysis. Attending public outreach meetings and assisted the public in understanding the project objective and goals. Provided review and QC of the Phase 1 final report. Michael Baker conducted a comprehensive drainage plan for the Saint Tammany Parish located on the north shore of Lake Pontchartrain, Louisiana. The plan evaluated the existing state of drainage in the parish including flood risk, water quality and development guidelines, recommended capital projects, and potential policy changes that would lead to reduced flood damaged and increased safety. The Michael Baker team provided data gathering efforts, ranked list of problem areas and provided four (4) in-person public and stakeholder outreach throughout Phase I of this project.
1/2023 - Ongoing	**LADOTD, Louisiana Watershed Initiative Modeling Contract - Region 6, LA | Deputy Project Manager.** Responsible for the contract administration and assisting the project manager with general project management duties such as resource allocation, scheduling, team coordination, and financial analysis. Michael Baker is providing engineering and modeling services to the Louisiana Department of Transportation & Development (DOTD) for Region 6 for the Louisiana Watershed Initiative (LWI). The LWI project was launched in 2018 and introduced a watershed-based approach to reducing flood risk in Louisiana. It is organized by seven modeling regions, each of which encompasses multiple HUC-8 watersheds. For the contract, Michael Baker is providing hydrologic and hydraulic modeling, data collection and analysis, stakeholder engagement, and surveying.

03/23 – Ongoing	**LADOTD, Barksdale AFB Entrance Roads, Bossier Parish, LA | Drainage Design Lead.** Responsible for development of drainage plans for new entrance roads for Barksdale AFB. The project includes a new roundabout at the Air Force Base gates along with new 4-lane divided highway to tie into the new LA 1267 highway constructed by DOTD under the I-20/I-220 Design Build interchange improvements. Coordinated with DOTD's I-20/I-220 Project Manager and Design Build Owner Verification Managers. The new roundabout is designed to be a multi-lane roundabout that accommodates the new LA 1267 spur of the I-20/220 interchange. Project includes the addition of street lighting in accordance with DOTD lighting guidelines.
1/2023 - Ongoing	**LADOTD, Louisiana Watershed Initiative Region 6 Task Order 2, LA | Deputy Project Manager.** Responsible for providing contract administration and assisting project manager in general project management duties such as resource allocation, scheduling, coordination of team members, and financial analysis. Michael Baker is providing engineering and modeling services to the Louisiana Department of Transportation & Development (DOTD) for Region 6 for the Louisiana Watershed Initiative (LWI). The LWI project was launched in 2018 and introduced a watershed-based approach to reducing flood risk in Louisiana. It is organized by seven modeling regions, each of which encompasses multiple HUC-8 watersheds. For the second task order, Michael Baker supplemented data collection and analysis, continued stakeholder engagement services, and performed topographic, bathymetric, and channel surveys.
2/2023 - Ongoing	**LADOTD, Task Order 3 Series II HUC8 Specific Hydrologic and Hydraulic Modeling, Lower Grand, West Central Louisiana Coastal Region 6, LA | Deputy Project Manager.** Responsible for contract administration and assisting in general project management duties such as resource allocation, scheduling, team coordination, and financial analysis. Michael Baker is performing hydrologic and hydraulic modeling for United States Geological Survey 8-digit cataloging unit subbasins Lower Grand and West Central Louisiana Coastal. These HUC 8s are in Louisiana Watershed Initiative Region 6. The contract includes data gap analysis, quality assurance/quality control, stakeholder engagement, topographic and bathymetric surveying, hydrometeorology and hydrography data, hydrological and hydraulic model developments, and data management. Michael Baker is developing a 2-D hydrological and hydraulic model of both HUC 8s utilizing rain-on-grid.
08/19 - 12/21	**Parish of East Baton Rouge DPW, South Choctaw Widening, Baton Rouge, LA** | **Drainage Design Reviewer.** Responsibilities included oversight of entire construction plan set, including geometric design and drainage design. Reviewed DOTD HYDRWIN input and output files to make sure the design team was following DOTD Hydraulics Manual and design requirements. Also responsible for assisting the designer in addressing drainage comments from the municipality.
07/17 - 09/17	**Parish of East Baton Rouge DPW, Scour Analysis for Perkins / Picardy Connector Bridges, Baton Rouge, LA | Hydraulic Engineer.** Responsibilities included hydraulic modeling and scour analysis of two separate proposed bridges to provide recommendations for pile lengths.
01/23 – Ongoing	**City/Parish of Baton Rouge, Huval PN7077 101722, Baton Rouge, Louisiana** | **Project Manager.** Responsible for the review and analysis of major drainage crossings in the project area including two large box culvert crossings and one minor box culvert crossing. Provided design methodology guidance to team members responsible for the design.

16. Staff Experience:

Michael Baker International, Inc.

Jeff McRae, P.E.

Technical Manager - Bridge

Years of experience with this firm/employer	27
Years of experience with other firm(s)/employer(s)	0

Degree(s) / Years / Specialization	Bachelor of Science / 1996 / Civil Engineering Management / Mississippi State University		
Active registration number / state / expiration date	P.E. 34554 / LA / Exp. 09/30/2025; Certified Floodplain Manager		
Year registered	2009	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	MPR 4; Bridge Design Engineer		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).
11/21 – Ongoing	**LADOTD, US 371: KCS RR Overpasses HBI, Webster Parish, Louisiana | Bridge Engineer.** Serving as the Bridge Design Lead for the replacement of 3 bridges along US 371 at 2 locations: Sibley, La and Minden, LA. His responsibilities include overseeing the bridge design calculations and development of bridge plans making sure they meet both DOTD and KCS Railroad Design Guidelines. Project includes the design of a detour structure (Akrow Bridge) for the bridge site at Sibley in order to keep US 371 open under traffic. The new bridges will be concrete girder-type and includes widening the two existing bridges in Minden to accommodate an additional travel lane for each bridge. A detour bridge will also be included for the Sibley location. Strict adherence to the KCS railroad design guidelines as well as adequate coordination with KCS will have to be maintained during all phases of design.
11/22 – Ongoing	**LADOTD, Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program | Lead Bridge Engineer.** Responsible for overseeing the generation of engineering design calculations, bridge geometry, bridge quantities, and design plans. Michael Baker was selected by DOTD to provide bridge, roadway and environmental services for the replacement of off-system bridges in the five parishes located in DOTD District 07. Structures replaced by this program include numerous culverts, box culverts, and slab span bridges. Currently, 10 of the 12 bridge surveys have been approved, hydraulic studies are ongoing and initial submittals in February 2024, Solicitation of Views have been sent out, and Preliminary Plans have started. Providing project status updates to the Parishes and performing coordination with those Parishes in regards to historical hydraulic events.
08/18 – Ongoing	**Madison County Board of Supervisors, Reunion Parkway Design Services Phase 3, Madison County, Mississippi | Project Manager.** Michael Baker provided design services for two bridge sites along Phase 3 of the Reunion Parkway in Madison County, Mississippi. The scope included developing Phase B Final Bridge Plans for an 880-foot-long bridge over Bear Creek and a 530-foot-long bridge over the Illinois Central Railroad.
01/14 – 03/16	**MDOT, S.R. 28 Big Creek, Quinn Creek, and Strong River Bridge Replacements, Simpson County, MS | Engineer.** Responsibilities included generating preliminary bridge R.O.W. plans, geometric calculations and design calculations for three hydraulic bridge crossings. One of the crossings, Strong River, required four separate alternates to be detailed as well as a construct-ability report and cost estimate comparison discussing the advantages and disadvantages of each alternate. Michael Baker is providing engineering services for the replacement of the S.R. 28 bridges over Big Creek, Quinn Creek, and Strong River. Michael Baker's services included hydraulic analyses, scour assessments, stream bank stabilization evaluations, preparation of hydraulic analysis reports, and conceptual and preliminary design.

16. Staff Experience:

Michael Baker International, Inc.

Petrina Butler, P.E., ENV SP

Bridge Project Manager

Years of experience with this firm/employer	4
Years of experience with other firm(s)/employer(s)	18

Degree(s) / Years / Specialization	Master of Science / 2008 / Structural Engineering / Florida Atlantic University Bachelor of Science / 2002 / Civil Engineering / Embry-Riddle Aeronautical University		
Active registration number / state / expiration date	P.E. 39597 / LA / Exp. 09/30/2025		
Year registered	2003	**Discipline**	P.E./Civil
Contract role(s) / brief description of responsibilities	MPR 5; Bridge Rating		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; ***i.e.***, **"designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the time specified in the applicable MPR(s).**
04/21 – Ongoing	**SCDOT, Bridge Load Rating and Evaluation Engineering, Statewide, South Carolina | Bridge Design Lead.** As lead bridge engineer, responsible for the emergency repair of two bridges and the QC of bridge load ratings. Michael Baker is providing bridge inspection and engineering evaluation services in support of a statewide, consultant-led, bridge inspection effort for higher priority bridges across South Carolina. The bridges included in this contract encompass interstate system bridges, bridges over railroads, underwater inspections, and bridges with more challenging access needs.
09/20 – Ongoing	**SCDOT, S-472/S-45 Bridge Replacement, Horry and Georgetown Counties, South Carolina | Bridge Engineer.** Responsible for QC review for load rating of two prestressed concrete cored slab bridges. Michael Baker is providing engineering services for the replacement of the S-472 Bridge over Horsepen Creek in Horry County and S-45 Bridge over Tributary to Boser Swamp in Georgetown County. Project services include surveys, environmental documentation and permitting, hydraulic and hydrological design, roadway design, bridge design, geotechnical design, utility coordination, ROW design and support, SUE, public involvement, and construction services.
05/22 – Ongoing	**SCDOT, District 1, US 21 over Congaree Creek, Lexington County, South Carolina | QA/QC Engineer.** Provided QC peer view of load rating calculations and documentation. Michael Baker is providing engineering services for the replacement of the U.S. 21 Bridge over Congaree Creek. The project includes development and delivery of preliminary roadway and bridge plans, environmental studies and documentation, environmental permitting, ROW plans, final construction plans, and bridge hydrologic and hydraulic analyses, including a FEMA study.
03/20-02/23	**SCDOT, Bridge Inspection and Evaluation Engineering, Statewide, South Carolina | Assistant Project Manager.** Responsible for technical review. Michael Baker provided bridge load rating and evaluation engineering services for state-owned, county-owned, and other municipality-owned structures throughout South Carolina, primarily for the 1,815 bridges in District 3. Tasks include project management, site assessments, data collection, agency coordination, quality assurance reviews, and training development. Michael Baker established this statewide program and oversees five other consultants performing bridge load ratings, assessments, load and material testing, oversize and overweight permitting, complex structure rating and maintenance manuals, development of custom AASHTOWare Bridge Management program, and QA reviews.

02/09 – 10/22	**Sandia National Laboratories, Bridge Services, Livermore, California and Albuquerque, NM | QA/QC Engineer.** Responsible for load rating review. Michael Baker provided traffic counts, growth projections, scour analysis, seismic vulnerability analysis, and load rating for three bridges located at the Sandia National Laboratories sites in Livermore, CA, and Albuquerque, NM. The structure types included prestressed CA BT girders, prestressed t-beams, steel girders, reinforced concrete flat slabs, timber beams, box culverts, corrugated metal pipes, and reinforced concrete pipes. All load ratings were completed to meet the requirements of the Department of Energy Order DOE O 437.1, using AASHTOWare BrR or CANDE.
11/20 – 06/22	**Anderson County, Shackleburg Road Bridge, Anderson County, SC | Senior Engineer.** Responsible for review and oversight of bridge design calculations and construction plans. Michael Baker provided professional engineering services on an accelerated schedule, providing advance design packages for the new single-span 60-foot span voided hollow cored slab bridge deck units and the end bent steel piles. The replacement design provided a very low maintenance, low-cost solution to prevent future washouts and allow for a 100-year life structure.
01/17 – 1/18	**Mississippi OSARC, Local Bridge Inspection and Load Rating, Statewide, MS | Bridge Design Lead.** The project scope consisted of the inspection and load rating of 162 bridges on an expedited schedule (4 months), including both superstructure and substructure components. Bridge Load Rating Task Leader and Engineer of Record for all load rating work, including development of substructure calculation templates using Consys and Mathcad, review of AASHTOWare BrR templates for the project, and QC review of the load rating calculations and reports for the project. The project was delivered on-time and within budget.
06/22 – Ongoing	**Spartanburg County, On-Call Engineering Services FY 22 and FY 23, Spartanburg, SC | Project Manager.** Provided evaluation of 18 posted bridges owned by the County and summarized repairs/strengthening options to eliminate load posting. Michael Baker is serving as an on-call consultant to perform roadway, bridge, and general civil design for Spartanburg County Public Works and the Community & Economic Development Departments. To date, tasks have included bridge inspection, load ratings, bridge analysis and repair, roadway design, drainage and erosion control, utility coordination, permitting and traffic control.
01/22 – 01/22	**Florida DOT, District 3, I-10 over Flat Creek Approach Slab Replacement, Gadsden County, FL | QA/QC Engineer.** Provided QA review for bridge replacement plans. Michael Baker provided structural engineering and design services for the emergency repair of a multi-girder bridge following the collision of an over-height vehicle with the fascia girder. As part of the project for the Florida Department of Transportation, Michael Baker performed an emergency inspection, prepared plans for roadway, traffic control, and signing and pavement markings, and designed replacements for the bridge approach slab, drainage inlets, shoulder gutter, and guardrail. Its designs included the installation of four parallel, precast, prestressed concrete panels connected with UHPC closure strips
12/08 – 01/10	**SCDOT, Quail Road Bridge Replacement over Wolf Creek, Colleton County, SC** | **Bridge Design Lead.** Lead Design Engineer for the replacement of a deficient two-lane bridge with a single-span prestressed girder superstructure supported on steel H-piles. Managed this bridge design project with SCDOT, including preparation of Scope of Work and Budget, submission of progress reports for invoice approval, tracking budget and schedule, and coordination with sub-consultants.

16. Staff Experience:

Vectura Consulting Services, LLC

Sheelagh Brin Ferlito, P.E., PTOE

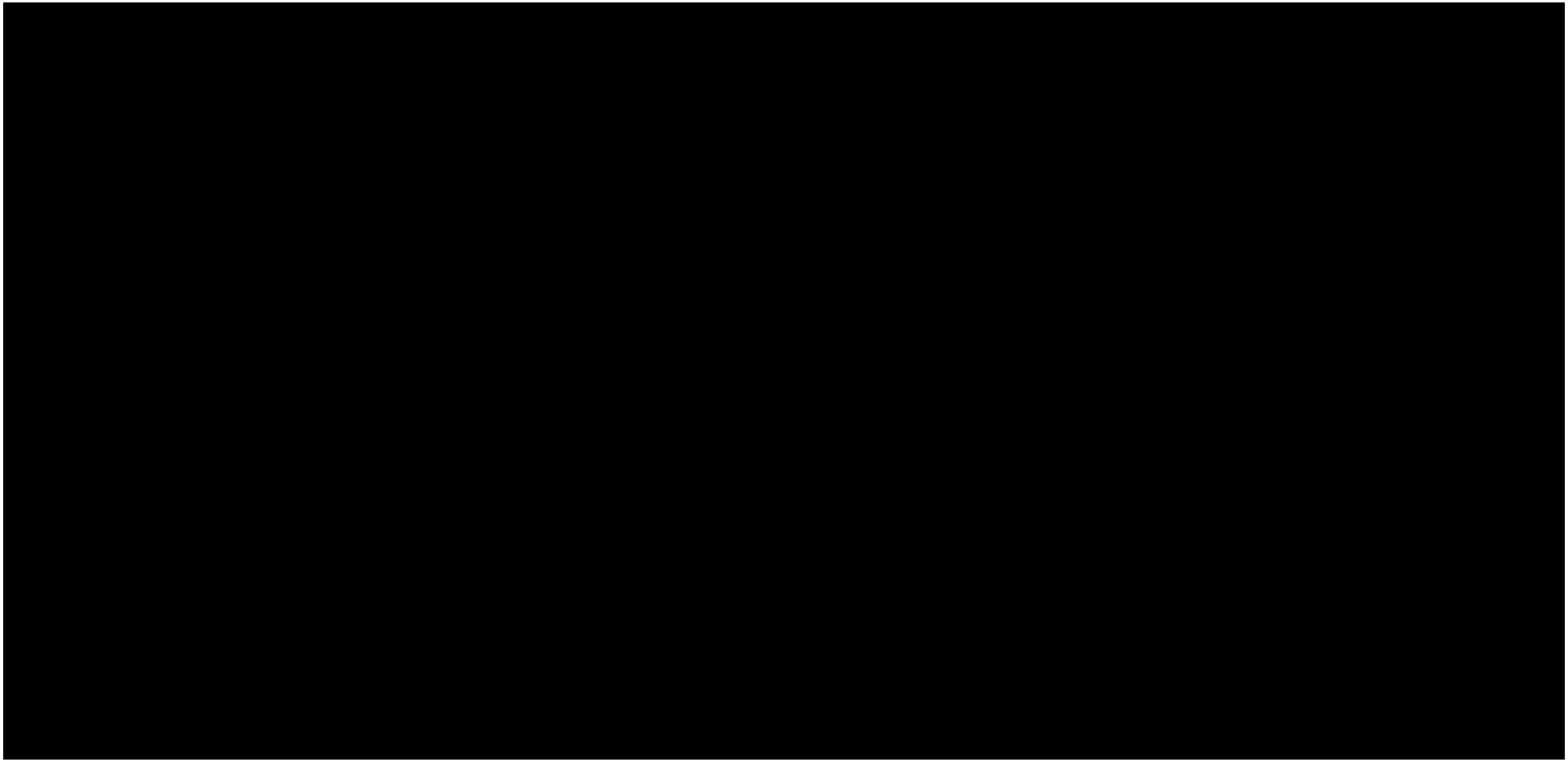
Principal

Years of experience with this employer	8
Years of experience with other employer(s)	27

Degree(s) / Years / Specialization	Bachelor of Science / 1988 / Environmental Engineering		
Active registration number / state / expiration date	PE.0025383 / LA / 9/30/2025		
Year registered	1993	**Discipline**	Civil
Contract role(s) / brief description of responsibilities	Traffic Control Design / Temporary Traffic Signal Analysis and Design QC		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; ***i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
07/21 - current	**H.007160 - EBR Computerized Traffic Signal, Phase VB (Baton Rouge, LA)** Brin is the task leader for Vectura for the **Construction Engineering and Inspection of 24 traffic signals**. Brin oversaw the review of signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Brin and Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
07/19 – current	**MOVEBR New Capacity Projects Program Management (Baton Rouge, LA)** Brin is the lead traffic engineer for entire the New Capacity Projects program management team. **All traffic engineering scope of services, traffic / speed data collection, traffic design studies, safety studies, and traffic signal design plans are reviewed by Brin.** She is in constant communication with the Traffic Engineering staff of DOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects.
07/19 – current	**H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement PPP (Belle Chasse, LA** Brin is the project manager for the **temporary and permanent traffic signal plans** for the intersections of LA 23 at Burmaster St and at Engineers Rd. She based her traffic signal plans on **design year volumes** that were developed using growth rates from the New Orleans Regional Planning Commission Travel Demand Model. This project is the first ever Public-Private-Partnership performed by Louisiana DOTD.
04/18 – 06/21	**H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish)** Brin reviewed 60 Percent Preliminary Signing and Striping Plans and developed documented comments based on LADOTD Road Design Manual, LADOTD Standard Details and MUTCD. She is also the project manager for the design of temporary traffic signal plans that will be implemented during the **roundabout construction** at the intersection of US 171 at Boone Street in Leesville, LA. She coordinated access management issues using aerials, aged traffic volumes and Synchro Software.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish, LA)** Brin is the project manager for the design of temporary traffic signal plans that will be implemented during the roundabout construction along LA 30 in Gonzales, LA. The project involves replacing three existing signalized intersections with multilane roundabouts along LA 30 at I-10 Interchange ramps and at the Tanger Boulevard. Vectura also developed **signal timing plans** for each phase of the construction to maintain progression along LA 30.

07/18 – 04/19	**LA 1 Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Design West Baton Rouge Parish, Addis, LA** Brin developed a Pedestrian Crosswalk Study and **Traffic Signal Construction Plans** for the intersection of LA 1 at LA 990 in Addis, LA. The study was based on DOTD Traffic Engineering Manual Crosswalk Guidelines followed by traffic signal design plans based on DOTD requirements. The study included **traffic and pedestrian traffic data collection, a speed study, crash analyses, intersection analyses and progression analyses**. The signal plans included pedestrian signal equipment, signal timing parameter calculations, crosswalk striping, signs, DOTD pay items, estimated quantities, and construction cost. Brin also assisted with the Parish with the DOTD Permit Request for Intersection Control Devices on a State Right of Way.
09/17-04/18	**US 11 at US 190 Bus. (Fremaux Ave.) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design Slidell, LA** Brin developed a formal traffic study for a proposed crosswalk with pedestrian **traffic signal equipment and pedestrian clearance timings** based on DOTD requirements. Brin assisted with **vehicle and pedestrian data collection, spot speed study, analyzed 3-year intersection crash data and developed signal timing for pedestrians to cross the street**. From the design study, a set of **Traffic Signal Modification Plans** were developed to implement the recommended alternative.
02/17-10/17	**Stage 0 Judge Tanner Boulevard at N. Causeway Roundabout Study (St. Tammany Parish, LA)** Brin developed the safety analyses for a Stage 0 Study for 4 intersections in the Mandeville area. The study was based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Brin assisted collecting 7-day, 24-hour counts w/ Classification, turning movement counts for peak periods and speed data for mainlines. She developed signal timing in the PTV Vistro software. The signal timings were then used in Sidra to complete the HCM analyses. Brin provided a quality control review of the traffic report.
06/16-09/17	**H.004490 Stage 0 Roundabout Studies (Lafayette Parish, LA)** Brin developed sections of a Stage 0 Feasibility Study for roundabouts the conformed to DOTD EDSMs and Traffic Engineering Manual Section 20.2 at ten intersections in the Lafayette area. Brin, along with Laurence, collected 7-day, 24-hour counts w/ classification, turning movement counts for AM and PM peak periods and speed data for mainlines. Brin provide a QC review of the Sidra analyses and developed traffic signal timing for 3 intersections for Years 2019 and 2039, AM & PM peak hours and developed a crash analyses as defined in Section 20.2 of TEM. CMF factors were identified for the preferred alternative to predict the number of crashes that could be eliminated. Brin provided a QC review of the final draft.
04/14 – 12/14	**H.002301 Signal Design for N. Sherwood Forest Dr. Widening Project (Baton Rouge, LA)** As the project engineer, Brin was in responsible charge for data collection and design for three signalized intersections as part of a road widening project as per EBR DPW and DOTD requirements. Ms. Ferlito developed the traffic signal equipment, signal timing and communication construction plans, special provision specifications, quantities, and cost estimate. She also performed tasks to develop the striping plans and sequence of construction plans which included temporary signal equipment placement due to lane shifts during construction.
07/12-03/14	**EBR 03-TS-CI-0026 CE&I for EBR Traffic Signal Systems Jefferson Highway Construction (Baton Rouge, LA)** Brin was the Project Resident Engineer on behalf of EBR for performing CE&I services for the construction of 11 traffic signals. She maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into interstate I-12 fiber backbone and ATM / EOC building. She processed all monthly tasks in EBR formats as well as well as all items on the EBR project closeout checklist.



16. Staff Experience:

Vectura Consulting Services, LLC

Laurence Lucius Lambert, II, P.E., PTOE, PTP

Principal

Years of experience with this employer	8
Years of experience with other employer(s)	18

Degree(s) / Years / Specialization	B.S./1997/Civil Engr. M.S./2006/Civil Engr. (Transportation focus) M.B.A./2010		
Active registration number / state / expiration date	PE.0029901 / LA / 3/31/2024		
Year registered	2001	**Discipline**	Civil
Contract role(s) / brief description of responsibilities	TMP QC		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
02/21 - 03/21	**H.013256.5 I-10 ITS Scott to Lake Charles (Southwest Louisiana)** Laurence was the lead traffic engineer for a Level 2 **Traffic Management Plan** (TMP) for the construction of ITS equipment along I-10. The plan included a safety strategy that included a CAT Scan, LOS determination utilizing Citrix data, lane closure recommendations based on a queue analysis and public information strategies.
07/22 – 09/22	**H.013716.5 – US 167: Camellia Blvd – Churchill Dr (Lafayette, LA) Pedestrian Count Study** Laurence developed a technical memorandum as part of a DOTD Safety IDIQ contract to document if an approach at a signalized intersection met the warrants listed in the *Traffic Engineering Manual* Sections 3B.2.4 and 3B.2.8 for a pedestrian marked crosswalk.
07/19 – current	**MOVEBR New Capacity Projects Program Management (Baton Rouge, LA)** At the beginning of the program, Laurence worked with the Capital Region Planning Commission to produce measures of effectiveness from the **travel demand model** to prioritize the MOVEBR project list. Laurence and Pong Wu developed a list of vehicle miles traveled, V/C ratios and vehicles hours of delay. Laurence also developed specifications of Rectangular Rapid Flashing Beacons (RRFB) for the City of Baton Rouge.
04/18 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger & I-10 Gonzales (Ascension, LA)** Laurence provided a Quality Control review of the **temporary construction and sequence of construction plans**. Vectura also provided Quality Control review of **signing and striping plans** at 30% and 60% plan sets to ensure the **roundabouts** conformed to the Pavement Markings Details Sheet PM-09 and the MUTCD details on roundabouts.
02/20 – 09/21	**College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA)** Laurence was the **project manager to develop Chapter 1 (Data Collection), Appendix A (Initial Data Collection), and Appendix B (Final Data Collection)** for proposed improvements College Drive. Since the I-10 interchange was included in the study, **approval from DOTD was required**. Vectura collected, turning movement counts, 85% speed data, travel time runs, queue measurements, field observations, verification of Traffic Signal Inventories, and bicycle / pedestrian / transit observations.
09/17-04/18	**US 11 at US 190 Bus. (Fremaux Ave.) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design Slidell, LA** Laurence assisted Brin in the development of a formal traffic study for a proposed crosswalk with pedestrian **traffic signal equipment and pedestrian clearance timings** based on DOTD requirements. Brin assisted with **vehicle and pedestrian data collection, spot speed study, analyzed 3-year intersection crash data and developed**

	signal timing for pedestrians to cross the street. From the design study, a set of **Traffic Signal Modification Plans** were developed to implement the recommended alternative.
10/17 - 10/18	**H.013025 LA 182 (University Avenue) Corridor Planning Study (Lafayette, LA)** Laurence was the lead transportation engineer for a **Corridor Planning Study** for LA 182. The scope focused on improving safety and mobility for pedestrian, bicycle, and transit users. Laurence collected AM & PM peak vehicle turning movement counts as well as pedestrian and bicycle counts. Laurence coordinated with the Acadiana Planning Commission to **develop growth rates and design year volumes**. Laurence then performed Highway Capacity Manual analysis for 5 intersections along the intersection analyses for the signalized and **roundabout** controlled alternatives. Included in the study was a **safety analyses** of five intersections and the intermediate segments. Based on the results of the safety analysis, Laurence provided design criteria to the design team for improving safety of pedestrians, bicycles, and vehicles.
01/17 – 07/17	**RPC Task ST-1.17 Minnesota Park Road Improvements (Tangipahoa Parish)** Laurence was the task leader for a traffic data collection and intersection analyses of a Stage 0 feasibility study. Laurence utilized **Sidra** software to perform an alternative analyses Highway Capacity Manual Analyses that included STOP, signal, and a **roundabout**. The DOTD procedures for utilizing Sidra were followed for this project. Laurence stamped the final version of the traffic study for the Stage 0.
09/16 - 04/17	**H.004957.5 I-12 To Bush - LA 3241 (I-12 – LA 36) Corridor Study (St. Tammany Parish, LA)** Laurence was the lead traffic engineer for a **DOTD traffic study** for the new LA 3241 alignment with the purpose of obtaining both existing and projected future traffic variables in accordance with standard operating procedures typically performed in these types of analyses. Laurence worked closely with the NORPC and District 62 to develop design year volumes using data the TransCAD model. The traffic study examined concepts that improved the safety and efficiency of the roadway consistent with the latest DOTD policies related to access management. Laurence, along with Brin, **collected 7-day, 24-hour counts** w/ classification on mainlines, turning movement counts for morning and evening peak periods and speed data for mainlines. Laurence also developed a VISSIM **traffic simulation model** of the preferred alternative.
07/14 - 01/17	**FHWA Intersection & Interchange Geometrics: Innovative Design Considerations for All Users (Multiple States)** FHWA funded workshops for state Departments of Transportation that were interested in learning more about innovative intersection & interchange design. Laurence presented either part or all the one-day or two-day workshops that included modules on the overall policy and goals of FHWA for these types of innovations, **roundabouts, roundabout interchanges**, DLTs, DDIs, J-turns / Superstreets, MUT, Thru-turns, quadrant, and the assessment tools (CAP-X) available to compare the measures of effectiveness of each innovation. Each module includes sections on design, traffic operations, safety and multi-modal accommodation Laurence has presented for the Alabama, Kentucky, Ohio, Oklahoma, Massachusetts, Tennessee, and Texas Departments of Transportation under this contract.
06/16 - 09/17	**H.004490 Stage 0 Roundabout Studies, (Lafayette Parish, LA)** Laurence performed a **Stage 0 Feasibility Study** for roundabouts at ten intersections in the Lafayette area. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Laurence, along with Brin, **collected 7-day, 24-hour counts w/ classification, turning movement counts for peak periods and speed data for mainlines**. Once the traffic data was collected, Laurence performed **traffic signal warrants analyses**, performed a Sidra unsignalized, signalized and roundabout analyses. After the analyses were completed, Laurence developed a report that captured the results.

16. Staff Experience:

Vectura Consulting Services, LLC

Reece Rodrigue, P.E., PTOE, RSP1

Project Traffic Engineer

Years of experience with this employer	4
Years of experience with other employer(s)	7

Degree(s) / Years / Specialization	Bachelor of Science / 2013 / Civil Engineering		
Active registration number / state / expiration date	PE. 0042074 / LA / 3/31/2024		
Year registered	2017	**Discipline**	Civil
Contract role(s) / brief description of responsibilities	Project Engineer for Traffic Control Design / Temporary Traffic Signal Analysis and Design		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
04/21 - current	**MOVEBR Direct Select for Traffic Signal Design, Baton Rouge, LA** Reece is a project engineer for the design of traffic signal upgrades at 10 intersections. This projected included a traffic design report, preliminary and final plans for traffic signals that included traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. The design also included traffic signal synchronization signal timing and pedestrian signal timing.
07/21 – current	**H.007160 - EBR Computerized Traffic Signal, Phase VB (Baton Rouge)** Reece is part of the team responsible for **Construction Engineering and Inspection**. Reece has reviewed the signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
01/21 – 05/21	**H.013256 - I-10 ITS Scott to Lake Charles (Lafayette, Acadia, and Jefferson Davis Parishes)** Reece was a member of the subconsultant team who was tasked with reviewing the ITS plans for 15 sites along I-10 where CCTV cameras were being installed. Reece was responsible for measuring anticipated construction quantities and producing a cost estimate for said quantities by using **DOTD's Bid Tabulation and Cost Estimating Tool**.
09/20 – 12/21	**H.011909.5-4 Roundabout: US 171 at Boone St. (Vernon Parish)** Reece was a project engineer, who participated in the production of the temporary **signal design** associated with the **sequence of construction** for the roundabout at US 171 at Boone St. He conducted a thorough analysis of the US 171 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish)** Reece was a project engineer, who assisted in the production of the temporary **signal design** associated with the **sequence of construction** for the roundabouts on LA 30 in Gonzales, LA. This project consists of eight proposed construction phases. He assisted in calculating the temporary pole heights, determining the placement location for the temporary poles for each phase, measuring and calculating clearance intervals. Reece conducted a thorough analysis of the LA 30 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.

04/20 - current	**H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project (Belle Chasse)** Reece is the project engineer who **designed the temporary traffic signal** for the intersection of LA 23 at Engineers Rd. The design of the temporary signals is set for eight phases of construction per the anticipated sequence of construction. Temporary pole location and heights were recommended for placement for use for all construction phases. Vehicle clearance interval calculations were conducted for each phase in accordance with DOTD and ITE guidance. Reece is responsible for producing the traffic impact analysis portion of the Traffic Management Plan, which was also used in planning for the permanent and temporary signal timing plans. Reece also produced permanent signal plans for the LA 23 intersections at Engineers Road and at Burmaster Street. He evaluated STOP bar locations, calculated vehicle, and pedestrian clearance intervals, designed the railroad preemption sequence for both at-grade crossings, designed the wiring layout, and developed the interconnect plan. Reece maintains correspondence with the fellow design engineering team for product consistency. In addition, Reece reviewed and approved shop drawings that were submitted by the contractor.
04/21 - current	**MOVEBR Direct Select for Traffic Signal Design, Baton Rouge, LA** Reece is a project engineer for the design of traffic signal upgrades at 10 intersections. This project included a traffic design report, preliminary and final plans for traffic signals that included traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. The design also included traffic signal synchronization signal timing and pedestrian signal timing.
02/20 – 09/21	**College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA)** Reece was the task leader for organizing and formatting the **data collection** of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.
07/19 – 12/19	**Burgess Avenue at Duff Road Traffic Signal Design, Walker, LA** Reece was responsible for the design of a fully actuated signalized intersection in the city of Walker, LA. The traffic signal was determined to meet signal warrants upon completion of the Foxglove subdivision in Livingston Parish, LA. Plans included road widening, signal face indication schedule, signal sequence chart, sign schedule, detector schedule, controller timing, wiring diagram, and free operation phasing diagram. Reece met with city officials to discuss the feasibility of constructing a traffic signal as opposed to other alternative measures for improving the intersection.
02/16 - 12/16	**H.005733.5 US 190 Superstreet Task Order (St. Tammany Parish)** Reece was a team member responsible for the layouts for the US 190 Superstreet signal designs. He created the **preliminary plans using CAD** software program MicroStation V8i. He aided in the technical design of each intersection. He conducted field inspections to verify locations of existing equipment as well as observing the area for feasible proposed utility locations. He attended project team meetings to discuss the project details as well as the plan-in-hand walk-through.
01/16 – 11/17	**Ochsner Main Campus Traffic Signals (Jefferson Parish)** Reece served as a design engineer for the **traffic signal plans** for the two Ochsner Main Campus access traffic signals with US 90 (Jefferson Hwy). The goal of the design was to implement updated pedestrian timings as well as optimize progression through the US 90 corridor. He reviewed traffic data and assigned time of day coordination timing parameters for the two intersections so that they may be included in the coordinated system west of the intersections. He used TruTraffic to determine the appropriate offset parameters so that vehicles may progress efficiently through the coordinated system. Plans for the two intersections were drafted in the form of DOTD's latest version of the TSI format. He was responsible for estimating construction quantities using DOTD's 2016 Spec Item list.
10/16 – 05/17	**Loyola Interchange Modification Request, Kenner, LA** Reece was a team member in the production of an Interchange Modification Report (IMR) for the I-10 at Loyola Dr. Interchange. He was an active member in collecting vehicle travel time data and processing the data. He also aided in collecting vehicle queues at the study intersections. He also assisted in the Vissim model calibration.

16. Staff Experience:

Vectura Consulting Services, LLC

Kristen Gahagan Farrington, P.E., PTOE, RSP1

Project Traffic Engineer

Years of experience with this employer	2
Years of experience with other employer(s)	7

Degree(s) / Years / Specialization	B.S. / 2013 / Civil Engineering		
Active registration number / state / expiration date	PE. 0042785 / LA / 3/31/2025		
Year registered	2016	**Discipline**	Civil
Contract role(s) / brief description of responsibilities	Project Engineer for TMP		

Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
05/23 – 07/23	**LADOTD, H.013722 Morgan City Sidewalks & Shared Use Path, Morgan City, LA | Lead Engineer.** Kristen was the lead engineer as part of a DOTD Safety IDIQ contract to document if an approach at a signalized intersection met the warrants listed in the *Traffic Engineering Manual* Sections 3B.2.4 and 3B.2.8 for a pedestrian marked crosswalk. The study also included an evaluation of a mid-block crossing based on the criteria set in Section 3B.2.7 of the *Traffic Engineering Manual*. The study consisted of vehicular and pedestrian counts, spot speed study, a safety analysis and field observations.
04/21 - current	**CP No. 16 CI-US-0032 Bus Rapid Transit (BRT) Improvement Project, Baton Rouge, LA | Project Engineer.** Kristen a project engineer for a **traffic design study and traffic signal design of 19 signals** along three corridors: Plank Road, 22nd Street and US 190 (Florida Street). Kristen assisted the prime consultant with the safety analysis as well.
08/21 – 04/22	**LADOTD, H.013267 Downtown to Scotlandville Parkway Trail Safety Enhancement Study, Baton Rouge, LA | Project Engineer.** Kristen was a project engineer for a design study to evaluate the recommended street crossing treatments of the trail at eight locations. The project consisted of collecting **vehicular speed and volume data** at the proposed trail crossings. Geometric field checks were also performed to determine if any hazards to pedestrians or cyclists existed. Once the field data was collected and analyzed, appropriate crossing treatments utilizing the *FHWA STEP Guide for Improving Pedestrian Safety at Unsignalized Locations* were developed that included Rectangular Rapid-Flashing Beacons (RRFB) and Pedestrian Hybrid Beacons (PHB's). Currently, Vectura is developing plans for the PHB's at four locations which will be the first implementation of PHB's in the Baton Rouge area on a state route.
02/20 – 09/21	**MOVEBR, College Drive Enhancement Project, Baton Rouge, LA | Data Collection.** Kristen assisted with the **data collection** task of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.
6/19 - 2/21	**LADOTD, H.013459 US 167 Improvements Stage 0 Elsie Street to Gilbert Street, St. Landry Parish, LA | Project Manager.** Kristen served as project manager for a **Stage 0** study to evaluate the addition of a third lane to US 167 from Elsie Street south to a point past Gilbert Drive. Environmental impacts and cost estimates were prepared, as well as a benefit-cost analysis of all improvements considered. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSM existing safety analysis, and No-Build Analysis. Designed high-level concept exhibits and

	comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes.
6/19 - 2/21	**LADOTD, H.013460 US 167 Improvements Stage 0 Enola Street to Ross Road, Evangeline Parish, LA | Project Manager.** Kristen served as project manager for a **Stage 0** study of a two-lane road to remove a curvilinear section of US 167 from Enola Street near LA 748, southeast for approximately 1.2 miles. The study compared connecting existing property owners to a new roadway with driveways or intersection of old roadway. Environmental impacts and cost estimates were prepared. Civil Engineer responsible for safety analysis including crash rate number method, over-representation, CATScan quality assurance, HSM existing safety analysis, and No-Build Analysis, as well as a benefit-cost analysis. Designed high-level concept exhibits and a comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes.
04/19 – 6/21	**LADOTD, H.013817.1 LA 117 Improvements Stage 0, Vernon and Natchitoches Parishes, LA | Project Engineer.** Kristen served as project engineer responsible for a **Stage 0** study for 18 miles of two-lane LA 117 from LA 8 to LA 118. The study evaluated the impacts of correcting deficient vertical and horizontal geometry along the corridor, widening for the addition of shoulders, and adding passing lanes and turn lanes at strategic locations along the corridor. Kristen was responsible for performing the safety analysis including crash rate number method, over-representation, CAT Scan quality assurance, HSM existing safety analysis, and No-Build Analysis. Kristen designed high-level concept exhibits, evaluated environmental impacts, and prepared high level cost estimates and comparison matrices to determine which preliminary alternatives best meet the purpose and need of the project. Kristen compiled all findings in the **Stage 0** report and coordinated with stakeholders and local agencies to ensure the purpose and need of project is met.
03/19 – 11/19	**LADOTD, H.012311 LA 429 Connector Stage 0, Ascension Parish, LA | Task Leader.** Kristen was the task leader for the preparation of a **Stage 0** study to evaluate alignments for a limited-access corridor (LA 429) near I-10, between LA 30, LA 73, and US 61. Two alternatives for the widening and reconstruction of LA 429 were evaluated. The scope consisted of stakeholder and public meetings, site visits and data collection, phasing of alternative development for the corridor, scope and budget checklists, and an opinion of probable cost to prepare the **Stage 0** Report. Kristen served as the civil engineer responsible for designing high level concept exhibits and comparison matrix to determine best preliminary alternatives moving forward to meet the purpose and need of the project. Compiled meeting agenda materials and minutes, coordinated with interchange study consultants for a cohesive project, and wrote report.
11/18 - 3/21	**LADOTD, H.013322 LA 3040 Feasibility / Safety Study Stage 0, Houma, LA | Project Engineer.** Kristen served as project engineer for a study to identify safety and operational issues along 2.5 miles of Martin Luther King Boulevard (LA 3040) in Houma, LA to evaluate reasonable alternatives to address any deficiencies discovered. Kristen was responsible for compiling a data collection plan for submittal to DOTD, including count locations, determined peak periods, and peak hours. Kristen performed peak period observations in the field and geometric field checks, as well as **unmet demand observations and calculations**. Kristen prepared TMC figures, as well as performed existing analysis in Vistro. Compiled all data collected into Appendices A and B per the DOTD Traffic Process and Report and wrote Chapter 1 of report. Kristen represented the project at stakeholder meetings to discuss project status.
04/18 – 04/19	**LADOTD, H.011243.1 I-49 at US 190 and LA 31 Interchange Improvements Stage 0, St. Landry Parish, LA | Project Engineer.** Kristen was the project engineer responsible for crash and safety analysis, report writing, planning, and designing for this **Stage 0** Study to evaluate alternatives to improve traffic operations and safety at the I-49 interchanges with US 190 and LA 31. Crash and safety analysis was performed using the LADOTD CAT Scan tool and IHSDM, and line and grade was prepared to DOTD Design Standards for various corridors, including arterial collectors and freeway ramps. Close coordination with traffic engineer ensured maximum improvement of safety and operations given limited right-of-way and utility conflicts along the corridors.

16. Staff Experience:

Vectura Consulting Services, LLC

Bridget Schevd Robicheaux, P.E., PTOE (Part Time)

Project Traffic Engineer

Years of experience with this employer	6
Years of experience with other employer(s)	9

Degree(s) / Years / Specialization	B.S./2007/Civil Engineering M.S./2014/Civil Engineering		
Active registration number / state / expiration date	PE. 0041272 / LA / 3/31/2023		
Year registered	2016	**Discipline**	Civil
Contract role(s) / brief description of responsibilities	Project Engineer for Traffic Control Design, Traffic Signal Analysis and Design / TMPs / Peer Reviews		

Experience dates (mm/yy–mm/yy)	**Experience and qualifications relevant to the proposed contract; *i.e.*, "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).**
07/21 – current	**LADOTD, H.007160 EBR Computerized Traffic Signal, Phase VB, Baton Rouge, LA | Traffic Signal Design.** Bridget has reviewed the signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Bridget also reviewed the traffic signal supports and documented all of her comments in a quality control tracker spreadsheet.
06/21 - 06/21	**LADOTD, CP No. 16 CI-US-0032 Bus Rapid Transit (BRT) Improvement Project, Baton Rouge, LA | Traffic Design.** Bridget assisted with the **traffic signal design of 19 signals** along three corridors: Plank Road, 22nd Street and US 190 (Florida Street).
03/21 - 07/22	**LADOTD, H.007160 - EBR Computerized Traffic Signal, Phase VB, Baton Rouge, LA | CEI.** Bridget is part of the team responsible for **Construction Engineering and Inspection**. Bridget has reviewed the signal mast arm shop drawings (checking pole quantities and markups) to assist the City-Parish of Baton Rouge in accepting the manufactured poles.
04/20 - 07/20	**LADOTD, H.004791 - Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project, Belle Chasse, LA | Traffic Signal Design.** Bridget assisted the project engineer who **designed the temporary traffic signal** for the intersection of LA 23 at Engineers Rd by pulling crash data along LA 23, reviewing and summarizing crash reports, and performing CATScan analysis.
04/19 - 01/20	**Traffic Studies for Broussard Middle School and Billeaud Elementary School, Lafayette Parish, LA | Project Engineer.** Bridget was the project engineer for developing a Traffic Study for two school entrances in Broussard, LA. Her project tasks included traffic data collection, forecast traffic volume development, existing traffic analyses and future traffic analyses using HCM software. She performed turn lane warrants based on NCHRP Report Number 457 as well as storage lengths based on queues and DOTD requirements.
07/19 – current	**MOVEBR, New Capacity Projects Program Management (Baton Rouge, LA | Traffic Signal Design.** Bridget assists Brin on a daily basis for the entire New Capacity Projects program management team. Bridget has performed multiple **reviews of traffic studies and traffic signal designs**. This includes reviewing raw data, unmet demand, volume maps, existing and build analyses, and safety analyses for accuracy and consistency throughout the report. She provides comments in a spreadsheet known as the Comment Tracker. All comments are posted in the Comment Tracker so that all parties are aware. Many of these projects are located on state routes and require approval by the Traffic Engineering staff of DOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects. Using methods outlined in NCHRP 765,

	Bridget helped to develop design year volumes for the Jones Creek (Airline to Jefferson) MOVEBR project. She has developed Turn Lane tech memos for the MOVEBR Old Hammond Highway Segments 1A and two projects and for the MOVEBR Highland at Siegen project.
07/18 – 04/19	**LA 1 Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Design West Baton Rouge Parish, Addis, LA** Bridget assisted Brin with the crosswalk study by pulling and formatting the crash data. She also assisted Brin with the crash analysis and formatting the findings.
10/17 - 07/18	**Travel Demand Model Update: Southeast Louisiana Travel Model, New Orleans, LA** Bridget developed base year traffic volumes to calibrate and test of the regional travel demand as part of **updating the New Orleans Regional Planning Commission Travel Demand Model in TransCAD**. Specifically, Bridget obtained and reviewed the over 4,000 traffic counts (cars / trucks) that were used in the validation of the SELATRAM model to check for consistency, reasonableness, and completeness. She tabulated her results in a spreadsheet that was included in a technical memorandum.
09/17 - 11/17	**US 11 (Front St.) at US 190 Bus. (Fremaux Ave.) Traffic Study (St. Tammany Parish, LA)** Bridget participated in the development of a Crosswalk Traffic Engineering Study for the City of Slidell as part of improvements to the intersection of US 11 (Front St.) at US 190 Bus. (Fremaux Ave.). Bridget processed raw traffic videos and developed **AM and PM peak period turning movement vehicle count** figures. She also assisted Brin with a PTV Vistro model for the AM and PM Peaks for the five intersections for capacity analyses as well as progression analyses. She also developed portions of the report.
02/17 - 10/17	**Judge Tanner Boulevard at N. Causeway Roundabout Study (St. Tammany Parish, LA)** Bridget participated in the development of a **Stage 0 Feasibility Study** for roundabouts at four intersections in St. Tammany Parish. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Bridget developed traffic **turning movement counts** for morning and evening peak periods including peak hour factor and heavy vehicle percentages. Growth rates for **design year volumes** were also developed based on information provided from the **TransCAD model**. She performed portions of the Sidra unsignalized, signalized and roundabout analyses for implementation and design years and report development.
06/16 - 09/17	**LADOTD, H.004490 Stage 0 Roundabout Studies, Lafayette Parish, LA** Bridget assisted with developing a **Stage 0 Feasibility Study** for roundabouts at seven intersections in the Lafayette area. The scope was developed based on EDSMs VI.1.1.1 / VI.1.1.5 and DOTD Traffic Engineering Manual Section 20.2. Bridget developed traffic **turning movement counts** diagrams for peak periods including peak hour factor and heavy vehicle percentages. She developed the speed data analyses as well as assisted with performing Sidra unsignalized, signalized and roundabout analyses for implementation and design years. Bridget also developed several figures that were included in the report.

17. Firm Experience:

Gresham Smith	**Past Performance Evaluation Discipline(s)***	Road

Hooper Road at Sullivan Road Roundabout Design

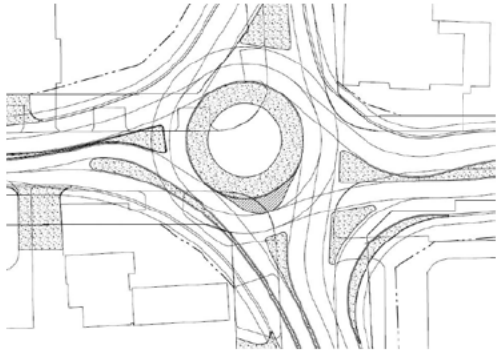
Firm responsibility (prime or sub?)	Sub

Project number	H.002320	**Owner's name**	City of Central (LA)	
Project location	Central, Louisiana	**Owner's Project Manager**		Toby Picard, P.E.
Owner's address, phone, email	13421 Hooper Road, Suite 8, Central, LA / 225.379.1302 / toby.picard@la.gov			

Services commenced by this firm (mm/yy)	04/20	**Total consultant contract cost ($1,000's)**	$195
Services completed by this firm (mm/yy)	12/22	**Cost of consultant services provided by this firm ($1,000's)**	$195

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) *If there is more than one past performance evaluation category included in the advertisement, then indicate which past performance evaluation discipline(s) this project is being used to represent.

This project was originally designed as an intersection improvement project to add left and right turn lanes at the intersection of Hooper Road (LA 408) at Sullivan Road (LA 3034). Due to the anticipated future traffic volumes, it was determined that a multi-lane roundabout would be more efficient and have a longer service life than the planned traditional signalized intersection. Gresham Smith was selected to design the multi-lane roundabout at the intersection of Hooper Road at Sullivan Road.



The intersection contains some major constraints which include a historic building in the Northeast quadrant of the intersection and a gas station in the Southwest quadrant of the intersection. The roundabout must accommodate both pedestrians and bicyclists as well as multiple approach lanes and free flow right turn lanes at select approach legs as required by LADOTD's conceptual traffic design to accommodate future projected traffic volumes.

Gresham Smith is tasked with the full roundabout design to be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Determining the location of the roundabout is critical in balancing a good geometric design with minimal right-of-way impacts and utility conflicts. Gresham Smith is also tasked with the drainage design at the roundabout and approach legs and is responsible for developing typical sections, plan and profile sheets, cross sections, quantities and construction cost estimates. This project includes a conceptual design phase as well as both preliminary and final plan design.

The roundabout design underwent several geometric reviews by DOTD, including a plan-in-hand meeting. The 100% preliminary plans were fully completed. However, construction funding issues led to scope adjustments for the intersection design, and the design reverted back to the signalized intersection for final plans. The project let in December 2022, and the design of the future roundabout is now being considered in a separate CMAR project.

Nature of firm's responsibility: Sub Consultant; Responsible for Developing Preliminary and Final Roundabout Design Plans.
Firm members involved: Brennon Hughes, Bert Moore, Richard Savoie, and Ronnie Robinson.

17. Firm Experience:

Gresham Smith	**Past Performance Evaluation Discipline(s)***	Road

SRTS/LRSP Task Order #6 and #21: Endom Bridge

Firm responsibility (prime or sub?)	Prime

Project number	H.012279; H.012279.5	**Owner's name**	Louisiana Department of Transportation and Development
Project location	West Monroe, Louisiana	**Owner's Project Manager**	Laura Riggs, P.E.
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA / 225.379.1143 / laura.riggs@la.gov		

Services commenced by this firm (mm/yy)	12/17	**Total consultant contract cost ($1,000's)**	$251
Services completed by this firm (mm/yy)	12/20	**Cost of consultant services provided by this firm ($1,000's)**	$222

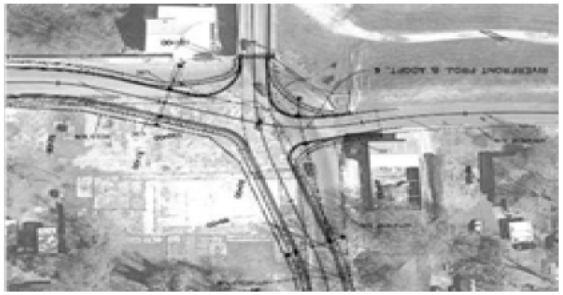
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

As part of LADOTD's Local Road Safety Program (LRSP) retainer contract, Gresham Smith was tasked to develop operational and safety improvements at the west approach to the Endom Bridge located in West Monroe, Ouachita Parish. After a technical review of this intersection, Gresham Smith was selected to perform engineering and related services to prepare preliminary and final plans for proposed safety and operational improvements to the intersection of Coleman Avenue with North and South Riverfront Streets at the Endom Bridge approach.

Before

After

The purpose of the improvements is to realign the Coleman Avenue approach to the Endom Bridge to improve intersection sight distance and safety for pedestrians and vehicles. This project will include pedestrian facilities including walking paths long Endom Bridge and the Ouachita River.



Gresham Smith's responsibilities were to oversee the topographic survey, coordinate with the local municipality, develop preliminary and final design plans to realign the intersection, right-of-way maps, specifications and construction cost estimates. This project was let for construction on December 9, 2020 with the apparent low bid only 5.14% over the estimate.

Project Highlights

- Milling Asphalt Pavement
- Traffic Maintenance
- Intersection Realignment
- Subsurface Drainage Design
- Truck Island Design
- Improved sight distance and safety
- Construction sequencing and detours

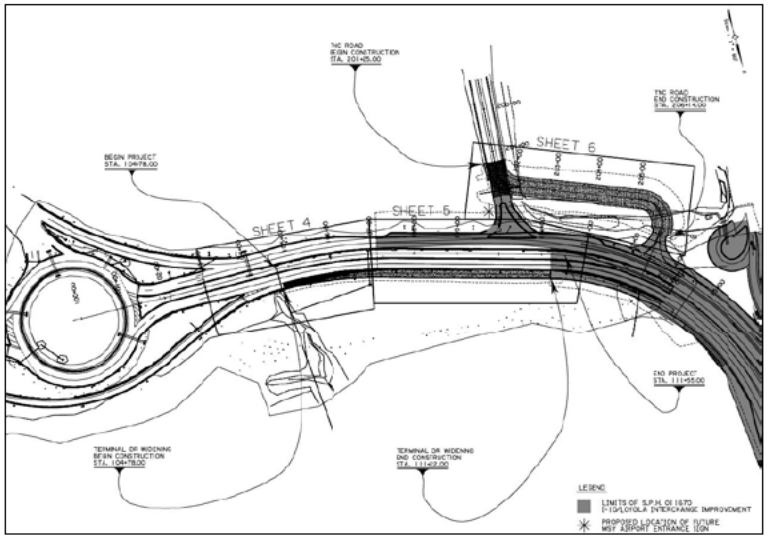
Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.
Firm members involved include: Bert Moore, Richard Savoie, Brennon Hughes, Rebecca Murray and Ronnie Robinson.

17. Firm Experience:

Gresham Smith	Past Performance Evaluation Discipline(s)*	Road
MSY - Task 4: Entrance Road Capacity	**Firm responsibility (prime or sub?)**	Prime

Project number	N/A	**Owner's name**	New Orleans Airport (MSY)		
Project location	Kenner, LA		**Owner's Project Manager**	Kenny Boyd	
Owner's address, phone, email	1 Terminal Dr, Kenner, LA 70062 / 303.641.9729 / ksboyd@burnsmcd.com				
Services commenced by this firm (mm/yy)	03/21	**Total consultant contract cost ($1,000's)**			$180.5
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**			$180.5

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)



Executed under a general engineering contract, Gresham Smith is currently providing design and project management for the City of New Orleans to widen the main exit road at Louis Armstrong New Orleans International Airport (MSY) from 2 lanes to 3 lanes. The project includes widening of approximately 1/4-mile of roadway, extending the roundabout slip lane exit from the roundabout and tying into the design-build flyover project currently under construction (S.P. H.011670). The completed widened road will connect the I-10 at Loyola Interchange Design-Build project that is currently under construction for LADOTD, improving the flow of traffic from MSY.

Additionally, Gresham Smith is tasked with the design of the new Transportation Network Companies (TNC) Uber lane roadway. This is a new alignment design which will realign the existing TNC Lane to a tie in point west of the existing location, tying into a turnout being constructed under the I-10 at Loyola Interchange Design-Build project. The completed new alignment roadway will provide access to a dedicated parking lot for ride-share vehicles approaching the airport and awaiting arrivals.

From the start, this project involved constant communication with both MSY Airport representatives along with coordination with the consultant for the I-10 at Loyola Interchange Design-Build project. A key aspect of this project was coordinating with the I-10 at Loyola Interchange Design-Build project which is currently under construction in order to facilitate a smooth transition for the widening of the roadway. This project was signed and sealed recently and is currently under construction.

Nature of firm's responsibility: Prime
Firm members involved include: Bert Moore, Brennon Hughes, Ronnie Robinson and Richard Savoie.

17. Firm Experience:

Gresham Smith	**Past Performance Evaluation Discipline(s)***	Road / Traffic

US 61 Superstreet: Lowes Ave to Malco Theater

Firm responsibility (prime or sub?)	Prime

Project number	H.015097	**Owner's name**	City of Gonzales		
Project location	Gonzales, LA		**Owner's Project Manager**	Jackie Baumann, P.E.	
Owner's address, phone, email	120 South Irma Boulevard, Gonzales, LA 70737 / 225.647.9589 / jackie@gonzalesla.com				
Services commenced by this firm (mm/yy)	08/22		**Total consultant contract cost ($1,000's)**		$435
Services completed by this firm (mm/yy)	Ongoing		**Cost of consultant services provided by this firm ($1,000's)**		$320

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Gresham Smith was selected by the City of Gonzales to provide the engineering design for the US 61 (Airline Highway) Superstreet segment from Lowes Avenue to just is east of the MALCO Driveway. This section includes the intersection of US 61 at LA 44. Gresham Smith is the prime consultant for this contract which includes survey, geotechnical, preliminary design, right-of-way maps, final design, traffic signal design, and construction administration. These services listed will be performed in accordance with LADOTD specifications and guidelines.

The US 61 within the city limits of Gonzales consists of dense commercial development and has experienced significant growth related to the commercial development. Currently US 61 consists of a 4-lane divided roadway with dense driveway spacing, uncontrolled median breaks and a number of signalized intersections. These characteristics combined with increasing volumes result in an increase of crashes. Due to the safety concerns, improvements to convert US 61 into a Superstreet through this area was initiated. The traffic study performed by LADOTD compared the existing conventional design to various alternatives and the Superstreet configuration was selected.

Gresham Smith is currently performing the design to convert this section of US 61 to a Superstreet. This design will remove all of the uncontrolled median breaks and replace them with directional median U-Turns or J-Turns with exclusive turn lanes. These J-Turns will be controlled by a 2 phased traffic signal which will only stop one direction of US 61 so that the U-Turns can be made. Additionally, the existing signalized intersection of US 61 at Lowes and US 61 at LA 44 will be converted to Restricted Crossing U-Turns (RCUTs). This will allow left turns from US 61 but restrict the side streets to right turn-only movements. These right-turners will be directed to a J-Turn to travel in the opposite direction on US 61. This intersection alternative improves safety and operation, while maintaining continuity and traffic flow along the corridor.

As the prime consultant Gresham Smith is responsible for the entirety of the project and will provide the geometric design for all of the turn lanes, median breaks, bulb outs, driveway modifications, pedestrian improvements and other necessary intersection improvements as well as the drainage, traffic signal and street lighting designs.

Nature of firm's responsibility: Prime

Firm members involved include: Brennon Hughes, Ronnie Robinson, Richard Savoie, Bert Moore, Rebecca Murray, Zillah Zoletta

17. Firm Experience

Gresham Smith	**Past Performance Evaluation Discipline(s)***	Road / Traffic

Task Order #2 - LA 73 at LA 621 Realignment

Firm responsibility (prime or sub?)	Prime

Project number	N/A	**Owner's name**	Ascension Parish
Project location	Prairieville, LA	**Owner's Project Manager**	Daniel Helms, Transportation Director
Owner's address, phone, email	P.O. Box 1659, Gonzales, LA 70737 / 225.450.1320 / Daniel.helms@apgov.us		

Services commenced by this firm (mm/yy)	10/20	**Total consultant contract cost ($1,000's)**	$118
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**	$118

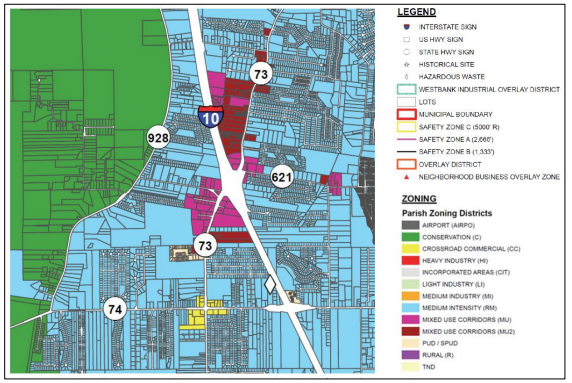
Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Ascension Parish selected Gresham Smith to assist them with traffic engineering expertise through a master contract. Task Order 2 under this contract was to performing a traffic study to meet LADOTD's Traffic Engineering Process and Report (TEPR) requirements for the relocation of the LA 73 at LA 621 intersection north of its current location. LADOTD provided the existing VISSIM model for the project area which included the recently completed widening of I-10. Gresham Smith was responsible for updating the VISSIM model provided by LADOTD to reflect current conditions which included additional developments, such as the LA 73 Baton Rouge General Hospital - Ascension and the Hallows of Dutchtown Subdivision, and calibrating the model to current conditions which were impacted by COVID.

Once the model was calibrated to LADOTD's requirements, the model was modified to include the proposed alternative which will relocate the intersection of LA 73 at LA 621 1,200 feet north of its current location. This also required some access management to be implemented and some trips to be rerouted to the relocated LA 621.

Project Highlights

- Data collection
- Field observations
- Trip generation
- Trip distribution
- VISSIM model
- Signalized analysis
- Unsignalized analysis
- Roundabout analysis
- LADOTD HQ, District 61 and Ascension Parish coordination
- HCS analysis
- Sidra analysis
- Conceptual design plans
- Traffic Report



Nature of firm's responsibility: Prime

Firm members involved include: Bert Moore, Brennon Hughes, Rebecca Murray and Zillah Zoletta

17. Firm Experience:

Michael Baker International, Inc.	Past Performance Evaluation Discipline(s)*	ROAD

Barksdale Air Force Base Entrance Road Design-Build

Firm responsibility (prime or sub?)	Prime

Project number	N69450-16-D-0100	**Owner's name**	NAVFAC Southeast
Project location	Bossier Parish, LA	**Owner's Project Manager**	Sarah Reed
Owner's address, phone, email	334 Davis Ave W, Suite 105, Barksdale AFB, LA 71110 | 318-243-3902 | sarah.m.reed16.civ@us.navy.mil		

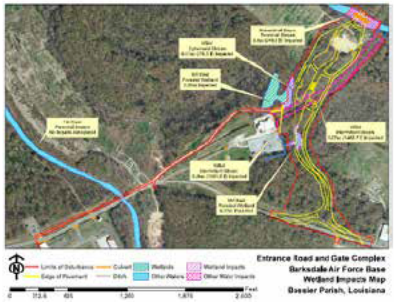
Services commenced by this firm (mm/yy)	08/22	**Total consultant contract cost ($1,000's)**	$2,031
Services completed by this firm (mm/yy)	05/23	**Cost of consultant services provided by this firm ($1,000's)**	$1,918

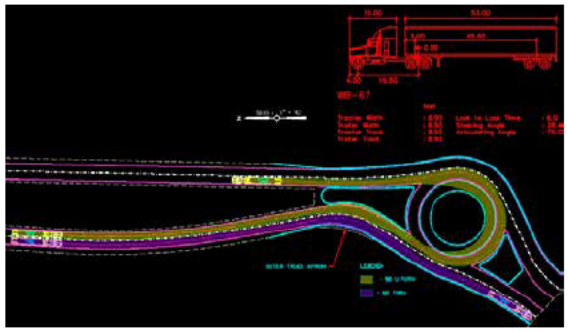
Describe the project including the firm's role and members involved.
(Highlight members to be used in this proposal.)

Michael Baker's design team finished the design for an alternative delivery design-build for the new entrance roads for Barksdale Air Force Base's . Our firm was responsible for coordination with both the owner and DOTD; however, the project was required to meet DOTD project delivery in order to obatin the required project permits.

The Michael Baker design team developed construction plans per DOTD Design Guidelines and Standard Specifications. The beginning of the project is a direct tie to LA 1267 where it terminates after the KCS railroad crossing bridge constructed under the DOTD I-20/I-220 Design Build project. The new road extension will continue as a four-lane divided highway as it enters the base property where it will transition to a new multi-lane roundabout. The roundabout is placed before the new base entrance gates and will allow for motorists that inadvertently exited onto LA 1267 to make a U-turn and return back towards the I-20/I-220 interchange without having to enter the Air Force Base. The new roadway extension is being built on the base property where a Corporate Endeavor Agreement was developed under the DOTD I-20/I-220 Design-Build project to allow for the completion of the roadway before entering the gates of the Air Force Base.

Michael Baker's design team coordinated directly with DOTD I-20/220 Project Manager, Corey Landry, and with DOTD I-20/220 Owner Verification Consultant Project Manager, Gordon Nelson. Additional requirements by the design team were to develop temporary traffic control (TTC) plans since the I-20/220 project was completed before this project was able to be constructed. The TTC plans identified one construction entry point along Ramp "EB-SB" and two construction exit points along Ramps "NB-EB" and the "C-D" road. Additionally, a project permit was prepared and submitted to DOTD for approval after the design plans and TTC plans were approved. The project is currently under construction.





17. Firm Experience:

Michael Baker International, Inc.	Past Performance Evaluation Discipline(s)*	ROAD, BRIDGE

Infrastructure Investment and Jobs Act (IIJA) Off-System Bridge Program

Firm responsibility (prime or sub?)	Prime

Project number	H.015338	**Owner's name**	Louisiana Department of Transportation and Development		
Project location	District 07 Parishes, Louisiana		**Owner's Project Manager**	Kurt M. Brauner, P.E.	
Owner's address, phone, email	1201 Capitol Access Road Baton Rouge, Louisiana 70802 | 225-379-1933 | Kurt.Brauner@LA.GOV				

Services commenced by this firm (mm/yy)	10/22	**Total consultant contract cost ($1,000's)**	$2,400
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**	$1,600

Describe the project including the firm's role and members involved.
(Highlight members to be used in this proposal.)

Michael Baker was selected by DOTD to provide bridge, roadway and environmental services for the replacement of off-system bridges in the five parishes (Allen Parish, Beauregard Parish, Calcasieu Parish, Cameron Parish and Jefferson Davis Parish) located in DOTD District 07. This off-system bridge program is being 100% funded by the recently passed IIJA bill. DOTD allocated $30.3 million of funding for District 07 for the implementation cost (construction, design, mitigation, right-of-way acquisition and utility relocation) for the replacement of bridges in this district. Structures will be replaced with Culvert(s), Box Culvert(s), or Slab Span Bridges that are available in DOTD Standard Plan catalog.

Project was broken into two phases: Phase I – Initial Services and Phase II – Plan Development. Phase I – Initial Services Preliminary Bridge Screen Matrix determined which 12 Brides would be carried forward into Phase II. Phase I was completed in early 2023. Phase II – Plan Development began June 2023. Phase II requirements are the survey, hydraulic studies, environmental screening, Preliminary and Final Plans, and ROW plans, if necessary. Hydraulic studies will determine the bridge structures and required hydraulic openings. Based on scope, required bridges can be one of the following three: Culvert, Box Culvert, or Slab Span Bridge. All slab span bridges will have a concrete substructure (prestressed piles and concrete caps).

Currently, 10 of the 12 bridge surveys have been approved, hydraulic studies are ongoing and initial submittals in February 2024, Solicitation of Views have been sent out, and Preliminary Plans have started. The Michael Baker team is providing project status updates to the Parishes and performing coordination with those Parishes in regards to historical hydraulic events. HEC-RAS modeling is being performed to determine the required hydraulic openings and recommendation of bridge structure types. Preliminary Plans are expected to begin submittals in late February 2024. Project Schedule is to have all projects design and let for construction by the end of 2025.

17. Firm Experience:

Michael Baker International, Inc.	Past Performance Evaluation Discipline(s)*	ROAD, BRIDGE

US 371: Railroad Overpasses HBI

Firm responsibility (prime or sub?) Prime

Project number	H.012030	**Owner's name**	Louisiana Department of Transportation and Development
Project location	Sibley & Minden, Louisiana; Webster Parish, LA	**Owner's Project Manager**	Hamed Babaizadeh, PE
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802 | 225-379-1033 | Hamed.Babaizadeh@la.gov		

Services commenced by this firm (mm/yy)	11/19	**Total consultant contract cost ($1,000's)**	$694
Services completed by this firm (mm/yy)	Ongoing	**Cost of consultant services provided by this firm ($1,000's)**	$630

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Michael Baker is providing bridge, structural, and transportation services for the replacement of three bridges along US 371 at in Sibley and Minden. All bridges span KCS Railroad at two locations along their rail line.

The existing bridge in Sibley was built in 1934 and is currently a three span, steel girder bridge for a total length of 120 feet, resting on concrete substructure. The bridge has sidewalks on both sides and ties to existing sidewalks along the route. US 371 is a rural arterial (depending on project site) with roughly 9% truck traffic along the route. The Michael Baker design team is tasked with determining the most efficient and cost-effective bridge to replace the existing structure. A bridge structure report is required to determine if the new bridge will either be concrete or steel girder type. The new structure and road improvements will meet the latest DOTD design guidelines.

One of the ***challenges*** at the Sibley loacation is the grade difference between the bridge and existing properties with the railroad underneath. Coordination with KCS railroad will help determine the final location of the bridge foundations in relationship with the rail line. It was determined in early preliminary plans that a re-alignment of US 371 at the existing bridge in Sibley would be required. The existing bridge will be utilized to maintain traffic during construction. It was determined that a brief closure of LA 164 intersection would be necessary for the sequence of construction.

The two bridges in Minden serve as part of the I-20 interchange at US 371. The bridges were built at different times around 1930 and both bridges are three span, steel girder bridges. One bridge is normal skew to the roadway while the other bridge was built on a skew aligning with the rail line.US 371 at Minden is considered a minor urban arterial with roughly 9% truck traffic.

Similar to the Sibley bridge, the design team will prepare a bridge structure report determining the most efficient and cost-effective bridges while minimizing impact to the local traffic. Being located at an interchange, ***additional challenges*** for these bridge replacements include the maintenance of traffic, phase construction, and shifting of traffic. At this location, one bridge will be removed and replaced while reducing travel to one-lane on the other bridge to keep roadway open to existing traffic. The design team is tasked with determining if the new bridge will be concrete or steel girder type while maintaining minimal adjustment to the existing roadway grade to reduce the amount of roadway necessary to tie to existing roadway.

17. Firm Experience:

Vectura Consulting Services, LLC	**Past Performance Evaluation Discipline(s)***	Traffic

I-10 ITS Scott to Lake Charles

Firm responsibility (prime or sub?)	Sub		
Project number	H.013256.5	**Owner's name**	Louisiana Department of Transportation and Development
Project location	I-10 (District 07)	**Owner's Project Manager**	Roy Esteven, PE
Owner's address, phone, email	1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-2527, Roy.Esteven@LA.gov		
Services commenced by this firm (mm/yy)	01/21	**Total consultant contract cost ($1,000's)**	Unknown
Services completed by this firm (mm/yy)	03/21	**Cost of consultant services provided by this firm ($1,000's)**	$20

Describe the project including the firm's role and members involved.
(Highlight staff to be used in this proposal.)

Vectura performed a Level 2 **Traffic Management Plan** (TMP) for the construction of ITS equipment along I-10. The plan included the following activities:

- safety strategy that included a CAT Scan,
- LOS determination utilizing Citrix data,
- lane closure recommendations based on a queue analysis,
- cost estimate,
- and public information strategies.

Personnel Utilized on this project: Laurence Lambert, Brin Ferlito, Reece Rodrigue, & Kristen Farrington (100% performed in Louisiana)

17. Firm Experience:

Vectura Consulting Services, LLC	**Past Performance Evaluation Discipline(s)***	Traffic

Roundabout: US 171 at Boone St.

Firm responsibility (prime or sub?)	Sub

Project number	H.011909.5	**Owner's name**	Louisiana Department of Transportation and Development
Project location	Vernon Parish, LA	**Owner's Project Manager**	Josh Harrouch
Owner's address, phone, email	PO Box 94245 Baton Rouge, LA 70804-9245, (225) 242-4640, Joshua.Harrouch@LA.GOV		
Services commenced by this firm (mm/yy)	04/17	**Total consultant contract cost ($1,000's)**	Unknown
Services completed by this firm (mm/yy)	12/20	**Cost of consultant services provided by this firm ($1,000's)**	$82

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Vectura designed temporary traffic signal plans as part of the sequence of construction plan for a roundabout construction at the intersection of US 171 at Boone Street in Leesville, LA. The purpose of the project was to replace the existing signalized intersection with a multilane roundabout at Boone Street.

Temporary Traffic Signal Design

Vectura performed following design tasks to develop temporary traffic signal plans

- Detailed study of sequence of construction plans to determine the optimal traffic signal operation and required traffic signal equipment for each sequence of construction phase
- Reviewed potential access issues for all the impacted driveways / streets along the project area for each sequence of construction phase
- Developed multiple traffic signal timing plans by time of day for each sequence of construction phase to maintain progression along main corridor
- Developed temporary signal plans including pole and span wire layout, signs, striping, power source, signal timings by time of day, vehicle detection, signal head placement, wiring diagram, pole height calculations, clearance calculations, quantities, construction cost estimate
- Coordinated with DOTD Traffic Section and District Traffic Engineer

Quality Control Review

Vectura provided Quality Control review of signing and striping plans at 30% and 60% plan sets to ensure the roundabouts conformed to the Pavement Markings Details Sheet PM-09 and the Manual on Uniform Traffic Control Devices (MUTCD) details on roundabouts.

Personnel Utilized on this project: Brin Ferlito, Reece Rodrigue, Laurence Lambert, and Bridget Robicheaux (100% performed in Louisiana)

17. Firm Experience:

Vectura Consulting Services, LLC	**Past Performance Evaluation Discipline(s)***	Traffic

LA 30 Roundabouts at Tanger I-10

Firm responsibility (prime or sub?)	Sub

Project number	H.010960.5	**Owner's name**	Louisiana Department of Transportation and Development
Project location	Ascension Parish, LA	**Owner's Project Manager**	Josh Harrouch
Owner's address, phone, email	PO Box 94245 Baton Rouge, LA 70804-9245, (225) 242-4640, Joshua.Harrouch@LA.GOV		

Services commenced by this firm (mm/yy)	04/17	**Total consultant contract cost ($1,000's)**	Unknown
Services completed by this firm (mm/yy)	12/20	**Cost of consultant services provided by this firm ($1,000's)**	$153

Describe the project including the firm's role and members involved.
(Highlight staff to be used in this proposal.)

Vectura designed temporary traffic signal plans that will be implemented during construction of the three roundabouts along LA 30 in Gonzales, LA. The project involves replacing three existing signalized intersections with multilane roundabouts along LA 30 at I-10 Interchange ramps and at the Tanger Boulevard. Vectura also provided Quality Control review of construction plans.

Temporary Traffic Signal Design

Vectura performed following design tasks to develop temporary traffic signal plans

- Detailed study of sequence of construction plans to determine the optimal traffic signal operation and required traffic signal equipment for each sequence of construction phase
- Reviewed potential access issues for all the impacted driveways / streets along the project area for each sequence of construction phase
- Developed multiple traffic signal timing plans by time of day for each sequence of construction phase to maintain progression along main corridor
- Developed temporary signal plans including pole and span wire layout, signs, striping, power source, signal timings by time of day, vehicle detection, signal head placement, wiring diagram, pole height calculations, clearance calculations, quantities, construction cost estimate
- Coordinated with DOTD Traffic Section and District Traffic Engineer

Quality Control Review

Vectura provided Quality Control review of signing and striping plans at 30% and 60% plan sets to ensure the roundabouts conformed to the Pavement Markings Details Sheet PM-09 and the Manual on Uniform Traffic Control Devices (MUTCD) details on roundabouts.

Personnel Utilized on this project: Brin Ferlito, Reece Rodrigue, Laurence Lambert, and Bridget Robicheaux (100% performed in Louisiana)

18. Approach and Methodology:

Project Background

The LA 44 at I-10 Interchange is located in Gonzales, Louisiana, at the southernmost end of the city limits. It is a typical diamond interchange with LA 44 consisting of a 4-lane divided roadway with shoulders. LA 44 has left-turn lanes for east and west bound movements to I-10. The on and off ramps are controlled by signals. During a recent field visit, it was observed that new traffic signals are being installed, but were not yet operational. This signal upgrade is part of the Flashing Yellow Arrow (FYA) traffic signal upgrades throughout district 61.

A roundabout justification report was prepared by LADOTD in November 2018 and states, “The LA 44 corridor between I-10 and LA 22 is a residential area south of Gonzales in Ascension Parish that is expected to experience significant growth related to future residential development.” The report compared stop and signal-controlled intersections to multi-lane roundabouts, a continuous median and restricted left turn movements intending to facilitate movement and reduce delays throughout the corridor. It was determined that providing multi-lane roundabouts at the I-10 eastbound and westbound interchanges will reduce the queuing and delays within the project limits. From a safety perspective, over 50% of the crashes at these two interchanges during the analysis period were right-angle or left-turn crashes. These types of crashes should be eliminated with a roundabout.

In addition, another multi-lane roundabout will replace the existing traffic signal that is less than 800’ from the signalized intersection of LA 44 at the Eastbound I-10 ramps, at LA 44 at West Edenborne Parkway. The roundabout at Edenborne Parkway may affect the two bridges over Conway Bayou. While we feel the roundabout can be installed without the modification to the Conway Bayou bridges, some modification may be required for the maintenance of traffic during the roundabout construction. Our team will perform a comprehensive bridge evaluation report that will provide a recommendation to our team concerning potential impacts to the existing bridges. The existing bridge has railing that does not meet current standards and that will play a role in this decision.

Kickoff Meeting

Due to the complexity of this project, we will hold a pre-design kickoff meeting to discuss the project scope and major discussion points. This meeting will consist of members of Gresham Smith’s design team, along with representatives from both LADOTD, Ascension Parish and the City of Gonzales.

Survey

The first step in the design process will be to review the topographic survey and existing drainage map prepared by LADOTD. The positioning of the roundabouts will be shifted such as to maintain the existing heavy traffic flow. We will make sure the survey is sufficient to accommodate the design to ensure that we have adequately covered all potential limits of construction to be generated by the future location of the roundabout.

Preliminary Design

The Preliminary Plan Design process is expected to be comprised of a 30%, 60%, 90% (Plan-in hand), and 100% submittal. Additionally, a Plan-in-Hand meeting will be held following the 90% Preliminary Plan submittal. The plan-in-hand meeting is very important to the project development because it delineates the required right of way that will be needed to accommodate the design. The required right of way will also be needed to address utility relocation within the project limits. There is a major overhead utility transmission line approximately midway between the southern most LA 44 at I-10 ramp and the Edenborne Parkway intersection locations. It has a guardrail protecting it from the traffic utilizing the right turn lane dedicated for Edenborne Parkway and this same guardrail protects a cross drain with headwalls. Certainly, the overhead structure will not be relocated and will be a consideration in the design.

The 60% submittal will consist of Typical Section and Plan Profile sheets, Drainage Plan Profile sheets along with hydraulic calculations. A design drainage map will be developed and included at this time. The plans will also include geometric details, cross sections, and summary tables. The plans will undergo a geometric review and hydraulics review at this submittal. The drainage design will play a large role in the design of this project. Our site visit showed large cross drain structures crossing LA 44 both north and south of the interstate in the vicinity of the interchanges, which may be affected by the design.

The 90% submittal will add suggested sequence of construction sheets and suggested temporary erosion control sheets to the plans. Given that this project will involve major construction at two interstate interchanges, along with construction at a heavily trafficked intersection providing the main access to River Parishes Comminuty College, the suggested sequence of construction plan will be one of the most important aspects of this project. The Gresham Smith team will lean on our experience in developing complicated sequencing plans, such as the Hooper at Sullivan Roundabout Design Project, and Endom Bridge Approach Realignment project, as listed in the previous section of this proposal.

The 90% preliminary plans is the first major plan submittal. A Plan-in-Hand meeting and site visit will be scheduled at least three weeks following the submittal. This meeting will be attended by the Gresham Smith Design Team, along with representatives from both LADOTD, Ascension Parish and the City of Gonzales. A utility conflicts matrix will also be developed and presented at the plan-in-hand with suggested resolutions of any potential utility conflicts. Any anticipated design waivers or design exceptions needed for the project will be submitted at this time. Following Preliminary Plans, a Joint Plan Review Meeting will be held to review Required Right-of-Way and Utility Relocations before proceeding with Final Plans. Additionally, an environmental decision must be received prior to commencing Final Plan Development.

Final Design

The Final Design process is expected to be comprised of a 60%, 95%, 98%, and 100% submittal. All Final Plan submissions will consist of the full plan set.

The 60% Final Plans will undergo a final geometric and drainage review.

The 95% Final Plans are the second major plan submittal of the design process. It is anticipated that temporary traffic signal plans will have to be developed to handle the traffic during construction of the roundabouts that will conflict with the existing signals. Gresham Smith will submit a completed Constructability Biddability Review form at this time. Also included is an updated Cost Estimate, Design Report Form, Storm Water Pollution Prevention Plan (SWPPP form), utility conflicts list, completed Contract Time Worksheet and responses to all comments received on previous plan submissions. The plans may be submitted to the departments plan quality unit for review and comment.

The 98% Final Plans will go to the DOTD Contracts & Specifications section for review. The Construction Proposal will be developed at this time. Included with this plan submittal is the updated cost estimate, any needed Design Waiver request form (signed and sealed) and the Final QA/QC Form. Also, the plans will be sent to the DOTD Plan Quality Unit for a QA/QC Check. The Engineer's Construction Cost Estimate will be finalized at this point.

The 100% Final Plans submittal will consist of furnishing the Full-Size Plan Set. The Plans will be signed, sealed, and dated by the Engineer of Record. We will provide assistance in answering any pre-bid questions

related to the plans and will also perform a review of the apparent low bidders bid and then provide a recommendation to LADOTD as to awarding or rejecting the bid.

Roundabout Design

The Gresham Smith Team is familiar with this intersection of I-10 and LA 44, as we are currently designing a SuperStreet project at the junction of LA 44 at US 61 in Gonzales just a few miles north of this interchange. This roundabout project has many similarities to other roundabouts that our lead design engineer, Brennon Hughes has designed in the past. Gresham Smith was contracted by the prime consultant who is working directly for the City of Central to provide design plans to DOTD for a roundabout at LA 408 (Hooper Road) at LA 3034 (Sullivan Road) in Central, Louisiana. Brennon Hughes served as our engineer of record for this roundabout design and was supported by our local roadway staff of Richard Savoie and Ronnie Robinson, all of whom are professional engineers licensed in the state of Louisiana. Brennon and his team have completed this design using the same tools as will be used within this project: MicroStation, Inroads, and DOTD's Road Design Manual and Design Guidelines. Senior Engineers Richard Savoie and Ronnie Robinson will provide design support, guidance and help with decision making. They will also provide on team QA/QC and have a depth of experience in both the design and construction of roadway projects throughout the state of Louisiana. Engineer Intern Zillah Zoleta will assist with plan development throughout the entirety of the preliminary and final plans. The entire team is supported by our firmwide roundabout experts Jody Braswell, P.E., and Blair Perry, P.E., with experience from designing numerous roundabouts throughout the southeastern U.S. as well as managing the Roundabout Peer Review Program for Alabama DOT.

Some of the similarities that we recognize are that both of these intersections are 4-legged intersections with multilane approaches. Additionally, the two projects are similar in that there are large volumes of traffic that will have to be dealt with during the development of the suggested sequence of construction and temporary traffic signal design. These constraints must be taken into consideration when determining the best location for the roundabouts. DOTD's Complete Streets Policy is likely to apply for this project, it is anticipated that bicycles will need to be accommodated in our design.

These constraints will play a key role as we look to reduce impacts to the existing right of way, while balancing that with the best possible geometric design, adhering to all DOTD Road Design Manual standards and guidelines. It is very reminiscent of the Hooper Road at Sullivan Road, LA 3034 designed roundabout, where we also had constraints which needed to be considered: high traffic volumes bicycle accommodations in the design. Brennon's experience in developing the design and location for the multilane roundabout, with pedestrian and bicycle accommodations will play a valuable role in the design of this project.

The Design Process

The Gresham Smith design team plans to use the same approach implemented on our LA 408 at LA 3034 Roundabout project, discussed above. We will ensure that all design services meet standard requirements of the many reference documents listed in this advertisement. Most notably, we will ensure that we are meeting DOTD's 2017 Minimum Design Guidelines while utilizing the Roundabout section in Chapter 6 of the DOTD Road Design Manual.

In our experience, the design of a roundabout is an iterative the process. We will use MicroStation and Inroads to create a working design. We will generate alignments, linework, profiles, and cross sections which will be modified and adjusted throughout the process to provide the best possible design for this roundabout. Graphical grades will also be provided to assist with the drainage layout and construction of the roundabouts. Several design considerations must be evaluated at the beginning of this design process. Both approaches currently have a posted speed of 35 MPH. The design speeds of these approaches will affect the horizontal and vertical geometry of the roadway approaches to the roundabout. The vertical geometry will affect the drainage design, using curb and gutter with sub-surface drainage, we must confirm that we maintain longitudinal grade requirements and/or ensure our vertical curves meet K-Value requirements as per the AASHTO Green Book. Our design will place the high points and low points along the roundabout exterior at logical locations in order to facilitate our drainage design, while maintaining a smooth circulating lane with no more than a 1.5% cross slope for the circulating lanes (as required by Ch. 6.9 of DOTD Road Design Manual).

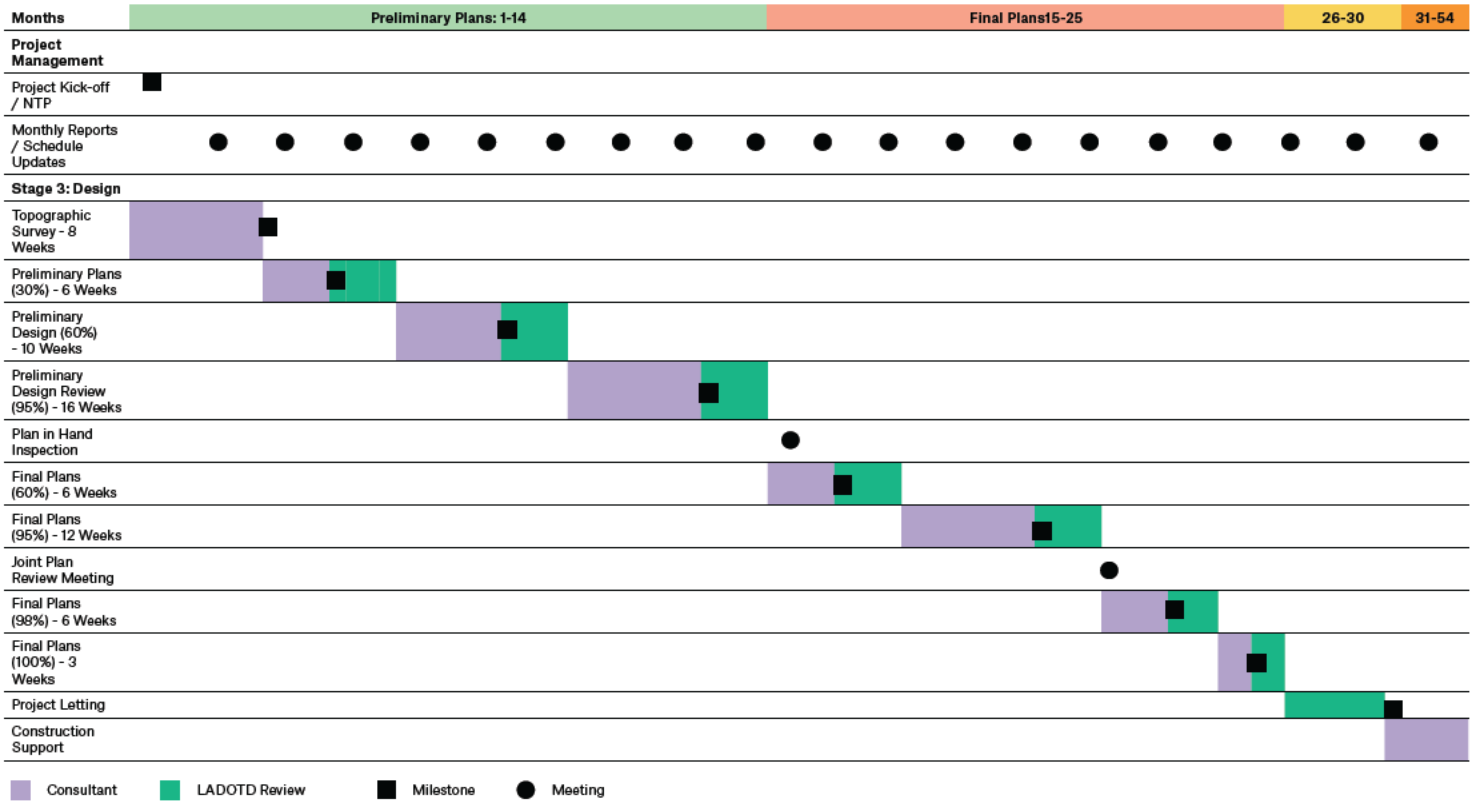
The suggested sequence of construction for the roundabout will be another challenge due to maintaining traffic since the approach roadways are both concrete. A review of other projects such as the roundabouts at I-12 and LA 447 in Walker and I-12 and US 51 in Hammond where the new roundabouts constructed with asphalt

concrete with the approach roadways being concrete pavement. This use of asphalt concrete pavement would expedite the construction of the project and have the least impact to the traveling public.

The initial design we envision to incorporate all of these items will be perfected through the iterative design process, resulting in the best possible design for the City of Gonzales and Ascension Parish that will minimize construction and maintenance costs and benefit the traveling public.

Example Schedule:

Termini	I-10 at LA 44 Northernmost Interchange to West Edenborne Pkwy at LA 44 Intersection
Location	Gonzales, LA
Scope	Roundabout Design
Kick-off Meeting	June 1, 2024
Notice to Proceed	June 1, 2024
Due Date	December 1, 2026



Summary

Gresham Smith's reputation has been built on a foundation of successful, long-term relationships with repeat clients. This foundation of repeat business is founded on our ability to share our clients' goals, and often enhance those visions by providing innovative, yet practical, solutions fitted within their budgets and timelines. The confirmation of our ability to perform highly professional work on the agreed-upon schedule and efficiently within budget is best validated through the clients we have worked for in the past, and in many cases, are working for today. The Gresham Smith team looks forward to your consideration for this project, and we are eager to make it a success for LADOTD.

19. Workload:

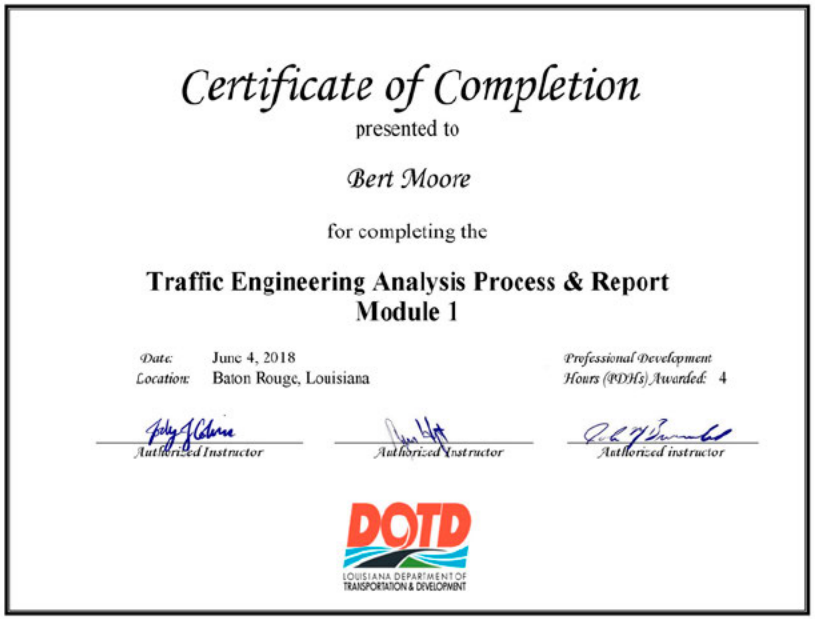
Firm All firms must be represented in this table	**Past Performance Evaluation Disciplines(s) ***	**Contract Number & State Project Number**	**Project Name**	**Remaining unpaid balance****
Gresham Smith	Traffic	H.12018.5	Lafayette Adaptive Traffic Signals	$111,054
Gresham Smith	CE&I/OV	H.011500.6	Lake Charles ITS Phase 3	$39,874
Gresham Smith	Bridge	H.009730.5	Complex Bridge Inspection TO #4	$14,755
Gresham Smith	Bridge	H.009730.5	Complex Bridge Inspection TO #5	$3,177
Gresham Smith	Bridge	H.009730.5	Complex Bridge Inspection TO #6	$23,960
Gresham Smith	Bridge	H.009730.5	Complex Bridge Inspection TO#7	$23,960
Gresham Smith	Road	H.013720	LRSP/STRPPP Bonner Street Bridge Pedestrian Improvements	$3,089
Gresham Smith	Road	H.013767.5	LRSP/STRPPP Signs and Striping - St. Landry and St. Martin Parishes	$4,223
Gresham Smith	Road	H.013073.5	LRSP/STRPPP Greenwells Springs & Wooddale Sidewalks	$54,578
Gresham Smith	Traffic	H.015086.5	LRSP/STRPPP LA 14	$146,128
Gresham Smith	Road	H.014629.5	LRSP/STRPPP Lafourche Signing and Striping	$4,759
Gresham Smith	Road	H.015202.5	LRSP/STRPPP Donaldsonville Signing and Striping	$6,087
Gresham Smith	Road	H.015200.5	LRSP/STRPPP East Street and Parkview, Monroe, LA Signing and Striping	$6,488
Gresham Smith	CE&I/OV	H.009308.6	TO #1 New Orleans DPW SRTS Sidewalk Project	$2.937
Gresham Smith	CE&I/OV	H. 013256.6	I-10 Scott to Lake Charles ITS CEI	$151,452
Michael Baker International, Inc.	CE&I/ OV	H.013958.6 Task Order No. 1	IDIQ Contract for Construction Engineering and Inspection Services in District 03, Carpenter's Bridge Road over Whisky Chitto Creek, Allen Parish	$199,633
Michael Baker International, Inc.	CE&I/ OV	H.014415.6 Task Order No. 2	IDIQ Contract for Construction Engineering and Inspection Services in District 03, LA 352 Drainage Improvement, Route: LA 352, St. Martin Parish	$127,780
Michael Baker International, Inc.	CE&I/ OV	H.009629.6 Task Order No. 3	IDIQ Contract for Construction Engineering and Inspection Services in District 03, US 90: RR JCT – Pinhook, LA 92 – LA 88, Iberia, Lafayette, and St. Martin Parishes	$199,633
Michael Baker International, Inc.	CE&I/ OV	H.005967.6 Task Order No. 4	IDIQ Contract for Construction Engineering and Inspection Services in District 03, Nelson Rd Ext & Bridge, Calcasieu Parish	$489,330

Michael Baker International, Inc.	CE&I/ OV	H.01399 Task Order No. 1	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Loc Rd. over Borrow Pit (Blind RV BT LNCH), St. James Parish	$182,080
Michael Baker International, Inc.	CE&I/ OV	H.01293.6 Task Order No. 2	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 78: US 190 – LA 1, Route: LA 78, Pointe Coupee Parish	$16,711
Michael Baker International, Inc.	CE&I/ OV	H.013458.6 Task Order No. 3	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Manchac Acres Rd & H H Wilson Rd Bridges, Ascension Parish	$189,447
Michael Baker International, Inc.	CE&I/ OV	H..015604.6 Task Order No. 4	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Pear St. at LA 1: Drainage, Route: LA 3199-P, Assumption Parish	$171,537
Michael Baker International, Inc.	CE&I/ OV	H.012057.6 Task Order No. 5	IDIQ Contract for Construction Engineering and Inspection Services in District 61, LA 431: Villar Canal and Drainage Bridges, Ascension Parish	$734,168
Michael Baker International, Inc.	CE&I/ OV	H.013956.6 Task Order No. 6	IDIQ Contract for Construction Engineering and Inspection Services in District 61, Beamon Road over Bayou Maringouin, Pointe Coupee Parish	$251,587
Michael Baker International, Inc.	CE&I/ OV	H.012018.6 H.012018.6 H012018	IDIQ Contract for Construction Engineering and Inspection Services with majority of work in District 07 Statewide Adaptive Traffic Signal and Implementation, Lafayette Parish	$46,184
Michael Baker International, Inc.	CE&I/ OV	H.0003184.6 H.003184.6	IDIQ Contract for Construction Engineering and Inspection Services with majority of work in District 07 Statewide, I-10: Texas State Line - E. of Coone Gully, Calcasieu Parish	$368,721
Michael Baker International, Inc.	CE&I/ OV	H.013959.6	IDIQ Contract for Construction Engineering and Inspection Services (CE&I) with Majority of Work in District 07 Statewide Reeds Bridge Road over Calcasieu River Relief, Calcasieu Parish	$78,209
Michael Baker International, Inc.	CE&I/ OV	H.009308.6	IDIQ Contract for Construction Engineering and Inspection Services for Safety Projects (CE&I), Statewide New Orleans DPW SRTS Sidewalk Project	$39,291
Michael Baker International, Inc.	CE&I/ OV	H.012527.6	Local Road Safety Upgrade (W. Feliciana), West Feliciana Parish	$617
Michael Baker International, Inc.	CE&I/ OV	H.013082.6	Bootlegger Road Sidewalks, St. Tammany Parish	$32,209
Michael Baker International, Inc.	ITS	H.011500.6	Retainer Contract for Intelligent Transportation Systems (ITS), Lake Charles ITS Phase 3	$428
Michael Baker International, Inc.	ITS	H.012381.6	IDIQ Contract for Construction Engineering and Inspection Services with majority of work in District 07 Statewide, Fiber Optic Mapping and Management Statewide, Calcasieu Parish	$579
Michael Baker International, Inc.	ITS	H.013256	I-10 ITS Scott to Lake Charles	$7,662
Michael Baker International, Inc.	Road/ Bridge	H.015338	Infrastructure Investment and Jobs Act (IIJA) Off-System	$1,271,453

			Bridge Program – District 07, Supplemental Agreement No. 1	
Michael Baker International, Inc.	Road/ Bridge	H.012030.5	US 371: KCS RR Overpasses HBI	$236,520
Michael Baker International, Inc.	Road/ Bridge/ Environmental	H.013797	LA 30: EBR PL-I-10	$309,268
Michael Baker International, Inc.	Environmental	H.005168	NORG EIS, New Orleans, Louisiana	$555,082
Michael Baker International, Inc.	Environmental	H.005168	NORG – Avondale PEL Study, New Orleans, Louisiana Supplemental Agreement	$675,963
Michael Baker International, Inc.	Other (Water Resource)	Contract No. 4400017092 Task Order No. 2	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 6	$94,665
Michael Baker International, Inc.	Other (Water Resource)	Contract No. 4400017092 Task Order No. 3	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 6	$647,476
Michael Baker International, Inc.	Other (Water Resource)	Contract No. 4400017090 Task Order No. 2	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 4	$127,342
Michael Baker International, Inc.	Other (Water Resource)	Contract No. 4400017090 Task Order No. 3	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 4	$57,542
Michael Baker International, Inc.	Other (Water Resource)	Contract No. 4400017067 Task Order No. 1	Collection of Existing Watershed Datasets, Models, and Studies; and Proposition of Modeling Design Approach, Schedule and Costs, Region 1	$304,431
Michael Baker International, Inc.	Other (Water Resource)	H.015040.1& H.015041.1	IDIQ Contract for Louisiana Watershed Initiative/ State Projects Program (LWI-SPP) – Group 1 Beauregard, Vernon, and St. Landry Parishes	$84,645
Michael Baker International, Inc.	Other (Water Resource)	H.015044.1	IDIQ Contract for Louisiana Watershed Initiative/ State Projects Program (LWI-SPP) – Group 1 Beauregard, Vernon, and St. Landry Parishes	$55,614
Michael Baker International, Inc.	Other (Water Resource)	H.015047.1	IDIQ Contract for Louisiana Watershed Initiative/ State Projects Program (LWI-SPP) – Group 1 Three Mile Lake Flood Reduction	$129,918
Michael Baker International, Inc.	Other (Water Resource)	Contract No. 4400023101 Task Order No. 4	IDIQ Contract for Louisiana Watershed Initiative/ State Projects Program (LWI-SPP) – Group 1 Peer Review Beauregard, Vernon, and St. Landry Parishes	$27,805

Michael Baker International, Inc.	Other (Aviation)	Contract No. 4400019130 Task Order No. 1	IDIQ Contract for Statewide Aviation Program Update – Phase II Statewide	$4,980
Vectura Consulting Services, LLC	Traffic	H.010616	I-20: LA 544 Overpass Replacement	$74,429
Vectura Consulting Services, LLC	Traffic	H.005168.2	New Orleans Rail Gateway Avondale EA	$92,995
Vectura Consulting Services, LLC	CE&I/ OV	H.007160	EBR Computerized Traffic Signal, Ph VB	$33,910
Vectura Consulting Services, LLC	Traffic	H.004791	Belle Chasse Bridge & Tunnel Replacement PPP	$14,740
Vectura Consulting Services, LLC	Traffic	H.012030.5	KCS RR Overpasses HBI	$572
Vectura Consulting Services, LLC	Traffic	H.013522	S. Lewis Street Widening	$7,499
Vectura Consulting Services, LLC	ITS	H.015136.4	Northshore Regional ITS Architecture Update	$11,421
Vectura Consulting Services, LLC	ITS	H.012845.1	C/AV Team and Working Group Support	$13,949
Vectura Consulting Services, LLC	ITS	H.011507.1	Monroe Phase 3 SEA	$29,217
Vectura Consulting Services, LLC	Traffic	H.014746.5	LA 383 Stage 0 Corridor Study	$22,388
Vectura Consulting Services, LLC	Traffic	H.011242.1	LA 384 (Big Lake Rd to McNeese St)	$31,827

20. Certifications/Licenses:



Certificate of Completion

presented to

Bert Moore

for completing the

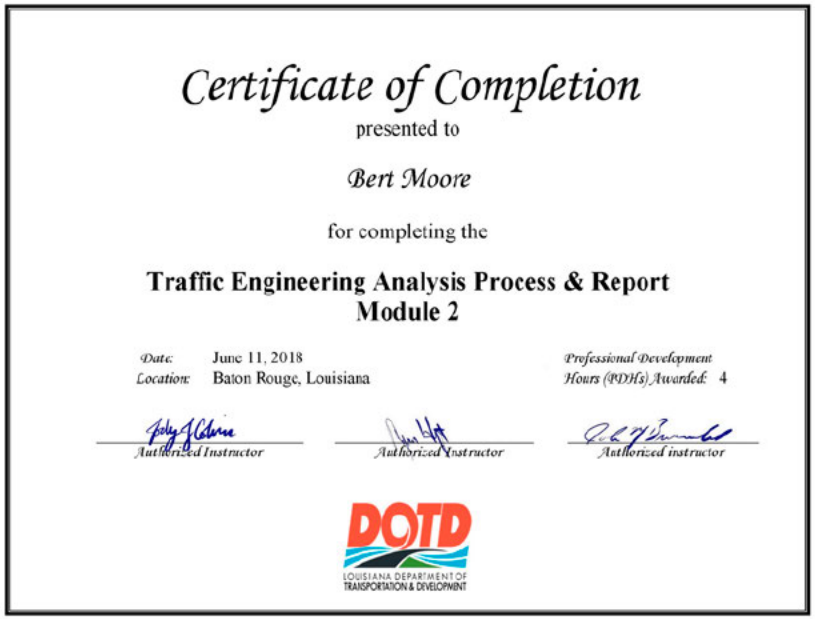
Traffic Engineering Analysis Process & Report
Module 1

Date: June 4, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDH's) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Bert Moore

for completing the

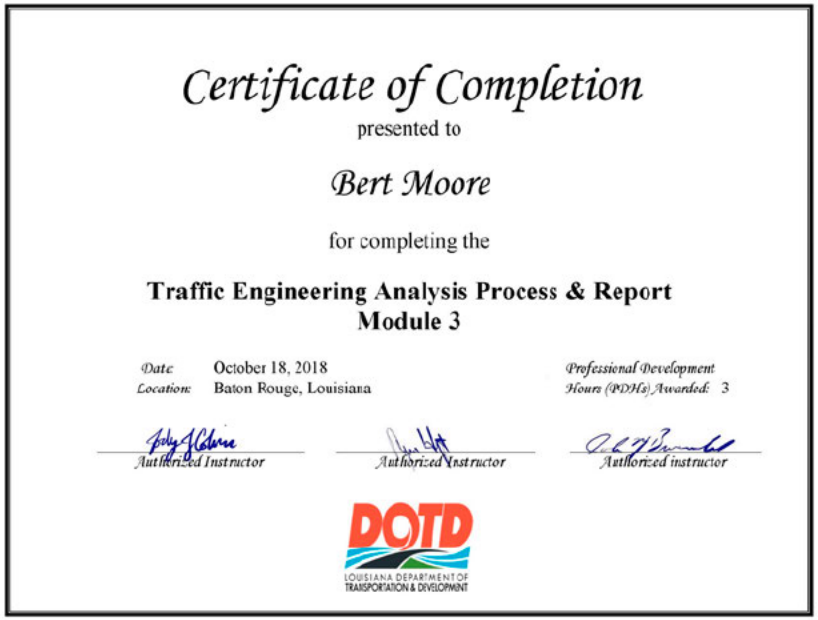
Traffic Engineering Analysis Process & Report
Module 2

Date: June 11, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDH's) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Bert Moore

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 18, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDH's) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

U.S. Department of Transportation
Federal Highway Administration

RESOURCE CENTER

Certificate of Completion

BERT MOORE

has successfully completed the course entitled:

Designing Pedestrian Facilities for Accessibility (DPFA)

Location: Baton Rouge, Louisiana
Dates: May 08-09, 2017

Hours of Instruction enhancing Professional Development: 12 hrs

Patrick E. Gomez
Civil Rights Specialist
Federal Highway Administration

Ted Green
Professional Engineer
New Jersey LTAP

Certificate of Training

PRESENTED BY

The National Cooperative Research Program

TO CERTIFY THAT

Herbert Moore

HAS SATISFACTORILY COMPLETED 20 HOURS OF TRAINING IN:

Highway Safety Manual Workshop
NCHRP 17-38

Karen K. Dixon, PhD, P.E.
Ida van Schalkwyk, PhD
Larry F. Sutherland, P. E.
Instructors

December 1-3, 2010
Date

Baton Rouge, Louisiana
Location

Certificate of Training

PRESENTED BY

Louisiana Local Technical
Assistance Program

TO CERTIFY THAT

Bert Moore

HAS SATISFACTORILY COMPLETED 3 PROFESSIONAL DEVELOPMENT HOURS IN:

Regional Crash Data Workshop

Director of Louisiana LTAP Center

February 23, 2017
Date

Baton Rouge, Louisiana
Location

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Herbert Moore
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

4/7/2023 to 4/7/2027
Training Valid Through

Vice President of Education and Technical Services

Baton Rouge, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA

American Traffic Safety Services Association ATSSA.com

American Traffic Safety Services Association

This is to affirm that

Herbert Moore

has satisfied the requirements to be designated as a
CERTIFIED FLAGGER

Issue Date 5/9/2023
Exp. Date 5/8/2027
State Issued LA

ATSSA
Instructor Name
Instructor Signature

A1000126198

Verify at Flagger.com

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

nhi national highway institute

Certificate of Training

BRENNON HUGHES

has participated in

FHWA-NHI-380096V Modern Roundabouts: Intersections Designed for Safety

hosted by

LA DOTD/LTRC

Date: September 8 and 9, 2020 *Hours of Instruction:* 6

Location: Virtual Delivery

Instructor

Instructor

Allison H. Landry
Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Brennon Hughes
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

8/5/2022 to 8/5/2026
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA

ATSSA American Traffic Safety Services Association ATSSA.com

U.S. Department of Transportation
Federal Highway Administration

National Highway Institute

nhi national highway institute

Certificate of Training

Brennon Hughes

has participated in

FHWA NHI #380091V
Planning and Designing for Pedestrian Safety

hosted by

Louisiana DOTD

Date: October 25thru 28, 2021 *Hours of Instruction:* 18

Location: Online Virtual Delivery

Joe Gilpin Digitally signed by Joe Gilpin Date: 2020.12.03 23:15:13 -05'00'
Instructor

Keith Sinclair Digitally signed by Keith Sinclair Date: 2020.12.05 23:16:51 -05'00'
Instructor

Allison H. Landry, CGMP
Local Coordinator

Thomas Harman
Thomas Harman, Director
National Highway Institute

Certificate of Attendance

presented to

Brennon Hughes

for attending

Advanced Highway Safety Manual Training – Interactive Highway Safety Design Model (IHSDM)

16 Professional Development Hours

June 5-6, 2018

Baton Rouge, Louisiana

Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

ATSSA
SAFER ROADS SAVE LIVES

American Traffic Safety Services Association

This is to affirm that

Brennon Hughes

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Issue Date 5/26/2023

Exp. Date 5/25/2027

State Issued LA

A1000127001

ATSSA
Instructor Name

Instructor Signature

Verify at Flagger.com

Certificate of Completion

presented to

Rebecca LaPorte

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Rebecca LaPorte

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Rebecca LaPorte Murray

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Attendance

presented to

Rebecca LaPorte

for attending

Advanced Highway Safety Manual Training –
Interactive Highway Safety Design Model (IHSDM)

16 Professional Development Hours

June 5-6, 2018

Baton Rouge, Louisiana

Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

The American Traffic Safety Services Association

Hereby recognizes that

Rebecca Murray

has attended

Traffic Control Supervisor Refresher-LA State Specific Training Course

2/14/2020 to 2/14/2020
Date

Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

ATSSA
SAFER ROADS SAVE LIVES

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Rebecca Murray

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 2/8/2024 State Issued in LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

TEMPORARY CERTIFICATE IS AWARDED TO

ZILLAH ZOLETA

Has successfully completed a flagger training course meeting the requirement of the

LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

on the following date

MAY 25, 2023

This certificate is valid for 30 days from completion date

with a government issued photo ID.

Verify this certificate against the information online use the code below to view certificates

190-57-93690

Enter the code to verify this certificate is an original at

https://process.onlineflagger.com/duplicate

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Daniel Thornhill

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

4/29/2022 to 4/29/2026
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA

ATSSA American Traffic Safety Services Association ATSSA.com

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: June 4, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: June 11, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: September 10, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: November 5, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: November 26, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: December 3, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 30, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: August 6, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Kristen Gahagan

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 29, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Bridget Robicheaux

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 30, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Bridget Robicheaux

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: August 6, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Bridget Robicheaux

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 18, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

21. QA/QC Plan and/or Work Plan:

Michael Baker
INTERNATIONAL

BRIDGE DESIGN QA/QC PLAN

LA 44: I-10 ROUNDABOUTS ROUTE: LA 44 & I-10

REVISIONS

DATE	REVISION

APPROVALS:

_____ _____
Mary E Flynn, PE Date
Office Quality Manager

_____ _____
Daniel Thornhill, PE Date

Principal
TABLE OF CONTENTS

SECTION I - PROJECT QUALITY PLAN

1.0 Introduction

The following quality plan was prepared for the LA 44: I-10 ROUNDABOUTS. The individual members of the Michael Baker International Team shall collectively adopt and implement this Design QC/QA Plan for the project. All team members will maintain an up-to-date copy of the Design QC/QA Plan as documented by a certification of receipt.
The Michael Baker Team recognizes and acknowledges that they are responsible for the quality of construction documents and constructability of the project. The Design QC/QA Plan presented incorporates the overall control of establishing review procedures and provides for an independent Quality Control/Quality Assurance review team within the Michael Baker Team. The quality policy herein is relevant to Michael Baker's organizational goals and the expectations and needs of Louisiana Department of Transportation and Development (LA DOTD). Our commitment and objectives to quality shall be exhibited throughout the life of the design process as well as in construction support.

1.1 Scope of the Project Bridge Design QC/QA Plan

The Design QC/QA Plan is the overall methodology to ensure the deliverable of a quality set of construction documents. It is intended to establish a systematic approach to prepare, review and document the design development process and to assure that quality control has been effectively implemented.
All designers, technicians and reviewers recognize that quality is the result of several processes. It requires many individuals performing many appropriate activities at the right time during the plan development process. Quality Control does not solely consist of a review after a product is completed. It is an approach and a realization that quality is something that occurs throughout the design process. Quality requires performing all activities in conformance with valid requirements, no matter how large or small their overall contribution to the design process. Not only are accuracy in design activities and calculations required, but good CAD techniques, attention to detail and ensuring the plans are correct are essential to quality and the LA DOTD.
As an agent of LA DOTD, the Michael Baker Team is tasked with the primary responsibility for preparation of construction documents. The Michael Baker Team will ensure quality and adhere to established design policies, procedures, standards and guidelines in the preparation and review of all design products for compliance and good engineering practice as directed by this Design QC/QA Plan.

1.2 Objectives of the Project Bridge Design QC/QA Plan

- Quality Control. Procedures of checking the accuracy and consistency of the calculations and the drawings, detecting and correcting design omissions and errors before the design plans are finalized, and verifying the specifications for the load-carrying members are adequate for the service and operation loads.
- Quality Assurance. Procedures of reviewing the work to ensure the quality control procedures are in place and effective in preventing mistakes, and consistency in the development of bridge design plans and specifications.
- Roles and Responsibilities. To define the roles of the various project participants and their respective responsibilities.

- Documentation. To provide a well-documented "trail" of the design process. A properly documented project file should be a by-product of the quality control process. A well-documented project file will be able to substantiate the LA DOTD's position should any legal, social or procedural issues arise regarding the project.
- Feedback. To provide informational feedback from reviews to the designers. The designer's improved expertise and general increase in knowledge from feedback should result in product improvement at early stages even before a project review is started. The Quality Control process thus serves as a parallel training program.

1.3 Quality Organization - Key Personnel

The following key personnel will contribute significantly to the overall quality of the project and their roles and responsibilities are defined here:

a) Principal-In-Charge – The Principal-In-Charge has the responsibility to determine the overall direction of The Michael Baker Team and its relationship to the quality efforts. The Principal-In-Charge will ensure that the quality policy is documented and understood by all team members and shall further ensure implementation of the quality policy. The Principal-In-Charge assigned for the LA 44: I-10 ROUNDABOUTS is Daniel Thornhill, P.E.

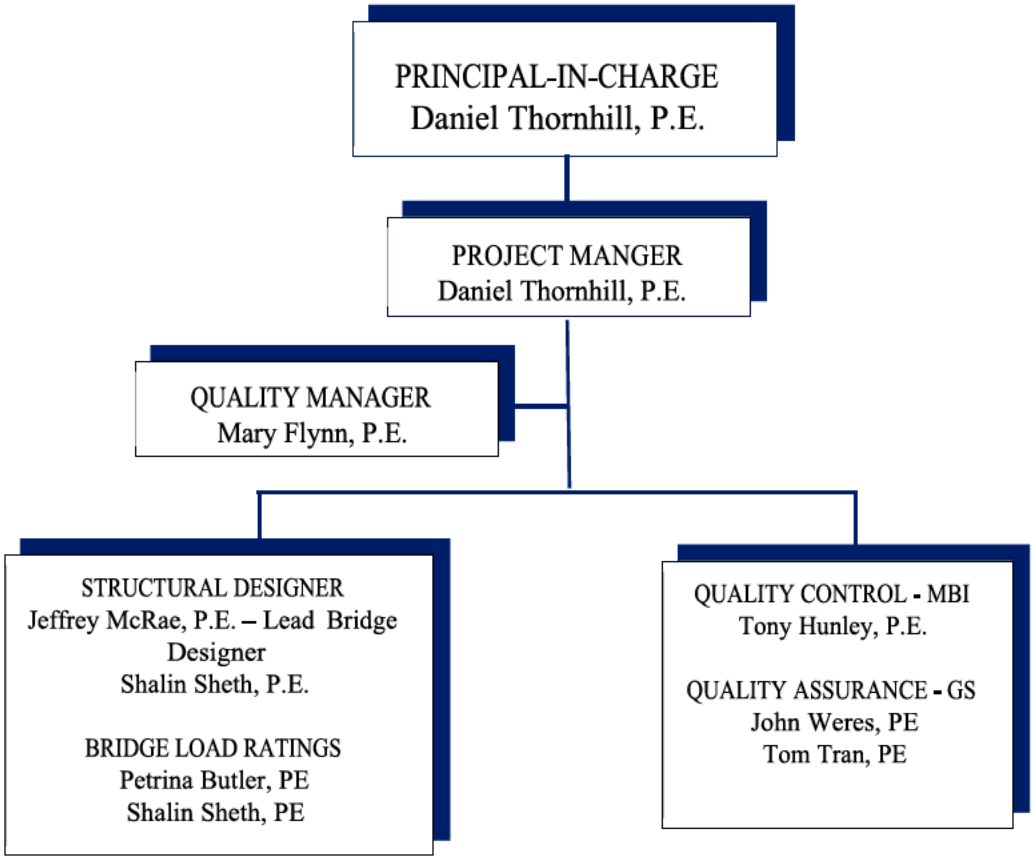
b) MBI Project Manager (PM) – The MBI PM is the team leader, licensed by the State of Louisiana as a Professional Engineer, responsible for the planning, staffing qualified designers and detailers, coordination and controlling of a project from inception to completion, meeting the project's requirements and ensuring that each project is completed on time, within budget, within scope, and in conjunction with the Quality Manager, meets required quality standards. The MBI Project Manager ensures that all phase Quality Control reviews have occurred and have been completed, that all comments have been satisfactorily addressed, and that all forms and checklists have been completed by the appropriate personnel. The PM is ultimately responsible for each project's adherence to the quality control plan. The MBI Project Manager for the LA 44: I-10 ROUNDABOUTS is Daniel Thornhill, P.E.

c) Quality Manager – The Quality Manager Reports directly to the Principal-In-Charge and will be a person who is independent from the production of the design. The Quality Manager is the person responsible for the Quality Assurance of all work produced. The Quality Manager will assess and evaluate the completeness and effectiveness of design quality control activities. Once Quality Assurance has verified a complete package, she will provide recommendation to the MBI Project Manager and certification to the LA DOTD that the design quality control activities comply with the contract requirements and the Design QC/QA Plan. The Quality Manager assigned to the Baton Rouge Office is Mary Flynn, P.E.

d) Designers – The Designers are the engineers responsible for their respective discipline or design efforts. The Designers must sign and seal design reports, design plans, working drawings and the project specifications for the assigned design activities. Designers are Louisiana licensed Professional Engineers, and have the necessary technical knowledge and experience required for this project. The Designers assigned are Daniel Thornhill, P.E.; Jeffrey McRae, P.E.; Tony Hunley, P.E.; and Shalin Sheth, P.E.

LA DOTD – The LA DOTD will review and approve design criteria and TS&L, and selectively check dimensions and details as a cursory review of the plans for constructability, consistency, and clarity, but not as QC/QA of the Michael Baker Team's work. The LA DOTD is not responsible for the accuracy and completeness of design. It is the responsibility of Engineer of Record to ensure accuracy; adequacy; conformance to standards of practice; compliance with codes, standards and permits; cost effectiveness; quality; and fitness for purpose.

1.4 Quality Organizational Chart



SECTION II – DESIGN CRITERIA DEVELOPMENT 2.0 Design Input Requirements

During the course of the design, the design-input requirements relating to the scope of work and the applicable statutory and regulatory requirements related to the work to be/being performed shall be identified and documented and reviewed by the MBI Project Manager for adequacy. Any incomplete, ambiguous, or conflicting requirements shall be resolved with the MBI Project Manager, Gresham Smith Project Manager and LA DOTD.

The MBI Project Manager will determine what information is needed to design the project and will determine if sufficient information has been provided to carry out the assignment. It is the MBI Project Manager's responsibility to obtain clarification of any unresolved ambiguity prior to proceeding with design information; sources and decisions made shall be documented and treated as a quality record.

Procedure: A team member noticing inconsistency with input requirements will notify the MBI Project Manager. If the MBI Project Manager is unable to resolve the inconsistency, a letter requesting clarification will be submitted through Gresham Smith Project Manager to the LA DOTD for clarification. The clarification provided by LA DOTD will be recorded, documented and saved as a quality record, and a copy of the correspondence will be forwarded to the Quality Manager.

2.1 Design Criteria

Criteria specific for the LA 44: I-10 ROUNDABOUTS will be developed, reviewed and accepted by the MBI Project Manager, and submitted through Gresham Smith to the LA DOTD for approval. A copy of the approved criteria will be provided to the Quality Manager. The Quality Manager will ensure the Michael Baker Team is working with the most updated criteria as they may change throughout the life of the project.

Bridge Design Criteria will include the following per LA DOTD BDEM Chapter 3, Appendix A:

a. Cover Sheet, with project number, name, revision date, and Team Leader signature.
b. General design information including assumptions made and/or exemptions obtained
c. Governing design and construction specifications and other references (AASHTO, LA DOTD Bridge Design Manual, ACI, AISC, etc.)
d. Hydraulic Design Criteria – BY OTHERS
e. Design Factors and Loads
f. Limit States
g. Bridge Barrier and Guardrail
h. Deck, Deck Drainage and Approach
i. Bearing
j. Joint Data
k. Superstructure Data
l. Substructure Data, including pile and drilled shafts
m. Geotechnical, Mechanical, and Electrical Design
n. Bridge Rating Criteria
o. Software

SECTION III – DEVELOPMENT OF DESIGN AND PLAN DETAILS 3.0 Design and Plan Preparation:

An Engineer of Record (EOR) will be assigned for the project. He/she is directly responsible for the supervision and/or preparation of plans, sealing drawings, special provision including nonstandard items, and calculations. The EOR for the bridge plans for LA 44: I-10 ROUNDABOUTS will be the Lead Bridge Designer (EOR), Jeffrey McRae, PE.
The following are the guidelines to be used for Calculations, Plans and Specifications.

3.1 Calculations

Calculations will be prepared as a guide and support for the design and will be provided during all phases of quality reviews but shall not be considered as elements of the Contract Documents. All calculation sheets will be organized and maintained in a standard calculation book format. The calculations will be consistent with the requirements of the design. In general, calculations will include the following:

- Design Criteria as detailed in Section IV.
- "Handwritten" Design Calculations will be made on standard calculation sheets; initialed by the designer; and, contain the date, job number, project title, and calculation title. All assumptions will be listed, verified and approved by the MBI Project Manager and Lead Bridge Designer (EOR). Where code dictates a requirement, the code, code date, section number and applicable table will be listed. When information is obtained from other calculations or disciplines, the source shall be properly referenced. Design iterations will be included as part of the final documentation. The final design will appear on the plans. During development of design calculations, proper sketches and details (when appropriate) will be presented in the design calculations for clarification purposes.
- Commercial Design Computer Software Calculations will be from the LA DOTD's approved list or approved for use by the MBI Project Manager and Lead Bridge Designer (EOR) and LA DOTD; training on usage and interpretation of results of software will be required for all inexperienced users. Generated output will be initialed by the designer; and contain the date, job number, project title, and calculation title. During development of design calculations, proper sketches and details (when appropriate) will be presented in the design calculations for clarification purposes.
- In-House Design Computer Programs will be approved for use by LA DOTD prior to use and may consist of spreadsheets, MathCAD worksheets, or other approved formats. Any in-house computer software used for design will be checked, or must have been previously checked, prior to use. All software checks will be documented and filed for future reference. The author will be responsible for updating the program and design manual (if required) to meet current code criteria. When the program is revised, the author will be responsible for informing the users. Results from in-house software will not be required as part of the deliverable.
- Design & Plan Preparation Computer Software will be a "total package" tool, in that a single software program is used throughout the design and detailing process to ultimately arrive at the final construction documents. Training on usage and interpretation of results of software is required for all inexperienced users. Where "industry standard" software is used, training should be readily available. MBI Project Manager and Lead Bridge Designer (EOR) should make the determination when training of individuals is needed. Planning, obtaining approval and scheduling of training sessions are responsibilities of the MBI Project Manager and Lead Bridge Designer (EOR).

3.2 Bridge Drawings

Drawings will show the structural member locations, sizes, reinforcing, and connections in sufficient scale and detail to enable the construction of the Bridge in a reasonable sequence. Elevations, sections, and details will be of appropriate scale, number, and extent to clearly portray the relationship of members to each other and their interconnection(s). Care will be taken to ascertain and determine that details noted "typical" are applicable to the LA 44: I-10 ROUNDABOUTS, for the condition being portrayed.

In general, final bridge drawings will include the following:

- General Notes and Bridge Index
- Summary of Bridge Quantities
- General Plan & Elevation
- Foundation/Pile Layout
- Transition Bent Details and Elevations
- Framing Plan
- Girder Details
- Approach Slab Details

- Abutment Details and Elevations Standard Bridge Plans & Details
- Intermediate Bent Details and Elevations

3.3 Specifications

The LA DOTD Standard Specifications (2016 Edition) will be used for the construction as indicated in the construction plans. Where necessary, existing LA DOTD Non-Standard Specifications will be used. If a Non-Standard specification does not exist and is required, it will be developed and submitted to LA DOTD for their review and acceptance.

SECTION IV - QUALITY CONTROL

4.0 Scope of Quality Control Activities

As part of the Design QC/QA Plan, the Quality Control will include activities performed by The Michael Baker Team to assess design and ensure the quality of the end product. The Quality Control will include activities in establishing and communicating policies and procedures; auditing of design reviews and checks; verifying completeness and accuracy of design; and, establishing procedures for and monitoring of document control, and production process control and inspection.
The MBI Project Manager and Lead Bridge Designer (EOR) will communicate design quality procedures and policies to the design staff at the outset of the project and ongoing communication of Design QC/QA Plan goals and initiatives as the project continues. Communication and directives to the design staff will also include details of the quality control activities for proper checking, back checking and signing of design computations and construction documents by the Designers.
The Quality Control efforts will establish design requirements for design codes, design standards, production formatting and detailing requirements.

4.1 Objectives of the Quality Control Plan

- Implement, monitor, review and provide recommendations for improvement of the Quality Control throughout the project
- Discuss and schedule all Design Reviews by LA DOTD
- Review of the adequacy and completeness of design solutions and design documents
- Review of design solutions, including work by other designers and subconsultants, to ensure that the requirements of the contract documents and Project scope are satisfied
- Review for conformance and completeness at all Project Design phase submittals with the overall project scope and overall contract documents
- Certify that all design documents, including work by other designers and subconsultants, are in conformance with the Design QC/QA Plan and conforms to the contract requirements
- Document that all design services are performed under the direction of a Professional Engineer licensed in the contracted State
- Arrange and schedule reviews of all design documents and other plans such as shop drawings and fabrication drawings
- Conduct independent design checks of critical project components and review findings with design staff

- Provide design verification throughout the project as required by the LA DOTD
- Check design for accuracy of designer's calculations, pay items, quantities, special provisions, including non-standard items, and cost estimate
- Check detail for dimension and quantity calculations, design information, and CAD standards
- Preparation of Quality Assurance information package to the Quality Manager

4.2 Training Processes

The Michael Baker Team will establish and maintain documented procedures for identifying training needs and provide for the training of all personnel performing activities affecting quality control. Personnel performing specific assigned tasks shall be qualified based on appropriate education, training, and/or experience, as required. Appropriate records of training will be maintained by the Michael Baker Baton Rouge Office.

4.3 Procedures for Internal Quality Control Audits

The Quality Manager shall audit the Design QC/QA Plan implementation on a regular basis to see that the quality records, indexes, and quality review schedules are being performed in accordance with the Design QC/QA Plan. Also, the Quality Manager may ask the independent reviewers (checkers) to provide an independent design of certain elements of the project to independently verify the adequacy of the design. The independent design calculations will become a part of the quality record.

SECTION V – QC OF DESIGN AND PLAN DETAILS 5.0 Quality Control:

The quality control process established to ensure correctness for design and plan preparation will be divided into two categories:

1. Ongoing through the process of design and plan preparation; and
2. Periodic reviews at particular phase submittals of the project.

A Design Reviewer (Checker) reporting directly to the Lead Bridge Designer (EOR) will conduct full technical reviews during the design, including design calculations, drawings, special provisions, including Non-Standard items, and cost estimate. When the MBI Project Manager and Lead Bridge Designer (EOR) identifies that the design and plans are ready for an independent review, he/she will create hard-copy printouts to be used for the calculation or plan review set. The calculations and/or plan review sets should identify the original designer and should be signed and dated by the Reviewer.

- The MBI Project Manager and Lead Bridge Designer (EOR) will provide hard-copy calculations and/or plan sets to the Design Reviewer (Checker). The Lead Bridge Designer (EOR) will indicate the phase of review.
- The Checker should sign and date the calculations or plan sheets being reviewed.
- The Checker should indicate with a highlighter (or check mark for calculations and spreadsheets) each item reviewed on the sheet. Reviewer comments should be indicated in 'red' pen or pencil on the printout.
- Design Quality Review Checklists will be created for each phase of submittal reviews. These checklists are to be used as guidance during the design review. Any checklist items which are not applicable to the project or to the stage of the design review will be marked "N/A" for "not applicable." Completed checklists will include the reviewer's initials and date of review, and a PDF copy of the checklist will be kept as a part of the quality record.
- The review comments will also be documented and listed in a separate document or quality record.
- Once the review is complete, the marked-up sheets, checklists, and listed comments should be returned to the MBI Project Manager and Lead Bridge Designer (EOR).
- The MBI Project Manager and Lead Bridge Designer (EOR) will review the comments for compliance with the contract and Design QC/QA Plan requirements.
- The MBI Project Manager and Lead Bridge Designer (EOR) will provide the review comments to the Design Staff. If needed, the MBI Project Manager and Lead Bridge Designer (EOR) may choose to hold a Design Review Conference to communicate the comments to the Design Staff.
- The Design Staff should thoroughly review and address the comments, indicating on the sheet his agreement and incorporation of the comment with a highlighter (of different color than that used by the Checker).
- If there is disagreement on how a particular item should be addressed, then the MBI Project Manager and Lead Bridge Designer (EOR) will make the final decision, and notes should be made on the markup sheet on how the comment is to be resolved.
- The Lead Bridge Designer (EOR) will initial each response to verify that each comment has been addressed.
- Once the review is complete, all check sets and calculations will be scanned as a PDF and kept electronically in the project files for future reference and saved as a part of the Quality Assurance package.

5.1 Quality Control Procedures:

Design and plan checking procedures will be conducted in Michael Baker's traditional manner. Quality procedures will include plan components and total package reviews.

Plan Component Review - Designs, plans and specifications will be checked for appropriateness, code compliance, completeness, design verification, and accuracy.

1. All Calculations shall include the name of the MAKER (design engineer or engineer intern) and the CHECKER (independent design engineer). Calculations shall be checked for appropriateness, code compliance, completeness, and accuracy. All design calculations

   will either be performed by or checked by an engineer licensed to practice in the State of Louisiana.

   a. "Handwritten" Design and Quantity Calculations shall be performed on a photocopy of the original. After checking and backchecking/comment resolution is completed, the original is to be corrected by the MAKER.

   b. Commercial Design Computer Software shall be checked to verify all input required for the design, as well as, support calculations required for input. Checking shall be performed on the original; with, "handwritten" support calculations checked accordingly. After checking and

backchecking/comment resolution is completed, the input will be revised by the MAKER and a new output generated. The new output will be reviewed for correctness and initialed and dated by the CHECKER.

c. In-house Design and Quantity Programs shall be checked in the same manner as Commercial Design Computer Software.

d. A three-color system will be used for checking, backchecking/comment resolution and final checking and review. Each color will be used exclusively by the person whose initials are signed with that color.

- CHECKER – first checking - Red
- MAKER – first backchecking/comment resolution - Blue
- CHECKER – final checking & review - Green

2. All Plans will be checked at completion. When a plan sheet has been completed to the satisfaction of those involved in its preparation, a half-size CHECKING PRINT shall be made of that sheet for the checker. All plans shall include the name of the MAKER and the CHECKER. Plans shall be checked for appropriate presentation, geometric conformance and accuracy, compliance with design calculations, and proper notes and references.

a. Appropriate presentation will include checking for conformance to customary layout, sections, details, and scales.

b. Geometric conformance will include checking for compatibility and fit with the overall project and adjacent components of the project. Accuracy checking shall include all horizontal and vertical dimensions and elevations for arithmetic correctness. Accuracy shall include checking against project calculations and spreadsheets, as well as independent computations.

c. Compliance with design calculations will include checking of plans to assure that dimensional and quantitative design requirements are correctly shown.

d. Proper notes and references will include checking of plans to ensure that code and design requirements are sufficiently indicated; and, cross referencing to other plan sheets and specifications are provided.

e. A four-color system is used, each color being used exclusively by the person whose initials are signed with that color. (Except for corrections made which may be signed off in red.)

- CHECKER – Red. Every number and figure must be checked in red (if correct) or circled in red with the correction shown to the side (if wrong).
- MAKER – Blue. Every number and figure circled and corrected by the CHECKER must be reviewed by the MAKER and checked off in blue or discussed with the CHECKER if disagreement occurs. At that point, any changes agreed upon by the CHECKER and MAKER will be shown in blue.
- CORRECTIONS MADE – Yellow. Every number and figure circled and corrected shall be yellowed by the person making the revisions to signify completion of each correction.
- CORRECTIONS CHECKED – Green. Every number and figure circled and corrected shall be checked off in green by the CHECKER to signify that the correction has been made properly.
- Upon completion of this process, the CHECKING PRINT is considered a finished document.
- Any additional corrections to the drawing shall require a new Checking Print, and the process shall be repeated. (Note: Previous Checking Prints shall not be discarded.)

SECTION VI – QUALITY ASSURANCE 6.0 Scope of the Quality Assurance Plan

The Quality Assurance Plan sets forth those actions, procedures, and methods employed at the management and senior technical levels to observe and ensure that prudent quality procedures are in place and are being implemented so that the desired result of a quality product is achieved.
This Quality Assurance Plan establishes a Quality System Team that will be distinct and separate from the design and production staff which includes a Quality Manager and independent reviewers. The Quality Manager will ensure that the Design QC/QA Plan is understood, implemented, and maintained at all levels of the Michael Baker Team.

6.1 Objectives of the Quality Assurance Plan

- Develop and prepare the Design QC/QA Plan, for review and concurrence by LA DOTD
- Publish, communicate and educate the Michael Baker Team on the approved Design QC/QA Plan for the project
- Review status and effectiveness of the Design QC/QA Plan - including Overall Quality Assurance and Construction Quality Control criteria throughout the life of the project
- Implement and oversee the overall quality program
- Develop procedures to allow the constructor to have input into the design in order to provide Design QC/QA Plans and construction methods
- Develop procedures on how document changes are initiated, reviewed, approved, implemented and recorded
- Define the liaison and interface between the quality assurance team and the design arms of project team
- Ensure that the QC process is complete, and the design calculations, drawings, special provisions, and cost estimate are in accordance with LA DOTD Design practices, policies, and procedures
- Provide reviews focused on constructability, areas of critical structural importance, areas that are new to the design practice, and other areas that the Quality Manager deem necessary.
- Update the Design QC/QA Plan and its procedures during the progress of the project
- Review, check and audit the Design QC/QA Plan to ensure compliance and functionality
- Cooperate and assist LA DOTD's designated representatives for QA

Ensuring that the Design QC/QA Plan is properly administered will start with proper staffing. The Quality Manager will be responsible for tracking, updating and communicating the Design QC/QA Plan status. A Design QC/QA Plan list of milestones, certifications, reports, and critical and noncritical elements will be refreshed as needed for the LA 44: I-10 ROUNDABOUTS Team and LA DOTD. The Quality Manager for the project will also track communication between the Michael Baker Team, LA DOTD and other organizations involved in the Design QC/QA Plan.

6.2 Procedures for Management Review

The Michael Baker Team's executive management will review the quality system at defined intervals sufficient to ensure its continuing suitability and effectiveness in satisfying the requirements of this standard and the designers stated quality policy and objectives. Management reviews will be at least at annual intervals.

6.3 Training Processes

The Michael Baker Team will establish and maintain documented procedures for identifying training needs and provide for the training of all personnel performing activities affecting quality assurance. Personnel performing specific assigned tasks shall be qualified based on appropriate education, training, and/or experience, as required. Appropriate records of training will be maintained by the Michael Baker Baton Rouge Office.

6.4 Procedures for Internal/External Quality Assurance Audits

The Quality Manager can audit the Design QC/QA Plan implementation at any time to see if the quality records, indexes, and quality review schedules are being performed in accordance with the Design QC/QA Plan. Also, the Quality Manager may perform independent design or calculation checks of certain elements of the project to verify the accuracy of checks. The independent checks may become a part of the quality record if necessary.

SECTION VII – QA REVIEW OF PLAN PACKAGE

7.0 Plan Package Review

A total package review shall be conducted by the MBI Project Manager and Lead Bridge Designer (EOR) for overall completeness and constructability prior to handing over to the Quality Manager for Quality Assurance review.

- Review shall include an assessment of completeness of the plan set in communicating design requirements, limitations of construction, required sequencing and critical instructions.
- Constructability review will be conducted to determine whether the project is buildable as designed and detailed using standard construction practices and materials; plan clarity has been achieved; and, plan details will result in a maintainable project.
- A complete set of half-size REVIEW PLANS, and other disciplines as needed for reference, shall be provided by the MBI Project Manager to the Quality Manager.

  a) A four-color system is used, each color being used exclusively by the person whose initials are signed with that color. (Except for corrections made which may be signed off in red.)
     a) REVIEWER – Red. Quality Manager or his representative shall provide comments in red.
     b) DESIGNER – Blue. Comments by the REVIEWER will be reviewed by the DESIGNER and checked off in blue or discussed with the Project Manager (EOR) if disagreement occurs. At that point, any changes agreed upon by the REVIEWER and DESIGNER will be shown in blue.
     c) CORRECTIONS MADE – Yellow. Comments shall be incorporated into the plans and yellowed by the person making the revisions to signify completion of each comment.
     d) CORRECTIONS CHECKED – Green. Every number and figure circled and corrected shall be checked off in green by the MBI Project Manager to signify that the correction has been made properly.
     e) Upon completion of this process the REVIEW PLANS are considered a finished document.
- Design QC/QA Plan Checklists completed during the QC review will be verified for completeness and effectiveness for each QA phase submittal. These checklists indicate typical items that should be included in the submittal and can serve as a guide to the QA Review. If checklists are found to be incomplete or ineffective, the Quality Manager will address with the Michael Baker Team and make edits to the QC/QA Plan and checklists if necessary.

7.1 LA DOTD Reviews

The MBI Project Manager will submit to Gresham Smith for submittal to the LA DOTD each Phase Review after sufficient quality verification has been performed by the Quality Team for each phase submittal. Design Documents to be reviewed will be provided to LA DOTD for review.
Gresham Smith will provide the MBI Project Manager with LA DOTD's comments which will be distributed to the Designers for incorporation and/or further explanation. The Designer will respond to each comment and return the updated plans to the MBI Project Manager. The Quality Manager will initial each comment to ensure that all comments have been addressed. If significant changes have been made to the plans since the previous independent review or if additional calculations are provided, the Quality Manager will conduct a second independent review of the phase submittal following the Procedures for Phase Reviews given above.
Once all reviews are complete and comments addressed, the MBI Project Manager will then forward a certification that the reviews have been completed to Gresham Smith for submittal to the LA DOTD. The Quality Manager will report any non-conformities/non-compliance. LA DOTD will then conduct another review with involvement of stakeholders at the discretion of LA DOTD. When all comments have been addressed to LA DOTD's satisfaction, the MBI Project Manager and Lead Bridge Designer (EOR) will finalize the phase submittal plans for construction.

7.2 Certification of Design Reviews

All design phase submittals shall be thoroughly reviewed by the MBI Project Manager and Lead Bridge Designer (EOR) as outlined in this Design QC/QA Plan. Further, the Quality Manager shall assure and certify that the Design QC/QA Plan has been adhered to before any submission to LA DOTD.

SECTION VIII – PROJECT DOCUMENT CONTROL

The Project Document Control will be used to house all quality records for the project. Quality records will be maintained to demonstrate conformance to the project requirements and to ensure that the Design QC/QA Plan has been implemented and followed.
Document Control Procedures for identification, collection, indexing, access, filing, storage, maintenance, and disposition of the quality records are as follows:

- Quality records will be identified with the stage of review. Quality records include the review plan set, specification or design calculation that is being submitted tabulating the review comments. Any calculations or other documentation of checking will also be included in the quality records. The quality records will be preserved as submitted by preparing a PDF copy of the design review documentation including the marked-up plan set. These records will be saved to the project files.
- The Quality Manager is responsible for collecting all Phase Review comments from the design review team and LA DOTD. The Quality Manager is responsible for collecting these comments and ensuring incorporation to the construction plans or a resolution derived.
- The Quality Manager will index reviews received. This index will note the Phase Review, the designer's name, the independent checker's name and date of review, the date of submission to LA DOTD for review, and the date the certified review was sent on to the Quality Control Manager.
- The Quality Manager will determine who will have access to the quality records in the Project Document Control.
- All quality records will be filed as described in the Project Document Control. A back-up system will also be maintained to ensure that this documentation is not lost.
- The duration of the storage of the quality records is 4 years.
- The Quality Manager or staff directly under his/her supervision will be responsible for the maintenance of the quality records in the Project Document Control.
- The Quality Manager or staff directly under his/her supervision will be responsible for the disposition, distribution and notification of quality records to the Michael Baker Team.

22. Sub-consultant Information:

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and email address	Phone Number
Michael Baker International, Inc.	2600 CitiPlace Drive, Suite 450 Baton Rouge, Louisiana 70808	Daniel Thornhill, PE Office Executive / Associate Vice President daniel.thornhill@mbakerintl.com	225.218.2846
Vectura Consulting Services, LLC	4467 Bluebonnet Blvd., Suite A, Baton Rouge, LA 70809-9639	Sheelagh Brin Ferlito, bferlito@vecturacs.com	225.223.6685

(Add rows as needed)

23. Location:

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank.

Gresham Smith

Genuine Ingenuity

Alpharetta, GA
Atlanta, GA
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Charlotte, NC
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Cincinnati, OH
Columbus, OH
Dallas, TX
Denver, CO
Ft. Lauderdale, FL
Jackson, MS
Jacksonville, FL
Knoxville, TN
Lexington, KY
Louisville, KY
Memphis, TN
Miami, FL
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